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Unicorn Management Consultants, LLC

ANNUAL GROUNDWATER MONITORING REPORT
CLOSURE YEAR 22 (2018)

UNION ROAD SITE
TOWN OF CHEEKTOWAGA
ERIE COUNTY, NEW YORK
(SITE REGISTRY NO. 9-15-128)

Prepared for:

AMERICAN PREMIER UNDERWRITERS, INC.
(FORMERLY THE PENN CENTRAL CORPORATION)
ONE EAST FOURTH STREET
CINCINNATI, OHIO 45202

Prepared by:

UNICORN MANAGEMENT CONSULTANTS, LLC
52 FEDERAL ROAD, SUITE 2C
DANBURY, CT 06810

January 22, 2019

Document Authorization Form

Annual Groundwater Monitoring Report
Closure Year 22 (2018)

Union Road Site
Town of Cheektowaga
Erie County, New York
(Site Registry No. 9-15-128)

Prepared for:

American Premier Underwriters, Inc.
(Formerly The Penn Central Corporation)
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Cincinnati, Ohio 45202

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January 22, 2019

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1/22/19

Date

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1. INTRODUCTION

This Groundwater Monitoring Report has been prepared by Unicorn Management Consultants, LLC (UMC) on behalf of American Premier Underwriters, Inc. (APU). The purpose of this document is to demonstrate compliance with Section 12.4.1 of the Union Road Site Remedial Design Report (Design Report), approved by the New York State Department of Environmental Conservation (NYSDEC) in May, 1995. Section 12.4.1 of the Design Report discusses the Groundwater Monitoring Plan (GMP).

The purpose of the GMP is as follows:

- To evaluate the groundwater quality to assess the effectiveness of the remedial action performed in accordance with the 1995 Design Report; and
- To monitor the groundwater gradient of the three hydrogeologic units in and around the landfill closure area.

The GMP consists of these elements:

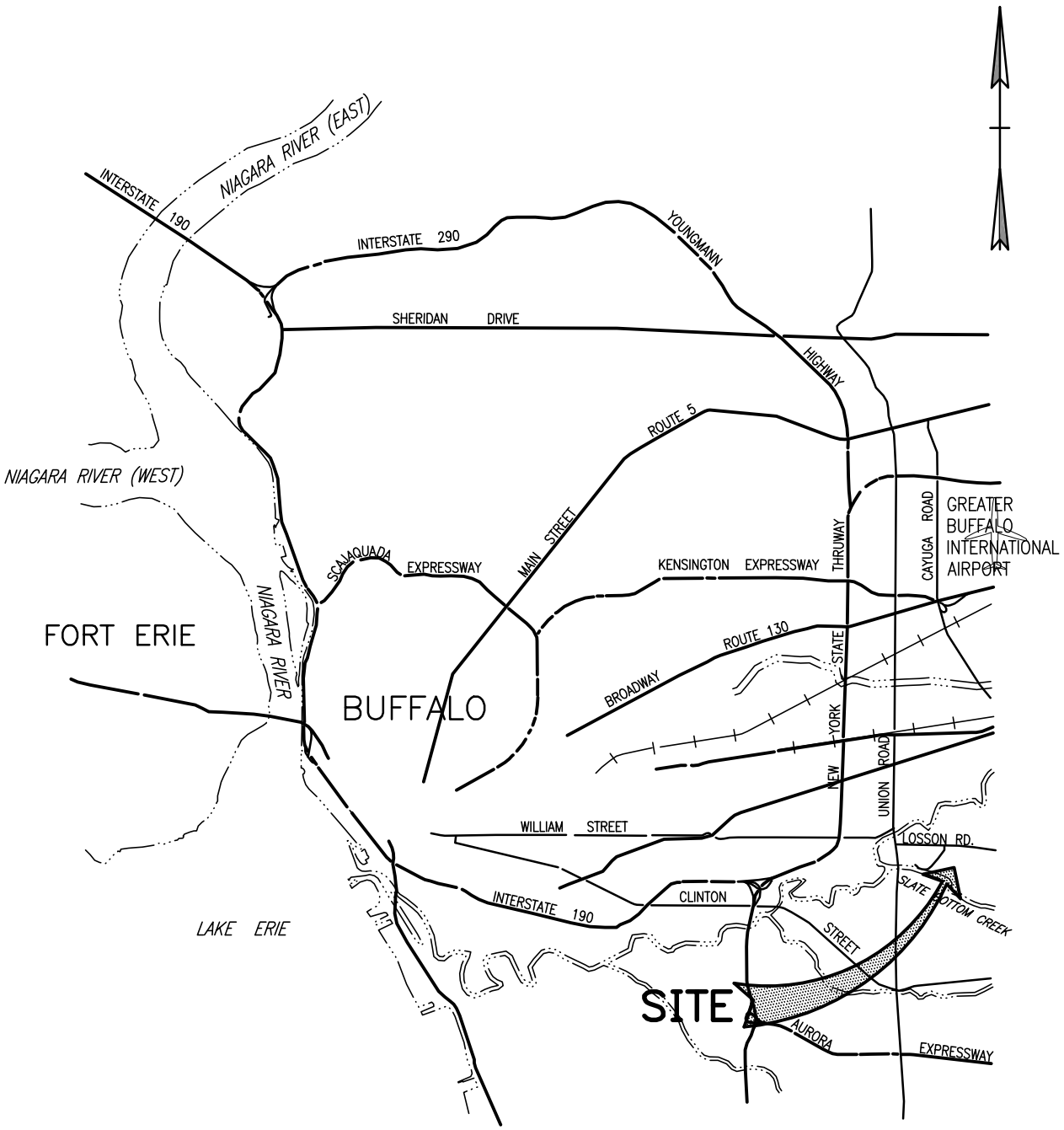
- The installation of groundwater monitoring wells inside and outside the slurry wall around the landfill closure;
- The collection and analyses of groundwater samples; and
- The determination of groundwater elevations.

Please note that pursuant to a letter dated October 18, 2001, from Blank Rome Comisky and McCauley, LLP (APU's legal counsel), effective October 19, 2001, APU designated UMC as their environmental consultants.

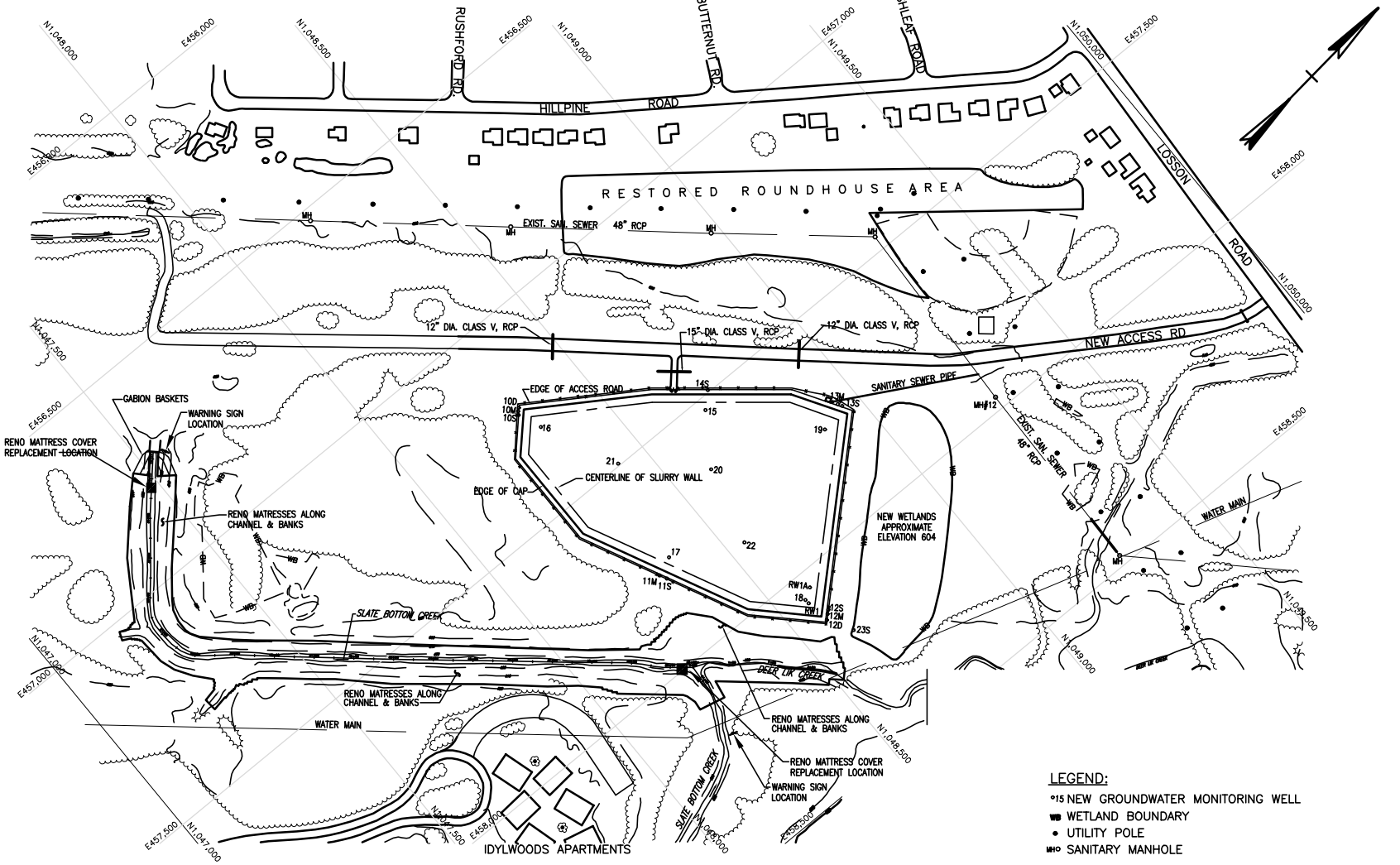
The Union Road site (the "Site") is a Class 4 Site as defined by the NYSDEC. The Site registry number is 915128. The Site is located at 333 Losson Road in Cheektowaga, New York (see Figure 1-1). A Record of Decision (ROD) for the Site was signed on March 9, 1992. Order on Consent Index No. B9-0148-92-03 was signed by The Penn Central Corporation (currently, APU.) and the NYSDEC; the effective date of the Order is April 12, 1994. Appendix "B" of the Order is the Final Remedial Action Work Plan (the "Work Plan"), dated June 18, 1993.

As required in Section 4.2 of the Work Plan, the design documents, including the Union Road Site Remedial Design Report, were submitted in May 1995 to the NYSDEC and were subsequently approved. After approval, work commenced and the landfill closure was completed in December 1996. Figure 1-2 illustrates a plan view of the Site closure.

The GMP, and Operation and Maintenance (O&M) activities for the Site went into effect following the landfill closure. This report presents and summarizes the activities conducted and analytical data for groundwater samples collected on Site during Closure Year 22 (2018). The 2018 Annual Sampling Event is the 26th sampling event since the landfill closure.



REVISION NO.		PROJECT	UNION ROAD SITE TOWN OF CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011-200
NO.	DATE				FILENAME: UNION_RD
					SCALE: 1"~2mi DATE: 1/16/02
		DRAWING	LOCATION MAP		BY: AD CK:
					FIGURE # 1-1



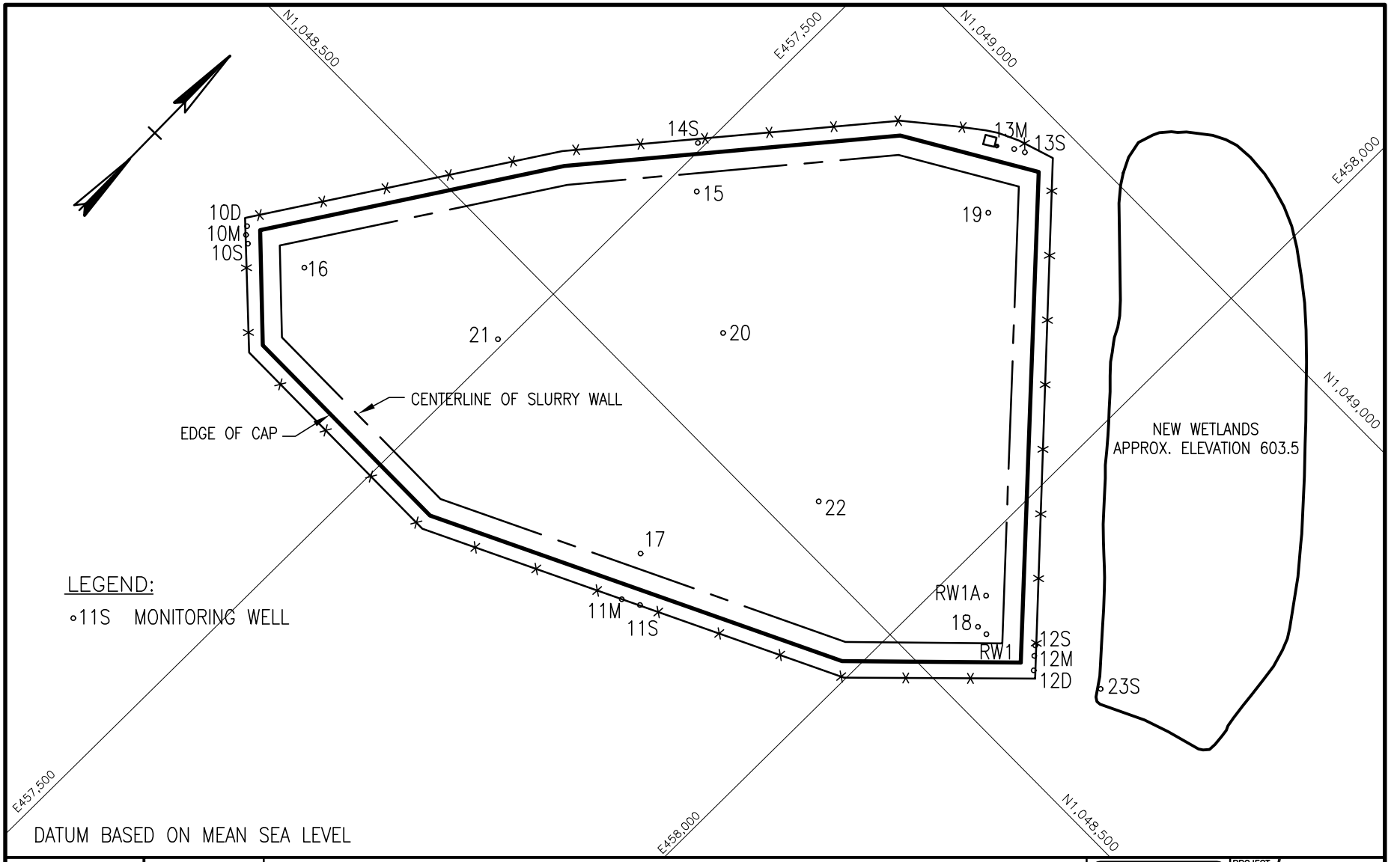
REVISIONS		PROJECT	UNION ROAD SITE TOWN OF CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011-200
NO.	DATE				FILENAME: 2045100B
		DRAWING	SITE LOCATION		SCALE: 1" =400' DATE: 8/23/06
					BY: AD CK:
					FIGURE # 1-2

2. WELL INSTALLATION

As proposed in the GMP, five well clusters were installed along the outside perimeter of the slurry wall. These exterior wells are identified as MW-10S/M/D, MW-11S/M, MW-12S/M/D, MW-13S/M, and MW-14S. Adjacent to these wells, along the inside perimeter of the slurry wall, five shallow wells identified as MW-15, MW-16, MW-17, MW-18, and MW-19 were installed.

Three additional shallow wells (not originally proposed) were also installed. These wells (MW-20, MW-21, and MW-22) were installed in the center of the landfill to monitor the elevation of groundwater inside the landfill closure. Proposed well MW-20S adjacent to the outfall of the new wetland was installed; however, the identification of this well was changed from MW-20S to MW-23S. As discussed in the Groundwater Monitoring Report for the Second Quarter 1997, the original Monitoring Well 14S (MW-14S) was decommissioned and the replacement was reinstalled nine feet southwest (along the fence line). The MW-14S replacement was installed, surveyed and developed on August 19, 1997. Well designations and locations are shown on Figure 2-1.

Installation of monitoring wells proceeded according to Section 02170 of the Technical Specifications. Installation of the interior wells occurred from February 19-23, 1996. Installation of the exterior wells took place from December 10, 1996 through January 6, 1997 and August 19, 1997. Copies of the Boring Logs and Well Construction Drawings are included as Appendix A.



REVISIONS		PROJECT	UNION ROAD SITE TOWN OF CHEEKTOWAGA, NEW YORK
NO.	DATE	DRAWING	GROUNDWATER MONITORING WELL LOCATIONS

Unicorn Management Consultants, LLC
52 FEDERAL ROAD
DANBURY, CT
(203) 205-9000

PROJECT # 2011-200
FILENAME: 2045100B
SCALE: 1" =150' | DATE: 1/15/02
BY: AD | CK:
FIGURE # 2-1

3. GROUNDWATER SAMPLING AND ANALYSES

3.1 GROUNDWATER SAMPLING

The purpose of groundwater sampling and analyses is to assess the effectiveness of the remedial action by evaluating the groundwater quality.

According to the GMP, groundwater samples will be collected from the outside perimeter monitoring wells by the following schedule:

- Quarterly the first year (1997);
- Semi-annually the second year (1998); and
- Annually (during the dry season) thereafter.

The parameters and applicable methods for the analyses are as follows:

- Total petroleum hydrocarbons (TPH) by EPA Method 1664A;
- Volatile organic compounds (VOCs) by EPA Method 8260;
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270; and
- Soluble metals (lead and arsenic) by EPA Method 6010B, respectively.

The sampling frequency, analytical parameters, and/or sampling of specific wells will be modified based on the results of previous sampling events (since the Site closure) and with written approval from the NYSDEC. Following discussions with NYSDEC and a review of the analytical data for groundwater samples collected on Site following the Site closure in 1997, UMC believes that a reduction in the sampling frequency is appropriate. A discussion of proposed modifications to the sampling frequency is presented in Section 3.5 below.

To evaluate the immediate effects of remedial activities on the groundwater around the landfill closure, the results of this sampling event are compared to results gathered from previous investigation reports performed by Dvirka and Bartilucci prior to the landfill closure. The data from the reports dated June, 1991 and August, 1991 are summarized in Table 3-1. Comparison between the averages prior to closure with post closure in the shallow wells shows significant decreases in all of the contaminants analyzed. To determine the continued effectiveness of the containment system, future sampling will be compared to the pre-closure concentrations.

3.2 2018 ANNUAL SAMPLING EVENT

On September 17-18, 2018, UMC conducted the 2018 Annual Sampling Event. UMC collected groundwater samples from a total of eleven groundwater monitoring wells on Site. UMC then submitted the groundwater samples to ALS Environmental Laboratories in Rochester, NY (ALS) to be analyzed for the parameters listed in Section 3.1 above.

Table 3-2 summarizes the water depth measurements and well purging operations completed on the wells along the outside perimeter of the slurry wall during the 2018 Annual Sampling Event. Tables 3-3 through 3-8 present the analytical results from this sampling event. An electronic copy of the analytical data report is included in Appendix B.

3.3 SUMMARY OF ANALYTICAL DATA

No TPH, lead, or arsenic were detected in any of the groundwater samples collected during this year's annual sampling event.

No VOCs were detected in the groundwater samples collected, except for acetone which was detected in MW-10D at a concentration of 180 µg/L; above the NYSDEC groundwater standard of 50 µg/L. Acetone was last detected in monitoring well MW-12S at a concentration of 16 µg/L in 2013. Acetone was not detected in any other groundwater samples collected during this year's annual sampling event.

No SVOCs were detected in the groundwater samples collected, except for bis(2-ethylhexyl)phthalate which was detected in MW-13S at a concentration of 14 µg/L; above the NYSDEC groundwater standard of 5 µg/L. Bis(2-ethylhexyl)phthalate has been detected in monitoring wells 10D, 11M, and 12D at similar concentrations between 2001 and 2006, and again in 2014. Bis(2-ehtylhexyl)phthalate was not detected in any other groundwater samples collected during this year's annual sampling event.

Both acetone and bis(2-ethylhexyl)phthalate are common laboratory artifacts and have not been observed consistently in groundwater samples collected on Site.

3.4 SAMPLING OF EMERGING CONTAMINATES

On June 13, 2018, the NYSDEC sent a letter to APU regarding the NYSDEC's statewide evaluation of emerging contaminates on and around remediation sites in the state of New York, and requesting that APU test the groundwater at the Site for 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS).

On July 2, 2018, UMC on behalf of APU submitted as a letter to the NYSDEC a draft work plan for the collection of groundwater samples from the Site to be analyzed for 1,4-dioxane and PFAS as requested in the above referenced letter.

On July 19, 2018, the NYSDEC emailed UMC a list of questions and comments regarding the draft work plan. UMC addressed these questions and comments in a phone call on July 23, 2018. UMC incorporated the comments into the work plan, and submitted as a letter to NYSDEC the *Final Work Plan for the Sampling of Emerging Contaminates (1,4-dioxane and PFAS)*, dated August 15, 2018 (Emerging Contaminate Work Plan). The NYSDEC approved the Emerging Contaminate Work Plan in a phone conversation on September 10, 2018.

On September 18, 2018, in accordance with the Emerging Contaminate Work Plan, UMC collected groundwater samples from six monitoring wells on Site. UMC submitted groundwater and QA/QC samples to be analyzed for 1,4-dioxane to ALS for analysis by Method 8270 run in selective ion monitoring (SIM) mode. UMC submitted groundwater and QA/QC samples to be analyzed for PFAS to Eurofins Lancaster Laboratories Environmental in Lancaster, PA (ELLE) for analysis by EPA Method 537 version 1.1 Modified.

Both ALS and ELLE provided UMC with full category B (Level IV) analytical reports with NYSDEC formatted electronic data deliverables. The analytical reports were submitted to Trillium, Inc. of Downingtown, PA (Trillium) for third party validation.

Overall the validated analytical results for groundwater samples collected on Site show no concentrations of 1,4-dioxane and only low concentrations of a limited number of PFAS. In particular, the combined concentrations of perfluorooctanoic acid (PFOA) and perfluoro-

octanesulfonate (PFOS) observed in three wells on Site were well below the EPA Health Advisory Level of 70 ppt.

Additional details regarding the emerging contaminate sampling conducted on Site are included in the *Emerging Contaminate Report for the Union Road Site*, dated January 8, 2019 (Emerging Contaminate Report). UMC submitted the Emerging Contaminate Report to NYSDEC on January 8, 2019.

3.5 MODIFICATION OF GROUNDWATER SAMPLING FREQUENCY

On January 24, 2018, NYSDEC sent an email to UMC in which NYSDEC remarked that the analytical data obtained for groundwater samples collected during the 2017 Annual Sampling Event conducted on September 6, 2017 "looked good". NYSDEC then asked if the data from 2017 was part of a longer trend and could support a modification to the frequency or scope of the collection of groundwater samples from the Site.

UMC reviewed the analytical data obtained during the groundwater sampling events conducted on Site since the Site closure in 1997 (including the data from the 2018 Annual Sampling Event), and noted an overall decrease in the number of detections observed in groundwater samples.

TPH has not been detected in groundwater samples since 2004. Lead has not been detected in groundwater samples since 2006. Arsenic has not been detected in groundwater samples since 2008.

Since 2009, only two analytes have been detected in groundwater samples collected during the annual sampling events, acetone and bis(2-ethylhexyl)phthalate. Acetone was observed in groundwater samples collected from MW-12S in 2013, and MW-10D in 2018. Bis(2-ethylhexyl)phthalate was observed in groundwater samples collected from MW-11M and MW-12D in 2014, and MW-13S in 2018. Both acetone and bis(2-ethylhexyl)phthalate are common laboratory artifacts and have not been observed consistently in groundwater samples collected on Site.

Based on these observations, UMC believes that a reduction of the sampling frequency on Site is appropriate. UMC recommends that the sampling frequency on Site be reduced from annual to once every five years, and that the next annual sampling event be conducted in the early fall of 2023. This reduction of sampling frequency would only apply to the collection of groundwater samples and not the annual groundwater elevation monitoring or other O&M activities (inspections, mowing, etc.).

TABLE 3-1
UNION ROAD GROUNDWATER MONITORING REPORT
CLOSURE YEAR 22 (2018)

Unicorn Management Consultants, LLC

PRE-CONSTRUCTION SAMPLING OF SHALLOW WELLS
(JUNE - AUGUST, 1991)

(concentrations in ug/L)

	MW-4S	MW-4S	MW-5S	MW-6S	MW-6S	
ANALYTE	**PHASE I**	**PHASE II**	**PHASE I**	**PHASE I**	**PHASE II**	**AVERAGE**
SVOC's (Base Neutrals)	17	16	120	290	100	109
Total VOC's	ND	5.9	ND	42	3	10
TPH	4,400	1,800	2,200	5,800	ND	2,840
Soluble Arsenic	34.8	35.5	14.7	27.1	5.7	24
Soluble Lead	10,100	8,090	4,450	3,560	367	5,313

ND- analyte not detected

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-2
UNION ROAD
GROUNDWATER MONITORING REPORT

Unicorn Management Consultants, LLC

September 17-18, 2018
WELL PURGING SUMMARY

Well Number	Riser Elev. (Feet) [1]	Orginal Bottom Elev. (Feet)	Depth to Water (Feet)	Water Elev. (Feet)	Water Height in Well (Feet)	Water Volume in Well (Gallons)	Water Removed from Well (Gallons)
10S	623.09	599.9	10.50	612.59	12.69	2.0	6.25
10M	622.50	589.6	13.15	609.35	19.75	3.2	9.50
10D	622.02	574.1	16.40	605.62	31.52	5.1	7.00
11S	622.74	597.1	16.25	606.49	9.39	1.5	4.50
11M	622.86	578.4	20.60	602.26	23.86	3.8	10.25
12S	622.62	595.8	21.40	601.22	5.42	0.9	2.00
12M	622.97	578.8	21.64	601.33	22.53	3.6	11.00
12D	621.18	557.8	18.72	602.46	44.66	7.2	22.00
13S	622.96	599.1	13.42	609.54	10.44	1.7	5.00
13M	621.66	585.8	13.57	608.09	22.29	3.6	11.00
14S [2]	621.61	602.1	12.16	609.45	7.35	1.2	3.50

[1] Elevations were surveyed by Douglas C. Meyers P.L.S., P.C. on March 17, 1997

[2] MW-14S was reinstalled, developed and resurveyed on August 19, 1997.

[3] All Elevations are referenced to Mean Sea Level

[4] All wells are two 2-inches in diameter

[5] Well development was performed on 1/16/1997

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-3
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

SHALLOW WELL SVOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)					MRL
	MW-10S	MW-11S	MW-12S	MW-13S	MW-14S	
Dilution	1.00	1.00	1.00	1.00	1.00	
acenapthene	ND	ND	ND	ND	ND	9.4
acenapthylene	ND	ND	ND	ND	ND	9.4
anthracene	ND	ND	ND	ND	ND	9.4
benzo(a)anthracene	ND	ND	ND	ND	ND	9.4
benzo(a)pyrene	ND	ND	ND	ND	ND	9.4
benzo(b)fluoranthene	ND	ND	ND	ND	ND	9.4
benzo(g,h,i)perylene	ND	ND	ND	ND	ND	9.4
benzo(k)fluoranthene	ND	ND	ND	ND	ND	9.4
benzyl alcohol	ND	ND	ND	ND	ND	9.4
butly benzyl phthalate	ND	ND	ND	ND	ND	9.4
di-n-butlyphthalate	ND	ND	ND	ND	ND	9.4
carbazole	ND	ND	ND	ND	ND	9.4
indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	9.4
4-chloroaniline	ND	ND	ND	ND	ND	9.4
bis(-2-chloroethoxy)methane	ND	ND	ND	ND	ND	9.4
bis(2-chloroethyl)ether	ND	ND	ND	ND	ND	9.4
2-chloronapthalene	ND	ND	ND	ND	ND	9.4
2-chlorophenol	ND	ND	ND	ND	ND	9.4
2,2'-oxybis(1-chloropropane)	ND	ND	ND	ND	ND	9.4
chrysene	ND	ND	ND	ND	ND	9.4
dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	9.4
dibenzofuran	ND	ND	ND	ND	ND	9.4
1,2-dichlorobenzene	ND	ND	ND	ND	ND	9.4
1,3-dichlorobenzene	ND	ND	ND	ND	ND	9.4
1,4-dichlorobenzene	ND	ND	ND	ND	ND	9.4
3,3'-dichlorobenzidine	ND	ND	ND	ND	ND	9.4
2,4-dichlorophenol	ND	ND	ND	ND	ND	9.4
diethylphthalate	ND	ND	ND	ND	ND	9.4
dimethyl phthalate	ND	ND	ND	ND	ND	9.4
2,4-dimethlyphenol	ND	ND	ND	ND	ND	9.4
2,4-dinitrophenol	ND	ND	ND	ND	ND	47
2,4-dinitrotoluene	ND	ND	ND	ND	ND	9.4
2,6-dinitrotoluene	ND	ND	ND	ND	ND	9.4
bis(2-ethylhexyl)phthalate	ND	ND	ND	**14**	ND	9.7
fluoranthene	ND	ND	ND	ND	ND	9.4
fluorene	ND	ND	ND	ND	ND	9.4
hexachlorobenzene	ND	ND	ND	ND	ND	9.4
hexachlorobutadiene	ND	ND	ND	ND	ND	9.4
hexachlorocyclopentadiene	ND	ND	ND	ND	ND	9.4
hexachloroethane	ND	ND	ND	ND	ND	9.4
isophorone	ND	ND	ND	ND	ND	9.4
2-methlynapthalene	ND	ND	ND	ND	ND	9.4
2-methylphenol	ND	ND	ND	ND	ND	9.4
4,6-dinitro-2-methylphenol	ND	ND	ND	ND	ND	47
4-chloro-3-methlyphenol	ND	ND	ND	ND	ND	9.4
3+4-methylphenol	ND	ND	ND	ND	ND	9.4

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-3
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

SHALLOW WELL SVOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)					MRL
	MW-10S	MW-11S	MW-12S	MW-13S	MW-14S	
Dilution	1.00	1.00	1.00	1.00	1.00	
napthalene	ND	ND	ND	ND	ND	9.4
2-nitroaniline	ND	ND	ND	ND	ND	47
3-nitroaniline	ND	ND	ND	ND	ND	47
4-nitroaniline	ND	ND	ND	ND	ND	47
nitrobenzene	ND	ND	ND	ND	ND	9.4
2-nitrophenol	ND	ND	ND	ND	ND	9.4
4-nitrophenol	ND	ND	ND	ND	ND	47
n-nitrosodimethylamine	ND	ND	ND	ND	ND	9.4
n-nitrosodiphenylamine	ND	ND	ND	ND	ND	9.4
di-n-octyl phthalate	ND	ND	ND	ND	ND	9.4
pentachlorophenol	ND	ND	ND	ND	ND	47
phenanthrene	ND	ND	ND	ND	ND	9.4
phenol	ND	ND	ND	ND	ND	9.4
4-bromophenyl-phenylether	ND	ND	ND	ND	ND	9.4
4-chlorophenyl-phenylether	ND	ND	ND	ND	ND	9.4
n-nitroso-di-n-propylamine	ND	ND	ND	ND	ND	9.4
pyrene	ND	ND	ND	ND	ND	9.4
1,2,4-trichlorobenzene	ND	ND	ND	ND	ND	9.4
2,4,5-trichlorophenol	ND	ND	ND	ND	ND	9.4
2,4,6-trichlorophenol	ND	ND	ND	ND	ND	9.4
TOTALS	ND	ND	ND	14	ND	

Average Outside Landfill (MW 10S - 14S)	2.8
Average Inside Landfill (Table 3-1)	109

ND - Not Detected, above the laboratory detection limit

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-4
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

SHALLOW WELL VOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)					MRL
	MW-10S	MW-11S	MW-12S	MW-13S	MW-14S	
Dilution	1.00	1.00	1.00	1.00	1.00	
acetone	ND	ND	ND	ND	ND	10
benzene	ND	ND	ND	ND	ND	5.0
bromodichloromethane	ND	ND	ND	ND	ND	5.0
bromoform	ND	ND	ND	ND	ND	5.0
bromomethane	ND	ND	ND	ND	ND	5.0
2-butanone (MEK)	ND	ND	ND	ND	ND	10
carbon disulfide	ND	ND	ND	ND	ND	10
carbon tetrachloride	ND	ND	ND	ND	ND	5.0
chlorobenzene	ND	ND	ND	ND	ND	5.0
chloroethane	ND	ND	ND	ND	ND	5.0
chloroform	ND	ND	ND	ND	ND	5.0
chloromethane	ND	ND	ND	ND	ND	5.0
dibromochloromethane	ND	ND	ND	ND	ND	5.0
1,1-dichloroethane	ND	ND	ND	ND	ND	5.0
1,2-dichloroethane	ND	ND	ND	ND	ND	5.0
1,1-dichloroethene	ND	ND	ND	ND	ND	5.0
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	5.0
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	5.0
1,2-dichloropropane	ND	ND	ND	ND	ND	5.0
cis-1,3-dichloropropene	ND	ND	ND	ND	ND	5.0
trans-1,3-dichloropropene	ND	ND	ND	ND	ND	5.0
ethlybenzene	ND	ND	ND	ND	ND	5.0
2-hexanone	ND	ND	ND	ND	ND	10
methylene chloride	ND	ND	ND	ND	ND	5.0
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	10
styrene	ND	ND	ND	ND	ND	5.0
1,1,2,2-tetrachloroethane	ND	ND	ND	ND	ND	5.0
tetrachloroethene	ND	ND	ND	ND	ND	5.0
toluene	ND	ND	ND	ND	ND	5.0
1,1,1-trichloroethane	ND	ND	ND	ND	ND	5.0
1,1,2-trichloroethane	ND	ND	ND	ND	ND	5.0
trichloroethene	ND	ND	ND	ND	ND	5.0
vinyl chloride	ND	ND	ND	ND	ND	5.0
m+p xylene	ND	ND	ND	ND	ND	5.0
o-xylene	ND	ND	ND	ND	ND	5.0
TOTAL VOC'S	ND	ND	ND	ND	ND	
TPH	ND	ND	ND	ND	ND	4.7
SOLUBLE ARSENIC	ND	ND	ND	ND	ND	10
SOLUBLE LEAD	ND	ND	ND	ND	ND	50

Average Outside Landfill (MW 10S - 14S)	Average Inside Landfill (Table 3-1)
0	10
0.0	2,840
0.0	24
0.0	5,313

ND - Not Detected, above the laboratory detection limit

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-5
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

MEDIUM WELL SVOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)				MRL
	MW-10M	MW-11M	MW-12M	MW-13M	
Dilution	1.00	1.00	1.00	1.00	
acenapthene	ND	ND	ND	ND	9.4
acenapthylene	ND	ND	ND	ND	9.4
anthracene	ND	ND	ND	ND	9.4
benzo(a)anthracene	ND	ND	ND	ND	9.4
benzo(a)pyrene	ND	ND	ND	ND	9.4
benzo(b)fluoranthene	ND	ND	ND	ND	9.4
benzo(g,h,i)perylene	ND	ND	ND	ND	9.4
benzo(k)fluoranthene	ND	ND	ND	ND	9.4
benzyl alcohol	ND	ND	ND	ND	9.4
butly benzyl phthalate	ND	ND	ND	ND	9.4
di-n-butlyphthalate	ND	ND	ND	ND	9.4
carbazole	ND	ND	ND	ND	9.4
indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	9.4
4-chloroaniline	ND	ND	ND	ND	9.4
bis(-2-chloroethoxy)methane	ND	ND	ND	ND	9.4
bis(2-chloroethyl)ether	ND	ND	ND	ND	9.4
2-chloronapthalene	ND	ND	ND	ND	9.4
2-chlorophenol	ND	ND	ND	ND	9.4
2,2'-oxybis(1-chloropropane)	ND	ND	ND	ND	9.4
chrysene	ND	ND	ND	ND	9.4
dibenzo(a,h)anthracene	ND	ND	ND	ND	9.4
dibenzofuran	ND	ND	ND	ND	9.4
1,2-dichlorobenzene	ND	ND	ND	ND	9.4
1,3-dichlorobenzene	ND	ND	ND	ND	9.4
1,4-dichlorobenzene	ND	ND	ND	ND	9.4
3,3'-dichlorobenzidine	ND	ND	ND	ND	9.4
2,4-dichlorophenol	ND	ND	ND	ND	9.4
diethylphthalate	ND	ND	ND	ND	9.4
dimethyl phthalate	ND	ND	ND	ND	9.4
2,4-dimethlyphenol	ND	ND	ND	ND	9.4
2,4-dinitrophenol	ND	ND	ND	ND	47
2,4-dinitrotoluene	ND	ND	ND	ND	9.4
2,6-dinitrotoluene	ND	ND	ND	ND	9.4
bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	9.7
fluoranthene	ND	ND	ND	ND	9.4
fluorene	ND	ND	ND	ND	9.4
hexachlorobenzene	ND	ND	ND	ND	9.4
hexachlorobutadiene	ND	ND	ND	ND	9.4
hexachlorocyclopentadiene	ND	ND	ND	ND	9.4
hexachloroethane	ND	ND	ND	ND	9.4
isophorone	ND	ND	ND	ND	9.4
2-methlynapthalene	ND	ND	ND	ND	9.4
2-methylphenol	ND	ND	ND	ND	9.4
4,6-dinitro-2-methylphenol	ND	ND	ND	ND	47
4-chloro-3-methlyphenol	ND	ND	ND	ND	9.4
3+4-methylphenol	ND	ND	ND	ND	9.4

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-5
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

MEDIUM WELL SVOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)				MRL
	MW-10M	MW-11M	MW-12M	MW-13M	
Dilution	1.00	1.00	1.00	1.00	
napthalene	ND	ND	ND	ND	9.4
2-nitroaniline	ND	ND	ND	ND	47
3-nitroaniline	ND	ND	ND	ND	47
4-nitroaniline	ND	ND	ND	ND	47
nitrobenzene	ND	ND	ND	ND	9.4
2-nitrophenol	ND	ND	ND	ND	9.4
4-nitrophenol	ND	ND	ND	ND	47
n-nitrosodimethylamine	ND	ND	ND	ND	9.4
n-nitrosodiphenylamine	ND	ND	ND	ND	9.4
di-n-octyl phthalate	ND	ND	ND	ND	9.4
pentachlorophenol	ND	ND	ND	ND	47
phenanthrene	ND	ND	ND	ND	9.4
phenol	ND	ND	ND	ND	9.4
4-bromophenyl-phenylether	ND	ND	ND	ND	9.4
4-chlorophenyl-phenylether	ND	ND	ND	ND	9.4
n-nitroso-di-n-propylamine	ND	ND	ND	ND	9.4
pyrene	ND	ND	ND	ND	9.4
1,2,4-trichlorobenzene	ND	ND	ND	ND	9.4
2,4,5-trichlorophenol	ND	ND	ND	ND	9.4
2,4,6-trichlorophenol	ND	ND	ND	ND	9.4
TOTALS	ND	ND	ND	ND	

ND - Not Detected, above the laboratory detection limit

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-6
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

MEDIUM WELL VOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)				MRL
	MW-10M	MW-11M	MW-12M	MW-13M	
Dilution	1.00	1.00	1.00	1.00	
acetone	ND	ND	ND	ND	10
benzene	ND	ND	ND	ND	5.0
bromodichloromethane	ND	ND	ND	ND	5.0
bromoform	ND	ND	ND	ND	5.0
bromomethane	ND	ND	ND	ND	5.0
2-butanone (MEK)	ND	ND	ND	ND	10
carbon disulfide	ND	ND	ND	ND	10
carbon tetrachloride	ND	ND	ND	ND	5.0
chlorobenzene	ND	ND	ND	ND	5.0
chloroethane	ND	ND	ND	ND	5.0
chloroform	ND	ND	ND	ND	5.0
chloromethane	ND	ND	ND	ND	5.0
dibromochloromethane	ND	ND	ND	ND	5.0
1,1-dichloroethane	ND	ND	ND	ND	5.0
1,2-dichloroethane	ND	ND	ND	ND	5.0
1,1-dichloroethene	ND	ND	ND	ND	5.0
cis-1,2-dichloroethene	ND	ND	ND	ND	5.0
trans-1,2-dichloroethene	ND	ND	ND	ND	5.0
1,2-dichloropropane	ND	ND	ND	ND	5.0
cis-1,3-dichloropropene	ND	ND	ND	ND	5.0
trans-1,3-dichloropropene	ND	ND	ND	ND	5.0
ethlybenzene	ND	ND	ND	ND	5.0
2-hexanone	ND	ND	ND	ND	10
methylene chloride	ND	ND	ND	ND	5.0
4-methyl-2-pentanone (MIBK)	ND	ND	ND	ND	10
styrene	ND	ND	ND	ND	5.0
1,1,2,2-tetrachloroethane	ND	ND	ND	ND	5.0
tetrachloroethene	ND	ND	ND	ND	5.0
toluene	ND	ND	ND	ND	5.0
1,1,1-trichloroethane	ND	ND	ND	ND	5.0
1,1,2-trichloroethane	ND	ND	ND	ND	5.0
trichloroethene	ND	ND	ND	ND	5.0
vinyl chloride	ND	ND	ND	ND	5.0
m+p xylene	ND	ND	ND	ND	5.0
o-xylene	ND	ND	ND	ND	5.0
TOTAL VOC'S	ND	ND	ND	ND	
TPH	ND	ND	ND	ND	4.7
SOLUBLE ARSENIC	ND	ND	ND	ND	10
SOLUBLE LEAD	ND	ND	ND	ND	50

ND - Not Detected, above the laboratory detection limit

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-7
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

DEEP WELL SVOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)		MRL
	MW-10D	MW-12D	
Dilution	1.00	1.00	
acenapthene	ND	ND	9.4
acenapthylene	ND	ND	9.4
anthracene	ND	ND	9.4
benzo(a)anthracene	ND	ND	9.4
benzo(a)pyrene	ND	ND	9.4
benzo(b)fluoranthene	ND	ND	9.4
benzo(g,h,i)perylene	ND	ND	9.4
benzo(k)fluoranthene	ND	ND	9.4
benzyl alcohol	ND	ND	9.4
butly benzyl phthalate	ND	ND	9.4
di-n-butlyphthalate	ND	ND	9.4
carbazole	ND	ND	9.4
indeno(1,2,3-cd)pyrene	ND	ND	9.4
4-chloroaniline	ND	ND	9.4
bis(-2-chloroethoxy)methane	ND	ND	9.4
bis(2-chloroethyl)ether	ND	ND	9.4
2-chloronapthalene	ND	ND	9.4
2-chlorophenol	ND	ND	9.4
2,2'-oxybis(1-chloropropane)	ND	ND	9.4
chrysene	ND	ND	9.4
dibenzo(a,h)anthracene	ND	ND	9.4
dibenzofuran	ND	ND	9.4
1,2-dichlorobenzene	ND	ND	9.4
1,3-dichlorobenzene	ND	ND	9.4
1,4-dichlorobenzene	ND	ND	9.4
3,3'-dichlorobenzidine	ND	ND	9.4
2,4-dichlorophenol	ND	ND	9.4
diethylphthalate	ND	ND	9.4
dimethyl phthalate	ND	ND	9.4
2,4-dimethlyphenol	ND	ND	9.4
2,4-dinitrophenol	ND	ND	47
2,4-dinitrotoluene	ND	ND	9.4
2,6-dinitrotoluene	ND	ND	9.4
bis(2-ethylhexyl)phthalate	ND	ND	9.7
fluoranthene	ND	ND	9.4
fluorene	ND	ND	9.4
hexachlorobenzene	ND	ND	9.4
hexachlorobutadiene	ND	ND	9.4
hexachlorocyclopentadiene	ND	ND	9.4
hexachloroethane	ND	ND	9.4
isophorone	ND	ND	9.4
2-methlynapthalene	ND	ND	9.4
2-methylphenol	ND	ND	9.4
4,6-dinitro-2-methylphenol	ND	ND	47
4-chloro-3-methlyphenol	ND	ND	9.4
3+4-methylphenol	ND	ND	9.4

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-7
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

DEEP WELL SVOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)		MRL
	MW-10D	MW-12D	
Dilution	1.00	1.00	
napthalene	ND	ND	9.4
2-nitroaniline	ND	ND	47
3-nitroaniline	ND	ND	47
4-nitroaniline	ND	ND	47
nitrobenzene	ND	ND	9.4
2-nitrophenol	ND	ND	9.4
4-nitrophenol	ND	ND	47
n-nitrosodimethylamine	ND	ND	9.4
n-nitrosodiphenylamine	ND	ND	9.4
di-n-octyl phthalate	ND	ND	9.4
pentachlorophenol	ND	ND	47
phenanthrene	ND	ND	9.4
phenol	ND	ND	9.4
4-bromophenyl-phenylether	ND	ND	9.4
4-chlorophenyl-phenylether	ND	ND	9.4
n-nitroso-di-n-propylamine	ND	ND	9.4
pyrene	ND	ND	9.4
1,2,4-trichlorobenzene	ND	ND	9.4
2,4,5-trichlorophenol	ND	ND	9.4
2,4,6-trichlorophenol	ND	ND	9.4
TOTALS	ND	ND	

ND - Not Detected, above the laboratory detection limit

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 3-8
UNION ROAD
ANNUAL GROUNDWATER MONITORING
September 17-18, 2018

Unicorn Management Consultants, LLC

DEEP WELL VOCs

ANALYTE	ANALYTICAL RESULTS (ug/L)		MRL
	MW-10D	MW-12D	
Dilution	1.00	1.00	
acetone	180	ND	10
benzene	ND	ND	5.0
bromodichloromethane	ND	ND	5.0
bromoform	ND	ND	5.0
bromomethane	ND	ND	5.0
2-butanone (MEK)	ND	ND	10
carbon disulfide	ND	ND	10
carbon tetrachloride	ND	ND	5.0
chlorobenzene	ND	ND	5.0
chloroethane	ND	ND	5.0
chloroform	ND	ND	5.0
chloromethane	ND	ND	5.0
dibromochloromethane	ND	ND	5.0
1,1-dichloroethane	ND	ND	5.0
1,2-dichloroethane	ND	ND	5.0
1,1-dichloroethene	ND	ND	5.0
cis-1,2-dichloroethene	ND	ND	5.0
trans-1,2-dichloroethene	ND	ND	5.0
1,2-dichloropropane	ND	ND	5.0
cis-1,3-dichloropropene	ND	ND	5.0
trans-1,3-dichloropropene	ND	ND	5.0
ethlybenzene	ND	ND	5.0
2-hexanone	ND	ND	10
methylene chloride	ND	ND	5.0
4-methyl-2-pentanone (MIBK)	ND	ND	10
styrene	ND	ND	5.0
1,1,2,2-tetrachloroethane	ND	ND	5.0
tetrachloroethene	ND	ND	5.0
toluene	ND	ND	5.0
1,1,1-trichloroethane	ND	ND	5.0
1,1,2-trichloroethane	ND	ND	5.0
trichloroethene	ND	ND	5.0
vinyl chloride	ND	ND	5.0
m+p xylene	ND	ND	5.0
o-xylene	ND	ND	5.0
TOTAL VOC'S	180	ND	
TPH	ND	ND	4.7
SOLUBLE ARSENIC	ND	ND	10
SOLUBLE LEAD	ND	ND	50

ND - Not Detected, above the laboratory detection limit

4. GROUNDWATER ELEVATION MONITORING

The purpose of groundwater elevation monitoring is to determine the groundwater gradient of the three hydrogeologic units in and around the closure area. The three hydrogeologic units (layers) are:

- The overburden layer (shallow), which is above the clay layer;
- The till layer (medium), which is beneath the clay layer; and
- Bedrock (deep), which is beneath the till layer.

As stated in the NYSDEC approved Design Report, the frequency of groundwater elevation measurements are as follows:

- Monthly for the first six months after closure (Jan – June 1997);
- Quarterly thereafter until the end of year two (July 1997 – December 1998); and
- Annually (during the dry season) thereafter.

As stated previously, the sampling frequency, sampling parameters, and/or sampling of specific wells will be modified based on the results of previous sampling events (since the landfill closure) and with written approval from the NYSDEC. UMC does not recommend any changes to the groundwater elevation monitoring frequency at this time.

The objective for collecting groundwater elevation measurements is to gain knowledge of the groundwater flows and hydraulic gradients in and around the closure. This information is used to generate groundwater flow maps and demonstrate an inward gradient of groundwater around the closure.

On September 17-18, 2018, UMC measured the depth to groundwater in the monitoring wells. Table 4-1 summarizes the results of these measurements. The data from Table 4-1 were used to create Groundwater Contour Maps (Figures 4-1 through 4-3), which depict groundwater elevations and inferred groundwater flow directions in the three hydrogeologic units. Figure 4-1 shows an inward gradient of shallow (overburden) groundwater across the slurry wall and towards the dewatering trench at the east corner of the closure.

Figures 4-2 and 4-3 depict groundwater elevations in the medium and deep units. The inferred groundwater flow direction for the medium unit is toward the southeast. The inferred groundwater flow direction for the deep unit is easterly. However, since only two (2) monitoring wells intercept the deep unit, a groundwater contour map cannot be produced. Flow is generally toward the southeast and east respectfully and has not been affected by the placement of the landfill closure.

Prepared by: MP
Date: 1/2/19
Checked by: RTM
Date: 1/2/19

TABLE 4-1
UNION ROAD
GROUNDWATER MONITORING REPORT

Unicorn Management Consultants, LLC

GROUNDWATER WELL MEASUREMENTS
September 17-18, 2018

Well Number	Riser Elev.[1] (Feet)	Depth to Water (Feet)	Water Elev. (Feet)
10S	623.09	10.50	612.59
10M	622.50	13.15	609.35
10D	622.02	16.40	605.62
11S	622.74	16.25	606.49
11M	622.86	20.60	602.26
12S	622.62	21.40	601.22
12M	622.97	21.64	601.33
12D	621.18	18.72	602.46
13S	622.96	13.42	609.54
13M	621.66	13.57	608.09
14S [2]	621.61	12.16	609.45
15	624.67	16.30	608.37
16	624.51	15.28	609.23
17	624.44	20.77	603.67
18 [3]	624.67	Dry	<602.75
19	625.08	21.40	603.68
20 [4]	631.98	28.43	603.55
21	629.25	23.40	605.85
22 [4]	629.24	26.40	602.84
23S	607.45	7.94	599.51
RW1 [5]	623.76	NM	598.76

[1] Elevations were surveyed by Douglas C. Meyers P.L.S., P.C. on March 17, 1997.

[2] MW-14S was reinstalled and resurveyed on August 19, 1997.

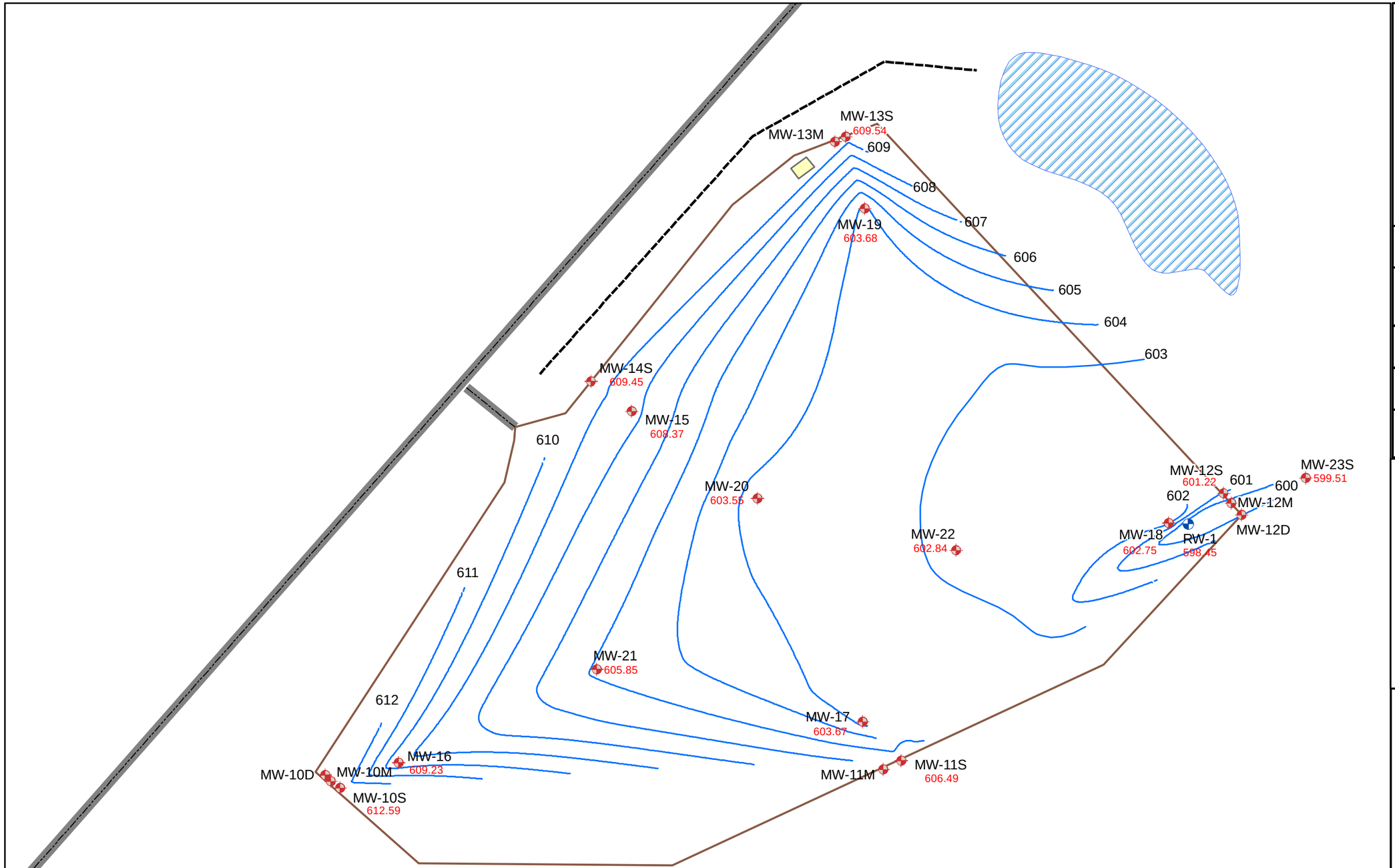
[3] MW-18 is dry; measuring tape stopped without indicating water.

[4] Depth measured to free product. Both MW-20 and MW-22 have free product on water surface; therefore water level measurement is conservatively assumed as the top of the oil layer (Because of the less dense oil, the actual water elevation would be lower).

[5] Groundwater measurement was not taken in RW1. The assumed elevation is at the pump inlet (598.76).

[6] NM: Not Measured

[7] All Elevations are referenced to Mean Sea Level



Union Road- Shallow Groundwater Elevation Contour Map for 9/18/18

Unicorn Management Consultants, LLC

52 Federal Road
Suite 2C
Danbury, CT
06810

(203) 205-9000

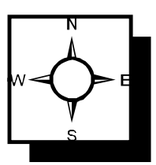
Project Name: Union Road

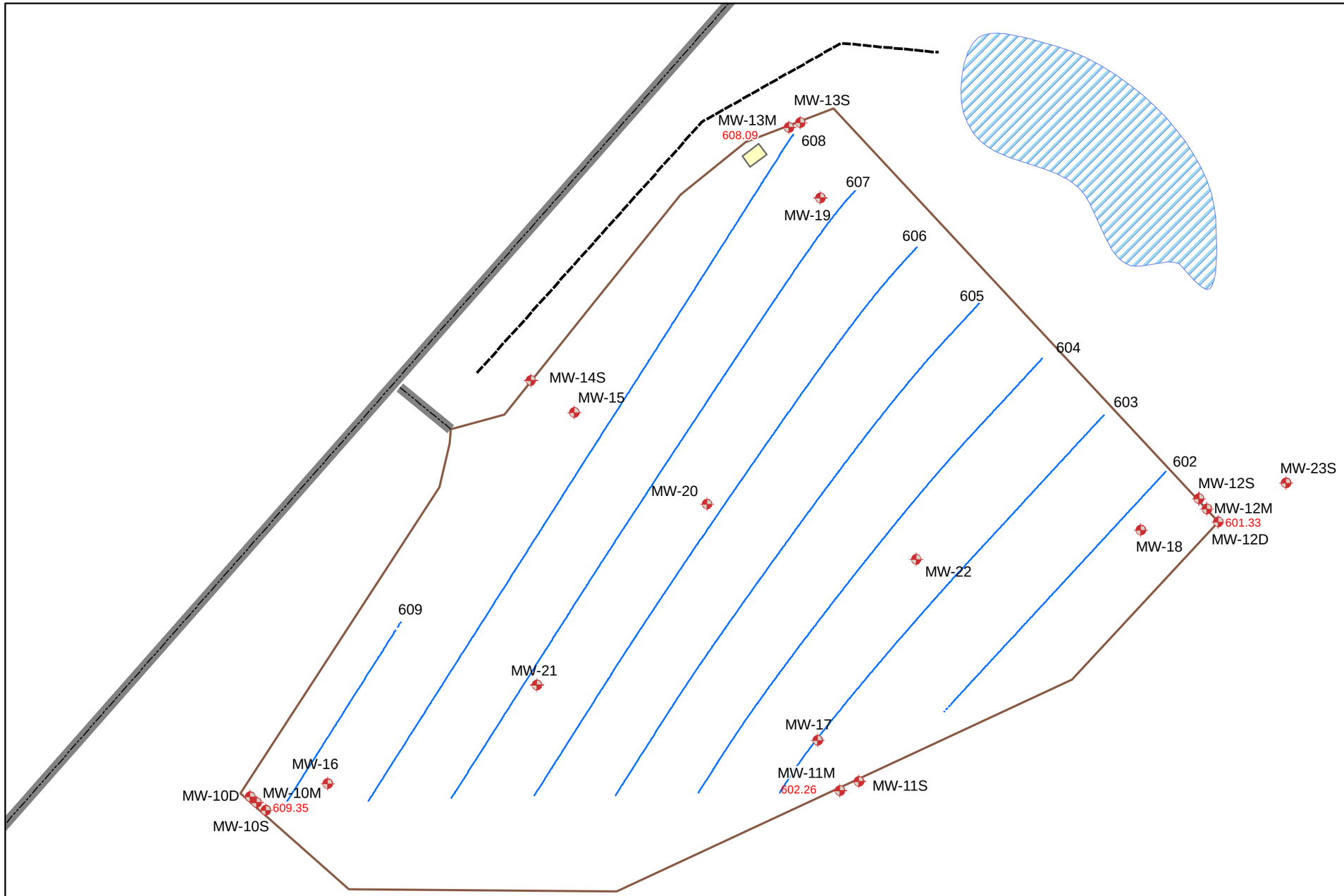
FIGURE 4-1

Author: RTM	**Checked By:** ----
Project #: 2011	**Created:** 10/10/2011
	Revised: 1/3/19
Scale: 1 in:100 ft	**File:** GWContour_S_2018

Legend

- Monitoring Wells
- Recovery Well
- Contour
- Road
- Ditch
- Fence
- Shed
- Pond





0 62.5 125 250 375 500 Feet

Union Road- Middle Groundwater Elevation Contour Map for 9/18/18

N W E S

Unicorn Management Consultants, LLC

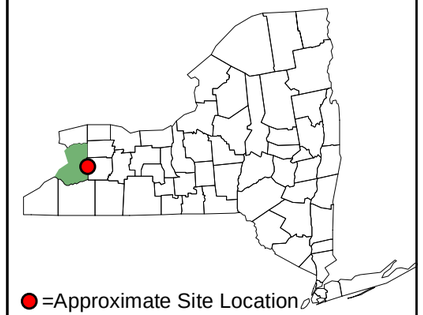
52 Federal Road
Suite 2C
Danbury, CT
06810

(203) 205-9000

Project Name: Union Road

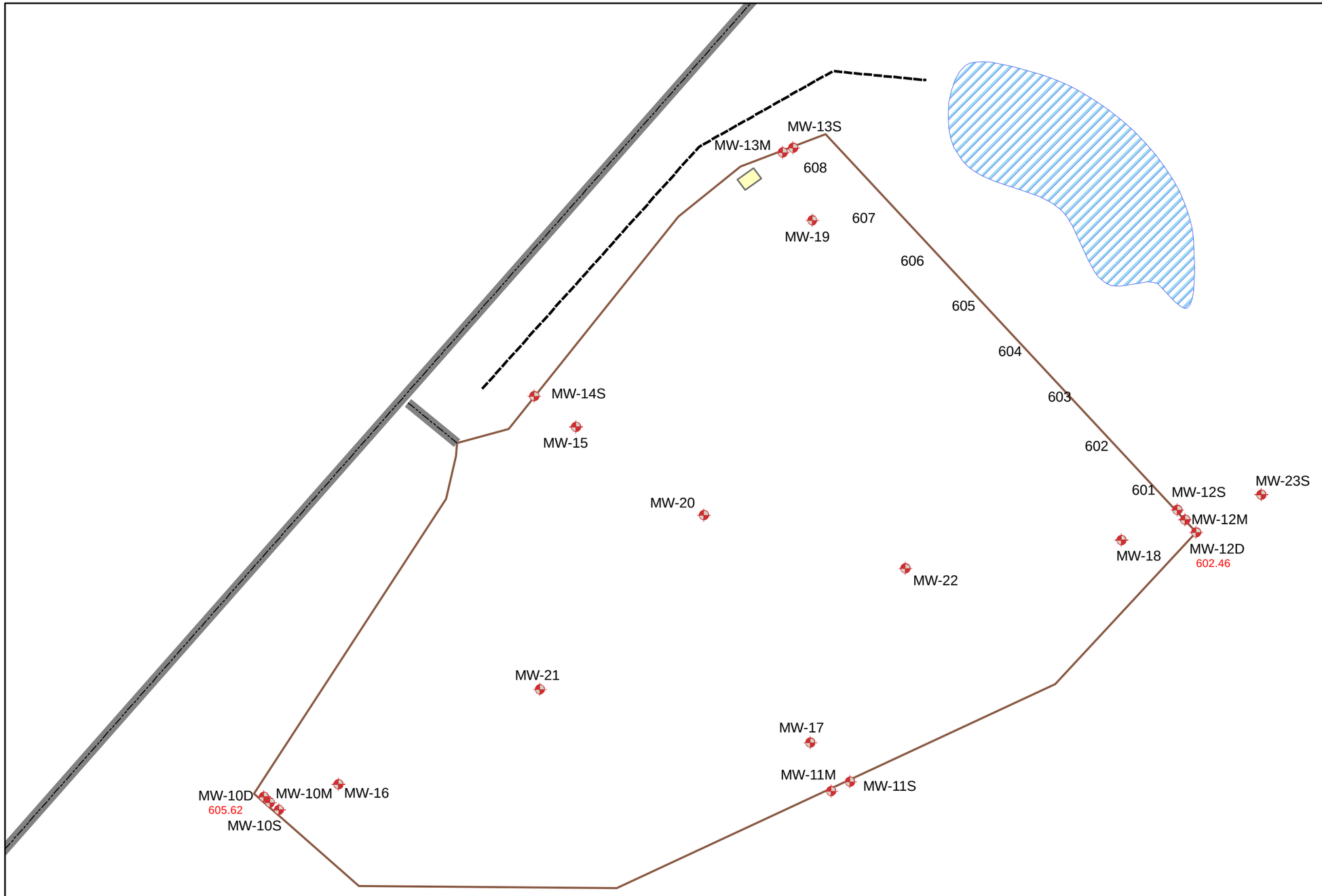
FIGURE 4-2

Author: RTM	**Checked By:** ----
Project #: 2011	**Created:** 10/10/2011
	Revised: 1/3/19
Scale: 1 in:100 ft	**File:** GWContour_M_2018



Legend

- Monitoring Wells
- Contour
- Road
- Ditch
- Fence
- Shed
- Pond



0 62.5 125 250 375 500 Feet

Union Road- Deep Groundwater Elevation Map for 9/18/18

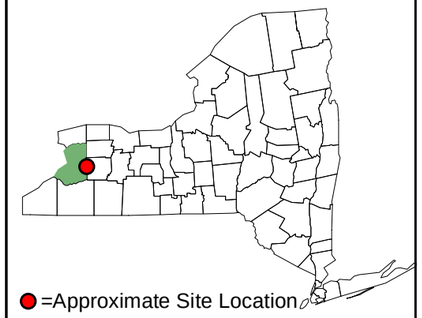
N W E S

Unicorn Management Consultants, LLC
52 Federal Road
Suite 2C
Danbury, CT
06810
(203) 205-9000

Project Name: Union Road

FIGURE 4-3

Author: RTM	**Checked By:** ----
Project #: 2011	**Created:** 10/10/2011
	Revised: 1/3/19
Scale: 1 in:100 ft	**File:** GWContour_D_2018



Legend

- Monitoring Wells
- Road
- Ditch
- Fence
- Shed
- Pond

5. SITE INSPECTION AND MAINTENANCE

UMC performed an annual site inspection on May 17, 2018. Mr. David Szymanski of the NYSDEC accompanied UMC on the inspection. The inspections consisted of walking the site and documenting the observations. Following is a summary of the inspection and maintenance activities that have occurred this year:

Roundhouse Area: The area is well vegetated and stabilized. During the inspection, several large holes were observed where the concrete of the former roundhouse has collapsed. These holes are large enough for a person to fall into. However, this land is not owned by APU. Numerous property owners adjacent to this area have encroached on it and are maintaining it with the rest of their properties. No action is needed.

Landfill Closure: There are no signs of significant erosion, no areas of distressed vegetation, and no evidence of any outbreak of any substance (slurry wall material or oil) on the landfill. Erie County Water Company was notified that a small quantity of contaminated soil is located northeast of the new wetland area and beneath the existing water pipe. UMC has an account with Dig Safely New York so when someone needs to dig in the area and calls Dig Safely, UMC will be notified. Except for periodic grass cutting, annual groundwater monitoring, and quarterly groundwater discharge monitoring required by the Buffalo Sewer Authority, no action is needed.

During the 2018 site inspection, no new groundhog tunneling was observed. UMC observed some minimal erosion due to a small number of animal burrows located on the sloped area between the landfill and the northern wetlands. These burrows were previously filled in with soil in April 2017. UMC continues to monitor the erosion and will replace eroded soils as necessary.

Some rutting attributed to vehicular traffic was observed along the southwestern side of the site near Slate Bottom Creek. This rutting does not affect the integrity of the capped landfill.

As requested by the NYSDEC, grass on the landfill area is mowed annually. Annual Mowing was performed on September 16, 2018.

Wetland Restoration: The wetlands north of the landfill closure, which was created during the remediation activities has continued to reestablish itself. The wetlands have completely revegetated itself and wildlife (e.g., ducks, geese and deer) have returned to the area.

Stream Restoration: A letter to the Town of Cheektowaga (Town) was sent by APU's Legal Counsel on October 7, 2005. This letter informs the Town that it must notify the NYSDEC prior to any activity in those creeks where the reno mattresses are located (see Figure 1-2).

The reno mattresses installed in 1995/1996 and repaired in 2006 on the creek channel have stabilized and vegetation has established itself through the reno mattresses. There is some sediment accumulation within the creek channels, but at some locations the reno mattress wire mesh was visible at the base of the channel.

At the time of the inspection on May 17, 2018, the gabion basket wing-walls were stable and the reno mattresses installed along the creek were in good condition. No other action is needed.

Downstream Area: Though some of the trees planted in this area have died, there are no signs of erosion in this area. Grass has established itself in this area. No action is needed.

UMC will continue to inspect and repair all closure areas to ensure that the closure remains intact and successful.

Dewatering System: On August 28-29, 2018, UMC received a series of notifications from the Site telemetry system indicating that the dewatering system was without power. UMC contacted the New York State Electic and Gas Corporation (NYSEG) to report the power outage. NYSEG confirmed the power outage in the area, then stated that the power had been restored to the area. Despite power being restored to the area, UMC could not remotely confirm that power had been restored to the dewatering system.

On September 1, 2018, UMC inspected the site , but did not observe any tripped circuit breakers, damage to the system control panels, or damage to the power lines and poles connecting the dewatering system shed to the power lines at Losson Road. UMC again contacted NYSEG requesting that the power lines between Losson Road and the Shed be inspected.

On September 4, 2018, NYSEG inspected the pole on Losson Road and found that the transformer at Losson Road was damaged. NYSEG serviced the transformer. Again UMC was unable to remotely confirm that power had been restored to the dewatering system.

On September 15, 2018, UMC again inspected the dewatering system and this time found that several circuit breakers had been tripped. UMC reset the circuit breakers and the system resumed operation.

The dewatering system is currently operating without issue.

6. CONCLUSION

The groundwater quality within the exterior wells and the groundwater elevation measurements during the 2018 annual monitoring event demonstrate that remedial activities at the Union Road Site are successful. The groundwater quality outside the landfill closure is better than groundwater quality in the interior of the closure.

No TPH, lead, or arsenic were detected in any of the groundwater samples collected during this year's annual sampling event. No VOCs were detected in the groundwater samples collected, except for acetone which was detected in MW-10D. Acetone was not detected in any other groundwater samples collected during this year's annual sampling event. No SVOCs were detected in the groundwater samples collected, except for bis(2-ethylhexyl)phthalate which was detected in MW-13S. Bis(2-ehtylhexyl)phthalate was not detected in any other groundwater samples collected during this year's annual sampling event. Both acetone and bis(2-ethylhexyl)phthalate are common laboratory artifacts and have not been observed consistently in groundwater samples collected on Site.

Validated analytical results for groundwater samples collected on Site as part of the Emerging Contaminate Sampling show no concentrations of 1,4-dioxane and only low concentrations of a limited number of PFAS. In particular, the combined concentrations of perfluorooctanoic acid (PFOA) and perfluoro-octanesulfonate (PFOS) observed in three wells on Site were well below the EPA Health Advisory Level of 70 ppt.

The groundwater elevation measurements indicate that an inward gradient of shallow groundwater flow has been established across the slurry wall. This inward gradient in combination with the groundwater quality outside the closure demonstrates that the contamination is contained within the slurry wall.

UMC will continue to monitor and evaluate the groundwater surrounding the landfill in accordance with the GMP. UMC believes, however, that a reduction of the sampling frequency on Site is appropriate and supported by the analytical data for groundwater samples collected on Site since 1997. UMC recommends that the sampling frequency on Site be reduced from annual to once every five years, and that the next annual sampling event be conducted in the early fall of 2023. This reduction of sampling frequency would only apply to the collection of groundwater samples and not the annual groundwater elevation monitoring or other O&M activities (inspections, mowing, etc.).

APPENDIX A

BORING LOGS AND WELL CONSTRUCTION DRAWINGS

TEST BORING LOG

BORING NO. 10-5

PROJECT NO. NAME Union Road - 2035-200 | LOCATION Buffalo NY

DRILLING CONTRACTOR/DRILLER MANM

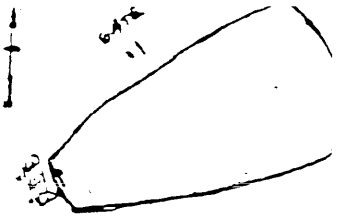
GEOLOGIST. OFFICE JOHN J ZACHER JR

DRILLING EQUIPMENT. METHOD HSA | SIZE TYPE OF BIT 6" HSA | SAMPLING METHOD SPLIT SPOON | START. FINISH

WELL INSTALLED? YES ☒ NO ☐ | CASING MAT./DIA. STAINLESS STEEL / 2" | SCREEN: TYPE SLOT MAT. STAINLESS LENGTH 10' DIA. 2" SLOT SIZE 0.02

ELEVATION OF: GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE (FT. ABOVE M.S.L.)

REMARKS: Hole to 21', Samples to 20'



DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC
				SAMPLING STARTS AT 4' B.G.			
5	4 4 6	21"	6 6 8 10	BRICK TO TANISH GREY CLAY W LITTLE ANGULAR ROCKS TO 1/2"	STIFF, DAMP		
	6 8 4	21"	6 45 20 8	0-3" BRICK TO TAN-GREY CLAY SOME ROCKS TO 3/4" 3-15" CINDERS W/SOME ROCKS. - DAMP 15-21" BROWN/TAN CLAY SOME SAND, LITTLE SILT TRACE ROCKS	STIFF DAMP SATURATED LITTLE H2O		
10	4 10	24"	8 5 4 10	TAN/LT BROWN CLAY	STIFF, LITTLE H2O		
	10 12	12"	2 3 4 3	TAN/LT BROWN CLAY	MED STIFF SOME H2O		
	12 14	16"	2 3 3 4	TAN/LT BROWN CLAY - TRACE SILTS	MED STIFF SOME H2O		
15	14 16	20"	2 2 3 4	GREY TO LT BROWN CLAY - LITTLE ROUNDED ROCKS	MED STIFF SOME H2O		
	16 18	18"	2 3 4 5	TAN TO LT BROWN CLAY	MED STIFF SOME H2O		
	18 20	20"	2 3 3 3	GREYISH BROWN CLAY TRACE ORGANICS.	MED STIFF SOME H2O		
				END of Boring 21' BGS - ~~20~~ 20'			

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

TEST BORING LOG



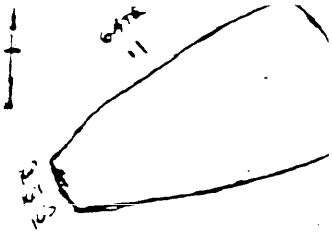
BORING NO. 10-M	
PROJECT NO. NAME Union Road - 2035-200	LOCATION Buffalo NY
DRILLING CONTRACTOR/DRILLER Manm	
GEOLOGIST. OFFICE John J Zacher JR	
DRILLING EQUIPMENT. METHOD HSA	SIZE TYPE OF BIT 6" HSA / SAMPLING METHOD Split Spoon / START. FINISH D: 1/3/97
WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA. Stainless Steel / 2" / SCREEN: TYPE Slot MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE 0.02
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE / TOP OF WELL CASING / TOP & BOTTOM SCREEN / GW SURFACE / DATE
REMARKS:	

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC
				SAMPLING STARTS 4' BG.			
5	4	28"	6 6 9 6	BLK TO TAN/GREY CLAY W/ LITTLE ROCKS TO 4"	STIFF, DAMP		
	6			0-7" BLACK TO TAN/GREY CLAY SOME ROCKS	STIFF DAMP		
	6	22"	6 8 5 6	7-14" CINDERS	DRY		
	8		12	14-22' BROWN TAN CLAY LITTLE ROCKS	MED STIFF, LITTLE H2O		Cont
	3		7 8 7 8	TAN/LT BROWN CLAY	STIFF, LITTLE H2O		
10	10	24"					
	20	15"	7 8 13 15	TAN/LT BROWN CLAY	MED STIFF SOME H2O		
	12		5				
	12	15"	3 4 5 5	TAN/LT BROWN CLAY	MED STIFF SOME H2O		
	14						
15	14	20"	3 4 4 5	TAN/LT BROWN CLAY, LITTLE GREY LITTLE ROUND ROCKS	MED STIFF SOME H2O		
	16						
	16	19"	3 3 3 3	TAN TO LT BROWN CLAY	MED STIFF SOME H2O		Ben
	18						
	18	20"	3 3 3 3	GREYISH BROWN CLAY, SOME ORGANICS	MED STIFF SOME H2O		+ Sp
	20						

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

TEST BORING LOG



BORING NO. 10M

PROJECT NO. NAME Woodlawn - 2035-200 | LOCATION BUFFALO NY

DRILLING CONTRACTOR/DRILLER MAHM

GEOLOGIST. OFFICE JOHN J ZACHER JR

DRILLING EQUIPMENT. METHOD	SIZE TYPE OF BIT	SAMPLING METHOD	START. FINISH
HSA	6" HSA	SPLIT SPOON	1/13/97

WELL INSTALLED?	CASING MAT./DIA.	SCREEN:				
YES ☒ NO ☐	STAINLESS STEEL/2"	TYPE SLOT	MAT. STAINLESS	LENGTH 10'	DIA. 2"	SLOT SIZE 0.02

ELEVATION OF: GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN ON SURFACE DATE (FT. ABOVE M.S.L.)

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC
20			1	DARK GREY w/ SOME ORGANICS LITTLE	MED STIFF		
21		21	3		SOME H2O		
22			2				
22			4	GREY & SOME BROWN CLAYS	MED STIFF		
23		21	5		LITTLE H2O		
24			4				
24			2	GREY CLAY	SOFT,		
25		20	3		WET		
26			3				
26			1	TOP 14" GREY CLAY	SOFT WET		
27		21	2				
28			2	BOT 7" GREY/LT BROWN CLAY, SOME ROCK FRAGS, LITTLE SAND	WET, NON COHESIVE		
28			10				
29			12	LT BROWN SILTS W/SOME SAND 0-6"	WET, LOOSE		
30		17"	4	LT BROWN TAN CLAY, SOME ROCKS 6-17" 1/2-1"	SOFT-WET		
30			4				
30			2				

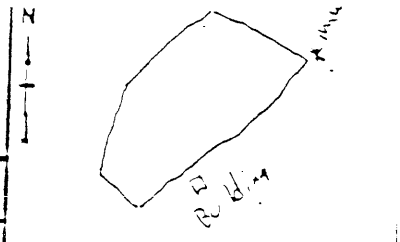
BOB @ 31' Bgl

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG



BORING NO. MW-10D

PROJECT NO.. NAME: Union Road | LOCATION: Buffalo NY

DRILLING CONTRACTOR/ DRILLER: Maxim (Dick Miller, Ron Brown)

GEOLOGIST. OFFICE: James Dann

DRILLING EQUIPMENT. METHOD	SIZE TYPE OF BIT	SAMPLING METHOD	START. FINISH DATE
Air Rotary / HSA	8¼" HSA / 7⅞"	Split Spoon	12/6 - 12/7/96

WELL INSTALLED?	CASING MAT./ DIA.	SCREEN: TYPE	MAT.	LENGTH	DIA.	SLOT SIZE
YES ☒ NO ☐	Stainless / 2"	Slot	Stainless	10'	2"	.020

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE | TOP OF WELL CASING | TOP & BOTTOM SCREEN | GW SURFACE | DATE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
				Sampling started @ 4' BG.			
5		21"	5 6 9 10	~~Blk to tan/Grey clay w/ Trace angular~~ Fragmented Rock upto 1" in size	~~Stiff,~~ Damp		
		22"	7 30 18 11	Top 8" Blk, tan/grey Clay w/ Trace angular Fragmented Rock next 6" Blk Cinder like material w/ ~~same~~ w/ angular Fragmented Rock, 1" in size Bottom 6" Brown/Tan Sand/Silty Clay w/ 10%-20% Rx Frag. 2"	Stiff, Damp Dry Not Cohesive, little H_2O		
10		24"	7 8 10 9	Tan to Lt Brown clay, No Rocks	m. stiffness w/ some H_2O		
		16"	2 2 3 3	Tan to lt Brown clay w/o Rocks	m. Stiffness w/ some H_2O		
15		15"	1 3 3 5	tan to lt Brown Clay w/o Rocks Possibly Some Silts	m. stiffness w/ some H_2O		
		20"	2 2 3 4	Grey to lt Brown Mottled clay w/ trace rounded Rocks, ¼ - ⅛" diameter.	m. stiffness w/ Some H_2O		
		18"	1 3 4 6	Tan to lt Brown Clay w/o Rxs	m. stiffness w/ Some H_2O		
		21"	2 2 3 4	Grayish/Brown/Blk clay w/ 10-20% organics	m. stiffness w/ some H_2O		

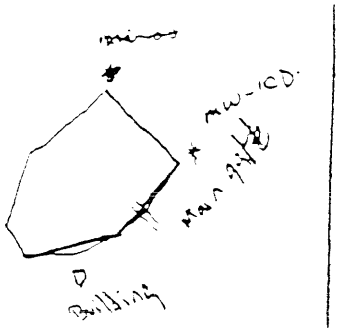
Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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C 01 /

TEST BORING LOG



BORING NO. MW- 10D

PROJECT NO.. NAME: Union Road 2035-200

LOCATION: Buffalo NY

DRILLING CONTRACTOR/ DRILLER: Maxim (Dick Miller, Ron Brown)

GEOLOGIST, OFFICE: James Doan

DRILLING EQUIPMENT. METHOD	SIZE TYPE OF BIT	SAMPLING METHOD	START. FINISH DATE
HSA / Air Rotary	HSA 8 1/4" / 7 7/8"	Split SPOON	

WELL INSTALLED?	CASING MAT.. DIA.	SCREEN: TYPE	MAT.	LENGTH	DIA.	SLOT SIZE
YES ☒ NO ☐	Stainless Steel / 2"	SLOT	Stainless	10'	2"	.020

ELEVATION OF: GROUND SURFACE | TOP OF WELL CASING | TOP & BOTTOM SCREEN | GW SURFACE | DATE
(FT. ABOVE M.S.L.)

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
20-22'		21"	1 3 5 8	Greyish/Blk/Dk Grey Clays w/ Traces organics	m. stiffness w/ Some H_2O		
22-24'		20"	3 5 8 9	Grey + Brown Clays	m. stiffness w/ Trace H_2O		
24-26'		0"	2 2 3 2	The inside of the spoon was v. wet, No Basket.			
26-28'		22"	1 1 3 17	Top 16" Grey clays mid 4" Grey clays, w/ trace organics Bottom 2" Grey/H Brown/ Clays w/ some Frag. Rks, Sands	soft wet soft wet Not cohesive wet		
28-30'		17"	3 3 3 3	lt Brown/Tan clays w/ silts 20% Rock Frags. 1/4" - 2"	Sof wet		
28-30'		18"	6 2 2 2	Top 3" Sands w/ lt Brown/Tan silts + clays Bottom 15" lt Brown / Tan Clays w/ silts, 20% Rock Fragments 1/4" - 2" in size	Not Cohesive wet Soft Wet		
32-34'		4"	2 3"/50	lt Brown/Tan clays w/ silts, 20% Rx's Frags 1/4" - 2" in size	Soft Wet		
				Bed Rock.			
				@ 38' BG Bottom of Protectiv casing	Bottem of The Protective Casing		

Proportions Used. Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

CS = Continuous Soil Core

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TEST BORING LOG



BORING NO. MW-10D

PROJECT NO.. NAME: 2035-200 Union Road

LOCATION: Buffalo NY

DRILLING CONTRACTOR/ DRILLER: Maxim

GEOLOGIST, OFFICE: James Doan

DRILLING EQUIPMENT. METHOD: HSA

SIZE. TYPE OF BIT:

SAMPLING METHOD: Split SPOON

START. FINISH DATE:

WELL INSTALLED? YES ☑ NO ☐

CASING MAT.. DIA.: Stainless Steel 2"

SCREEN: TYPE SLOT MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE .020

ELEVATION OF: GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE
(FT. ABOVE M.S.L.)

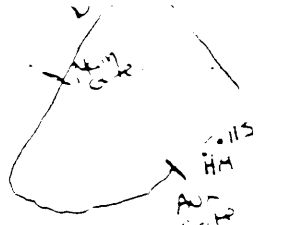
REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
5				@ 45 the water bearing zone The hole has collapsed The Rock isn't very consolidated	B.O.B 45.5' BG		
10							
15							

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Samples: ST = Shelby Tube, CSC = Continuous Soil Core

TEST BORING LOG



BORING NO. MW-115	
PROJECT NO. NAME Niagara 2035-200	LOCATION Buffalo NY
DRILLING CONTRACTOR/DRILLER MAXIM	
GEOLOGIST. OFFICE JOHN J ZAHER JR	
DRILLING EQUIPMENT. METHOD HSA	SIZE TYPE OF BIT 6" HSA / SAMPLING METHOD SPLIT SPOON / START. FINISH DAT 1/2/97
WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA. STAINLESS STEEL 2" / SCREEN: TYPE SLOT MAT. STAINLESS LENGTH 10' DIA. 2" SLOT SIZE 0.020
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE / TOP OF WELL CASING / TOP & BOTTOM SCREEN / GW SURFACE / DATE
REMARKS:	

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LOG
				SAMPLING STARTED AT 4' B.G.			
	4'		10	BROWN/DRK BROWN SILTS & CLAYS	STIFF/		
5		15"	9	TRACE RX FRAGMENTS < 1/8"	DRY - LITTLE TO H2O		Conc
	6'		10				
	6'		4	BROWN/DRK BROWN SILTS AND CLAYS	STIFF		
		15"	9	NO RXS	LITTLE TO H2O		
	8'		12	FILL			
	8'		11	BROWN/DRK BROWN CLAYS	STIFF		
		10"	12	TRACE RX FRAGS	LITTLE TO H2O		Bent
	10'		12	FILL			
10	10'		4	TOP 9" DRK BROWN CLAYS W/SOME ORGANICS	STIFF - LITTLE H2O		
		13"	6	BOTTOM 4" - GREY SILTS/CLAYS AND ORGANICS	~~SOFT~~ STIFF - LITTLE H2O MED		
	12'		8				Sand
	12'		8	GREY CLAYS LITTLE ORGANICS	MEDIUM STIFFNESS SOME H2O		
		20"	9				
	14'		10				
	14'		13	TOP 6" - GREY CLAYS, LITTLE ORGANICS	MED STIFFNESS WISOME H2O		Bent
			9				
15		15"	11				
	16'		15	BOTTOM 12" - REDDISH BROWN CLAY NO RXS ORGANICS	STILL - LITTLE TO NO H2O		
	16'		19	REDDISH BROWN CLAYS W/GREY LAYERS	STIFF - LITTLE		
		21"	20	GREY LAYERS MAY BE EVIDENCE OF VARVED CLAYS	TO NO H2O		
	18'		22				
	18'		5	REDDISH BROWN CLAYS W/GREY LAYERS	M. STIFFNESS		
		12"	5	GREY LAYERS MAY BE EVIDENCE OF VARVED CLAYS	DAMP		
	20'		21				
			4				

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

TEST BORING LOG

BORING NO. MW-11S

PROJECT NO. NAME: Niagara Road - 2035-200 | LOCATION: BUFFALO NY

DRILLING CONTRACTOR/DRILLER: MARIM

GEOLOGIST. OFFICE: John J Zacher Jr

DRILLING EQUIPMENT. METHOD	SIZE TYPE OF BIT	SAMPLING METHOD	START. FINISH DATE
HSA	6" HSA	SPLIT SPOON	1/2/97

WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA.	SCREEN: TYPE	MAT.	LENGTH	DIA.	SLOT SIZE
	SS 2"	SLOT	STAINLESS	10'	2"	0.020

ELEVATION OF: GROUND SURFACE ____ TOP OF WELL CASING ____ TOP & BOTTOM SCREEN ____ GW SURFACE ____ DATE ____
(FT. ABOVE M.S.L.)

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY LOG
20	20	24"	3 5 6	BROWN / DRK BROWN CLAYS, NO ZAS	STIFF LITTLE - NO H_2O		
22	22	---	5 2	BROWN WISOME GREY CLAYS	STIFF TRACE H_2O		
	22	23"	4 5	BoBe 24' Bgl			
	24	-	4				
5							
10							
15							

Proportions Used: Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

Sampling Abbreviations: SS = Split Spoon. ST = Shelby Tube. CSC = Continuous Soil Core

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TEST BORING LOG

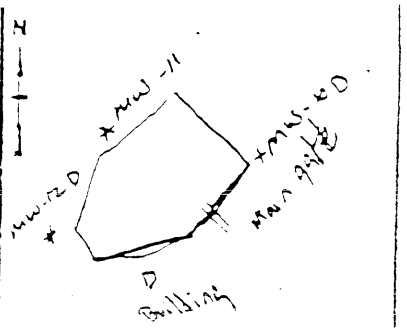
BORING NO. MW-11M

PROJECT NO.. NAME Union Road 2035-200

LOCATION Buffalo NY

DRILLING CONTRACTOR/ DRILLER Maxim

GEOLOGIST, OFFICE James Dean



DRILLING EQUIPMENT. METHOD	SIZE. TYPE OF BIT	SAMPLING METHOD	START. FINISH. DATE
HSA		Split Spoon	12/18 - 12/19/96

WELL INSTALLED? YES ☑ NO ☐ | CASING MAT./ DIA. Stainless Steel / 2" | SCREEN: TYPE SLOT MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE .020

ELEVATION OF: GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE
(FT. ABOVE M.S.L.)

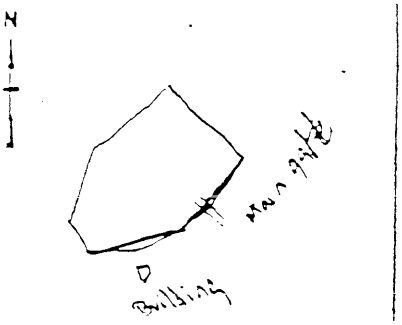
REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
				Sampling started @ 4' BG			
4'			10				
5 6'		14"	8 10 10	Brown/DRK Brown silts + clays w/ Trace amounts of Rx Fragments. less than ½"	Stiff little to No H_2O		
6'			8	Brown/Drk Brown silts + clays, w/o Rxs	Stiff little to No H_2O		
8'		13"	12 12 14	Most likely Fill			
8'				Drk Brown clays w/ Trace amounts of Rx frags.	Stiff little to No H_2O		
		4"		most liky Fill			
10 10'				Top 8" Drk Brown clays w/ some Organics	Stiff little to No H_2O		
10'		10"	3 4 5	Bottom 2" Grey silts + clays w/ some Organics	~~little to No H_2O~~ soft w/ some H_2O		
12'			9	Top 4" discarded looked as if they fell into hole			
12'		18"	5 18		m. Stiffness Some H_2O		
14'			15	Bottom 14" Grey clays w/ Some organics + Trace ashes or soot.			
14'			7		Stiff		
15		19"	11 11	Reddish Brown clays w/ No Rxs or organics	little to No H_2O		
16'			20				
16'			19		Stiff		
		24"	25 18	Reddish Brown clays w/ Grey layers evidence of The grey layers may be varbed clays.	little to No H_2O		
18'			20		m. Stiffness		
18'			6 3	Reddish Brown clays w/ Grey layers			
			4	The Grey layers may be evedence of Varbed clays	Damn		
20			5				

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

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TEST BORING LOG



BORING NO. MW-11M

PROJECT NO.. NAME: Union Road 2035-200 | LOCATION: Buffalo NY

DRILLING CONTRACTOR/ DRILLER: Maxim

GEOLOGIST OFFICE: James Dean

DRILLING EQUIPMENT. METHOD: HSA | SIZE. TYPE OF BIT | SAMPLING METHOD: Split Spoon | START. FINISH DATE

WELL INSTALLED? YES ☑ NO ☐ | CASING MAT./ DIA.: Stainless Steel/ 2" | SCREEN: TYPE SLOT MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE .020 | DATE

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE | TOP OF WELL CASING | TOP & BOTTOM SCREEN | GW SURFACE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
20'			6	- Reddish brown varbed clays w/ Red, Grey, and dark Brown layers.	Soft Wet		
22'		24"	3 3 3				
22'					Soft		
24'		12"	3 2 4	Reddish/ Brown clays	Wet		
24			1 1 3	Reddish Brown (Fleshy Color) clays ¼" - ½" Rx frags. w/ Rounded edges.	Soft Wet		
26'		18"					
26'			3 4 5	Reddish Brown (Fleshy Color) clays ¼" - 2" Rx frags w/ rounded edges.	Soft Wet		
28'		18					
28'			2 2 2	Reddish Brown (Fleshy Color) clays + 40%-50% Rock fragments w/ some rounded edges	Soft Wet		
30'		13"					
30'			5 6 7	- Mostly Rocks 70% w/ Some Reddish Brown (Fleshy color) clays	Soft Wet		
32'		4"					
32'			3 3 3	- Reddish Brown (Flesh color) clays + silts - Some Sands 20-30% rock mostly smoothed pebbles ¼" - 1"	Soft Wet		
34'		14"					
34'			1 8 15	Reddish Brown/ Grey silts + clays 10% Rocks + Sands	The sample Ranged from Soft → hard Wet		
36'		13"	22		Soft → Hard		
36			24	Reddish Brown/ Grey silts, clays, Sands + Rocks.	Wet		
35		5"	54/2"				
				Bed Rock @ 39' BG			

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

SS = Split Spoon Type, CSC = Continuous Soil Core

TEST BORING LOG

BORING NO. 17-S

PROJECT NO. NAME Woodlawn - 2035-200 | LOCATION BUFFALO NY

DRILLING CONTRACTOR/ DRILLER MANM

GEOLOGIST. OFFICE JOHN J ZACHER JR

DRILLING EQUIPMENT. METHOD	SIZE TYPE OF BIT	SAMPLING METHOD	START. FINISH DA
HSA	6" 8" & HSA	SPLIT SPOON	1-2-97

WELL INSTALLED?	CASING MAT./DIA.	SCREEN:				
YES ☒ NO ☐	STAINLESS STEEL/2"	TYPE SLOT	MAT. STAINLESS	LENGTH 10'	DIA. 2"	SLOT SIZE 0.020

ELEVATION OF: GROUND SURFACE | TOP OF WELL CASING | TOP & BOTTOM SCREEN | GW SURFACE | DATE
(FT. ABOVE M.S.L.)

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LOG
				SAMPLING START AT 15' BG			
15	15'	24"	6 9 9 7 6 5 5	BROWN CLAYS - FILL	STIFF - LITTLE TO SOME H2O		
	17						
	17	24"		BROWN CLAYS FILL	STIFF - TRACE H2O		
	19		5 6 6 7 8 9				
20	21	23		BROWN TO DARK BROWN CLAYS	STIFF LITTLE H2O		
	21						
	23	24"	4 5 5 5 5 5	BROWN TO TAN CLAY W/ LITTLE GREY	STIFF SOME TO LITTLE H2O		
	23						
	25	24"	5 5 6 6	BROWN - GREY CLAY 0-12 12-24	SOFT / MOIST		
25				BB 25'			

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

TEST BORING LOG

BORING NO. 12-M

PROJECT NO. NAME (Woodlawn - 2035-200) | LOCATION BUFFALO NY

DRILLING CONTRACTOR/ DRILLER MANM

GEOLOGIST. OFFICE JOHN J ZACHER JR

DRILLING EQUIPMENT. METHOD	SIZE TYPE OF BIT	SAMPLING METHOD	START. FINISH DA
HSA	6" ~~4"~~ 6" HSA	SPLIT SPOON	12/31/96

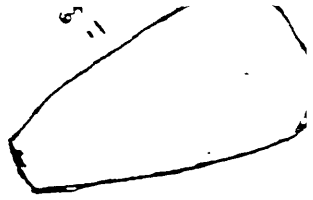
WELL INSTALLED?	CASING MAT./DIA.	SCREEN:				
YES ☒ NO ☐	STAINLESS STEEL / 2"	TYPE SLOT	MAT. STAINLESS	LENGTH 10'	DIA. 2"	SLOT SIZE 0.020

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE | TOP OF WELL CASING | TOP & BOTTOM SCREEN | GW SURFACE | DATE

REMARKS: NO SAMPLES 0-20' FILL MATERIAL, CUTTINGS BROWN DRY SAMPLE 40-42 - NO RECOVERY REFUSAL 42.5'

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS
20			9	BROWN/DARK BROWN CLAYS	STIFF - LITTLE TO NO H_2O
22		22"	5 6 8		
22			4	BROWN TO TAN CLAY SOME GREY	STIFF SOME TO TRACE H_2O
24		24"	4 4 4		
24			2	GREY TO RED BROWN CLAY, TRACE ROCKS	SOFT, MOIST
26		24"	1 1 1		
26			4	RED BROWN CLAY	STIFF, LITTLE H_2O
28		19"	7 7 8		
28			2	LT BROWN/TAN CLAY, TRACE SILTS, LITTLE ROCKS (1/8")	SOFT, DAMP
30		18	4 2 4		
30			2	LT BROWN/TAN CLAY - LITTLE GREY, LITTLE ROCKS (1/8 - 1/4)	SOFT DAMP
32		16	2 3 4		
32			3	TOP 12" - LT BROWN/TAN CLAY - SOME GREYS, LITTLE ROCKS	SOFT DAMP, SOME H_2O
34		18	8 12 10	BC - 6" - GREY CLAY AND SAND, NO COHESIVE STRENGTH	WET
34			1	GREY CLAY AND SAND	NO STRENGTH, WET
36		24"	2 2 1		
36			1	GREY CLAY AND SAND 0-15'	NO STRENGTH
38		20"	1 1 1	15-20' - GREY CLAY ~~AND~~ AND ROCKS 1/4 - 1/2"	WET
38			7	MOSTLY ROCK - W/SOME GREY/TAN CLAY	WET, STIFF
HC		6"	50/3"		

WELL CONSTR. GRAPHIC LOG



Bent 24'

31.5'

41.5'

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

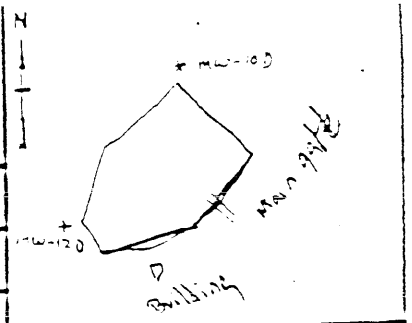
Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

Weather Bad Rain

BOB - 42.5

44 SHELTER ROCK ROAD
DANBURY, CT 06810
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TEST BORING LOG



BORING NO. MW-120

LOCATION Buffalo NY

PROJECT NO.. NAME Union Road 2035-200

DRILLING CONTRACTOR/ DRILLER Maxim (Ron Brown, Dick Miller)

GEOLOGIST, OFFICE James Dean

START, FINISH DATE 12/12-12/16/96

DRILLING EQUIPMENT, METHOD HSA / Air Rotary

SIZE, TYPE OF BIT 8¼" HSA / 7⅞" Air / 5⅞" SAMPLING METHOD Split Spoon

WELL INSTALLED? YES ☑ NO ☐

CASING MAT., DIA. Stainless Steel / 2"

SCREEN: TYPE SLOT MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE .020

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE

REMARKS:

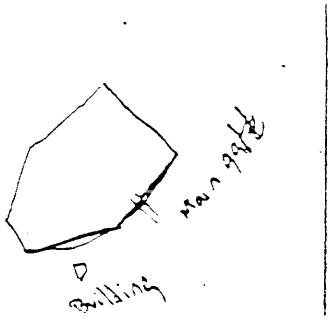
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
				No samples taken until 20' BG. The material is all Fill untill then.			
				Grout Seal			
5							
10							
15							

...-10%, Little = 10-20%, Some = 20-35%, And = 35-50%
...SC = Continuous Soil Core

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< 01 >

TEST BORING LOG



BORING NO. MW-125

PROJECT NO.. NAME Union Road 2035-200

LOCATION Buffalo NY

DRILLING CONTRACTOR/ DRILLER Maxim

GEOLOGIST. OFFICE James Doar

DRILLING EQUIPMENT. METHOD HSA

SIZE TYPE OF BIT

SAMPLING METHOD Split SPOON

START. FINISH DATE

WELL INSTALLED? YES ☑ NO ☐ | CASING MAT.. DIA. Stainless Steel 2" | SCREEN: TYPE SLOT MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE .020

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
20'			3	Brown to Drk Brown Clays, No Rxs	Stiff little to No H_2O		
		24"	5				
22'			6				
			8				
22'			3	Brown/Tan/w/ some Greys	Stiff w/ trace H_2O		
		24"	5				
			4				
24'			4		Soft Damp		
5			1	Greyish/ Red Brown Clays, Trace Rx Fragments Y8" - Y4"			
24'		24"	1				
26'			1				
26'			4	Top 6" Red Brown Clay, No Rxs	Stiff		
		17"	6		Soft w/		
			14	Bottom 11" lt Brown/Tan (Fleshy color) Clays, Trace silts & some Rx Fragments	Some H_2O		
28'			20		Soft		
28'			1	lt Brown/Tan (Fleshy color) clays, Trace silts &	Some H_2O		
		15"	4	Some rock fragments. Y8" - Y4"			
			2		Soft		
30'			3	lt Brown/Tan (Flesh Color) clays, Trace silts &	Some H_2O		
10 D'			1	some Rock fragments			
		14"	3		Soft, Damp		
32'			4	Top 12" lt Brown/Tan, w/ some Grey clays some Rx fragments.			
32'			1		No Cohesive Strength Wet to Damp		
		24"	8	lst 16 Brown/Tan (Flesh Color) clays & silts			
34'			16	Bottom 8" Grey 50% Sands No Rxs			
			50				
				Sample skipped the augers into hard unconsolidated Rocks.			
15							
					Soft		
				lt Brown/Tan/Grey Clays w/ silts & Angular Rock Fragments 40-50% Y8" - 1"			
37'		5/6"	5"		Wet		
39'							

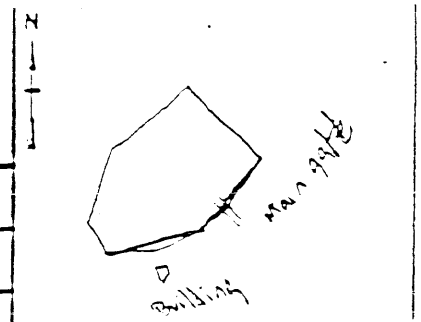
Abbreviations Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

CSC = Continuous Soil Core

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SOT 5

TEST BORING LOG



BORING NO. MW-12D

PROJECT NO.. NAME Union Road 2035-200

LOCATION Buffalo NY

DRILLING CONTRACTOR/ DRILLER Maxim

GEOLOGIST, OFFICE James Doan

DRILLING EQUIPMENT. METHOD HSA

SIZE. TYPE OF BIT

SAMPLING METHOD Split Spoon

START. FINISH DATE

WELL INSTALLED? YES ☒ NO ☐

CASING MAT.. DIA. Stainless Steel 2"

SCREEN: TYPE SLOT MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE .020

ELEVATION OF: GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE
FT. ABOVE M.S.L.)

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOG
40-42'	2'	50/2"		Mostly Rx ¼"-2" in size w/ a matrix of lt Brown/Tan/Grey Clays + silts -Bed Rock @ -41' BG	Wet Stiff		
					Cement Seal		
5				Bottom of Protective casing @ 46' BG	Bentonite seal		
				Stainless Steal Riser			
10				Stainless steal Screen			
15				Sand			
				Bottom of hole 61.5' BG			

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

61.5'

TEST BORING LOG



BORING NO. MW-135	
PROJECT NO. NAME UNION ROAD 2035-200	LOCATION BUFFALO NY
DRILLING CONTRACTOR/DRILLER MAKIM	
GEOLOGIST. OFFICE JOHN J ZACHER JR	
DRILLING EQUIPMENT. METHOD HSA	SIZE TYPE OF BIT 6" HSA / SAMPLING METHOD SPLIT SPOON / START. FINISH DATE 12/20/96
WELL INSTALLED? YES ☒ NO ☐ / CASING MAT./DIA. STAINLESS STEEL / 2"	SCREEN: TYPE SLOT MAT. STAINLESS LENGTH 10' DIA. 2" SLOT SIZE 0.020
ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE	TOP OF WELL CASING / TOP & BOTTOM SCREEN / GW SURFACE / DATE
REMARKS: BORING TO 21', LAST 1' NOT SPLIT SPOONED WELL ~~RISER~~ RISER AT 20.5' B.G.	

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY LOG
				SAMPLING STARTED AT 4' B.G.			
4			15	DARK BROWN CLAYS	STIFF		
			10	NO ROCKS	LITTLE NO H2O		
5		14"	15	SOME CINDERS			
6'			12				
6			12	DARK BROWN CLAYS	STIFF		
		12	10	SOME CINDERS	TRACE H2O		
8'			10				
8'			12	5' → DARK BROWN CLAYS, LITTLE CINDERS	STIFF, LITTLE H2O		
		10"	11				
10'			13	BOTS" - BLACK SANDS/CINDERS NOT NATIVE	DRY		
10			8	TOP 3" - BLACK SAND CINDERS	DRY		
		11'	5				
			10	BOTTOM 3" - WOOD SOME CREOSOTE ODOR			
12			7				
12			8	BLACK SAND / CINDERS	WET		
		10"	3				
14			6				
14			7	BLACK SAND / CINDERS	WET		
15		12"	7	SOME BRICK AND WOOD			
16			6				
16			5	BLACK SAND CINDERS W/SOME RED CLAY	DAMP		
		7"	4				
18			4		WET		
18			3	TOP 6" BLACK CINDERS	MED STIFF		
		21"	5	6"-15" RED CLAY, NO ROCKS	SOME H2O		
20			9				

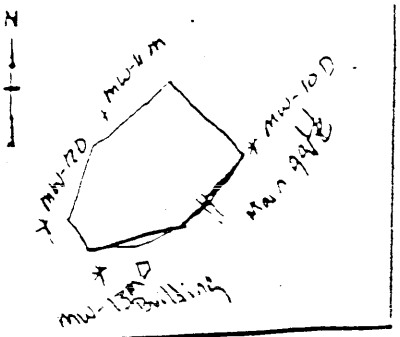
BOB 21'

Proportions Used: Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

Sampling Abbreviations: SS = Split Spoon. ST = Shelby Tube. CSC = Continuous Soil Core

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TEST BORING LOG



BORING NO. MW- 13 M

PROJECT NO.. NAME Union Road 2025-200

LOCATION Buffalo NY

DRILLING CONTRACTOR/ DRILLER Maxim

GEOLOGIST, OFFICE James Doan

DRILLING EQUIPMENT. METHOD HSA

SIZE. TYPE OF BIT

SAMPLING METHOD Split SPOON

START. FINISH DATE 12/9/96

WELL INSTALLED? YES ☒ NO ☐

CASING MAT./DIA. Stainless Steel / 2"

SCREEN: TYPE SLOT MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE .020

ELEVATION OF: GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE
(FT. ABOVE M.S.L.)

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESIST-ANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
5	5'	12"	18 12 8 17	-Drk Brown clays w/o RKS	Stiff little to No H2O		
	7'						
10	10'	8"	15 14 11 5	Blk sands + cashes or cinders - Not a native material	No Cohesive strength DRY		
	12'						
	12'	11"	7 9 4 5	Top 9" Blk sand + ashes or cinder some organics Bottom 2" Wood, Hobby from a RR tie-	No Cohesive strength DRY		
	14'				Damp		
15	14'	5"	50/5"	Top 2" Blk ash w/ some ~~as~~ organics Next 1" Brick (Red Bottom 2" Wood			
	16'						
	16'	3"	50/3"	Wood Next Sample will be 19'-21'			
	18'						
	19'	3"	50/3"	Wood			

Proportions Used: Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

44 SHELTER ROCK ROAD
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2 of 2

TEST BORING LOG

BORING NO. MW-13M

PROJECT NO.. NAME Union Road 2035-200

LOCATION Buffalo NY

DRILLING CONTRACTOR/ DRILLER Maxim

GEOLOGIST, OFFICE James Doan

DRILLING EQUIPMENT. METHOD HSA

SIZE. TYPE OF BIT

SAMPLING METHOD Split SPOON

START. FINISH DATE

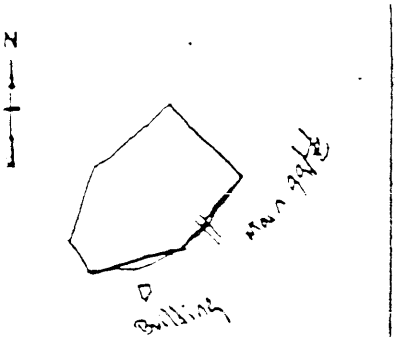
WELL INSTALLED? YES ☑ NO ☐

CASING MAT./ DIA. Stainless Steel / 2"

SCREEN: TYPE SLOT MAT. Stainless LENGTH 10' DIA. 2" SLOT SIZE .020

ELEVATION OF: GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE
(FT. ABOVE M.S.L.)

REMARKS:



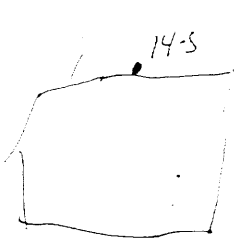
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS
	24'		7	Top 5" Wood	stiff → soft
5		24"	5	Bottom 19" Greyish red clays, No Rocks	little to No H_2O
	26'		5	~~Reddish Grey clays w/ some rocks~~	
10	30'		1	Top 2" Wood – Maybe from a plug in Bottom of auger	Soft Wet.
		12"	1	Bottom 10" Reddish / Grey Clays w/ some Rx Frag Pebbles	
	32'		1		
	32	0"	2	There wasn't a basket in the spoon.	
			5		
	34'		8		
			6		
15	34'	0"	50/0"	Bed Rock	Bottom of Borring
	36'				

WELL CONST. | GRAPHIC LITHOLOGY LOG

Little = 10-20%, Some = 20-35%, And = 35-50%

(203) 796-5279

TEST BORING LOG



BORING NO. 14-S

PROJECT NO.. NAME UNION ROAD | LOCATION Buffalo NY

DRILLING CONTRACTOR/ DRILLER Maxim Technologies

GEOLOGIST, OFFICE Mark Cambra NES Danbury, CT

DRILLING EQUIPMENT, METHOD	SIZE, TYPE OF BIT	SAMPLING METHOD	START, FINISH DATE
HSA	6" HSA	AF	8/19/97

WELL INSTALLED? YES ☑ NO ☐	CASING MAT./DIA.	SCREEN: TYPE	MAT.	LENGTH	DIA.	SLOT SIZE
	Steel 4"	Slotted	Stainless Steel	10	2"	020

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE | TOP OF WELL CASING | TOP & BOTTOM SCREEN | GW SURFACE DATE 8/19/97

REMARKS: Replaced Previous 14-S well.

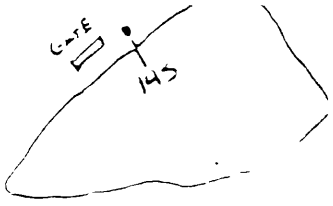
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOG
				Topsoil			
				Fill - Reddish brown Sandy Clay		grout	
						3.8 Bentonite	
5						5.3	
						6.8	
				Reddish Brown Clay	SAND		
10							
15						16.8	
				End of Boring		17.3	

See 14-S Previous

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

TEST BORING LOG



BORING NO. 14-S

PROJECT NO. NAME: UNION ROAD 2035-200

LOCATION: BUFFALO NY

DRILLING CONTRACTOR/DRILLER: MADIM

GEOLOGIST. OFFICE: JOHN J ZACHER JR

DRILLING EQUIPMENT. METHOD	SIZE TYPE OF BIT	SAMPLING METHOD	START. FINISH DAT
HSA	6" HSA	SPLIT SPOON	12-30-91

WELL INSTALLED?	CASING MAT./DIA.	SCREEN: TYPE	MAT.	LENGTH	DIA.	SLOT SIZE
YES ☒ NO ☐	STAINLESS STEEL/2"	SLOT	STAINLESS	10'	2"	0.020

ELEVATION OF: GROUND SURFACE ~~TOP OF WELL CASING~~ TOP & BOTTOM SCREEN GW SURFACE DATE
(FT. ABOVE M.S.L.)

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LOG
				SAMPLING STARTS AT 41' B.G.			
				A Bandes 8/19/97			
	4'		7	TOP 1" - WOOD			
		20"	14	1-11" - BROWN CLAY W/LITTLE GRAVEL	STIFF, DRY		
5			17	11-17" CINDERS			
	6'		12	17-20 BROWN CLAY W/ SOME ORGANIC	DRY STIFF, DRY		
	6'		19	0-7" - FILL - CINDERS, STONES, BRICK -			
		19"	14	7-19" - BROWN CLAY W ~~SOME~~ GREY VARBING	STIFF, TRACE H_2O		
	8'		17				
			23				
	8'		5	0-7" BROWN CLAY W/ LITTLE ROOTS (CM°)	STIFF, LITTLE H_2O		
		22"	7	7-22" REDIBROWN CLAY	STIFF, LITTLE H_2O		
	10'		9				
10			10				
	10'		16	REDIBROWN CLAY, TRACE ORGANICS (ROOTS)	STIFF - LITTLE H_2O		
		22"	12				
			13				
	12'		14				
	12		8	REDIBROWN CLAY - SOME GREY VARBING	STIFF LITTLE H_2O		
			5				
		24"	7		~~LITTLE~~ 4" SOME H_2O		
	14		10				
	14		3	REDIBROWN CLAY SOME GREY VARBING	STIFF / LITTLE H_2O		15
15			5				
	16'	24"	7				-Bed
			12	REDIBROWN CLAY W/SOME GREY	STIFF - LITTLE H_2O		
	16		13				17.
			15				
	18		13				
	18		0	0-4" MIX BROWN/GREY CLAY	REDSTIFF SOME AND H_2O		
		24"	3				4
	20		5	4-24" GREY SANDY CLAY (40-50%)	SOFT, WET		

Proportions Used: Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

Sampling Abbreviations: SS = Split Spoon. ST = Shelby Tube. CSC = Continuous Soil Core

TEST BORING LOG

BORING NO. 145

PROJECT NO., NAME | LOCATION

DRILLING CONTRACTOR/DRILLER

GEOLOGIST, OFFICE

DRILLING EQUIPMENT, METHOD | SIZE, TYPE OF BIT | SAMPLING METHOD | START, FINISH DA

WELL INSTALLED? YES ☐ NO ☐ | CASING MAT./DIA. | SCREEN: TYPE MAT. LENGTH DIA. SLOT SIZE

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE | TOP OF WELL CASING | TOP & BOTTOM SCREEN | GW SURFACE | DATE

REMARKS:

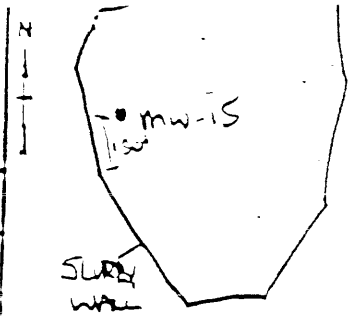
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LOG
20			6 9	GREY CLAY	SOFT, WET		
22		18"	3 7				
22			weight of	GREY CLAY	VERY SOFT, WET		
24		15"	ROD				
24			0	GREY CLAY	SOFT, WET		
25		18"	0 3				
26			2				
26			2	GREY CLAY	SOFT		
28		24"	3 3		SATURATED)		
28			3	G-S GREY CLAY	SATURATED, SOFT		
29			0				
30		24"	0 1 4	5-20' GREY CLAY, SOME ROCKS BOB	VERY WET SOFT		

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

DANBURY, CT 06810
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TEST BORING LOG



BORING NO. MW-15	
PROJECT NO.. NAME: UNION ROAD	LOCATION: ON LANDFILL CAP
DRILLING CONTRACTOR/ DRILLER: MAXIM - ENGINE · P. JENCE	
GEOLOGIST. OFFICE: HANSON / SZWAJA DANBURY	
DRILLING EQUIPMENT. METHOD: 6 3/4 HSA HSA	SIZE. TYPE OF BIT: 6.25" H.S.A	SAMPLING METHOD: SS	START. FINISH DATE: 2/20/96
WELL INSTALLED? YES ☒ NO ☐	CASING MAT.. DIA.: SS 2"	SCREEN: TYPE	MAT. SS	LENGTH 10' DIA. 2"	SLOT SIZE 0.D
ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE: 618.8	TOP OF WELL CASING: 620.01'	TOP & BOTTOM SCREEN: 610'-600'	GW SURFACE: NA	DATE: 2/20/96

REMARKS: ELEVATION AND DEPTHS RELATIVE TO PAVED SURFACE

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS
0		2'	22/8	Poorly graded CLAY/SILT & GRAVEL. MOIST. ORANGE. TAN/BROWN FINE/MEDIUM. MOIST (FROZEN) · LITTLE ¼" GRAVEL.	
2		1'	13/11	TAN/BROWN CLAY, FIRM. NO COARSE MATERIALS ENCOUNTERED.	
4		1.5'	27/8	CLAYEY FILL MATL. COARSE. DOUBLE SAND & GRAVEL W/ TRACE FINES. TAN. 1" SUBANGULAR ROCK FRAG. TAN FINE SILTY CLAY. NO COARSE MATL.	GRAVEL
6		1.5'	11/14	GREY/GREEN CLAY. NO COARSE MATERIAL. SOFT. TRACE SILT	FINE SAND
8		1.5'	9/4	SAME BUT SILTY. SILTY CLAY. TRACE ORANGE SAND. SOFT GREY/GREEN. SILTY CLAY.	COARSE SAND
10		2'	5/16	GREY/GREEN SILT. SOME CLAY. SOFT.	
12		1.5'	6/16	SAME	
14		1.5'	4/16	SAME	
16		2'	4	SAME	
18				EOB 19.0'	

WELL CONST. | GRAPHIC LITHOLOGY LOG

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG

BORING NO. MW-16

PROJECT NO., NAME: UNION ROAD | LOCATION: CAN INTERIOR

DRILLING CONTRACTOR/DRILLER: MAXIM/COMPIRE BENCE

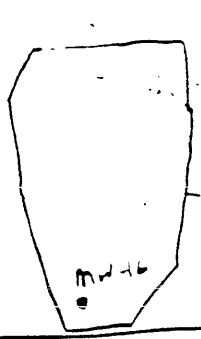
GEOLOGIST/OFFICE: MANSON/SZUNYOG Danbury

DRILLING EQUIPMENT, METHOD: CME 850 HSA | SIZE, TYPE OF BIT: 6 1/4" | SAMPLING METHOD: SS | START, FINISH DATE: 2/2/96

WELL INSTALLED? YES ☑ NO ☐ | CASING MAT./DIA.: 2" SS | SCREEN: TYPE 0.20 MAT. SS LENGTH 10 DIA. 2" SLOT SIZE 0.20

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE ~~618~~ 617.9 | TOP OF WELL CASING 620.10 | TOP & BOTTOM SCREEN ~~618~~ 610.0 - 600.0 | GW SURFACE NA | DATE 2/2/96

REMARKS: ALL ELEVATIONS AND DEPTHS RELATIVE TO PRE-CAP GRADE



DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS
0		2.0'	35	Hard Brown Clay, 10% Gravel	FROST
2'		1.5'	20	Upper 12" same Bottom 6" CINDERS	DRY
4'					FROST →
5		1.0	9/ft	same	DRY
6'		9"	12/ft	TAN SAND & SILT, SOME ANGULAR ROCK FRAGS (WELL GRADED)	FINE SAND →
8'				1" of BLACK CINDERS (?) TAN CLAY, NO COHESIVE MATERIAL	
10'		2'	5/ft	SOFT TAN/BROWN CLAY, NO COHESIVE MATERIAL, SLIGHT Fe STAINING	
		1.5'	5/ft	same but angular	
12'				same & TRACE GRAVEL.	
		1.5'	5/ft	same	
14'		1.5'	4/ft	same & ~~SAND~~ (20%) ROCK FRAGS TO 1/4", ANGULAR, IN BOTTOM 6"	
15					
16'		1.5'	12/ft	same.	MOIST
18'				EOB 19.0'	COARSE SAND →

LOG OF TEST BORING

WELL CONST.

GRAPHIC LITHOLOG

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG

BORING NO. MW-17	
PROJECT NO., NAME: Uniroyal	LOCATION: LANDFILL CAP
DRILLING CONTRACTOR/DRILLER: Marine-Environ / P. Bence	
GEOLOGIST, OFFICE: M. Sbrana / Danbury	
DRILLING EQUIPMENT, METHOD	SIZE, TYPE OF BIT: 6.25" HSA; SAMPLING METHOD: 2" SS; START, FINISH DATE: 2/22/96
WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA.: 2" SS; SCREEN: TYPE MAT. SS LENGTH 10' DIA. 2 SLOT SIZE 20
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE; TOP OF WELL CASING; TOP & BOTTOM SCREEN; GW SURFACE; DATE
REMARKS:	



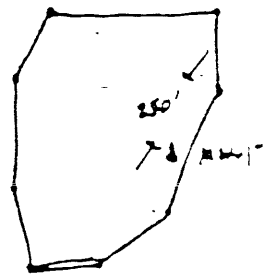
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
0		0.25'	20/ft	TAN/BROWN CLAY. FROZEN. NO COARSE MATERIAL	FROZEN		
2'		.25'	42/6"	2' BLACK/DARK BRN SILTY SAND. GRAVEL PRESENT. FE STAINING.	WET		
4'		1.0'	11/ft	4' TAN/BROWN CLAY SOFT. NO COARSE MATERIAL. FE STAINING	DRY		
5				5' BROWN/DARK BRN CLAY. TRACE ORGANICS. FE STAINING. ROOT FRAGS.			
6'		1.25'	24/ft	6.5' BLACK CLAY. 30% ORGANICS (WOOD), TRACE COARSE MATERIAL (GRAVEL, GRAVEL). ODOR			
8'		1.5'	11/6"	8' SOFT BROWN CLAY. FE STAINING. NO COARSE MAT'L. TRACE BLACK CINDER FILL MAT'L.			
10		0.5'	11/ft	SAME			
12'		0	7/ft	NO RECOVERY	WET		
14'		0	8/ft	NO RECOVERY			
15							
16		0.8'	11/ft	SAME. NO FILL MAT'L. TRACE ORGANICS (WOOD) GRAVEL.			
18		1.5	14/ft	18.5' GRAY/BROWN CLAY W/ BLACK STAINING. TRACE ORGANICS (WOOD) NO COARSE MAT'L. FE STAINING (SLIGHT)			

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG



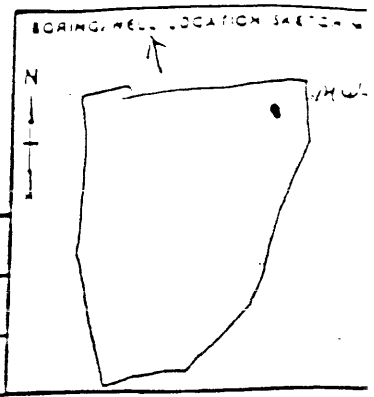
BORING NO. MW-17	
PROJECT NO.. NAME	LOCATION: LANDFILL CAP
DRILLING CONTRACTOR/ DRILLER: MARIA - EMPIRE D. BENGE	
GEOLOGIST. OFFICE: M. LEWANDA DANBURY	
DRILLING EQUIPMENT. METHOD: 838 HSA	SIZE. TYPE OF BIT: 6.25" HSA; SAMPLING METHOD: 2" SS; START. FINISH DAT: 2/22/96
WELL INSTALLED? YES ☑ NO ☐	CASING MAT.. DIA.: 2" SS; SCREEN: TYPE MAT. SS LENGTH 10' DIA. 2" SLOT SIZE 20
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE: 619.1; TOP OF WELL CASING: 620'; TOP & BOTTOM SCREEN: 605'-595'; GW SURFACE: -609'; DATE: 3/12
REMARKS:	Elevations in MSL relative to PAD-CAP TOPS.

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOG
20		2'	14/ft.	(SAME) brn/black coarse F SAND, some staining. TRACE Organics (no ODOR noted). Slightly wet staining	WET		
22'		1.5'	15/ft	23.0' Brown SILTY SAND, trace Organic matl.			
24'				E.O.B. 24.0'			
25							
10							
15							

Proportions Used. Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

A DIVISION OF NES
44 SHELTER ROCK ROAD
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TEST BORING LOG

BORING NO. MW-3	
PROJECT NO.. NAME UNION ROAD	LOCATION CAP INTERIOR
DRILLING CONTRACTOR/ DRILLER MAINE EMPIRE PHIL BENGE	
GEOLOGIST/ OFFICE Hanlon/Schmidt, DANBURY	
DRILLING EQUIPMENT. METHOD CME 750	SIZE TYPE OF BIT 6¼" HSA / SAMPLING METHOD SS / START. FINISH DAT 2/19/96
WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA. SS 2" / SCREEN: TYPE MAT. SS LENGTH 10' DIA. 2" SLOT SIZE 0.20
ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE 619.1	TOP OF WELL CASING 620.0 / TOP & BOTTOM SCREEN 605.0 - 595.0 / GW SURFACE NA / DATE 2/19/96
REMARKS: ELEVATIONS AND DEPTHS RELATIVE TO PRE-CAP SURFACE	

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
		2'	32/FT	Tan clay, Hard, No coarse, Dry	(Topsoil)		
		1'	10/FT	Tan clay, Firm ~~SFT~~, No coarse, Dry			
5		1'	12/FT	Tan/brown Clay, Firm, No Coarse, Dry	grout		
		2'	15/FT	Brown clay, ~~SFT~~ Firm, No Coarse, Dry Festering			
		1'	12/FT	Same			
10		1.5'	24/FT	Same w/ trace organics + SH bottom 6"			
		1.5'	27/FT	Same w/ trace rock frags (angular, fine)	Fine Sand		
15		1.5'	20/FT	Same (5% clast to 10%)			
		2'	34/FT	Same	Coarse Sand		
		1.5	4/FT	Same but SAT + MOIST			

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG

BORING NO. MW-13

PROJECT NO.. NAME UNION PACIFIC | LOCATION INSIDE CAP AREA

DRILLING CONTRACTOR/ DRILLER MAXTON/CONDRE P. BURKE

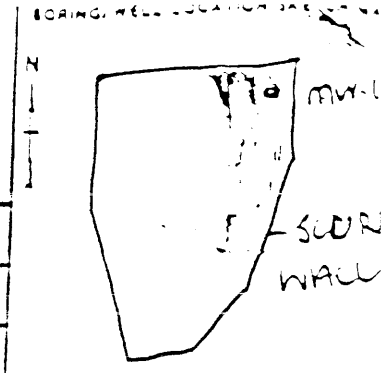
GEOLOGIST. OFFICE HALEY/SEWARD DANBURY

DRILLING EQUIPMENT. METHOD	SIZE. TYPE OF BIT	SAMPLING METHOD	START. FINISH DATE
CME 850 HSA	6 1/4 HSA	SS	2/14/96

WELL INSTALLED?	CASING MAT.. DIA.	SCREEN: TYPE	MAT.	LENGTH	DIA.	SLOT SIZE
YES X NO	SS 2"		SS	10'	2"	0.02

ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE	TOP OF WELL CASING	TOP & BOTTOM SCREEN	GW SURFACE	DATE
	619.1	620.0	605.0 - 595.0	NA	2/19/96

REMARKS: ELEVATIONS AND DEPTHS RELATIVE TO PRE-CAP SURFACE



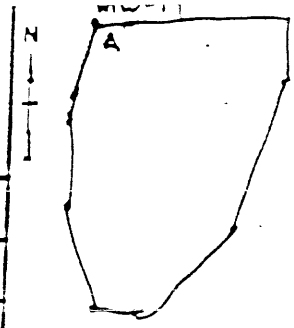
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOG
0	1'	9/12		Sand, Trace Black Shale Chips	Coarse Sand →		
2	2'	3/12		Brown Sand, Clay, 20% Organic Very Soft Trace Rock Frags Bottom 6" Very Soft Wet Brown Clay trace Rock Fragments - Largest ~ 1"			
25				EOB 24.5'			
10							
15							

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG



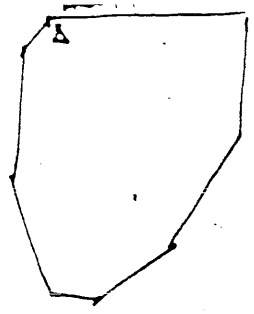
BORING NO. MW-19				
PROJECT NO., NAME: UNION ROAD	LOCATION: LANDFILL CAP			
DRILLING CONTRACTOR/DRILLER: MANN-LAMAR, P. BENLE				
GEOLOGIST, OFFICE: SEARS DANBURY				
DRILLING EQUIPMENT, METHOD: 855 HSA	SIZE, TYPE OF BIT: 6.25" HSA	SAMPLING METHOD: 2" SS	START, FINISH DATE: 2/22/96	
WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA.: 2" SS	SCREEN: TYPE	MAT. SS	LENGTH 10' DIA. 2" SLOT SIZE 20
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE: 618.5'	TOP OF WELL CASING: 617.5'	TOP & BOTTOM SCREEN: 605' - 595'	GW SURFACE: DRY DATE 2/22/96
REMARKS: ELEVATION & DEPTH REFERENCE TO PAD-CAP SURFACE				

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONSTR.	GRAPHIC LITHOLOGY
		1.25'	15/ft	WELL-GRADED SAND, SOME GRAVEL, TAN/BROWN, FINE-COARSE/HARD	FROZEN		
2'		1.0'	12/ft	2' FINE-MEDIUM BROWN/TAN SAND, Fe' & BLACK STAINING, NO CLASTIC MATL.	DRY.		
4'							
5		1.5'	13/ft	SAME			
6'		1.5'	26/ft	7.0' SAME WITH TRACE ¼" GRAVEL (RUNOFF), V. HARD	DRY.		
8'		0.5'	62/ft	8.0' TAN, DAY, HARD, CLAY & SILT, Fe' STAINING, TRACE GRAVEL (RUNOFF) SMALL BLACK CLAY MATL. & STAINING	FINE SAND		
10		1.75'	24/ft	11' BLACK, FIRM, DRY CLAY, TRACE GRAVEL, APPEARS TO BE CLAY 12' SLAG FILL MATL. GRAVEL, ROCK FRAGS.	WET	COARSE SAND	
12'		1.0'	14/ft	BLACK, WET, SILTY SAND, SOME GRAVEL, ASPHALT, PETROL ODOR, TRACE CRYSTALS			
14		1.0'	19/ft	SAME, SLIGHT SHEEN PRESENT, BLACK BANDS FROM ASPHALT, PETROL.			
15							
16		1.0'	6/ft	16' SOFT, WET, GRAVELLY CLAY, BLACK MOTTLING FROM ASPHALT, TRACE ASPHALT MATL., Fe' STAINING, NO CLASTIC MATL.			
18'		1.25'	11/ft	18.5' SAME AS TAN/BROWN CLAY, HIGHLY STRIATED, NO CLASTIC MATL. Fe' STAINING FROM	E.O.B @ 20'		

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%
Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG



BORING NO. MW-19	
PROJECT NO.. NAME: Union Road	LOCATION: Landfill Cap
DRILLING CONTRACTOR/ DRILLER: Maxim - Lindsay, P. Benge	
GEOLOGIST. OFFICE: Sawaya, Danbury	

DRILLING EQUIPMENT. METHOD	SIZE. TYPE OF BIT	SAMPLING METHOD	START. FINISH DATE
3SB HSA	6.25" HSA	2" SS.	2/23/96

WELL INSTALLED?	CASING MAT./ DIA.	SCREEN: TYPE	MAT.	LENGTH	DIA.	SLOT SIZE
YES ☒ NO ☐	2" SS		SS	10'	2"	20

ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE	TOP OF WELL CASING	TOP & BOTTOM SCREEN	GW SURFACE	DATE
	618.5'	617.5	605' - 595'	n/a	2/23/96

REMARKS: Elevations in Relation to 726-Cap Elev.

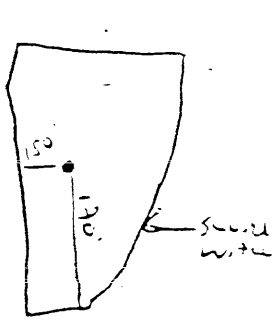
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
				← 20' E.O.B →			
5							
10							
15							

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG



BORING NO. MW-20			
PROJECT NO., NAME UNION RD	LOCATION INTERIM CAP		
DRILLING CONTRACTOR/DRILLER MAXIM/EMPIRE BENCE/BOITNOTT			
GEOLOGIST, OFFICE HANSON/SUWATA DANBURY			
DRILLING EQUIPMENT, METHOD CME 850 HSA	SIZE, TYPE OF BIT 6¼"	SAMPLING METHOD SS	START, FINISH DATE 2/2/96
WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA. SS 7"	SCREEN: TYPE MAT. SS LENGTH 10' DIA. 7"	SLOT SIZE 0.20
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE 614.6	TOP OF WELL CASING 617.0	TOP & BOTTOM SCREEN 607.0 – 597.0
GW SURFACE NA	DATE 2/11/96		

REMARKS: ELEVATION AND DEPTHS RELATIVE TO PRE-CAP SURFACE

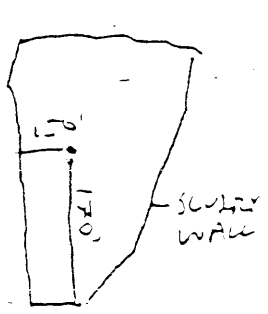
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
		1.5	8	Brown Clay; NO coarse, frozen, BOTTOM 4" Black w/15% organics	FROZEN		
		1.0	26	FIRM Brown Clay trace organics and silt	moist		
5		1.5	19	Same BOTTOM 12" Black fine granular material w/charcoal odor, 10% organics 10% "FOAM BOARD"	moist		
		2'	14	Black Firm Clay 10% organics TRACE 1/2" Rock Frags	moist		
10		1.5	24	BOTTOM 4" Firm tan Clay, NO coarse			
		5"	16	First 6" Same w/organics 1st Gray Sandy Clay Next 6" Red Sand w/Black Cinders Some Clay Next 6" WHITE Cindery ash w/30% wood	moist		
		0.5'	6	Soft tan Clay, NO coarse	wet		
				Fine sand/silt red w/Black Stringy 10% organics			
15		2	8	Fine Black Fine Sand Trace red fine sand	~~DRY~~ moist		
		1.5	3	Same Trace organics	WET		
		1.0	3	Brown Clay + SAND w/Black Stringy, Strong Petroleum ODOR, Sheening, 20% rock frags upto 0.5"	WET		

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG



BORING NO. MW-20

PROJECT NO.. NAME UNION ROAD | LOCATION INTERIOR OF CAP

DRILLING CONTRACTOR/ DRILLER MAYNARD / CHARLIE BEMIS

GEOLOGIST. OFFICE HANSON/SWARTH DANBURY

DRILLING EQUIPMENT. METHOD	SIZE. TYPE OF BIT	SAMPLING METHOD	START. FINISH. DAT
CME 850 HSA	6 1/4"	SS	2/21/96

WELL INSTALLED?	CASING MAT.. DIA.	SCREEN: TYPE	MAT.	LENGTH	DIA.	SLOT SIZE
YES ☒ NO ☐	SS 2"		SS	10'	2"	0.20

ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE	TOP OF WELL CASING	TOP & BOTTOM SCREEN	GW SURFACE	DATE
	624.6	624.6	627.0	607.0 - 597.0	NA 2/21/96

REMARKS: ELEVATIONS AND DEPTHS RELATIVE TO PRE-CAP GRADE

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS
0		0	3	~~Silt~~ ? NO RECOVERY	
		2.0'	8	Silt & W/ROCKS up to 1.5" grades into fine material w/ 30% organics	
				Bottom 3" Black Clay, NO coarse, trace organics	
5			7	Grey Clay, trace 1/8" rock frags. No odor, NO petroleum	
			6	Same no rock Frags	
				EOB 29.0'	
30					
15					

LOG OF TEST BORING

WELL CONST. | GRAPHIC LITHOLOGY LOG

coarse sand

Proportions Used. Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

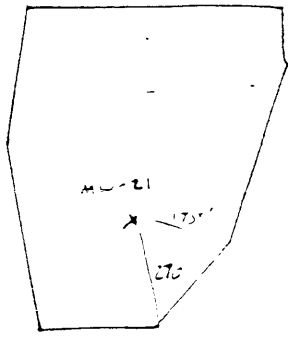
Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG

BORING NO.	MW-21
PROJECT NO.. NAME	UNION ROAD
LOCATION	LANDFILL CAP
DRILLING CONTRACTOR/ DRILLER	MASON-SMOLIZ
GEOLOGIST. OFFICE	SZWAJA / HANLON, DANIJUK
DRILLING EQUIPMENT. METHOD	9 5/8 HSA
SIZE. TYPE OF BIT	6.25" HSA
SAMPLING METHOD	2" SS
START. FINISH DATE	2/22/96
WELL INSTALLED? YES ☒ NO ☐	
CASING MAT./ DIA.	2" SS
SCREEN: TYPE	
MAT.	S.S.
LENGTH	10'
DIA.	2"
SLOT SIZE	20
ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE	623.9
TOP OF WELL CASING	625'
TOP & BOTTOM SCREEN	595' - 605'
GW SURFACE	DRY
DATE	2/22/96

REMARKS: All elevations & depths relative to pre-cap grade



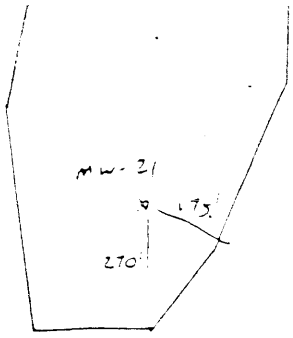
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
2'		2'	41/4"	BROWN FRIABLE CLAY.	FROZEN		
				BLACK CLAY AND BROWN CLAYEY FILL MATERIAL TRACE ORGANICS. FROZEN/PEAT HARD.			
4'		1.25'	WH.	SAME	ADVANCED W/ SS BROKEN. W/6 HAMMER 340# HAMMER.		
5		1.25'	9/4"	SAME W/ GREY/BLACK CLAY. FE STAINING. 10-15% ORGANICS	DRY		
6				BLACK COAL CINDERS PRESENT.			
		1'	50/4"	LIGHT TAN, DRY, SAND + GRAVEL. NO FINES. REFUSAL @ 6"			
8'				BLACK + DARK RED CLAYEY FILL MATERIAL. DRY. TRACE FINES. RUN GRAB. 1', REFUSAL.			
				BROWN SILT + SAND. POORLY GRADED. DRY.			
		1'	7/4"	SAME W/ MANY GRAVEL (1/4") ROCK + HARDER FINGER RESISTANCE.			
10				BLACK SILT + FINE SAND. TRACE ORGANICS. DRY.			
		1.25'	9/4"	POORLY GRADED FINE SAND. NO CLAYEY MATERIAL. DRY. Fe STAINED			
12							
		0'	15/4"				
14'							
15		1'	5/4"	SAME			
17½							
		0.5'	9/4"	RED SILT + SAND. W/ GRAVEL & ROCK FRAG.	WATER		
19½							
			4/5"	SAME			

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

[redacted]
DANBURY, CT 06810
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TEST BORING LOG



BORING NO. MW-21				
PROJECT NO.. NAME: Union Road	LOCATION: Landfill Cap			
DRILLING CONTRACTOR/DRILLER: Maine-Empire; D. Rencé				
GEOLOGIST. OFFICE: M. Szuba; Danbury				
DRILLING EQUIPMENT. METHOD: 8¼ HSA	SIZE TYPE OF BIT: 6.25" H.S.A.	SAMPLING METHOD: 2" SS	START. FINISH DA: 2/22/91	
WELL INSTALLED? YES ☒ NO ☐	CASING MAT./DIA.: 2" SS	SCREEN: TYPE MAT. S.S. LENGTH 10' DIA. 2"	SLOT SIZE 20	
ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE: 623.9	TOP OF WELL CASING: 625'	TOP & BOTTOM SCREEN: 607'-597'	GW SURFACE: dry	DATE: 2/22/91

REMARKS: All Elevation & Depths relative to In-Cal Grade

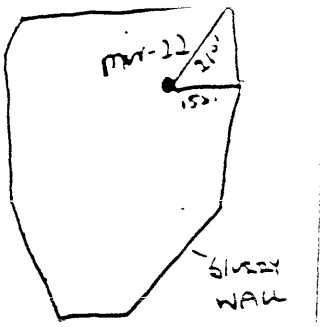
DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOG
		2.25'	40/ft	SAME. 2" PVC Blanked SS opening			
22		1.0	16/ft	Black silt/sand, Angular Rock Frags. Slight Petrol. odor.			
24		1.5	11/ft	Rock core, no visible mineralization			
25				EOB@26'			
30							
15							

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

DANBURY, CT 06810
(203) 796-5279

TEST BORING LOG



BORING NO. MW-22	
PROJECT NO., NAME: UNION ROAD	LOCATION: ENGINE LANDFILL CAP
DRILLING CONTRACTOR/DRILLER: MAXIM ENGINE — D. BENÉ	
GEOLOGIST, OFFICE: HANLON/SZUWALA, DANBURY	
DRILLING EQUIPMENT, METHOD: CME 55B, HSA	SIZE, TYPE OF BIT: 6.25" HSA — SAMPLING METHOD: SS — START, FINISH DATE: 2/20/96
WELL INSTALLED? YES ☒ NO ☐ — CASING MAT./DIA.: 2" SS	SCREEN: TYPE 10 SLOT MAT. SS — LENGTH 10' DIA. 2" SLOT SIZE 10
ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE: 623.4 — TOP OF WELL CASING: 626.40 — TOP & BOTTOM SCREEN: 606.0' - 596.0' — GW SURFACE: NA — DATE: 2/20/96	
REMARKS: ~2' ABOVE CURRENT SURFACE — PRE-CAP SURFACE	

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS
2		2'	13/46	TAN CLAY, WET. FIRM. BOTTOM 6" POSS. ORGANIC, BLACK STAIN, 20% ORGANIC & COARSE MAT'L	
		1'	5/16	SAME. NOT AS COARSE	
4'					
5		1.5'	12/16	SAME RED FINE/MED. SAND. NO FINES MOSTLY GRAVEL	
6'				SAME	
		1'	10/46	CINDER FILL MATERIAL, SOME BLACK MATERIAL, ROCK FRAGS TO 1/2",	
8'		1'	5/16	SAME W/ 1/2" ROCK WALL-LIKE MAT'L	
10		1'	4/12	SAME	
12		1'	5/16	SOME WOOD WASTE & FE STAINING	
14					
15		1'	2/16	SAME	FINE SAND
16		1'	2/16	SAME	
18		1'	6/16	SOME BRICK FRAGS,	COARSE SAND

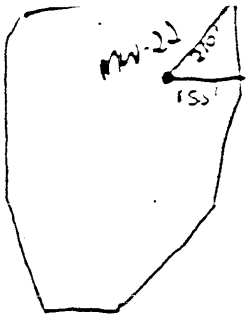
WELL CONST. | GRAPHIC LITHOLOG

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

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TEST BORING LOG



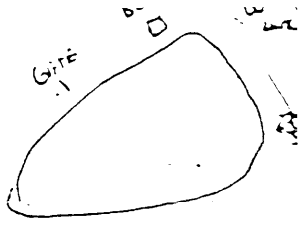
BORING NO. MW-22			
PROJECT NO.. NAME: Union Road	LOCATION: Inside CAP		
DRILLING CONTRACTOR/ DRILLER: Maxim - Ensign P. Dencl			
GEOLOGIST. OFFICE: Hanson / Shawna Oakland			
DRILLING EQUIPMENT. METHOD: CME 855	SIZE. TYPE OF BIT: 6.25" HSA	SAMPLING METHOD: SS	START. FINISH DATE: 2/20/96
WELL INSTALLED? YES ☒ NO ☐	CASING MAT.. DIA.: 2" SS	SCREEN: TYPE	MAT. SS LENGTH 10' DIA. 2" SLOT SIZE 10
ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE: 623.4	TOP OF WELL CASING: 626.70	TOP & BOTTOM SCREEN: 606' 596'	GW SURFACE: NA DATE 2/20/96
REMARKS: PRE-CAP SURFACE			

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHOLOGY
20		6"	15/ft	Angular gravelly matl. Asphalt, road & stone. Trace wood 2" Angular rock.			
22		6"	15/ft	Same			
24							
5		1'	11/ft	Fine clay, some silt, trace organics. No coarse matl.	Coarse fill		
26							
7		2'	9/ft	Same			
28				EOB 28.0'			
10							
15							

Proportions Used: Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

Sampling Abbreviations: SS = Split Spoon. ST = Shelby Tube. CSC = Continuous Soil Core

TEST BORING LOG



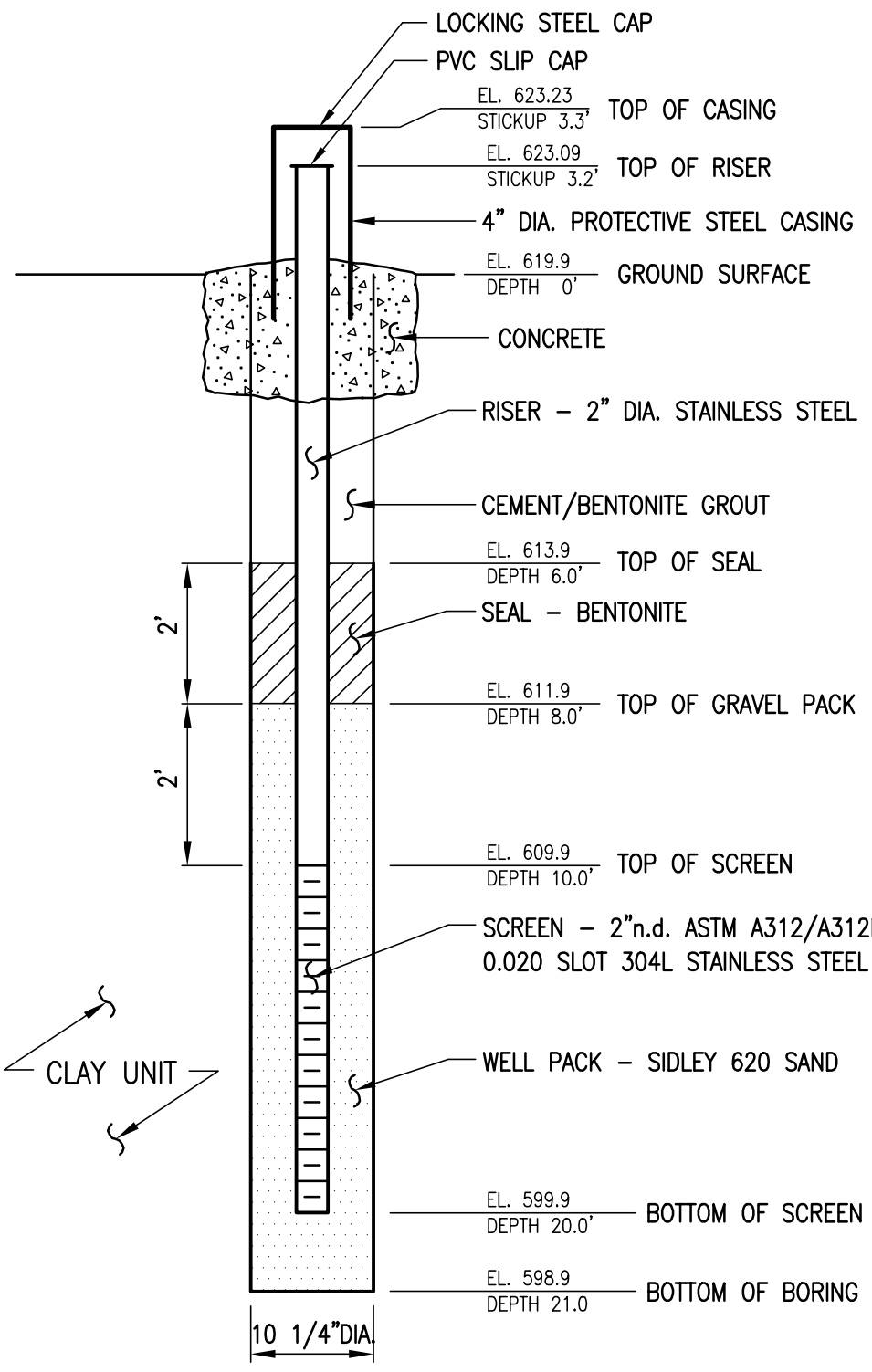
BORING NO. 23S	
PROJECT NO., NAME UNION ROAD 2035-200	LOCATION BUFFALO NY
DRILLING CONTRACTOR/DRILLER MAXIM	
GEOLOGIST, OFFICE JOHN J ZACHER JR	
DRILLING EQUIPMENT, METHOD HSA	SIZE, TYPE OF BIT 10" HSA / SAMPLING METHOD SPLIT SPOON / START, FINISH DA 1-6-97
WELL INSTALLED? YES ☒ NO ☐ / CASING MAT./DIA. STAINLESS STEEL 2"	SCREEN: TYPE SLOT MAT. STAINLESS LENGTH 10' DIA. 2" SLOT SIZE 0.02
ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE	TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE
REMARKS:	

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (IN)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING — DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC
				SAMPLING STARTS 2' BG.			
2							
	2'	-	4	0-4 TOPSOIL/SAND			
		15"	3	4-15 RED/BROWN CLAY	STIFF - DRY		
	4'		9	15-18 RED/BROWN CLAY, SOME ORG.	STIFF TRACE H2O		
	4		4	0-15 RED/BROWN CLAY	STIFF, TRACE H2O		
5		21"	6	15-21 SOME MOISTURE			
	6		6				
	6		8	0-10 RED/BROWN CLAY	MEDSTIFF DAMP		
		24"	6	10-14 RED/BROWN - GREY CLAY	MEDSTIFF DAMP.		
	8		4	14-24 GREY CLAY	MEDSTIFF, DAMP.		
	8		2	GREY CLAY, LITTLE SAND, LITTLE RKS	SOFT, WET		
		12"	2				
10	10		2				
	10		6	GREY CLAY, LITTLE SAND, LITTLE RKS	SOFT WET		
		17"	5				
	12		4				
	12		2	GREY CLAY, LITTLE SAND, LITTLE RKS	SOFT WET		
		8"	3				
	14		4				
	14		4	GREY CLAY, LITTLE SAND LITTLE RKS	SOFT, WET		
15		10"	3				
	16		3	BOB 16			

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

MW–10S

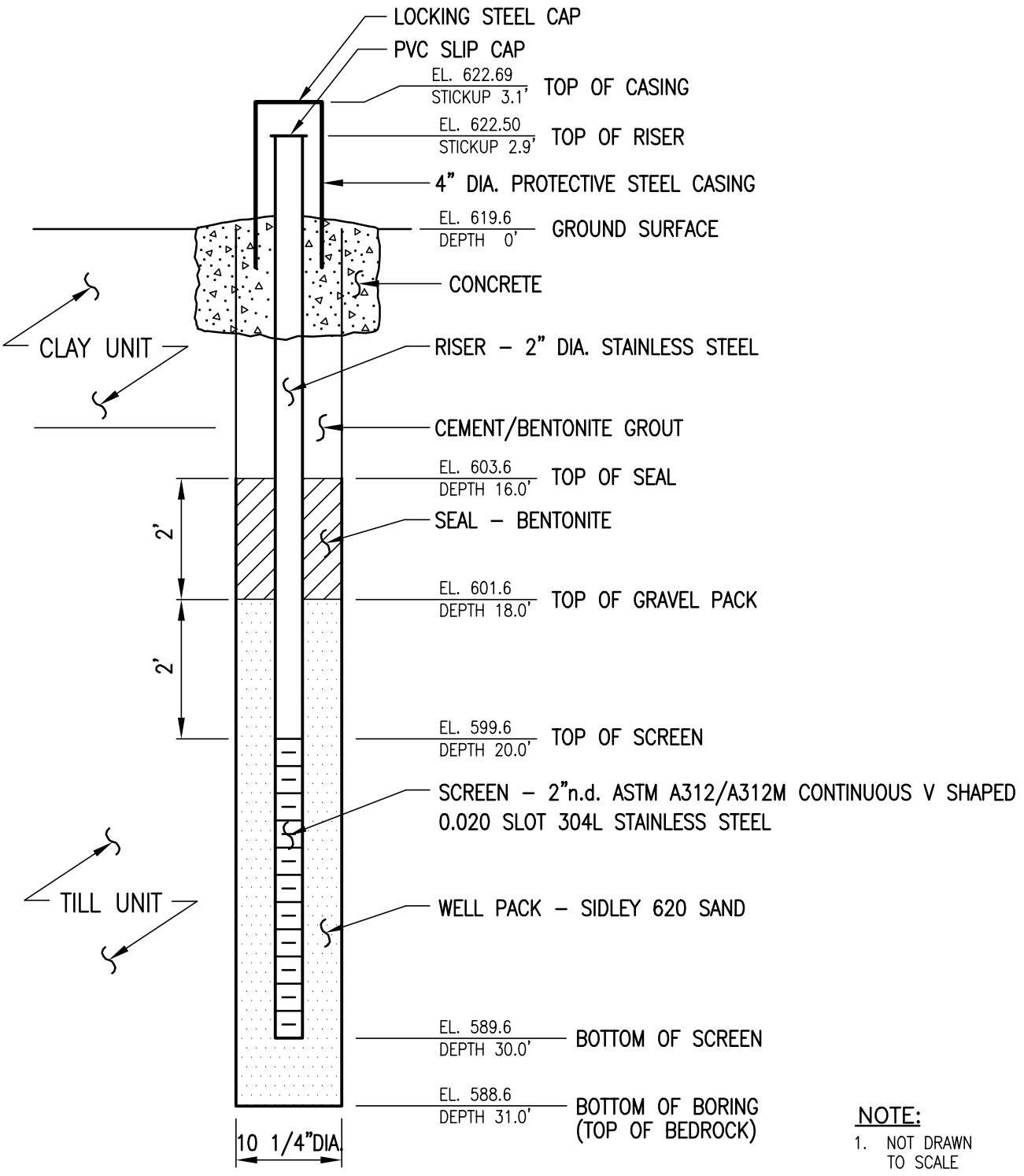


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	SHALLOW GROUNDWATER MONITORING WELL DETAIL		BY: AD / CK:
					FIGURE # MW–10S

MW–10M

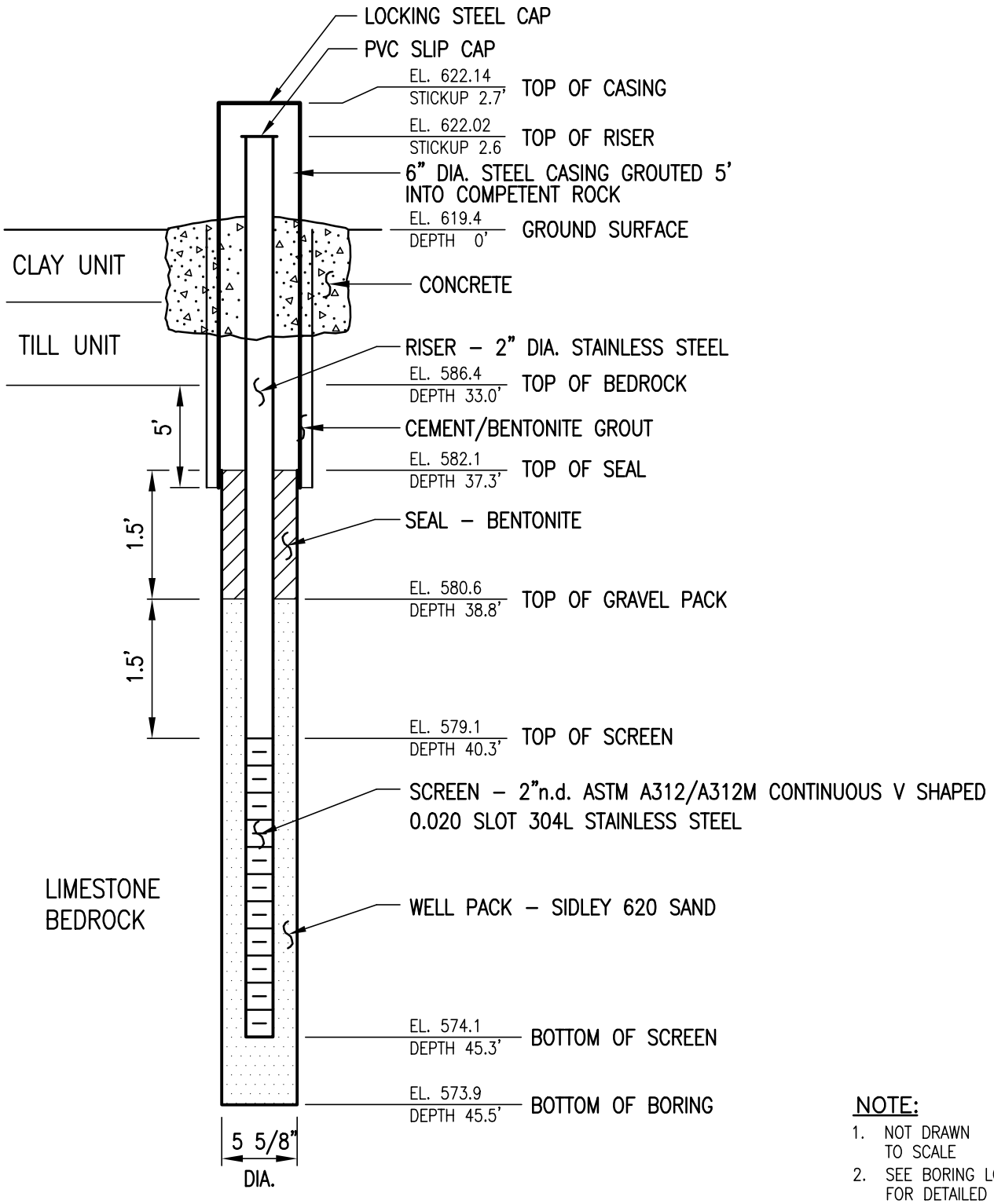


NOTE:

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REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	MEDIUM GROUNDWATER MONITORING WELL DETAIL		BY: AD / CK:
					FIGURE # MW–10M

MW–10D

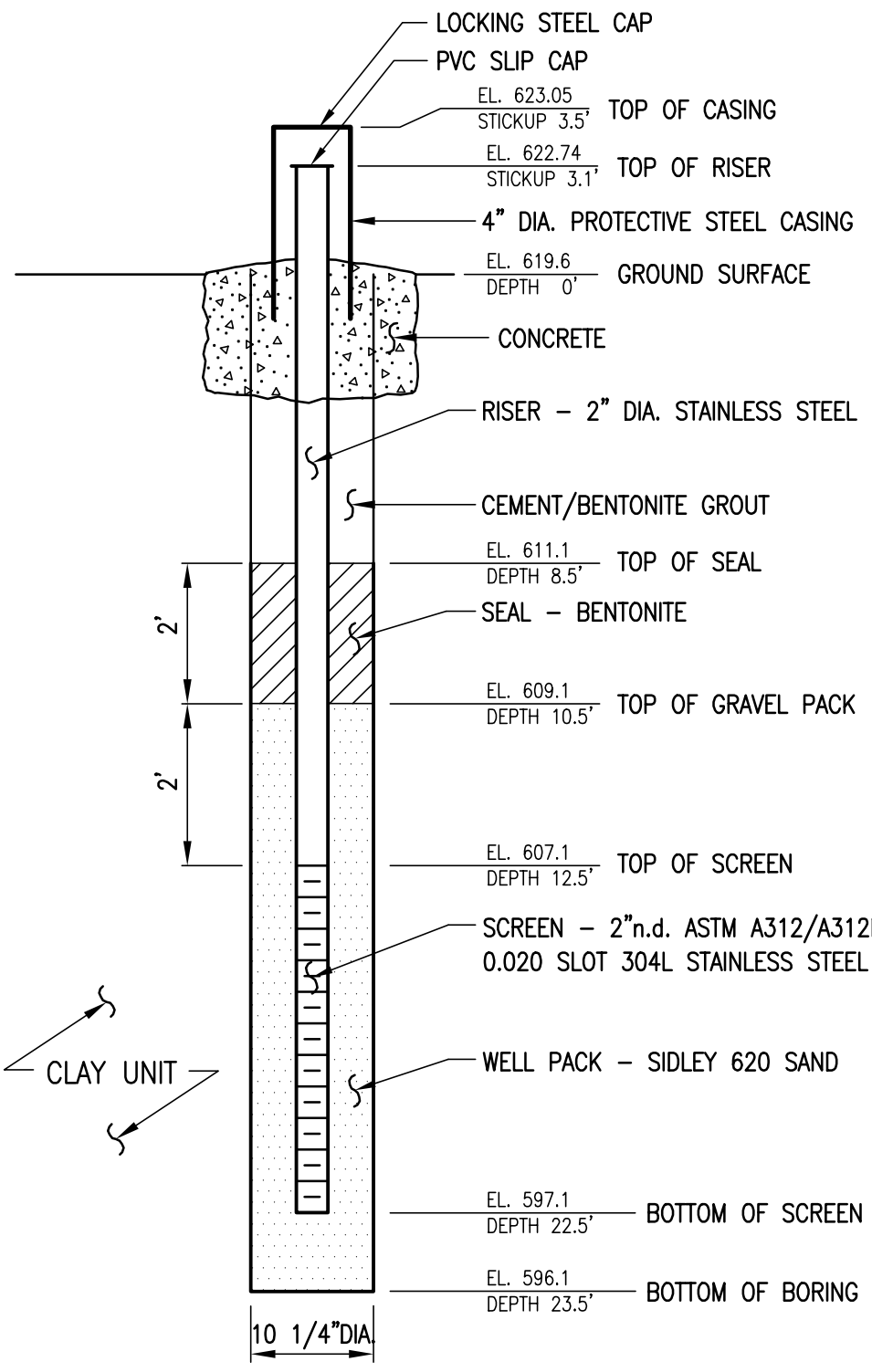


NOTE:

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2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	BEDROCK GROUNDWATER MONITORING WELL DETAIL		BY: AD / CK:
					FIGURE # MW–10D

MW–11S

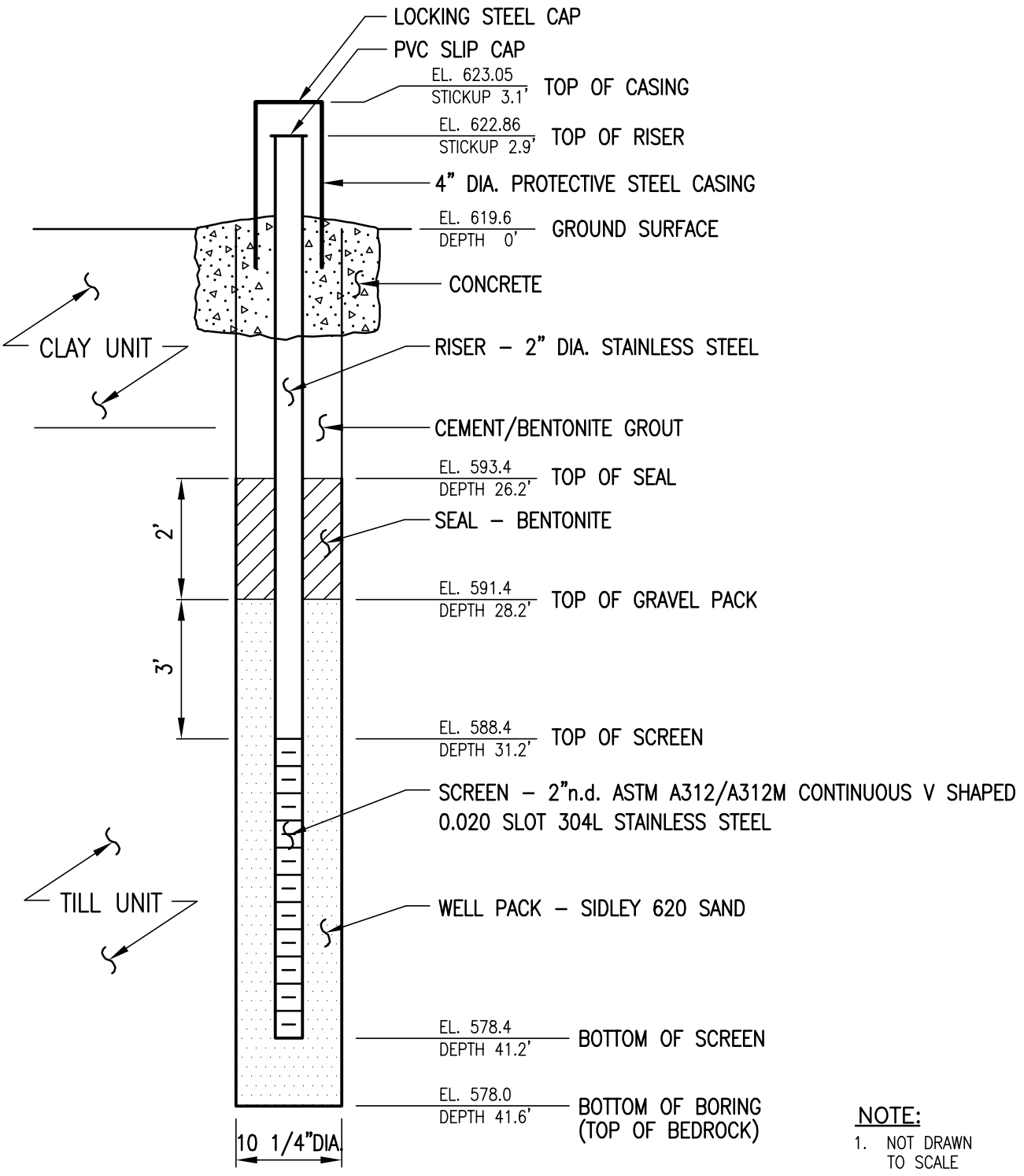


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
		DRAWING	SHALLOW GROUNDWATER MONITORING WELL DETAIL		SCALE: NTS DATE: 1/15/02
					BY: AD CK:
					FIGURE # MW–11S

MW–11M

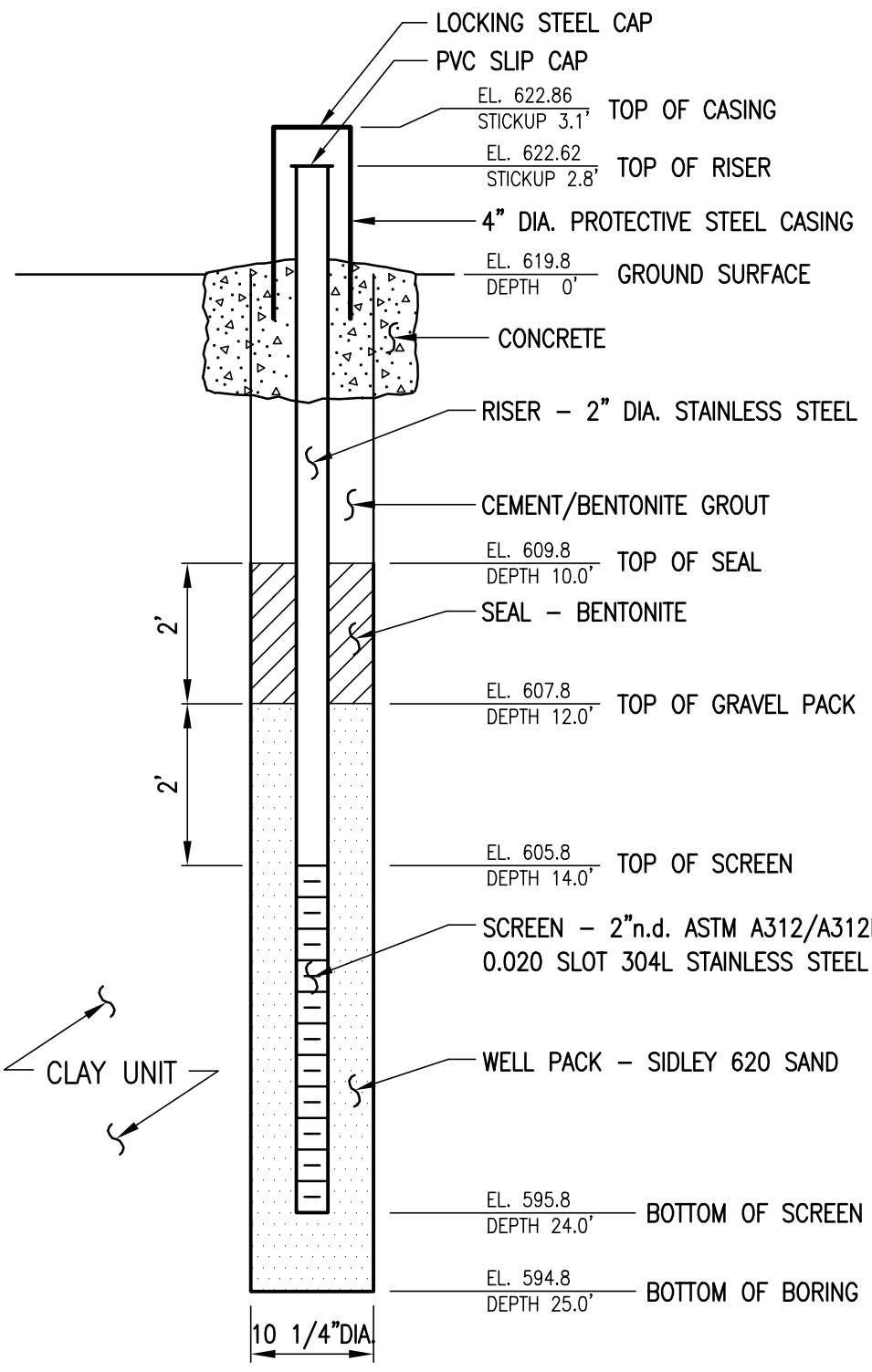


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
		DRAWING	MEDIUM GROUNDWATER MONITORING WELL DETAIL		SCALE: NTS DATE: 1/15/02
					BY: AD CK:
					FIGURE # MW–11M

MW–12S



NOTE:

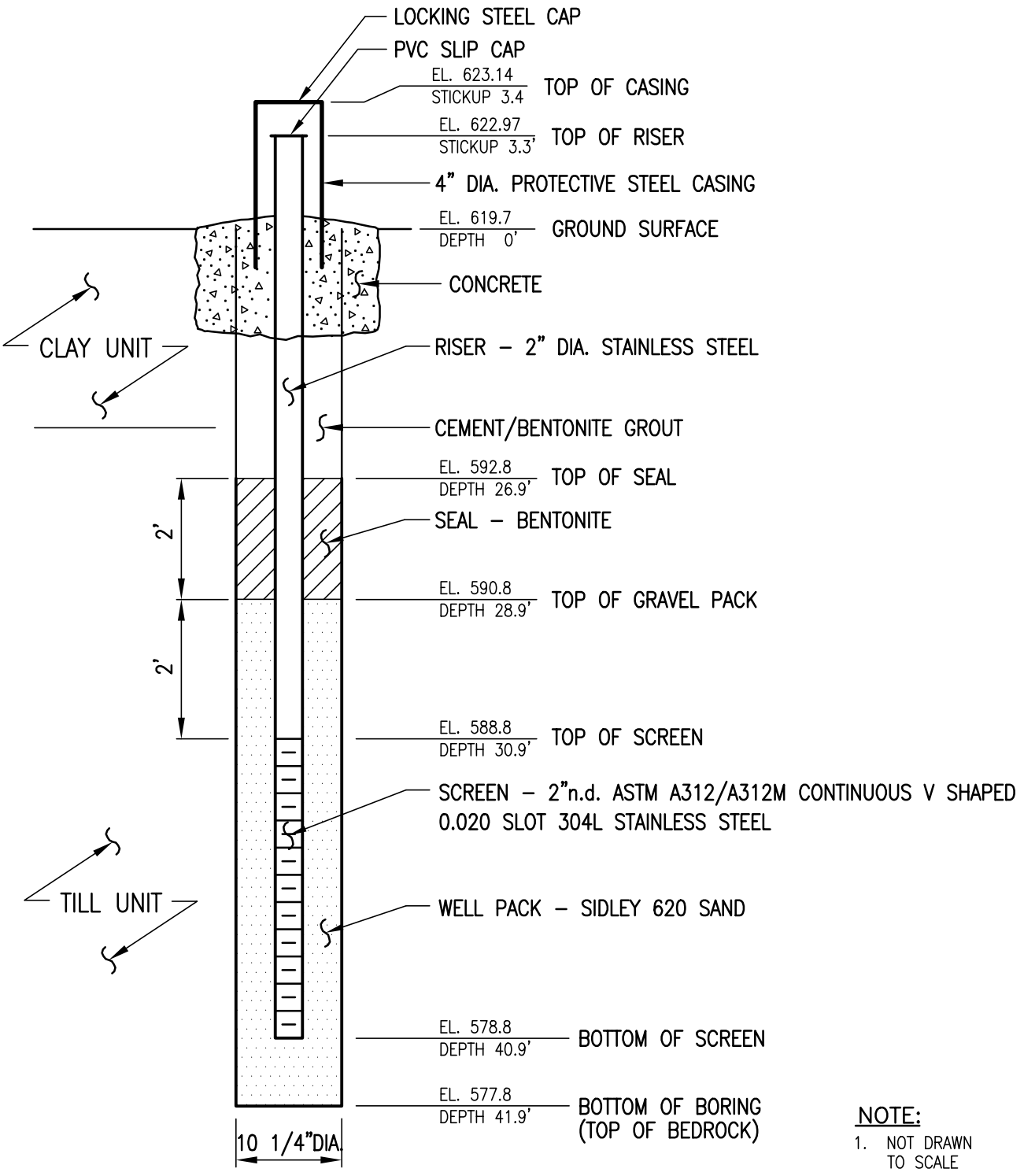
1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK
NO.	DATE		
		DRAWING	SHALLOW GROUNDWATER MONITORING WELL DETAIL

Unicorn Management Consultants, LLC
52 FEDERAL ROAD
DANBURY, CT
(203) 205-9000

PROJECT # 2011–200
FILENAME: 2035200A
SCALE: NTS
DATE: 1/15/02
BY: AD
CK:
FIGURE # MW–12S

MW–12M

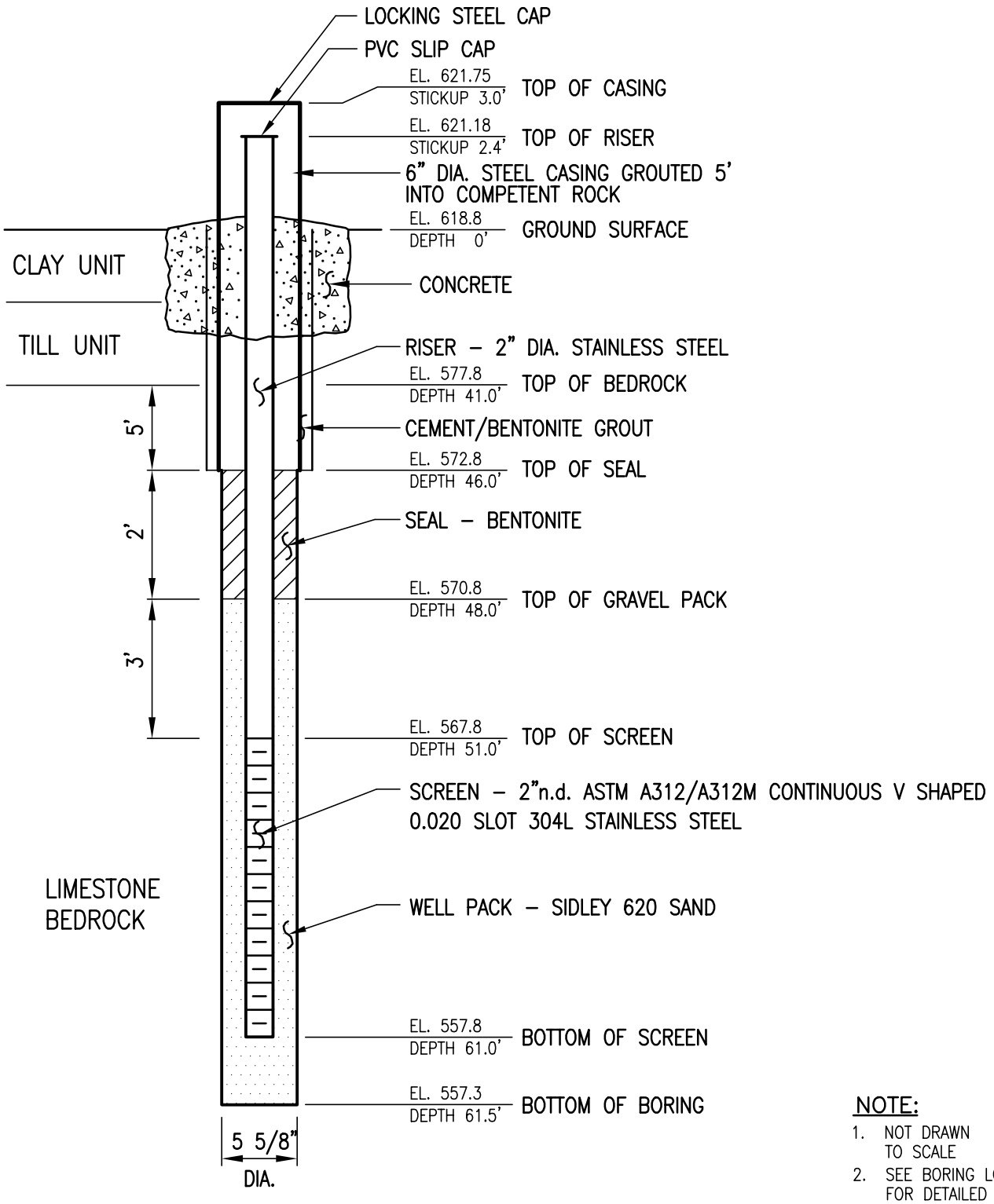


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	MEDIUM GROUNDWATER MONITORING WELL DETAIL		BY: AD / CK:
					FIGURE # MW–12M

MW–12D

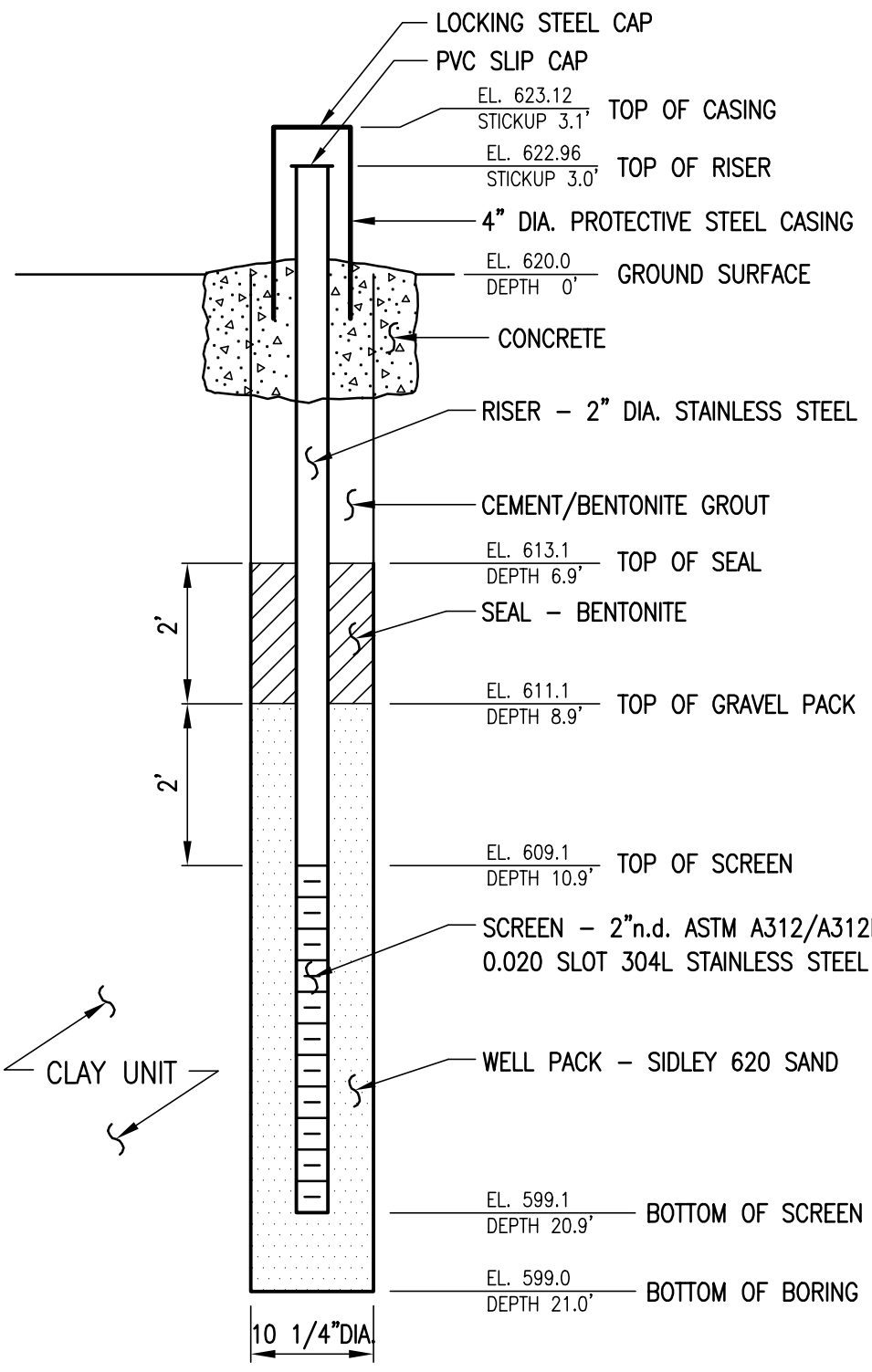


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200 FILENAME: 2035200A SCALE: NTS DATE: 1/15/02 BY: AD CK:
NO.	DATE	DRAWING	BEDROCK GROUNDWATER MONITORING WELL DETAIL		FIGURE # MW–12D

MW–13S

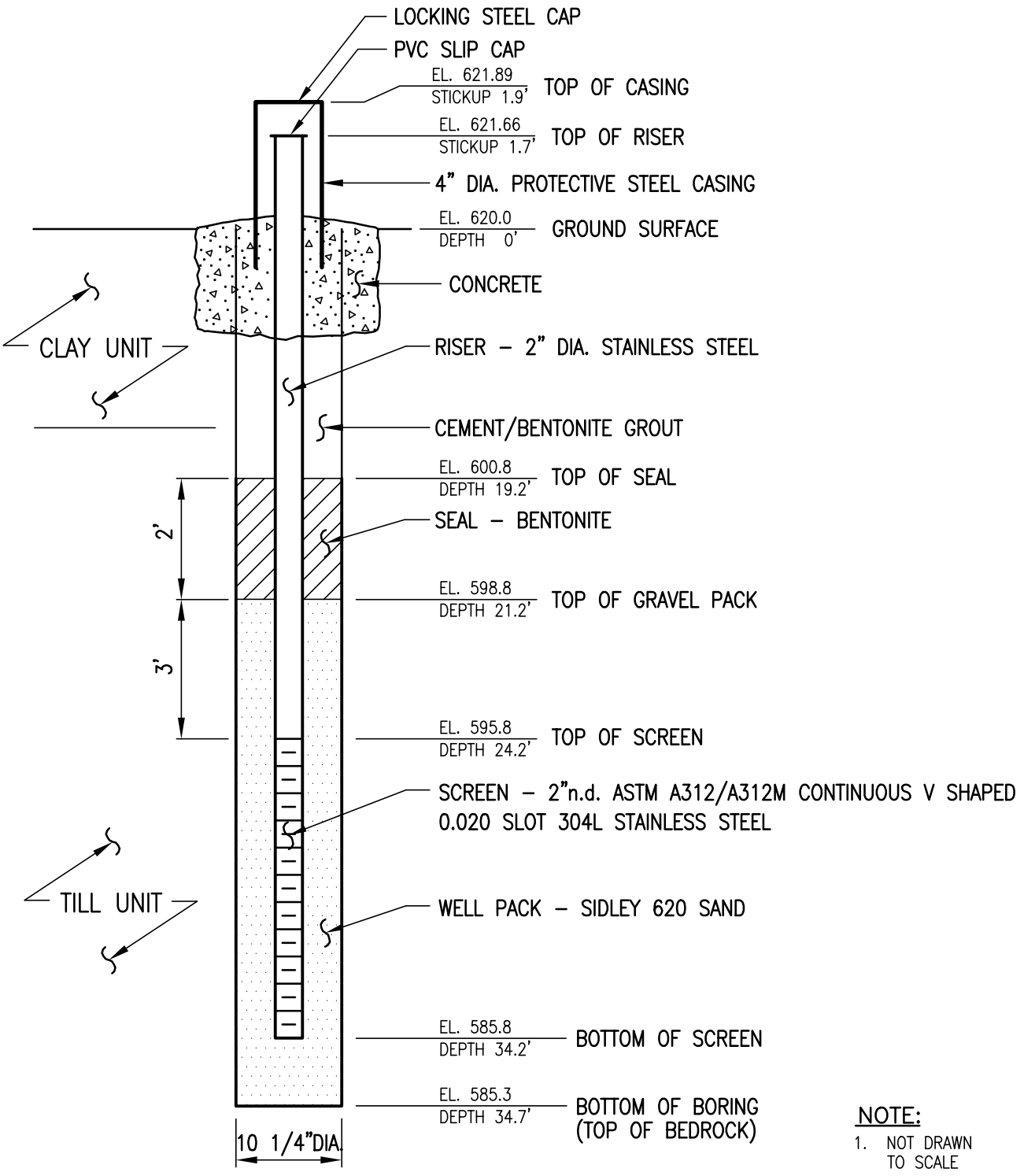


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
		DRAWING	SHALLOW GROUNDWATER MONITORING WELL DETAIL		SCALE: NTS DATE: 1/15/02
					BY: AD CK:
					FIGURE # MW–13S

MW–13M

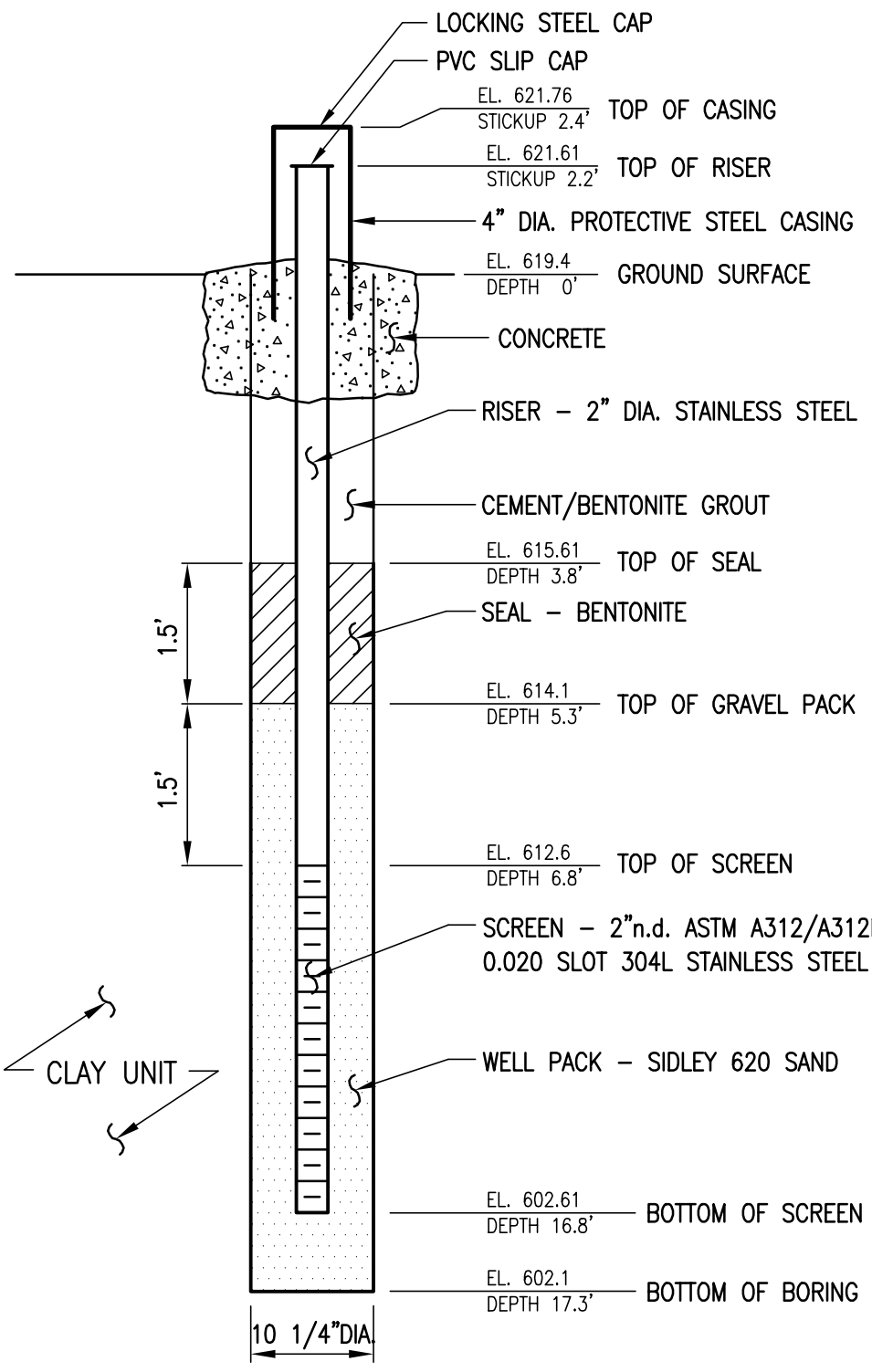


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	MEDIUM GROUNDWATER MONITORING WELL DETAIL		BY: AD / CK:
					FIGURE # MW–13M

MW–14S

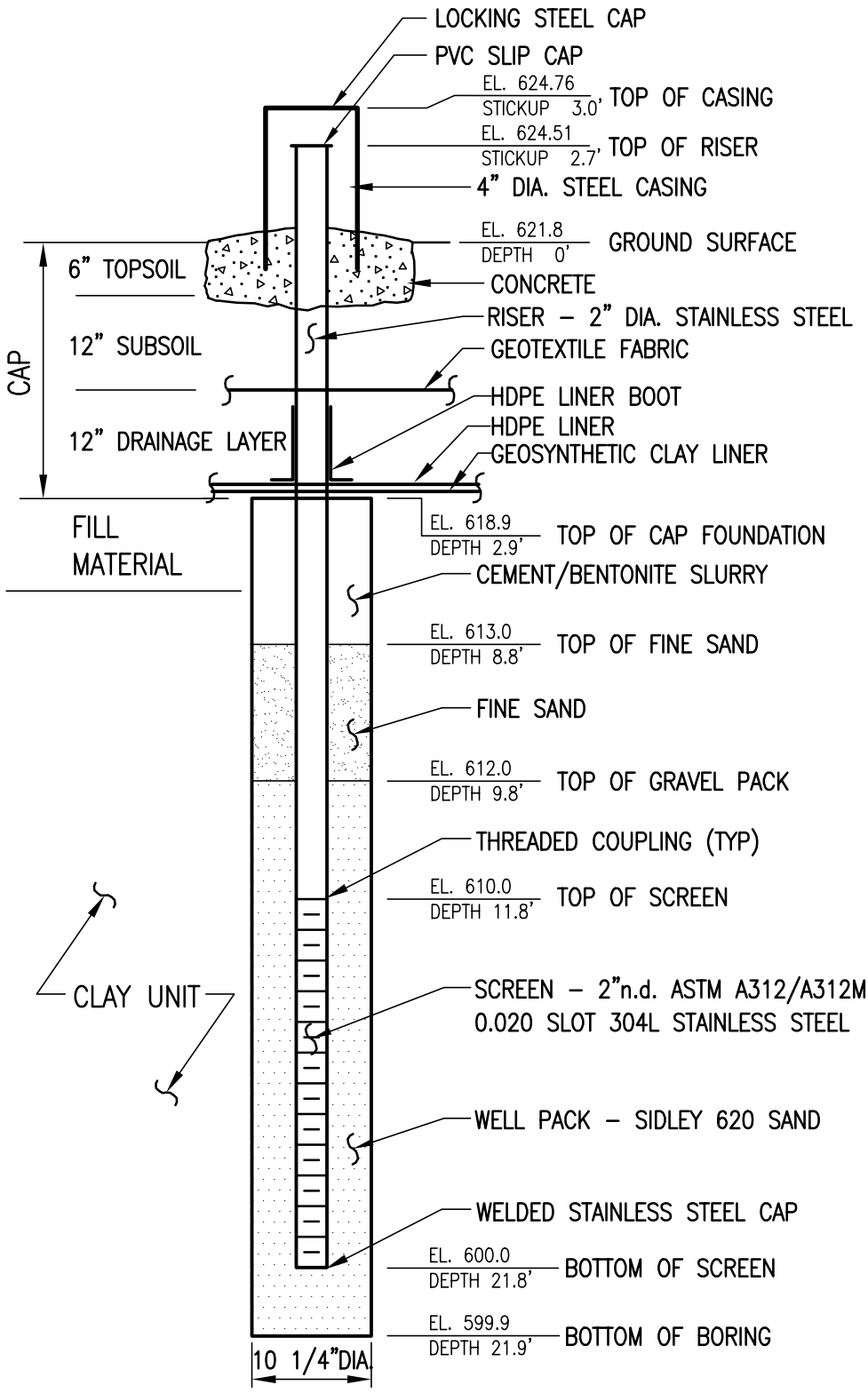


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
		DRAWING	SHALLOW GROUNDWATER MONITORING WELL DETAIL		SCALE: NTS DATE: 1/15/02
					BY: AD CK:
					FIGURE # MW–14S

MW–16

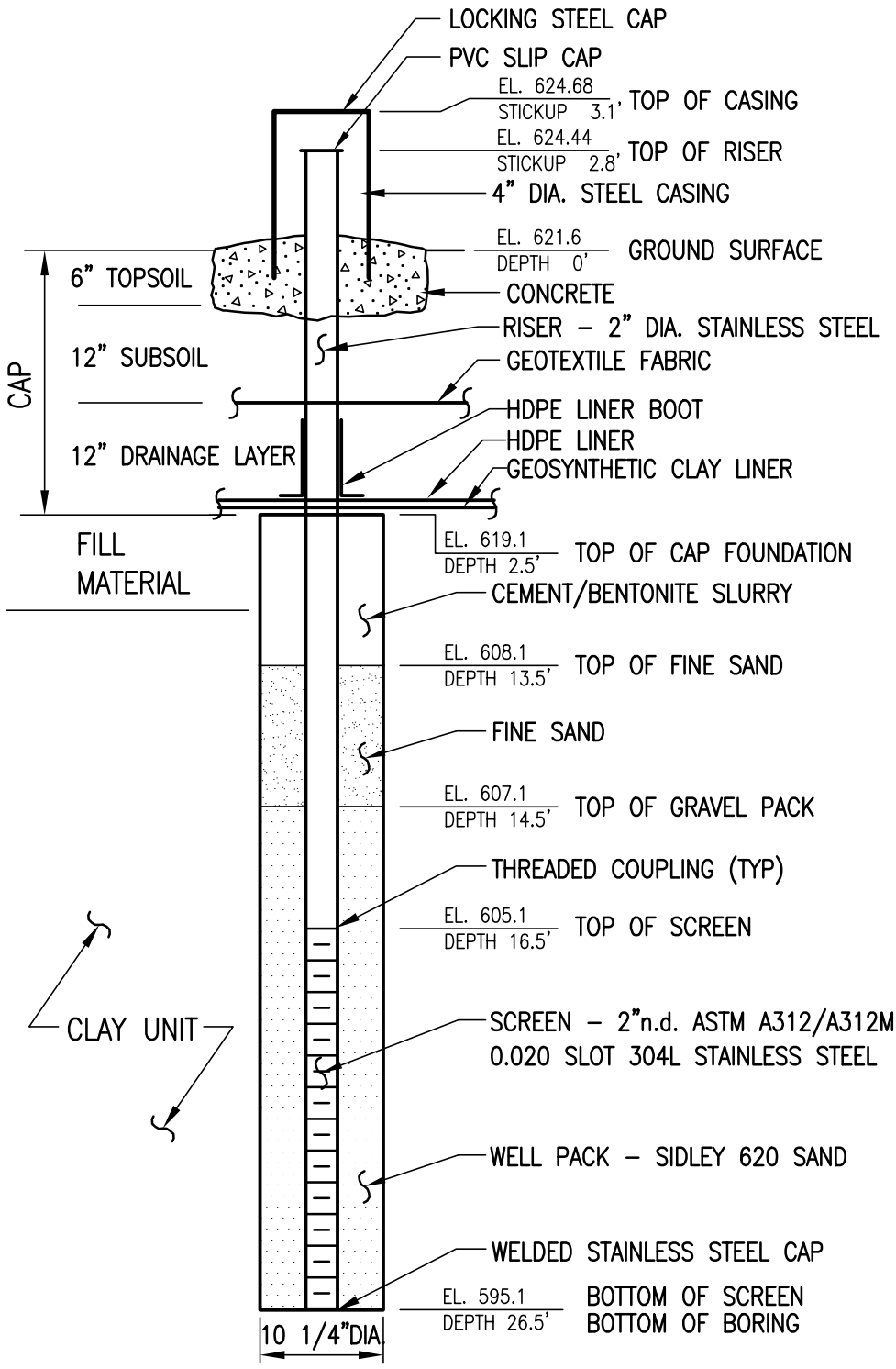


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	GROUNDWATER OBSERVATION WELL DETAIL		BY: AD / CK:
					FIGURE # MW–16

MW–17

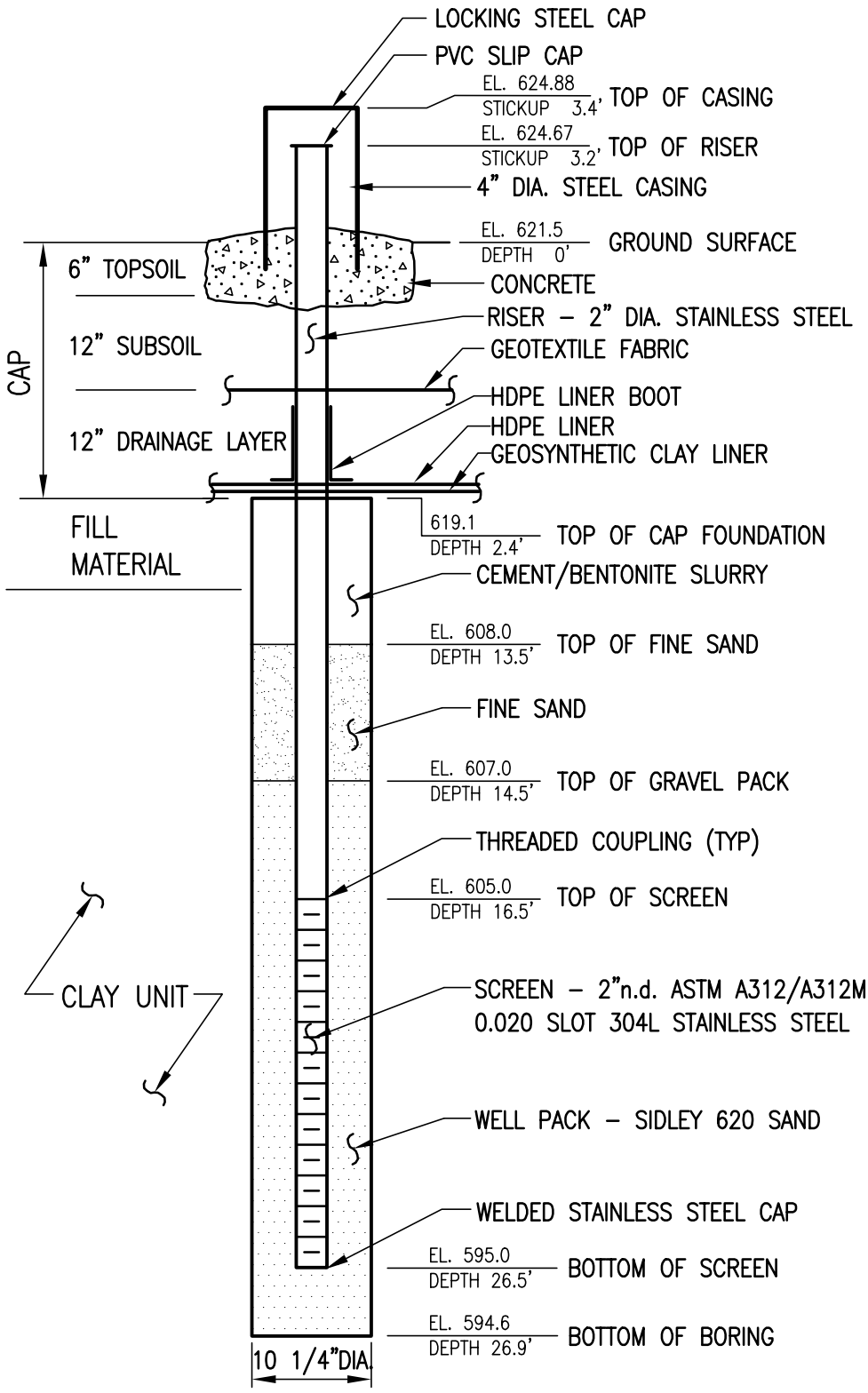


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	GROUNDWATER OBSERVATION WELL DETAIL		BY: AD / CK:
					FIGURE # MW–17

MW–18

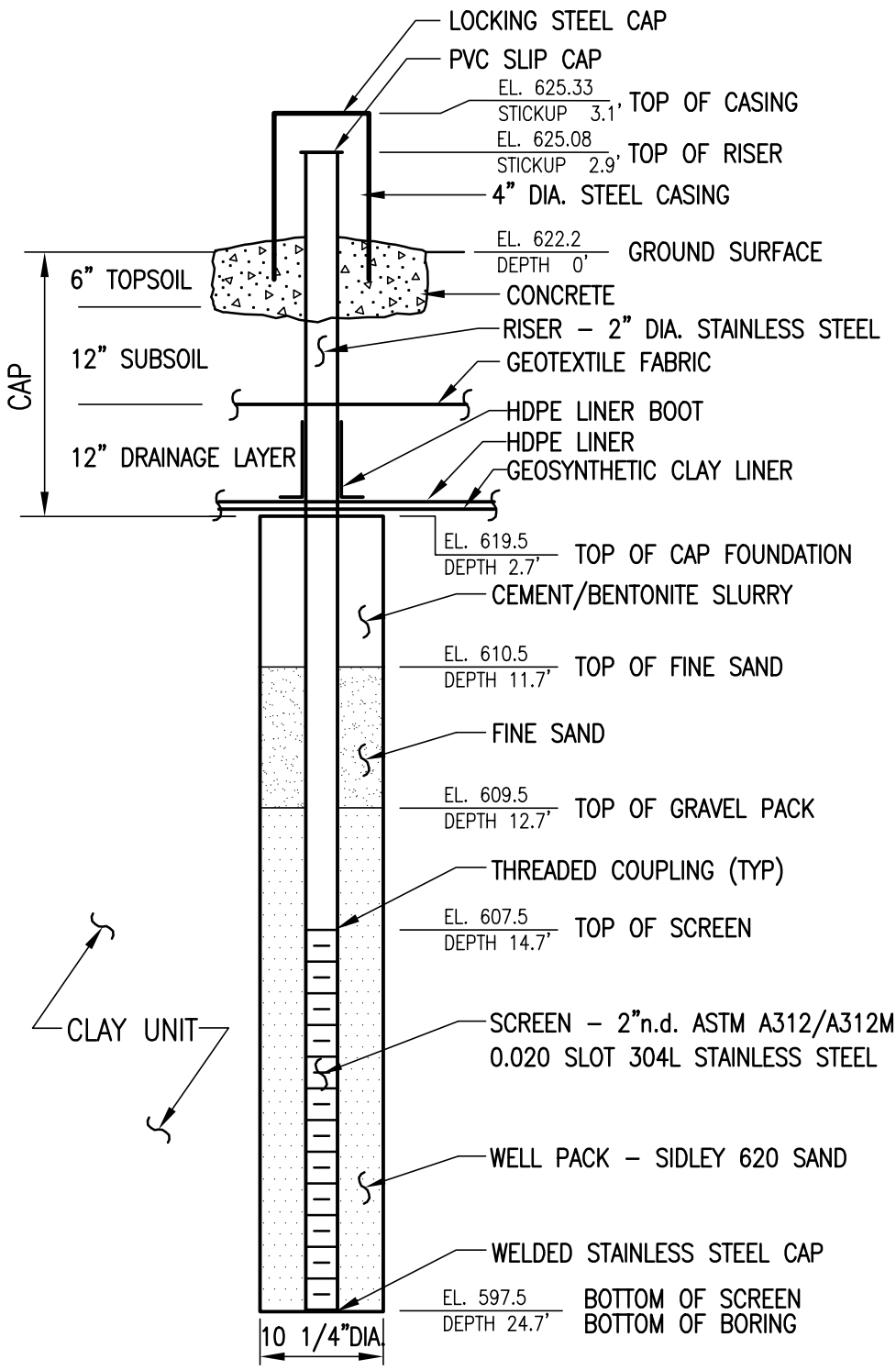


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	GROUNDWATER OBSERVATION WELL DETAIL		BY: AD / CK:
					FIGURE # MW–18

MW–19

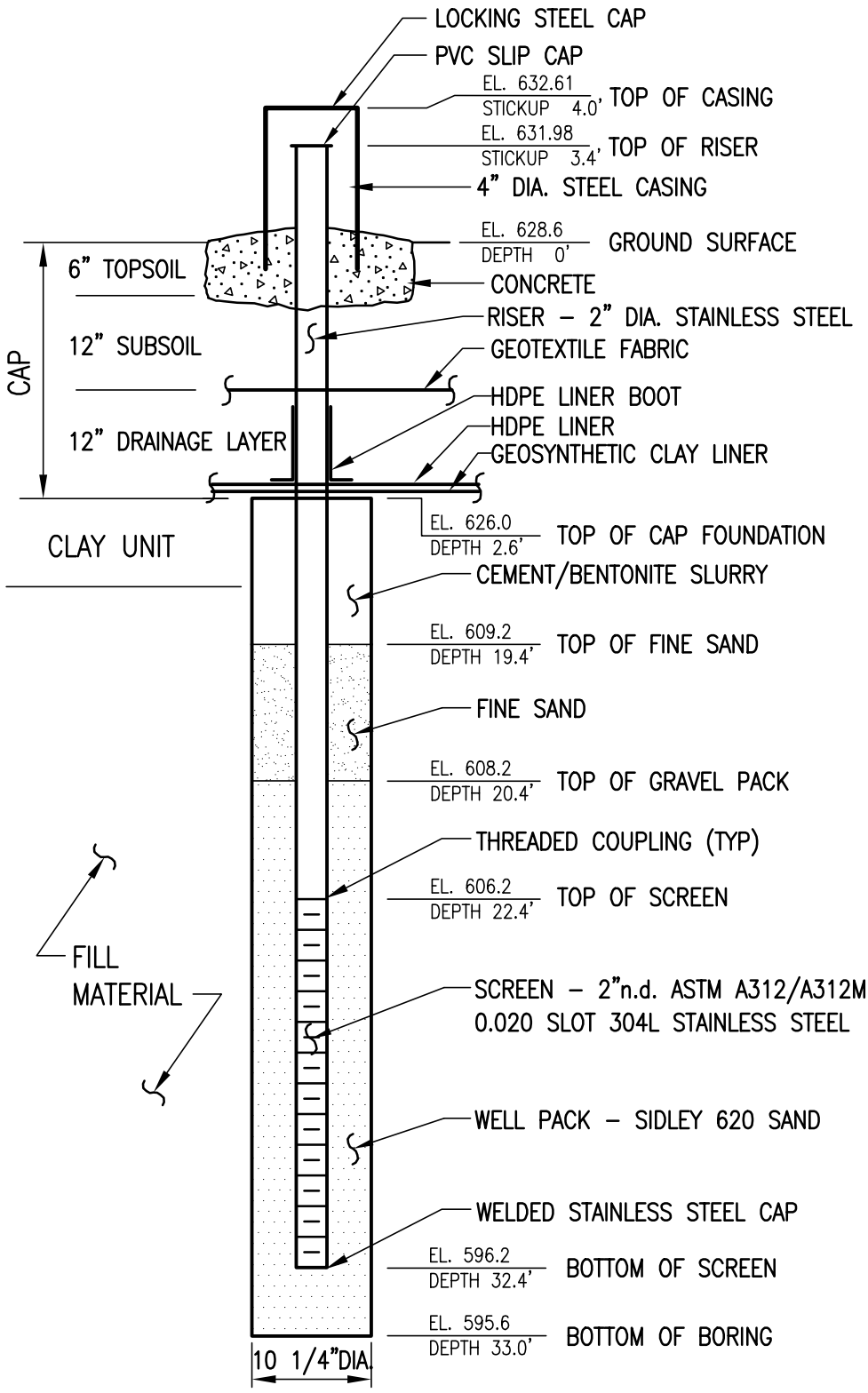


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200 FILENAME: 2035200A SCALE: NTS DATE: 1/15/02 BY: AD CK:
NO.	DATE	DRAWING	GROUNDWATER OBSERVATION WELL DETAIL		FIGURE # MW–19

MW–20



NOTE:

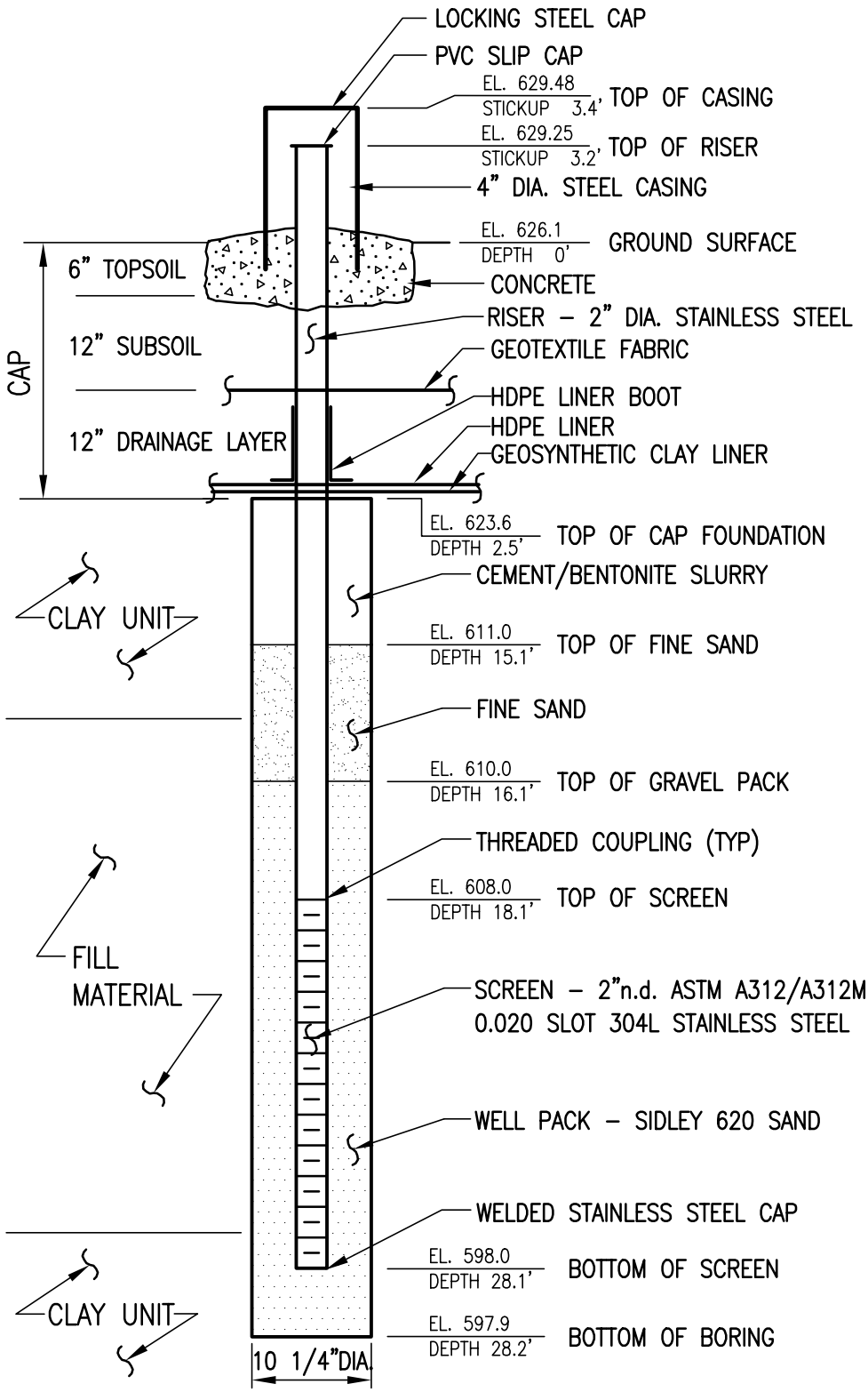
1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.				
NO.	DATE			
		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	
		DRAWING	GROUNDWATER OBSERVATION WELL DETAIL	

Unicorn Management Consultants, LLC
52 FEDERAL ROAD
DANBURY, CT
(203) 205-9000

PROJECT #	2011–200
FILENAME:	2035200A
SCALE: NTS	DATE: 1/15/02
BY: AD	CK:
FIGURE #	MW–20

MW–21

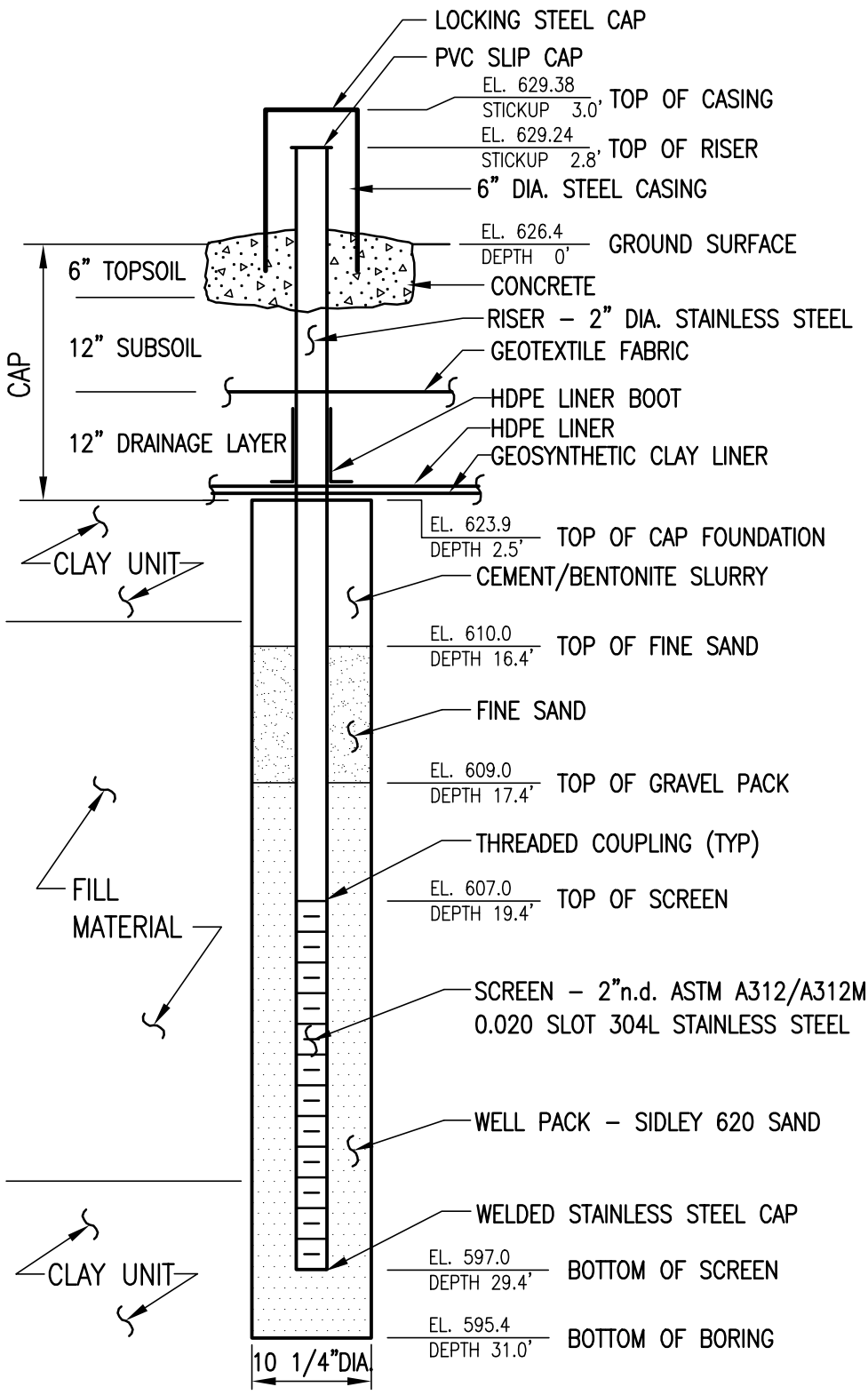


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200 FILENAME: 2035200A SCALE: NTS DATE: 1/15/02 BY: AD CK:
NO.	DATE	DRAWING	GROUNDWATER OBSERVATION WELL DETAIL		FIGURE # MW–21

MW–22

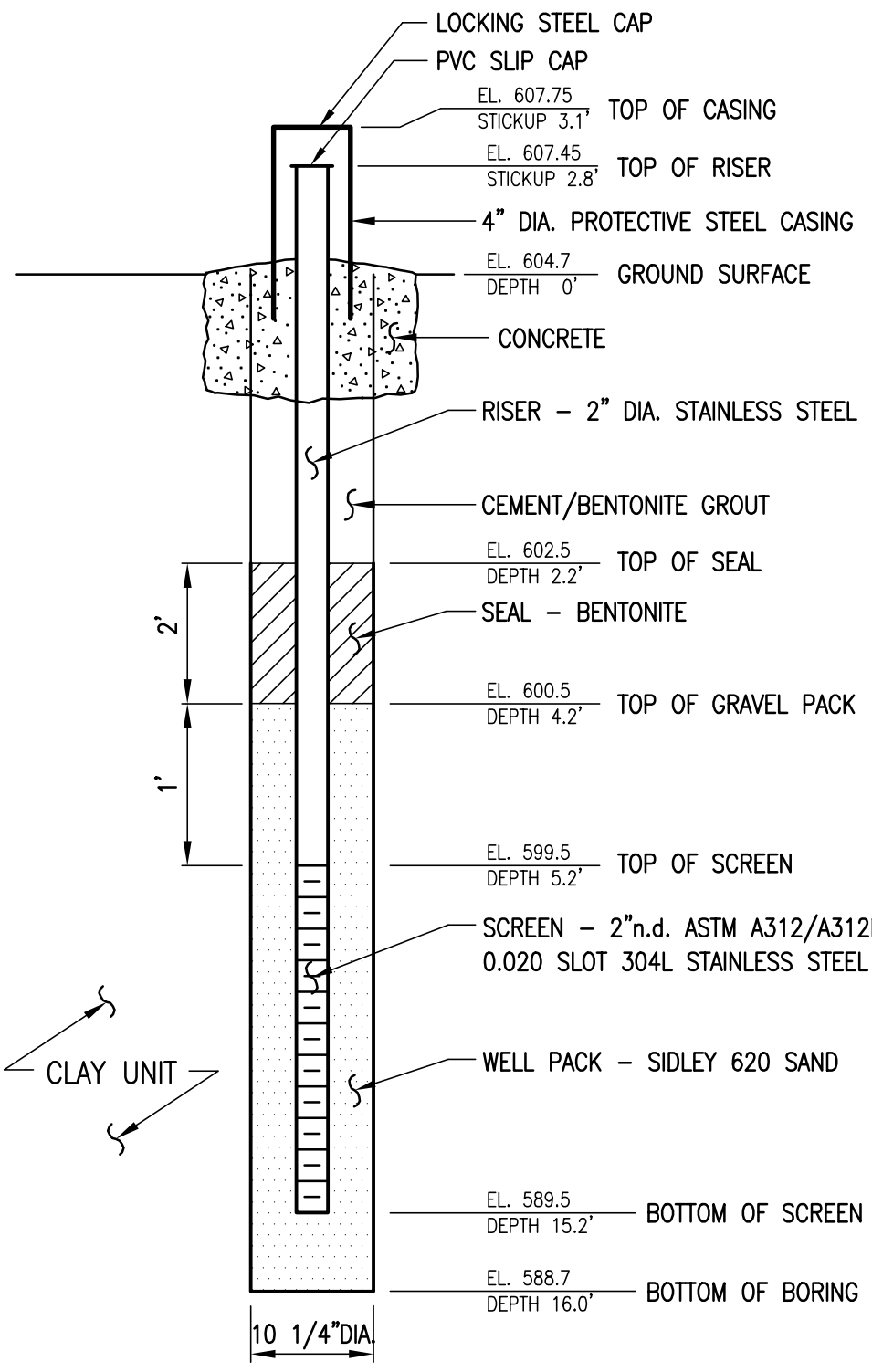


NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	GROUNDWATER OBSERVATION WELL DETAIL		BY: AD / CK:
					FIGURE # MW–22

MW–23S



NOTE:

1. NOT DRAWN TO SCALE
2. SEE BORING LOG FOR DETAILED SOIL DESCRIPTION.

REVISION NO.		PROJECT	UNION ROAD CHEEKTOWAGA, NEW YORK	Unicorn Management Consultants, LLC 52 FEDERAL ROAD DANBURY, CT (203) 205-9000	PROJECT # 2011–200
NO.	DATE				FILENAME: 2035200A
					SCALE: NTS / DATE: 1/15/02
		DRAWING	SHALLOW GROUNDWATER MONITORING WELL DETAIL		BY: AD / CK:
					FIGURE # MW–23S

APPENDIX B

LABORATORY REPORT

October 02, 2018 Service Request No:R1808910

Mr. Michael Persico
Unicorn Management Consultants
52 Federal Road
Suite 2C
Danbury, CT 06810

Laboratory Results for: Union Road

Dear Mr.Persico,

Enclosed are the results of the sample(s) submitted to our laboratory September 18, 2018
For your reference, these analyses have been assigned our service request number **R1808910.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7475. You may also contact me via email at Meghan.Pedro@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Meghan Pedro
Project Manager

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

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MW-12S - GenChem 1120
MW-12M - GenChem 1121
MW-10D - GenChem 1122
1664A - OG HEM - 608139 1123

Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Environmental

Client: Unicorn Management Consultants
Project: Union Road
Sample Matrix: Water

Service Request: R1808910
Date Received: 09/17/2018 - 09/18/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt:

Seventeen water samples were received for analysis at ALS Environmental on 09/17/2018 - 09/18/2018. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Semivolatiles by GC/MS:

Method 8270D, 09/24/2018: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8270D, 09/24/2018: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8270D, 09/24/2018: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8270D, 09/24/2018: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8270D, 09/24/2018: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8270D SIM, 09/21/2018: The control limit was exceeded for one or more surrogates in the Continuing Calibration Verification (CCV). The surrogates were within acceptance limits for the associated field samples. The data quality was not significantly affected and no further corrective action was taken.
Method 8270D SIM, 09/18/2018: The control limit was exceeded for one or more surrogates in the Continuing Calibration Verification (CCV). The surrogates were within acceptance limits for the associated field samples. The data quality was not significantly affected and no further corrective action was taken.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 10/02/2018

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 09/21/2018: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8260C, 09/21/2018: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Approved by _____ Date 10/02/2018

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1808910-001	MW-12D	9/17/2018	1118
R1808910-002	MW-11M	9/17/2018	1155
R1808910-003	MW-13S	9/17/2018	1225
R1808910-004	MW-13M	9/17/2018	1155
R1808910-005	Trip Blank	9/17/2018	1200
R1808910-006	MW-14S	9/18/2018	0910
R1808910-007	MW-11S	9/18/2018	1100
R1808910-008	MW-10S	9/18/2018	1135
R1808910-009	MW-10M	9/18/2018	1145
R1808910-010	MW-12S	9/18/2018	1230
R1808910-011	MW-12M	9/18/2018	1235
R1808910-012	Dup 091818A	9/18/2018	1105
R1808910-013	FB 091818A	9/18/2018	0920
R1808910-014	EB 091818A	9/18/2018	0955
R1808910-015	TB-A	9/18/2018	
R1808910-016	TB-B	9/18/2018	
R1808910-017	MW-10D	9/18/2018	0730

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 53381

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: Union Road	Project Number: 2011 - 200
Project Manager: Michael Persico	Report CC: F. Trejo / M. Oconnor *
Company/Address: Unicorn Management Consultants, LLC 52 Federal Road, Suite 2C Danbury, CT 06810	
Phone #: (203) 205-9000	Email: mpersico@unicornmgt.com
Sampler's Signature: UMC	Sampler's Printed Name: UMC

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1 | C | | | | | | O | 3

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs ○ 8260 ○ 624 ○ CLP	GCMS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 6081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below) 7470 (HG) 6010 *	1664A / 06 HEM	REMARKS/ ALTERNATE DESCRIPTION
MW-12D		9/17/18	1118	GW	7	X	X					X	X	
MW-11M		9/17/18	1155	GW	7	X	X					X	X	
MW-13S		9/17/18	~~1225~~ 1223	GW	7	X	X					X	X	
MW-13M		9/17/18	~~1255~~ 1155	GW	7	X	X					X	X	
Trip Blank		9/10/18	1200	AQ	3	X								

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals * ftrejo@unicornmgt.com
Moconnor@unicornmgt.com
edickinson@trilliumitc.com
** Dissolved As, Pb — Lab Filter

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED NY

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
X Standard (10 business days-No Surcharge)
REQUESTED REPORT DATE: _____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
X IV. Data Validation Report with Raw Data
NYSDEC Format
Edata X Yes ____ No

INVOICE INFORMATION
PO # 2011 - 200
BILL TO: Isabel Miller
imiller@unicornmgt.com

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Michael Persico	Printed Name: Daniel Marc	Printed Name	Printed Name	Printed Name	Printed Name
Firm: UMC	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 9/17/18 1415	Date/Time: 9/17/18/ 1415	Date/Time	Date/Time	Date/Time	Date/Time

R1808910 5
Unicorn Management Consultants
Union Rd #2011-200

Distribution: White - Lab Copy; Yellow - Return to Originator

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 53383

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 2

Project Name: Union Road	Project Number: 2011 -200
Project Manager: Michael Persico	Report CC: F.Tresso/M.Oconnor *
Company/Address: Unicorn Management Consultants, LLC 52 Federal Road, Suite 2C Danbury, CT 06810	
Phone #: (203) 205.9000	Email: mpersico@unicornmgt.com
Sampler's Signature: UMC	Sampler's Printed Name: UMC

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1 0 0 3 0

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs 8260 ○ 624 ○ CLP	GC/MS SVOAs 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below) 6010 **	1664A/OG HEM	8270 - 1,4-Dioxane (SIM)						
MW-14S		9/18/18	0910	GW	7	X	X					X	X							
MW-14S MS/MSD		9/18/18	0910	GW	3									X						
MW-11S		9/18/18	1000	GW	8	X	X					X	X	X						
MW-10S		9/18/18	1135	GW	8	X	X					X	X	X						
MW-10M		9/18/18	1145	GW	8	X	X					X	X	X						
MW-12S		9/18/18	1230	GW	8	X	X					X	X	X						
MW-12M		9/18/18	1235	GW	8	X	X					X	X	X						
Dup 091818A		9/18/18	1105	GW	8	X	X	(VP)			(MP)	X	X	X						
FB091818A		9/18/18	0920	AQ	1									X						
EB091818A		9/18/18	0955	AQ	1									X						
TB-A		lab	Lab	Lab	3	X														

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals * ftresso@unicornmgt.com
moconnor@unicornmgt.com
edickinson@trilliuminc.com

** Dissolved As, Pb + Lab Filter

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED NY

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
X Standard (10 business days-No Surcharge)
REQUESTED REPORT DATE _____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
X IV. Data Validation Report with Raw Data
NYSDEC Format
Edata X Yes ____ No

INVOICE INFORMATION
PO # 2011-200
BILL TO: Isabel Miller
imiller@unicornmgt.com

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Michael Persico	Printed Name: David Hurc	Printed Name	Printed Name	Printed Name	
Firm: UMC	Firm: ALS	Firm	Firm	Firm	
Date/Time: 9/18/18 1735	Date/Time: 9/18/18/ 1735	Date/Time	Date/Time	Date/Time	

R1808910 5
Unicorn Management Consultants
Union Road

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 53382

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 2 OF 2

Project Name: Union Road	Project Number: 2011-200
Project Manager: Michael Persico	Report CC: F.Troyo / Moconnor *
Company/Address: Unicorn Management Consultants, LLC 52 Federal Road, Suite 2C Danbury, CT 06810	
Phone #: (203) 205-9000	Email: mpersico@unicornmgt.com
Sampler's Signature: UMC	Sampler's Printed Name: UMC

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1. D — O 3

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs 8260 ○ 624 ○ CLP	GC/MS SVOAs 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below) 6010 **	1664A/Oil HEM								
TB-B		Lab	Lab	Lab	3	X																
MW-10D		9/18/18	0730	GW	7	X	X					X	X									

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals
* ftroyo@unicornmgt.com
Moconnor@unicornmgt.com
edickinson@trilliuminc.com

** Dissolved As, Pb — Lab Filter

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED NY

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
X Standard (10 business days-No Surcharge)
REQUESTED REPORT DATE _____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
X IV. Data Validation Report with Raw Data
NYSDEC format
Edata X Yes ____ No

INVOICE INFORMATION
PO # 2011-200
BILL TO: Isabel Miller
imiller@unicornmgt.com

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name M. Persico	Printed Name Daniel Ward	Printed Name	Printed Name	Printed Name	
Firm UMC	Firm ALS	Firm	Firm	Firm	
Date/Time 9/18/18 1736	Date/Time 9/18/18/ 1735	Date/Time	Date/Time	Date/Time	

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Unicorn Management Consultants
Union Road

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Unicorn Management Consultants
Union Rd #2011-200
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Cooler Receipt and Preservation Check Form

Project/Client Unicorn Folder Number .

Cooler received on 9/17/18 by: JLW

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	NA

8. Temperature Readings Date: 9/17/18 Time: 1432 ID: IR#7 IR#10 From: Temp Blank Sample Bottle

Observed Temp (°C)	3.3						
Correction Factor (°C)	+0.4						
Corrected Temp (°C)	3.7						
Temp from:Type of bottle	Cont tube						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: Standing Approval Client aware at drop-off Client notified by:

All samples held in storage location: R-002 by JLW on 9/17/18 at 1432
5035 samples placed in storage location: by on at

Cooler Breakdown/Preservation Check**: Date : 9/18/18 Time: 0918 by: @

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2		H_2SO_4			192169	8/19				
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**	411090					

Bottle lot numbers: 8-039-004, 072318-101C

Explain all Discrepancies/ Other Comments:

* 3 vials for the trip blank
1 vial for MW-135

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: @
PC Secondary Review: MP

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

Cooler Receipt and Preservation Check Form

R1808910 5
Unicorn Management Consultants
Union Road

Project/Client Unicorn Folder Number

Cooler received on 9/18/18 by: dlw

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 9/18/18 Time: 1748 ID: IR#7 IR#10 From: Temp Blank Sample Bottle

Observed Temp (°C)	2.4°	5.6°					
Correction Factor (°C)	±0.0	±0.0					
Corrected Temp (°C)	2.4°	5.6°					
Temp from:Type of bottle							
Within 0-6°C?	(Y) N	(Y) N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R002 by dlw on 9/18/18 at 1749
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date: 9/19/18 Time: 1337 by: @

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2		H_2SO_4			192169	9/19				
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**	411709					

Bottle lot numbers: 070218-1BMC, 072318-1DK, 8-039-004

Explain all Discrepancies/ Other Comments:

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: @
PC Secondary Review: MP

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1808910-001.01					
	8260C				
		9/18/2018	0919	R-001 / GLAFORCE	
		9/18/2018	0919	SMO / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-001.02					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-001.03					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-001.04					
	1664A				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-001.05					
	6010C,6010C				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/25/2018	1519	In Lab / KMCLAEN	
		9/25/2018	1808	R-A01 / KMCLAEN	
R1808910-001.06					
	8270D				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/19/2018	0840	In Lab / CHARRINGTON	
R1808910-001.07					
	8270D SIM				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/18/2018	1006	In Lab / JMISIUREWICZ	
		9/18/2018	1638	R-002 / JMISIUREWICZ	
R1808910-002.01					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-002.02					

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-002.03					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-002.04					
	1664A				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-002.05					
	6010C,6010C				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/25/2018	1519	In Lab / KMCLAEN	
		9/25/2018	1808	R-A01 / KMCLAEN	
R1808910-002.06					
	8270D				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/19/2018	0840	In Lab / CHARRINGTON	
R1808910-002.07					
	8270D SIM				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/18/2018	1006	In Lab / JMISIUREWICZ	
		9/18/2018	1638	R-002 / JMISIUREWICZ	
R1808910-003.01					
	8260C				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-003.02					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1808910-003.03					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-003.04					
	1664A				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-003.05					
	6010C,6010C				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/25/2018	1519	In Lab / KMCLAEN	
		9/25/2018	1808	R-A01 / KMCLAEN	
R1808910-003.06					
	8270D				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/19/2018	0840	In Lab / CHARRINGTON	
R1808910-003.07					
	8270D SIM				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/18/2018	1006	In Lab / JMISIUREWICZ	
		9/18/2018	1638	R-002 / JMISIUREWICZ	
R1808910-004.01					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-004.02					
	8260C				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-004.03					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-004.04					

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	1664A				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-004.05					
	6010C,6010C				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/25/2018	1519	In Lab / KMCLAEN	
		9/25/2018	1808	R-A01 / KMCLAEN	
R1808910-004.06					
	8270D				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/19/2018	0840	In Lab / CHARRINGTON	
R1808910-004.07					
	8270D SIM				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-002 / GLAFORCE	
		9/18/2018	1006	In Lab / JMISIUREWICZ	
		9/18/2018	1638	R-002 / JMISIUREWICZ	
R1808910-005.01					
	8260C				
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-005.02					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-005.03					
		9/18/2018	0919	SMO / GLAFORCE	
		9/18/2018	0919	R-001 / GLAFORCE	
R1808910-006.01					
	8260C				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1808910-006.02					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-006.03					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-006.04					
	1664A				
		9/19/2018	1038	SMO / JJANSON	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-006.05					
	6010C,6010C				
		9/19/2018	1038	SMO / JJANSON	
		9/25/2018	1520	In Lab / KMCLAEN	
		9/25/2018	1809	R-A01 / KMCLAEN	
R1808910-006.06					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
R1808910-006.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1557	R-002 / JMISIUREWICZ	
R1808910-006.08					
		9/19/2018	1339	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1557	R-002 / JMISIUREWICZ	
R1808910-006.09					
		9/19/2018	1339	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	
R1808910-006.10					
	8270D				
		9/19/2018	1341	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8270D				
		9/20/2018	0810	In Lab / CHARRINGTON	
R1808910-007.01					
	8260C				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-007.02					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-007.03					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-007.04					
	1664A				
		9/19/2018	1038	SMO / JJANSON	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-007.05					
	6010C,6010C				
		9/19/2018	1038	SMO / JJANSON	
		9/25/2018	1519	In Lab / KMCLAEN	
		9/25/2018	1809	R-A01 / KMCLAEN	
R1808910-007.06					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
R1808910-007.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1556	R-002 / JMISIUREWICZ	
R1808910-007.08					
	8270D				
		9/19/2018	1341	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/20/2018	0809	In Lab / CHARRINGTON	

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1808910-008.01					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-008.02					
	8260C				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-008.03					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-008.04					
	1664A				
		9/19/2018	1038	SMO / JJANSON	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-008.05					
	6010C,6010C				
		9/19/2018	1038	SMO / JJANSON	
		9/25/2018	1519	In Lab / KMCLAEN	
		9/25/2018	1809	R-A01 / KMCLAEN	
R1808910-008.06					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
R1808910-008.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1557	R-002 / JMISIUREWICZ	
R1808910-008.08					
	8270D				
		9/19/2018	1341	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/20/2018	0809	In Lab / CHARRINGTON	
R1808910-009.01					
	8260C				
		9/19/2018	1038	SMO / JJANSON	

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C				
		9/19/2018	1340	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-009.02					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-009.03					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-009.04					
	1664A				
		9/19/2018	1038	SMO / JJANSON	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-009.05					
	6010C,6010C				
		9/19/2018	1038	SMO / JJANSON	
		9/25/2018	1519	In Lab / KMCLAEN	
		9/25/2018	1809	R-A01 / KMCLAEN	
R1808910-009.06					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
R1808910-009.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1557	R-002 / JMISIUREWICZ	
R1808910-009.08					
	8270D				
		9/19/2018	1341	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/20/2018	0809	In Lab / CHARRINGTON	
R1808910-010.01					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	

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Internal Chain of Custody Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1808910-010.02					
	8260C				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-010.03					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-010.04					
	1664A				
		9/19/2018	1038	SMO / JJANSON	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-010.05					
	6010C,6010C				
		9/19/2018	1038	SMO / JJANSON	
		9/25/2018	1520	In Lab / KMCLAEN	
		9/25/2018	1809	R-A01 / KMCLAEN	
R1808910-010.06					
	8270D				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/20/2018	0809	In Lab / CHARRINGTON	
R1808910-010.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1556	R-002 / JMISIUREWICZ	
R1808910-010.08					
		9/19/2018	1341	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	
R1808910-011.01					
	8260C				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1635	R-001-S08 / FNAEGLER	
R1808910-011.02					

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-011.03					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-011.04					
	1664A				
		9/19/2018	1038	SMO / JJANSON	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-011.05					
	6010C,6010C				
		9/19/2018	1038	SMO / JJANSON	
		9/25/2018	1520	In Lab / KMCLAEN	
		9/25/2018	1809	R-A01 / KMCLAEN	
R1808910-011.06					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
R1808910-011.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1556	R-002 / JMISIUREWICZ	
R1808910-011.08					
	8270D				
		9/19/2018	1341	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/20/2018	0809	In Lab / CHARRINGTON	
R1808910-012.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1556	R-002 / JMISIUREWICZ	
R1808910-013.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8270D SIM				
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1556	R-002 / JMISIUREWICZ	
R1808910-014.07					
	8270D SIM				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/21/2018	1051	In Lab / JMISIUREWICZ	
		9/21/2018	1556	R-002 / JMISIUREWICZ	
R1808910-015.01					
	8260C				
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1636	R-001-S08 / FNAEGLER	
R1808910-015.02					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-015.03					
		9/19/2018	1038	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-016.01					
	8260C				
		9/19/2018	1044	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1636	R-001-S08 / FNAEGLER	
R1808910-016.02					
		9/19/2018	1044	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-016.03					
		9/19/2018	1044	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-017.01					
	8260C				
		9/19/2018	1045	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	

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Internal Chain of Custody Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C				
		9/20/2018	1548	In Lab / FNAEGLER	
		9/20/2018	1636	R-001-S08 / FNAEGLER	
R1808910-017.02					
		9/19/2018	1045	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-017.03					
		9/19/2018	1045	SMO / JJANSON	
		9/19/2018	1340	R-001 / GLAFORCE	
R1808910-017.04					
	1664A				
		9/19/2018	1045	SMO / JJANSON	
		9/26/2018	0944	R-Dumpster / AFELSER	
R1808910-017.05					
	6010C,6010C				
		9/19/2018	1045	SMO / JJANSON	
		9/25/2018	1520	In Lab / KMCLAEN	
		9/25/2018	1809	R-A01 / KMCLAEN	
R1808910-017.06					
	8270D				
		9/19/2018	1045	SMO / JJANSON	
		9/19/2018	1341	R-002 / GLAFORCE	
		9/20/2018	0809	In Lab / CHARRINGTON	
R1808910-017.07					
		9/19/2018	1341	SMO / GLAFORCE	
		9/19/2018	1341	R-002 / GLAFORCE	

Miscellaneous Forms

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www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
8270D SIM	Water	1,4-Dioxane

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Sample Name: MW-12D **Date Collected:** 09/17/18
Lab Code: R1808910-001 **Date Received:** 09/17/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ

Sample Name: MW-11M **Date Collected:** 09/17/18
Lab Code: R1808910-002 **Date Received:** 09/17/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ

Sample Name: MW-13S **Date Collected:** 09/17/18
Lab Code: R1808910-003 **Date Received:** 09/17/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ

Sample Name: MW-13M **Date Collected:** 09/17/18
Lab Code: R1808910-004 **Date Received:** 09/17/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Sample Name: Trip Blank **Date Collected:** 09/17/18
Lab Code: R1808910-005 **Date Received:** 09/17/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Sample Name: MW-14S **Date Collected:** 09/18/18
Lab Code: R1808910-006 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Sample Name: MW-11S **Date Collected:** 09/18/18
Lab Code: R1808910-007 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Sample Name: MW-10S **Date Collected:** 09/18/18
Lab Code: R1808910-008 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Sample Name: MW-10M **Date Collected:** 09/18/18
Lab Code: R1808910-009 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Sample Name: MW-12S **Date Collected:** 09/18/18
Lab Code: R1808910-010 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Sample Name: MW-12M **Date Collected:** 09/18/18
Lab Code: R1808910-011 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Sample Name: Dup 091818A **Date Collected:** 09/18/18
Lab Code: R1808910-012 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200

Sample Name: FB 091818A **Date Collected:** 09/18/18
Lab Code: R1808910-013 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Sample Name: EB 091818A **Date Collected:** 09/18/18
Lab Code: R1808910-014 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270D SIM	JMISIUREWICZ	JMISIUREWICZ

Sample Name: TB-A **Date Collected:** 09/18/18
Lab Code: R1808910-015 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Sample Name: TB-B **Date Collected:** 09/18/18
Lab Code: R1808910-016 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Sample Name: MW-10D **Date Collected:** 09/18/18
Lab Code: R1808910-017 **Date Received:** 09/18/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER

Analyst Summary report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200		

Sample Name:	MW-10D	**Date Collected:**	09/18/18
Lab Code:	R1808910-017	**Date Received:**	09/18/18
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER
8270D	CHARRINGTON	JMISIUREWICZ

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

ALS Environmental—Rochester Laboratory
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Volatile Organic Compounds by GC/MS

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www.alsglobal.com

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Units:**	ug/L
Lab Code:	R1808910-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 00:53	
Benzene	ND U	5.0	1	09/21/18 00:53	
Bromodichloromethane	ND U	5.0	1	09/21/18 00:53	
Bromoform	ND U	5.0	1	09/21/18 00:53	
Bromomethane	ND U	5.0	1	09/21/18 00:53	
2-Butanone (MEK)	ND U	10	1	09/21/18 00:53	
Carbon Disulfide	ND U	10	1	09/21/18 00:53	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 00:53	
Chlorobenzene	ND U	5.0	1	09/21/18 00:53	
Chloroethane	ND U	5.0	1	09/21/18 00:53	
Chloroform	ND U	5.0	1	09/21/18 00:53	
Chloromethane	ND U	5.0	1	09/21/18 00:53	
Dibromochloromethane	ND U	5.0	1	09/21/18 00:53	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 00:53	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 00:53	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 00:53	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:53	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:53	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 00:53	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:53	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:53	
Ethylbenzene	ND U	5.0	1	09/21/18 00:53	
2-Hexanone	ND U	10	1	09/21/18 00:53	
Methylene Chloride	ND U	5.0	1	09/21/18 00:53	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 00:53	
Styrene	ND U	5.0	1	09/21/18 00:53	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 00:53	
Tetrachloroethene	ND U	5.0	1	09/21/18 00:53	
Toluene	ND U	5.0	1	09/21/18 00:53	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 00:53	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 00:53	
Trichloroethene	ND U	5.0	1	09/21/18 00:53	
Vinyl Chloride	ND U	5.0	1	09/21/18 00:53	
o-Xylene	ND U	5.0	1	09/21/18 00:53	
m,p-Xylenes	ND U	5.0	1	09/21/18 00:53	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Units:**	ug/L
Lab Code:	R1808910-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 122	09/21/18 00:53	
Toluene-d8	96	87 - 121	09/21/18 00:53	
Dibromofluoromethane	94	89 - 119	09/21/18 00:53	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Units:**	ug/L
Lab Code:	R1808910-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 01:16	
Benzene	ND U	5.0	1	09/21/18 01:16	
Bromodichloromethane	ND U	5.0	1	09/21/18 01:16	
Bromoform	ND U	5.0	1	09/21/18 01:16	
Bromomethane	ND U	5.0	1	09/21/18 01:16	
2-Butanone (MEK)	ND U	10	1	09/21/18 01:16	
Carbon Disulfide	ND U	10	1	09/21/18 01:16	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 01:16	
Chlorobenzene	ND U	5.0	1	09/21/18 01:16	
Chloroethane	ND U	5.0	1	09/21/18 01:16	
Chloroform	ND U	5.0	1	09/21/18 01:16	
Chloromethane	ND U	5.0	1	09/21/18 01:16	
Dibromochloromethane	ND U	5.0	1	09/21/18 01:16	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 01:16	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 01:16	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 01:16	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 01:16	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 01:16	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 01:16	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 01:16	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 01:16	
Ethylbenzene	ND U	5.0	1	09/21/18 01:16	
2-Hexanone	ND U	10	1	09/21/18 01:16	
Methylene Chloride	ND U	5.0	1	09/21/18 01:16	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 01:16	
Styrene	ND U	5.0	1	09/21/18 01:16	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 01:16	
Tetrachloroethene	ND U	5.0	1	09/21/18 01:16	
Toluene	ND U	5.0	1	09/21/18 01:16	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 01:16	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 01:16	
Trichloroethene	ND U	5.0	1	09/21/18 01:16	
Vinyl Chloride	ND U	5.0	1	09/21/18 01:16	
o-Xylene	ND U	5.0	1	09/21/18 01:16	
m,p-Xylenes	ND U	5.0	1	09/21/18 01:16	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Units:**	ug/L
Lab Code:	R1808910-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/21/18 01:16	
Toluene-d8	97	87 - 121	09/21/18 01:16	
Dibromofluoromethane	95	89 - 119	09/21/18 01:16	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Units:**	ug/L
Lab Code:	R1808910-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 01:38	
Benzene	ND U	5.0	1	09/21/18 01:38	
Bromodichloromethane	ND U	5.0	1	09/21/18 01:38	
Bromoform	ND U	5.0	1	09/21/18 01:38	
Bromomethane	ND U	5.0	1	09/21/18 01:38	
2-Butanone (MEK)	ND U	10	1	09/21/18 01:38	
Carbon Disulfide	ND U	10	1	09/21/18 01:38	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 01:38	
Chlorobenzene	ND U	5.0	1	09/21/18 01:38	
Chloroethane	ND U	5.0	1	09/21/18 01:38	
Chloroform	ND U	5.0	1	09/21/18 01:38	
Chloromethane	ND U	5.0	1	09/21/18 01:38	
Dibromochloromethane	ND U	5.0	1	09/21/18 01:38	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 01:38	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 01:38	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 01:38	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 01:38	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 01:38	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 01:38	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 01:38	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 01:38	
Ethylbenzene	ND U	5.0	1	09/21/18 01:38	
2-Hexanone	ND U	10	1	09/21/18 01:38	
Methylene Chloride	ND U	5.0	1	09/21/18 01:38	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 01:38	
Styrene	ND U	5.0	1	09/21/18 01:38	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 01:38	
Tetrachloroethene	ND U	5.0	1	09/21/18 01:38	
Toluene	ND U	5.0	1	09/21/18 01:38	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 01:38	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 01:38	
Trichloroethene	ND U	5.0	1	09/21/18 01:38	
Vinyl Chloride	ND U	5.0	1	09/21/18 01:38	
o-Xylene	ND U	5.0	1	09/21/18 01:38	
m,p-Xylenes	ND U	5.0	1	09/21/18 01:38	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Units:**	ug/L
Lab Code:	R1808910-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	09/21/18 01:38	
Toluene-d8	96	87 - 121	09/21/18 01:38	
Dibromofluoromethane	94	89 - 119	09/21/18 01:38	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Units:**	ug/L
Lab Code:	R1808910-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 02:01	
Benzene	ND U	5.0	1	09/21/18 02:01	
Bromodichloromethane	ND U	5.0	1	09/21/18 02:01	
Bromoform	ND U	5.0	1	09/21/18 02:01	
Bromomethane	ND U	5.0	1	09/21/18 02:01	
2-Butanone (MEK)	ND U	10	1	09/21/18 02:01	
Carbon Disulfide	ND U	10	1	09/21/18 02:01	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 02:01	
Chlorobenzene	ND U	5.0	1	09/21/18 02:01	
Chloroethane	ND U	5.0	1	09/21/18 02:01	
Chloroform	ND U	5.0	1	09/21/18 02:01	
Chloromethane	ND U	5.0	1	09/21/18 02:01	
Dibromochloromethane	ND U	5.0	1	09/21/18 02:01	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 02:01	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 02:01	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 02:01	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:01	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:01	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 02:01	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:01	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:01	
Ethylbenzene	ND U	5.0	1	09/21/18 02:01	
2-Hexanone	ND U	10	1	09/21/18 02:01	
Methylene Chloride	ND U	5.0	1	09/21/18 02:01	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 02:01	
Styrene	ND U	5.0	1	09/21/18 02:01	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 02:01	
Tetrachloroethene	ND U	5.0	1	09/21/18 02:01	
Toluene	ND U	5.0	1	09/21/18 02:01	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 02:01	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 02:01	
Trichloroethene	ND U	5.0	1	09/21/18 02:01	
Vinyl Chloride	ND U	5.0	1	09/21/18 02:01	
o-Xylene	ND U	5.0	1	09/21/18 02:01	
m,p-Xylenes	ND U	5.0	1	09/21/18 02:01	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Units:**	ug/L
Lab Code:	R1808910-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	09/21/18 02:01	
Toluene-d8	97	87 - 121	09/21/18 02:01	
Dibromofluoromethane	96	89 - 119	09/21/18 02:01	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:00
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1808910-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/20/18 23:46	
Benzene	ND U	5.0	1	09/20/18 23:46	
Bromodichloromethane	ND U	5.0	1	09/20/18 23:46	
Bromoform	ND U	5.0	1	09/20/18 23:46	
Bromomethane	ND U	5.0	1	09/20/18 23:46	
2-Butanone (MEK)	ND U	10	1	09/20/18 23:46	
Carbon Disulfide	ND U	10	1	09/20/18 23:46	
Carbon Tetrachloride	ND U	5.0	1	09/20/18 23:46	
Chlorobenzene	ND U	5.0	1	09/20/18 23:46	
Chloroethane	ND U	5.0	1	09/20/18 23:46	
Chloroform	ND U	5.0	1	09/20/18 23:46	
Chloromethane	ND U	5.0	1	09/20/18 23:46	
Dibromochloromethane	ND U	5.0	1	09/20/18 23:46	
1,1-Dichloroethane	ND U	5.0	1	09/20/18 23:46	
1,2-Dichloroethane	ND U	5.0	1	09/20/18 23:46	
1,1-Dichloroethene	ND U	5.0	1	09/20/18 23:46	
cis-1,2-Dichloroethene	ND U	5.0	1	09/20/18 23:46	
trans-1,2-Dichloroethene	ND U	5.0	1	09/20/18 23:46	
1,2-Dichloropropane	ND U	5.0	1	09/20/18 23:46	
cis-1,3-Dichloropropene	ND U	5.0	1	09/20/18 23:46	
trans-1,3-Dichloropropene	ND U	5.0	1	09/20/18 23:46	
Ethylbenzene	ND U	5.0	1	09/20/18 23:46	
2-Hexanone	ND U	10	1	09/20/18 23:46	
Methylene Chloride	ND U	5.0	1	09/20/18 23:46	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/20/18 23:46	
Styrene	ND U	5.0	1	09/20/18 23:46	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/20/18 23:46	
Tetrachloroethene	ND U	5.0	1	09/20/18 23:46	
Toluene	ND U	5.0	1	09/20/18 23:46	
1,1,1-Trichloroethane	ND U	5.0	1	09/20/18 23:46	
1,1,2-Trichloroethane	ND U	5.0	1	09/20/18 23:46	
Trichloroethene	ND U	5.0	1	09/20/18 23:46	
Vinyl Chloride	ND U	5.0	1	09/20/18 23:46	
o-Xylene	ND U	5.0	1	09/20/18 23:46	
m,p-Xylenes	ND U	5.0	1	09/20/18 23:46	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:00
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1808910-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/20/18 23:46	
Toluene-d8	96	87 - 121	09/20/18 23:46	
Dibromofluoromethane	95	89 - 119	09/20/18 23:46	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 02:23	
Benzene	ND U	5.0	1	09/21/18 02:23	
Bromodichloromethane	ND U	5.0	1	09/21/18 02:23	
Bromoform	ND U	5.0	1	09/21/18 02:23	
Bromomethane	ND U	5.0	1	09/21/18 02:23	
2-Butanone (MEK)	ND U	10	1	09/21/18 02:23	
Carbon Disulfide	ND U	10	1	09/21/18 02:23	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 02:23	
Chlorobenzene	ND U	5.0	1	09/21/18 02:23	
Chloroethane	ND U	5.0	1	09/21/18 02:23	
Chloroform	ND U	5.0	1	09/21/18 02:23	
Chloromethane	ND U	5.0	1	09/21/18 02:23	
Dibromochloromethane	ND U	5.0	1	09/21/18 02:23	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 02:23	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 02:23	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 02:23	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:23	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:23	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 02:23	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:23	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:23	
Ethylbenzene	ND U	5.0	1	09/21/18 02:23	
2-Hexanone	ND U	10	1	09/21/18 02:23	
Methylene Chloride	ND U	5.0	1	09/21/18 02:23	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 02:23	
Styrene	ND U	5.0	1	09/21/18 02:23	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 02:23	
Tetrachloroethene	ND U	5.0	1	09/21/18 02:23	
Toluene	ND U	5.0	1	09/21/18 02:23	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 02:23	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 02:23	
Trichloroethene	ND U	5.0	1	09/21/18 02:23	
Vinyl Chloride	ND U	5.0	1	09/21/18 02:23	
o-Xylene	ND U	5.0	1	09/21/18 02:23	
m,p-Xylenes	ND U	5.0	1	09/21/18 02:23	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	09/21/18 02:23	
Toluene-d8	96	87 - 121	09/21/18 02:23	
Dibromofluoromethane	93	89 - 119	09/21/18 02:23	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 02:45	
Benzene	ND U	5.0	1	09/21/18 02:45	
Bromodichloromethane	ND U	5.0	1	09/21/18 02:45	
Bromoform	ND U	5.0	1	09/21/18 02:45	
Bromomethane	ND U	5.0	1	09/21/18 02:45	
2-Butanone (MEK)	ND U	10	1	09/21/18 02:45	
Carbon Disulfide	ND U	10	1	09/21/18 02:45	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 02:45	
Chlorobenzene	ND U	5.0	1	09/21/18 02:45	
Chloroethane	ND U	5.0	1	09/21/18 02:45	
Chloroform	ND U	5.0	1	09/21/18 02:45	
Chloromethane	ND U	5.0	1	09/21/18 02:45	
Dibromochloromethane	ND U	5.0	1	09/21/18 02:45	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 02:45	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 02:45	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 02:45	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:45	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:45	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 02:45	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:45	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:45	
Ethylbenzene	ND U	5.0	1	09/21/18 02:45	
2-Hexanone	ND U	10	1	09/21/18 02:45	
Methylene Chloride	ND U	5.0	1	09/21/18 02:45	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 02:45	
Styrene	ND U	5.0	1	09/21/18 02:45	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 02:45	
Tetrachloroethene	ND U	5.0	1	09/21/18 02:45	
Toluene	ND U	5.0	1	09/21/18 02:45	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 02:45	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 02:45	
Trichloroethene	ND U	5.0	1	09/21/18 02:45	
Vinyl Chloride	ND U	5.0	1	09/21/18 02:45	
o-Xylene	ND U	5.0	1	09/21/18 02:45	
m,p-Xylenes	ND U	5.0	1	09/21/18 02:45	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	09/21/18 02:45	
Toluene-d8	97	87 - 121	09/21/18 02:45	
Dibromofluoromethane	96	89 - 119	09/21/18 02:45	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 03:08	
Benzene	ND U	5.0	1	09/21/18 03:08	
Bromodichloromethane	ND U	5.0	1	09/21/18 03:08	
Bromoform	ND U	5.0	1	09/21/18 03:08	
Bromomethane	ND U	5.0	1	09/21/18 03:08	
2-Butanone (MEK)	ND U	10	1	09/21/18 03:08	
Carbon Disulfide	ND U	10	1	09/21/18 03:08	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 03:08	
Chlorobenzene	ND U	5.0	1	09/21/18 03:08	
Chloroethane	ND U	5.0	1	09/21/18 03:08	
Chloroform	ND U	5.0	1	09/21/18 03:08	
Chloromethane	ND U	5.0	1	09/21/18 03:08	
Dibromochloromethane	ND U	5.0	1	09/21/18 03:08	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 03:08	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 03:08	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 03:08	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:08	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:08	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 03:08	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:08	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:08	
Ethylbenzene	ND U	5.0	1	09/21/18 03:08	
2-Hexanone	ND U	10	1	09/21/18 03:08	
Methylene Chloride	ND U	5.0	1	09/21/18 03:08	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 03:08	
Styrene	ND U	5.0	1	09/21/18 03:08	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 03:08	
Tetrachloroethene	ND U	5.0	1	09/21/18 03:08	
Toluene	ND U	5.0	1	09/21/18 03:08	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 03:08	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 03:08	
Trichloroethene	ND U	5.0	1	09/21/18 03:08	
Vinyl Chloride	ND U	5.0	1	09/21/18 03:08	
o-Xylene	ND U	5.0	1	09/21/18 03:08	
m,p-Xylenes	ND U	5.0	1	09/21/18 03:08	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/21/18 03:08	
Toluene-d8	97	87 - 121	09/21/18 03:08	
Dibromofluoromethane	96	89 - 119	09/21/18 03:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 03:30	
Benzene	ND U	5.0	1	09/21/18 03:30	
Bromodichloromethane	ND U	5.0	1	09/21/18 03:30	
Bromoform	ND U	5.0	1	09/21/18 03:30	
Bromomethane	ND U	5.0	1	09/21/18 03:30	
2-Butanone (MEK)	ND U	10	1	09/21/18 03:30	
Carbon Disulfide	ND U	10	1	09/21/18 03:30	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 03:30	
Chlorobenzene	ND U	5.0	1	09/21/18 03:30	
Chloroethane	ND U	5.0	1	09/21/18 03:30	
Chloroform	ND U	5.0	1	09/21/18 03:30	
Chloromethane	ND U	5.0	1	09/21/18 03:30	
Dibromochloromethane	ND U	5.0	1	09/21/18 03:30	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 03:30	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 03:30	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 03:30	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:30	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:30	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 03:30	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:30	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:30	
Ethylbenzene	ND U	5.0	1	09/21/18 03:30	
2-Hexanone	ND U	10	1	09/21/18 03:30	
Methylene Chloride	ND U	5.0	1	09/21/18 03:30	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 03:30	
Styrene	ND U	5.0	1	09/21/18 03:30	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 03:30	
Tetrachloroethene	ND U	5.0	1	09/21/18 03:30	
Toluene	ND U	5.0	1	09/21/18 03:30	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 03:30	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 03:30	
Trichloroethene	ND U	5.0	1	09/21/18 03:30	
Vinyl Chloride	ND U	5.0	1	09/21/18 03:30	
o-Xylene	ND U	5.0	1	09/21/18 03:30	
m,p-Xylenes	ND U	5.0	1	09/21/18 03:30	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 122	09/21/18 03:30	
Toluene-d8	96	87 - 121	09/21/18 03:30	
Dibromofluoromethane	97	89 - 119	09/21/18 03:30	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 03:52	
Benzene	ND U	5.0	1	09/21/18 03:52	
Bromodichloromethane	ND U	5.0	1	09/21/18 03:52	
Bromoform	ND U	5.0	1	09/21/18 03:52	
Bromomethane	ND U	5.0	1	09/21/18 03:52	
2-Butanone (MEK)	ND U	10	1	09/21/18 03:52	
Carbon Disulfide	ND U	10	1	09/21/18 03:52	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 03:52	
Chlorobenzene	ND U	5.0	1	09/21/18 03:52	
Chloroethane	ND U	5.0	1	09/21/18 03:52	
Chloroform	ND U	5.0	1	09/21/18 03:52	
Chloromethane	ND U	5.0	1	09/21/18 03:52	
Dibromochloromethane	ND U	5.0	1	09/21/18 03:52	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 03:52	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 03:52	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 03:52	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:52	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:52	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 03:52	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:52	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:52	
Ethylbenzene	ND U	5.0	1	09/21/18 03:52	
2-Hexanone	ND U	10	1	09/21/18 03:52	
Methylene Chloride	ND U	5.0	1	09/21/18 03:52	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 03:52	
Styrene	ND U	5.0	1	09/21/18 03:52	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 03:52	
Tetrachloroethene	ND U	5.0	1	09/21/18 03:52	
Toluene	ND U	5.0	1	09/21/18 03:52	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 03:52	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 03:52	
Trichloroethene	ND U	5.0	1	09/21/18 03:52	
Vinyl Chloride	ND U	5.0	1	09/21/18 03:52	
o-Xylene	ND U	5.0	1	09/21/18 03:52	
m,p-Xylenes	ND U	5.0	1	09/21/18 03:52	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	09/21/18 03:52	
Toluene-d8	95	87 - 121	09/21/18 03:52	
Dibromofluoromethane	94	89 - 119	09/21/18 03:52	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 04:15	
Benzene	ND U	5.0	1	09/21/18 04:15	
Bromodichloromethane	ND U	5.0	1	09/21/18 04:15	
Bromoform	ND U	5.0	1	09/21/18 04:15	
Bromomethane	ND U	5.0	1	09/21/18 04:15	
2-Butanone (MEK)	ND U	10	1	09/21/18 04:15	
Carbon Disulfide	ND U	10	1	09/21/18 04:15	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 04:15	
Chlorobenzene	ND U	5.0	1	09/21/18 04:15	
Chloroethane	ND U	5.0	1	09/21/18 04:15	
Chloroform	ND U	5.0	1	09/21/18 04:15	
Chloromethane	ND U	5.0	1	09/21/18 04:15	
Dibromochloromethane	ND U	5.0	1	09/21/18 04:15	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 04:15	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 04:15	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 04:15	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 04:15	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 04:15	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 04:15	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 04:15	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 04:15	
Ethylbenzene	ND U	5.0	1	09/21/18 04:15	
2-Hexanone	ND U	10	1	09/21/18 04:15	
Methylene Chloride	ND U	5.0	1	09/21/18 04:15	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 04:15	
Styrene	ND U	5.0	1	09/21/18 04:15	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 04:15	
Tetrachloroethene	ND U	5.0	1	09/21/18 04:15	
Toluene	ND U	5.0	1	09/21/18 04:15	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 04:15	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 04:15	
Trichloroethene	ND U	5.0	1	09/21/18 04:15	
Vinyl Chloride	ND U	5.0	1	09/21/18 04:15	
o-Xylene	ND U	5.0	1	09/21/18 04:15	
m,p-Xylenes	ND U	5.0	1	09/21/18 04:15	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	09/21/18 04:15	
Toluene-d8	96	87 - 121	09/21/18 04:15	
Dibromofluoromethane	95	89 - 119	09/21/18 04:15	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	TB-A	**Units:**	ug/L
Lab Code:	R1808910-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 00:09	
Benzene	ND U	5.0	1	09/21/18 00:09	
Bromodichloromethane	ND U	5.0	1	09/21/18 00:09	
Bromoform	ND U	5.0	1	09/21/18 00:09	
Bromomethane	ND U	5.0	1	09/21/18 00:09	
2-Butanone (MEK)	ND U	10	1	09/21/18 00:09	
Carbon Disulfide	ND U	10	1	09/21/18 00:09	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 00:09	
Chlorobenzene	ND U	5.0	1	09/21/18 00:09	
Chloroethane	ND U	5.0	1	09/21/18 00:09	
Chloroform	ND U	5.0	1	09/21/18 00:09	
Chloromethane	ND U	5.0	1	09/21/18 00:09	
Dibromochloromethane	ND U	5.0	1	09/21/18 00:09	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 00:09	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 00:09	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 00:09	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:09	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:09	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 00:09	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:09	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:09	
Ethylbenzene	ND U	5.0	1	09/21/18 00:09	
2-Hexanone	ND U	10	1	09/21/18 00:09	
Methylene Chloride	ND U	5.0	1	09/21/18 00:09	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 00:09	
Styrene	ND U	5.0	1	09/21/18 00:09	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 00:09	
Tetrachloroethene	ND U	5.0	1	09/21/18 00:09	
Toluene	ND U	5.0	1	09/21/18 00:09	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 00:09	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 00:09	
Trichloroethene	ND U	5.0	1	09/21/18 00:09	
Vinyl Chloride	ND U	5.0	1	09/21/18 00:09	
o-Xylene	ND U	5.0	1	09/21/18 00:09	
m,p-Xylenes	ND U	5.0	1	09/21/18 00:09	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	TB-A	**Units:**	ug/L
Lab Code:	R1808910-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	09/21/18 00:09	
Toluene-d8	95	87 - 121	09/21/18 00:09	
Dibromofluoromethane	96	89 - 119	09/21/18 00:09	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	TB-B	**Units:**	ug/L
Lab Code:	R1808910-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 00:31	
Benzene	ND U	5.0	1	09/21/18 00:31	
Bromodichloromethane	ND U	5.0	1	09/21/18 00:31	
Bromoform	ND U	5.0	1	09/21/18 00:31	
Bromomethane	ND U	5.0	1	09/21/18 00:31	
2-Butanone (MEK)	ND U	10	1	09/21/18 00:31	
Carbon Disulfide	ND U	10	1	09/21/18 00:31	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 00:31	
Chlorobenzene	ND U	5.0	1	09/21/18 00:31	
Chloroethane	ND U	5.0	1	09/21/18 00:31	
Chloroform	ND U	5.0	1	09/21/18 00:31	
Chloromethane	ND U	5.0	1	09/21/18 00:31	
Dibromochloromethane	ND U	5.0	1	09/21/18 00:31	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 00:31	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 00:31	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 00:31	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:31	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:31	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 00:31	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:31	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:31	
Ethylbenzene	ND U	5.0	1	09/21/18 00:31	
2-Hexanone	ND U	10	1	09/21/18 00:31	
Methylene Chloride	ND U	5.0	1	09/21/18 00:31	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 00:31	
Styrene	ND U	5.0	1	09/21/18 00:31	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 00:31	
Tetrachloroethene	ND U	5.0	1	09/21/18 00:31	
Toluene	ND U	5.0	1	09/21/18 00:31	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 00:31	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 00:31	
Trichloroethene	ND U	5.0	1	09/21/18 00:31	
Vinyl Chloride	ND U	5.0	1	09/21/18 00:31	
o-Xylene	ND U	5.0	1	09/21/18 00:31	
m,p-Xylenes	ND U	5.0	1	09/21/18 00:31	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	TB-B	**Units:**	ug/L
Lab Code:	R1808910-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 122	09/21/18 00:31	
Toluene-d8	94	87 - 121	09/21/18 00:31	
Dibromofluoromethane	93	89 - 119	09/21/18 00:31	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Units:**	ug/L
Lab Code:	R1808910-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	**180**	10	1	09/21/18 04:37	
Benzene	ND U	5.0	1	09/21/18 04:37	
Bromodichloromethane	ND U	5.0	1	09/21/18 04:37	
Bromoform	ND U	5.0	1	09/21/18 04:37	
Bromomethane	ND U	5.0	1	09/21/18 04:37	
2-Butanone (MEK)	ND U	10	1	09/21/18 04:37	
Carbon Disulfide	ND U	10	1	09/21/18 04:37	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 04:37	
Chlorobenzene	ND U	5.0	1	09/21/18 04:37	
Chloroethane	ND U	5.0	1	09/21/18 04:37	
Chloroform	ND U	5.0	1	09/21/18 04:37	
Chloromethane	ND U	5.0	1	09/21/18 04:37	
Dibromochloromethane	ND U	5.0	1	09/21/18 04:37	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 04:37	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 04:37	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 04:37	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 04:37	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 04:37	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 04:37	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 04:37	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 04:37	
Ethylbenzene	ND U	5.0	1	09/21/18 04:37	
2-Hexanone	ND U	10	1	09/21/18 04:37	
Methylene Chloride	ND U	5.0	1	09/21/18 04:37	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 04:37	
Styrene	ND U	5.0	1	09/21/18 04:37	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 04:37	
Tetrachloroethene	ND U	5.0	1	09/21/18 04:37	
Toluene	ND U	5.0	1	09/21/18 04:37	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 04:37	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 04:37	
Trichloroethene	ND U	5.0	1	09/21/18 04:37	
Vinyl Chloride	ND U	5.0	1	09/21/18 04:37	
o-Xylene	ND U	5.0	1	09/21/18 04:37	
m,p-Xylenes	ND U	5.0	1	09/21/18 04:37	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Units:**	ug/L
Lab Code:	R1808910-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/21/18 04:37	
Toluene-d8	97	87 - 121	09/21/18 04:37	
Dibromofluoromethane	96	89 - 119	09/21/18 04:37	

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Units:**	ug/L
Lab Code:	R1808910-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 18:32	9/19/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Methylphenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Nitroaniline	ND U	47	1	09/24/18 18:32	9/19/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 18:32	9/19/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 18:32	9/19/18	
3-Nitroaniline	ND U	47	1	09/24/18 18:32	9/19/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 18:32	9/19/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:32	9/19/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 18:32	9/19/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:32	9/19/18	
4-Nitroaniline	ND U	47	1	09/24/18 18:32	9/19/18	
4-Nitrophenol	ND U	47	1	09/24/18 18:32	9/19/18	
Acenaphthene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Acenaphthylene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Anthracene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 18:32	9/19/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 18:32	9/19/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 18:32	9/19/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 18:32	9/19/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Carbazole	ND U	9.4	1	09/24/18 18:32	9/19/18	
Chrysene	ND U	9.4	1	09/24/18 18:32	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Units:**	ug/L
Lab Code:	R1808910-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Dibenzofuran	ND U	9.4	1	09/24/18 18:32	9/19/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Fluoranthene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Fluorene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Hexachloroethane	ND U	9.4	1	09/24/18 18:32	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Isophorone	ND U	9.4	1	09/24/18 18:32	9/19/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 18:32	9/19/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 18:32	9/19/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 18:32	9/19/18	
Naphthalene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Nitrobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 18:32	9/19/18	
Phenanthrene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Phenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
Pyrene	ND U	9.4	1	09/24/18 18:32	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	97	35 - 141	09/24/18 18:32	
2-Fluorobiphenyl	78	31 - 118	09/24/18 18:32	
2-Fluorophenol	40	10 - 105	09/24/18 18:32	
Nitrobenzene-d5	80	31 - 110	09/24/18 18:32	
Phenol-d6	29	10 - 107	09/24/18 18:32	
p-Terphenyl-d14	76	10 - 165	09/24/18 18:32	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Units:**	ug/L
Lab Code:	R1808910-002	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 19:00	9/19/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 19:00	9/19/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 19:00	9/19/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 19:00	9/19/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 19:00	9/19/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 19:00	9/19/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 19:00	9/19/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 19:00	9/19/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 19:00	9/19/18	
2-Methylphenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
2-Nitroaniline	ND U	47	1	09/24/18 19:00	9/19/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 19:00	9/19/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 19:00	9/19/18	
3-Nitroaniline	ND U	47	1	09/24/18 19:00	9/19/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 19:00	9/19/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:00	9/19/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 19:00	9/19/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:00	9/19/18	
4-Nitroaniline	ND U	47	1	09/24/18 19:00	9/19/18	
4-Nitrophenol	ND U	47	1	09/24/18 19:00	9/19/18	
Acenaphthene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Acenaphthylene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Anthracene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 19:00	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 19:00	9/19/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 19:00	9/19/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 19:00	9/19/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 19:00	9/19/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Carbazole	ND U	9.4	1	09/24/18 19:00	9/19/18	
Chrysene	ND U	9.4	1	09/24/18 19:00	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Units:**	ug/L
Lab Code:	R1808910-002	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:00	9/19/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Fluorene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:00	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Isophorone	ND U	9.4	1	09/24/18 19:00	9/19/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:00	9/19/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:00	9/19/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:00	9/19/18	
Naphthalene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:00	9/19/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Phenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
Pyrene	ND U	9.4	1	09/24/18 19:00	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	96	35 - 141	09/24/18 19:00	
2-Fluorobiphenyl	76	31 - 118	09/24/18 19:00	
2-Fluorophenol	37	10 - 105	09/24/18 19:00	
Nitrobenzene-d5	86	31 - 110	09/24/18 19:00	
Phenol-d6	28	10 - 107	09/24/18 19:00	
p-Terphenyl-d14	52	10 - 165	09/24/18 19:00	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Units:**	ug/L
Lab Code:	R1808910-003	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
1,2-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
1,3-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
1,4-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4,5-Trichlorophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4,6-Trichlorophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4-Dichlorophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4-Dimethylphenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4-Dinitrophenol	ND	U	47	1	09/24/18 19:28	9/19/18	
2,4-Dinitrotoluene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,6-Dinitrotoluene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Chloronaphthalene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Chlorophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Methylnaphthalene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Methylphenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Nitroaniline	ND	U	47	1	09/24/18 19:28	9/19/18	
2-Nitrophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
3,3'-Dichlorobenzidine	ND	U	9.4	1	09/24/18 19:28	9/19/18	
3- and 4-Methylphenol Coelution	ND	U	9.4	1	09/24/18 19:28	9/19/18	
3-Nitroaniline	ND	U	47	1	09/24/18 19:28	9/19/18	
4,6-Dinitro-2-methylphenol	ND	U	47	1	09/24/18 19:28	9/19/18	
4-Bromophenyl Phenyl Ether	ND	U	9.4	1	09/24/18 19:28	9/19/18	
4-Chloro-3-methylphenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
4-Chloroaniline	ND	U	9.4	1	09/24/18 19:28	9/19/18	
4-Chlorophenyl Phenyl Ether	ND	U	9.4	1	09/24/18 19:28	9/19/18	
4-Nitroaniline	ND	U	47	1	09/24/18 19:28	9/19/18	
4-Nitrophenol	ND	U	47	1	09/24/18 19:28	9/19/18	
Acenaphthene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Acenaphthylene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Anthracene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benz(a)anthracene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzo(a)pyrene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzo(b)fluoranthene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzo(g,h,i)perylene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzo(k)fluoranthene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzyl Alcohol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Bis(2-chloroethoxy)methane	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Bis(2-chloroethyl) Ether	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Bis(2-ethylhexyl) Phthalate	**14**		9.7	1	09/24/18 19:28	9/19/18	
Butyl Benzyl Phthalate	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Carbazole	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Chrysene	ND	U	9.4	1	09/24/18 19:28	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Units:**	ug/L
Lab Code:	R1808910-003	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:28	9/19/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:28	9/19/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:28	9/19/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:28	9/19/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:28	9/19/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Fluorene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:28	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Isophorone	ND U	9.4	1	09/24/18 19:28	9/19/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:28	9/19/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:28	9/19/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:28	9/19/18	
Naphthalene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:28	9/19/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Phenol	ND U	9.4	1	09/24/18 19:28	9/19/18	
Pyrene	ND U	9.4	1	09/24/18 19:28	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	102	35 - 141	09/24/18 19:28	
2-Fluorobiphenyl	79	31 - 118	09/24/18 19:28	
2-Fluorophenol	45	10 - 105	09/24/18 19:28	
Nitrobenzene-d5	80	31 - 110	09/24/18 19:28	
Phenol-d6	32	10 - 107	09/24/18 19:28	
p-Terphenyl-d14	45	10 - 165	09/24/18 19:28	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Units:**	ug/L
Lab Code:	R1808910-004	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 19:56	9/19/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Methylphenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Nitroaniline	ND U	47	1	09/24/18 19:56	9/19/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 19:56	9/19/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 19:56	9/19/18	
3-Nitroaniline	ND U	47	1	09/24/18 19:56	9/19/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 19:56	9/19/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:56	9/19/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 19:56	9/19/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:56	9/19/18	
4-Nitroaniline	ND U	47	1	09/24/18 19:56	9/19/18	
4-Nitrophenol	ND U	47	1	09/24/18 19:56	9/19/18	
Acenaphthene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Acenaphthylene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Anthracene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 19:56	9/19/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 19:56	9/19/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 19:56	9/19/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 19:56	9/19/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Carbazole	ND U	9.4	1	09/24/18 19:56	9/19/18	
Chrysene	ND U	9.4	1	09/24/18 19:56	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Units:**	ug/L
Lab Code:	R1808910-004	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:56	9/19/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Fluorene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:56	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Isophorone	ND U	9.4	1	09/24/18 19:56	9/19/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:56	9/19/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:56	9/19/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:56	9/19/18	
Naphthalene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:56	9/19/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Phenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
Pyrene	ND U	9.4	1	09/24/18 19:56	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	99	35 - 141	09/24/18 19:56	
2-Fluorobiphenyl	81	31 - 118	09/24/18 19:56	
2-Fluorophenol	40	10 - 105	09/24/18 19:56	
Nitrobenzene-d5	78	31 - 110	09/24/18 19:56	
Phenol-d6	27	10 - 107	09/24/18 19:56	
p-Terphenyl-d14	75	10 - 165	09/24/18 19:56	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 17:22	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 17:22	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 17:22	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 17:22	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 17:22	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 17:22	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 17:22	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 17:22	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 17:22	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 17:22	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 17:22	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 17:22	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 17:22	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 17:22	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 17:22	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 17:22	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 17:22	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 17:22	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 17:22	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 17:22	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 17:22	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 17:22	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 17:22	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 17:22	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Phenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 17:22	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	79	35 - 141	09/24/18 17:22	
2-Fluorobiphenyl	76	31 - 118	09/24/18 17:22	
2-Fluorophenol	46	10 - 105	09/24/18 17:22	
Nitrobenzene-d5	75	31 - 110	09/24/18 17:22	
Phenol-d6	34	10 - 107	09/24/18 17:22	
p-Terphenyl-d14	42	10 - 165	09/24/18 17:22	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 17:49	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 17:49	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 17:49	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 17:49	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 17:49	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 17:49	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 17:49	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 17:49	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 17:49	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 17:49	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 17:49	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 17:49	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 17:49	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 17:49	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 17:49	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 17:49	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 17:49	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 17:49	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 17:49	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 17:49	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 17:49	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 17:49	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 17:49	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 17:49	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Phenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 17:49	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	80	35 - 141	09/24/18 17:49	
2-Fluorobiphenyl	89	31 - 118	09/24/18 17:49	
2-Fluorophenol	45	10 - 105	09/24/18 17:49	
Nitrobenzene-d5	78	31 - 110	09/24/18 17:49	
Phenol-d6	32	10 - 107	09/24/18 17:49	
p-Terphenyl-d14	77	10 - 165	09/24/18 17:49	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 18:17	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 18:17	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 18:17	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 18:17	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 18:17	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 18:17	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:17	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 18:17	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:17	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 18:17	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 18:17	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 18:17	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 18:17	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 18:17	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 18:17	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 18:17	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 18:17	9/20/18	

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 18:17	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 18:17	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 18:17	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 18:17	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 18:17	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 18:17	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 18:17	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Phenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 18:17	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	80	35 - 141	09/24/18 18:17	
2-Fluorobiphenyl	80	31 - 118	09/24/18 18:17	
2-Fluorophenol	42	10 - 105	09/24/18 18:17	
Nitrobenzene-d5	69	31 - 110	09/24/18 18:17	
Phenol-d6	31	10 - 107	09/24/18 18:17	
p-Terphenyl-d14	55	10 - 165	09/24/18 18:17	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 18:46	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 18:46	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 18:46	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 18:46	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 18:46	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 18:46	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:46	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 18:46	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:46	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 18:46	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 18:46	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 18:46	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 18:46	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 18:46	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 18:46	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 18:46	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 18:46	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 18:46	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 18:46	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 18:46	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 18:46	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 18:46	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 18:46	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 18:46	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Phenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 18:46	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	81	35 - 141	09/24/18 18:46	
2-Fluorobiphenyl	85	31 - 118	09/24/18 18:46	
2-Fluorophenol	44	10 - 105	09/24/18 18:46	
Nitrobenzene-d5	77	31 - 110	09/24/18 18:46	
Phenol-d6	33	10 - 107	09/24/18 18:46	
p-Terphenyl-d14	64	10 - 165	09/24/18 18:46	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 19:13	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 19:13	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 19:13	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 19:13	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 19:13	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 19:13	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:13	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 19:13	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:13	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 19:13	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 19:13	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 19:13	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 19:13	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 19:13	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 19:13	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 19:13	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 19:13	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:13	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:13	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 19:13	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:13	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:13	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:13	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:13	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Phenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 19:13	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	81	35 - 141	09/24/18 19:13	
2-Fluorobiphenyl	86	31 - 118	09/24/18 19:13	
2-Fluorophenol	45	10 - 105	09/24/18 19:13	
Nitrobenzene-d5	78	31 - 110	09/24/18 19:13	
Phenol-d6	33	10 - 107	09/24/18 19:13	
p-Terphenyl-d14	82	10 - 165	09/24/18 19:13	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 19:41	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 19:41	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 19:41	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 19:41	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 19:41	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 19:41	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:41	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 19:41	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:41	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 19:41	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 19:41	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 19:41	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 19:41	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 19:41	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 19:41	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 19:41	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 19:41	9/20/18	

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:41	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:41	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 19:41	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:41	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:41	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:41	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:41	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Phenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 19:41	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	75	35 - 141	09/24/18 19:41	
2-Fluorobiphenyl	79	31 - 118	09/24/18 19:41	
2-Fluorophenol	42	10 - 105	09/24/18 19:41	
Nitrobenzene-d5	73	31 - 110	09/24/18 19:41	
Phenol-d6	35	10 - 107	09/24/18 19:41	
p-Terphenyl-d14	70	10 - 165	09/24/18 19:41	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Units:**	ug/L
Lab Code:	R1808910-017	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 20:09	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 20:09	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 20:09	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 20:09	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 20:09	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 20:09	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 20:09	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 20:09	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 20:09	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 20:09	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 20:09	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 20:09	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 20:09	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 20:09	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 20:09	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 20:09	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 20:09	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Units:**	ug/L
Lab Code:	R1808910-017	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 20:09	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 20:09	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 20:09	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 20:09	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 20:09	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 20:09	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 20:09	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Phenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 20:09	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	67	35 - 141	09/24/18 20:09	
2-Fluorobiphenyl	69	31 - 118	09/24/18 20:09	
2-Fluorophenol	33	10 - 105	09/24/18 20:09	
Nitrobenzene-d5	62	31 - 110	09/24/18 20:09	
Phenol-d6	27	10 - 107	09/24/18 20:09	
p-Terphenyl-d14	58	10 - 165	09/24/18 20:09	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 19:42	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	101	64 - 124	09/21/18 19:42	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 20:37	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	104	64 - 124	09/21/18 20:37	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 20:55	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	99	64 - 124	09/21/18 20:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 21:13	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	93	64 - 124	09/21/18 21:13	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 21:31	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	112	64 - 124	09/21/18 21:31	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 21:49	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	101	64 - 124	09/21/18 21:49	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:05
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	Dup 091818A	**Units:**	ug/L
Lab Code:	R1808910-012	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 22:08	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	104	64 - 124	09/21/18 22:08	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:20
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	FB 091818A	**Units:**	ug/L
Lab Code:	R1808910-013	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 22:28	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	109	64 - 124	09/21/18 22:28	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:55
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	EB 091818A	**Units:**	ug/L
Lab Code:	R1808910-014	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 22:48	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	97	64 - 124	09/21/18 22:48	

Metals

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www.alsglobal.com

METALS

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-12D

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-001

Level (low/med): LOW Date Received: 9/17/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-11M

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-002

Level (low/med): LOW Date Received: 9/17/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-13S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-003

Level (low/med): LOW Date Received: 9/17/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-13M

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-004

Level (low/med): LOW Date Received: 9/17/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-14S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-006

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-11S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-007

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-10S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-008

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-10M

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-009

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-12S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-010

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-12M

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-011

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-10D

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-017

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

General Chemistry

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Basis:**	NA
Lab Code:	R1808910-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Basis:**	NA
Lab Code:	R1808910-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Basis:**	NA
Lab Code:	R1808910-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Basis:**	NA
Lab Code:	R1808910-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Basis:**	NA
Lab Code:	R1808910-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Basis:**	NA
Lab Code:	R1808910-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.9	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Basis:**	NA
Lab Code:	R1808910-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Basis:**	NA
Lab Code:	R1808910-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Basis:**	NA
Lab Code:	R1808910-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Basis:**	NA
Lab Code:	R1808910-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Basis:**	NA
Lab Code:	R1808910-017		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Sample Name	Lab Code	4-Bromofluorobenzene 85-122	Toluene-d8 87-121	Dibromofluoromethane 89-119
MW-12D	R1808910-001	88	96	94
MW-11M	R1808910-002	91	97	95
MW-13S	R1808910-003	89	96	94
MW-13M	R1808910-004	90	97	96
Trip Blank	R1808910-005	91	96	95
MW-14S	R1808910-006	90	96	93
MW-11S	R1808910-007	90	97	96
MW-10S	R1808910-008	91	97	96
MW-10M	R1808910-009	88	96	97
MW-12S	R1808910-010	89	95	94
MW-12M	R1808910-011	90	96	95
TB-A	R1808910-015	89	95	96
TB-B	R1808910-016	87	94	93
MW-10D	R1808910-017	91	97	96
Method Blank	RQ1810045-04	92	97	96
Lab Control Sample	RQ1810045-03	97	98	100

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QA/QC Report

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/20/18 23:24

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1810045-04

Instrument ID:R-MS-14
File ID:I:\ACQUDATA\MSVOA14\Data\092018\F0522.D\

Analysis Method: 8260C
Analysis Lot:607574

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1810045-03	I:\ACQUDATA\MSVOA14\Data\092018 \F0520.D\	09/20/18 22:39
Trip Blank	R1808910-005	I:\ACQUDATA\MSVOA14\Data\092018 \F0523.D\	09/20/18 23:46
TB-A	R1808910-015	I:\ACQUDATA\MSVOA14\Data\092018 \F0524.D\	09/21/18 00:09
TB-B	R1808910-016	I:\ACQUDATA\MSVOA14\Data\092018 \F0525.D\	09/21/18 00:31
MW-12D	R1808910-001	I:\ACQUDATA\MSVOA14\Data\092018 \F0526.D\	09/21/18 00:53
MW-11M	R1808910-002	I:\ACQUDATA\MSVOA14\Data\092018 \F0527.D\	09/21/18 01:16
MW-13S	R1808910-003	I:\ACQUDATA\MSVOA14\Data\092018 \F0528.D\	09/21/18 01:38
MW-13M	R1808910-004	I:\ACQUDATA\MSVOA14\Data\092018 \F0529.D\	09/21/18 02:01
MW-14S	R1808910-006	I:\ACQUDATA\MSVOA14\Data\092018 \F0530.D\	09/21/18 02:23
MW-11S	R1808910-007	I:\ACQUDATA\MSVOA14\Data\092018 \F0531.D\	09/21/18 02:45
MW-10S	R1808910-008	I:\ACQUDATA\MSVOA14\Data\092018 \F0532.D\	09/21/18 03:08
MW-10M	R1808910-009	I:\ACQUDATA\MSVOA14\Data\092018 \F0533.D\	09/21/18 03:30
MW-12S	R1808910-010	I:\ACQUDATA\MSVOA14\Data\092018 \F0534.D\	09/21/18 03:52
MW-12M	R1808910-011	I:\ACQUDATA\MSVOA14\Data\092018 \F0535.D\	09/21/18 04:15
MW-10D	R1808910-017	I:\ACQUDATA\MSVOA14\Data\092018 \F0536.D\	09/21/18 04:37

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1810045-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/20/18 23:24	
Benzene	ND U	5.0	1	09/20/18 23:24	
Bromodichloromethane	ND U	5.0	1	09/20/18 23:24	
Bromoform	ND U	5.0	1	09/20/18 23:24	
Bromomethane	ND U	5.0	1	09/20/18 23:24	
2-Butanone (MEK)	ND U	10	1	09/20/18 23:24	
Carbon Disulfide	ND U	10	1	09/20/18 23:24	
Carbon Tetrachloride	ND U	5.0	1	09/20/18 23:24	
Chlorobenzene	ND U	5.0	1	09/20/18 23:24	
Chloroethane	ND U	5.0	1	09/20/18 23:24	
Chloroform	ND U	5.0	1	09/20/18 23:24	
Chloromethane	ND U	5.0	1	09/20/18 23:24	
Dibromochloromethane	ND U	5.0	1	09/20/18 23:24	
1,1-Dichloroethane	ND U	5.0	1	09/20/18 23:24	
1,2-Dichloroethane	ND U	5.0	1	09/20/18 23:24	
1,1-Dichloroethene	ND U	5.0	1	09/20/18 23:24	
cis-1,2-Dichloroethene	ND U	5.0	1	09/20/18 23:24	
trans-1,2-Dichloroethene	ND U	5.0	1	09/20/18 23:24	
1,2-Dichloropropane	ND U	5.0	1	09/20/18 23:24	
cis-1,3-Dichloropropene	ND U	5.0	1	09/20/18 23:24	
trans-1,3-Dichloropropene	ND U	5.0	1	09/20/18 23:24	
Ethylbenzene	ND U	5.0	1	09/20/18 23:24	
2-Hexanone	ND U	10	1	09/20/18 23:24	
Methylene Chloride	ND U	5.0	1	09/20/18 23:24	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/20/18 23:24	
Styrene	ND U	5.0	1	09/20/18 23:24	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/20/18 23:24	
Tetrachloroethene	ND U	5.0	1	09/20/18 23:24	
Toluene	ND U	5.0	1	09/20/18 23:24	
1,1,1-Trichloroethane	ND U	5.0	1	09/20/18 23:24	
1,1,2-Trichloroethane	ND U	5.0	1	09/20/18 23:24	
Trichloroethene	ND U	5.0	1	09/20/18 23:24	
Vinyl Chloride	ND U	5.0	1	09/20/18 23:24	
o-Xylene	ND U	5.0	1	09/20/18 23:24	
m,p-Xylenes	ND U	5.0	1	09/20/18 23:24	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1810045-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	09/20/18 23:24	
Toluene-d8	97	87 - 121	09/20/18 23:24	
Dibromofluoromethane	96	89 - 119	09/20/18 23:24	

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QA/QC Report

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/20/18 22:39

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: RQ1810045-03

Instrument ID:R-MS-14
File ID:I:\ACQUDATA\MSVOA14\Data\092018\F0520.D\

Analysis Method: 8260C
Analysis Lot:607574

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1810045-04	I:\ACQUDATA\MSVOA14\Data\092018 \F0522.D\	09/20/18 23:24
Trip Blank	R1808910-005	I:\ACQUDATA\MSVOA14\Data\092018 \F0523.D\	09/20/18 23:46
TB-A	R1808910-015	I:\ACQUDATA\MSVOA14\Data\092018 \F0524.D\	09/21/18 00:09
TB-B	R1808910-016	I:\ACQUDATA\MSVOA14\Data\092018 \F0525.D\	09/21/18 00:31
MW-12D	R1808910-001	I:\ACQUDATA\MSVOA14\Data\092018 \F0526.D\	09/21/18 00:53
MW-11M	R1808910-002	I:\ACQUDATA\MSVOA14\Data\092018 \F0527.D\	09/21/18 01:16
MW-13S	R1808910-003	I:\ACQUDATA\MSVOA14\Data\092018 \F0528.D\	09/21/18 01:38
MW-13M	R1808910-004	I:\ACQUDATA\MSVOA14\Data\092018 \F0529.D\	09/21/18 02:01
MW-14S	R1808910-006	I:\ACQUDATA\MSVOA14\Data\092018 \F0530.D\	09/21/18 02:23
MW-11S	R1808910-007	I:\ACQUDATA\MSVOA14\Data\092018 \F0531.D\	09/21/18 02:45
MW-10S	R1808910-008	I:\ACQUDATA\MSVOA14\Data\092018 \F0532.D\	09/21/18 03:08
MW-10M	R1808910-009	I:\ACQUDATA\MSVOA14\Data\092018 \F0533.D\	09/21/18 03:30
MW-12S	R1808910-010	I:\ACQUDATA\MSVOA14\Data\092018 \F0534.D\	09/21/18 03:52
MW-12M	R1808910-011	I:\ACQUDATA\MSVOA14\Data\092018 \F0535.D\	09/21/18 04:15
MW-10D	R1808910-017	I:\ACQUDATA\MSVOA14\Data\092018 \F0536.D\	09/21/18 04:37

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/20/18

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1810045-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	19.9	20.0	99	40-161
Benzene	8260C	22.6	20.0	113	79-119
Bromodichloromethane	8260C	22.2	20.0	111	81-123
Bromoform	8260C	25.1	20.0	125	65-146
Bromomethane	8260C	14.0	20.0	70	42-166
2-Butanone (MEK)	8260C	20.7	20.0	103	61-137
Carbon Disulfide	8260C	15.8	20.0	79	66-128
Carbon Tetrachloride	8260C	25.4	20.0	127	70-127
Chlorobenzene	8260C	22.1	20.0	111	80-121
Chloroethane	8260C	19.7	20.0	99	62-131
Chloroform	8260C	21.3	20.0	107	79-120
Chloromethane	8260C	21.3	20.0	107	65-135
Dibromochloromethane	8260C	23.2	20.0	116	72-128
1,1-Dichloroethane	8260C	21.2	20.0	106	80-124
1,2-Dichloroethane	8260C	23.5	20.0	118	71-127
1,1-Dichloroethene	8260C	20.8	20.0	104	71-118
cis-1,2-Dichloroethene	8260C	20.0	20.0	100	80-121
trans-1,2-Dichloroethene	8260C	20.8	20.0	104	73-118
1,2-Dichloropropane	8260C	22.4	20.0	112	80-119
cis-1,3-Dichloropropene	8260C	20.8	20.0	104	77-122
trans-1,3-Dichloropropene	8260C	20.9	20.0	104	71-133
Ethylbenzene	8260C	22.6	20.0	113	76-120
2-Hexanone	8260C	23.9	20.0	120	63-124
Methylene Chloride	8260C	19.2	20.0	96	73-122
4-Methyl-2-pentanone (MIBK)	8260C	23.8	20.0	119	66-124
Styrene	8260C	22.6	20.0	113	80-124
1,1,2,2-Tetrachloroethane	8260C	26.6	20.0	133 *	78-126
Tetrachloroethene	8260C	24.0	20.0	120	72-125
Toluene	8260C	22.5	20.0	112	79-119
1,1,1-Trichloroethane	8260C	20.0	20.0	100	75-125
1,1,2-Trichloroethane	8260C	23.1	20.0	116	82-121
Trichloroethene	8260C	21.3	20.0	106	74-122
Vinyl Chloride	8260C	22.0	20.0	110	74-159

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/20/18

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1810045-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
o-Xylene	8260C	22.5	20.0	113	79-123
m,p-Xylenes	8260C	45.0	40.0	112	80-126

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/20/18 21:54

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\092018\F0518.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-14 **Analysis Lot:** 607574

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.54	36005	Pass
75	95	30	60	54.09	90416	Pass
95	95	100	100	100.00	167171	Pass
96	95	5	9	6.76	11298	Pass
173	174	0	2	0.00	0	Pass
174	95	50	120	93.76	156736	Pass
175	174	5	9	7.42	11635	Pass
176	174	95	101	98.00	153600	Pass
177	176	5	9	6.42	9866	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1810045-02	I:\ACQUDATA\MSVOA14\Data\092018\F0519.D\	09/20/18 22:17	
Lab Control Sample	RQ1810045-03	I:\ACQUDATA\MSVOA14\Data\092018\F0520.D\	09/20/18 22:39	
Method Blank	RQ1810045-04	I:\ACQUDATA\MSVOA14\Data\092018\F0522.D\	09/20/18 23:24	
Trip Blank	R1808910-005	I:\ACQUDATA\MSVOA14\Data\092018\F0523.D\	09/20/18 23:46	
TB-A	R1808910-015	I:\ACQUDATA\MSVOA14\Data\092018\F0524.D\	09/21/18 00:09	
TB-B	R1808910-016	I:\ACQUDATA\MSVOA14\Data\092018\F0525.D\	09/21/18 00:31	
MW-12D	R1808910-001	I:\ACQUDATA\MSVOA14\Data\092018\F0526.D\	09/21/18 00:53	
MW-11M	R1808910-002	I:\ACQUDATA\MSVOA14\Data\092018\F0527.D\	09/21/18 01:16	
MW-13S	R1808910-003	I:\ACQUDATA\MSVOA14\Data\092018\F0528.D\	09/21/18 01:38	
MW-13M	R1808910-004	I:\ACQUDATA\MSVOA14\Data\092018\F0529.D\	09/21/18 02:01	
MW-14S	R1808910-006	I:\ACQUDATA\MSVOA14\Data\092018\F0530.D\	09/21/18 02:23	
MW-11S	R1808910-007	I:\ACQUDATA\MSVOA14\Data\092018\F0531.D\	09/21/18 02:45	
MW-10S	R1808910-008	I:\ACQUDATA\MSVOA14\Data\092018\F0532.D\	09/21/18 03:08	
MW-10M	R1808910-009	I:\ACQUDATA\MSVOA14\Data\092018\F0533.D\	09/21/18 03:30	
MW-12S	R1808910-010	I:\ACQUDATA\MSVOA14\Data\092018\F0534.D\	09/21/18 03:52	
MW-12M	R1808910-011	I:\ACQUDATA\MSVOA14\Data\092018\F0535.D\	09/21/18 04:15	
MW-10D	R1808910-017	I:\ACQUDATA\MSVOA14\Data\092018\F0536.D\	09/21/18 04:37	

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QA/QC Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/20/18 22:17

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\092018\F0519.D\ **Lab Code:**RQ1810045-02
Instrument ID: R-MS-14 **Analysis Lot:**607574
Analysis Method: 8260C **Signal ID:**1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	318,863	11.74	580,562	5.94	526,049	9.58
	Upper Limit ==>	637,726	12.24	1,161,124	6.44	1,052,098	10.08
	Lower Limit ==>	159,432	11.24	290,281	5.44	263,025	9.08
Associated Analyses							
Lab Control Sample	RQ1810045-03	289612	11.73	579698	5.94	512552	9.58
Method Blank	RQ1810045-04	261520	11.74	554561	5.94	486606	9.58
Trip Blank	R1808910-005	256691	11.74	548089	5.94	483783	9.58
TB-A	R1808910-015	249316	11.74	531904	5.94	465548	9.58
TB-B	R1808910-016	255691	11.74	546228	5.94	475848	9.58
MW-12D	R1808910-001	251233	11.74	537683	5.94	467673	9.58
MW-11M	R1808910-002	255101	11.74	544447	5.94	476464	9.58
MW-13S	R1808910-003	254397	11.74	536625	5.94	471917	9.58
MW-13M	R1808910-004	258742	11.74	545237	5.94	474637	9.58
MW-14S	R1808910-006	252651	11.73	535646	5.94	467223	9.58
MW-11S	R1808910-007	246667	11.74	528268	5.94	465708	9.58
MW-10S	R1808910-008	249014	11.74	528498	5.94	464502	9.58
MW-10M	R1808910-009	255899	11.74	534058	5.94	474616	9.58
MW-12S	R1808910-010	249932	11.74	536192	5.94	469444	9.58
MW-12M	R1808910-011	259359	11.74	537341	5.94	476610	9.58
MW-10D	R1808910-017	248264	11.74	522519	5.94	458127	9.58

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QA/QC Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/20/18 22:17

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\092018\F0519.D\ **Lab Code:**RQ1810045-02
Instrument ID: R-MS-14 **Analysis Lot:**607574
Analysis Method: 8260C **Signal ID:**1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	402,352	4.69
	Upper Limit ==>	804,704	5.19
	Lower Limit ==>	201,176	4.19
Associated Analyses			
Lab Control Sample	RQ1810045-03	403696	4.69
Method Blank	RQ1810045-04	381685	4.69
Trip Blank	R1808910-005	379502	4.69
TB-A	R1808910-015	370538	4.69
TB-B	R1808910-016	375502	4.69
MW-12D	R1808910-001	370518	4.69
MW-11M	R1808910-002	373487	4.69
MW-13S	R1808910-003	370830	4.69
MW-13M	R1808910-004	378706	4.69
MW-14S	R1808910-006	367409	4.69
MW-11S	R1808910-007	362637	4.69
MW-10S	R1808910-008	365076	4.69
MW-10M	R1808910-009	369576	4.69
MW-12S	R1808910-010	369591	4.69
MW-12M	R1808910-011	373146	4.69
MW-10D	R1808910-017	362026	4.69

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol 35-141	2-Fluorobiphenyl 31-118	2-Fluorophenol 10-105
MW-12D	R1808910-001	97	78	40
MW-11M	R1808910-002	96	76	37
MW-13S	R1808910-003	102	79	45
MW-13M	R1808910-004	99	81	40
MW-14S	R1808910-006	79	76	46
MW-11S	R1808910-007	80	89	45
MW-10S	R1808910-008	80	80	42
MW-10M	R1808910-009	81	85	44
MW-12S	R1808910-010	81	86	45
MW-12M	R1808910-011	75	79	42
MW-10D	R1808910-017	67	69	33
Method Blank	RQ1809900-01	95	74	48
Method Blank	RQ1809963-01	73	72	47
Lab Control Sample	RQ1809900-02	91	83	51
Duplicate Lab Control Sample	RQ1809900-03	91	77	47
Lab Control Sample	RQ1809963-02	72	82	49
Duplicate Lab Control Sample	RQ1809963-03	67	75	47

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Extraction Method: EPA 3510C

Sample Name	Lab Code	Nitrobenzene-d5 31-110	Phenol-d6 10-107	p-Terphenyl-d14 10-165
MW-12D	R1808910-001	80	29	76
MW-11M	R1808910-002	86	28	52
MW-13S	R1808910-003	80	32	45
MW-13M	R1808910-004	78	27	75
MW-14S	R1808910-006	75	34	42
MW-11S	R1808910-007	78	32	77
MW-10S	R1808910-008	69	31	55
MW-10M	R1808910-009	77	33	64
MW-12S	R1808910-010	78	33	82
MW-12M	R1808910-011	73	35	70
MW-10D	R1808910-017	62	27	58
Method Blank	RQ1809900-01	80	34	95
Method Blank	RQ1809963-01	77	34	87
Lab Control Sample	RQ1809900-02	81	36	95
Duplicate Lab Control Sample	RQ1809900-03	85	35	95
Lab Control Sample	RQ1809963-02	78	36	89
Duplicate Lab Control Sample	RQ1809963-03	80	35	85

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Analyzed:**	09/24/18 15:59
Sample Matrix:	Water	**Date Extracted:**	09/20/18

Method Blank Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-51
Lab Code:	RQ1809963-01	**File ID:**	I:\ACQUDATA\5973A\DATA\092418\DP316.D\
Analysis Method:	8270D	**Analysis Lot:**	608270,608264
Prep Method:	EPA 3510C	**Extraction Lot:**	322300

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1809963-02	I:\ACQUDATA\5973A\DATA\092418\DP317.D\	09/24/18 16:26
Duplicate Lab Control Sample	RQ1809963-03	I:\ACQUDATA\5973A\DATA\092418\DP318.D\	09/24/18 16:54
MW-14S	R1808910-006	I:\ACQUDATA\5973A\DATA\092418\DP319.D\	09/24/18 17:22
MW-11S	R1808910-007	I:\ACQUDATA\5973A\DATA\092418\DP320.D\	09/24/18 17:49
MW-10S	R1808910-008	I:\ACQUDATA\5973A\DATA\092418\DP321.D\	09/24/18 18:17
MW-10M	R1808910-009	I:\ACQUDATA\5973A\DATA\092418\DP322.D\	09/24/18 18:46
MW-12S	R1808910-010	I:\ACQUDATA\5973A\DATA\092418\DP323.D\	09/24/18 19:13
MW-12M	R1808910-011	I:\ACQUDATA\5973A\DATA\092418\DP324.D\	09/24/18 19:41
MW-10D	R1808910-017	I:\ACQUDATA\5973A\DATA\092418\DP325.D\	09/24/18 20:09

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Analyzed:**	09/24/18 16:41
Sample Matrix:	Water	**Date Extracted:**	09/19/18

Method Blank Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-54
Lab Code:	RQ1809900-01	**File ID:**	I:\ACQUDATA\5973D\Data\092418\BP382.D\
Analysis Method:	8270D	**Analysis Lot:**	608270,608264
Prep Method:	EPA 3510C	**Extraction Lot:**	322187

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1809900-02	I:\ACQUDATA\5973D\Data\092418\BP383.D\	09/24/18 17:09
Duplicate Lab Control Sample	RQ1809900-03	I:\ACQUDATA\5973D\Data\092418\BP384.D\	09/24/18 17:36
MW-12D	R1808910-001	I:\ACQUDATA\5973D\Data\092418\BP386.D\	09/24/18 18:32
MW-11M	R1808910-002	I:\ACQUDATA\5973D\Data\092418\BP387.D\	09/24/18 19:00
MW-13S	R1808910-003	I:\ACQUDATA\5973D\Data\092418\BP388.D\	09/24/18 19:28
MW-13M	R1808910-004	I:\ACQUDATA\5973D\Data\092418\BP389.D\	09/24/18 19:56

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1809900-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	10	1	09/24/18 16:41	9/19/18	
1,2-Dichlorobenzene	ND U	10	1	09/24/18 16:41	9/19/18	
1,3-Dichlorobenzene	ND U	10	1	09/24/18 16:41	9/19/18	
1,4-Dichlorobenzene	ND U	10	1	09/24/18 16:41	9/19/18	
2,4,5-Trichlorophenol	ND U	10	1	09/24/18 16:41	9/19/18	
2,4,6-Trichlorophenol	ND U	10	1	09/24/18 16:41	9/19/18	
2,4-Dichlorophenol	ND U	10	1	09/24/18 16:41	9/19/18	
2,4-Dimethylphenol	ND U	10	1	09/24/18 16:41	9/19/18	
2,4-Dinitrophenol	ND U	50	1	09/24/18 16:41	9/19/18	
2,4-Dinitrotoluene	ND U	10	1	09/24/18 16:41	9/19/18	
2,6-Dinitrotoluene	ND U	10	1	09/24/18 16:41	9/19/18	
2-Chloronaphthalene	ND U	10	1	09/24/18 16:41	9/19/18	
2-Chlorophenol	ND U	10	1	09/24/18 16:41	9/19/18	
2-Methylnaphthalene	ND U	10	1	09/24/18 16:41	9/19/18	
2-Methylphenol	ND U	10	1	09/24/18 16:41	9/19/18	
2-Nitroaniline	ND U	50	1	09/24/18 16:41	9/19/18	
2-Nitrophenol	ND U	10	1	09/24/18 16:41	9/19/18	
3,3'-Dichlorobenzidine	ND U	10	1	09/24/18 16:41	9/19/18	
3- and 4-Methylphenol Coelution	ND U	10	1	09/24/18 16:41	9/19/18	
3-Nitroaniline	ND U	50	1	09/24/18 16:41	9/19/18	
4,6-Dinitro-2-methylphenol	ND U	50	1	09/24/18 16:41	9/19/18	
4-Bromophenyl Phenyl Ether	ND U	10	1	09/24/18 16:41	9/19/18	
4-Chloro-3-methylphenol	ND U	10	1	09/24/18 16:41	9/19/18	
4-Chloroaniline	ND U	10	1	09/24/18 16:41	9/19/18	
4-Chlorophenyl Phenyl Ether	ND U	10	1	09/24/18 16:41	9/19/18	
4-Nitroaniline	ND U	50	1	09/24/18 16:41	9/19/18	
4-Nitrophenol	ND U	50	1	09/24/18 16:41	9/19/18	
Acenaphthene	ND U	10	1	09/24/18 16:41	9/19/18	
Acenaphthylene	ND U	10	1	09/24/18 16:41	9/19/18	
Anthracene	ND U	10	1	09/24/18 16:41	9/19/18	
Benz(a)anthracene	ND U	10	1	09/24/18 16:41	9/19/18	
Benzo(a)pyrene	ND U	10	1	09/24/18 16:41	9/19/18	
Benzo(b)fluoranthene	ND U	10	1	09/24/18 16:41	9/19/18	
Benzo(g,h,i)perylene	ND U	10	1	09/24/18 16:41	9/19/18	
Benzo(k)fluoranthene	ND U	10	1	09/24/18 16:41	9/19/18	
Benzyl Alcohol	ND U	10	1	09/24/18 16:41	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND U	10	1	09/24/18 16:41	9/19/18	
Bis(2-chloroethoxy)methane	ND U	10	1	09/24/18 16:41	9/19/18	
Bis(2-chloroethyl) Ether	ND U	10	1	09/24/18 16:41	9/19/18	
Bis(2-ethylhexyl) Phthalate	ND U	10	1	09/24/18 16:41	9/19/18	
Butyl Benzyl Phthalate	ND U	10	1	09/24/18 16:41	9/19/18	
Carbazole	ND U	10	1	09/24/18 16:41	9/19/18	
Chrysene	ND U	10	1	09/24/18 16:41	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1809900-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	10	1	09/24/18 16:41	9/19/18	
Di-n-octyl Phthalate	ND U	10	1	09/24/18 16:41	9/19/18	
Dibenz(a,h)anthracene	ND U	10	1	09/24/18 16:41	9/19/18	
Dibenzofuran	ND U	10	1	09/24/18 16:41	9/19/18	
Diethyl Phthalate	ND U	10	1	09/24/18 16:41	9/19/18	
Dimethyl Phthalate	ND U	10	1	09/24/18 16:41	9/19/18	
Fluoranthene	ND U	10	1	09/24/18 16:41	9/19/18	
Fluorene	ND U	10	1	09/24/18 16:41	9/19/18	
Hexachlorobenzene	ND U	10	1	09/24/18 16:41	9/19/18	
Hexachlorobutadiene	ND U	10	1	09/24/18 16:41	9/19/18	
Hexachlorocyclopentadiene	ND U	10	1	09/24/18 16:41	9/19/18	
Hexachloroethane	ND U	10	1	09/24/18 16:41	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	10	1	09/24/18 16:41	9/19/18	
Isophorone	ND U	10	1	09/24/18 16:41	9/19/18	
N-Nitrosodi-n-propylamine	ND U	10	1	09/24/18 16:41	9/19/18	
N-Nitrosodimethylamine	ND U	10	1	09/24/18 16:41	9/19/18	
N-Nitrosodiphenylamine	ND U	10	1	09/24/18 16:41	9/19/18	
Naphthalene	ND U	10	1	09/24/18 16:41	9/19/18	
Nitrobenzene	ND U	10	1	09/24/18 16:41	9/19/18	
Pentachlorophenol (PCP)	ND U	50	1	09/24/18 16:41	9/19/18	
Phenanthrene	ND U	10	1	09/24/18 16:41	9/19/18	
Phenol	ND U	10	1	09/24/18 16:41	9/19/18	
Pyrene	ND U	10	1	09/24/18 16:41	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	95	35 - 141	09/24/18 16:41	
2-Fluorobiphenyl	74	31 - 118	09/24/18 16:41	
2-Fluorophenol	48	10 - 105	09/24/18 16:41	
Nitrobenzene-d5	80	31 - 110	09/24/18 16:41	
Phenol-d6	34	10 - 107	09/24/18 16:41	
p-Terphenyl-d14	95	10 - 165	09/24/18 16:41	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1809963-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	10	1	09/24/18 15:59	9/20/18	
1,2-Dichlorobenzene	ND U	10	1	09/24/18 15:59	9/20/18	
1,3-Dichlorobenzene	ND U	10	1	09/24/18 15:59	9/20/18	
1,4-Dichlorobenzene	ND U	10	1	09/24/18 15:59	9/20/18	
2,4,5-Trichlorophenol	ND U	10	1	09/24/18 15:59	9/20/18	
2,4,6-Trichlorophenol	ND U	10	1	09/24/18 15:59	9/20/18	
2,4-Dichlorophenol	ND U	10	1	09/24/18 15:59	9/20/18	
2,4-Dimethylphenol	ND U	10	1	09/24/18 15:59	9/20/18	
2,4-Dinitrophenol	ND U	50	1	09/24/18 15:59	9/20/18	
2,4-Dinitrotoluene	ND U	10	1	09/24/18 15:59	9/20/18	
2,6-Dinitrotoluene	ND U	10	1	09/24/18 15:59	9/20/18	
2-Chloronaphthalene	ND U	10	1	09/24/18 15:59	9/20/18	
2-Chlorophenol	ND U	10	1	09/24/18 15:59	9/20/18	
2-Methylnaphthalene	ND U	10	1	09/24/18 15:59	9/20/18	
2-Methylphenol	ND U	10	1	09/24/18 15:59	9/20/18	
2-Nitroaniline	ND U	50	1	09/24/18 15:59	9/20/18	
2-Nitrophenol	ND U	10	1	09/24/18 15:59	9/20/18	
3,3'-Dichlorobenzidine	ND U	10	1	09/24/18 15:59	9/20/18	
3- and 4-Methylphenol Coelution	ND U	10	1	09/24/18 15:59	9/20/18	
3-Nitroaniline	ND U	50	1	09/24/18 15:59	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	50	1	09/24/18 15:59	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	10	1	09/24/18 15:59	9/20/18	
4-Chloro-3-methylphenol	ND U	10	1	09/24/18 15:59	9/20/18	
4-Chloroaniline	ND U	10	1	09/24/18 15:59	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	10	1	09/24/18 15:59	9/20/18	
4-Nitroaniline	ND U	50	1	09/24/18 15:59	9/20/18	
4-Nitrophenol	ND U	50	1	09/24/18 15:59	9/20/18	
Acenaphthene	ND U	10	1	09/24/18 15:59	9/20/18	
Acenaphthylene	ND U	10	1	09/24/18 15:59	9/20/18	
Anthracene	ND U	10	1	09/24/18 15:59	9/20/18	
Benz(a)anthracene	ND U	10	1	09/24/18 15:59	9/20/18	
Benzo(a)pyrene	ND U	10	1	09/24/18 15:59	9/20/18	
Benzo(b)fluoranthene	ND U	10	1	09/24/18 15:59	9/20/18	
Benzo(g,h,i)perylene	ND U	10	1	09/24/18 15:59	9/20/18	
Benzo(k)fluoranthene	ND U	10	1	09/24/18 15:59	9/20/18	
Benzyl Alcohol	ND U	10	1	09/24/18 15:59	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	10	1	09/24/18 15:59	9/20/18	
Bis(2-chloroethoxy)methane	ND U	10	1	09/24/18 15:59	9/20/18	
Bis(2-chloroethyl) Ether	ND U	10	1	09/24/18 15:59	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	10	1	09/24/18 15:59	9/20/18	
Butyl Benzyl Phthalate	ND U	10	1	09/24/18 15:59	9/20/18	
Carbazole	ND U	10	1	09/24/18 15:59	9/20/18	
Chrysene	ND U	10	1	09/24/18 15:59	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1809963-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	10	1	09/24/18 15:59	9/20/18	
Di-n-octyl Phthalate	ND U	10	1	09/24/18 15:59	9/20/18	
Dibenz(a,h)anthracene	ND U	10	1	09/24/18 15:59	9/20/18	
Dibenzofuran	ND U	10	1	09/24/18 15:59	9/20/18	
Diethyl Phthalate	ND U	10	1	09/24/18 15:59	9/20/18	
Dimethyl Phthalate	ND U	10	1	09/24/18 15:59	9/20/18	
Fluoranthene	ND U	10	1	09/24/18 15:59	9/20/18	
Fluorene	ND U	10	1	09/24/18 15:59	9/20/18	
Hexachlorobenzene	ND U	10	1	09/24/18 15:59	9/20/18	
Hexachlorobutadiene	ND U	10	1	09/24/18 15:59	9/20/18	
Hexachlorocyclopentadiene	ND U	10	1	09/24/18 15:59	9/20/18	
Hexachloroethane	ND U	10	1	09/24/18 15:59	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	10	1	09/24/18 15:59	9/20/18	
Isophorone	ND U	10	1	09/24/18 15:59	9/20/18	
N-Nitrosodi-n-propylamine	ND U	10	1	09/24/18 15:59	9/20/18	
N-Nitrosodimethylamine	ND U	10	1	09/24/18 15:59	9/20/18	
N-Nitrosodiphenylamine	ND U	10	1	09/24/18 15:59	9/20/18	
Naphthalene	ND U	10	1	09/24/18 15:59	9/20/18	
Nitrobenzene	ND U	10	1	09/24/18 15:59	9/20/18	
Pentachlorophenol (PCP)	ND U	50	1	09/24/18 15:59	9/20/18	
Phenanthrene	ND U	10	1	09/24/18 15:59	9/20/18	
Phenol	ND U	10	1	09/24/18 15:59	9/20/18	
Pyrene	ND U	10	1	09/24/18 15:59	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	73	35 - 141	09/24/18 15:59	
2-Fluorobiphenyl	72	31 - 118	09/24/18 15:59	
2-Fluorophenol	47	10 - 105	09/24/18 15:59	
Nitrobenzene-d5	77	31 - 110	09/24/18 15:59	
Phenol-d6	34	10 - 107	09/24/18 15:59	
p-Terphenyl-d14	87	10 - 165	09/24/18 15:59	

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Analyzed:**	09/24/18 16:26
Sample Matrix:	Water	**Date Extracted:**	09/20/18

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-51
Lab Code:	RQ1809963-02	**File ID:**	I:\ACQUDATA\5973A\DATA\092418\DP317.D\
Analysis Method:	8270D	**Analysis Lot:**	608270,608264
Prep Method:	EPA 3510C	**Extraction Lot:**	322300

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1809963-01	I:\ACQUDATA\5973A\DATA\092418\DP316.D\	09/24/18 15:59
Duplicate Lab Control Sample	RQ1809963-03	I:\ACQUDATA\5973A\DATA\092418\DP318.D\	09/24/18 16:54
MW-14S	R1808910-006	I:\ACQUDATA\5973A\DATA\092418\DP319.D\	09/24/18 17:22
MW-11S	R1808910-007	I:\ACQUDATA\5973A\DATA\092418\DP320.D\	09/24/18 17:49
MW-10S	R1808910-008	I:\ACQUDATA\5973A\DATA\092418\DP321.D\	09/24/18 18:17
MW-10M	R1808910-009	I:\ACQUDATA\5973A\DATA\092418\DP322.D\	09/24/18 18:46
MW-12S	R1808910-010	I:\ACQUDATA\5973A\DATA\092418\DP323.D\	09/24/18 19:13
MW-12M	R1808910-011	I:\ACQUDATA\5973A\DATA\092418\DP324.D\	09/24/18 19:41
MW-10D	R1808910-017	I:\ACQUDATA\5973A\DATA\092418\DP325.D\	09/24/18 20:09

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Analyzed:**	09/24/18 17:09
Sample Matrix:	Water	**Date Extracted:**	09/19/18

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-54
Lab Code:	RQ1809900-02	**File ID:**	I:\ACQUDATA\5973D\Data\092418\BP383.D\
Analysis Method:	8270D	**Analysis Lot:**	608270,608264
Prep Method:	EPA 3510C	**Extraction Lot:**	322187

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1809900-01	I:\ACQUDATA\5973D\Data\092418\BP382.D\	09/24/18 16:41
Duplicate Lab Control Sample	RQ1809900-03	I:\ACQUDATA\5973D\Data\092418\BP384.D\	09/24/18 17:36
MW-12D	R1808910-001	I:\ACQUDATA\5973D\Data\092418\BP386.D\	09/24/18 18:32
MW-11M	R1808910-002	I:\ACQUDATA\5973D\Data\092418\BP387.D\	09/24/18 19:00
MW-13S	R1808910-003	I:\ACQUDATA\5973D\Data\092418\BP388.D\	09/24/18 19:28
MW-13M	R1808910-004	I:\ACQUDATA\5973D\Data\092418\BP389.D\	09/24/18 19:56

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/24/18

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1809900-02			RQ1809900-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4-Trichlorobenzene	8270D	30.7	50.0	61	31.6	50.0	63	10-127	3	30
1,2-Dichlorobenzene	8270D	31.4	50.0	63	31.2	50.0	62	23-130	2	30
1,3-Dichlorobenzene	8270D	29.2	50.0	58	28.6	50.0	57	21-90	2	30
1,4-Dichlorobenzene	8270D	31.5	50.0	63	30.0	50.0	60	10-124	5	30
2,4,5-Trichlorophenol	8270D	49.0	50.0	98	52.8	50.0	106	48-134	8	30
2,4,6-Trichlorophenol	8270D	43.6	50.0	87	46.0	50.0	92	44-135	6	30
2,4-Dichlorophenol	8270D	39.7	50.0	79	41.5	50.0	83	48-127	5	30
2,4-Dimethylphenol	8270D	41.6	50.0	83	44.1	50.0	88	59-113	6	30
2,4-Dinitrophenol	8270D	44.5 J	50.0	89	46.5 J	50.0	93	21-154	4	30
2,4-Dinitrotoluene	8270D	47.6	50.0	95	46.2	50.0	92	54-130	3	30
2,6-Dinitrotoluene	8270D	50.1	50.0	100	51.0	50.0	102	51-127	2	30
2-Chloronaphthalene	8270D	39.8	50.0	80	39.1	50.0	78	40-108	3	30
2-Chlorophenol	8270D	37.3	50.0	75	38.9	50.0	78	42-112	4	30
2-Methylnaphthalene	8270D	34.7	50.0	69	35.5	50.0	71	34-102	3	30
2-Methylphenol	8270D	35.6	50.0	71	36.4	50.0	73	47-100	3	30
2-Nitroaniline	8270D	45.0 J	50.0	90	47.6 J	50.0	95	52-133	5	30
2-Nitrophenol	8270D	38.3	50.0	77	41.2	50.0	82	43-131	6	30
3,3'-Dichlorobenzidine	8270D	44.3	50.0	89	47.2	50.0	94	43-126	5	30
3- and 4-Methylphenol Coelution	8270D	31.3	50.0	63	30.9	50.0	62	40-92	2	30
3-Nitroaniline	8270D	38.0 J	50.0	76	40.5 J	50.0	81	42-111	6	30
4,6-Dinitro-2-methylphenol	8270D	47.7 J	50.0	95	48.8 J	50.0	98	36-152	3	30
4-Bromophenyl Phenyl Ether	8270D	50.0	50.0	100	50.4	50.0	101	48-114	<1	30
4-Chloro-3-methylphenol	8270D	41.6	50.0	83	43.8	50.0	88	52-113	6	30
4-Chloroaniline	8270D	40.2	50.0	80	44.1	50.0	88	44-109	10	30
4-Chlorophenyl Phenyl Ether	8270D	43.9	50.0	88	42.0	50.0	84	51-107	5	30
4-Nitroaniline	8270D	42.6 J	50.0	85	44.2 J	50.0	88	54-133	3	30
4-Nitrophenol	8270D	22.0 J	50.0	44	24.7 J	50.0	49	10-126	11	30
Acenaphthene	8270D	42.6	50.0	85	41.2	50.0	82	52-107	4	30
Acenaphthylene	8270D	42.7	50.0	85	43.0	50.0	86	55-109	1	30
Anthracene	8270D	54.5	50.0	109	56.3	50.0	113	55-116	4	30
Benz(a)anthracene	8270D	51.2	50.0	102	54.7	50.0	109	61-121	7	30
Benzo(a)pyrene	8270D	52.6	50.0	105	53.5	50.0	107	44-114	2	30
Benzo(b)fluoranthene	8270D	49.9	50.0	100	52.0	50.0	104	62-115	4	30

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/24/18

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1809900-02			RQ1809900-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Benzo(g,h,i)perylene	8270D	60.8	50.0	122	65.0	50.0	130	63-136	6	30
Benzo(k)fluoranthene	8270D	51.1	50.0	102	53.0	50.0	106	49-133	4	30
Benzyl Alcohol	8270D	40.7	50.0	81	42.0	50.0	84	31-109	4	30
2,2'-Oxybis(1-chloropropane)	8270D	42.1	50.0	84	43.6	50.0	87	32-122	4	30
Bis(2-chloroethoxy)methane	8270D	44.1	50.0	88	50.3	50.0	101	55-110	14	30
Bis(2-chloroethyl) Ether	8270D	44.8	50.0	90	47.0	50.0	94	46-102	4	30
Bis(2-ethylhexyl) Phthalate	8270D	52.2	50.0	104	53.5	50.0	107	51-132	3	30
Butyl Benzyl Phthalate	8270D	51.7	50.0	103	54.6	50.0	109	41-148	6	30
Carbazole	8270D	53.3	50.0	107	54.9	50.0	110	56-139	3	30
Chrysene	8270D	54.1	50.0	108	55.3	50.0	111	57-118	3	30
Di-n-butyl Phthalate	8270D	58.2	50.0	116	59.8	50.0	120	57-128	3	30
Di-n-octyl Phthalate	8270D	53.4	50.0	107	52.6	50.0	105	62-124	2	30
Dibenz(a,h)anthracene	8270D	56.2	50.0	112	59.6	50.0	119	54-135	6	30
Dibenzofuran	8270D	42.7	50.0	85	41.9	50.0	84	55-110	1	30
Diethyl Phthalate	8270D	43.6	50.0	87	45.3	50.0	91	53-113	4	30
Dimethyl Phthalate	8270D	48.4	50.0	97	48.2	50.0	96	51-112	1	30
Fluoranthene	8270D	59.0	50.0	118	59.8	50.0	120	66-127	2	30
Fluorene	8270D	45.6	50.0	91	45.3	50.0	91	54-106	<1	30
Hexachlorobenzene	8270D	50.4	50.0	101	52.4	50.0	105	53-123	4	30
Hexachlorobutadiene	8270D	31.9	50.0	64	32.0	50.0	64	16-95	<1	30
Hexachlorocyclopentadiene	8270D	21.7	50.0	43	19.9	50.0	40	10-99	7	30
Hexachloroethane	8270D	29.9	50.0	60	25.8	50.0	52	15-92	14	30
Indeno(1,2,3-cd)pyrene	8270D	51.5	50.0	103	54.6	50.0	109	62-137	6	30
Isophorone	8270D	54.8	50.0	110	60.8	50.0	122 *	50-116	10	30
N-Nitrosodi-n-propylamine	8270D	40.8	50.0	82	42.3	50.0	85	49-115	4	30
N-Nitrosodimethylamine	8270D	29.3	50.0	59	29.5	50.0	59	31-70	<1	30
N-Nitrosodiphenylamine	8270D	50.8	50.0	102	52.3	50.0	105	45-123	3	30
Naphthalene	8270D	33.5	50.0	67	35.3	50.0	71	38-99	6	30
Nitrobenzene	8270D	41.4	50.0	83	46.2	50.0	92	46-108	10	30
Pentachlorophenol (PCP)	8270D	48.9 J	50.0	98	50.9	50.0	102	29-164	4	30
Phenanthrene	8270D	52.0	50.0	104	54.0	50.0	108	58-118	4	30
Phenol	8270D	20.3	50.0	41	20.7	50.0	41	10-113	<1	30
Pyrene	8270D	52.8	50.0	106	55.7	50.0	111	61-122	5	30

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/24/18

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1809963-02			RQ1809963-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4-Trichlorobenzene	8270D	31.3	50.0	63	31.1	50.0	62	10-127	2	30
1,2-Dichlorobenzene	8270D	29.2	50.0	58	27.8	50.0	56	23-130	4	30
1,3-Dichlorobenzene	8270D	27.0	50.0	54	26.4	50.0	53	21-90	2	30
1,4-Dichlorobenzene	8270D	27.6	50.0	55	27.8	50.0	56	10-124	2	30
2,4,5-Trichlorophenol	8270D	52.5	50.0	105	49.9	50.0	100	48-134	5	30
2,4,6-Trichlorophenol	8270D	48.1	50.0	96	44.0	50.0	88	44-135	9	30
2,4-Dichlorophenol	8270D	45.7	50.0	91	44.5	50.0	89	48-127	2	30
2,4-Dimethylphenol	8270D	46.6	50.0	93	46.4	50.0	93	59-113	<1	30
2,4-Dinitrophenol	8270D	33.6 J	50.0	67	32.5 J	50.0	65	21-154	3	30
2,4-Dinitrotoluene	8270D	41.1	50.0	82	39.4	50.0	79	54-130	4	30
2,6-Dinitrotoluene	8270D	46.8	50.0	94	46.0	50.0	92	51-127	2	30
2-Chloronaphthalene	8270D	38.6	50.0	77	35.7	50.0	71	40-108	8	30
2-Chlorophenol	8270D	37.0	50.0	74	36.9	50.0	74	42-112	<1	30
2-Methylnaphthalene	8270D	35.9	50.0	72	35.1	50.0	70	34-102	3	30
2-Methylphenol	8270D	38.1	50.0	76	35.1	50.0	70	47-100	8	30
2-Nitroaniline	8270D	44.3 J	50.0	89	42.3 J	50.0	85	52-133	5	30
2-Nitrophenol	8270D	39.1	50.0	78	40.1	50.0	80	43-131	3	30
3,3'-Dichlorobenzidine	8270D	49.0	50.0	98	47.4	50.0	95	43-126	3	30
3- and 4-Methylphenol Coelution	8270D	34.4	50.0	69	33.1	50.0	66	40-92	4	30
3-Nitroaniline	8270D	35.9 J	50.0	72	34.9 J	50.0	70	42-111	3	30
4,6-Dinitro-2-methylphenol	8270D	30.3 J	50.0	61	30.8 J	50.0	62	36-152	2	30
4-Bromophenyl Phenyl Ether	8270D	46.4	50.0	93	47.0	50.0	94	48-114	1	30
4-Chloro-3-methylphenol	8270D	46.3	50.0	93	45.5	50.0	91	52-113	2	30
4-Chloroaniline	8270D	41.4	50.0	83	43.5	50.0	87	44-109	5	30
4-Chlorophenyl Phenyl Ether	8270D	48.7	50.0	97	46.7	50.0	93	51-107	4	30
4-Nitroaniline	8270D	38.9 J	50.0	78	40.8 J	50.0	82	54-133	5	30
4-Nitrophenol	8270D	16.0 J	50.0	32	17.1 J	50.0	34	10-126	6	30
Acenaphthene	8270D	43.0	50.0	86	40.0	50.0	80	52-107	7	30
Acenaphthylene	8270D	43.8	50.0	88	41.1	50.0	82	55-109	7	30
Anthracene	8270D	54.0	50.0	108	53.2	50.0	106	55-116	2	30
Benz(a)anthracene	8270D	56.0	50.0	112	54.6	50.0	109	61-121	3	30
Benzo(a)pyrene	8270D	53.3	50.0	107	52.0	50.0	104	44-114	3	30
Benzo(b)fluoranthene	8270D	50.8	50.0	102	49.4	50.0	99	62-115	3	30

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/24/18

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1809963-02			RQ1809963-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Benzo(g,h,i)perylene	8270D	62.4	50.0	125	60.0	50.0	120	63-136	4	30
Benzo(k)fluoranthene	8270D	55.0	50.0	110	53.0	50.0	106	49-133	4	30
Benzyl Alcohol	8270D	43.5	50.0	87	43.0	50.0	86	31-109	1	30
2,2'-Oxybis(1-chloropropane)	8270D	43.1	50.0	86	42.4	50.0	85	32-122	1	30
Bis(2-chloroethoxy)methane	8270D	47.4	50.0	95	47.9	50.0	96	55-110	1	30
Bis(2-chloroethyl) Ether	8270D	41.8	50.0	84	41.3	50.0	83	46-102	1	30
Bis(2-ethylhexyl) Phthalate	8270D	53.2	50.0	106	53.1	50.0	106	51-132	<1	30
Butyl Benzyl Phthalate	8270D	52.4	50.0	105	51.6	50.0	103	41-148	2	30
Carbazole	8270D	51.7	50.0	103	51.7	50.0	103	56-139	<1	30
Chrysene	8270D	56.4	50.0	113	54.8	50.0	110	57-118	3	30
Di-n-butyl Phthalate	8270D	55.8	50.0	112	54.6	50.0	109	57-128	3	30
Di-n-octyl Phthalate	8270D	57.8	50.0	116	56.7	50.0	113	62-124	3	30
Dibenz(a,h)anthracene	8270D	57.5	50.0	115	54.0	50.0	108	54-135	6	30
Dibenzofuran	8270D	44.6	50.0	89	41.9	50.0	84	55-110	6	30
Diethyl Phthalate	8270D	47.0	50.0	94	44.9	50.0	90	53-113	4	30
Dimethyl Phthalate	8270D	50.5	50.0	101	49.9	50.0	100	51-112	<1	30
Fluoranthene	8270D	59.8	50.0	120	58.8	50.0	118	66-127	2	30
Fluorene	8270D	49.4	50.0	99	46.3	50.0	93	54-106	6	30
Hexachlorobenzene	8270D	42.2	50.0	84	42.1	50.0	84	53-123	<1	30
Hexachlorobutadiene	8270D	31.6	50.0	63	30.8	50.0	62	16-95	2	30
Hexachlorocyclopentadiene	8270D	13.5	50.0	27	12.0	50.0	24	10-99	12	30
Hexachloroethane	8270D	24.7	50.0	49	23.6	50.0	47	15-92	4	30
Indeno(1,2,3-cd)pyrene	8270D	58.3	50.0	117	55.2	50.0	110	62-137	6	30
Isophorone	8270D	59.6	50.0	119 *	59.9	50.0	120 *	50-116	<1	30
N-Nitrosodi-n-propylamine	8270D	40.8	50.0	82	40.3	50.0	81	49-115	1	30
N-Nitrosodimethylamine	8270D	29.9	50.0	60	28.5	50.0	57	31-70	5	30
N-Nitrosodiphenylamine	8270D	49.8	50.0	100	49.0	50.0	98	45-123	2	30
Naphthalene	8270D	33.7	50.0	67	33.6	50.0	67	38-99	<1	30
Nitrobenzene	8270D	42.1	50.0	84	42.5	50.0	85	46-108	1	30
Pentachlorophenol (PCP)	8270D	39.6 J	50.0	79	39.0 J	50.0	78	29-164	1	30
Phenanthrene	8270D	50.6	50.0	101	49.5	50.0	99	58-118	2	30
Phenol	8270D	20.7	50.0	41	20.0	50.0	40	10-113	2	30
Pyrene	8270D	54.6	50.0	109	53.5	50.0	107	61-122	2	30

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/24/18 14:05

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973A\DATA\092418\DP314.D\ **Analytical Method:** 8270D
Instrument ID: R-MS-51 **Analysis Lot:** 608264

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	33.89	30476	Pass
68	69	0.00	2	0.00	0	Pass
69	198	0.00	100	40.41	36345	Pass
70	69	0.00	2	0.39	142	Pass
127	198	10	80	50.06	45021	Pass
197	198	0.00	2	0.00	0	Pass
198	198	100	100	100.00	89931	Pass
199	198	5	9	7.09	6372	Pass
275	198	10	60	23.55	21181	Pass
365	198	1	100	2.02	1817	Pass
441	442	0.01	24	17.65	14058	Pass
442	442	100	100	100.00	79669	Pass
443	442	15	24	19.40	15456	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1810210-02	I:\ACQUDATA\5973A\DATA\092418\DP315.D\	09/24/18 15:11	
Method Blank	RQ1809963-01	I:\ACQUDATA\5973A\DATA\092418\DP316.D\	09/24/18 15:59	
Lab Control Sample	RQ1809963-02	I:\ACQUDATA\5973A\DATA\092418\DP317.D\	09/24/18 16:26	
Duplicate Lab Control Sample	RQ1809963-03	I:\ACQUDATA\5973A\DATA\092418\DP318.D\	09/24/18 16:54	
MW-14S	R1808910-006	I:\ACQUDATA\5973A\DATA\092418\DP319.D\	09/24/18 17:22	
MW-11S	R1808910-007	I:\ACQUDATA\5973A\DATA\092418\DP320.D\	09/24/18 17:49	
MW-10S	R1808910-008	I:\ACQUDATA\5973A\DATA\092418\DP321.D\	09/24/18 18:17	
MW-10M	R1808910-009	I:\ACQUDATA\5973A\DATA\092418\DP322.D\	09/24/18 18:46	
MW-12S	R1808910-010	I:\ACQUDATA\5973A\DATA\092418\DP323.D\	09/24/18 19:13	
MW-12M	R1808910-011	I:\ACQUDATA\5973A\DATA\092418\DP324.D\	09/24/18 19:41	
MW-10D	R1808910-017	I:\ACQUDATA\5973A\DATA\092418\DP325.D\	09/24/18 20:09	

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/24/18 12:13

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\092418\BP375.D\ **Analytical Method:** 8270D
Instrument ID: R-MS-54 **Analysis Lot:** 608270

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	41.28	23048	Pass
68	69	0.00	2	1.32	363	Pass
69	198	0.00	100	49.30	27520	Pass
70	69	0.00	2	0.55	150	Pass
127	198	10	80	56.72	31664	Pass
197	198	0.00	2	0.58	324	Pass
198	198	100	100	100.00	55827	Pass
199	198	5	9	7.20	4019	Pass
275	198	10	60	28.33	15817	Pass
365	198	1	100	4.89	2728	Pass
441	442	0.01	24	14.44	9201	Pass
442	442	100	100	100.00	63712	Pass
443	442	15	24	19.48	12411	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1810222-04	I:\ACQUDATA\5973D\Data\092418\BP376.D\	09/24/18 13:38	
Continuing Calibration Verification	RQ1810222-05	I:\ACQUDATA\5973D\Data\092418\BP381.D\	09/24/18 16:14	
Method Blank	RQ1809900-01	I:\ACQUDATA\5973D\Data\092418\BP382.D\	09/24/18 16:41	
Lab Control Sample	RQ1809900-02	I:\ACQUDATA\5973D\Data\092418\BP383.D\	09/24/18 17:09	
Duplicate Lab Control Sample	RQ1809900-03	I:\ACQUDATA\5973D\Data\092418\BP384.D\	09/24/18 17:36	
MW-12D	R1808910-001	I:\ACQUDATA\5973D\Data\092418\BP386.D\	09/24/18 18:32	
MW-11M	R1808910-002	I:\ACQUDATA\5973D\Data\092418\BP387.D\	09/24/18 19:00	
MW-13S	R1808910-003	I:\ACQUDATA\5973D\Data\092418\BP388.D\	09/24/18 19:28	
MW-13M	R1808910-004	I:\ACQUDATA\5973D\Data\092418\BP389.D\	09/24/18 19:56	

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/24/18 13:38

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\092418\BP376.D\ **Lab Code:**RQ1810222-04
Instrument ID: R-MS-54 **Analysis Lot:**608270
Analysis Method: 8270D **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	127,605	4.78	257,164	7.65	464,357	12.41
	Upper Limit ==>	255,210	5.28	514,328	8.15	928,714	12.91
	Lower Limit ==>	63,803	4.28	128,582	7.15	232,179	11.91
Associated Analyses							
Continuing Calibration Verification	RQ1810222-04	127605	4.78	257164	7.65	464357	12.41

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/24/18 13:38

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\092418\BP376.D\ **Lab Code:**RQ1810222-04
Instrument ID: R-MS-54 **Analysis Lot:**608270
Analysis Method: 8270D **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	479,692	5.95	475,385	15.37	384,586	9.12
	Upper Limit ==>	959,384	6.45	950,770	15.87	769,172	9.62
	Lower Limit ==>	239,846	5.45	237,693	14.87	192,293	8.62
Associated Analyses							
Continuing Calibration Verification	RQ1810222-04	479692	5.95	475385	15.37	384586	9.12

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/24/18 16:14

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\092418\BP381.D\ **Lab Code:**RQ1810222-05
Instrument ID: R-MS-54 **Analysis Lot:**608270
Analysis Method: 8270D **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	92,691	4.78	196,185	7.65	331,132	12.41
	Upper Limit ==>	185,382	5.28	392,370	8.15	662,264	12.91
	Lower Limit ==>	46,346	4.28	98,093	7.15	165,566	11.91
Associated Analyses							
Method Blank	RQ1809900-01	71986	4.78	148701	7.65	267055	12.41
Lab Control Sample	RQ1809900-02	76251	4.78	160972	7.65	275301	12.41
Duplicate Lab Control Sample	RQ1809900-03	75617	4.78	161983	7.65	257282	12.41
MW-12D	R1808910-001	63350	4.78	129251	7.65	240062	12.41
MW-11M	R1808910-002	72930	4.78	148230	7.65	278407	12.41
MW-13S	R1808910-003	66428	4.78	131591	7.65	246012	12.41
MW-13M	R1808910-004	69178	4.78	142630	7.65	260513	12.41

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/24/18 16:14

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\092418\BP381.D\ **Lab Code:**RQ1810222-05
Instrument ID: R-MS-54 **Analysis Lot:**608270
Analysis Method: 8270D **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	370,612	5.95	335,604	15.36	321,155	9.12
	Upper Limit ==>	741,224	6.45	671,208	15.86	642,310	9.62
	Lower Limit ==>	185,306	5.45	167,802	14.86	160,578	8.62
Associated Analyses							
Method Blank	RQ1809900-01	282231	5.95	276414	15.36	245364	9.12
Lab Control Sample	RQ1809900-02	317728	5.95	283664	15.36	235665	9.12
Duplicate Lab Control Sample	RQ1809900-03	297147	5.95	278465	15.36	230660	9.12
MW-12D	R1808910-001	237496	5.95	260258	15.36	213914	9.12
MW-11M	R1808910-002	263996	5.95	298955	15.36	248700	9.12
MW-13S	R1808910-003	251192	5.95	270162	15.36	227048	9.12
MW-13M	R1808910-004	257819	5.95	273222	15.36	242126	9.12

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/24/18 15:11

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973A\DATA\092418\DP315.D\ **Lab Code:**RQ1810210-02
Instrument ID: R-MS-51 **Analysis Lot:**608264
Analysis Method: 8270D **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	153,030	4.68	304,548	7.55	446,116	12.23
	Upper Limit ==>	306,060	5.18	609,096	8.05	892,232	12.73
	Lower Limit ==>	76,515	4.18	152,274	7.05	223,058	11.73
Associated Analyses							
Method Blank	RQ1809963-01	124927	4.69	251193	7.55	383217	12.22
Lab Control Sample	RQ1809963-02	116209	4.69	234243	7.55	361868	12.22
Duplicate Lab Control Sample	RQ1809963-03	114210	4.69	237223	7.55	355518	12.22
MW-14S	R1808910-006	113092	4.69	232209	7.55	373009	12.22
MW-11S	R1808910-007	114193	4.68	228071	7.55	362972	12.22
MW-10S	R1808910-008	118667	4.69	240036	7.55	372973	12.22
MW-10M	R1808910-009	113501	4.69	231082	7.55	347394	12.22
MW-12S	R1808910-010	115181	4.69	229505	7.55	357632	12.22
MW-12M	R1808910-011	108860	4.69	225754	7.55	352449	12.22
MW-10D	R1808910-017	111879	4.69	222978	7.55	354257	12.22

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/24/18 15:11

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973A\DATA\092418\DP315.D\ **Lab Code:**RQ1810210-02
Instrument ID: R-MS-51 **Analysis Lot:**608264
Analysis Method: 8270D **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	596,444	5.85	429,606	15.12	465,423	9.02
	Upper Limit ==>	1,192,888	6.35	859,212	15.62	930,846	9.52
	Lower Limit ==>	298,222	5.35	214,803	14.62	232,712	8.52
Associated Analyses							
Method Blank	RQ1809963-01	466226	5.85	388833	15.12	401224	9.01
Lab Control Sample	RQ1809963-02	460720	5.85	369104	15.11	344593	9.01
Duplicate Lab Control Sample	RQ1809963-03	436954	5.85	360844	15.11	336576	9.01
MW-14S	R1808910-006	434349	5.85	367134	15.11	385575	9.01
MW-11S	R1808910-007	422773	5.85	366076	15.11	385209	9.01
MW-10S	R1808910-008	449318	5.85	374865	15.11	395574	9.01
MW-10M	R1808910-009	424837	5.85	354587	15.11	371850	9.01
MW-12S	R1808910-010	429378	5.85	361503	15.11	372804	9.01
MW-12M	R1808910-011	418053	5.85	358064	15.11	377354	9.01
MW-10D	R1808910-017	418487	5.85	353380	15.11	363292	9.01

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road/2011-200
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Extraction Method: EPA 3535A

Sample Name	Lab Code	1,4-Dioxane-d8 64-124
MW-14S	R1808910-006	101
MW-11S	R1808910-007	104
MW-10S	R1808910-008	99
MW-10M	R1808910-009	93
MW-12S	R1808910-010	112
MW-12M	R1808910-011	101
Dup 091818A	R1808910-012	104
FB 091818A	R1808910-013	109
EB 091818A	R1808910-014	97
Method Blank	RQ1810048-01	98
Lab Control Sample	RQ1810048-02	101
Duplicate Lab Control Sample	RQ1810048-03	101
MW-14S MS	RQ1810048-04	106
MW-14S DMS	RQ1810048-05	104

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QA/QC Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18
		Date Analyzed:	09/21/18
		Date Extracted:	09/21/18

Duplicate Matrix Spike Summary
1,4-Dioxane by GC/MS

Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA
Analysis Method:	8270D SIM		
Prep Method:	EPA 3535A		

		Matrix Spike RQ1810048-04			Duplicate Matrix Spike RQ1810048-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,4-Dioxane	ND U	9.91	10.1	98	9.38	10.1	93	33-146	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Analyzed:**	09/21/18 18:47
Sample Matrix:	Water	**Date Extracted:**	09/21/18

Method Blank Summary
1,4-Dioxane by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-56
Lab Code:	RQ1810048-01	**File ID:**	I:\ACQUDATA\5975E\data\092118\AQ564.D\
Analysis Method:	8270D SIM	**Analysis Lot:**	607876
Prep Method:	EPA 3535A	**Extraction Lot:**	322405

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1810048-02	I:\ACQUDATA\5975E\data\092118\AQ565.D\	09/21/18 19:05
Duplicate Lab Control Sample	RQ1810048-03	I:\ACQUDATA\5975E\data\092118\AQ566.D\	09/21/18 19:23
MW-14S	R1808910-006	I:\ACQUDATA\5975E\data\092118\AQ567.D\	09/21/18 19:42
MW-14SMS	RQ1810048-04	I:\ACQUDATA\5975E\data\092118\AQ568.D\	09/21/18 20:00
MW-14SDMS	RQ1810048-05	I:\ACQUDATA\5975E\data\092118\AQ569.D\	09/21/18 20:18
MW-11S	R1808910-007	I:\ACQUDATA\5975E\data\092118\AQ570.D\	09/21/18 20:37
MW-10S	R1808910-008	I:\ACQUDATA\5975E\data\092118\AQ571.D\	09/21/18 20:55
MW-10M	R1808910-009	I:\ACQUDATA\5975E\data\092118\AQ572.D\	09/21/18 21:13
MW-12S	R1808910-010	I:\ACQUDATA\5975E\data\092118\AQ573.D\	09/21/18 21:31
MW-12M	R1808910-011	I:\ACQUDATA\5975E\data\092118\AQ574.D\	09/21/18 21:49
Dup 091818A	R1808910-012	I:\ACQUDATA\5975E\data\092118\AQ575.D\	09/21/18 22:08
FB 091818A	R1808910-013	I:\ACQUDATA\5975E\data\092118\AQ576.D\	09/21/18 22:28
EB 091818A	R1808910-014	I:\ACQUDATA\5975E\data\092118\AQ577.D\	09/21/18 22:48

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1810048-01	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 18:47	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	98	64 - 124	09/21/18 18:47	

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QA/QC Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Analyzed:**	09/21/18 19:05
Sample Matrix:	Water	**Date Extracted:**	09/21/18

Lab Control Sample Summary
1,4-Dioxane by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-56
Lab Code:	RQ1810048-02	**File ID:**	I:\ACQUDATA\5975E\data\092118\AQ565.D\
Analysis Method:	8270D SIM	**Analysis Lot:**	607876
Prep Method:	EPA 3535A	**Extraction Lot:**	322405

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1810048-01	I:\ACQUDATA\5975E\data\092118\AQ564.D\	09/21/18 18:47
Duplicate Lab Control Sample	RQ1810048-03	I:\ACQUDATA\5975E\data\092118\AQ566.D\	09/21/18 19:23
MW-14S	R1808910-006	I:\ACQUDATA\5975E\data\092118\AQ567.D\	09/21/18 19:42
MW-14SMS	RQ1810048-04	I:\ACQUDATA\5975E\data\092118\AQ568.D\	09/21/18 20:00
MW-14SDMS	RQ1810048-05	I:\ACQUDATA\5975E\data\092118\AQ569.D\	09/21/18 20:18
MW-11S	R1808910-007	I:\ACQUDATA\5975E\data\092118\AQ570.D\	09/21/18 20:37
MW-10S	R1808910-008	I:\ACQUDATA\5975E\data\092118\AQ571.D\	09/21/18 20:55
MW-10M	R1808910-009	I:\ACQUDATA\5975E\data\092118\AQ572.D\	09/21/18 21:13
MW-12S	R1808910-010	I:\ACQUDATA\5975E\data\092118\AQ573.D\	09/21/18 21:31
MW-12M	R1808910-011	I:\ACQUDATA\5975E\data\092118\AQ574.D\	09/21/18 21:49
Dup 091818A	R1808910-012	I:\ACQUDATA\5975E\data\092118\AQ575.D\	09/21/18 22:08
FB 091818A	R1808910-013	I:\ACQUDATA\5975E\data\092118\AQ576.D\	09/21/18 22:28
EB 091818A	R1808910-014	I:\ACQUDATA\5975E\data\092118\AQ577.D\	09/21/18 22:48

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/21/18

Duplicate Lab Control Sample Summary
1,4-Dioxane by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1810048-02			RQ1810048-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,4-Dioxane	8270D SIM	9.36	10.1	92	9.22	10.1	91	60-119	2	30

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QC/QC Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/21/18 13:00

Tune Summary
1,4-Dioxane by GC/MS

File ID: I:\ACQUDATA\5975E\data\092118\AQ548.D\ **Analytical Method:** 8270D SIM
Instrument ID: R-MS-56 **Analysis Lot:** 607876

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	43.48	491157	Pass
68	69	0.00	2	1.44	7912	Pass
69	198	0.00	100	48.66	549670	Pass
70	69	0.00	2	0.52	2883	Pass
127	198	10	80	60.21	680167	Pass
197	198	0.00	2	0.00	0	Pass
198	198	100	100	100.00	1129664	Pass
199	198	5	9	6.81	76979	Pass
275	198	10	60	18.65	210709	Pass
365	198	1	100	1.87	21080	Pass
441	442	0.01	24	17.68	112728	Pass
442	442	100	100	100.00	637568	Pass
443	442	15	24	20.08	128029	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1810106-05	I:\ACQUDATA\5975E\data\092118\AQ563.D\	09/21/18 18:28	
Method Blank	RQ1810048-01	I:\ACQUDATA\5975E\data\092118\AQ564.D\	09/21/18 18:47	
Lab Control Sample	RQ1810048-02	I:\ACQUDATA\5975E\data\092118\AQ565.D\	09/21/18 19:05	
Duplicate Lab Control Sample	RQ1810048-03	I:\ACQUDATA\5975E\data\092118\AQ566.D\	09/21/18 19:23	
MW-14S	R1808910-006	I:\ACQUDATA\5975E\data\092118\AQ567.D\	09/21/18 19:42	
MW-14S	RQ1810048-04	I:\ACQUDATA\5975E\data\092118\AQ568.D\	09/21/18 20:00	
MW-14S	RQ1810048-05	I:\ACQUDATA\5975E\data\092118\AQ569.D\	09/21/18 20:18	
MW-11S	R1808910-007	I:\ACQUDATA\5975E\data\092118\AQ570.D\	09/21/18 20:37	
MW-10S	R1808910-008	I:\ACQUDATA\5975E\data\092118\AQ571.D\	09/21/18 20:55	
MW-10M	R1808910-009	I:\ACQUDATA\5975E\data\092118\AQ572.D\	09/21/18 21:13	
MW-12S	R1808910-010	I:\ACQUDATA\5975E\data\092118\AQ573.D\	09/21/18 21:31	
MW-12M	R1808910-011	I:\ACQUDATA\5975E\data\092118\AQ574.D\	09/21/18 21:49	
Dup 091818A	R1808910-012	I:\ACQUDATA\5975E\data\092118\AQ575.D\	09/21/18 22:08	
FB 091818A	R1808910-013	I:\ACQUDATA\5975E\data\092118\AQ576.D\	09/21/18 22:28	
EB 091818A	R1808910-014	I:\ACQUDATA\5975E\data\092118\AQ577.D\	09/21/18 22:48	

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QA/QC Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200 **Date Analyzed:**09/21/18 18:28

Internal Standard Area and RT SUMMARY
1,4-Dioxane by GC/MS

File ID: I:\ACQUDATA\5975E\data\092118\AQ563.D\ **Lab Code:**RQ1810106-05
Instrument ID: R-MS-56 **Analysis Lot:**607876
Analysis Method: 8270D SIM **Signal ID:**1

		Tetrahydrofuran-d8	
		Area	**RT**
	Result ==>	61,116	3.21
	Upper Limit ==>	122,232	3.71
	Lower Limit ==>	30,558	2.71
Associated Analyses			
Method Blank	RQ1810048-01	80474	3.19
Lab Control Sample	RQ1810048-02	75361	3.16
Duplicate Lab Control Sample	RQ1810048-03	74835	3.17
MW-14S	R1808910-006	74111	3.19
MW-14SMS	RQ1810048-04	75369	3.17
MW-14SDMS	RQ1810048-05	72665	3.17
MW-11S	R1808910-007	67247	3.16
MW-10S	R1808910-008	74030	3.16
MW-10M	R1808910-009	71759	3.17
MW-12S	R1808910-010	66640	3.16
MW-12M	R1808910-011	75310	3.19
Dup 091818A	R1808910-012	69248	3.14
FB 091818A	R1808910-013	71611	3.21
EB 091818A	R1808910-014	73421	3.14

Metals

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METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	1000	985	98	1000	976	98	971	97	P
Lead	500	511	102	500	510	102	510	102	P

Comments:

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				1000	979	98	973	97	P
Lead				500	510	102	506	101	P

Comments:

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				1000	988	99			P
Lead				500	506	101			P

Comments:

METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: MW-12D

AA CRDL Standard Source: ACCUSTANDARD

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				20.0	18.10	90	19.90	100
Lead				10.0	11.50	115	9.30	93

Comments:

METALS

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BLANKS

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	10.00	U	10.00	U	10.00	U	10.00	U	10.000	U	P
Lead	50.00	U	50.00	U	50.00	U	50.00	U	50.000	U	P

Comments:

METALS

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BLANKS

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			10.00	U	10.00	U					P
Lead			50.00	U	50.00	U					P

Comments:

METALS

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ICP INTERFERENCE CHECK SAMPLE

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

ICP ID Number: Agilent ICP ICS Source: PERKIN ELMER

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic		100	-0.6	101	101	-0.1	98	98
Lead		50	-0.2	49	98	0.9	47	94

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic	40	39	98					
Lead	500	517	103					

Comments: _____

METALS

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ICP SERIAL DILUTIONS

SAMPLE NO.

MW-10DL

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	10.00	U	50.00	U			P
Lead	50.00	U	250.00	U			P

Comments: _____

METALS

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DETECTION LIMITS

Contract: R1808910

Lab Code: _____ **Case No.:** _____ **SAS No.:** _____ **SDG NO.:** MW-12D

ICP ID Number: Agilent ICP **Date:** 3/26/2018

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	PQL ug/L	MDL ug/L	M
Arsenic	188.980		10.0	10.0	P
Lead	220.353		50.0	50.0	P

Comments: _____

METALS
ICP LINEAR RANGES (QUARTERLY)
-12-

Contract: R1808910

Lab Code: _____ **Case No.:** _____ **SAS No.:** _____ **SDG NO.:** MW-12D

ICP ID Number: Agilent ICP **Date:** 3/26/2018

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Arsenic	1.000	4000	P
Lead	1.000	10000	P

Comments: _____

METALS

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ANALYSIS RUN LOG

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: MW-12D

Instrument ID Number: Agilent ICP Method: P

Start Date: 9/27/2018 End Date: 9/27/2018

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
BLANK	1.00	18:29				X									X															
STANDARD 1	1.00	18:32				X									X															
STANDARD 2	1.00	18:35				X									X															
STANDARD 3	1.00	18:38				X									X															
STANDARD 4	1.00	18:42				X									X															
STANDARD 5	1.00	18:45				X									X															
ICV1	1.00	18:49				X									X															
ICB1	1.00	18:52				X									X															
CRDL1	1.00	18:55				X									X															
ICS-A1	1.00	18:58				X									X															
ICS-AB1	1.00	19:02				X									X															
CCV1	1.00	19:05				X									X															
CCB1	1.00	19:08				X									X															
PBW	1.00	19:11				X									X															
ZZZZZZ	1.00	19:15																												
LCSW	1.00	19:18				X									X															
MW-12D	1.00	19:21				X									X															
MW-11M	1.00	19:24				X									X															
MW-13S	1.00	19:28				X									X															
MW-13M	1.00	19:31				X									X															
MW-14S	1.00	19:34				X									X															
MW-11S	1.00	19:37				X									X															
MW-10S	1.00	19:41				X									X															
CCV2	1.00	19:44				X									X															
CCB2	1.00	19:47				X									X															
MW-10M	1.00	19:50				X									X															
MW-12S	1.00	19:54				X									X															
MW-12M	1.00	19:57				X									X															
MW-10D	1.00	20:00				X									X															
MW-10DL	5.00	20:03				X									X															
ZZZZZZ	1.00	20:06																												
ZZZZZZ	1.00	20:10																												
ZZZZZZ	1.00	20:13																												

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS

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ANALYSIS RUN LOG

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: MW-12D

Instrument ID Number: Agilent ICP Method: P

Start Date: 9/27/2018 End Date: 9/27/2018

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ZZZZZZ	1.00	20:16																												
ZZZZZZ	1.00	20:19																												
CCV3	1.00	20:23				X									X															
CCB3	1.00	20:26				X									X															
ZZZZZZ	5.00	20:29																												
ZZZZZZ	1.00	20:32																												
ZZZZZZ	1.00	20:36																												
ZZZZZZ	1.00	20:39																												
ZZZZZZ	1.00	20:42																												
ZZZZZZ	1.00	20:45																												
ZZZZZZ	1.00	20:49																												
CCV4	1.00	20:52				X									X															
CCB4	1.00	20:55				X									X															
CRDL2	1.00	20:58				X									X															
ICS-A2	1.00	21:02				X									X															
ICS-AB2	1.00	21:05				X									X															
ZZZZZZ	1.00	21:08																												
ZZZZZZ	1.00	21:11																												
ZZZZZZ	1.00	21:15																												
CCV5	1.00	21:18				X									X															
CCB5	1.00	21:21				X									X															

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1808910-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	5.0	1	09/25/18 11:55	

Client: Unicorn Management Consultants
Project: Union Road/2011-200
Sample Matrix: Water

Service Request: R1808910
Date Analyzed: 09/25/18

Duplicate Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		R1808910-LCS			R1808910-DLCS					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Oil and Grease, Total (HEM)	1664A	36.5	40.9	89	34.5	40.9	84	78-114	6	18

Raw Data

ALS Environmental—Rochester Laboratory
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Volatile Organic Compounds by GC/MS

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Units:**	ug/L
Lab Code:	R1808910-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 00:53	
Benzene	ND U	5.0	1	09/21/18 00:53	
Bromodichloromethane	ND U	5.0	1	09/21/18 00:53	
Bromoform	ND U	5.0	1	09/21/18 00:53	
Bromomethane	ND U	5.0	1	09/21/18 00:53	
2-Butanone (MEK)	ND U	10	1	09/21/18 00:53	
Carbon Disulfide	ND U	10	1	09/21/18 00:53	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 00:53	
Chlorobenzene	ND U	5.0	1	09/21/18 00:53	
Chloroethane	ND U	5.0	1	09/21/18 00:53	
Chloroform	ND U	5.0	1	09/21/18 00:53	
Chloromethane	ND U	5.0	1	09/21/18 00:53	
Dibromochloromethane	ND U	5.0	1	09/21/18 00:53	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 00:53	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 00:53	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 00:53	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:53	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:53	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 00:53	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:53	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:53	
Ethylbenzene	ND U	5.0	1	09/21/18 00:53	
2-Hexanone	ND U	10	1	09/21/18 00:53	
Methylene Chloride	ND U	5.0	1	09/21/18 00:53	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 00:53	
Styrene	ND U	5.0	1	09/21/18 00:53	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 00:53	
Tetrachloroethene	ND U	5.0	1	09/21/18 00:53	
Toluene	ND U	5.0	1	09/21/18 00:53	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 00:53	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 00:53	
Trichloroethene	ND U	5.0	1	09/21/18 00:53	
Vinyl Chloride	ND U	5.0	1	09/21/18 00:53	
o-Xylene	ND U	5.0	1	09/21/18 00:53	
m,p-Xylenes	ND U	5.0	1	09/21/18 00:53	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Units:**	ug/L
Lab Code:	R1808910-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 122	09/21/18 00:53	
Toluene-d8	96	87 - 121	09/21/18 00:53	
Dibromofluoromethane	94	89 - 119	09/21/18 00:53	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Units:**	ug/L
Lab Code:	R1808910-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 01:16	
Benzene	ND U	5.0	1	09/21/18 01:16	
Bromodichloromethane	ND U	5.0	1	09/21/18 01:16	
Bromoform	ND U	5.0	1	09/21/18 01:16	
Bromomethane	ND U	5.0	1	09/21/18 01:16	
2-Butanone (MEK)	ND U	10	1	09/21/18 01:16	
Carbon Disulfide	ND U	10	1	09/21/18 01:16	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 01:16	
Chlorobenzene	ND U	5.0	1	09/21/18 01:16	
Chloroethane	ND U	5.0	1	09/21/18 01:16	
Chloroform	ND U	5.0	1	09/21/18 01:16	
Chloromethane	ND U	5.0	1	09/21/18 01:16	
Dibromochloromethane	ND U	5.0	1	09/21/18 01:16	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 01:16	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 01:16	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 01:16	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 01:16	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 01:16	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 01:16	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 01:16	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 01:16	
Ethylbenzene	ND U	5.0	1	09/21/18 01:16	
2-Hexanone	ND U	10	1	09/21/18 01:16	
Methylene Chloride	ND U	5.0	1	09/21/18 01:16	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 01:16	
Styrene	ND U	5.0	1	09/21/18 01:16	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 01:16	
Tetrachloroethene	ND U	5.0	1	09/21/18 01:16	
Toluene	ND U	5.0	1	09/21/18 01:16	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 01:16	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 01:16	
Trichloroethene	ND U	5.0	1	09/21/18 01:16	
Vinyl Chloride	ND U	5.0	1	09/21/18 01:16	
o-Xylene	ND U	5.0	1	09/21/18 01:16	
m,p-Xylenes	ND U	5.0	1	09/21/18 01:16	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Units:**	ug/L
Lab Code:	R1808910-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/21/18 01:16	
Toluene-d8	97	87 - 121	09/21/18 01:16	
Dibromofluoromethane	95	89 - 119	09/21/18 01:16	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Units:**	ug/L
Lab Code:	R1808910-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 01:38	
Benzene	ND U	5.0	1	09/21/18 01:38	
Bromodichloromethane	ND U	5.0	1	09/21/18 01:38	
Bromoform	ND U	5.0	1	09/21/18 01:38	
Bromomethane	ND U	5.0	1	09/21/18 01:38	
2-Butanone (MEK)	ND U	10	1	09/21/18 01:38	
Carbon Disulfide	ND U	10	1	09/21/18 01:38	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 01:38	
Chlorobenzene	ND U	5.0	1	09/21/18 01:38	
Chloroethane	ND U	5.0	1	09/21/18 01:38	
Chloroform	ND U	5.0	1	09/21/18 01:38	
Chloromethane	ND U	5.0	1	09/21/18 01:38	
Dibromochloromethane	ND U	5.0	1	09/21/18 01:38	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 01:38	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 01:38	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 01:38	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 01:38	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 01:38	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 01:38	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 01:38	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 01:38	
Ethylbenzene	ND U	5.0	1	09/21/18 01:38	
2-Hexanone	ND U	10	1	09/21/18 01:38	
Methylene Chloride	ND U	5.0	1	09/21/18 01:38	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 01:38	
Styrene	ND U	5.0	1	09/21/18 01:38	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 01:38	
Tetrachloroethene	ND U	5.0	1	09/21/18 01:38	
Toluene	ND U	5.0	1	09/21/18 01:38	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 01:38	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 01:38	
Trichloroethene	ND U	5.0	1	09/21/18 01:38	
Vinyl Chloride	ND U	5.0	1	09/21/18 01:38	
o-Xylene	ND U	5.0	1	09/21/18 01:38	
m,p-Xylenes	ND U	5.0	1	09/21/18 01:38	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Units:**	ug/L
Lab Code:	R1808910-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	09/21/18 01:38	
Toluene-d8	96	87 - 121	09/21/18 01:38	
Dibromofluoromethane	94	89 - 119	09/21/18 01:38	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Units:**	ug/L
Lab Code:	R1808910-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 02:01	
Benzene	ND U	5.0	1	09/21/18 02:01	
Bromodichloromethane	ND U	5.0	1	09/21/18 02:01	
Bromoform	ND U	5.0	1	09/21/18 02:01	
Bromomethane	ND U	5.0	1	09/21/18 02:01	
2-Butanone (MEK)	ND U	10	1	09/21/18 02:01	
Carbon Disulfide	ND U	10	1	09/21/18 02:01	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 02:01	
Chlorobenzene	ND U	5.0	1	09/21/18 02:01	
Chloroethane	ND U	5.0	1	09/21/18 02:01	
Chloroform	ND U	5.0	1	09/21/18 02:01	
Chloromethane	ND U	5.0	1	09/21/18 02:01	
Dibromochloromethane	ND U	5.0	1	09/21/18 02:01	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 02:01	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 02:01	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 02:01	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:01	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:01	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 02:01	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:01	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:01	
Ethylbenzene	ND U	5.0	1	09/21/18 02:01	
2-Hexanone	ND U	10	1	09/21/18 02:01	
Methylene Chloride	ND U	5.0	1	09/21/18 02:01	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 02:01	
Styrene	ND U	5.0	1	09/21/18 02:01	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 02:01	
Tetrachloroethene	ND U	5.0	1	09/21/18 02:01	
Toluene	ND U	5.0	1	09/21/18 02:01	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 02:01	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 02:01	
Trichloroethene	ND U	5.0	1	09/21/18 02:01	
Vinyl Chloride	ND U	5.0	1	09/21/18 02:01	
o-Xylene	ND U	5.0	1	09/21/18 02:01	
m,p-Xylenes	ND U	5.0	1	09/21/18 02:01	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Units:**	ug/L
Lab Code:	R1808910-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	09/21/18 02:01	
Toluene-d8	97	87 - 121	09/21/18 02:01	
Dibromofluoromethane	96	89 - 119	09/21/18 02:01	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:00
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1808910-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/20/18 23:46	
Benzene	ND U	5.0	1	09/20/18 23:46	
Bromodichloromethane	ND U	5.0	1	09/20/18 23:46	
Bromoform	ND U	5.0	1	09/20/18 23:46	
Bromomethane	ND U	5.0	1	09/20/18 23:46	
2-Butanone (MEK)	ND U	10	1	09/20/18 23:46	
Carbon Disulfide	ND U	10	1	09/20/18 23:46	
Carbon Tetrachloride	ND U	5.0	1	09/20/18 23:46	
Chlorobenzene	ND U	5.0	1	09/20/18 23:46	
Chloroethane	ND U	5.0	1	09/20/18 23:46	
Chloroform	ND U	5.0	1	09/20/18 23:46	
Chloromethane	ND U	5.0	1	09/20/18 23:46	
Dibromochloromethane	ND U	5.0	1	09/20/18 23:46	
1,1-Dichloroethane	ND U	5.0	1	09/20/18 23:46	
1,2-Dichloroethane	ND U	5.0	1	09/20/18 23:46	
1,1-Dichloroethene	ND U	5.0	1	09/20/18 23:46	
cis-1,2-Dichloroethene	ND U	5.0	1	09/20/18 23:46	
trans-1,2-Dichloroethene	ND U	5.0	1	09/20/18 23:46	
1,2-Dichloropropane	ND U	5.0	1	09/20/18 23:46	
cis-1,3-Dichloropropene	ND U	5.0	1	09/20/18 23:46	
trans-1,3-Dichloropropene	ND U	5.0	1	09/20/18 23:46	
Ethylbenzene	ND U	5.0	1	09/20/18 23:46	
2-Hexanone	ND U	10	1	09/20/18 23:46	
Methylene Chloride	ND U	5.0	1	09/20/18 23:46	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/20/18 23:46	
Styrene	ND U	5.0	1	09/20/18 23:46	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/20/18 23:46	
Tetrachloroethene	ND U	5.0	1	09/20/18 23:46	
Toluene	ND U	5.0	1	09/20/18 23:46	
1,1,1-Trichloroethane	ND U	5.0	1	09/20/18 23:46	
1,1,2-Trichloroethane	ND U	5.0	1	09/20/18 23:46	
Trichloroethene	ND U	5.0	1	09/20/18 23:46	
Vinyl Chloride	ND U	5.0	1	09/20/18 23:46	
o-Xylene	ND U	5.0	1	09/20/18 23:46	
m,p-Xylenes	ND U	5.0	1	09/20/18 23:46	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:00
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1808910-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/20/18 23:46	
Toluene-d8	96	87 - 121	09/20/18 23:46	
Dibromofluoromethane	95	89 - 119	09/20/18 23:46	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 02:23	
Benzene	ND U	5.0	1	09/21/18 02:23	
Bromodichloromethane	ND U	5.0	1	09/21/18 02:23	
Bromoform	ND U	5.0	1	09/21/18 02:23	
Bromomethane	ND U	5.0	1	09/21/18 02:23	
2-Butanone (MEK)	ND U	10	1	09/21/18 02:23	
Carbon Disulfide	ND U	10	1	09/21/18 02:23	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 02:23	
Chlorobenzene	ND U	5.0	1	09/21/18 02:23	
Chloroethane	ND U	5.0	1	09/21/18 02:23	
Chloroform	ND U	5.0	1	09/21/18 02:23	
Chloromethane	ND U	5.0	1	09/21/18 02:23	
Dibromochloromethane	ND U	5.0	1	09/21/18 02:23	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 02:23	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 02:23	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 02:23	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:23	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:23	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 02:23	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:23	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:23	
Ethylbenzene	ND U	5.0	1	09/21/18 02:23	
2-Hexanone	ND U	10	1	09/21/18 02:23	
Methylene Chloride	ND U	5.0	1	09/21/18 02:23	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 02:23	
Styrene	ND U	5.0	1	09/21/18 02:23	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 02:23	
Tetrachloroethene	ND U	5.0	1	09/21/18 02:23	
Toluene	ND U	5.0	1	09/21/18 02:23	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 02:23	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 02:23	
Trichloroethene	ND U	5.0	1	09/21/18 02:23	
Vinyl Chloride	ND U	5.0	1	09/21/18 02:23	
o-Xylene	ND U	5.0	1	09/21/18 02:23	
m,p-Xylenes	ND U	5.0	1	09/21/18 02:23	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	09/21/18 02:23	
Toluene-d8	96	87 - 121	09/21/18 02:23	
Dibromofluoromethane	93	89 - 119	09/21/18 02:23	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 02:45	
Benzene	ND U	5.0	1	09/21/18 02:45	
Bromodichloromethane	ND U	5.0	1	09/21/18 02:45	
Bromoform	ND U	5.0	1	09/21/18 02:45	
Bromomethane	ND U	5.0	1	09/21/18 02:45	
2-Butanone (MEK)	ND U	10	1	09/21/18 02:45	
Carbon Disulfide	ND U	10	1	09/21/18 02:45	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 02:45	
Chlorobenzene	ND U	5.0	1	09/21/18 02:45	
Chloroethane	ND U	5.0	1	09/21/18 02:45	
Chloroform	ND U	5.0	1	09/21/18 02:45	
Chloromethane	ND U	5.0	1	09/21/18 02:45	
Dibromochloromethane	ND U	5.0	1	09/21/18 02:45	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 02:45	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 02:45	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 02:45	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:45	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 02:45	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 02:45	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:45	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 02:45	
Ethylbenzene	ND U	5.0	1	09/21/18 02:45	
2-Hexanone	ND U	10	1	09/21/18 02:45	
Methylene Chloride	ND U	5.0	1	09/21/18 02:45	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 02:45	
Styrene	ND U	5.0	1	09/21/18 02:45	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 02:45	
Tetrachloroethene	ND U	5.0	1	09/21/18 02:45	
Toluene	ND U	5.0	1	09/21/18 02:45	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 02:45	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 02:45	
Trichloroethene	ND U	5.0	1	09/21/18 02:45	
Vinyl Chloride	ND U	5.0	1	09/21/18 02:45	
o-Xylene	ND U	5.0	1	09/21/18 02:45	
m,p-Xylenes	ND U	5.0	1	09/21/18 02:45	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	09/21/18 02:45	
Toluene-d8	97	87 - 121	09/21/18 02:45	
Dibromofluoromethane	96	89 - 119	09/21/18 02:45	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 03:08	
Benzene	ND U	5.0	1	09/21/18 03:08	
Bromodichloromethane	ND U	5.0	1	09/21/18 03:08	
Bromoform	ND U	5.0	1	09/21/18 03:08	
Bromomethane	ND U	5.0	1	09/21/18 03:08	
2-Butanone (MEK)	ND U	10	1	09/21/18 03:08	
Carbon Disulfide	ND U	10	1	09/21/18 03:08	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 03:08	
Chlorobenzene	ND U	5.0	1	09/21/18 03:08	
Chloroethane	ND U	5.0	1	09/21/18 03:08	
Chloroform	ND U	5.0	1	09/21/18 03:08	
Chloromethane	ND U	5.0	1	09/21/18 03:08	
Dibromochloromethane	ND U	5.0	1	09/21/18 03:08	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 03:08	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 03:08	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 03:08	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:08	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:08	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 03:08	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:08	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:08	
Ethylbenzene	ND U	5.0	1	09/21/18 03:08	
2-Hexanone	ND U	10	1	09/21/18 03:08	
Methylene Chloride	ND U	5.0	1	09/21/18 03:08	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 03:08	
Styrene	ND U	5.0	1	09/21/18 03:08	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 03:08	
Tetrachloroethene	ND U	5.0	1	09/21/18 03:08	
Toluene	ND U	5.0	1	09/21/18 03:08	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 03:08	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 03:08	
Trichloroethene	ND U	5.0	1	09/21/18 03:08	
Vinyl Chloride	ND U	5.0	1	09/21/18 03:08	
o-Xylene	ND U	5.0	1	09/21/18 03:08	
m,p-Xylenes	ND U	5.0	1	09/21/18 03:08	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/21/18 03:08	
Toluene-d8	97	87 - 121	09/21/18 03:08	
Dibromofluoromethane	96	89 - 119	09/21/18 03:08	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 03:30	
Benzene	ND U	5.0	1	09/21/18 03:30	
Bromodichloromethane	ND U	5.0	1	09/21/18 03:30	
Bromoform	ND U	5.0	1	09/21/18 03:30	
Bromomethane	ND U	5.0	1	09/21/18 03:30	
2-Butanone (MEK)	ND U	10	1	09/21/18 03:30	
Carbon Disulfide	ND U	10	1	09/21/18 03:30	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 03:30	
Chlorobenzene	ND U	5.0	1	09/21/18 03:30	
Chloroethane	ND U	5.0	1	09/21/18 03:30	
Chloroform	ND U	5.0	1	09/21/18 03:30	
Chloromethane	ND U	5.0	1	09/21/18 03:30	
Dibromochloromethane	ND U	5.0	1	09/21/18 03:30	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 03:30	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 03:30	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 03:30	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:30	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:30	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 03:30	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:30	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:30	
Ethylbenzene	ND U	5.0	1	09/21/18 03:30	
2-Hexanone	ND U	10	1	09/21/18 03:30	
Methylene Chloride	ND U	5.0	1	09/21/18 03:30	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 03:30	
Styrene	ND U	5.0	1	09/21/18 03:30	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 03:30	
Tetrachloroethene	ND U	5.0	1	09/21/18 03:30	
Toluene	ND U	5.0	1	09/21/18 03:30	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 03:30	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 03:30	
Trichloroethene	ND U	5.0	1	09/21/18 03:30	
Vinyl Chloride	ND U	5.0	1	09/21/18 03:30	
o-Xylene	ND U	5.0	1	09/21/18 03:30	
m,p-Xylenes	ND U	5.0	1	09/21/18 03:30	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 122	09/21/18 03:30	
Toluene-d8	96	87 - 121	09/21/18 03:30	
Dibromofluoromethane	97	89 - 119	09/21/18 03:30	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 03:52	
Benzene	ND U	5.0	1	09/21/18 03:52	
Bromodichloromethane	ND U	5.0	1	09/21/18 03:52	
Bromoform	ND U	5.0	1	09/21/18 03:52	
Bromomethane	ND U	5.0	1	09/21/18 03:52	
2-Butanone (MEK)	ND U	10	1	09/21/18 03:52	
Carbon Disulfide	ND U	10	1	09/21/18 03:52	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 03:52	
Chlorobenzene	ND U	5.0	1	09/21/18 03:52	
Chloroethane	ND U	5.0	1	09/21/18 03:52	
Chloroform	ND U	5.0	1	09/21/18 03:52	
Chloromethane	ND U	5.0	1	09/21/18 03:52	
Dibromochloromethane	ND U	5.0	1	09/21/18 03:52	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 03:52	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 03:52	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 03:52	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:52	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 03:52	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 03:52	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:52	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 03:52	
Ethylbenzene	ND U	5.0	1	09/21/18 03:52	
2-Hexanone	ND U	10	1	09/21/18 03:52	
Methylene Chloride	ND U	5.0	1	09/21/18 03:52	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 03:52	
Styrene	ND U	5.0	1	09/21/18 03:52	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 03:52	
Tetrachloroethene	ND U	5.0	1	09/21/18 03:52	
Toluene	ND U	5.0	1	09/21/18 03:52	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 03:52	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 03:52	
Trichloroethene	ND U	5.0	1	09/21/18 03:52	
Vinyl Chloride	ND U	5.0	1	09/21/18 03:52	
o-Xylene	ND U	5.0	1	09/21/18 03:52	
m,p-Xylenes	ND U	5.0	1	09/21/18 03:52	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	09/21/18 03:52	
Toluene-d8	95	87 - 121	09/21/18 03:52	
Dibromofluoromethane	94	89 - 119	09/21/18 03:52	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 04:15	
Benzene	ND U	5.0	1	09/21/18 04:15	
Bromodichloromethane	ND U	5.0	1	09/21/18 04:15	
Bromoform	ND U	5.0	1	09/21/18 04:15	
Bromomethane	ND U	5.0	1	09/21/18 04:15	
2-Butanone (MEK)	ND U	10	1	09/21/18 04:15	
Carbon Disulfide	ND U	10	1	09/21/18 04:15	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 04:15	
Chlorobenzene	ND U	5.0	1	09/21/18 04:15	
Chloroethane	ND U	5.0	1	09/21/18 04:15	
Chloroform	ND U	5.0	1	09/21/18 04:15	
Chloromethane	ND U	5.0	1	09/21/18 04:15	
Dibromochloromethane	ND U	5.0	1	09/21/18 04:15	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 04:15	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 04:15	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 04:15	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 04:15	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 04:15	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 04:15	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 04:15	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 04:15	
Ethylbenzene	ND U	5.0	1	09/21/18 04:15	
2-Hexanone	ND U	10	1	09/21/18 04:15	
Methylene Chloride	ND U	5.0	1	09/21/18 04:15	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 04:15	
Styrene	ND U	5.0	1	09/21/18 04:15	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 04:15	
Tetrachloroethene	ND U	5.0	1	09/21/18 04:15	
Toluene	ND U	5.0	1	09/21/18 04:15	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 04:15	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 04:15	
Trichloroethene	ND U	5.0	1	09/21/18 04:15	
Vinyl Chloride	ND U	5.0	1	09/21/18 04:15	
o-Xylene	ND U	5.0	1	09/21/18 04:15	
m,p-Xylenes	ND U	5.0	1	09/21/18 04:15	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	09/21/18 04:15	
Toluene-d8	96	87 - 121	09/21/18 04:15	
Dibromofluoromethane	95	89 - 119	09/21/18 04:15	

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Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	TB-A	**Units:**	ug/L
Lab Code:	R1808910-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 00:09	
Benzene	ND U	5.0	1	09/21/18 00:09	
Bromodichloromethane	ND U	5.0	1	09/21/18 00:09	
Bromoform	ND U	5.0	1	09/21/18 00:09	
Bromomethane	ND U	5.0	1	09/21/18 00:09	
2-Butanone (MEK)	ND U	10	1	09/21/18 00:09	
Carbon Disulfide	ND U	10	1	09/21/18 00:09	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 00:09	
Chlorobenzene	ND U	5.0	1	09/21/18 00:09	
Chloroethane	ND U	5.0	1	09/21/18 00:09	
Chloroform	ND U	5.0	1	09/21/18 00:09	
Chloromethane	ND U	5.0	1	09/21/18 00:09	
Dibromochloromethane	ND U	5.0	1	09/21/18 00:09	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 00:09	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 00:09	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 00:09	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:09	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:09	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 00:09	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:09	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:09	
Ethylbenzene	ND U	5.0	1	09/21/18 00:09	
2-Hexanone	ND U	10	1	09/21/18 00:09	
Methylene Chloride	ND U	5.0	1	09/21/18 00:09	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 00:09	
Styrene	ND U	5.0	1	09/21/18 00:09	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 00:09	
Tetrachloroethene	ND U	5.0	1	09/21/18 00:09	
Toluene	ND U	5.0	1	09/21/18 00:09	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 00:09	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 00:09	
Trichloroethene	ND U	5.0	1	09/21/18 00:09	
Vinyl Chloride	ND U	5.0	1	09/21/18 00:09	
o-Xylene	ND U	5.0	1	09/21/18 00:09	
m,p-Xylenes	ND U	5.0	1	09/21/18 00:09	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	TB-A	**Units:**	ug/L
Lab Code:	R1808910-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	09/21/18 00:09	
Toluene-d8	95	87 - 121	09/21/18 00:09	
Dibromofluoromethane	96	89 - 119	09/21/18 00:09	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	TB-B	**Units:**	ug/L
Lab Code:	R1808910-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	ND U	10	1	09/21/18 00:31	
Benzene	ND U	5.0	1	09/21/18 00:31	
Bromodichloromethane	ND U	5.0	1	09/21/18 00:31	
Bromoform	ND U	5.0	1	09/21/18 00:31	
Bromomethane	ND U	5.0	1	09/21/18 00:31	
2-Butanone (MEK)	ND U	10	1	09/21/18 00:31	
Carbon Disulfide	ND U	10	1	09/21/18 00:31	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 00:31	
Chlorobenzene	ND U	5.0	1	09/21/18 00:31	
Chloroethane	ND U	5.0	1	09/21/18 00:31	
Chloroform	ND U	5.0	1	09/21/18 00:31	
Chloromethane	ND U	5.0	1	09/21/18 00:31	
Dibromochloromethane	ND U	5.0	1	09/21/18 00:31	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 00:31	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 00:31	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 00:31	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:31	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 00:31	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 00:31	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:31	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 00:31	
Ethylbenzene	ND U	5.0	1	09/21/18 00:31	
2-Hexanone	ND U	10	1	09/21/18 00:31	
Methylene Chloride	ND U	5.0	1	09/21/18 00:31	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 00:31	
Styrene	ND U	5.0	1	09/21/18 00:31	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 00:31	
Tetrachloroethene	ND U	5.0	1	09/21/18 00:31	
Toluene	ND U	5.0	1	09/21/18 00:31	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 00:31	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 00:31	
Trichloroethene	ND U	5.0	1	09/21/18 00:31	
Vinyl Chloride	ND U	5.0	1	09/21/18 00:31	
o-Xylene	ND U	5.0	1	09/21/18 00:31	
m,p-Xylenes	ND U	5.0	1	09/21/18 00:31	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	TB-B	**Units:**	ug/L
Lab Code:	R1808910-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 122	09/21/18 00:31	
Toluene-d8	94	87 - 121	09/21/18 00:31	
Dibromofluoromethane	93	89 - 119	09/21/18 00:31	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Units:**	ug/L
Lab Code:	R1808910-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	**180**	10	1	09/21/18 04:37	
Benzene	ND U	5.0	1	09/21/18 04:37	
Bromodichloromethane	ND U	5.0	1	09/21/18 04:37	
Bromoform	ND U	5.0	1	09/21/18 04:37	
Bromomethane	ND U	5.0	1	09/21/18 04:37	
2-Butanone (MEK)	ND U	10	1	09/21/18 04:37	
Carbon Disulfide	ND U	10	1	09/21/18 04:37	
Carbon Tetrachloride	ND U	5.0	1	09/21/18 04:37	
Chlorobenzene	ND U	5.0	1	09/21/18 04:37	
Chloroethane	ND U	5.0	1	09/21/18 04:37	
Chloroform	ND U	5.0	1	09/21/18 04:37	
Chloromethane	ND U	5.0	1	09/21/18 04:37	
Dibromochloromethane	ND U	5.0	1	09/21/18 04:37	
1,1-Dichloroethane	ND U	5.0	1	09/21/18 04:37	
1,2-Dichloroethane	ND U	5.0	1	09/21/18 04:37	
1,1-Dichloroethene	ND U	5.0	1	09/21/18 04:37	
cis-1,2-Dichloroethene	ND U	5.0	1	09/21/18 04:37	
trans-1,2-Dichloroethene	ND U	5.0	1	09/21/18 04:37	
1,2-Dichloropropane	ND U	5.0	1	09/21/18 04:37	
cis-1,3-Dichloropropene	ND U	5.0	1	09/21/18 04:37	
trans-1,3-Dichloropropene	ND U	5.0	1	09/21/18 04:37	
Ethylbenzene	ND U	5.0	1	09/21/18 04:37	
2-Hexanone	ND U	10	1	09/21/18 04:37	
Methylene Chloride	ND U	5.0	1	09/21/18 04:37	
4-Methyl-2-pentanone (MIBK)	ND U	10	1	09/21/18 04:37	
Styrene	ND U	5.0	1	09/21/18 04:37	
1,1,2,2-Tetrachloroethane	ND U	5.0	1	09/21/18 04:37	
Tetrachloroethene	ND U	5.0	1	09/21/18 04:37	
Toluene	ND U	5.0	1	09/21/18 04:37	
1,1,1-Trichloroethane	ND U	5.0	1	09/21/18 04:37	
1,1,2-Trichloroethane	ND U	5.0	1	09/21/18 04:37	
Trichloroethene	ND U	5.0	1	09/21/18 04:37	
Vinyl Chloride	ND U	5.0	1	09/21/18 04:37	
o-Xylene	ND U	5.0	1	09/21/18 04:37	
m,p-Xylenes	ND U	5.0	1	09/21/18 04:37	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Units:**	ug/L
Lab Code:	R1808910-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

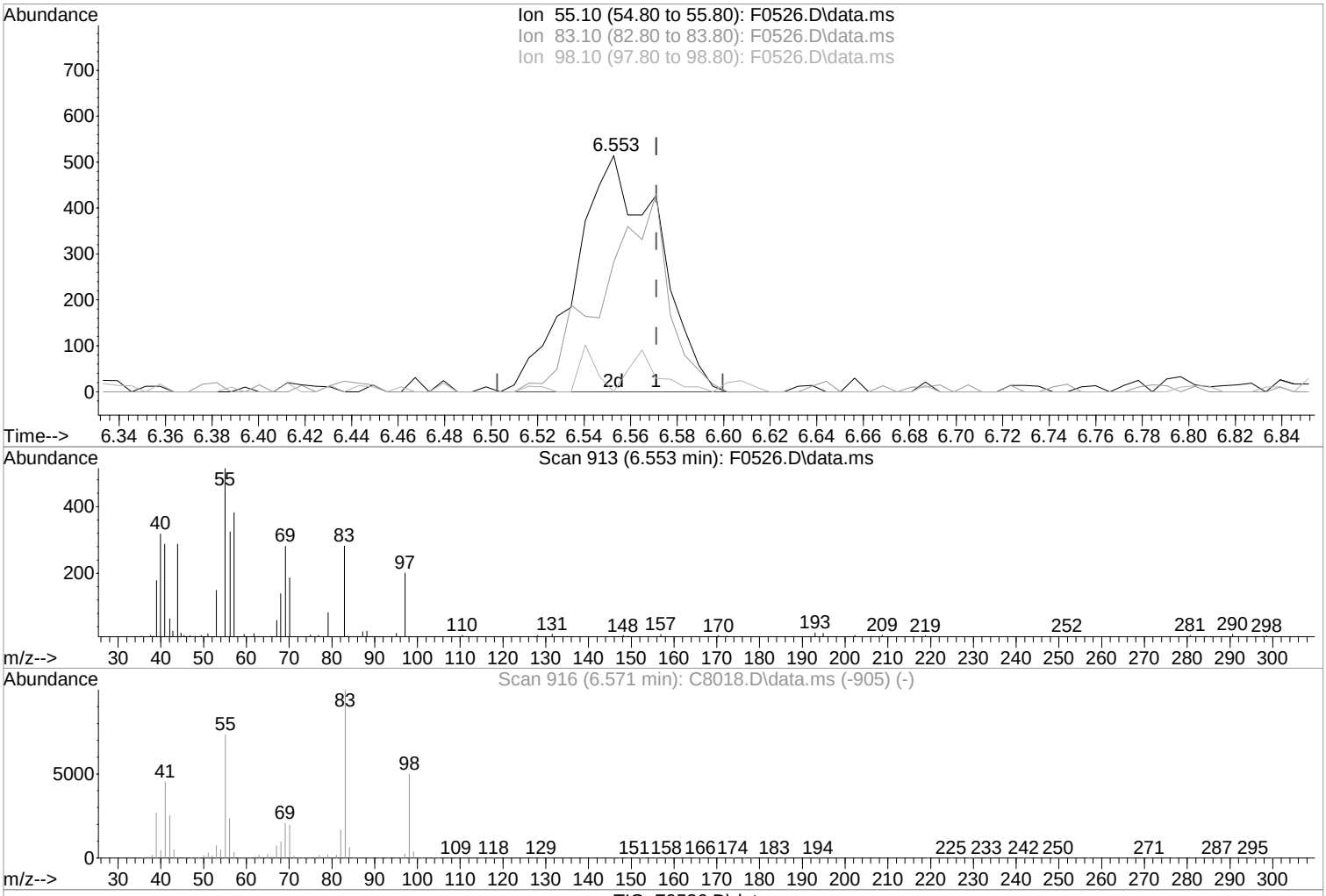
Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	09/21/18 04:37	
Toluene-d8	97	87 - 121	09/21/18 04:37	
Dibromofluoromethane	96	89 - 119	09/21/18 04:37	

1st FW 09/22/18
2nd 09/23/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0526.D
Acq On : 21 Sep 2018 12:53 am
Operator : F.NAEGLER
Sample : R1808910-001|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Sep 21 10:14:34 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



TIC: F0526.D\data.ms

(54) Methylcyclohexane (P)

6.553min (-0.018) 0.30 ug/L m

response 1280

Ion	Exp%	Act%
55.10	100	100
83.10	136.20	54.86#
98.10	68.00	0.00#
0.00	0.00	0.00

Manual Integration:

After

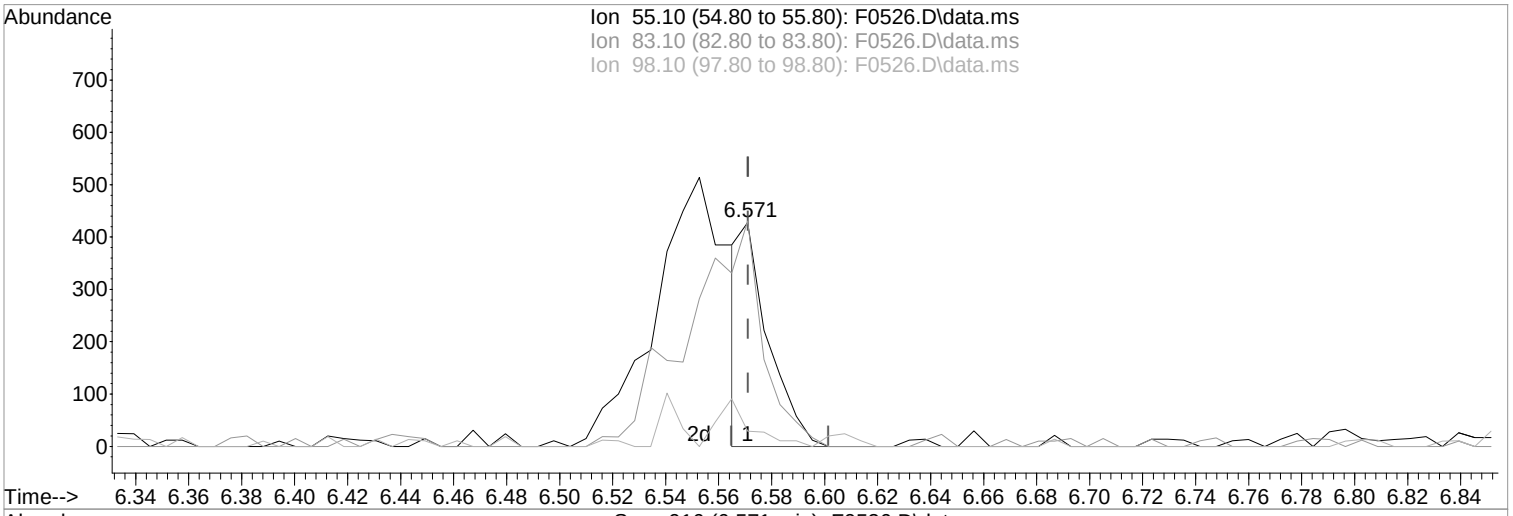
Poor integration.

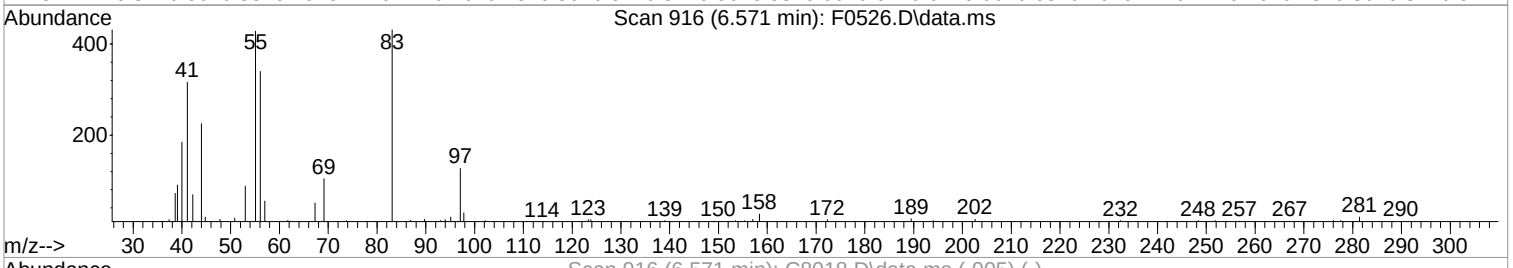
09/22/18

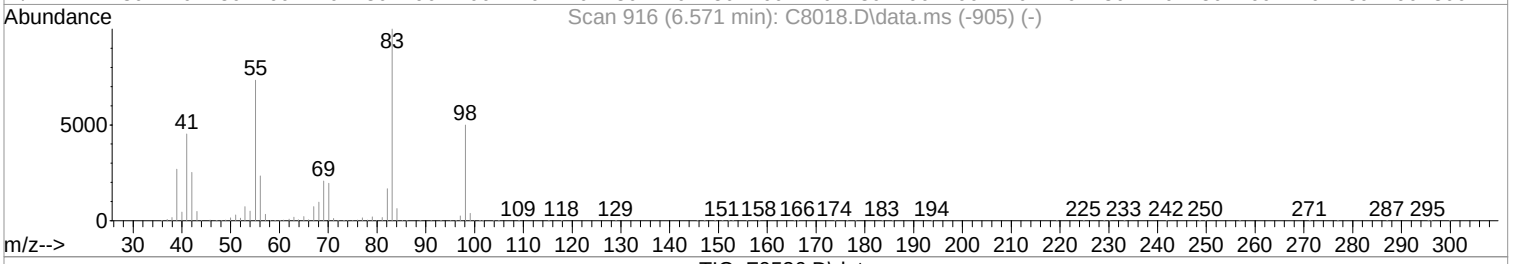
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0526.D
Acq On : 21 Sep 2018 12:53 am
Operator : F.NAEGLER
Sample : R1808910-001|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Sep 21 10:14:34 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration







TIC: F0526.D\data.ms

(54) Methylcyclohexane (P)

6.571min (-0.000) 0.07 ug/L

response 313

Ion	Exp%	Act%
55.10	100	100
83.10	136.20	100.70#
98.10	68.00	6.78#
0.00	0.00	0.00

Manual Integration:

Before

09/22/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0526.D
Acq On : 21 Sep 2018 12:53 am
Operator : F.NAEGLER
Sample : R1808910-001|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Sep 22 14:41:24 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

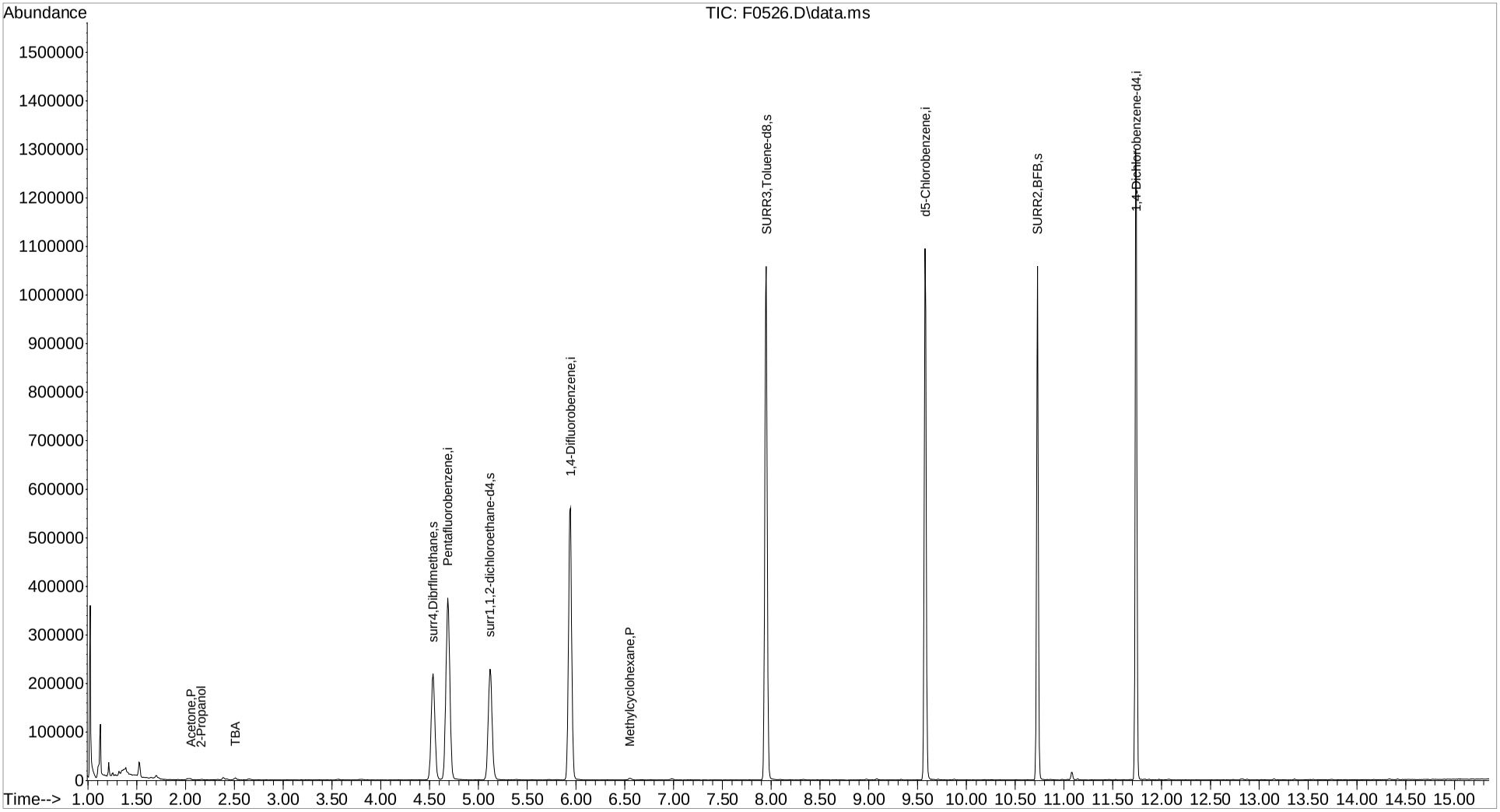
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	370518	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.943	114	537683	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.576	117	467673	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	251233	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	168254	46.82	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.64%			
47) surr1,1,2-dichloroetha...	5.120	65	229025	52.46	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.92%			
64) SURR3,Toluene-d8	7.949	98	659409	47.77	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.54%			
69) SURR2,BFB	10.729	95	235701	44.24	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 88.48%			
Target Compounds						Qvalue
15) Acetone	2.054	43	3153	1.49	ug/L	86
16) 2-Propanol	2.163	45	572	1.54	ug/L #	52
23) TBA	2.511	59	2837	4.50	ug/L	75
54) Methylcyclohexane	6.553	55	1280m	0.30	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

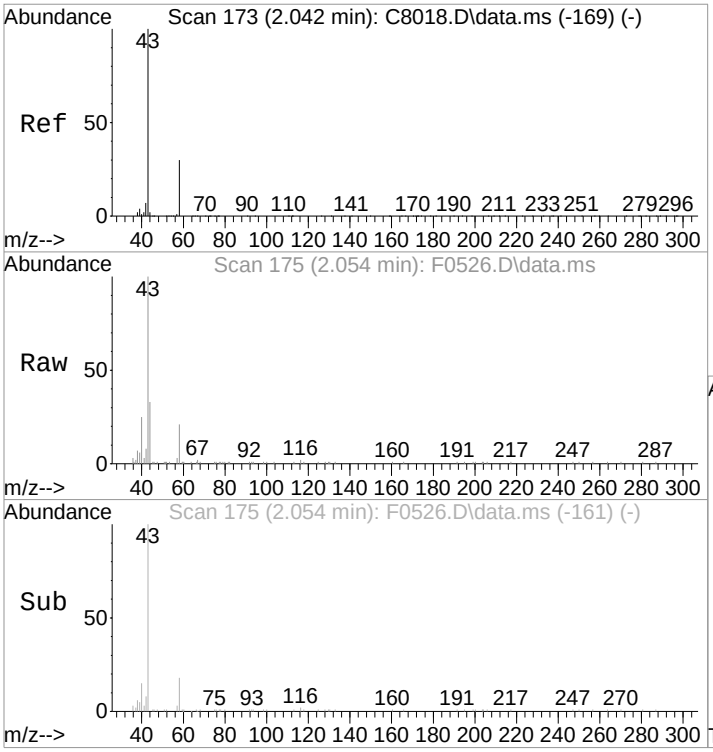
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0526.D
Acq On : 21 Sep 2018 12:53 am
Operator : F.NAEGLER
Sample : R1808910-001|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Sep 22 14:41:24 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



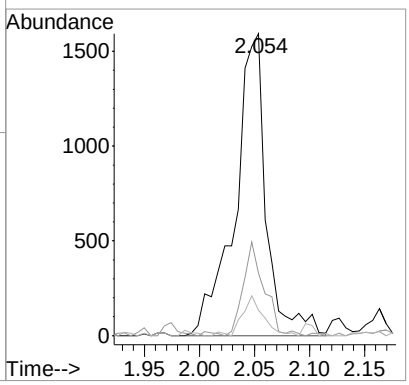
1st FN 09/22/18
2nd 09/23/18

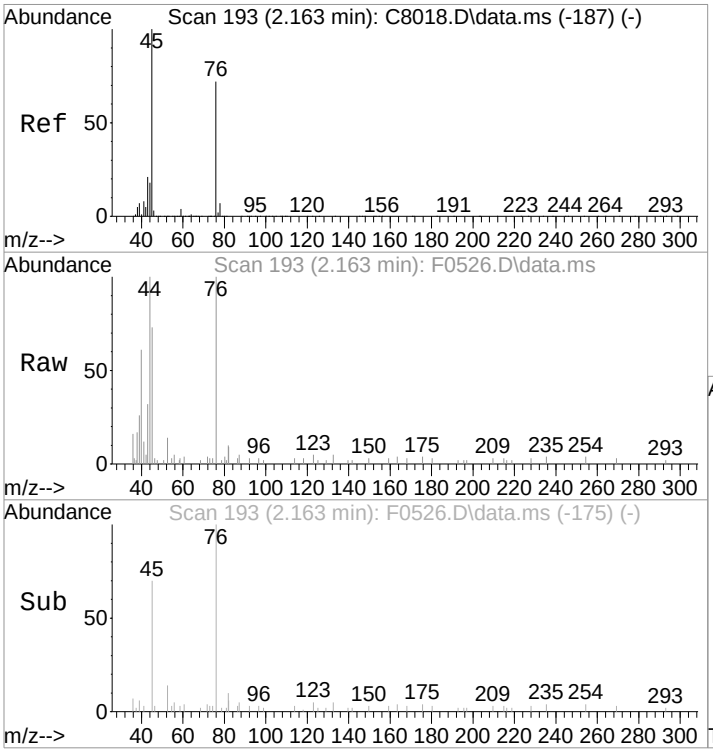


#15
Acetone
Concen: 1.49 ug/L
RT: 2.054 min Scan# 175
Delta R.T. 0.013 min
Lab File: F0526.D
Acq: 21 Sep 2018 12:53 am

Tgt Ion: 43 Resp: 3153

Ion	Ratio	Lower	Upper
43	100		
58	20.8	9.9	49.9
42	8.4	0.0	27.5

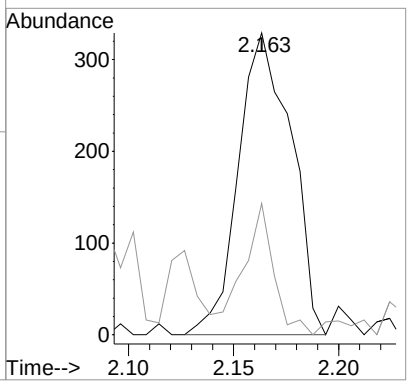


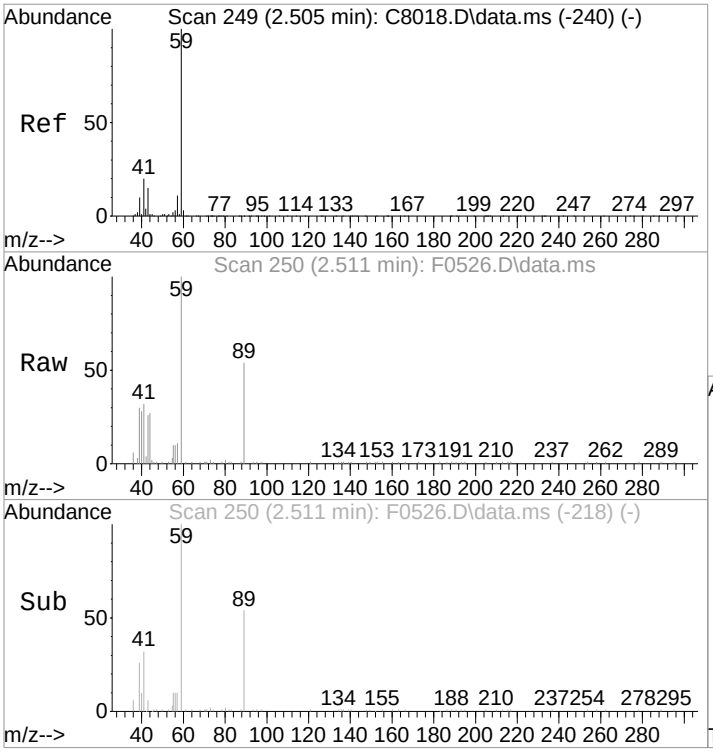


#16
2-Propanol
Concen: 1.54 ug/L
RT: 2.163 min Scan# 193
Delta R.T. -0.000 min
Lab File: F0526.D
Acq: 21 Sep 2018 12:53 am

Tgt Ion: 45 Resp: 572

Ion	Ratio	Lower	Upper
45	100		
43	43.5	1.1	41.1#

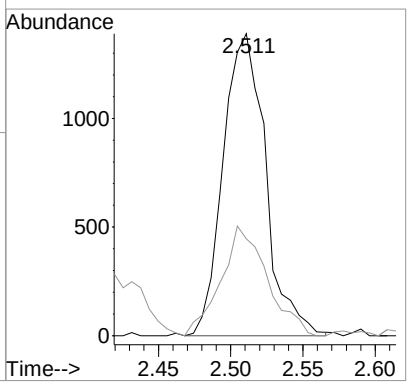


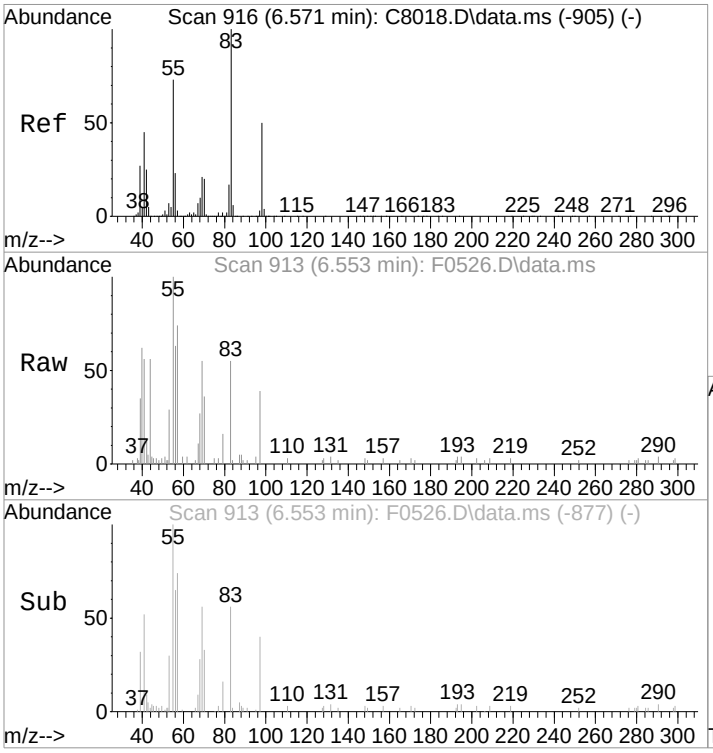


#23
TBA
Concen: 4.50 ug/L
RT: 2.511 min Scan# 250
Delta R.T. 0.006 min
Lab File: F0526.D
Acq: 21 Sep 2018 12:53 am

Tgt Ion: 59 Resp: 2837

Ion	Ratio	Lower	Upper
59	100		
41	32.0	0.5	40.5

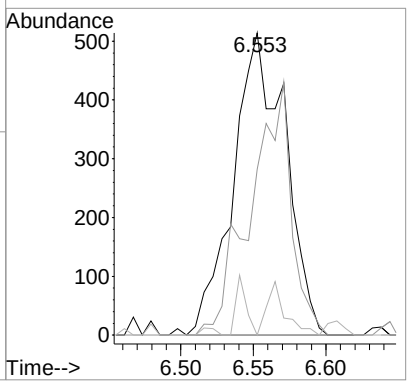




#54
Methylcyclohexane
Concen: 0.30 ug/L m
RT: 6.553 min Scan# 913
Delta R.T. -0.018 min
Lab File: F0526.D
Acq: 21 Sep 2018 12:53 am

Tgt Ion: 55 Resp: 1280

Ion	Ratio	Lower	Upper
55	100		
83	54.9	116.2	156.2#
98	0.0	48.0	88.0#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0527.D
Acq On : 21 Sep 2018 1:16 am
Operator : F.NAEGLER
Sample : R1808910-002|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 22 14:42:32 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

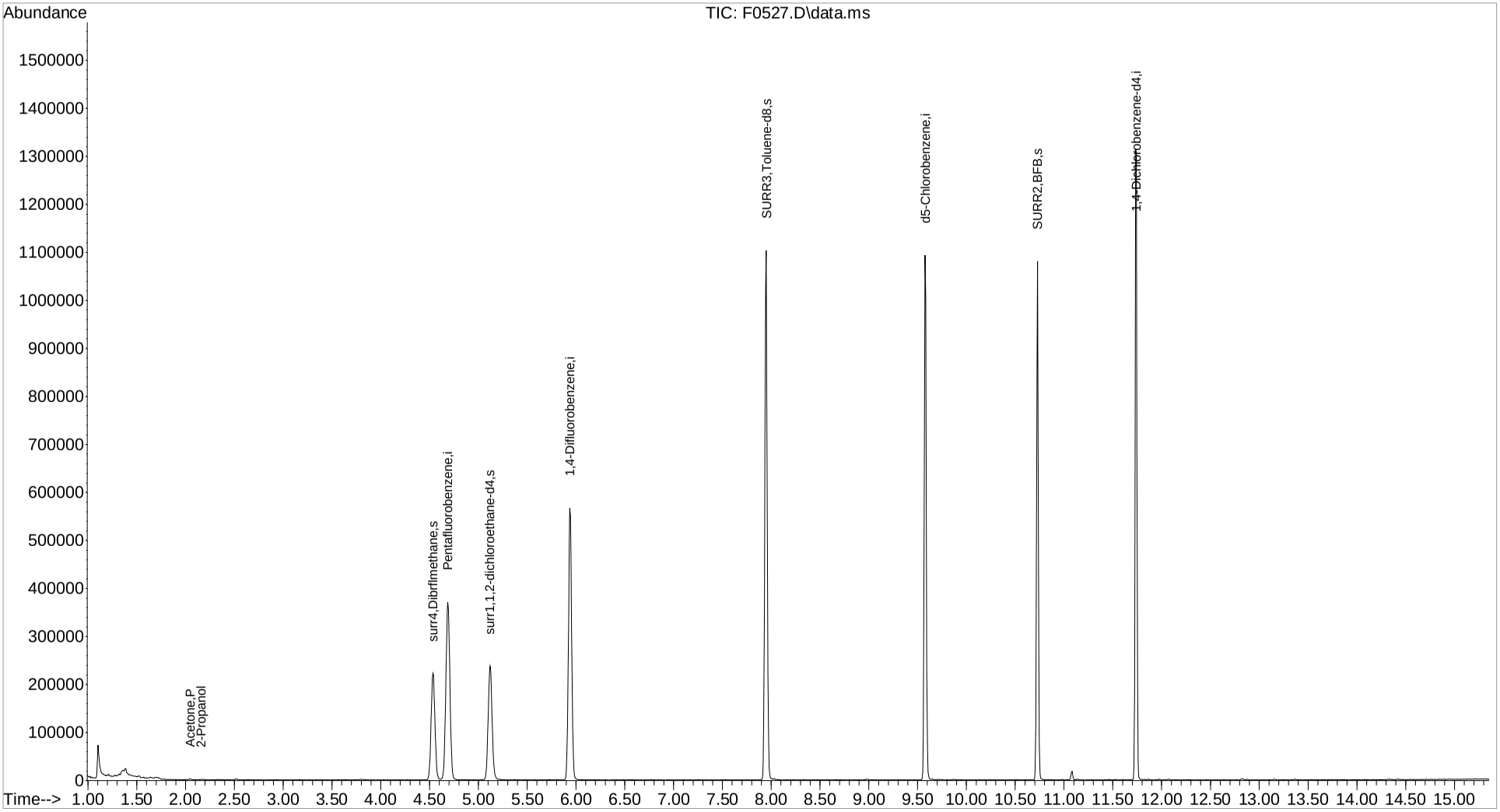
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	373487	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	544447	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.576	117	476464	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	255101	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	172477	47.40	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.80%			
47) surr1,1,2-dichloroetha...	5.120	65	237602	53.75	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.50%			
64) SURR3,Toluene-d8	7.949	98	675014	48.29	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.58%			
69) SURR2,BFB	10.729	95	246121	45.62	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 91.24%			
Target Compounds						Qvalue
15) Acetone	2.047	43	1911	0.90	ug/L	95
16) 2-Propanol	2.163	45	686	1.83	ug/L #	34

(#) = qualifier out of range (m) = manual integration (+) = signals summed

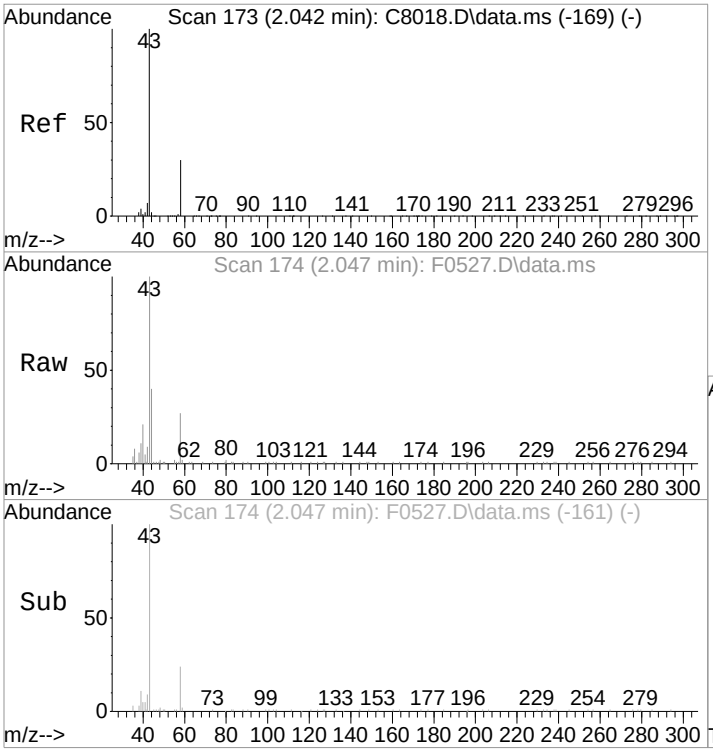
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0527.D
Acq On : 21 Sep 2018 1:16 am
Operator : F.NAEGLER
Sample : R1808910-002|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 22 14:42:32 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



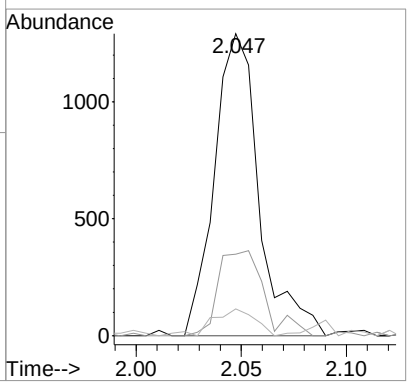
1st FJ 09/22/18
2nd 09/23/18

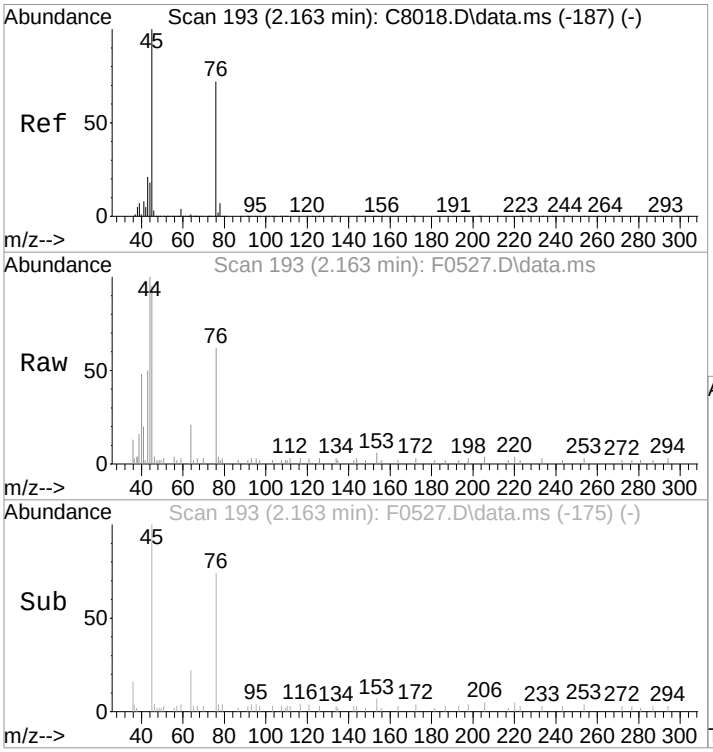


#15
Acetone
Concen: 0.90 ug/L
RT: 2.047 min Scan# 174
Delta R.T. 0.006 min
Lab File: F0527.D
Acq: 21 Sep 2018 1:16 am

Tgt Ion: 43 Resp: 1911

Ion	Ratio	Lower	Upper
43	100		
58	26.9	9.9	49.9
42	8.9	0.0	27.5

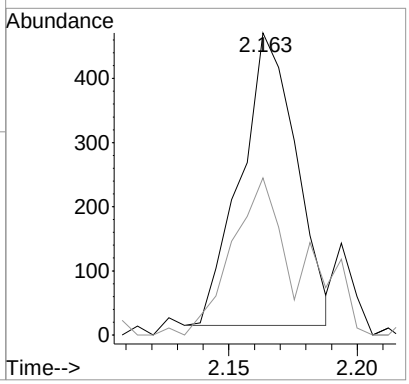




#16
2-Propanol
Concen: 1.83 ug/L
RT: 2.163 min Scan# 193
Delta R.T. -0.000 min
Lab File: F0527.D
Acq: 21 Sep 2018 1:16 am

Tgt Ion: 45 Resp: 686

Ion	Ratio	Lower	Upper
45	100		
43	52.0	1.1	41.1#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0528.D
Acq On : 21 Sep 2018 1:38 am
Operator : F.NAEGLER
Sample : R1808910-003|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 22 14:44:09 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

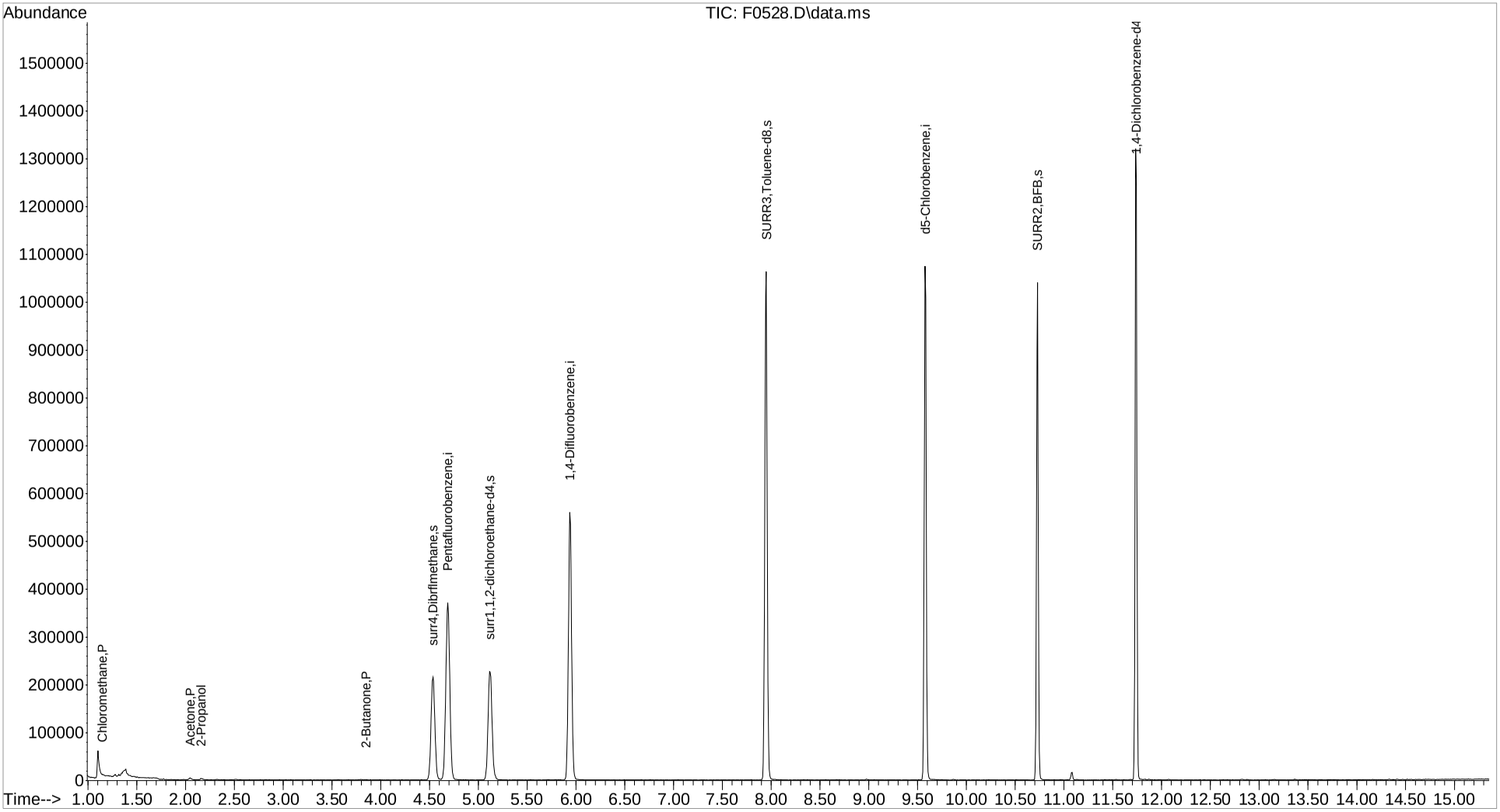
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	370830	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	536625	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	471917	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	254397	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	168570	47.00	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.00%			
47) surr1,1,2-dichloroetha...	5.114	65	231678	53.17	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.34%			
64) SURR3,Toluene-d8	7.949	98	659216	47.85	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.70%			
69) SURR2,BFB	10.729	95	235657	44.32	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 88.64%			
Target Compounds						Qvalue
3) Chloromethane	1.145	50	1174	0.24	ug/L	85
15) Acetone	2.048	43	4157	1.96	ug/L	98
16) 2-Propanol	2.157	45	2743	7.37	ug/L #	55
34) 2-Butanone	3.846	43	907	0.31	ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

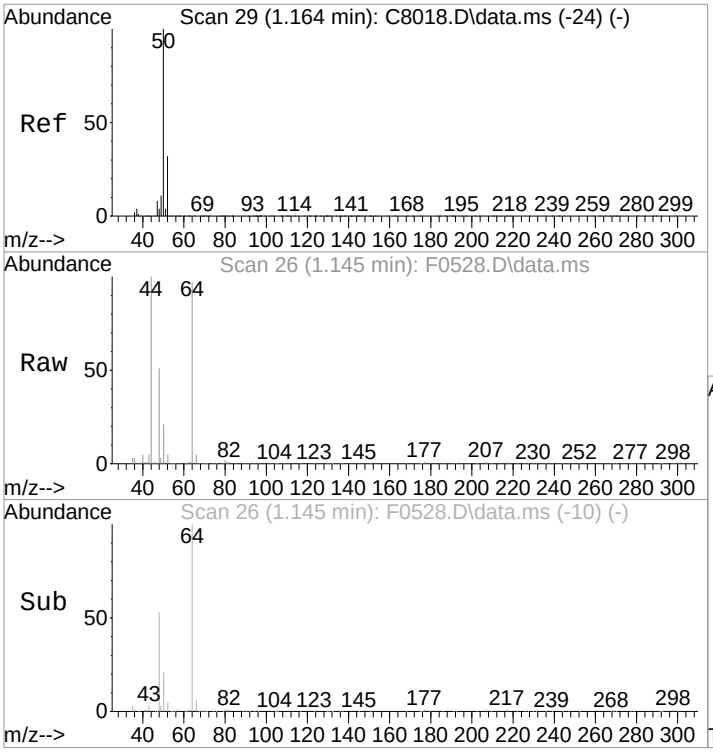
Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0528.D
Acq On : 21 Sep 2018 1:38 am
Operator : F.NAEGLER
Sample : R1808910-003|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 22 14:44:09 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



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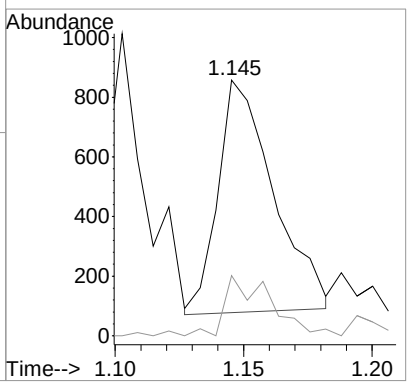
1st 09/22/18
2nd 09/23/18

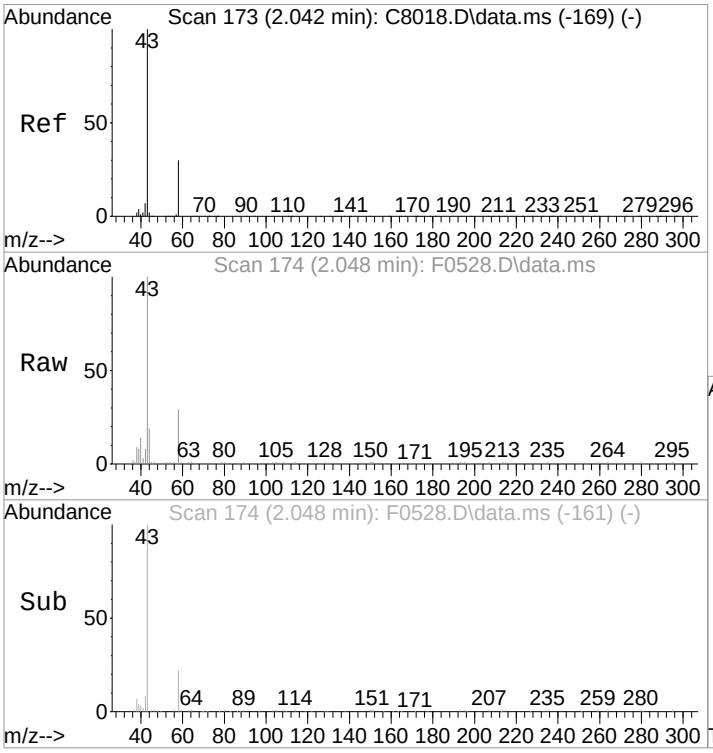


#3
Chloromethane
Concen: 0.24 ug/L
RT: 1.145 min Scan# 26
Delta R.T. -0.018 min
Lab File: F0528.D
Acq: 21 Sep 2018 1:38 am

Tgt Ion: 50 Resp: 1174

Ion	Ratio	Lower	Upper
50	100		
52	23.6	11.7	51.7

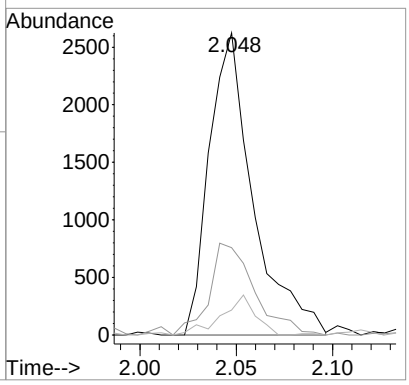


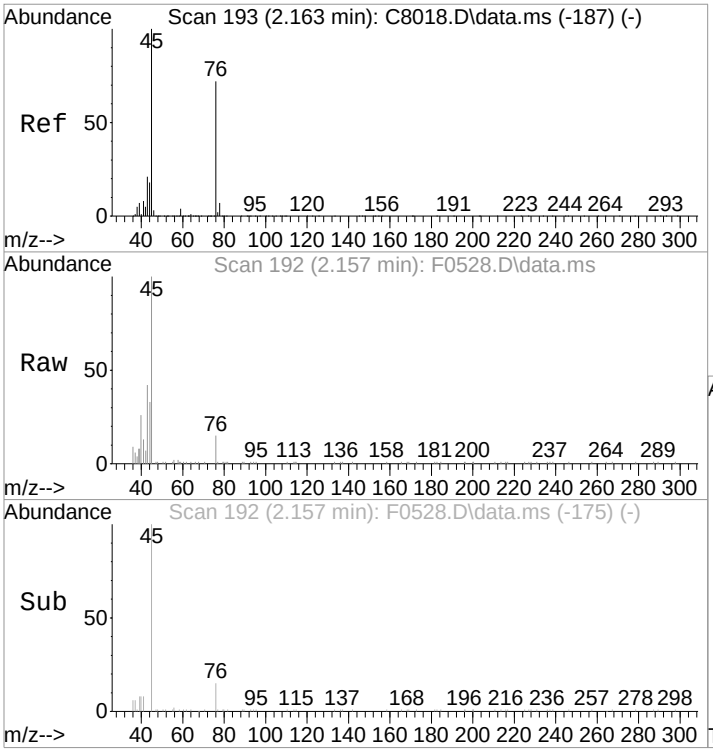


#15
Acetone
Concen: 1.96 ug/L
RT: 2.048 min Scan# 174
Delta R.T. 0.007 min
Lab File: F0528.D
Acq: 21 Sep 2018 1:38 am

Tgt Ion: 43 Resp: 4157

Ion	Ratio	Lower	Upper
43	100		
58	28.9	9.9	49.9
42	8.2	0.0	27.5

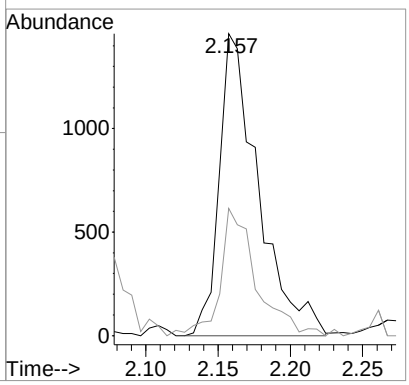


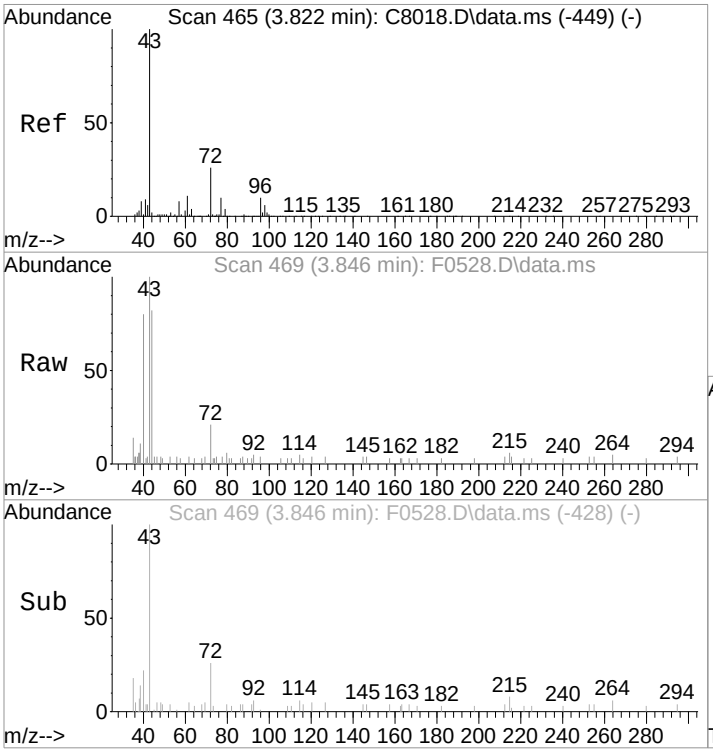


#16
2-Propanol
Concen: 7.37 ug/L
RT: 2.157 min Scan# 192
Delta R.T. -0.006 min
Lab File: F0528.D
Acq: 21 Sep 2018 1:38 am

Tgt Ion: 45 Resp: 2743

Ion	Ratio	Lower	Upper
45	100		
43	42.1	1.1	41.1#

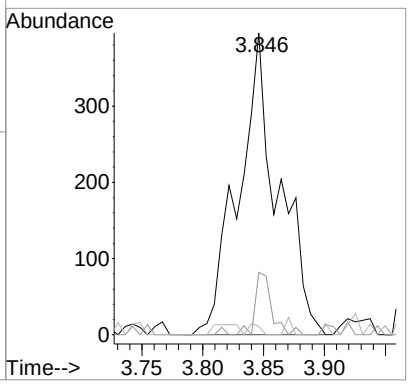




#34
2-Butanone
Concen: 0.31 ug/L
RT: 3.846 min Scan# 469
Delta R.T. 0.024 min
Lab File: F0528.D
Acq: 21 Sep 2018 1:38 am

Tgt Ion: 43 Resp: 907

Ion	Ratio	Lower	Upper
43	100		
72	20.7	5.8	45.8
57	2.8	0.0	28.4

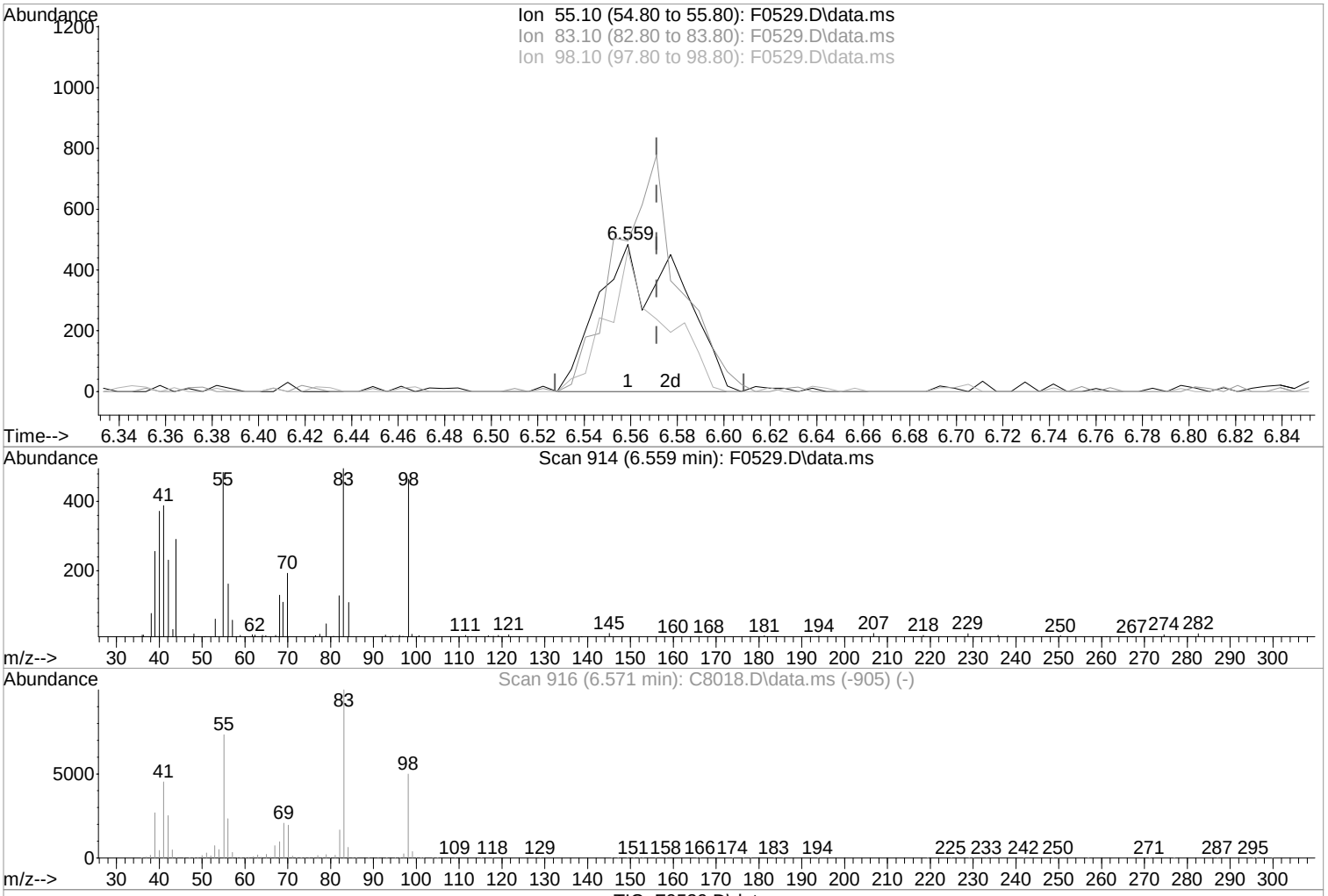


1st FN 09/22/18
2nd 09/23/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0529.D
Acq On : 21 Sep 2018 2:01 am
Operator : F.NAEGLER
Sample : R1808910-004|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Sep 22 14:46:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



TIC: F0529.D\data.ms

(54) Methylcyclohexane (P)

6.559min (-0.012) 0.27 ug/L m

response 1194

Ion	Exp%	Act%
55.10	100	100
83.10	136.20	102.27#
98.10	68.00	95.87#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

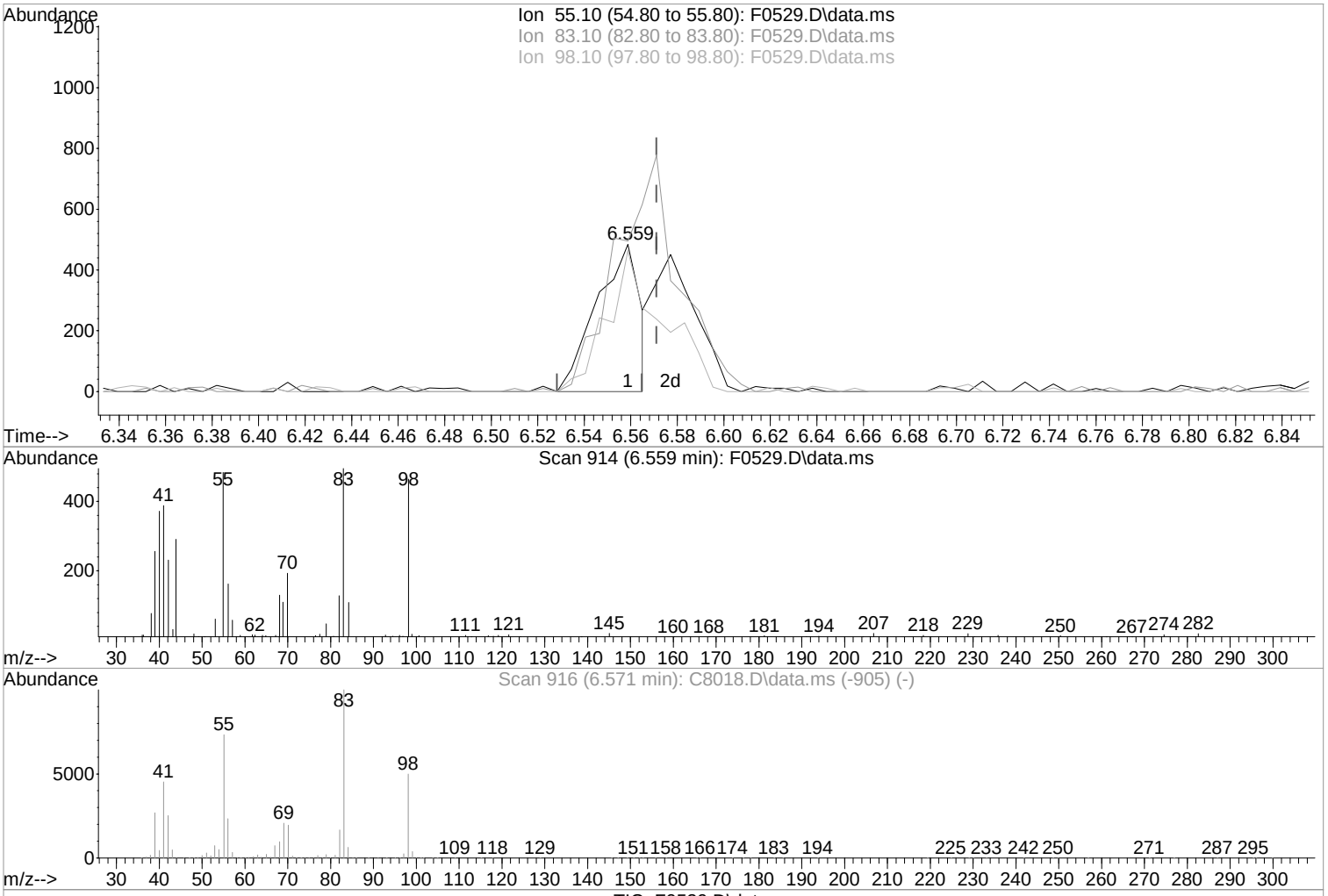
09/22/18

1st FJ 09/22/18
2nd 09/23/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0529.D
Acq On : 21 Sep 2018 2:01 am
Operator : F.NAEGLER
Sample : R1808910-004|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Sep 21 10:15:18 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



TIC: F0529.D\data.ms

(54) Methylcyclohexane (P)

6.559min (-0.012) 0.15 ug/L

response 631

Ion	Exp%	Act%
55.10	100	100
83.10	136.20	102.27#
98.10	68.00	95.87#
0.00	0.00	0.00

Manual Integration:

Before

09/22/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0529.D
Acq On : 21 Sep 2018 2:01 am
Operator : F.NAEGLER
Sample : R1808910-004|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Sep 22 14:46:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

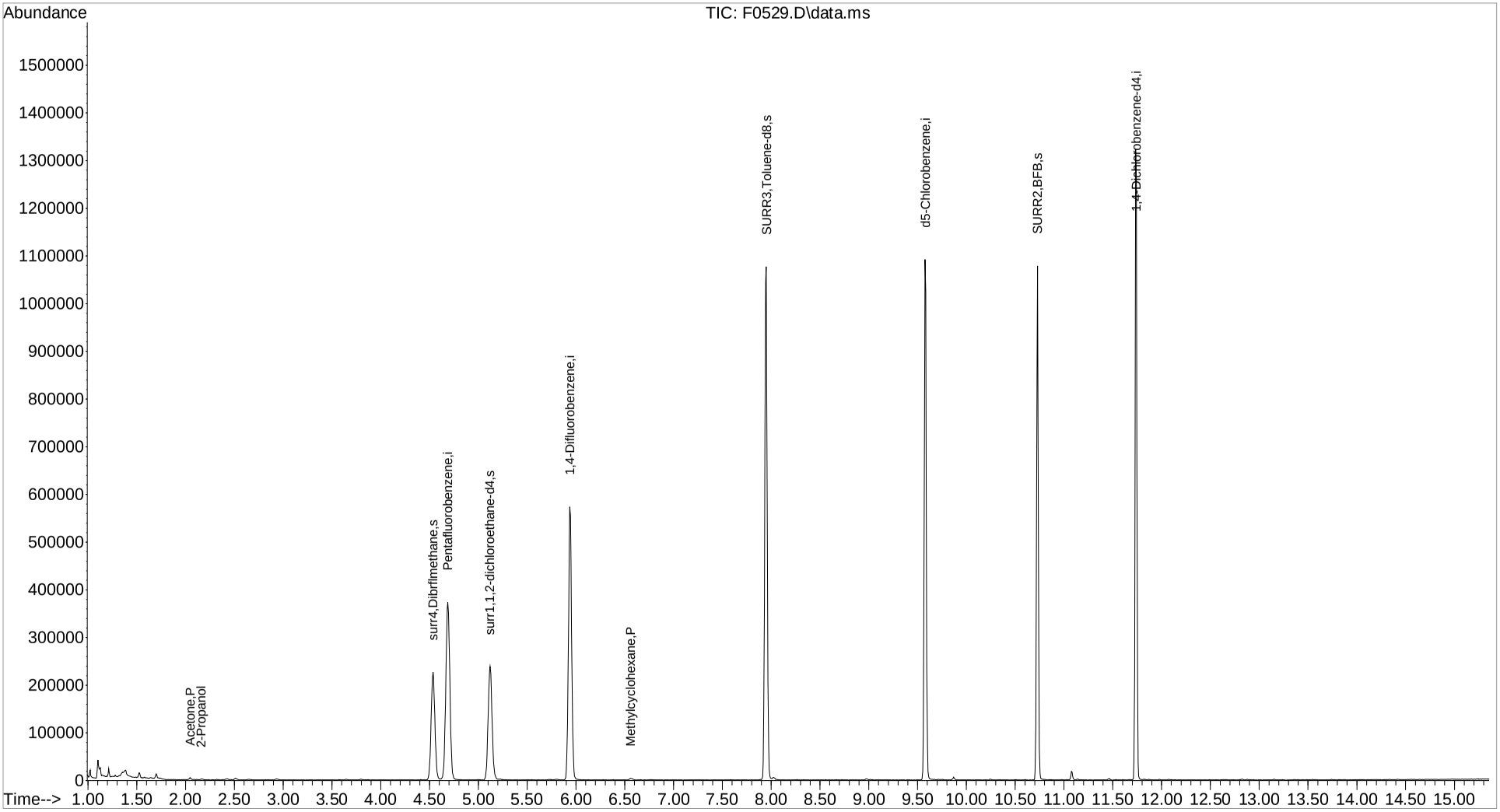
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	378706	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	545237	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.576	117	474637	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	258742	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	174902	47.99	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.98%			
47) surr1,1,2-dichloroetha...	5.120	65	238631	53.90	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.80%			
64) SURR3,Toluene-d8	7.949	98	675679	48.27	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.54%			
69) SURR2,BFB	10.729	95	243789	45.12	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 90.24%			
Target Compounds						Qvalue
15) Acetone	2.047	43	4138	1.91	ug/L	96
16) 2-Propanol	2.157	45	1349	3.55	ug/L	93
54) Methylcyclohexane	6.559	55	1194m	0.27	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

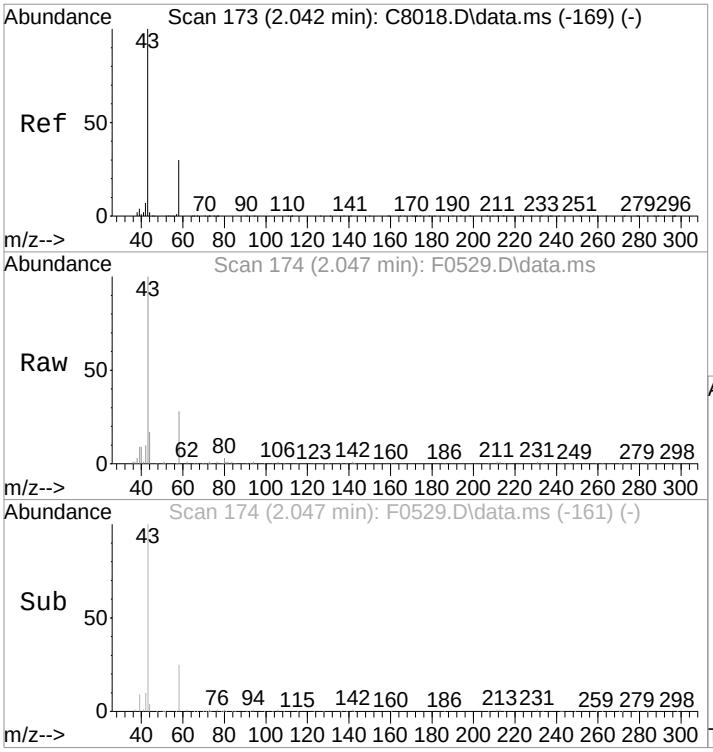
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0529.D
Acq On : 21 Sep 2018 2:01 am
Operator : F.NAEGLER
Sample : R1808910-004|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Sep 22 14:46:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



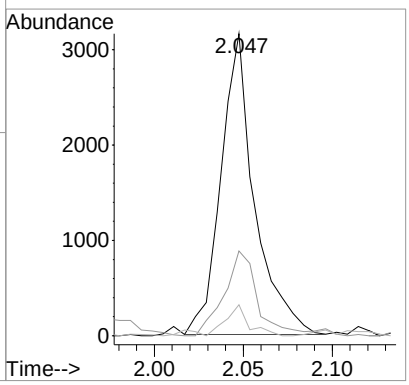
1st FJ 09/22/18
2nd 09/23/18

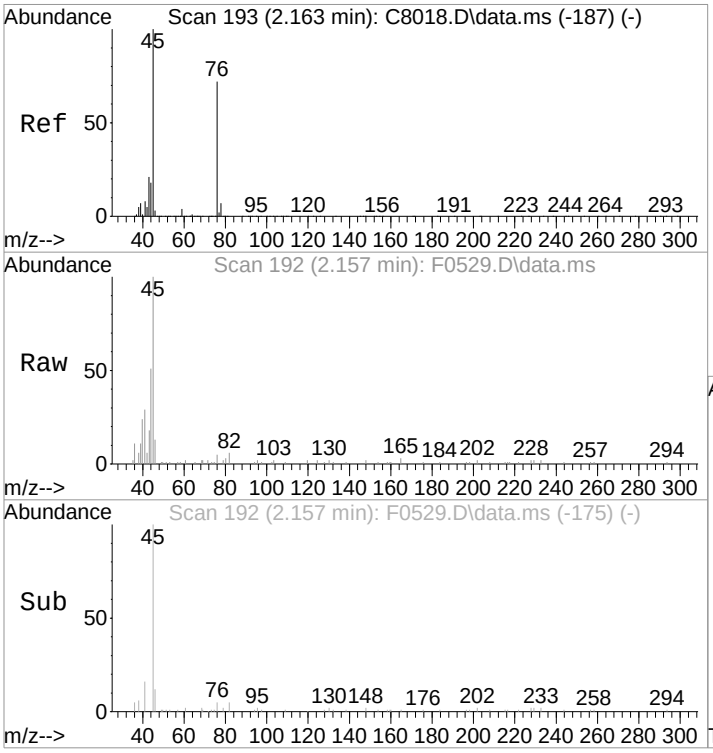


#15
Acetone
Concen: 1.91 ug/L
RT: 2.047 min Scan# 174
Delta R.T. 0.006 min
Lab File: F0529.D
Acq: 21 Sep 2018 2:01 am

Tgt Ion: 43 Resp: 4138

Ion	Ratio	Lower	Upper
43	100		
58	28.0	9.9	49.9
42	10.2	0.0	27.5

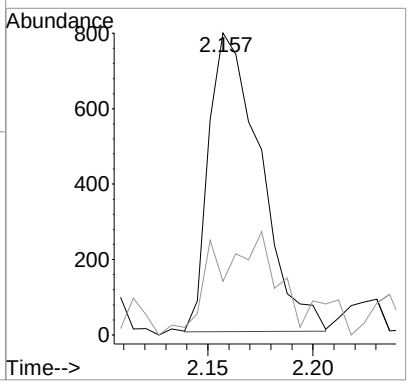


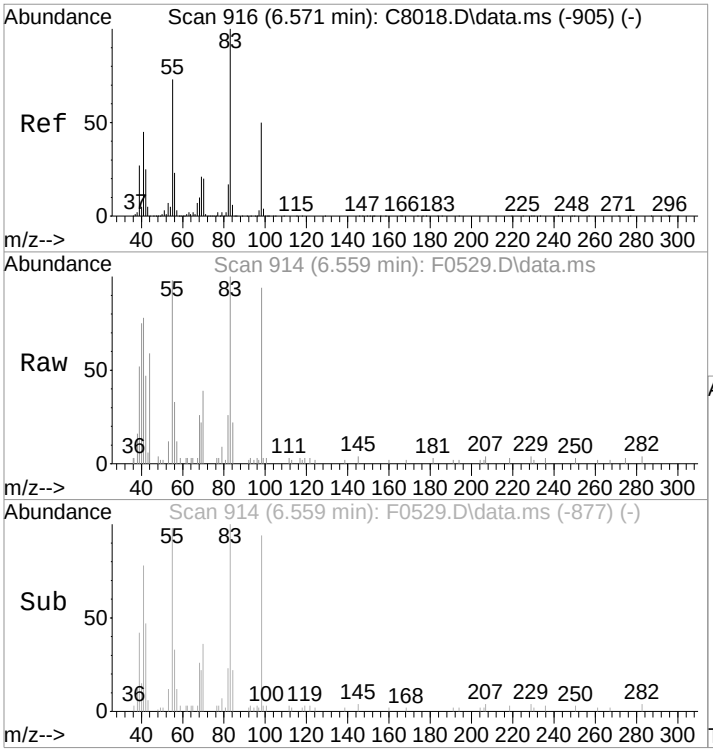


#16
2-Propanol
Concen: 3.55 ug/L
RT: 2.157 min Scan# 192
Delta R.T. -0.006 min
Lab File: F0529.D
Acq: 21 Sep 2018 2:01 am

Tgt Ion: 45 Resp: 1349

Ion	Ratio	Lower	Upper
45	100		
43	17.7	1.1	41.1

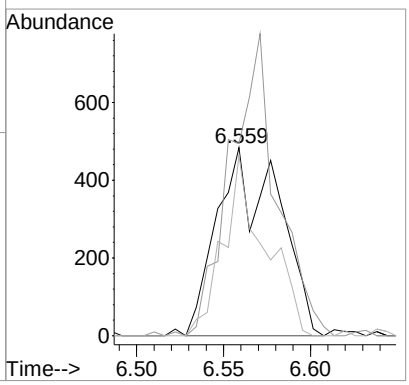




#54
Methylcyclohexane
Concen: 0.27 ug/L m
RT: 6.559 min Scan# 914
Delta R.T. -0.012 min
Lab File: F0529.D
Acq: 21 Sep 2018 2:01 am

Tgt Ion: 55 Resp: 1194

Ion	Ratio	Lower	Upper
55	100		
83	102.3	116.2	156.2#
98	95.9	48.0	88.0#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0523.D
Acq On : 20 Sep 2018 11:46 pm
Operator : F.NAEGLER
Sample : R1808910-005|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Sep 22 14:34:27 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

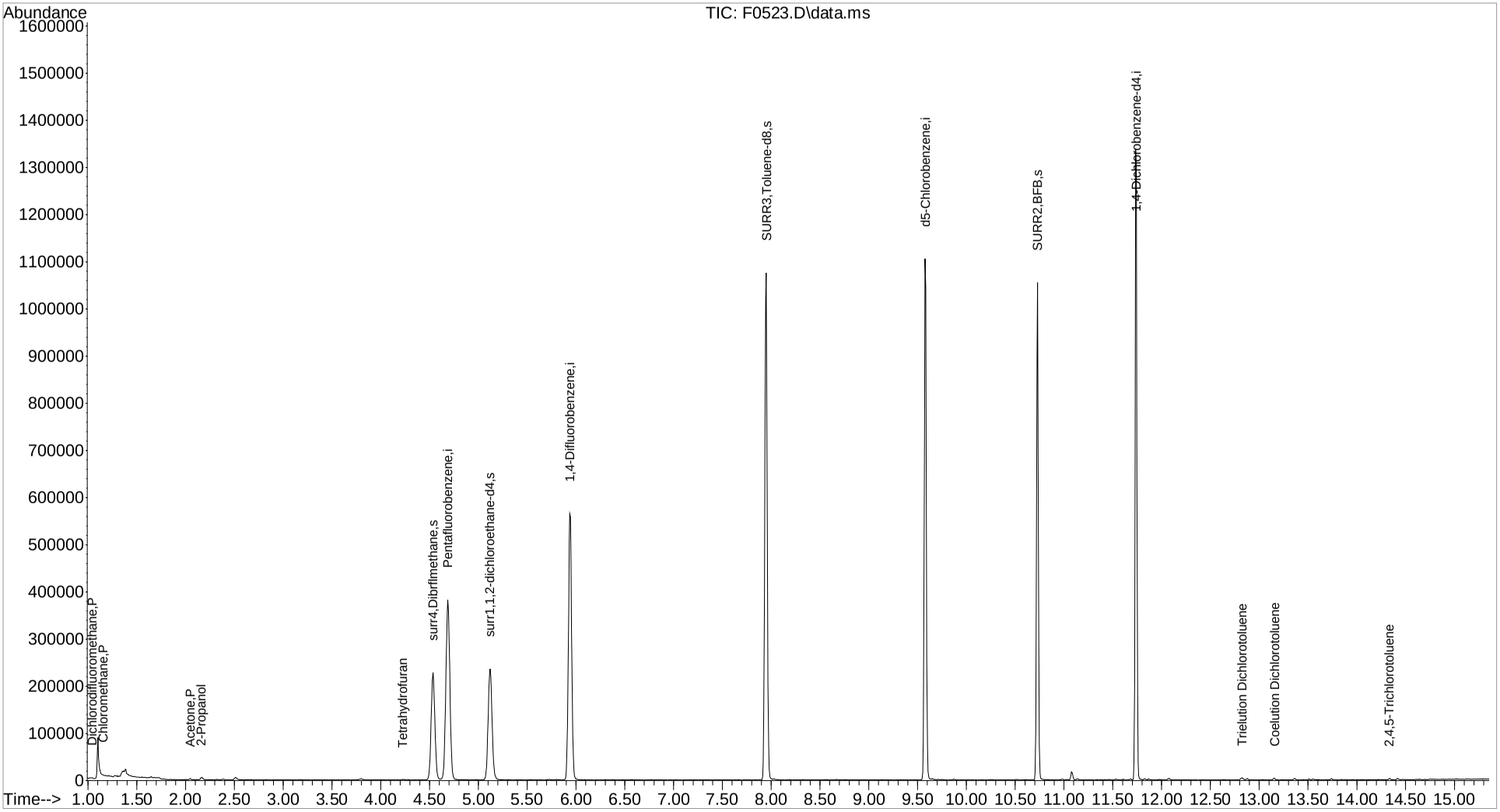
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	379502	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	548089	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	483783	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	256691	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	174174	47.55	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.10%			
47) surr1,1,2-dichloroetha...	5.120	65	236651	53.18	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.36%			
64) SURR3,Toluene-d8	7.949	98	673796	47.88	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.76%			
69) SURR2,BFB	10.729	95	246267	45.34	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 90.68%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.042	85	953	0.21	ug/L	81
3) Chloromethane	1.152	50	1176	0.23	ug/L	100
15) Acetone	2.048	43	2334	1.08	ug/L	86
16) 2-Propanol	2.164	45	4423	11.61	ug/L	82
38) Tetrahydrofuran	4.224	42	799	0.47	ug/L	91
111) Trielution Dichlorotol...	12.826	125	1974	0.31	ug/L	94
113) Coelution Dichlorotoluene	13.155	125	1609	0.23	ug/L	82
118) 2,4,5-Trichlorotoluene	14.332	159	796	0.23	ug/L	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

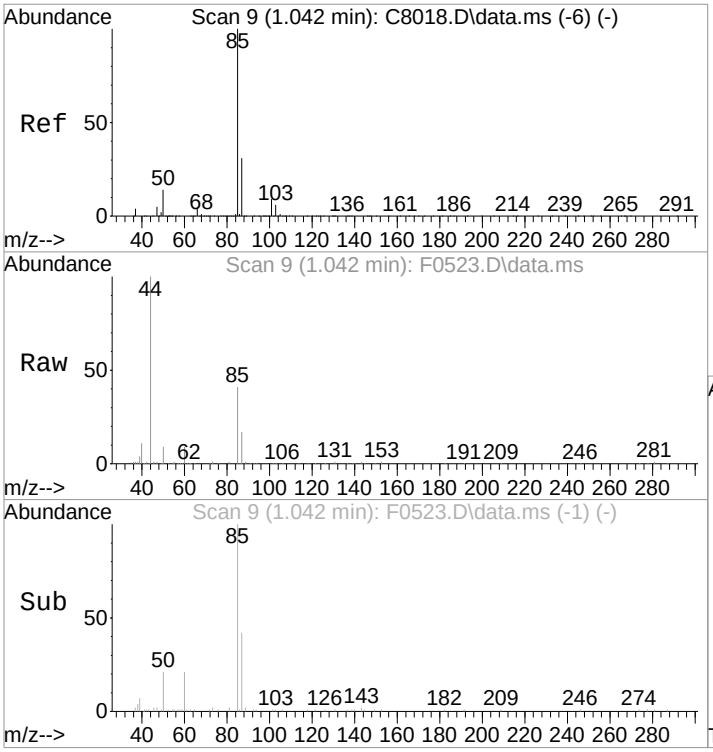
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0523.D
Acq On : 20 Sep 2018 11:46 pm
Operator : F.NAEGLER
Sample : R1808910-005|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Sep 22 14:34:27 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



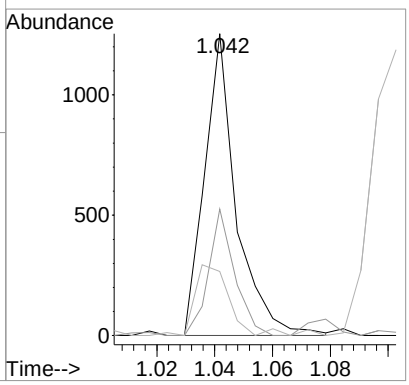
1st FJ 09/22/18
2nd 09/23/18

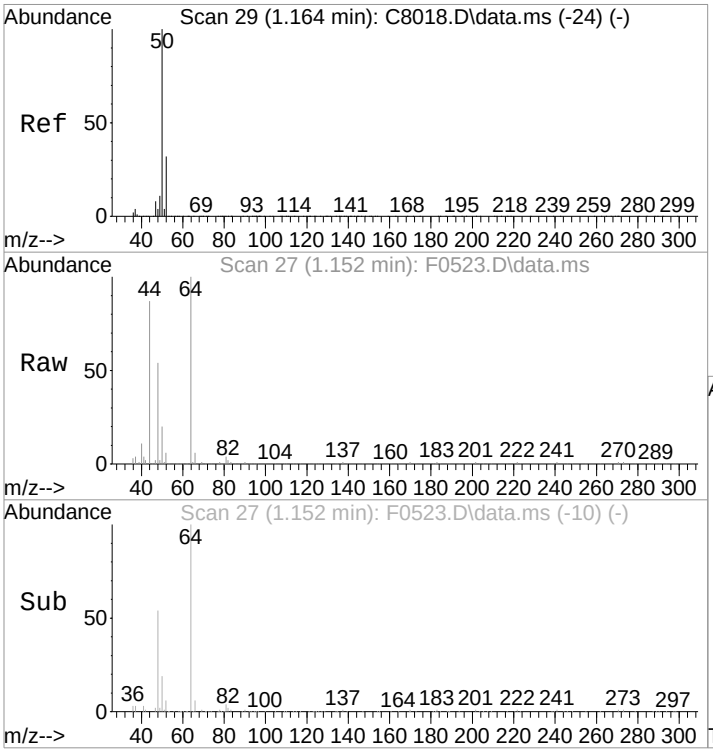


#2
Dichlorodifluoromethane
Concen: 0.21 ug/L
RT: 1.042 min Scan# 9
Delta R.T. 0.000 min
Lab File: F0523.D
Acq: 20 Sep 2018 11:46 pm

Tgt Ion: 85 Resp: 953

Ion	Ratio	Lower	Upper
85	100		
87	41.9	11.3	51.3
50	21.3	0.0	33.6

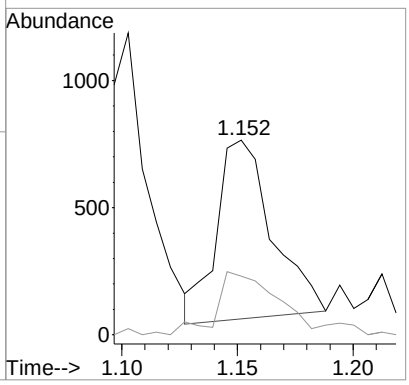


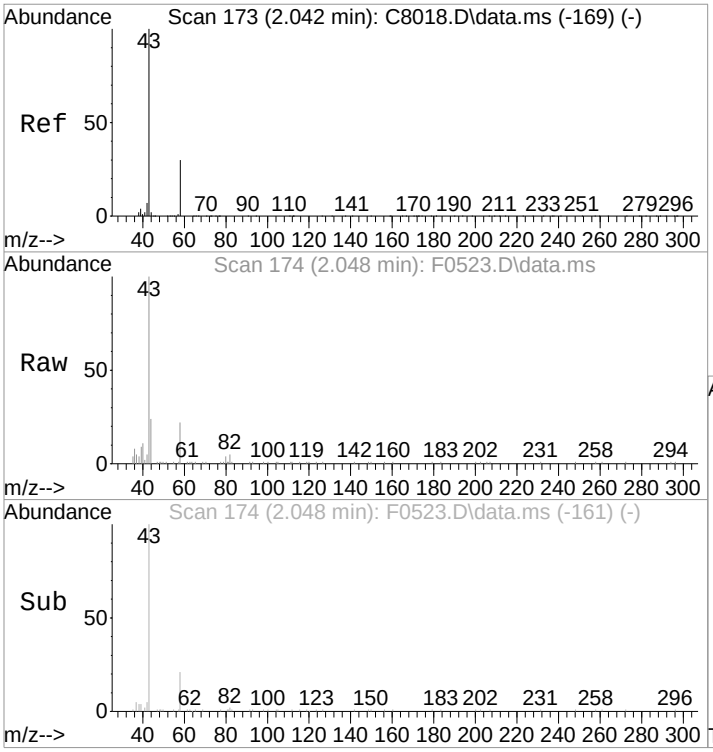


#3
Chloromethane
Concen: 0.23 ug/L
RT: 1.152 min Scan# 27
Delta R.T. -0.012 min
Lab File: F0523.D
Acq: 20 Sep 2018 11:46 pm

Tgt Ion: 50 Resp: 1176

Ion	Ratio	Lower	Upper
50	100		
52	31.6	11.7	51.7

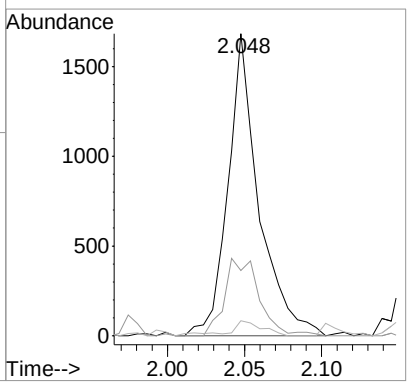


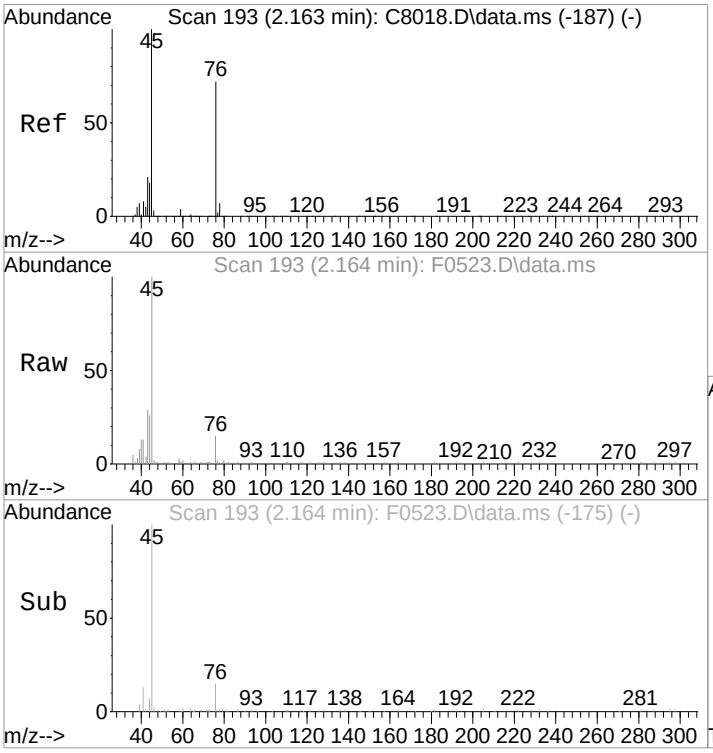


#15
Acetone
Concen: 1.08 ug/L
RT: 2.048 min Scan# 174
Delta R.T. 0.007 min
Lab File: F0523.D
Acq: 20 Sep 2018 11:46 pm

Tgt Ion: 43 Resp: 2334

Ion	Ratio	Lower	Upper
43	100		
58	21.6	9.9	49.9
42	5.0	0.0	27.5

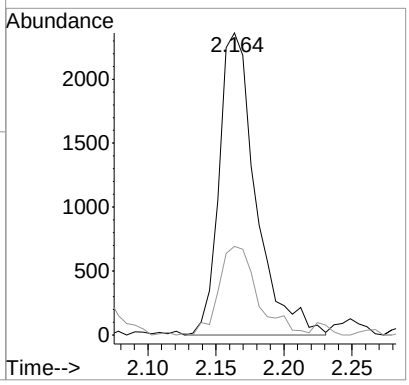


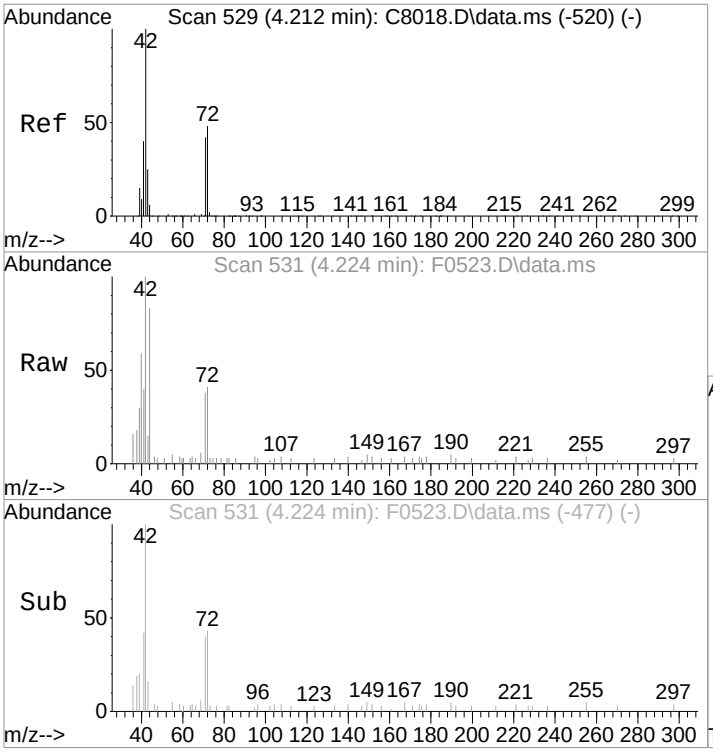


#16
2-Propanol
Concen: 11.61 ug/L
RT: 2.164 min Scan# 193
Delta R.T. 0.000 min
Lab File: F0523.D
Acq: 20 Sep 2018 11:46 pm

Tgt Ion: 45 Resp: 4423

Ion	Ratio	Lower	Upper
45	100		
43	29.3	1.1	41.1

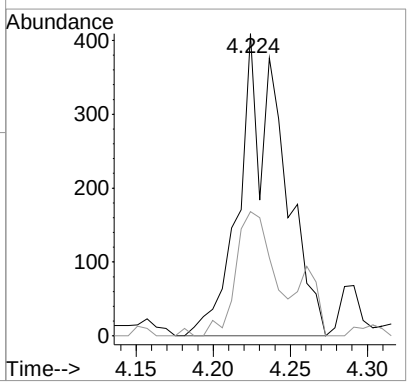


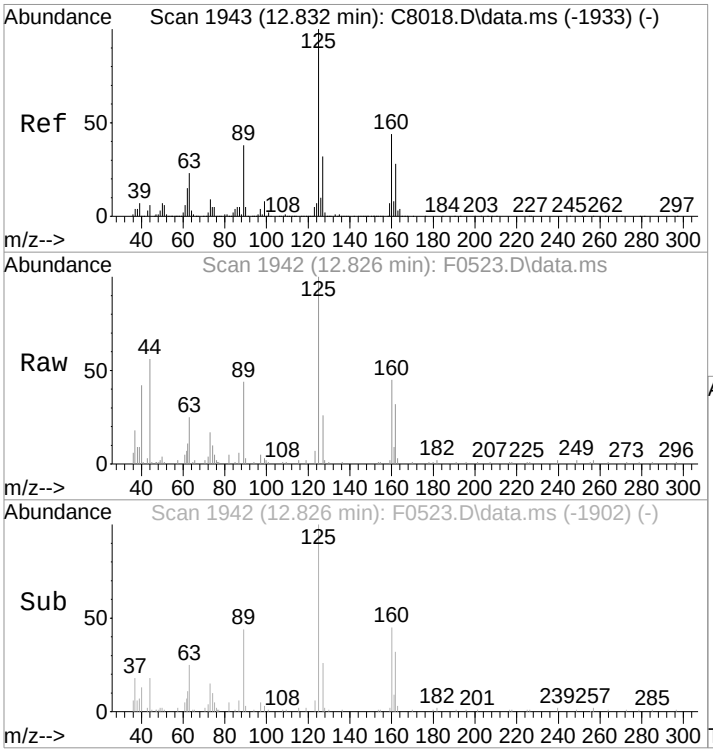


#38
Tetrahydrofuran
Concen: 0.47 ug/L
RT: 4.224 min Scan# 531
Delta R.T. 0.013 min
Lab File: F0523.D
Acq: 20 Sep 2018 11:46 pm

Tgt Ion: 42 Resp: 799

Ion	Ratio	Lower	Upper
42	100		
72	41.1	27.4	67.4

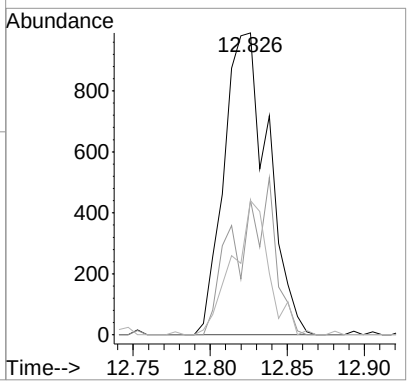


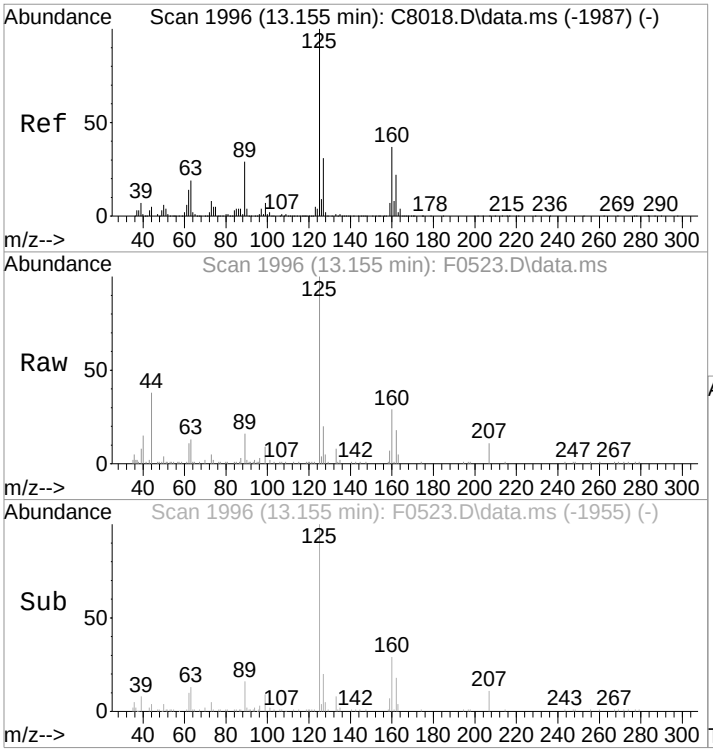


#111
Trielution Dichlorotoluene
Concen: 0.31 ug/L
RT: 12.826 min Scan# 1942
Delta R.T. -0.006 min
Lab File: F0523.D
Acq: 20 Sep 2018 11:46 pm

Tgt Ion:125 Resp: 1974

Ion	Ratio	Lower	Upper
125	100		
160	44.5	23.7	63.7
89	44.4	17.9	57.9

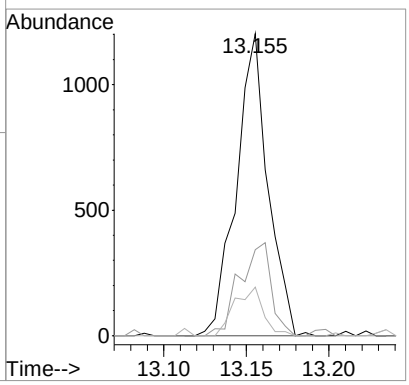


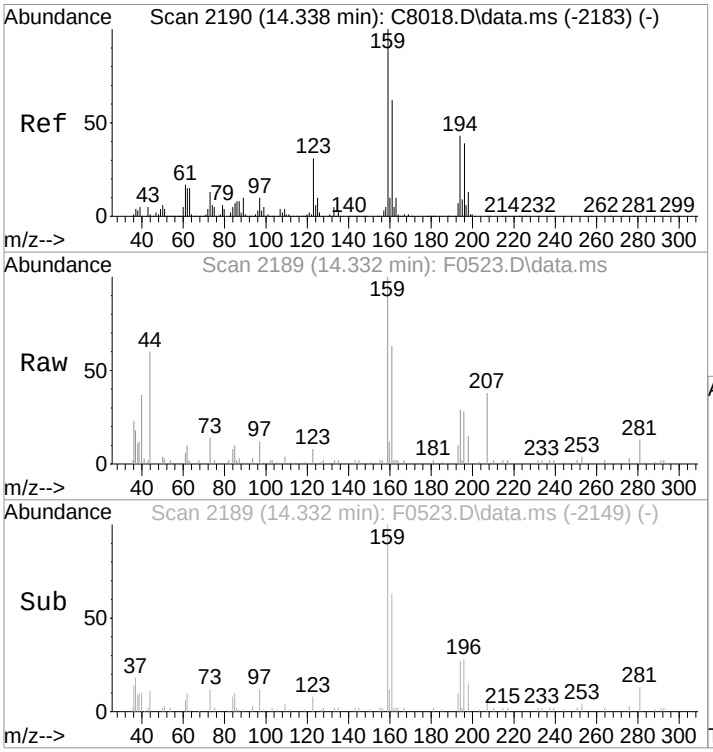


#113
Coelution Dichlorotoluene
Concen: 0.23 ug/L
RT: 13.155 min Scan# 1996
Delta R.T. 0.000 min
Lab File: F0523.D
Acq: 20 Sep 2018 11:46 pm

Tgt Ion:125 Resp: 1609

Ion	Ratio	Lower	Upper
125	100		
160	28.5	16.6	56.6
89	16.0	9.2	49.2

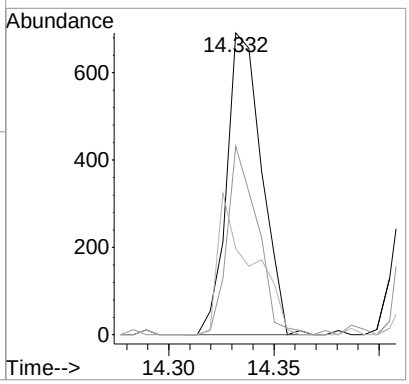




#118
2,4,5-Trichlorotoluene
Concen: 0.23 ug/L
RT: 14.332 min Scan# 2189
Delta R.T. -0.005 min
Lab File: F0523.D
Acq: 20 Sep 2018 11:46 pm

Tgt Ion:159 Resp: 796

Ion	Ratio	Lower	Upper
159	100		
161	56.0	42.1	82.1
194	25.6	23.4	63.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0530.D
Acq On : 21 Sep 2018 2:23 am
Operator : F.NAEGLER
Sample : R1808910-006|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Sep 22 14:49:28 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

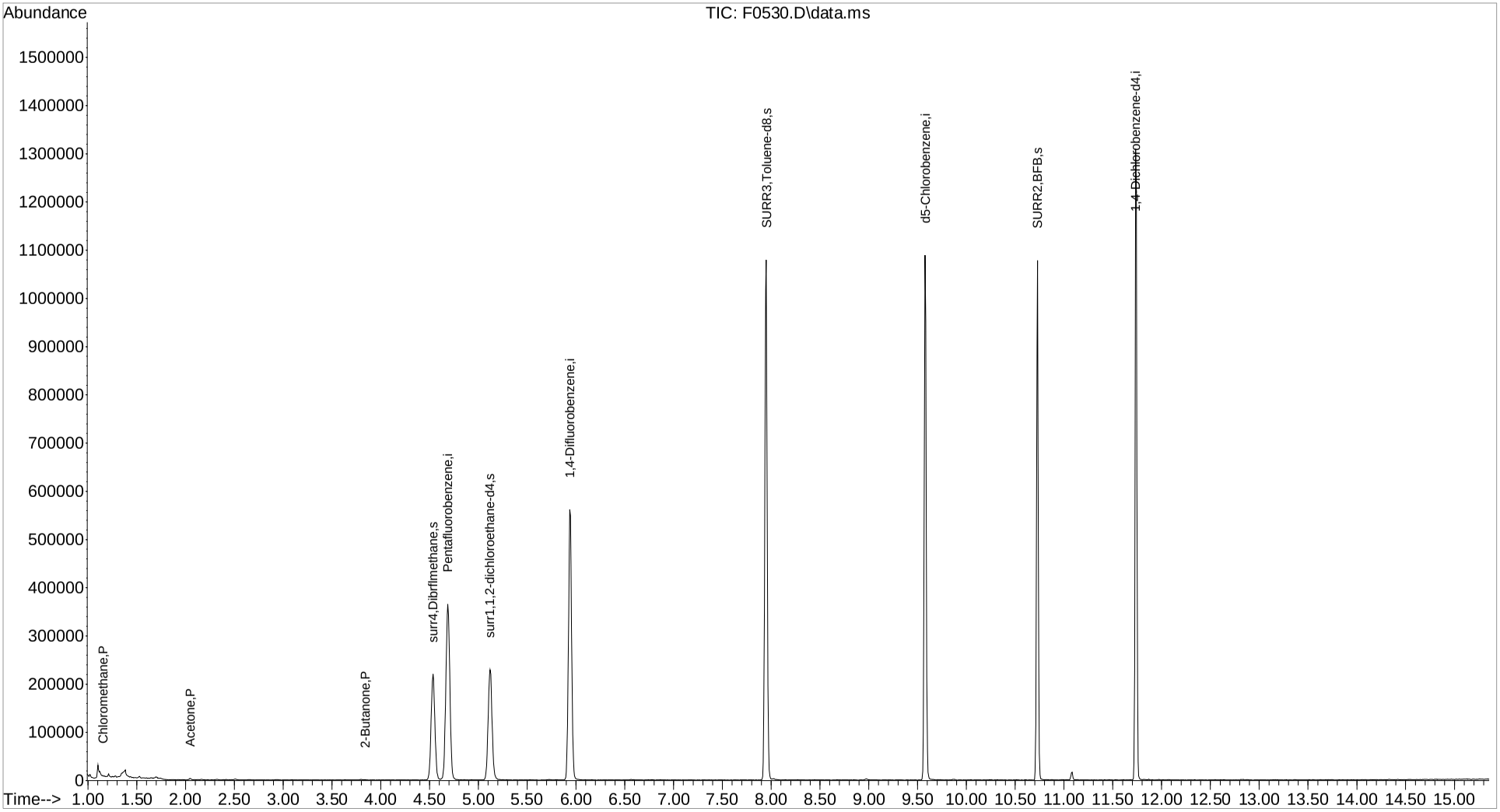
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	367409	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	535646	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	467223	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.735	152	252651	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	167338	46.74	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.48%			
47) surr1,1,2-dichloroetha...	5.120	65	228244	52.48	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.96%			
64) SURR3,Toluene-d8	7.949	98	657647	47.82	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.64%			
69) SURR2,BFB	10.729	95	238303	44.90	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 89.80%			
Target Compounds						Qvalue
3) Chloromethane	1.151	50	1154	0.24	ug/L #	55
15) Acetone	2.048	43	2894	1.38	ug/L	86
34) 2-Butanone	3.840	43	610	0.21	ug/L	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

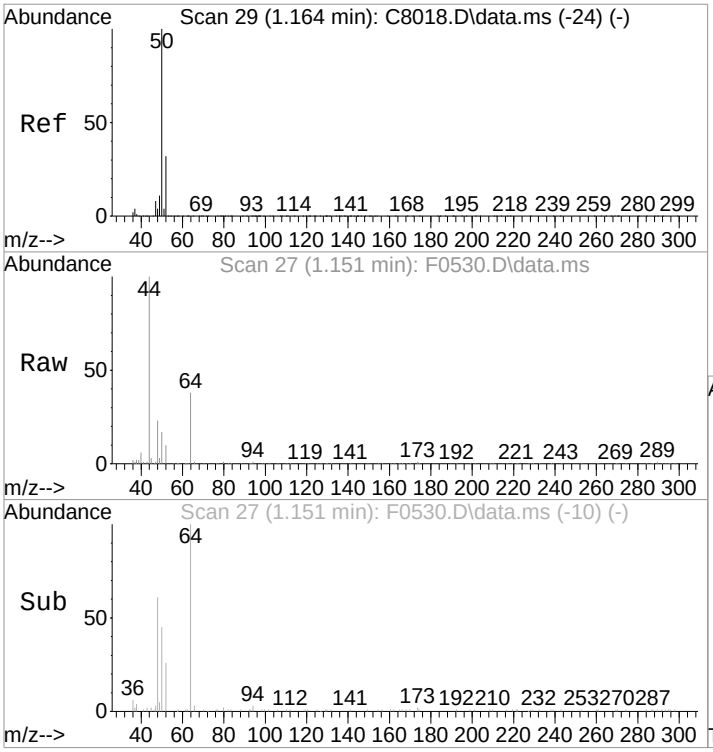
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0530.D
Acq On : 21 Sep 2018 2:23 am
Operator : F.NAEGLER
Sample : R1808910-006|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Sep 22 14:49:28 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



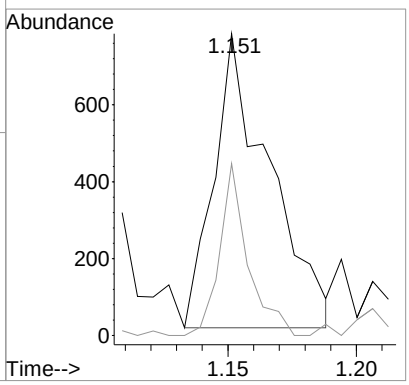
1st FJ 09/22/18
2nd 09/23/18

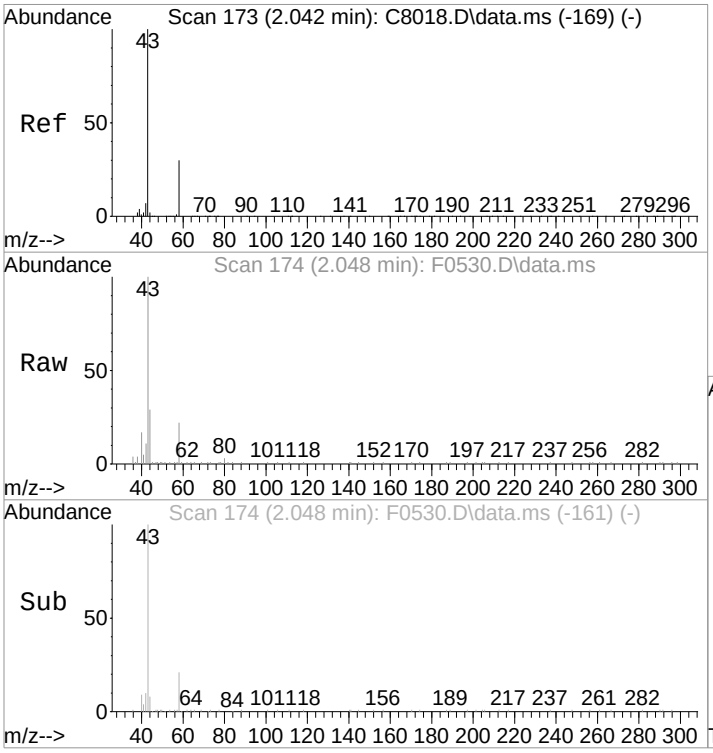


#3
Chloromethane
Concen: 0.24 ug/L
RT: 1.151 min Scan# 27
Delta R.T. -0.012 min
Lab File: F0530.D
Acq: 21 Sep 2018 2:23 am

Tgt Ion: 50 Resp: 1154

Ion	Ratio	Lower	Upper
50	100		
52	56.9	11.7	51.7#

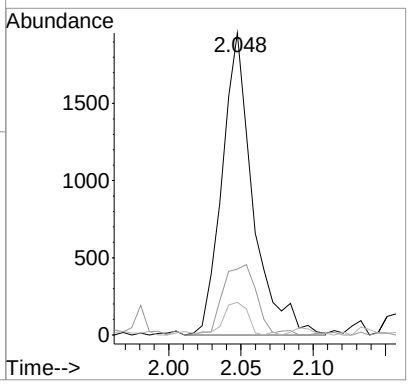


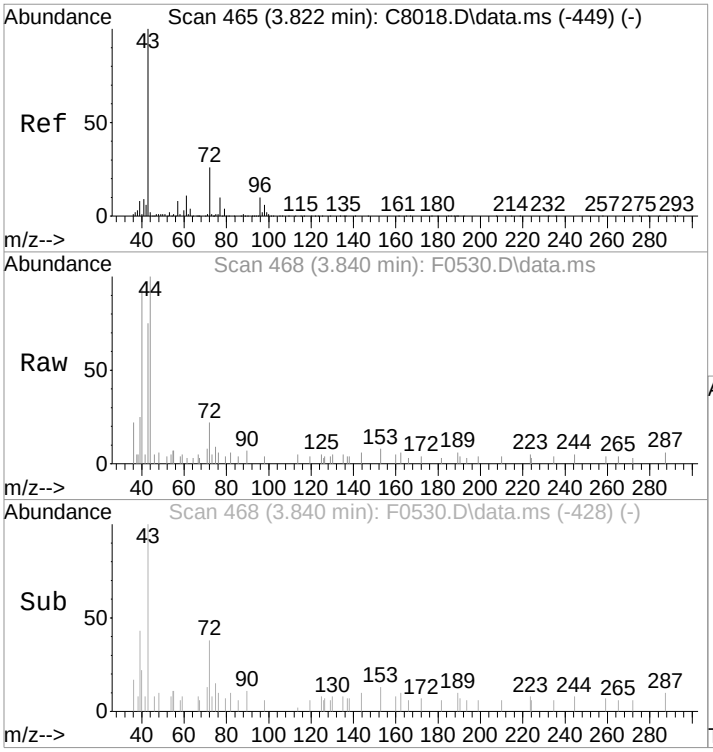


#15
Acetone
Concen: 1.38 ug/L
RT: 2.048 min Scan# 174
Delta R.T. 0.007 min
Lab File: F0530.D
Acq: 21 Sep 2018 2:23 am

Tgt Ion: 43 Resp: 2894

Ion	Ratio	Lower	Upper
43	100		
58	21.8	9.9	49.9
42	10.7	0.0	27.5

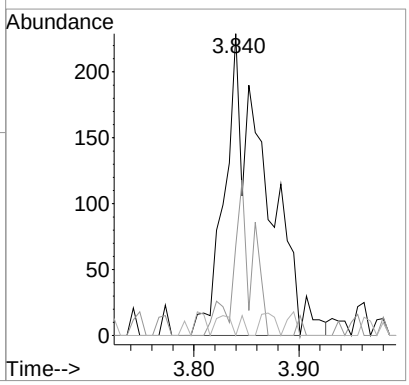




#34
2-Butanone
Concen: 0.21 ug/L
RT: 3.840 min Scan# 468
Delta R.T. 0.018 min
Lab File: F0530.D
Acq: 21 Sep 2018 2:23 am

Tgt Ion: 43 Resp: 610

Ion	Ratio	Lower	Upper
43	100		
72	29.7	5.8	45.8
57	0.0	0.0	28.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0531.D
Acq On : 21 Sep 2018 2:45 am
Operator : F.NAEGLER
Sample : R1808910-007|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Sep 22 14:52:49 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

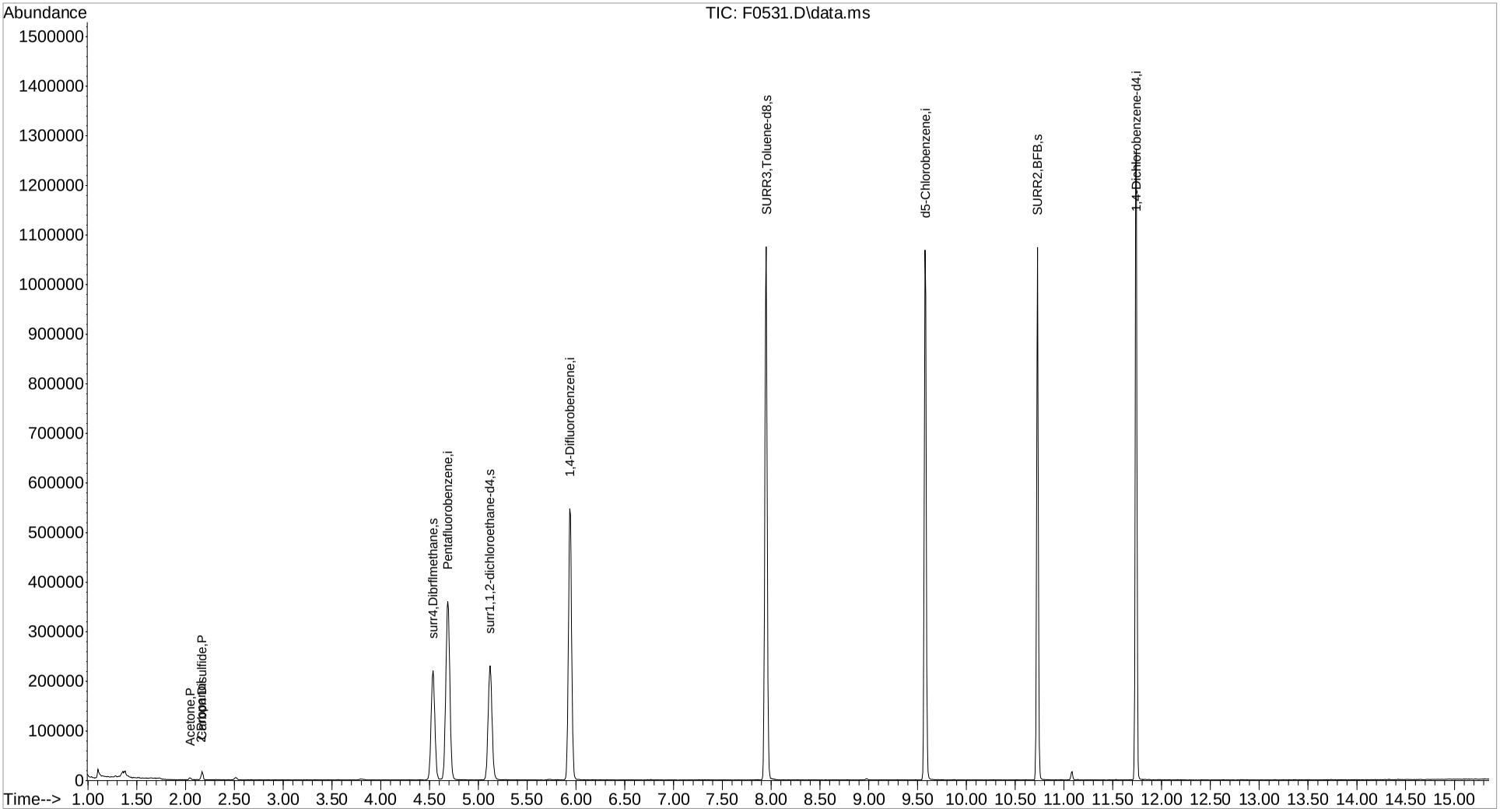
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	362637	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	528268	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	465708	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	246667	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	168753	47.79	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.58%			
47) surr1,1,2-dichloroetha...	5.120	65	230910	53.84	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.68%			
64) SURR3,Toluene-d8	7.949	98	656368	48.39	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.78%			
69) SURR2,BFB	10.729	95	235215	44.93	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 89.86%			
Target Compounds						Qvalue
15) Acetone	2.047	43	4041	1.95	ug/L	93
16) 2-Propanol	2.163	45	3706	10.18	ug/L	76
18) Carbon Disulfide	2.169	76	12329	1.36	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

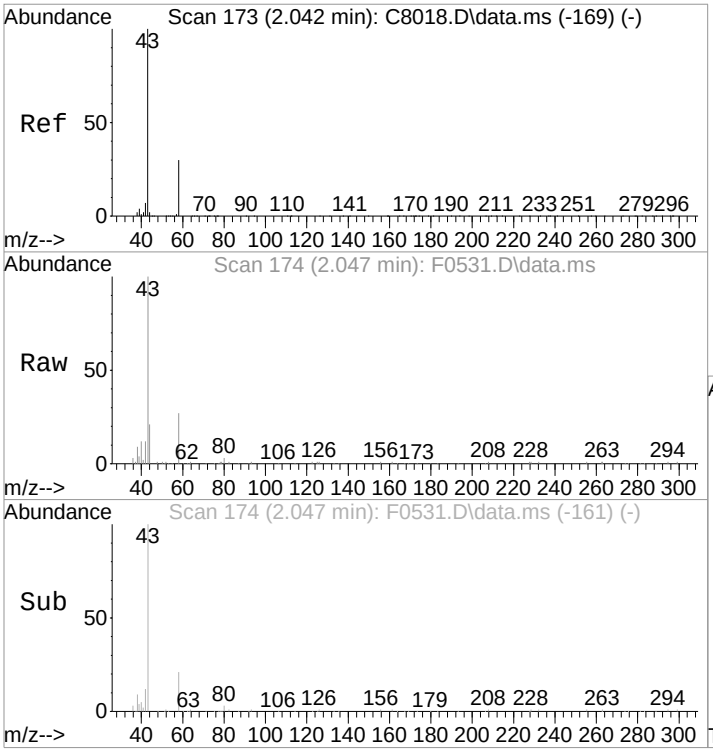
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0531.D
Acq On : 21 Sep 2018 2:45 am
Operator : F.NAEGLER
Sample : R1808910-007|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Sep 22 14:52:49 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



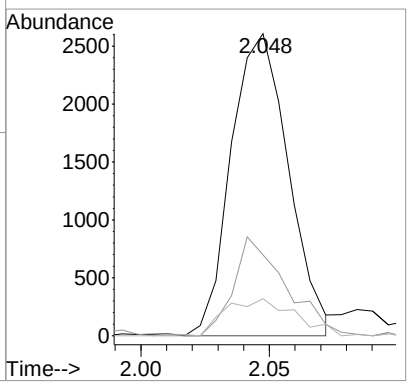
1st FJ 09/22/18
2nd 09/23/18

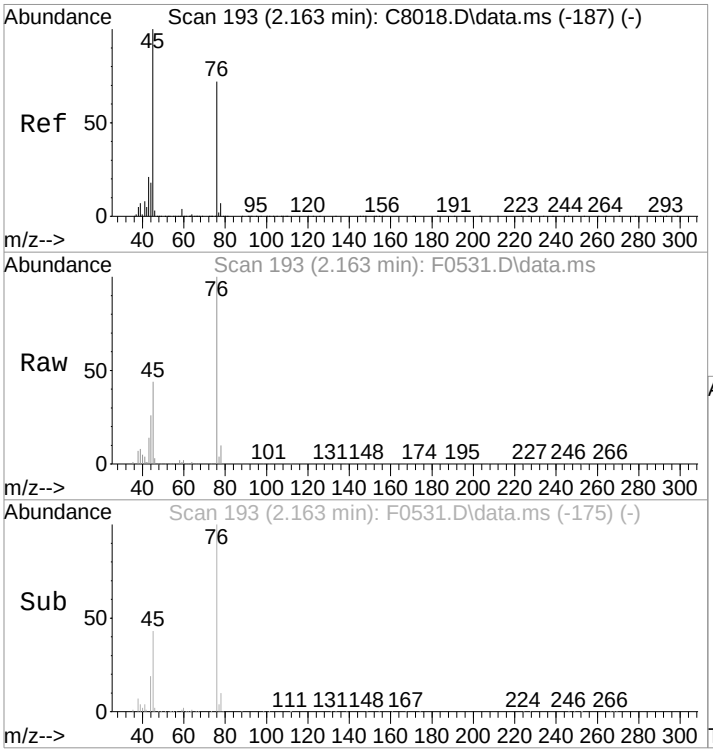


#15
Acetone
Concen: 1.95 ug/L
RT: 2.047 min Scan# 174
Delta R.T. 0.006 min
Lab File: F0531.D
Acq: 21 Sep 2018 2:45 am

Tgt Ion: 43 Resp: 4041

Ion	Ratio	Lower	Upper
43	100		
58	26.8	9.9	49.9
42	12.3	0.0	27.5

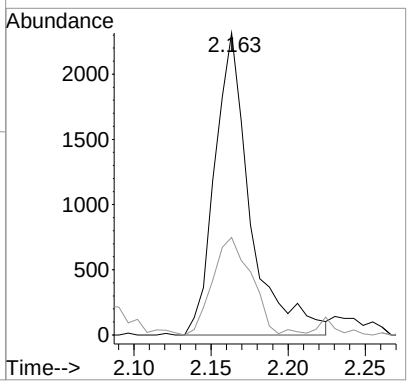


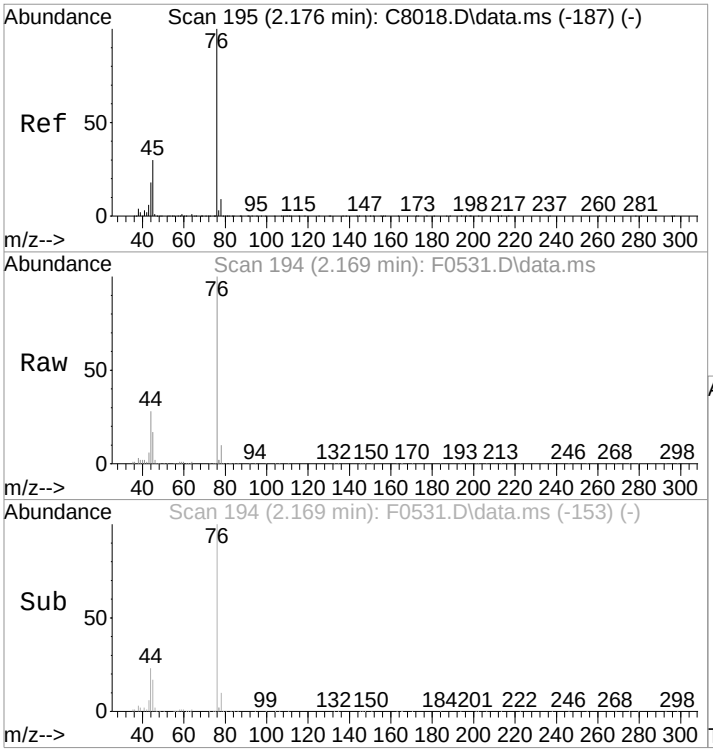


#16
2-Propanol
Concen: 10.18 ug/L
RT: 2.163 min Scan# 193
Delta R.T. -0.000 min
Lab File: F0531.D
Acq: 21 Sep 2018 2:45 am

Tgt Ion: 45 Resp: 3706

Ion	Ratio	Lower	Upper
45	100		
43	32.3	1.1	41.1

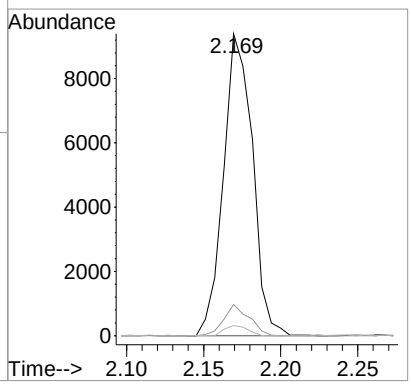




#18
Carbon Disulfide
Concen: 1.36 ug/L
RT: 2.169 min Scan# 194
Delta R.T. -0.006 min
Lab File: F0531.D
Acq: 21 Sep 2018 2:45 am

Tgt Ion: 76 Resp: 12329

Ion	Ratio	Lower	Upper
76	100		
78	10.3	0.0	29.1
77	3.4	0.0	22.8



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0532.D
Acq On : 21 Sep 2018 3:08 am
Operator : F.NAEGLER
Sample : R1808910-008|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Sep 22 14:54:11 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

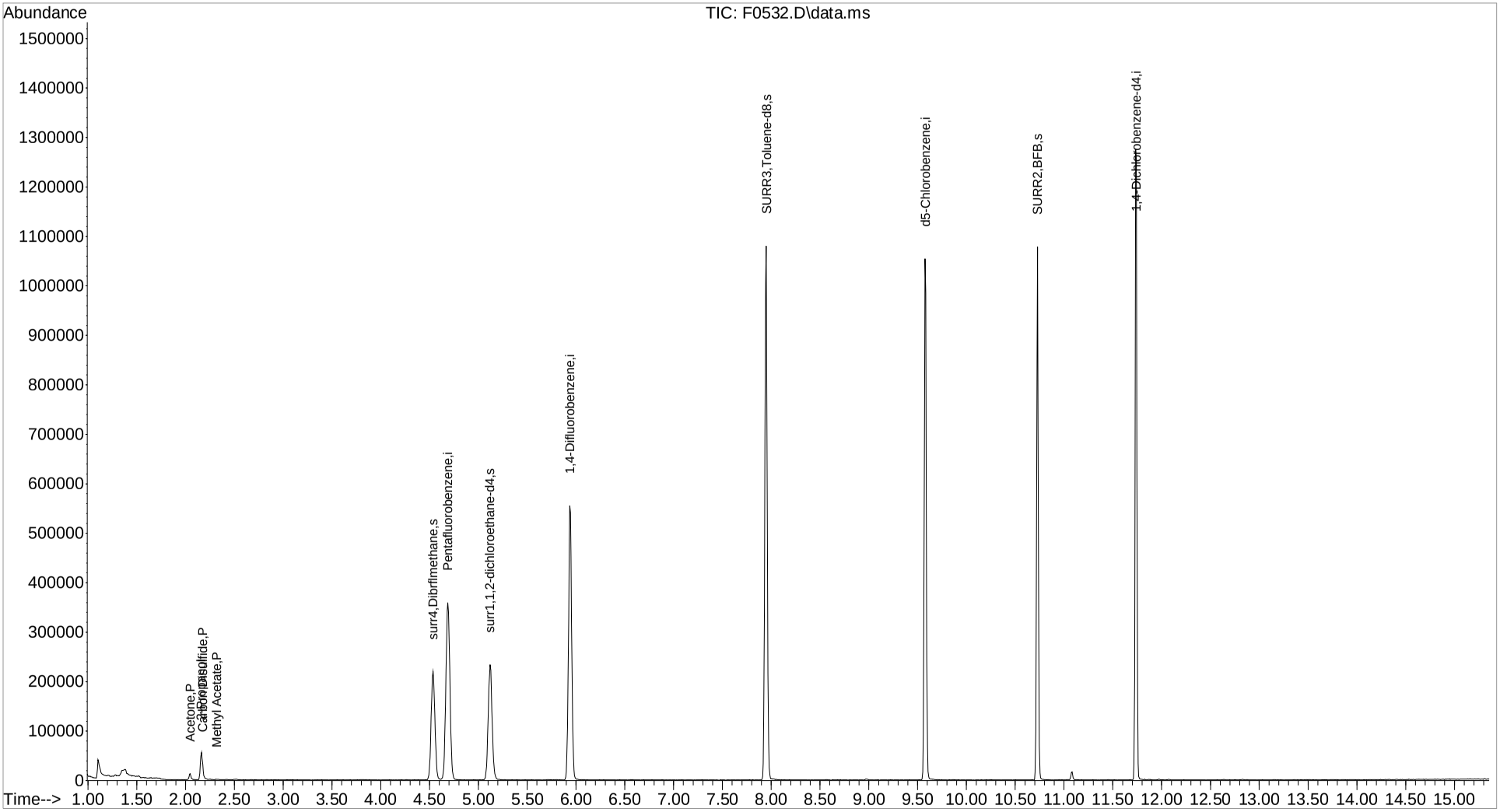
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	365076	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	528498	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.576	117	464502	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	249014	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	169228	47.91	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.82%			
47) surr1,1,2-dichloroetha...	5.120	65	230619	53.74	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.48%			
64) SURR3,Toluene-d8	7.949	98	661129	48.72	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.44%			
69) SURR2,BFB	10.729	95	238330	45.51	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 91.02%			
Target Compounds						Qvalue
15) Acetone	2.047	43	11871	5.69	ug/L	97
16) 2-Propanol	2.163	45	42954	117.16	ug/L	82
18) Carbon Disulfide	2.175	76	15367	1.69	ug/L	96
21) Methyl Acetate	2.322	43	816	0.22	ug/L	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

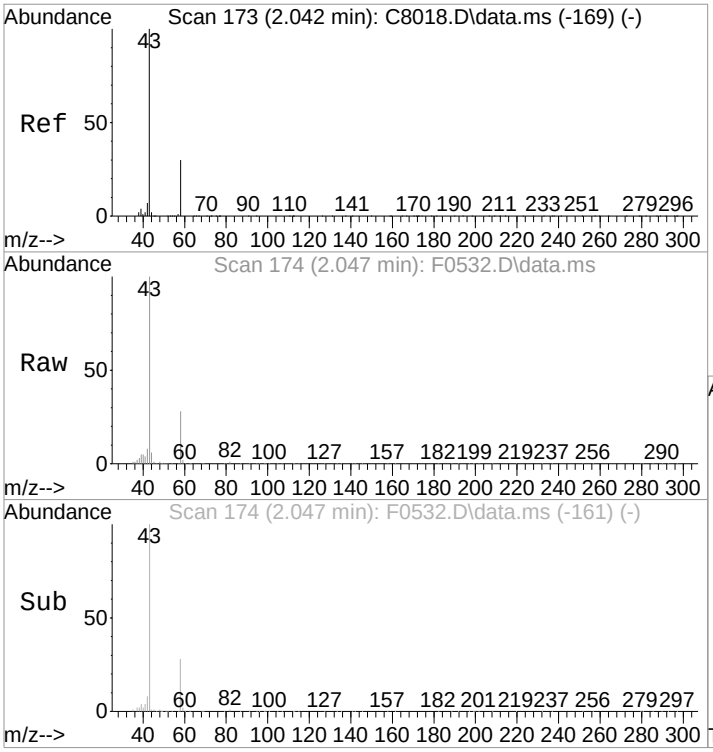
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0532.D
Acq On : 21 Sep 2018 3:08 am
Operator : F.NAEGLER
Sample : R1808910-008|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Sep 22 14:54:11 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



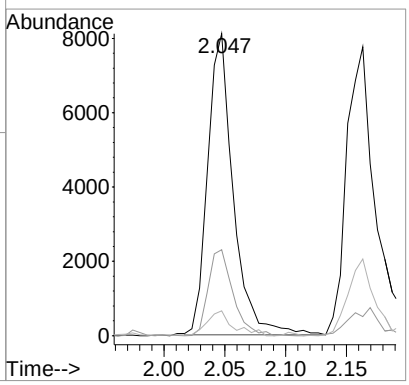
1st FJ 09/22/18
2nd 09/23/18

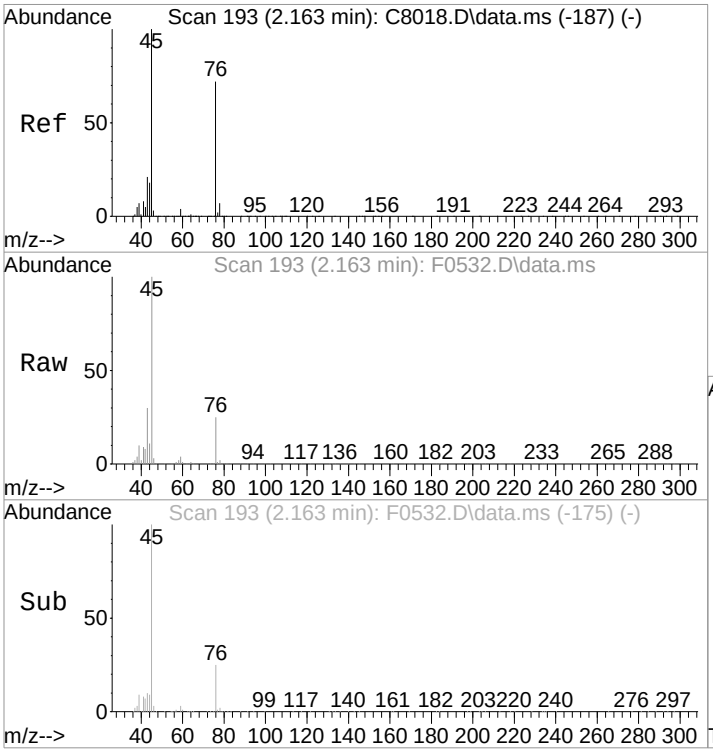


#15
Acetone
Concen: 5.69 ug/L
RT: 2.047 min Scan# 174
Delta R.T. 0.006 min
Lab File: F0532.D
Acq: 21 Sep 2018 3:08 am

Tgt Ion: 43 Resp: 11871

Ion	Ratio	Lower	Upper
43	100		
58	28.5	9.9	49.9
42	8.2	0.0	27.5

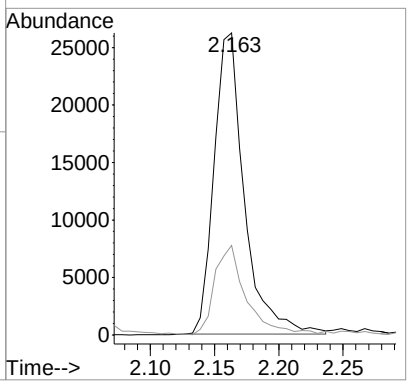


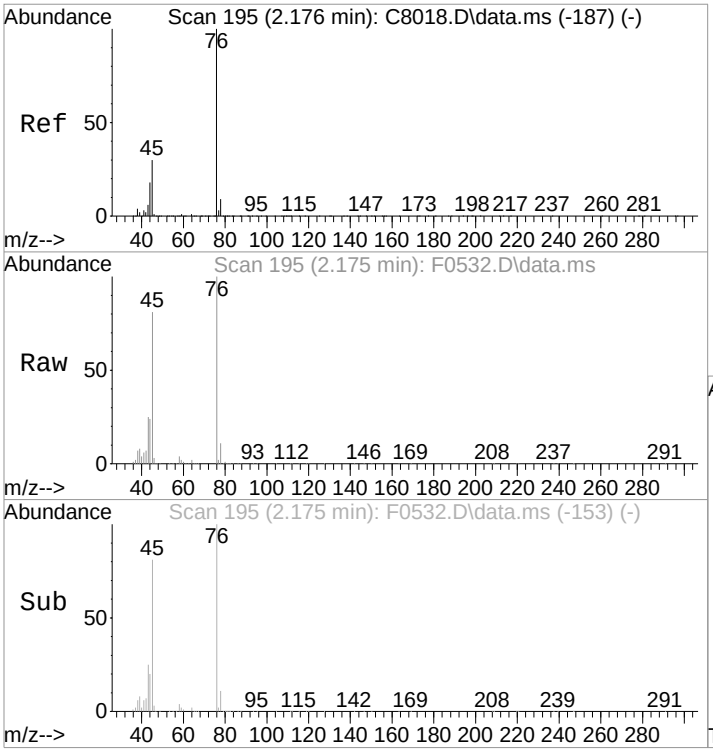


#16
2-Propanol
Concen: 117.16 ug/L
RT: 2.163 min Scan# 193
Delta R.T. -0.000 min
Lab File: F0532.D
Acq: 21 Sep 2018 3:08 am

Tgt Ion: 45 Resp: 42954

Ion	Ratio	Lower	Upper
45	100		
43	29.6	1.1	41.1

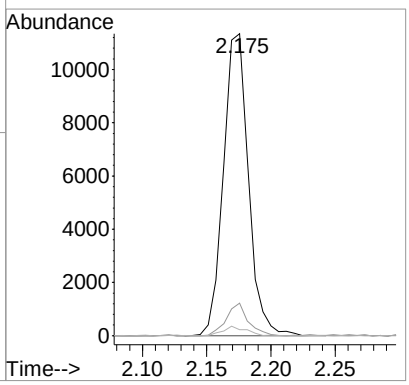


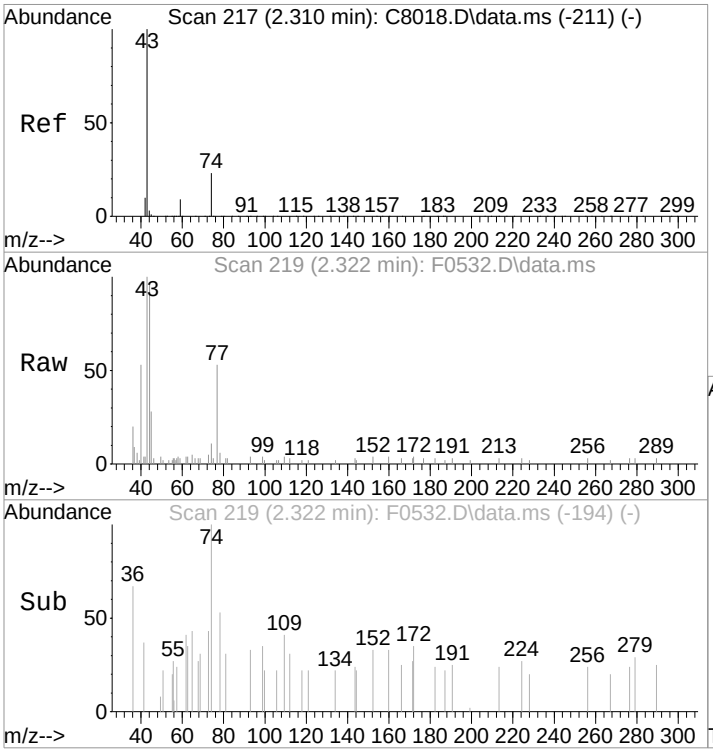


#18
Carbon Disulfide
Concen: 1.69 ug/L
RT: 2.175 min Scan# 195
Delta R.T. -0.000 min
Lab File: F0532.D
Acq: 21 Sep 2018 3:08 am

Tgt Ion: 76 Resp: 15367

Ion	Ratio	Lower	Upper
76	100		
78	10.8	0.0	29.1
77	2.0	0.0	22.8

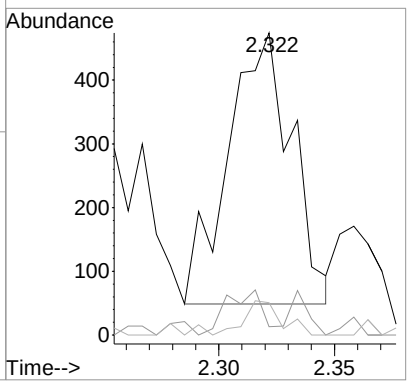




#21
Methyl Acetate
Concen: 0.22 ug/L
RT: 2.322 min Scan# 219
Delta R.T. 0.012 min
Lab File: F0532.D
Acq: 21 Sep 2018 3:08 am

Tgt Ion: 43 Resp: 816

Ion	Ratio	Lower	Upper
43	100		
59	2.7	0.0	29.2
74	10.8	2.6	42.6



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0533.D
Acq On : 21 Sep 2018 3:30 am
Operator : F.NAEGLER
Sample : R1808910-009|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Sep 22 14:55:30 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

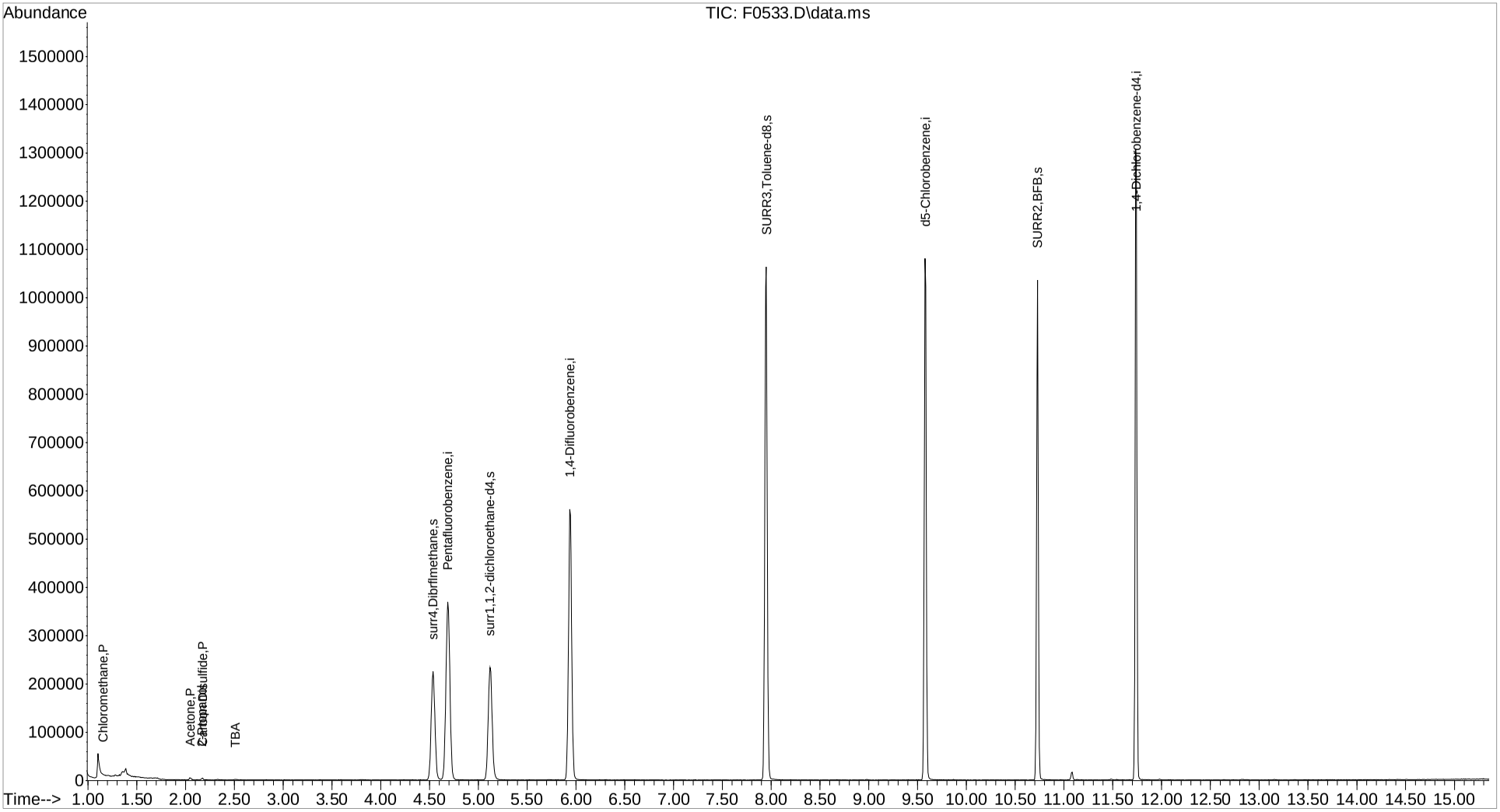
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	369576	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	534058	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	474616	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	255899	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	173219	48.53	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.06%			
47) surr1,1,2-dichloroetha...	5.120	65	234746	54.14	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 108.28%			
64) SURR3,Toluene-d8	7.949	98	657835	47.98	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.96%			
69) SURR2,BFB	10.729	95	232226	43.88	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 87.76%			
Target Compounds						Qvalue
3) Chloromethane	1.151	50	1196	0.24	ug/L	71
15) Acetone	2.048	43	3785	1.79	ug/L	94
16) 2-Propanol	2.169	45	681	1.83	ug/L	78
18) Carbon Disulfide	2.176	76	2335	0.25	ug/L	94
23) TBA	2.511	59	820	1.30	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

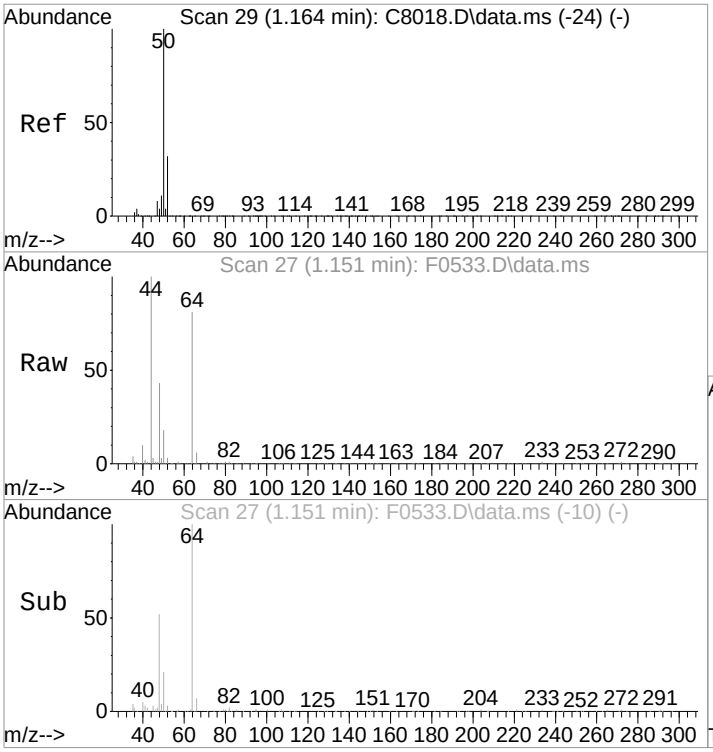
Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0533.D
Acq On : 21 Sep 2018 3:30 am
Operator : F.NAEGLER
Sample : R1808910-009|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Sep 22 14:55:30 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



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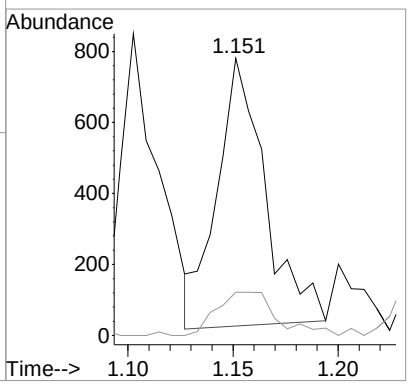
1st FJ 09/22/18
2nd 09/23/18

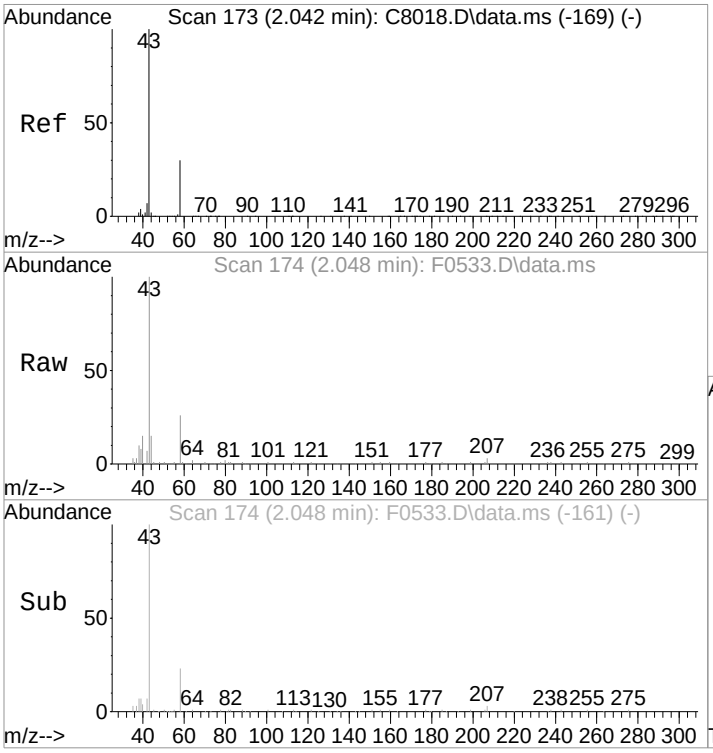


#3
Chloromethane
Concen: 0.24 ug/L
RT: 1.151 min Scan# 27
Delta R.T. -0.012 min
Lab File: F0533.D
Acq: 21 Sep 2018 3:30 am

Tgt Ion: 50 Resp: 1196

Ion	Ratio	Lower	Upper
50	100		
52	15.6	11.7	51.7

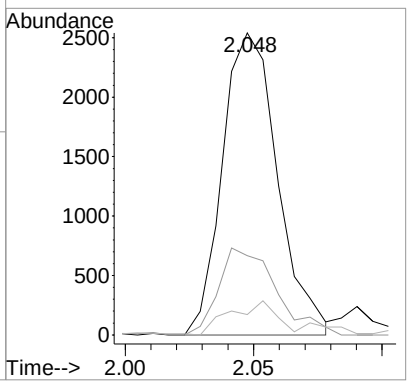


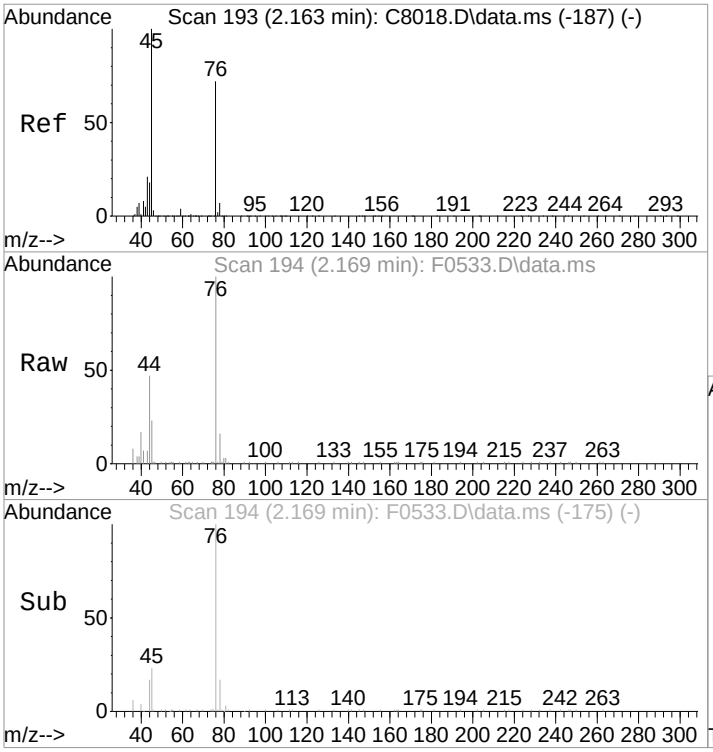


#15
Acetone
Concen: 1.79 ug/L
RT: 2.048 min Scan# 174
Delta R.T. 0.007 min
Lab File: F0533.D
Acq: 21 Sep 2018 3:30 am

Tgt Ion: 43 Resp: 3785

Ion	Ratio	Lower	Upper
43	100		
58	26.2	9.9	49.9
42	6.7	0.0	27.5

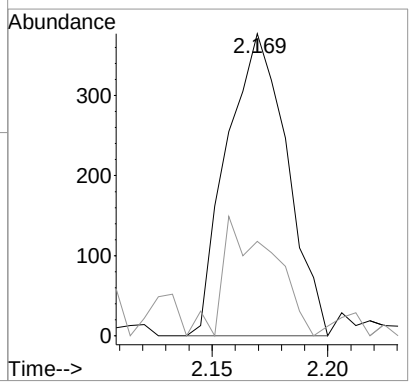


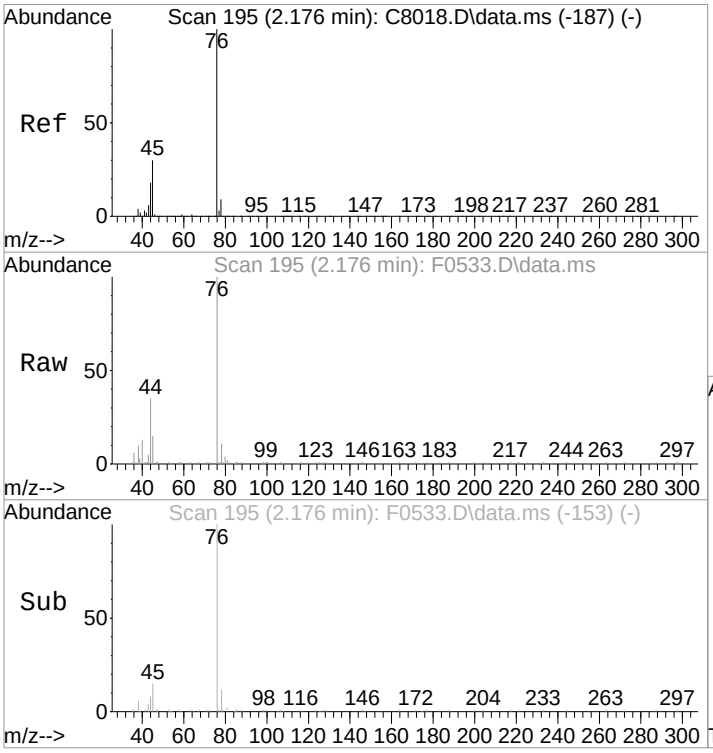


#16
2-Propanol
Concen: 1.83 ug/L
RT: 2.169 min Scan# 194
Delta R.T. 0.006 min
Lab File: F0533.D
Acq: 21 Sep 2018 3:30 am

Tgt Ion: 45 Resp: 681

Ion	Ratio	Lower	Upper
45	100		
43	31.3	1.1	41.1

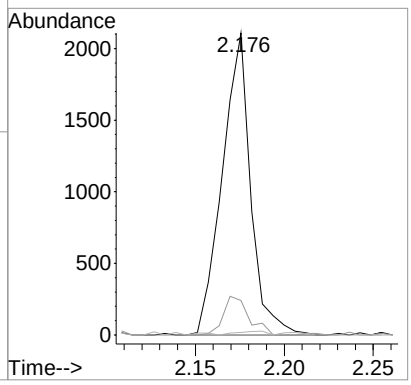


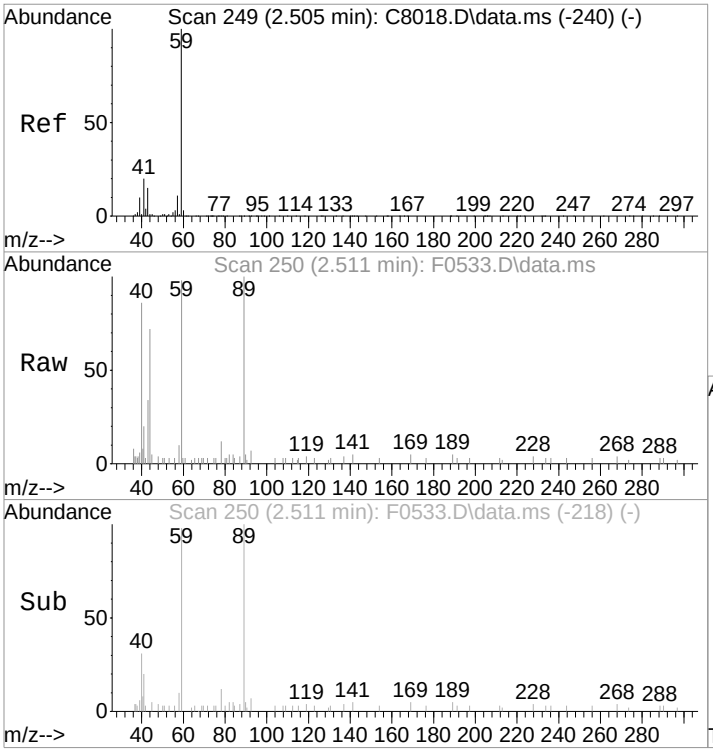


#18
Carbon Disulfide
Concen: 0.25 ug/L
RT: 2.176 min Scan# 195
Delta R.T. -0.000 min
Lab File: F0533.D
Acq: 21 Sep 2018 3:30 am

Tgt Ion: 76 Resp: 2335

Ion	Ratio	Lower	Upper
76	100		
78	11.5	0.0	29.1
77	0.9	0.0	22.8

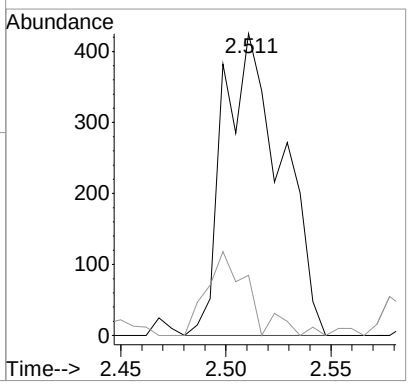




#23
TBA
Concen: 1.30 ug/L
RT: 2.511 min Scan# 250
Delta R.T. 0.006 min
Lab File: F0533.D
Acq: 21 Sep 2018 3:30 am

Tgt Ion: 59 Resp: 820

Ion	Ratio	Lower	Upper
59	100		
41	23.5	0.5	40.5



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0534.D
Acq On : 21 Sep 2018 3:52 am
Operator : F.NAEGLER
Sample : R1808910-010|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Sep 22 14:56:42 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

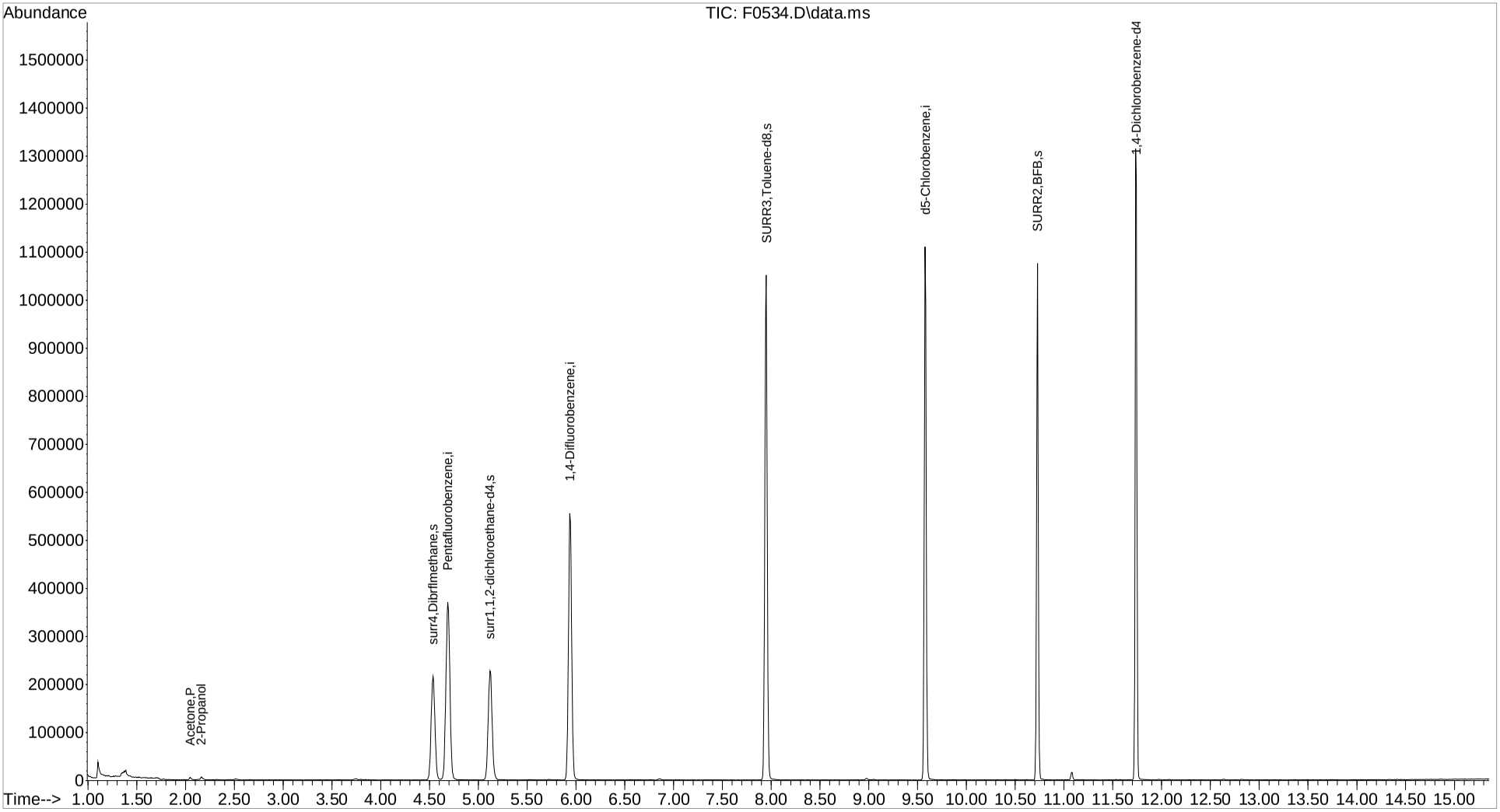
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	369591	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	536192	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	469444	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	249932	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	168091	46.90	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.80%			
47) surr1,1,2-dichloroetha...	5.120	65	227810	52.33	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.66%			
64) SURR3,Toluene-d8	7.949	98	652082	47.37	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.74%			
69) SURR2,BFB	10.729	95	237135	44.63	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 89.26%			
Target Compounds						Qvalue
15) Acetone	2.048	43	4428	2.10	ug/L	87
16) 2-Propanol	2.164	45	5198	14.01	ug/L	69

(#) = qualifier out of range (m) = manual integration (+) = signals summed

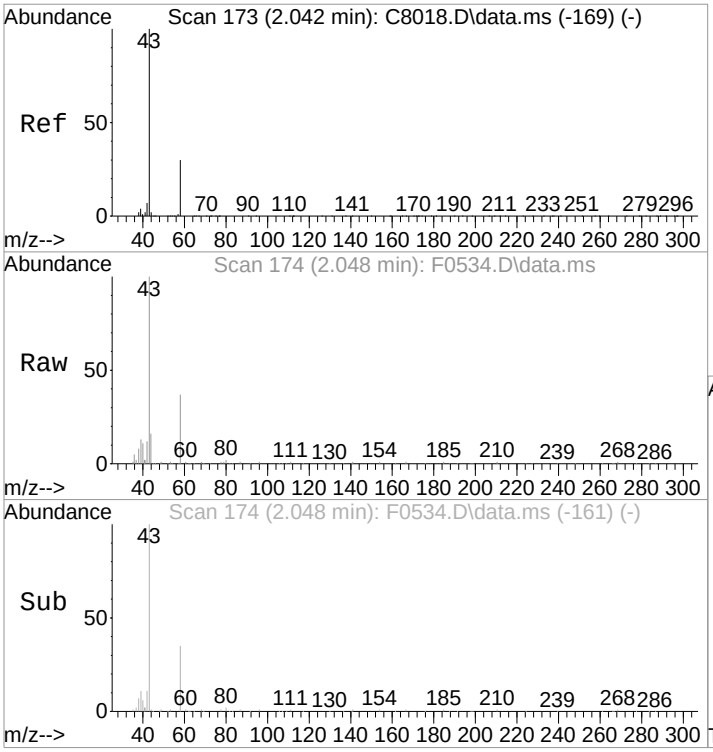
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0534.D
Acq On : 21 Sep 2018 3:52 am
Operator : F.NAEGLER
Sample : R1808910-010|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Sep 22 14:56:42 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



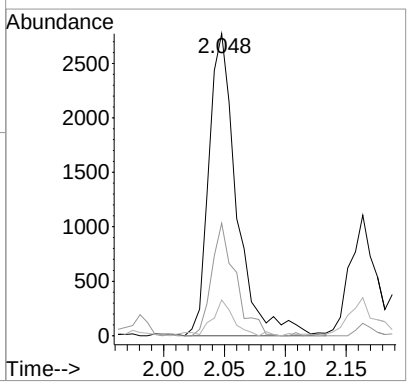
1st FJ 09/22/18
2nd 09/23/18

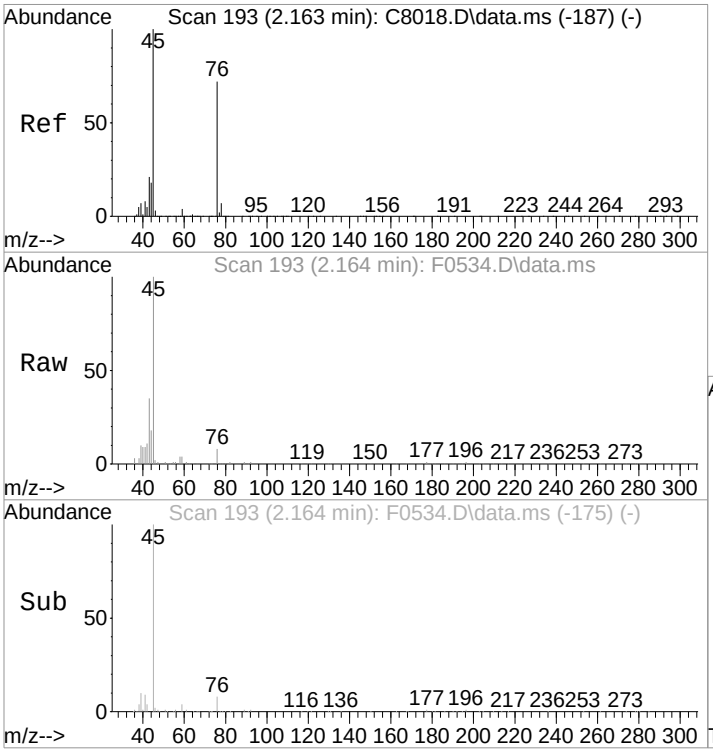


#15
Acetone
Concen: 2.10 ug/L
RT: 2.048 min Scan# 174
Delta R.T. 0.007 min
Lab File: F0534.D
Acq: 21 Sep 2018 3:52 am

Tgt Ion: 43 Resp: 4428

Ion	Ratio	Lower	Upper
43	100		
58	37.3	9.9	49.9
42	11.8	0.0	27.5

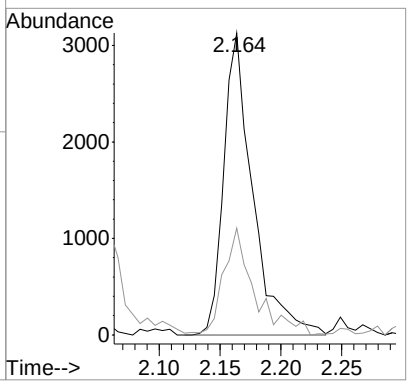




#16
2-Propanol
Concen: 14.01 ug/L
RT: 2.164 min Scan# 193
Delta R.T. 0.000 min
Lab File: F0534.D
Acq: 21 Sep 2018 3:52 am

Tgt Ion: 45 Resp: 5198

Ion	Ratio	Lower	Upper
45	100		
43	35.4	1.1	41.1



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0535.D
Acq On : 21 Sep 2018 4:15 am
Operator : F.NAEGLER
Sample : R1808910-011|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 22 14:57:58 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

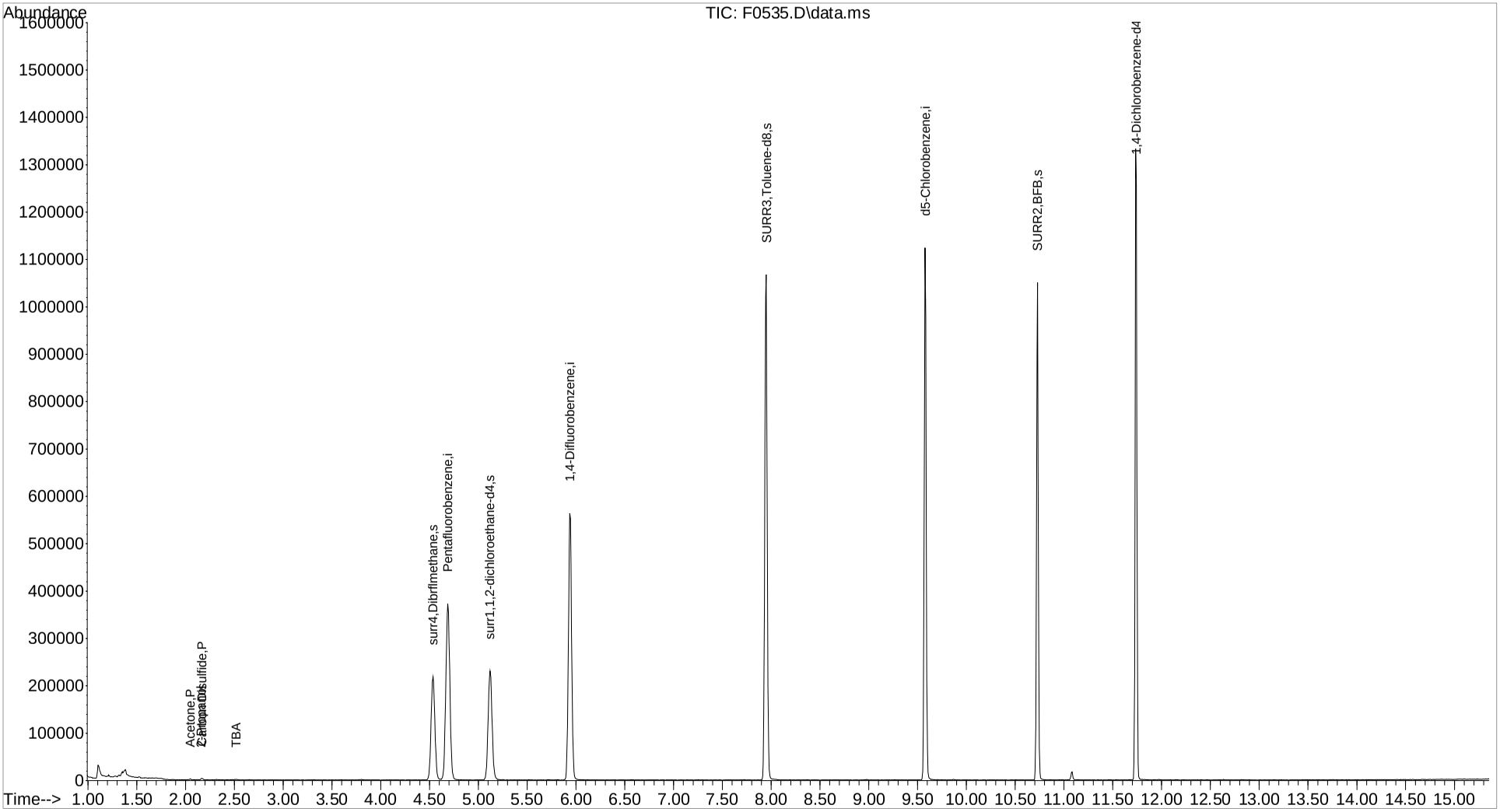
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	373146	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	537341	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	476610	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	259359	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	170668	47.52	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.04%			
47) surr1,1,2-dichloroetha...	5.120	65	232090	53.20	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.40%			
64) SURR3,Toluene-d8	7.949	98	664829	48.19	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.38%			
69) SURR2,BFB	10.729	95	240149	45.10	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 90.20%			
Target Compounds						Qvalue
15) Acetone	2.048	43	1288	0.60	ug/L	90
16) 2-Propanol	2.157	45	634	1.69	ug/L	95
18) Carbon Disulfide	2.170	76	2553	0.27	ug/L	98
23) TBA	2.517	59	874	1.38	ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

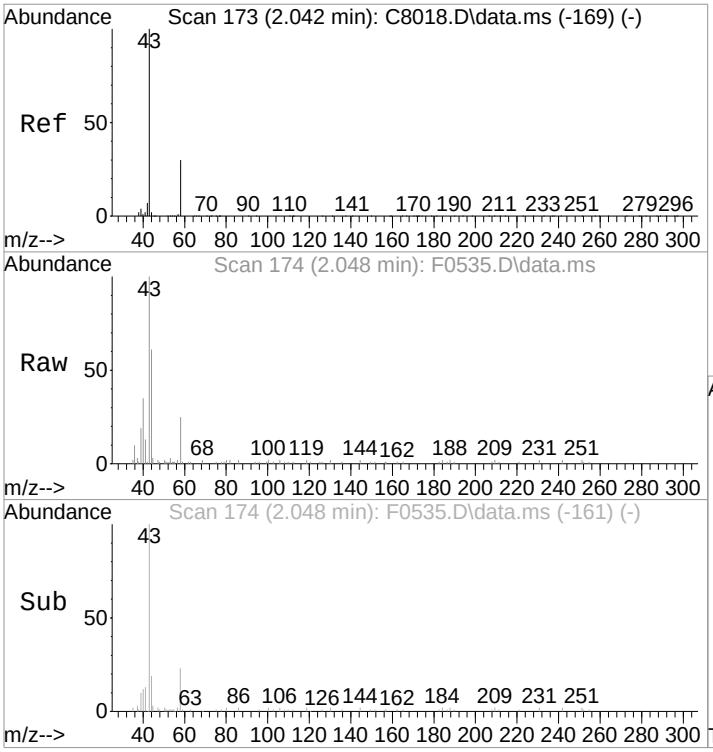
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0535.D
Acq On : 21 Sep 2018 4:15 am
Operator : F.NAEGLER
Sample : R1808910-011|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 22 14:57:58 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



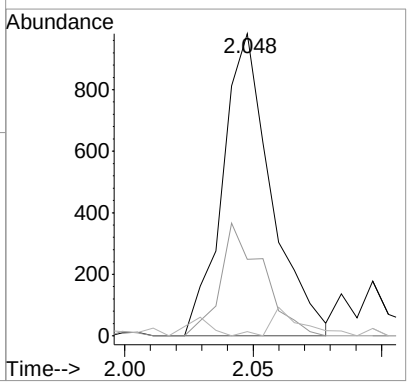
1st FJ 09/22/18
2nd 09/23/18

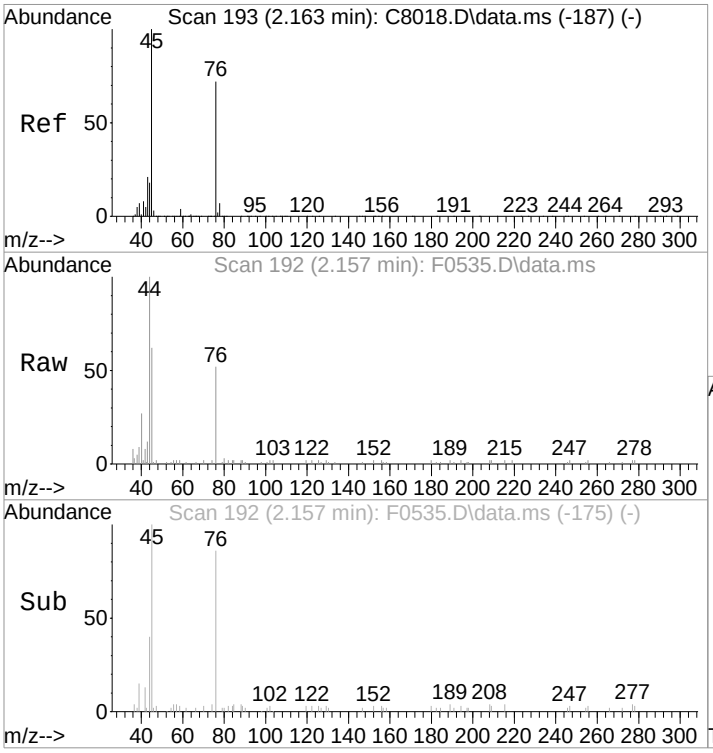


#15
Acetone
Concen: 0.60 ug/L
RT: 2.048 min Scan# 174
Delta R.T. 0.007 min
Lab File: F0535.D
Acq: 21 Sep 2018 4:15 am

Tgt Ion: 43 Resp: 1288

Ion	Ratio	Lower	Upper
43	100		
58	25.4	9.9	49.9
42	1.4	0.0	27.5

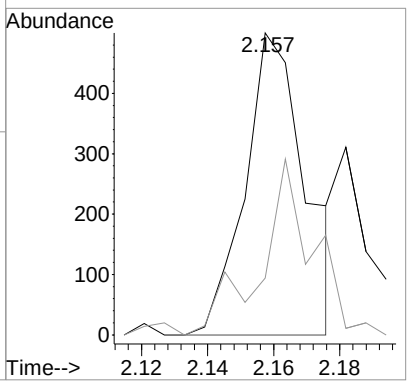


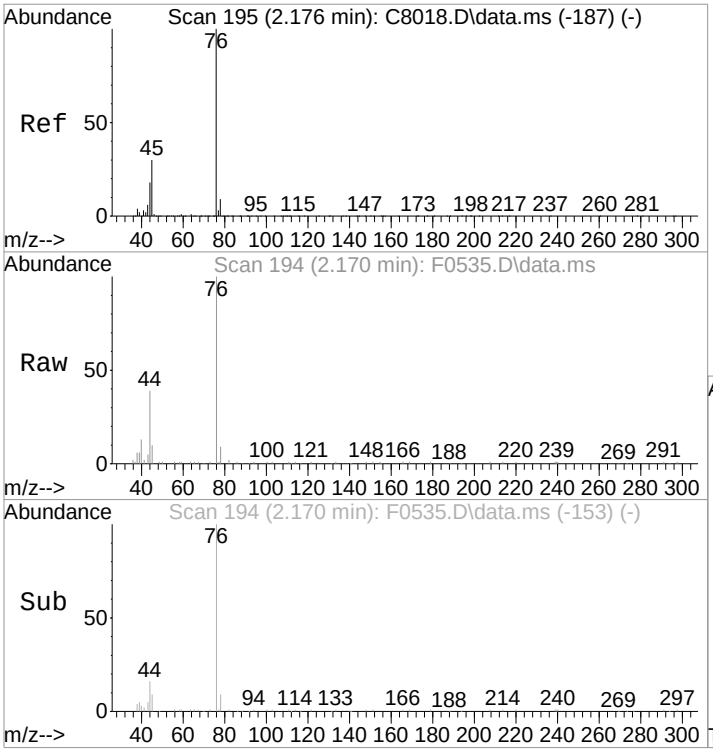


#16
2-Propanol
Concen: 1.69 ug/L
RT: 2.157 min Scan# 192
Delta R.T. -0.006 min
Lab File: F0535.D
Acq: 21 Sep 2018 4:15 am

Tgt Ion: 45 Resp: 634

Ion	Ratio	Lower	Upper
45	100		
43	18.8	1.1	41.1

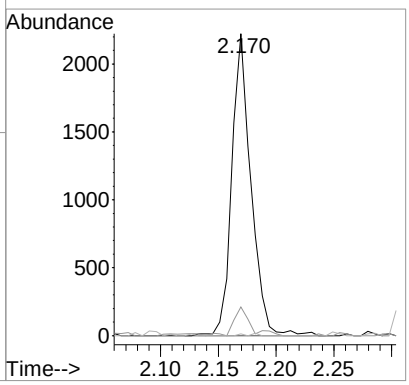


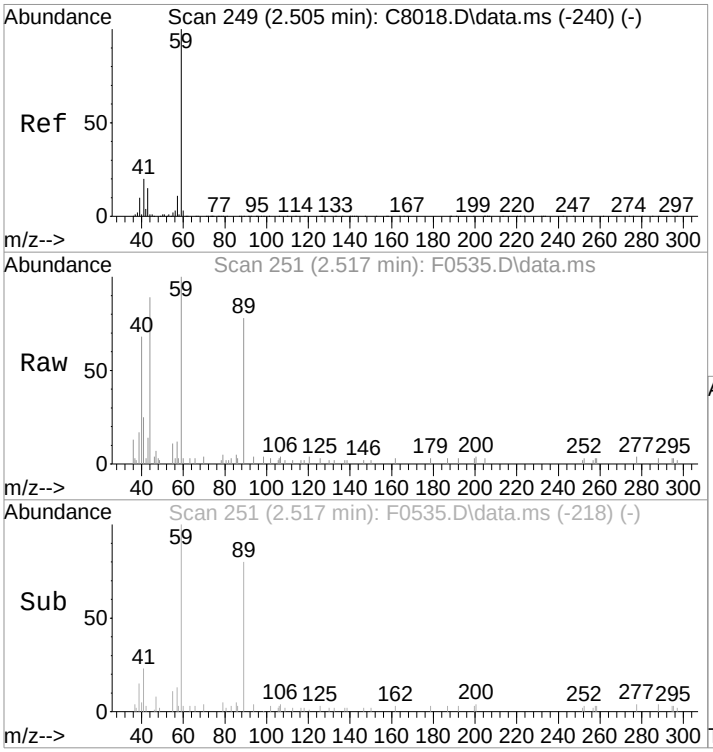


#18
Carbon Disulfide
Concen: 0.27 ug/L
RT: 2.170 min Scan# 194
Delta R.T. -0.006 min
Lab File: F0535.D
Acq: 21 Sep 2018 4:15 am

Tgt Ion: 76 Resp: 2553

Ion	Ratio	Lower	Upper
76	100		
78	9.5	0.0	29.1
77	0.6	0.0	22.8

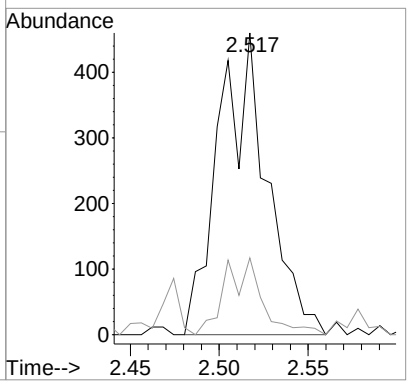




#23
TBA
Concen: 1.38 ug/L
RT: 2.517 min Scan# 251
Delta R.T. 0.012 min
Lab File: F0535.D
Acq: 21 Sep 2018 4:15 am

Tgt Ion: 59 Resp: 874

Ion	Ratio	Lower	Upper
59	100		
41	25.4	0.5	40.5



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0524.D
Acq On : 21 Sep 2018 12:09 am
Operator : F.NAEGLER
Sample : R1808910-015|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Sep 22 14:38:23 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

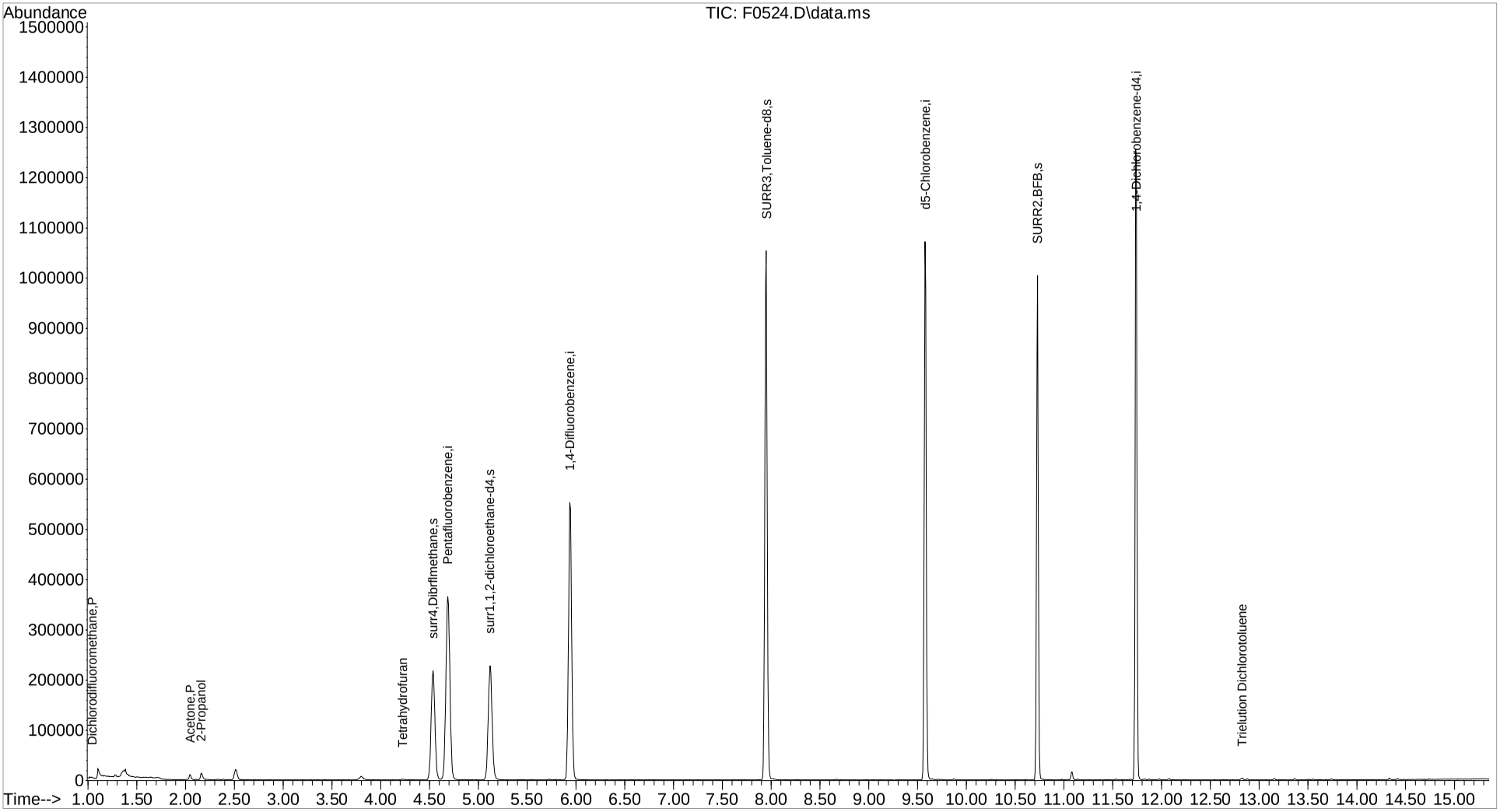
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	370538	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	531904	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	465548	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	249316	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	169992	47.82	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.64%			
47) surr1,1,2-dichloroetha...	5.120	65	224055	51.88	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.76%			
64) SURR3,Toluene-d8	7.949	98	647981	47.45	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.90%			
69) SURR2,BFB	10.729	95	234047	44.41	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 88.82%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.042	85	970	0.22	ug/L	93
15) Acetone	2.048	43	9887	4.67	ug/L	99
16) 2-Propanol	2.163	45	11564	31.08	ug/L	86
38) Tetrahydrofuran	4.224	42	1057	0.64	ug/L #	62
111) Trielution Dichlorotol...	12.826	125	1253	0.20	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

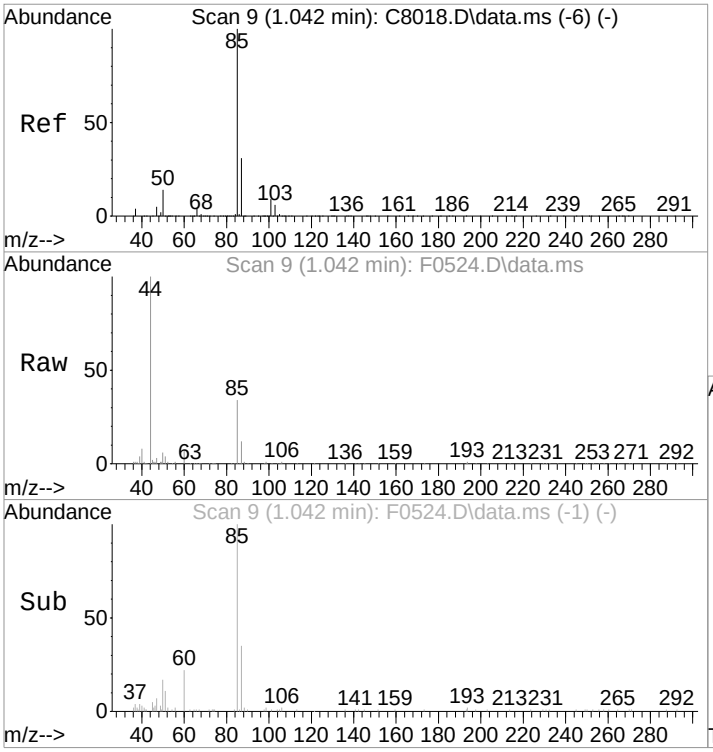
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0524.D
Acq On : 21 Sep 2018 12:09 am
Operator : F.NAEGLER
Sample : R1808910-015|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Sep 22 14:38:23 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



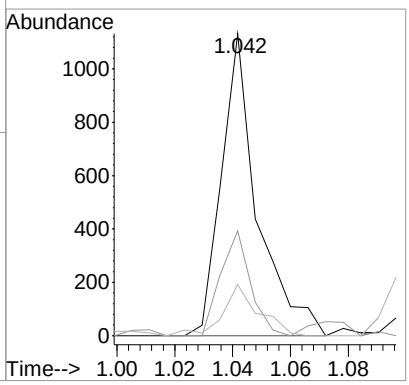
1st FJ 09/22/18
2nd 09/23/18

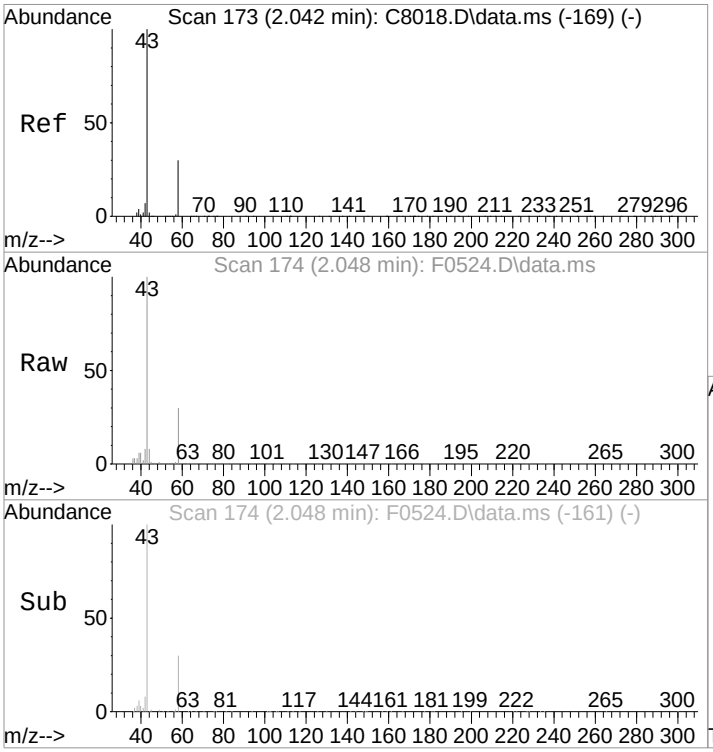


#2
Dichlorodifluoromethane
Concen: 0.22 ug/L
RT: 1.042 min Scan# 9
Delta R.T. -0.000 min
Lab File: F0524.D
Acq: 21 Sep 2018 12:09 am

Tgt Ion: 85 Resp: 970

Ion	Ratio	Lower	Upper
85	100		
87	34.7	11.3	51.3
50	16.9	0.0	33.6

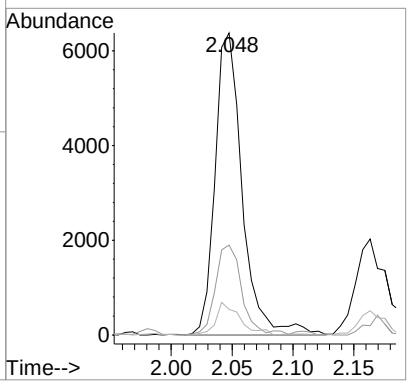


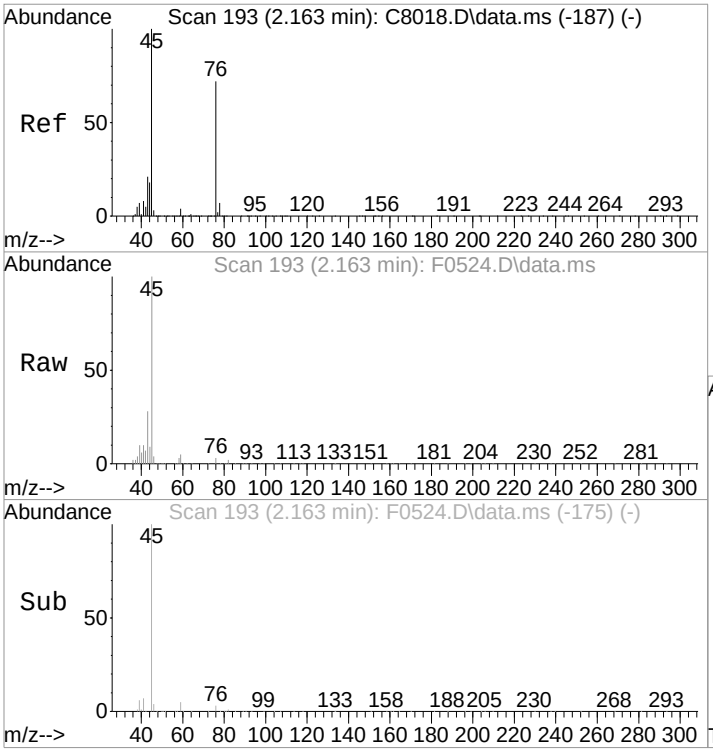


#15
Acetone
Concen: 4.67 ug/L
RT: 2.048 min Scan# 174
Delta R.T. 0.007 min
Lab File: F0524.D
Acq: 21 Sep 2018 12:09 am

Tgt Ion: 43 Resp: 9887

Ion	Ratio	Lower	Upper
43	100		
58	29.8	9.9	49.9
42	8.4	0.0	27.5

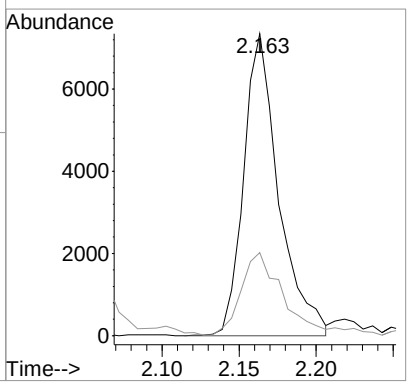


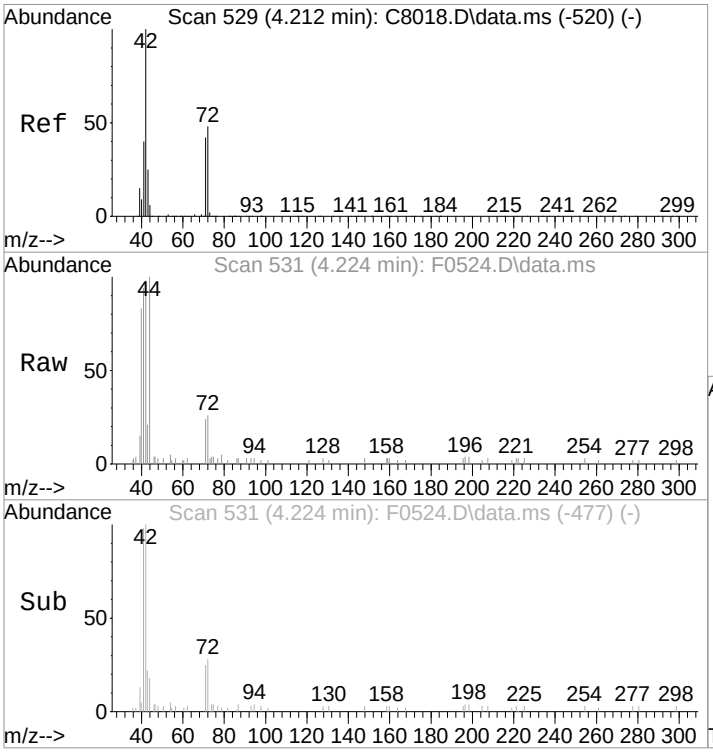


#16
2-Propanol
Concen: 31.08 ug/L
RT: 2.163 min Scan# 193
Delta R.T. -0.000 min
Lab File: F0524.D
Acq: 21 Sep 2018 12:09 am

Tgt Ion: 45 Resp: 11564

Ion	Ratio	Lower	Upper
45	100		
43	27.6	1.1	41.1

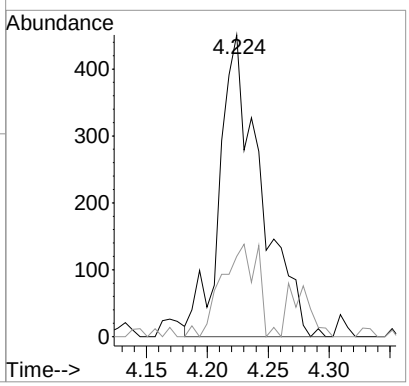


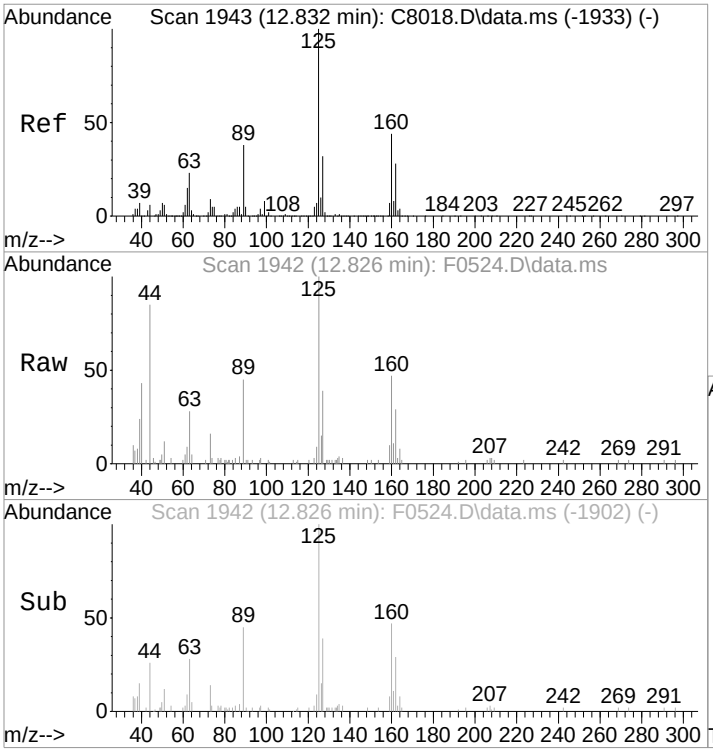


#38
Tetrahydrofuran
Concen: 0.64 ug/L
RT: 4.224 min Scan# 531
Delta R.T. 0.013 min
Lab File: F0524.D
Acq: 21 Sep 2018 12:09 am

Tgt Ion: 42 Resp: 1057

Ion	Ratio	Lower	Upper
42	100		
72	21.9	27.4	67.4#

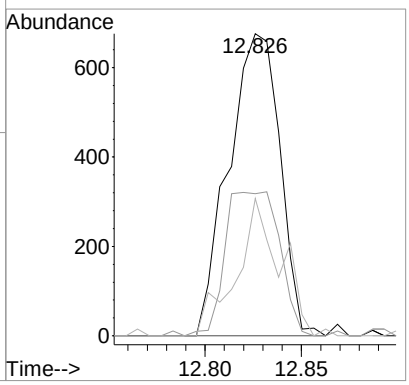




#111
Trielution Dichlorotoluene
Concen: 0.20 ug/L
RT: 12.826 min Scan# 1942
Delta R.T. -0.006 min
Lab File: F0524.D
Acq: 21 Sep 2018 12:09 am

Tgt Ion:125 Resp: 1253

Ion	Ratio	Lower	Upper
125	100		
160	47.0	23.7	63.7
89	45.4	17.9	57.9



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0525.D
Acq On : 21 Sep 2018 12:31 am
Operator : F.NAEGLER
Sample : R1808910-016|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Sep 22 14:40:23 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

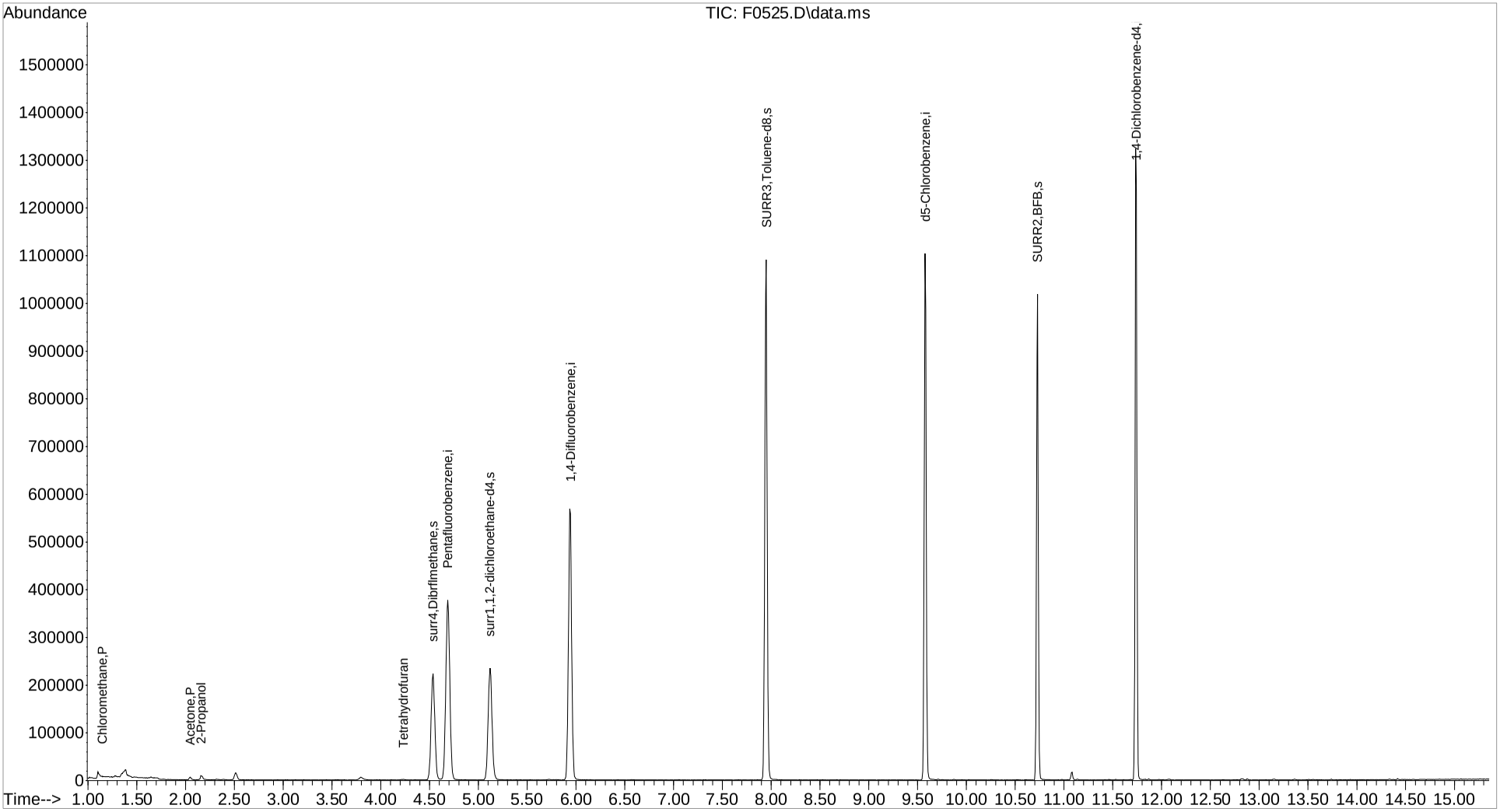
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	375502	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.943	114	546228	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	475848	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	255691	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	170126	46.60	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.20%			
47) surr1,1,2-dichloroetha...	5.120	65	233589	52.67	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.34%			
64) SURR3,Toluene-d8	7.949	98	661404	47.16	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.32%			
69) SURR2,BFB	10.729	95	235613	43.53	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 87.06%			
Target Compounds						Qvalue
3) Chloromethane	1.145	50	1421	0.29	ug/L	95
15) Acetone	2.048	43	5643	2.63	ug/L	100
16) 2-Propanol	2.157	45	7983	21.17	ug/L	77
38) Tetrahydrofuran	4.230	42	894	0.53	ug/L #	46

(#) = qualifier out of range (m) = manual integration (+) = signals summed

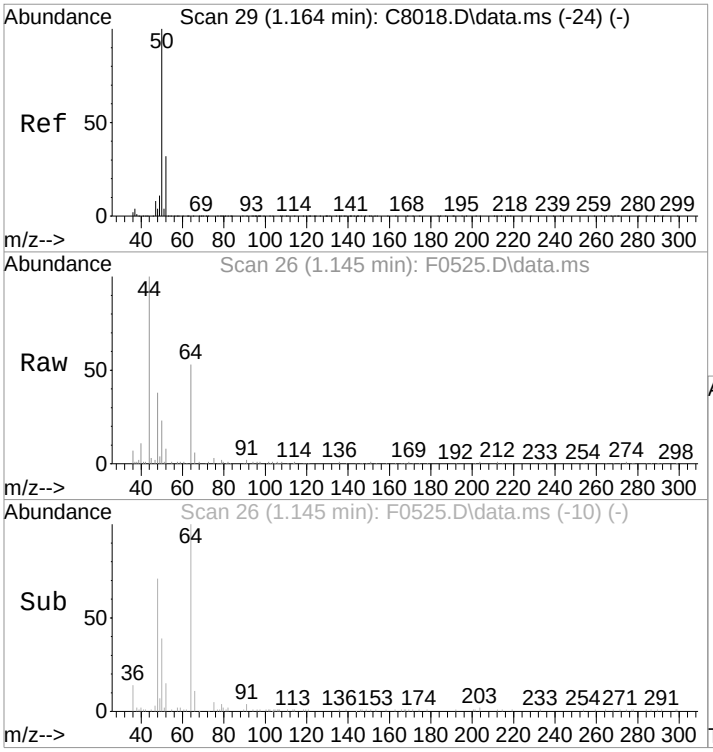
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0525.D
Acq On : 21 Sep 2018 12:31 am
Operator : F.NAEGLER
Sample : R1808910-016|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Sep 22 14:40:23 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



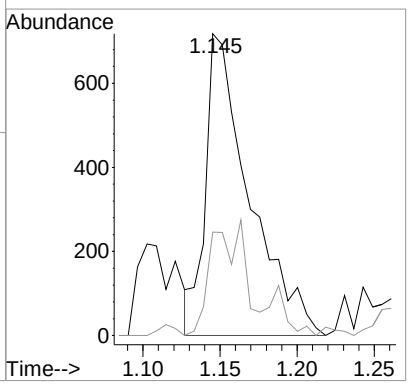
1st FN 09/22/18
2nd 09/23/18

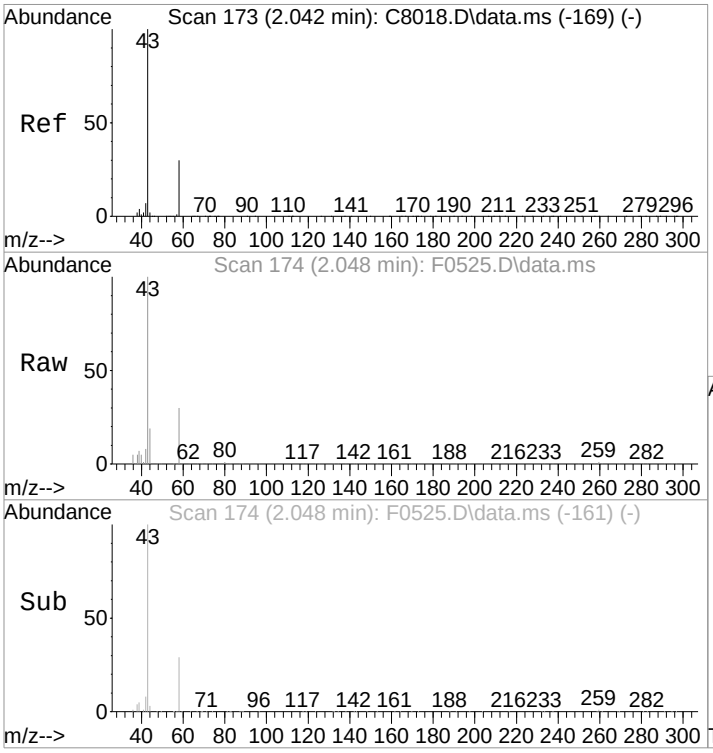


#3
Chloromethane
Concen: 0.29 ug/L
RT: 1.145 min Scan# 26
Delta R.T. -0.018 min
Lab File: F0525.D
Acq: 21 Sep 2018 12:31 am

Tgt Ion: 50 Resp: 1421

Ion	Ratio	Lower	Upper
50	100		
52	34.3	11.7	51.7

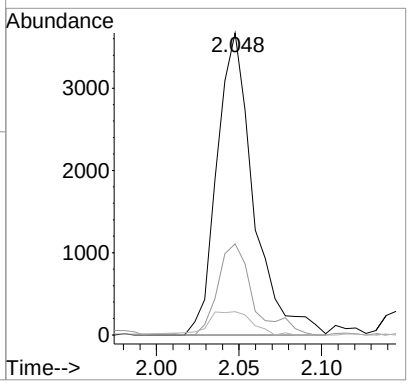


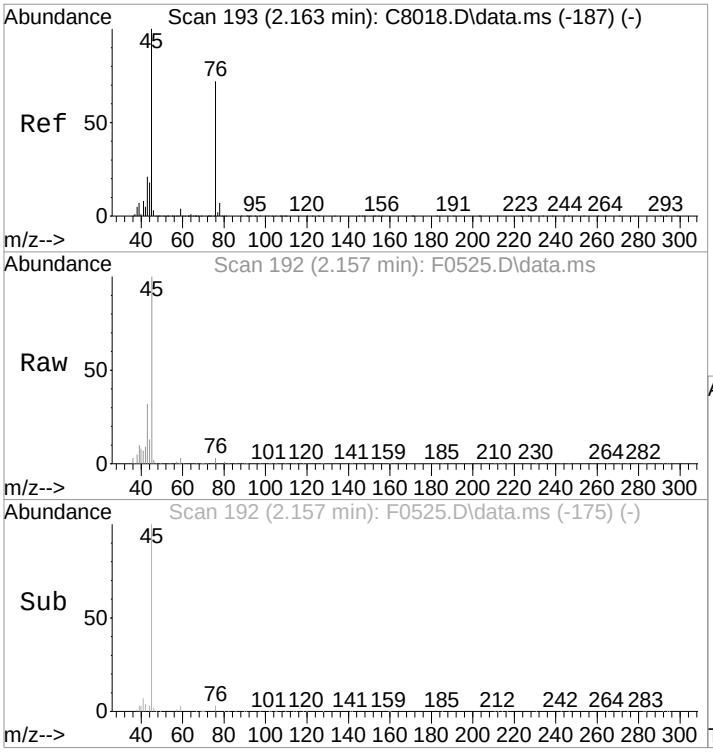


#15
Acetone
Concen: 2.63 ug/L
RT: 2.048 min Scan# 174
Delta R.T. 0.007 min
Lab File: F0525.D
Acq: 21 Sep 2018 12:31 am

Tgt Ion: 43 Resp: 5643

Ion	Ratio	Lower	Upper
43	100		
58	30.1	9.9	49.9
42	7.7	0.0	27.5

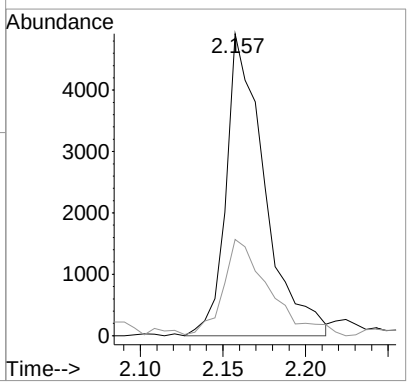


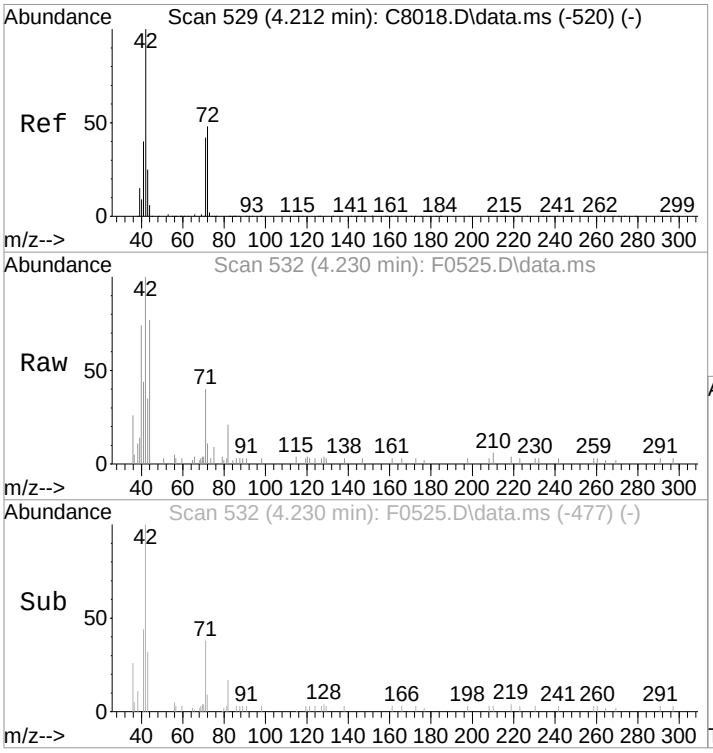


#16
2-Propanol
Concen: 21.17 ug/L
RT: 2.157 min Scan# 192
Delta R.T. -0.006 min
Lab File: F0525.D
Acq: 21 Sep 2018 12:31 am

Tgt Ion: 45 Resp: 7983

Ion	Ratio	Lower	Upper
45	100		
43	31.9	1.1	41.1

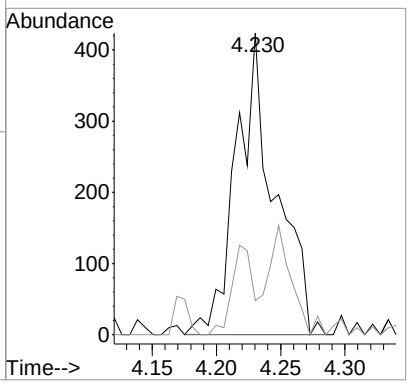




#38
Tetrahydrofuran
Concen: 0.53 ug/L
RT: 4.230 min Scan# 532
Delta R.T. 0.019 min
Lab File: F0525.D
Acq: 21 Sep 2018 12:31 am

Tgt Ion: 42 Resp: 894

Ion	Ratio	Lower	Upper
42	100		
72	11.3	27.4	67.4#

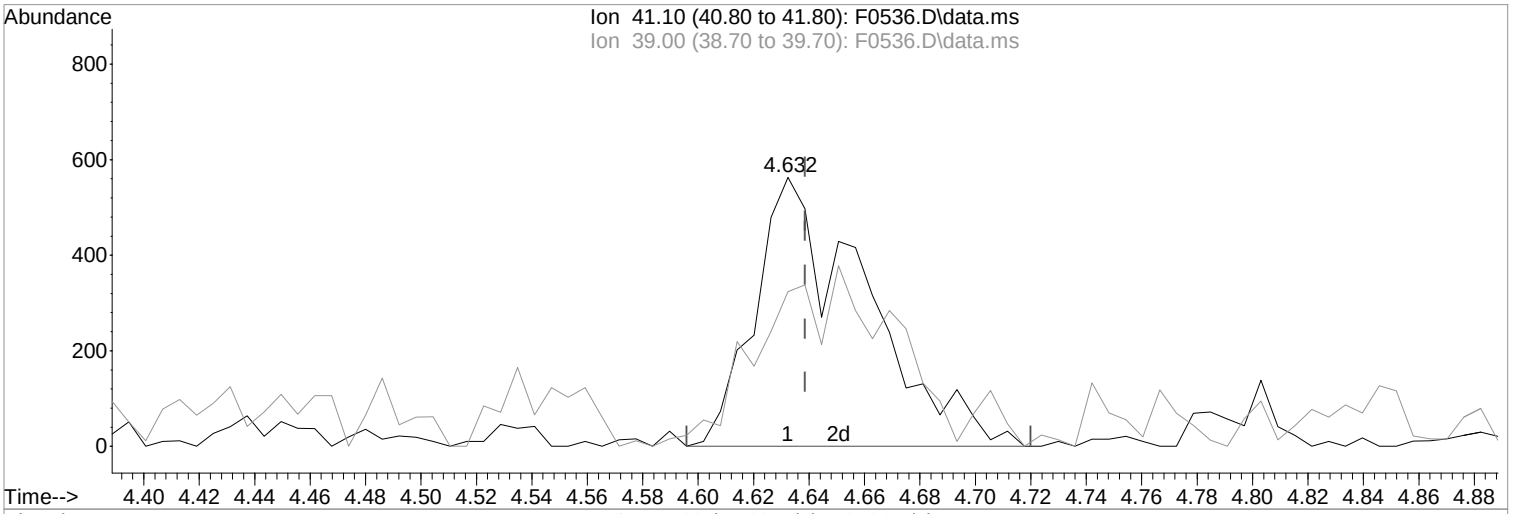


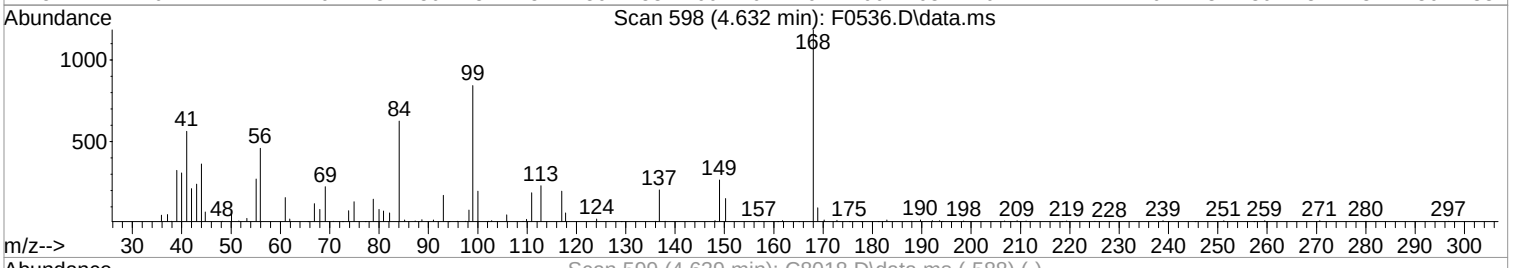
1st FW 09/22/18
2nd WR 09/23/18

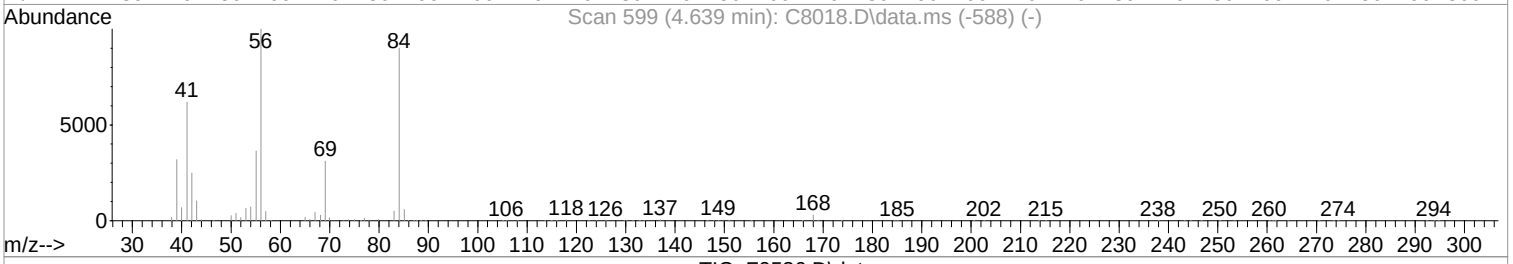
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0536.D
Acq On : 21 Sep 2018 4:37 am
Operator : F.NAEGLER
Sample : R1808910-017|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 10:17:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration







TIC: F0536.D\data.ms

(43) Cyclohexane (P)

4.632min (-0.006) 0.47 ug/L m

response 1563

Ion	Exp%	Act%
41.10	100	100
39.00	51.60	57.55
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

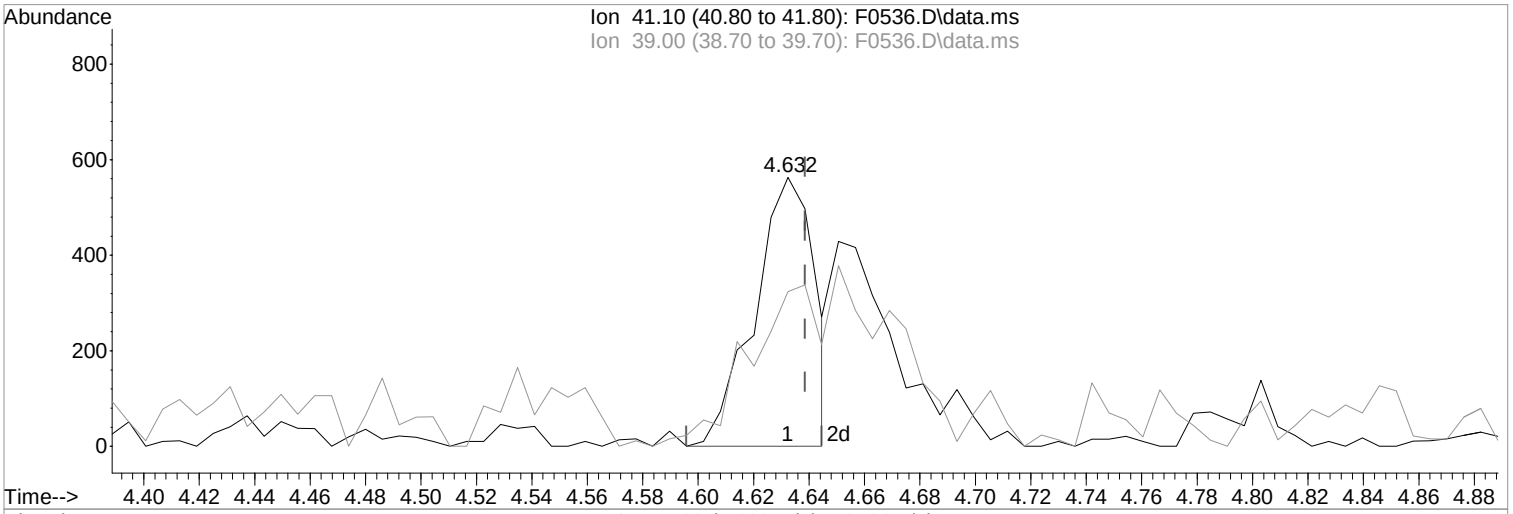
09/22/18

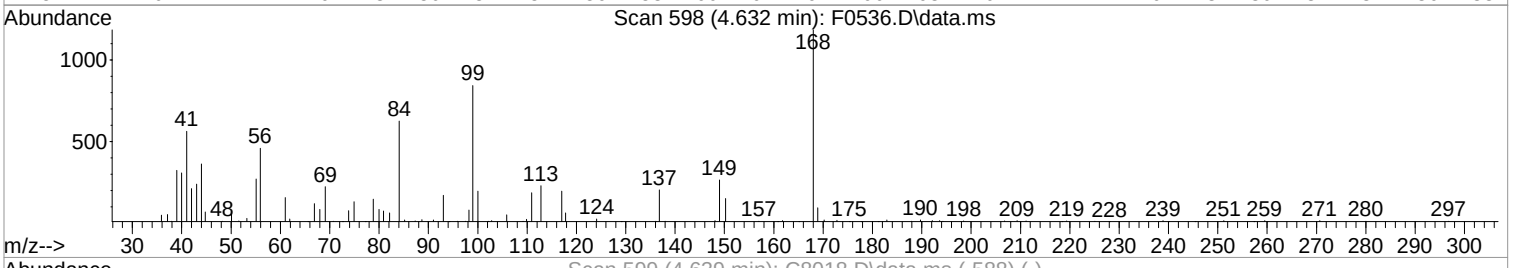
1st FW 09/22/18
2nd WR 09/23/18

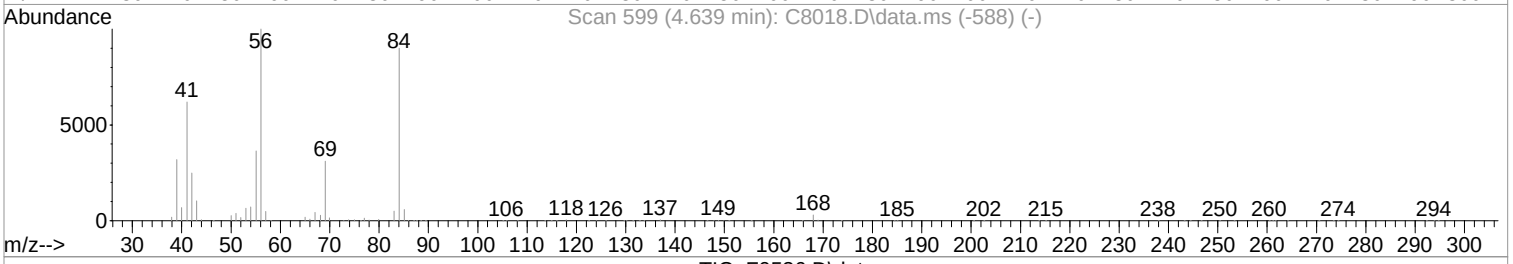
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0536.D
Acq On : 21 Sep 2018 4:37 am
Operator : F.NAEGLER
Sample : R1808910-017|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 21 10:17:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration







TIC: F0536.D\data.ms

(43) Cyclohexane (P)

4.632min (-0.006) 0.26 ug/L

response 851

Ion	Exp%	Act%
41.10	100	100
39.00	51.60	57.55
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/22/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0536.D
Acq On : 21 Sep 2018 4:37 am
Operator : F.NAEGLER
Sample : R1808910-017|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 22 14:59:39 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

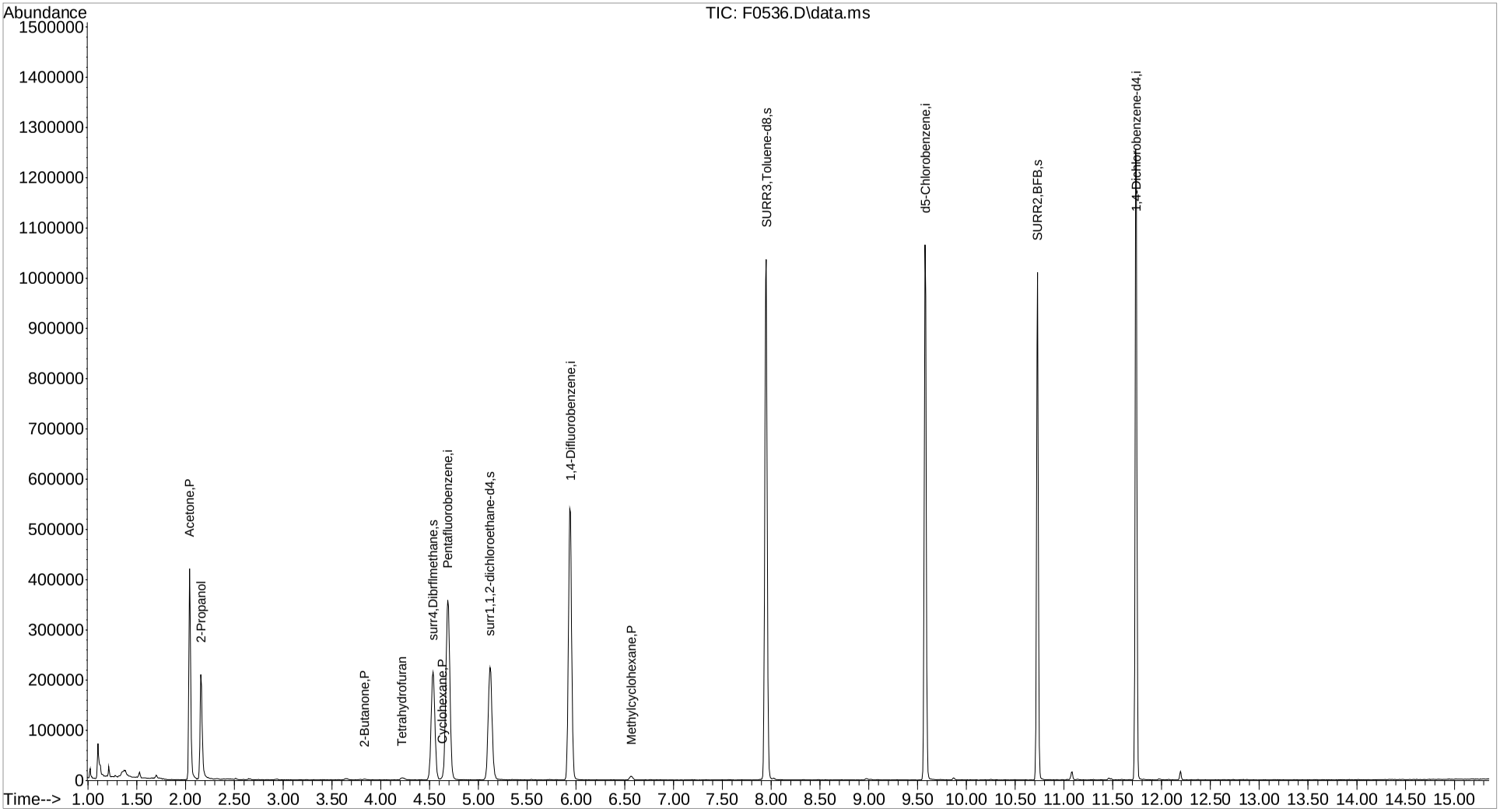
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	362026	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.943	114	522519	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	458127	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	248264	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	166904	47.79	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.58%			
47) surr1,1,2-dichloroetha...	5.120	65	226114	53.30	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.60%			
64) SURR3,Toluene-d8	7.949	98	648251	48.32	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.64%			
69) SURR2,BFB	10.729	95	234726	45.33	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 90.66%			
Target Compounds						Qvalue
15) Acetone	2.041	43	363168	175.60	ug/L	96
16) 2-Propanol	2.157	45	188422	518.28	ug/L	85
34) 2-Butanone	3.834	43	2473	0.87	ug/L	81
38) Tetrahydrofuran	4.218	42	3846	2.38	ug/L	74
43) Cyclohexane	4.632	41	1563m	0.47	ug/L	
54) Methylcyclohexane	6.571	55	2701	0.65	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

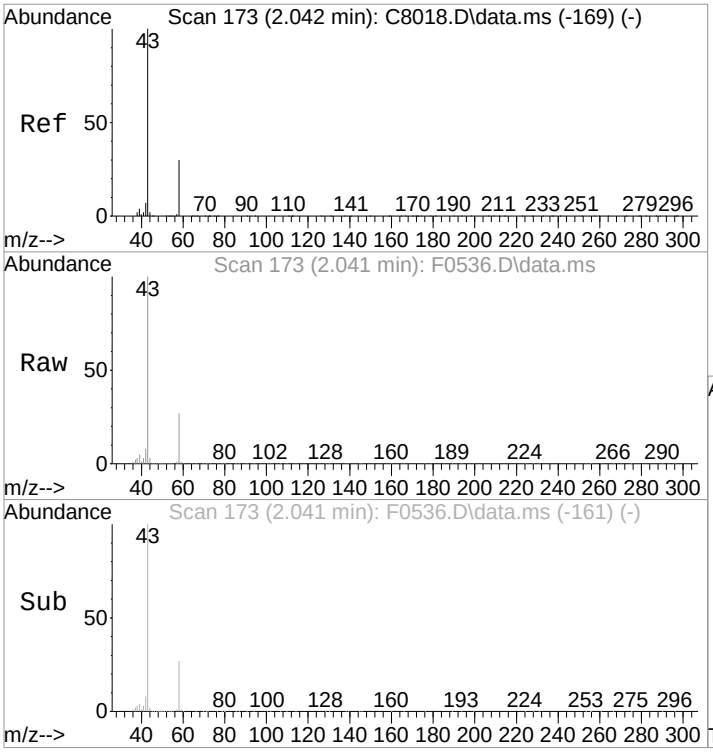
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0536.D
Acq On : 21 Sep 2018 4:37 am
Operator : F.NAEGLER
Sample : R1808910-017|1.0 Inst : MSVOA14
Misc : UNICORN 6691 T4
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 22 14:59:39 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



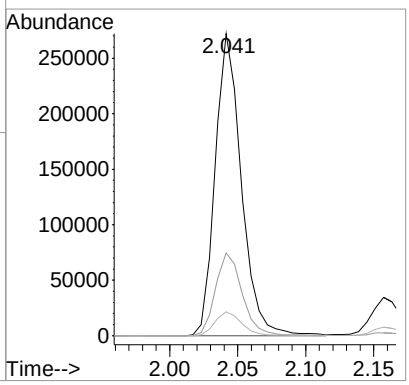
1st FJ 09/22/18
2nd 09/23/18

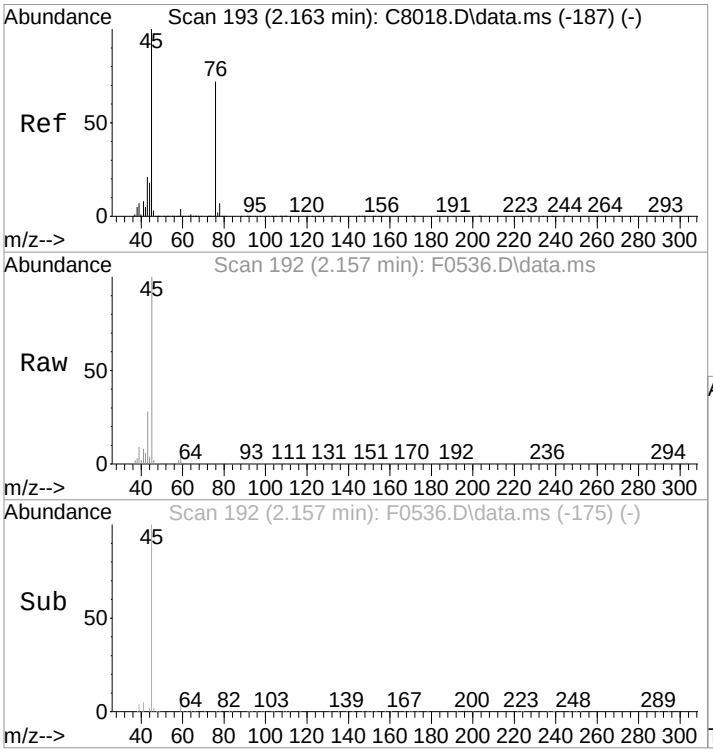


#15
Acetone
Concen: 175.60 ug/L
RT: 2.041 min Scan# 173
Delta R.T. 0.000 min
Lab File: F0536.D
Acq: 21 Sep 2018 4:37 am

Tgt Ion: 43 Resp: 363168

Ion	Ratio	Lower	Upper
43	100		
58	27.5	9.9	49.9
42	7.9	0.0	27.5

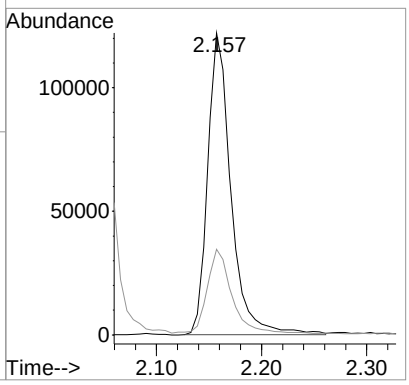


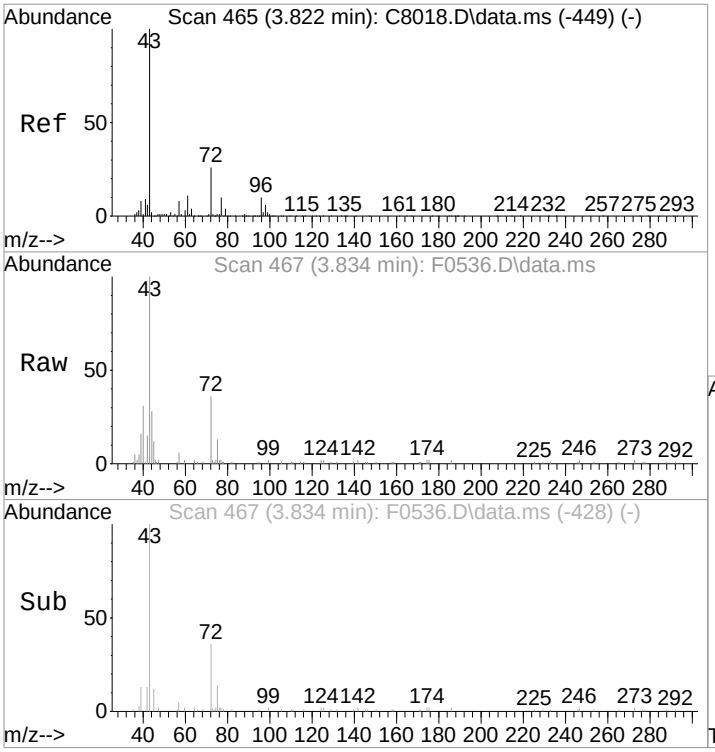


#16
2-Propanol
Concen: 518.28 ug/L
RT: 2.157 min Scan# 192
Delta R.T. -0.006 min
Lab File: F0536.D
Acq: 21 Sep 2018 4:37 am

Tgt Ion: 45 Resp: 188422

Ion	Ratio	Lower	Upper
45	100		
43	28.3	1.1	41.1

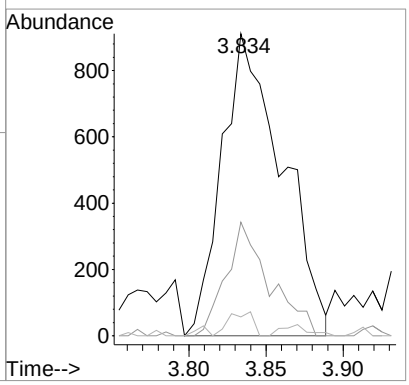


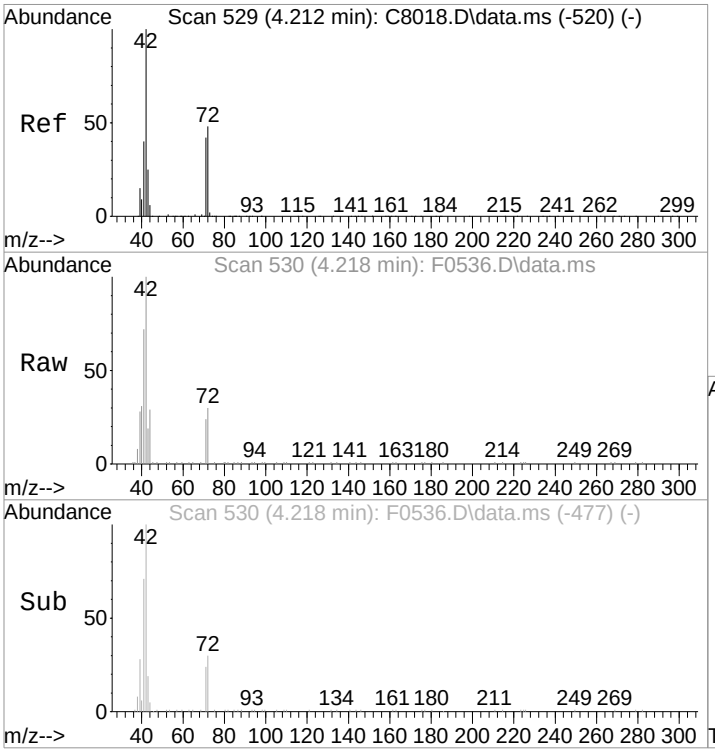


#34
2-Butanone
Concen: 0.87 ug/L
RT: 3.834 min Scan# 467
Delta R.T. 0.012 min
Lab File: F0536.D
Acq: 21 Sep 2018 4:37 am

Tgt Ion: 43 Resp: 2473

Ion	Ratio	Lower	Upper
43	100		
72	37.7	5.8	45.8
57	6.3	0.0	28.4

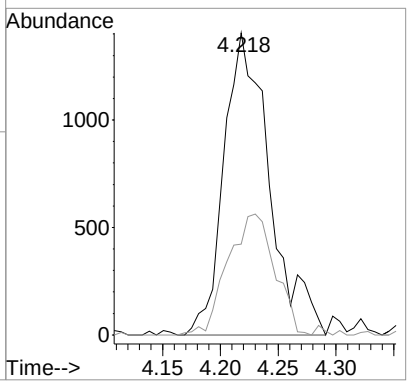


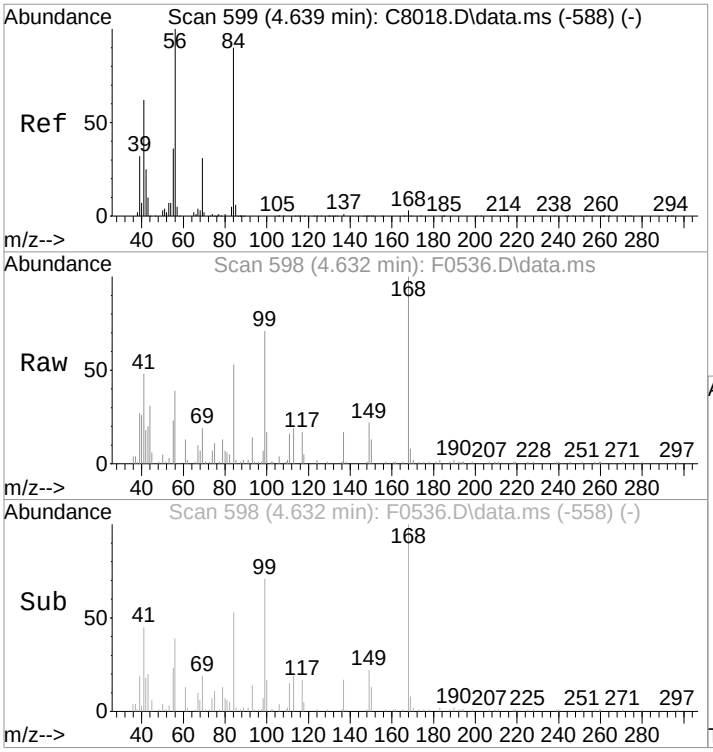


#38
Tetrahydrofuran
Concen: 2.38 ug/L
RT: 4.218 min Scan# 530
Delta R.T. 0.007 min
Lab File: F0536.D
Acq: 21 Sep 2018 4:37 am

Tgt Ion: 42 Resp: 3846

Ion	Ratio	Lower	Upper
42	100		
72	30.0	27.4	67.4

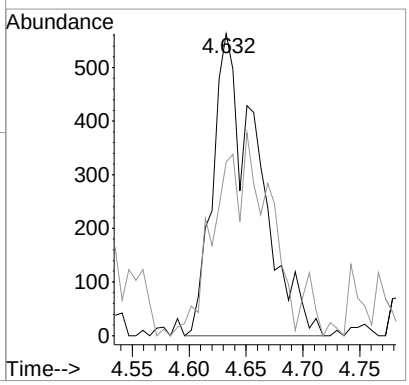


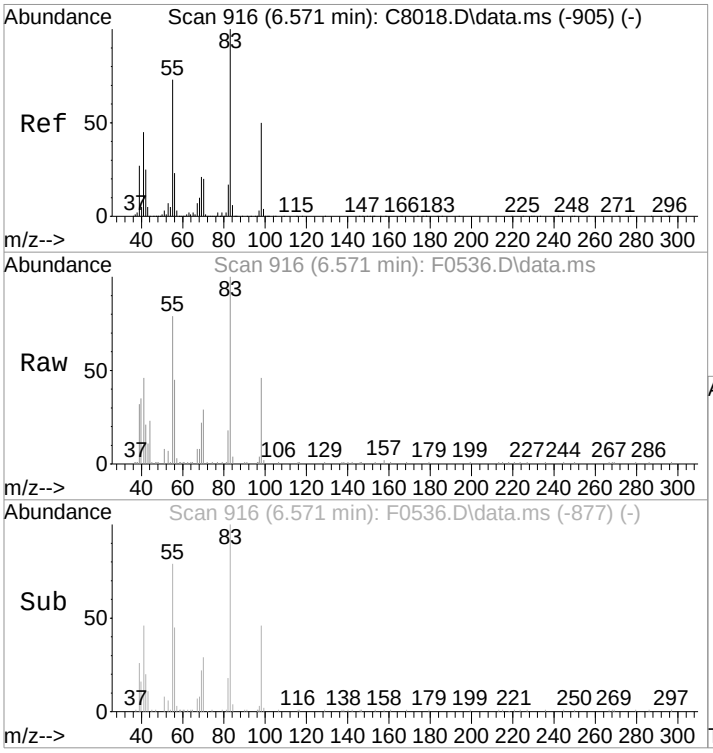


#43
Cyclohexane
Concen: 0.47 ug/L m
RT: 4.632 min Scan# 598
Delta R.T. -0.006 min
Lab File: F0536.D
Acq: 21 Sep 2018 4:37 am

Tgt Ion: 41 Resp: 1563

Ion	Ratio	Lower	Upper
41	100		
39	57.5	31.6	71.6

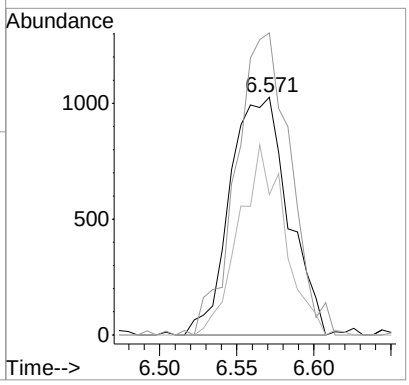




#54
Methylcyclohexane
Concen: 0.65 ug/L
RT: 6.571 min Scan# 916
Delta R.T. -0.000 min
Lab File: F0536.D
Acq: 21 Sep 2018 4:37 am

Tgt Ion: 55 Resp: 2701

Ion	Ratio	Lower	Upper
55	100		
83	127.0	116.2	156.2
98	59.0	48.0	88.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0522.D
Acq On : 20 Sep 2018 11:24 pm
Operator : F.NAEGLER
Sample : MBLK Inst : MSVOA14
Misc :
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Sep 22 14:32:36 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

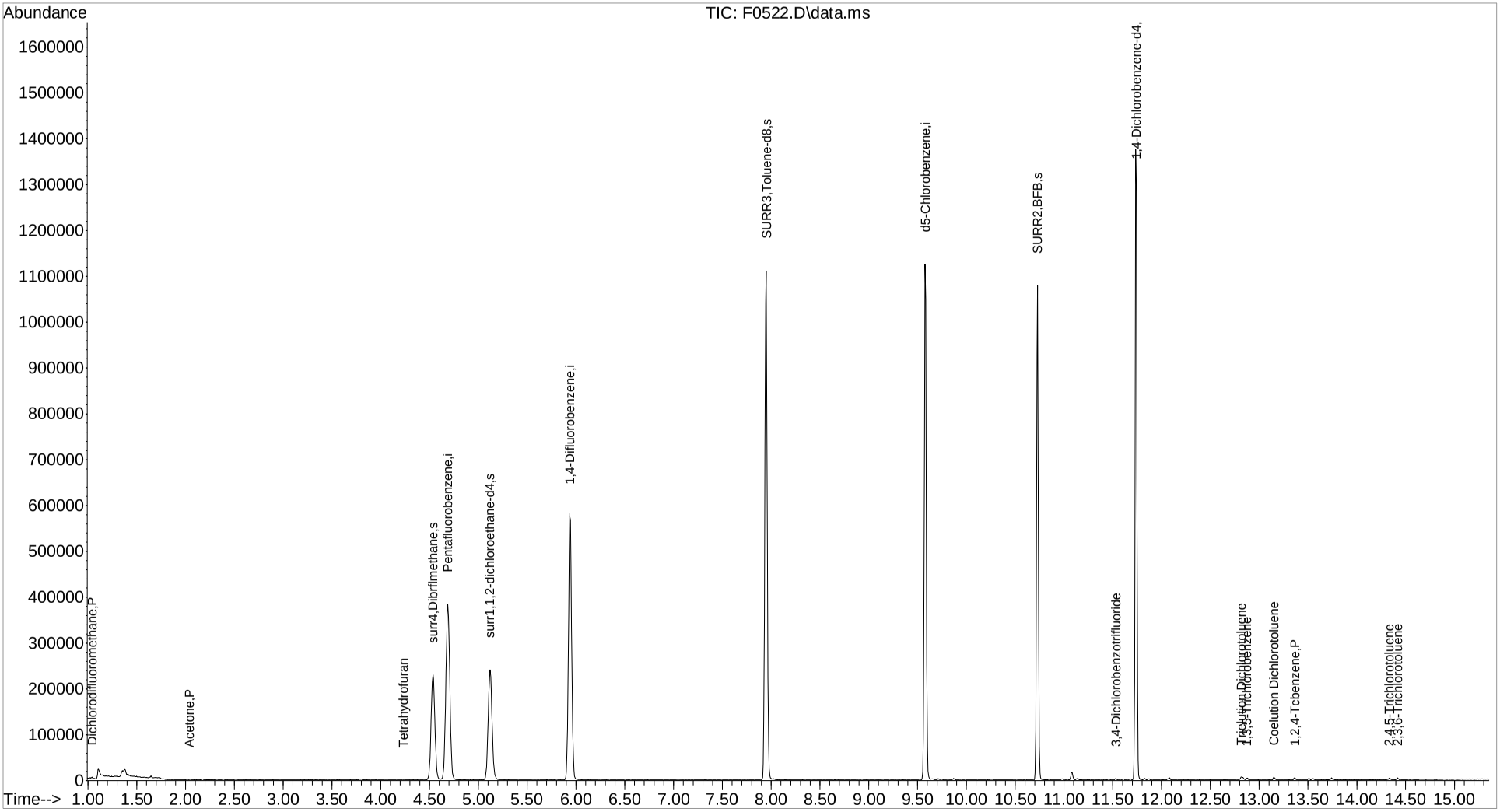
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	381685	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	554561	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.577	117	486606	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	261520	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	178138	48.06	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.12%			
47) surr1,1,2-dichloroetha...	5.120	65	239249	53.13	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.26%			
64) SURR3,Toluene-d8	7.949	98	690031	48.46	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.92%			
69) SURR2,BFB	10.729	95	252334	45.92	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 91.84%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.042	85	1344	0.29	ug/L	80
15) Acetone	2.041	43	805	0.37	ug/L	90
38) Tetrahydrofuran	4.230	42	760	0.45	ug/L #	70
101) 3,4-Dichlorobenzotrifl...	11.533	214	755	0.21	ug/L	95
111) Trielution Dichlorotol...	12.814	125	2693	0.42	ug/L	90
112) 1,3,5-Trichlorobenzene	12.875	180	1186	0.22	ug/L	91
113) Coelution Dichlorotoluene	13.149	125	2093	0.30	ug/L	84
114) 1,2,4-Tcbenzene	13.362	180	1344	0.24	ug/L #	81
118) 2,4,5-Trichlorotoluene	14.332	159	951	0.27	ug/L	81
119) 2,3,6-Trichlorotoluene	14.417	159	866	0.27	ug/L	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

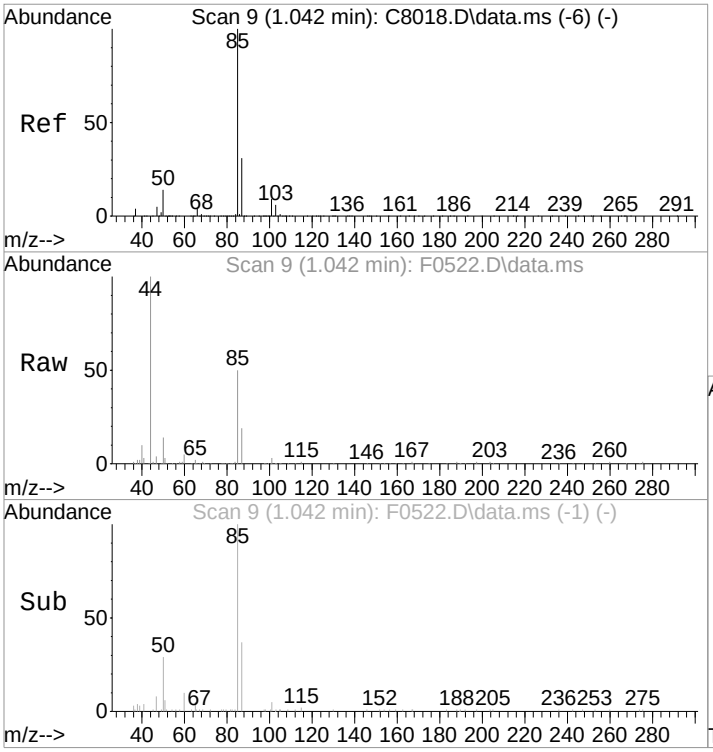
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0522.D
Acq On : 20 Sep 2018 11:24 pm
Operator : F.NAEGLER
Sample : MBLK Inst : MSVOA14
Misc :
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Sep 22 14:32:36 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



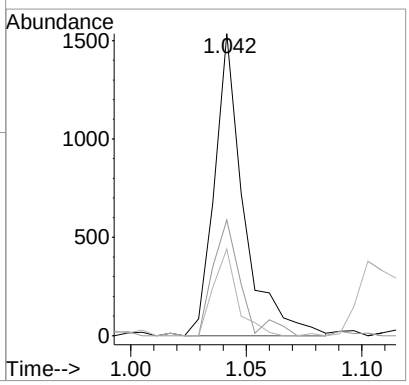
1st 09/22/18
2nd 09/23/18

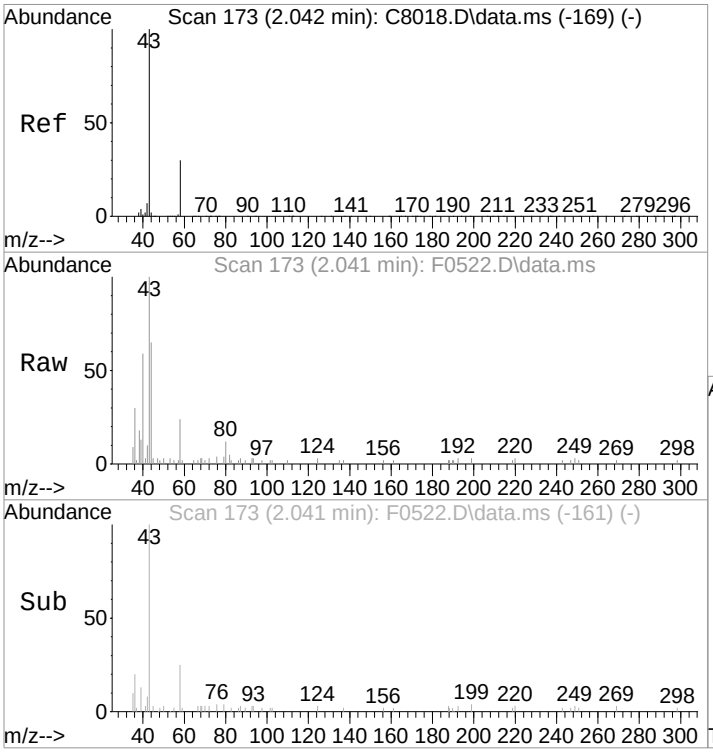


#2
Dichlorodifluoromethane
Concen: 0.29 ug/L
RT: 1.042 min Scan# 9
Delta R.T. -0.000 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion: 85 Resp: 1344

Ion	Ratio	Lower	Upper
85	100		
87	38.4	11.3	51.3
50	28.7	0.0	33.6

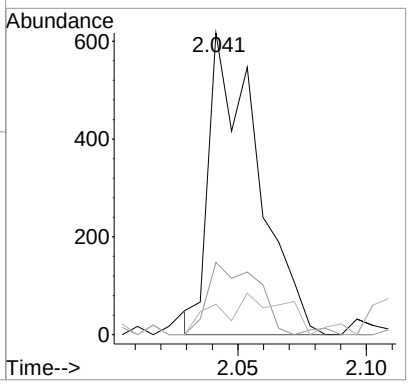


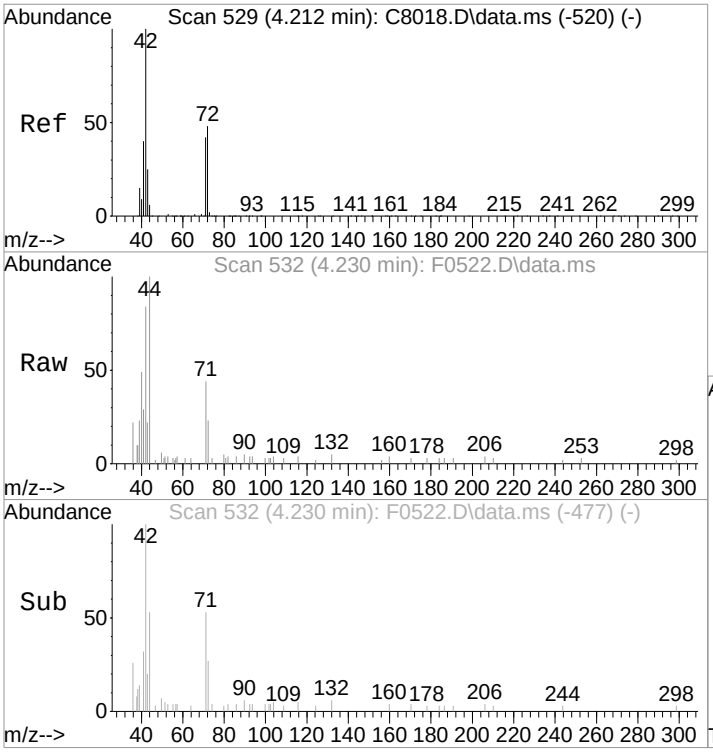


#15
Acetone
Concen: 0.37 ug/L
RT: 2.041 min Scan# 173
Delta R.T. 0.000 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion: 43 Resp: 805

Ion	Ratio	Lower	Upper
43	100		
58	24.0	9.9	49.9
42	10.0	0.0	27.5

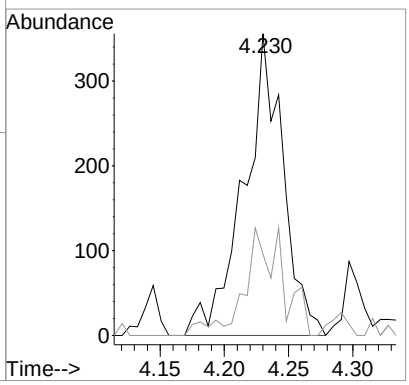


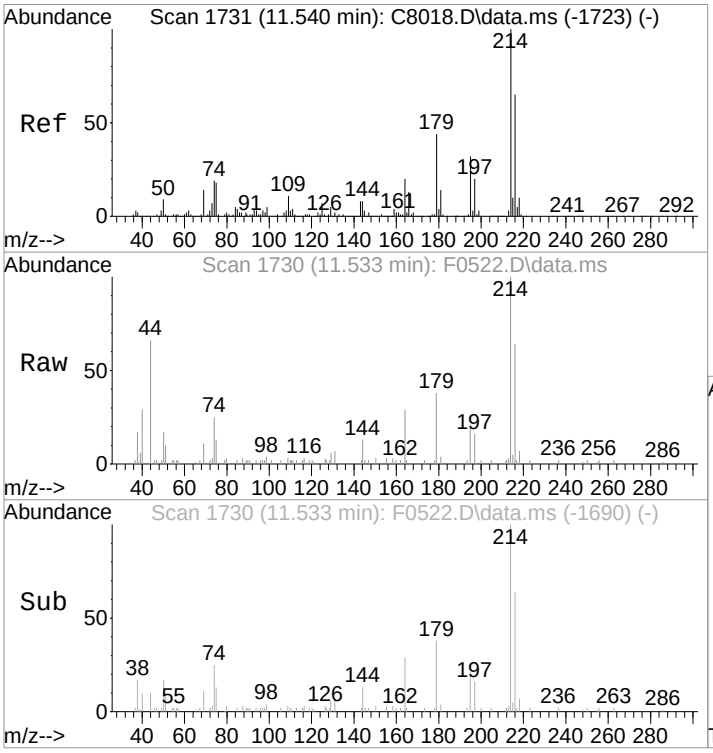


#38
Tetrahydrofuran
Concen: 0.45 ug/L
RT: 4.230 min Scan# 532
Delta R.T. 0.019 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion: 42 Resp: 760

Ion	Ratio	Lower	Upper
42	100		
72	27.0	27.4	67.4#

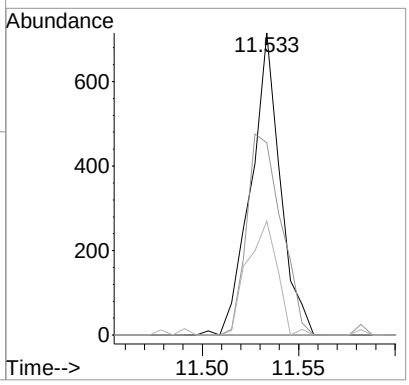


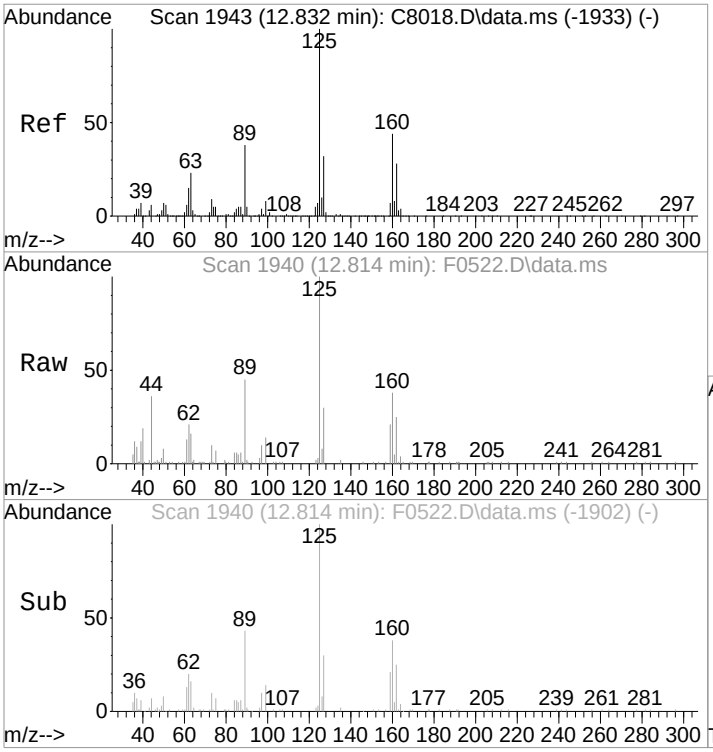


#101
3,4-Dichlorobenzotrifluoride
Concen: 0.21 ug/L
RT: 11.533 min Scan# 1730
Delta R.T. -0.006 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion:214 Resp: 755

Ion	Ratio	Lower	Upper
214	100		
216	63.6	44.6	84.6
179	37.8	23.8	63.8

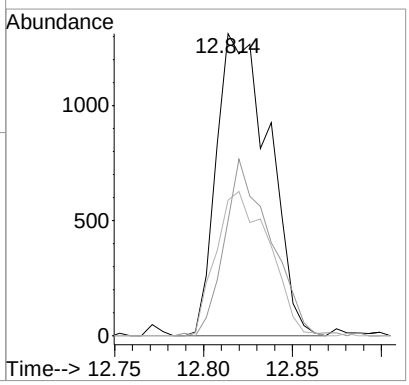


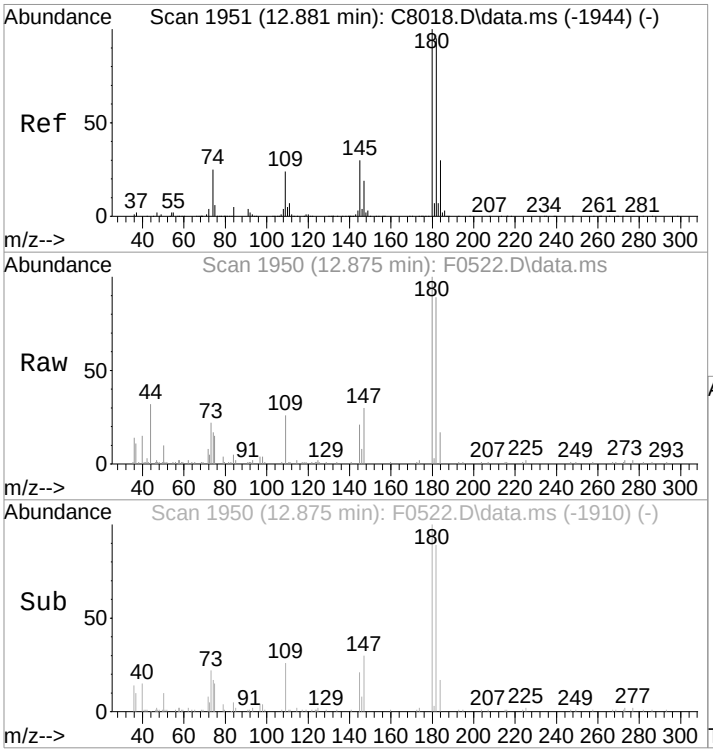


#111
Trielution Dichlorotoluene
Concen: 0.42 ug/L
RT: 12.814 min Scan# 1940
Delta R.T. -0.018 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion:125 Resp: 2693

Ion	Ratio	Lower	Upper
125	100		
160	38.1	23.7	63.7
89	44.9	17.9	57.9

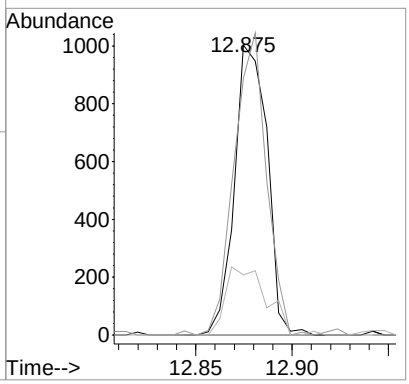


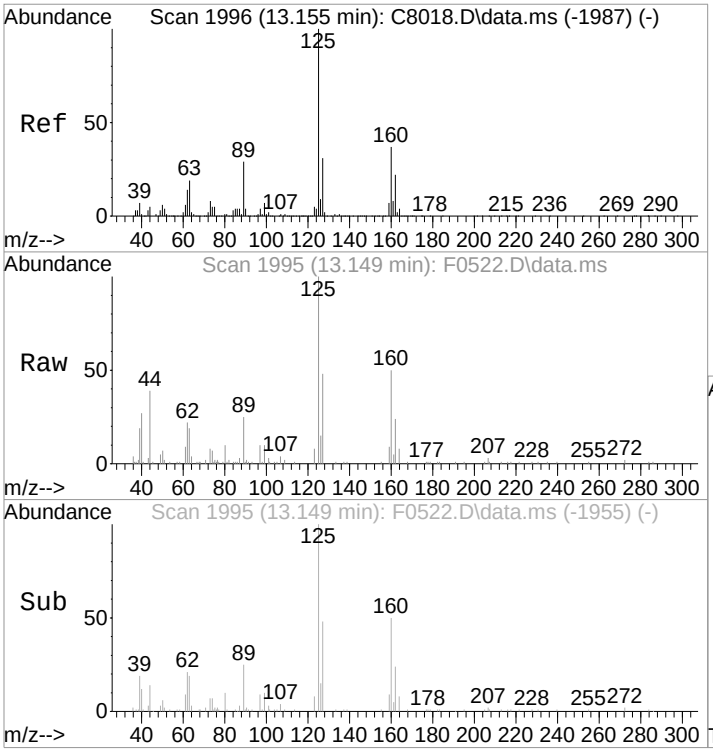


#112
1,3,5-Trichlorobenzene
Concen: 0.22 ug/L
RT: 12.875 min Scan# 1950
Delta R.T. -0.005 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion:180 Resp: 1186

Ion	Ratio	Lower	Upper
180	100		
182	88.6	75.5	115.5
145	20.7	9.6	49.6

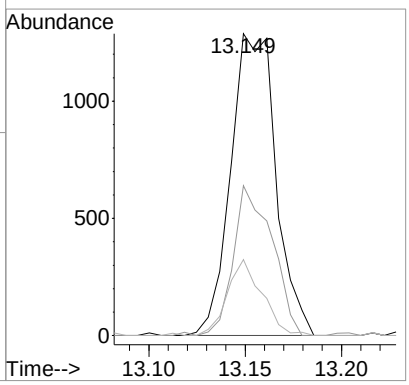


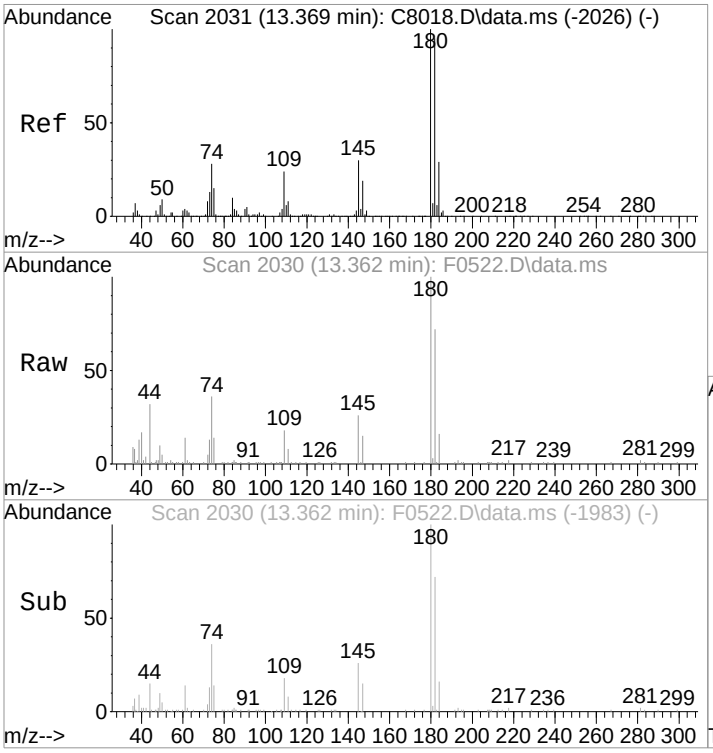


#113
Coelution Dichlorotoluene
Concen: 0.30 ug/L
RT: 13.149 min Scan# 1995
Delta R.T. -0.006 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion:125 Resp: 2093

Ion	Ratio	Lower	Upper
125	100		
160	49.7	16.6	56.6
89	25.2	9.2	49.2

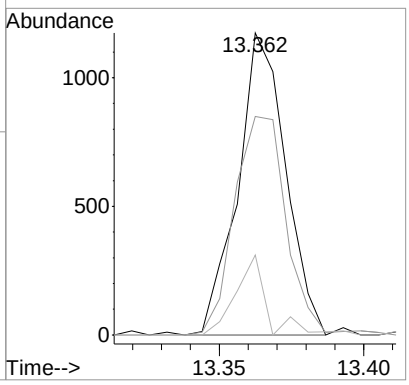


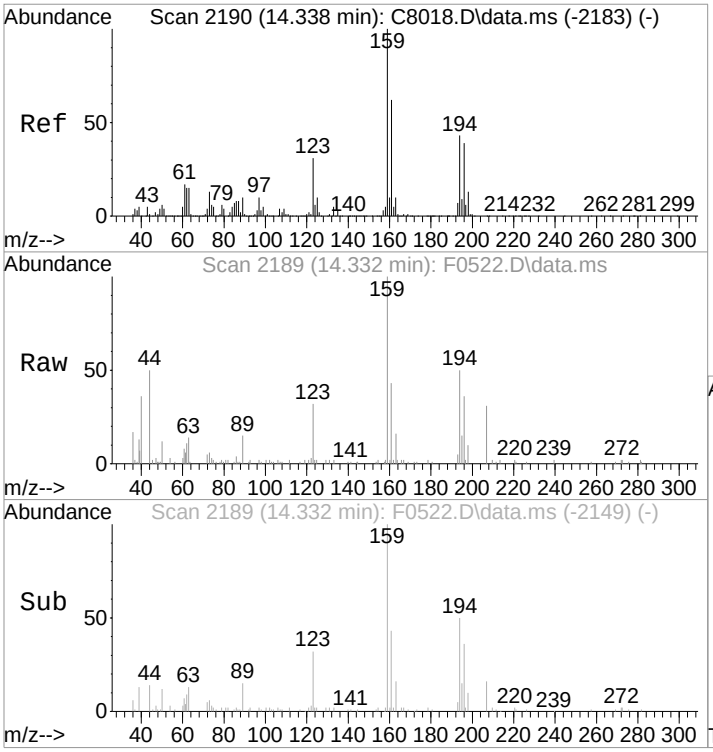


#114
1,2,4-Tcbenzene
Concen: 0.24 ug/L
RT: 13.362 min Scan# 2030
Delta R.T. -0.006 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion:180 Resp: 1344

Ion	Ratio	Lower	Upper
180	100		
182	72.3	75.2	115.2#
145	26.5	9.6	49.6

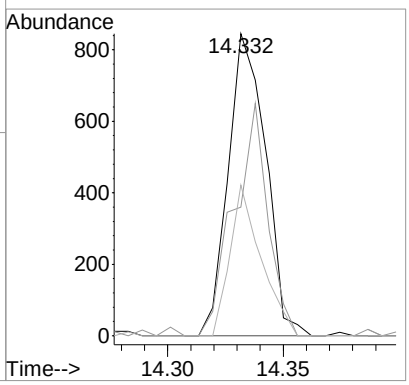


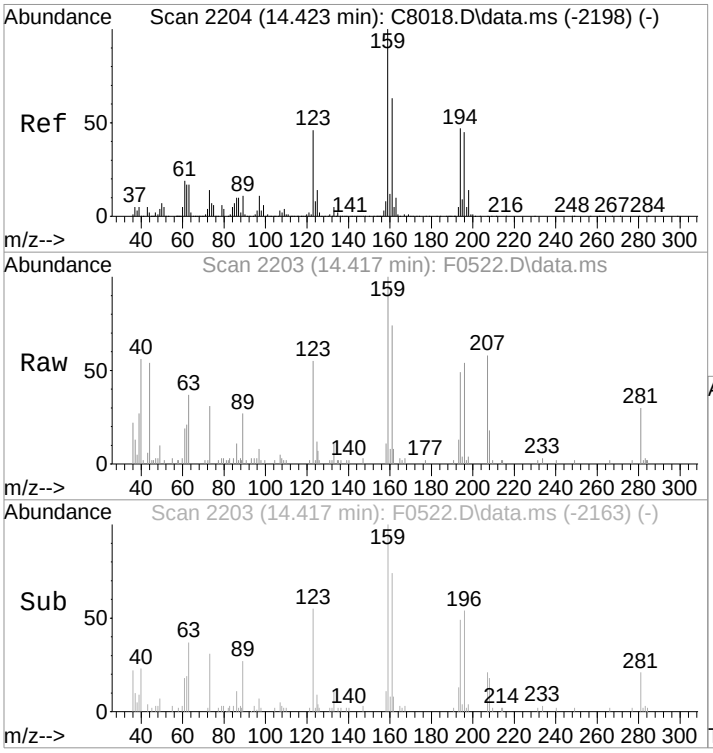


#118
2,4,5-Trichlorotoluene
Concen: 0.27 ug/L
RT: 14.332 min Scan# 2189
Delta R.T. -0.005 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion:159 Resp: 951

Ion	Ratio	Lower	Upper
159	100		
161	42.6	42.1	82.1
194	49.9	23.4	63.4

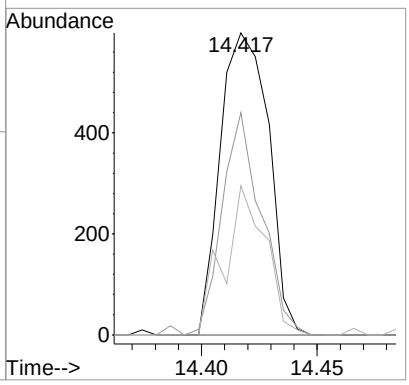




#119
2,3,6-Trichlorotoluene
Concen: 0.27 ug/L
RT: 14.417 min Scan# 2203
Delta R.T. -0.006 min
Lab File: F0522.D
Acq: 20 Sep 2018 11:24 pm

Tgt Ion:159 Resp: 866

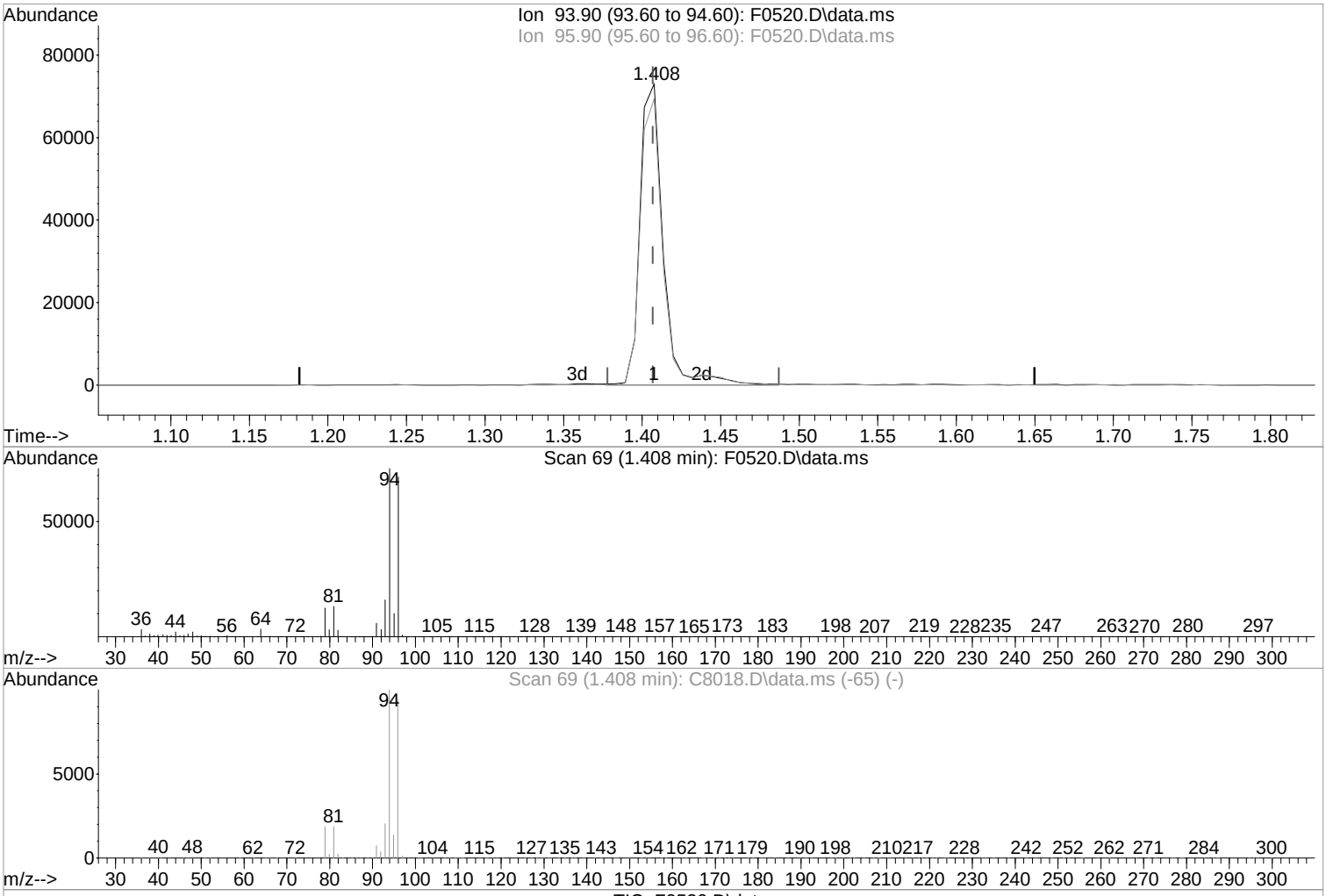
Ion	Ratio	Lower	Upper
159	100		
161	81.6	43.0	83.0
194	49.3	27.2	67.2



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0520.D
Acq On : 20 Sep 2018 10:39 pm
Operator : F.NAEGLER
Sample : LCS-ACIDIFIED Inst : MSVOA14
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 21 09:49:27 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



TIC: F0520.D\data.ms

(5) Bromomethane (P)

1.408min (+0.001) 14.01 ug/L m

response 74138

Ion	Exp%	Act%
93.90	100	100
95.90	93.70	95.05
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

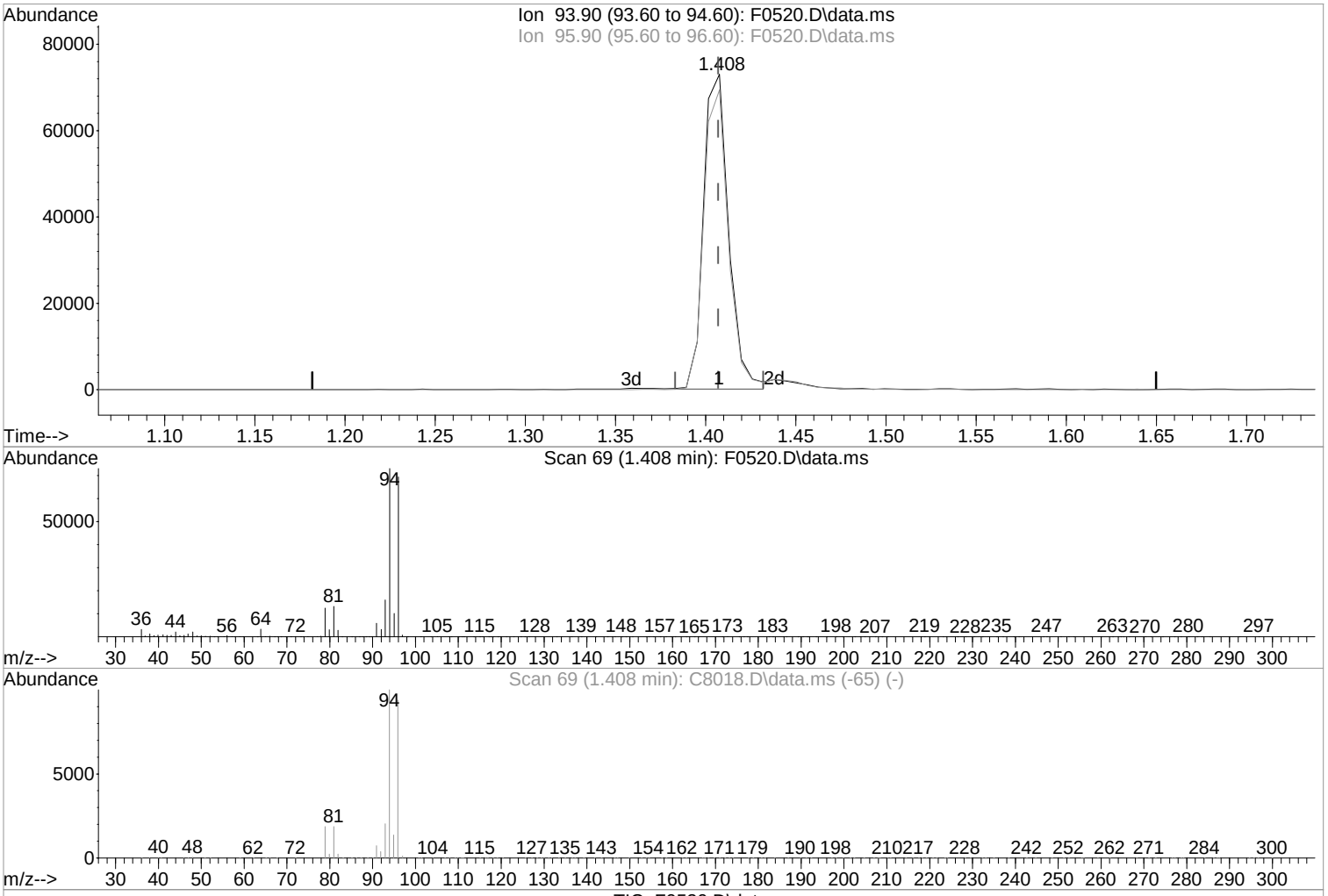
Poor integration.

09/21/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0520.D
Acq On : 20 Sep 2018 10:39 pm
Operator : F.NAEGLER
Sample : LCS-ACIDIFIED Inst : MSVOA14
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 21 09:49:27 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



TIC: F0520.D\data.ms

(5) Bromomethane (P)

1.408min (+0.001) 13.23 ug/L

response 70266

Ion	Exp%	Act%
93.90	100	100
95.90	93.70	95.05
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/21/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0520.D
Acq On : 20 Sep 2018 10:39 pm
Operator : F.NAEGLER
Sample : LCS-ACIDIFIED Inst : MSVOA14
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 21 09:49:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	403696	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.937	114	579698	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.577	117	512552	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.735	152	289612	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	194281	50.14	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.28%				
47) surr1,1,2-dichloroetha...	5.120	65	251197	53.37	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.74%				
64) SURR3,Toluene-d8	7.949	98	730311	49.07	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.14%				
69) SURR2,BFB	10.729	95	279572	48.67	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.34%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	115296	23.71	ug/L		97
3) Chloromethane	1.152	50	113686	21.30	ug/L		99
4) Vinyl Chloride	1.212	62	112984	22.00	ug/L		97
5) Bromomethane	1.408	94	74138m	14.01	ug/L		
6) Chloroethane	1.475	64	70192	19.73	ug/L		98
7) Freon 21	1.603	67	165324	18.79	ug/L		100
8) Trichlorofluoromethane	1.645	101	150717	22.02	ug/L		96
9) Diethyl Ether	1.847	59	77507	22.64	ug/L		99
10) Freon 123a	1.847	67	93112	20.29	ug/L		92
11) Freon 123	1.889	83	139950	27.24	ug/L		99
12) Acrolein	1.926	56	28844	26.59	ug/L		97
13) 1,1-Diclethene	2.005	96	73163	20.80	ug/L		91
14) Freon 113	2.011	101	71347	20.69	ug/L		98
15) Acetone	2.042	43	45838	19.88	ug/L		96
16) 2-Propanol	2.164	45	148114	365.36	ug/L		92
17) Iodomethane	2.121	142	41604	10.01	ug/L		94
18) Carbon Disulfide	2.170	76	158904	15.80	ug/L		99
19) Acetonitrile	2.255	40	42045	111.17	ug/L	#	87
20) Allyl Chloride	2.285	76	39149	22.68	ug/L	#	82
21) Methyl Acetate	2.310	43	81304	19.71	ug/L		99
22) Methylene Chloride	2.389	84	85929	19.20	ug/L		99
23) TBA	2.505	59	262666	382.17	ug/L		79
24) Acrylonitrile	2.602	53	240134	114.63	ug/L		97
25) Methyl-t-Butyl Ether	2.657	73	261662	19.38	ug/L		99
26) trans-1,2-Dichloroethene	2.639	96	83564	20.81	ug/L		94
27) 1,1-Diclethane	3.066	63	155116	21.21	ug/L		96
28) Vinyl Acetate	3.151	86	18278	22.15	ug/L	#	83
29) DIPE	3.182	45	260441	21.26	ug/L		97
30) 2-Chloro-1,3-Butadiene	3.176	53	113470	18.74	ug/L		95
31) ETBE	3.639	59	212503	17.83	ug/L		98
32) 2,2-Dichloropropane	3.779	77	89859	14.70	ug/L		99
33) cis-1,2-Dichloroethene	3.785	96	94512	20.01	ug/L		93
34) 2-Butanone	3.828	43	65833	20.70	ug/L		97
35) Propionitrile	3.889	54	100363	112.72	ug/L		95
36) Bromochloromethane	4.120	130	62940	20.33	ug/L		95
37) Methacrylonitrile	4.120	67	47847	21.49	ug/L		88
38) Tetrahydrofuran	4.218	42	40487	22.49	ug/L		88
39) Chloroform	4.279	83	157713	21.32	ug/L		97
40) 1,1,1-Trichloroethane	4.547	97	125757	20.04	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0520.D
Acq On : 20 Sep 2018 10:39 pm
Operator : F.NAEGLER
Sample : LCS-ACIDIFIED Inst : MSVOA14
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 21 09:49:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) TAME	5.510	73	213931	18.01	ug/L		95
43) Cyclohexane	4.639	41	77408	21.13	ug/L		99
45) Carbontetrachloride	4.846	117	102549	25.37	ug/L		94
46) 1,1-Dichloropropene	4.852	75	113809	21.68	ug/L		98
48) Benzene	5.218	78	332977	22.55	ug/L		98
49) 1,2-Dichloroethane	5.260	62	140693	23.51	ug/L		97
50) Iso-Butyl Alcohol	5.260	43	117250	454.63	ug/L		98
51) n-Heptane	5.809	43	85960	19.22	ug/L		96
52) 1-Butanol	6.370	56	168145	1155.96	ug/L		95
53) Trichloroethene	6.297	130	91490	21.29	ug/L		97
54) Methylcyclohexane	6.565	55	98242	21.24	ug/L		89
55) 1,2-Diclpropane	6.608	63	89046	22.37	ug/L		99
56) Dibromomethane	6.766	93	63215	22.16	ug/L		95
57) 1,4-Dioxane	6.846	88	38580	507.11	ug/L		98
58) Methyl Methacrylate	6.888	69	77710	23.56	ug/L		95
59) Bromodichloromethane	7.022	83	108426	22.24	ug/L		99
60) 2-Nitropropane	7.333	41	43686	45.98	ug/L		88
62) cis-1,3-Dichloropropene	7.626	75	125270	20.84	ug/L		98
63) 4-Methyl-2-pentanone	7.864	43	115709	23.80	ug/L		99
65) Toluene	8.028	91	367676	22.48	ug/L		99
66) trans-1,3-Dichloropropene	8.327	75	108319	20.86	ug/L		96
67) Ethyl Methacrylate	8.504	69	129286	23.14	ug/L		93
68) 1,1,2-Trichloroethane	8.528	97	89474	23.12	ug/L		98
71) Tetrachloroethene	8.674	164	74289	24.02	ug/L		93
72) 2-Hexanone	8.870	43	86982	23.94	ug/L		97
73) 1,3-Dichloropropane	8.711	76	155402	23.17	ug/L		95
74) Dibromochloromethane	8.961	129	83532	23.24	ug/L		98
75) N-Butyl Acetate	9.059	43	143193	19.32	ug/L		98
76) 1,2-Dibromoethane	9.059	107	92011	22.87	ug/L		99
77) 3-Chlorobenzotrifluoride	9.650	180	115204	21.93	ug/L		98
78) Chlorobenzene	9.607	112	240708	22.10	ug/L		98
79) 4-Chlorobenzotrifluoride	9.711	180	102880	21.78	ug/L		99
80) 1,1,1,2-Tetrachloroethane	9.705	131	80623	23.38	ug/L		99
81) Ethylbenzene	9.747	106	126979	22.56	ug/L		97
82) (m+p)Xylene	9.869	106	316539	44.97	ug/L		97
83) o-Xylene	10.247	106	153818	22.51	ug/L		96
84) Styrene	10.266	104	261634	22.61	ug/L		95
85) Bromoform	10.412	173	55919	25.06	ug/L		99
86) 2-Chlorobenzotrifluoride	10.516	180	117430	22.80	ug/L		98
87) Isopropylbenzene	10.607	105	392827	22.25	ug/L		99
88) Cyclohexanone	10.656	55	105509	114.73	ug/L		91
89) trans-1,4-Dichloro-2-B...	10.930	53	20384	19.75	ug/L	#	73
91) 1,1,2,2-Tetrachloroethane	10.881	83	137104	26.58	ug/L		99
92) Bromobenzene	10.851	156	110317	23.13	ug/L	#	87
93) 1,2,3-Trichloropropane	10.906	110	45646	24.58	ug/L	#	87
94) n-Propylbenzene	10.979	91	457033	21.85	ug/L		99
95) 2-Chlorotoluene	11.034	91	275388	22.21	ug/L		100
96) 3-Chlorotoluene	11.089	91	266254	22.05	ug/L		96
97) 4-Chlorotoluene	11.131	91	320182	21.31	ug/L		98
98) 1,3,5-Trimethylbenzene	11.143	105	330019	22.13	ug/L		97
99) tert-Butylbenzene	11.418	119	280340	21.45	ug/L		98
100) 1,2,4-Trimethylbenzene	11.460	105	335926	22.67	ug/L		99
101) 3,4-Dichlorobenzotrifl...	11.534	214	92890	22.78	ug/L		96
102) sec-Butylbenzene	11.607	105	413170	21.68	ug/L		100
103) p-Isopropyltoluene	11.735	119	354878	21.99	ug/L		99
104) 1,3-Dclbenz	11.680	146	199886	22.02	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0520.D
Acq On : 20 Sep 2018 10:39 pm
Operator : F.NAEGLER
Sample : LCS-ACIDIFIED Inst : MSVOA14
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 21 09:49:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

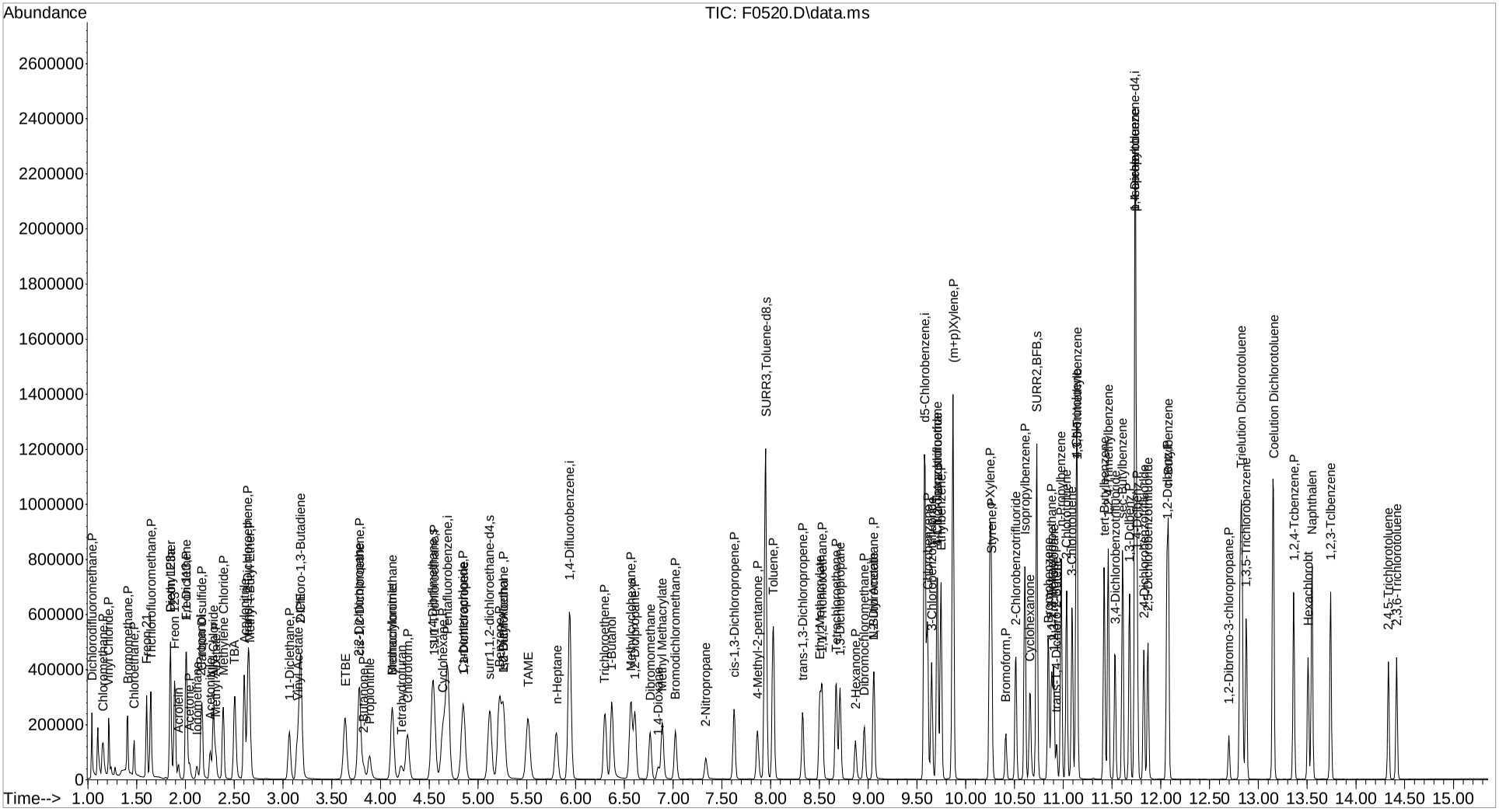
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,4-Dclbenz	11.759	146	203067	21.10	ug/L	98
106) 2,4-Dichlorobenzotrifl...	11.826	214	86983	23.01	ug/L	96
107) 2,5-Dichlorobenzotrifl...	11.869	214	96046	22.33	ug/L	97
108) n-Butylbenzene	12.076	91	317182	21.58	ug/L	99
109) 1,2-Dclbenz	12.064	146	198252	21.81	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.698	157	27866	25.06	ug/L	90
111) Trielution Dichlorotol...	12.826	125	457062	63.72	ug/L	97
112) 1,3,5-Trichlorobenzene	12.875	180	134469	22.21	ug/L	98
113) Coelution Dichlorotoluene	13.155	125	340213	43.35	ug/L	95
114) 1,2,4-Tcbenzene	13.363	180	144971	23.15	ug/L	98
115) Hexachlorobt	13.509	225	61558	25.27	ug/L	99
116) Naphthalen	13.552	128	437041	22.96	ug/L	100
117) 1,2,3-Tclbenzene	13.741	180	146938	23.79	ug/L	99
118) 2,4,5-Trichlorotoluene	14.332	159	79508	20.55	ug/L	98
119) 2,3,6-Trichlorotoluene	14.417	159	76125	21.07	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0520.D
Acq On : 20 Sep 2018 10:39 pm
Operator : F.NAEGLER
Sample : LCS-ACIDIFIED Inst : MSVOA14
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 21 09:49:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

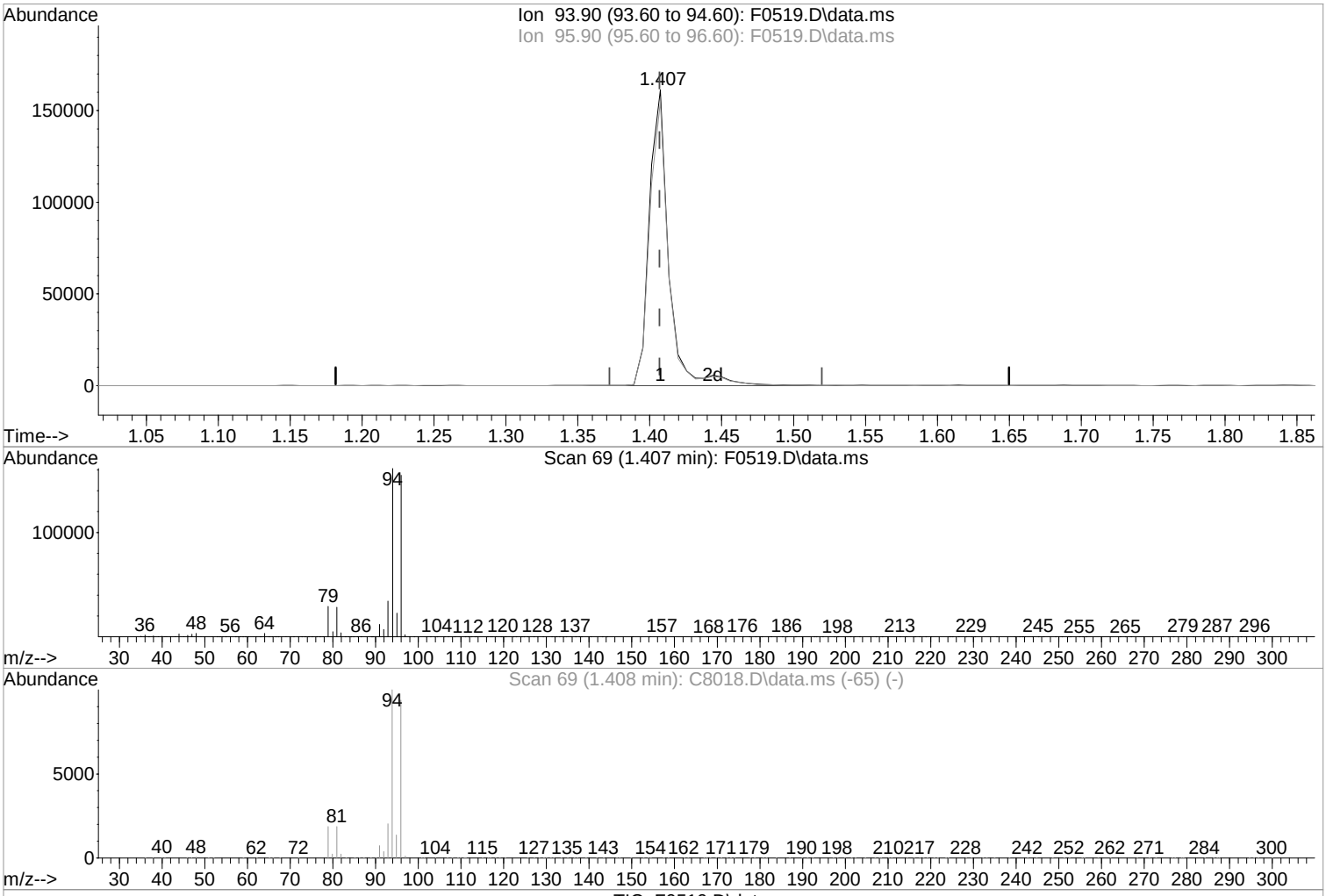


1st 09/22/18
2nd 09/23/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:46:52 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



TIC: F0519.D\data.ms

(5) Bromomethane (P)

1.407min (+0.000) 31.45 ug/L m

response 151730

Ion	Exp%	Act%
93.90	100	100
95.90	93.70	95.99
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

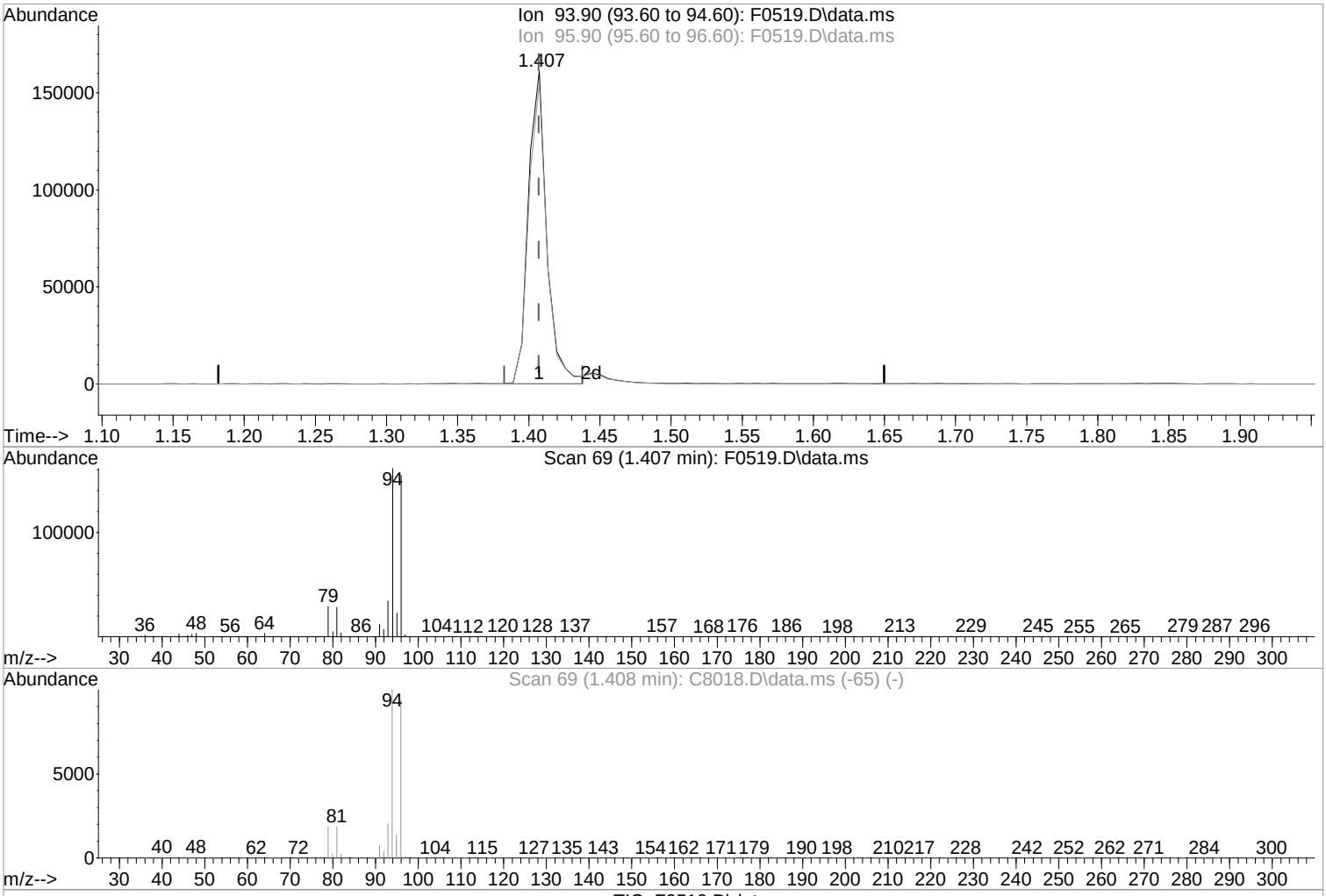
Poor integration.

09/21/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:46:52 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



TIC: F0519.D\data.ms

(5) Bromomethane (P)

1.407min (+0.000) 29.58 ug/L

response 144094

Ion	Exp%	Act%
93.90	100	100
95.90	93.70	95.99
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/21/18

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:47:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)	
1	i	Pentafluorobenzene	50.000	50.000	0.0	129	0.00	
2	P	Dichlorodifluoromethane	50.000	48.645	2.7	122	0.00	
3	P	Chloromethane	50.000	47.416	5.2	126	-0.01	
4	P	Vinyl Chloride	50.000	47.453	5.1	120	0.00	
5	P	Bromomethane	50.000	31.453	37.1#	85	0.00	(1)
6	P	Chloroethane	50.000	49.691	0.6	131	0.00	
7		Freon 21	50.000	48.049	3.9	114	0.00	
8	P	Trichlorofluoromethane	50.000	46.272	7.5	123	0.00	
9		Diethyl Ether	50.000	49.831	0.3	126	0.00	
10		Freon 123a	50.000	49.238	1.5	120	0.00	
11		Freon 123	50.000	49.069	1.9	117	0.00	
12		Acrolein	250.000	192.954	22.8#	94	0.00	NT
13		1,1-Diclethene	50.000	47.076	5.8	126	0.00	
14	P	Freon 113	50.000	46.532	6.9	124	0.00	
15	P	Acetone	50.000	49.411	1.2	121	0.00	
16		2-Propanol	1000.000	933.450	6.7	106	0.00	
17		Iodomethane	50.000	31.881	36.2#	71	0.00	(2)
18	P	Carbon Disulfide	50.000	39.937	20.1#	102	0.00	(3)
19		Acetonitrile	250.000	250.029	-0.0	114	0.00	
20		Allyl Chloride	50.000	41.995	16.0	109	0.00	
21	P	Methyl Acetate	50.000	49.193	1.6	120	0.00	
22	P	Methylene Chloride	50.000	43.628	12.7	121	0.00	
23		TBA	1000.000	870.083	13.0	99	0.00	
24		Acrylonitrile	250.000	256.833	-2.7	122	0.00	
25	P	Methyl-t-Butyl Ether	50.000	43.535	12.9	107	0.00	
26	P	trans-1,2-Dichloroethene	50.000	45.768	8.5	119	0.00	
27	P	1,1-Diclethane	50.000	46.449	7.1	119	0.00	
28		Vinyl Acetate	50.000	39.440	21.1#	87	0.00	(4)
29		DIPE	50.000	51.474	-2.9	131	0.00	
30		2-Chloro-1,3-Butadiene	50.000	48.252	3.5	122	0.00	
31		ETBE	50.000	45.485	9.0	112	0.00	
32		2,2-Dichloropropane	50.000	33.543	32.9#	85	0.00	NT
33	P	cis-1,2-Dichloroethene	50.000	45.475	9.0	118	0.00	
34	P	2-Butanone	50.000	48.561	2.9	124	0.00	
35		Propionitrile	250.000	258.059	-3.2	121	0.00	
36		Bromochloromethane	50.000	46.623	6.8	117	0.00	
37		Methacrylonitrile	50.000	49.126	1.7	118	0.00	
38		Tetrahydrofuran	50.000	50.905	-1.8	129	0.00	
39	P	Chloroform	50.000	47.425	5.2	118	0.00	
40	P	1,1,1-Trichloroethane	50.000	45.187	9.6	114	0.00	
41		TAME	50.000	44.024	12.0	105	0.00	
42	i	1,4-Difluorobenzene	50.000	50.000	0.0	117	0.00	
43	P	Cyclohexane	50.000	51.131	-2.3	115	0.00	
44	s	surr4,Dibrflmethane	50.000	49.409	1.2	115	0.00	
45	P	Carbontetrachloride	50.000	55.074	-10.1	121	0.00	
46		1,1-Dichloropropene	50.000	49.236	1.5	118	0.00	
47	s	surr1,1,2-dichloroethane-d4	50.000	52.538	-5.1	122	0.00	
48	P	Benzene	50.000	50.365	-0.7	118	0.00	
49	P	1,2-Dichloroethane	50.000	53.950	-7.9	125	0.00	
50		Iso-Butyl Alcohol	1000.000	1097.581	-9.8	109	0.00	
51		n-Heptane	50.000	43.604	12.8	110	0.00	

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:47:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52		1-Butanol	2500.000	2904.294	-16.2	118	0.00
53	P	Trichloroethene	50.000	47.967	4.1	114	0.00
54	P	Methylcyclohexane	50.000	50.130	-0.3	111	0.00
55	P	1,2-Diclpropane	50.000	51.659	-3.3	116	0.00
56		Dibromomethane	50.000	50.163	-0.3	112	0.00
57		1,4-Dioxane	1000.000	1124.052	-12.4	114	0.00
58		Methyl Methacrylate	50.000	54.128	-8.3	112	0.00
59	P	Bromodichloromethane	50.000	52.486	-5.0	113	0.00
60		2-Nitropropane	100.000	109.805	-9.8	114	0.00
61		2-Chloroethylvinyl Ether	50.000	41.675	16.7	84	0.00
62	P	cis-1,3-Dichloropropene	50.000	50.004	-0.0	105	0.00
63	P	4-Methyl-2-pentanone	50.000	57.132	-14.3	119	0.00
64	s	SURR3,Toluene-d8	50.000	48.917	2.2	117	0.00
65	P	Toluene	50.000	51.220	-2.4	119	0.00
66	P	trans-1,3-Dichloropropene	50.000	48.582	2.8	102	0.00
67		Ethyl Methacrylate	50.000	53.407	-6.8	110	0.00
68	P	1,1,2-Trichloroethane	50.000	52.907	-5.8	119	0.00
69	s	SURR2,BFB	50.000	50.750	-1.5	120	0.00
70	i	d5-Chlorobenzene	50.000	50.000	0.0	119	0.00
71	P	Tetrachloroethene	50.000	52.682	-5.4	129	0.00
72	P	2-Hexanone	50.000	56.615	-13.2	120	0.00
73		1,3-Dichloropropane	50.000	52.370	-4.7	120	0.00
74	P	Dibromochloromethane	50.000	53.739	-7.5	115	0.00
75		N-Butyl Acetate	50.000	53.819	-7.6	110	0.00
76	P	1,2-Dibromoethane	50.000	52.614	-5.2	116	0.00
77		3-Chlorobenzotrifluoride	50.000	56.394	-12.8	133	0.00
78	P	Chlorobenzene	50.000	50.410	-0.8	120	0.00
79		4-Chlorobenzotrifluoride	50.000	56.997	-14.0	136	0.00
80		1,1,1,2-Tetrachloroethane	50.000	55.256	-10.5	120	0.00
81	P	Ethylbenzene	50.000	50.650	-1.3	121	0.00
82	P	(m+p)Xylene	100.000	101.977	-2.0	121	0.00
83	P	o-Xylene	50.000	52.509	-5.0	121	0.00
84	P	Styrene	50.000	52.955	-5.9	120	0.00
85	P	Bromoform	50.000	57.205	-14.4	120	0.00
86		2-Chlorobenzotrifluoride	50.000	59.388	-18.8	139	0.00
87	P	Isopropylbenzene	50.000	52.867	-5.7	126	0.00
88		Cyclohexanone	1000.000	1128.231	-12.8	114	0.00
89		trans-1,4-Dichloro-2-Butene	50.000	55.226	-10.5	111	0.00
90	i	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	127	0.00
91	P	1,1,2,2-Tetrachloroethane	50.000	57.452	-14.9	127	0.00
92		Bromobenzene	50.000	50.811	-1.6	128	0.00
93		1,2,3-Trichloropropane	50.000	52.981	-6.0	125	0.00
94		n-Propylbenzene	50.000	48.971	2.1	126	0.00
95		2-Chlorotoluene	50.000	49.459	1.1	128	0.00
96		3-Chlorotoluene	50.000	53.717	-7.4	135	0.00
97		4-Chlorotoluene	50.000	49.287	1.4	128	0.00
98		1,3,5-Trimethylbenzene	50.000	49.731	0.5	127	0.00
99		tert-Butylbenzene	50.000	48.498	3.0	126	0.00
100		1,2,4-Trimethylbenzene	50.000	50.242	-0.5	125	0.00
101		3,4-Dichlorobenzotrifluorid	50.000	56.470	-12.9	142	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:47:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102		sec-Butylbenzene	50.000	48.054	3.9	125	0.00
103		p-Isopropyltoluene	50.000	48.999	2.0	126	0.00
104	P	1,3-Dclbenz	50.000	49.450	1.1	128	0.00
105	P	1,4-Dclbenz	50.000	48.315	3.4	126	0.00
106		2,4-Dichlorobenzotrifluorid	50.000	54.726	-9.5	142	0.00
107		2,5-Dichlorobenzotrifluorid	50.000	55.161	-10.3	143	0.00
108		n-Butylbenzene	50.000	47.609	4.8	122	0.00
109	P	1,2-Dclbenz	50.000	49.661	0.7	127	0.00
110	P	1,2-Dibromo-3-chloropropane	50.000	58.137	-16.3	126	0.00
111		Trielution Dichlorotoluene	150.000	153.212	-2.1	131	0.00
112		1,3,5-Trichlorobenzene	50.000	52.772	-5.5	139	0.00
113		Coelution Dichlorotoluene	100.000	104.403	-4.4	133	0.00
114	P	1,2,4-Tcbenzene	50.000	49.832	0.3	129	0.00
115		Hexachlorobt	50.000	53.307	-6.6	141	0.00
116		Naphthalen	50.000	50.556	-1.1	121	0.00
117		1,2,3-Tclbenzene	50.000	50.125	-0.3	130	0.00
118		2,4,5-Trichlorotoluene	50.000	48.803	2.4	128	0.00
119		2,3,6-Trichlorotoluene	50.000	48.247	3.5	130	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:47:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	402352	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.943	114	580562	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.576	117	526049	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	318863	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	191724	49.41	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.82%				
47) surr1,1,2-dichloroetha...	5.120	65	247652	52.54	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.08%				
64) SURR3,Toluene-d8	7.949	98	729161	48.92	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.84%				
69) SURR2,BFB	10.729	95	291955	50.75	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	235791	48.65	ug/L		98
3) Chloromethane	1.151	50	252183	47.42	ug/L		97
4) Vinyl Chloride	1.212	62	242853	47.45	ug/L		99
5) Bromomethane	1.407	94	151730m	31.45	ug/L		
6) Chloroethane	1.474	64	176230	49.69	ug/L		96
7) Freon 21	1.602	67	421399	48.05	ug/L		99
8) Trichlorofluoromethane	1.645	101	315695	46.27	ug/L		99
9) Diethyl Ether	1.846	59	169998	49.83	ug/L		97
10) Freon 123a	1.846	67	225244	49.24	ug/L		94
11) Freon 123	1.889	83	251300	49.07	ug/L		98
12) Acrolein	1.926	56	208588	192.95	ug/L		99
13) 1,1-Diclethene	2.005	96	165009	47.08	ug/L		97
14) Freon 113	2.011	101	159934	46.53	ug/L		89
15) Acetone	2.041	43	113573	49.41	ug/L		98
16) 2-Propanol	2.163	45	377156	933.45	ug/L		92
17) Iodomethane	2.115	142	153876	31.88	ug/L		96
18) Carbon Disulfide	2.169	76	400325	39.94	ug/L		100
19) Acetonitrile	2.255	40	94249	250.03	ug/L		95
20) Allyl Chloride	2.291	76	72236	42.00	ug/L		90
21) Methyl Acetate	2.310	43	202195	49.19	ug/L		98
22) Methylene Chloride	2.389	84	194556	43.63	ug/L		97
23) TBA	2.511	59	596017	870.08	ug/L		79
24) Acrylonitrile	2.602	53	536237	256.83	ug/L		99
25) Methyl-t-Butyl Ether	2.657	73	585692	43.54	ug/L		99
26) trans-1,2-Dichloroethene	2.639	96	183216	45.77	ug/L		95
27) 1,1-Diclethane	3.066	63	338638	46.45	ug/L		98
28) Vinyl Acetate	3.145	86	34059	39.44	ug/L	#	74
29) DIPE	3.181	45	628360	51.47	ug/L		98
30) 2-Chloro-1,3-Butadiene	3.175	53	291264	48.25	ug/L		92
31) ETBE	3.639	59	540367	45.48	ug/L		97
32) 2,2-Dichloropropane	3.779	77	204372	33.54	ug/L		98
33) cis-1,2-Dichloroethene	3.785	96	214108	45.48	ug/L		99
34) 2-Butanone	3.828	43	153958	48.56	ug/L		98
35) Propionitrile	3.889	54	229010	258.06	ug/L		99
36) Bromochloromethane	4.120	130	143868	46.62	ug/L		98
37) Methacrylonitrile	4.120	67	109016	49.13	ug/L		95
38) Tetrahydrofuran	4.212	42	91352	50.90	ug/L		94
39) Chloroform	4.273	83	349702	47.42	ug/L		97
40) 1,1,1-Trichloroethane	4.553	97	282650	45.19	ug/L		96

1st FNJ 09/22/18
2nd WR 09/23/18

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:47:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) TAME	5.510	73	521099	44.02 ug/L	96
43) Cyclohexane	4.638	41	187599	51.13 ug/L	100
45) Carbontetrachloride	4.840	117	234746	55.07 ug/L	97
46) 1,1-Dichloropropene	4.852	75	258846	49.24 ug/L	97
48) Benzene	5.218	78	744796	50.36 ug/L	98
49) 1,2-Dichloroethane	5.260	62	323283	53.95 ug/L	98
50) Iso-Butyl Alcohol	5.266	43	283489	1097.58 ug/L	98
51) n-Heptane	5.803	43	195347	43.60 ug/L	96
52) 1-Butanol	6.376	56	448298	2904.29 ug/L	96
53) Trichloroethene	6.303	130	206483	47.97 ug/L	94
54) Methylcyclohexane	6.565	55	232190	50.13 ug/L	91
55) 1,2-Diclpropane	6.608	63	205937	51.66 ug/L	98
56) Dibromomethane	6.760	93	143329	50.16 ug/L	98
57) 1,4-Dioxane	6.845	88	85643	1124.05 ug/L	94
58) Methyl Methacrylate	6.888	69	178791	54.13 ug/L	91
59) Bromodichloromethane	7.028	83	256227	52.49 ug/L	99
60) 2-Nitropropane	7.339	41	114680	109.81 ug/L	91
61) 2-Chloroethylvinyl Ether	7.492	63	80869	41.68 ug/L	99
62) cis-1,3-Dichloropropene	7.626	75	301087	50.00 ug/L	99
63) 4-Methyl-2-pentanone	7.863	43	278153	57.13 ug/L	97
65) Toluene	8.028	91	839165	51.22 ug/L	99
66) trans-1,3-Dichloropropene	8.327	75	266529	48.58 ug/L	97
67) Ethyl Methacrylate	8.504	69	298802	53.41 ug/L	95
68) 1,1,2-Trichloroethane	8.528	97	205030	52.91 ug/L	99
71) Tetrachloroethene	8.674	164	167201	52.68 ug/L	95
72) 2-Hexanone	8.869	43	211128	56.62 ug/L	97
73) 1,3-Dichloropropane	8.711	76	360421	52.37 ug/L	96
74) Dibromochloromethane	8.961	129	209048	53.74 ug/L	98
75) N-Butyl Acetate	9.058	43	409355	53.82 ug/L	99
76) 1,2-Dibromoethane	9.058	107	217261	52.61 ug/L	99
77) 3-Chlorobenzotrifluoride	9.650	180	304032	56.39 ug/L	99
78) Chlorobenzene	9.607	112	563517	50.41 ug/L	99
79) 4-Chlorobenzotrifluoride	9.711	180	276334	57.00 ug/L	98
80) 1,1,1,2-Tetrachloroethane	9.705	131	195585	55.26 ug/L	98
81) Ethylbenzene	9.747	106	292614	50.65 ug/L	95
82) (m+p)Xylene	9.869	106	736652	101.98 ug/L	96
83) o-Xylene	10.247	106	368329	52.51 ug/L	97
84) Styrene	10.265	104	628967	52.96 ug/L	97
85) Bromoform	10.412	173	144852	57.21 ug/L	99
86) 2-Chlorobenzotrifluoride	10.515	180	313995	59.39 ug/L	97
87) Isopropylbenzene	10.607	105	957768	52.87 ug/L	100
88) Cyclohexanone	10.662	55	1064877	1128.23 ug/L	93
89) trans-1,4-Dichloro-2-B...	10.930	53	64826	55.23 ug/L	80
91) 1,1,2,2-Tetrachloroethane	10.881	83	326297	57.45 ug/L	95
92) Bromobenzene	10.845	156	266766	50.81 ug/L	99
93) 1,2,3-Trichloropropane	10.906	110	108314	52.98 ug/L	98
94) n-Propylbenzene	10.979	91	1127891	48.97 ug/L	99
95) 2-Chlorotoluene	11.034	91	675278	49.46 ug/L	99
96) 3-Chlorotoluene	11.088	91	714134	53.72 ug/L	98
97) 4-Chlorotoluene	11.131	91	815174	49.29 ug/L	98
98) 1,3,5-Trimethylbenzene	11.143	105	816696	49.73 ug/L	98
99) tert-Butylbenzene	11.418	119	697706	48.50 ug/L	98
100) 1,2,4-Trimethylbenzene	11.460	105	819795	50.24 ug/L	98
101) 3,4-Dichlorobenzotrifl...	11.533	214	253529	56.47 ug/L	97
102) sec-Butylbenzene	11.607	105	1008201	48.05 ug/L	99
103) p-Isopropyltoluene	11.735	119	870730	49.00 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:47:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

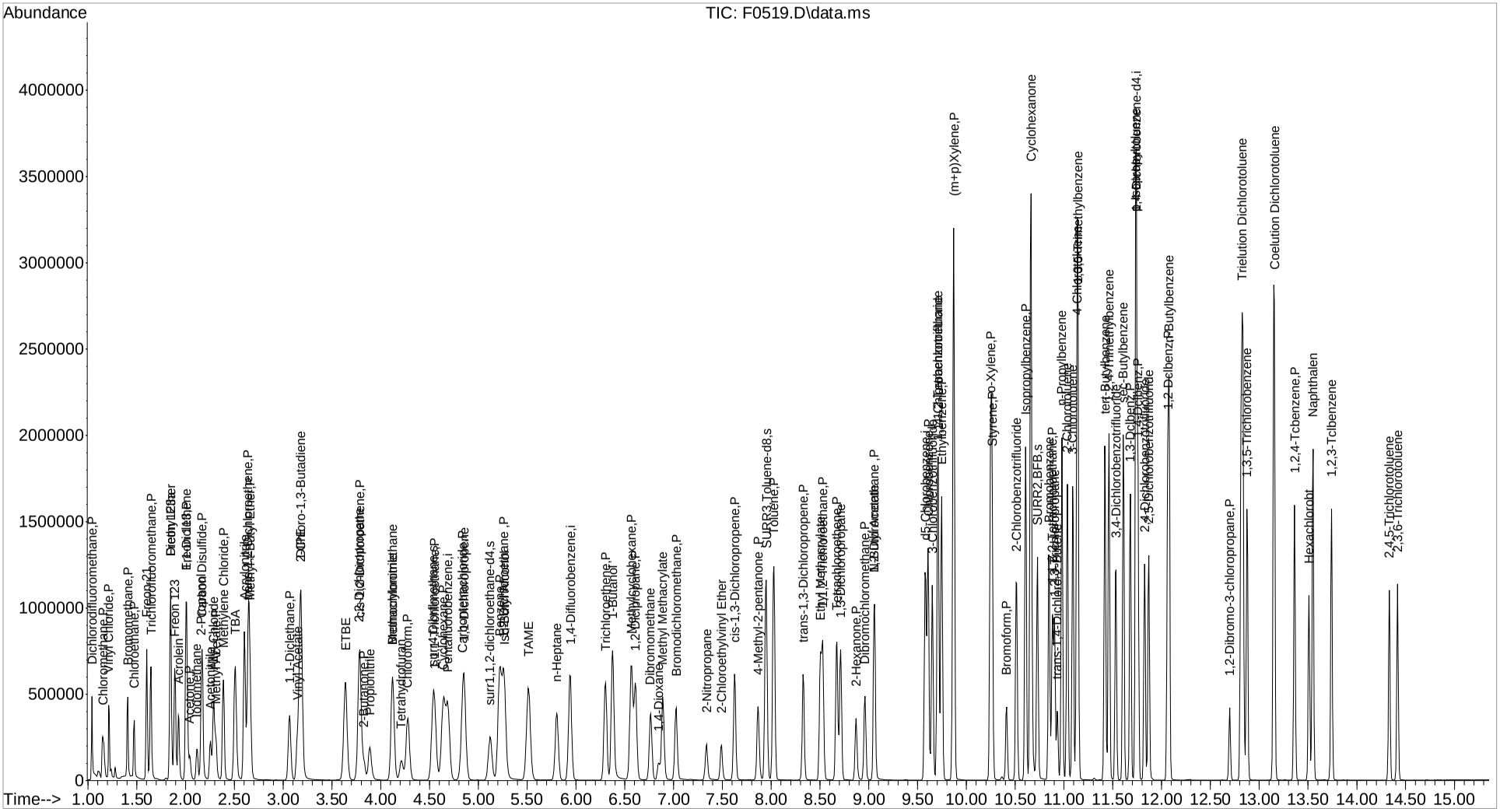
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.680	146	494162	49.45	ug/L	99
105) 1,4-Dclbenz	11.759	146	512018	48.31	ug/L	99
106) 2,4-Dichlorobenzotrifl...	11.826	214	227733	54.73	ug/L	98
107) 2,5-Dichlorobenzotrifl...	11.869	214	261275	55.16	ug/L	96
108) n-Butylbenzene	12.076	91	770371	47.61	ug/L	99
109) 1,2-Dclbenz	12.064	146	496961	49.66	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.698	157	75865	58.14	ug/L	95
111) Trielution Dichlorotol...	12.826	125	1209934	153.21	ug/L	99
112) 1,3,5-Trichlorobenzene	12.875	180	351715	52.77	ug/L	99
113) Coelution Dichlorotoluene	13.155	125	902164	104.40	ug/L	95
114) 1,2,4-Tcbenzene	13.362	180	343542	49.83	ug/L	99
115) Hexachlorobt	13.509	225	142968	53.31	ug/L	96
116) Naphthalen	13.551	128	1059662	50.56	ug/L	100
117) 1,2,3-Tclbenzene	13.740	180	340863	50.12	ug/L	98
118) 2,4,5-Trichlorotoluene	14.332	159	207871	48.80	ug/L	99
119) 2,3,6-Trichlorotoluene	14.417	159	191957	48.25	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0519.D
Acq On : 20 Sep 2018 10:17 pm
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA14
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 21 09:47:12 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



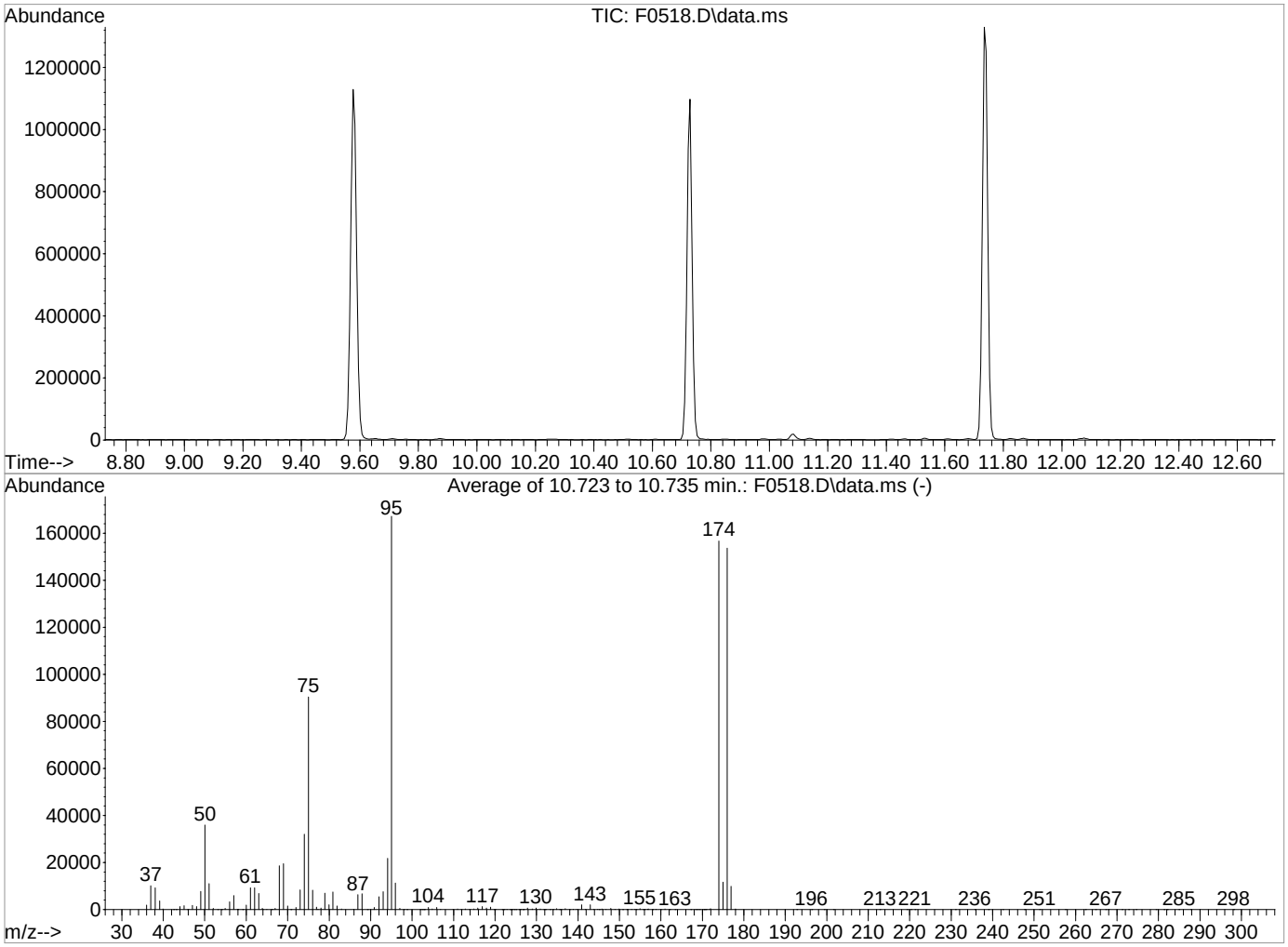
1st FJ 09/22/18
2nd 09/23/18

1st FJ 09/22/18
2nd 09/23/18

Data Path : I:\ACQUDATA\MSVOA14\Data\092018\
Data File : F0518.D
Acq On : 20 Sep 2018 9:54 pm
Operator : F.NAEGLER
Sample : TUNE Inst : MSVOA14
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Title : MS#14 - 8260 WATERS 5mL Purge
Last Update : Fri Jun 08 16:43:40 2018



AutoFind: Scans 1597, 1598, 1599; Background Corrected with Scan 1591

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	36005	PASS
75	95	30	60	54.1	90416	PASS
95	95	100	100	100.0	167171	PASS
96	95	5	9	6.8	11298	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	93.8	156736	PASS
175	174	5	9	7.4	11635	PASS
176	174	95	101	98.0	153600	PASS
177	176	5	9	6.4	9866	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8025.D
Acq On : 8 Jun 2018 5:33 pm
Operator : F.NAEGLER
Sample : 50 PPB ICV Inst : MSVOA14
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 11 11:09:28 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	305283	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.943	114	488141	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.583	117	441419	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	252774	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	163192	50.02	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.04%			
47) surr1,1,2-dichloroetha...	5.120	65	199487	50.33	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.66%			
64) SURR3,Toluene-d8	7.949	98	623832	49.77	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.54%			
69) SURR2,BFB	10.735	95	242087	50.05	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.042	85	231849	63.04	ug/L	99
3) Chloromethane	1.164	50	205124	50.83	ug/L	96
4) Vinyl Chloride	1.219	62	220361	56.75	ug/L	99
5) Bromomethane	1.408	94	174543m	54.19	ug/L	
6) Chloroethane	1.475	64	119347	44.35	ug/L	98
7) Freon 21	1.603	67	330053	49.60	ug/L	99
8) Trichlorofluoromethane	1.645	101	291244	56.26	ug/L	98
9) Diethyl Ether	1.846	59	134420	51.93	ug/L	98
10) Freon 123a	1.846	67	179842	51.81	ug/L	98
11) Freon 123	1.889	83	267165	68.75	ug/L	99
12) Acrolein	1.926	56	82805	100.95	ug/L	100
13) 1,1-Diclethene	2.005	96	141756	53.30	ug/L	96
14) Freon 113	2.011	101	146152	56.04	ug/L	97
15) Acetone	2.042	43	93162	53.42	ug/L	97
16) 2-Propanol	2.157	45	298819	974.72	ug/L	99
17) Iodomethane	2.121	142	196648	50.72	ug/L	97
18) Carbon Disulfide	2.170	76	391009	51.41	ug/L	99
19) Acetonitrile	2.255	40	71086	248.54	ug/L	97
20) Allyl Chloride	2.292	76	81583	62.51	ug/L	96
21) Methyl Acetate	2.310	43	151842	48.69	ug/L	98
22) Methylene Chloride	2.389	84	160106	47.32	ug/L	98
23) TBA	2.505	59	506966	975.40	ug/L	98
24) Acrylonitrile	2.602	53	392659	247.86	ug/L	98
25) Methyl-t-Butyl Ether	2.657	73	512973	50.25	ug/L	98
26) trans-1,2-Dichloroethene	2.645	96	159765	52.60	ug/L	100
27) 1,1-Diclethane	3.066	63	298073	53.88	ug/L	98
28) Vinyl Acetate	3.145	86	32805	48.98	ug/L #	89
29) DIPE	3.182	45	477950	51.60	ug/L	98
30) 2-Chloro-1,3-Butadiene	3.176	53	243287	53.12	ug/L	97
31) ETBE	3.633	59	469520	52.09	ug/L	99
32) 2,2-Dichloropropane	3.779	77	244936	52.98	ug/L	98
33) cis-1,2-Dichloroethene	3.785	96	183152	51.27	ug/L	100
34) 2-Butanone	3.822	43	115610	48.06	ug/L	98
35) Propionitrile	3.883	54	164196	243.85	ug/L	100
36) Bromochloromethane	4.120	130	117140	50.03	ug/L	98
37) Methacrylonitrile	4.120	67	84928	50.44	ug/L	98
38) Tetrahydrofuran	4.212	42	66096	48.54	ug/L	89
39) Chloroform	4.279	83	299947	53.61	ug/L	99
40) 1,1,1-Trichloroethane	4.547	97	264718	55.78	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8025.D
Acq On : 8 Jun 2018 5:33 pm
Operator : F.NAEGLER
Sample : 50 PPB ICV Inst : MSVOA14
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 11 11:09:28 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) TAME	5.510	73	490823	54.65 ug/L	98
43) Cyclohexane	4.639	41	156068	50.59 ug/L	97
45) Carbontetrachloride	4.846	117	204697	56.94 ug/L	97
46) 1,1-Dichloropropene	4.852	75	228265	51.64 ug/L	98
48) Benzene	5.218	78	659281	53.02 ug/L	99
49) 1,2-Dichloroethane	5.260	62	254149	50.44 ug/L	99
50) Iso-Butyl Alcohol	5.260	43	218140	1004.47 ug/L	95
51) n-Heptane	5.803	43	191235	50.77 ug/L	97
52) 1-Butanol	6.370	56	334959	2604.24 ug/L	98
53) Trichloroethene	6.303	130	187938	51.92 ug/L	96
54) Methylcyclohexane	6.571	55	199751	51.29 ug/L	99
55) 1,2-Diclpropane	6.614	63	179414	53.53 ug/L	100
56) Dibromomethane	6.766	93	120228	50.04 ug/L	96
57) 1,4-Dioxane	6.846	88	63786	995.69 ug/L	99
58) Methyl Methacrylate	6.894	69	145115	52.25 ug/L	97
59) Bromodichloromethane	7.028	83	223071	54.35 ug/L	100
60) 2-Nitropropane	7.339	41	89881	103.25 ug/L	91
61) 2-Chloroethylvinyl Ether	7.492	63	76319	46.33 ug/L	96
62) cis-1,3-Dichloropropene	7.632	75	281276	55.56 ug/L	100
63) 4-Methyl-2-pentanone	7.870	43	212379	51.88 ug/L	98
65) Toluene	8.028	91	730686	53.04 ug/L	99
66) trans-1,3-Dichloropropene	8.333	75	252975	54.27 ug/L	97
67) Ethyl Methacrylate	8.510	69	257583	54.76 ug/L	100
68) 1,1,2-Trichloroethane	8.528	97	166352	51.05 ug/L	99
71) Tetrachloroethene	8.674	164	136306	51.18 ug/L	99
72) 2-Hexanone	8.876	43	162366	51.89 ug/L	97
73) 1,3-Dichloropropane	8.717	76	287801	49.84 ug/L	99
74) Dibromochloromethane	8.967	129	170335	52.31 ug/L	99
75) N-Butyl Acetate	9.059	43	336784	52.77 ug/L	98
76) 1,2-Dibromoethane	9.065	107	177097	51.11 ug/L	98
77) 3-Chlorobenzotrifluoride	9.656	180	220467	48.73 ug/L	99
78) Chlorobenzene	9.613	112	471538	50.27 ug/L	99
79) 4-Chlorobenzotrifluoride	9.717	180	195604	48.08 ug/L	98
80) 1,1,1,2-Tetrachloroethane	9.711	131	166273	55.98 ug/L	99
81) Ethylbenzene	9.753	106	253392	52.27 ug/L	97
82) (m+p)Xylene	9.875	106	638107	105.27 ug/L	100
83) o-Xylene	10.253	106	311664	52.95 ug/L	97
84) Styrene	10.266	104	537829	53.96 ug/L	99
85) Bromoform	10.418	173	114781	54.46 ug/L	99
86) 2-Chlorobenzotrifluoride	10.522	180	225199	50.76 ug/L	99
87) Isopropylbenzene	10.613	105	796002	52.36 ug/L	99
88) Cyclohexanone	10.662	55	801083	1011.47 ug/L	98
89) trans-1,4-Dichloro-2-B...	10.936	53	61406	61.32 ug/L	99
91) 1,1,2,2-Tetrachloroethane	10.887	83	237272	52.70 ug/L	98
92) Bromobenzene	10.851	156	205738	49.43 ug/L	97
93) 1,2,3-Trichloropropane	10.906	110	81756	50.45 ug/L	96
94) n-Propylbenzene	10.985	91	941616	51.57 ug/L	100
95) 2-Chlorotoluene	11.040	91	547100	50.55 ug/L	98
96) 3-Chlorotoluene	11.095	91	531743	50.45 ug/L	100
97) 4-Chlorotoluene	11.137	91	630166	48.06 ug/L	99
98) 1,3,5-Trimethylbenzene	11.143	105	676058	51.93 ug/L	98
99) tert-Butylbenzene	11.424	119	588949	51.64 ug/L	99
100) 1,2,4-Trimethylbenzene	11.467	105	680727	52.63 ug/L	99
101) 3,4-Dichlorobenzotrifl...	11.540	214	172179	48.38 ug/L	98
102) sec-Butylbenzene	11.613	105	866416	52.09 ug/L	99
103) p-Isopropyltoluene	11.741	119	731407	51.92 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8025.D
Acq On : 8 Jun 2018 5:33 pm
Operator : F.NAEGLER
Sample : 50 PPB ICV Inst : MSVOA14
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 11 11:09:28 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

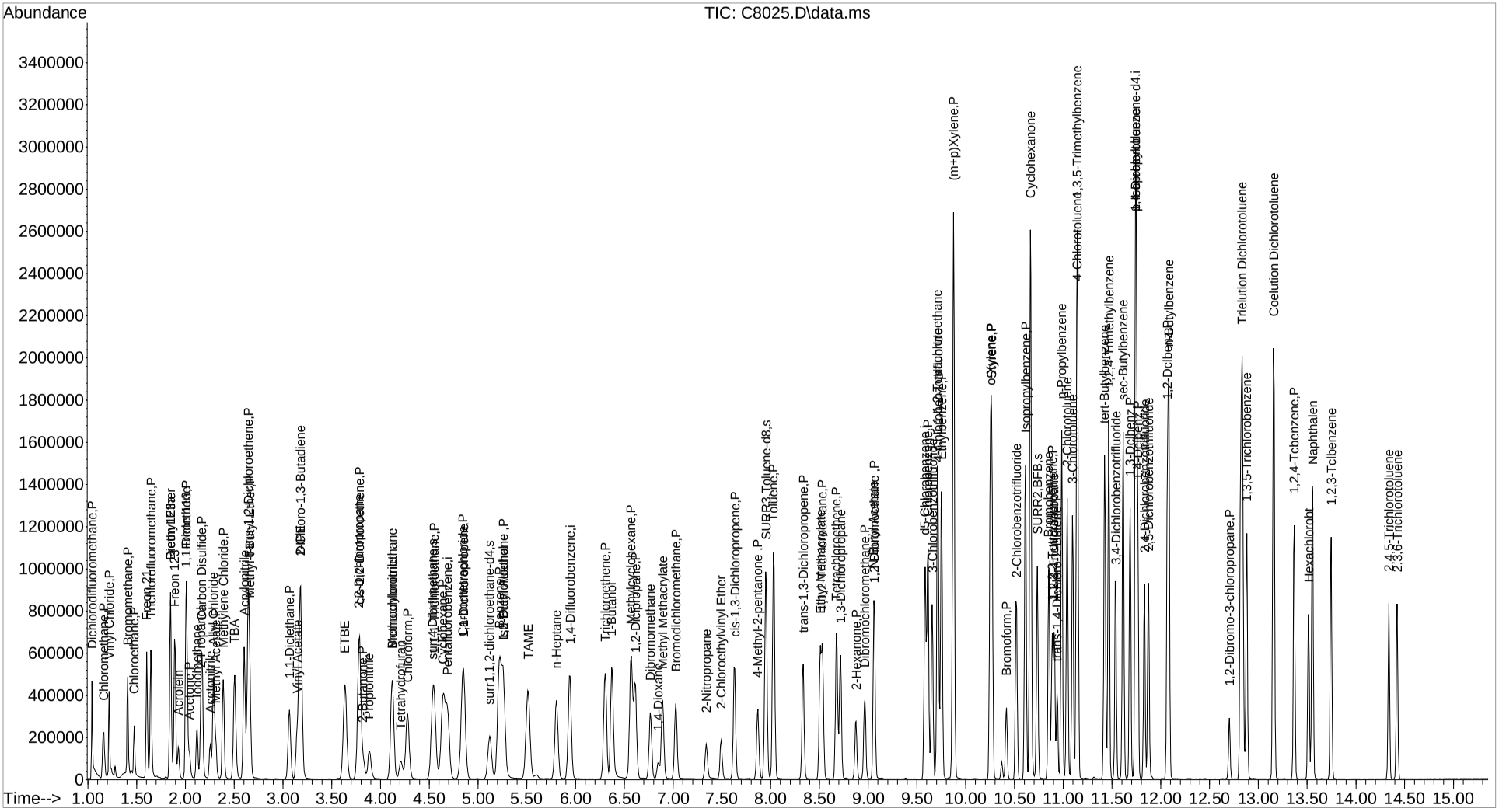
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	387831	48.96	ug/L	99
105) 1,4-Dclbenz	11.765	146	395854	47.12	ug/L	99
106) 2,4-Dichlorobenzotrifl...	11.832	214	159817	48.45	ug/L	99
107) 2,5-Dichlorobenzotrifl...	11.875	214	181134	48.24	ug/L	97
108) n-Butylbenzene	12.082	91	667530	52.04	ug/L	98
109) 1,2-Dclbenz	12.070	146	382671	48.24	ug/L	98
110) 1,2-Dibromo-3-chloropr...	12.704	157	55074	53.68	ug/L	96
111) Trielution Dichlorotol...	12.832	125	924141	147.62	ug/L	100
112) 1,3,5-Trichlorobenzene	12.881	180	249559	47.23	ug/L	99
113) Coelution Dichlorotoluene	13.155	125	673839	98.37	ug/L	99
114) 1,2,4-Tcbenzene	13.369	180	259930	47.56	ug/L	99
115) Hexachlorobt	13.515	225	103564	48.71	ug/L	97
116) Naphthalen	13.558	128	830849	50.00	ug/L	99
117) 1,2,3-Tclbenzene	13.747	180	253797	47.08	ug/L	99
118) 2,4,5-Trichlorotoluene	14.338	159	154243	45.68	ug/L	98
119) 2,3,6-Trichlorotoluene	14.423	159	140036	44.40	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8025.D
Acq On : 8 Jun 2018 5:33 pm
Operator : F.NAEGLER
Sample : 50 PPB ICV Inst : MSVOA14
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 11 11:09:28 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration



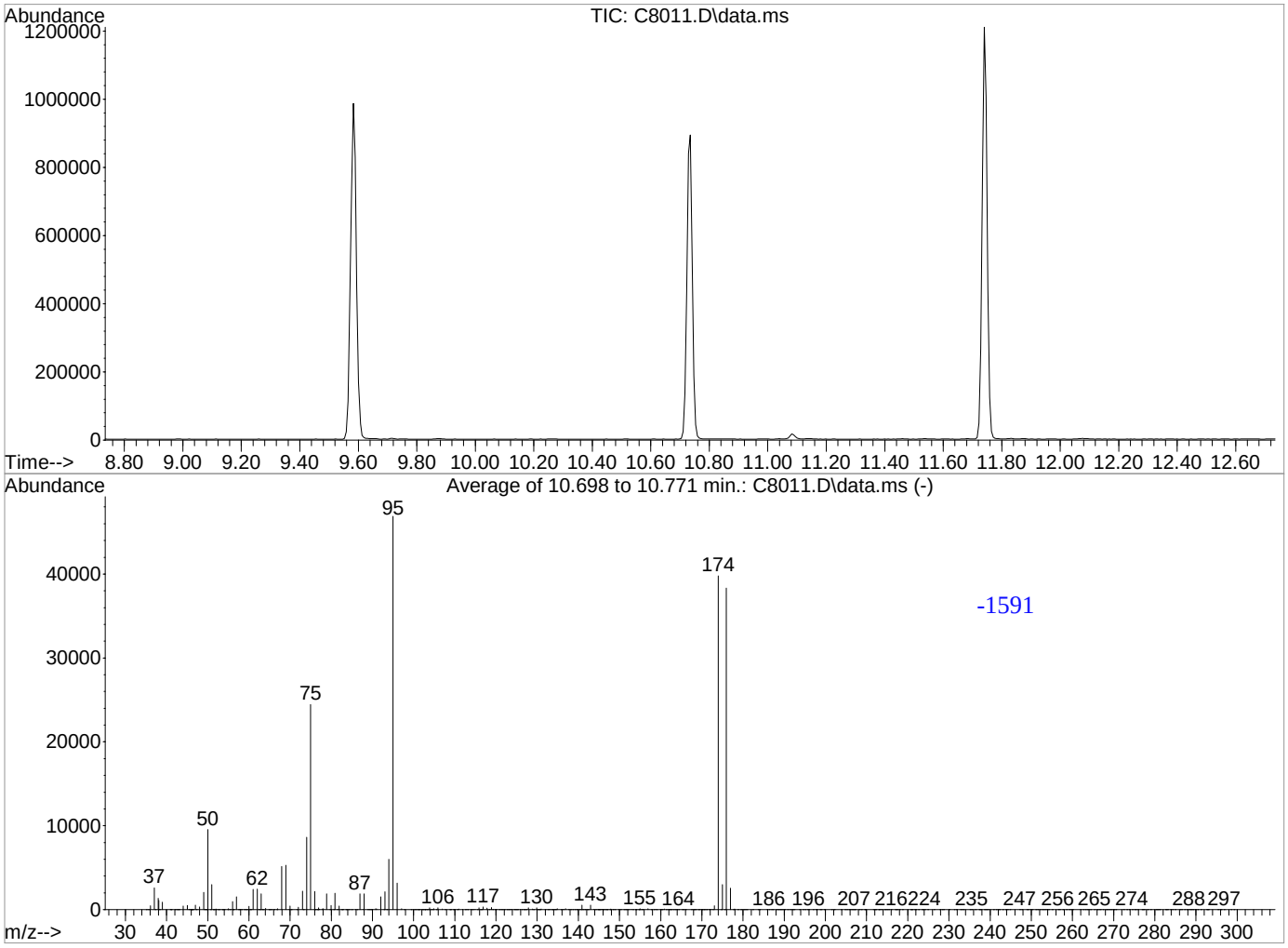
1st 06/11/18
2nd 06/11/18

1st FJ 06/11/18
2nd 06/11/18

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8011.D
Acq On : 8 Jun 2018 11:27 am
Operator : F.NAEGLER
Sample : TUNE Inst : MSVOA14
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Title : MS#14 - 8260 WATERS 5mL Purge
Last Update : Tue Mar 20 16:59:21 2018



Spectrum Information: Average of 10.698 to 10.771 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.4	9546	PASS
75	95	30	60	52.2	24466	PASS
95	95	100	100	100.0	46879	PASS
96	95	5	9	6.7	3156	PASS
173	174	0.00	2	1.2	476	PASS
174	95	50	120	84.8	39776	PASS
175	174	5	9	7.5	2977	PASS
176	174	95	101	96.3	38315	PASS
177	176	5	9	6.7	2549	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8012.D
Acq On : 8 Jun 2018 12:02 pm
Operator : F.NAEGLER
Sample : ICALBLK Inst : MSVOA14
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 11 11:04:50 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

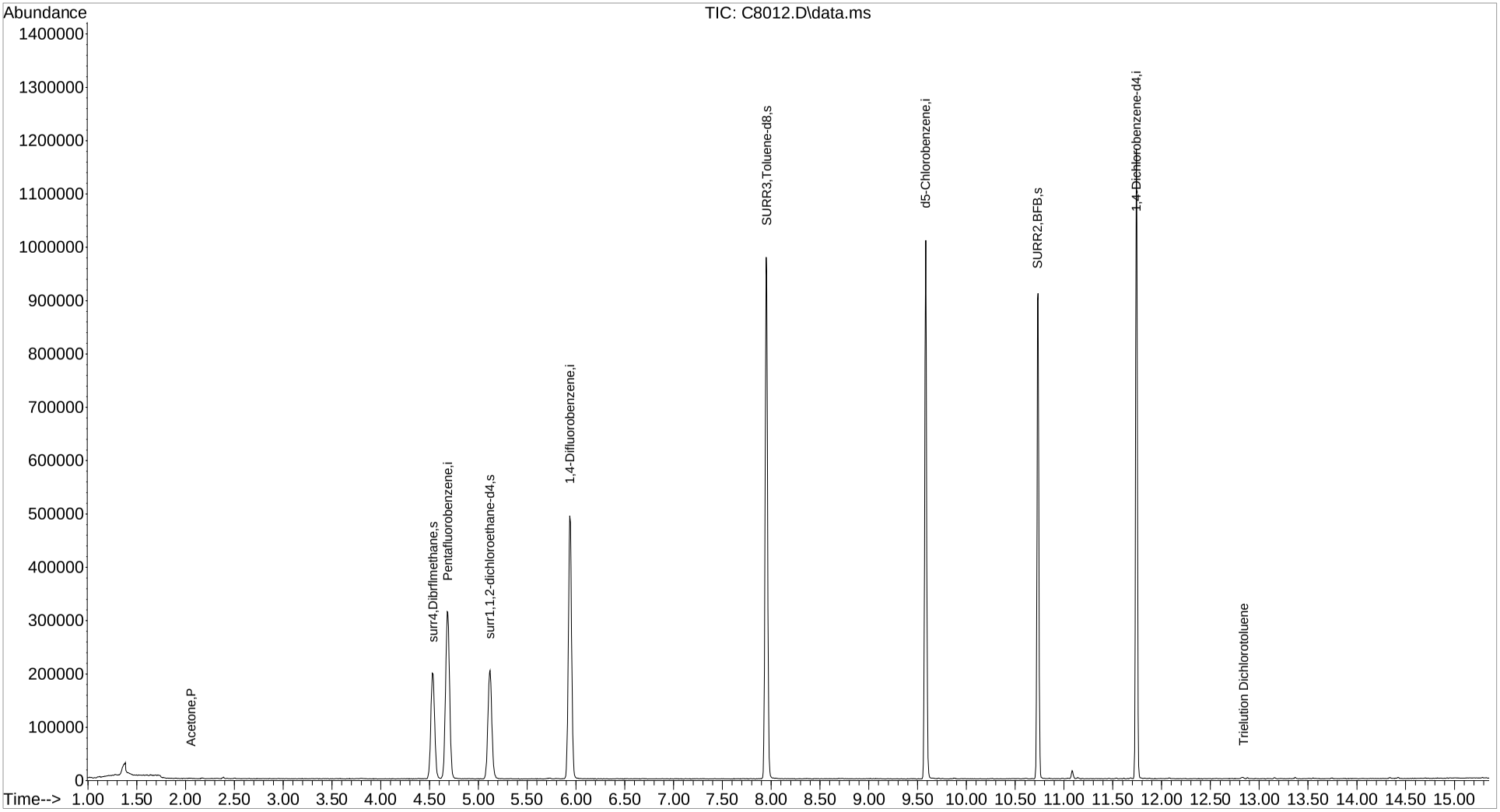
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.687	168	316036	50.00	ug/L	0.00
42) 1,4-Difluorobenzene	5.937	114	496609	50.00	ug/L	0.00
70) d5-Chlorobenzene	9.583	117	434551	50.00	ug/L	0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	225410	50.00	ug/L	0.00
System Monitoring Compounds						
44) surr4,Dibrflmethane	4.535	113	160965	48.49	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.98%			
47) surr1,1,2-dichloroetha...	5.120	65	201046	49.86	ug/L	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.72%			
64) SURR3,Toluene-d8	7.949	98	636573	49.93	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.86%			
69) SURR2,BFB	10.729	95	231607	47.07	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.14%			
Target Compounds						Qvalue
15) Acetone	2.054	43	680	0.38	ug/L	75
111) Trielution Dichlorotol...	12.838	125	1353	0.24	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8012.D
Acq On : 8 Jun 2018 12:02 pm
Operator : F.NAEGLER
Sample : ICALBLK Inst : MSVOA14
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 11 11:04:50 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration

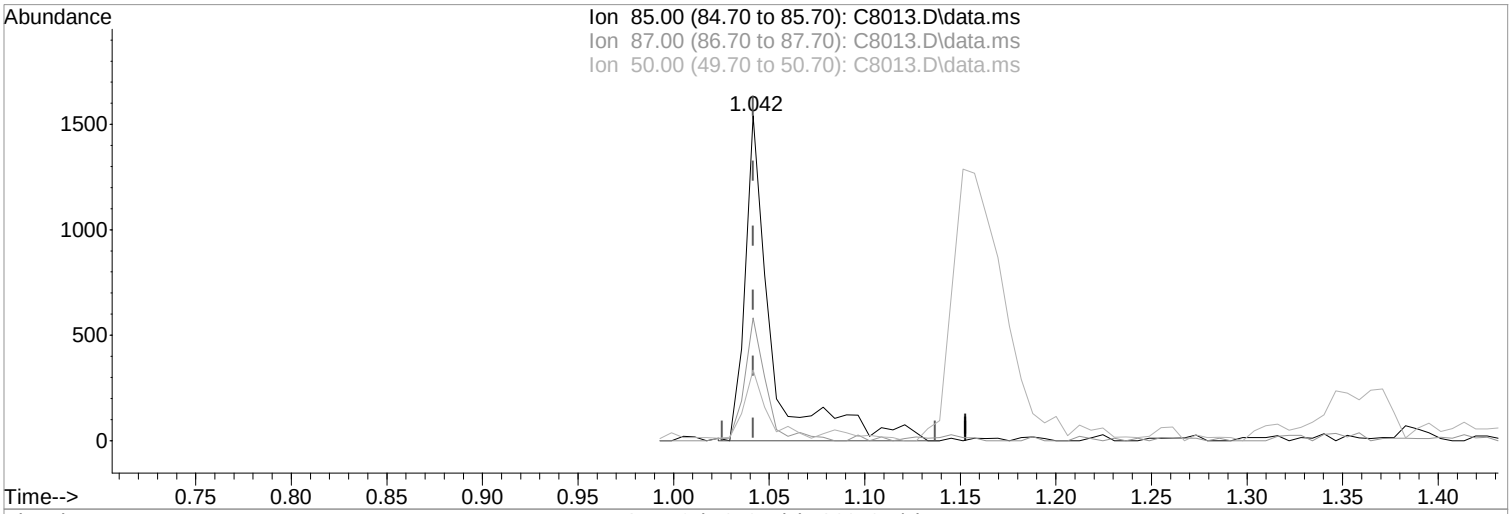


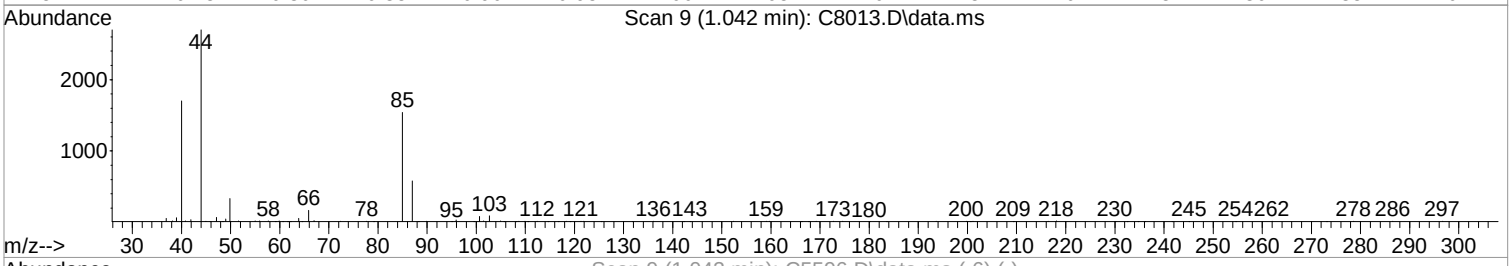
1st FJ 06/11/18
2nd 06/11/18

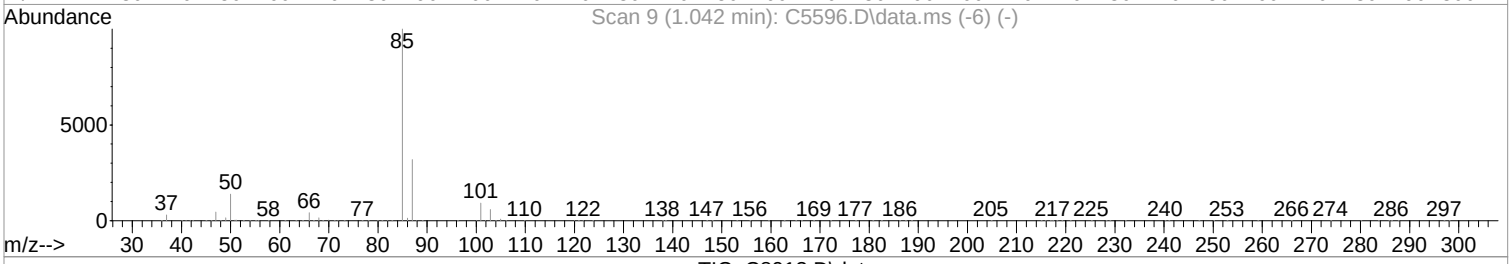
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(2) Dichlorodifluoromethane (P)

1.042min (-0.000) 0.35 ug/L m

response 1484

Ion	Exp%	Act%
85.00	100	100
87.00	31.80	37.74
50.00	13.90	21.73
0.00	0.00	0.00

Manual Integration:

After

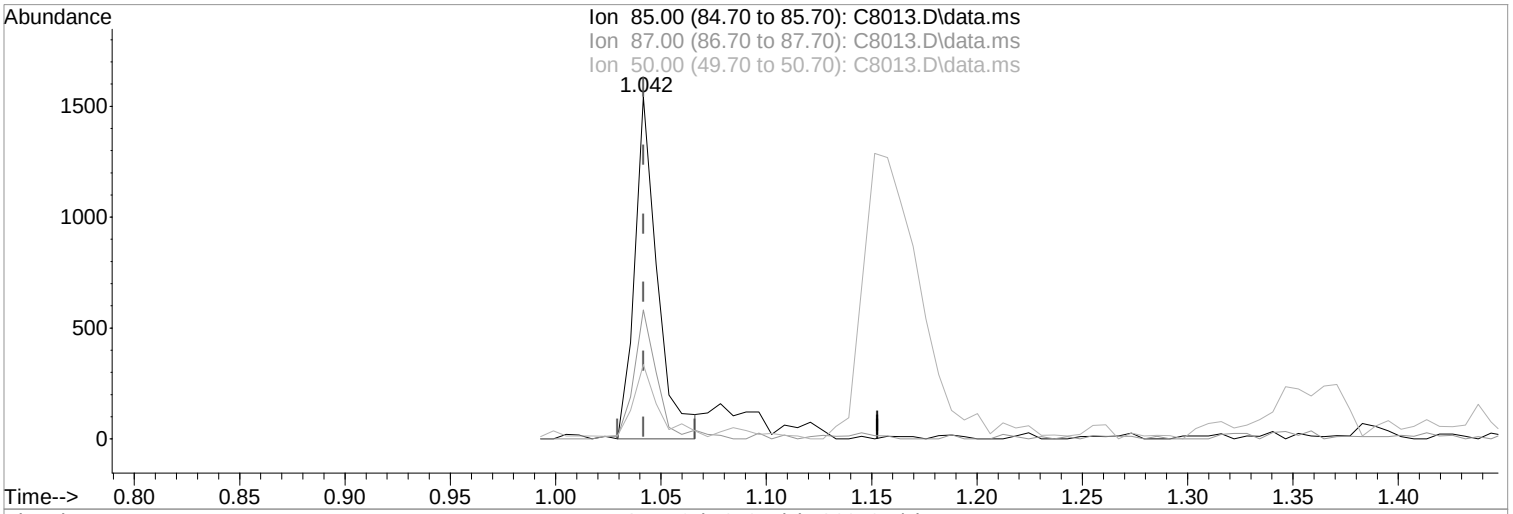
Poor integration.

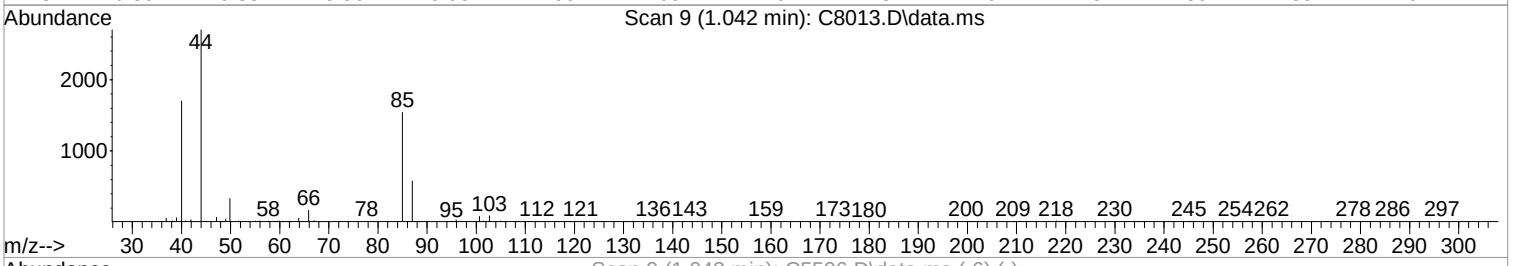
06/08/18

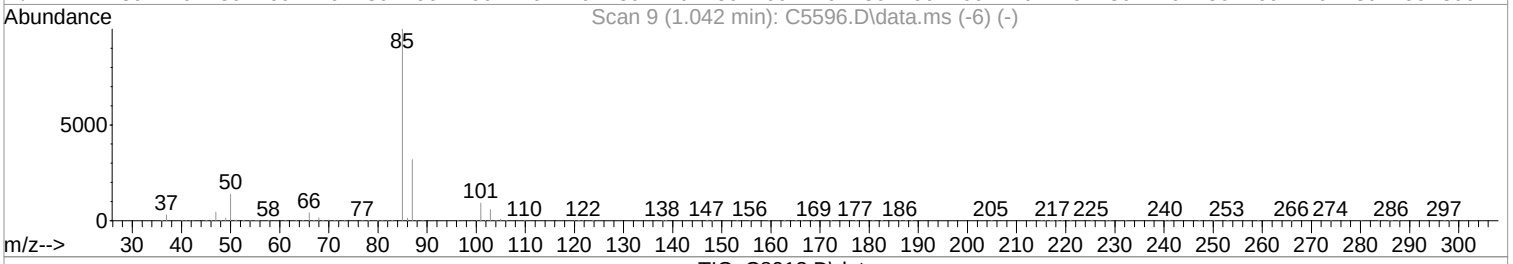
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(2) Dichlorodifluoromethane (P)

1.042min (-0.000) 0.28 ug/L

response 1166

Ion	Exp%	Act%
85.00	100	100
87.00	31.80	37.74
50.00	13.90	21.73
0.00	0.00	0.00

Manual Integration:

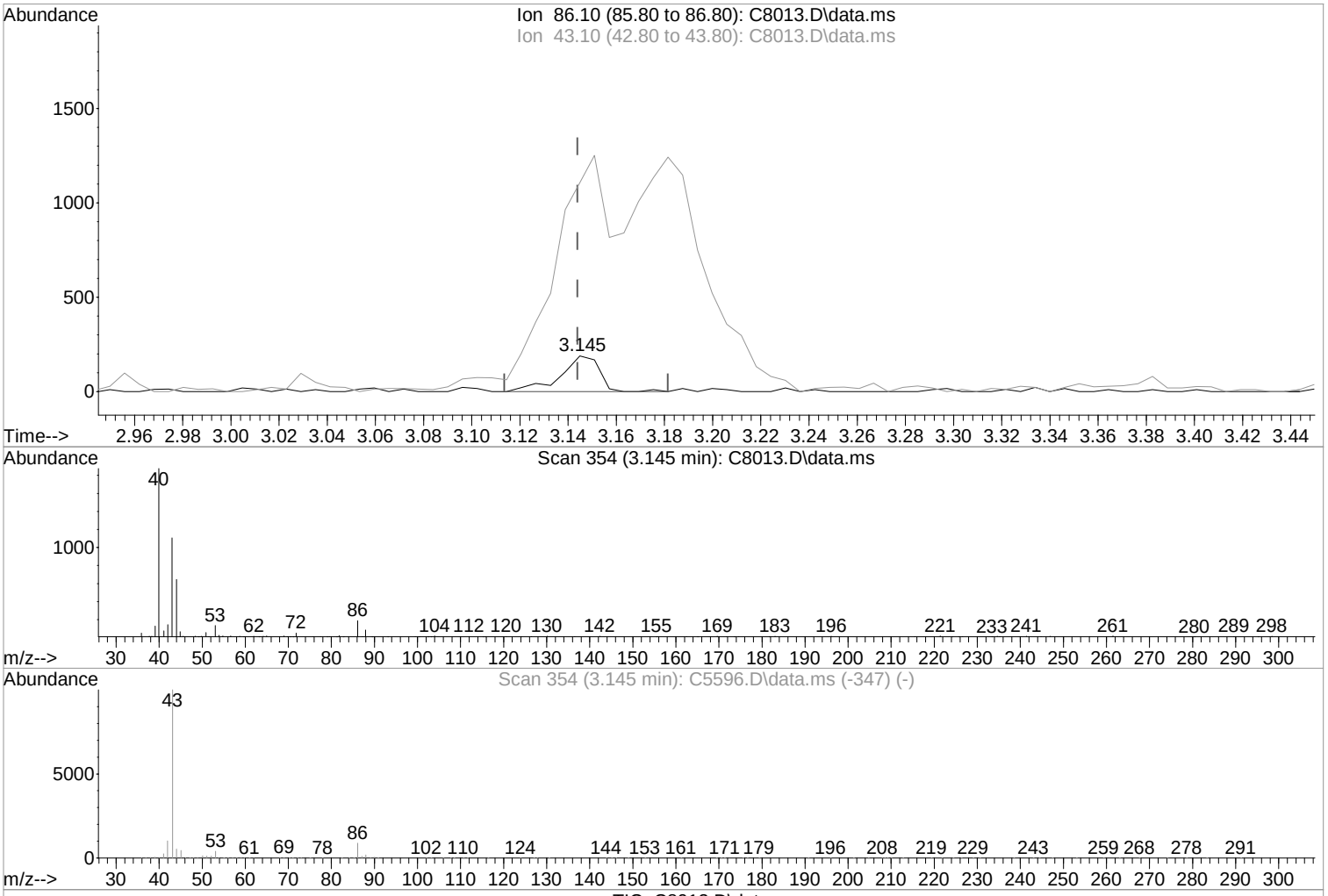
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(28) Vinyl Acetate

3.145min (+0.001) 0.34 ug/L m

response 214

Ion	Exp%	Act%
86.10	100	100
43.10	1134.40	585.71#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

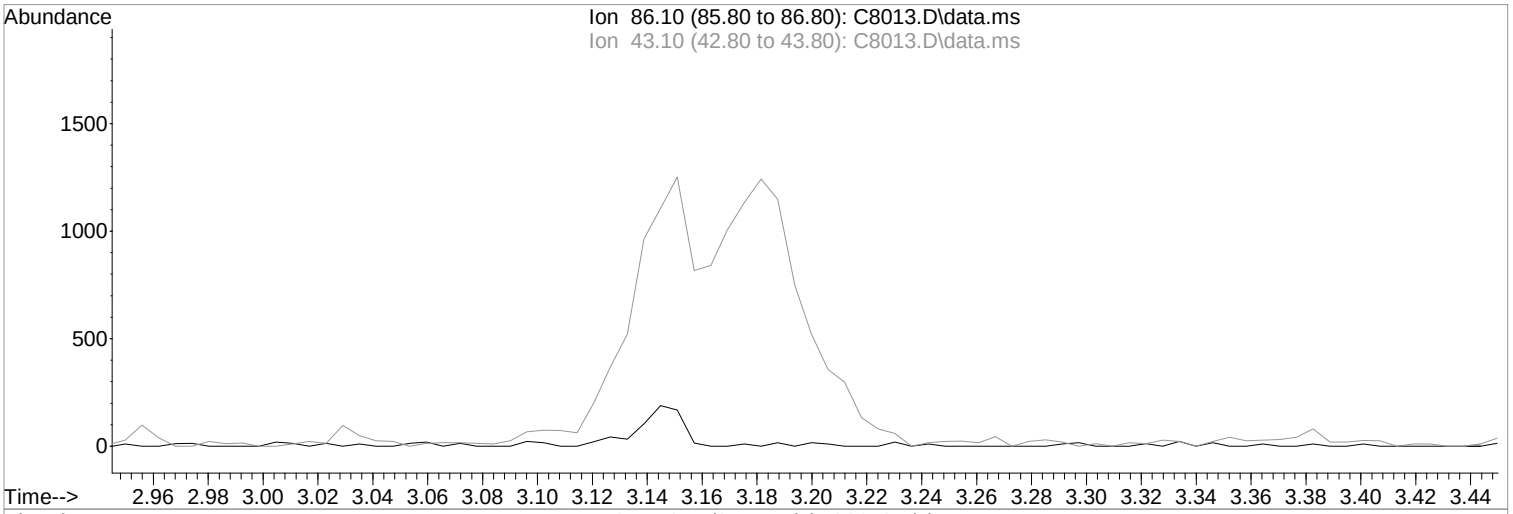
Peak not found.

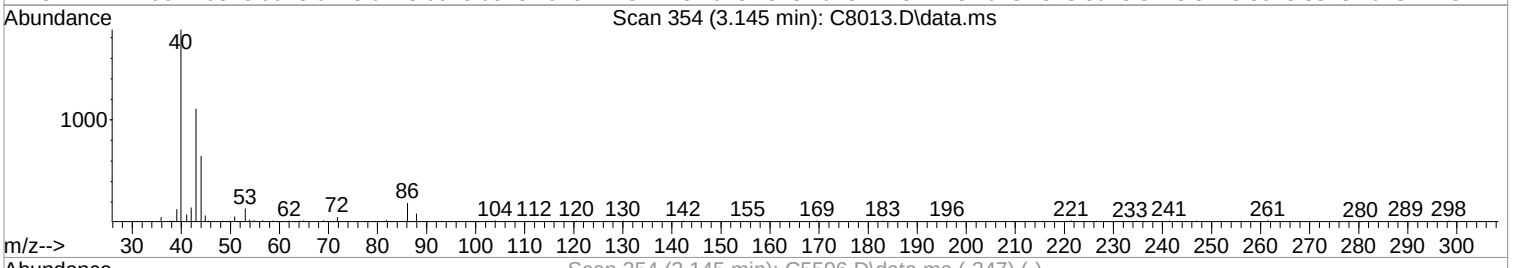
06/08/18

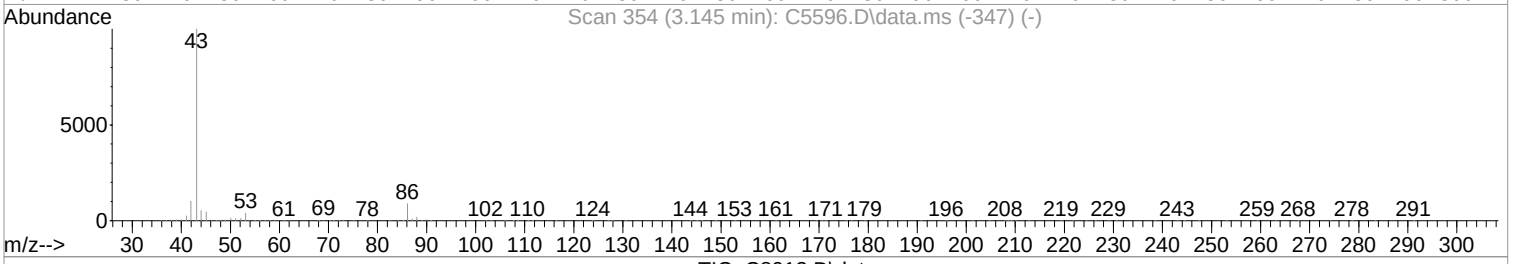
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(28) Vinyl Acetate

3.144min (-3.144) 0.00 ug/L

response 0

Ion	Exp%	Act%
86.10	100	0.00
43.10	1134.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

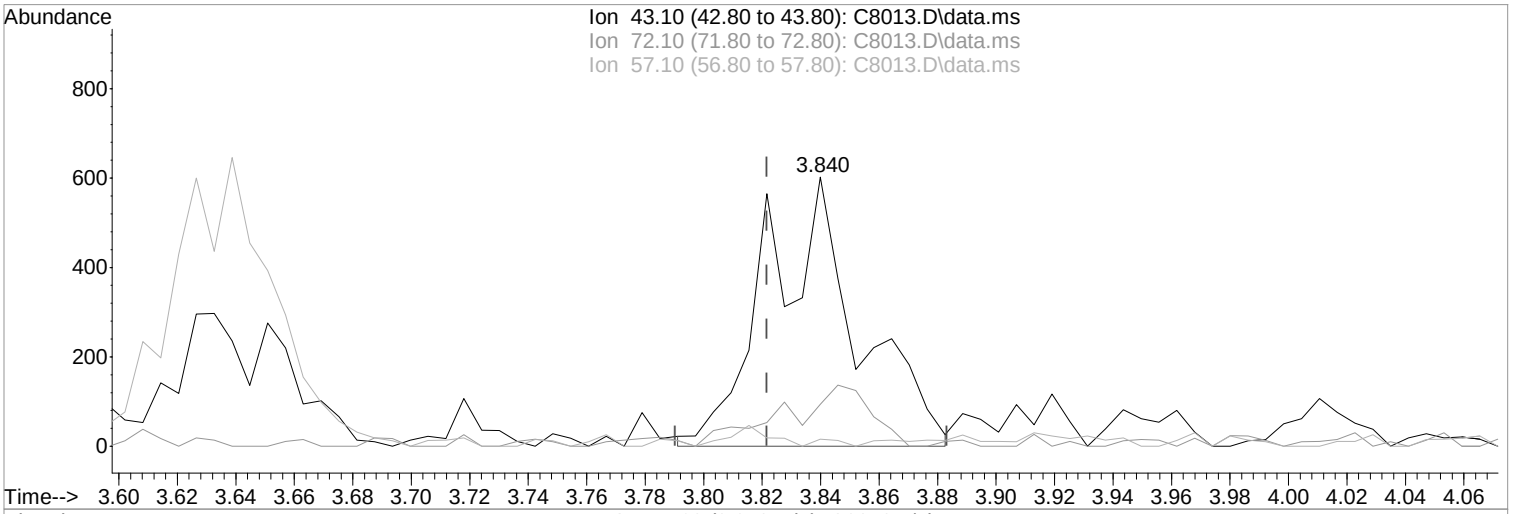
06/08/18

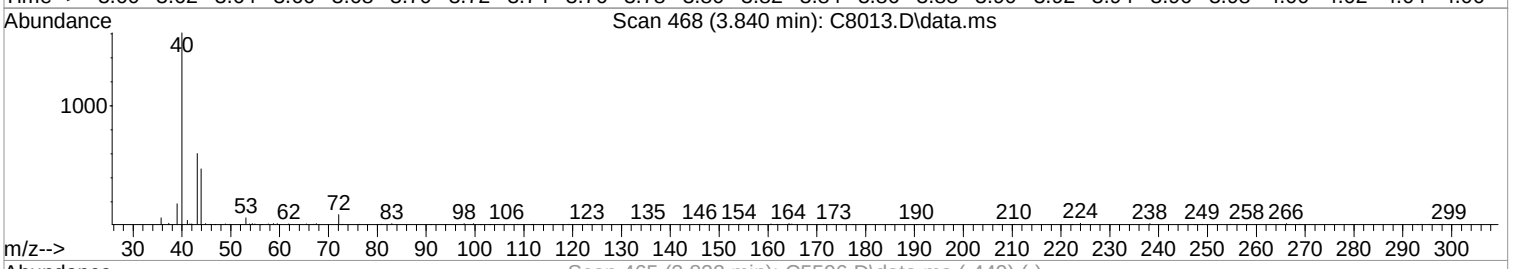
1st FW 06/11/18
2nd WR 06/11/18

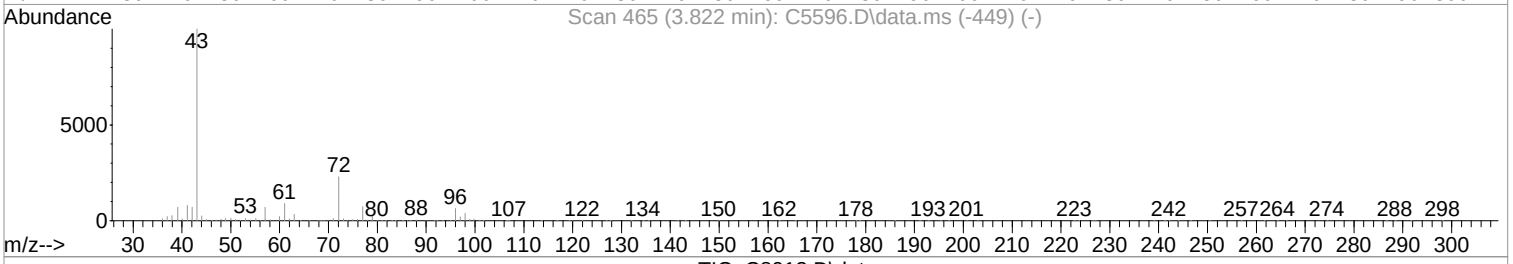
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(34) 2-Butanone (P)

3.840min (+0.018) 0.49 ug/L m

response 1297

Ion	Exp%	Act%
43.10	100	100
72.10	22.90	15.61
57.10	7.20	2.66
0.00	0.00	0.00

Manual Integration:

After

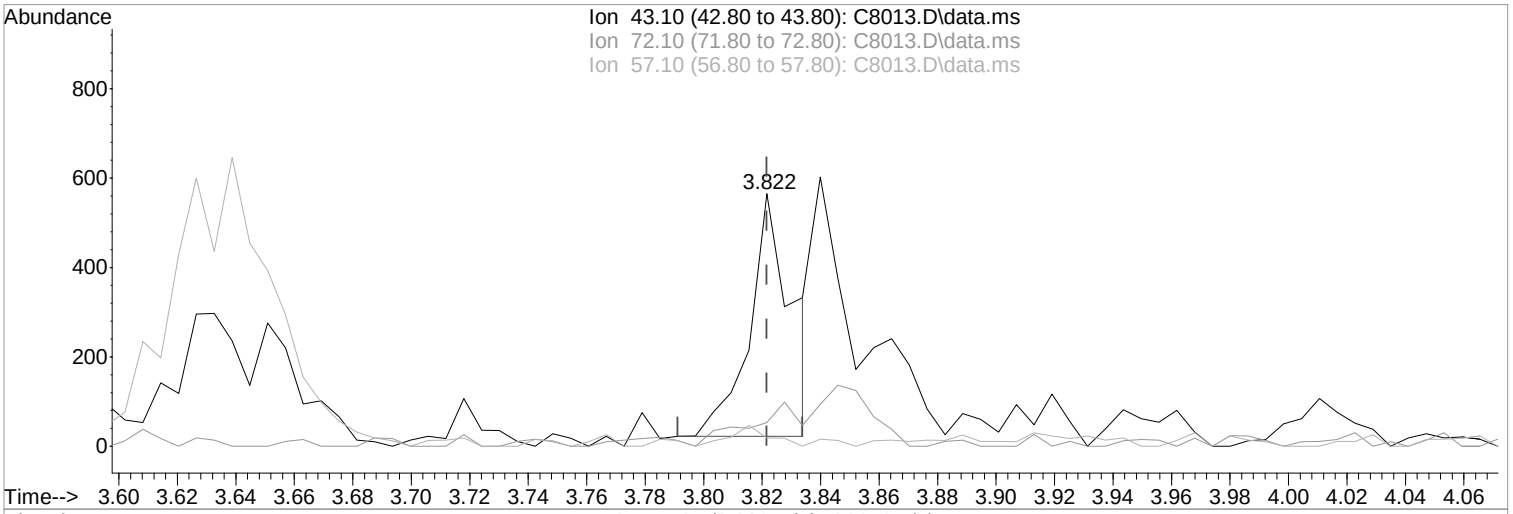
Poor integration.

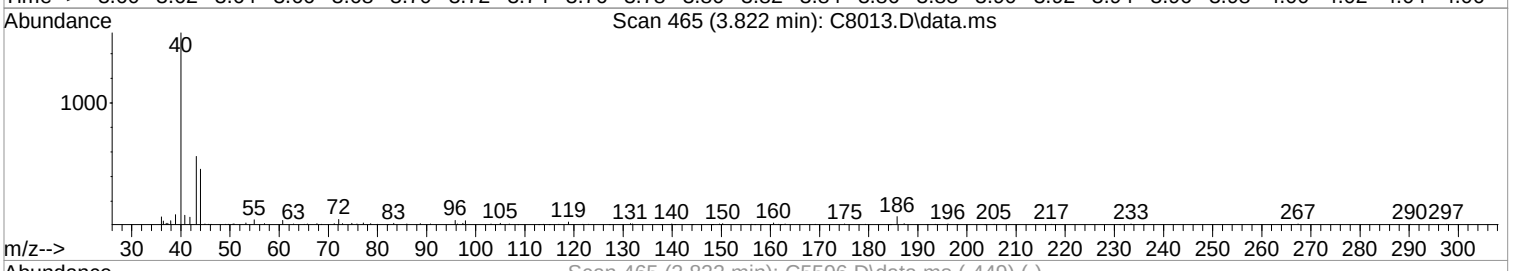
06/08/18

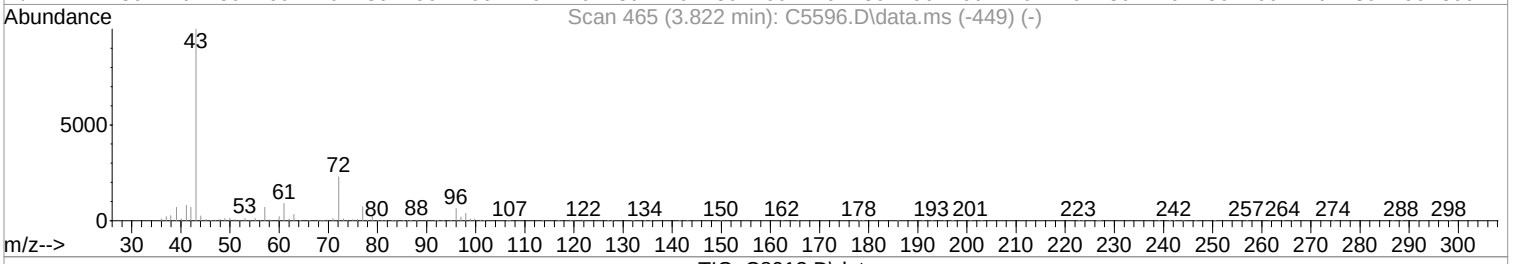
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(34) 2-Butanone (P)

3.822min (-0.000) 0.21 ug/L

response 545

Ion	Exp%	Act%
43.10	100	100
72.10	22.90	9.38
57.10	7.20	3.36
0.00	0.00	0.00

Manual Integration:

Before

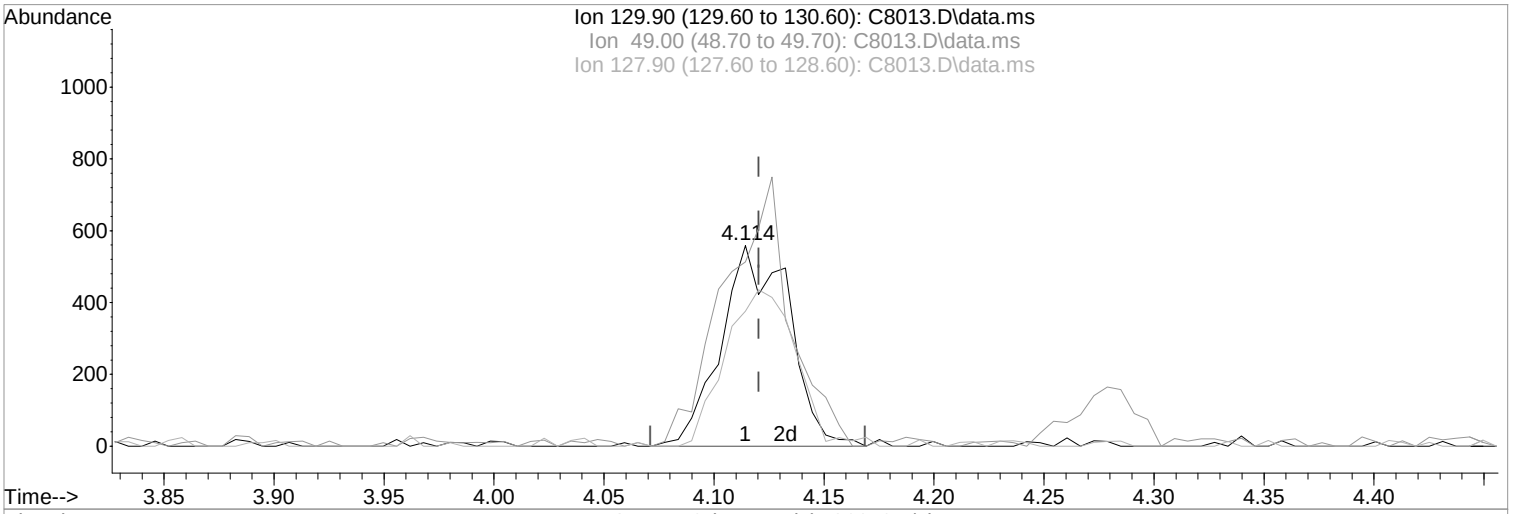
06/08/18

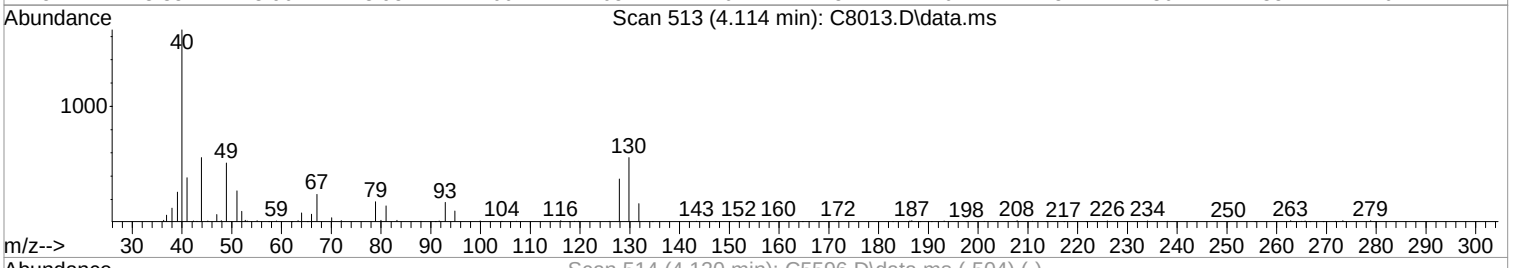
1st FN 06/11/18
2nd 06/11/18

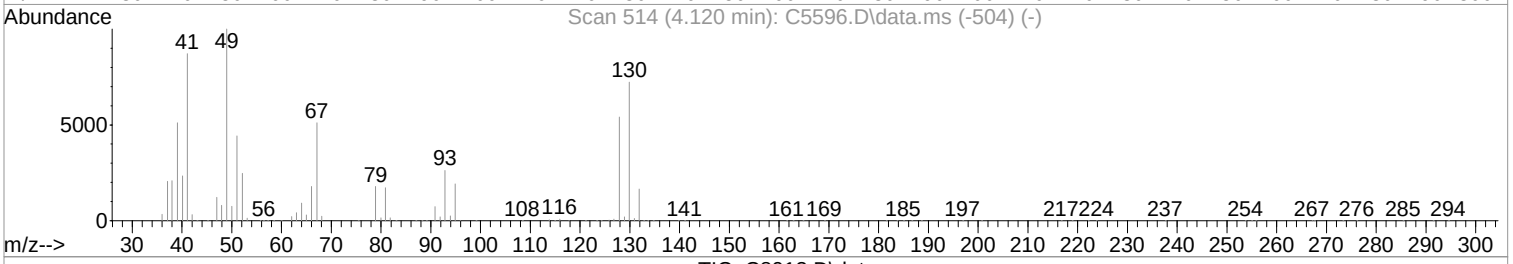
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(36) Bromochloromethane

4.114min (-0.006) 0.53 ug/L m

response 1206

Ion	Exp%	Act%
129.90	100	100
49.00	138.30	91.77#
127.90	74.80	67.26
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

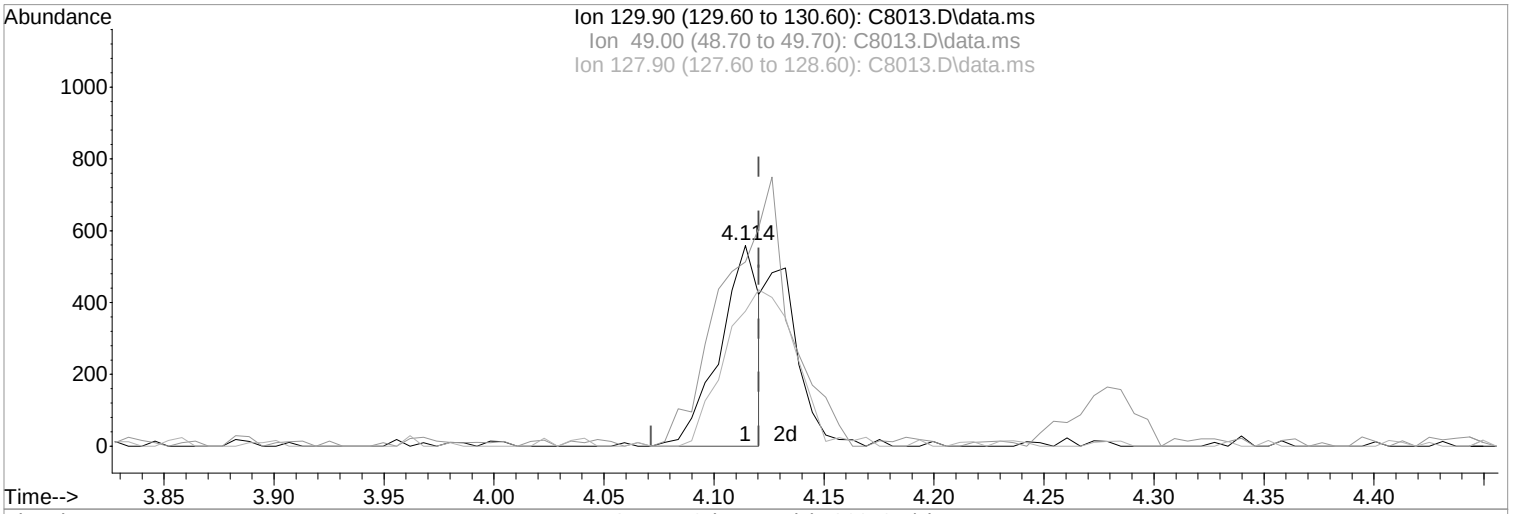
06/08/18

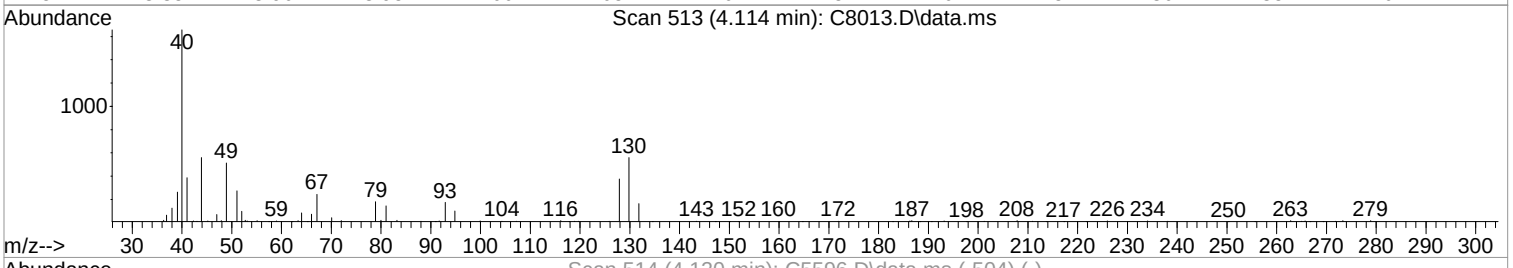
1st FN 06/11/18
2nd 06/11/18

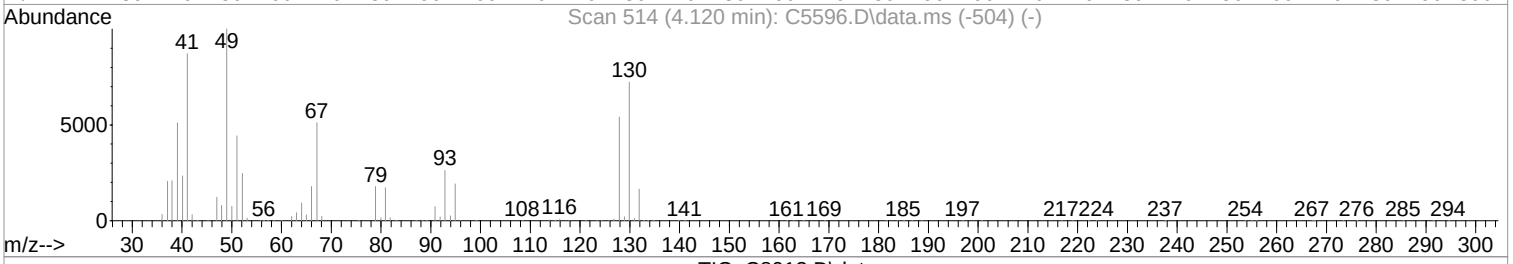
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(36) Bromochloromethane

4.114min (-0.006) 0.31 ug/L

response 705

Ion	Exp%	Act%
129.90	100	100
49.00	138.30	91.77#
127.90	74.80	67.26
0.00	0.00	0.00

Manual Integration:

Before

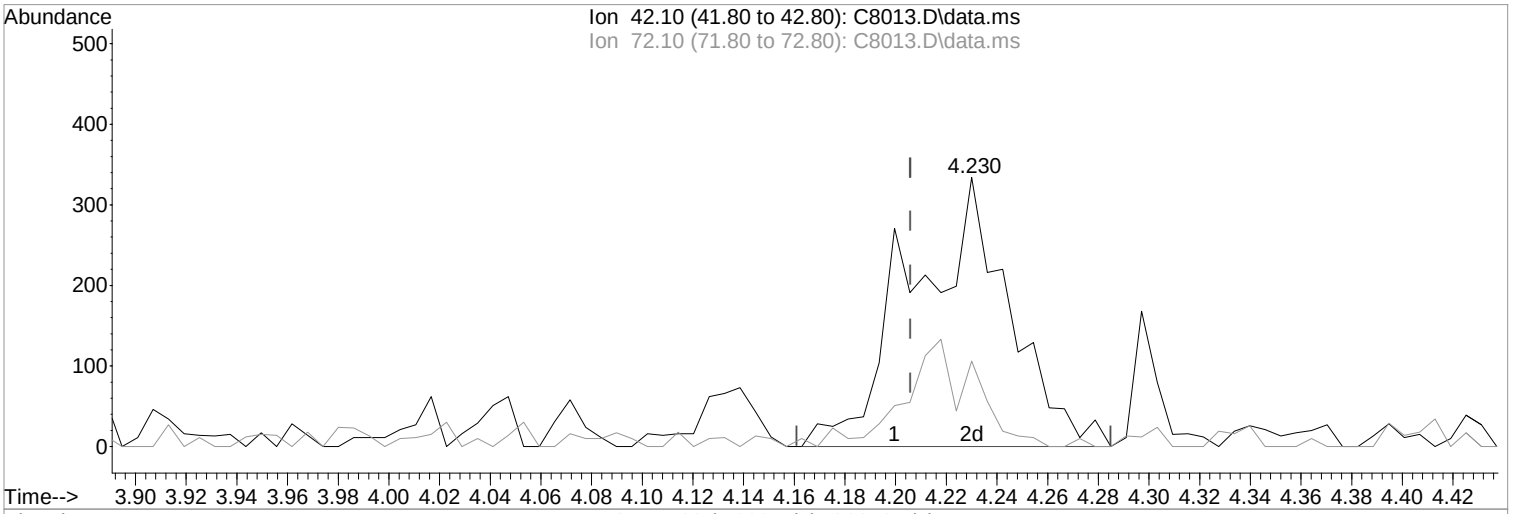
06/08/18

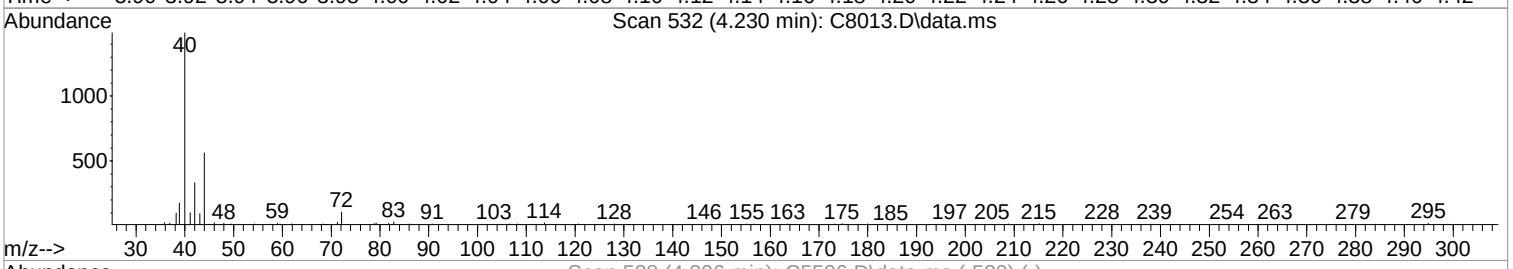
1st FW 06/11/18
2nd 06/11/18

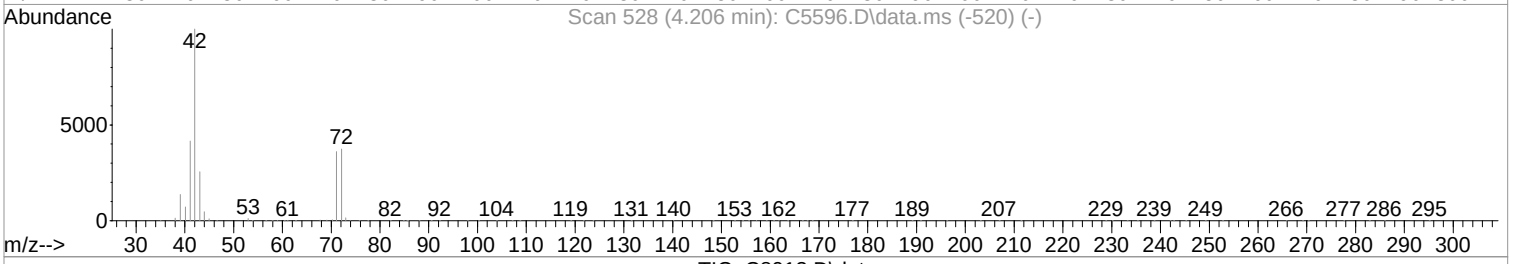
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(38) Tetrahydrofuran

4.230min (+0.024) 0.60 ug/L m

response 895

Ion	Exp%	Act%
42.10	100	100
72.10	37.10	31.74
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

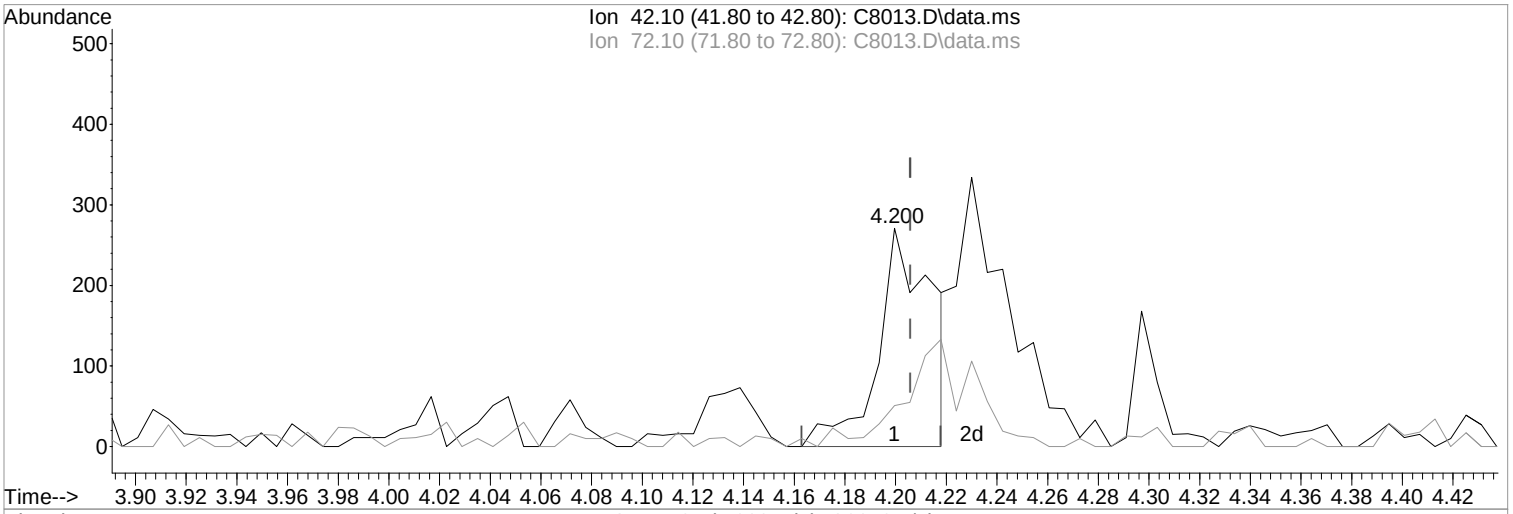
Poor integration.

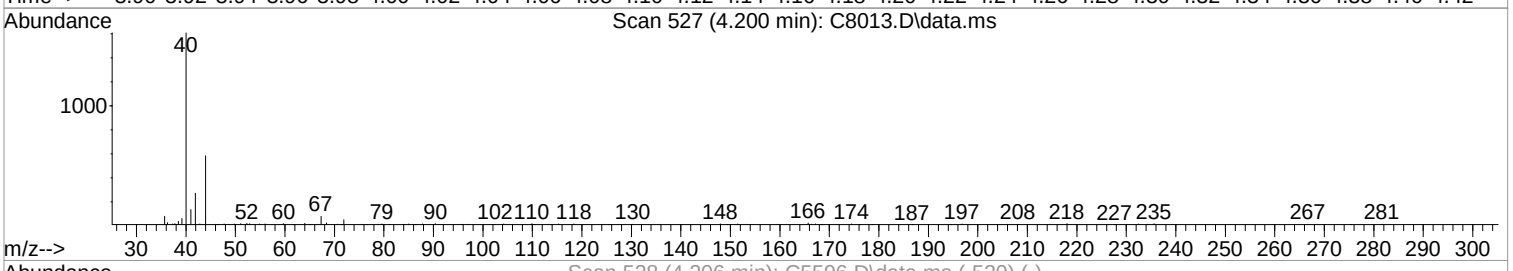
06/08/18

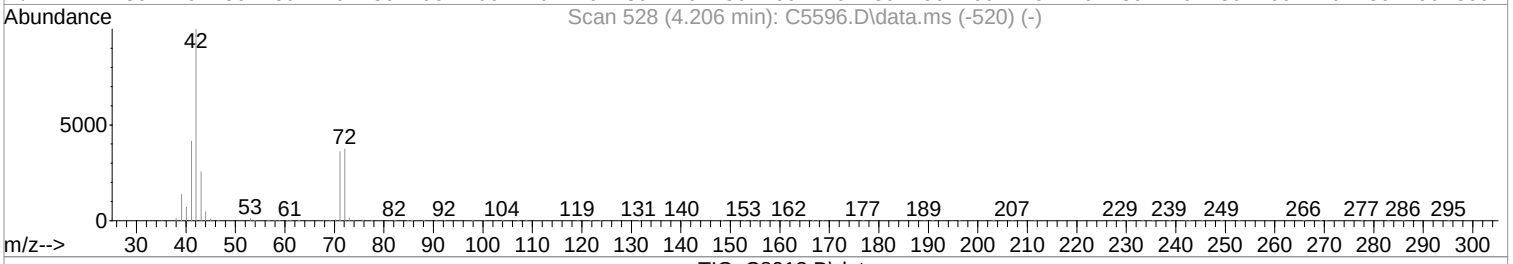
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(38) Tetrahydrofuran

4.200min (-0.006) 0.27 ug/L

response 400

Ion	Exp%	Act%
42.10	100	100
72.10	37.10	17.83
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

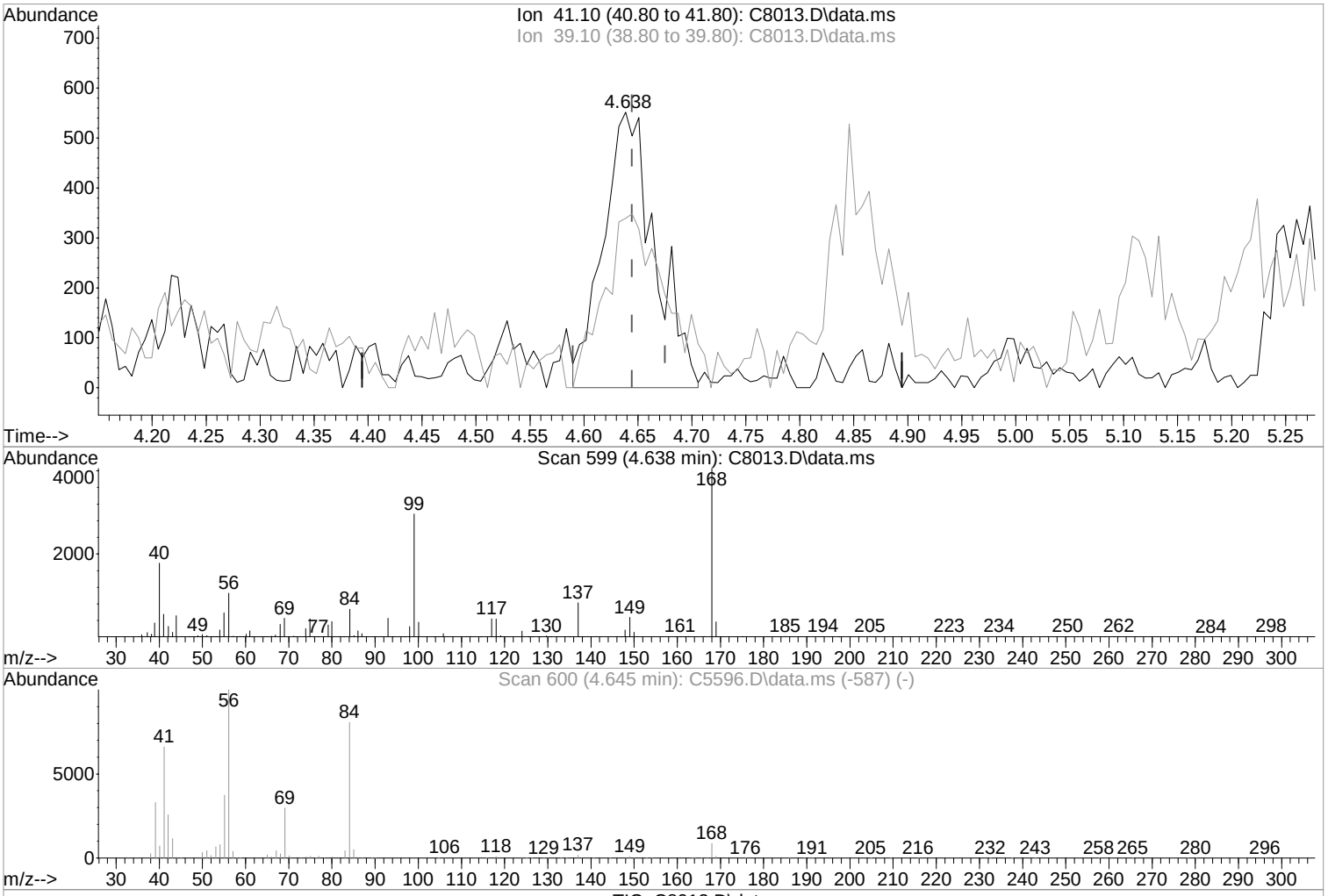
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(43) Cyclohexane (P)

4.638min (-0.006) 0.48 ug/L m

response 1828

Ion	Exp%	Act%
41.10	100	100
39.10	50.00	61.41
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

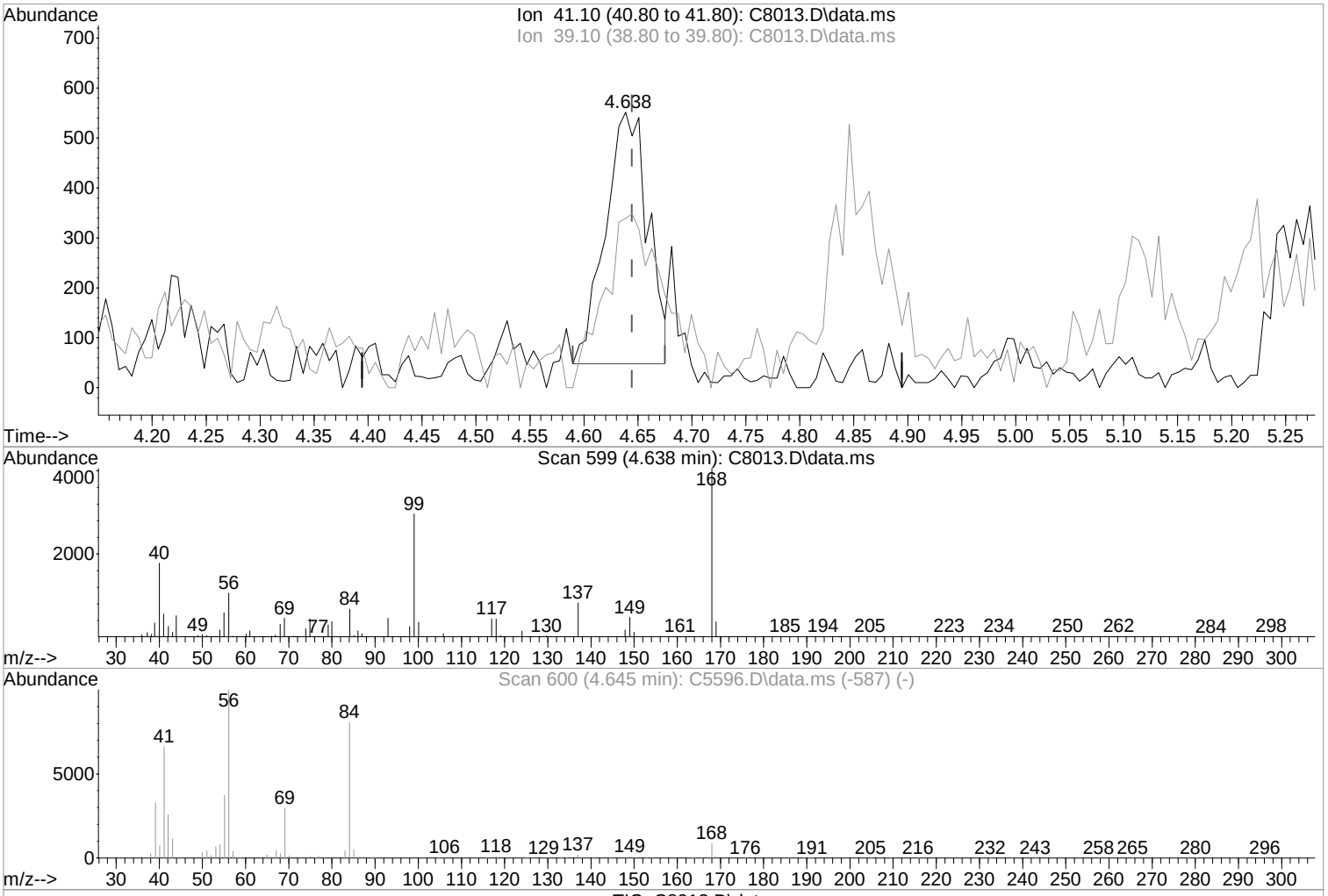
06/08/18

1st FW 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(43) Cyclohexane (P)

4.638min (-0.006) 0.36 ug/L

response 1380

Ion	Exp%	Act%
41.10	100	100
39.10	50.00	61.41
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

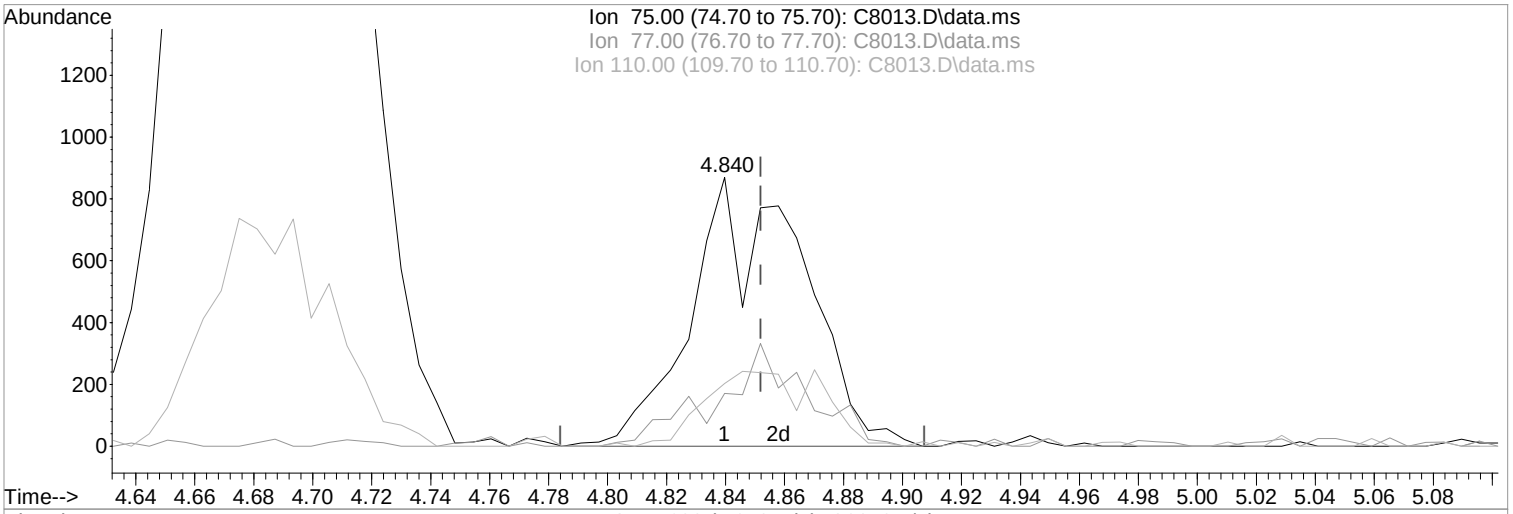
Before

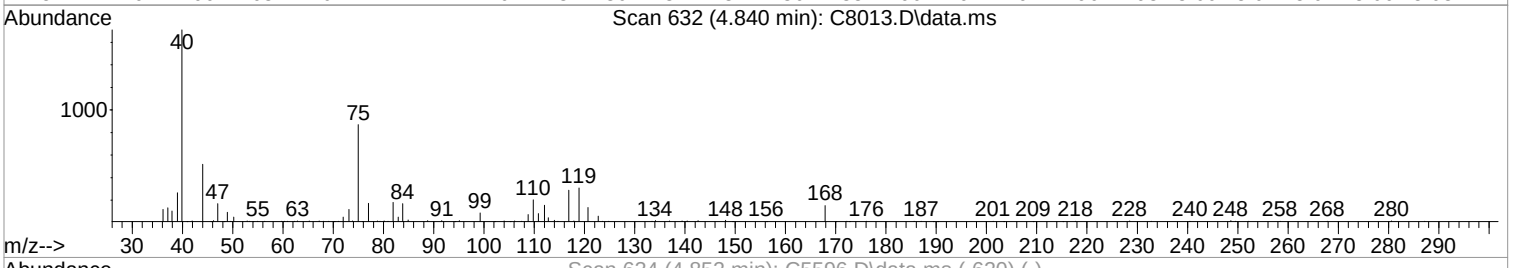
06/08/18

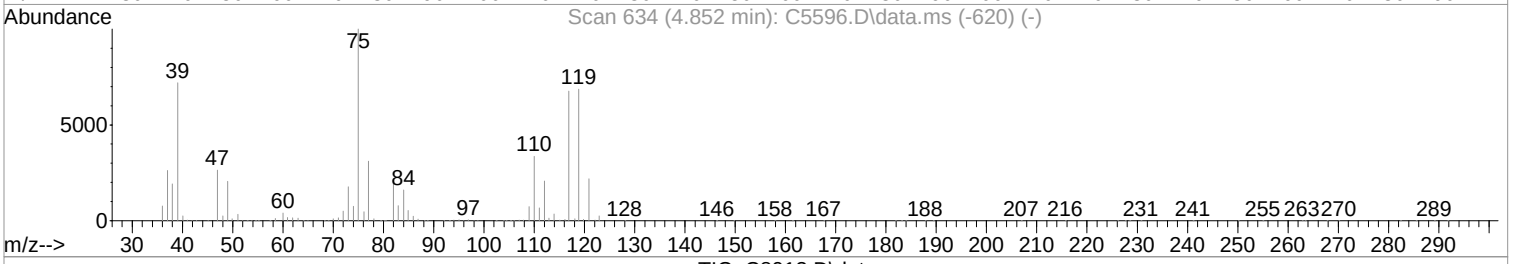
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(46) 1,1-Dichloropropene

4.840min (-0.012) 0.50 ug/L m

response 2293

Ion	Exp%	Act%
75.00	100	100
77.00	31.00	19.66
110.00	33.60	23.33
0.00	0.00	0.00

Manual Integration:

After

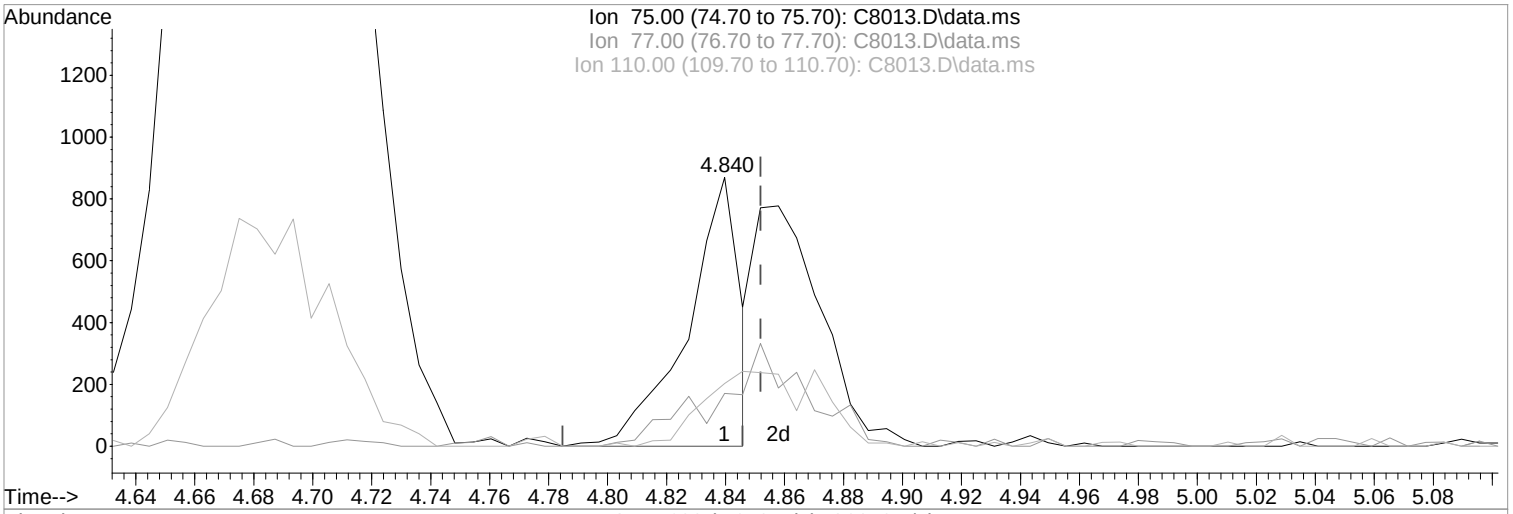
Poor integration.

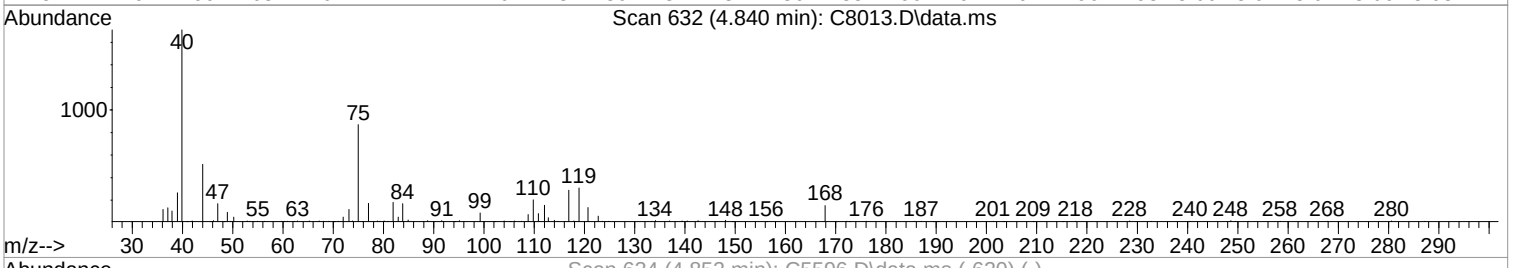
06/08/18

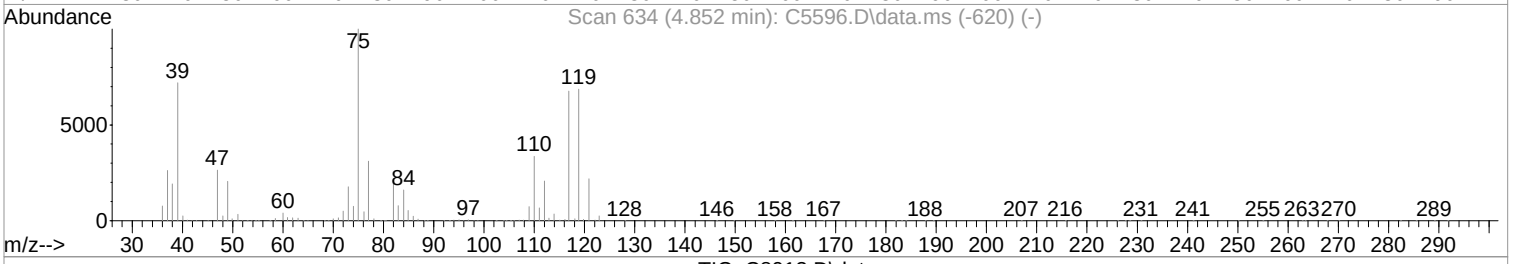
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(46) 1,1-Dichloropropene

4.840min (-0.012) 0.23 ug/L

response 1071

Ion	Exp%	Act%
75.00	100	100
77.00	31.00	19.66
110.00	33.60	23.33
0.00	0.00	0.00

Manual Integration:

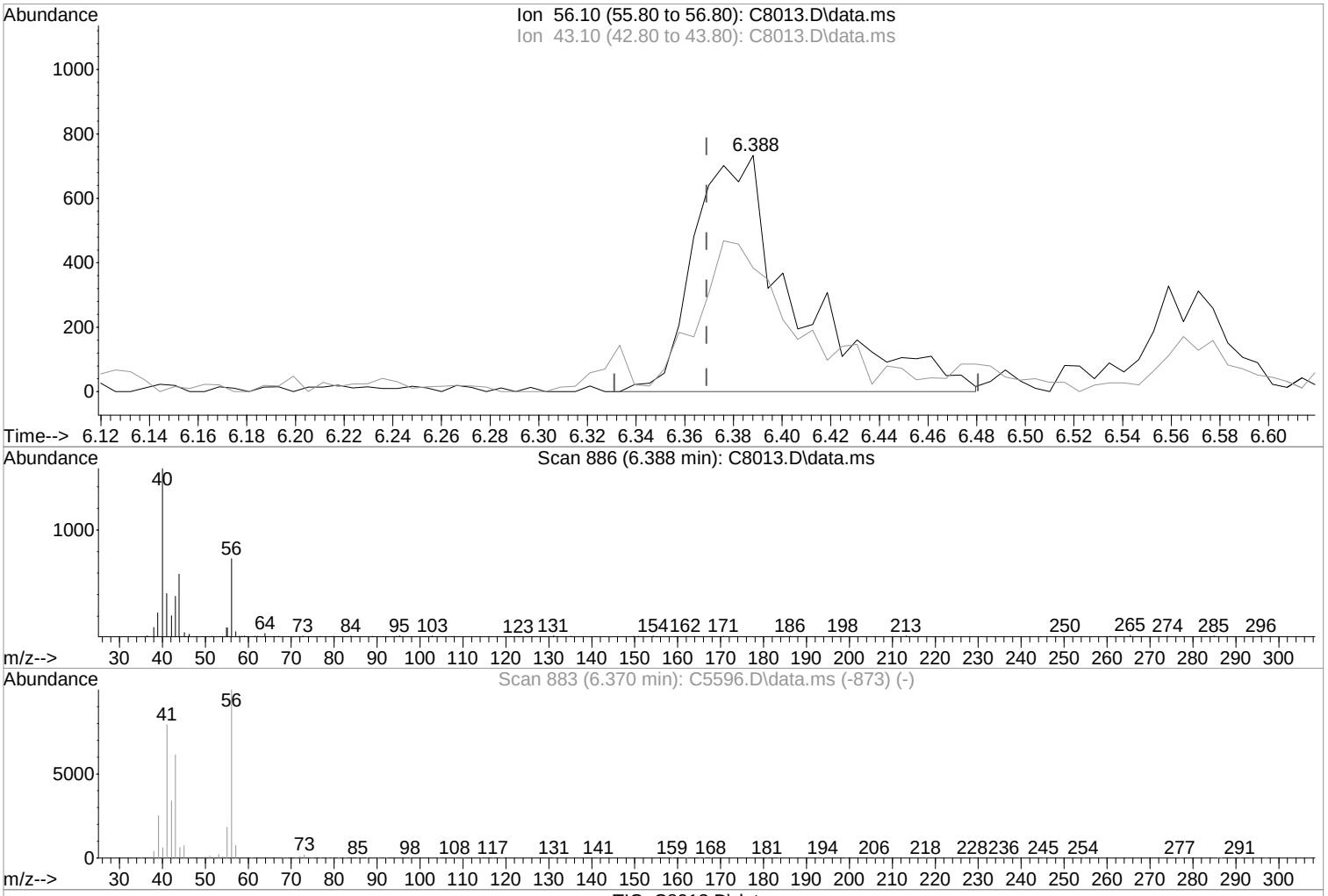
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(52) 1-Butanol

6.388min (+0.019) 16.66 ug/L m

response 2137

Ion	Exp%	Act%
56.10	100	100
43.10	61.60	52.39
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

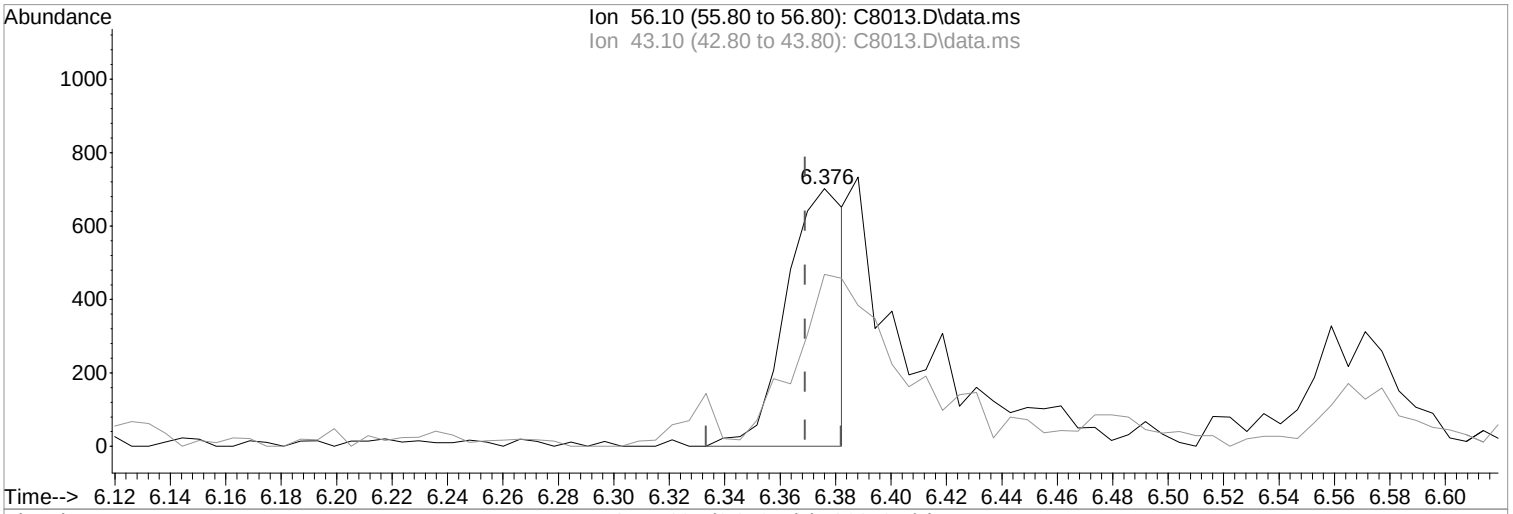
06/08/18

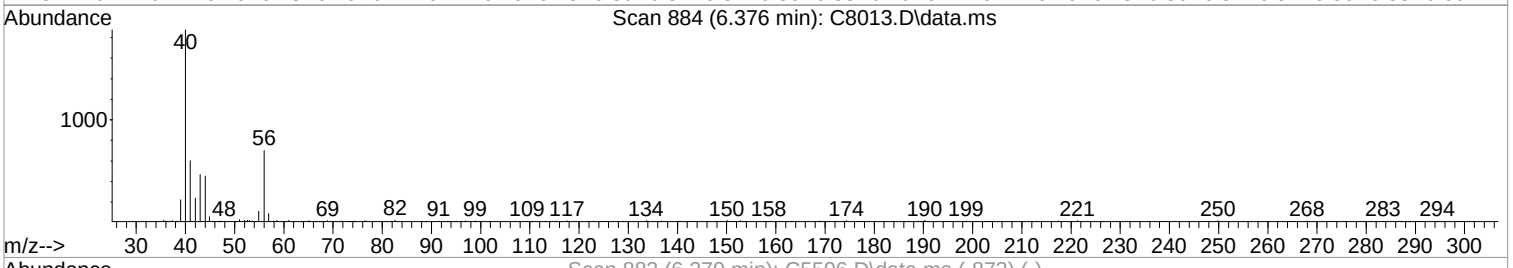
1st FN 06/11/18
2nd 06/11/18

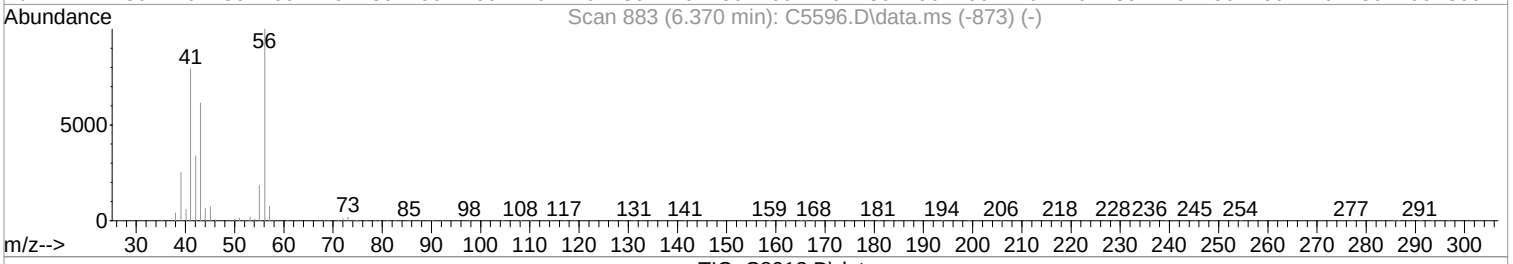
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(52) 1-Butanol

6.376min (+0.007) 7.95 ug/L

response 1020

Ion	Exp%	Act%
56.10	100	100
43.10	61.60	66.67
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

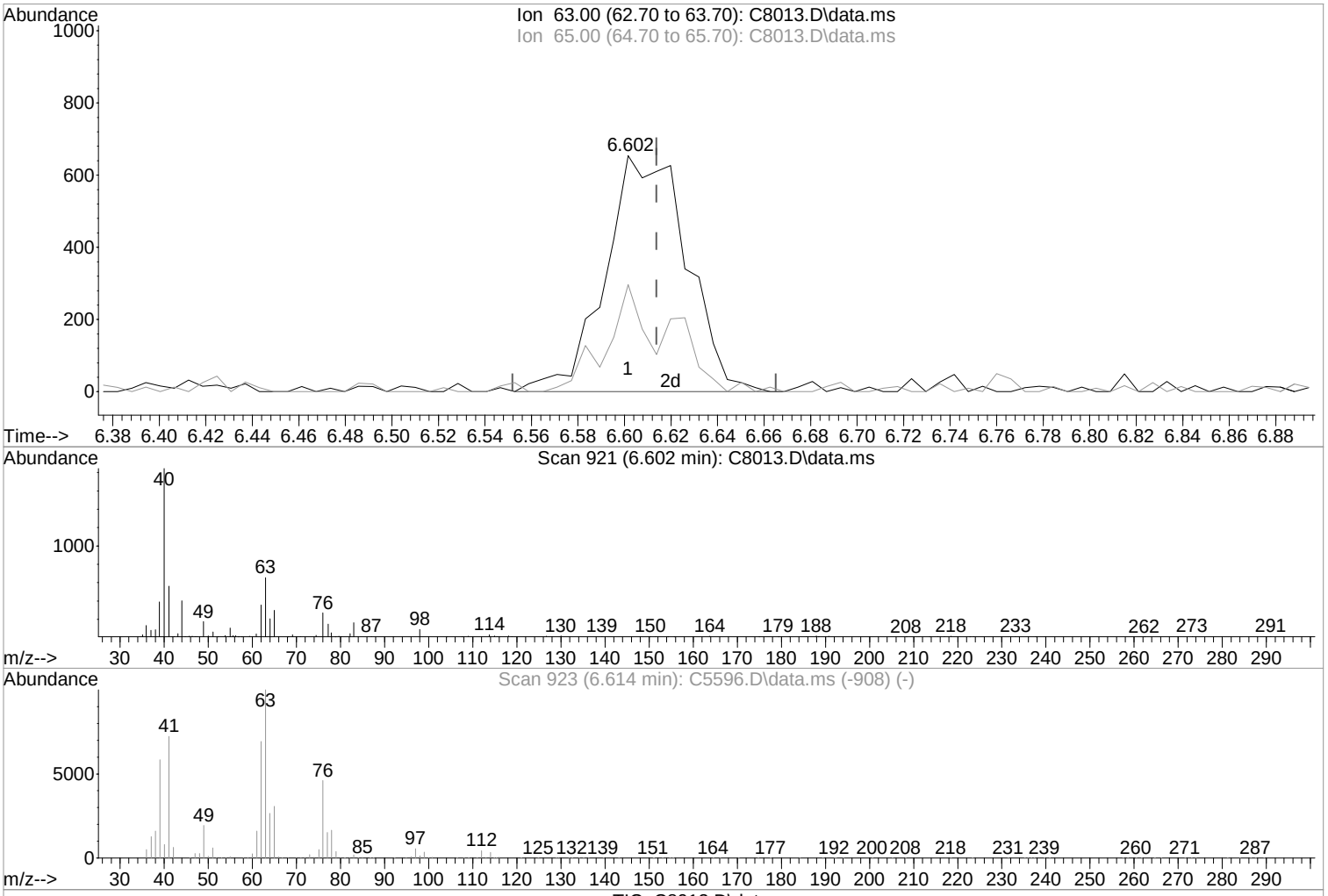
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
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Sample : 0.5 PPB STD Inst : MSVOA14
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QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(55) 1,2-Diclpropane (P)

6.602min (-0.012) 0.44 ug/L m

response 1592

Ion	Exp%	Act%
63.00	100	100
65.00	30.80	45.41
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

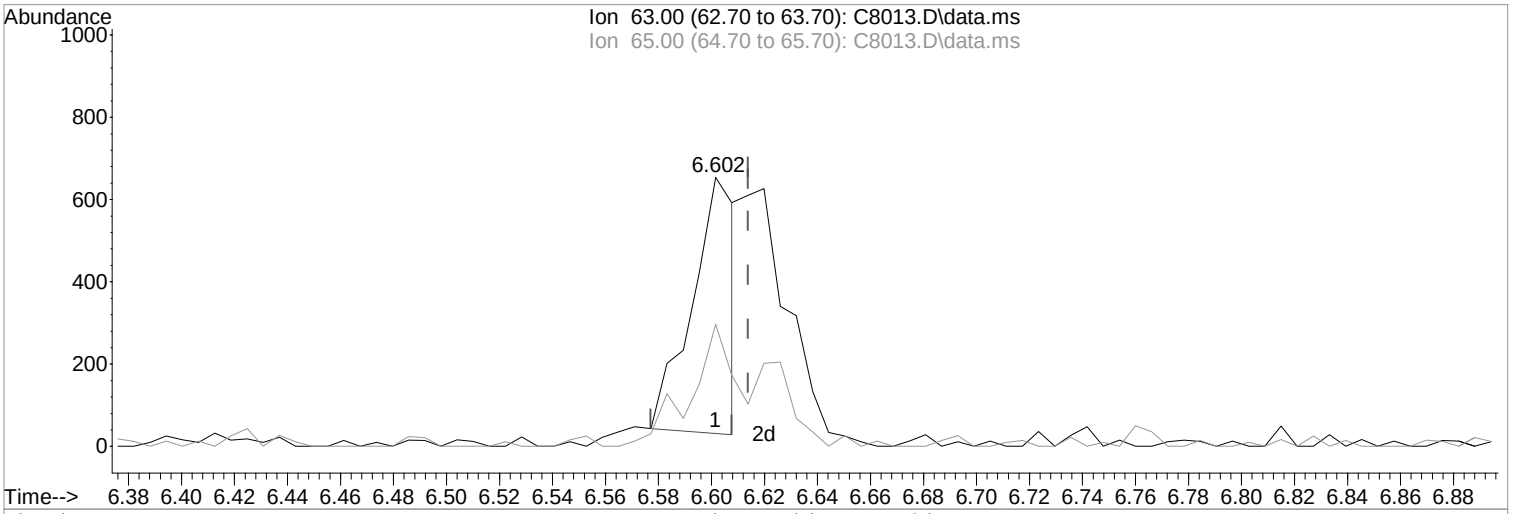
Poor integration.

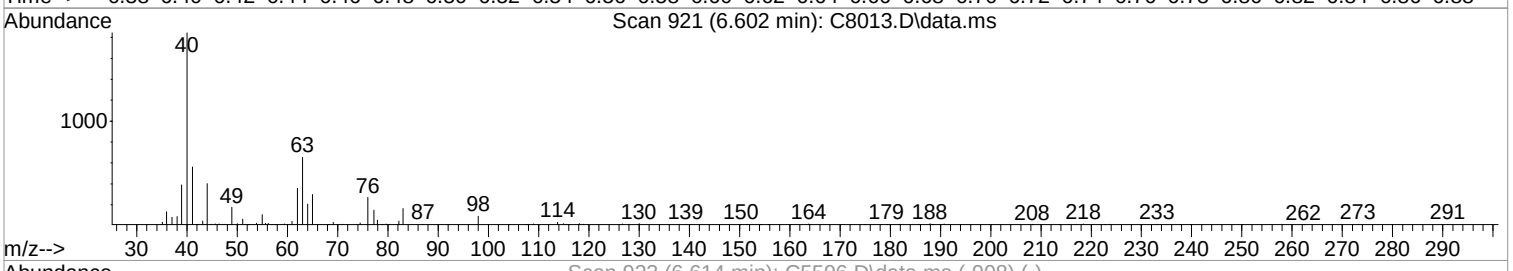
06/08/18

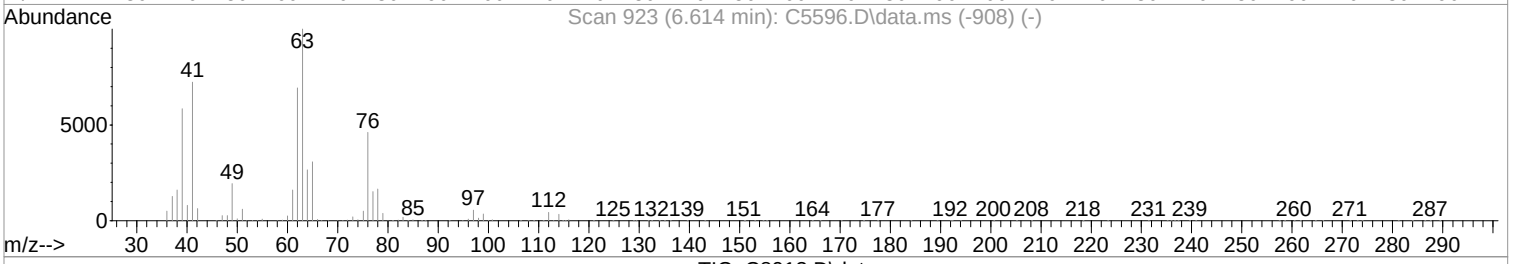
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(55) 1,2-Diclpropane (P)

6.602min (-0.012) 0.20 ug/L

response 705

Ion	Exp%	Act%
63.00	100	100
65.00	30.80	45.41
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

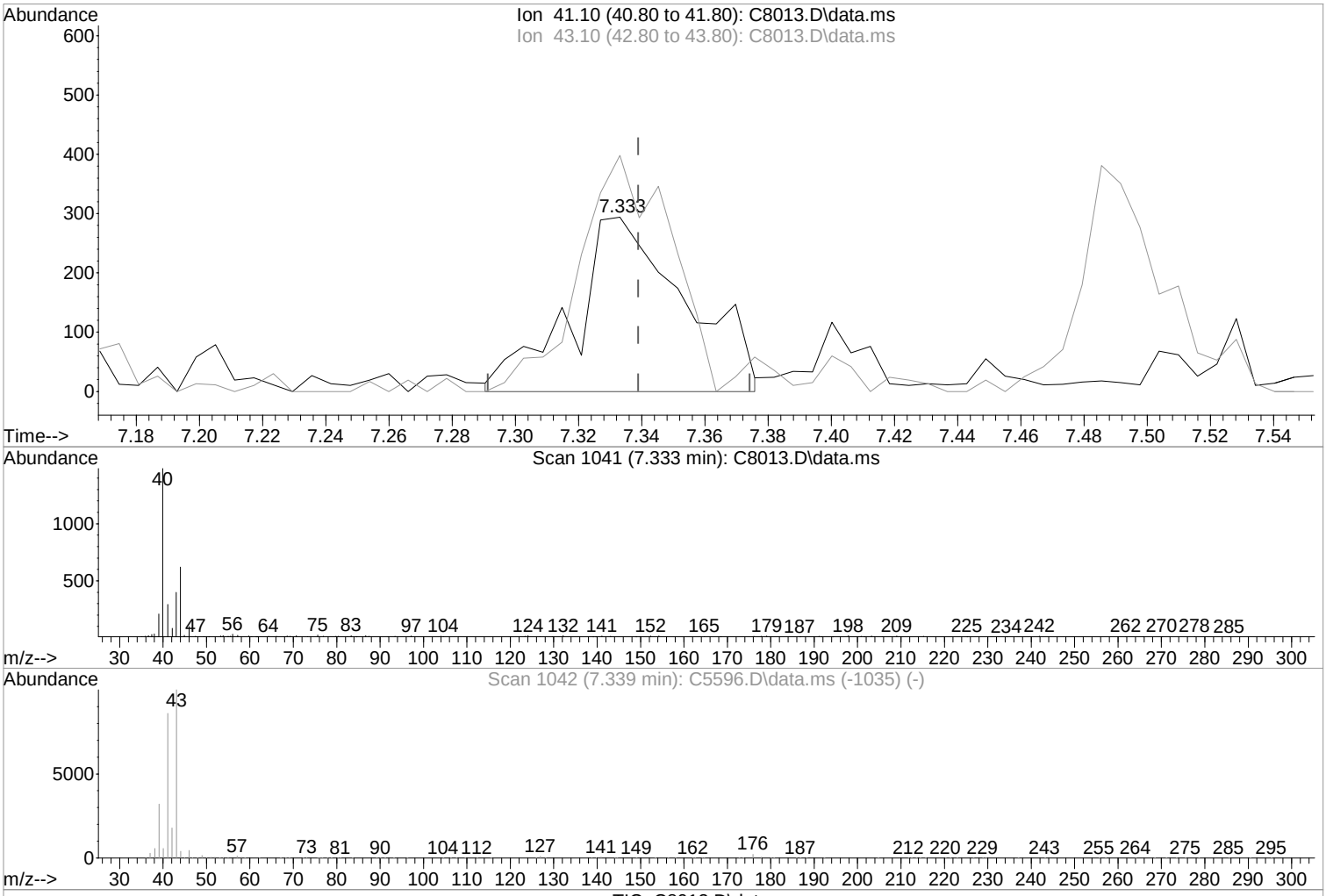
06/08/18

1st FN 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(60) 2-Nitropropane

7.333min (-0.006) 0.69 ug/L m

response 733

Ion	Exp%	Act%
41.10	100	100
43.10	116.10	135.37
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

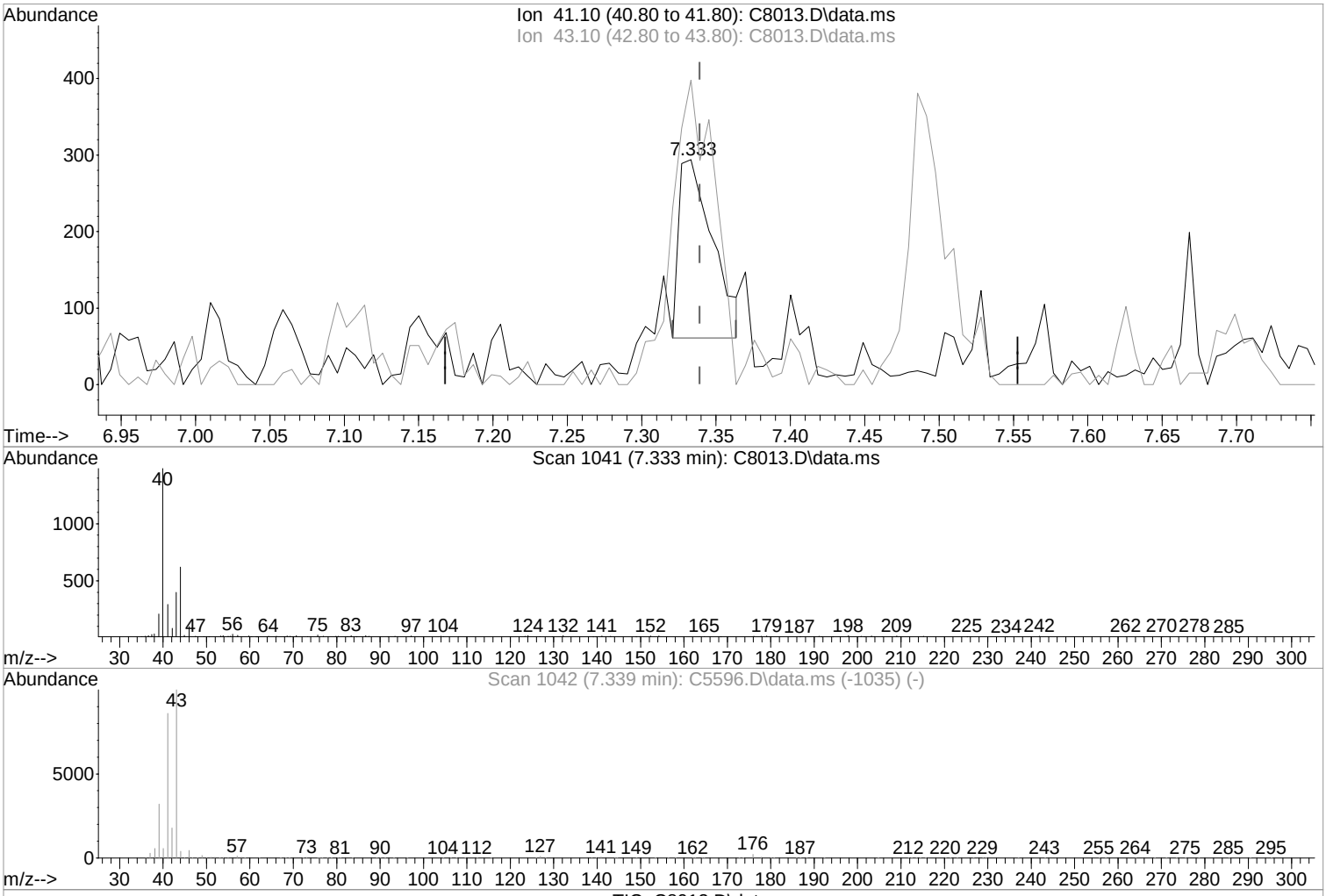
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(60) 2-Nitropropane

7.333min (-0.006) 0.34 ug/L

response 368

Ion	Exp%	Act%
41.10	100	100
43.10	116.10	135.37
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

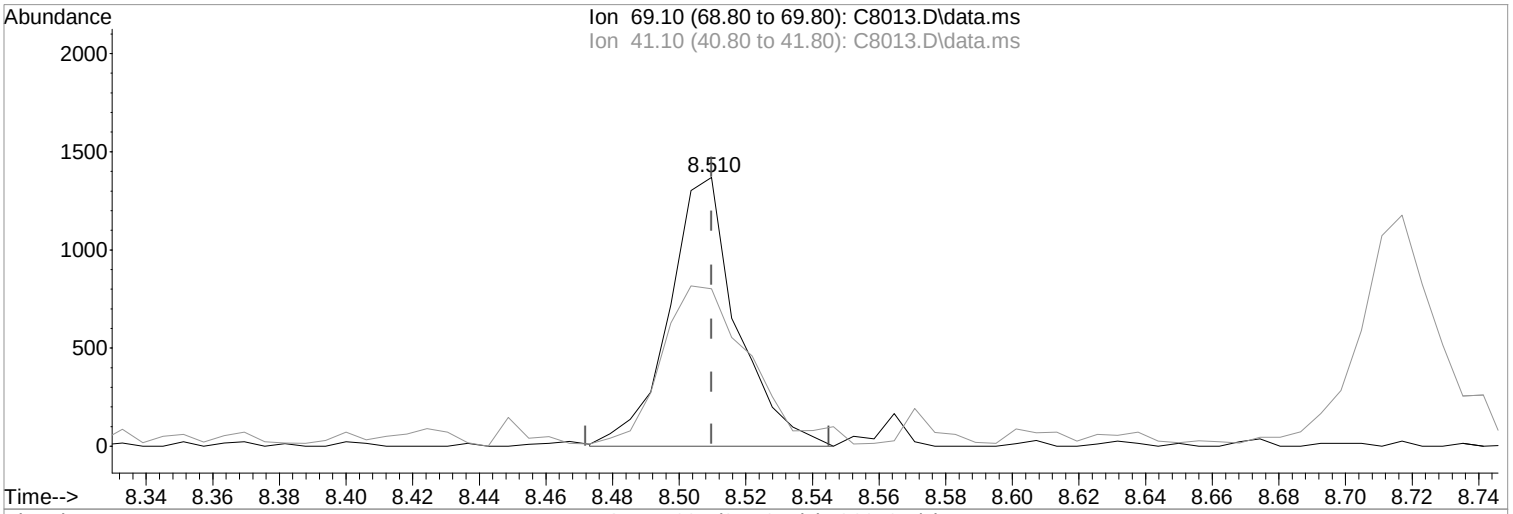
Before

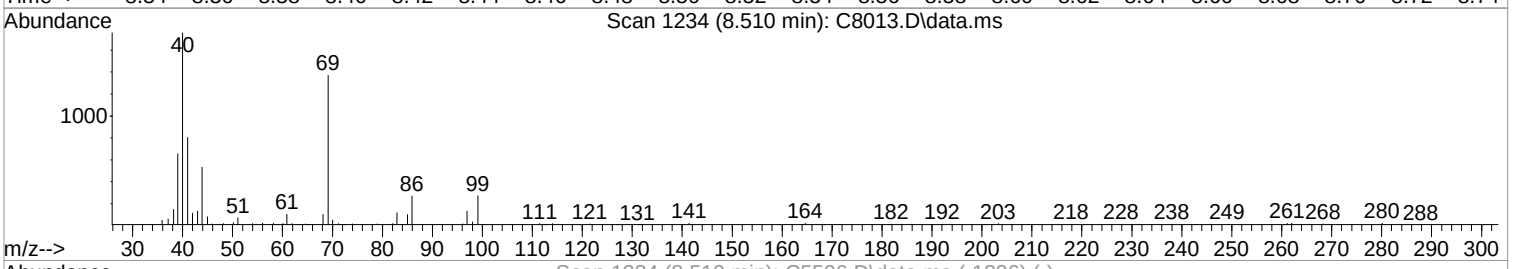
06/08/18

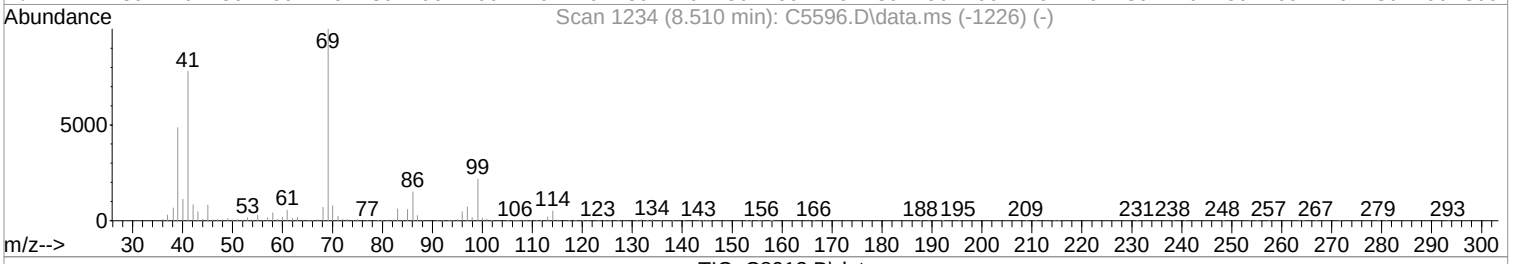
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(67) Ethyl Methacrylate

8.510min (-0.000) 0.41 ug/L m

response 1939

Ion	Exp%	Act%
69.10	100	100
41.10	78.10	58.54
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

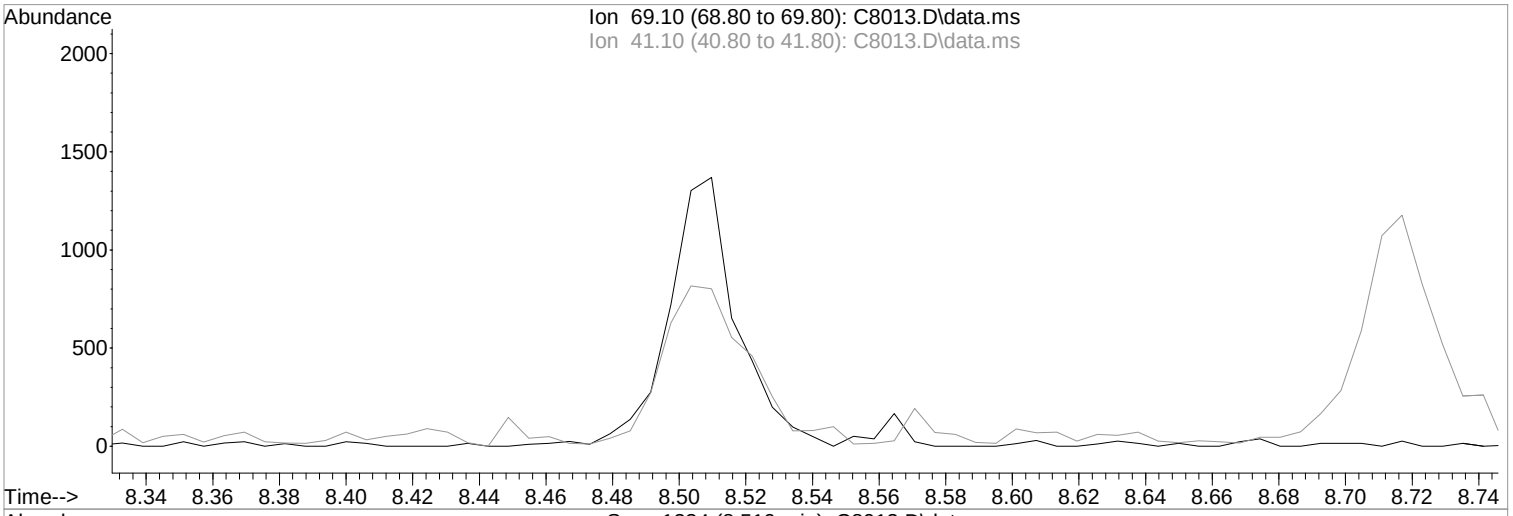
06/08/18

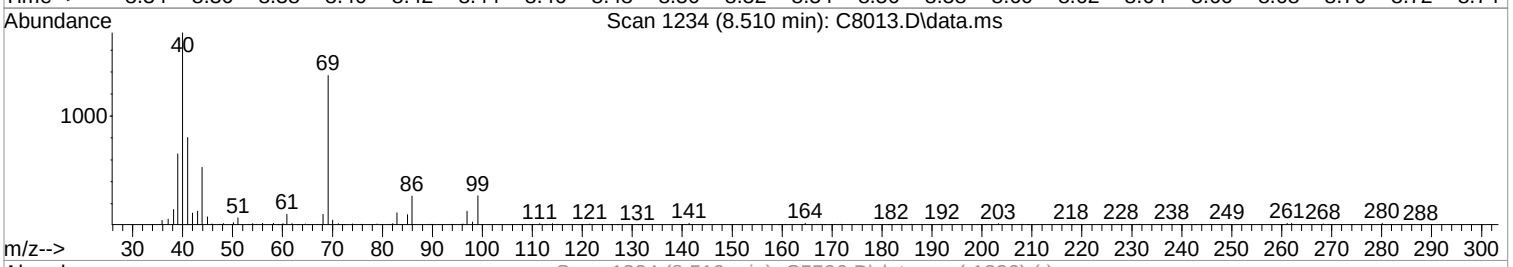
1st FW 06/11/18
2nd 06/11/18

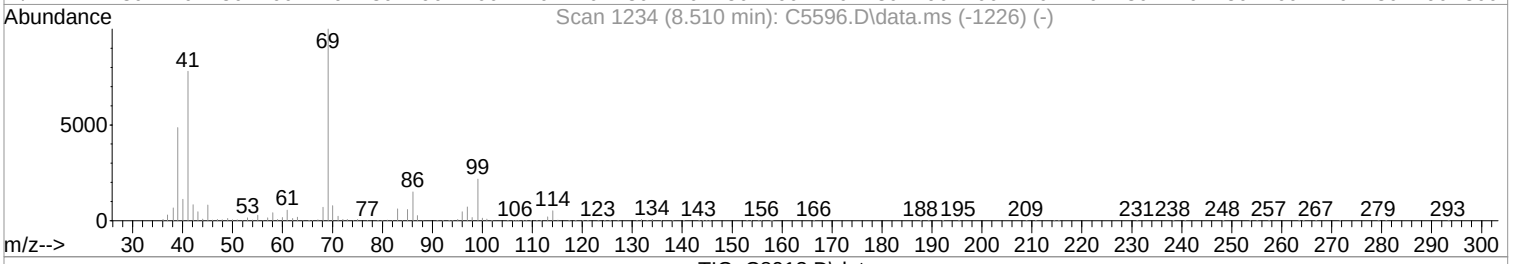
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(67) Ethyl Methacrylate

8.510min (-8.510) 0.00 ug/L

response 0

Ion	Exp%	Act%
69.10	100	0.00
41.10	78.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

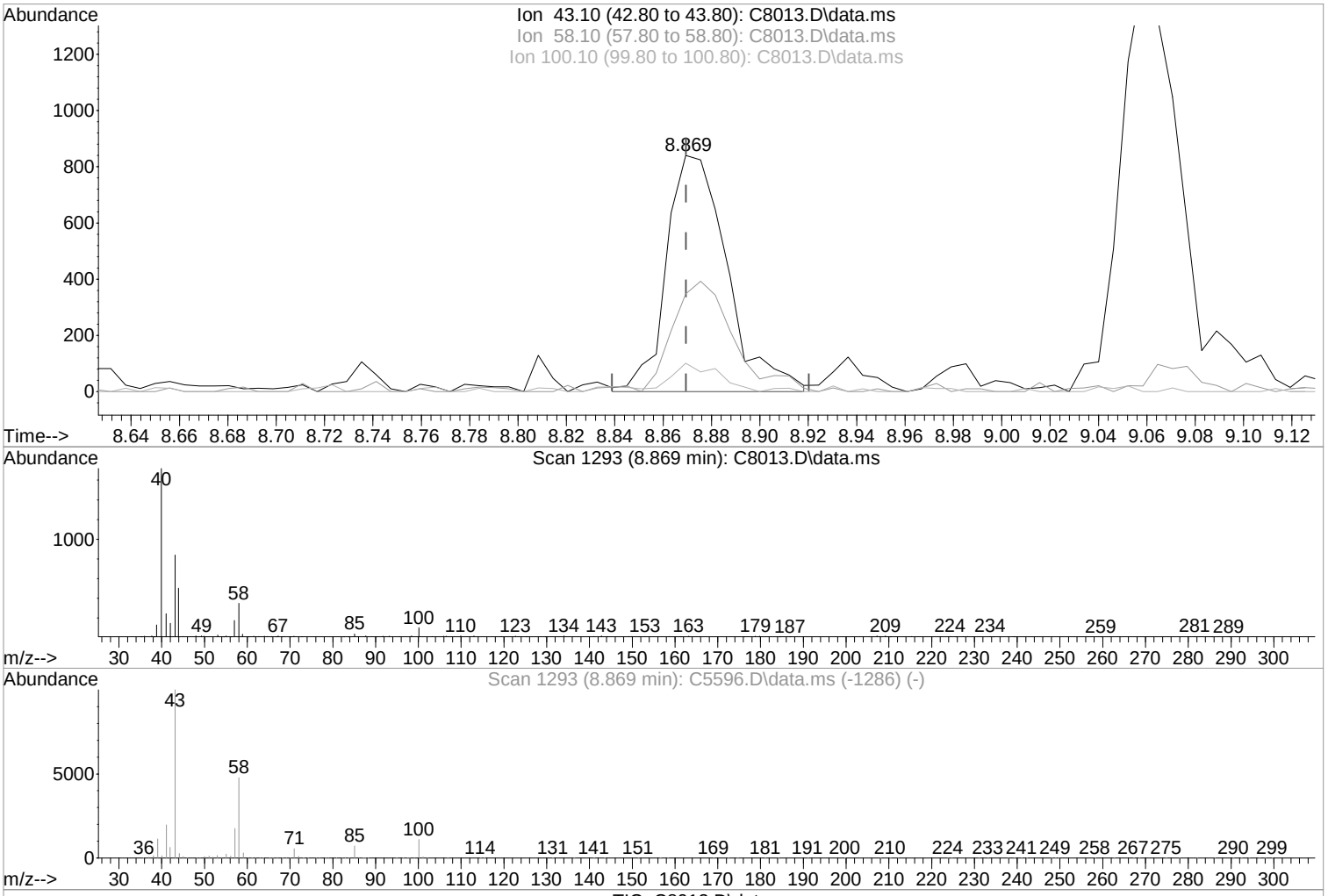
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(72) 2-Hexanone (P)

8.869min (-0.000) 0.42 ug/L m

response 1463

Ion	Exp%	Act%
43.10	100	100
58.10	47.70	41.43
100.10	11.00	12.02
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

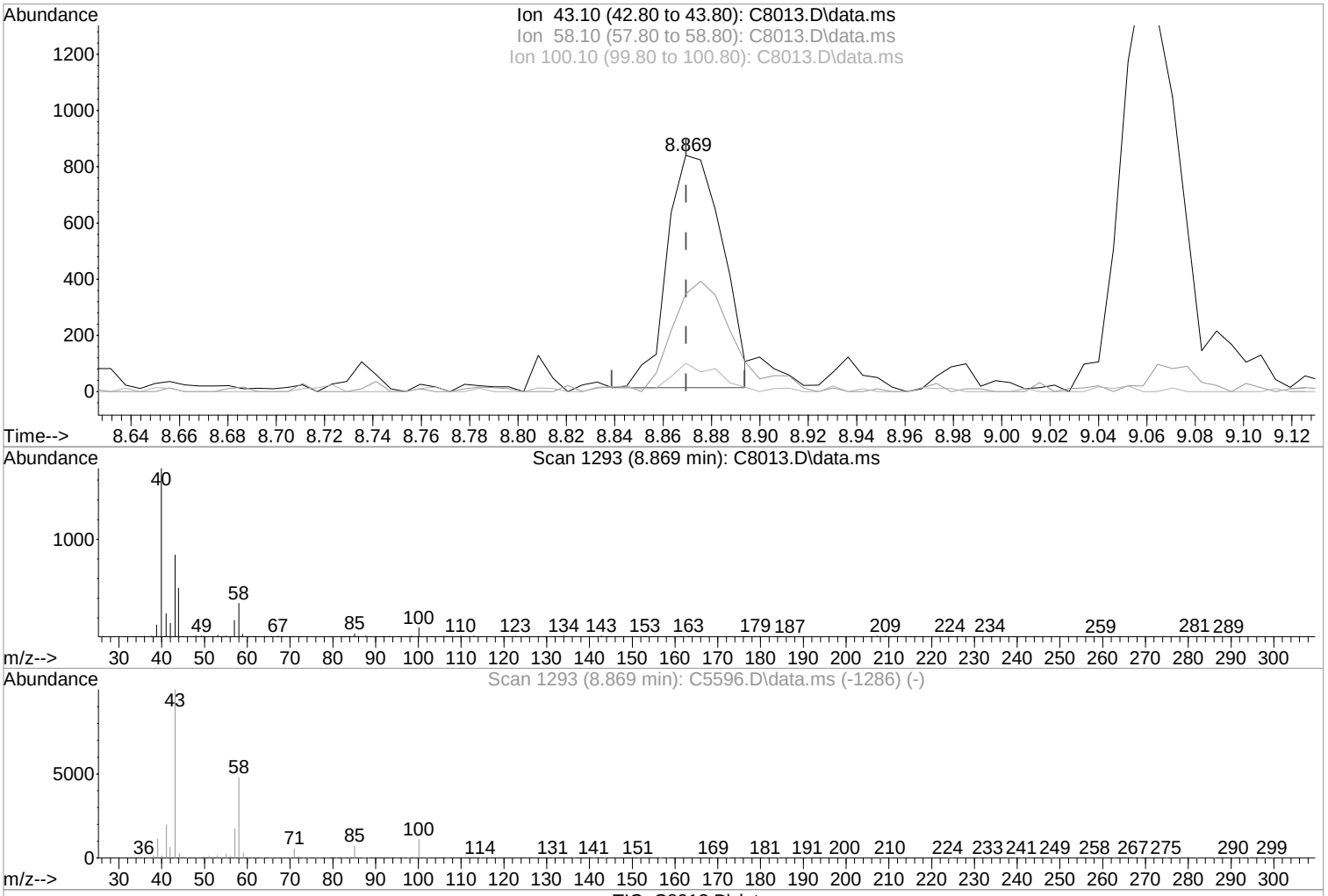
06/08/18

1st FJ 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(72) 2-Hexanone (P)

8.869min (-0.000) 0.38 ug/L

response 1313

Ion	Exp%	Act%
43.10	100	100
58.10	47.70	41.43
100.10	11.00	12.02
0.00	0.00	0.00

Manual Integration:

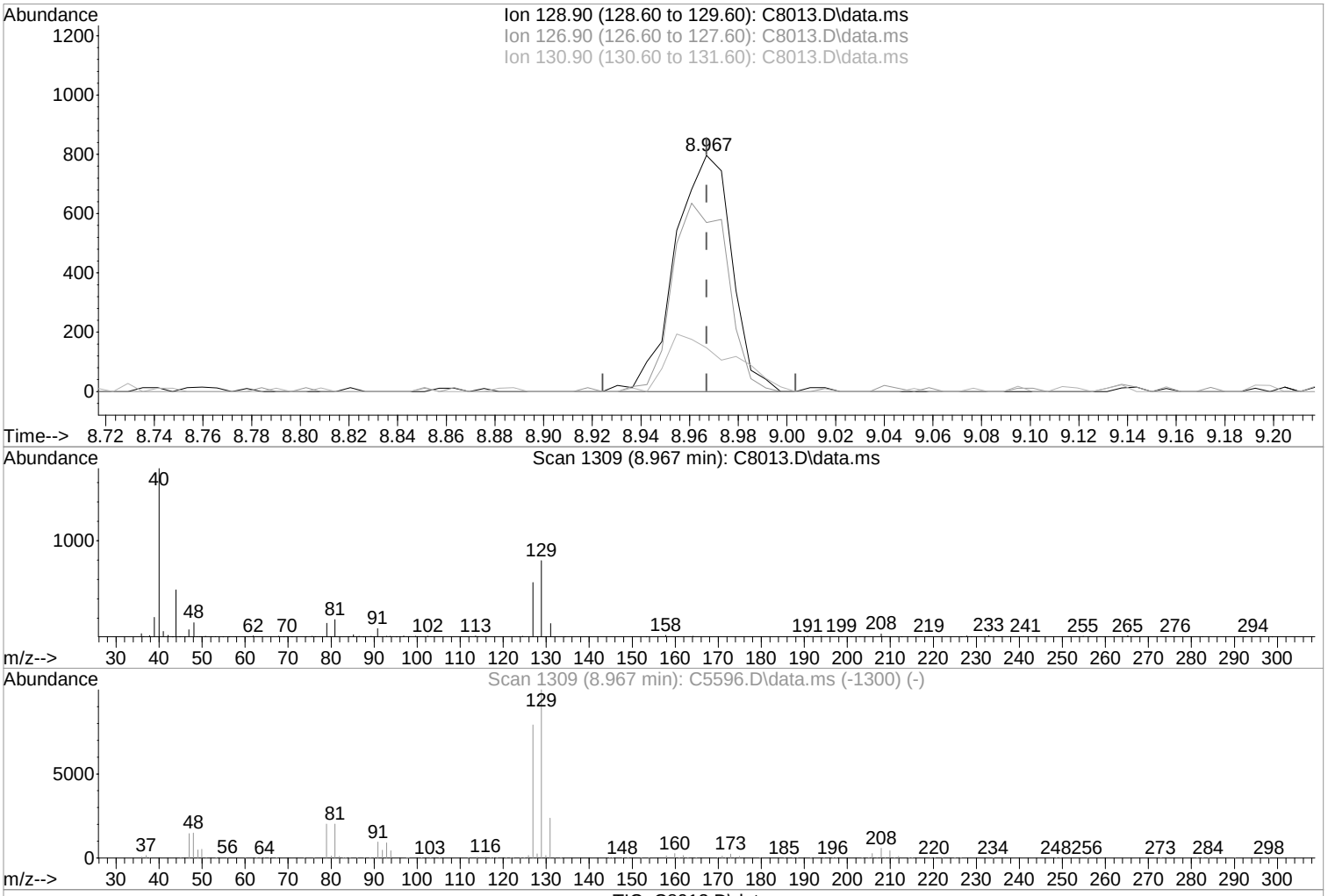
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(74) Dibromochloromethane (P)

8.967min (-0.000) 0.42 ug/L m

response 1288

Ion	Exp%	Act%
128.90	100	100
126.90	79.10	71.61
130.90	23.80	18.47
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

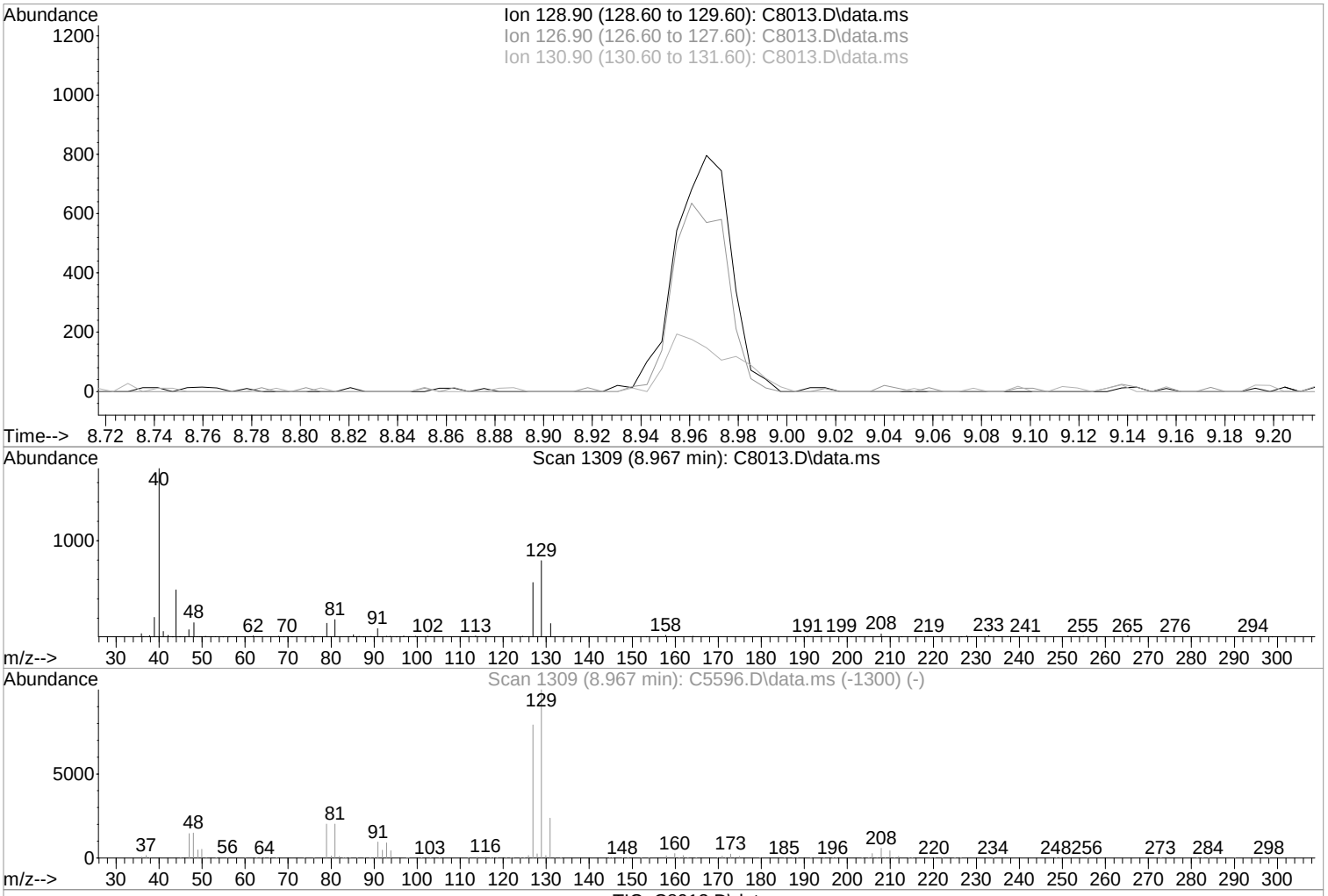
06/08/18

1st FJ 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8013.D\data.ms

(74) Dibromochloromethane (P)

8.967min (-8.967) 0.00 ug/L

response 0

Ion	Exp%	Act%
128.90	100	0.00
126.90	79.10	0.00#
130.90	23.80	0.00#
0.00	0.00	0.00

Manual Integration:

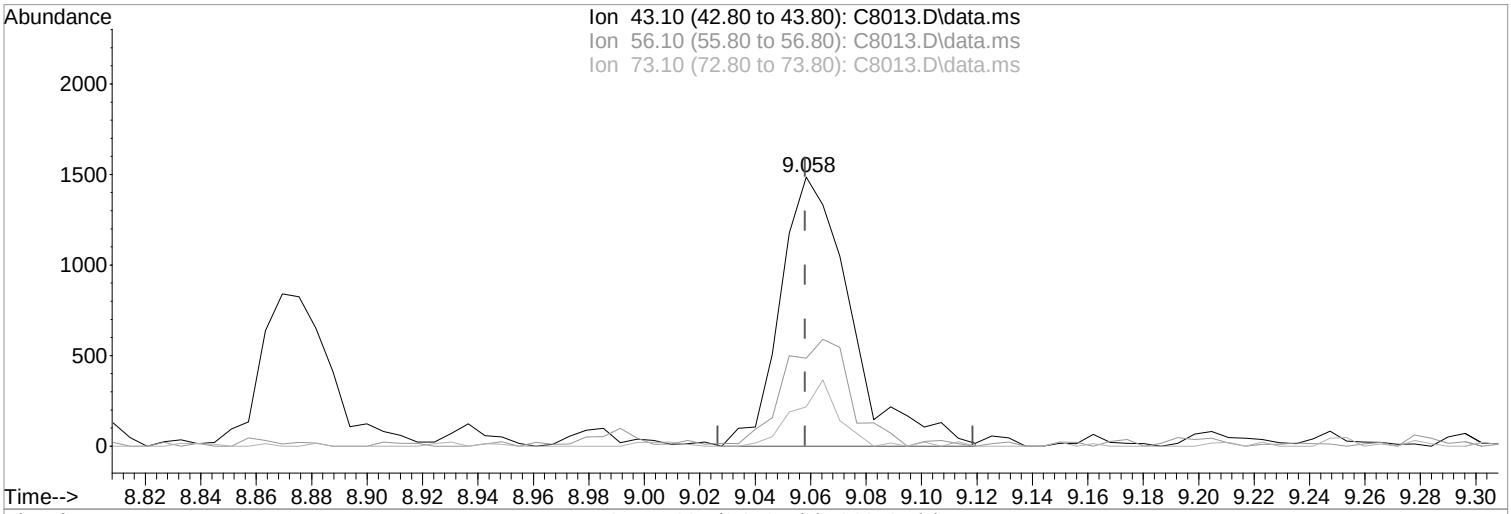
Before

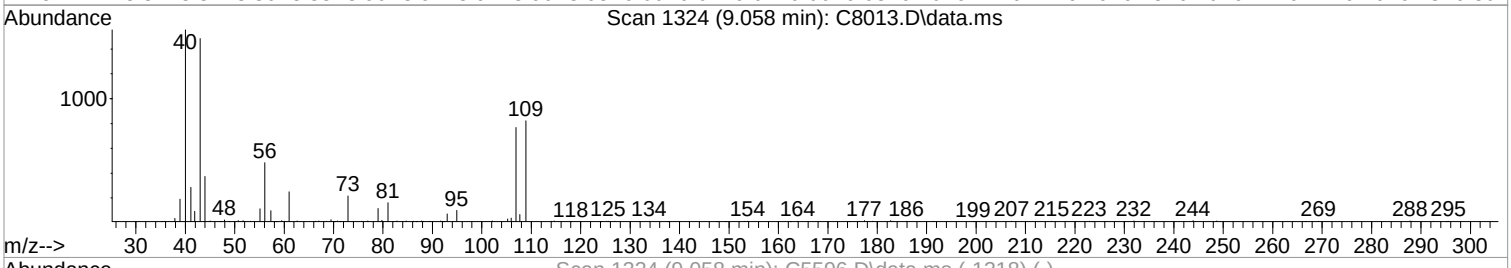
06/08/18

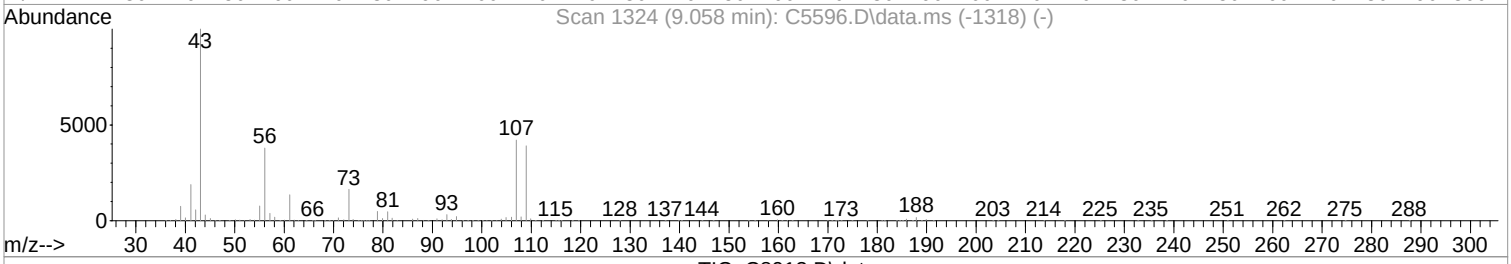
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(75) N-Butyl Acetate

9.058min (+0.000) 0.35 ug/L m

response 2625

Ion	Exp%	Act%
43.10	100	100
56.10	38.00	32.66
73.10	16.30	14.61
0.00	0.00	0.00

Manual Integration:

After

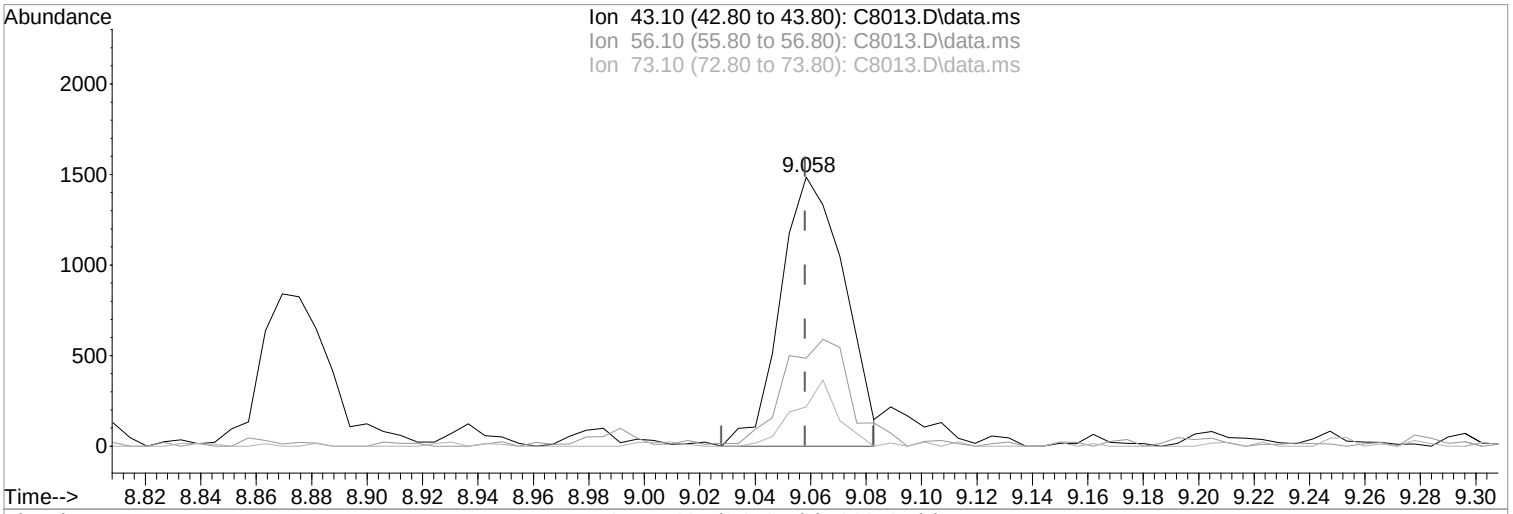
Poor integration.

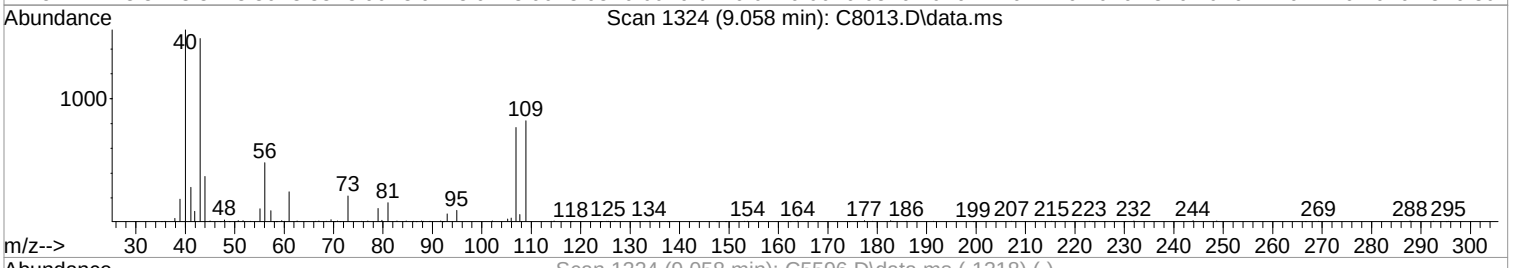
06/08/18

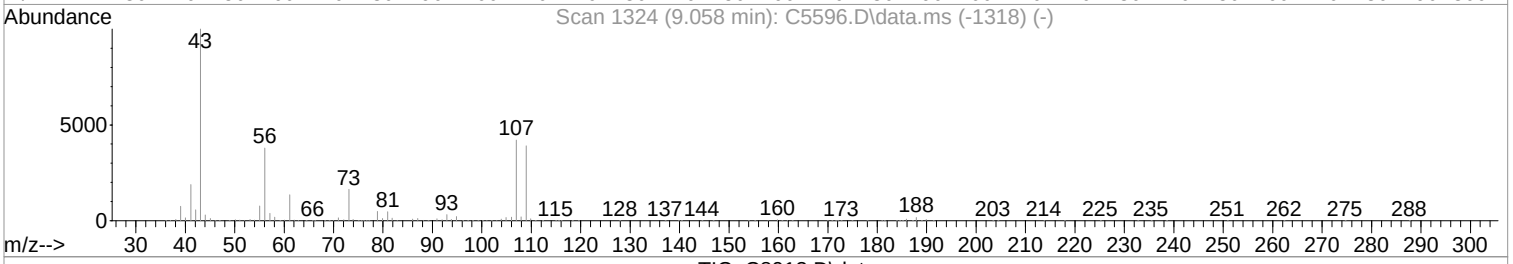
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(75) N-Butyl Acetate

9.058min (+0.000) 0.32 ug/L

response 2377

Ion	Exp%	Act%
43.10	100	100
56.10	38.00	32.66
73.10	16.30	14.61
0.00	0.00	0.00

Manual Integration:

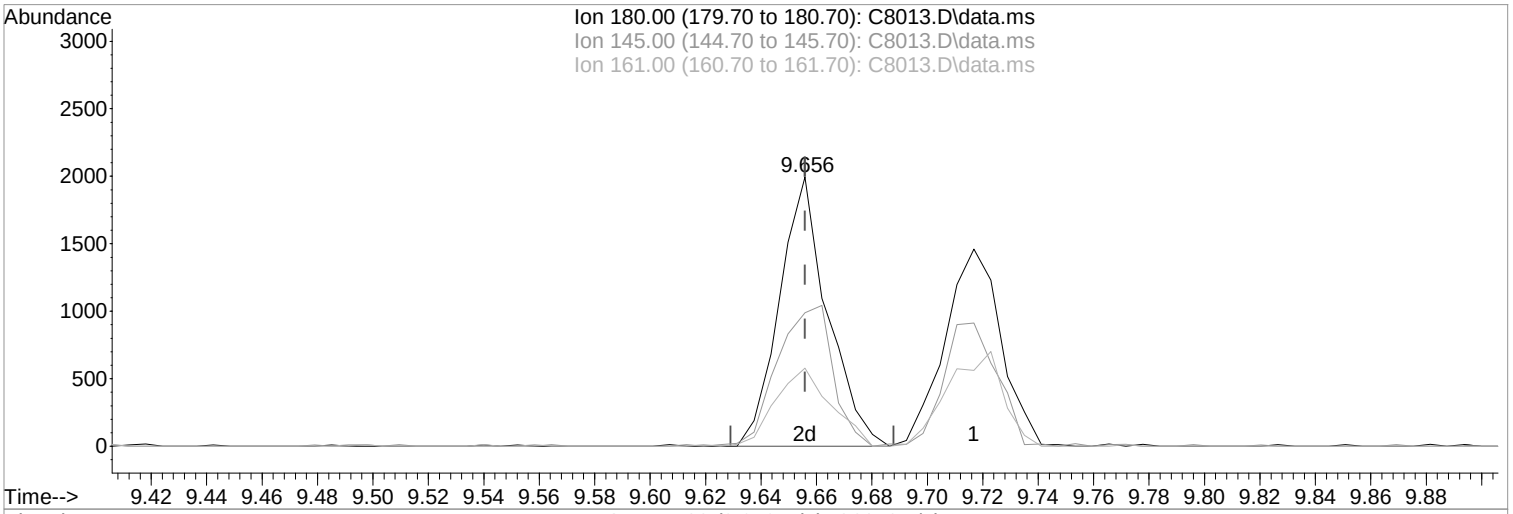
Before

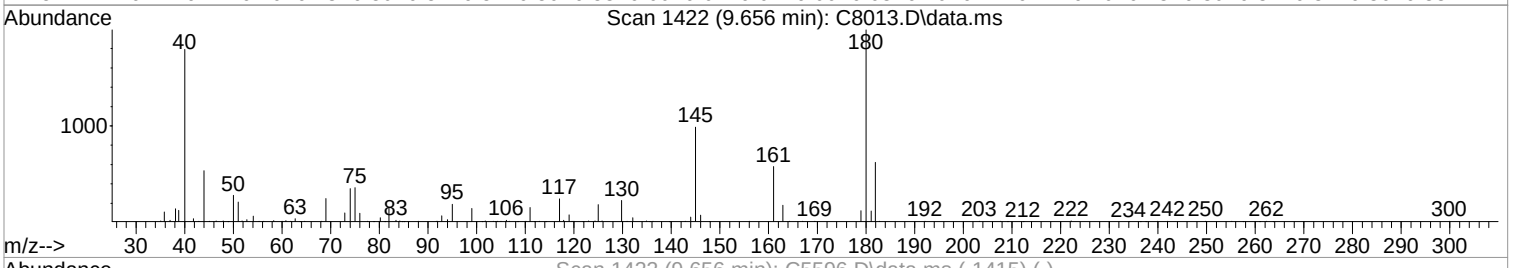
06/08/18

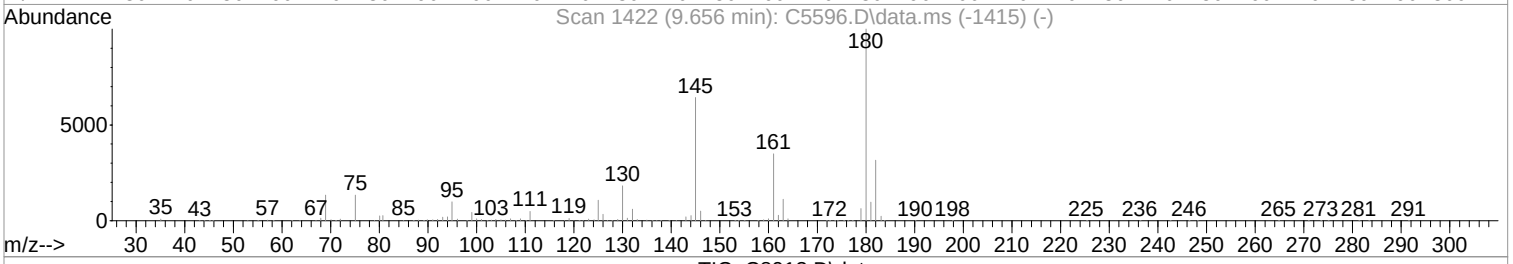
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(77) 3-Chlorobenzotrifluoride

9.656min (-0.000) 0.48 ug/L m

response 2400

Ion	Exp%	Act%
180.00	100	100
145.00	64.20	49.57#
161.00	34.90	29.05
0.00	0.00	0.00

Manual Integration:

After

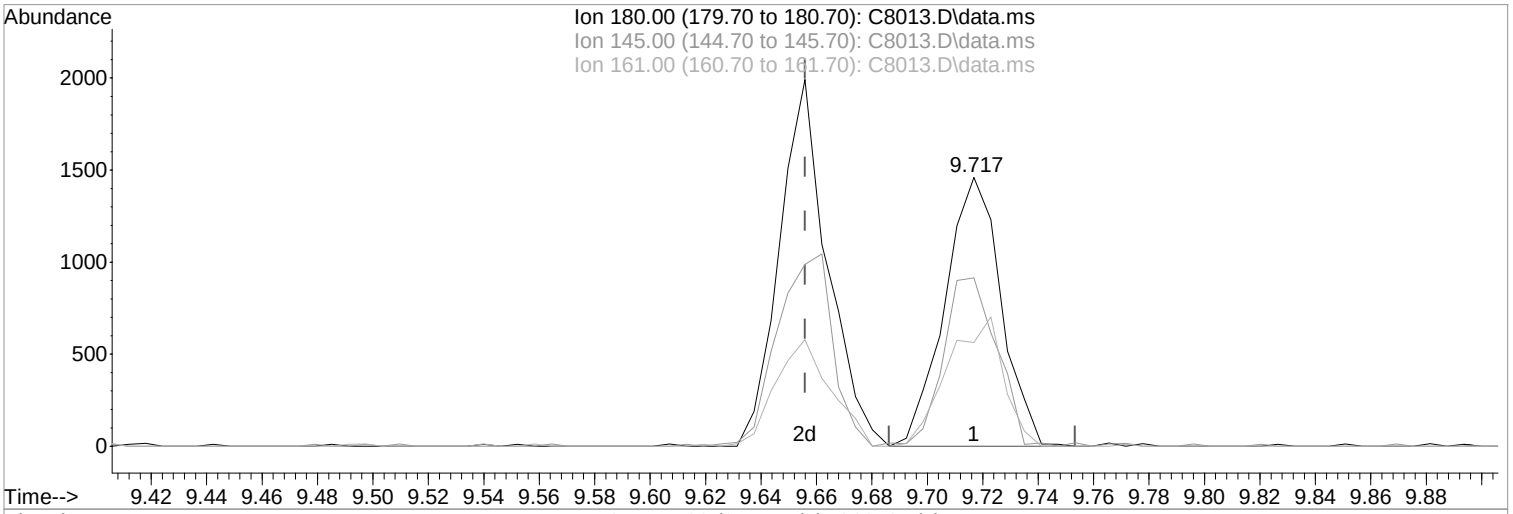
Wrong peak selected.

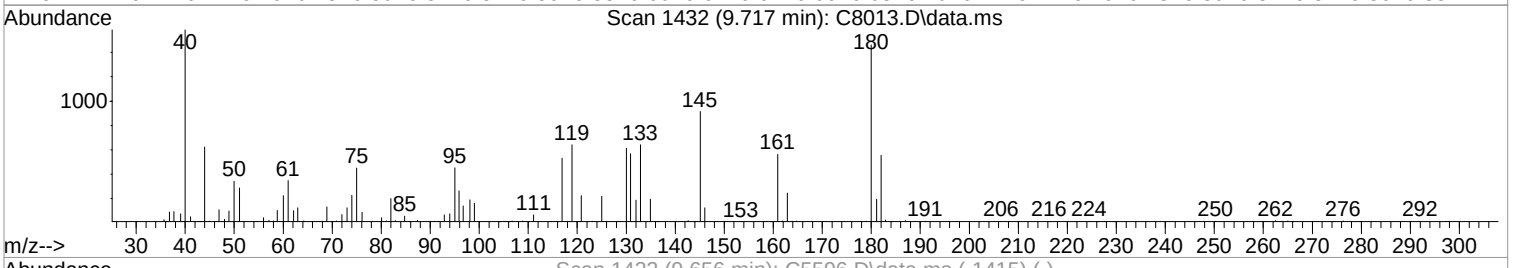
06/08/18

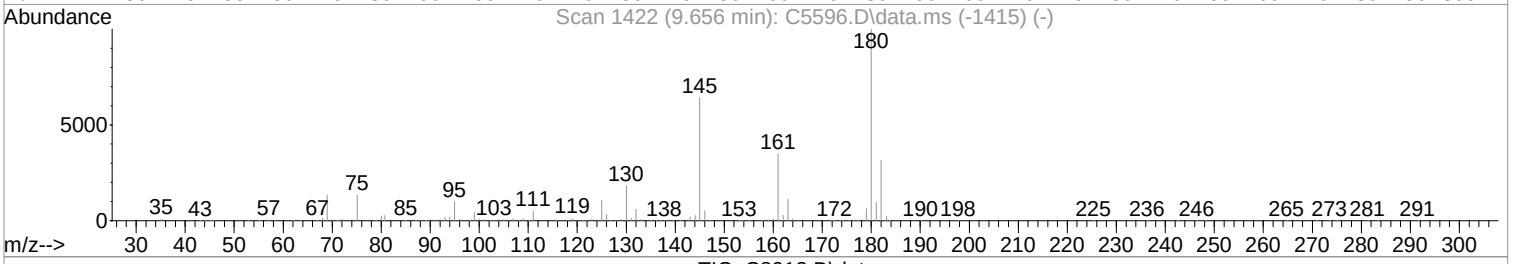
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:50:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8013.D\data.ms

(77) 3-Chlorobenzotrifluoride

9.717min (+0.061) 0.42 ug/L

response 2061

Ion	Exp%	Act%
180.00	100	100
145.00	64.20	62.56
161.00	34.90	38.54
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:55:32 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	309483	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.937	114	488720	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	436130	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	222665	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	35545	10.84	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 21.68%#				
47) surr1,1,2-dichloroetha...	5.114	65	45007	9.69	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 19.38%#				
64) SURR3,Toluene-d8	7.949	98	139969	11.17	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 22.34%#				
69) SURR2,BFB	10.735	95	49589	9.74	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 19.48%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	1484m	0.35	ug/L		
3) Chloromethane	1.151	50	2333	0.53	ug/L		95
4) Vinyl Chloride	1.218	62	1819	0.47	ug/L		80
5) Bromomethane	1.414	94	2117	0.71	ug/L		94
6) Chloroethane	1.481	64	1433	0.59	ug/L		93
7) Freon 21	1.609	67	3198	0.49	ug/L		97
8) Trichlorofluoromethane	1.651	101	2413	0.50	ug/L		97
9) Diethyl Ether	1.846	59	1278	0.43	ug/L	#	73
10) Freon 123a	1.846	67	1671	0.43	ug/L		93
11) Freon 123	1.895	83	1718	0.40	ug/L		96
12) Acrolein	1.932	56	2006	2.50	ug/L		99
13) 1,1-Diclethene	2.011	96	1365	0.50	ug/L	#	70
14) Freon 113	2.011	101	1300	0.45	ug/L		94
15) Acetone	2.048	43	1731	0.80	ug/L		93
16) 2-Propanol	2.157	45	2598	7.98	ug/L		98
18) Carbon Disulfide	2.176	76	4041	0.54	ug/L		98
20) Allyl Chloride	2.291	76	667	0.45	ug/L	#	69
21) Methyl Acetate	2.310	43	1653	0.44	ug/L		96
22) Methylene Chloride	2.389	84	2190	0.64	ug/L		93
23) TBA	2.499	59	4489	8.58	ug/L		90
24) Acrylonitrile	2.608	53	3467	2.00	ug/L		90
25) Methyl-t-Butyl Ether	2.651	73	4705	0.43	ug/L		91
26) trans-1,2-Dichloroethene	2.645	96	1480	0.49	ug/L	#	82
27) 1,1-Diclethane	3.072	63	2786	0.48	ug/L		98
28) Vinyl Acetate	3.145	86	214m	0.34	ug/L		
29) DIPE	3.188	45	4749	0.41	ug/L		92
30) 2-Chloro-1,3-Butadiene	3.175	53	2310	0.42	ug/L		93
31) ETBE	3.633	59	4665	0.44	ug/L		92
32) 2,2-Dichloropropane	3.785	77	2221	0.51	ug/L		95
33) cis-1,2-Dichloroethene	3.779	96	1707	0.49	ug/L	#	57
34) 2-Butanone	3.840	43	1297m	0.49	ug/L		
35) Propionitrile	3.895	54	1689	2.40	ug/L		81
36) Bromochloromethane	4.114	130	1206m	0.53	ug/L		
37) Methacrylonitrile	4.120	67	764	0.45	ug/L	#	73
38) Tetrahydrofuran	4.230	42	895m	0.60	ug/L		
39) Chloroform	4.279	83	2791	0.47	ug/L		90
40) 1,1,1-Trichloroethane	4.547	97	2289	0.48	ug/L		86
41) TAME	5.510	73	4096	0.42	ug/L		94
43) Cyclohexane	4.638	41	1828m	0.48	ug/L		

1st FNJ 06/11/18
2nd WR 06/11/18

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:55:32 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Carbontetrachloride	4.834	117	1312	0.34 ug/L #	74
46) 1,1-Dichloropropene	4.840	75	2293m	0.50 ug/L	
48) Benzene	5.224	78	6082	0.47 ug/L	97
49) 1,2-Dichloroethane	5.254	62	2655	0.45 ug/L	88
50) Iso-Butyl Alcohol	5.260	43	1783	7.64 ug/L	91
51) n-Heptane	5.803	43	2166	0.50 ug/L	86
52) 1-Butanol	6.388	56	2137m	16.66 ug/L	
53) Trichloroethene	6.303	130	1827	0.49 ug/L #	78
54) Methylcyclohexane	6.565	55	2026	0.46 ug/L	95
55) 1,2-Diclpropane	6.602	63	1592m	0.44 ug/L	
56) Dibromomethane	6.760	93	1299	0.53 ug/L #	78
57) 1,4-Dioxane	6.851	88	520	7.66 ug/L #	72
58) Methyl Methacrylate	6.888	69	1131	0.39 ug/L	90
59) Bromodichloromethane	7.028	83	1747	0.39 ug/L	92
60) 2-Nitropropane	7.333	41	733m	0.69 ug/L	
61) 2-Chloroethylvinyl Ether	7.492	63	698	0.38 ug/L	85
62) cis-1,3-Dichloropropene	7.626	75	2080	0.40 ug/L	95
63) 4-Methyl-2-pentanone	7.870	43	1761	0.38 ug/L	94
65) Toluene	8.034	91	6529	0.46 ug/L	92
66) trans-1,3-Dichloropropene	8.333	75	1963	0.42 ug/L	84
67) Ethyl Methacrylate	8.510	69	1939m	0.41 ug/L	
68) 1,1,2-Trichloroethane	8.528	97	1554	0.47 ug/L #	85
71) Tetrachloroethene	8.674	164	1309	0.49 ug/L #	91
72) 2-Hexanone	8.869	43	1463m	0.42 ug/L	
73) 1,3-Dichloropropane	8.717	76	2811	0.46 ug/L	92
74) Dibromochloromethane	8.967	129	1288m	0.42 ug/L	
75) N-Butyl Acetate	9.058	43	2625m	0.35 ug/L	
76) 1,2-Dibromoethane	9.064	107	1653	0.48 ug/L #	75
77) 3-Chlorobenzotrifluoride	9.656	180	2400m	0.48 ug/L	
78) Chlorobenzene	9.613	112	4316	0.46 ug/L	96
79) 4-Chlorobenzotrifluoride	9.717	180	2061	0.45 ug/L	85
80) 1,1,1,2-Tetrachloroethane	9.711	131	1129	0.37 ug/L	86
81) Ethylbenzene	9.753	106	2347	0.50 ug/L #	88
82) (m+p)Xylene	9.875	106	5335	0.90 ug/L #	86
83) o-Xylene	10.253	106	2515	0.43 ug/L	89
84) Styrene	10.265	104	4322	0.45 ug/L	94
85) Bromoform	10.418	173	705	0.32 ug/L	83
86) 2-Chlorobenzotrifluoride	10.515	180	2397	0.49 ug/L	82
87) Isopropylbenzene	10.613	105	7031	0.47 ug/L	94
88) Cyclohexanone	10.662	55	4502	4.22 ug/L	100
89) trans-1,4-Dichloro-2-B...	10.936	53	436	0.32 ug/L #	60
91) 1,1,2,2-Tetrachloroethane	10.881	83	1669	0.40 ug/L	83
92) Bromobenzene	10.851	156	1945	0.53 ug/L #	76
93) 1,2,3-Trichloropropane	10.906	110	633	0.42 ug/L	91
94) n-Propylbenzene	10.985	91	8415	0.52 ug/L	96
95) 2-Chlorotoluene	11.040	91	5012	0.50 ug/L	97
96) 3-Chlorotoluene	11.095	91	5244	0.49 ug/L	86
97) 4-Chlorotoluene	11.137	91	6147	0.51 ug/L	94
98) 1,3,5-Trimethylbenzene	11.149	105	5412	0.47 ug/L	90
99) tert-Butylbenzene	11.424	119	5255	0.54 ug/L	94
100) 1,2,4-Trimethylbenzene	11.466	105	5525	0.48 ug/L	98
101) 3,4-Dichlorobenzotrifl...	11.540	214	1746	0.47 ug/L	98
102) sec-Butylbenzene	11.613	105	7696	0.55 ug/L	97
103) p-Isopropyltoluene	11.741	119	6558	0.55 ug/L	89
104) 1,3-Dclbenz	11.686	146	3728	0.53 ug/L	94
105) 1,4-Dclbenz	11.759	146	4426	0.60 ug/L	85

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:55:32 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

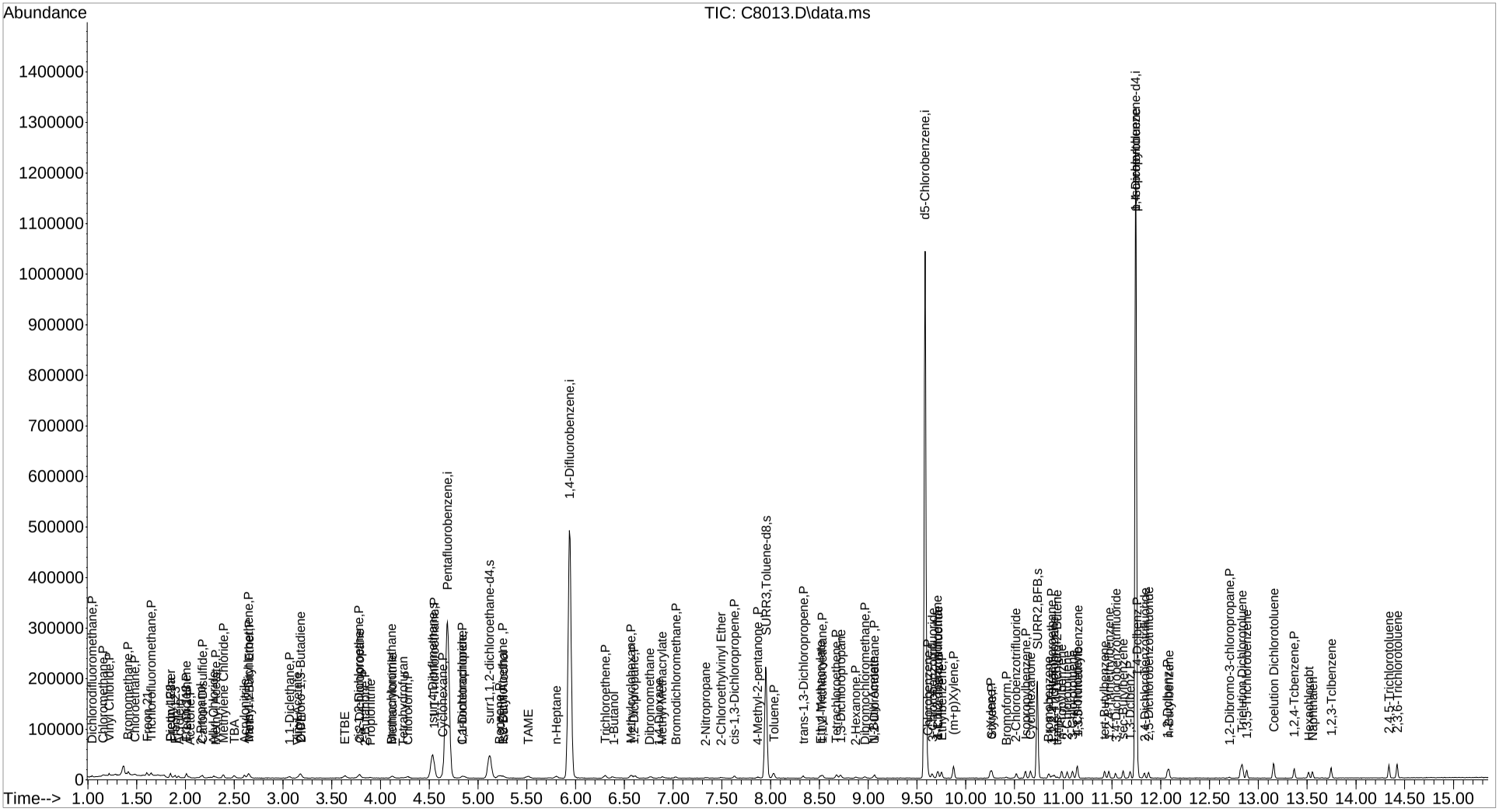
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 2,4-Dichlorobenzotrifl...	11.832	214	1767	0.53	ug/L		93
107) 2,5-Dichlorobenzotrifl...	11.875	214	2072	0.54	ug/L		97
108) n-Butylbenzene	12.082	91	6041	0.54	ug/L		94
109) 1,2-Dclbenz	12.070	146	3753	0.53	ug/L		94
110) 1,2-Dibromo-3-chloropr...	12.704	157	329	0.37	ug/L	#	77
111) Trielution Dichlorotol...	12.832	125	11895	1.97	ug/L		92
112) 1,3,5-Trichlorobenzene	12.881	180	3374	0.63	ug/L		92
113) Coelution Dichlorotoluene	13.155	125	9046	1.35	ug/L		87
114) 1,2,4-Tcbenzene	13.368	180	4054	0.81	ug/L		92
115) Hexachlorobt	13.515	225	1570	0.76	ug/L		82
116) Naphthalen	13.557	128	7369	0.52	ug/L		95
117) 1,2,3-Tclbenzene	13.746	180	4380	0.87	ug/L		95
118) 2,4,5-Trichlorotoluene	14.338	159	4992	1.54	ug/L		95
119) 2,3,6-Trichlorotoluene	14.423	159	4707	1.50	ug/L		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8013.D
Acq On : 8 Jun 2018 12:52 pm
Operator : F.NAEGLER
Sample : 0.5 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 13:55:32 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



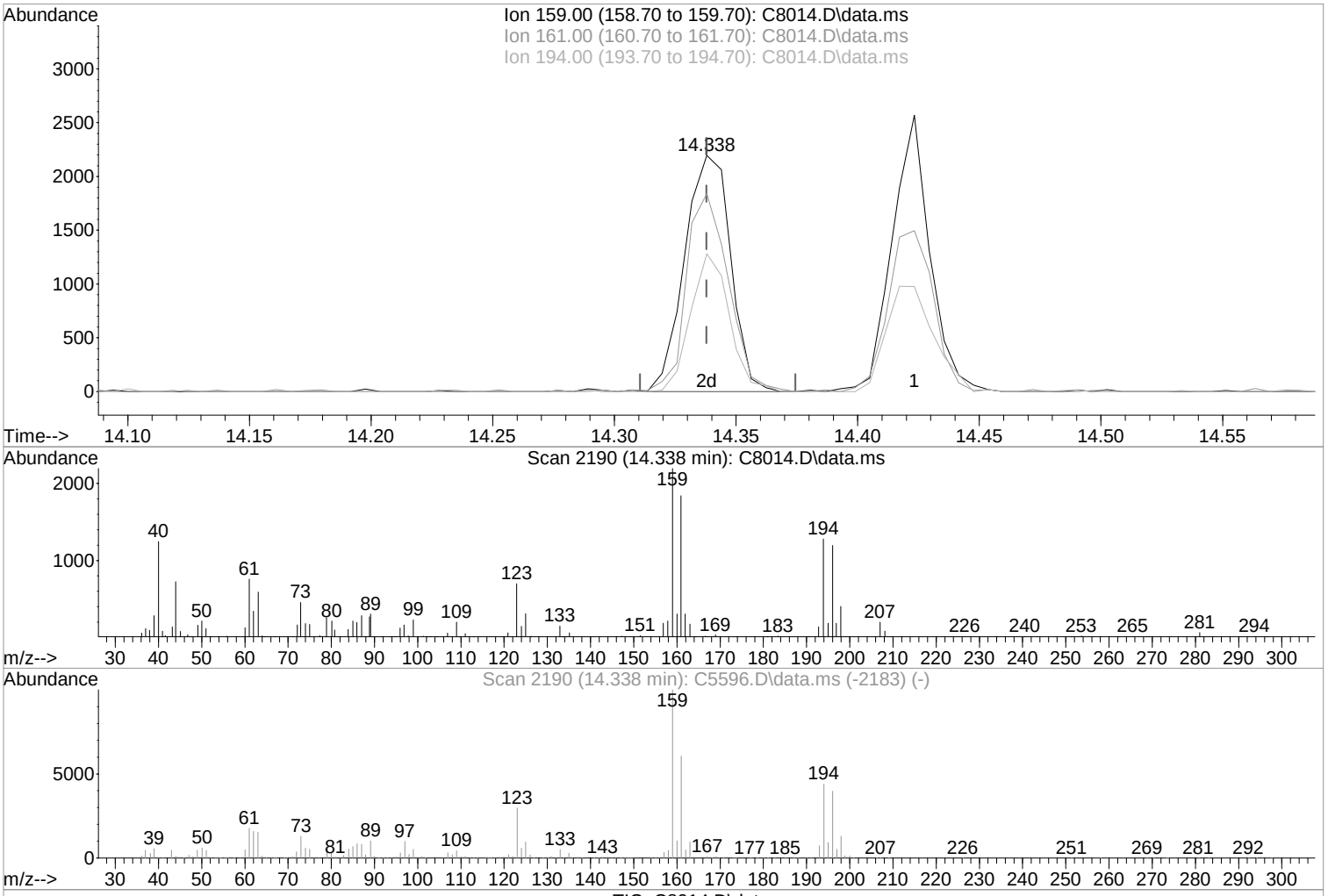
1st 06/11/18
2nd 06/11/18

1st FW 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8014.D\data.ms

(118) 2,4,5-Trichlorotoluene

14.338min (0.000) 0.93 ug/L m

response 2881

Ion	Exp%	Act%
159.00	100	100
161.00	60.60	83.87#
194.00	43.90	58.36
0.00	0.00	0.00

Manual Integration:

After

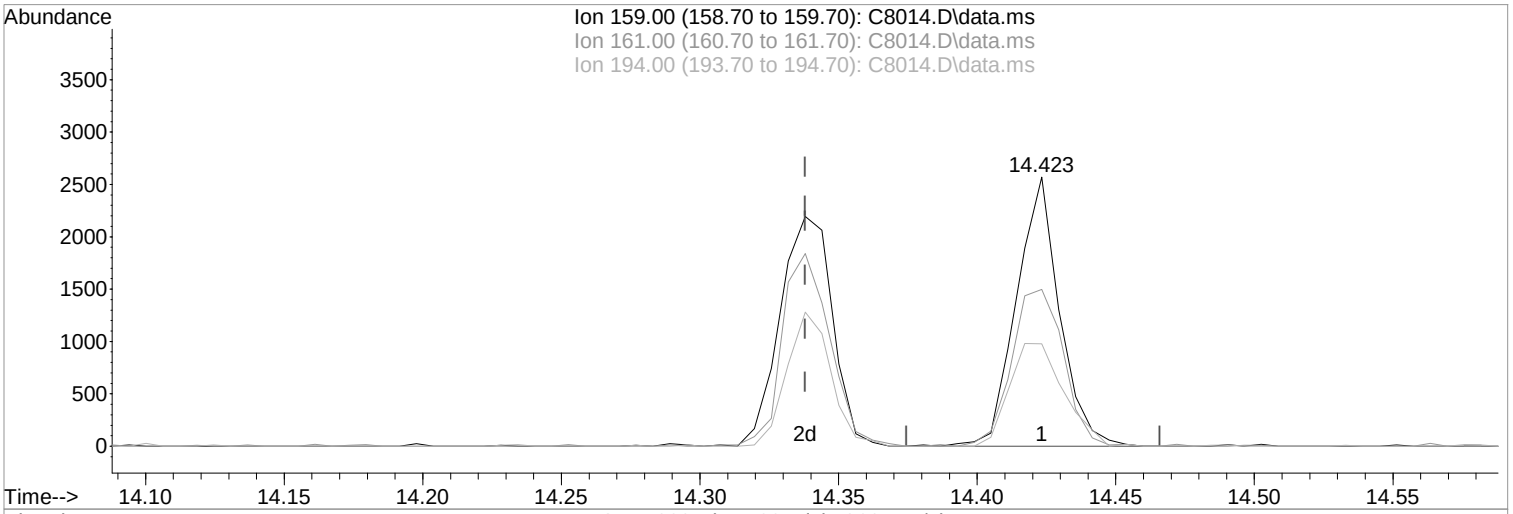
Wrong peak selected.

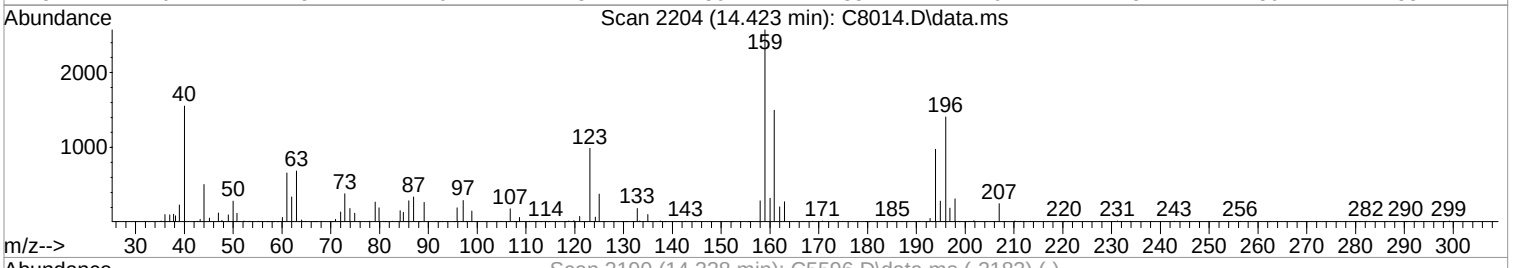
06/08/18

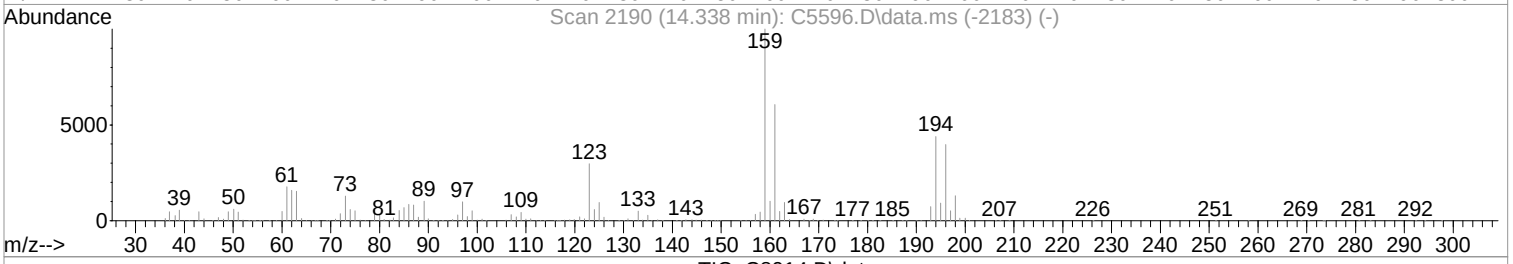
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8014.D\data.ms

(118) 2,4,5-Trichlorotoluene

14.423min (+0.085) 0.90 ug/L

response 2779

Ion	Exp%	Act%
159.00	100	100
161.00	60.60	58.27
194.00	43.90	38.03
0.00	0.00	0.00

Manual Integration:

Before

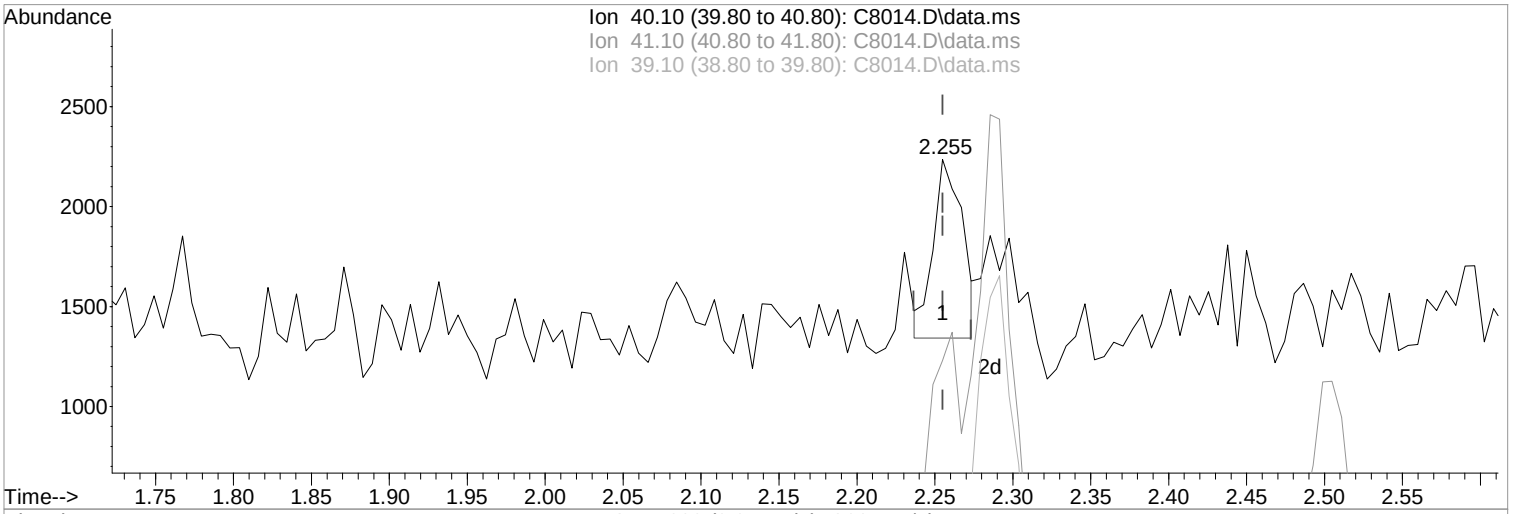
06/08/18

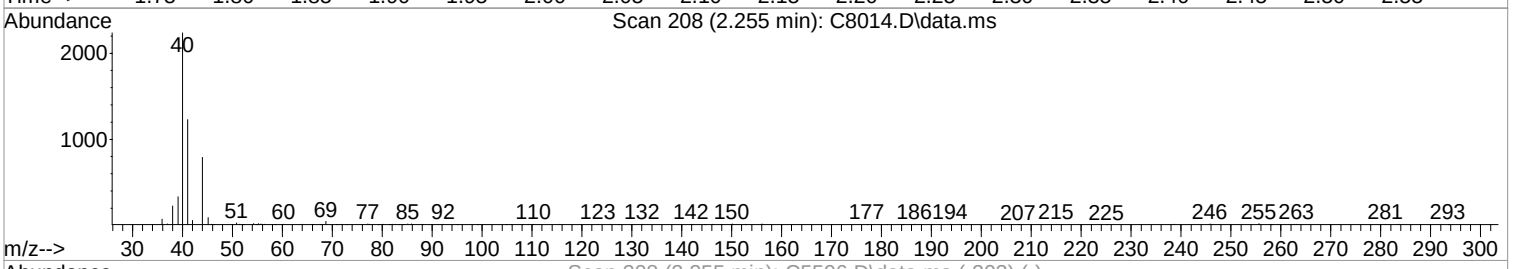
1st FN 06/11/18
2nd 06/11/18

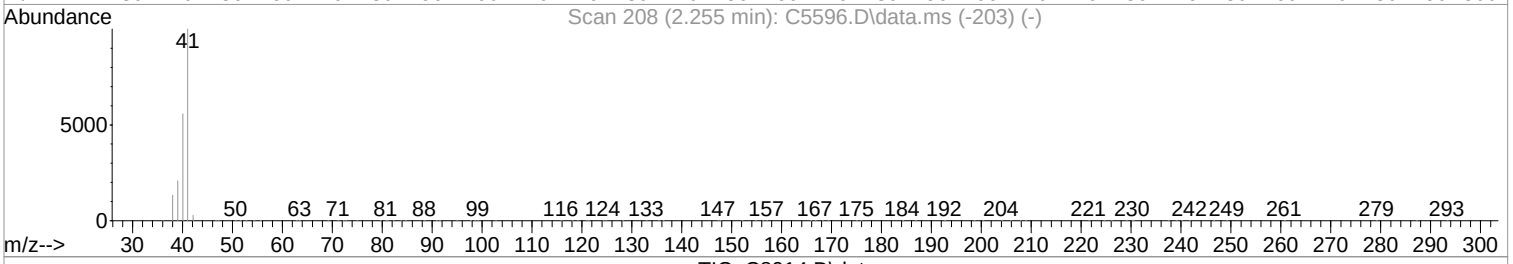
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8014.D\data.ms

(19) Acetonitrile

2.255min (0.000) 3.72 ug/L m

response 1165

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	55.01#
39.10	38.30	14.89#
0.00	0.00	0.00

Manual Integration:

After

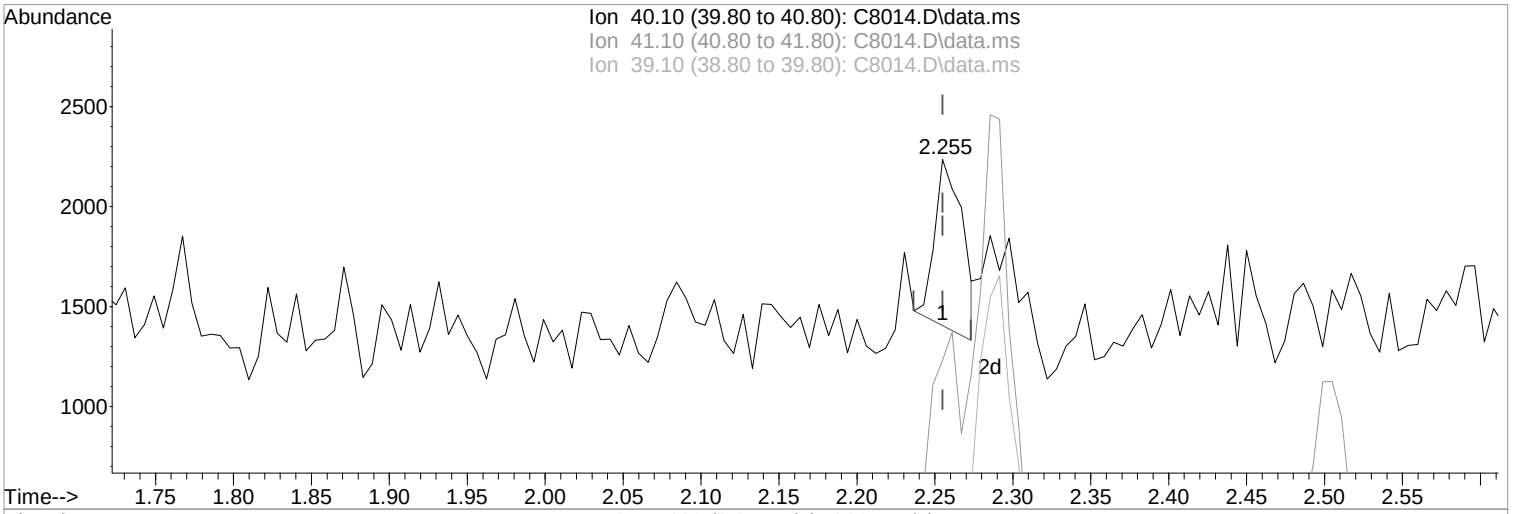
Poor integration.

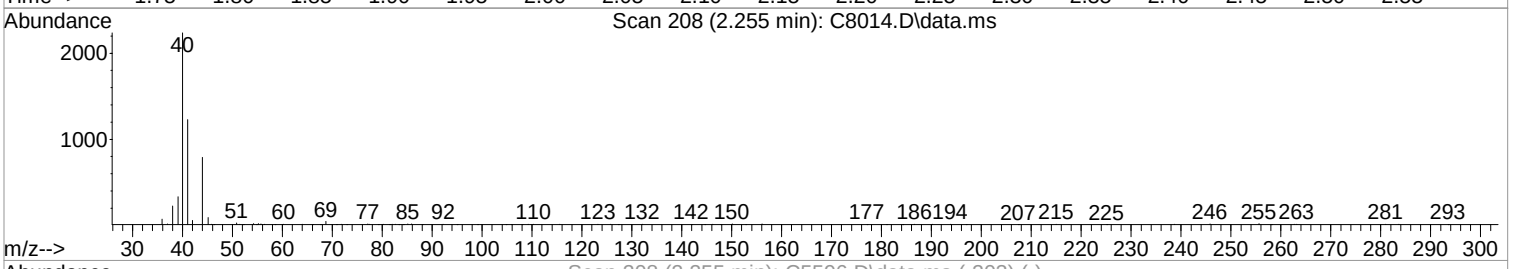
06/08/18

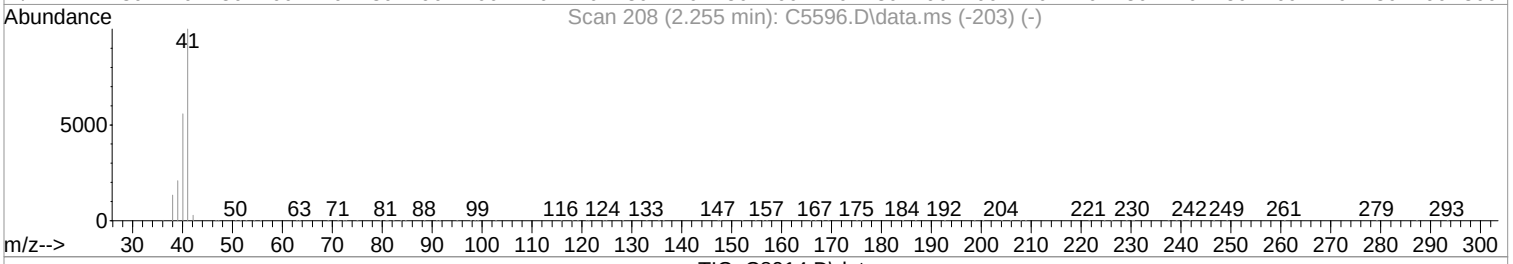
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8014.D\data.ms

(19) Acetonitrile

2.255min (0.000) 3.28 ug/L

response 1026

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	55.01#
39.10	38.30	14.89#
0.00	0.00	0.00

Manual Integration:

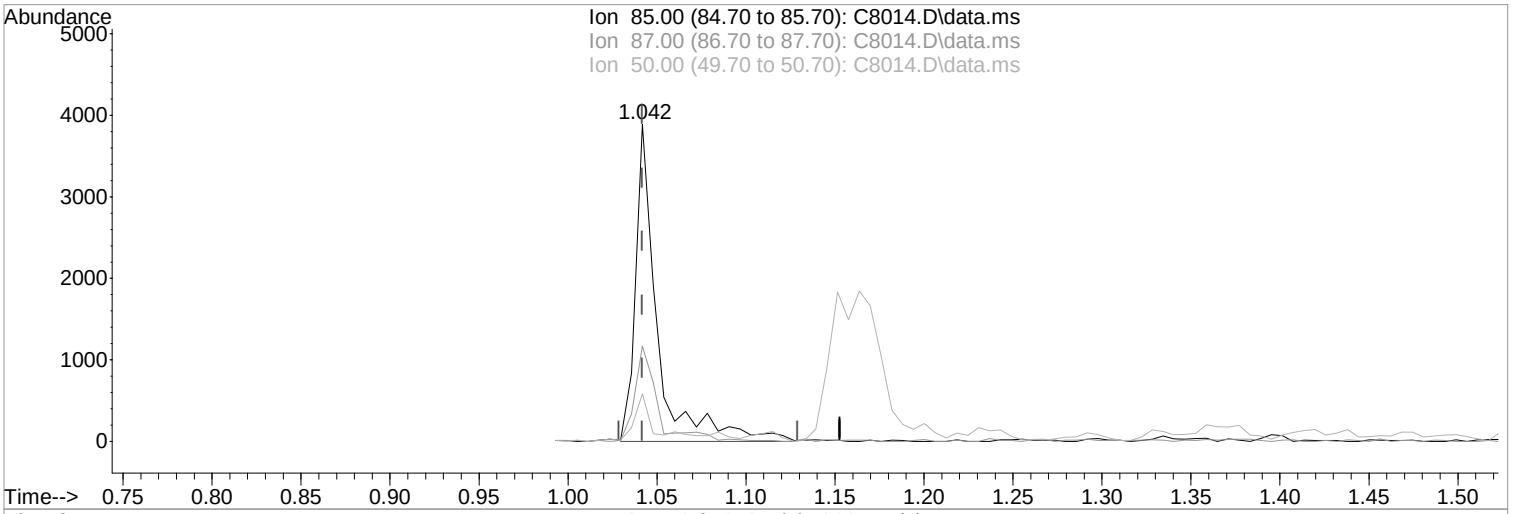
Before

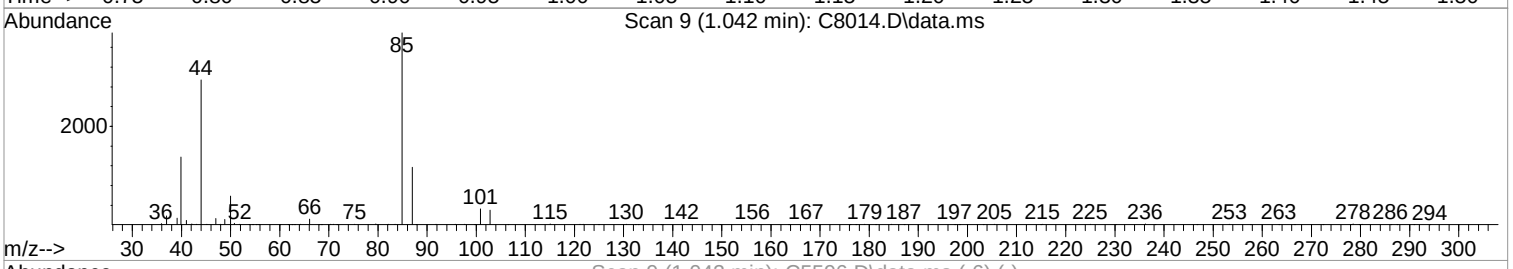
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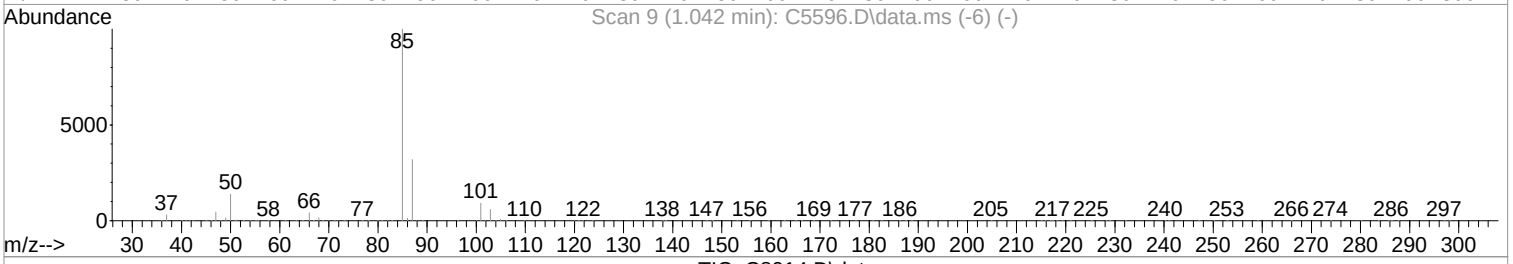
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8014.D\data.ms

(2) Dichlorodifluoromethane (P)

1.042min (0.000) 0.83 ug/L m

response 3341

Ion	Exp%	Act%
85.00	100	100
87.00	31.80	30.06
50.00	13.90	15.01
0.00	0.00	0.00

Manual Integration:

After

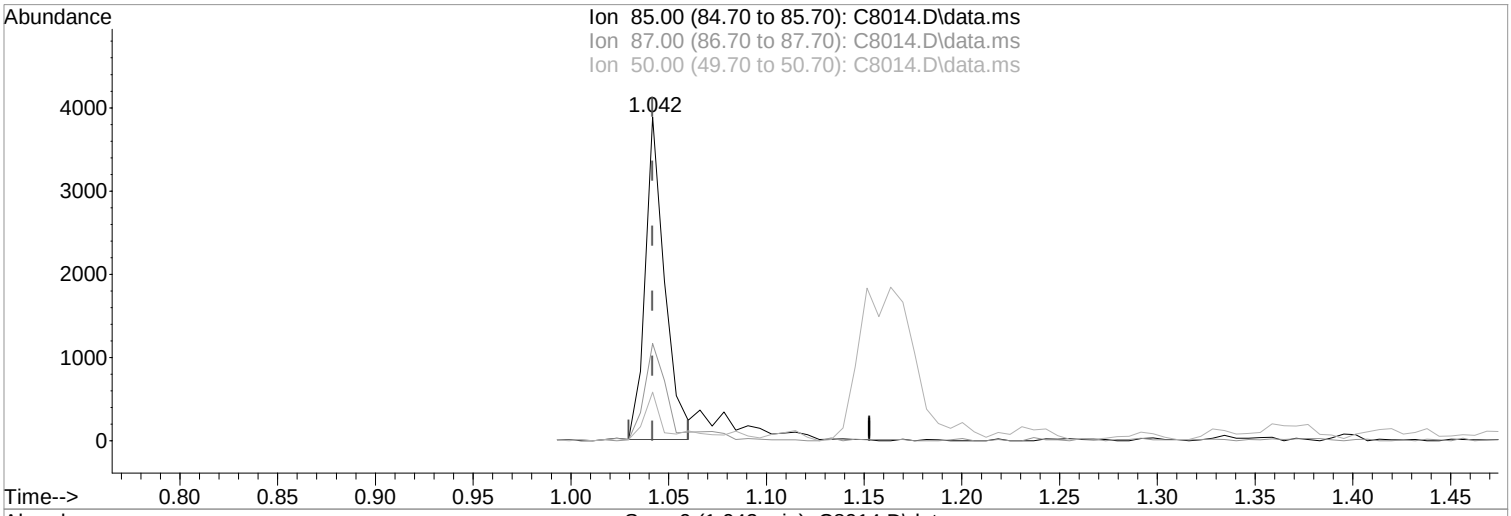
Poor integration.

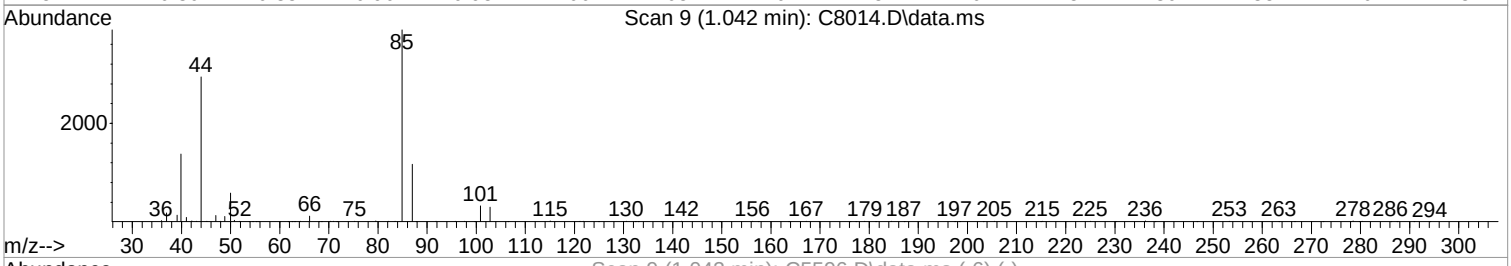
06/08/18

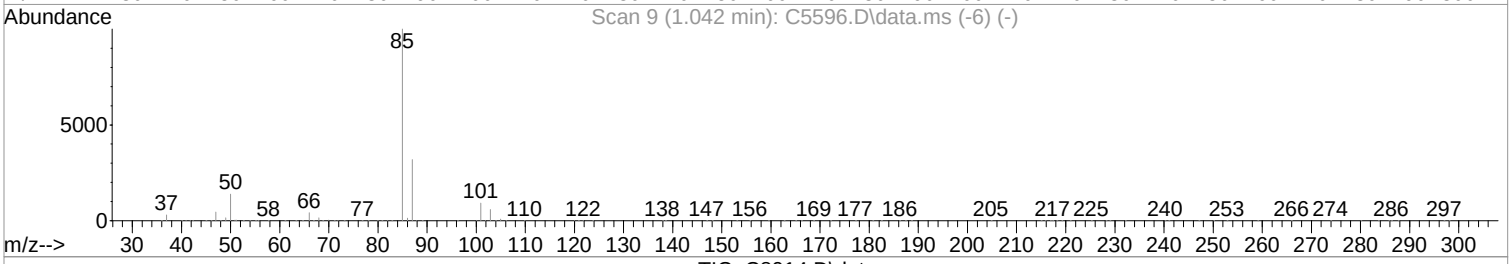
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8014.D\data.ms

(2) Dichlorodifluoromethane (P)

1.042min (0.000) 0.67 ug/L

response 2693

Ion	Exp%	Act%
85.00	100	100
87.00	31.80	30.06
50.00	13.90	15.01
0.00	0.00	0.00

Manual Integration:

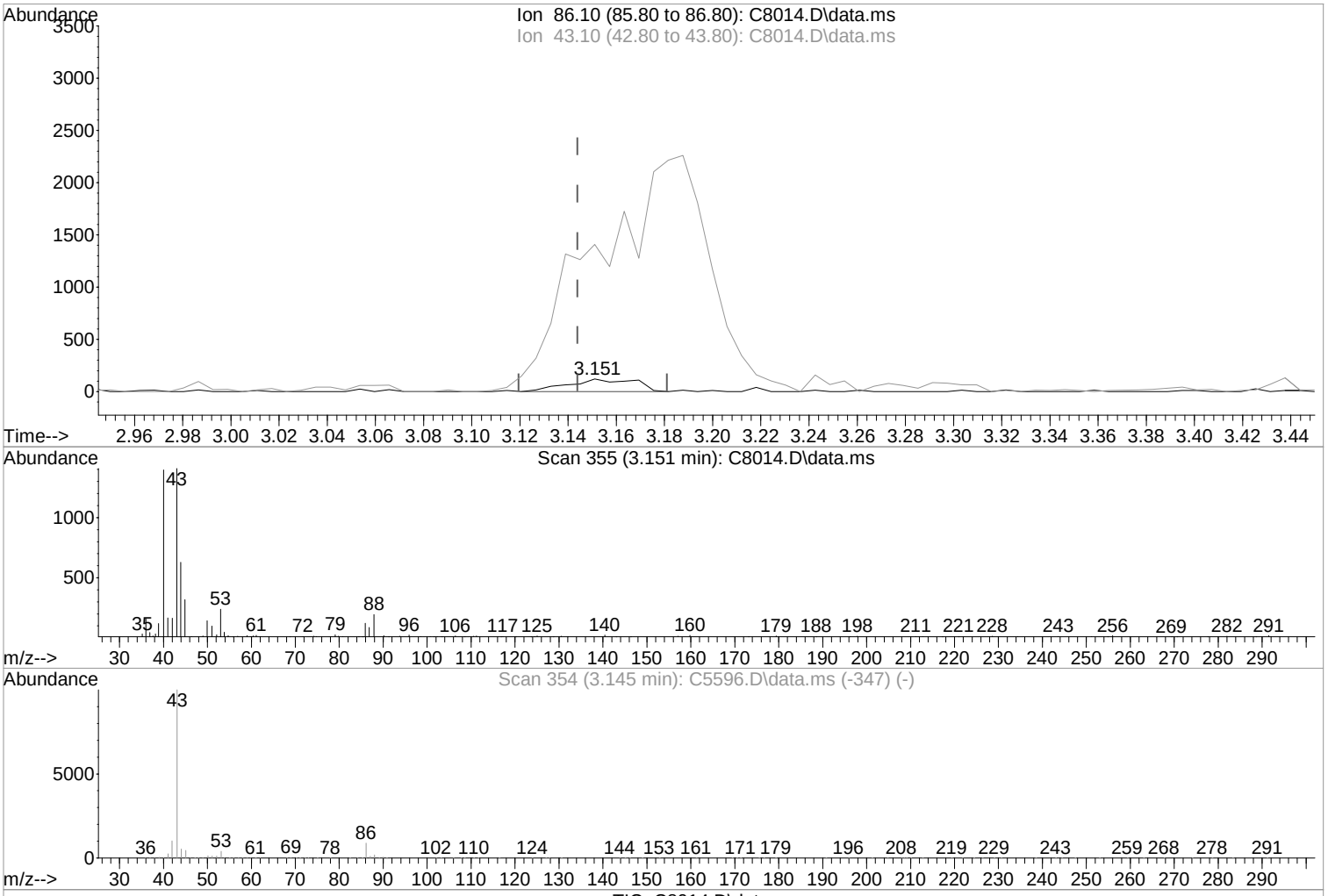
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8014.D\data.ms

(28) Vinyl Acetate

3.151min (+0.007) 0.39 ug/L m

response 234

Ion	Exp%	Act%
86.10	100	100
43.10	1134.40	1154.10
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

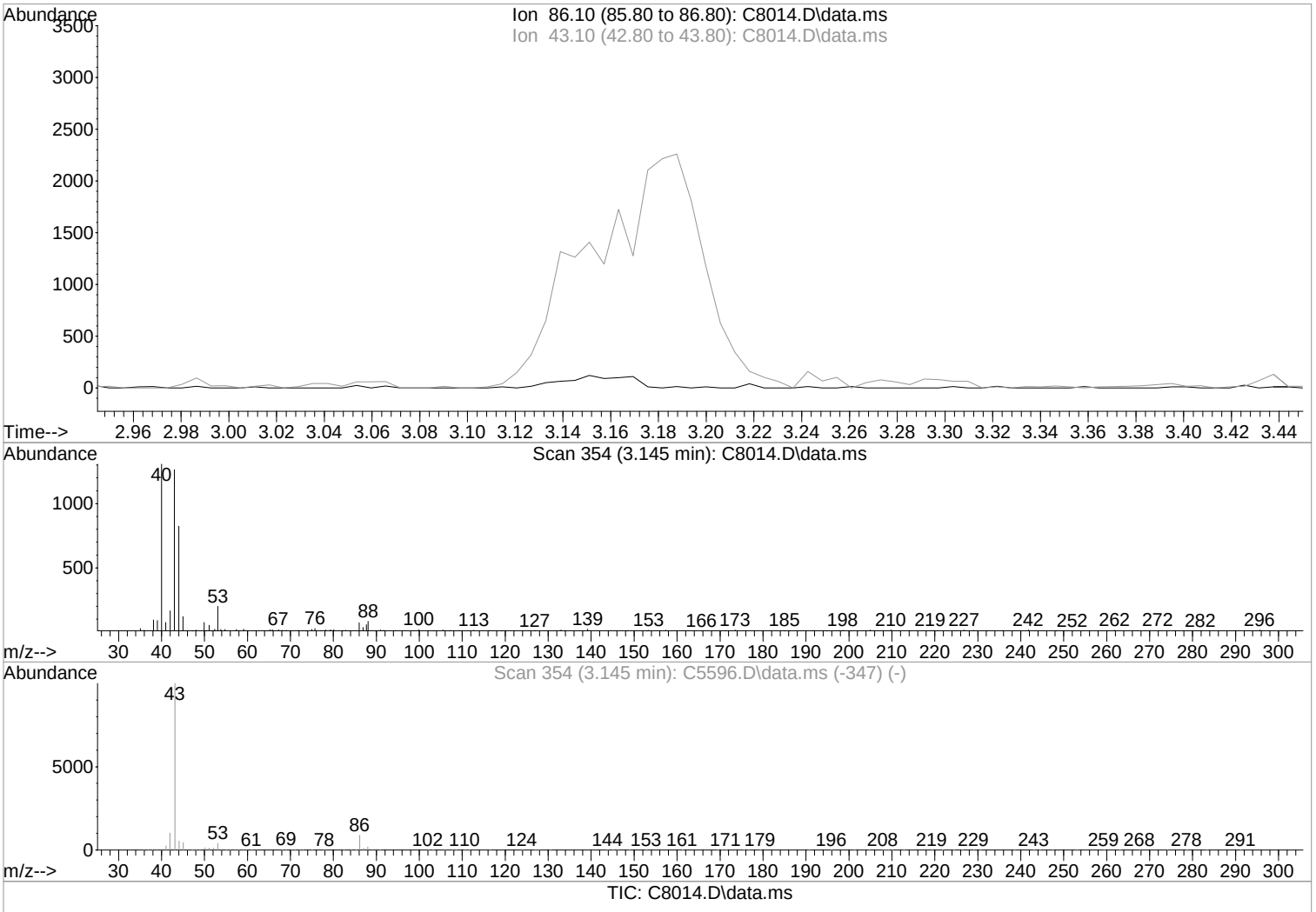
Peak not found.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8014.D\data.ms

(28) Vinyl Acetate

3.144min (-3.144) 0.00 ug/L

response 0

Ion	Exp%	Act%
86.10	100	0.00
43.10	1134.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

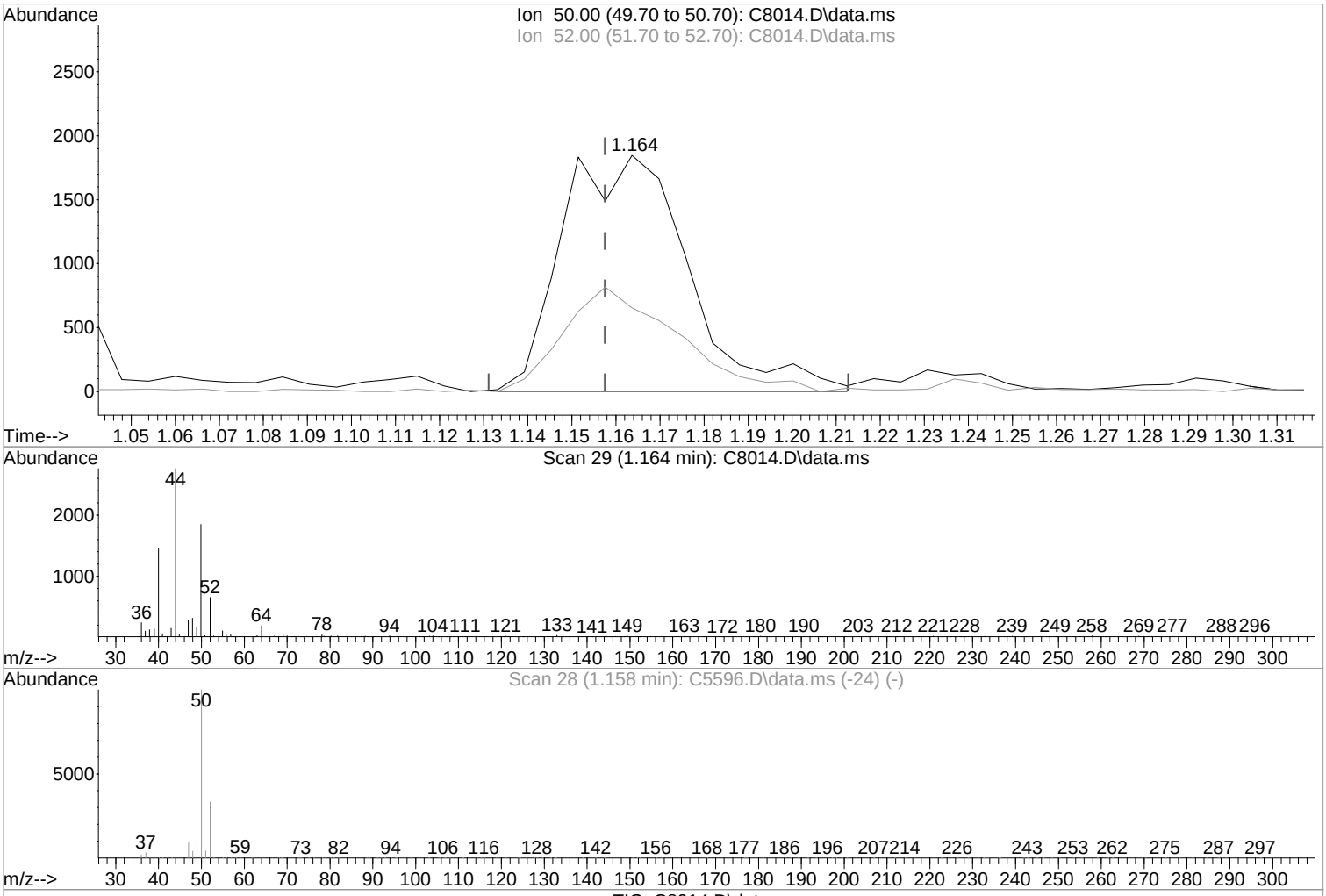
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8014.D\data.ms

(3) Chloromethane (P)

1.164min (+0.006) 0.87 ug/L m

response 3668

Ion	Exp%	Act%
50.00	100	100
52.00	33.10	35.37
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

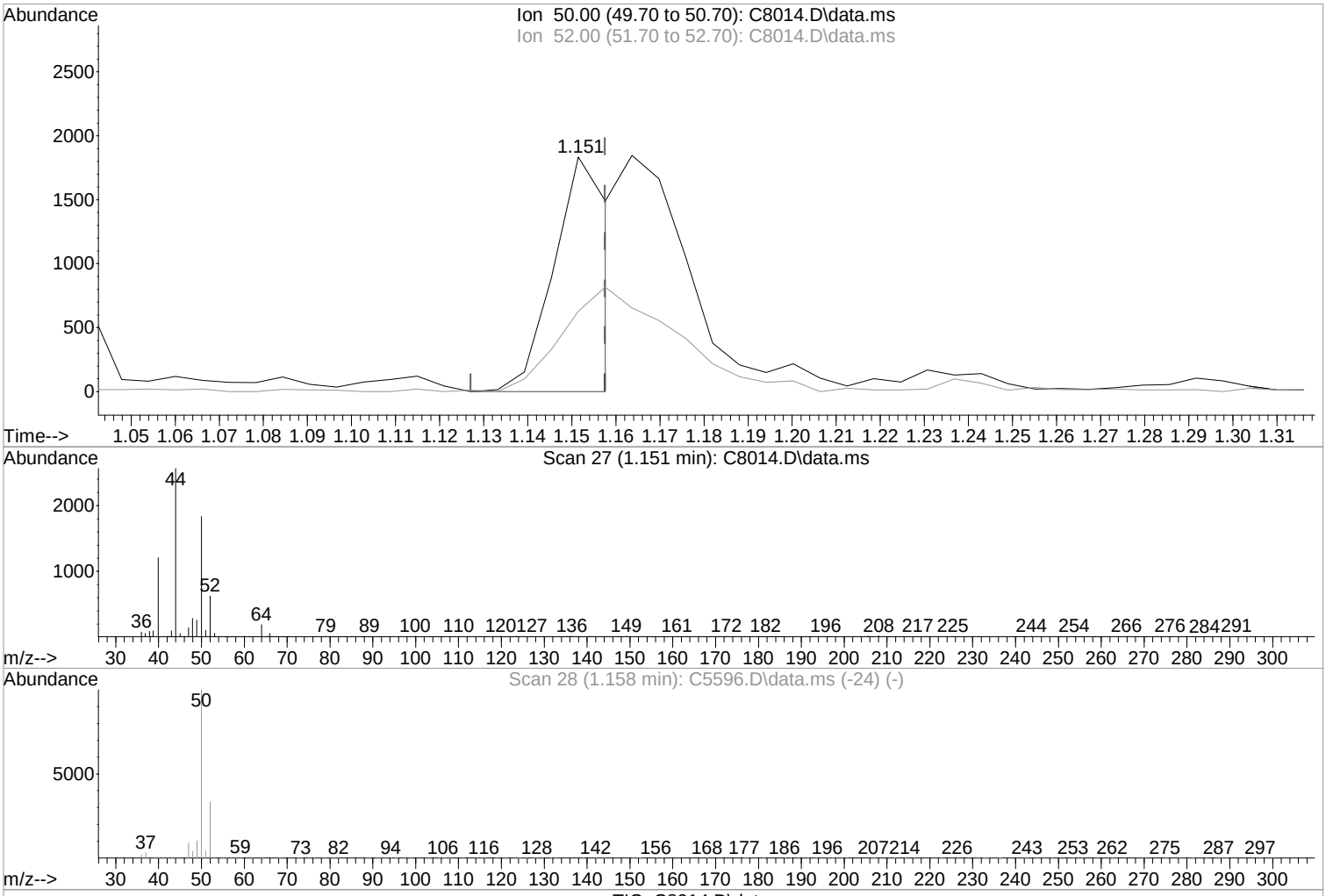
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8014.D\data.ms

(3) Chloromethane (P)

1.151min (-0.006) 0.38 ug/L

response 1603

Ion	Exp%	Act%
50.00	100	100
52.00	33.10	34.24
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

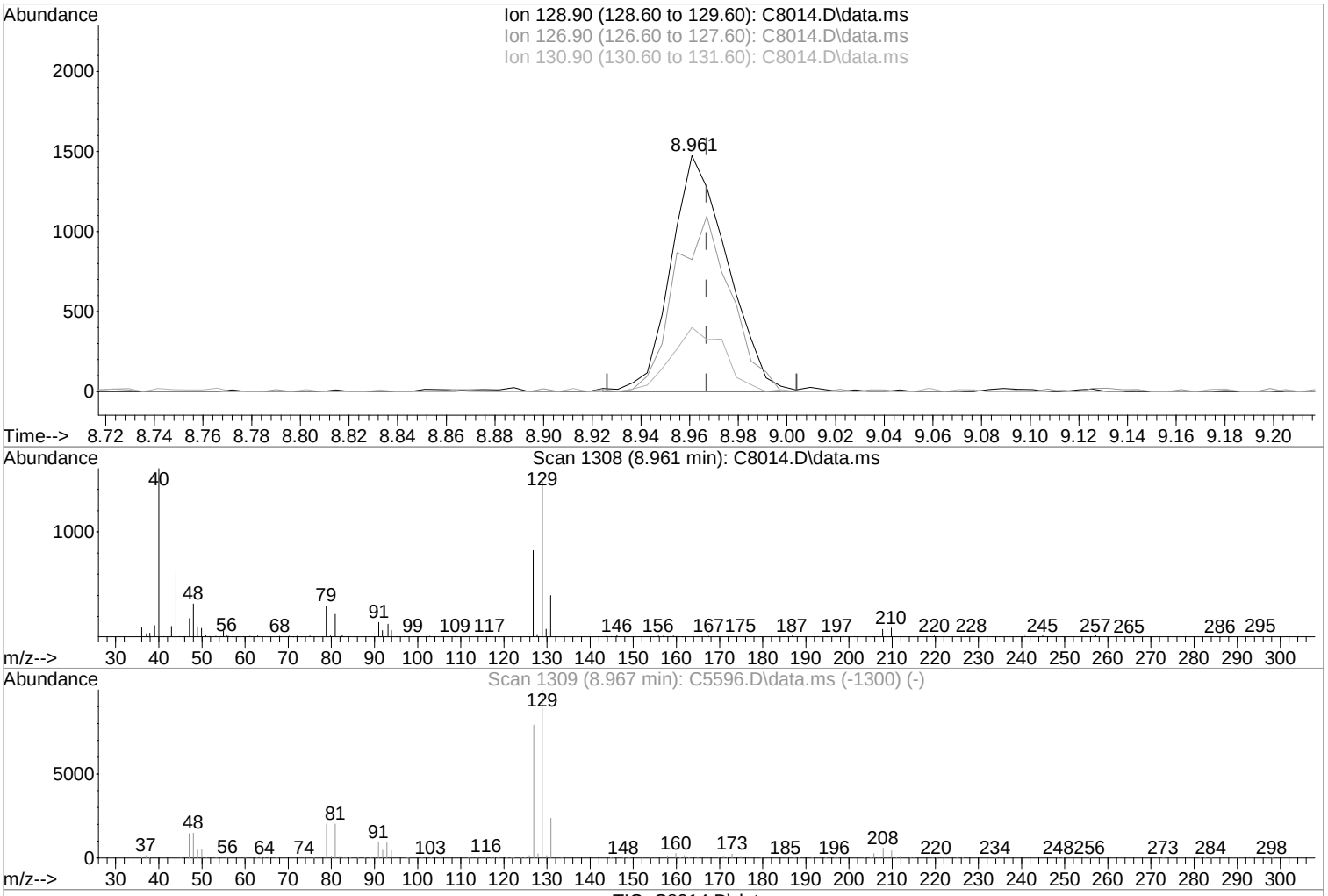
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8014.D\data.ms

(74) Dibromochloromethane (P)

8.961min (-0.006) 0.82 ug/L m

response 2366

Ion	Exp%	Act%
128.90	100	100
126.90	79.10	55.90#
130.90	23.80	27.14
0.00	0.00	0.00

Manual Integration:

After

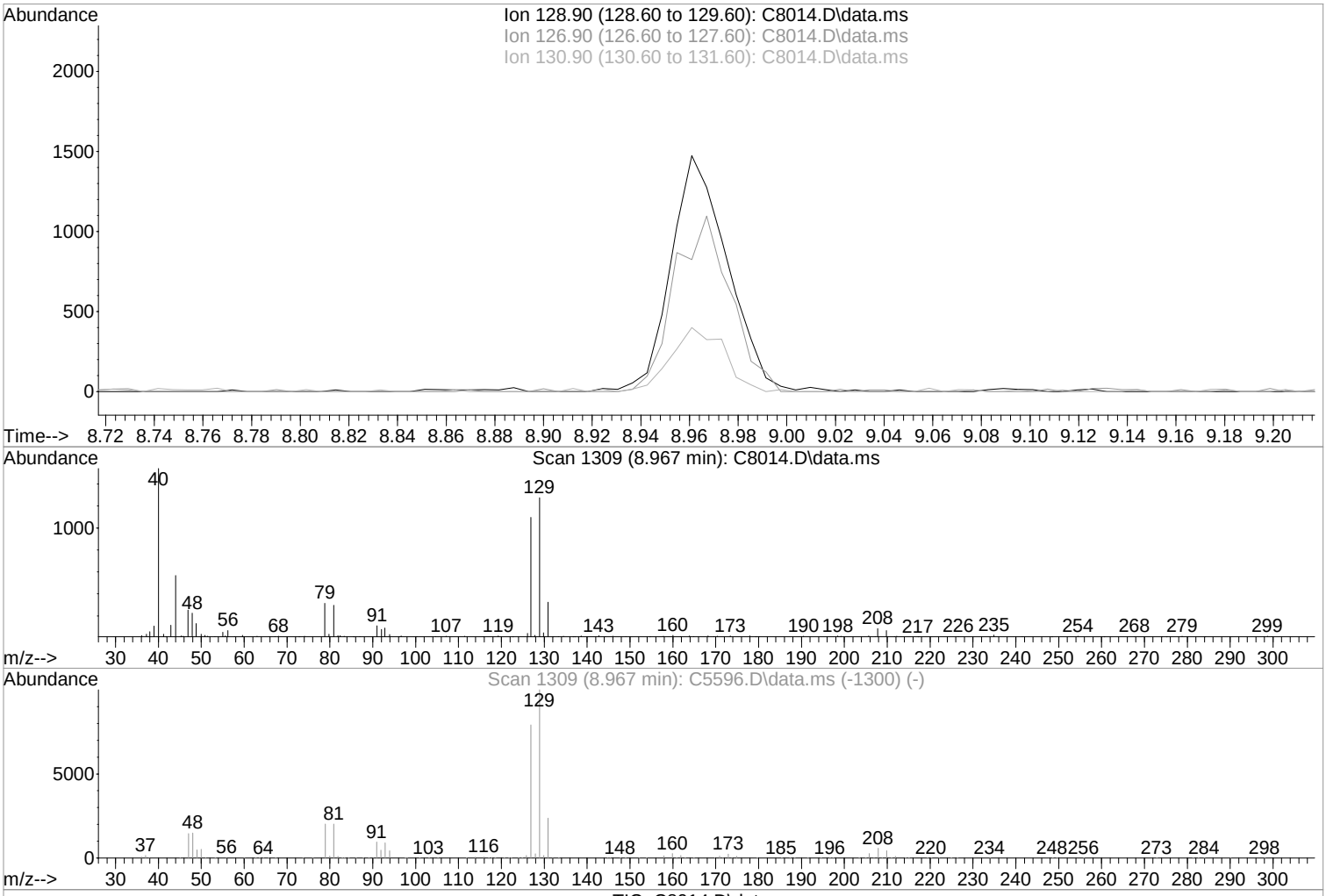
Peak not found.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 13:56:10 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8014.D\data.ms

(74) Dibromochloromethane (P)

8.967min (-8.967) 0.00 ug/L

response 0

Ion	Exp%	Act%
128.90	100	0.00
126.90	79.10	0.00#
130.90	23.80	0.00#
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 14:01:50 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	295136	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.943	114	470862	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	408676	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	212601	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	32459	10.28	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 20.56%#				
47) surr1,1,2-dichloroetha...	5.120	65	40733	9.11	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 18.22%#				
64) SURR3,Toluene-d8	7.949	98	128554	10.65	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.30%#				
69) SURR2,BFB	10.729	95	45494	9.27	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 18.54%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	3341m	0.83	ug/L		
3) Chloromethane	1.164	50	3668m	0.87	ug/L		
4) Vinyl Chloride	1.219	62	3382	0.91	ug/L		96
5) Bromomethane	1.414	94	4161	1.47	ug/L		95
6) Chloroethane	1.481	64	2688	1.16	ug/L		91
7) Freon 21	1.609	67	6196	0.99	ug/L		90
8) Trichlorofluoromethane	1.651	101	5031	1.09	ug/L		95
9) Diethyl Ether	1.846	59	2479	0.87	ug/L		90
10) Freon 123a	1.846	67	3532	0.96	ug/L		84
11) Freon 123	1.889	83	3584	0.87	ug/L		98
12) Acrolein	1.932	56	3859	5.05	ug/L		85
13) 1,1-Diclethene	2.011	96	2380	0.91	ug/L		96
14) Freon 113	2.017	101	2371	0.86	ug/L		81
15) Acetone	2.042	43	2704	1.31	ug/L		90
16) 2-Propanol	2.157	45	5448	17.56	ug/L		99
17) Iodomethane	2.121	142	1218	0.32	ug/L		86
18) Carbon Disulfide	2.176	76	6722	0.95	ug/L		97
19) Acetonitrile	2.255	40	1165m	3.72	ug/L		
20) Allyl Chloride	2.291	76	1086	0.77	ug/L	#	68
21) Methyl Acetate	2.316	43	3026	0.85	ug/L		86
22) Methylene Chloride	2.389	84	3630	1.12	ug/L		96
23) TBA	2.499	59	9873	19.78	ug/L		94
24) Acrylonitrile	2.608	53	7481	4.53	ug/L		98
25) Methyl-t-Butyl Ether	2.657	73	9960	0.96	ug/L		97
26) trans-1,2-Dichloroethene	2.639	96	2729	0.95	ug/L		90
27) 1,1-Diclethane	3.066	63	4996	0.90	ug/L		96
28) Vinyl Acetate	3.151	86	234m	0.39	ug/L		
29) DIPE	3.182	45	8562	0.77	ug/L		92
30) 2-Chloro-1,3-Butadiene	3.175	53	3821	0.73	ug/L		91
31) ETBE	3.639	59	8494	0.85	ug/L		97
32) 2,2-Dichloropropane	3.779	77	4229	1.02	ug/L		98
33) cis-1,2-Dichloroethene	3.779	96	3477	1.04	ug/L	#	56
34) 2-Butanone	3.828	43	2740	1.09	ug/L		91
35) Propionitrile	3.889	54	3057	4.56	ug/L		94
36) Bromochloromethane	4.120	130	2371	1.09	ug/L	#	81
37) Methacrylonitrile	4.127	67	1845	1.14	ug/L	#	58
38) Tetrahydrofuran	4.224	42	1403	0.98	ug/L		99
39) Chloroform	4.273	83	5096	0.91	ug/L		93
40) 1,1,1-Trichloroethane	4.547	97	4107	0.90	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 14:01:50 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) TAME	5.516	73	8254	0.89	ug/L		93
43) Cyclohexane	4.633	41	2653	0.72	ug/L		98
45) Carbontetrachloride	4.840	117	2164	0.59	ug/L		96
46) 1,1-Dichloropropene	4.858	75	3955	0.89	ug/L		92
48) Benzene	5.212	78	11213	0.89	ug/L		95
49) 1,2-Dichloroethane	5.260	62	4656	0.82	ug/L		95
50) Iso-Butyl Alcohol	5.260	43	3518	15.64	ug/L		95
51) n-Heptane	5.797	43	3767	0.91	ug/L		85
52) 1-Butanol	6.376	56	4368	35.34	ug/L		82
53) Trichloroethene	6.303	130	3567	1.00	ug/L		93
54) Methylcyclohexane	6.565	55	3460	0.81	ug/L		87
55) 1,2-Diclpropane	6.614	63	2833	0.82	ug/L		92
56) Dibromomethane	6.772	93	2030	0.87	ug/L		82
57) 1,4-Dioxane	6.858	88	1166	17.84	ug/L		84
58) Methyl Methacrylate	6.888	69	2484	0.90	ug/L	#	83
59) Bromodichloromethane	7.028	83	3397	0.79	ug/L		98
60) 2-Nitropropane	7.339	41	979	0.95	ug/L		93
61) 2-Chloroethylvinyl Ether	7.504	63	1024	0.57	ug/L		96
62) cis-1,3-Dichloropropene	7.626	75	3985	0.79	ug/L		95
63) 4-Methyl-2-pentanone	7.864	43	3657	0.82	ug/L		95
65) Toluene	8.028	91	12430	0.92	ug/L		95
66) trans-1,3-Dichloropropene	8.333	75	3209	0.71	ug/L		90
67) Ethyl Methacrylate	8.510	69	3754	0.82	ug/L		99
68) 1,1,2-Trichloroethane	8.534	97	3147	0.99	ug/L		90
71) Tetrachloroethene	8.680	164	2364	0.94	ug/L		89
72) 2-Hexanone	8.876	43	2601	0.80	ug/L		93
73) 1,3-Dichloropropane	8.717	76	5181	0.91	ug/L		86
74) Dibromochloromethane	8.961	129	2366m	0.82	ug/L		
75) N-Butyl Acetate	9.065	43	4977	0.72	ug/L		89
76) 1,2-Dibromoethane	9.065	107	2936	0.91	ug/L		86
77) 3-Chlorobenzotrifluoride	9.656	180	4284	0.92	ug/L	#	87
78) Chlorobenzene	9.613	112	8821	1.01	ug/L		91
79) 4-Chlorobenzotrifluoride	9.717	180	4055	0.95	ug/L		94
80) 1,1,1,2-Tetrachloroethane	9.711	131	2478	0.87	ug/L		91
81) Ethylbenzene	9.753	106	4332	0.98	ug/L	#	85
82) (m+p)Xylene	9.875	106	10921	1.96	ug/L	#	82
83) o-Xylene	10.253	106	5024	0.91	ug/L		97
84) Styrene	10.266	104	7947	0.88	ug/L		97
85) Bromoform	10.418	173	1325	0.64	ug/L		96
86) 2-Chlorobenzotrifluoride	10.515	180	4048	0.88	ug/L		91
87) Isopropylbenzene	10.613	105	13209	0.94	ug/L		92
88) Cyclohexanone	10.662	55	11381	11.40	ug/L		80
89) trans-1,4-Dichloro-2-B...	10.936	53	688	0.54	ug/L		85
91) 1,1,2,2-Tetrachloroethane	10.881	83	3180	0.80	ug/L		80
92) Bromobenzene	10.851	156	3441	0.98	ug/L		97
93) 1,2,3-Trichloropropane	10.906	110	1332	0.92	ug/L		91
94) n-Propylbenzene	10.985	91	14693	0.95	ug/L		94
95) 2-Chlorotoluene	11.040	91	9414	0.98	ug/L		97
96) 3-Chlorotoluene	11.095	91	8545	0.84	ug/L		92
97) 4-Chlorotoluene	11.137	91	10980	0.96	ug/L		87
98) 1,3,5-Trimethylbenzene	11.143	105	10068	0.92	ug/L		95
99) tert-Butylbenzene	11.424	119	9380	1.01	ug/L		96
100) 1,2,4-Trimethylbenzene	11.467	105	9725	0.89	ug/L		92
101) 3,4-Dichlorobenzotrifl...	11.534	214	2953	0.84	ug/L		92
102) sec-Butylbenzene	11.613	105	12905	0.97	ug/L		99
103) p-Isopropyltoluene	11.741	119	10889	0.95	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 14:01:50 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

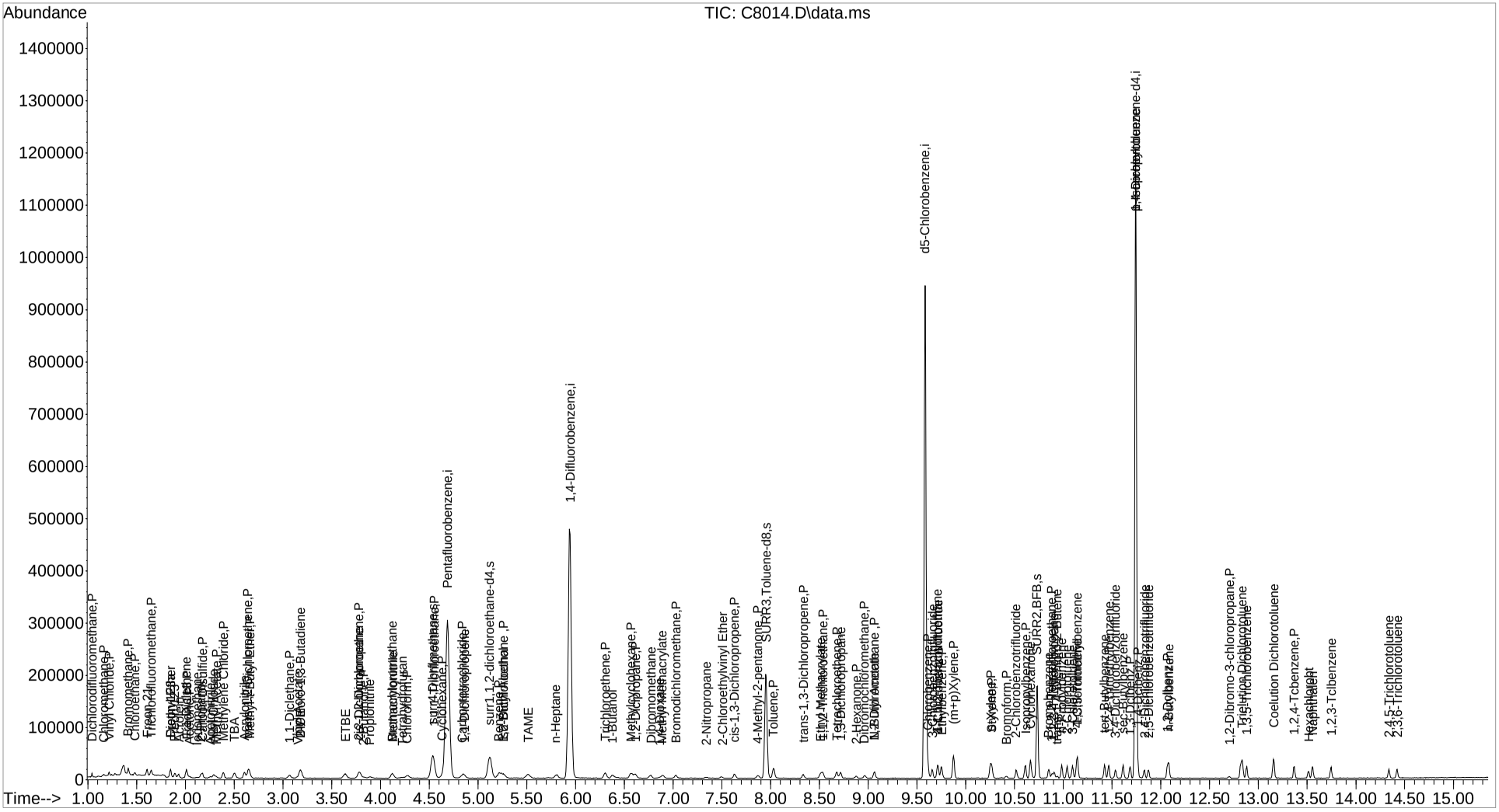
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	6349	0.95	ug/L	99
105) 1,4-Dclbenz	11.765	146	6984	0.99	ug/L	97
106) 2,4-Dichlorobenzotrifl...	11.832	214	2528	0.79	ug/L	79
107) 2,5-Dichlorobenzotrifl...	11.875	214	3206	0.88	ug/L	95
108) n-Butylbenzene	12.082	91	9563	0.90	ug/L	90
109) 1,2-Dclbenz	12.070	146	6982	1.04	ug/L	95
110) 1,2-Dibromo-3-chloropr...	12.704	157	585	0.69	ug/L	86
111) Trielution Dichlorotol...	12.832	125	16003	2.77	ug/L	96
112) 1,3,5-Trichlorobenzene	12.881	180	4977	0.97	ug/L	96
113) Coelution Dichlorotoluene	13.155	125	11603	1.81	ug/L	95
114) 1,2,4-Tcbenzene	13.369	180	4656	0.97	ug/L	92
115) Hexachlorobt	13.521	225	1851	0.94	ug/L	84
116) Naphthalen	13.558	128	13562	1.01	ug/L	97
117) 1,2,3-Tclbenzene	13.747	180	4747	0.99	ug/L	93
118) 2,4,5-Trichlorotoluene	14.338	159	2881m	0.93	ug/L	
119) 2,3,6-Trichlorotoluene	14.423	159	2779	0.93	ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8014.D
Acq On : 8 Jun 2018 1:14 pm
Operator : F.NAEGLER
Sample : 1.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 3 Sample Multiplier: 1

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Quant Title : MS#14 - 8260 WATERS 5mL Purge
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Response via : Initial Calibration



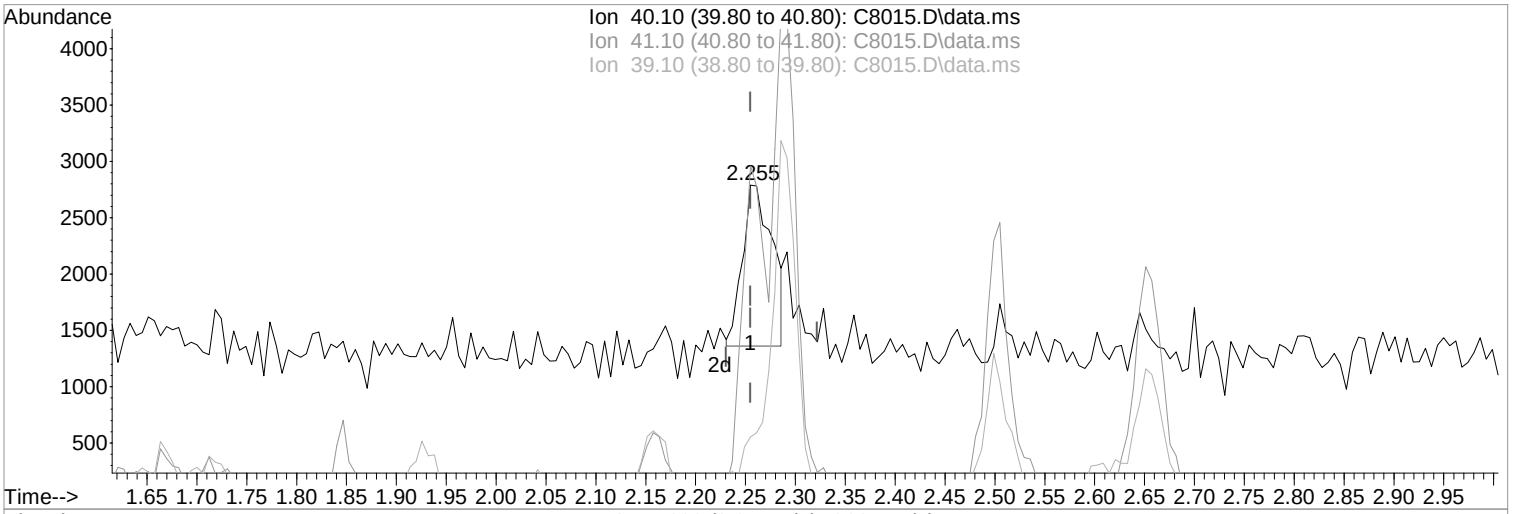
1st FJ 06/11/18
2nd 06/11/18

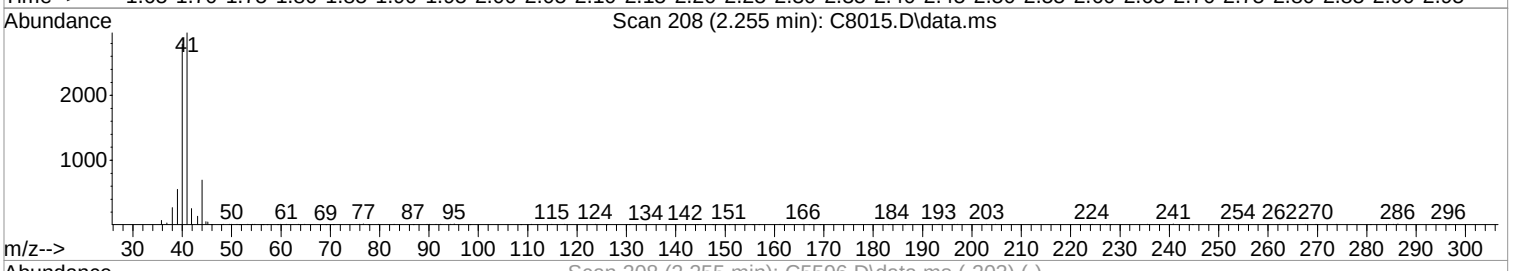
1st FJ 06/11/18
2nd 06/11/18

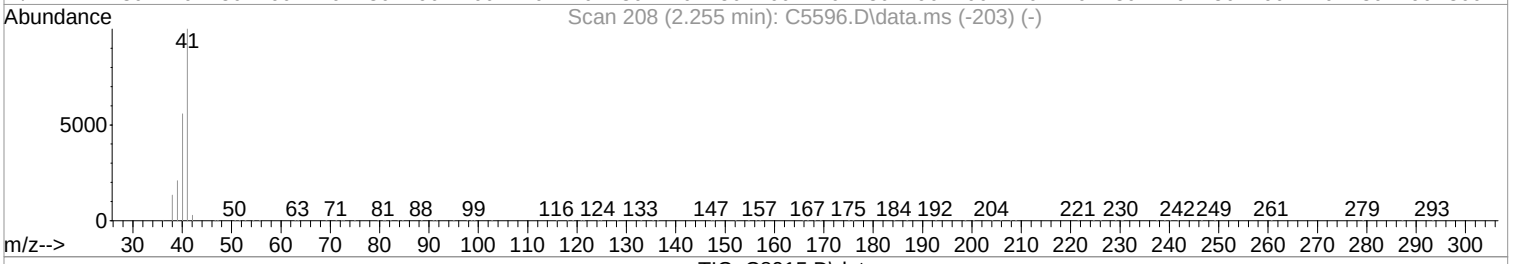
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8015.D
Acq On : 8 Jun 2018 1:37 pm
Operator : F.NAEGLER
Sample : 2.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 14:02:02 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8015.D\data.ms

(19) Acetonitrile

2.255min (+0.000) 9.59 ug/L m

response 2975

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	106.09#
39.10	38.30	19.85
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

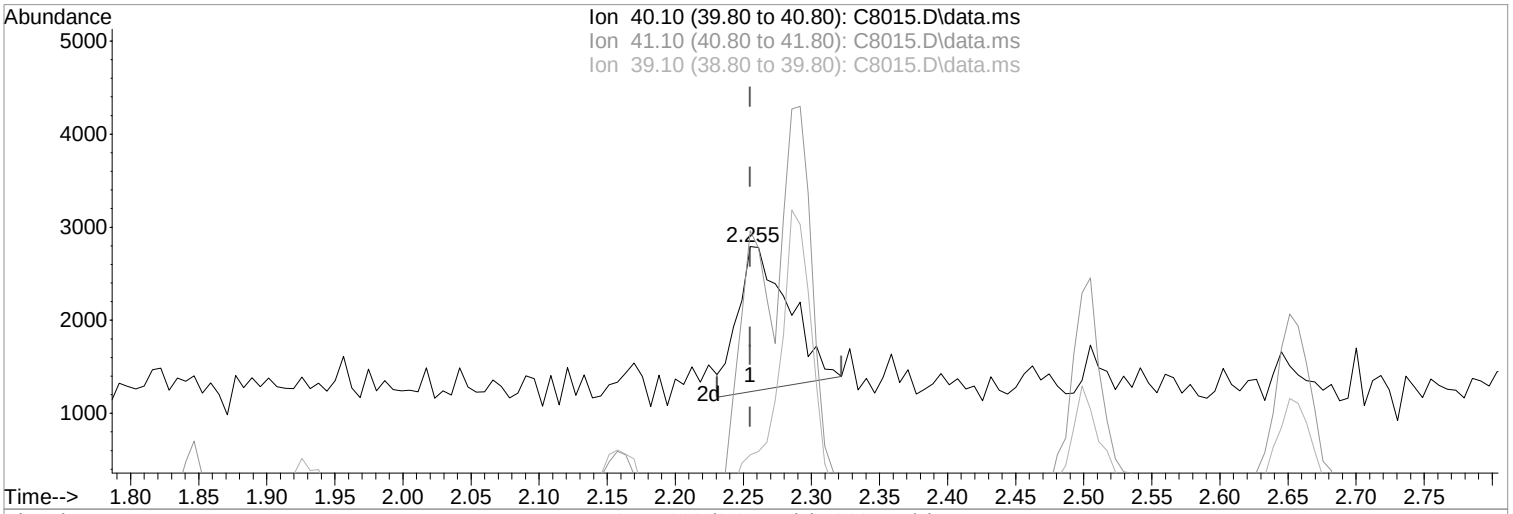
06/08/18

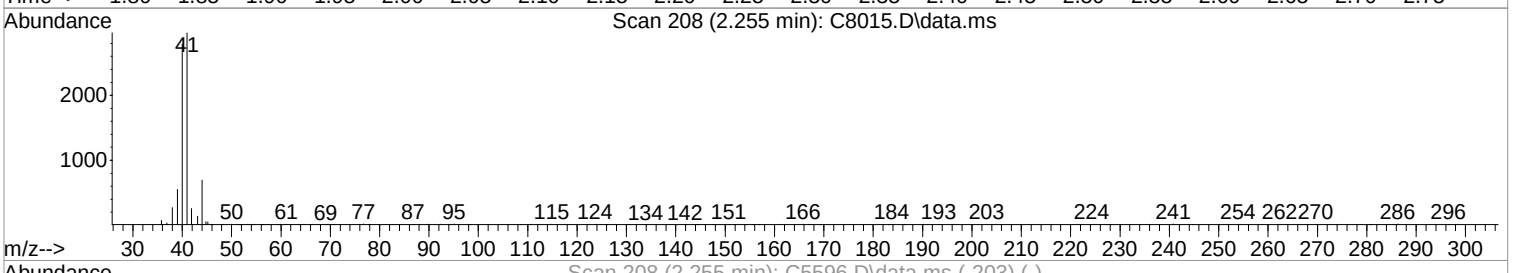
1st FW 06/11/18
2nd 06/11/18

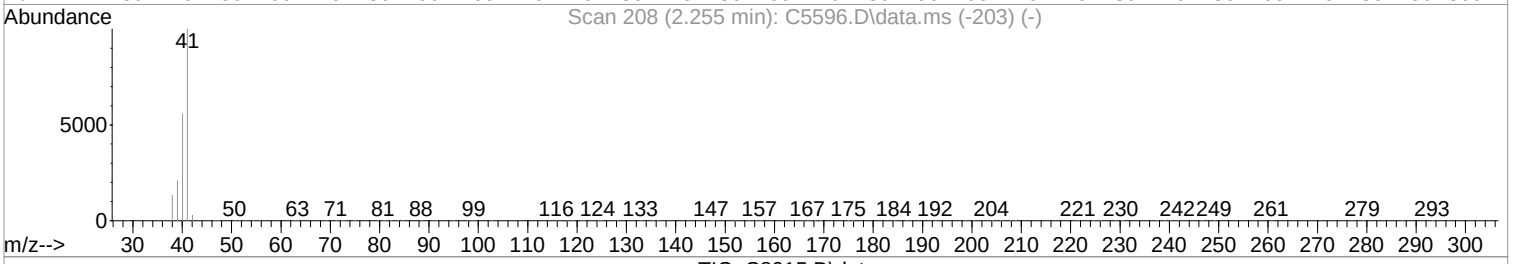
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8015.D
Acq On : 8 Jun 2018 1:37 pm
Operator : F.NAEGLER
Sample : 2.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 14:02:02 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8015.D\data.ms

(19) Acetonitrile

2.255min (+0.000) 12.96 ug/L

response 4019

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	106.09#
39.10	38.30	19.85
0.00	0.00	0.00

Manual Integration:

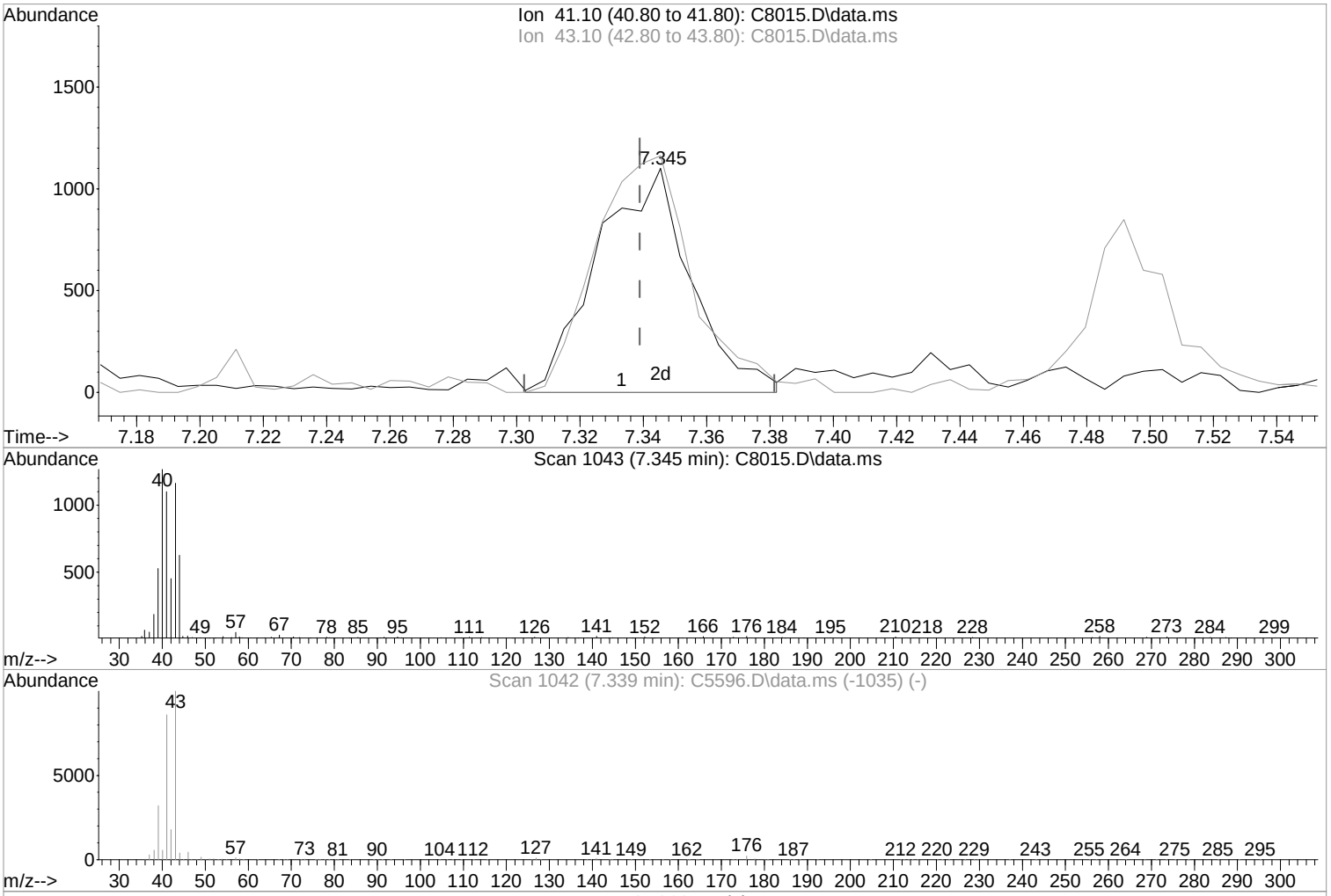
Before

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8015.D
Acq On : 8 Jun 2018 1:37 pm
Operator : F.NAEGLER
Sample : 2.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 14:02:02 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8015.D\data.ms

(60) 2-Nitropropane

7.345min (+0.006) 2.22 ug/L m

response 2260

Ion	Exp%	Act%
41.10	100	100
43.10	116.10	105.64
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

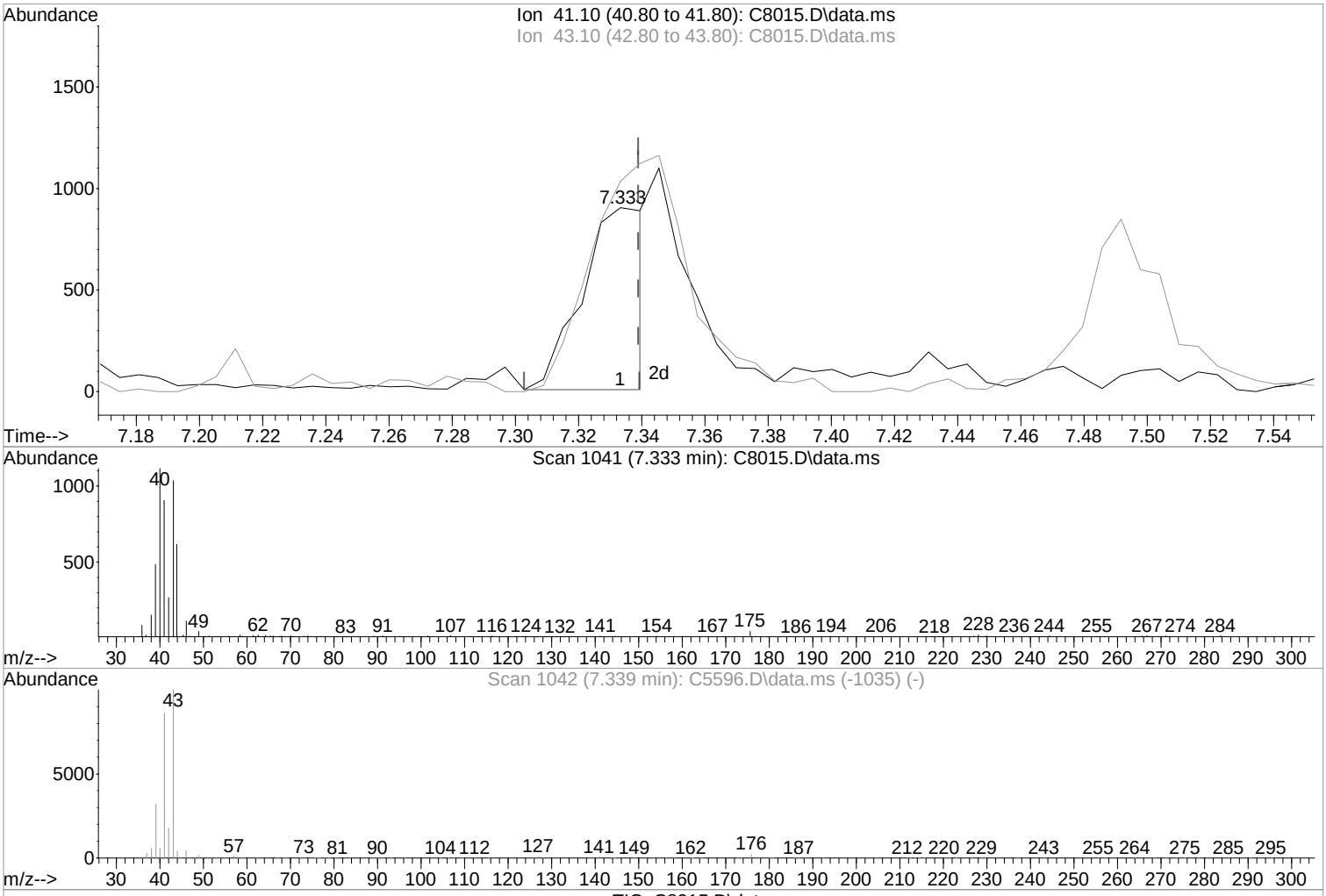
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8015.D
Acq On : 8 Jun 2018 1:37 pm
Operator : F.NAEGLER
Sample : 2.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 14:02:02 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8015.D\data.ms

(60) 2-Nitropropane

7.333min (-0.006) 1.21 ug/L

response 1233

Ion	Exp%	Act%
41.10	100	100
43.10	116.10	114.36
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8015.D
Acq On : 8 Jun 2018 1:37 pm
Operator : F.NAEGLER
Sample : 2.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 14:03:33 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	292234	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.943	114	467138	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	407259	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	212902	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	32204	10.28	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 20.56%#				
47) surr1,1,2-dichloroetha...	5.114	65	41478	9.35	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 18.70%#				
64) SURR3,Toluene-d8	7.949	98	129299	10.80	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.60%#				
69) SURR2,BFB	10.735	95	46649	9.58	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 19.16%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	6579	1.65	ug/L		98
3) Chloromethane	1.164	50	8042	1.92	ug/L		96
4) Vinyl Chloride	1.219	62	7077	1.93	ug/L		100
5) Bromomethane	1.414	94	8763	3.13	ug/L		96
6) Chloroethane	1.481	64	5372	2.33	ug/L		96
7) Freon 21	1.603	67	12518	2.03	ug/L		100
8) Trichlorofluoromethane	1.645	101	10362	2.26	ug/L		94
9) Diethyl Ether	1.847	59	4947	1.75	ug/L		97
10) Freon 123a	1.847	67	6574	1.80	ug/L		98
11) Freon 123	1.889	83	7918	1.94	ug/L		89
12) Acrolein	1.932	56	7817	10.33	ug/L		92
13) 1,1-Diclethene	2.005	96	5437	2.10	ug/L	#	80
14) Freon 113	2.017	101	5318	1.95	ug/L		87
15) Acetone	2.042	43	4817	2.36	ug/L		89
16) 2-Propanol	2.157	45	10992	35.78	ug/L		92
17) Iodomethane	2.121	142	2460	0.65	ug/L		86
18) Carbon Disulfide	2.176	76	14311	2.04	ug/L		99
19) Acetonitrile	2.255	40	2975m	9.59	ug/L		
20) Allyl Chloride	2.292	76	2413	1.73	ug/L	#	60
21) Methyl Acetate	2.310	43	5930	1.69	ug/L		96
22) Methylene Chloride	2.389	84	6480	2.02	ug/L		92
23) TBA	2.499	59	19511	39.48	ug/L		93
24) Acrylonitrile	2.602	53	14812	9.06	ug/L		100
25) Methyl-t-Butyl Ether	2.651	73	18414	1.79	ug/L		97
26) trans-1,2-Dichloroethene	2.639	96	5996	2.12	ug/L	#	79
27) 1,1-Diclethane	3.066	63	10592	1.93	ug/L		96
28) Vinyl Acetate	3.145	86	545	0.92	ug/L	#	29
29) DIPE	3.182	45	18239	1.66	ug/L		96
30) 2-Chloro-1,3-Butadiene	3.176	53	8873	1.72	ug/L		81
31) ETBE	3.639	59	16883	1.70	ug/L		98
32) 2,2-Dichloropropane	3.779	77	8299	2.03	ug/L		90
33) cis-1,2-Dichloroethene	3.779	96	7239	2.19	ug/L		87
34) 2-Butanone	3.822	43	4715	1.89	ug/L		86
35) Propionitrile	3.889	54	6301	9.48	ug/L		99
36) Bromochloromethane	4.120	130	4077	1.88	ug/L		89
37) Methacrylonitrile	4.120	67	2874	1.79	ug/L		87
38) Tetrahydrofuran	4.218	42	2751	1.94	ug/L		71
39) Chloroform	4.273	83	10463	1.88	ug/L		94
40) 1,1,1-Trichloroethane	4.547	97	9261	2.06	ug/L		91

1st FNJ 06/11/18
2nd [illegible] 06/11/18

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8015.D
Acq On : 8 Jun 2018 1:37 pm
Operator : F.NAEGLER
Sample : 2.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 14:03:33 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) TAME	5.510	73	16476	1.79	ug/L		96
43) Cyclohexane	4.639	41	6051	1.65	ug/L		72
45) Carbontetrachloride	4.846	117	5505	1.50	ug/L	#	83
46) 1,1-Dichloropropene	4.858	75	9030	2.05	ug/L		91
48) Benzene	5.218	78	23844	1.91	ug/L		97
49) 1,2-Dichloroethane	5.260	62	9523	1.68	ug/L		92
50) Iso-Butyl Alcohol	5.254	43	6814	30.54	ug/L		98
51) n-Heptane	5.803	43	7445	1.81	ug/L		89
52) 1-Butanol	6.376	56	8920	72.75	ug/L		91
53) Trichloroethene	6.309	130	7417	2.10	ug/L		90
54) Methylcyclohexane	6.571	55	7774	1.83	ug/L		89
55) 1,2-Diclpropane	6.608	63	6473	1.88	ug/L		95
56) Dibromomethane	6.766	93	4630	1.99	ug/L		86
57) 1,4-Dioxane	6.858	88	2277	35.11	ug/L		83
58) Methyl Methacrylate	6.894	69	4761	1.74	ug/L		91
59) Bromodichloromethane	7.022	83	6997	1.65	ug/L		97
60) 2-Nitropropane	7.345	41	2260m	2.22	ug/L		
61) 2-Chloroethylvinyl Ether	7.498	63	1834	1.03	ug/L		93
62) cis-1,3-Dichloropropene	7.626	75	8020	1.60	ug/L		97
63) 4-Methyl-2-pentanone	7.870	43	7655	1.72	ug/L		96
65) Toluene	8.028	91	26773	1.99	ug/L		92
66) trans-1,3-Dichloropropene	8.333	75	6830	1.52	ug/L		96
67) Ethyl Methacrylate	8.510	69	7788	1.71	ug/L		87
68) 1,1,2-Trichloroethane	8.534	97	5875	1.85	ug/L		90
71) Tetrachloroethene	8.681	164	5268	2.09	ug/L	#	86
72) 2-Hexanone	8.876	43	5289	1.63	ug/L		94
73) 1,3-Dichloropropane	8.717	76	10628	1.87	ug/L		86
74) Dibromochloromethane	8.967	129	4752	1.65	ug/L		95
75) N-Butyl Acetate	9.059	43	10086	1.46	ug/L		97
76) 1,2-Dibromoethane	9.065	107	5803	1.80	ug/L		83
77) 3-Chlorobenzotrifluoride	9.656	180	8795	1.90	ug/L	#	92
78) Chlorobenzene	9.613	112	17291	1.99	ug/L		97
79) 4-Chlorobenzotrifluoride	9.717	180	7947	1.88	ug/L		97
80) 1,1,1,2-Tetrachloroethane	9.711	131	4819	1.70	ug/L		87
81) Ethylbenzene	9.754	106	8976	2.03	ug/L		97
82) (m+p)Xylene	9.875	106	21970	3.96	ug/L		96
83) o-Xylene	10.253	106	10573	1.93	ug/L		93
84) Styrene	10.272	104	16457	1.83	ug/L		94
85) Bromoform	10.412	173	2557	1.25	ug/L		84
86) 2-Chlorobenzotrifluoride	10.516	180	7928	1.73	ug/L		91
87) Isopropylbenzene	10.613	105	28340	2.03	ug/L		92
88) Cyclohexanone	10.662	55	23632	23.75	ug/L		90
89) trans-1,4-Dichloro-2-B...	10.936	53	1274	1.01	ug/L		85
91) 1,1,2,2-Tetrachloroethane	10.887	83	6561	1.66	ug/L		98
92) Bromobenzene	10.851	156	6864	1.95	ug/L		92
93) 1,2,3-Trichloropropane	10.912	110	2951	2.03	ug/L		99
94) n-Propylbenzene	10.985	91	32095	2.08	ug/L		97
95) 2-Chlorotoluene	11.040	91	18971	1.98	ug/L		93
96) 3-Chlorotoluene	11.095	91	19491	1.92	ug/L		97
97) 4-Chlorotoluene	11.137	91	22642	1.98	ug/L		96
98) 1,3,5-Trimethylbenzene	11.150	105	23154	2.12	ug/L		96
99) tert-Butylbenzene	11.424	119	19878	2.14	ug/L		99
100) 1,2,4-Trimethylbenzene	11.467	105	22234	2.03	ug/L		97
101) 3,4-Dichlorobenzotrifl...	11.534	214	6131	1.73	ug/L		95
102) sec-Butylbenzene	11.613	105	29550	2.21	ug/L		99
103) p-Isopropyltoluene	11.741	119	24164	2.10	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8015.D
Acq On : 8 Jun 2018 1:37 pm
Operator : F.NAEGLER
Sample : 2.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 14:03:33 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

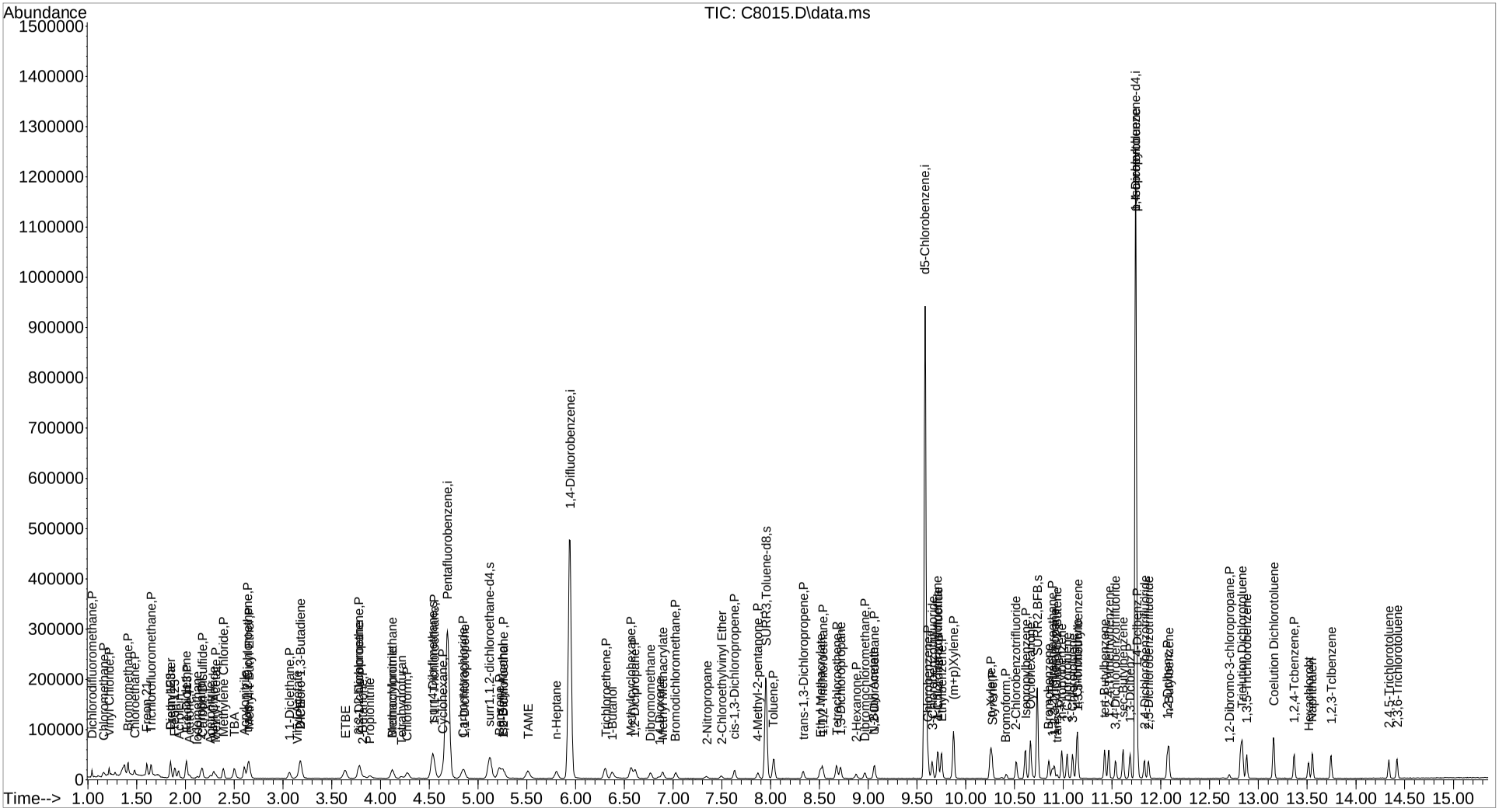
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	14338	2.13	ug/L	94
105) 1,4-Dclbenz	11.759	146	14129	2.00	ug/L	88
106) 2,4-Dichlorobenzotrifl...	11.832	214	5962	1.86	ug/L	90
107) 2,5-Dichlorobenzotrifl...	11.875	214	6673	1.82	ug/L	98
108) n-Butylbenzene	12.082	91	21583	2.02	ug/L	98
109) 1,2-Dclbenz	12.070	146	13809	2.05	ug/L	98
110) 1,2-Dibromo-3-chloropr...	12.704	157	1256	1.48	ug/L	91
111) Trielution Dichlorotol...	12.832	125	34795	6.02	ug/L	97
112) 1,3,5-Trichlorobenzene	12.881	180	10183	1.99	ug/L	99
113) Coelution Dichlorotoluene	13.155	125	25269	3.94	ug/L	98
114) 1,2,4-Tcbenzene	13.369	180	10021	2.08	ug/L	96
115) Hexachlorobt	13.515	225	3748	1.90	ug/L	96
116) Naphthalen	13.552	128	27955	2.07	ug/L	96
117) 1,2,3-Tclbenzene	13.747	180	10274	2.15	ug/L	98
118) 2,4,5-Trichlorotoluene	14.338	159	6858	2.21	ug/L	98
119) 2,3,6-Trichlorotoluene	14.423	159	6710	2.24	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8015.D
Acq On : 8 Jun 2018 1:37 pm
Operator : F.NAEGLER
Sample : 2.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 14:03:33 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

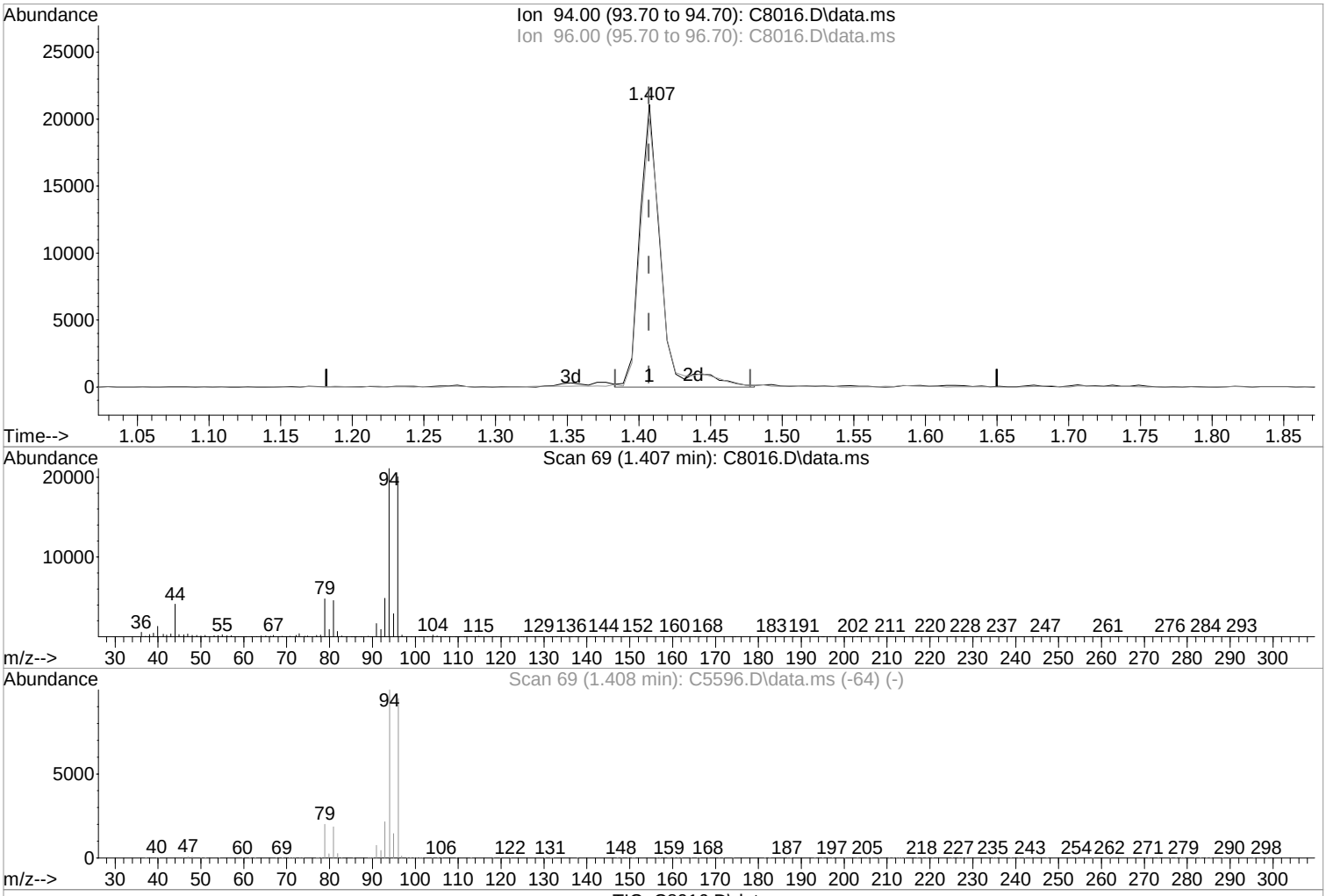


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1st 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8016.D
Acq On : 8 Jun 2018 1:59 pm
Operator : F.NAEGLER
Sample : 5.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 15:00:58 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8016.D\data.ms

(5) Bromomethane (P)

1.407min (+0.000) 7.64 ug/L m

response 21243

Ion	Exp%	Act%
94.00	100	100
96.00	94.80	95.10
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

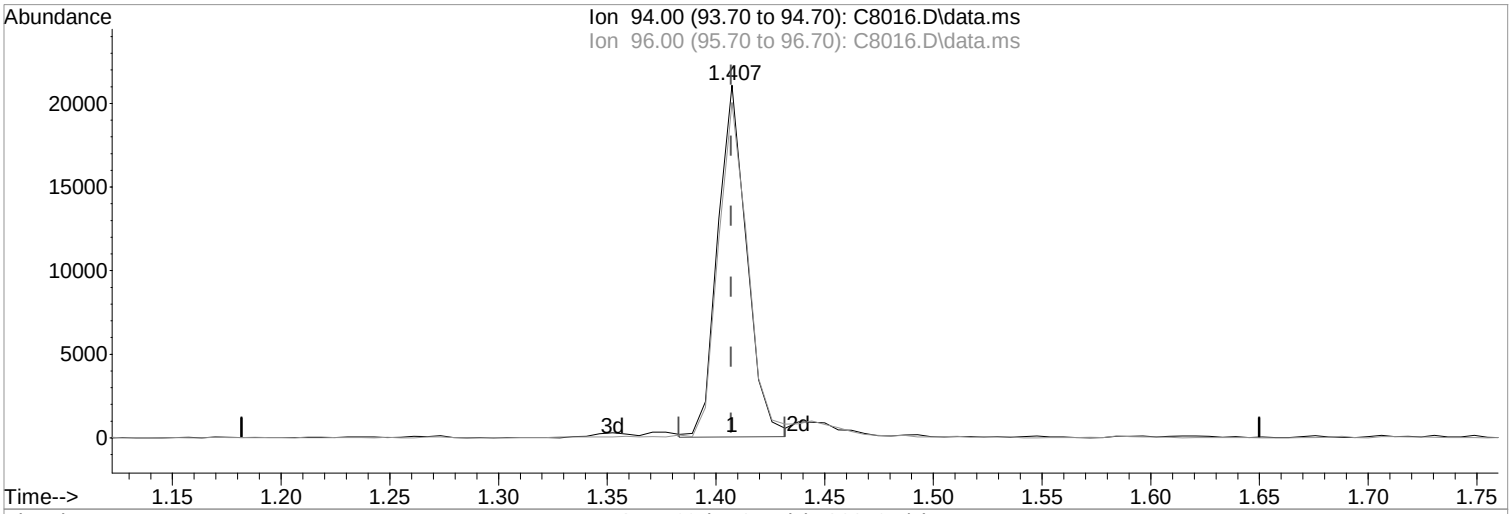
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8016.D
Acq On : 8 Jun 2018 1:59 pm
Operator : F.NAEGLER
Sample : 5.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 15:00:58 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8016.D\data.ms

(5) Bromomethane (P)

1.407min (+0.000) 7.02 ug/L

response 19516

Ion	Exp%	Act%
94.00	100	100
96.00	94.80	95.10
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8016.D
Acq On : 8 Jun 2018 1:59 pm
Operator : F.NAEGLER
Sample : 5.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 15:01:22 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	290251	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.943	114	457264	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	411423	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	211071	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	33501	10.92	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 21.84%#				
47) surr1,1,2-dichloroetha...	5.126	65	41485	9.55	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 19.10%#				
64) SURR3,Toluene-d8	7.949	98	131376	11.21	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 22.42%#				
69) SURR2,BFB	10.735	95	46861	9.84	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 19.68%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	16534	4.18	ug/L		98
3) Chloromethane	1.164	50	19291	4.64	ug/L		95
4) Vinyl Chloride	1.218	62	19309	5.31	ug/L		98
5) Bromomethane	1.407	94	21243m	7.64	ug/L		
6) Chloroethane	1.474	64	13254	5.79	ug/L		96
7) Freon 21	1.603	67	33258	5.42	ug/L		96
8) Trichlorofluoromethane	1.645	101	24966	5.48	ug/L		96
9) Diethyl Ether	1.846	59	12366	4.41	ug/L		91
10) Freon 123a	1.846	67	17189	4.73	ug/L		95
11) Freon 123	1.889	83	19909	4.92	ug/L		94
12) Acrolein	1.932	56	19624	26.10	ug/L		98
13) 1,1-Diclethene	2.005	96	12773	4.97	ug/L		91
14) Freon 113	2.017	101	12269	4.53	ug/L		93
15) Acetone	2.048	43	9721	4.80	ug/L		94
16) 2-Propanol	2.157	45	28583	93.66	ug/L		98
17) Iodomethane	2.121	142	10077	2.68	ug/L		98
18) Carbon Disulfide	2.176	76	35791	5.14	ug/L		98
19) Acetonitrile	2.255	40	6904	22.42	ug/L		91
20) Allyl Chloride	2.291	76	6135	4.43	ug/L	#	79
21) Methyl Acetate	2.310	43	13768	3.94	ug/L		92
22) Methylene Chloride	2.389	84	15859	4.98	ug/L		94
23) TBA	2.505	59	46947	95.65	ug/L		95
24) Acrylonitrile	2.602	53	37881	23.34	ug/L		99
25) Methyl-t-Butyl Ether	2.651	73	48301	4.74	ug/L		98
26) trans-1,2-Dichloroethene	2.645	96	14611	5.19	ug/L		95
27) 1,1-Diclethane	3.066	63	27593	5.05	ug/L		96
28) Vinyl Acetate	3.145	86	2133	3.62	ug/L	#	57
29) DIPE	3.181	45	46773	4.28	ug/L		96
30) 2-Chloro-1,3-Butadiene	3.175	53	22536	4.40	ug/L		89
31) ETBE	3.633	59	43173	4.37	ug/L		100
32) 2,2-Dichloropropane	3.785	77	21379	5.26	ug/L		97
33) cis-1,2-Dichloroethene	3.785	96	17318	5.26	ug/L		95
34) 2-Butanone	3.834	43	11953	4.83	ug/L		95
35) Propionitrile	3.889	54	15462	23.43	ug/L		100
36) Bromochloromethane	4.126	130	11006	5.12	ug/L	#	84
37) Methacrylonitrile	4.120	67	7846	4.92	ug/L		95
38) Tetrahydrofuran	4.212	42	7013	4.98	ug/L		96
39) Chloroform	4.273	83	26789	4.84	ug/L		95
40) 1,1,1-Trichloroethane	4.553	97	22315	4.99	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8016.D
Acq On : 8 Jun 2018 1:59 pm
Operator : F.NAEGLER
Sample : 5.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 15:01:22 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) TAME	5.516	73	43101	4.70	ug/L		90
43) Cyclohexane	4.638	41	14876	4.15	ug/L		96
45) Carbontetrachloride	4.840	117	14643	4.08	ug/L		93
46) 1,1-Dichloropropene	4.852	75	21204	4.91	ug/L		93
48) Benzene	5.224	78	61181	5.02	ug/L		97
49) 1,2-Dichloroethane	5.254	62	24081	4.34	ug/L		98
50) Iso-Butyl Alcohol	5.260	43	18393	84.22	ug/L		87
51) n-Heptane	5.797	43	16492	4.09	ug/L		87
52) 1-Butanol	6.376	56	24635	205.26	ug/L		92
53) Trichloroethene	6.303	130	17715	5.12	ug/L		98
54) Methylcyclohexane	6.571	55	17599	4.24	ug/L	#	79
55) 1,2-Diclpropane	6.608	63	16075	4.77	ug/L		94
56) Dibromomethane	6.766	93	10642	4.68	ug/L		97
57) 1,4-Dioxane	6.851	88	6029	94.97	ug/L		86
58) Methyl Methacrylate	6.894	69	12661	4.72	ug/L	#	80
59) Bromodichloromethane	7.028	83	19109	4.60	ug/L		100
60) 2-Nitropropane	7.339	41	5713	5.72	ug/L		90
61) 2-Chloroethylvinyl Ether	7.498	63	5889	3.39	ug/L		91
62) cis-1,3-Dichloropropene	7.632	75	22819	4.66	ug/L		98
63) 4-Methyl-2-pentanone	7.870	43	18972	4.36	ug/L		94
65) Toluene	8.028	91	64921	4.94	ug/L		99
66) trans-1,3-Dichloropropene	8.333	75	18471	4.19	ug/L		96
67) Ethyl Methacrylate	8.510	69	20955	4.69	ug/L		92
68) 1,1,2-Trichloroethane	8.534	97	15276	4.93	ug/L		95
71) Tetrachloroethene	8.674	164	13042	5.13	ug/L		94
72) 2-Hexanone	8.875	43	14125	4.30	ug/L		92
73) 1,3-Dichloropropane	8.717	76	26515	4.61	ug/L		87
74) Dibromochloromethane	8.967	129	12897	4.43	ug/L		98
75) N-Butyl Acetate	9.064	43	28100	4.03	ug/L		94
76) 1,2-Dibromoethane	9.064	107	15228	4.68	ug/L		92
77) 3-Chlorobenzotrifluoride	9.656	180	20959	4.48	ug/L		95
78) Chlorobenzene	9.613	112	43769	4.98	ug/L		95
79) 4-Chlorobenzotrifluoride	9.717	180	19529	4.56	ug/L		94
80) 1,1,1,2-Tetrachloroethane	9.711	131	12858	4.49	ug/L		99
81) Ethylbenzene	9.753	106	22891	5.13	ug/L		95
82) (m+p)Xylene	9.875	106	56137	10.02	ug/L		97
83) o-Xylene	10.253	106	27777	5.02	ug/L		89
84) Styrene	10.265	104	45131	4.98	ug/L		98
85) Bromoform	10.418	173	7470	3.61	ug/L		95
86) 2-Chlorobenzotrifluoride	10.521	180	20105	4.33	ug/L		99
87) Isopropylbenzene	10.613	105	69434	4.92	ug/L		98
88) Cyclohexanone	10.662	55	67147	66.80	ug/L		89
89) trans-1,4-Dichloro-2-B...	10.936	53	3381	2.65	ug/L		94
91) 1,1,2,2-Tetrachloroethane	10.887	83	18177	4.63	ug/L		97
92) Bromobenzene	10.851	156	17618	5.04	ug/L		94
93) 1,2,3-Trichloropropane	10.906	110	7315	5.07	ug/L		93
94) n-Propylbenzene	10.985	91	79186	5.18	ug/L		99
95) 2-Chlorotoluene	11.040	91	46198	4.86	ug/L		93
96) 3-Chlorotoluene	11.095	91	46953	4.65	ug/L		95
97) 4-Chlorotoluene	11.137	91	56439	4.97	ug/L		97
98) 1,3,5-Trimethylbenzene	11.143	105	57370	5.30	ug/L		98
99) tert-Butylbenzene	11.424	119	51090	5.54	ug/L		99
100) 1,2,4-Trimethylbenzene	11.466	105	56133	5.18	ug/L		98
101) 3,4-Dichlorobenzotrifl...	11.540	214	15104	4.31	ug/L		96
102) sec-Butylbenzene	11.613	105	73181	5.53	ug/L		95
103) p-Isopropyltoluene	11.741	119	58951	5.17	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8016.D
Acq On : 8 Jun 2018 1:59 pm
Operator : F.NAEGLER
Sample : 5.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 15:01:22 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

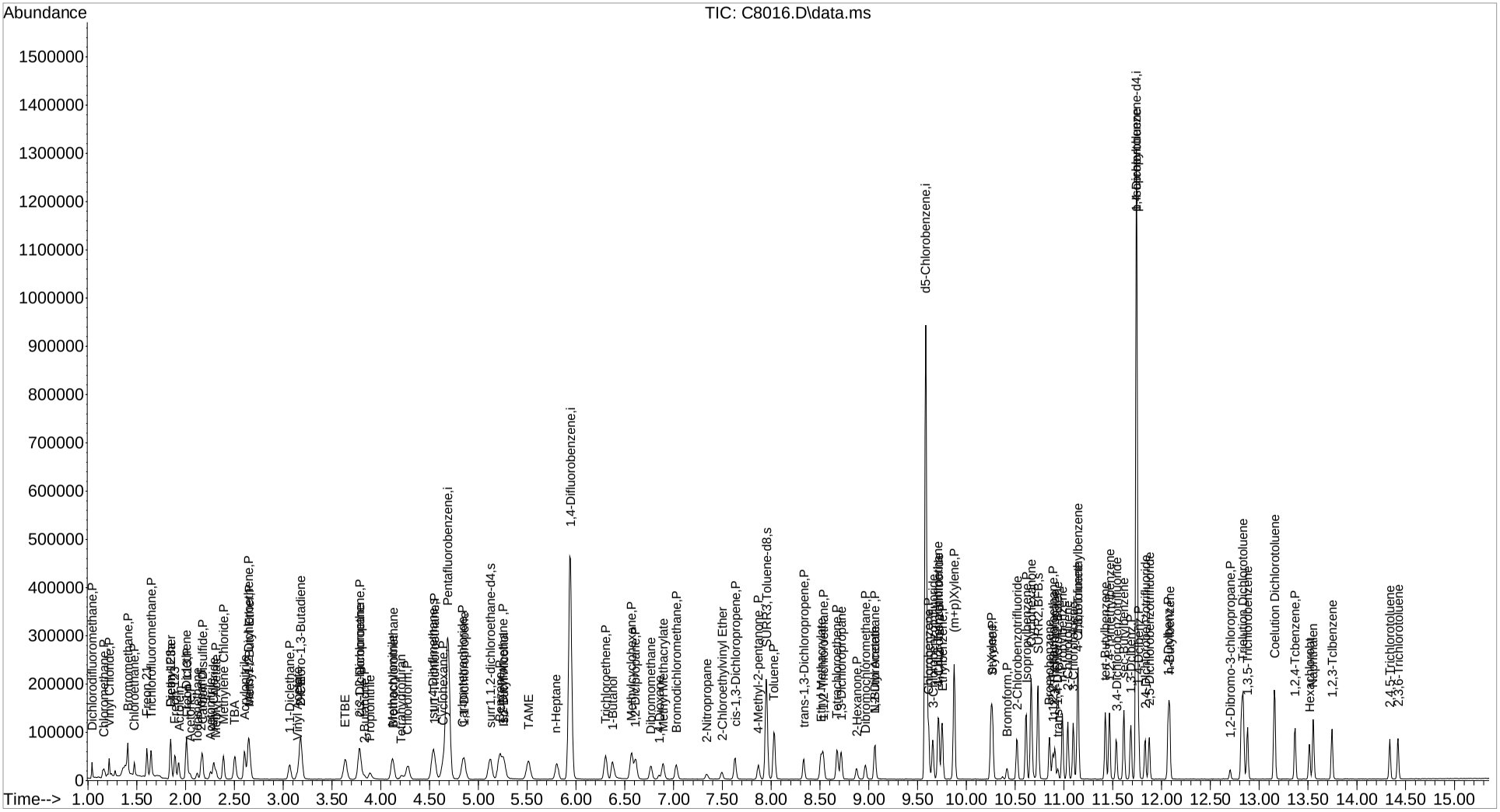
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	33567	5.03	ug/L	98
105) 1,4-Dclbenz	11.765	146	34395	4.91	ug/L	96
106) 2,4-Dichlorobenzotrifl...	11.832	214	13773	4.34	ug/L	99
107) 2,5-Dichlorobenzotrifl...	11.875	214	16274	4.48	ug/L	98
108) n-Butylbenzene	12.082	91	55368	5.24	ug/L	98
109) 1,2-Dclbenz	12.070	146	33016	4.94	ug/L	94
110) 1,2-Dibromo-3-chloropr...	12.704	157	3532	4.21	ug/L	89
111) Trielution Dichlorotol...	12.832	125	83174	14.52	ug/L	95
112) 1,3,5-Trichlorobenzene	12.881	180	23000	4.53	ug/L	98
113) Coelution Dichlorotoluene	13.155	125	59293	9.31	ug/L	98
114) 1,2,4-Tcbenzene	13.368	180	23667	4.96	ug/L	96
115) Hexachlorobt	13.515	225	9176	4.69	ug/L	94
116) Naphthalen	13.551	128	69569	5.21	ug/L	98
117) 1,2,3-Tclbenzene	13.746	180	22979	4.84	ug/L	98
118) 2,4,5-Trichlorotoluene	14.338	159	15449	5.03	ug/L	95
119) 2,3,6-Trichlorotoluene	14.423	159	14456	4.87	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8016.D
Acq On : 8 Jun 2018 1:59 pm
Operator : F.NAEGLER
Sample : 5.0 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 15:01:22 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

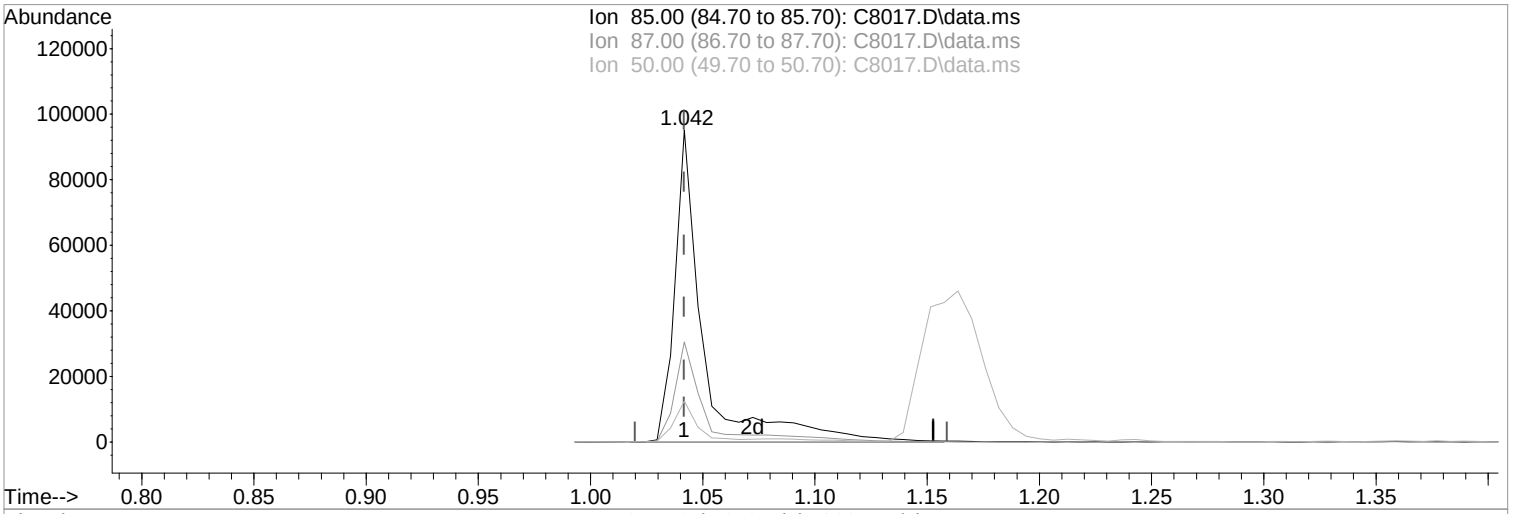


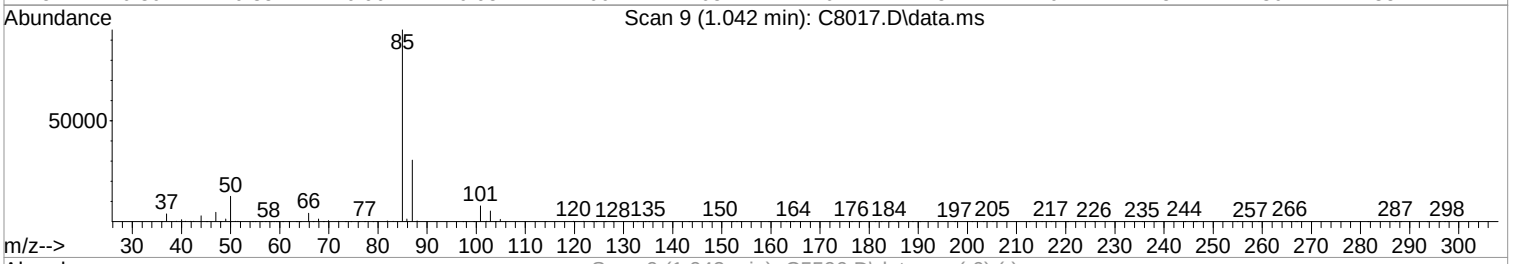
1st 06/11/18
2nd 06/11/18

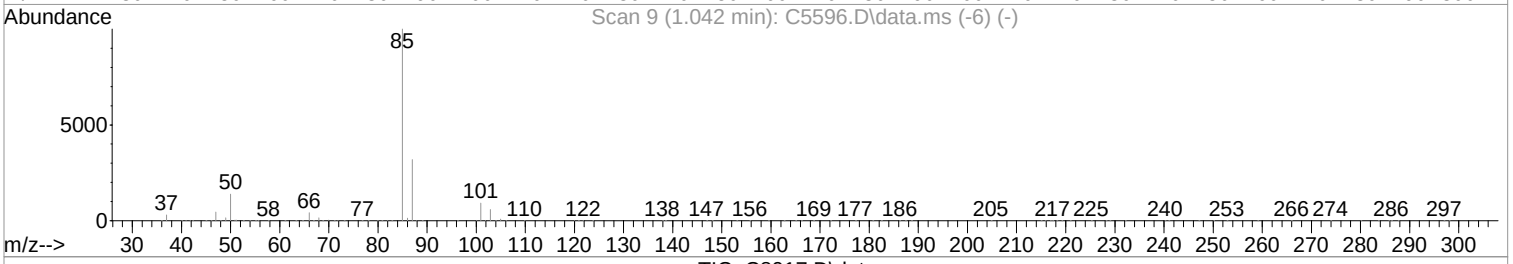
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8017.D
Acq On : 8 Jun 2018 2:32 pm
Operator : F.NAEGLER
Sample : 20 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 15:02:40 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8017.D\data.ms

(2) Dichlorodifluoromethane (P)

1.042min (+0.000) 20.62 ug/L m

response 84869

Ion	Exp%	Act%
85.00	100	100
87.00	31.80	32.03
50.00	13.90	13.13
0.00	0.00	0.00

Manual Integration:

After

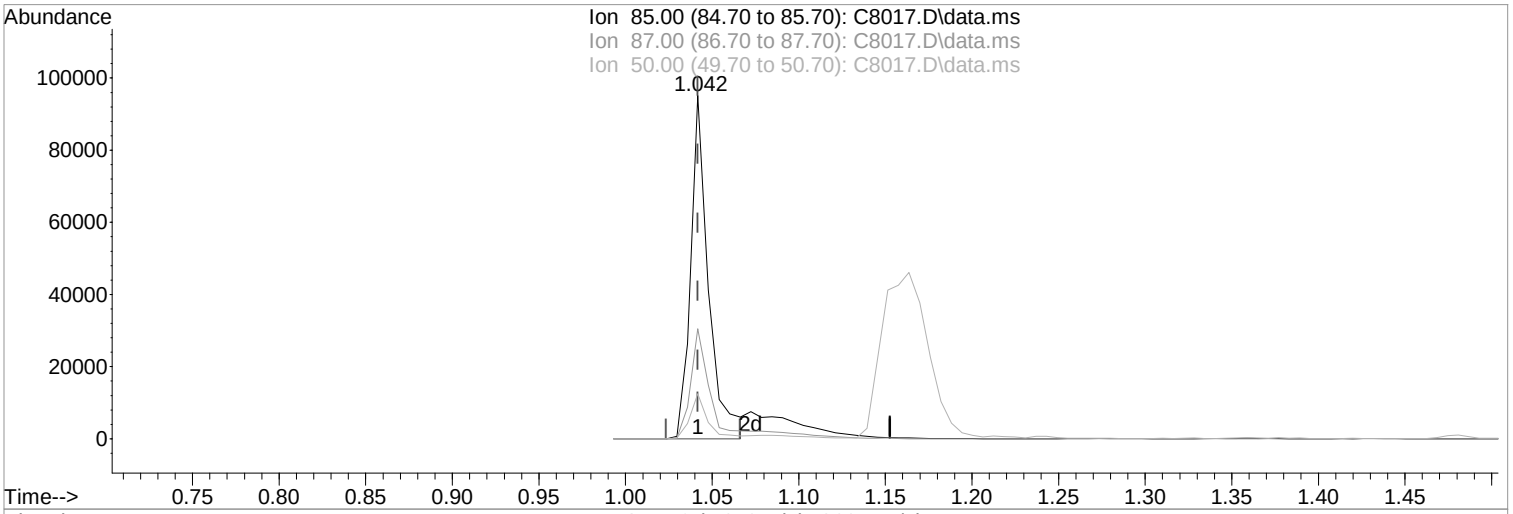
Poor integration.

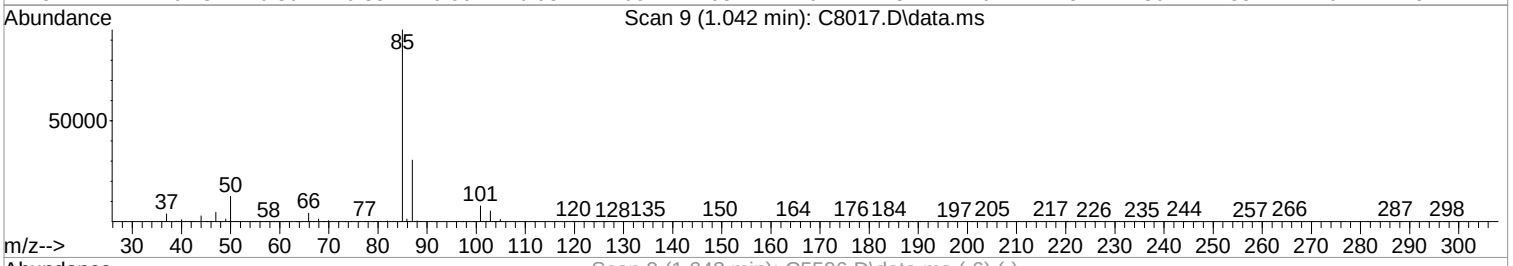
06/08/18

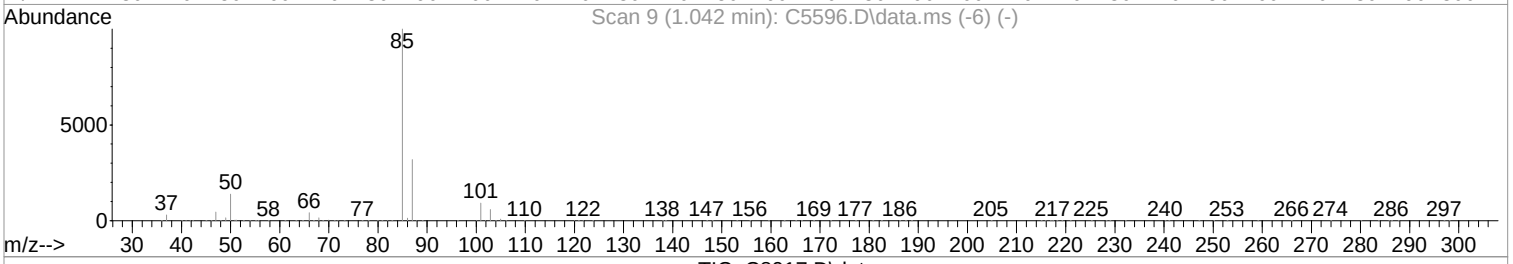
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8017.D
Acq On : 8 Jun 2018 2:32 pm
Operator : F.NAEGLER
Sample : 20 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 15:02:40 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8017.D\data.ms

(2) Dichlorodifluoromethane (P)

1.042min (+0.000) 16.63 ug/L

response 68444

Ion	Exp%	Act%
85.00	100	100
87.00	31.80	32.03
50.00	13.90	13.13
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8017.D
Acq On : 8 Jun 2018 2:32 pm
Operator : F.NAEGLER
Sample : 20 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 15:03:02 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	301783	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.943	114	483268	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	431033	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	232788	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	61024	18.83	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 37.66%#				
47) surr1,1,2-dichloroetha...	5.120	65	74665	16.26	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 32.52%#				
64) SURR3,Toluene-d8	7.949	98	237850	19.20	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 38.40%#				
69) SURR2,BFB	10.735	95	91636	18.20	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 36.40%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	84869m	20.62	ug/L		
3) Chloromethane	1.164	50	84432	19.53	ug/L		100
4) Vinyl Chloride	1.219	62	86518	22.87	ug/L		99
5) Bromomethane	1.414	94	69493	24.03	ug/L		98
6) Chloroethane	1.481	64	55405	23.29	ug/L		99
7) Freon 21	1.603	67	141164	22.13	ug/L		98
8) Trichlorofluoromethane	1.645	101	115427	24.39	ug/L		100
9) Diethyl Ether	1.847	59	52075	17.85	ug/L		94
10) Freon 123a	1.847	67	71307	18.86	ug/L		93
11) Freon 123	1.889	83	80909	19.24	ug/L		98
12) Acrolein	1.926	56	79604	101.82	ug/L		96
13) 1,1-Diclethene	2.011	96	54838	20.50	ug/L	#	88
14) Freon 113	2.017	101	55160	19.61	ug/L		97
15) Acetone	2.042	43	32176	15.29	ug/L		94
16) 2-Propanol	2.157	45	115686	364.61	ug/L		92
17) Iodomethane	2.121	142	70941	18.13	ug/L		90
18) Carbon Disulfide	2.176	76	135309	18.69	ug/L		99
19) Acetonitrile	2.255	40	26699	83.37	ug/L		97
20) Allyl Chloride	2.292	76	27327	18.99	ug/L	#	71
21) Methyl Acetate	2.310	43	60315	16.61	ug/L		98
22) Methylene Chloride	2.389	84	63009	19.02	ug/L		96
23) TBA	2.499	59	187600	367.59	ug/L		92
24) Acrylonitrile	2.602	53	153510	90.97	ug/L		98
25) Methyl-t-Butyl Ether	2.657	73	204919	19.33	ug/L		98
26) trans-1,2-Dichloroethene	2.645	96	62329	21.31	ug/L	#	87
27) 1,1-Diclethane	3.066	63	114081	20.10	ug/L		97
28) Vinyl Acetate	3.145	86	13234	21.62	ug/L	#	69
29) DIPE	3.182	45	160096	14.08	ug/L		98
30) 2-Chloro-1,3-Butadiene	3.176	53	86122	16.18	ug/L		87
31) ETBE	3.639	59	157804	15.36	ug/L		94
32) 2,2-Dichloropropane	3.779	77	98402	23.29	ug/L		96
33) cis-1,2-Dichloroethene	3.785	96	73332	21.44	ug/L		85
34) 2-Butanone	3.822	43	42556	16.55	ug/L		99
35) Propionitrile	3.889	54	63771	92.96	ug/L		96
36) Bromochloromethane	4.120	130	46245	20.70	ug/L		96
37) Methacrylonitrile	4.120	67	32570	19.63	ug/L	#	78
38) Tetrahydrofuran	4.212	42	24519	16.73	ug/L		79
39) Chloroform	4.279	83	115800	20.13	ug/L		96
40) 1,1,1-Trichloroethane	4.553	97	98541	21.18	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8017.D
Acq On : 8 Jun 2018 2:32 pm
Operator : F.NAEGLER
Sample : 20 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 15:03:02 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) TAME	5.510	73	163020	17.11 ug/L	93
43) Cyclohexane	4.645	41	62364	16.48 ug/L	99
45) Carbontetrachloride	4.846	117	73071	19.28 ug/L	99
46) 1,1-Dichloropropene	4.852	75	90914	19.93 ug/L	98
48) Benzene	5.218	78	254715	19.76 ug/L	95
49) 1,2-Dichloroethane	5.260	62	100025	17.06 ug/L	98
50) Iso-Butyl Alcohol	5.248	43	77254	334.72 ug/L	91
51) n-Heptane	5.803	43	72635	17.06 ug/L	85
52) 1-Butanol	6.370	56	107075	844.14 ug/L	91
53) Trichloroethene	6.303	130	73110	20.00 ug/L	97
54) Methylcyclohexane	6.571	55	80750	18.41 ug/L	88
55) 1,2-Diclpropane	6.608	63	68886	19.33 ug/L	99
56) Dibromomethane	6.766	93	48051	19.99 ug/L	99
57) 1,4-Dioxane	6.846	88	25387	378.39 ug/L	88
58) Methyl Methacrylate	6.894	69	54413	19.18 ug/L	88
59) Bromodichloromethane	7.028	83	83141	18.92 ug/L	97
60) 2-Nitropropane	7.339	41	29786	28.22 ug/L	100
61) 2-Chloroethylvinyl Ether	7.492	63	31737	17.29 ug/L	95
62) cis-1,3-Dichloropropene	7.626	75	106123	20.50 ug/L	97
63) 4-Methyl-2-pentanone	7.870	43	78115	16.98 ug/L	94
65) Toluene	8.028	91	277824	19.99 ug/L	99
66) trans-1,3-Dichloropropene	8.333	75	94369	20.27 ug/L	98
67) Ethyl Methacrylate	8.510	69	94533	20.02 ug/L	89
68) 1,1,2-Trichloroethane	8.534	97	64905	19.80 ug/L	98
71) Tetrachloroethene	8.674	164	51424	19.32 ug/L	96
72) 2-Hexanone	8.876	43	58271	16.95 ug/L	96
73) 1,3-Dichloropropane	8.717	76	113646	18.86 ug/L	89
74) Dibromochloromethane	8.967	129	62564	20.51 ug/L	100
75) N-Butyl Acetate	9.059	43	126658	17.32 ug/L	98
76) 1,2-Dibromoethane	9.065	107	69641	20.43 ug/L	98
77) 3-Chlorobenzotrifluoride	9.656	180	70575	14.39 ug/L	97
78) Chlorobenzene	9.613	112	187293	20.32 ug/L	97
79) 4-Chlorobenzotrifluoride	9.717	180	64200	14.31 ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.711	131	59862	19.94 ug/L	96
81) Ethylbenzene	9.754	106	95675	20.48 ug/L	92
82) (m+p)Xylene	9.875	106	236906	40.36 ug/L	96
83) o-Xylene	10.253	106	116229	20.07 ug/L	91
84) Styrene	10.266	104	199412	20.99 ug/L	97
85) Bromoform	10.418	173	38606	17.82 ug/L	97
86) 2-Chlorobenzotrifluoride	10.516	180	71177	14.64 ug/L	95
87) Isopropylbenzene	10.613	105	296016	20.02 ug/L	100
88) Cyclohexanone	10.662	55	281751	267.53 ug/L	91
89) trans-1,4-Dichloro-2-B...	10.936	53	18709	14.00 ug/L	93
91) 1,1,2,2-Tetrachloroethane	10.887	83	88400	20.41 ug/L	99
92) Bromobenzene	10.851	156	77427	20.10 ug/L	98
93) 1,2,3-Trichloropropane	10.906	110	29857	18.75 ug/L	97
94) n-Propylbenzene	10.985	91	343871	20.40 ug/L	97
95) 2-Chlorotoluene	11.040	91	204171	19.47 ug/L	97
96) 3-Chlorotoluene	11.095	91	165365	14.86 ug/L	94
97) 4-Chlorotoluene	11.137	91	240303	19.20 ug/L	97
98) 1,3,5-Trimethylbenzene	11.150	105	244552	20.47 ug/L	97
99) tert-Butylbenzene	11.424	119	210571	20.69 ug/L	99
100) 1,2,4-Trimethylbenzene	11.467	105	244054	20.41 ug/L	100
101) 3,4-Dichlorobenzotrifl...	11.540	214	54891	14.20 ug/L	98
102) sec-Butylbenzene	11.613	105	307555	21.06 ug/L	100
103) p-Isopropyltoluene	11.741	119	260614	20.72 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8017.D
Acq On : 8 Jun 2018 2:32 pm
Operator : F.NAEGLER
Sample : 20 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 15:03:02 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

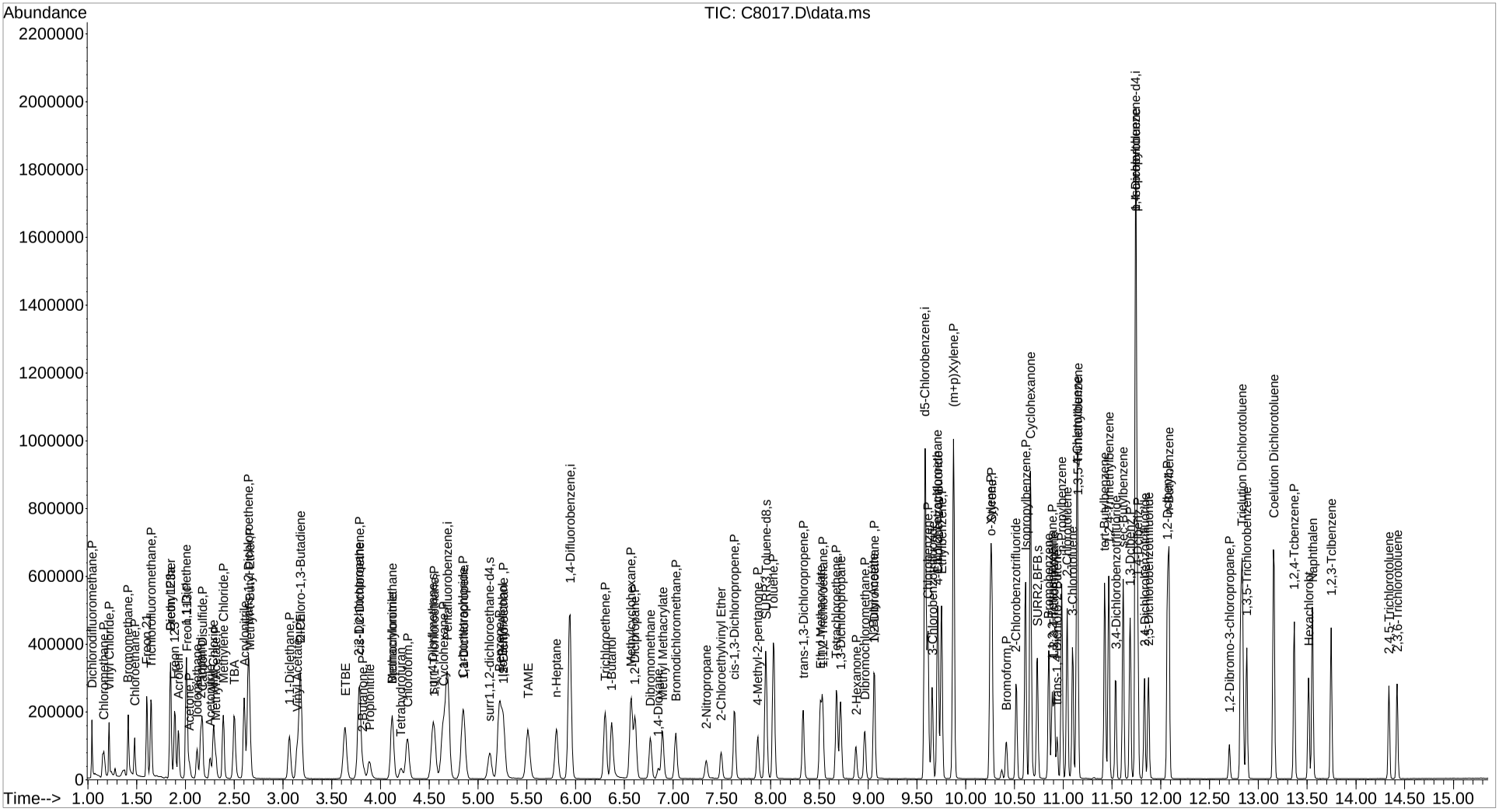
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	146165	19.87	ug/L	97
105) 1,4-Dclbenz	11.765	146	152033	19.67	ug/L	97
106) 2,4-Dichlorobenzotrifl...	11.832	214	49656	14.20	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.875	214	57428	14.33	ug/L	96
108) n-Butylbenzene	12.082	91	239032	20.50	ug/L	98
109) 1,2-Dclbenz	12.070	146	145783	19.78	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.704	157	18422	19.92	ug/L	95
111) Trielution Dichlorotol...	12.832	125	301733	47.77	ug/L	96
112) 1,3,5-Trichlorobenzene	12.881	180	82685	14.75	ug/L	97
113) Coelution Dichlorotoluene	13.155	125	219906	31.32	ug/L	99
114) 1,2,4-Tcbenzene	13.369	180	98834	18.78	ug/L	98
115) Hexachlorobt	13.515	225	38604	17.89	ug/L	96
116) Naphthalen	13.558	128	297912	20.21	ug/L	98
117) 1,2,3-Tclbenzene	13.747	180	95561	18.25	ug/L	100
118) 2,4,5-Trichlorotoluene	14.338	159	51859	15.30	ug/L	97
119) 2,3,6-Trichlorotoluene	14.423	159	48436	14.79	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8017.D
Acq On : 8 Jun 2018 2:32 pm
Operator : F.NAEGLER
Sample : 20 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 15:03:02 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

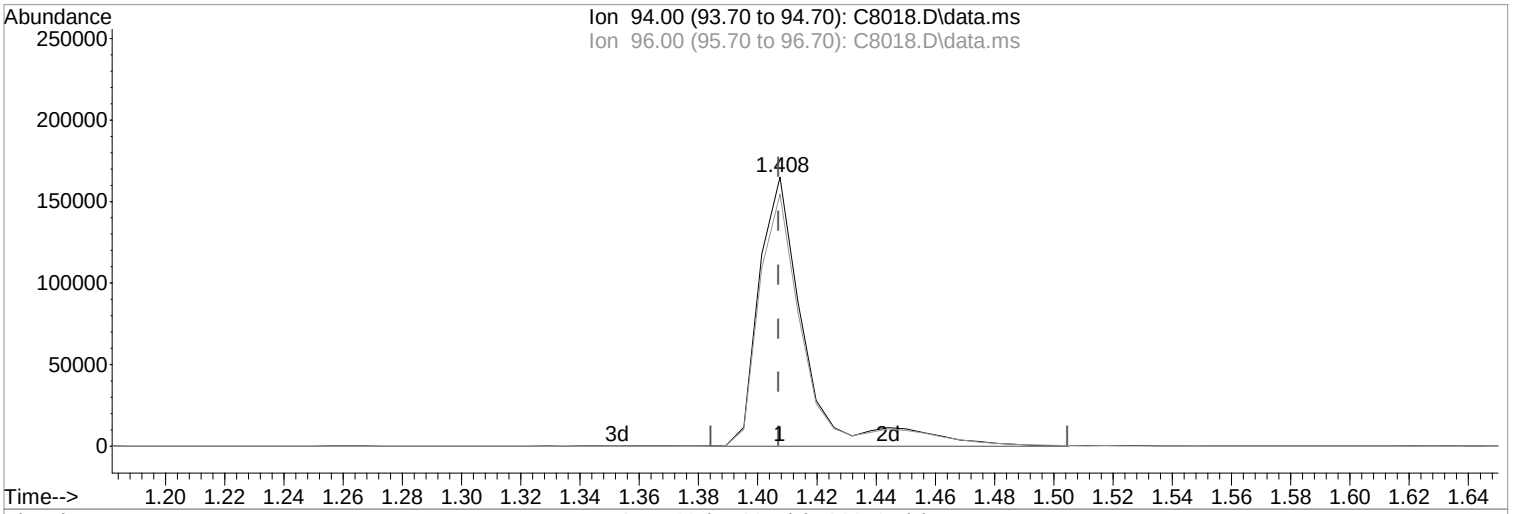


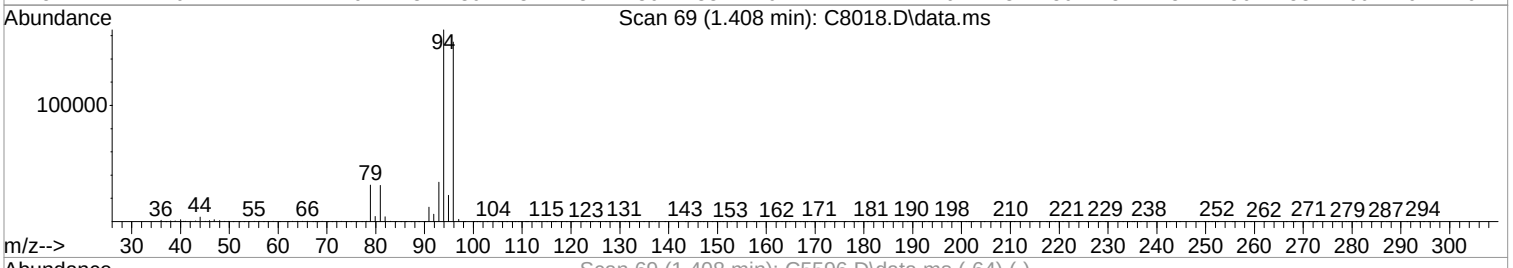
1st 06/11/18
2nd 06/11/18

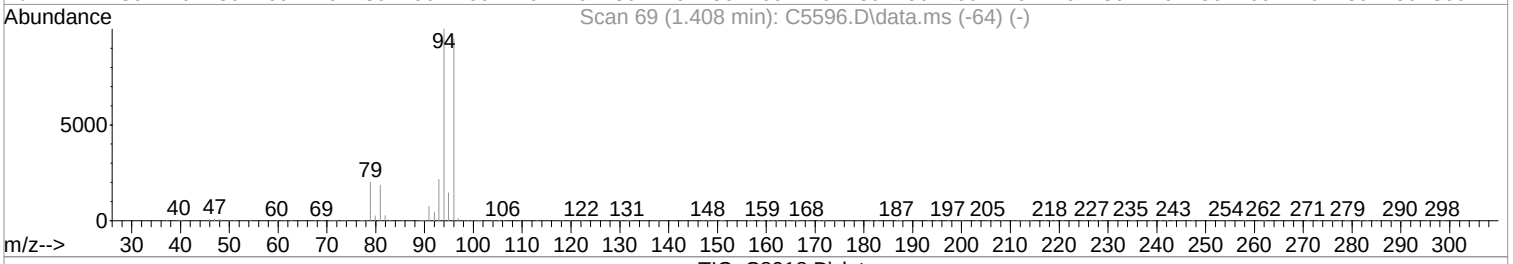
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8018.D
Acq On : 8 Jun 2018 2:55 pm
Operator : F.NAEGLER
Sample : 50 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 15:10:56 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8018.D\data.ms

(5) Bromomethane (P)

1.408min (+0.000) 59.28 ug/L m

response 177826

Ion	Exp%	Act%
94.00	100	100
96.00	94.80	93.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

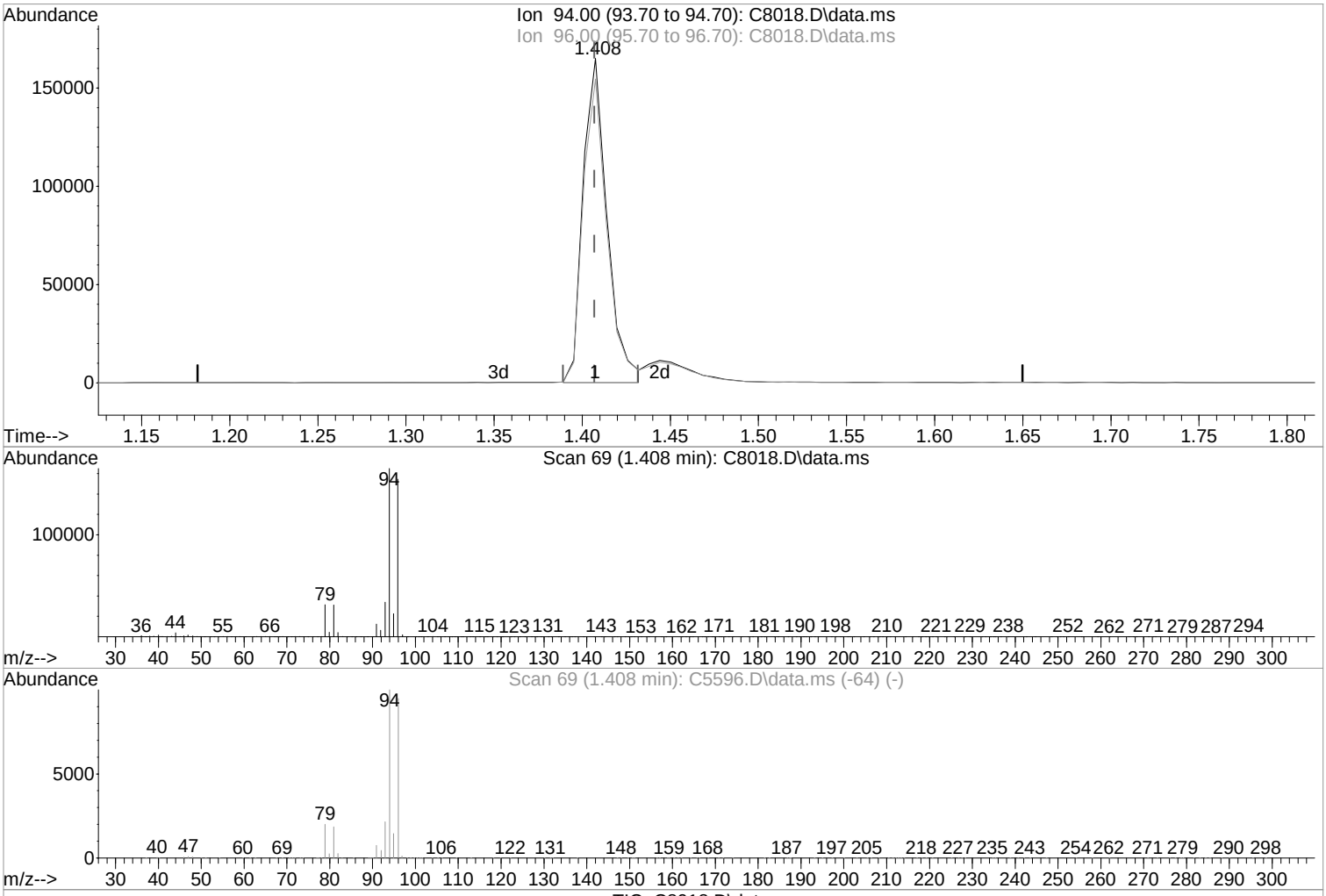
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8018.D
Acq On : 8 Jun 2018 2:55 pm
Operator : F.NAEGLER
Sample : 50 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 15:10:56 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8018.D\data.ms

(5) Bromomethane (P)

1.408min (+0.000) 52.19 ug/L

response 156578

Ion	Exp%	Act%
94.00	100	100
96.00	94.80	93.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8018.D
Acq On : 8 Jun 2018 2:55 pm
Operator : F.NAEGLER
Sample : 50 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 15:11:21 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	313028	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.943	114	495087	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	441299	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	251437	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	166335	50.10	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.20%				
47) surr1,1,2-dichloroetha...	5.120	65	203027	43.17	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 86.34%				
64) SURR3,Toluene-d8	7.955	98	624764	49.22	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.44%				
69) SURR2,BFB	10.735	95	242736	47.06	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.12%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	192530	45.11	ug/L		99
3) Chloromethane	1.164	50	200245	44.66	ug/L		98
4) Vinyl Chloride	1.218	62	202781	51.67	ug/L		98
5) Bromomethane	1.408	94	177826m	59.28	ug/L		
6) Chloroethane	1.475	64	134060	54.32	ug/L		98
7) Freon 21	1.603	67	371246	56.10	ug/L		99
8) Trichlorofluoromethane	1.645	101	256176	52.18	ug/L		98
9) Diethyl Ether	1.846	59	134919	44.59	ug/L		95
10) Freon 123a	1.846	67	187074	47.69	ug/L		95
11) Freon 123	1.889	83	214561	49.19	ug/L		98
12) Acrolein	1.932	56	222072	273.84	ug/L		100
13) 1,1-Diclethene	2.005	96	131354	47.35	ug/L		93
14) Freon 113	2.011	101	128892	44.17	ug/L		98
15) Acetone	2.042	43	93950	43.05	ug/L		95
16) 2-Propanol	2.163	45	355504	1080.19	ug/L		95
17) Iodomethane	2.121	142	218180	53.76	ug/L		90
18) Carbon Disulfide	2.176	76	392684	52.28	ug/L		100
19) Acetonitrile	2.255	40	82652	248.82	ug/L		99
20) Allyl Chloride	2.291	76	66314	44.42	ug/L	#	73
21) Methyl Acetate	2.310	43	168087	44.64	ug/L		97
22) Methylene Chloride	2.389	84	160335	46.66	ug/L		94
23) TBA	2.505	59	604214	1141.40	ug/L		92
24) Acrylonitrile	2.602	53	439928	251.35	ug/L		98
25) Methyl-t-Butyl Ether	2.657	73	546343	49.69	ug/L		98
26) trans-1,2-Dichloroethene	2.645	96	154453	50.91	ug/L	#	88
27) 1,1-Diclethane	3.066	63	283609	48.16	ug/L		98
28) Vinyl Acetate	3.145	86	38996	61.43	ug/L	#	54
29) DIPE	3.182	45	481114	40.80	ug/L		97
30) 2-Chloro-1,3-Butadiene	3.175	53	238778	43.25	ug/L		86
31) ETBE	3.639	59	480468	45.09	ug/L		93
32) 2,2-Dichloropropane	3.779	77	240266	54.82	ug/L		98
33) cis-1,2-Dichloroethene	3.785	96	182122	51.32	ug/L		90
34) 2-Butanone	3.822	43	124167	46.55	ug/L		95
35) Propionitrile	3.889	54	189766	266.68	ug/L		96
36) Bromochloromethane	4.120	130	122722	52.97	ug/L		93
37) Methacrylonitrile	4.120	67	92468	53.72	ug/L	#	80
38) Tetrahydrofuran	4.212	42	70969	46.69	ug/L		83
39) Chloroform	4.279	83	296431	49.67	ug/L		98
40) 1,1,1-Trichloroethane	4.547	97	246993	51.19	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8018.D
Acq On : 8 Jun 2018 2:55 pm
Operator : F.NAEGLER
Sample : 50 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 15:11:21 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) TAME	5.510	73	496556	50.24 ug/L	94
43) Cyclohexane	4.639	41	163601	42.19 ug/L	98
45) Carbontetrachloride	4.840	117	194760	50.15 ug/L	98
46) 1,1-Dichloropropene	4.852	75	218970	46.87 ug/L	97
48) Benzene	5.218	78	632298	47.89 ug/L	96
49) 1,2-Dichloroethane	5.260	62	258971	43.13 ug/L	99
50) Iso-Butyl Alcohol	5.260	43	259030	1095.53 ug/L	99
51) n-Heptane	5.803	43	178060	40.83 ug/L	87
52) 1-Butanol	6.376	56	380696	2929.62 ug/L	93
53) Trichloroethene	6.303	130	181669	48.50 ug/L	98
54) Methylcyclohexane	6.571	55	209720	46.66 ug/L	85
55) 1,2-Diclpropane	6.614	63	178002	48.74 ug/L	100
56) Dibromomethane	6.766	93	128234	52.07 ug/L	100
57) 1,4-Dioxane	6.845	88	74984	1090.95 ug/L	94
58) Methyl Methacrylate	6.894	69	160317	55.16 ug/L	87
59) Bromodichloromethane	7.028	83	226550	50.32 ug/L	99
60) 2-Nitropropane	7.339	41	100374	92.84 ug/L	93
61) 2-Chloroethylvinyl Ether	7.492	63	95774	50.94 ug/L	98
62) cis-1,3-Dichloropropene	7.632	75	285658	53.85 ug/L	99
63) 4-Methyl-2-pentanone	7.870	43	233376	49.53 ug/L	95
65) Toluene	8.028	91	703701	49.42 ug/L	99
66) trans-1,3-Dichloropropene	8.333	75	261617	54.84 ug/L	97
67) Ethyl Methacrylate	8.510	69	271218	56.06 ug/L	90
68) 1,1,2-Trichloroethane	8.534	97	172035	51.23 ug/L	98
71) Tetrachloroethene	8.674	164	129317	47.44 ug/L	97
72) 2-Hexanone	8.876	43	176305	50.09 ug/L	90
73) 1,3-Dichloropropane	8.717	76	300634	48.74 ug/L	89
74) Dibromochloromethane	8.967	129	181525	58.12 ug/L	100
75) N-Butyl Acetate	9.058	43	373465	49.89 ug/L	97
76) 1,2-Dibromoethane	9.065	107	187687	53.78 ug/L	99
77) 3-Chlorobenzotrifluoride	9.656	180	228200	45.44 ug/L	98
78) Chlorobenzene	9.613	112	471375	49.96 ug/L	97
79) 4-Chlorobenzotrifluoride	9.717	180	203160	44.24 ug/L	98
80) 1,1,1,2-Tetrachloroethane	9.711	131	162458	52.86 ug/L	96
81) Ethylbenzene	9.753	106	241914	50.58 ug/L	95
82) (m+p)Xylene	9.875	106	606983	101.00 ug/L	96
83) o-Xylene	10.253	106	304023	51.27 ug/L	95
84) Styrene	10.266	104	523144	53.79 ug/L	97
85) Bromoform	10.418	173	120767	54.44 ug/L	98
86) 2-Chlorobenzotrifluoride	10.522	180	226697	45.54 ug/L	96
87) Isopropylbenzene	10.613	105	760154	50.21 ug/L	99
88) Cyclohexanone	10.662	55	934446	866.63 ug/L	90
89) trans-1,4-Dichloro-2-B...	10.936	53	58362	42.65 ug/L	87
91) 1,1,2,2-Tetrachloroethane	10.887	83	255999	54.72 ug/L	97
92) Bromobenzene	10.851	156	207690	49.91 ug/L	97
93) 1,2,3-Trichloropropane	10.906	110	86479	50.28 ug/L	98
94) n-Propylbenzene	10.985	91	893137	49.06 ug/L	98
95) 2-Chlorotoluene	11.040	91	529117	46.70 ug/L	97
96) 3-Chlorotoluene	11.095	91	527353	43.88 ug/L	97
97) 4-Chlorotoluene	11.137	91	638433	47.22 ug/L	97
98) 1,3,5-Trimethylbenzene	11.150	105	645604	50.03 ug/L	95
99) tert-Butylbenzene	11.424	119	553481	50.34 ug/L	98
100) 1,2,4-Trimethylbenzene	11.467	105	655237	50.73 ug/L	99
101) 3,4-Dichlorobenzotrifl...	11.540	214	178300	42.70 ug/L	96
102) sec-Butylbenzene	11.613	105	806445	51.13 ug/L	98
103) p-Isopropyltoluene	11.741	119	692967	51.01 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8018.D
Acq On : 8 Jun 2018 2:55 pm
Operator : F.NAEGLER
Sample : 50 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 15:11:21 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

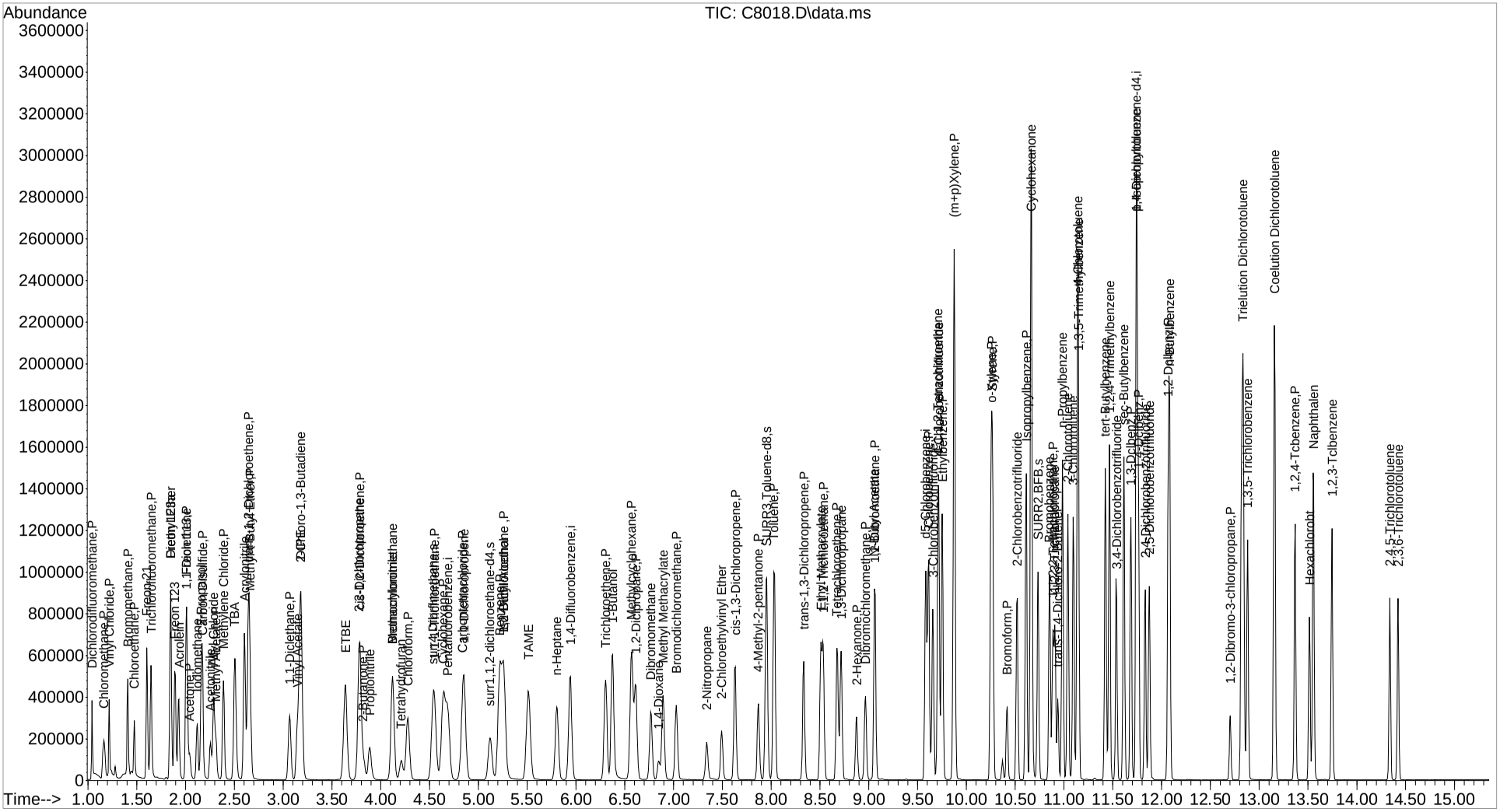
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	386849	48.70	ug/L	99
105) 1,4-Dclbenz	11.765	146	406997	48.75	ug/L	97
106) 2,4-Dichlorobenzotrifl...	11.832	214	160499	42.49	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.875	214	182564	42.17	ug/L	96
108) n-Butylbenzene	12.082	91	633046	50.27	ug/L	99
109) 1,2-Dclbenz	12.070	146	390020	48.99	ug/L	97
110) 1,2-Dibromo-3-chloropr...	12.704	157	60380	60.44	ug/L	92
111) Trielution Dichlorotol...	12.832	125	926192	135.75	ug/L	96
112) 1,3,5-Trichlorobenzene	12.881	180	252256	41.67	ug/L	99
113) Coelution Dichlorotoluene	13.155	125	680549	89.74	ug/L	99
114) 1,2,4-Tcbenzene	13.369	180	266390	46.86	ug/L	99
115) Hexachlorobt	13.515	225	101652	43.62	ug/L	97
116) Naphthalen	13.558	128	879216	55.23	ug/L	98
117) 1,2,3-Tclbenzene	13.747	180	262094	46.33	ug/L	100
118) 2,4,5-Trichlorotoluene	14.338	159	161796	44.19	ug/L	99
119) 2,3,6-Trichlorotoluene	14.423	159	148065	41.85	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8018.D
Acq On : 8 Jun 2018 2:55 pm
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Sample : 50 PPB STD Inst : MSVOA14
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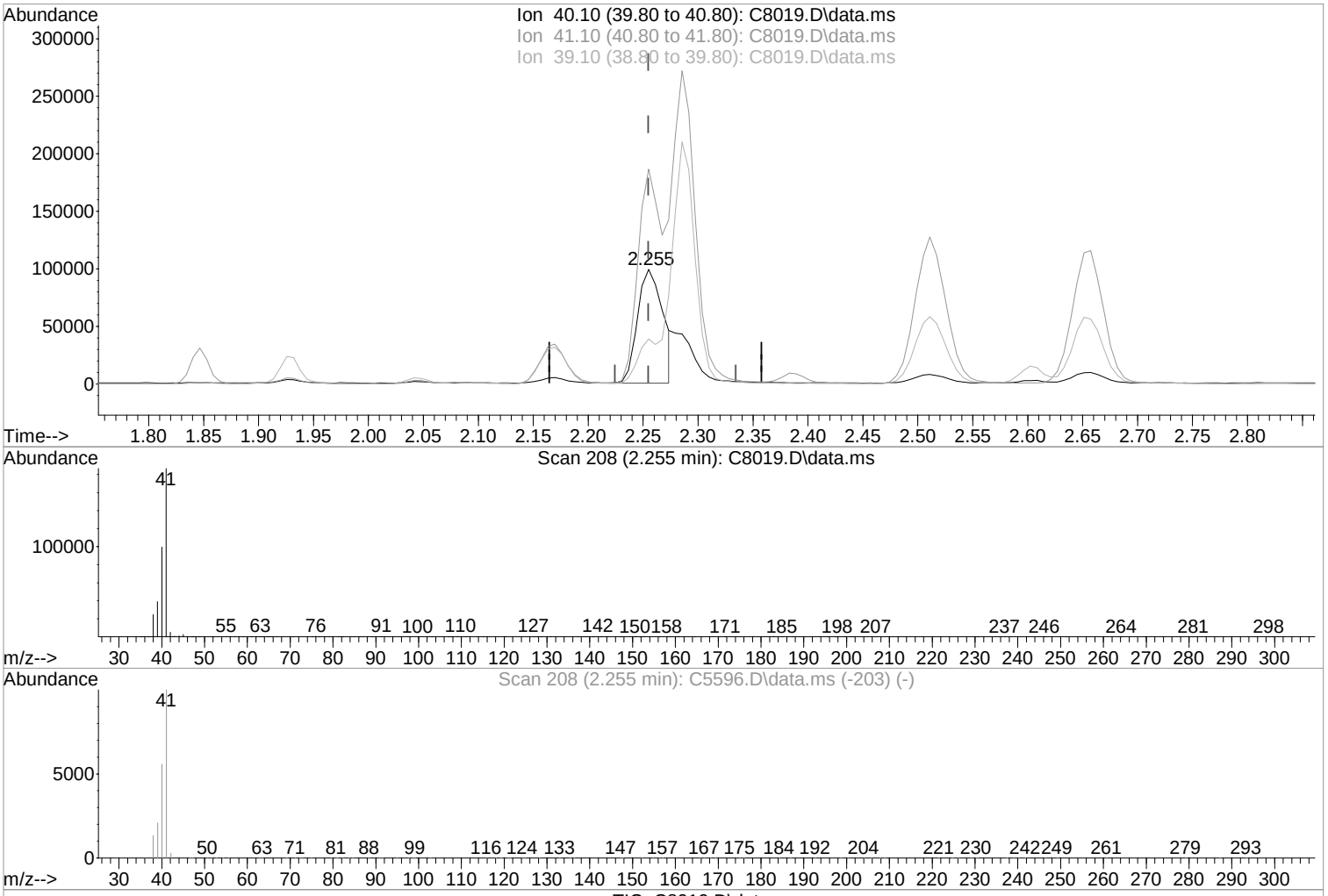


1st 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8019.D
Acq On : 8 Jun 2018 3:17 pm
Operator : F.NAEGLER
Sample : 100 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 15:54:38 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8019.D\data.ms

(19) Acetonitrile

2.255min (+0.000) 452.30 ug/L m

response 159144

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	187.59
39.10	38.30	39.20
0.00	0.00	0.00

Manual Integration:

After

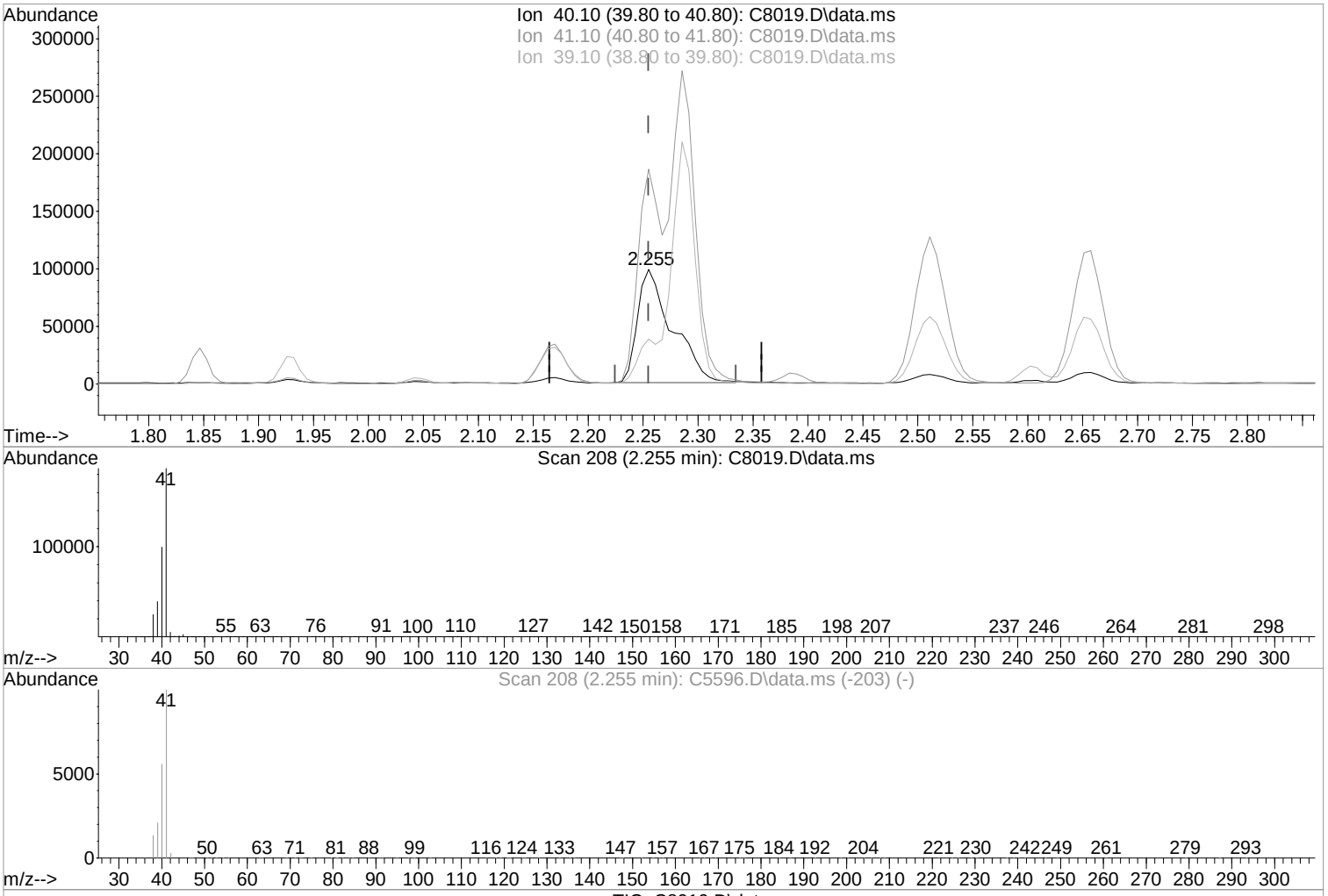
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8019.D
Acq On : 8 Jun 2018 3:17 pm
Operator : F.NAEGLER
Sample : 100 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 15:54:38 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8019.D\data.ms

(19) Acetonitrile

2.255min (+0.000) 611.86 ug/L

response 215285

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	187.59
39.10	38.30	39.20
0.00	0.00	0.00

Manual Integration:

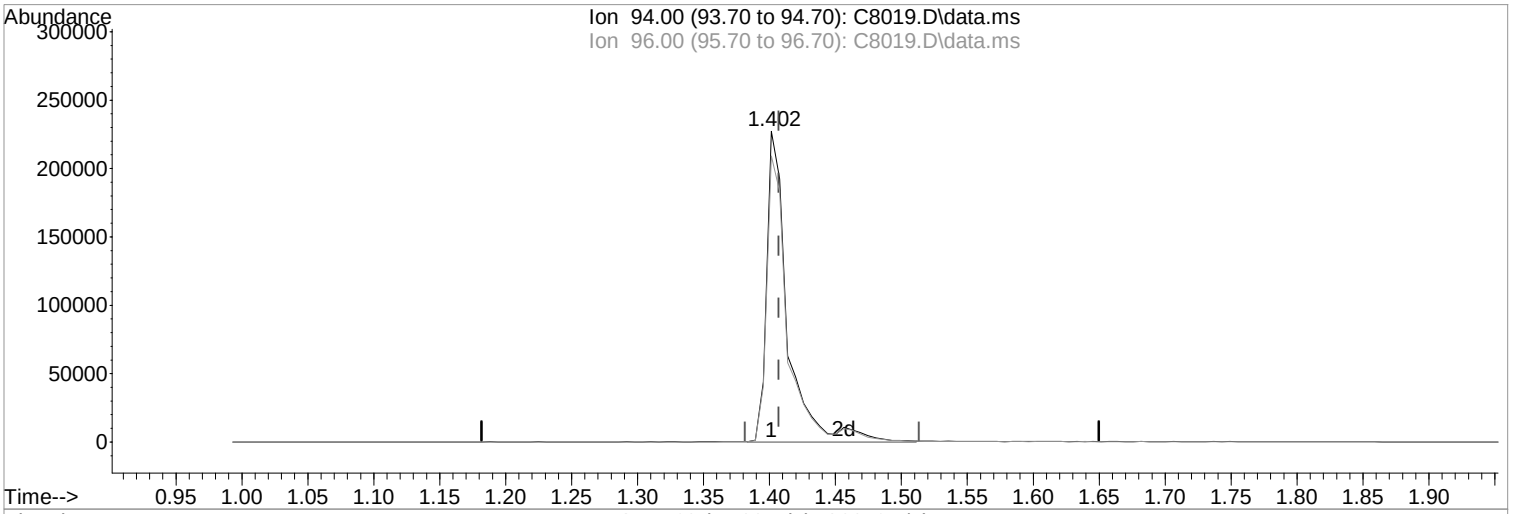
Before

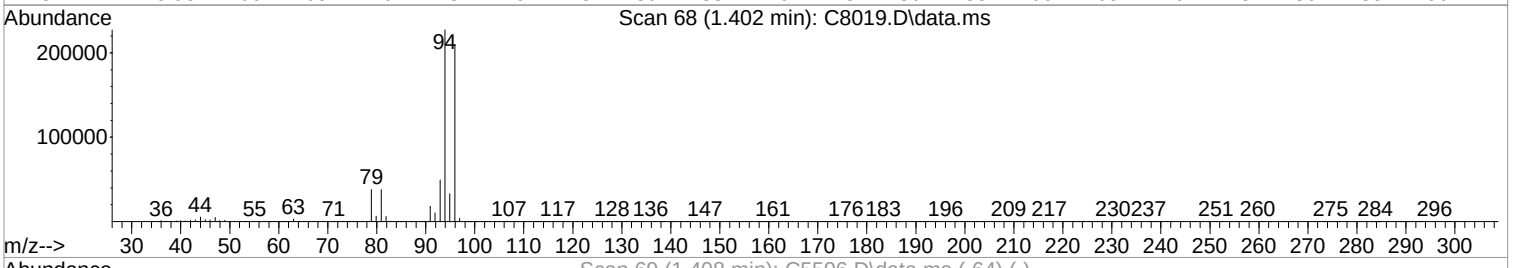
06/08/18

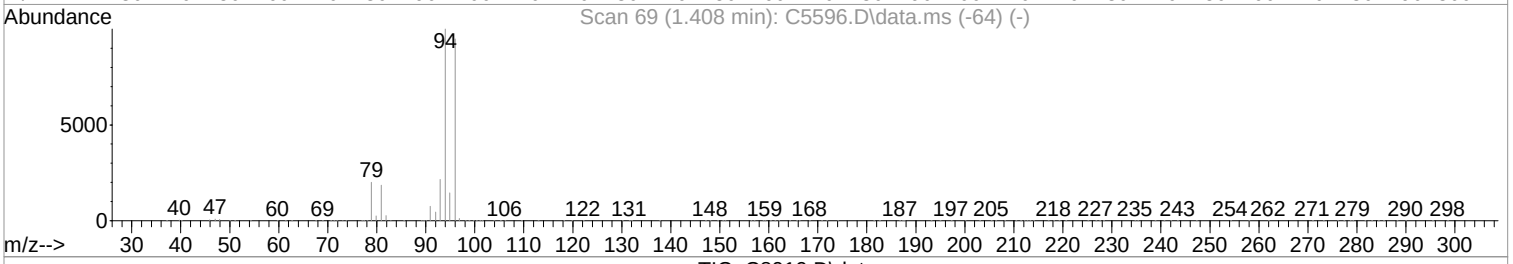
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8019.D
Acq On : 8 Jun 2018 3:17 pm
Operator : F.NAEGLER
Sample : 100 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 15:54:38 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8019.D\data.ms

(5) Bromomethane (P)

1.402min (-0.006) 78.96 ug/L m

response 250913

Ion	Exp%	Act%
94.00	100	100
96.00	94.80	92.09
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

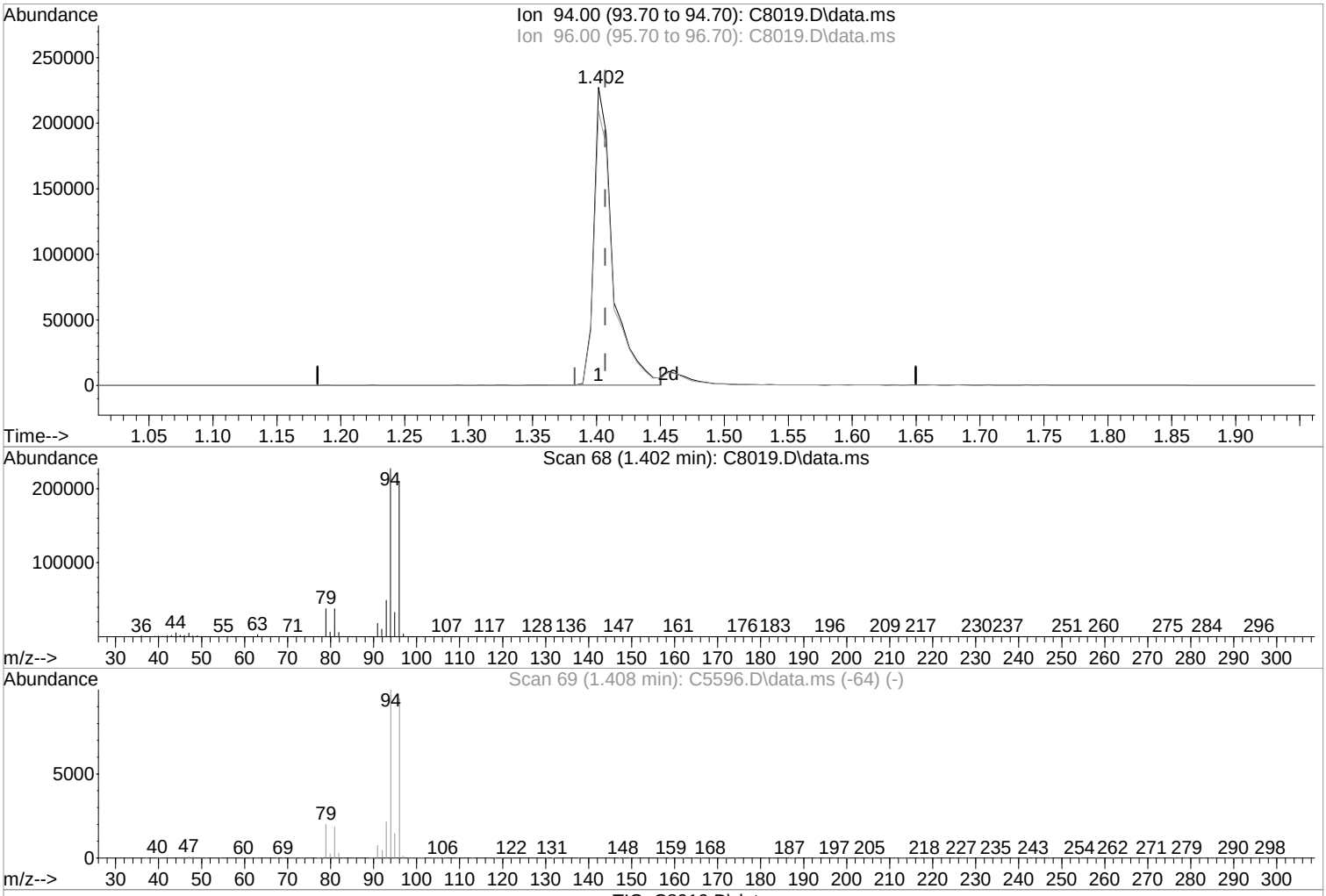
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8019.D
Acq On : 8 Jun 2018 3:17 pm
Operator : F.NAEGLER
Sample : 100 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 15:54:38 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8019.D\data.ms

(5) Bromomethane (P)

1.402min (-0.006) 73.99 ug/L

response 235124

Ion	Exp%	Act%
94.00	100	100
96.00	94.80	92.09
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8019.D
Acq On : 8 Jun 2018 3:17 pm
Operator : F.NAEGLER
Sample : 100 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 15:55:29 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	331576	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.943	114	517231	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	467306	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.741	152	277785	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	347933	100.30	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 200.60%#				
47) surr1,1,2-dichloroetha...	5.114	65	415874	84.64	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 169.28%#				
64) SURR3,Toluene-d8	7.949	98	1313328	99.04	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 198.08%#				
69) SURR2,BFB	10.735	95	522287	96.91	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 193.82%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	385318	85.22	ug/L		97
3) Chloromethane	1.158	50	391060	82.34	ug/L		98
4) Vinyl Chloride	1.219	62	402490	96.82	ug/L		98
5) Bromomethane	1.402	94	250913m	78.96	ug/L		
6) Chloroethane	1.469	64	262174	100.29	ug/L		100
7) Freon 21	1.603	67	663691	94.68	ug/L		99
8) Trichlorofluoromethane	1.639	101	509766	98.02	ug/L		98
9) Diethyl Ether	1.847	59	277268	86.51	ug/L		95
10) Freon 123a	1.847	67	333664	80.30	ug/L		99
11) Freon 123	1.889	83	376909	81.57	ug/L		98
12) Acrolein	1.926	56	450766	524.75	ug/L		100
13) 1,1-Diclethene	2.005	96	267426	91.00	ug/L		91
14) Freon 113	2.011	101	257108	83.17	ug/L		98
15) Acetone	2.042	43	179611	77.69	ug/L		95
16) 2-Propanol	2.170	45	731107	2097.19	ug/L		94
17) Iodomethane	2.115	142	453738	105.55	ug/L		92
18) Carbon Disulfide	2.170	76	773402	97.21	ug/L		100
19) Acetonitrile	2.255	40	159144m	452.30	ug/L		
20) Allyl Chloride	2.285	76	138920	87.84	ug/L	#	79
21) Methyl Acetate	2.310	43	339926	85.22	ug/L		97
22) Methylene Chloride	2.389	84	331054	90.95	ug/L		91
23) TBA	2.511	59	1238020	2207.88	ug/L		92
24) Acrylonitrile	2.602	53	901234	486.11	ug/L		99
25) Methyl-t-Butyl Ether	2.657	73	1140855	97.96	ug/L		98
26) trans-1,2-Dichloroethene	2.639	96	316546	98.51	ug/L		90
27) 1,1-Diclethane	3.066	63	577213	92.54	ug/L		98
28) Vinyl Acetate	3.145	86	82857	123.22	ug/L	#	68
29) DIPE	3.182	45	979611	78.43	ug/L		98
30) 2-Chloro-1,3-Butadiene	3.176	53	465855	79.66	ug/L		87
31) ETBE	3.639	59	981420	86.95	ug/L		93
32) 2,2-Dichloropropane	3.779	77	488346	105.18	ug/L		98
33) cis-1,2-Dichloroethene	3.785	96	369085	98.19	ug/L		88
34) 2-Butanone	3.822	43	248129	87.82	ug/L		97
35) Propionitrile	3.889	54	384190	509.70	ug/L		94
36) Bromochloromethane	4.120	130	252546	102.91	ug/L		93
37) Methacrylonitrile	4.120	67	189089	103.71	ug/L	#	78
38) Tetrahydrofuran	4.206	42	145715	90.50	ug/L		87
39) Chloroform	4.279	83	597708	94.55	ug/L		97
40) 1,1,1-Trichloroethane	4.547	97	506033	99.01	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8019.D
Acq On : 8 Jun 2018 3:17 pm
Operator : F.NAEGLER
Sample : 100 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 15:55:29 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) TAME	5.517	73	1021332	97.56	ug/L		93
43) Cyclohexane	4.639	41	286565	70.74	ug/L		100
45) Carbontetrachloride	4.840	117	402693	99.25	ug/L		96
46) 1,1-Dichloropropene	4.852	75	437674	89.67	ug/L		97
48) Benzene	5.218	78	1285796	93.21	ug/L		96
49) 1,2-Dichloroethane	5.261	62	529388	84.38	ug/L		99
50) Iso-Butyl Alcohol	5.267	43	527995	2137.47	ug/L		99
51) n-Heptane	5.803	43	355709	78.07	ug/L		86
52) 1-Butanol	6.382	56	813173	5989.81	ug/L		91
53) Trichloroethene	6.303	130	353701	90.39	ug/L		99
54) Methylcyclohexane	6.571	55	375677	80.01	ug/L		87
55) 1,2-Diclpropane	6.614	63	359748	94.30	ug/L		99
56) Dibromomethane	6.766	93	258119	100.32	ug/L		100
57) 1,4-Dioxane	6.852	88	148655	2070.21	ug/L		93
58) Methyl Methacrylate	6.894	69	326358	107.49	ug/L	#	86
59) Bromodichloromethane	7.028	83	467027	99.29	ug/L		98
60) 2-Nitropropane	7.339	41	227722	201.62	ug/L		98
61) 2-Chloroethylvinyl Ether	7.492	63	201801	102.74	ug/L		98
62) cis-1,3-Dichloropropene	7.626	75	593675	107.13	ug/L		98
63) 4-Methyl-2-pentanone	7.870	43	466908	94.85	ug/L		96
65) Toluene	8.028	91	1447747	97.32	ug/L		98
66) trans-1,3-Dichloropropene	8.333	75	562227	112.81	ug/L		99
67) Ethyl Methacrylate	8.510	69	560651	110.93	ug/L		89
68) 1,1,2-Trichloroethane	8.534	97	350206	99.82	ug/L		98
71) Tetrachloroethene	8.681	164	263923	91.44	ug/L		98
72) 2-Hexanone	8.876	43	359651	96.48	ug/L		92
73) 1,3-Dichloropropane	8.717	76	619584	94.86	ug/L		89
74) Dibromochloromethane	8.967	129	389749	117.85	ug/L		96
75) N-Butyl Acetate	9.059	43	752804	94.96	ug/L		97
76) 1,2-Dibromoethane	9.065	107	386480	104.58	ug/L		98
77) 3-Chlorobenzotrifluoride	9.656	180	444888	83.65	ug/L		98
78) Chlorobenzene	9.613	112	978340	97.93	ug/L		96
79) 4-Chlorobenzotrifluoride	9.717	180	400115	82.28	ug/L		99
80) 1,1,1,2-Tetrachloroethane	9.711	131	343516	105.55	ug/L		94
81) Ethylbenzene	9.754	106	500123	98.76	ug/L		95
82) (m+p)Xylene	9.875	106	1279413	201.04	ug/L		96
83) o-Xylene	10.253	106	640240	101.95	ug/L		93
84) Styrene	10.266	104	1115949	108.36	ug/L		97
85) Bromoform	10.418	173	270303	115.06	ug/L		98
86) 2-Chlorobenzotrifluoride	10.522	180	450175	85.40	ug/L		95
87) Isopropylbenzene	10.613	105	1587838	99.04	ug/L		99
88) Cyclohexanone	10.668	55	1912435	1674.93	ug/L		90
89) trans-1,4-Dichloro-2-B...	10.936	53	128311	88.55	ug/L		86
91) 1,1,2,2-Tetrachloroethane	10.887	83	548728	106.16	ug/L		99
92) Bromobenzene	10.851	156	444631	96.72	ug/L		95
93) 1,2,3-Trichloropropane	10.906	110	178887	94.15	ug/L		97
94) n-Propylbenzene	10.985	91	1877579	93.36	ug/L		97
95) 2-Chlorotoluene	11.040	91	1106610	88.41	ug/L		95
96) 3-Chlorotoluene	11.095	91	1079347	81.30	ug/L		98
97) 4-Chlorotoluene	11.137	91	1345173	90.05	ug/L		96
98) 1,3,5-Trimethylbenzene	11.150	105	1378152	96.66	ug/L		96
99) tert-Butylbenzene	11.424	119	1161306	95.61	ug/L		99
100) 1,2,4-Trimethylbenzene	11.467	105	1392153	97.56	ug/L		97
101) 3,4-Dichlorobenzotrifl...	11.540	214	366005	79.34	ug/L		96
102) sec-Butylbenzene	11.613	105	1701051	97.61	ug/L		99
103) p-Isopropyltoluene	11.741	119	1472682	98.12	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8019.D
Acq On : 8 Jun 2018 3:17 pm
Operator : F.NAEGLER
Sample : 100 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 15:55:29 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

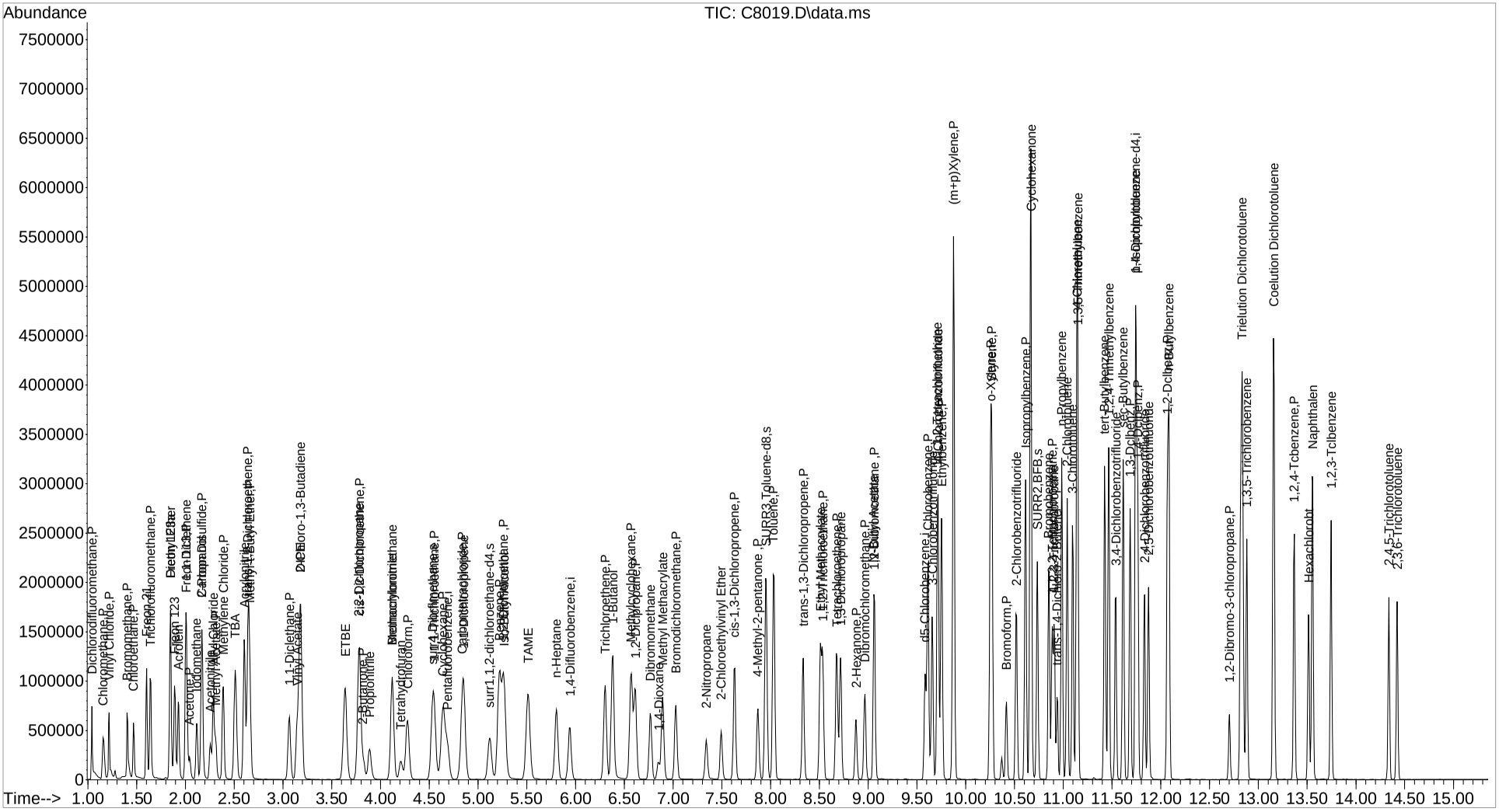
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	824867	93.99	ug/L	97
105) 1,4-Dclbenz	11.765	146	866631	93.96	ug/L	97
106) 2,4-Dichlorobenzotrifl...	11.832	214	337060	80.78	ug/L	100
107) 2,5-Dichlorobenzotrifl...	11.875	214	361178	75.51	ug/L	99
108) n-Butylbenzene	12.082	91	1323403	95.12	ug/L	99
109) 1,2-Dclbenz	12.070	146	814520	92.62	ug/L	98
110) 1,2-Dibromo-3-chloropr...	12.704	157	130504	118.24	ug/L	94
111) Trielution Dichlorotol...	12.832	125	1914149	253.94	ug/L	98
112) 1,3,5-Trichlorobenzene	12.881	180	524388	78.40	ug/L	98
113) Coelution Dichlorotoluene	13.155	125	1425912	170.19	ug/L	99
114) 1,2,4-Tcbenzene	13.369	180	563871	89.78	ug/L	98
115) Hexachlorobt	13.515	225	213893	83.08	ug/L	97
116) Naphthalen	13.558	128	1843750	104.83	ug/L	98
117) 1,2,3-Tclbenzene	13.747	180	556092	88.98	ug/L	100
118) 2,4,5-Trichlorotoluene	14.338	159	345273	85.36	ug/L	97
119) 2,3,6-Trichlorotoluene	14.423	159	315225	80.64	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8019.D
Acq On : 8 Jun 2018 3:17 pm
Operator : F.NAEGLER
Sample : 100 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 15:55:29 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

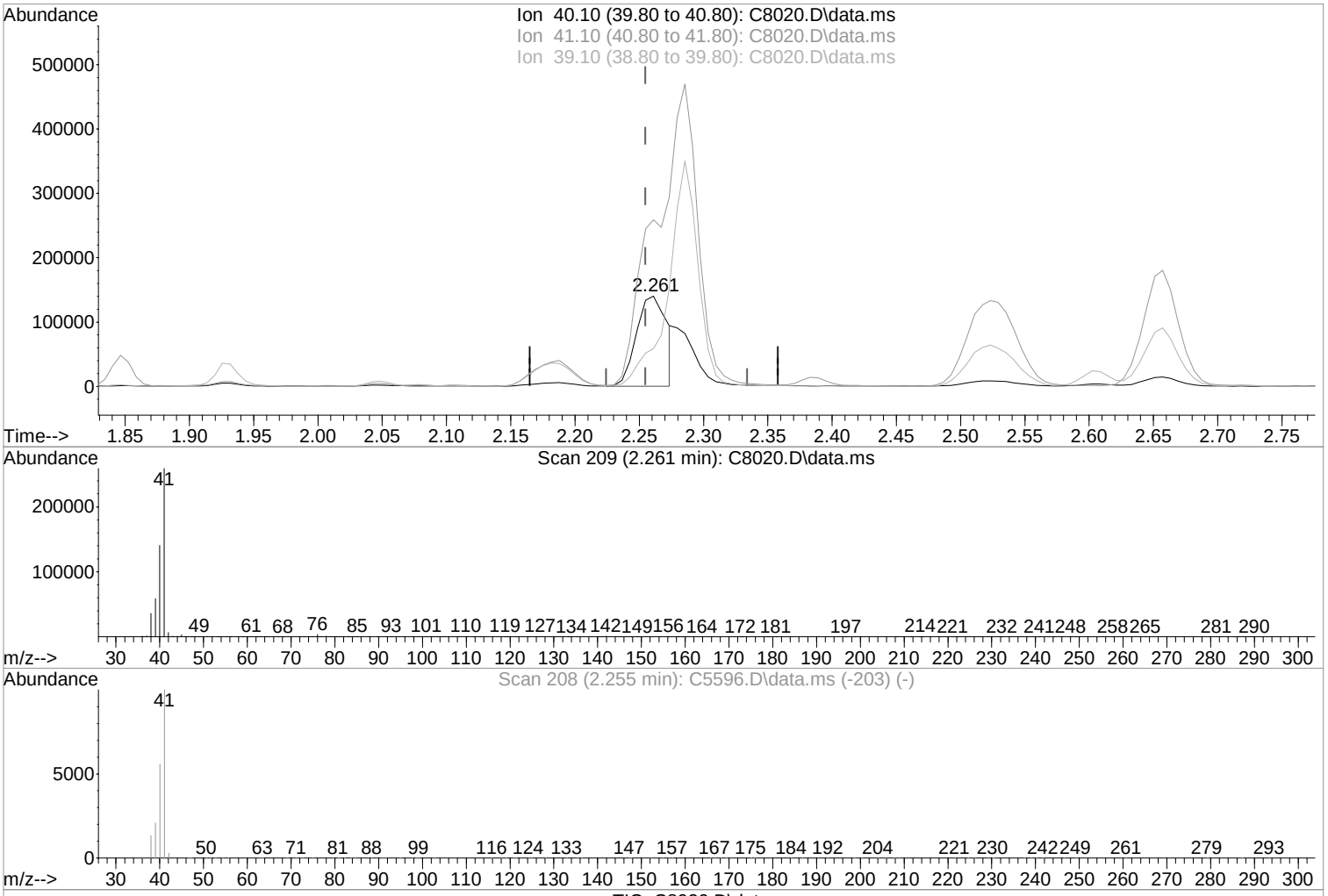


1st 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8020.D
Acq On : 8 Jun 2018 3:42 pm
Operator : F.NAEGLER
Sample : 150 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 16:18:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8020.D\data.ms

(19) Acetonitrile

2.261min (+0.006) 629.66 ug/L m

response 228822

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	184.37
39.10	38.30	41.94
0.00	0.00	0.00

Manual Integration:

After

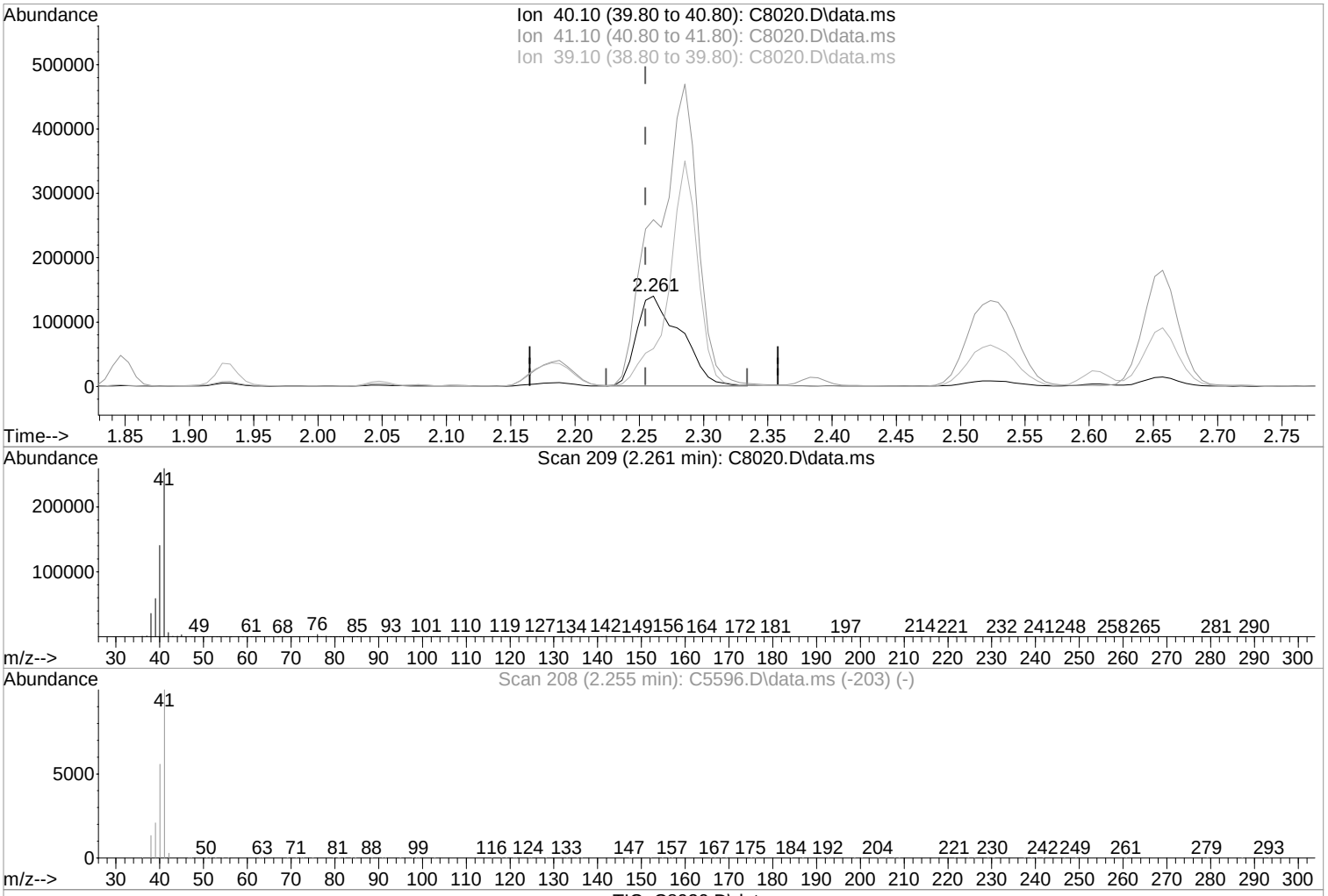
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8020.D
Acq On : 8 Jun 2018 3:42 pm
Operator : F.NAEGLER
Sample : 150 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 16:18:44 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8020.D\data.ms

(19) Acetonitrile

2.261min (+0.006) 922.04 ug/L

response 335071

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	184.37
39.10	38.30	41.94
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8020.D
Acq On : 8 Jun 2018 3:42 pm
Operator : F.NAEGLER
Sample : 150 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 16:19:16 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	342461	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.937	114	538434	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	485644	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.747	152	305740	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	681960	188.86	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 377.72%#				
47) surr1,1,2-dichloroetha...	5.120	65	813810	159.11	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 318.22%#				
64) SURR3,Toluene-d8	7.955	98	2628182	190.39	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 380.78%#				
69) SURR2,BFB	10.735	95	1067431	190.27	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 380.54%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	687560	147.24	ug/L		98
3) Chloromethane	1.158	50	648374	132.17	ug/L		100
4) Vinyl Chloride	1.218	62	665631	155.03	ug/L		98
5) Bromomethane	1.401	94	345809	105.36	ug/L		98
6) Chloroethane	1.462	64	440559	163.16	ug/L		100
7) Freon 21	1.596	67	1074038	148.34	ug/L		99
8) Trichlorofluoromethane	1.639	101	866617	161.34	ug/L		99
9) Diethyl Ether	1.846	59	425945	128.67	ug/L		95
10) Freon 123a	1.846	67	562944	131.18	ug/L		98
11) Freon 123	1.889	83	632402	132.51	ug/L		98
12) Acrolein	1.932	56	677228	763.32	ug/L		98
13) 1,1-Diclethene	2.005	96	451594	148.79	ug/L	#	87
14) Freon 113	2.011	101	456231	142.89	ug/L		96
15) Acetone	2.048	43	272033	113.93	ug/L		96
16) 2-Propanol	2.188	45	1091372	3031.11	ug/L		93
17) Iodomethane	2.115	142	798301	179.80	ug/L		92
18) Carbon Disulfide	2.170	76	1381754	168.16	ug/L		100
19) Acetonitrile	2.261	40	228822m	629.66	ug/L		
20) Allyl Chloride	2.285	76	229362	140.42	ug/L	#	82
21) Methyl Acetate	2.310	43	511706	124.21	ug/L		98
22) Methylene Chloride	2.389	84	517724	137.71	ug/L		91
23) TBA	2.523	59	1784043	3080.53	ug/L		90
24) Acrylonitrile	2.608	53	1345710	702.77	ug/L		99
25) Methyl-t-Butyl Ether	2.657	73	1717777	142.81	ug/L		99
26) trans-1,2-Dichloroethene	2.639	96	520819	156.93	ug/L		91
27) 1,1-Diclethane	3.066	63	919538	142.74	ug/L		98
28) Vinyl Acetate	3.145	86	136847	197.05	ug/L	#	67
29) DIPE	3.182	45	1570304	121.73	ug/L		97
30) 2-Chloro-1,3-Butadiene	3.175	53	826741	136.87	ug/L		87
31) ETBE	3.639	59	1543360	132.39	ug/L		93
32) 2,2-Dichloropropane	3.779	77	815773	170.12	ug/L		98
33) cis-1,2-Dichloroethene	3.785	96	588428	151.57	ug/L		86
34) 2-Butanone	3.828	43	364776	125.00	ug/L		94
35) Propionitrile	3.895	54	562997	723.18	ug/L		97
36) Bromochloromethane	4.120	130	388974	153.46	ug/L		92
37) Methacrylonitrile	4.120	67	279072	148.20	ug/L	#	78
38) Tetrahydrofuran	4.212	42	211969	127.46	ug/L		89
39) Chloroform	4.279	83	936300	143.40	ug/L		96
40) 1,1,1-Trichloroethane	4.547	97	822078	155.73	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8020.D
Acq On : 8 Jun 2018 3:42 pm
Operator : F.NAEGLER
Sample : 150 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 16:19:16 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) TAME	5.516	73	1569443	145.15	ug/L		93
43) Cyclohexane	4.639	41	479077	113.60	ug/L		98
45) Carbontetrachloride	4.840	117	682492	161.59	ug/L		98
46) 1,1-Dichloropropene	4.852	75	719807	141.66	ug/L		98
48) Benzene	5.218	78	2031774	141.49	ug/L		97
49) 1,2-Dichloroethane	5.260	62	796670	121.99	ug/L		99
50) Iso-Butyl Alcohol	5.285	43	770954	2998.13	ug/L		98
51) n-Heptane	5.803	43	653516	137.79	ug/L		84
52) 1-Butanol	6.394	56	1170049	8279.16	ug/L		92
53) Trichloroethene	6.303	130	567058	139.21	ug/L		98
54) Methylcyclohexane	6.571	55	639637	130.86	ug/L		87
55) 1,2-Diclpropane	6.608	63	553887	139.47	ug/L		100
56) Dibromomethane	6.766	93	389045	145.26	ug/L		99
57) 1,4-Dioxane	6.852	88	219240	2932.96	ug/L		98
58) Methyl Methacrylate	6.894	69	480634	152.06	ug/L	#	87
59) Bromodichloromethane	7.028	83	729857	149.06	ug/L		99
60) 2-Nitropropane	7.339	41	352392	299.71	ug/L		99
61) 2-Chloroethylvinyl Ether	7.492	63	321011	156.99	ug/L		100
62) cis-1,3-Dichloropropene	7.632	75	931315	161.43	ug/L		98
63) 4-Methyl-2-pentanone	7.870	43	688346	134.33	ug/L		97
65) Toluene	8.028	91	2320250	149.82	ug/L		99
66) trans-1,3-Dichloropropene	8.333	75	882188	170.05	ug/L		98
67) Ethyl Methacrylate	8.510	69	847223	161.03	ug/L		90
68) 1,1,2-Trichloroethane	8.534	97	537503	147.17	ug/L		97
71) Tetrachloroethene	8.674	164	441265	147.11	ug/L		97
72) 2-Hexanone	8.876	43	530609	136.97	ug/L		94
73) 1,3-Dichloropropane	8.717	76	930438	137.08	ug/L		90
74) Dibromochloromethane	8.967	129	605136	176.07	ug/L		99
75) N-Butyl Acetate	9.058	43	1126431	136.73	ug/L		97
76) 1,2-Dibromoethane	9.065	107	584218	152.12	ug/L		98
77) 3-Chlorobenzotrifluoride	9.656	180	775891	140.38	ug/L		98
78) Chlorobenzene	9.613	112	1540134	148.34	ug/L		97
79) 4-Chlorobenzotrifluoride	9.717	180	678453	134.24	ug/L		100
80) 1,1,1,2-Tetrachloroethane	9.711	131	545662	161.33	ug/L		96
81) Ethylbenzene	9.753	106	805820	153.11	ug/L		96
82) (m+p)Xylene	9.875	106	2114778	319.75	ug/L		97
83) o-Xylene	10.253	106	1021476	156.52	ug/L		94
84) Styrene	10.272	104	1814360	169.52	ug/L		94
85) Bromoform	10.418	173	440310	180.35	ug/L		98
86) 2-Chlorobenzotrifluoride	10.522	180	779457	142.29	ug/L		96
87) Isopropylbenzene	10.613	105	2660425	159.67	ug/L		99
88) Cyclohexanone	10.668	55	2901351	2445.08	ug/L		91
89) trans-1,4-Dichloro-2-B...	10.936	53	198813	132.02	ug/L		84
91) 1,1,2,2-Tetrachloroethane	10.887	83	848362	149.12	ug/L		98
92) Bromobenzene	10.857	156	721935	142.69	ug/L	#	85
93) 1,2,3-Trichloropropane	10.912	110	268301	128.30	ug/L	#	90
94) n-Propylbenzene	10.985	91	3190385	144.13	ug/L		98
95) 2-Chlorotoluene	11.040	91	1828737	132.75	ug/L		96
96) 3-Chlorotoluene	11.095	91	1804603	123.50	ug/L		99
97) 4-Chlorotoluene	11.143	91	2272786	138.24	ug/L		98
98) 1,3,5-Trimethylbenzene	11.149	105	2349206	149.70	ug/L		97
99) tert-Butylbenzene	11.424	119	1998422	149.49	ug/L		99
100) 1,2,4-Trimethylbenzene	11.466	105	2349236	149.58	ug/L		99
101) 3,4-Dichlorobenzotrifl...	11.540	214	659475	129.89	ug/L		97
102) sec-Butylbenzene	11.613	105	2974415	155.08	ug/L		99
103) p-Isopropyltoluene	11.741	119	2597091	157.21	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8020.D
Acq On : 8 Jun 2018 3:42 pm
Operator : F.NAEGLER
Sample : 150 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 16:19:16 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

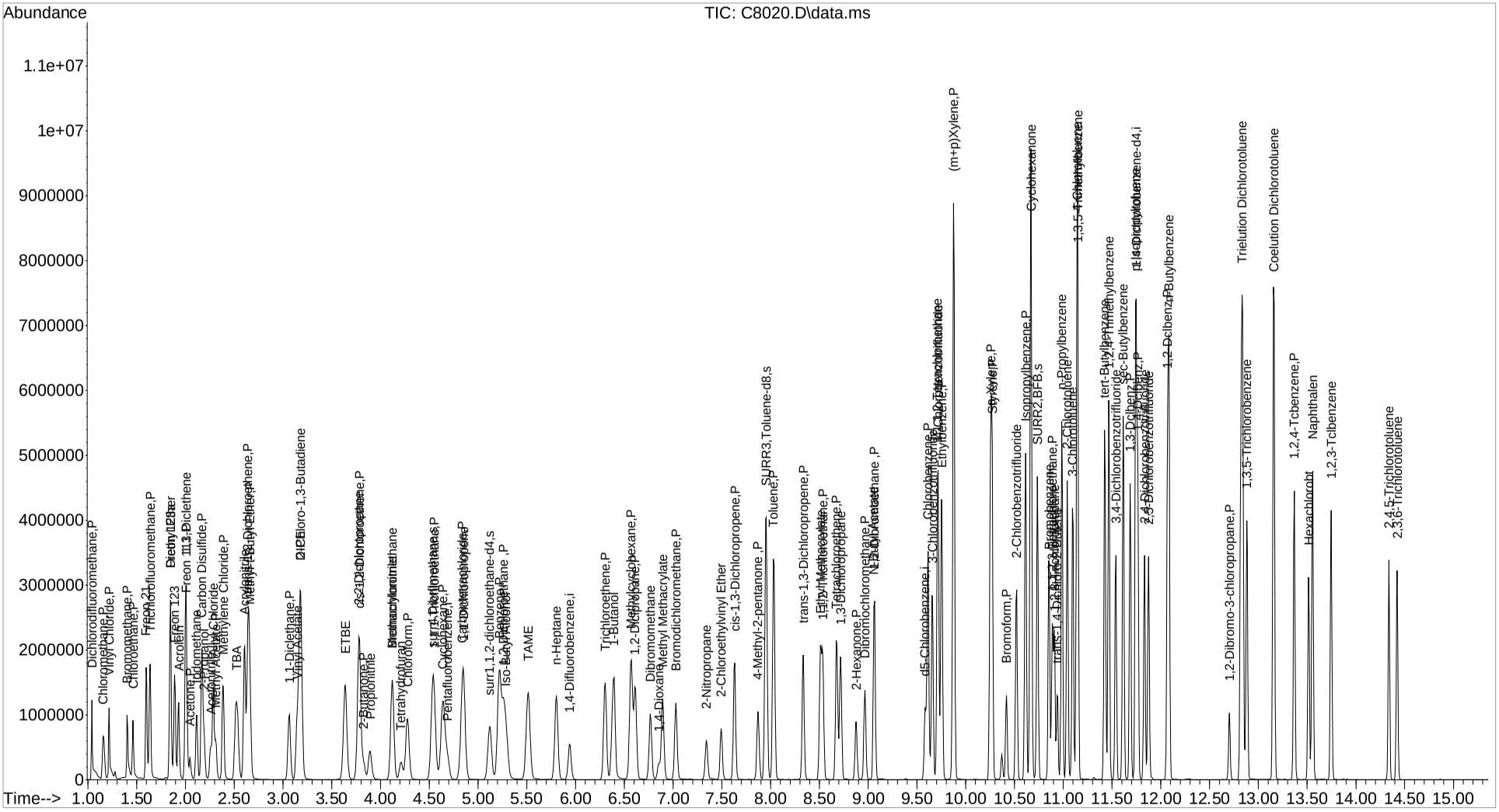
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	1370562	141.89	ug/L	98
105) 1,4-Dclbenz	11.765	146	1441338	141.97	ug/L	97
106) 2,4-Dichlorobenzotrifl...	11.832	214	614235	133.74	ug/L	97
107) 2,5-Dichlorobenzotrifl...	11.875	214	651478	123.75	ug/L	97
108) n-Butylbenzene	12.082	91	2377490	155.26	ug/L	99
109) 1,2-Dclbenz	12.070	146	1341107	138.55	ug/L	98
110) 1,2-Dibromo-3-chloropr...	12.704	157	204487	168.33	ug/L	94
111) Trielution Dichlorotol...	12.832	125	3396366	409.38	ug/L	96
112) 1,3,5-Trichlorobenzene	12.881	180	928135	126.07	ug/L	99
113) Coelution Dichlorotoluene	13.161	125	2467698	267.60	ug/L	96
114) 1,2,4-Tcbenzene	13.369	180	961203	139.05	ug/L	100
115) Hexachlorobt	13.515	225	400889	141.48	ug/L	98
116) Naphthalen	13.558	128	2891256	149.36	ug/L	98
117) 1,2,3-Tclbenzene	13.747	180	925686	134.58	ug/L	99
118) 2,4,5-Trichlorotoluene	14.338	159	628075	141.08	ug/L	99
119) 2,3,6-Trichlorotoluene	14.423	159	570939	132.70	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8020.D
Acq On : 8 Jun 2018 3:42 pm
Operator : F.NAEGLER
Sample : 150 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 16:19:16 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

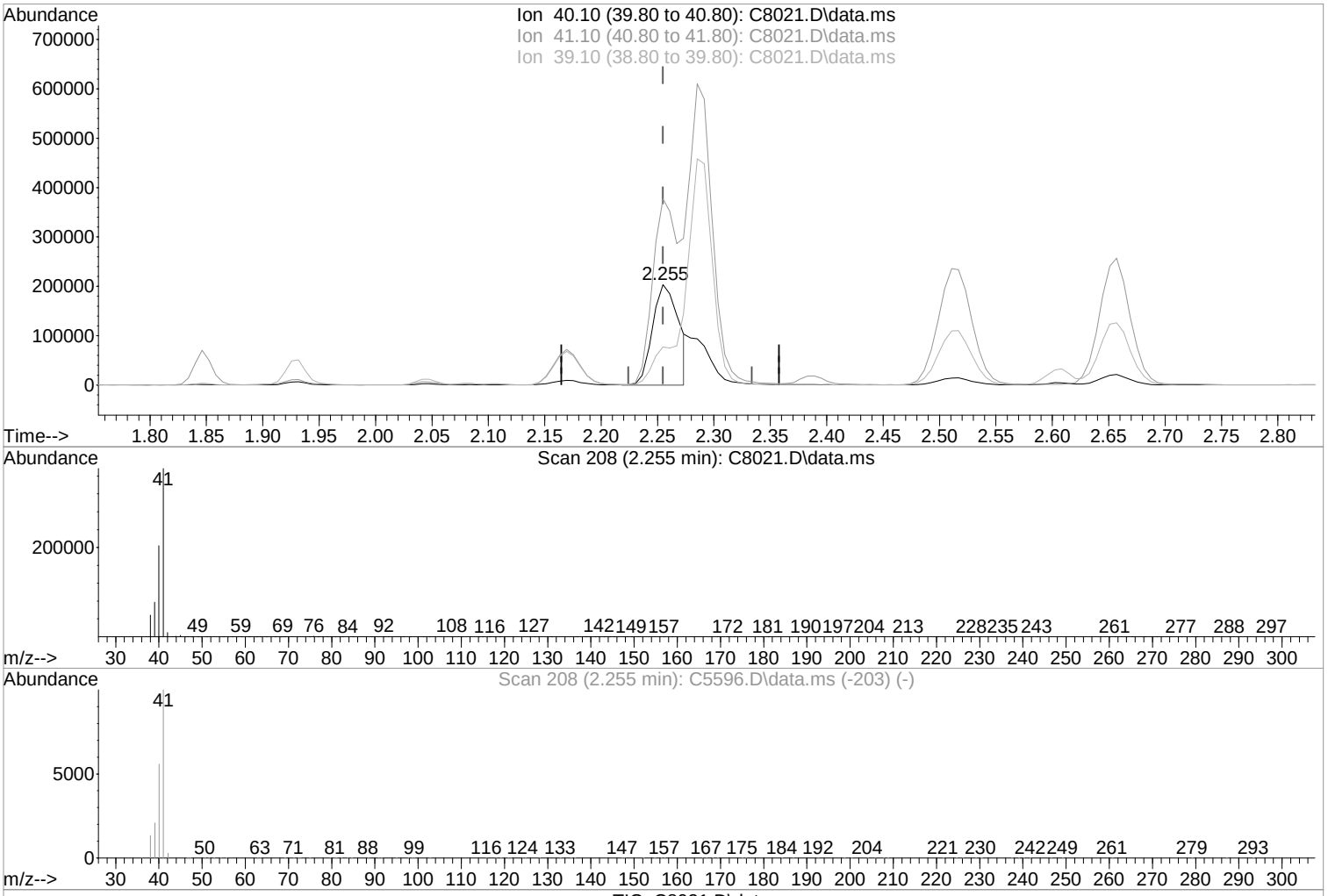


1st 06/11/18
2nd 06/11/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8021.D
Acq On : 8 Jun 2018 4:04 pm
Operator : F.NAEGLER
Sample : 200 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 16:20:33 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8021.D\data.ms

(19) Acetonitrile

2.255min (-0.000) 889.93 ug/L m

response 326199

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	184.96
39.10	38.30	37.88
0.00	0.00	0.00

Manual Integration:

After

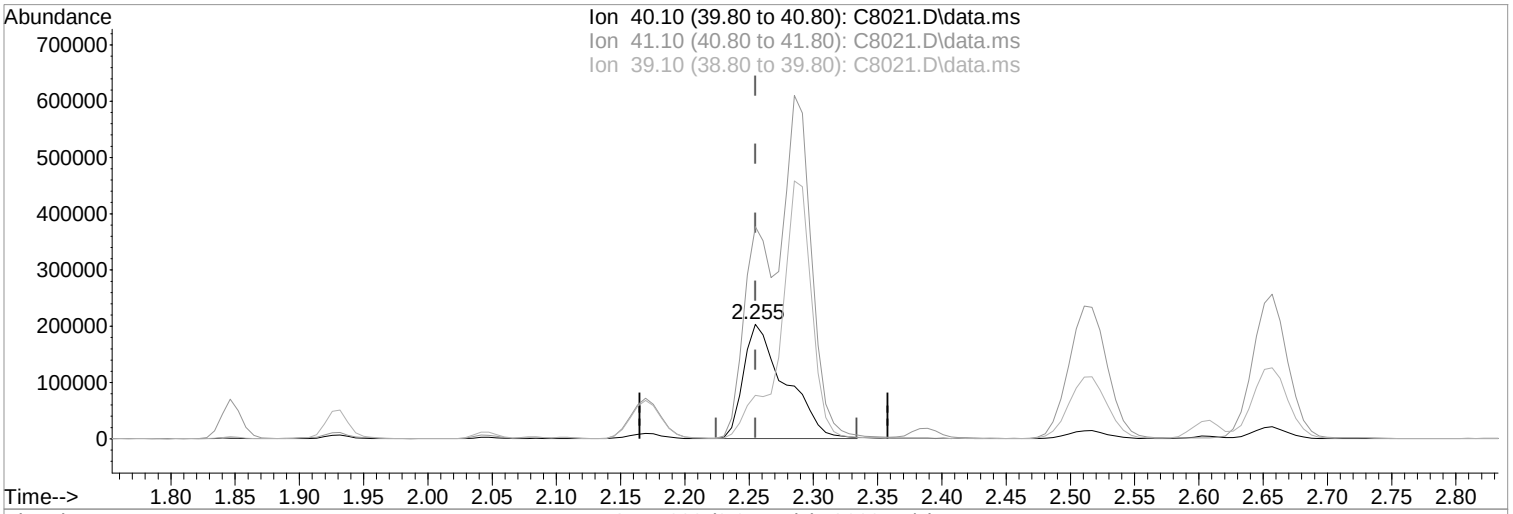
Poor integration.

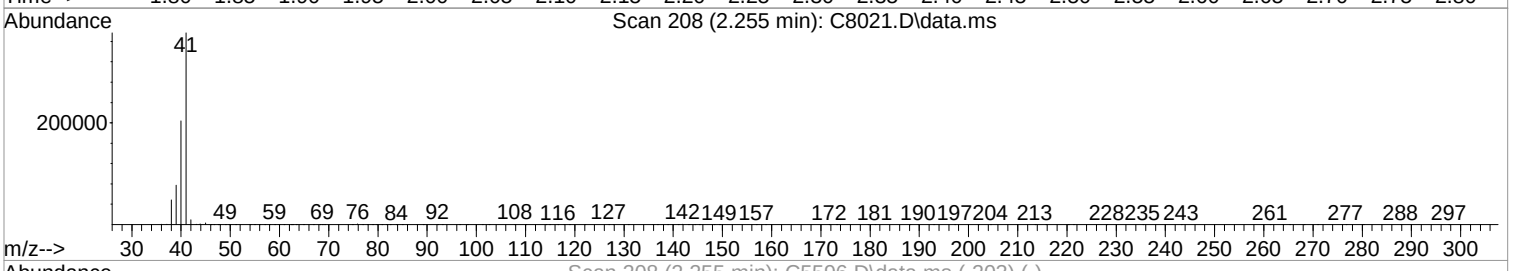
06/08/18

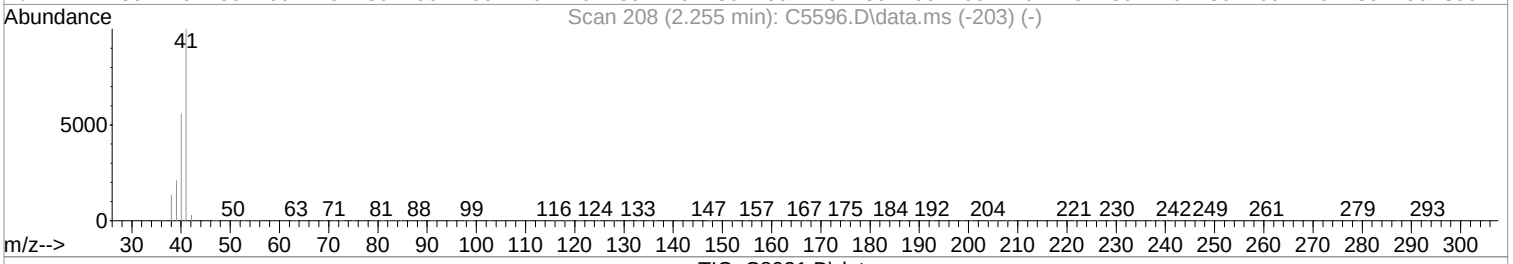
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8021.D
Acq On : 8 Jun 2018 4:04 pm
Operator : F.NAEGLER
Sample : 200 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 16:20:33 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8021.D\data.ms

(19) Acetonitrile

2.255min (-0.000) 1251.77 ug/L

response 458827

Ion	Exp%	Act%
40.10	100	100
41.10	179.40	184.96
39.10	38.30	37.88
0.00	0.00	0.00

Manual Integration:

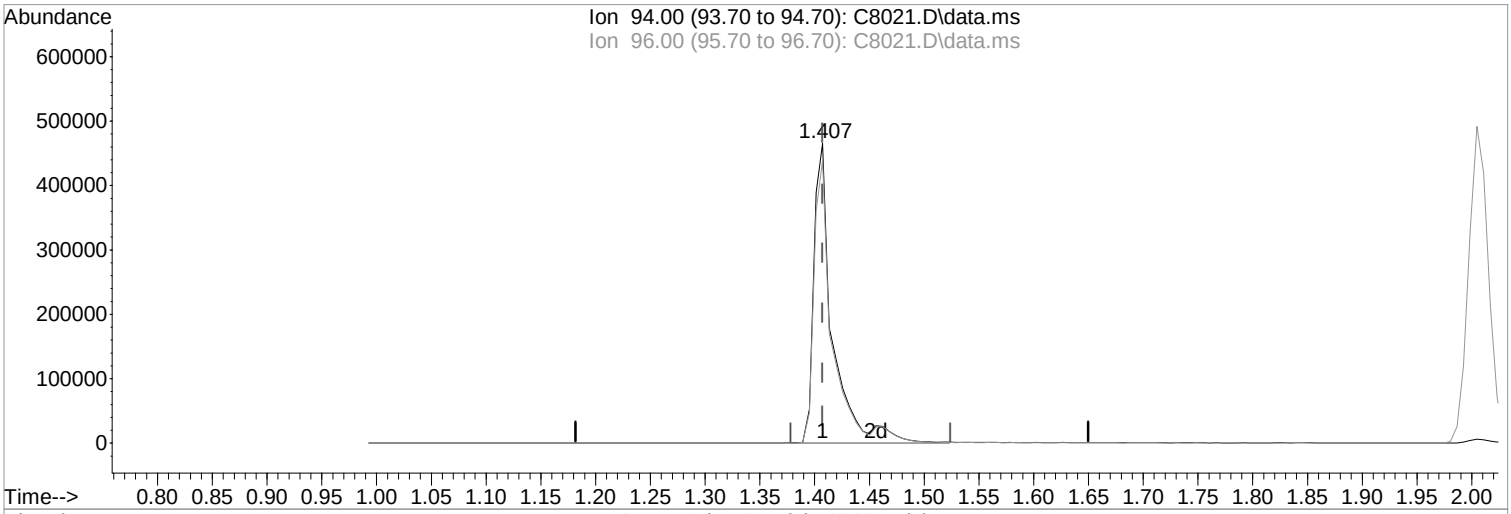
Before

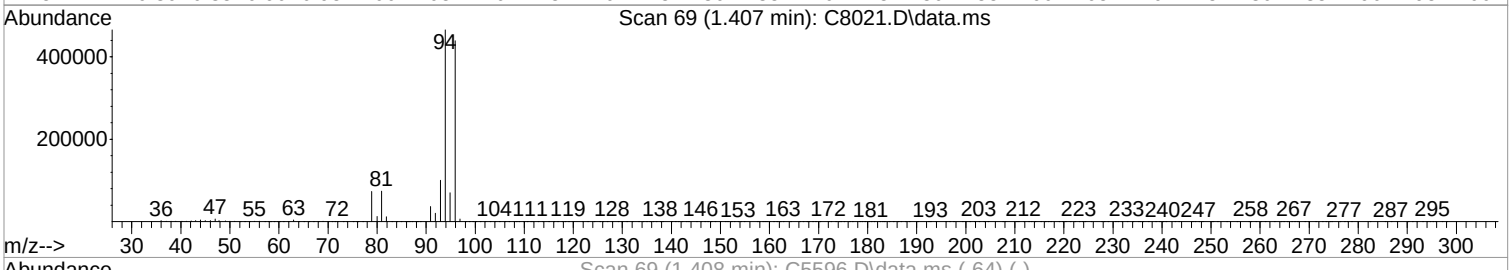
06/08/18

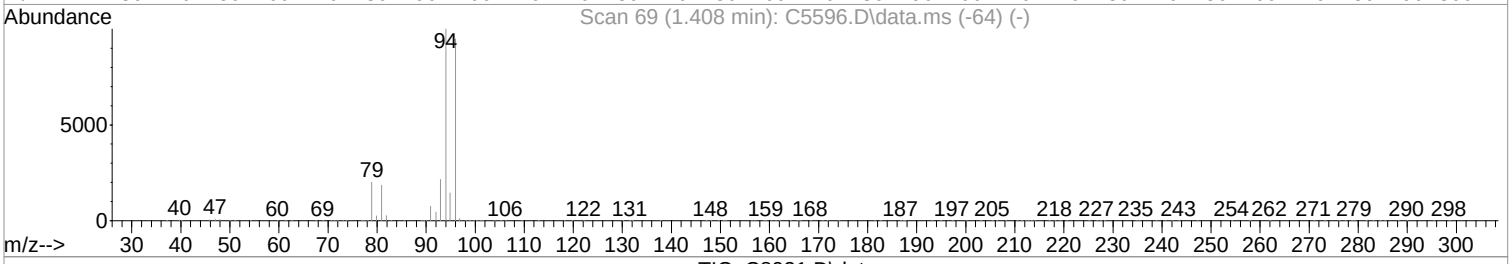
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8021.D
Acq On : 8 Jun 2018 4:04 pm
Operator : F.NAEGLER
Sample : 200 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 16:20:33 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration







TIC: C8021.D\data.ms

(5) Bromomethane (P)

1.407min (+0.000) 169.84 ug/L m

response 562242

Ion	Exp%	Act%
94.00	100	100
96.00	94.80	94.37
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

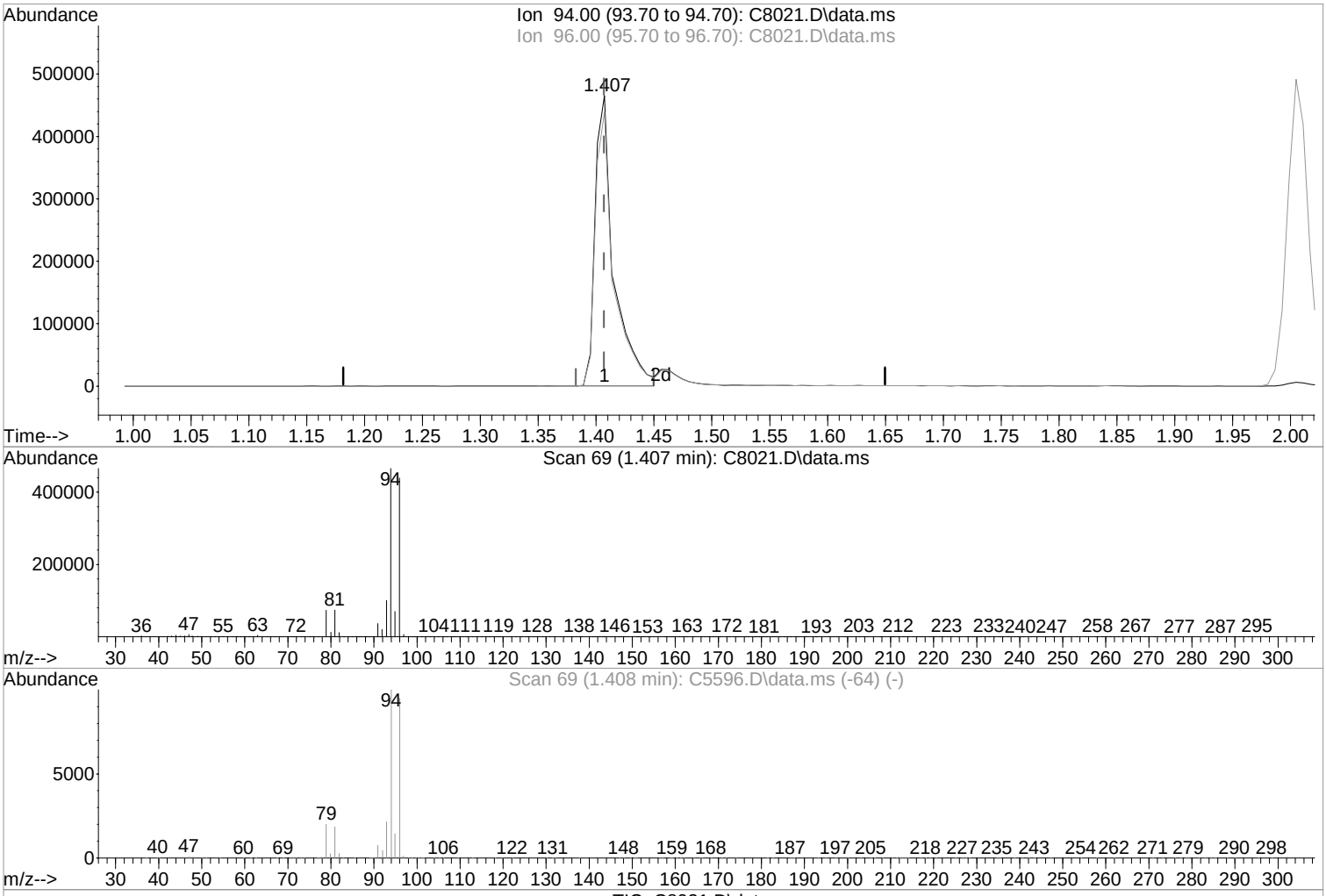
Poor integration.

06/08/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8021.D
Acq On : 8 Jun 2018 4:04 pm
Operator : F.NAEGLER
Sample : 200 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 16:20:33 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration



TIC: C8021.D\data.ms

(5) Bromomethane (P)

1.407min (+0.000) 157.38 ug/L

response 520989

Ion	Exp%	Act%
94.00	100	100
96.00	94.80	94.37
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

06/08/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8021.D
Acq On : 8 Jun 2018 4:04 pm
Operator : F.NAEGLER
Sample : 200 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 16:21:21 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.687	168	345420	50.00	ug/L		0.00
42) 1,4-Difluorobenzene	5.943	114	536474	50.00	ug/L		0.00
70) d5-Chlorobenzene	9.583	117	485217	50.00	ug/L		0.00
90) 1,4-Dichlorobenzene-d4	11.747	152	294360	50.00	ug/L		0.00
System Monitoring Compounds							
44) surr4,Dibrflmethane	4.535	113	186983	51.97	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.94%				
47) surr1,1,2-dichloroetha...	5.120	65	220665	43.30	ug/L		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 86.60%				
64) SURR3,Toluene-d8	7.955	98	703409	51.14	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.28%				
69) SURR2,BFB	10.735	95	285843	51.14	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.28%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.042	85	932368	197.95	ug/L		98
3) Chloromethane	1.157	50	912628	184.45	ug/L		98
4) Vinyl Chloride	1.218	62	930032	214.76	ug/L		98
5) Bromomethane	1.407	94	562242m	169.84	ug/L		
6) Chloroethane	1.468	64	580926	213.31	ug/L		100
7) Freon 21	1.602	67	1530003	209.51	ug/L		99
8) Trichlorofluoromethane	1.645	101	1195382	220.64	ug/L		99
9) Diethyl Ether	1.846	59	605469	181.34	ug/L		95
10) Freon 123a	1.846	67	806901	186.42	ug/L		98
11) Freon 123	1.889	83	915605	190.21	ug/L		99
12) Acrolein	1.932	56	954252	1066.34	ug/L		100
13) 1,1-Diclethene	2.005	96	627340	204.93	ug/L		93
14) Freon 113	2.011	101	613746	190.58	ug/L		98
15) Acetone	2.047	43	382167	158.69	ug/L		95
16) 2-Propanol	2.169	45	1508144	4152.74	ug/L		94
17) Iodomethane	2.115	142	1178308	263.12	ug/L		92
18) Carbon Disulfide	2.169	76	1965583	237.16	ug/L		100
19) Acetonitrile	2.255	40	326199m	889.93	ug/L		
20) Allyl Chloride	2.291	76	325447	197.54	ug/L	#	71
21) Methyl Acetate	2.310	43	720310	173.35	ug/L		97
22) Methylene Chloride	2.389	84	727990	191.98	ug/L		92
23) TBA	2.517	59	2521962	4317.40	ug/L		89
24) Acrylonitrile	2.608	53	1892693	979.96	ug/L		99
25) Methyl-t-Butyl Ether	2.657	73	2437607	200.92	ug/L		98
26) trans-1,2-Dichloroethene	2.645	96	727193	217.24	ug/L		89
27) 1,1-Diclethane	3.066	63	1290617	198.62	ug/L		98
28) Vinyl Acetate	3.145	86	188379	268.93	ug/L	#	68
29) DIPE	3.181	45	2248376	172.80	ug/L		97
30) 2-Chloro-1,3-Butadiene	3.175	53	1158561	190.16	ug/L		90
31) ETBE	3.639	59	2189561	186.22	ug/L		93
32) 2,2-Dichloropropane	3.779	77	1133671	234.39	ug/L		99
33) cis-1,2-Dichloroethene	3.785	96	816105	208.42	ug/L		89
34) 2-Butanone	3.828	43	509810	173.20	ug/L		95
35) Propionitrile	3.895	54	781192	994.87	ug/L		96
36) Bromochloromethane	4.120	130	548939	214.72	ug/L		92
37) Methacrylonitrile	4.126	67	392810	206.81	ug/L	#	79
38) Tetrahydrofuran	4.212	42	295045	175.89	ug/L		88
39) Chloroform	4.279	83	1305598	198.25	ug/L		95
40) 1,1,1-Trichloroethane	4.547	97	1147877	215.59	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8021.D
Acq On : 8 Jun 2018 4:04 pm
Operator : F.NAEGLER
Sample : 200 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 16:21:21 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) TAME	5.516	73	2234893	204.92 ug/L		93
43) Cyclohexane	4.644	41	670087	159.47 ug/L		98
45) Carbontetrachloride	4.840	117	956026	227.19 ug/L		98
46) 1,1-Dichloropropene	4.852	75	981724	193.91 ug/L		98
48) Benzene	5.218	78	2827296	197.61 ug/L		96
49) 1,2-Dichloroethane	5.260	62	1127147	173.22 ug/L		98
50) Iso-Butyl Alcohol	5.272	43	1090325	4255.62 ug/L		95
51) n-Heptane	5.803	43	829157	175.46 ug/L		86
52) 1-Butanol	6.388	56	1630805	11581.59 ug/L		93
53) Trichloroethene	6.303	130	775845	191.16 ug/L		99
54) Methylcyclohexane	6.571	55	872946	179.25 ug/L		86
55) 1,2-Diclpropane	6.614	63	770010	194.60 ug/L		99
56) Dibromomethane	6.766	93	546903	204.94 ug/L		98
57) 1,4-Dioxane	6.851	88	289685	3889.52 ug/L		96
58) Methyl Methacrylate	6.894	69	676058	214.67 ug/L		87
59) Bromodichloromethane	7.028	83	1035239	212.20 ug/L		99
60) 2-Nitropropane	7.345	41	507021	432.79 ug/L		99
61) 2-Chloroethylvinyl Ether	7.492	63	449908	220.84 ug/L		99
62) cis-1,3-Dichloropropene	7.632	75	1316934	229.11 ug/L		99
63) 4-Methyl-2-pentanone	7.869	43	960275	188.08 ug/L		95
65) Toluene	8.034	91	3210230	208.05 ug/L		98
66) trans-1,3-Dichloropropene	8.333	75	1251262	242.07 ug/L		98
67) Ethyl Methacrylate	8.510	69	1207733	230.39 ug/L		91
68) 1,1,2-Trichloroethane	8.534	97	748056	205.57 ug/L		98
71) Tetrachloroethene	8.680	164	599075	199.89 ug/L		97
72) 2-Hexanone	8.875	43	741193	191.50 ug/L		94
73) 1,3-Dichloropropane	8.717	76	1300475	191.77 ug/L		91
74) Dibromochloromethane	8.967	129	867724	252.70 ug/L		99
75) N-Butyl Acetate	9.058	43	1618906	196.68 ug/L		99
76) 1,2-Dibromoethane	9.064	107	822989	214.48 ug/L		99
77) 3-Chlorobenzotrifluoride	9.656	180	1073475	194.39 ug/L		99
78) Chlorobenzene	9.613	112	2154689	207.71 ug/L		98
79) 4-Chlorobenzotrifluoride	9.717	180	950284	188.20 ug/L		99
80) 1,1,1,2-Tetrachloroethane	9.711	131	776513	229.78 ug/L		95
81) Ethylbenzene	9.753	106	1116366	212.30 ug/L		97
82) (m+p)Xylene	9.875	106	2942956	445.36 ug/L		99
83) o-Xylene	10.253	106	1428064	219.01 ug/L		98
84) Styrene	10.271	104	2539395	237.47 ug/L		95
85) Bromoform	10.418	173	628225	257.54 ug/L		99
86) 2-Chlorobenzotrifluoride	10.521	180	1085831	198.39 ug/L		95
87) Isopropylbenzene	10.613	105	3644251	218.91 ug/L		99
88) Cyclohexanone	10.668	55	4055027	3420.34 ug/L		92
89) trans-1,4-Dichloro-2-B...	10.942	53	285125	189.50 ug/L		76
91) 1,1,2,2-Tetrachloroethane	10.887	83	1184565	216.26 ug/L		99
92) Bromobenzene	10.857	156	990174	203.27 ug/L	#	85
93) 1,2,3-Trichloropropane	10.912	110	371416	184.47 ug/L		93
94) n-Propylbenzene	10.985	91	4292849	201.43 ug/L		98
95) 2-Chlorotoluene	11.040	91	2477615	186.80 ug/L		97
96) 3-Chlorotoluene	11.101	91	2473153	175.80 ug/L		95
97) 4-Chlorotoluene	11.143	91	3116470	196.89 ug/L		98
98) 1,3,5-Trimethylbenzene	11.149	105	3185135	210.82 ug/L		98
99) tert-Butylbenzene	11.424	119	2649668	205.87 ug/L		99
100) 1,2,4-Trimethylbenzene	11.466	105	3172868	209.83 ug/L		99
101) 3,4-Dichlorobenzotrifl...	11.539	214	877832	179.58 ug/L		97
102) sec-Butylbenzene	11.613	105	3963040	214.61 ug/L		100
103) p-Isopropyltoluene	11.747	119	3420512	215.06 ug/L		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8021.D
Acq On : 8 Jun 2018 4:04 pm
Operator : F.NAEGLER
Sample : 200 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 16:21:21 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

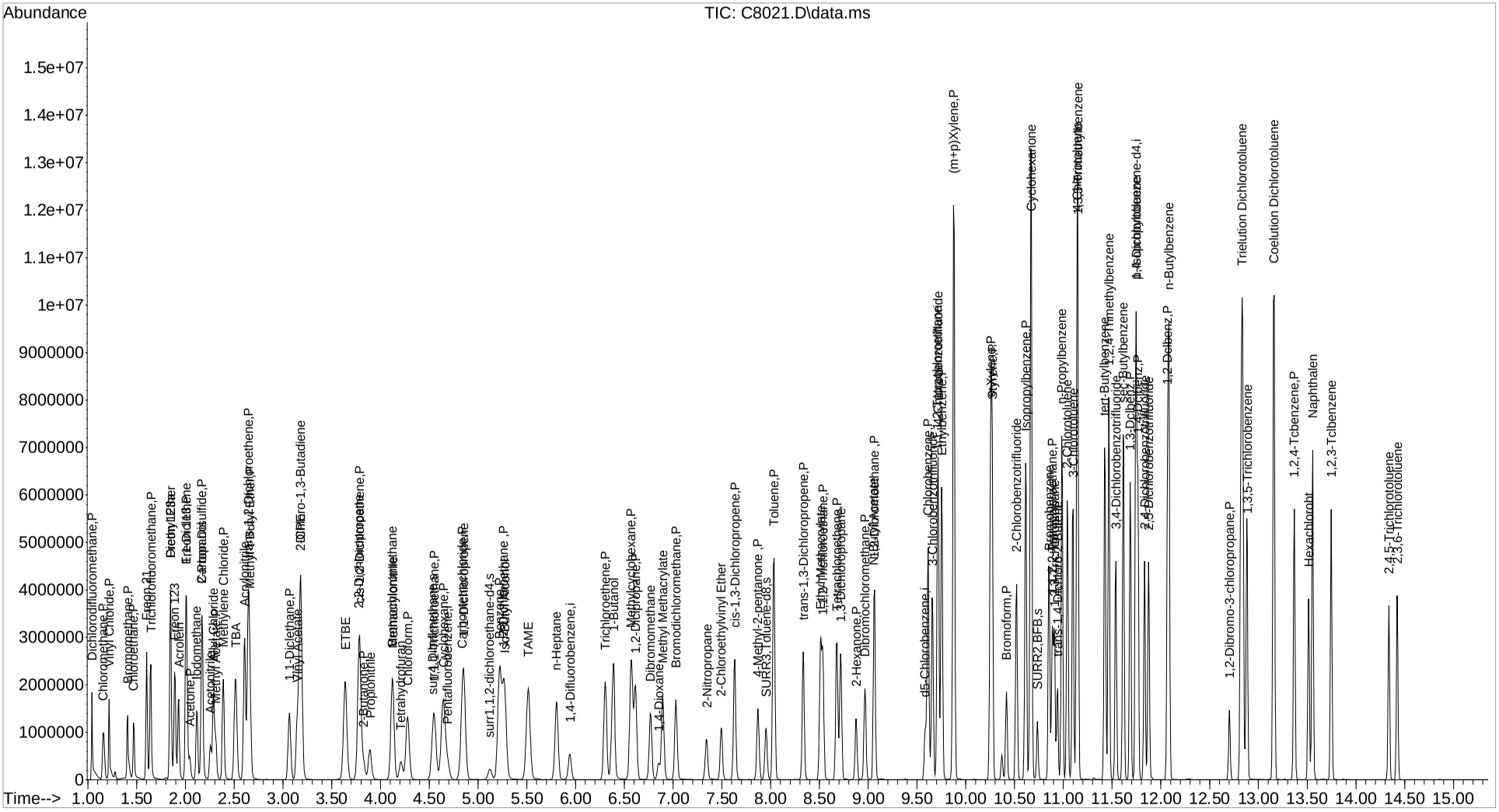
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 1,3-Dclbenz	11.686	146	1853620	199.32	ug/L	99
105) 1,4-Dclbenz	11.765	146	1947868	199.29	ug/L	98
106) 2,4-Dichlorobenzotrifl...	11.832	214	805400	182.14	ug/L	98
107) 2,5-Dichlorobenzotrifl...	11.875	214	873992	172.44	ug/L	97
108) n-Butylbenzene	12.082	91	3129091	212.25	ug/L	99
109) 1,2-Dclbenz	12.070	146	1841750	197.63	ug/L	99
110) 1,2-Dibromo-3-chloropr...	12.704	157	295722	252.84	ug/L	93
111) Trielution Dichlorotol...	12.832	125	4541998	568.64	ug/L	97
112) 1,3,5-Trichlorobenzene	12.887	180	1245387	175.71	ug/L	98
113) Coelution Dichlorotoluene	13.161	125	3355007	377.89	ug/L	96
114) 1,2,4-Tcbenzene	13.368	180	1261518	189.55	ug/L	99
115) Hexachlorobt	13.515	225	486653	178.38	ug/L	98
116) Naphthalen	13.557	128	3927357	210.72	ug/L	98
117) 1,2,3-Tclbenzene	13.746	180	1224920	184.97	ug/L	99
118) 2,4,5-Trichlorotoluene	14.338	159	732101	170.80	ug/L	98
119) 2,3,6-Trichlorotoluene	14.423	159	666139	160.81	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8021.D
Acq On : 8 Jun 2018 4:04 pm
Operator : F.NAEGLER
Sample : 200 PPB STD Inst : MSVOA14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 16:21:21 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Tue Mar 20 16:59:21 2018
Response via : Initial Calibration

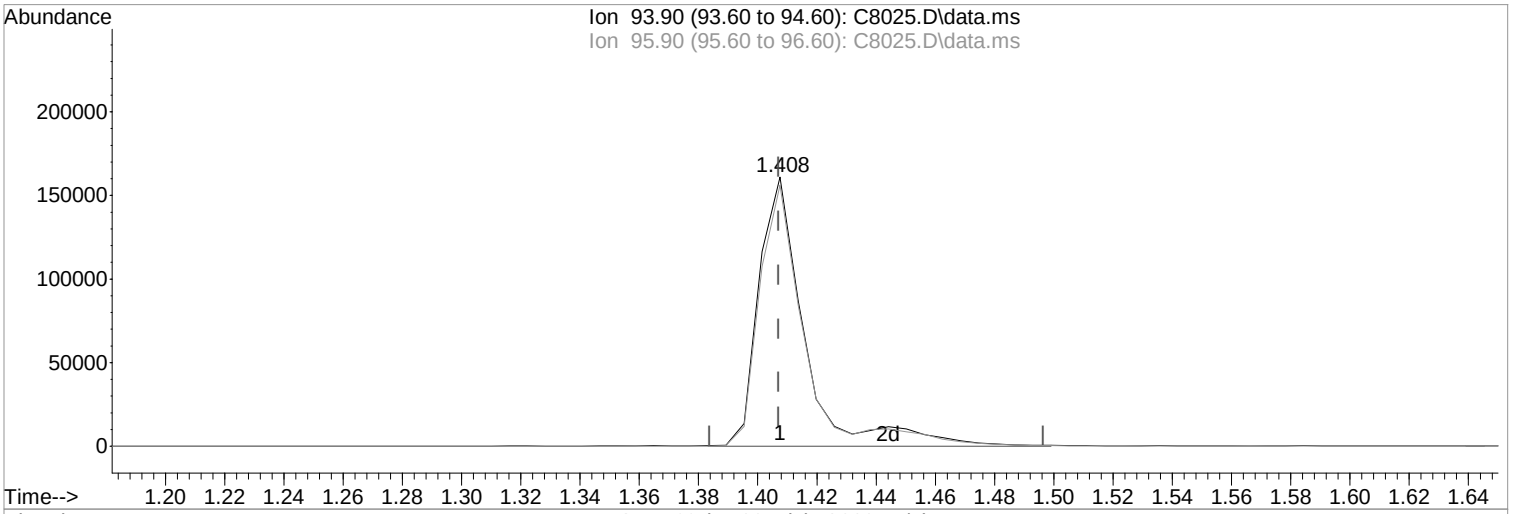


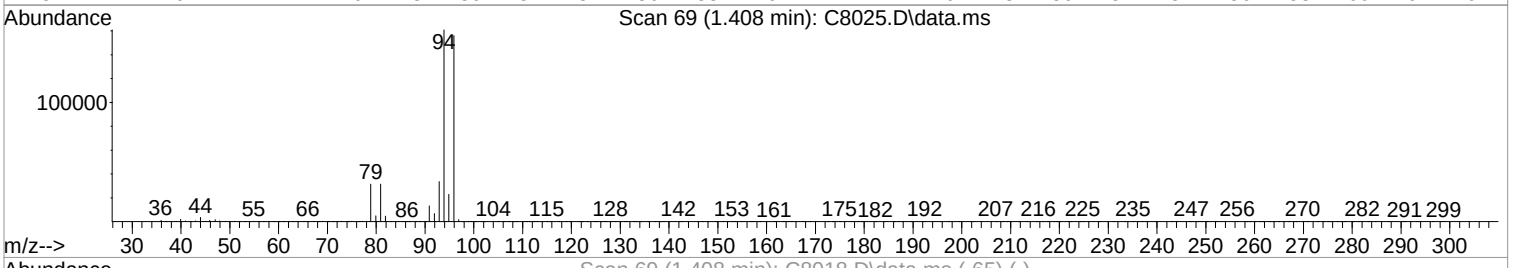
1st FJ 06/11/18
2nd 06/11/18

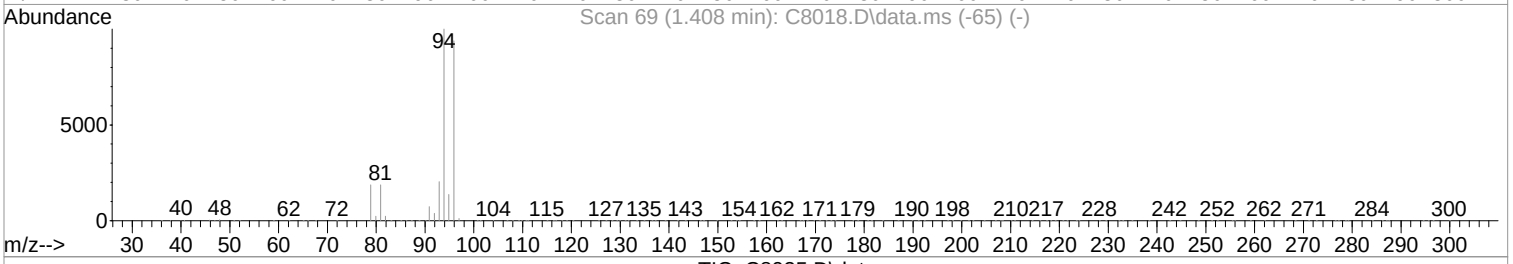
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\MSVOA14\Data\060818\
Data File : C8025.D
Acq On : 8 Jun 2018 5:33 pm
Operator : F.NAEGLER
Sample : 50 PPB ICV Inst : MSVOA14
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 11 11:09:28 2018
Quant Method : I:\ACQUDATA\MSVOA14\Methods\W060818.m
Quant Title : MS#14 - 8260 WATERS 5mL Purge
QLast Update : Fri Jun 08 16:43:40 2018
Response via : Initial Calibration







TIC: C8025.D\data.ms

(5) Bromomethane (P)

1.408min (+0.001) 54.19 ug/L m

response 174543

Ion	Exp%	Act%
93.90	100	100
95.90	93.70	97.02
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

06/11/18

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1800065-01	0.5 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8013.D	06/08/2018 12:52
02	RC1800065-02	1.0 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8014.D	06/08/2018 13:14
03	RC1800065-03	2.0 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8015.D	06/08/2018 13:37
04	RC1800065-04	5.0 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8016.D	06/08/2018 13:59
05	RC1800065-05	20 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8017.D	06/08/2018 14:32
06	RC1800065-06	50 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8018.D	06/08/2018 14:55
07	RC1800065-07	100 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8019.D	06/08/2018 15:17
08	RC1800065-08	150 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8020.D	06/08/2018 15:42
09	RC1800065-09	200 PPB STD	I:\ACQUDATA\MSVOA14\Data\060818\C8021.D	06/08/2018 16:04

Analyte

1,1,1-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7396	02	1.000	0.6958	03	2.000	0.7923	04	5.000	0.7688
05	20.000	0.8163	06	50.000	0.789	07	100.000	0.7631	08	150.000	0.8002
09	200.000	0.8308									

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7496	02	1.000	0.7479	03	2.000	0.7704	04	5.000	0.8612
05	20.000	0.9494	06	50.000	1.018	07	100.000	0.9877	08	150.000	0.9249
09	200.000	1.006									

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.318	02	1.000	0.3342	03	2.000	0.3144	04	5.000	0.3341
05	20.000	0.3358	06	50.000	0.3475	07	100.000	0.3385	08	150.000	0.3328
09	200.000	0.3486									

1,1-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9002	02	1.000	0.8464	03	2.000	0.9061	04	5.000	0.9507
05	20.000	0.9451	06	50.000	0.906	07	100.000	0.8704	08	150.000	0.895
09	200.000	0.9341									

1,1-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4411	02	1.000	0.4032	03	2.000	0.4651	04	5.000	0.4401
05	20.000	0.4543	06	50.000	0.4196	07	100.000	0.4033	08	150.000	0.4396
09	200.000	0.454									

1,2-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5433	02	1.000	0.4944	03	2.000	0.5096	04	5.000	0.5266
05	20.000	0.5174	06	50.000	0.5231	07	100.000	0.5118	08	150.000	0.4932
09	200.000	0.5253									

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

Analyte

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3257	02	1.000	0.3008	03	2.000	0.3464	04	5.000	0.3515
05	20.000	0.3564	06	50.000	0.3595	07	100.000	0.3478	08	150.000	0.3429
09	200.000	0.3588									

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4191	02	1.000	0.4642	03	2.000	0.4034	04	5.000	0.4118
05	20.000	0.3525	06	50.000	0.3967	07	100.000	0.3742	08	150.000	0.3551
09	200.000	0.369									

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3355	02	1.000	0.3182	03	2.000	0.3247	04	5.000	0.3433
05	20.000	0.338	06	50.000	0.3995	07	100.000	0.3848	08	150.000	0.3642
09	200.000	0.3819									

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.5124	05	20.000	0.474	06	50.000	0.4903	07	100.000	0.5049
08	200.000	0.4956									

4-Methyl-2-pentanone (MIBK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3603	02	1.000	0.3883	03	2.000	0.4097	04	5.000	0.4149
05	20.000	0.4041	06	50.000	0.4714	07	100.000	0.4514	08	150.000	0.4261
09	200.000	0.4475									

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.3349	05	20.000	0.2665	06	50.000	0.3001	07	100.000	0.2708
08	150.000	0.2648	09	200.000	0.2766						

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.244	02	1.000	1.191	03	2.000	1.276	04	5.000	1.338
05	20.000	1.318	06	50.000	1.277	07	100.000	1.243	08	150.000	1.258
09	200.000	1.318									

Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3575	02	1.000	0.3607	03	2.000	0.3745	04	5.000	0.4179
05	20.000	0.4301	06	50.000	0.4576	07	100.000	0.4515	08	150.000	0.4518
09	200.000	0.4824									

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1616	02	1.000	0.1621	03	2.000	0.157	04	5.000	0.1816

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

Analyte

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.2239	06	50.000	0.2737	07	100.000	0.2892	08	150.000	0.3022
09	200.000	0.3237									

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.684	02	1.000	0.7049	03	2.000	0.7497	04	5.000	0.7319
05	20.000	0.5757	06	50.000	0.5681	07	100.000	0.3784			

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.306	02	1.000	1.139	03	2.000	1.224	04	5.000	1.233
05	20.000	1.121	06	50.000	1.254	07	100.000	1.166	08	150.000	1.345
09	200.000	1.423									

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2685	02	1.000	0.2298	03	2.000	0.2946	04	5.000	0.3202
05	20.000	0.378	06	50.000	0.3934	07	100.000	0.3893	08	150.000	0.4225
09	200.000	0.4455									

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9896	02	1.000	1.079	03	2.000	1.061	04	5.000	1.064
05	20.000	1.086	06	50.000	1.068	07	100.000	1.047	08	150.000	1.057
09	200.000	1.11									

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.463	02	1.000	0.4554	03	2.000	0.4596	04	5.000	0.4566
05	20.000	0.459	06	50.000	0.4283	07	100.000	0.3953	08	150.000	0.4288
09	200.000	0.4204									

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9018	02	1.000	0.8633	03	2.000	0.8951	04	5.000	0.923
05	20.000	0.9593	06	50.000	0.947	07	100.000	0.9013	08	150.000	0.9113
09	200.000	0.9449									

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7538	02	1.000	0.6214	03	2.000	0.688	04	5.000	0.6646
05	20.000	0.6994	06	50.000	0.6397	07	100.000	0.5897	08	150.000	0.6311
09	200.000	0.6605									

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2953	02	1.000	0.2895	03	2.000	0.2917	04	5.000	0.3135

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

Analyte

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.3629	06	50.000	0.4113	07	100.000	0.417	08	150.000	0.4153
09	200.000	0.4471									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.3663	05	20.000	0.3157	06	50.000	0.336	07	100.000	0.3363
08	200.000	0.3166									

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5381	02	1.000	0.53	03	2.000	0.551	04	5.000	0.5564
05	20.000	0.5549	06	50.000	0.5482	07	100.000	0.5351	08	150.000	0.5531
09	200.000	0.5752									

Methylene Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7076	02	1.000	0.615	03	2.000	0.5544	04	5.000	0.5464
05	20.000	0.522	06	50.000	0.5122	07	100.000	0.4992	08	150.000	0.5039
09	200.000	0.5269									

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.991	02	1.000	0.9723	03	2.000	1.01	04	5.000	1.097
05	20.000	1.157	06	50.000	1.185	07	100.000	1.194	08	150.000	1.245
09	200.000	1.308									

Tetrachloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3001	02	1.000	0.2892	03	2.000	0.3234	04	5.000	0.317
05	20.000	0.2983	06	50.000	0.293	07	100.000	0.2824	08	150.000	0.3029
09	200.000	0.3087									

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.336	02	1.000	1.32	03	2.000	1.433	04	5.000	1.42
05	20.000	1.437	06	50.000	1.421	07	100.000	1.4	08	150.000	1.436
09	200.000	1.496									

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	1.437	05	20.000	1.23	06	50.000	1.262	07	100.000	1.27
08	200.000	1.22									

Trichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3738	02	1.000	0.3788	03	2.000	0.3969	04	5.000	0.3874
05	20.000	0.3782	06	50.000	0.3669	07	100.000	0.3419	08	150.000	0.3511

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

Analyte

Trichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	200.000	0.3615									

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5878	02	1.000	0.573	03	2.000	0.6054	04	5.000	0.6653
05	20.000	0.7167	06	50.000	0.6478	07	100.000	0.6069	08	150.000	0.6479
09	200.000	0.6731									

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5516	02	1.000	0.5891	03	2.000	0.6193	04	5.000	0.5967
05	20.000	0.6075	06	50.000	0.5818	07	100.000	0.5566	08	150.000	0.5727
09	200.000	0.5907									

cis-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4256	02	1.000	0.4232	03	2.000	0.4292	04	5.000	0.499
05	20.000	0.549	06	50.000	0.577	07	100.000	0.5739	08	150.000	0.5766
09	200.000	0.6137									

m,p-Xylenes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6116	02	2.000	0.6681	03	4.000	0.6743	04	10.000	0.6822
05	40.000	0.687	06	100.000	0.6877	07	200.000	0.6845	08	300.000	0.7258
09	400.000	0.7582									

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5767	02	1.000	0.6147	03	2.000	0.649	04	5.000	0.6751
05	20.000	0.6741	06	50.000	0.6889	07	100.000	0.685	08	150.000	0.7011
09	200.000	0.7358									

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4782	02	1.000	0.4623	03	2.000	0.5129	04	5.000	0.5034
05	20.000	0.5163	06	50.000	0.4934	07	100.000	0.4773	08	150.000	0.5069
09	200.000	0.5263									

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4017	02	1.000	0.3408	03	2.000	0.3655	04	5.000	0.4039
05	20.000	0.4882	06	50.000	0.5284	07	100.000	0.5435	08	150.000	0.5461
09	200.000	0.5831									

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,1,1-Trichloroethane	TRG	Average RF	% RSD	5.3	≤20	0.7773	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	12.5	≤20	0.8906	0.300
1,1,2-Trichloroethane	TRG	Average RF	% RSD	3.4	≤20	0.3338	0.100
1,1-Dichloroethane	TRG	Average RF	% RSD	3.8	≤20	0.906	0.200
1,1-Dichloroethene	TRG	Average RF	% RSD	5.1	≤20	0.4356	0.100
1,2-Dichloroethane	TRG	Average RF	% RSD	3.1	≤20	0.5161	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	5.5	≤20	0.3433	0.100
2-Butanone (MEK)	TRG	Average RF	% RSD	9.1	≤20	0.394	0.05
2-Hexanone	TRG	Average RF	% RSD	8.2	≤20	0.3544	0.05
4-Bromofluorobenzene	SURR	Average RF	% RSD	3.0	≤20	0.4954	
4-Methyl-2-pentanone (MIBK)	TRG	Average RF	% RSD	8.2	≤20	0.4193	0.05
Acetone	TRG	Average RF	% RSD	9.6	≤20	0.2856	0.05
Benzene	TRG	Average RF	% RSD	3.6	≤20	1.274	0.500
Bromodichloromethane	TRG	Average RF	% RSD	10.9	≤20	0.4204	0.200
Bromoform	TRG	Quadratic	COD	0.9953	≥0.99	0.2306	0.100
Bromomethane	TRG	Quadratic	COD	0.9969	≥0.99	0.6275	0.100
Carbon Disulfide	TRG	Average RF	% RSD	8.0	≤20	1.246	0.100
Carbon Tetrachloride	TRG	Quadratic	COD	0.9993	≥0.99	0.3491	0.05
Chlorobenzene	TRG	Average RF	% RSD	3.1	≤20	1.063	0.500
Chloroethane	TRG	Average RF	% RSD	5.3	≤20	0.4407	0.100
Chloroform	TRG	Average RF	% RSD	3.3	≤20	0.9163	0.200
Chloromethane	TRG	Average RF	% RSD	7.3	≤20	0.6609	0.100
Dibromochloromethane	TRG	Quadratic	COD	0.9977	≥0.99	0.3604	0.100
Dibromofluoromethane	SURR	Average RF	% RSD	6.2	≤20	0.3342	
Ethylbenzene	TRG	Average RF	% RSD	2.5	≤20	0.5491	0.100
Methylene Chloride	TRG	Average RF	% RSD	12.2	≤20	0.5542	0.100
Styrene	TRG	Average RF	% RSD	10.5	≤20	1.129	0.300
Tetrachloroethene	TRG	Average RF	% RSD	4.3	≤20	0.3017	0.200
Toluene	TRG	Average RF	% RSD	3.8	≤20	1.411	0.400
Toluene-d8	SURR	Average RF	% RSD	6.8	≤20	1.284	
Trichloroethene	TRG	Average RF	% RSD	4.7	≤20	0.3707	0.200
Vinyl Chloride	TRG	Average RF	% RSD	7.3	≤20	0.636	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	3.8	≤20	0.5851	0.100
cis-1,3-Dichloropropene	TRG	Average RF	% RSD	14.6	≤20	0.5186	0.200

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
m,p-Xylenes	TRG	Average RF	% RSD	5.8	≤20	0.6866	0.100
o-Xylene	TRG	Average RF	% RSD	7.1	≤20	0.6667	0.300
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	4.3	≤20	0.4975	0.100
trans-1,3-Dichloropropene	TRG	Quadratic	COD	0.9973	≥0.99	0.4668	0.100

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

#	Lab Code	Sample Name	File Location	Acquisition Date
10	RC1800065-10	50 PPB ICV	I:\ACQUDATA\MSVOA14\Data\060818\C8025.D	06/08/2018 17:33

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Acetone	50.0	53.4	2.856E-1	3.052E-1	6.84	±30	Average RF
Benzene	50.0	53.0	1.274E0	1.351E0	6.05	±30	Average RF
Bromodichloromethane	50.0	54.3	4.204E-1	4.57E-1	8.69	±30	Average RF
Bromoform	50.0	54.5	2.306E-1	2.6E-1	8.92	±30	Quadratic
Bromomethane	50.0	54.2	6.275E-1	5.717E-1	8.38	±30	Quadratic
2-Butanone (MEK)	50.0	48.1	3.94E-1	3.787E-1	-3.880	±30	Average RF
Carbon Disulfide	50.0	51.4	1.246E0	1.281E0	2.82	±30	Average RF
Carbon Tetrachloride	50.0	56.9	3.491E-1	4.193E-1	13.89	±30	Quadratic
Chlorobenzene	50.0	50.3	1.063E0	1.068E0	0.538	±30	Average RF
Chloroethane	50.0	44.4	4.407E-1	3.909E-1	-11.295	±30	Average RF
Chloroform	50.0	53.6	9.163E-1	9.825E-1	7.22	±30	Average RF
Chloromethane	50.0	50.8	6.609E-1	6.719E-1	1.66	±30	Average RF
Dibromochloromethane	50.0	52.3	3.604E-1	3.859E-1	4.61	±30	Quadratic
1,1-Dichloroethane	50.0	53.9	9.06E-1	9.764E-1	7.77	±30	Average RF
1,2-Dichloroethane	50.0	50.4	5.161E-1	5.206E-1	0.886	±30	Average RF
1,1-Dichloroethene	50.0	53.3	4.356E-1	4.643E-1	6.60	±30	Average RF
cis-1,2-Dichloroethene	50.0	51.3	5.851E-1	5.999E-1	2.54	±30	Average RF
trans-1,2-Dichloroethene	50.0	52.6	4.975E-1	5.233E-1	5.20	±30	Average RF
1,2-Dichloropropane	50.0	53.5	3.433E-1	3.675E-1	7.05	±30	Average RF
cis-1,3-Dichloropropene	50.0	55.6	5.186E-1	5.762E-1	11.12	±30	Average RF
trans-1,3-Dichloropropene	50.0	54.3	4.668E-1	5.182E-1	8.55	±30	Quadratic
Ethylbenzene	50.0	52.3	5.491E-1	5.74E-1	4.54	±30	Average RF
2-Hexanone	50.0	51.9	3.544E-1	3.678E-1	3.77	±30	Average RF
Methylene Chloride	50.0	47.3	5.542E-1	5.245E-1	-5.363	±30	Average RF
4-Methyl-2-pentanone (MIBK)	50.0	51.9	4.193E-1	4.351E-1	3.76	±30	Average RF
Styrene	50.0	54.0	1.129E0	1.218E0	7.93	±30	Average RF
1,1,2,2-Tetrachloroethane	50.0	52.7	8.906E-1	9.387E-1	5.40	±30	Average RF
Tetrachloroethene	50.0	51.2	3.017E-1	3.088E-1	2.36	±30	Average RF
Toluene	50.0	53.0	1.411E0	1.497E0	6.09	±30	Average RF
1,1,1-Trichloroethane	50.0	55.8	7.773E-1	8.671E-1	11.55	±30	Average RF
1,1,2-Trichloroethane	50.0	51.1	3.338E-1	3.408E-1	2.11	±30	Average RF
Trichloroethene	50.0	51.9	3.707E-1	3.85E-1	3.85	±30	Average RF
Vinyl Chloride	50.0	56.7	6.36E-1	7.218E-1	13.50	±30	Average RF

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 6/8/2018

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1800065 **Signal ID:** 1
Instrument ID: R-MS-14

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
o-Xylene	50.0	52.9	6.667E-1	7.061E-1	5.90	±30	Average RF
m,p-Xylenes	100	105	6.866E-1	7.228E-1	5.27	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	50.0	4.954E-1	4.959E-1	0.098	±30	Average RF
Toluene-d8	50.0	49.8	1.284E0	1.278E0	-0.450	±30	Average RF
Dibromofluoromethane	50.0	50.0	3.342E-1	3.343E-1	0.036	±30	Average RF

Client: Unicorn Management Consultants
Project: Union Road/2011-200

Service Request: R1808910
Date Analyzed: 09/20/18 22:17

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\MSVOA14\Data\092018\F0519.D\
Signal ID: 1

Calibration Date: 6/8/2018
Calibration ID: RC1800065
Analysis Lot: 607574
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Acetone	50.0	49.4	0.2856	0.2823	-1.2	NA	±20	Average RF
Benzene	50.0	50.4	1.2736	1.2829	0.7	NA	±20	Average RF
Bromodichloromethane	50.0	52.5	0.4204	0.4413	5.0	NA	±20	Average RF
Bromoform	50.0	57.2	0.2306	0.2754	NA	14.4	±20	Quadratic
Bromomethane	50.0	31.5	0.6275	0.3771	NA	-37.1*	±20	Quadratic
2-Butanone (MEK)	50.0	48.6	0.394	0.3826	-2.9	NA	±20	Average RF
Carbon Disulfide	50.0	39.9	1.2457	0.995	-20.1	NA	±20	Average RF
Carbon Tetrachloride	50.0	55.1	0.3491	0.4043	NA	10.1	±20	Quadratic
Chlorobenzene	50.0	50.4	1.0625	1.0712	0.8	NA	±20	Average RF
Chloroethane	50.0	49.7	0.4407	0.438	-0.6	NA	±20	Average RF
Chloroform	50.0	47.4	0.9163	0.8691	-5.2	NA	±20	Average RF
Chloromethane	50.0	47.4	0.6609	0.6268	-5.2	NA	±20	Average RF
Dibromochloromethane	50.0	53.7	0.3604	0.3974	NA	7.5	±20	Quadratic
1,1-Dichloroethane	50.0	46.4	0.906	0.8416	-7.1	NA	±20	Average RF
1,2-Dichloroethane	50.0	54.0	0.5161	0.5568	7.9	NA	±20	Average RF
1,1-Dichloroethene	50.0	47.1	0.4356	0.4101	-5.8	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	45.5	0.5851	0.5321	-9.0	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	45.8	0.4975	0.4554	-8.5	NA	±20	Average RF
1,2-Dichloropropane	50.0	51.7	0.3433	0.3547	3.3	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	50.0	0.5186	0.5186	0.0	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	48.6	0.4668	0.4591	NA	-2.8	±20	Quadratic
Ethylbenzene	50.0	50.7	0.5491	0.5562	1.3	NA	±20	Average RF
2-Hexanone	50.0	56.6	0.3544	0.4013	13.2	NA	±20	Average RF
Methylene Chloride	50.0	43.6	0.5542	0.4835	-12.7	NA	±20	Average RF
4-Methyl-2-pentanone (MIBK)	50.0	57.1	0.4193	0.4791	14.3	NA	±20	Average RF
Styrene	50.0	53.0	1.1289	1.1956	5.9	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	57.5	0.8906	1.0233	14.9	NA	±20	Average RF
Tetrachloroethene	50.0	52.7	0.3017	0.3178	5.4	NA	±20	Average RF
Toluene	50.0	51.2	1.411	1.4454	2.4	NA	±20	Average RF
1,1,1-Trichloroethane	50.0	45.2	0.7773	0.7025	-9.6	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	52.9	0.3338	0.3532	5.8	NA	±20	Average RF
Trichloroethene	50.0	48.0	0.3707	0.3557	-4.1	NA	±20	Average RF
Vinyl Chloride	50.0	47.5	0.636	0.6036	-5.1	NA	±20	Average RF
o-Xylene	50.0	52.5	0.6667	0.7002	5.0	NA	±20	Average RF
m,p-Xylenes	100	102	0.6866	0.7002	2.0	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit

Client: Unicorn Management Consultants
Project: Union Road/2011-200

Service Request: R1808910
Date Analyzed: 09/20/18 22:17

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\MSVOA14\Data\092018\F0519.D\
Signal ID: 1

Calibration Date: 6/8/2018
Calibration ID: RC1800065
Analysis Lot: 607574
Units: ug/L

4-Bromofluorobenzene	50.0	50.8	0.4954	0.5029	1.5	NA	±20	Average RF
Toluene-d8	50.0	48.9	1.2838	1.256	-2.2	NA	±20	Average RF
Dibromofluoromethane	50.0	49.4	0.3342	0.3302	-1.2	NA	±20	Average RF

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**607574
Instrument ID:R-MS-14

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\MSVOA14\Data\092018\F0518.D\	ZZZZZZZ	ZZZZZZZ	9/20/2018	21:54:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0519.D\	Continuing Calibration Verification	RQ1810045-02	9/20/2018	22:17:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0520.D\	Lab Control Sample	RQ1810045-03	9/20/2018	22:39:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0522.D\	Method Blank	RQ1810045-04	9/20/2018	23:24:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0523.D\	Trip Blank	R1808910-005	9/20/2018	23:46:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0524.D\	TB-A	R1808910-015	9/21/2018	00:09:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0525.D\	TB-B	R1808910-016	9/21/2018	00:31:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0526.D\	MW-12D	R1808910-001	9/21/2018	00:53:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0527.D\	MW-11M	R1808910-002	9/21/2018	01:16:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0528.D\	MW-13S	R1808910-003	9/21/2018	01:38:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0529.D\	MW-13M	R1808910-004	9/21/2018	02:01:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0530.D\	MW-14S	R1808910-006	9/21/2018	02:23:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0531.D\	MW-11S	R1808910-007	9/21/2018	02:45:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0532.D\	MW-10S	R1808910-008	9/21/2018	03:08:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0533.D\	MW-10M	R1808910-009	9/21/2018	03:30:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0534.D\	MW-12S	R1808910-010	9/21/2018	03:52:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0535.D\	MW-12M	R1808910-011	9/21/2018	04:15:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0536.D\	MW-10D	R1808910-017	9/21/2018	04:37:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0537.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	05:00:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0538.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	05:22:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0539.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	05:44:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0540.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	06:07:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0541.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	06:29:00	

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**607574
Instrument ID:R-MS-14

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\MSVOA14\Data\092018\F0542.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	06:51:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0543.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	07:14:00	
I:\ACQUDATA\MSVOA14\Data\092018\F0544.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	07:36:00	

Analysis: 8260C	Analyst: F. Naegler	pH strips: 204018	Tune Method: W060818.M
Date: 9/20/18 #2	Balance ID: —	ResCl strips:	Run Method: ↓
Instr. MS14	50 mL Class A used for dilution FV	Syringes: 190697 / 77958	LIMS Run#: 607574

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
31	TUNE							F0518	Y	
32	CCV							19	Y	
33	LCS-ACID							20	Y	
34	MBLK							21	(N)	
35	MBLK							22	Y	
36	R1808910-005	1.0		6691	4	1	<2	23	Y	
37	-015	1.0				1	<2	24	Y	
38	-016	1.0				1	<2	25	Y	
39	-001	1.0				1	<2	26	Y	
40	-002	1.0				1	<2	27	Y	
41	-003	1.0				1	<2	28	Y	
42	-004	1.0				1	<2	29	Y	
43	-006	1.0				1	<2	30	Y	
44	-007	1.0				1	<2	31	Y	
45	-008	1.0				1	<2	32	Y	
46	-009	1.0				1	<2	33	Y	
47	-010	1.0				1	<2	34	Y	
48	-011	1.0				1	<2	35	Y	
49	-017	1.0		↓	↓	1	<2	36	Y	
50	R1808899-004	1.0		6813	4	1	<2	37	Y	
51	-001	1.0				1	<2	38	Y	
52	-002	1.0				1	<2	39	Y	
53	-003	1.0		↓	↓	1	<2	40	Y	
54	R1808903-001	1.0		18730	2	1	<2	41	Y	
55	-002	20.0	2.5/50mL	↓	↓	1	<2	42	(Y)	Rpt 1/50
56	R1808899-003MS	1.0		6813	4	2	<2	43	Y	
57	-003MSD	1.0		↓	↓	3	<2	44	Y	
58	BLK							45	Y	
59								46	Y	
60								↓ 47	Y	
										FJ 9/21/18

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr — : —

Surrogate 50 : 193101

Internal Std 50 : 193099

Reagents:

T/G Primary 500 : 193033 - 5uL | 5mL

HSL Primary ↓ : 192928 - | ↓ (CCV)

Fr Primary : 193220 - |

DCC Primary ↓ : 193306 - ↓

Primary :

Fr Secondary 200 : 192808 - 5mL | -12.5uL

T/G Secondary 500 : 192785 - 2L | 5mL (LCS) -5mL ↓ | 5mL (SPK)

HSL Secondary ↓ : 192657 |

DCC Secondary ↓ : 191355 - ↓

Secondary :

Runlog-MSVOAr4 1/17/17

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Units:**	ug/L
Lab Code:	R1808910-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 18:32	9/19/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Methylphenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2-Nitroaniline	ND U	47	1	09/24/18 18:32	9/19/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 18:32	9/19/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 18:32	9/19/18	
3-Nitroaniline	ND U	47	1	09/24/18 18:32	9/19/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 18:32	9/19/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:32	9/19/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 18:32	9/19/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:32	9/19/18	
4-Nitroaniline	ND U	47	1	09/24/18 18:32	9/19/18	
4-Nitrophenol	ND U	47	1	09/24/18 18:32	9/19/18	
Acenaphthene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Acenaphthylene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Anthracene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 18:32	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 18:32	9/19/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 18:32	9/19/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 18:32	9/19/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 18:32	9/19/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Carbazole	ND U	9.4	1	09/24/18 18:32	9/19/18	
Chrysene	ND U	9.4	1	09/24/18 18:32	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Units:**	ug/L
Lab Code:	R1808910-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Dibenzofuran	ND U	9.4	1	09/24/18 18:32	9/19/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 18:32	9/19/18	
Fluoranthene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Fluorene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Hexachloroethane	ND U	9.4	1	09/24/18 18:32	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Isophorone	ND U	9.4	1	09/24/18 18:32	9/19/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 18:32	9/19/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 18:32	9/19/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 18:32	9/19/18	
Naphthalene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Nitrobenzene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 18:32	9/19/18	
Phenanthrene	ND U	9.4	1	09/24/18 18:32	9/19/18	
Phenol	ND U	9.4	1	09/24/18 18:32	9/19/18	
Pyrene	ND U	9.4	1	09/24/18 18:32	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	97	35 - 141	09/24/18 18:32	
2-Fluorobiphenyl	78	31 - 118	09/24/18 18:32	
2-Fluorophenol	40	10 - 105	09/24/18 18:32	
Nitrobenzene-d5	80	31 - 110	09/24/18 18:32	
Phenol-d6	29	10 - 107	09/24/18 18:32	
p-Terphenyl-d14	76	10 - 165	09/24/18 18:32	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Units:**	ug/L
Lab Code:	R1808910-002	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
1,2-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
1,3-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
1,4-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2,4,5-Trichlorophenol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2,4,6-Trichlorophenol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2,4-Dichlorophenol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2,4-Dimethylphenol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2,4-Dinitrophenol	ND	U	47	1	09/24/18 19:00	9/19/18	
2,4-Dinitrotoluene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2,6-Dinitrotoluene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2-Chloronaphthalene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2-Chlorophenol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2-Methylnaphthalene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2-Methylphenol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2-Nitroaniline	ND	U	47	1	09/24/18 19:00	9/19/18	
2-Nitrophenol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
3,3'-Dichlorobenzidine	ND	U	9.4	1	09/24/18 19:00	9/19/18	
3- and 4-Methylphenol Coelution	ND	U	9.4	1	09/24/18 19:00	9/19/18	
3-Nitroaniline	ND	U	47	1	09/24/18 19:00	9/19/18	
4,6-Dinitro-2-methylphenol	ND	U	47	1	09/24/18 19:00	9/19/18	
4-Bromophenyl Phenyl Ether	ND	U	9.4	1	09/24/18 19:00	9/19/18	
4-Chloro-3-methylphenol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
4-Chloroaniline	ND	U	9.4	1	09/24/18 19:00	9/19/18	
4-Chlorophenyl Phenyl Ether	ND	U	9.4	1	09/24/18 19:00	9/19/18	
4-Nitroaniline	ND	U	47	1	09/24/18 19:00	9/19/18	
4-Nitrophenol	ND	U	47	1	09/24/18 19:00	9/19/18	
Acenaphthene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Acenaphthylene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Anthracene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Benz(a)anthracene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Benzo(a)pyrene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Benzo(b)fluoranthene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Benzo(g,h,i)perylene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Benzo(k)fluoranthene	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Benzyl Alcohol	ND	U	9.4	1	09/24/18 19:00	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Bis(2-chloroethoxy)methane	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Bis(2-chloroethyl) Ether	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Bis(2-ethylhexyl) Phthalate	ND	U	9.7	1	09/24/18 19:00	9/19/18	
Butyl Benzyl Phthalate	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Carbazole	ND	U	9.4	1	09/24/18 19:00	9/19/18	
Chrysene	ND	U	9.4	1	09/24/18 19:00	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Units:**	ug/L
Lab Code:	R1808910-002	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:00	9/19/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:00	9/19/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Fluorene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:00	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Isophorone	ND U	9.4	1	09/24/18 19:00	9/19/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:00	9/19/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:00	9/19/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:00	9/19/18	
Naphthalene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:00	9/19/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:00	9/19/18	
Phenol	ND U	9.4	1	09/24/18 19:00	9/19/18	
Pyrene	ND U	9.4	1	09/24/18 19:00	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	96	35 - 141	09/24/18 19:00	
2-Fluorobiphenyl	76	31 - 118	09/24/18 19:00	
2-Fluorophenol	37	10 - 105	09/24/18 19:00	
Nitrobenzene-d5	86	31 - 110	09/24/18 19:00	
Phenol-d6	28	10 - 107	09/24/18 19:00	
p-Terphenyl-d14	52	10 - 165	09/24/18 19:00	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Units:**	ug/L
Lab Code:	R1808910-003	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
1,2-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
1,3-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
1,4-Dichlorobenzene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4,5-Trichlorophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4,6-Trichlorophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4-Dichlorophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4-Dimethylphenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,4-Dinitrophenol	ND	U	47	1	09/24/18 19:28	9/19/18	
2,4-Dinitrotoluene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,6-Dinitrotoluene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Chloronaphthalene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Chlorophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Methylnaphthalene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Methylphenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2-Nitroaniline	ND	U	47	1	09/24/18 19:28	9/19/18	
2-Nitrophenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
3,3'-Dichlorobenzidine	ND	U	9.4	1	09/24/18 19:28	9/19/18	
3- and 4-Methylphenol Coelution	ND	U	9.4	1	09/24/18 19:28	9/19/18	
3-Nitroaniline	ND	U	47	1	09/24/18 19:28	9/19/18	
4,6-Dinitro-2-methylphenol	ND	U	47	1	09/24/18 19:28	9/19/18	
4-Bromophenyl Phenyl Ether	ND	U	9.4	1	09/24/18 19:28	9/19/18	
4-Chloro-3-methylphenol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
4-Chloroaniline	ND	U	9.4	1	09/24/18 19:28	9/19/18	
4-Chlorophenyl Phenyl Ether	ND	U	9.4	1	09/24/18 19:28	9/19/18	
4-Nitroaniline	ND	U	47	1	09/24/18 19:28	9/19/18	
4-Nitrophenol	ND	U	47	1	09/24/18 19:28	9/19/18	
Acenaphthene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Acenaphthylene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Anthracene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benz(a)anthracene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzo(a)pyrene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzo(b)fluoranthene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzo(g,h,i)perylene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzo(k)fluoranthene	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Benzyl Alcohol	ND	U	9.4	1	09/24/18 19:28	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Bis(2-chloroethoxy)methane	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Bis(2-chloroethyl) Ether	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Bis(2-ethylhexyl) Phthalate	**14**		9.7	1	09/24/18 19:28	9/19/18	
Butyl Benzyl Phthalate	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Carbazole	ND	U	9.4	1	09/24/18 19:28	9/19/18	
Chrysene	ND	U	9.4	1	09/24/18 19:28	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Units:**	ug/L
Lab Code:	R1808910-003	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:28	9/19/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:28	9/19/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:28	9/19/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:28	9/19/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:28	9/19/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Fluorene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:28	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Isophorone	ND U	9.4	1	09/24/18 19:28	9/19/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:28	9/19/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:28	9/19/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:28	9/19/18	
Naphthalene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:28	9/19/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:28	9/19/18	
Phenol	ND U	9.4	1	09/24/18 19:28	9/19/18	
Pyrene	ND U	9.4	1	09/24/18 19:28	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	102	35 - 141	09/24/18 19:28	
2-Fluorobiphenyl	79	31 - 118	09/24/18 19:28	
2-Fluorophenol	45	10 - 105	09/24/18 19:28	
Nitrobenzene-d5	80	31 - 110	09/24/18 19:28	
Phenol-d6	32	10 - 107	09/24/18 19:28	
p-Terphenyl-d14	45	10 - 165	09/24/18 19:28	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Units:**	ug/L
Lab Code:	R1808910-004	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 19:56	9/19/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Methylphenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2-Nitroaniline	ND U	47	1	09/24/18 19:56	9/19/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 19:56	9/19/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 19:56	9/19/18	
3-Nitroaniline	ND U	47	1	09/24/18 19:56	9/19/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 19:56	9/19/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:56	9/19/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 19:56	9/19/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:56	9/19/18	
4-Nitroaniline	ND U	47	1	09/24/18 19:56	9/19/18	
4-Nitrophenol	ND U	47	1	09/24/18 19:56	9/19/18	
Acenaphthene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Acenaphthylene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Anthracene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 19:56	9/19/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 19:56	9/19/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 19:56	9/19/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 19:56	9/19/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 19:56	9/19/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Carbazole	ND U	9.4	1	09/24/18 19:56	9/19/18	
Chrysene	ND U	9.4	1	09/24/18 19:56	9/19/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Units:**	ug/L
Lab Code:	R1808910-004	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:56	9/19/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:56	9/19/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Fluorene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:56	9/19/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Isophorone	ND U	9.4	1	09/24/18 19:56	9/19/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:56	9/19/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:56	9/19/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:56	9/19/18	
Naphthalene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:56	9/19/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:56	9/19/18	
Phenol	ND U	9.4	1	09/24/18 19:56	9/19/18	
Pyrene	ND U	9.4	1	09/24/18 19:56	9/19/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	99	35 - 141	09/24/18 19:56	
2-Fluorobiphenyl	81	31 - 118	09/24/18 19:56	
2-Fluorophenol	40	10 - 105	09/24/18 19:56	
Nitrobenzene-d5	78	31 - 110	09/24/18 19:56	
Phenol-d6	27	10 - 107	09/24/18 19:56	
p-Terphenyl-d14	75	10 - 165	09/24/18 19:56	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 17:22	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 17:22	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 17:22	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 17:22	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 17:22	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 17:22	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 17:22	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 17:22	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 17:22	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 17:22	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 17:22	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 17:22	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 17:22	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 17:22	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 17:22	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 17:22	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 17:22	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 17:22	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 17:22	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 17:22	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 17:22	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 17:22	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 17:22	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 17:22	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 17:22	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 17:22	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 17:22	9/20/18	
Phenol	ND U	9.4	1	09/24/18 17:22	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 17:22	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	79	35 - 141	09/24/18 17:22	
2-Fluorobiphenyl	76	31 - 118	09/24/18 17:22	
2-Fluorophenol	46	10 - 105	09/24/18 17:22	
Nitrobenzene-d5	75	31 - 110	09/24/18 17:22	
Phenol-d6	34	10 - 107	09/24/18 17:22	
p-Terphenyl-d14	42	10 - 165	09/24/18 17:22	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 17:49	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 17:49	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 17:49	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 17:49	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 17:49	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 17:49	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 17:49	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 17:49	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 17:49	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 17:49	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 17:49	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 17:49	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 17:49	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 17:49	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 17:49	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 17:49	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 17:49	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 17:49	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 17:49	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 17:49	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 17:49	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 17:49	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 17:49	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 17:49	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 17:49	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 17:49	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 17:49	9/20/18	
Phenol	ND U	9.4	1	09/24/18 17:49	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 17:49	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	80	35 - 141	09/24/18 17:49	
2-Fluorobiphenyl	89	31 - 118	09/24/18 17:49	
2-Fluorophenol	45	10 - 105	09/24/18 17:49	
Nitrobenzene-d5	78	31 - 110	09/24/18 17:49	
Phenol-d6	32	10 - 107	09/24/18 17:49	
p-Terphenyl-d14	77	10 - 165	09/24/18 17:49	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 18:17	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 18:17	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 18:17	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 18:17	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 18:17	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 18:17	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:17	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 18:17	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:17	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 18:17	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 18:17	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 18:17	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 18:17	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 18:17	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 18:17	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 18:17	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 18:17	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 18:17	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 18:17	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 18:17	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 18:17	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 18:17	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 18:17	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 18:17	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 18:17	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 18:17	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 18:17	9/20/18	
Phenol	ND U	9.4	1	09/24/18 18:17	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 18:17	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	80	35 - 141	09/24/18 18:17	
2-Fluorobiphenyl	80	31 - 118	09/24/18 18:17	
2-Fluorophenol	42	10 - 105	09/24/18 18:17	
Nitrobenzene-d5	69	31 - 110	09/24/18 18:17	
Phenol-d6	31	10 - 107	09/24/18 18:17	
p-Terphenyl-d14	55	10 - 165	09/24/18 18:17	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 18:46	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 18:46	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 18:46	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 18:46	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 18:46	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 18:46	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:46	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 18:46	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 18:46	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 18:46	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 18:46	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 18:46	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 18:46	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 18:46	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 18:46	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 18:46	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 18:46	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 18:46	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 18:46	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 18:46	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 18:46	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 18:46	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 18:46	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 18:46	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 18:46	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 18:46	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 18:46	9/20/18	
Phenol	ND U	9.4	1	09/24/18 18:46	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 18:46	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	81	35 - 141	09/24/18 18:46	
2-Fluorobiphenyl	85	31 - 118	09/24/18 18:46	
2-Fluorophenol	44	10 - 105	09/24/18 18:46	
Nitrobenzene-d5	77	31 - 110	09/24/18 18:46	
Phenol-d6	33	10 - 107	09/24/18 18:46	
p-Terphenyl-d14	64	10 - 165	09/24/18 18:46	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 19:13	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 19:13	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 19:13	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 19:13	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 19:13	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 19:13	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:13	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 19:13	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:13	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 19:13	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 19:13	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 19:13	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 19:13	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 19:13	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 19:13	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 19:13	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 19:13	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 19:13	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:13	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:13	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:13	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 19:13	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:13	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:13	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:13	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:13	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:13	9/20/18	
Phenol	ND U	9.4	1	09/24/18 19:13	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 19:13	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	81	35 - 141	09/24/18 19:13	
2-Fluorobiphenyl	86	31 - 118	09/24/18 19:13	
2-Fluorophenol	45	10 - 105	09/24/18 19:13	
Nitrobenzene-d5	78	31 - 110	09/24/18 19:13	
Phenol-d6	33	10 - 107	09/24/18 19:13	
p-Terphenyl-d14	82	10 - 165	09/24/18 19:13	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 19:41	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 19:41	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 19:41	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 19:41	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 19:41	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 19:41	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:41	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 19:41	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 19:41	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 19:41	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 19:41	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 19:41	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 19:41	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 19:41	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 19:41	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 19:41	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 19:41	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 19:41	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 19:41	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 19:41	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 19:41	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 19:41	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 19:41	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 19:41	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 19:41	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 19:41	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 19:41	9/20/18	
Phenol	ND U	9.4	1	09/24/18 19:41	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 19:41	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	75	35 - 141	09/24/18 19:41	
2-Fluorobiphenyl	79	31 - 118	09/24/18 19:41	
2-Fluorophenol	42	10 - 105	09/24/18 19:41	
Nitrobenzene-d5	73	31 - 110	09/24/18 19:41	
Phenol-d6	35	10 - 107	09/24/18 19:41	
p-Terphenyl-d14	70	10 - 165	09/24/18 19:41	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Units:**	ug/L
Lab Code:	R1808910-017	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
1,2-Dichlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
1,3-Dichlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
1,4-Dichlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4,5-Trichlorophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4,6-Trichlorophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4-Dichlorophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4-Dimethylphenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,4-Dinitrophenol	ND U	47	1	09/24/18 20:09	9/20/18	
2,4-Dinitrotoluene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,6-Dinitrotoluene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Chloronaphthalene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Chlorophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Methylnaphthalene	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Methylphenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2-Nitroaniline	ND U	47	1	09/24/18 20:09	9/20/18	
2-Nitrophenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
3,3'-Dichlorobenzidine	ND U	9.4	1	09/24/18 20:09	9/20/18	
3- and 4-Methylphenol Coelution	ND U	9.4	1	09/24/18 20:09	9/20/18	
3-Nitroaniline	ND U	47	1	09/24/18 20:09	9/20/18	
4,6-Dinitro-2-methylphenol	ND U	47	1	09/24/18 20:09	9/20/18	
4-Bromophenyl Phenyl Ether	ND U	9.4	1	09/24/18 20:09	9/20/18	
4-Chloro-3-methylphenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
4-Chloroaniline	ND U	9.4	1	09/24/18 20:09	9/20/18	
4-Chlorophenyl Phenyl Ether	ND U	9.4	1	09/24/18 20:09	9/20/18	
4-Nitroaniline	ND U	47	1	09/24/18 20:09	9/20/18	
4-Nitrophenol	ND U	47	1	09/24/18 20:09	9/20/18	
Acenaphthene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Acenaphthylene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Anthracene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benz(a)anthracene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzo(a)pyrene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzo(b)fluoranthene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzo(g,h,i)perylene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzo(k)fluoranthene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Benzyl Alcohol	ND U	9.4	1	09/24/18 20:09	9/20/18	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	1	09/24/18 20:09	9/20/18	
Bis(2-chloroethoxy)methane	ND U	9.4	1	09/24/18 20:09	9/20/18	
Bis(2-chloroethyl) Ether	ND U	9.4	1	09/24/18 20:09	9/20/18	
Bis(2-ethylhexyl) Phthalate	ND U	9.7	1	09/24/18 20:09	9/20/18	
Butyl Benzyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Carbazole	ND U	9.4	1	09/24/18 20:09	9/20/18	
Chrysene	ND U	9.4	1	09/24/18 20:09	9/20/18	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Units:**	ug/L
Lab Code:	R1808910-017	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Di-n-butyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Di-n-octyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Dibenz(a,h)anthracene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Dibenzofuran	ND U	9.4	1	09/24/18 20:09	9/20/18	
Diethyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Dimethyl Phthalate	ND U	9.4	1	09/24/18 20:09	9/20/18	
Fluoranthene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Fluorene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Hexachlorobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Hexachlorobutadiene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Hexachlorocyclopentadiene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Hexachloroethane	ND U	9.4	1	09/24/18 20:09	9/20/18	
Indeno(1,2,3-cd)pyrene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Isophorone	ND U	9.4	1	09/24/18 20:09	9/20/18	
N-Nitrosodi-n-propylamine	ND U	9.4	1	09/24/18 20:09	9/20/18	
N-Nitrosodimethylamine	ND U	9.4	1	09/24/18 20:09	9/20/18	
N-Nitrosodiphenylamine	ND U	9.4	1	09/24/18 20:09	9/20/18	
Naphthalene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Nitrobenzene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Pentachlorophenol (PCP)	ND U	47	1	09/24/18 20:09	9/20/18	
Phenanthrene	ND U	9.4	1	09/24/18 20:09	9/20/18	
Phenol	ND U	9.4	1	09/24/18 20:09	9/20/18	
Pyrene	ND U	9.4	1	09/24/18 20:09	9/20/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	67	35 - 141	09/24/18 20:09	
2-Fluorobiphenyl	69	31 - 118	09/24/18 20:09	
2-Fluorophenol	33	10 - 105	09/24/18 20:09	
Nitrobenzene-d5	62	31 - 110	09/24/18 20:09	
Phenol-d6	27	10 - 107	09/24/18 20:09	
p-Terphenyl-d14	58	10 - 165	09/24/18 20:09	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP386.D
Acq On : 24 Sep 2018 6:32 pm
Operator : J.Misiurewicz
Sample : R1808910-001
Misc : 322187 8270D
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 26 08:49:16 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

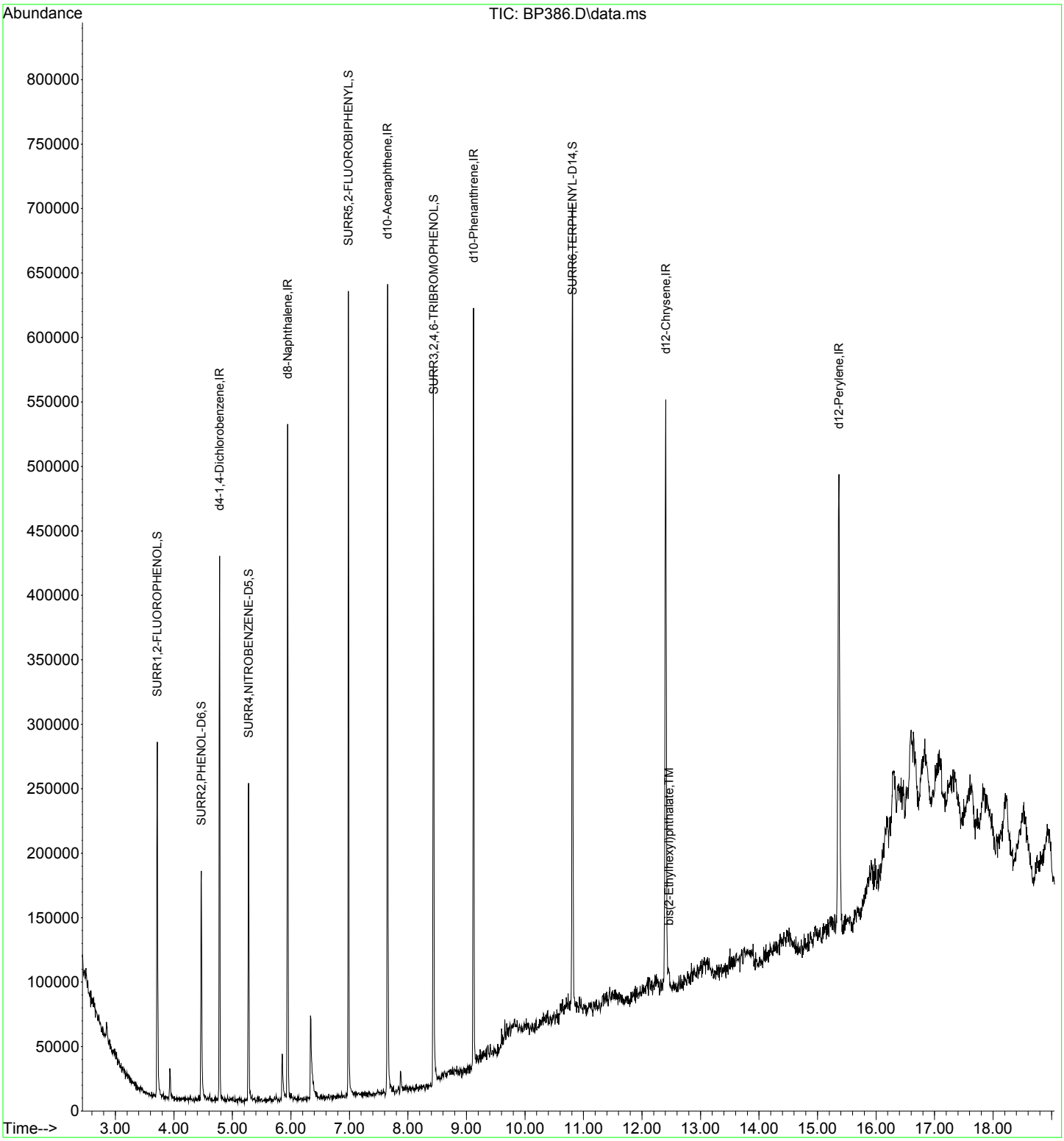
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	63350	40.00	ppm	0.00
33) d8-Naphthalene	5.946	136	237496	40.00	ppm	0.00
57) d10-Acenaphthene	7.652	164	129251	40.00	ppm	0.00
91) d10-Phenanthrene	9.123	188	213914	40.00	ppm	0.00
117) d12-Chrysene	12.407	240	240062	40.00	ppm	0.00
135) d12-Perylene	15.365	264	260258	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.715	112	83198	39.69	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 19.84%			
12) SURR2,PHENOL-D6	4.469	99	73948	28.75	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 14.37%			
34) SURR4,NITROBENZENE-D5	5.277	82	87327	39.94	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 39.94%			
63) SURR5,2-FLUOROBIPHENYL	6.983	172	176530	39.04	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 39.04%			
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	72452	97.00	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 48.50%			
124) SURR6,TERPHENYL-D14	10.813	244	208708	38.12	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 38.12%			
Target Compounds						Qvalue
134) bis(2-Ethylhexyl)phtha...	12.460	149	5247	1.024	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

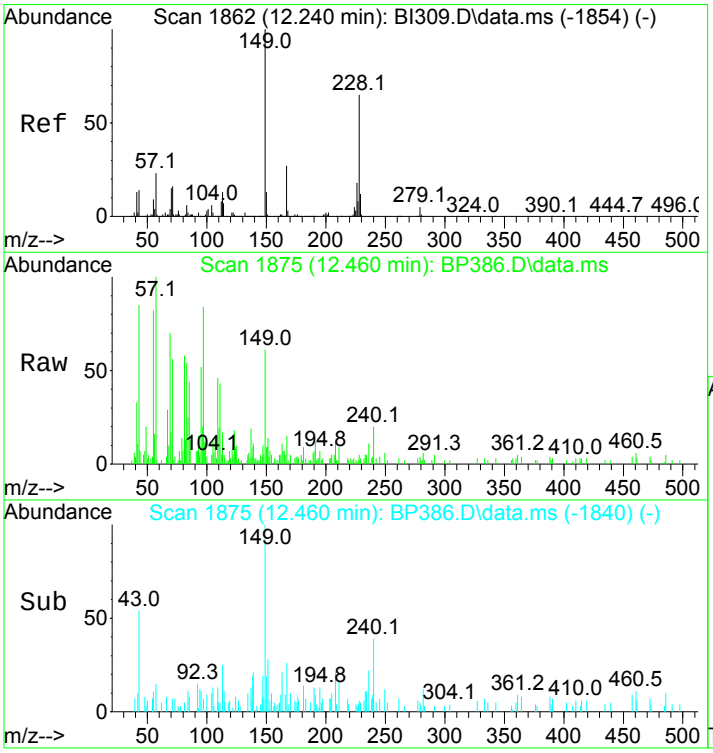
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP386.D
Acq On : 24 Sep 2018 6:32 pm
Operator : J.Misiurewicz
Sample : R1808910-001
Misc : 322187 8270D
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 26 08:49:16 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration



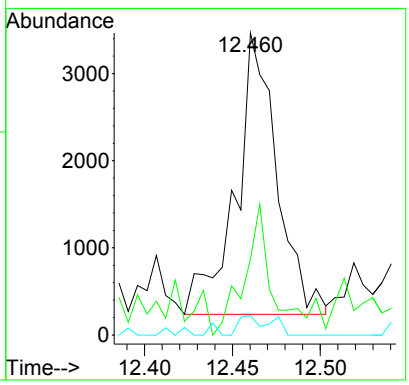
1st 09/26/18
2nd 09/26/18



#134
bis(2-Ethylhexyl)phthalate
Concen: 1.02 ppm
RT: 12.460 min Scan# 1875
Delta R.T. -0.015 min
Lab File: BP386.D
Acq: 24 Sep 2018 6:32 pm

Tgt Ion:149 Resp: 5247

Ion	Ratio	Lower	Upper
149	100		
167	24.7	8.6	48.6
279	5.9	0.0	26.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP387.D
Acq On : 24 Sep 2018 7:00 pm
Operator : J.Misiurewicz
Sample : R1808910-002
Misc : 322187 8270D
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 26 08:49:25 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

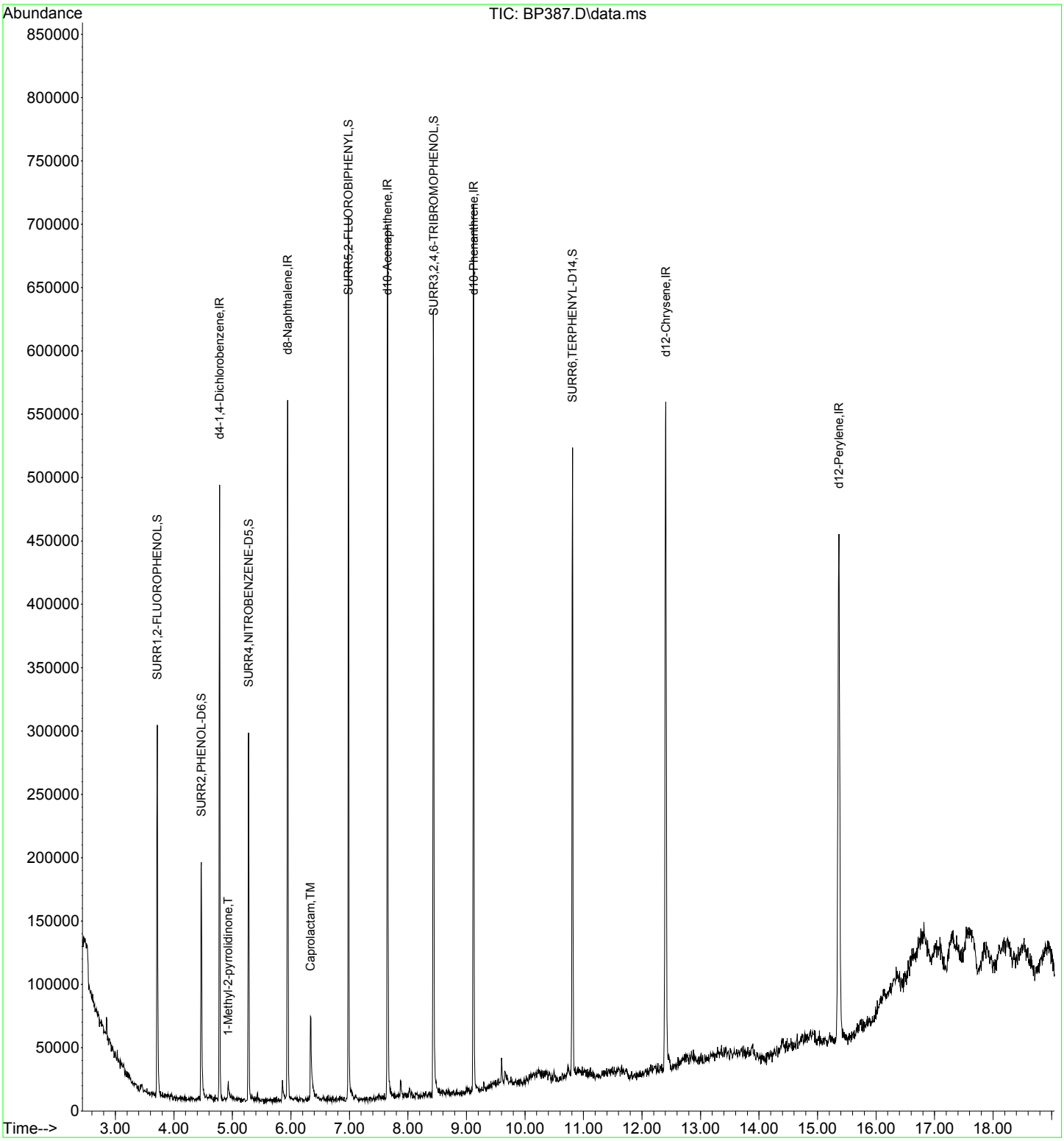
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	72930	40.00	ppm	0.00
33) d8-Naphthalene	5.946	136	263996	40.00	ppm	0.00
57) d10-Acenaphthene	7.652	164	148230	40.00	ppm	0.00
91) d10-Phenanthrene	9.123	188	248700	40.00	ppm	0.00
117) d12-Chrysene	12.407	240	278407	40.00	ppm	0.00
135) d12-Perylene	15.365	264	298955	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.715	112	89496	37.09	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 18.55%			
12) SURR2,PHENOL-D6	4.469	99	82145	27.74	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 13.87%			
34) SURR4,NITROBENZENE-D5	5.277	82	104913	43.17	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 43.17%			
63) SURR5,2-FLUOROBIPHENYL	6.983	172	197762	38.13	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 38.13%			
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	82378	96.17	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 48.09%			
124) SURR6,TERPHENYL-D14	10.813	244	164386	25.89	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 25.89%			
Target Compounds						Qvalue
21) 1-Methyl-2-pyrrolidinone	4.929	99	4983	3.027	ppm	# 83
52) Caprolactam	6.336	113	12126	17.118	ppm	95

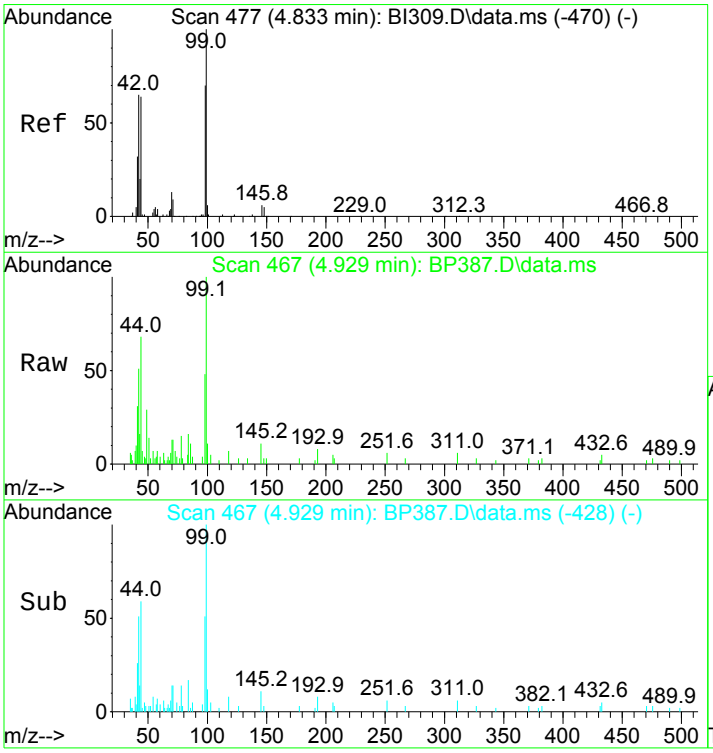
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP387.D
Acq On : 24 Sep 2018 7:00 pm
Operator : J.Misiurewicz
Sample : R1808910-002
Misc : 322187 8270D
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 26 08:49:25 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

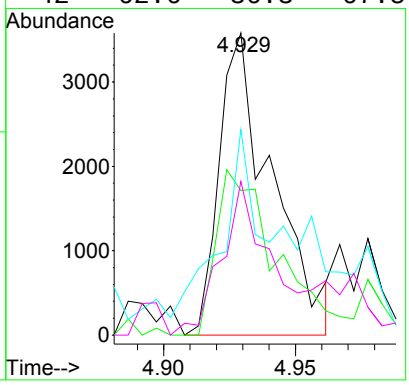


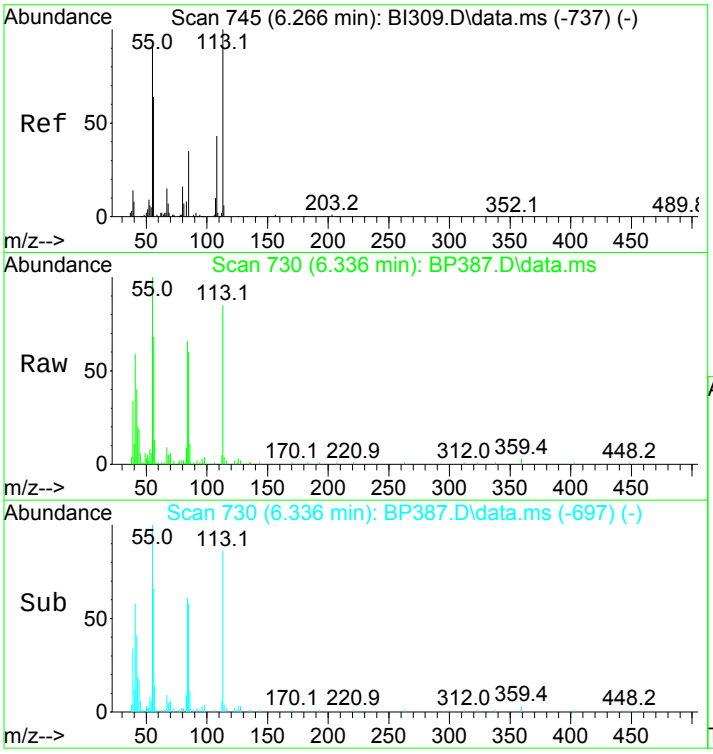


#21
1-Methyl-2-pyrrolidinone
Concen: 3.03 ppm
RT: 4.929 min Scan# 467
Delta R.T. 0.010 min
Lab File: BP387.D
Acq: 24 Sep 2018 7:00 pm

Tgt Ion: 99 Resp: 4983

Ion	Ratio	Lower	Upper
99	100		
98	47.9	48.9	90.9#
44	53.7	35.1	65.3
42	62.6	36.3	67.5

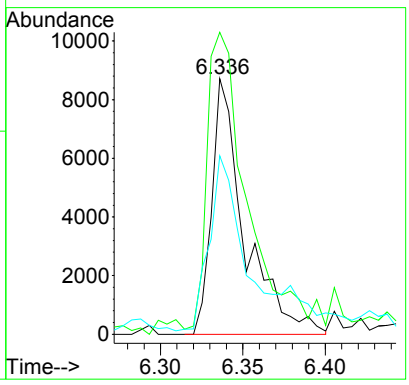




#52
Caprolactam
Concen: 17.12 ppm
RT: 6.336 min Scan# 730
Delta R.T. -0.022 min
Lab File: BP387.D
Acq: 24 Sep 2018 7:00 pm

Tgt Ion:113 Resp: 12126

Ion	Ratio	Lower	Upper
113	100		
55	116.1	86.6	160.8
41	65.9	45.5	84.5



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP388.D
Acq On : 24 Sep 2018 7:28 pm
Operator : J.Misiurewicz
Sample : R1808910-003
Misc : 322187 8270D
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 26 08:49:33 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

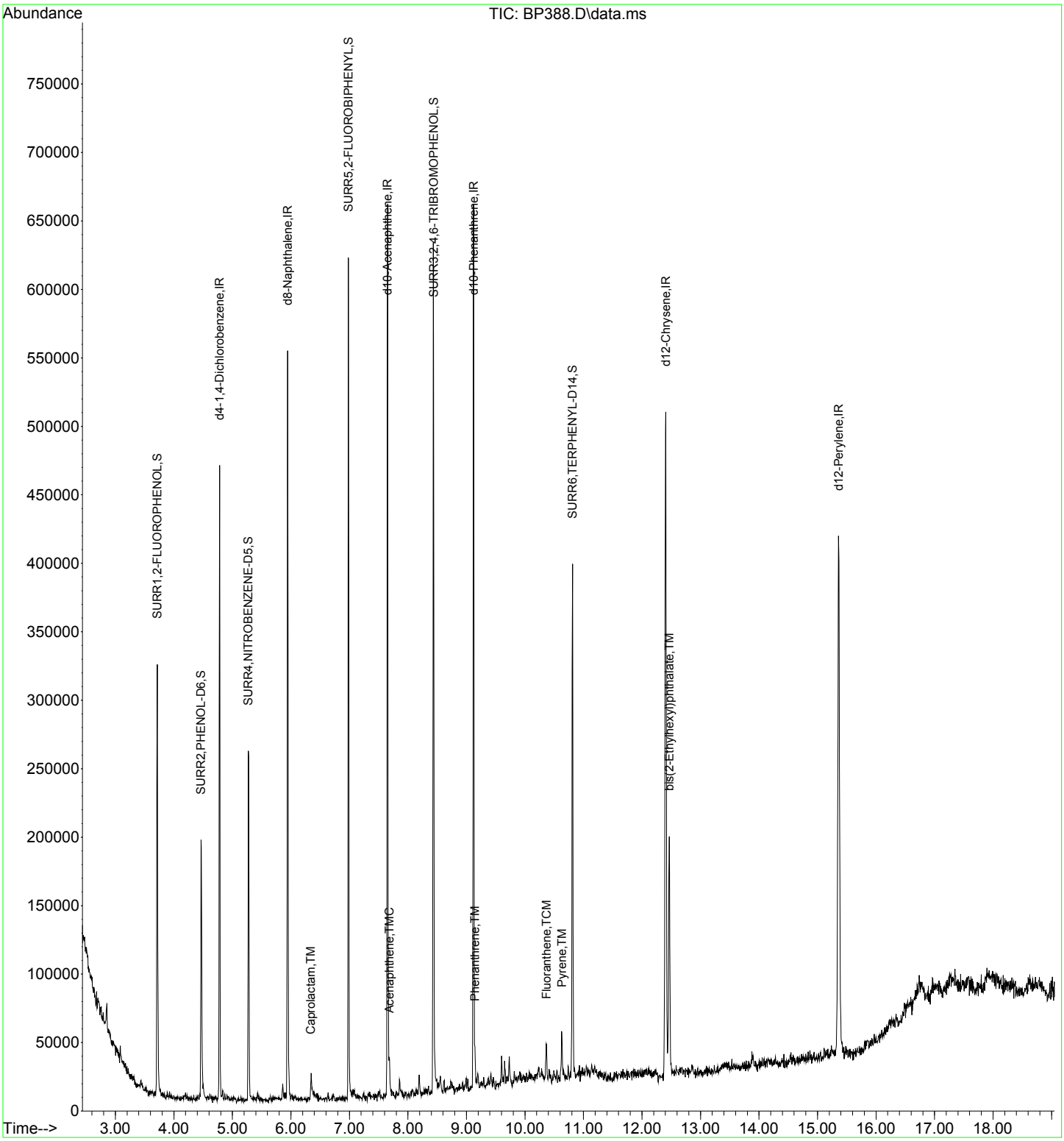
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	66428	40.00	ppm	0.00
33) d8-Naphthalene	5.946	136	251192	40.00	ppm	0.00
57) d10-Acenaphthene	7.652	164	131591	40.00	ppm	0.00
91) d10-Phenanthrene	9.123	188	227048	40.00	ppm	0.00
117) d12-Chrysene	12.407	240	246012	40.00	ppm	0.00
135) d12-Perylene	15.359	264	270162	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.715	112	99207	45.14	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 22.57%			
12) SURR2,PHENOL-D6	4.464	99	85642	31.75	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 15.88%			
34) SURR4,NITROBENZENE-D5	5.272	82	92061	39.81	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 39.81%			
63) SURR5,2-FLUOROBIPHENYL	6.983	172	180895	39.29	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 39.29%			
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	77295	101.65	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 50.82%			
124) SURR6,TERPHENYL-D14	10.813	244	125956	22.45	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 22.45%			
Target Compounds						Qvalue
52) Caprolactam	6.341	113	3039	4.509	ppm #	82
73) Acenaphthene	7.684	153	4851	1.212	ppm #	80
111) Phenanthrene	9.144	178	7940	1.283	ppm	89
116) Fluoranthene	10.369	202	11702	1.736	ppm	89
123) Pyrene	10.631	202	14285	1.957	ppm	85
134) bis(2-Ethylhexyl)phtha...	12.466	149	76625	14.598	ppm	97

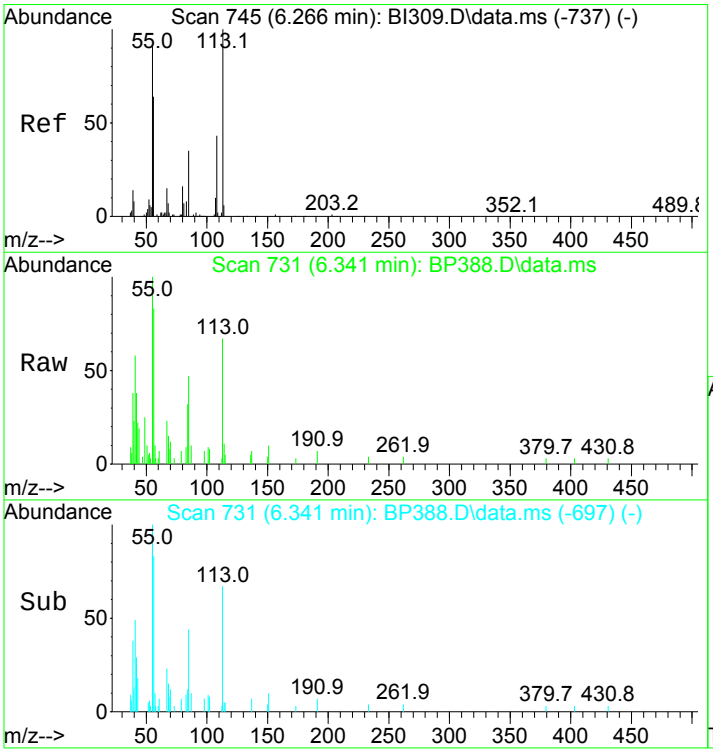
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP388.D
Acq On : 24 Sep 2018 7:28 pm
Operator : J.Misiurewicz
Sample : R1808910-003
Misc : 322187 8270D
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 26 08:49:33 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

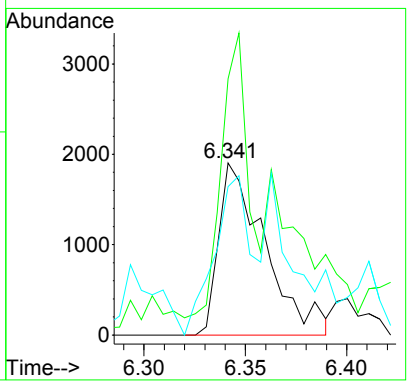


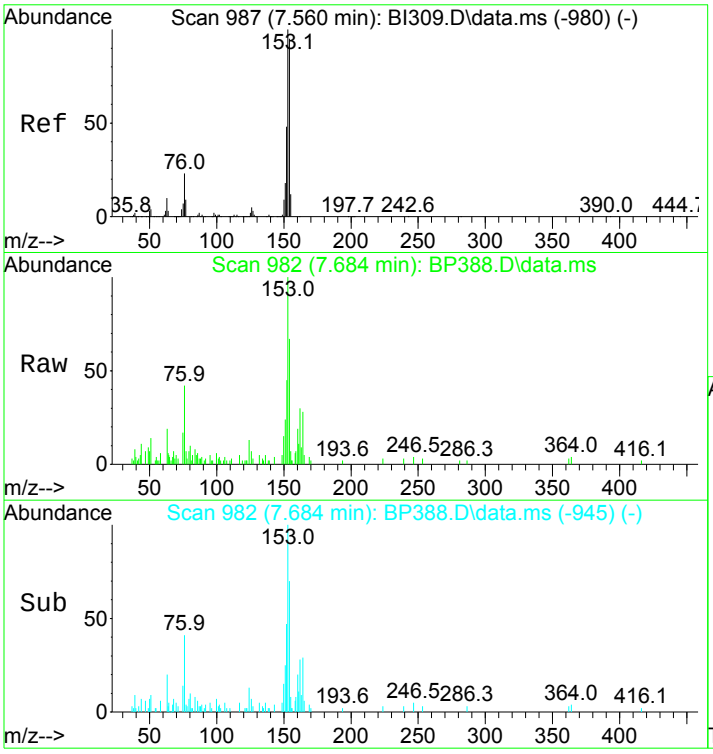


#52
Caprolactam
Concen: 4.51 ppm
RT: 6.341 min Scan# 731
Delta R.T. -0.017 min
Lab File: BP388.D
Acq: 24 Sep 2018 7:28 pm

Tgt Ion:113 Resp: 3039

Ion	Ratio	Lower	Upper
113	100		
55	138.6	86.6	160.8
41	86.1	45.5	84.5#

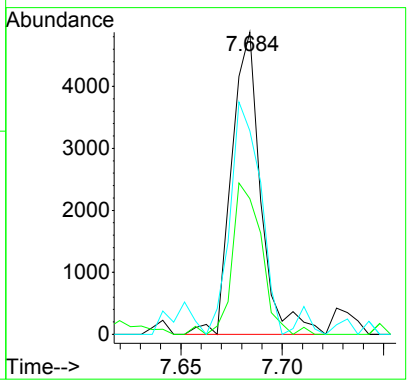


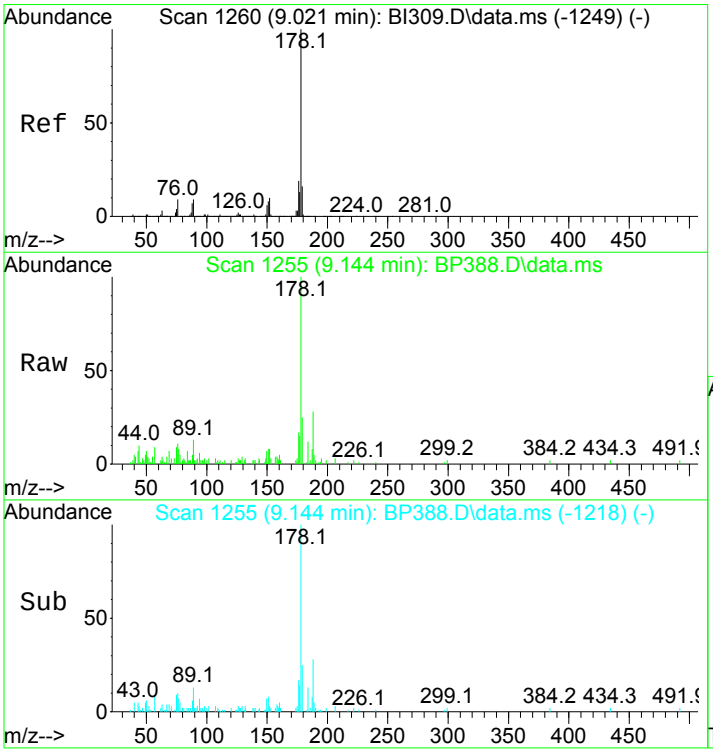


#73
Acenaphthene
Concen: 1.21 ppm
RT: 7.684 min Scan# 982
Delta R.T. -0.001 min
Lab File: BP388.D
Acq: 24 Sep 2018 7:28 pm

Tgt Ion:153 Resp: 4851

Ion	Ratio	Lower	Upper
153	100		
152	44.9	26.1	66.1
154	62.0	70.2	110.2#

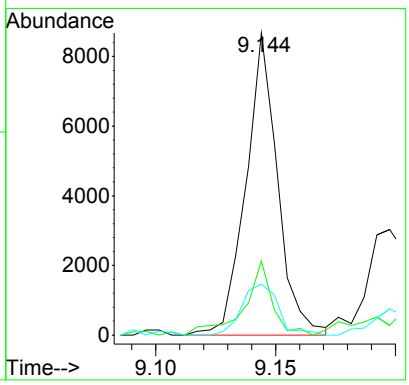


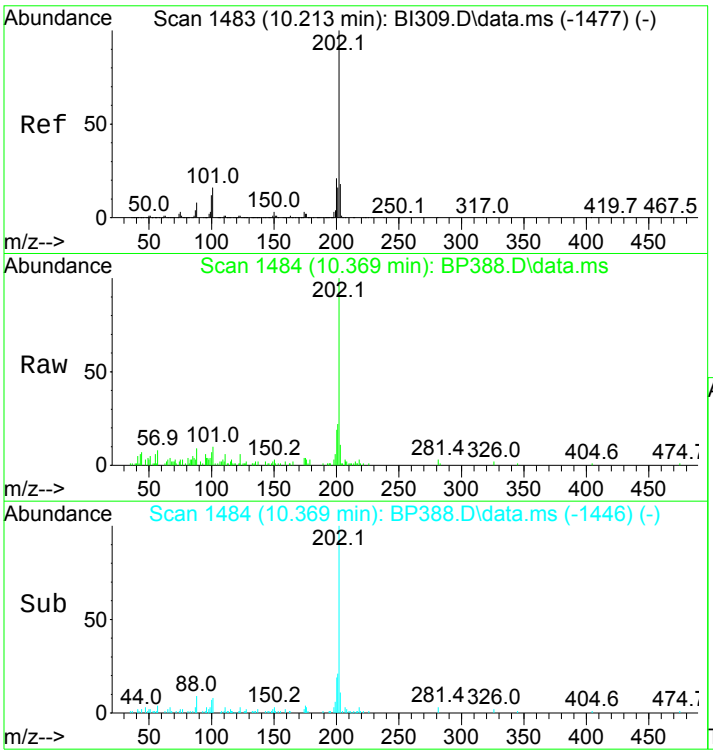


#111
Phenanthrene
Concen: 1.28 ppm
RT: 9.144 min Scan# 1255
Delta R.T. -0.003 min
Lab File: BP388.D
Acq: 24 Sep 2018 7:28 pm

Tgt Ion:178 Resp: 7940

Ion	Ratio	Lower	Upper
178	100		
179	24.0	0.0	35.9
176	17.0	0.0	39.3

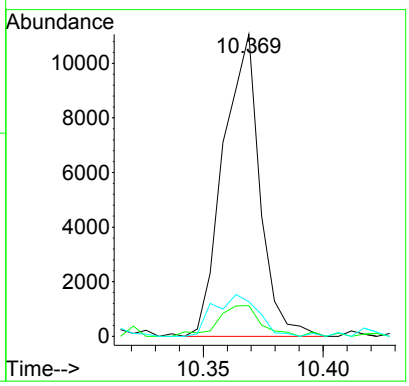


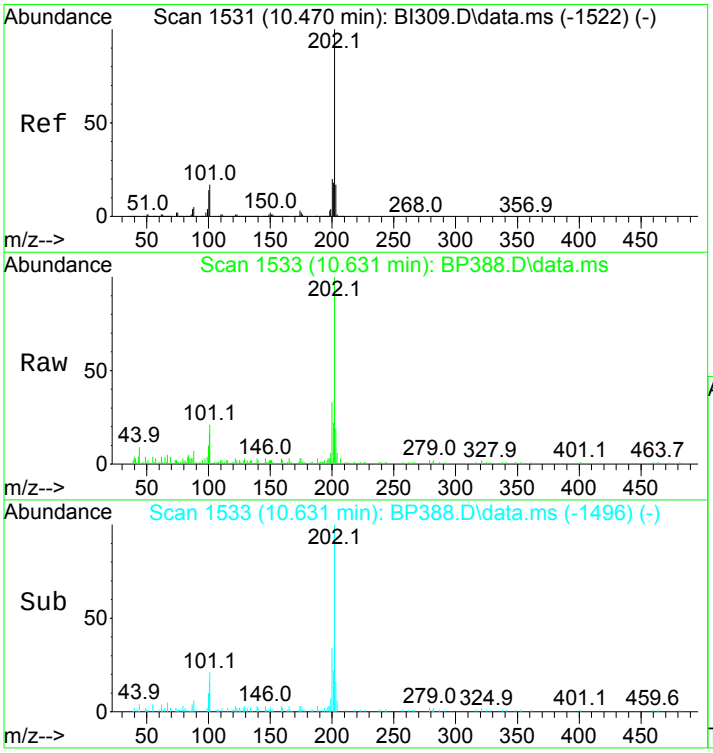


#116
Fluoranthene
Concen: 1.74 ppm
RT: 10.369 min Scan# 1484
Delta R.T. 0.003 min
Lab File: BP388.D
Acq: 24 Sep 2018 7:28 pm

Tgt Ion:202 Resp: 11702

Ion	Ratio	Lower	Upper
202	100		
101	9.4	0.0	33.1
203	12.5	0.0	38.1

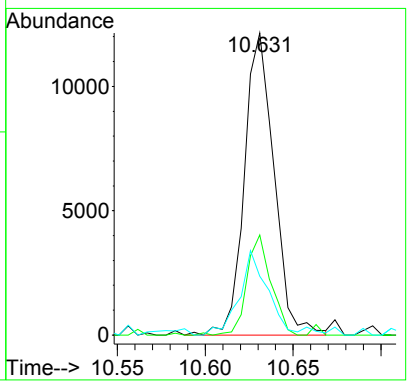


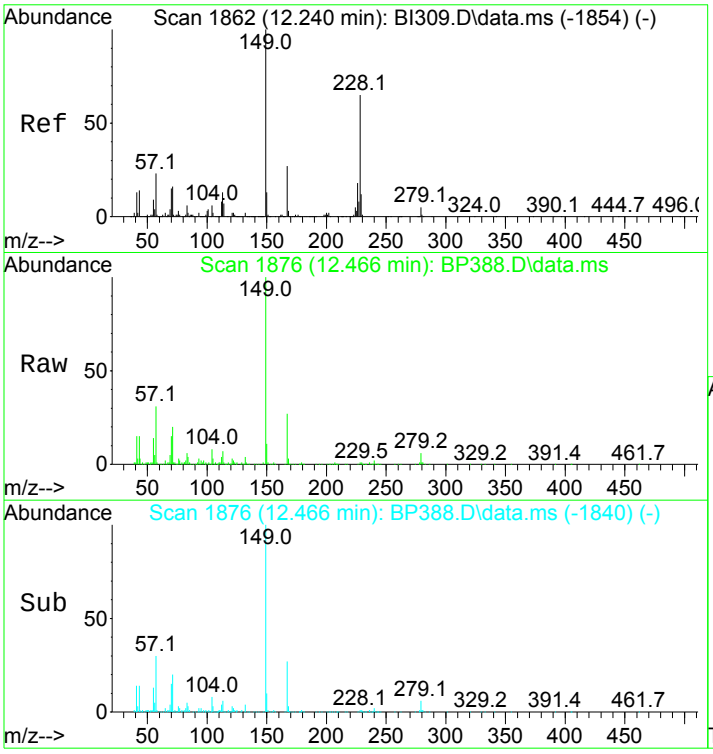


#123
Pyrene
Concen: 1.96 ppm
RT: 10.631 min Scan# 1533
Delta R.T. -0.002 min
Lab File: BP388.D
Acq: 24 Sep 2018 7:28 pm

Tgt Ion:202 Resp: 14285

Ion	Ratio	Lower	Upper
202	100		
200	32.9	0.3	40.3
203	17.9	0.0	37.2

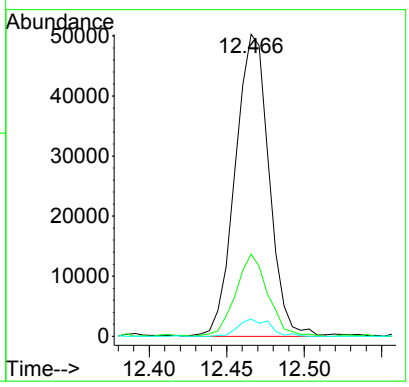




#134
bis(2-Ethylhexyl)phthalate
Concen: 14.60 ppm
RT: 12.466 min Scan# 1876
Delta R.T. -0.010 min
Lab File: BP388.D
Acq: 24 Sep 2018 7:28 pm

Tgt Ion:149 Resp: 76625

Ion	Ratio	Lower	Upper
149	100		
167	27.2	8.6	48.6
279	5.7	0.0	26.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP389.D
Acq On : 24 Sep 2018 7:56 pm
Operator : J.Misiurewicz
Sample : R1808910-004
Misc : 322187 8270D
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 26 08:49:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

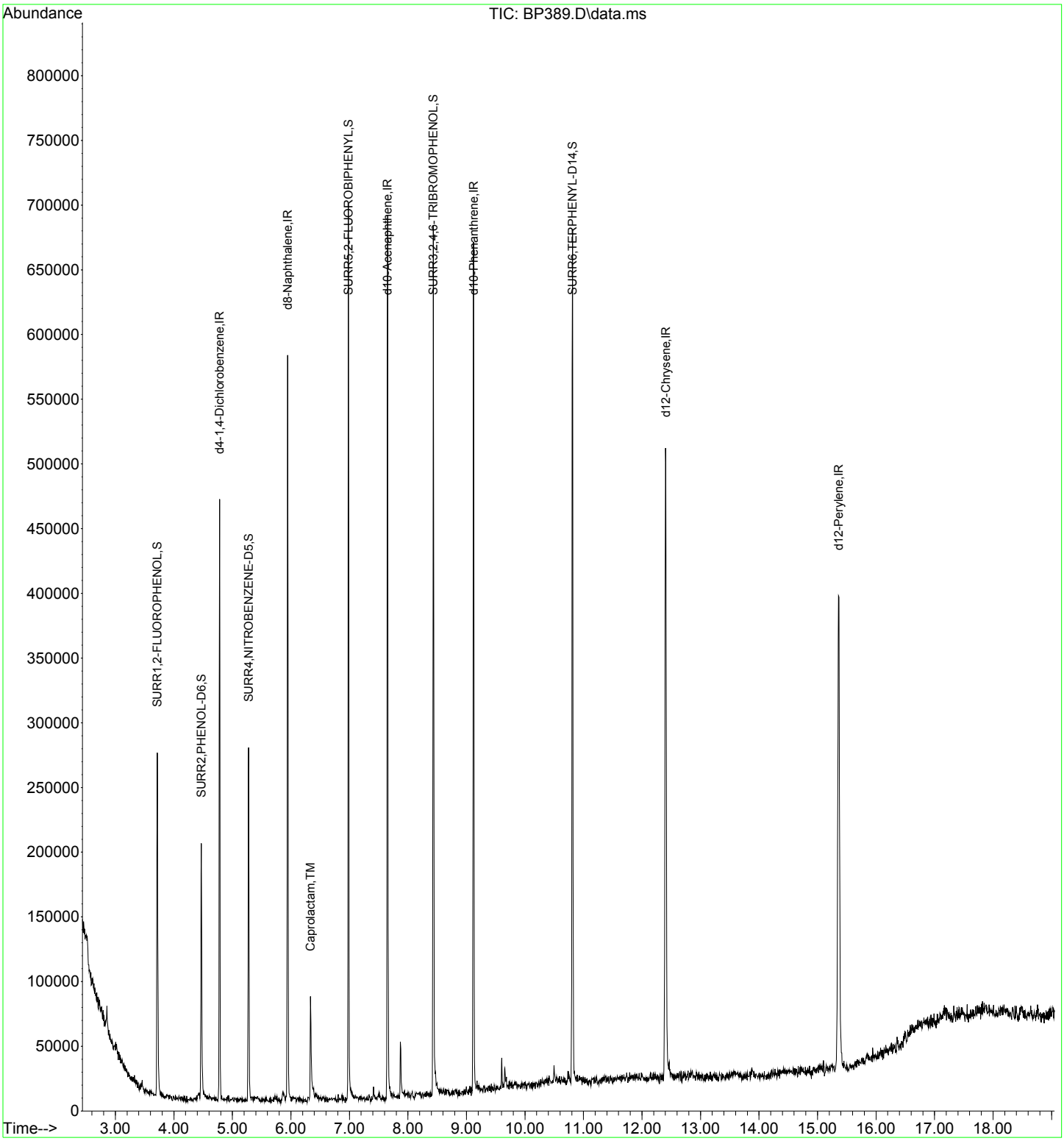
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	69178	40.00	ppm	0.00
33) d8-Naphthalene	5.946	136	257819	40.00	ppm	0.00
57) d10-Acenaphthene	7.652	164	142630	40.00	ppm	0.00
91) d10-Phenanthrene	9.123	188	242126	40.00	ppm	0.00
117) d12-Chrysene	12.407	240	260513	40.00	ppm	0.00
135) d12-Perylene	15.359	264	273222	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.715	112	92381	40.36	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 20.18%			
12) SURR2,PHENOL-D6	4.469	99	76719	27.31	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 13.66%			
34) SURR4,NITROBENZENE-D5	5.277	82	93125	39.24	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 39.24%			
63) SURR5,2-FLUOROBIPHENYL	6.983	172	201272	40.33	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 40.33%			
88) SURR3,2,4,6-TRIBROMOPH...	8.433	330	81903	99.37	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 49.69%			
124) SURR6,TERPHENYL-D14	10.813	244	222866	37.51	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 37.51%			
Target Compounds						Qvalue
52) Caprolactam	6.336	113	12660	18.300	ppm	91

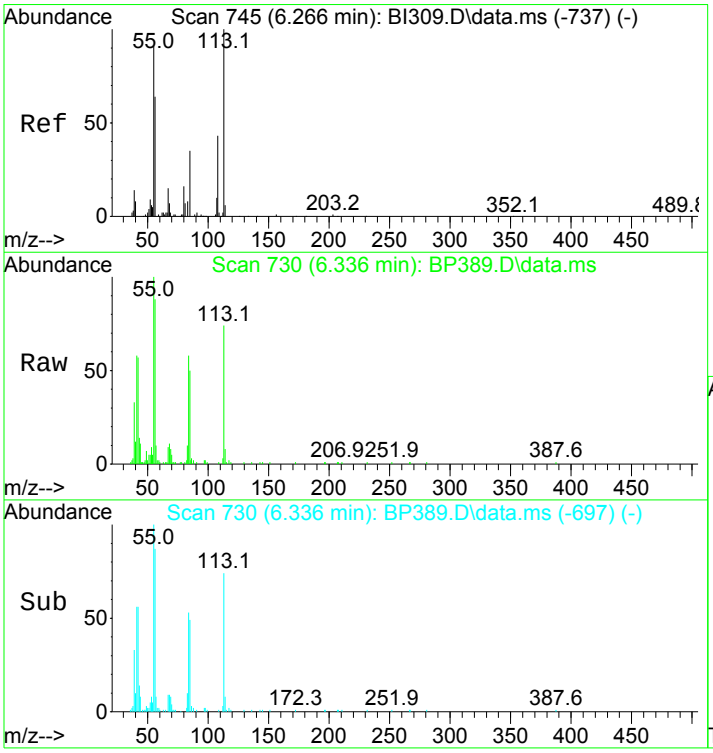
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP389.D
Acq On : 24 Sep 2018 7:56 pm
Operator : J.Misiurewicz
Sample : R1808910-004
Misc : 322187 8270D
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 26 08:49:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

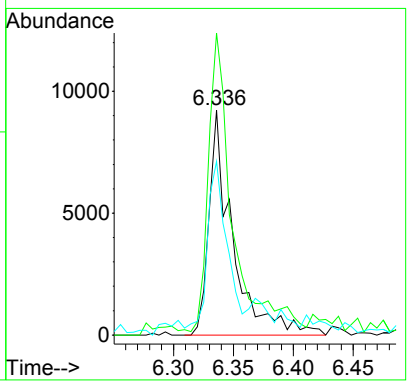




#52
Caprolactam
Concen: 18.30 ppm
RT: 6.336 min Scan# 730
Delta R.T. -0.023 min
Lab File: BP389.D
Acq: 24 Sep 2018 7:56 pm

Tgt Ion:113 Resp: 12660

Ion	Ratio	Lower	Upper
113	100		
55	132.0	86.6	160.8
41	74.3	45.5	84.5



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP319.D
Acq On : 24 Sep 2018 5:22 pm
Operator : J.Misiurewicz
Sample : R1808910-006
Misc : 322300 8270D
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 26 06:13:45 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

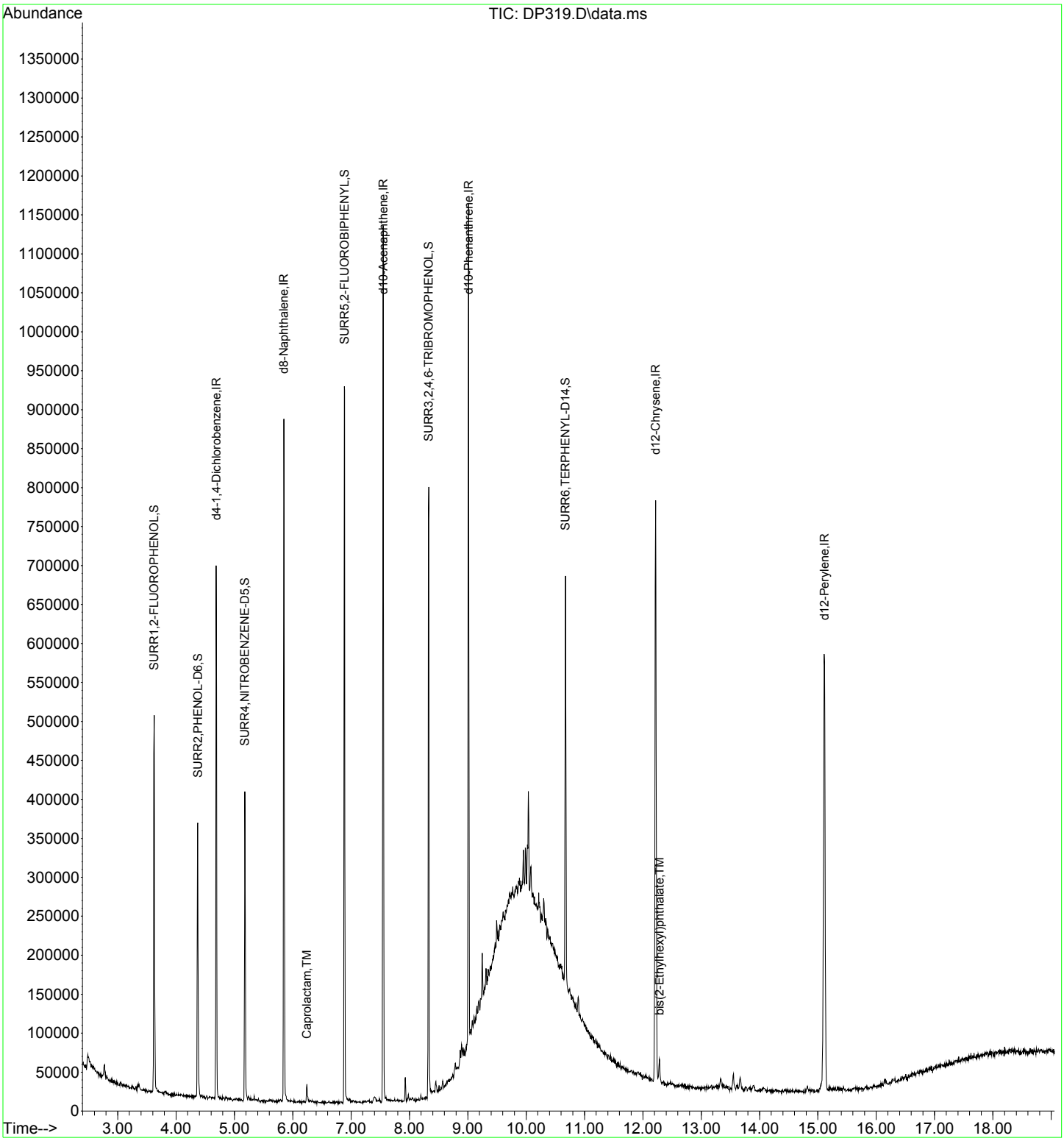
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.687	152	113092	40.00	ppm	0.00
24) d8-Naphthalene	5.846	136	434349	40.00	ppm	0.00
42) d10-Acenaphthene	7.550	164	232209	40.00	ppm	0.00
69) d10-Phenanthrene	9.014	188	385575	40.00	ppm	0.00
82) d12-Chrysene	12.218	240	373009	40.00	ppm	0.00
91) d12-Perylene	15.113	264	367134	40.00	ppm	0.02
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.625	112	182238	46.34	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 23.17%			
8) SURR2,PHENOL-D6	4.372	99	160332	33.64	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 16.82%			
25) SURR4,NITROBENZENE-D5	5.179	82	138413	37.35	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 37.35%			
48) SURR5,2-FLUOROBIPHENYL	6.888	172	305805	37.77	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 37.77%			
67) SURR3,2,4,6-TRIBROMOPH...	8.330	330	94940	78.76	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 39.38%			
85) SURR6,TERPHENYL-D14	10.675	244	181702	21.11	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 21.11%			
Target Compounds						Qvalue
39) Caprolactam	6.242	113	4463	3.566	ppm	96
90) bis(2-Ethylhexyl)phtha...	12.288	149	12780	1.537	ppm	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

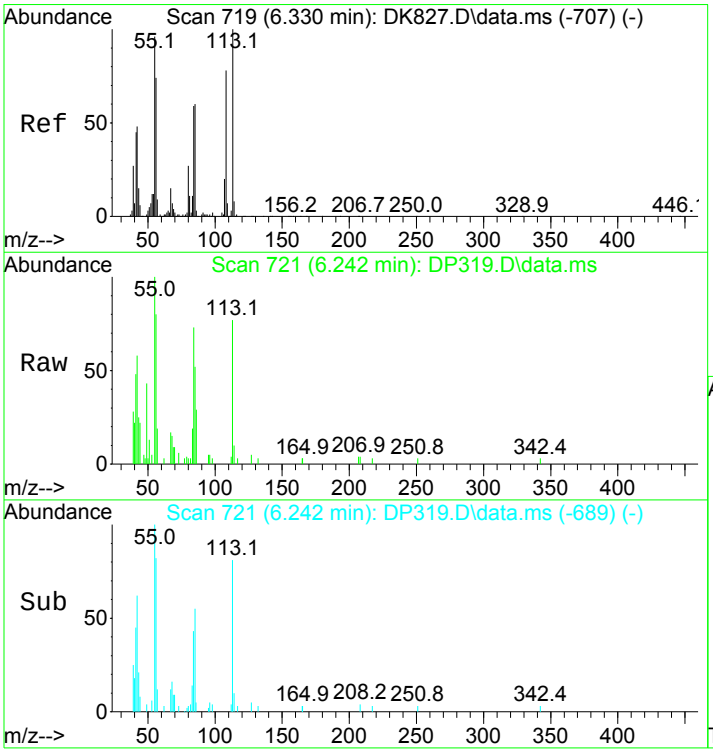
1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP319.D
Acq On : 24 Sep 2018 5:22 pm
Operator : J.Misiurewicz
Sample : R1808910-006
Misc : 322300 8270D
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 26 06:13:45 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration



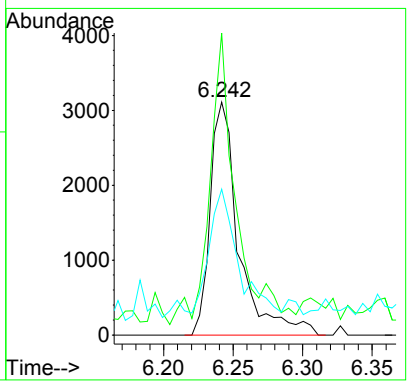
1st 09/26/18
2nd 09/26/18

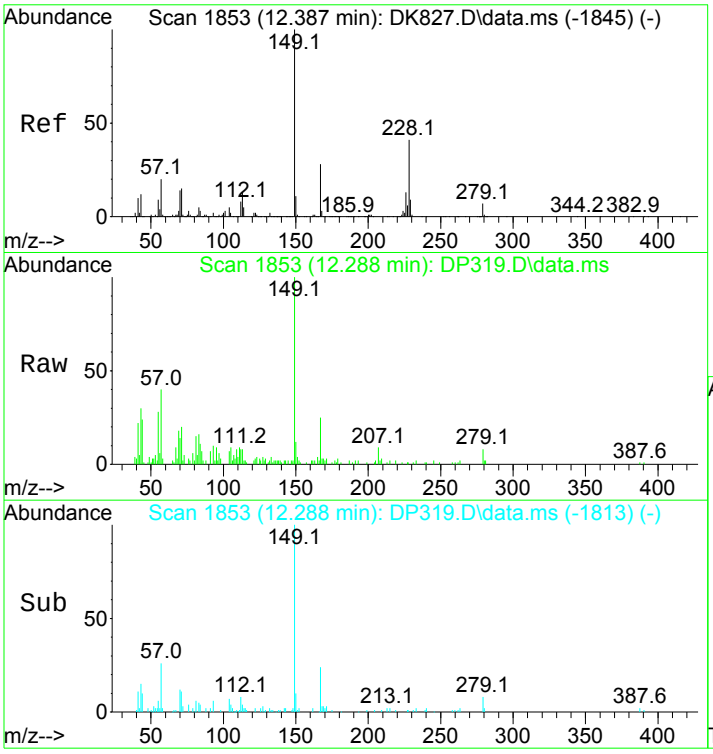


#39
Caprolactam
Concen: 3.57 ppm
RT: 6.242 min Scan# 721
Delta R.T. -0.029 min
Lab File: DP319.D
Acq: 24 Sep 2018 5:22 pm

Tgt Ion:113 Resp: 4463

Ion	Ratio	Lower	Upper
113	100		
55	118.2	82.3	152.9
41	52.2	42.9	79.7

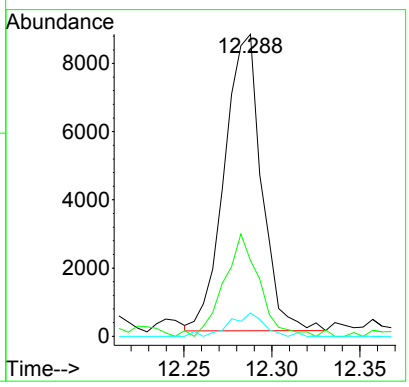




#90
bis(2-Ethylhexyl)phthalate
Concen: 1.54 ppm
RT: 12.288 min Scan# 1853
Delta R.T. 0.014 min
Lab File: DP319.D
Acq: 24 Sep 2018 5:22 pm

Tgt Ion:149 Resp: 12780

Ion	Ratio	Lower	Upper
149	100		
167	23.7	9.5	49.5
279	7.9	0.0	27.8



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP320.D
Acq On : 24 Sep 2018 5:49 pm
Operator : J.Misiurewicz
Sample : R1808910-007
Misc : 322300 8270D
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 06:13:50 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

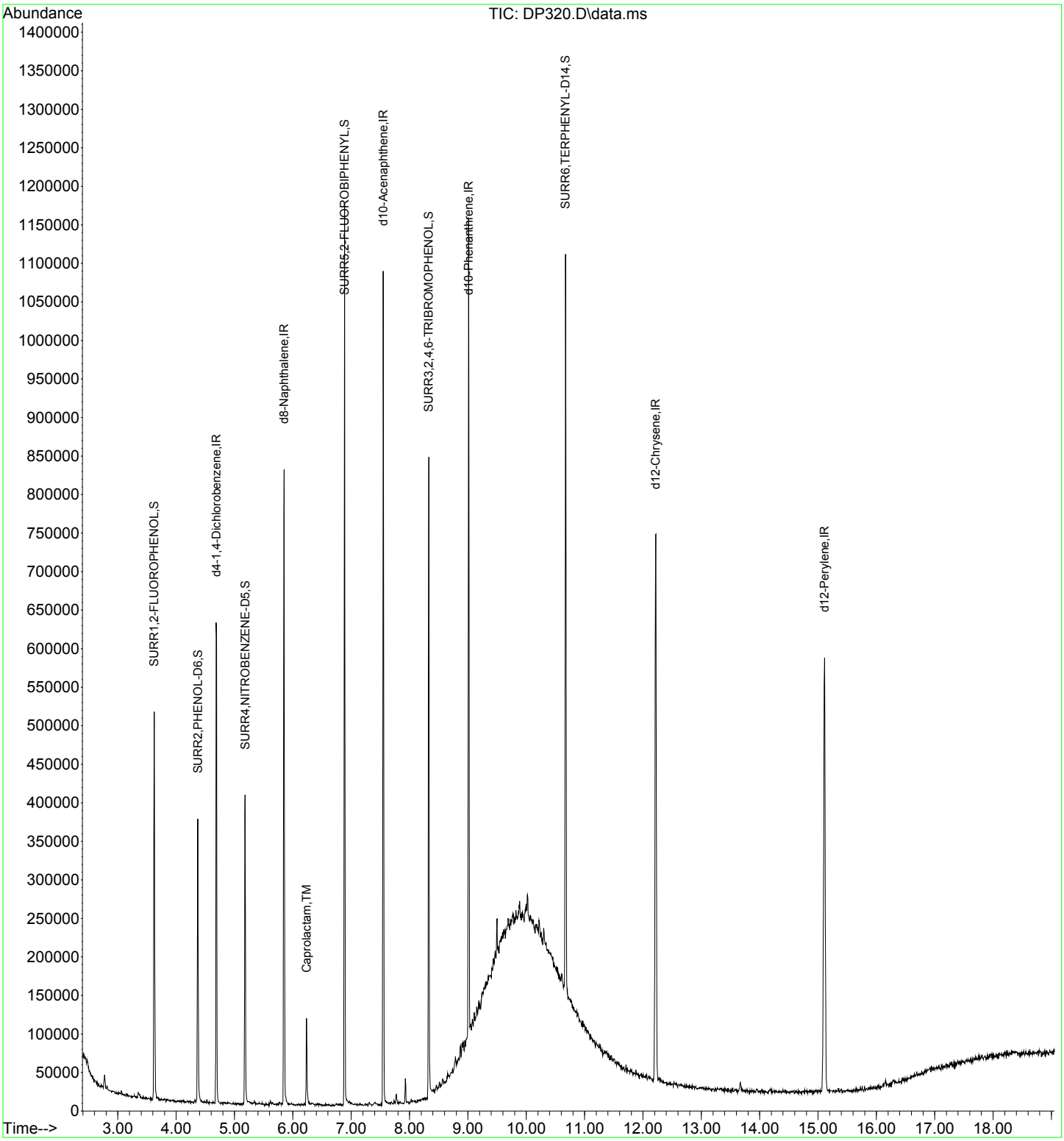
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.685	152	114193	40.00	ppm	0.00
24) d8-Naphthalene	5.849	136	422773	40.00	ppm	0.00
42) d10-Acenaphthene	7.547	164	228071	40.00	ppm	0.00
69) d10-Phenanthrene	9.011	188	385209	40.00	ppm	0.00
82) d12-Chrysene	12.216	240	362972	40.00	ppm	0.00
91) d12-Perylene	15.110	264	366076	40.00	ppm	0.02
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.622	112	177154	44.61	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 22.31%			
8) SURR2,PHENOL-D6	4.370	99	154221	32.05	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 16.02%			
25) SURR4,NITROBENZENE-D5	5.181	82	140336	38.90	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 38.90%			
48) SURR5,2-FLUOROBIPHENYL	6.885	172	352106	44.28	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 44.28%			
67) SURR3,2,4,6-TRIBROMOPH...	8.327	330	95143	80.36	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 40.18%			
85) SURR6,TERPHENYL-D14	10.672	244	320429	38.25	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 38.25%			
Target Compounds						Qvalue
39) Caprolactam	6.234	113	17565	14.418	ppm	92

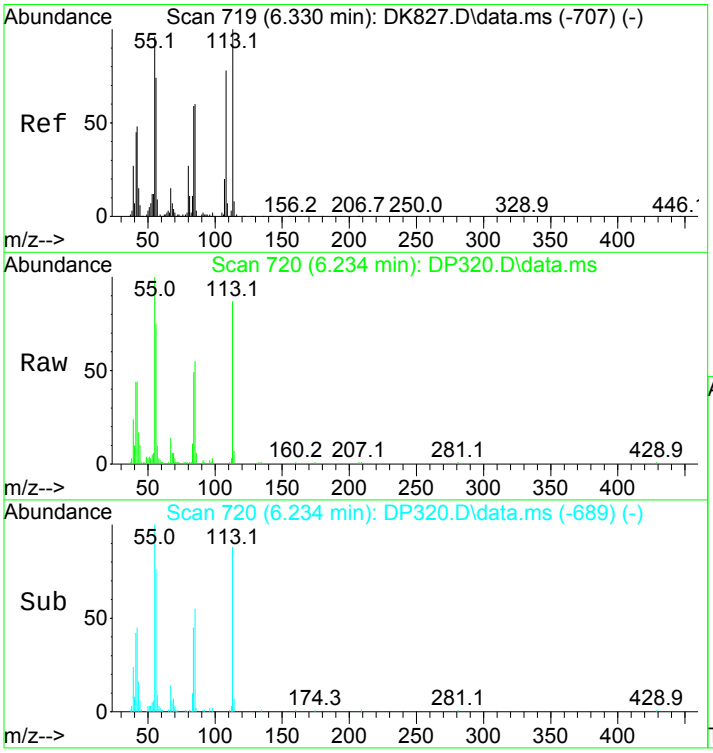
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP320.D
Acq On : 24 Sep 2018 5:49 pm
Operator : J.Misiurewicz
Sample : R1808910-007
Misc : 322300 8270D
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 06:13:50 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

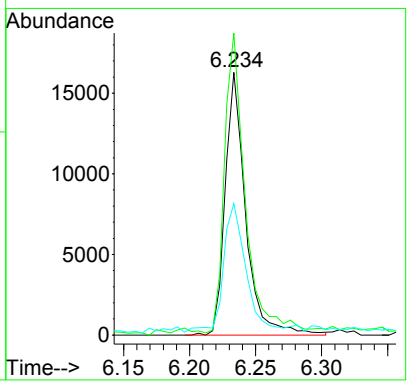




#39
Caprolactam
Concen: 14.42 ppm
RT: 6.234 min Scan# 720
Delta R.T. -0.037 min
Lab File: DP320.D
Acq: 24 Sep 2018 5:49 pm

Tgt Ion:113 Resp: 17565

Ion	Ratio	Lower	Upper
113	100		
55	112.7	82.3	152.9
41	49.0	42.9	79.7



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP321.D
Acq On : 24 Sep 2018 6:17 pm
Operator : J.Misiurewicz
Sample : R1808910-008
Misc : 322300 8270D
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 06:13:55 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

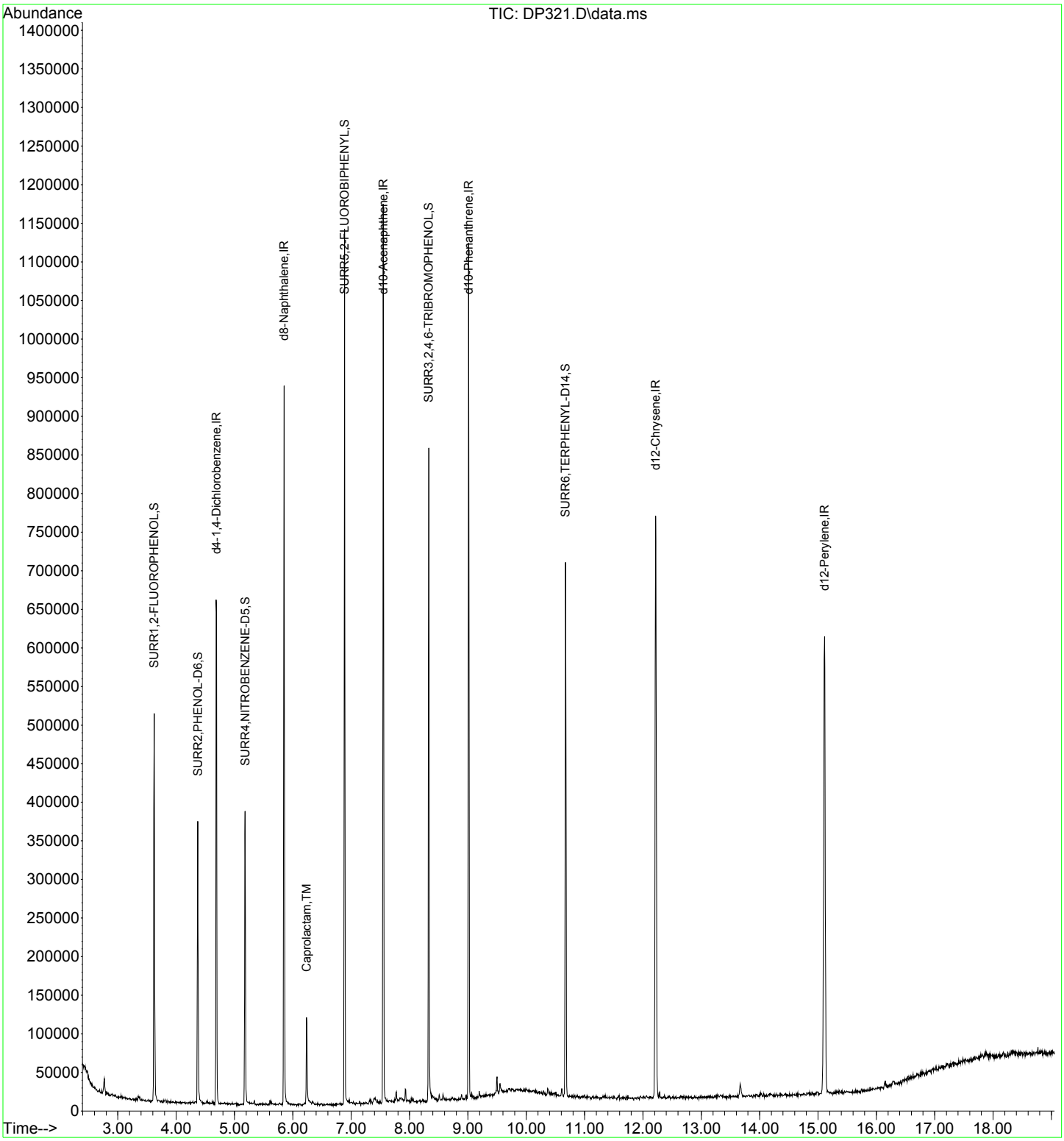
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.685	152	118667	40.00	ppm	0.00
24) d8-Naphthalene	5.849	136	449318	40.00	ppm	0.00
42) d10-Acenaphthene	7.548	164	240036	40.00	ppm	0.00
69) d10-Phenanthrene	9.011	188	395574	40.00	ppm	0.00
82) d12-Chrysene	12.216	240	372973	40.00	ppm	0.00
91) d12-Perylene	15.111	264	374865	40.00	ppm	0.02
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.622	112	175320	42.49	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 21.25%			
8) SURR2,PHENOL-D6	4.370	99	155769	31.15	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 15.57%			
25) SURR4,NITROBENZENE-D5	5.182	82	132952	34.68	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 34.68%			
48) SURR5,2-FLUOROBIPHENYL	6.886	172	335070	40.04	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 40.04%			
67) SURR3,2,4,6-TRIBROMOPH...	8.328	330	99173	79.59	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 39.80%			
85) SURR6,TERPHENYL-D14	10.672	244	234645	27.26	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 27.26%			
Target Compounds						Qvalue
39) Caprolactam	6.234	113	19004	14.678	ppm	98

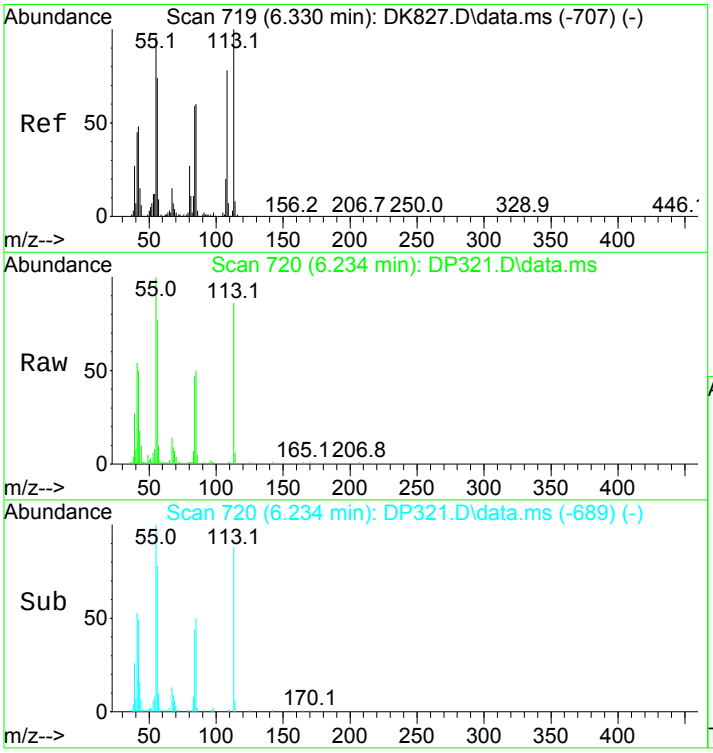
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP321.D
Acq On : 24 Sep 2018 6:17 pm
Operator : J.Misiurewicz
Sample : R1808910-008
Misc : 322300 8270D
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 06:13:55 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

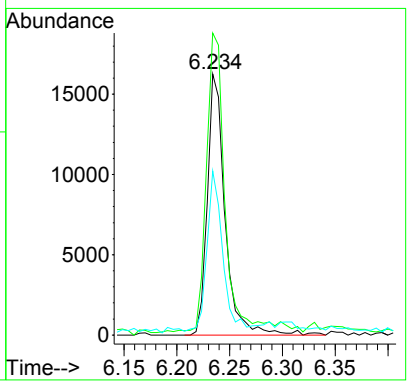




#39
Caprolactam
Concen: 14.68 ppm
RT: 6.234 min Scan# 720
Delta R.T. -0.037 min
Lab File: DP321.D
Acq: 24 Sep 2018 6:17 pm

Tgt Ion:113 Resp: 19004

Ion	Ratio	Lower	Upper
113	100		
55	113.9	82.3	152.9
41	61.4	42.9	79.7



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP322.D
Acq On : 24 Sep 2018 6:46 pm
Operator : J.Misiurewicz
Sample : R1808910-009
Misc : 322300 8270D
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 06:14:00 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

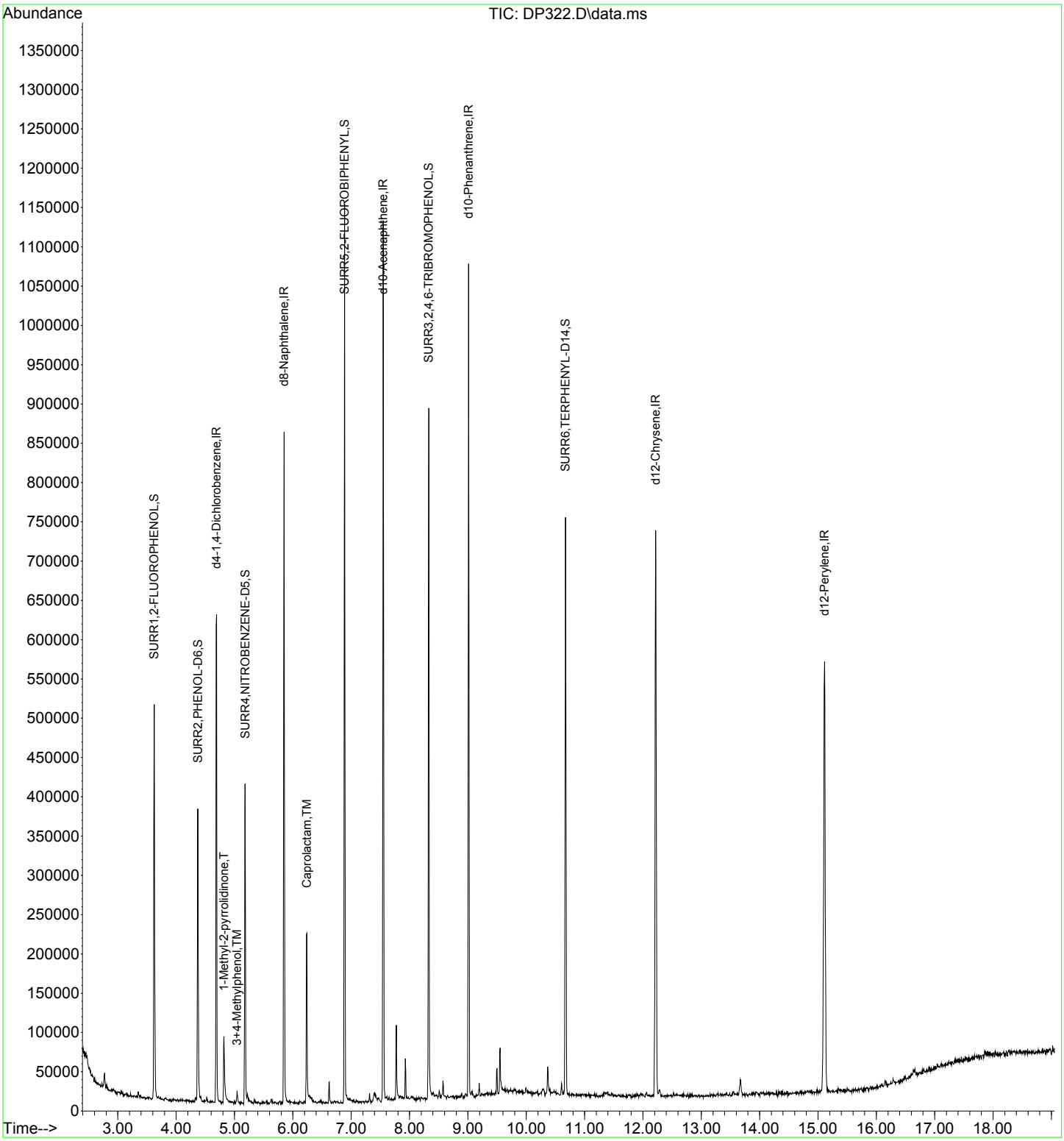
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.690	152	113501	40.00	ppm		0.00
24) d8-Naphthalene	5.849	136	424837	40.00	ppm		0.00
42) d10-Acenaphthene	7.548	164	231082	40.00	ppm		0.00
69) d10-Phenanthrene	9.011	188	371850	40.00	ppm		0.00
82) d12-Chrysene	12.216	240	347394	40.00	ppm		0.00
91) d12-Perylene	15.111	264	354587	40.00	ppm		0.02
System Monitoring Compounds							
4) SURR1,2-FLUOROPHENOL	3.622	112	174776	44.28	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 22.14%				
8) SURR2,PHENOL-D6	4.370	99	158042	33.04	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 16.52%				
25) SURR4,NITROBENZENE-D5	5.182	82	140045	38.63	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 38.63%				
48) SURR5,2-FLUOROBIPHENYL	6.886	172	344072	42.71	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 42.71%				
67) SURR3,2,4,6-TRIBROMOPH...	8.328	330	96698	80.61	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 40.31%				
85) SURR6,TERPHENYL-D14	10.672	244	258474	32.24	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 32.24%				
Target Compounds							Qvalue
16) 1-Methyl-2-pyrrolidinone	4.819	99	30132	10.881	ppm		99
19) 3+4-Methylphenol	5.043	108	4454	1.183	ppm	#	74
39) Caprolactam	6.239	113	34362	28.068	ppm		93

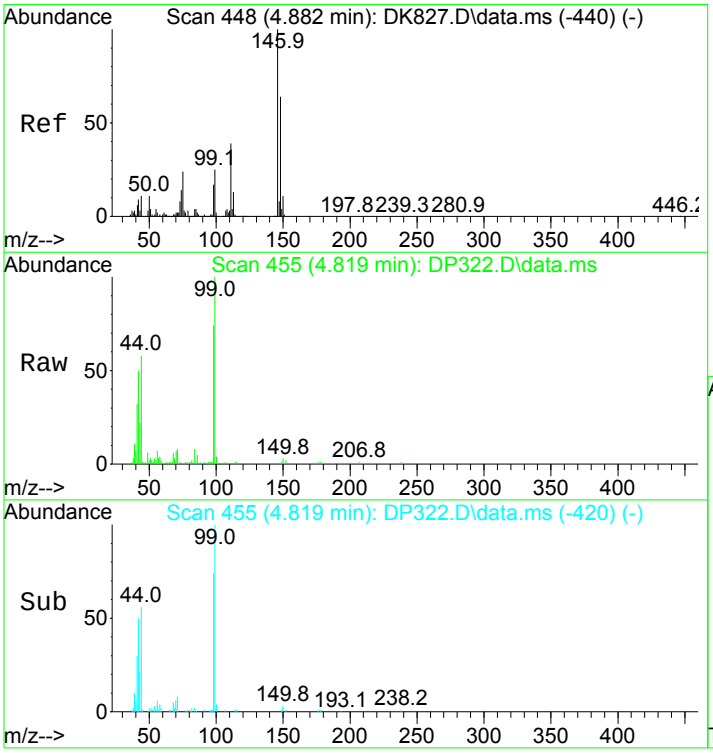
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP322.D
Acq On : 24 Sep 2018 6:46 pm
Operator : J.Misiurewicz
Sample : R1808910-009
Misc : 322300 8270D
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 06:14:00 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

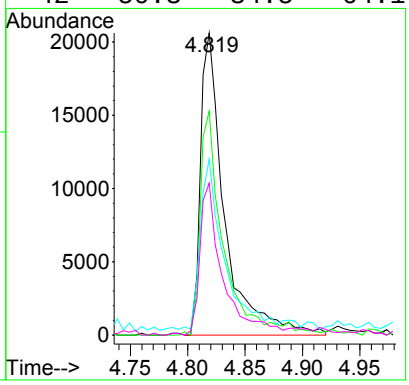


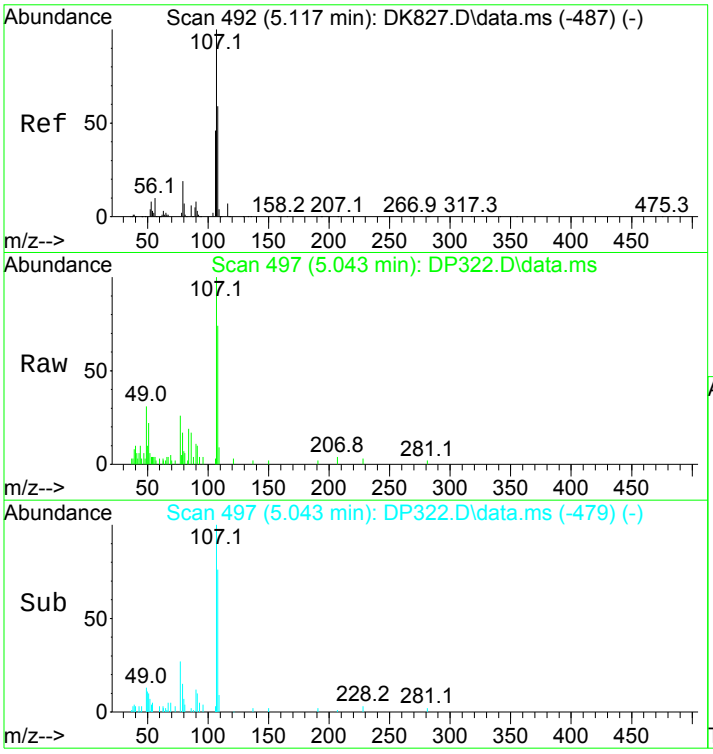


#16
1-Methyl-2-pyrrolidinone
Concen: 10.88 ppm
RT: 4.819 min Scan# 455
Delta R.T. -0.015 min
Lab File: DP322.D
Acq: 24 Sep 2018 6:46 pm

Tgt Ion: 99 Resp: 30132

Ion	Ratio	Lower	Upper
99	100		
98	73.2	50.3	93.3
44	55.6	38.3	71.1
42	50.3	34.5	64.1

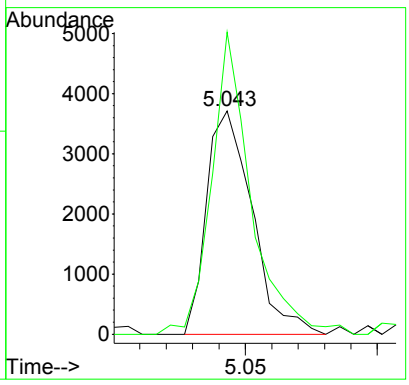


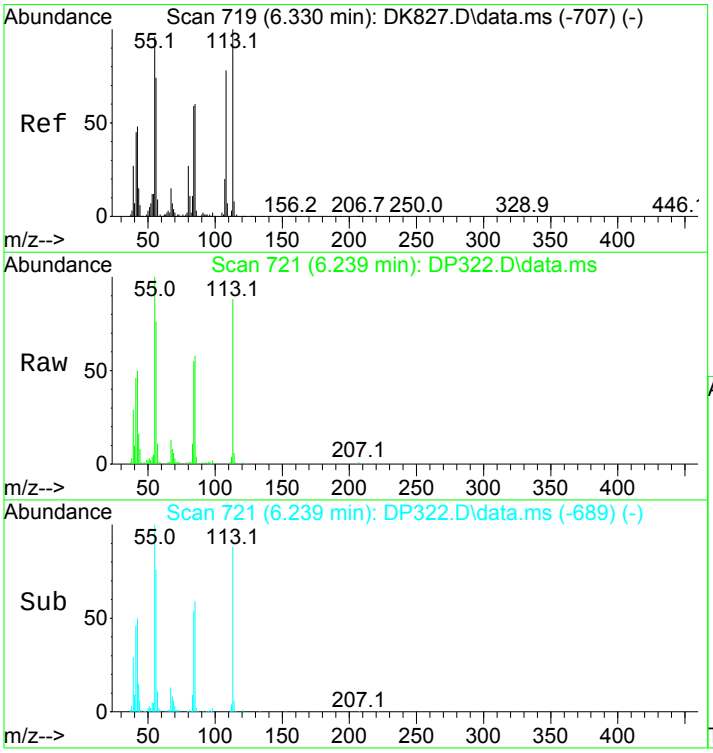


#19
3+4-Methylphenol
Concen: 1.18 ppm
RT: 5.043 min Scan# 497
Delta R.T. -0.004 min
Lab File: DP322.D
Acq: 24 Sep 2018 6:46 pm

Tgt Ion:108 Resp: 4454

Ion	Ratio	Lower	Upper
108	100		
107	131.9	84.9	124.9#

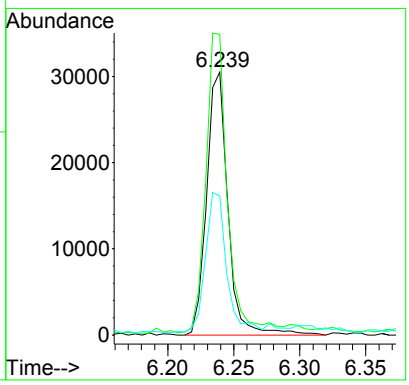




#39
Caprolactam
Concen: 28.07 ppm
RT: 6.239 min Scan# 721
Delta R.T. -0.031 min
Lab File: DP322.D
Acq: 24 Sep 2018 6:46 pm

Tgt Ion:113 Resp: 34362

Ion	Ratio	Lower	Upper
113	100		
55	113.1	82.3	152.9
41	51.8	42.9	79.7



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP323.D
Acq On : 24 Sep 2018 7:13 pm
Operator : J.Misiurewicz
Sample : R1808910-010
Misc : 322300 8270D
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 26 06:14:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

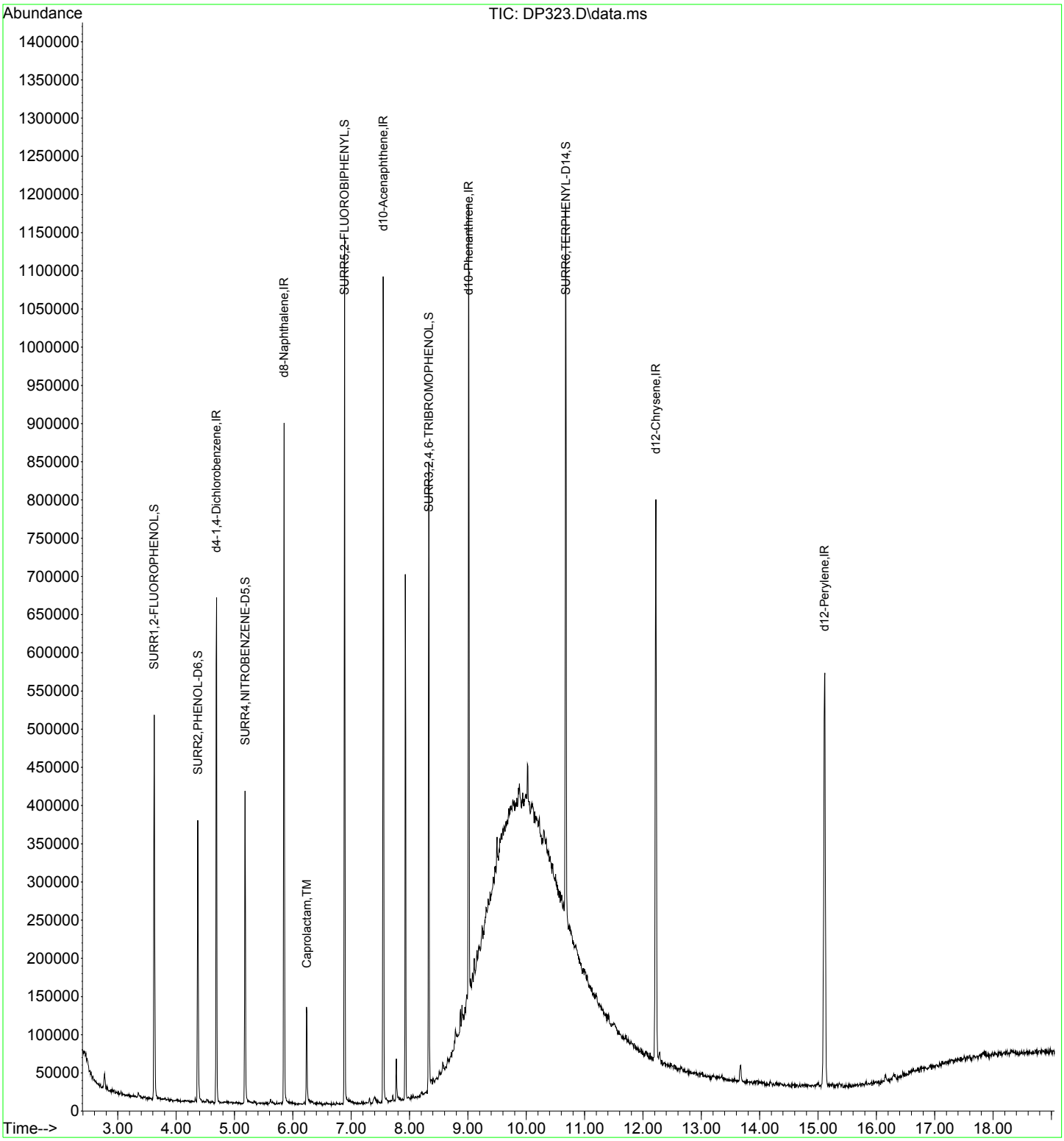
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.690	152	115181	40.00	ppm	0.00
24) d8-Naphthalene	5.849	136	429378	40.00	ppm	0.00
42) d10-Acenaphthene	7.547	164	229505	40.00	ppm	0.00
69) d10-Phenanthrene	9.011	188	372804	40.00	ppm	0.00
82) d12-Chrysene	12.221	240	357632	40.00	ppm	0.00
91) d12-Perylene	15.110	264	361503	40.00	ppm	0.02
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.622	112	180518	45.07	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 22.54%			
8) SURR2,PHENOL-D6	4.369	99	160143	32.99	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 16.50%			
25) SURR4,NITROBENZENE-D5	5.181	82	142829	38.98	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 38.98%			
48) SURR5,2-FLUOROBIPHENYL	6.885	172	344063	43.00	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 43.00%			
67) SURR3,2,4,6-TRIBROMOPH...	8.332	330	96598	81.08	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 40.54%			
85) SURR6,TERPHENYL-D14	10.677	244	337702	40.91	ppm	0.01
Spiked Amount 100.000	Range 10 - 165		Recovery = 40.91%			
Target Compounds						Qvalue
39) Caprolactam	6.239	113	21517	17.390	ppm	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

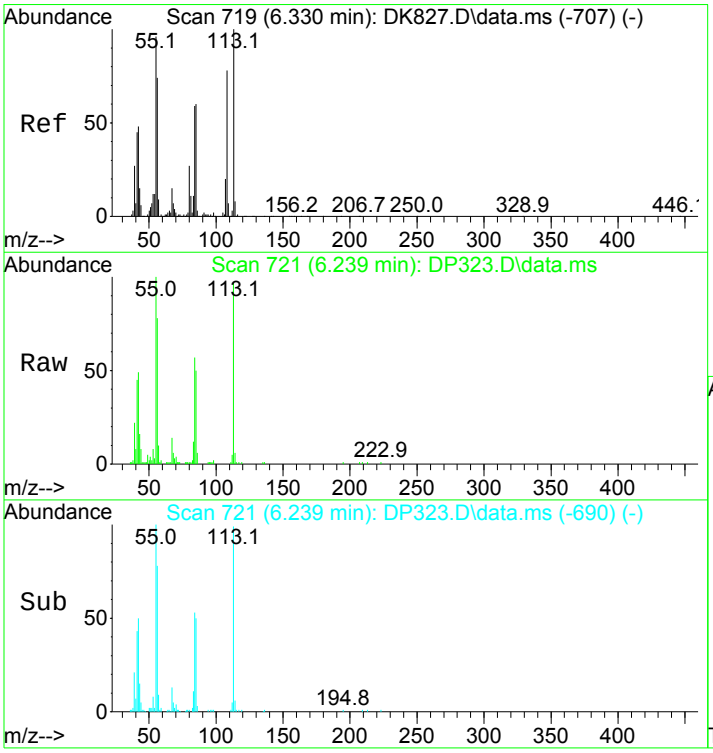
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP323.D
Acq On : 24 Sep 2018 7:13 pm
Operator : J.Misiurewicz
Sample : R1808910-010
Misc : 322300 8270D
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 26 06:14:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration



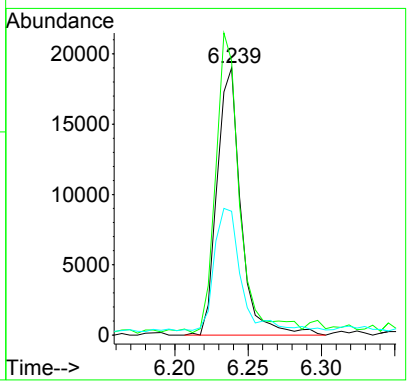
1st DM 09/26/18
2nd MP 09/26/18



#39
Caprolactam
Concen: 17.39 ppm
RT: 6.239 min Scan# 721
Delta R.T. -0.032 min
Lab File: DP323.D
Acq: 24 Sep 2018 7:13 pm

Tgt Ion:113 Resp: 21517

Ion	Ratio	Lower	Upper
113	100		
55	100.3	82.3	152.9
41	44.3	42.9	79.7



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP324.D
Acq On : 24 Sep 2018 7:41 pm
Operator : J.Misiurewicz
Sample : R1808910-011
Misc : 322300 8270D
ALS Vial : 12 Sample Multiplier: 1

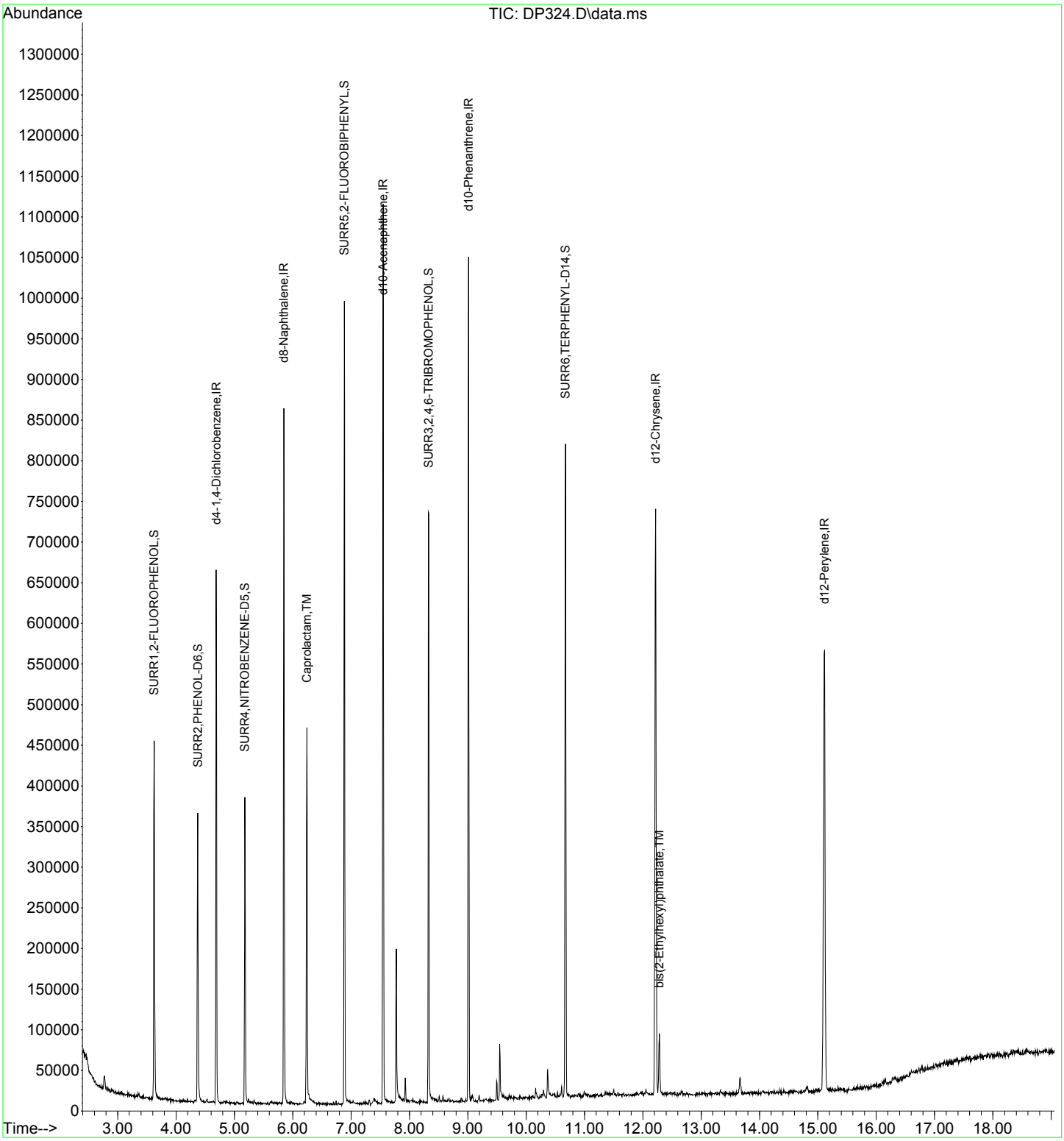
Quant Time: Sep 26 06:14:10 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

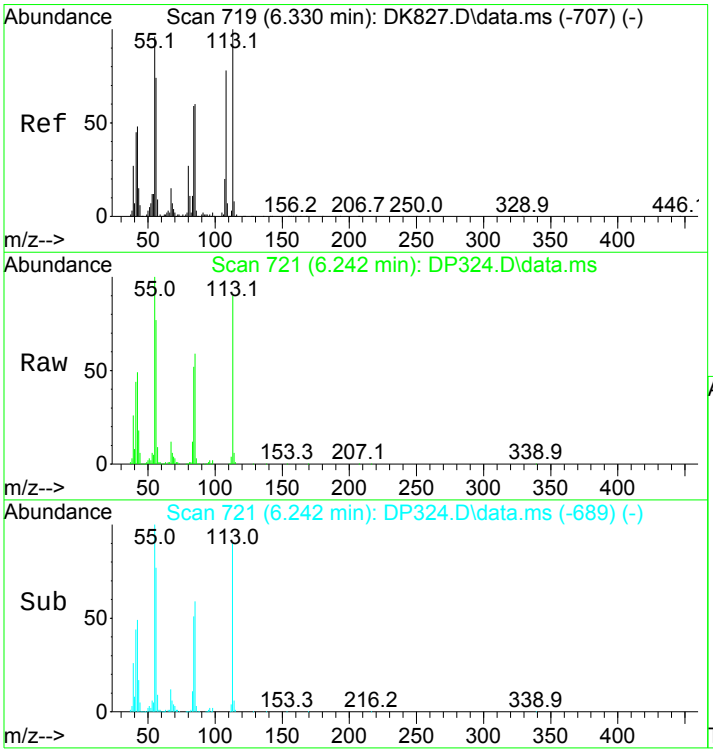
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.687	152	108860	40.00	ppm	0.00
24) d8-Naphthalene	5.846	136	418053	40.00	ppm	0.00
42) d10-Acenaphthene	7.550	164	225754	40.00	ppm	0.00
69) d10-Phenanthrene	9.014	188	377354	40.00	ppm	0.00
82) d12-Chrysene	12.218	240	352449	40.00	ppm	0.00
91) d12-Perylene	15.113	264	358064	40.00	ppm	0.02
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.624	112	159097	42.03	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 21.02%			
8) SURR2,PHENOL-D6	4.372	99	162208	35.36	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 17.68%			
25) SURR4,NITROBENZENE-D5	5.179	82	129656	36.35	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 36.35%			
48) SURR5,2-FLUOROBIPHENYL	6.883	172	309903	39.37	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 39.37%			
67) SURR3,2,4,6-TRIBROMOPH...	8.330	330	88419	75.45	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 37.73%			
85) SURR6,TERPHENYL-D14	10.675	244	283681	34.87	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 34.87%			
Target Compounds						Qvalue
39) Caprolactam	6.242	113	74039	61.460	ppm	90
90) bis(2-Ethylhexyl)phtha...	12.282	149	33632	4.280	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP324.D
Acq On : 24 Sep 2018 7:41 pm
Operator : J.Misiurewicz
Sample : R1808910-011
Misc : 322300 8270D
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 26 06:14:10 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

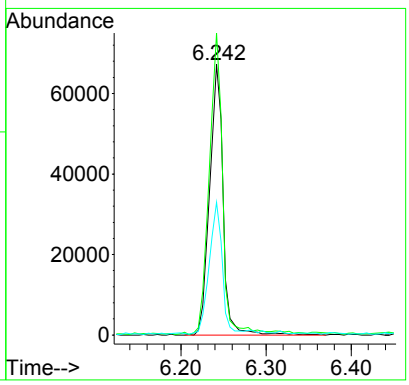


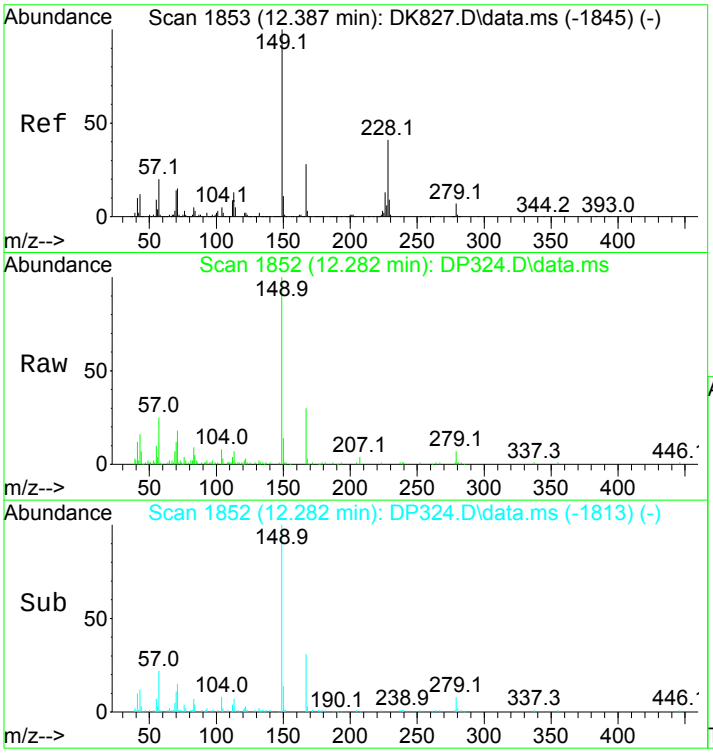


#39
Caprolactam
Concen: 61.46 ppm
RT: 6.242 min Scan# 721
Delta R.T. -0.029 min
Lab File: DP324.D
Acq: 24 Sep 2018 7:41 pm

Tgt Ion:113 Resp: 74039

Ion	Ratio	Lower	Upper
113	100		
55	110.8	82.3	152.9
41	48.5	42.9	79.7

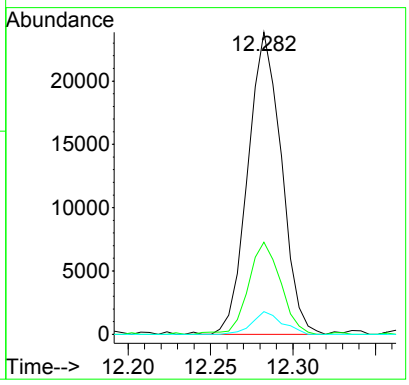




#90
bis(2-Ethylhexyl)phthalate
Concen: 4.28 ppm
RT: 12.282 min Scan# 1852
Delta R.T. 0.008 min
Lab File: DP324.D
Acq: 24 Sep 2018 7:41 pm

Tgt Ion:149 Resp: 33632

Ion	Ratio	Lower	Upper
149	100		
167	30.5	9.5	49.5
279	7.5	0.0	27.8



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP325.D
Acq On : 24 Sep 2018 8:09 pm
Operator : J.Misiurewicz
Sample : R1808910-017
Misc : 322300 8270D
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 26 06:14:15 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

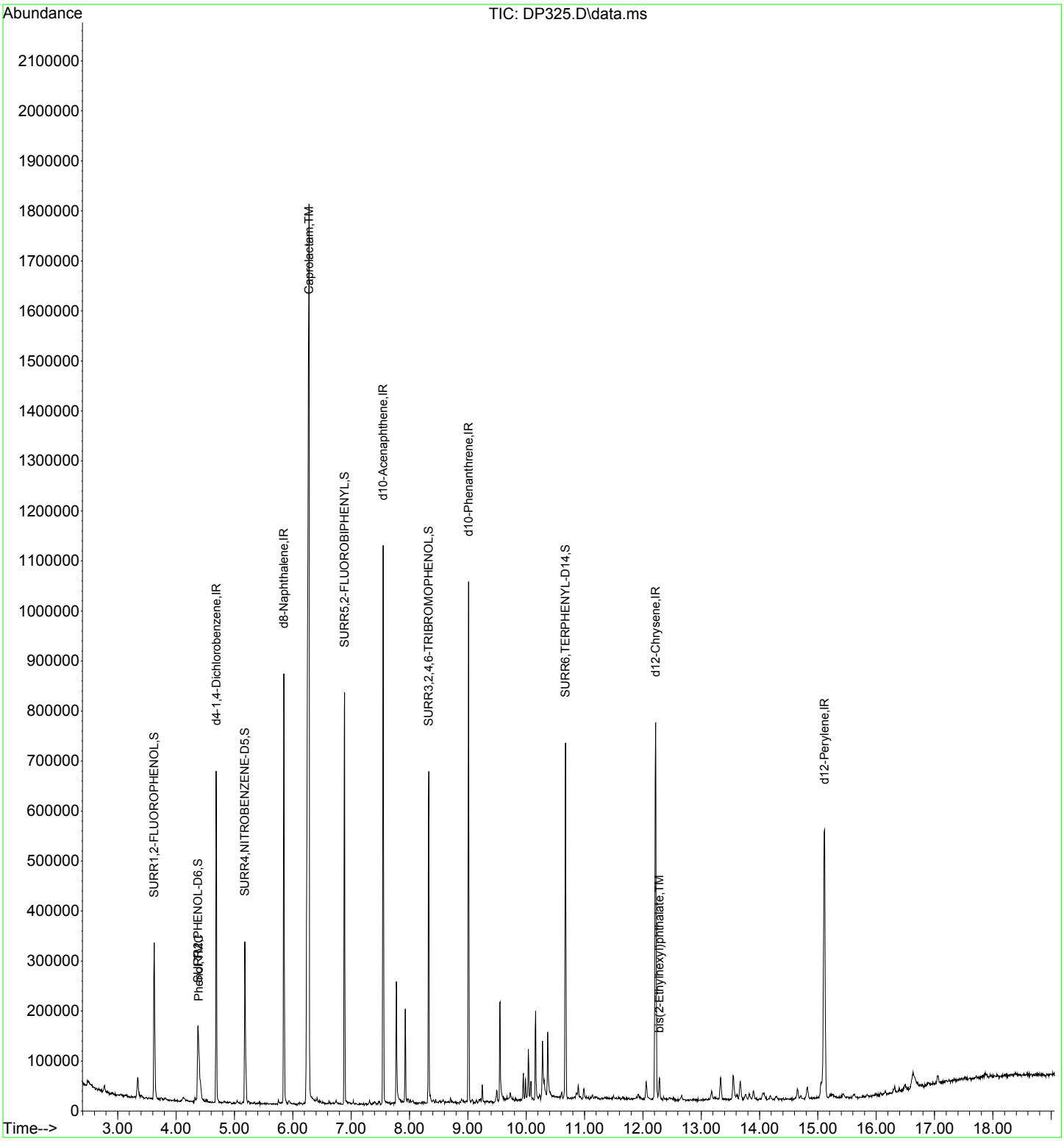
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.687	152	111879	40.00	ppm	0.00
24) d8-Naphthalene	5.846	136	418487	40.00	ppm	0.00
42) d10-Acenaphthene	7.550	164	222978	40.00	ppm	0.00
69) d10-Phenanthrene	9.014	188	363292	40.00	ppm	0.00
82) d12-Chrysene	12.218	240	354257	40.00	ppm	0.00
91) d12-Perylene	15.113	264	353380	40.00	ppm	0.02
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.624	112	130232	33.47	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 16.73%			
8) SURR2,PHENOL-D6	4.372	99	125542	26.63	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 13.32%			
25) SURR4,NITROBENZENE-D5	5.179	82	110250	30.87	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 30.87%#			
48) SURR5,2-FLUOROBIPHENYL	6.888	172	269286	34.64	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 34.64%			
67) SURR3,2,4,6-TRIBROMOPH...	8.330	330	78057	67.43	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 33.72%#			
85) SURR6,TERPHENYL-D14	10.675	244	235910	28.85	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 28.85%			
Target Compounds						Qvalue
9) Phenol	4.388	94	19832	3.918	ppm	85
39) Caprolactam	6.279	113	541743	449.236	ppm	94 NT
90) bis(2-Ethylhexyl)phtha...	12.282	149	19996	2.532	ppm	96

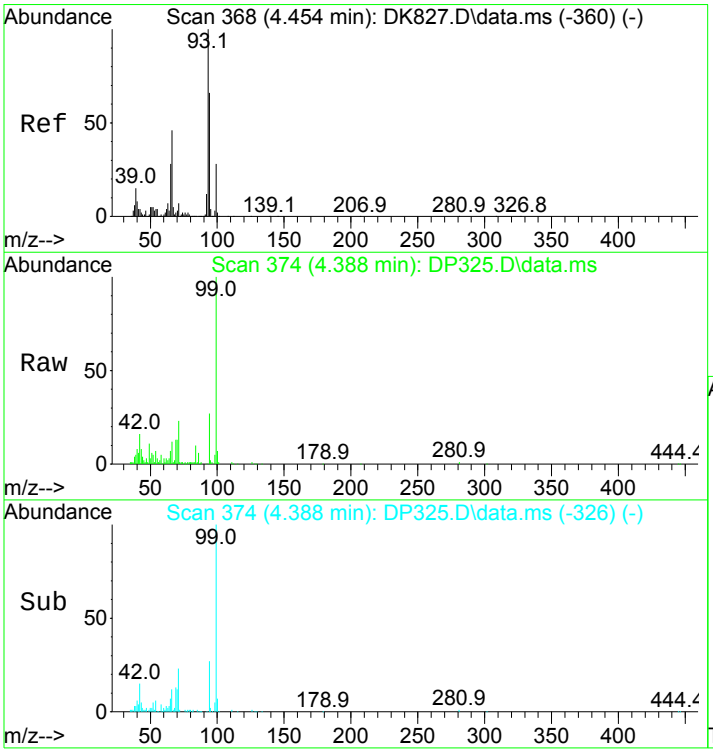
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP325.D
Acq On : 24 Sep 2018 8:09 pm
Operator : J.Misiurewicz
Sample : R1808910-017
Misc : 322300 8270D
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 26 06:14:15 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

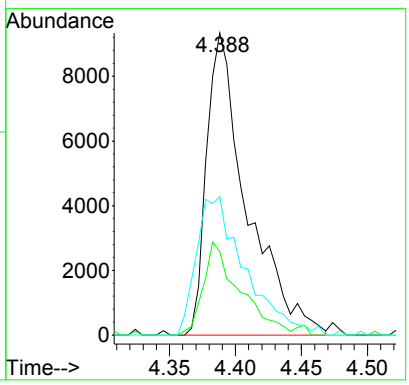


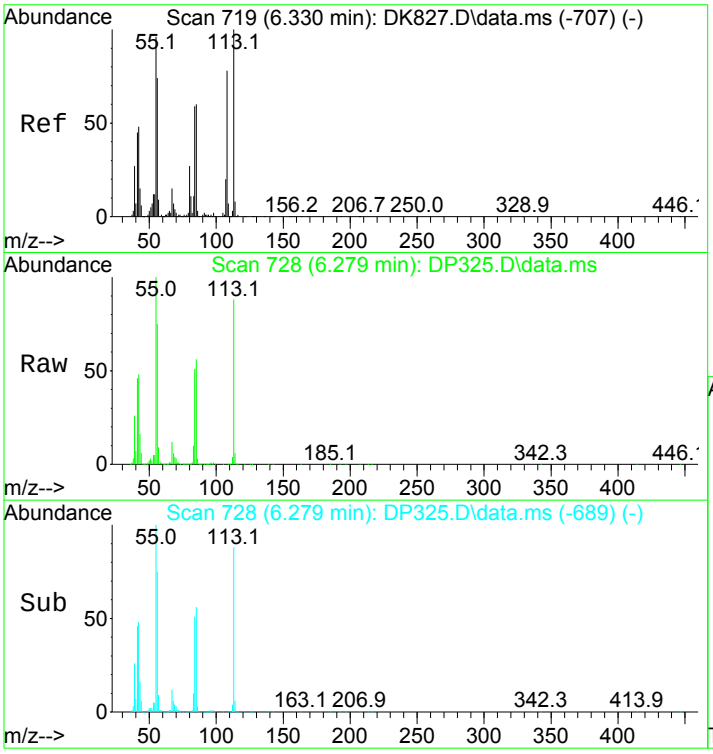


#9
Phenol
Concen: 3.92 ppm
RT: 4.388 min Scan# 374
Delta R.T. 0.008 min
Lab File: DP325.D
Acq: 24 Sep 2018 8:09 pm

Tgt Ion: 94 Resp: 19832

Ion	Ratio	Lower	Upper
94	100		
65	27.3	0.0	55.3
66	42.9	0.0	59.9

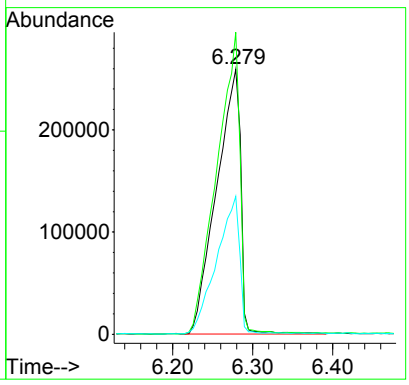


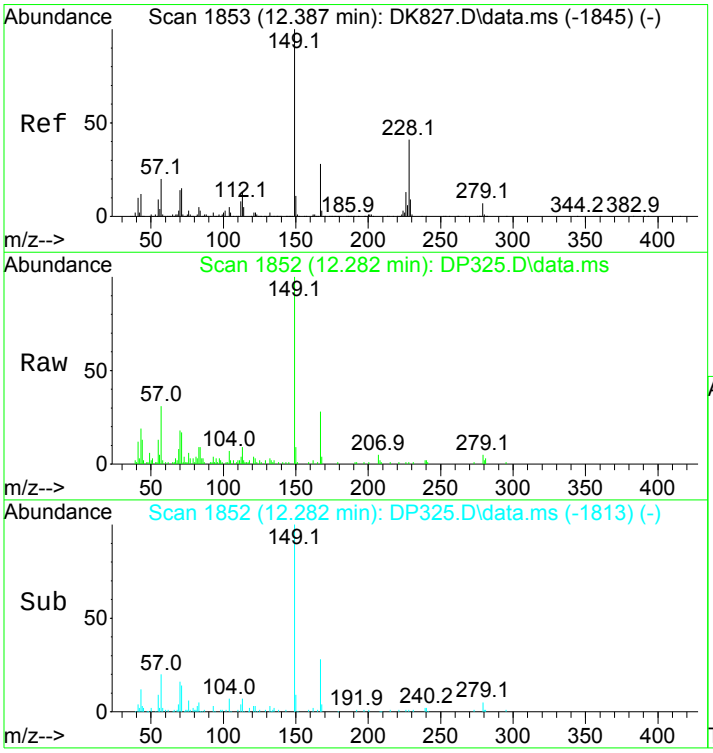


#39
Caprolactam
Concen: 449.24 ppm
RT: 6.279 min Scan# 728
Delta R.T. 0.008 min
Lab File: DP325.D
Acq: 24 Sep 2018 8:09 pm

Tgt Ion:113 Resp: 541743

Ion	Ratio	Lower	Upper
113	100		
55	113.9	82.3	152.9
41	51.8	42.9	79.7

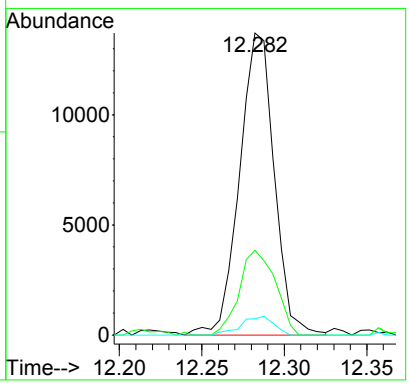




#90
bis(2-Ethylhexyl)phthalate
Concen: 2.53 ppm
RT: 12.282 min Scan# 1852
Delta R.T. 0.008 min
Lab File: DP325.D
Acq: 24 Sep 2018 8:09 pm

Tgt Ion:149 Resp: 19996

Ion	Ratio	Lower	Upper
149	100		
167	27.8	9.5	49.5
279	5.4	0.0	27.8



LSC Area Percent Report

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 25000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Title : 8270 BNA ANALYSIS

Signal : TIC: BP382.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.715	235	240	247	rBV	343617	391221	42.66%	5.419%
2	4.464	376	380	392	rBV	237948	279217	30.44%	3.867%
3	4.780	435	439	444	rBV	481892	453476	49.44%	6.281%
4	5.272	527	531	538	rBV	311663	307908	33.57%	4.265%
5	5.946	652	657	661	rBV	575636	594850	64.86%	8.239%
6	6.983	847	851	857	rBV	659345	580709	63.32%	8.043%
7	7.652	971	976	988	rBV	696111	704110	76.77%	9.752%
8	8.433	1114	1122	1131	rBV	642299	669001	72.94%	9.266%
9	9.117	1246	1250	1258	rBV	667843	670125	73.07%	9.282%
10	10.813	1561	1567	1575	rBV	822180	917134	100.00%	12.703%
11	12.401	1853	1864	1874	rBV2	516664	824868	89.94%	11.425%
12	15.365	2408	2418	2427	rBV2	352253	827214	90.20%	11.458%

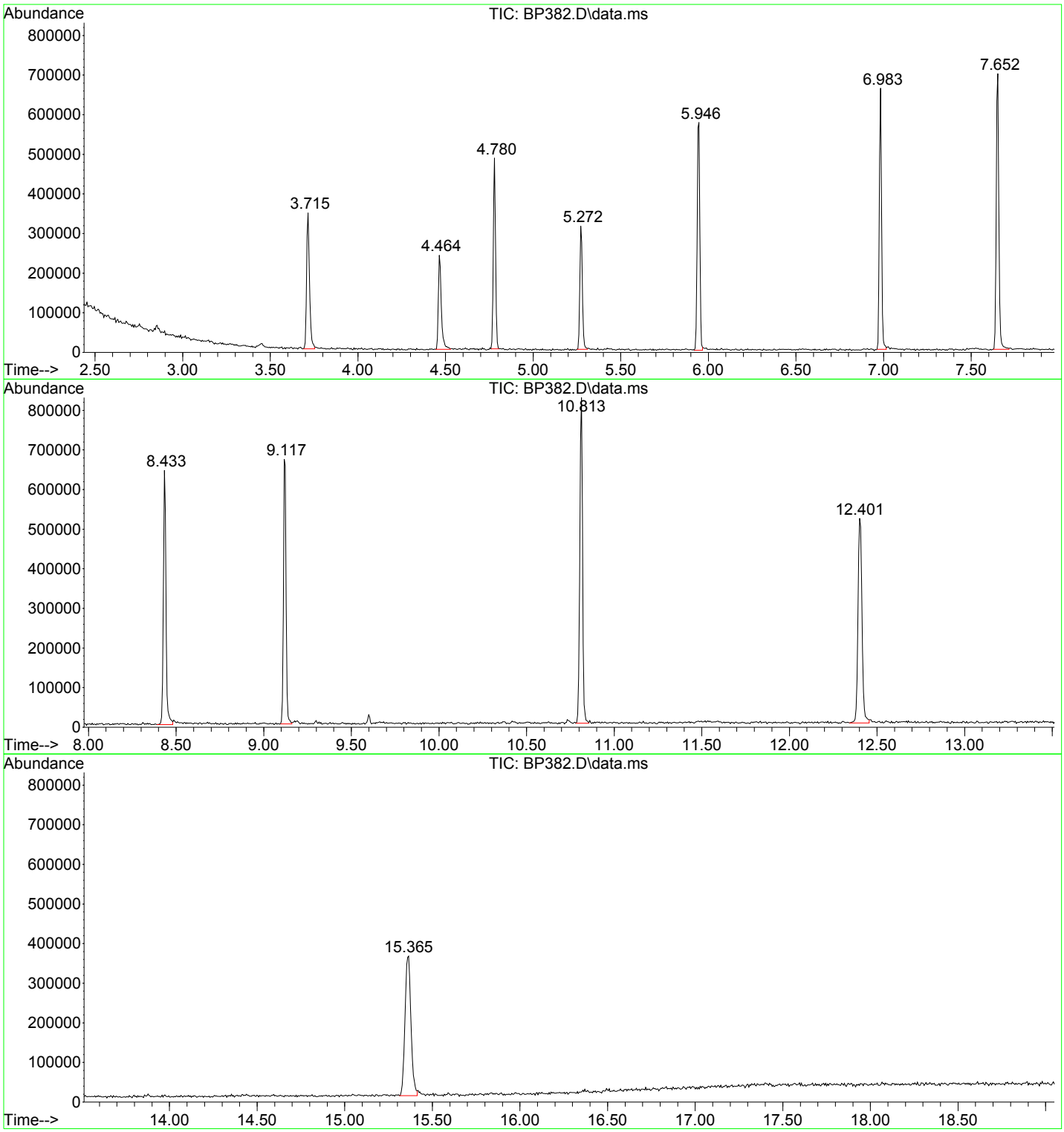
Sum of corrected areas: 7219833

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: TEBINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 08:48:44 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	71986	40.00	ppm	0.00
33) d8-Naphthalene	5.946	136	282231	40.00	ppm	0.00
57) d10-Acenaphthene	7.652	164	148701	40.00	ppm	0.00
91) d10-Phenanthrene	9.117	188	245364	40.00	ppm	0.00
117) d12-Chrysene	12.407	240	267055	40.00	ppm	0.00
135) d12-Perylene	15.365	264	276414	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.715	112	113842	47.80	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 23.90%			
12) SURR2,PHENOL-D6	4.464	99	98015	33.53	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 16.77%			
34) SURR4,NITROBENZENE-D5	5.272	82	104051	40.05	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 40.05%			
63) SURR5,2-FLUOROBIPHENYL	6.983	172	192060	36.91	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 36.91%			
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	81939	95.36	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 47.68%			
124) SURR6,TERPHENYL-D14	10.813	244	289488	47.52	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 47.52%			

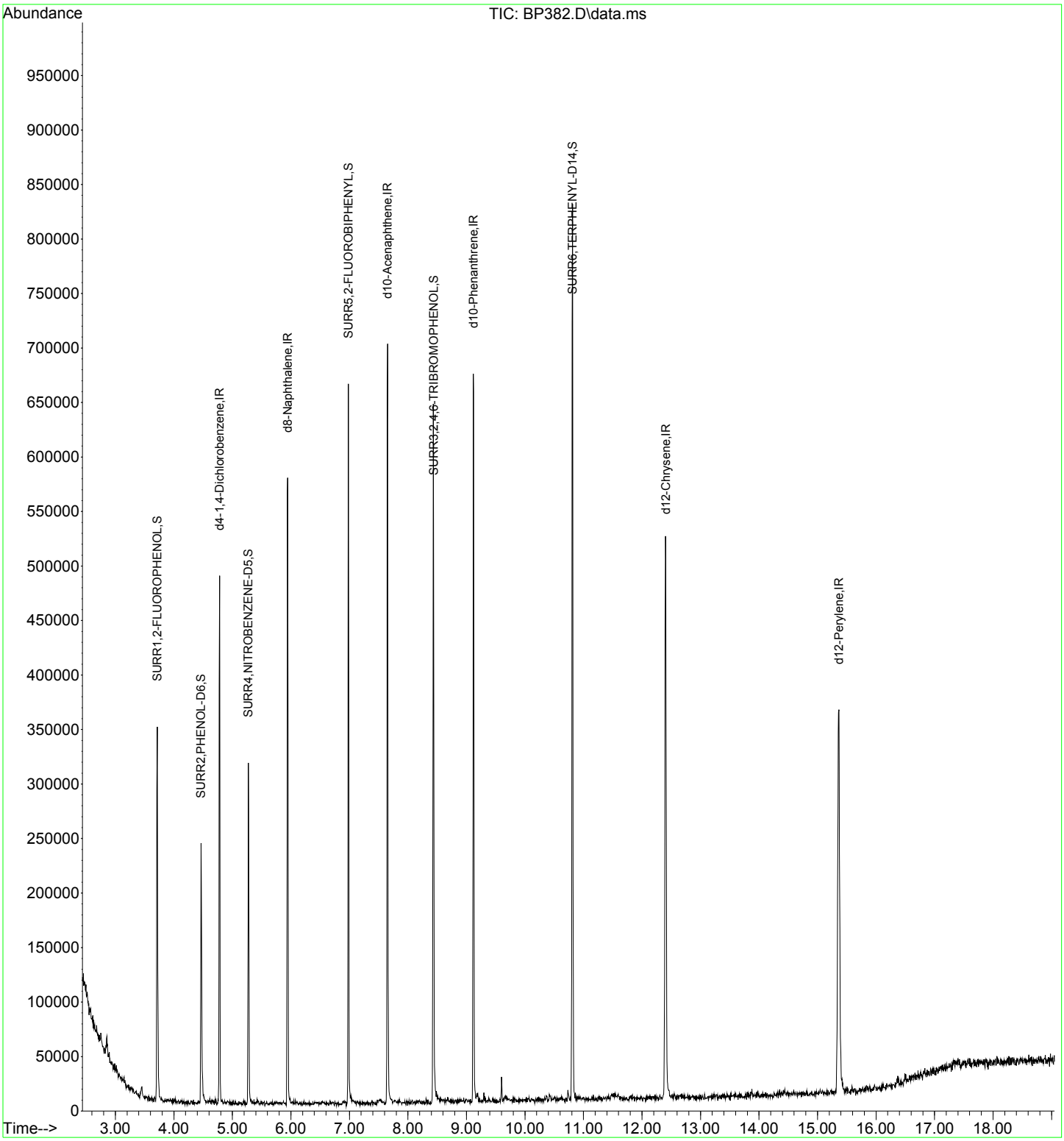
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 08:48:44 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 09:42:32 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

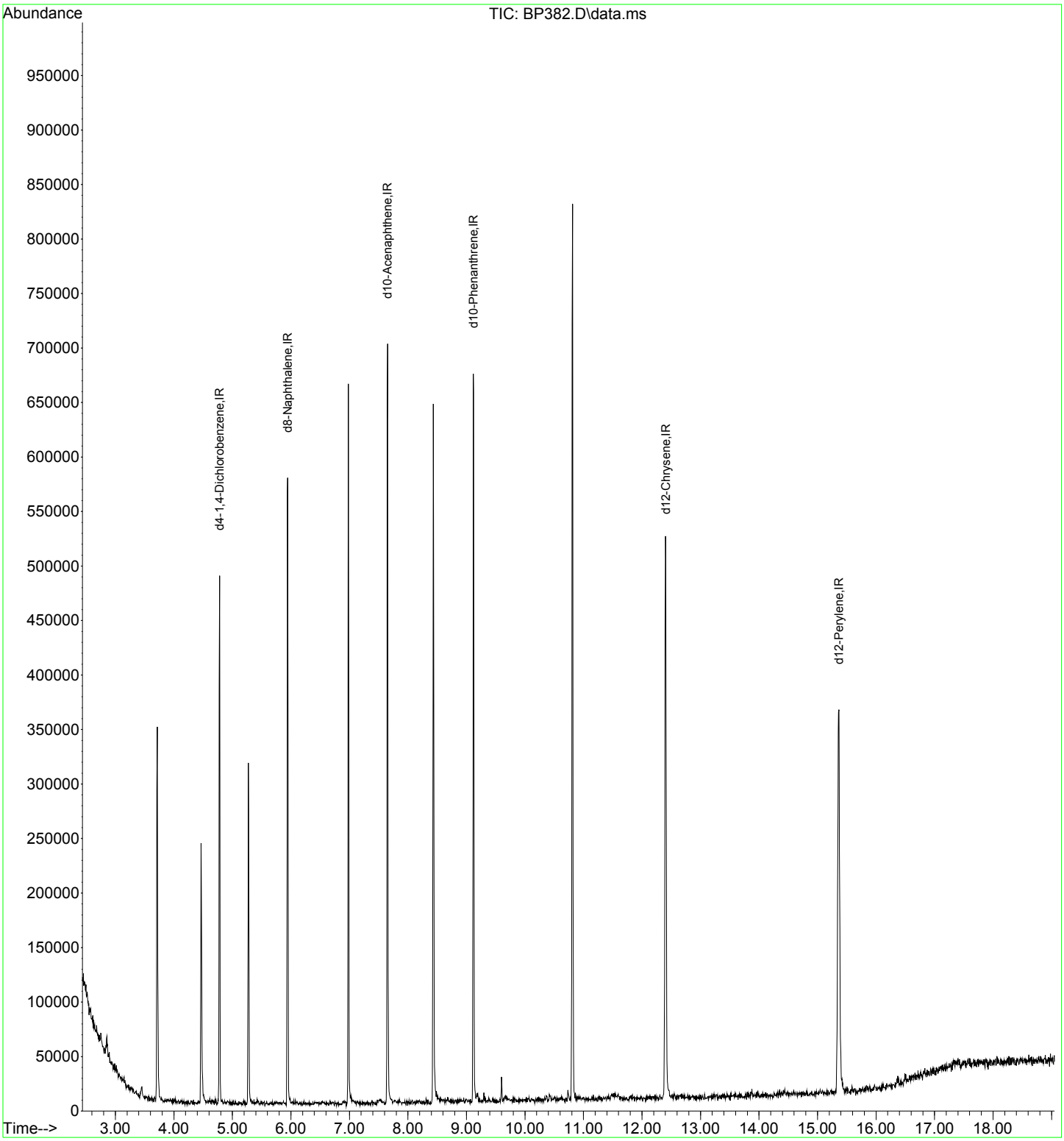
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	71986	40.00	ppm	0.00
3) d8-Naphthalene	5.946	136	282231	40.00	ppm	0.00
5) d10-Acenaphthene	7.652	164	148701	40.00	ppm	0.00
6) d10-Phenanthrene	9.117	188	245364	40.00	ppm	0.00
8) d12-Chrysene	12.407	240	267055	40.00	ppm	0.00
9) d12-Perylene	15.365	264	276414	40.00	ppm	0.01
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 09:42:32 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 09:13:16 2018
Quant Method : I:\ACQUDATA\5973D\Methods\HEXA092418D.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Wed Sep 26 08:44:59 2018
Response via : Initial Calibration

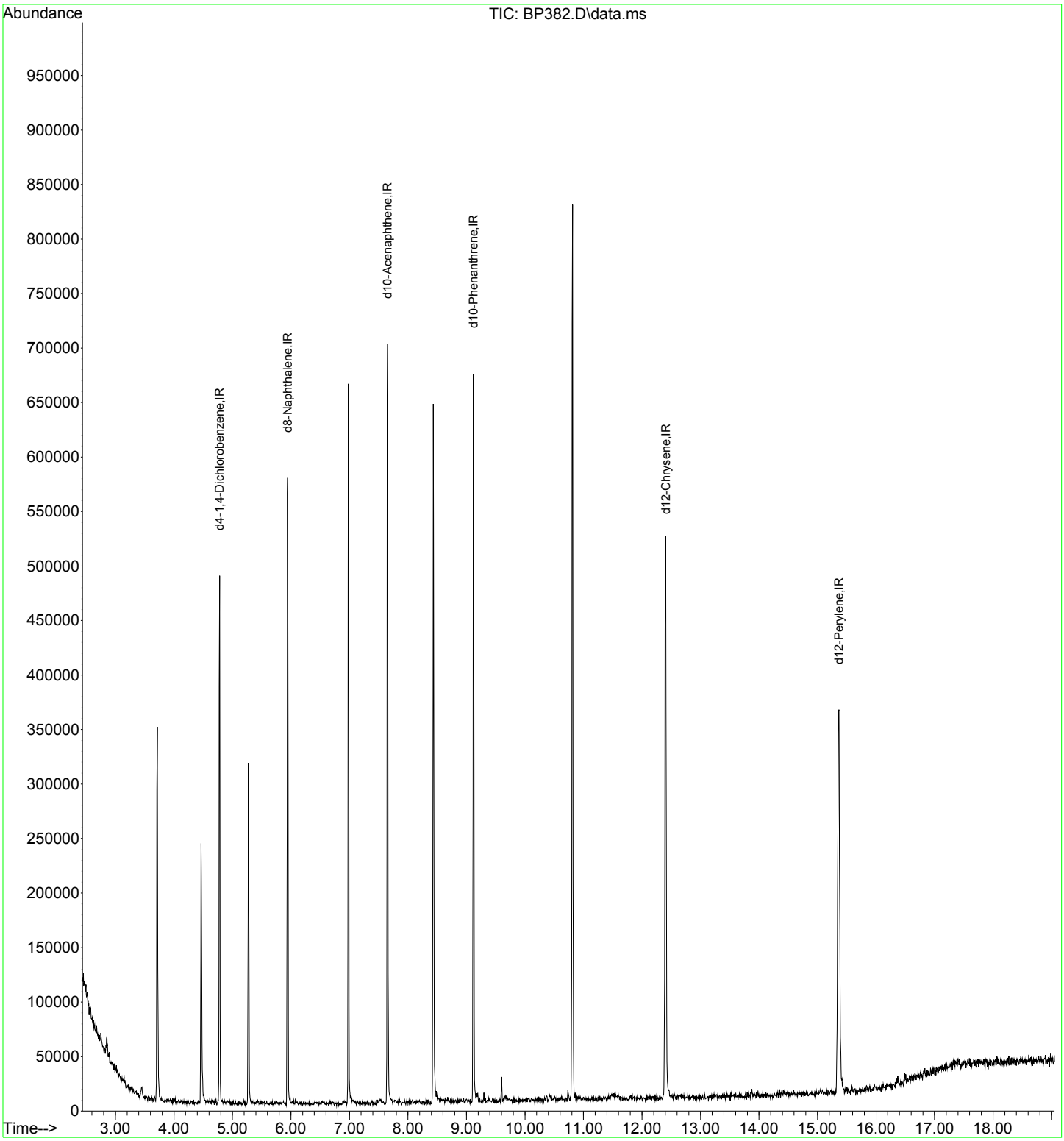
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	71986	40.00	ppm	0.00
2) d8-Naphthalene	5.946	136	283297	40.00	ppm	0.00
3) d10-Acenaphthene	7.652	164	148701	40.00	ppm	0.00
4) d10-Phenanthrene	9.117	188	245364	40.00	ppm	0.00
5) d12-Chrysene	12.407	240	267055	40.00	ppm	0.00
7) d12-Perylene	15.365	264	276414	40.00	ppm	-0.01
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP382.D
Acq On : 24 Sep 2018 4:41 pm
Operator : J.Misiurewicz
Sample : RQ1809900-01
Misc : 322187 8270D/625 BLK
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 09:13:16 2018
Quant Method : I:\ACQUDATA\5973D\Methods\HEXA092418D.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Wed Sep 26 08:44:59 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP316.D
Acq On : 24 Sep 2018 3:59 pm
Operator : J.Misiurewicz
Sample : RQ1809963-01
Misc : 322300 8270D BLK
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 26 06:13:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

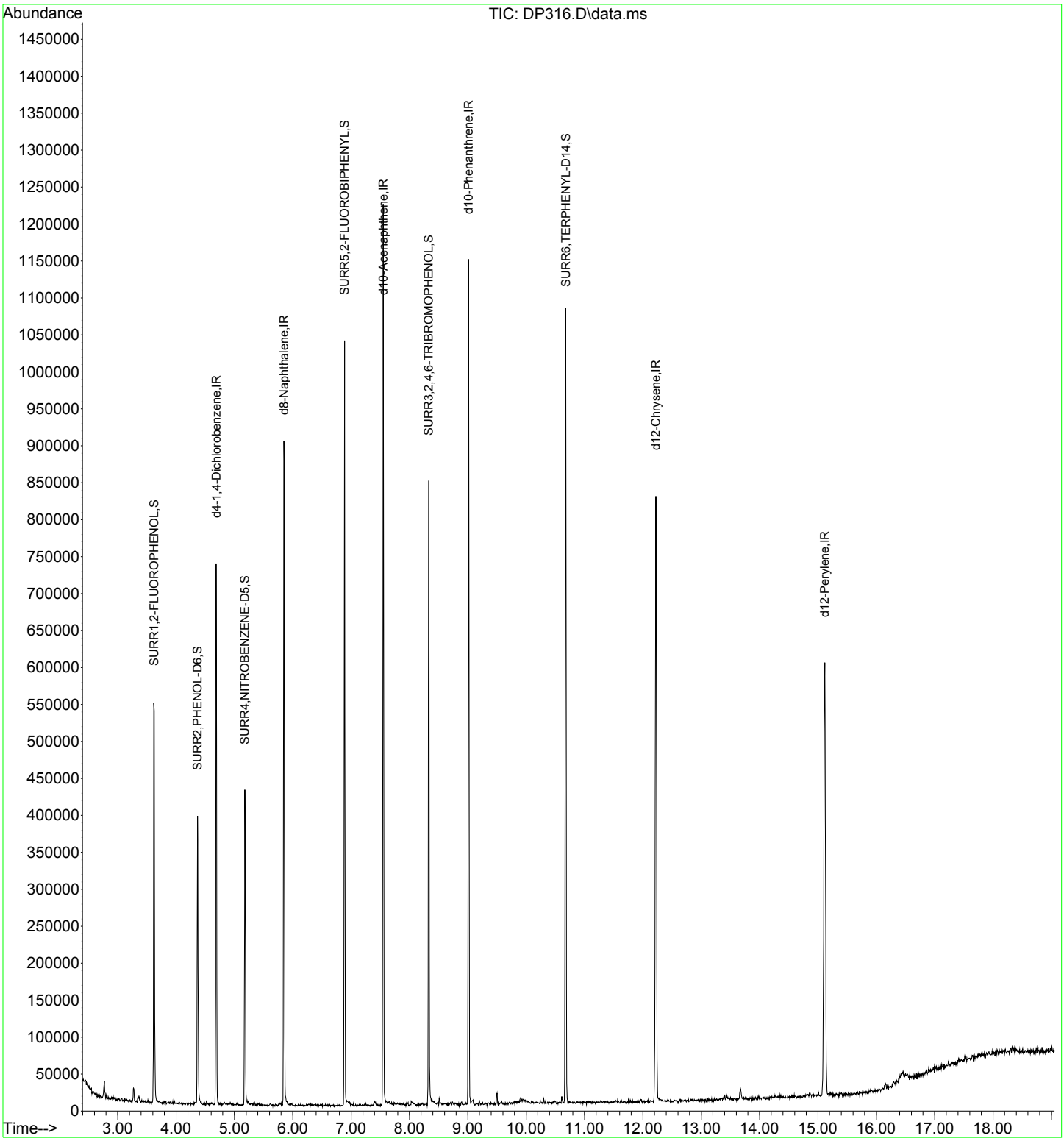
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.686	152	124927	40.00	ppm	0.00
24) d8-Naphthalene	5.851	136	466226	40.00	ppm	0.00
42) d10-Acenaphthene	7.549	164	251193	40.00	ppm	0.00
69) d10-Phenanthrene	9.012	188	401224	40.00	ppm	0.00
82) d12-Chrysene	12.222	240	383217	40.00	ppm	0.00
91) d12-Perylene	15.117	264	388833	40.00	ppm	0.03
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.623	112	203303	46.80	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 23.40%			
8) SURR2,PHENOL-D6	4.366	99	177007	33.62	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 16.81%			
25) SURR4,NITROBENZENE-D5	5.178	82	153569	38.60	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 38.60%			
48) SURR5,2-FLUOROBIPHENYL	6.887	172	314782	35.94	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 35.94%			
67) SURR3,2,4,6-TRIBROMOPH...	8.329	330	95756	73.43	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 36.72%			
85) SURR6,TERPHENYL-D14	10.679	244	385190	43.55	ppm	0.01
Spiked Amount 100.000	Range 10 - 165		Recovery = 43.55%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP316.D
Acq On : 24 Sep 2018 3:59 pm
Operator : J.Misiurewicz
Sample : RQ1809963-01
Misc : 322300 8270D BLK
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 26 06:13:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration



1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP383.D
Acq On : 24 Sep 2018 5:09 pm
Operator : J.Misiurewicz
Sample : RQ1809900-02
Misc : 322187 8270D/625 LCS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 08:48:51 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.779	152	76251	40.00	ppm	0.00
33) d8-Naphthalene	5.945	136	317728	40.00	ppm	0.00
57) d10-Acenaphthene	7.652	164	160972	40.00	ppm	0.00
91) d10-Phenanthrene	9.123	188	235665	40.00	ppm	0.00
117) d12-Chrysene	12.407	240	275301	40.00	ppm	0.00
135) d12-Perylene	15.364	264	283664	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.715	112	128569	50.96	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 25.48%			
12) SURR2,PHENOL-D6	4.464	99	111551	36.03	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 18.02%			
34) SURR4,NITROBENZENE-D5	5.277	82	118297	40.44	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 40.44%			
63) SURR5,2-FLUOROBIPHENYL	6.983	172	233394	41.44	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 41.44%			
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	84677	91.03	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 45.52%			
124) SURR6,TERPHENYL-D14	10.813	244	297438	47.37	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 47.37%			
Target Compounds						Qvalue
2) Pyridine	2.715	79	40775	15.359	ppm	91
3) N-Nitrosodimethylamine	2.672	74	40652	29.335	ppm	90
11) Aniline	4.496	93	128964	31.664	ppm	96
13) Phenol	4.475	94	67199	20.273	ppm	93
14) bis(2-Clethyl)Ether	4.539	93	99191	44.802	ppm	88
16) 2-Chlorophenol	4.608	128	99203	37.258	ppm	98
17) 1,3-Diclbenzene	4.731	146	81806	29.168	ppm	93
18) 1,4-Dichlorobenzene	4.796	146	88463	31.546	ppm	96
19) 1,2-Diclbenzene	4.929	146	82436	31.447	ppm	95
20) Benzyl Alcohol	4.897	79	81332	40.700	ppm	90
21) 1-Methyl-2-pyrrolidinone	4.929	99	28584	16.609	ppm	87
22) 2,2'-oxybis(1-Chloropr...	5.004	45	119253	42.061	ppm	94
23) 2-Methylphenol	4.999	108	80661	35.586	ppm	98
24) 3+4-Methylphenol	5.138	108	80311	31.284	ppm	88
25) Acetophenone	5.132	105	296960	83.565	ppm	83
26) N-Nitroso-Di-n-propyla...	5.122	70	82761	40.807	ppm	88
30) Hexachloroethane	5.229	117	35403	29.898	ppm	81
32) Alpha-terpinol	5.962	121	44923	43.421	ppm	81
35) Nitrobenzene	5.293	77	114568	41.352	ppm	97
37) Isophorone	5.507	82	229702	54.815	ppm	99
38) 2-Nitrophenol	5.587	139	59120	38.334	ppm	96
40) 2,4-Dimethylphenol	5.625	107	118607	41.556	ppm	95
41) bis(-2-Chloroethoxy)Me...	5.699	93	134706	44.079	ppm	94
42) 2,4-Dichlorophenol	5.822	162	90542	39.712	ppm	96
44) 1,2,4-Trichlorobenzene	5.887	180	73870	30.716	ppm	93
45) Naphthalene	5.967	128	272469	33.504	ppm	99
46) 4-Chloroaniline	6.015	127	139066	40.232	ppm	95
48) Hexachlorobutadiene	6.069	225	46021	31.906	ppm	99
50) 4-Chloro-3-methylphenol	6.496	107	99507	41.561	ppm	94
52) Caprolactam	6.352	113	10694	12.544	ppm	88
55) 2-Methylnaphthalene	6.630	142	179359	34.677	ppm	94
56) 1-Methylnaphthalene	6.726	142	186868	36.435	ppm	98
58) Hexachlorocyclopentadiene	6.775	237	13840	21.712	ppm	96

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP383.D
Acq On : 24 Sep 2018 5:09 pm
Operator : J.Misiurewicz
Sample : RQ1809900-02
Misc : 322187 8270D/625 LCS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 08:48:51 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

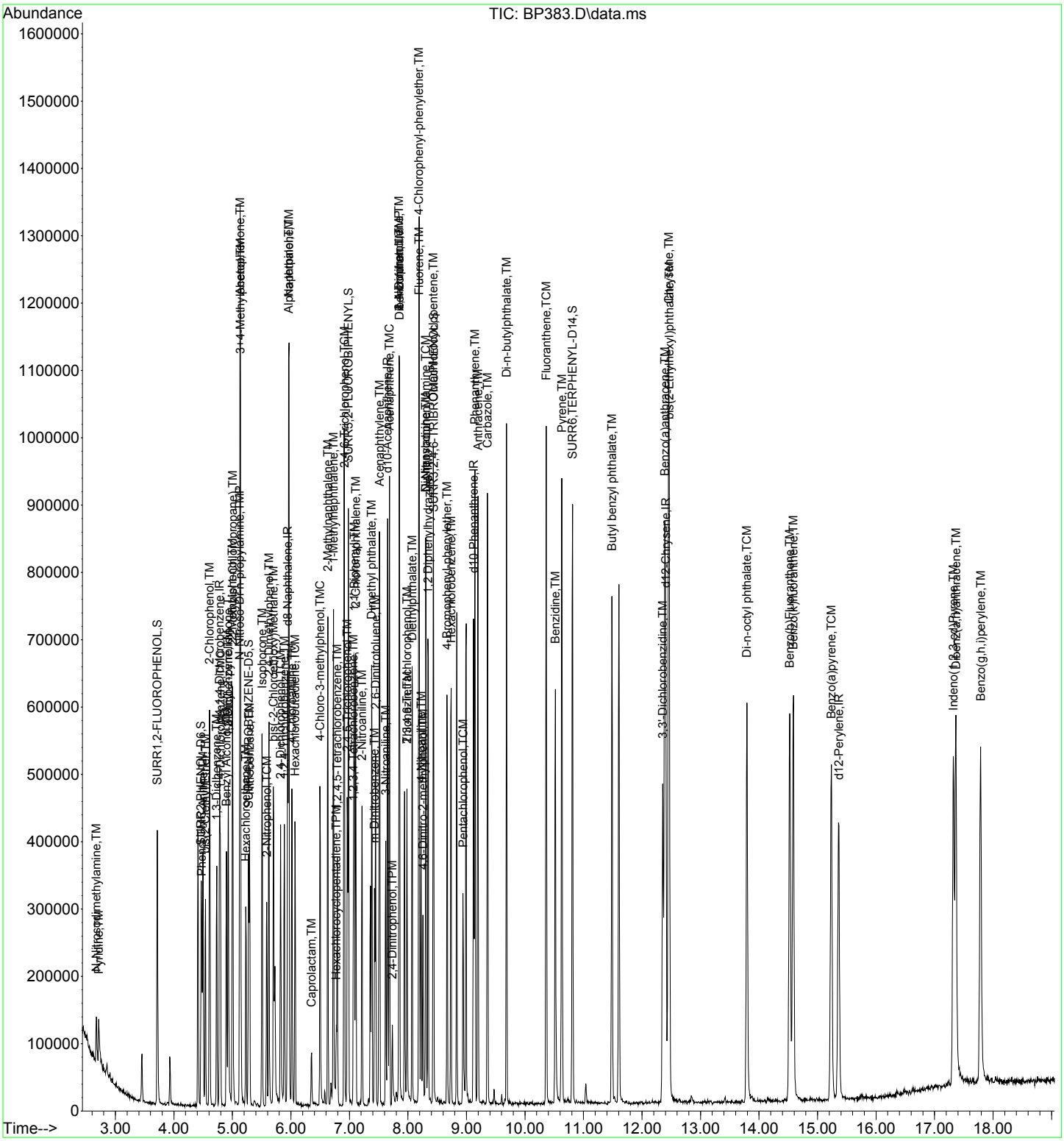
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
59) 1,2,4,5-Tetrachloroben...	6.791	216	59517	26.621	ppm		94
60) 1,2,3,4-Tetrachloroben...	7.069	216	60124	24.805	ppm		97
61) 2,4,6-Trichlorophenol	6.914	196	63528	43.606	ppm		95
62) 2,4,5-Trichlorophenol	6.962	196	68482	49.039	ppm		98
65) 1,1'-Biphenyl	7.085	154	195025	28.969	ppm		96
66) 2-Chloronaphthalene	7.106	162	180236	39.833	ppm		91
67) 2-Nitroaniline	7.213	65	67069	45.030	ppm	#	79
69) m-Dinitrobenzene	7.427	168	37226	44.788	ppm		61
70) Acenaphthylene	7.513	152	321153	42.725	ppm		94
71) Dimethyl phthalate	7.379	163	255013	48.351	ppm		99
72) 2,6-Dinitrotoluene	7.448	165	60307	50.105	ppm		91
73) Acenaphthene	7.684	153	208486	42.579	ppm		99
74) 3-Nitroaniline	7.620	138	57121	38.037	ppm		79
75) 2,4-Dinitrophenol	7.732	184	19967	44.546	ppm		79
76) Dibenzofuran	7.855	168	284114	42.691	ppm		89
77) 2,4-Dinitrotoluene	7.850	165	76918	47.609	ppm		76
78) 4-Nitrophenol	7.850	65	18592	21.976	ppm	#	1
82) 2,3,4,6-Tetrachlorophenol	7.983	232	52608	46.393	ppm		90
83) Fluorene	8.192	166	239848	45.611	ppm		92
84) 4-Chlorophenyl-phenyle...	8.187	204	109667	43.868	ppm		91
85) Diethylphthalate	8.074	149	238542	43.550	ppm		95
86) 4-Nitroaniline	8.224	138	66279	42.601	ppm		83
90) Octachlorocyclopentene	8.433	307	19667	21.947	ppm		98
92) Thionazin	7.983	107	6447	8.157	ppm		68
93) 4,6-Dinitro-2-methylph...	8.256	198	39155	47.650	ppm		81
94) Diphenylamine	8.304	169	199201	50.816	ppm		99
95) 1,2 Diphenylhydrazine	8.342	77	265072	54.154	ppm		86
96) N-Nitrosodiphenylamine	8.304	169	199201	50.803	ppm		99
101) 4-Bromophenyl-phenylether	8.668	248	67171	50.002	ppm	#	84
102) Hexachlorobenzene	8.737	284	79956	50.429	ppm		99
105) Pentachlorophenol	8.941	266	38259	48.871	ppm		96
111) Phenanthrene	9.144	178	334062	52.002	ppm		99
112) Anthracene	9.197	178	345576	54.511	ppm		99
113) Carbazole	9.358	167	364036	53.300	ppm		99
114) Di-n-butylphthalate	9.684	149	470215	58.241	ppm		99
116) Fluoranthene	10.363	202	412806	59.013	ppm		98
122) Benzidine	10.519	184	251187	48.024	ppm		98
123) Pyrene	10.631	202	431035	52.755	ppm		99
128) Butyl benzyl phthalate	11.487	149	217393	51.725	ppm		88
131) 3,3'-Dichlorobenzidine	12.353	252	148523	44.256	ppm		93
132) Benzo(a)anthracene	12.391	228	405180	51.249	ppm		99
133) Chrysene	12.455	228	411528	54.144	ppm		97
134) bis(2-Ethylhexyl)phtha...	12.465	149	306649	52.204	ppm		96
136) Di-n-octyl phthalate	13.792	149	511589	53.411	ppm		96
138) Benzo(b)Fluoranthene	14.525	252	410443	49.918	ppm		96
139) Benzo(k)fluoranthene	14.589	252	407899	51.124	ppm		96
140) Benzo(a)pyrene	15.236	252	373459	52.627	ppm		97
142) Indeno(1,2,3-cd)Pyrene	17.322	276	342385	51.510	ppm		98
143) Dibenz(a,h)anthracene	17.365	278	382976	56.170	ppm		98
144) Benzo(g,h,i)perylene	17.787	276	390737	60.751	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP383.D
Acq On : 24 Sep 2018 5:09 pm
Operator : J.Misiurewicz
Sample : RQ1809900-02
Misc : 322187 8270D/625 LCS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 08:48:51 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP383.D
Acq On : 24 Sep 2018 5:09 pm
Operator : J.Misiurewicz
Sample : RQ1809900-02
Misc : 322187 8270D/625 LCS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 09:42:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

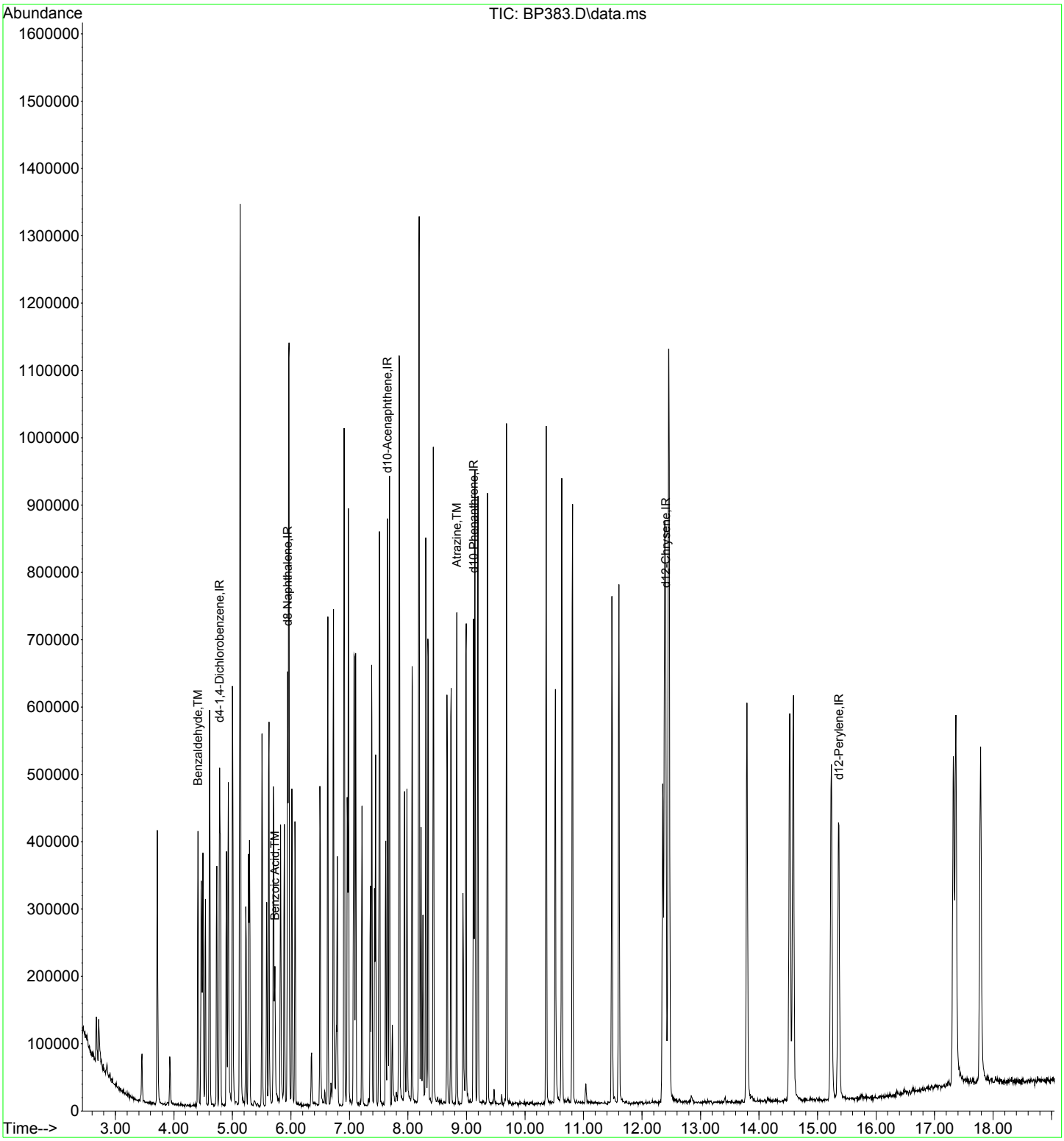
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.779	152	76251	40.00	ppm		0.00
3) d8-Naphthalene	5.945	136	317728	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	160972	40.00	ppm		0.00
6) d10-Phenanthrene	9.123	188	235665	40.00	ppm		0.00
8) d12-Chrysene	12.407	240	275301	40.00	ppm		0.00
9) d12-Perylene	15.364	264	283664	40.00	ppm		0.01
Target Compounds							Qvalue
2) Benzaldehyde	4.410	106	81087	45.061	ppm		94
4) Benzoic Acid	5.726	105	87172	58.692	ppm		88
7) Atrazine	8.834	215	34116	50.278	ppm	#	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP383.D
Acq On : 24 Sep 2018 5:09 pm
Operator : J.Misiurewicz
Sample : RQ1809900-02
Misc : 322187 8270D/625 LCS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 09:42:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP383.D
Acq On : 24 Sep 2018 5:09 pm
Operator : J.Misiurewicz
Sample : RQ1809900-02
Misc : 322187 8270D/625 LCS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 09:13:18 2018
Quant Method : I:\ACQUDATA\5973D\Methods\HEXA092418D.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Wed Sep 26 08:44:59 2018
Response via : Initial Calibration

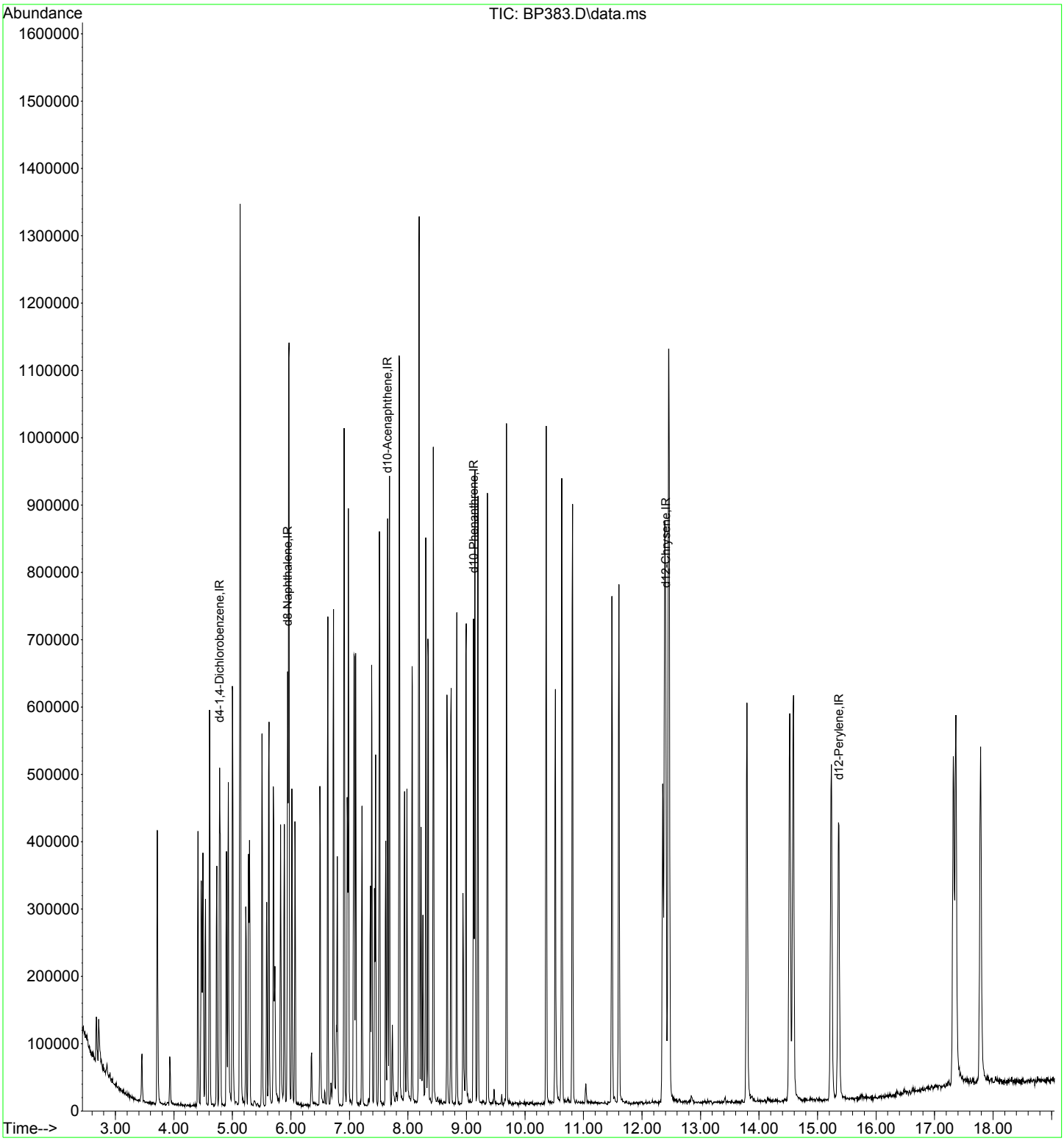
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.779	152	76251	40.00	ppm	0.00
2) d8-Naphthalene	5.945	136	319131	40.00	ppm	0.00
3) d10-Acenaphthene	7.652	164	160972	40.00	ppm	0.00
4) d10-Phenanthrene	9.123	188	235665	40.00	ppm	0.00
5) d12-Chrysene	12.407	240	275301	40.00	ppm	0.00
7) d12-Perylene	15.364	264	283664	40.00	ppm	-0.01
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP383.D
Acq On : 24 Sep 2018 5:09 pm
Operator : J.Misiurewicz
Sample : RQ1809900-02
Misc : 322187 8270D/625 LCS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 09:13:18 2018
Quant Method : I:\ACQUDATA\5973D\Methods\HEXA092418D.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Wed Sep 26 08:44:59 2018
Response via : Initial Calibration



1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP317.D
Acq On : 24 Sep 2018 4:26 pm
Operator : J.Misiurewicz
Sample : RQ1809963-02
Misc : 322300 8270D BLK
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 26 06:13:35 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.685	152	116209	40.00	ppm	0.00
24) d8-Naphthalene	5.849	136	460720	40.00	ppm	0.00
42) d10-Acenaphthene	7.548	164	234243	40.00	ppm	0.00
69) d10-Phenanthrene	9.011	188	344593	40.00	ppm	0.00
82) d12-Chrysene	12.221	240	361868	40.00	ppm	0.00
91) d12-Perylene	15.111	264	369104	40.00	ppm	0.02
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.622	112	199367	49.34	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 24.67%			
8) SURR2,PHENOL-D6	4.370	99	178410	36.43	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 18.22%			
25) SURR4,NITROBENZENE-D5	5.182	82	153847	39.13	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 39.13%			
48) SURR5,2-FLUOROBIPHENYL	6.886	172	334974	41.02	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 41.02%			
67) SURR3,2,4,6-TRIBROMOPH...	8.328	330	87766	72.18	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 36.09%			
85) SURR6,TERPHENYL-D14	10.672	244	370042	44.31	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 44.31%			
Target Compounds						Qvalue
2) Pyridine	2.623	79	80532	19.208	ppm	95
3) N-Nitrosodimethylamine	2.586	74	62920	29.939	ppm	92
7) Aniline	4.402	93	208682	32.176	ppm	94
9) Phenol	4.381	94	108968	20.725	ppm	96
10) bis(2-Clethyl)Ether	4.445	93	157897	41.751	ppm	96
11) 2-Chlorophenol	4.509	128	153851	36.975	ppm	95
12) 1,3-Diclbenzene	4.637	146	117019	26.973	ppm	98
13) 1,4-Dichlorobenzene	4.701	146	120320	27.644	ppm	97
14) 1,2-Diclbenzene	4.835	146	119462	29.163	ppm	97
15) Benzyl Alcohol	4.803	79	121679	43.450	ppm	99
16) 1-Methyl-2-pyrrolidinone	4.835	99	43556	15.362	ppm	99
17) 2,2'-oxybis(1-Chloropr...	4.915	45	173289	43.132	ppm	94
18) 2-Methylphenol	4.904	108	138786	38.066	ppm	97
19) 3+4-Methylphenol	5.043	108	132629	34.403	ppm	95
20) Acetophenone	5.038	105	434295	82.526	ppm	94
21) N-Nitroso-Di-n-propyla...	5.032	70	116298	40.768	ppm	93
22) Hexachloroethane	5.134	117	40579	24.652	ppm	98
23) Alpha-terpinol	5.871	121	71914	46.974	ppm	94
26) Nitrobenzene	5.198	77	156812	42.106	ppm	100
27) Isophorone	5.412	82	354949	59.637	ppm	100
28) 2-Nitrophenol	5.492	139	82931	39.072	ppm	99
29) 2,4-Dimethylphenol	5.524	107	182608	46.617	ppm	87
30) bis(-2-Chloroethoxy)Me...	5.609	93	212394	47.375	ppm	99
32) 2,4-Dichlorophenol	5.721	162	144227	45.737	ppm	98
33) 1,2,4-Trichlorobenzene	5.791	180	100977	31.346	ppm	97
34) Naphthalene	5.866	128	400830	33.717	ppm	99
35) 4-Chloroaniline	5.919	127	207548	41.406	ppm	99
37) Hexachlorobutadiene	5.972	225	51766	31.613	ppm	98
38) 4-Chloro-3-methylphenol	6.394	107	146596	46.330	ppm	95
39) Caprolactam	6.250	113	18060	13.603	ppm	86
40) 2-Methylnaphthalene	6.533	142	267669	35.932	ppm	99
41) 1-Methylnaphthalene	6.629	142	267717	36.341	ppm	98
43) Hexachlorocyclopentadiene	6.677	237	9890	13.517	ppm	90

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP317.D
Acq On : 24 Sep 2018 4:26 pm
Operator : J.Misiurewicz
Sample : RQ1809963-02
Misc : 322300 8270D BLK
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 26 06:13:35 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

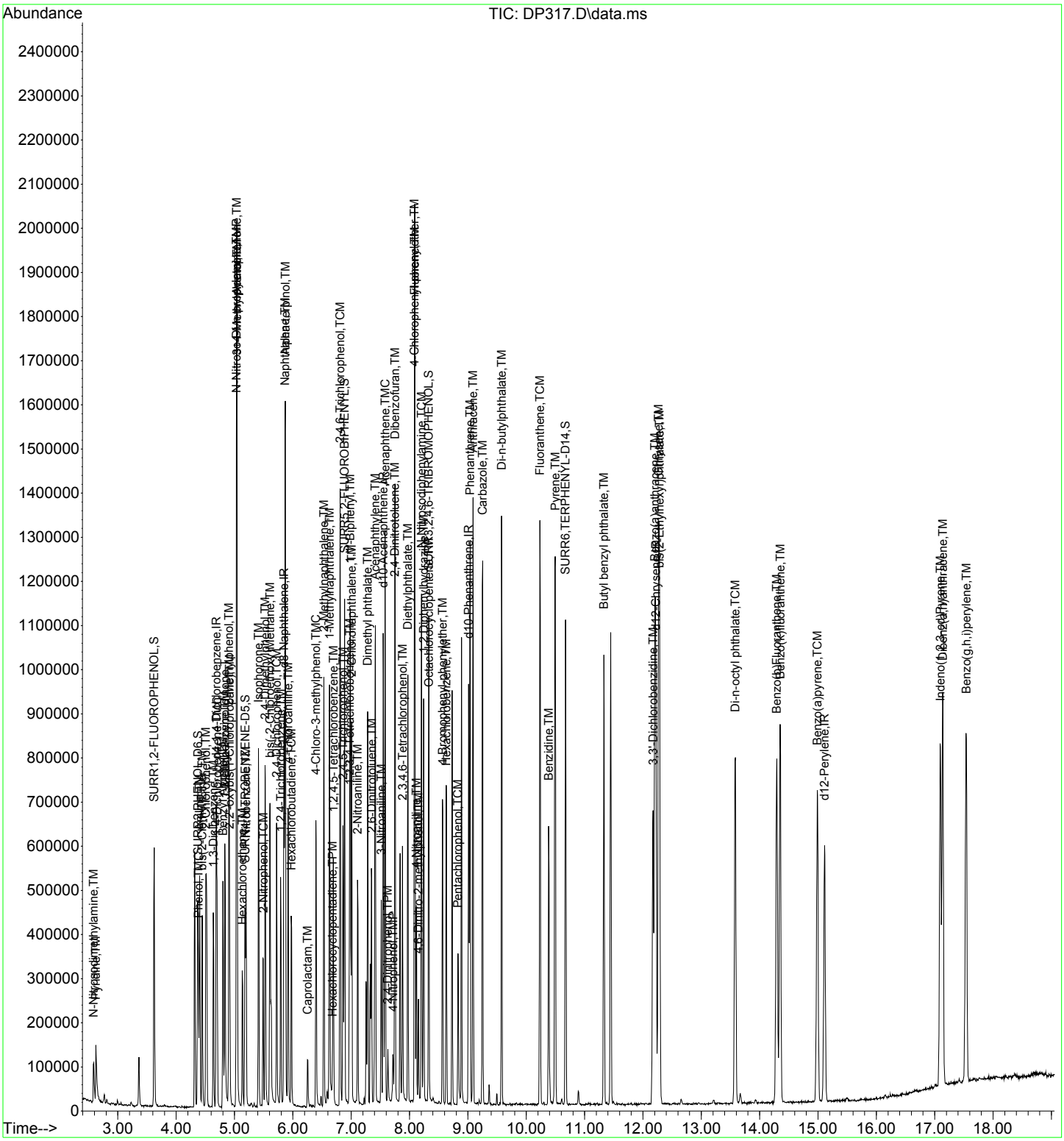
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,2,4,5-Tetrachloroben...	6.693	216	95028	33.084	ppm	98
45) 1,2,3,4-Tetrachloroben...	6.971	216	93449	30.376	ppm	100
46) 2,4,6-Trichlorophenol	6.811	196	97693	48.114	ppm	98
47) 2,4,5-Trichlorophenol	6.859	196	103224	52.452	ppm	99
49) 1,1'-Biphenyl	6.982	154	332280	33.339	ppm	98
50) 2-Chloronaphthalene	7.008	162	258480	38.622	ppm	99
51) 2-Nitroaniline	7.110	65	80200	44.270	ppm	99
52) Acenaphthylene	7.414	152	483089	43.837	ppm	99
53) Dimethyl phthalate	7.281	163	367190	50.516	ppm	98
54) 2,6-Dinitrotoluene	7.350	165	76563	46.794	ppm	89
55) Acenaphthene	7.580	153	311067	43.039	ppm	98
56) 3-Nitroaniline	7.516	138	78719	35.872	ppm	99
57) 2,4-Dinitrophenol	7.628	184	21126	33.631	ppm	88
58) Dibenzofuran	7.751	168	414131	44.569	ppm	96
59) 2,4-Dinitrotoluene	7.746	165	89115	41.070	ppm	86
60) 4-Nitrophenol	7.719	65	17804	15.994	ppm	93
62) 2,3,4,6-Tetrachlorophenol	7.879	232	72438	48.635	ppm	95
63) Fluorene	8.087	166	365325	49.427	ppm	95
64) 4-Chlorophenyl-phenyle...	8.082	204	155142	48.671	ppm	100
65) Diethylphthalate	7.970	149	343676	46.961	ppm	99
66) 4-Nitroaniline	8.119	138	88819	38.921	ppm	98
68) Octachlorocyclopentene	8.333	307	24573	23.631	ppm	98
70) 4,6-Dinitro-2-methylph...	8.152	198	34617	30.280	ppm	96
71) 1,2 Diphenylhydrazine	8.242	77	342043	48.570	ppm	97
72) N-Nitrosodiphenylamine	8.205	169	294716	49.802	ppm	98
73) 4-Bromophenyl-phenylether	8.568	248	87895	46.370	ppm	94
74) Hexachlorobenzene	8.632	284	93414	42.180	ppm	94
76) Pentachlorophenol	8.830	266	46826	39.593	ppm	94
77) Phenanthrene	9.038	178	488362	50.586	ppm	99
78) Anthracene	9.086	178	509450	54.026	ppm	99
79) Carbazole	9.252	167	529995	51.736	ppm	99
80) Di-n-butylphthalate	9.578	149	662720	55.776	ppm	100
81) Fluoranthene	10.235	202	584952	59.806	ppm	99
83) Benzidine	10.384	184	268547	38.673	ppm	100
84) Pyrene	10.496	202	601949	54.601	ppm	99
86) Butyl benzyl phthalate	11.329	149	309501	52.382	ppm	97
87) 3,3'-Dichlorobenzidine	12.173	252	211176	49.021	ppm	96
88) Benzo(a)anthracene	12.205	228	570167	55.982	ppm	98
89) Chrysene	12.269	228	562310	56.385	ppm	98
90) bis(2-Ethylhexyl)phtha...	12.285	149	428938	53.167	ppm	96
92) Di-n-octyl phthalate	13.583	149	748239	57.803	ppm	98
93) Benzo(b)Fluoranthene	14.294	252	560550	50.836	ppm	94
94) Benzo(k)fluoranthene	14.352	252	562482	55.036	ppm	97
95) Benzo(a)pyrene	14.988	252	495383	53.343	ppm	97
96) Indeno(1,2,3-cd)Pyrene	17.098	276	519986	58.337	ppm	97
97) Dibenz(a,h)anthracene	17.140	278	536410	57.534	ppm	96
98) Benzo(g,h,i)perylene	17.541	276	533583	62.386	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP317.D
Acq On : 24 Sep 2018 4:26 pm
Operator : J.Misiurewicz
Sample : RQ1809963-02
Misc : 322300 8270D BLK
ALS Vial : 5 Sample Multiplier: 1

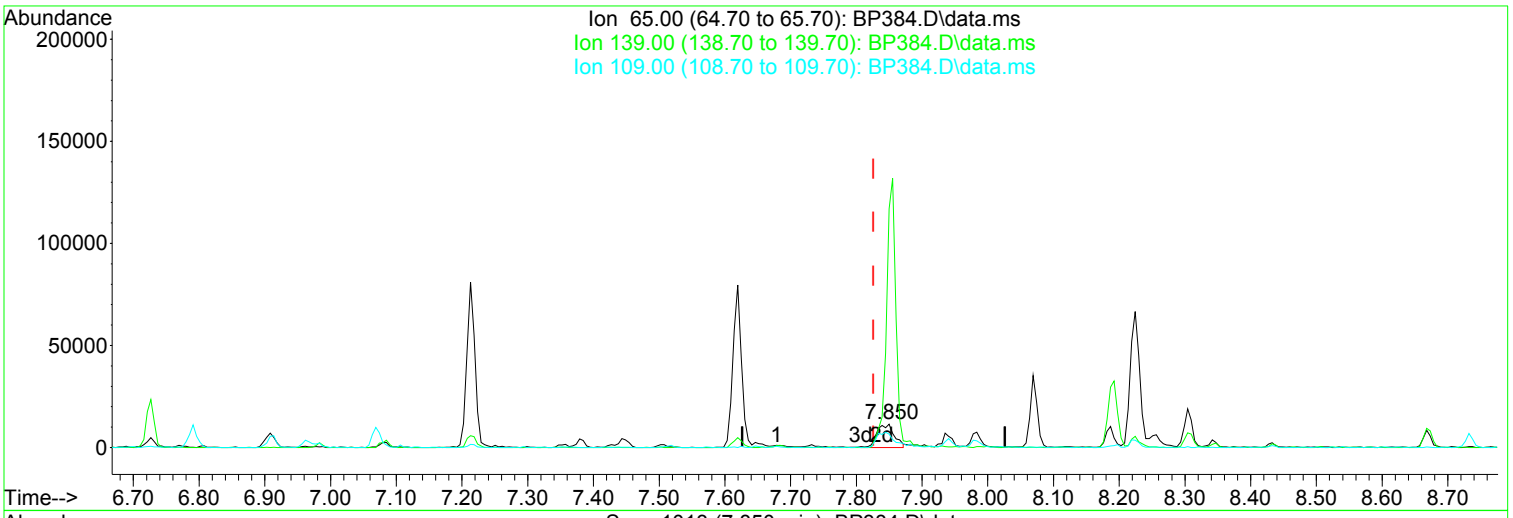
Quant Time: Sep 26 06:13:35 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

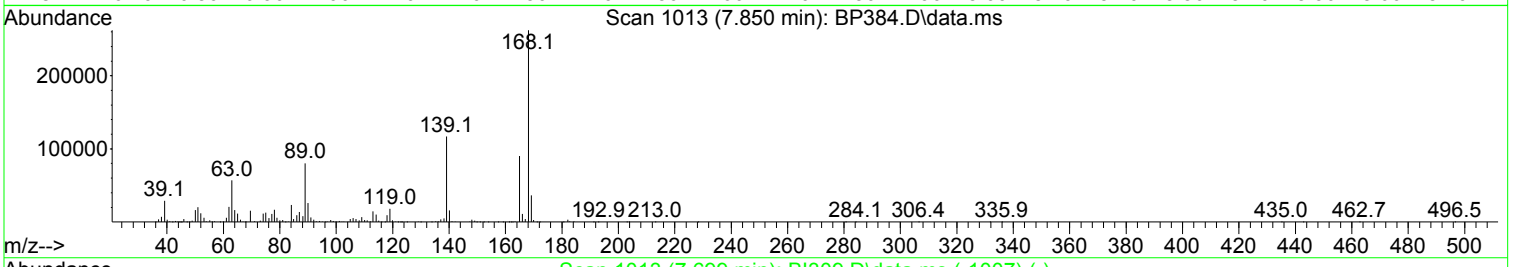


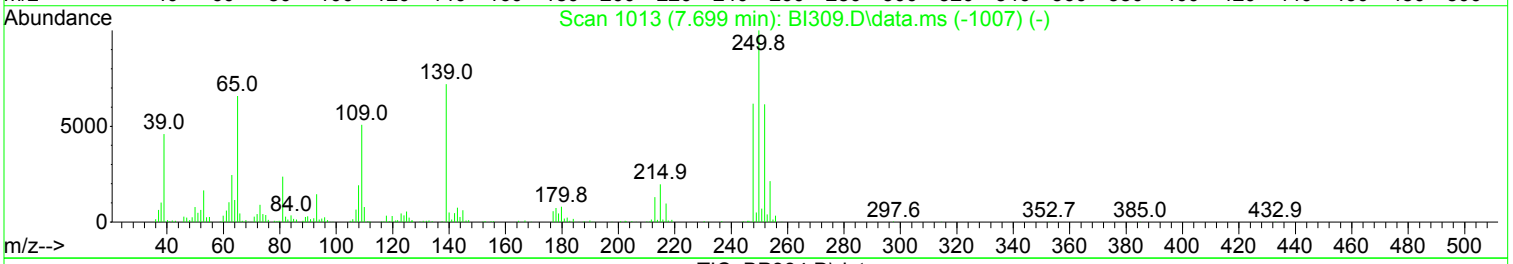
1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 08:48:59 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration







TIC: BP384.D\data.ms

(78) 4-Nitrophenol (TMP)

7.850min (+ 0.023) 24.65 ppm m

response 20987

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	1025.59#
109.00	86.40	57.58
0.00	0.00	0.00

Manual Integration:

After

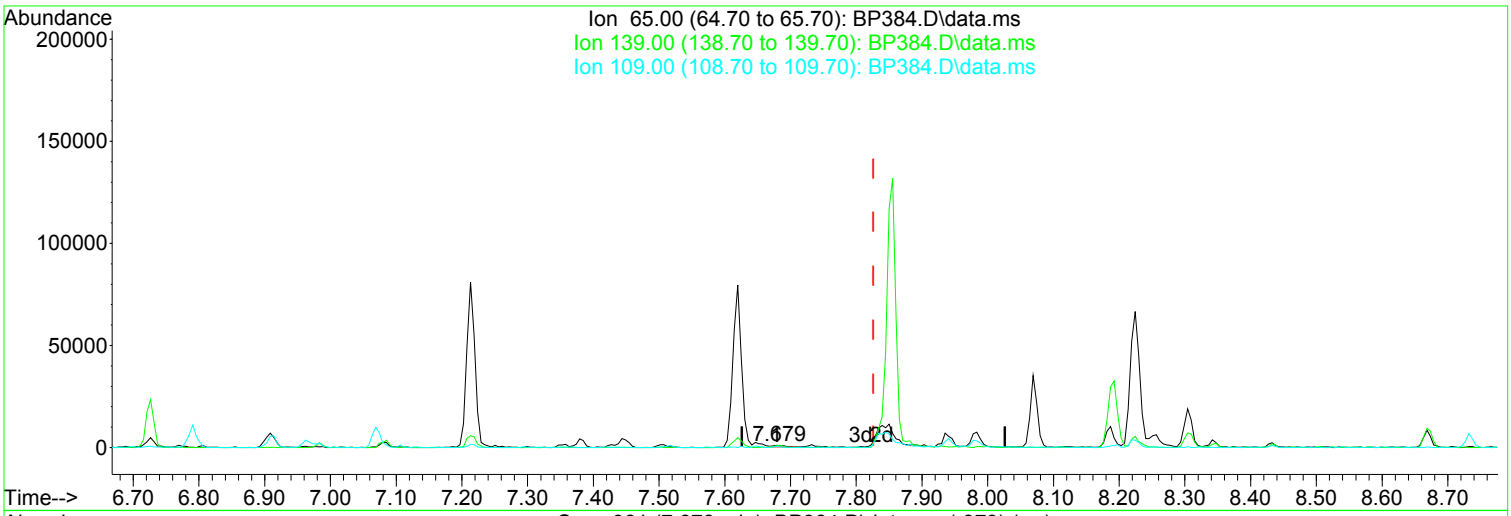
Peak not found.

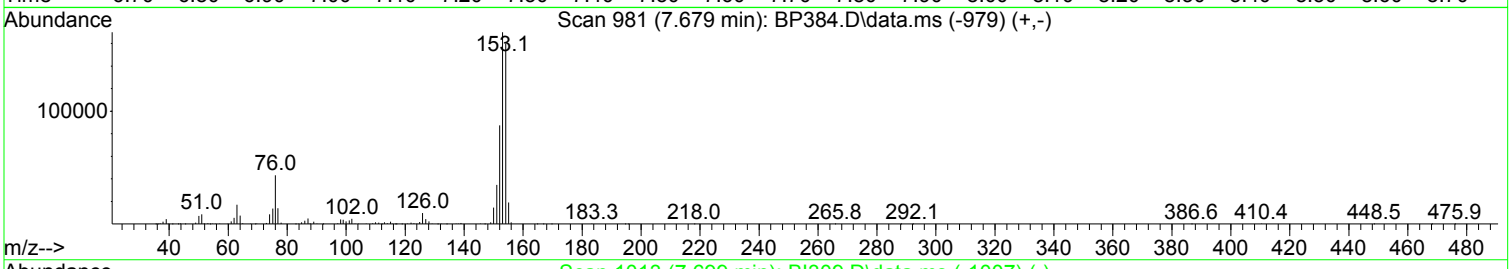
09/26/18

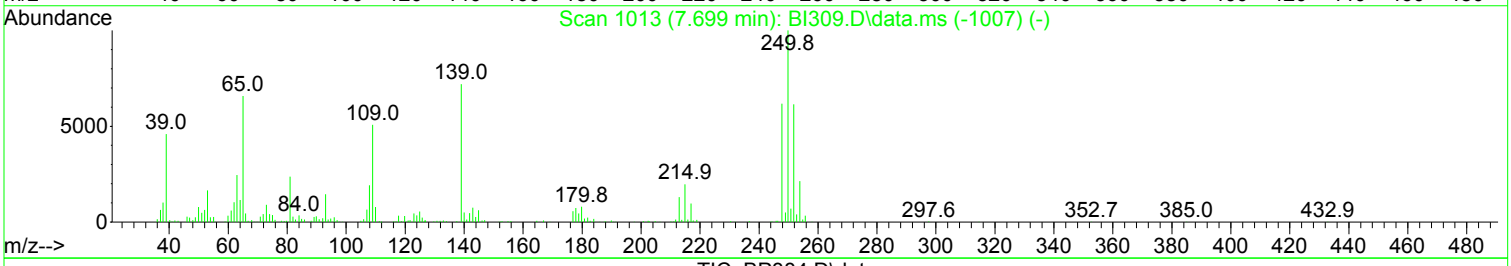
1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 08:48:59 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration







TIC: BP384.D\data.ms

(78) 4-Nitrophenol (TMP)

7.679min (-0.148) 1.26 ppm

response 1072

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	122.18
109.00	86.40	86.18
0.00	0.00	0.00

Manual Integration:

Before

09/26/18

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 08:48:59 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	75617	40.00	ppm		0.00
33) d8-Naphthalene	5.946	136	297147	40.00	ppm		0.00
57) d10-Acenaphthene	7.652	164	161983	40.00	ppm		0.00
91) d10-Phenanthrene	9.123	188	230660	40.00	ppm		0.00
117) d12-Chrysene	12.407	240	257282	40.00	ppm		0.00
135) d12-Perylene	15.359	264	278465	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.715	112	118265	47.27	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 23.64%				
12) SURR2,PHENOL-D6	4.464	99	108122	35.22	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 17.61%				
34) SURR4,NITROBENZENE-D5	5.272	82	116258	42.50	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 42.50%				
63) SURR5,2-FLUOROBIPHENYL	6.983	172	218642	38.58	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 38.58%				
88) SURR3,2,4,6-TRIBROMOPH...	8.433	330	84803	90.60	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 45.30%				
124) SURR6,TERPHENYL-D14	10.813	244	277573	47.30	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 47.30%				
Target Compounds							Qvalue
2) Pyridine	2.710	79	54633	20.752	ppm		95
3) N-Nitrosodimethylamine	2.667	74	40555	29.510	ppm		71
11) Aniline	4.496	93	144181	35.697	ppm		96
13) Phenol	4.475	94	68171	20.739	ppm		84
14) bis(2-Clethyl)Ether	4.539	93	103117	46.965	ppm		95
16) 2-Chlorophenol	4.603	128	102725	38.905	ppm		94
17) 1,3-Diclbenzene	4.731	146	79425	28.557	ppm		91
18) 1,4-Dichlorobenzene	4.796	146	83412	29.994	ppm		94
19) 1,2-Diclbenzene	4.929	146	81020	31.166	ppm		95
20) Benzyl Alcohol	4.897	79	83186	41.976	ppm		95
21) 1-Methyl-2-pyrrolidinone	4.929	99	30221	17.707	ppm		97
22) 2,2'-oxybis(1-Chloropr...	5.004	45	122654	43.623	ppm		90
23) 2-Methylphenol	4.999	108	81802	36.392	ppm		96
24) 3+4-Methylphenol	5.138	108	78548	30.854	ppm		98
25) Acetophenone	5.133	105	295677	83.901	ppm		88
26) N-Nitroso-Di-n-propyla...	5.122	70	85046	42.285	ppm		94
30) Hexachloroethane	5.229	117	30275	25.782	ppm	#	79
32) Alpha-terpinol	5.962	121	49141	47.896	ppm		90
35) Nitrobenzene	5.293	77	119657	46.180	ppm		93
37) Isophorone	5.507	82	238231	60.788	ppm		93
38) 2-Nitrophenol	5.587	139	59481	41.239	ppm		91
40) 2,4-Dimethylphenol	5.625	107	117629	44.068	ppm		99
41) bis(-2-Chloroethoxy)Me...	5.700	93	143789	50.310	ppm		99
42) 2,4-Dichlorophenol	5.823	162	88583	41.544	ppm		99
44) 1,2,4-Trichlorobenzene	5.887	180	71133	31.626	ppm		95
45) Naphthalene	5.967	128	268431	35.294	ppm		100
46) 4-Chloroaniline	6.015	127	142585	44.107	ppm		95
48) Hexachlorobutadiene	6.069	225	43192	32.019	ppm		90
50) 4-Chloro-3-methylphenol	6.496	107	97998	43.766	ppm		92
52) Caprolactam	6.352	113	9752	12.231	ppm		88
55) 2-Methylnaphthalene	6.630	142	171574	35.470	ppm		96
56) 1-Methylnaphthalene	6.726	142	178205	37.152	ppm		98
58) Hexachlorocyclopentadiene	6.775	237	12488	19.879	ppm		94

1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 08:48:59 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

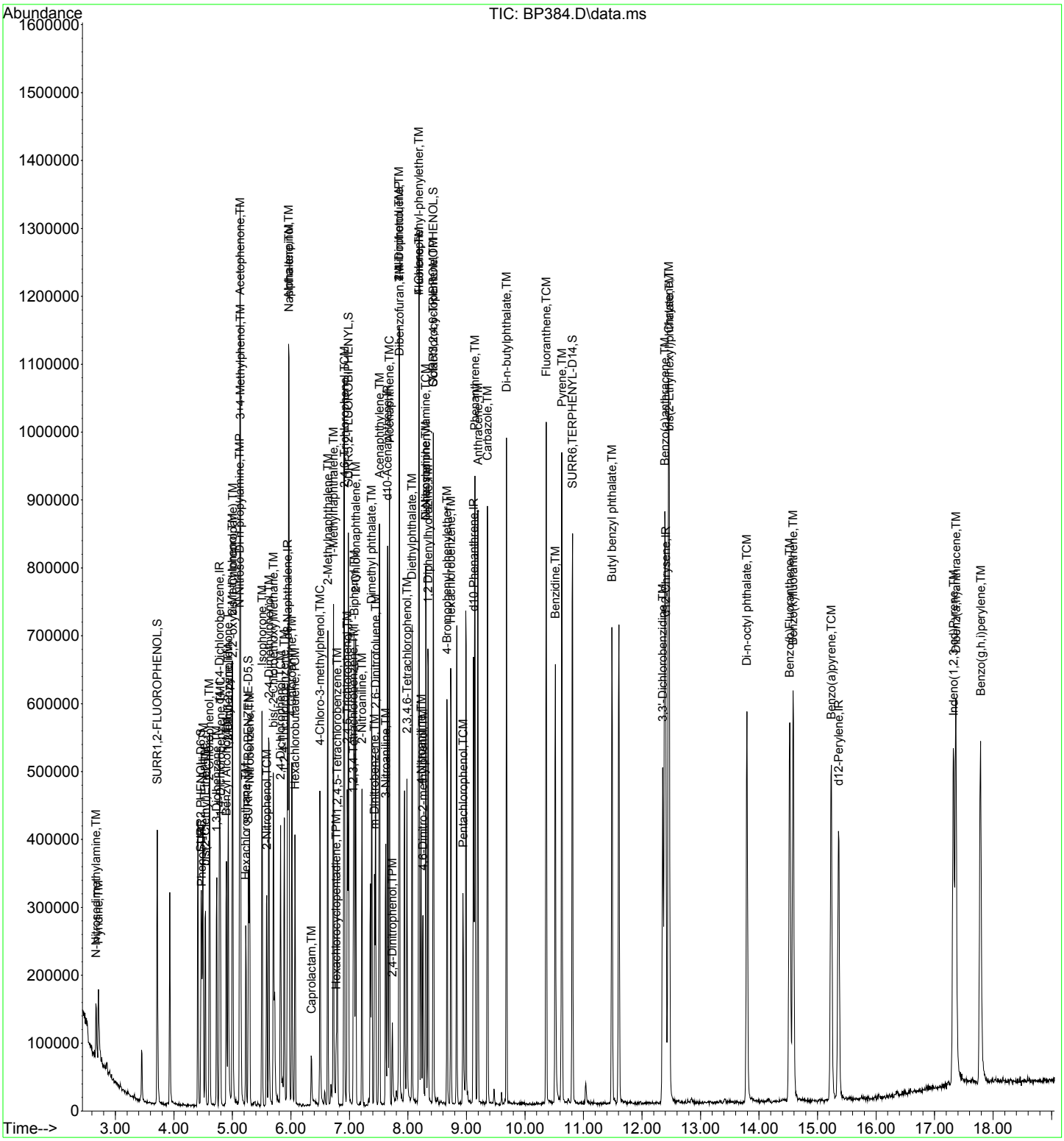
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
59)	1,2,4,5-Tetrachloroben...	6.791	216	57624	25.614	ppm		94
60)	1,2,3,4-Tetrachloroben...	7.069	216	57210	23.456	ppm		97
61)	2,4,6-Trichlorophenol	6.914	196	67497	46.041	ppm		97
62)	2,4,5-Trichlorophenol	6.962	196	74148	52.765	ppm		99
65)	1,1'-Biphenyl	7.085	154	196810	29.051	ppm		97
66)	2-Chloronaphthalene	7.106	162	177989	39.091	ppm		97
67)	2-Nitroaniline	7.213	65	71360	47.611	ppm	#	78
69)	m-Dinitrobenzene	7.427	168	39498	47.224	ppm		73
70)	Acenaphthylene	7.513	152	325162	42.988	ppm		99
71)	Dimethyl phthalate	7.379	163	255899	48.216	ppm		97
72)	2,6-Dinitrotoluene	7.449	165	61762	50.993	ppm		81
73)	Acenaphthene	7.684	153	203146	41.230	ppm		99
74)	3-Nitroaniline	7.620	138	61248	40.530	ppm		85
75)	2,4-Dinitrophenol	7.732	184	21193	46.464	ppm		95
76)	Dibenzofuran	7.855	168	280310	41.856	ppm		91
77)	2,4-Dinitrotoluene	7.850	165	75147	46.223	ppm	#	69
78)	4-Nitrophenol	7.850	65	20987m	24.652	ppm		
82)	2,3,4,6-Tetrachlorophenol	7.983	232	59850	52.450	ppm		94
83)	Fluorene	8.192	166	239798	45.316	ppm		96
84)	4-Chlorophenyl-phenyle...	8.187	204	105662	42.002	ppm		90
85)	Diethylphthalate	8.069	149	249454	45.258	ppm		97
86)	4-Nitroaniline	8.224	138	69123	44.152	ppm		91
90)	Octachlorocyclopentene	8.433	307	21221	23.533	ppm		95
93)	4,6-Dinitro-2-methylph...	8.256	198	39218	48.762	ppm		79
94)	Diphenylamine	8.304	169	200768	52.327	ppm		99
95)	1,2 Diphenylhydrazine	8.342	77	257724	53.795	ppm		86
96)	N-Nitrosodiphenylamine	8.304	169	200768	52.314	ppm		99
101)	4-Bromophenyl-phenylether	8.668	248	66243	50.381	ppm		90
102)	Hexachlorobenzene	8.732	284	81288	52.382	ppm		93
105)	Pentachlorophenol	8.941	266	39103	50.930	ppm		100
111)	Phenanthrene	9.144	178	339238	53.953	ppm		98
112)	Anthracene	9.198	178	349214	56.281	ppm		99
113)	Carbazole	9.358	167	367027	54.904	ppm		100
114)	Di-n-butylphthalate	9.684	149	472438	59.786	ppm		99
116)	Fluoranthene	10.364	202	409246	59.774	ppm		97
122)	Benzidine	10.519	184	273045	55.859	ppm		96
123)	Pyrene	10.631	202	425021	55.662	ppm		98
128)	Butyl benzyl phthalate	11.487	149	214557	54.625	ppm		94
131)	3,3'-Dichlorobenzidine	12.353	252	147948	47.172	ppm		95
132)	Benzo(a)anthracene	12.391	228	403804	54.652	ppm		99
133)	Chrysene	12.455	228	392931	55.318	ppm		97
134)	bis(2-Ethylhexyl)phtha...	12.466	149	293829	53.525	ppm		93
136)	Di-n-octyl phthalate	13.792	149	494614	52.603	ppm		95
138)	Benzo(b)Fluoranthene	14.525	252	419429	51.963	ppm		97
139)	Benzo(k)fluoranthene	14.584	252	414965	52.981	ppm		99
140)	Benzo(a)pyrene	15.236	252	372356	53.451	ppm		98
142)	Indeno(1,2,3-cd)Pyrene	17.327	276	356447	54.626	ppm		96
143)	Dibenz(a,h)anthracene	17.365	278	399053	59.621	ppm		97
144)	Benzo(g,h,i)perylene	17.787	276	410660	65.041	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 08:48:59 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 09:42:36 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

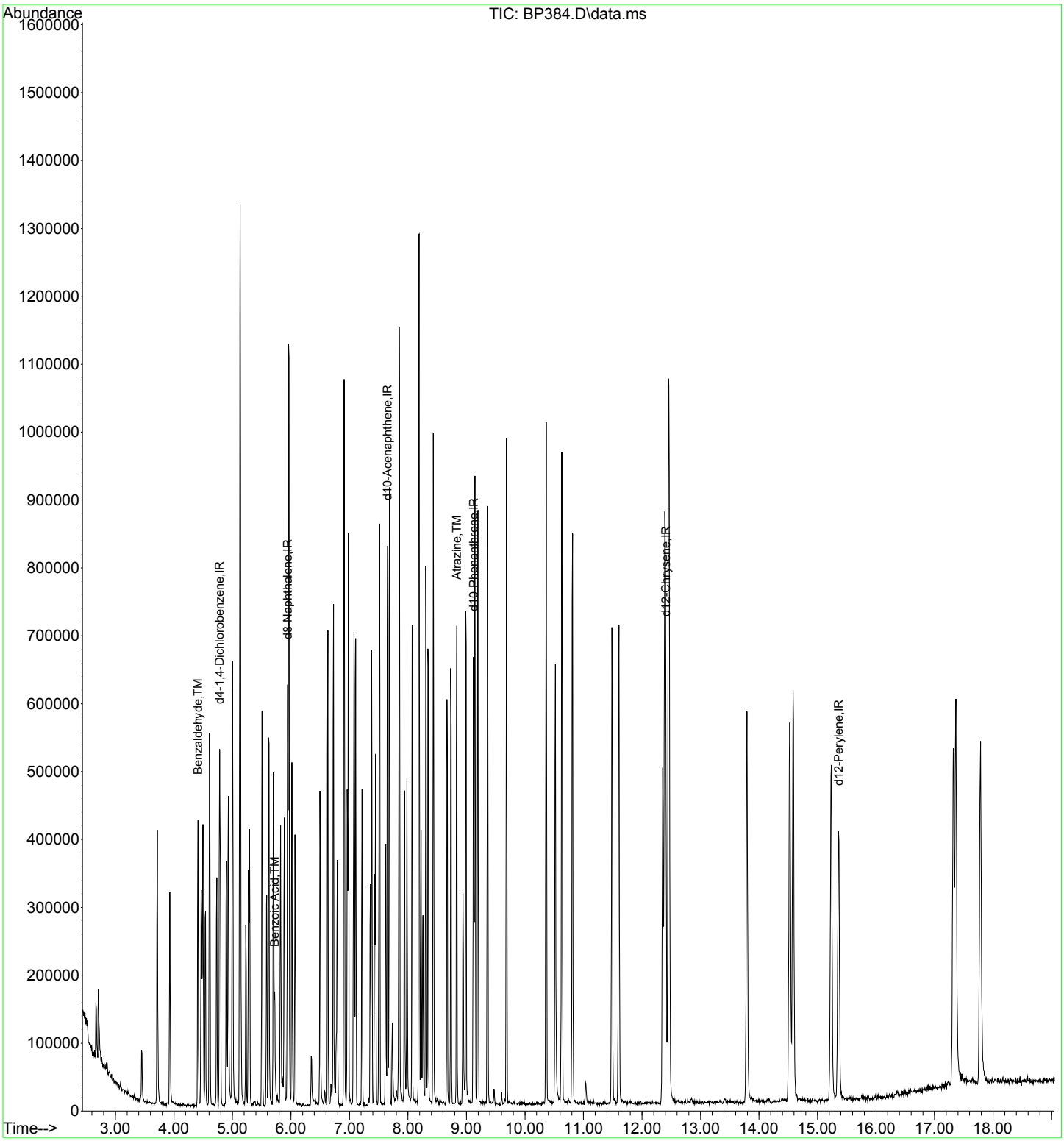
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	75617	40.00	ppm		0.00
3) d8-Naphthalene	5.946	136	297147	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	161983	40.00	ppm		0.00
6) d10-Phenanthrene	9.123	188	230660	40.00	ppm		0.00
8) d12-Chrysene	12.407	240	257282	40.00	ppm		0.00
9) d12-Perylene	15.359	264	278465	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.410	106	76796	43.034	ppm		96
4) Benzoic Acid	5.721	105	71776	51.674	ppm		95
7) Atrazine	8.834	215	33018	49.924	ppm	#	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 09:42:36 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 09:13:20 2018
Quant Method : I:\ACQUDATA\5973D\Methods\HEXA092418D.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Wed Sep 26 08:44:59 2018
Response via : Initial Calibration

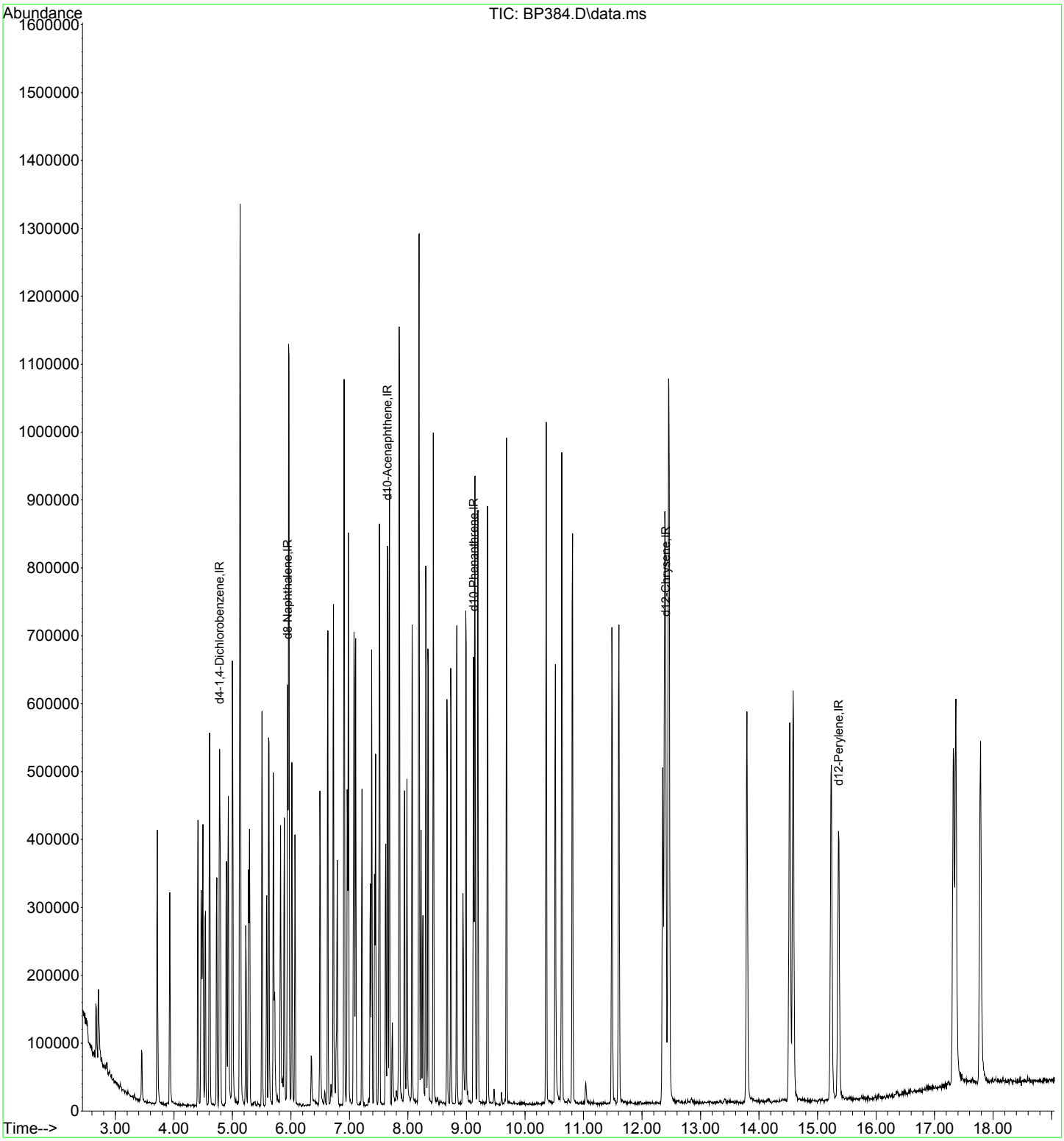
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	75617	40.00	ppm	0.00
2) d8-Naphthalene	5.946	136	318926	40.00	ppm	0.00
3) d10-Acenaphthene	7.652	164	161983	40.00	ppm	0.00
4) d10-Phenanthrene	9.123	188	230660	40.00	ppm	0.00
5) d12-Chrysene	12.407	240	257282	40.00	ppm	0.00
7) d12-Perylene	15.359	264	278683	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP384.D
Acq On : 24 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : RQ1809900-03
Misc : 322187 8270D/625 LCSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 26 09:13:20 2018
Quant Method : I:\ACQUDATA\5973D\Methods\HEXA092418D.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Wed Sep 26 08:44:59 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP318.D
Acq On : 24 Sep 2018 4:54 pm
Operator : J.Misiurewicz
Sample : RQ1809963-03
Misc : 322300 8270D BLK
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 26 06:13:40 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.687	152	114210	40.00	ppm	0.00
24) d8-Naphthalene	5.846	136	436954	40.00	ppm	0.00
42) d10-Acenaphthene	7.550	164	237223	40.00	ppm	0.00
69) d10-Phenanthrene	9.014	188	336576	40.00	ppm	0.00
82) d12-Chrysene	12.224	240	355518	40.00	ppm	0.00
91) d12-Perylene	15.113	264	360844	40.00	ppm	0.02
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.625	112	187048	47.10	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 23.55%			
8) SURR2,PHENOL-D6	4.372	99	168156	34.94	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 17.47%			
25) SURR4,NITROBENZENE-D5	5.179	82	148905	39.94	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 39.94%			
48) SURR5,2-FLUOROBIPHENYL	6.888	172	309900	37.47	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 37.47%			
67) SURR3,2,4,6-TRIBROMOPH...	8.330	330	82938	67.35	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 33.67%#			
85) SURR6,TERPHENYL-D14	10.675	244	348070	42.42	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 42.42%			
Target Compounds						Qvalue
2) Pyridine	2.626	79	81591	19.801	ppm	97
3) N-Nitrosodimethylamine	2.588	74	58853	28.494	ppm	95
7) Aniline	4.404	93	209810	32.916	ppm	99
9) Phenol	4.383	94	103200	19.971	ppm	95
10) bis(2-Clethyl)Ether	4.447	93	153523	41.305	ppm	97
11) 2-Chlorophenol	4.511	128	150756	36.866	ppm	98
12) 1,3-Diclbenzene	4.639	146	112452	26.374	ppm	96
13) 1,4-Dichlorobenzene	4.703	146	118746	27.760	ppm	99
14) 1,2-Diclbenzene	4.837	146	112112	27.848	ppm	97
15) Benzyl Alcohol	4.805	79	118273	42.973	ppm	95
16) 1-Methyl-2-pyrrolidinone	4.837	99	43788	15.714	ppm	98
17) 2,2'-oxybis(1-Chloropr...	4.917	45	167462	42.411	ppm	95
18) 2-Methylphenol	4.906	108	125673	35.072	ppm	87
19) 3+4-Methylphenol	5.045	108	125373	33.090	ppm	96
20) Acetophenone	5.040	105	420931	81.386	ppm	93
21) N-Nitroso-Di-n-propyla...	5.029	70	113089	40.337	ppm	92
22) Hexachloroethane	5.136	117	38186	23.605	ppm	91
23) Alpha-terpinol	5.868	121	68035	45.218	ppm	96
26) Nitrobenzene	5.200	77	150174	42.517	ppm	93
27) Isophorone	5.414	82	338193	59.913	ppm	99
28) 2-Nitrophenol	5.489	139	80687	40.082	ppm	99
29) 2,4-Dimethylphenol	5.526	107	172221	46.356	ppm	92
30) bis(-2-Chloroethoxy)Me...	5.606	93	203707	47.909	ppm	97
32) 2,4-Dichlorophenol	5.724	162	132956	44.456	ppm	99
33) 1,2,4-Trichlorobenzene	5.793	180	94908	31.064	ppm	100
34) Naphthalene	5.868	128	378914	33.607	ppm	99
35) 4-Chloroaniline	5.921	127	206734	43.487	ppm	98
37) Hexachlorobutadiene	5.975	225	47900	30.844	ppm	100
38) 4-Chloro-3-methylphenol	6.397	107	136504	45.487	ppm	96
39) Caprolactam	6.252	113	17033	13.528	ppm	94
40) 2-Methylnaphthalene	6.530	142	248234	35.135	ppm	99
41) 1-Methylnaphthalene	6.626	142	253388	36.267	ppm	97
43) Hexachlorocyclopentadiene	6.680	237	8659	11.980	ppm	91

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP318.D
Acq On : 24 Sep 2018 4:54 pm
Operator : J.Misiurewicz
Sample : RQ1809963-03
Misc : 322300 8270D BLK
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 26 06:13:40 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

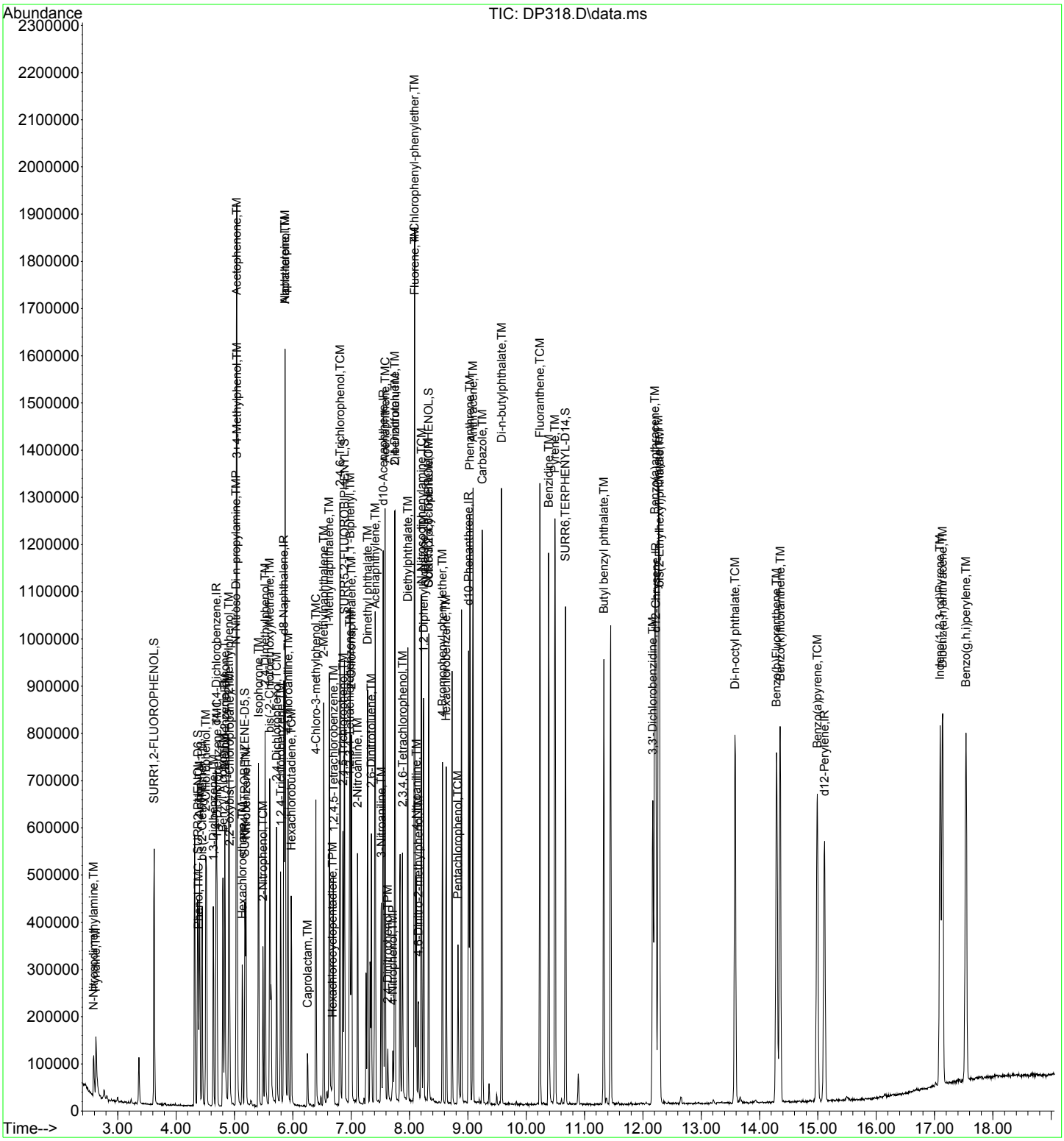
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,2,4,5-Tetrachloroben...	6.696	216	86464	29.724	ppm	98
45) 1,2,3,4-Tetrachloroben...	6.973	216	84096	26.993	ppm	100
46) 2,4,6-Trichlorophenol	6.813	196	90468	43.996	ppm	98
47) 2,4,5-Trichlorophenol	6.861	196	99392	49.870	ppm	98
49) 1,1'-Biphenyl	6.984	154	305521	30.269	ppm	100
50) 2-Chloronaphthalene	7.005	162	241819	35.678	ppm	96
51) 2-Nitroaniline	7.112	65	77583	42.288	ppm	97
52) Acenaphthylene	7.417	152	459065	41.134	ppm	98
53) Dimethyl phthalate	7.283	163	367524	49.926	ppm	99
54) 2,6-Dinitrotoluene	7.347	165	76281	46.036	ppm	98
55) Acenaphthene	7.582	153	292431	39.952	ppm	100
56) 3-Nitroaniline	7.518	138	77606	34.920	ppm	94
57) 2,4-Dinitrophenol	7.630	184	20525	32.472	ppm	92
58) Dibenzofuran	7.753	168	394530	41.926	ppm	97
59) 2,4-Dinitrotoluene	7.748	165	86544	39.384	ppm	87
60) 4-Nitrophenol	7.716	65	19271	17.094	ppm	87
62) 2,3,4,6-Tetrachlorophenol	7.881	232	72704	48.200	ppm	96
63) Fluorene	8.090	166	346757	46.325	ppm	97
64) 4-Chlorophenyl-phenyle...	8.084	204	150677	46.677	ppm	97
65) Diethylphthalate	7.972	149	332598	44.876	ppm	99
66) 4-Nitroaniline	8.116	138	94305	40.806	ppm	96
68) Octachlorocyclopentene	8.330	307	20837	19.787	ppm	90
70) 4,6-Dinitro-2-methylph...	8.154	198	34389	30.797	ppm	96
71) 1,2 Diphenylhydrazine	8.245	77	327685	47.639	ppm	92
72) N-Nitrosodiphenylamine	8.207	169	283177	48.991	ppm	98
73) 4-Bromophenyl-phenylether	8.565	248	87042	47.014	ppm	97
74) Hexachlorobenzene	8.629	284	91047	42.091	ppm	86
76) Pentachlorophenol	8.832	266	45040	38.990	ppm	96
77) Phenanthrene	9.035	178	466637	49.487	ppm	99
78) Anthracene	9.088	178	489670	53.166	ppm	99
79) Carbazole	9.249	167	517518	51.722	ppm	99
80) Di-n-butylphthalate	9.580	149	633753	54.608	ppm	100
81) Fluoranthene	10.237	202	561354	58.760	ppm	98
83) Benzidine	10.386	184	500897	73.422	ppm	99
84) Pyrene	10.493	202	578931	53.451	ppm	100
86) Butyl benzyl phthalate	11.332	149	299360	51.571	ppm	98
87) 3,3'-Dichlorobenzidine	12.170	252	200545	47.385	ppm	98
88) Benzo(a)anthracene	12.208	228	546096	54.577	ppm	100
89) Chrysene	12.266	228	536634	54.771	ppm	99
90) bis(2-Ethylhexyl)phtha...	12.288	149	420650	53.071	ppm	97
92) Di-n-octyl phthalate	13.580	149	717008	56.658	ppm	99
93) Benzo(b)Fluoranthene	14.291	252	532217	49.371	ppm	92
94) Benzo(k)fluoranthene	14.355	252	529616	53.006	ppm	98
95) Benzo(a)pyrene	14.990	252	472110	52.001	ppm	99
96) Indeno(1,2,3-cd)Pyrene	17.095	276	480787	55.174	ppm	94
97) Dibenz(a,h)anthracene	17.137	278	492531	54.037	ppm	95
98) Benzo(g,h,i)perylene	17.538	276	501303	59.953	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP318.D
Acq On : 24 Sep 2018 4:54 pm
Operator : J.Misiurewicz
Sample : RQ1809963-03
Misc : 322300 8270D BLK
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 26 06:13:40 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP315.D
Acq On : 24 Sep 2018 3:11 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80 ppm STD 8270D/625
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 06:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%D	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	1.000	1.000	0.0		85	-0.07
2	TM	Pyridine	1.443	1.555	-7.8		93	-0.08
3	TM	N-Nitrosodimethylamine	0.723	0.822	-13.7		92	-0.07
4	S	SURR1,2-FLUOROPHENOL	1.391	1.476	-6.1		93	-0.06
5	TM	N-Nitrosodiethylamine	0.673	0.720	-7.0		91	-0.07
6	TM	Benzaldehyde	0.000	0.000	0.0		0#	0.06
7	TM	Aniline	2.232	2.361	-5.8		91	-0.07
8	S	SURR2,PHENOL-D6	1.686	1.803	-6.9		92	-0.06
9	TMC	Phenol	1.810	1.951	-7.8		92	-0.06
10	TM	bis(2-Clethyl)Ether	1.302	1.286	1.2		87	-0.07
11	TM	2-Chlorophenol	1.432	1.498	-4.6		89	-0.07
12	TM	1,3-Diclbenzene	1.493	1.574	-5.4		91	-0.07
13	TMC	1,4-Dichlorobenzene	1.498	1.575	-5.1		92	-0.07
14	TM	1,2-Diclbenzene	1.410	1.482	-5.1		91	-0.07
15	TM	Benzyl Alcohol	0.964	1.092	-13.3		94	-0.07
16	T	1-Methyl-2-pyrrolidinone	0.976	1.034	-5.9		90	-0.07
17	TM	2,2'-oxybis(1-Chloropropane	1.383	1.498	-8.3		95	-0.07
18	TM	2-Methylphenol	1.255	1.339	-6.7		92	-0.06
19	TM	3+4-Methylphenol	1.327	1.535	-15.7		99	-0.06
20	TM	Acetophenone	1.811	1.867	-3.1		90	-0.07
21	TMP	N-Nitroso-Di-n-propylamine	0.982	1.046	-6.5		91	-0.06
22	TM	Hexachloroethane	0.567	0.564	0.5		86	-0.07
23	TM	Alpha-terpinol	0.527	0.544	-3.2		89	-0.07
24	IR	d8-Naphthalene	1.000	1.000	0.0		86	-0.07
25	S	SURR4,NITROBENZENE-D5	0.341	0.343	-0.6		87	-0.07
26	TM	Nitrobenzene	0.323	0.337	-4.3		90	-0.07
27	TM	Isophorone	0.517	0.547	-5.8		92	-0.07
28	TCM	2-Nitrophenol	0.184	0.184	0.0		82	-0.07
29	TM	2,4-Dimethylphenol	0.340	0.362	-6.5		90	-0.07
30	TM	bis(-2-Chloroethoxy)Methane	0.389	0.392	-0.8		88	-0.07
31	TM	Benzoic Acid	0.000	0.000	0.0		0#	0.00
32	TCM	2,4-Dichlorophenol	0.274	0.302	-10.2		93	-0.07
33	TM	1,2,4-Trichlorobenzene	0.280	0.307	-9.6		95	-0.07
34	TM	Naphthalene	1.032	1.055	-2.2		90	-0.07
35	TM	4-Chloroaniline	0.435	0.457	-5.1		90	-0.07
36	TM	2,6-Dichlorophenol	0.274	0.295	-7.7		91	-0.07
37	TCM	Hexachlorobutadiene	0.142	0.153	-7.7		94	-0.07
38	TMC	4-Chloro-3-methylphenol	0.275	0.286	-4.0		91	-0.07
39	TM	Caprolactam	0.115	0.120	-4.3		88	-0.07
40	TM	2-Methylnaphthalene	0.647	0.664	-2.6		90	-0.08
41	TM	1-Methylnaphthalene	0.640	0.670	-4.7		90	-0.08
42	IR	d10-Acenaphthene	1.000	1.000	0.0		88	-0.08
43	TPM	Hexachlorocyclopentadiene	0.156	0.140	18.7	~~10.3~~	63	-0.07
44	TM	1,2,4,5-Tetrachlorobenzene	0.490	0.536	-9.4		97	-0.07
45	TM	1,2,3,4-Tetrachlorobenzene	0.525	0.575	-9.5		98	-0.07
46	TCM	2,4,6-Trichlorophenol	0.347	0.366	-5.5		91	-0.07
47	TM	2,4,5-Trichlorophenol	0.336	0.333	0.9		89	-0.07
48	S	SURR5,2-FLUOROBIPHENYL	1.395	1.466	-5.1		93	-0.07
49	TM	1,1'-Biphenyl	1.702	1.753	-3.0		93	-0.08
50	TM	2-Chloronaphthalene	1.143	1.183	-3.5		92	-0.07

1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP315.D
Acq On : 24 Sep 2018 3:11 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80 ppm STD 8270D/625
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 06:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%D	%Dev	Area%	Dev(min)
51	TM	2-Nitroaniline	0.309	0.307		0.6	88	-0.07
52	TM	Acenaphthylene	1.882	1.981		-5.3	92	-0.08
53	TM	Dimethyl phthalate	1.241	1.269		-2.3	94	-0.07
54	TM	2,6-Dinitrotoluene	0.279	0.258		7.5	79	-0.07
55	TMC	Acenaphthene	1.234	1.243		-0.7	90	-0.08
56	TM	3-Nitroaniline	0.375	0.360		4.0	82	-0.07
57	TPM	2,4-Dinitrophenol	0.121	0.094	22.8	~~22.3#~~	62	-0.07
58	TM	Dibenzofuran	1.587	1.648		-3.8	91	-0.07
59	TM	2,4-Dinitrotoluene	0.371	0.325		12.4	74	-0.07
60	TMP	4-Nitrophenol	0.190	0.177		6.8	74	-0.07
61	TM	Pentachlorobenzene	0.451	0.456		-1.1	91	-0.08
62	TM	2,3,4,6-Tetrachlorophenol	0.254	0.262		-3.1	88	-0.08
63	TM	Fluorene	1.262	1.311		-3.9	93	-0.08
64	TM	4-Chlorophenyl-phenylether	0.544	0.616		-13.2	100	-0.08
65	TM	Diethylphthalate	1.250	1.256		-0.5	91	-0.07
66	TM	4-Nitroaniline	0.390	0.389		0.3	86	-0.07
67	S	SURR3,2,4,6-TRIBROMOPHENOL	0.208	0.155		25.5#	65	-0.07
68	TM	Octachlorocyclopentene	0.178	0.146		18.0	67	-0.08
69	IR	d10-Phenanthrene	1.000	1.000		0.0	88	-0.08
70	TM	4,6-Dinitro-2-methylphenol	0.133	0.107		19.5	67	-0.07
71	TM	1,2 Diphenylhydrazine	0.817	0.839		-2.7	93	-0.07
72	TCM	N-Nitrosodiphenylamine	0.687	0.686		0.1	91	-0.08
73	TM	4-Bromophenyl-phenylether	0.220	0.216		1.8	90	-0.08
74	TM	Hexachlorobenzene	0.257	0.225		12.5	79	-0.07
75	TM	Atrazine	0.000	0.000		0.0	0#	-0.08
76	TCM	Pentachlorophenol	0.137	0.119		13.1	72	-0.07
77	TM	Phenanthrene	1.121	1.171		-4.5	92	-0.08
78	TM	Anthracene	1.095	1.173		-7.1	93	-0.07
79	TM	Carbazole	1.189	1.273		-7.1	92	-0.08
80	TM	Di-n-butylphthalate	1.379	1.460		-5.9	89	-0.08
81	TCM	Fluoranthene	1.135	1.265		-11.5	96	-0.09
82	IR	d12-Chrysene	1.000	1.000		0.0	87	-0.12
83	TM	Benzidine	0.768	0.949		-23.6#	105	-0.09
84	TM	Pyrene	1.219	1.359		-11.5	94	-0.10
85	S	SURR6,TERPHENYL-D14	0.923	0.942		-2.1	86	-0.10
86	TM	Butyl benzyl phthalate	0.653	0.681		-4.3	91	-0.12
87	TM	3,3'-Dichlorobenzidine	0.476	0.516		-8.4	89	-0.12
88	TM	Benzo(a)anthracene	1.126	1.237		-9.9	96	-0.12
89	TM	Chrysene	1.102	1.181		-7.2	94	-0.12
90	TM	bis(2-Ethylhexyl)phthalate	0.892	0.964		-8.1	95	-0.13
91	IR	d12-Perylene	1.000	1.000		0.0	79	-0.17
92	TCM	Di-n-octyl phthalate	1.403	1.665		-18.7	91	-0.15
93	TM	Benzo(b)Fluoranthene	1.195	1.299		-8.7	88	-0.15
94	TM	Benzo(k)fluoranthene	1.108	1.186		-7.0	85	-0.15
95	TCM	Benzo(a)pyrene	1.006	1.110		-10.3	86	-0.16
96	TM	Indeno(1,2,3-cd)Pyrene	0.966	1.134		-17.4	89	-0.14
97	TM	Dibenz(a,h)anthracene	1.010	1.107		-9.6	84	-0.15
98	TM	Benzo(g,h,i)perylene	0.927	1.051		-13.4	89	-0.16

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP315.D
Acq On : 24 Sep 2018 3:11 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80 ppm STD 8270D/625
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 06:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP315.D
Acq On : 24 Sep 2018 3:11 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80 ppm STD 8270D/625
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 06:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.684	152	153030	40.00	ppm		0.00
24) d8-Naphthalene	5.848	136	596444	40.00	ppm		0.00
42) d10-Acenaphthene	7.552	164	304548	40.00	ppm		0.00
69) d10-Phenanthrene	9.016	188	465423	40.00	ppm		0.00
82) d12-Chrysene	12.231	240	446116	40.00	ppm		0.02
91) d12-Perylene	15.115	264	429606	40.00	ppm		0.03
System Monitoring Compounds							
4) SURR1,2-FLUOROPHENOL	3.627	112	451610	84.87	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 42.44%				
8) SURR2,PHENOL-D6	4.374	99	551712	85.55	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 42.77%				
25) SURR4,NITROBENZENE-D5	5.181	82	408871	80.34	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 80.34%				
48) SURR5,2-FLUOROBIPHENYL	6.890	172	893052	84.11	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 84.11%				
67) SURR3,2,4,6-TRIBROMOPH...	8.337	330	94399	59.71	ppm		0.01
Spiked Amount 200.000	Range 35 - 141		Recovery = 29.85%#				
85) SURR6,TERPHENYL-D14	10.677	244	840207	81.60	ppm		0.01
Spiked Amount 100.000	Range 10 - 165		Recovery = 81.60%				
Target Compounds							Qvalue
2) Pyridine	2.617	79	475924	86.200	ppm		99
3) N-Nitrosodimethylamine	2.585	74	251569	90.900	ppm		95
5) N-Nitrosodiethylamine	3.792	102	220379	85.545	ppm		99
7) Aniline	4.406	93	722497	84.594	ppm		98
9) Phenol	4.385	94	597034	86.229	ppm		98
10) bis(2-Clethyl)Ether	4.449	93	393601	79.033	ppm		97
11) 2-Chlorophenol	4.513	128	458330	83.648	ppm		99
12) 1,3-Diclbenzene	4.636	146	481680	84.313	ppm		97
13) 1,4-Dichlorobenzene	4.700	146	481954	84.087	ppm		98
14) 1,2-Diclbenzene	4.834	146	453549	84.079	ppm		99
15) Benzyl Alcohol	4.807	79	334350	90.664	ppm		94
16) 1-Methyl-2-pyrrolidinone	4.834	99	316455	84.754	ppm		99
17) 2,2'-oxybis(1-Chloropr...	4.914	45	458393	86.643	ppm	#	77
18) 2-Methylphenol	4.919	108	409849	85.364	ppm		93
19) 3+4-Methylphenol	5.053	108	469812	92.545	ppm		100
20) Acetophenone	5.042	105	571382	82.451	ppm		95
21) N-Nitroso-Di-n-propyla...	5.042	70	320026	85.191	ppm		98
22) Hexachloroethane	5.138	117	172625	79.639	ppm		84
23) Alpha-terpinol	5.870	121	166521	82.600	ppm		97
26) Nitrobenzene	5.202	77	402149	83.411	ppm		96
27) Isophorone	5.416	82	651918	84.608	ppm		99
28) 2-Nitrophenol	5.491	139	219997	80.063	ppm		99
29) 2,4-Dimethylphenol	5.533	107	431836	85.154	ppm		93
30) bis(-2-Chloroethoxy)Me...	5.608	93	467602	80.566	ppm		98
32) 2,4-Dichlorophenol	5.726	162	360739	88.365	ppm		99
33) 1,2,4-Trichlorobenzene	5.795	180	366116	87.789	ppm		98
34) Naphthalene	5.870	128	1257905	81.735	ppm		97
35) 4-Chloroaniline	5.923	127	544954	83.980	ppm		99
36) 2,6-Dichlorophenol	5.934	162	352422	86.242	ppm		96
37) Hexachlorobutadiene	5.977	225	183008	86.331	ppm		100
38) 4-Chloro-3-methylphenol	6.404	107	341381	83.339	ppm		97
39) Caprolactam	6.270	113	143213	83.325	ppm		89
40) 2-Methylnaphthalene	6.532	142	792442	82.170	ppm		99

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP315.D
Acq On : 24 Sep 2018 3:11 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80 ppm STD 8270D/625
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 06:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration

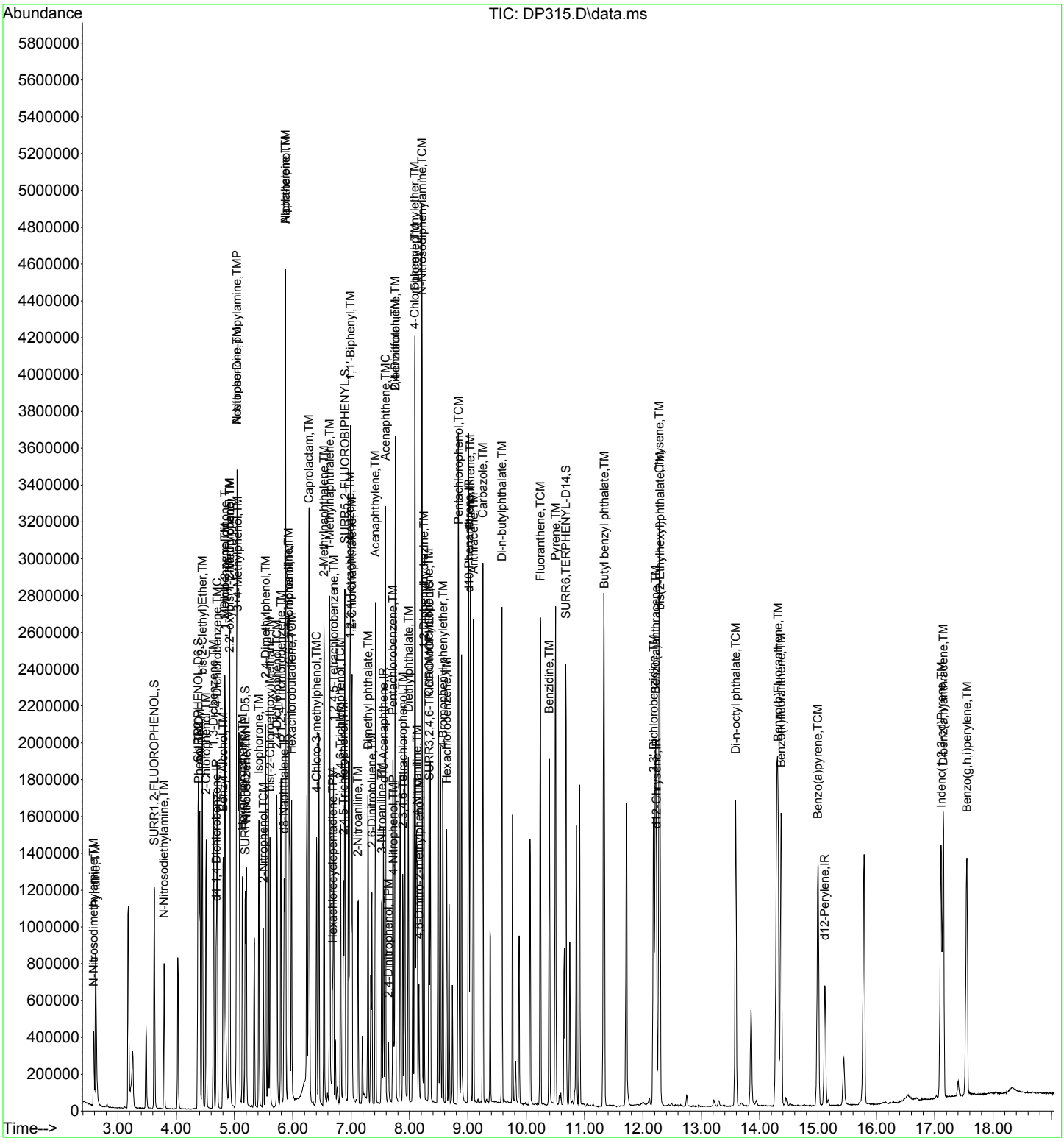
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) 1-Methylnaphthalene	6.628	142	799070	83.787	ppm		98
43) Hexachlorocyclopentadiene	6.682	237	85436	65.050	ppm		96
44) 1,2,4,5-Tetrachloroben...	6.698	216	326465	87.420	ppm		99
45) 1,2,3,4-Tetrachloroben...	6.975	216	350015	87.510	ppm		99
46) 2,4,6-Trichlorophenol	6.815	196	223144	84.530	ppm		100
47) 2,4,5-Trichlorophenol	6.869	196	202926	79.310	ppm		100
49) 1,1'-Biphenyl	6.986	154	1068007	82.421	ppm		99
50) 2-Chloronaphthalene	7.013	162	720682	82.825	ppm		98
51) 2-Nitroaniline	7.114	65	187101	79.438	ppm		99
52) Acenaphthylene	7.413	152	1206725	84.224	ppm		100
53) Dimethyl phthalate	7.285	163	772736	81.767	ppm		99
54) 2,6-Dinitrotoluene	7.355	165	156967	73.789	ppm		91
55) Acenaphthene	7.584	153	757149	80.575	ppm		98
56) 3-Nitroaniline	7.526	138	219090	76.790	ppm		94
57) 2,4-Dinitrophenol	7.638	184	57288	61.785	ppm		96
58) Dibenzofuran	7.755	168	1003500	83.066	ppm		97
59) 2,4-Dinitrotoluene	7.755	165	197931	70.161	ppm		80
60) 4-Nitrophenol	7.723	65	107822	74.500	ppm	#	61
61) Pentachlorobenzene	7.712	250	277576	80.874	ppm		99
62) 2,3,4,6-Tetrachlorophenol	7.883	232	159700	82.470	ppm		96
63) Fluorene	8.092	166	798707	83.115	ppm		93
64) 4-Chlorophenyl-phenyle...	8.086	204	375435	90.592	ppm		98
65) Diethylphthalate	7.980	149	765258	80.428	ppm		98
66) 4-Nitroaniline	8.129	138	236908	79.849	ppm		97
68) Octachlorocyclopentene	8.332	307	88705	65.613	ppm		97
70) 4,6-Dinitro-2-methylph...	8.161	198	99946	64.729	ppm		98
71) 1,2 Diphenylhydrazine	8.247	77	781091	82.119	ppm		97
72) N-Nitrosodiphenylamine	8.209	169	1278001	159.893	ppm		99
73) 4-Bromophenyl-phenylether	8.572	248	201053	78.531	ppm		94
74) Hexachlorobenzene	8.636	284	208994	69.870	ppm		92
76) Pentachlorophenol	8.839	266	110691	69.296	ppm		98
77) Phenanthrene	9.042	178	1089989	83.593	ppm		100
78) Anthracene	9.096	178	1091860	85.729	ppm		100
79) Carbazole	9.256	167	1185056	85.649	ppm		100
80) Di-n-butylphthalate	9.582	149	1359246	84.698	ppm		99
81) Fluoranthene	10.244	202	1177113	89.104	ppm		97
83) Benzidine	10.394	184	846574	98.891	ppm		99
84) Pyrene	10.501	202	1212219	89.191	ppm		99
86) Butyl benzyl phthalate	11.334	149	607243	83.365	ppm		96
87) 3,3'-Dichlorobenzidine	12.183	252	460253	86.664	ppm		96
88) Benzo(a)anthracene	12.215	228	1103842	87.914	ppm		99
89) Chrysene	12.279	228	1053912	85.722	ppm		99
90) bis(2-Ethylhexyl)phtha...	12.290	149	860206	86.487	ppm		96
92) Di-n-octyl phthalate	13.588	149	1430854	94.969	ppm		99
93) Benzo(b)Fluoranthene	14.314	252	1115746	86.936	ppm		94
94) Benzo(k)fluoranthene	14.367	252	1018638	85.632	ppm		97
95) Benzo(a)pyrene	14.998	252	953896	88.251	ppm		98
96) Indeno(1,2,3-cd)Pyrene	17.113	276	974660	93.947	ppm		98
97) Dibenz(a,h)anthracene	17.145	278	951296	87.664	ppm		92
98) Benzo(g,h,i)perylene	17.551	276	902967	90.705	ppm		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP315.D
Acq On : 24 Sep 2018 3:11 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80 ppm STD 8270D/625
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 06:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718AS.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 26 06:12:57 2018
Response via : Initial Calibration



1st DM 09/26/18
2nd MP 09/26/18

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP376.D
Acq On : 24 Sep 2018 1:38 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625 Benz/Atraz
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 14:48:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%D	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	1.000	1.000		0.0	175	0.00
2	TM	Benzaldehyde	0.944	0.947		-0.3	174	0.00
3	IR	d8-Naphthalene	1.000	1.000		0.0	166	0.00
4	TM	Benzoic Acid	0.187	0.226		-20.9#	183	0.01
5	IR	d10-Acenaphthene	1.000	1.000		0.0	160	0.00
6	IR	d10-Phenanthrene	1.000	1.000		0.0	186	0.00
7	TM	Atrazine	0.155	0.123	13.3	~~20.6#~~	164	0.00
8	IR	d12-Chrysene	1.000	1.000		0.0	198	0.00
9	IR	d12-Perylene	1.000	1.000		0.0	167	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP376.D
Acq On : 24 Sep 2018 1:38 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625 Benz/Atraz
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 14:48:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

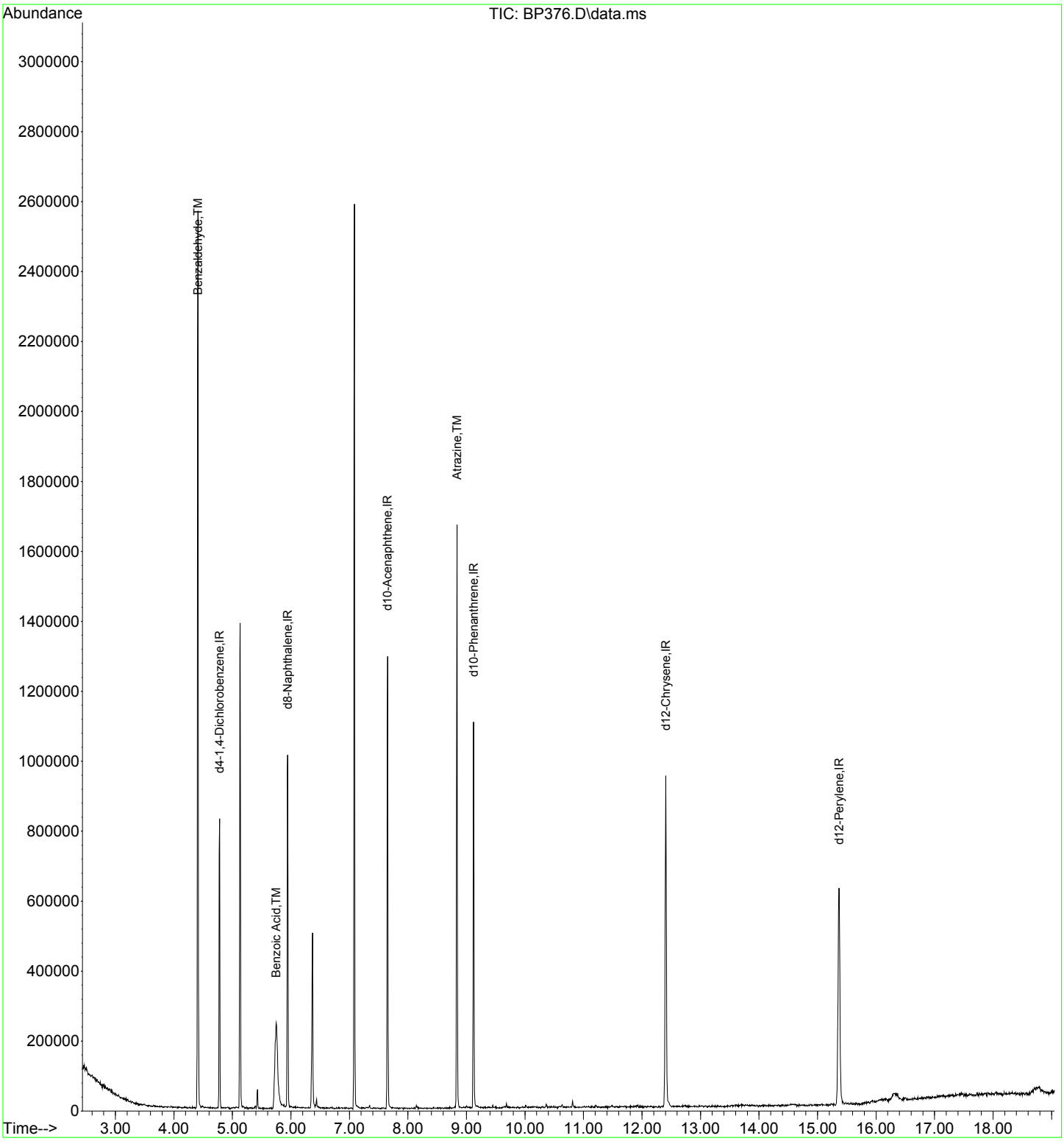
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.779	152	127605	40.00	ppm		0.00
3) d8-Naphthalene	5.945	136	479692	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	257164	40.00	ppm		0.00
6) d10-Phenanthrene	9.123	188	384586	40.00	ppm		0.00
8) d12-Chrysene	12.407	240	464357	40.00	ppm		0.00
9) d12-Perylene	15.370	264	475385	40.00	ppm		0.02
Target Compounds							Qvalue
2) Benzaldehyde	4.410	106	483476	160.547	ppm		89
4) Benzoic Acid	5.748	105	217054	96.798	ppm		89
7) Atrazine	8.839	215	94339	69.386	ppm	#	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP376.D
Acq On : 24 Sep 2018 1:38 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625 Benz/Atraz
ALS Vial : 3 Sample Multiplier: 1

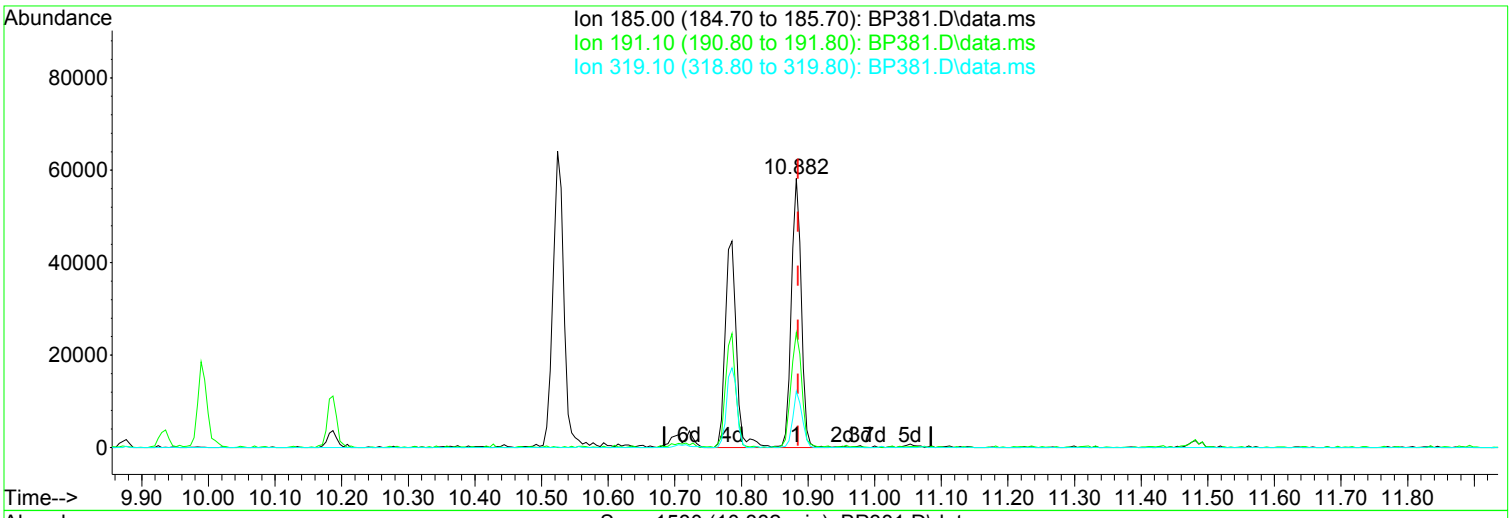
Quant Time: Sep 24 14:48:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

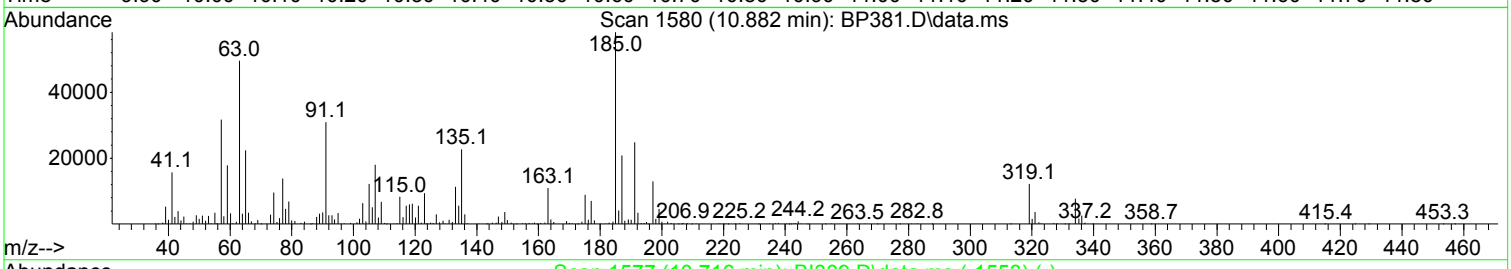


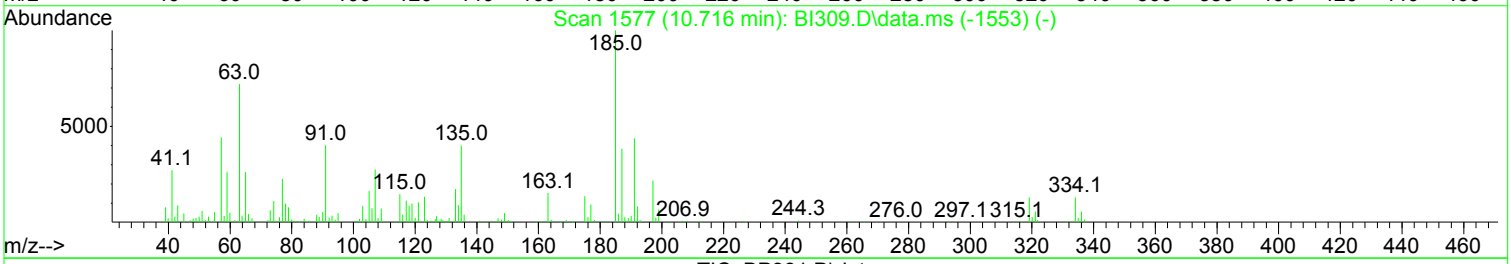
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration







TIC: BP381.D\data.ms

(125) Aramite (TM)

10.882min (-0.003) 88.12 ppm m

response 113031

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	42.65
319.10	20.20	20.90
0.00	0.00	0.00

Manual Integration:

After

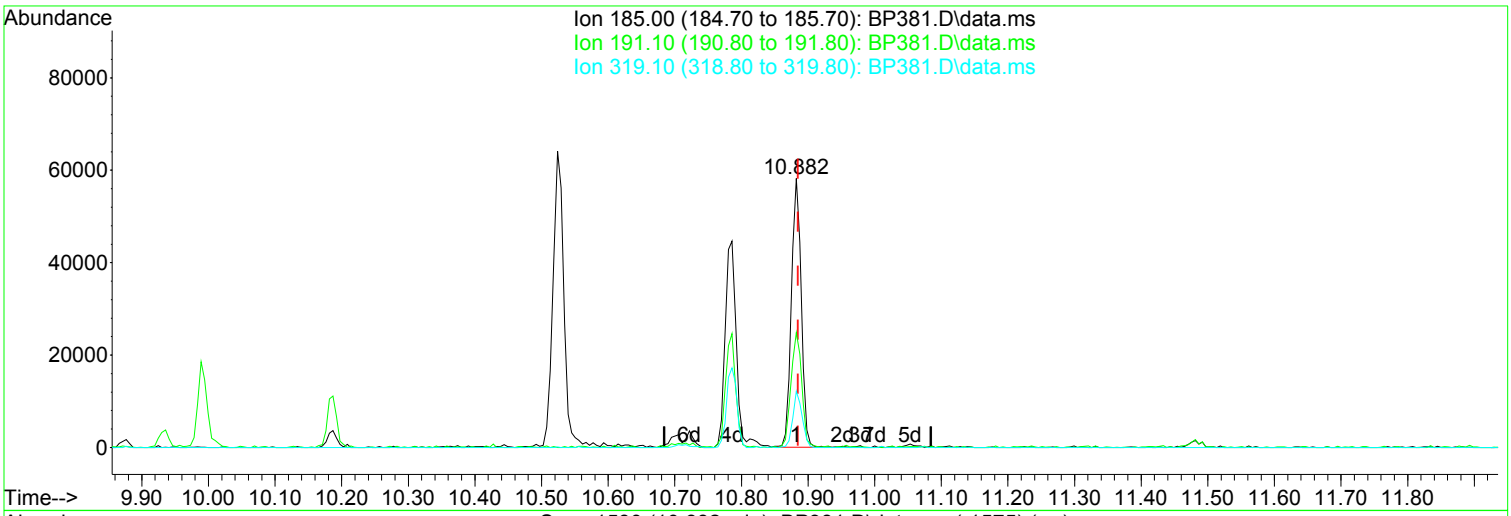
Split Peak.

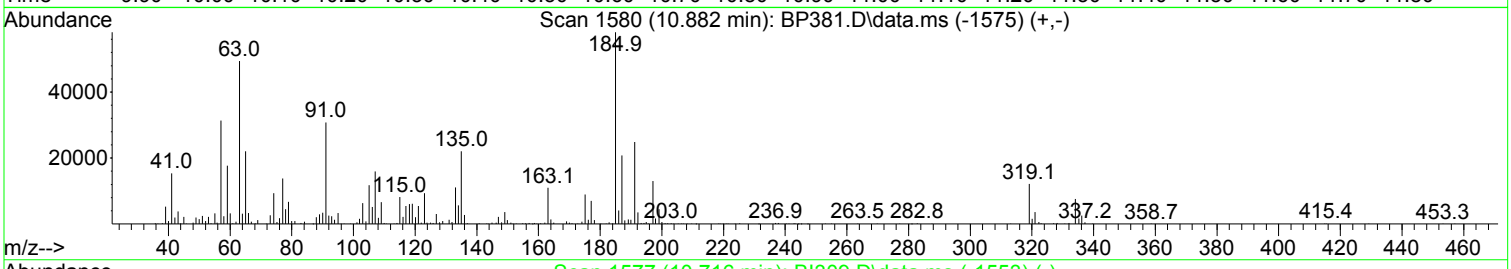
09/26/18

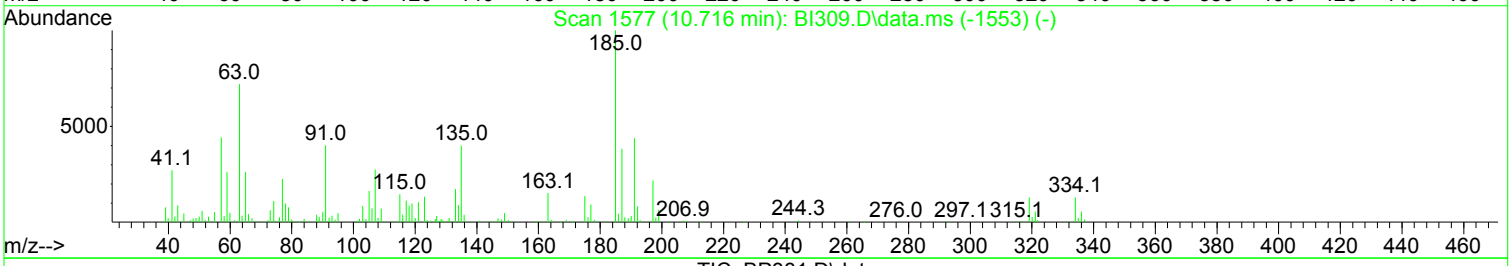
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration







TIC: BP381.D\data.ms

(125) Aramite (TM)

10.882min (-0.003) 46.39 ppm

response 59506

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	42.77
319.10	20.20	20.96
0.00	0.00	0.00

Manual Integration:

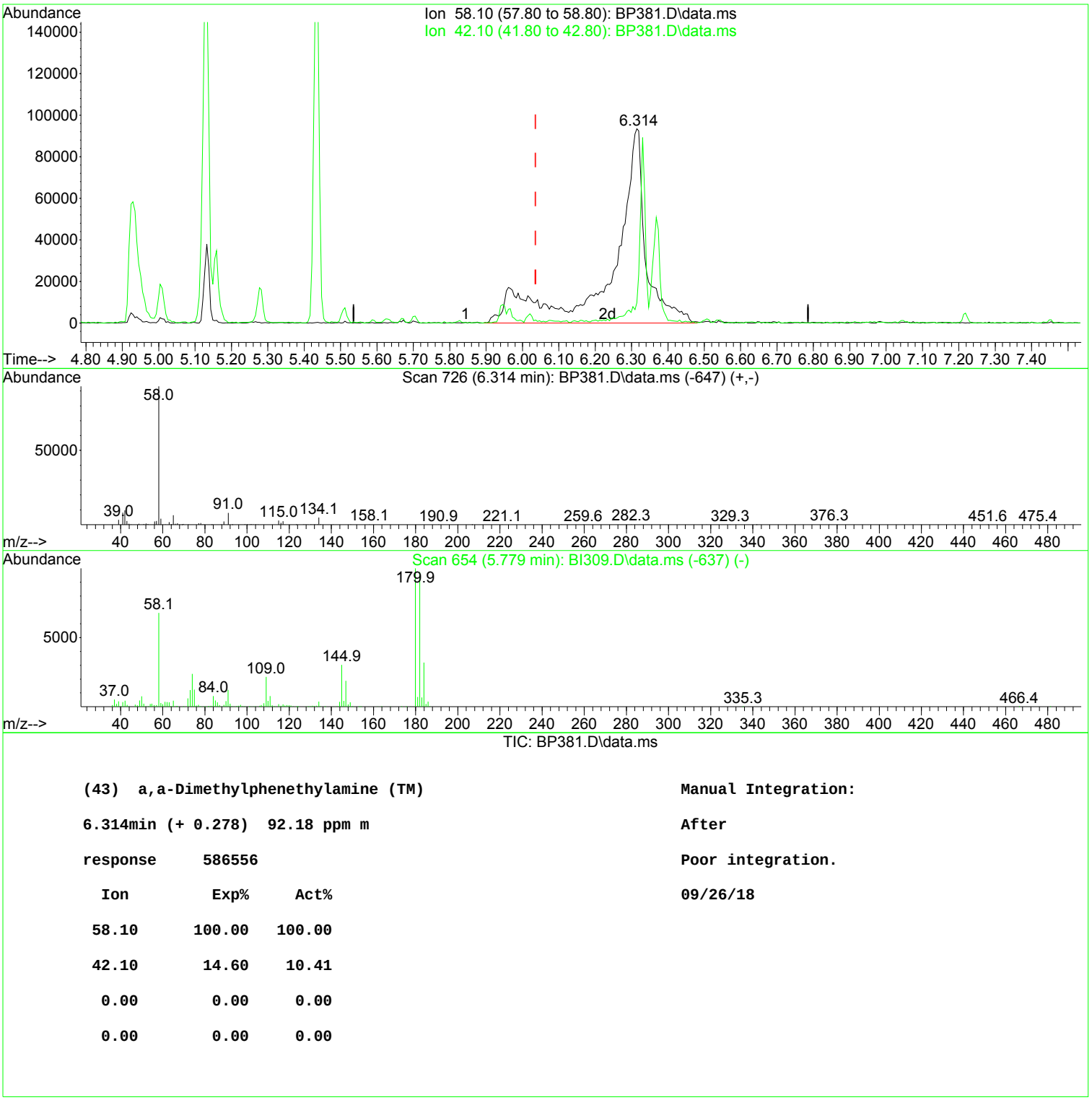
Before

09/26/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration



TIC: BP381.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.314min (+ 0.278) 92.18 ppm m

response 586556

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	10.41
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

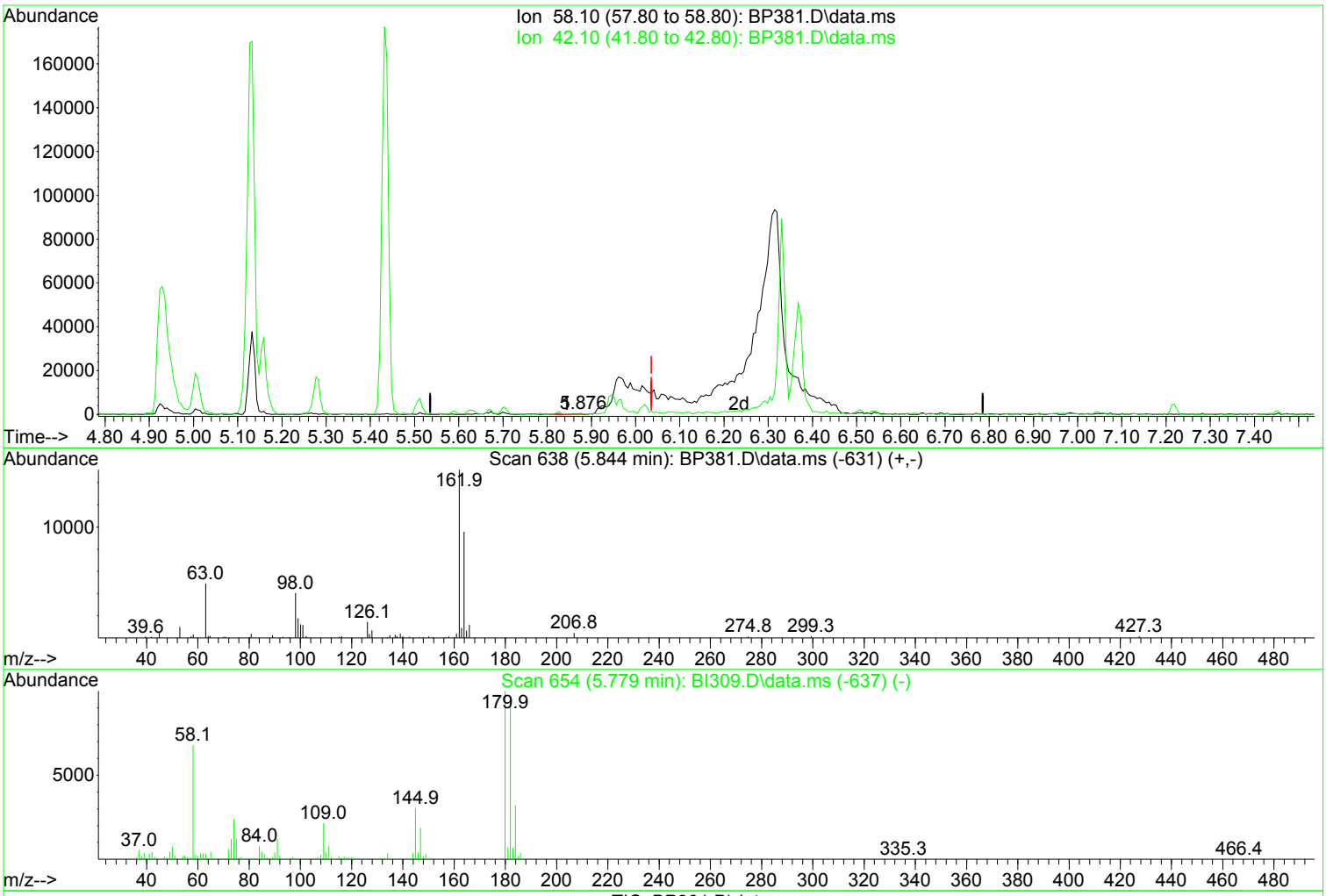
Poor integration.

09/26/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration



TIC: BP381.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.844min (-0.192) 0.11 ppm

response 728

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	34.15
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/26/18

1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%D	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	1.000	1.000		0.0	126	0.00
2	TM	Pyridine	1.393	1.534		-10.1	138	0.00
3	TM	N-Nitrosodimethylamine	0.727	0.780		-7.3	132	0.00
4	TM	2-Picoline	1.387	1.473		-6.2	132	0.00
5	TM	N-Nitrosomethylamine	0.693	0.713		-2.9	132	0.00
6	TM	Methyl Methansulfonate	0.643	0.652		-1.4	128	0.00
7	S	SURR1,2-FLUOROPHENOL	1.323	1.426		-7.8	134	0.00
8	TM	N-Nitrosodiethylamine	0.612	0.654		-6.9	135	0.00
9	TM	Ethyl Mathanesulfonate	1.028	1.109		-7.9	134	0.00
10	TM	Benzaldehyde	0.000	0.000		0.0	0#	-0.04
11	TM	Aniline	2.137	2.305		-7.9	135	0.00
12	S	SURR2,PHENOL-D6	1.624	1.706		-5.0	133	0.00
13	TMC	Phenol	1.739	1.858		-6.8	131	0.00
14	TM	bis(2-Clethyl)Ether	1.161	1.263		-8.8	137	0.00
15	TM	Pentachloroethane	0.474	0.499		-5.3	136	0.00
16	TM	2-Chlorophenol	1.397	1.465		-4.9	132	0.00
17	TM	1,3-Diclbenzene	1.471	1.504		-2.2	132	0.00
18	TMC	1,4-Dichlorobenzene	1.471	1.511		-2.7	131	0.00
19	TM	1,2-Diclbenzene	1.375	1.426		-3.7	130	0.00
20	TM	Benzyl Alcohol	1.048	1.166		-11.3	130	0.00
21	T	1-Methyl-2-pyrrolidinone	0.903	0.986		-9.2	133	0.00
22	TM	2,2'-oxybis(1-Chloropropane	1.487	1.630		-9.6	141	0.00
23	TM	2-Methylphenol	1.189	1.249		-5.0	136	0.00
24	TM	3+4-Methylphenol	1.347	1.477		-9.7	134	0.00
25	TM	Acetophenone	1.864	2.005		-7.6	138	0.00
26	TMP	N-Nitroso-Di-n-propylamine	1.064	1.124		-5.6	132	0.00
27	TM	N-Nitrosopyrrolidine	0.722	0.783		-8.4	133	0.00
28	TM	N-Nitrosomorpholine	0.843	0.918		-8.9	140	0.00
29	TM	o-Toluidine	2.110	2.221		-5.3	130	0.00
30	TM	Hexachloroethane	0.621	0.655		-5.5	136	0.00
31	TM	o,o,o-Triethylphosphorothio	0.660	0.675		-2.3	126	0.00
32	TM	Alpha-terpinol	0.543	0.551		-1.5	128	0.00
33	IR	d8-Naphthalene	1.000	1.000		0.0	127	0.00
34	S	SURR4,NITROBENZENE-D5	0.368	0.381		-3.5	134	0.00
35	TM	Nitrobenzene	0.349	0.360		-3.2	131	0.00
36	TM	N-Nitrosopiperidine	0.231	0.244		-5.6	138	0.00
37	TM	Isophorone	0.528	0.546		-3.4	132	0.00
38	TCM	2-Nitrophenol	0.194	0.191		1.5	123	0.00
39	TM	Benzoic Acid	0.000	0.000		0.0	0#	0.00
40	TM	2,4-Dimethylphenol	0.359	0.372		-3.6	132	0.00
41	TM	bis(-2-Chloroethoxy)Methane	0.385	0.390		-1.3	133	0.00
42	TCM	2,4-Dichlorophenol	0.287	0.292		-1.7	128	0.00
43	TM	a,a-Dimethylphenethylamine	0.687	0.791		-15.1	166	0.28
44	TM	1,2,4-Trichlorobenzene	0.303	0.298		1.7	128	0.00
45	TM	Naphthalene	1.024	1.027		-0.3	129	0.00
46	TM	4-Chloroaniline	0.435	0.458		-5.3	134	0.00
47	TM	2,6-Dichlorophenol	0.283	0.288		-1.8	128	0.00
48	TCM	Hexachlorobutadiene	0.182	0.190		-4.4	133	0.00
49	TM	Hexachloropropene	0.216	0.216		0.0	129	0.00
50	TMC	4-Chloro-3-methylphenol	0.301	0.297		1.3	128	0.00
51	TM	N-N-di-n-butylamine	0.276	0.263		4.7	136	0.00

1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%D	%Dev	Area%	Dev(min)
52	TM	Caprolactam	0.107	0.103		3.7	128	0.00
53	TM	p-Phenylenediamine	0.149	0.128		14.1	113	0.00
54	TM	Safrole	0.258	0.267		-3.5	133	0.00
55	TM	2-Methylnaphthalene	0.651	0.650		0.2	129	0.00
56	TM	1-Methylnaphthalene	0.646	0.651		-0.8	129	0.00
57	IR	d10-Acenaphthene	1.000	1.000		0.0	123	0.00
58	TPM	Hexachlorocyclopentadiene	0.197	0.179	14.2	~~-9.1~~	99	0.00
59	TM	1,2,4,5-Tetrachlorobenzene	0.556	0.568		-2.2	129	0.00
60	TM	1,2,3,4-Tetrachlorobenzene	0.602	0.614		-2.0	130	0.00
61	TCM	2,4,6-Trichlorophenol	0.362	0.370		-2.2	123	0.00
62	TM	2,4,5-Trichlorophenol	0.347	0.360		-3.7	133	0.00
63	S	SURR5,2-FLUOROBIPHENYL	1.400	1.457		-4.1	131	0.00
64	TM	Isosafrole	0.271	0.276		-1.8	131	0.00
65	TM	1,1'-Biphenyl	1.673	1.687		-0.8	127	0.00
66	TM	2-Chloronaphthalene	1.124	1.178		-4.8	132	0.00
67	TM	2-Nitroaniline	0.370	0.388		-4.9	137	0.00
68	TM	1,4-Naphthoquinone	0.192	0.204		-6.2	126	0.00
69	TM	m-Dinitrobenzene	0.207	0.211		-1.9	139	0.00
70	TM	Acenaphthylene	1.868	1.948		-4.3	131	0.00
71	TM	Dimethyl phthalate	1.311	1.286		1.9	127	0.00
72	TM	2,6-Dinitrotoluene	0.299	0.293		2.0	123	0.00
73	TMC	Acenaphthene	1.217	1.233		-1.3	130	0.00
74	TM	3-Nitroaniline	0.373	0.380		-1.9	130	0.00
75	TPM	2,4-Dinitrophenol	0.121	0.134	-0.7	~~-10.7~~	116	0.00
76	TM	Dibenzofuran	1.654	1.689		-2.1	129	0.00
77	TM	2,4-Dinitrotoluene	0.401	0.423		-5.5	131	0.00
78	TMP	4-Nitrophenol	0.210	0.140		33.3#	72	0.00
79	TM	Pentachlorobenzene	0.522	0.530		-1.5	129	0.00
80	TM	1-Napthylamine	1.085	1.058		2.5	131	0.00
81	TM	2-Napthylamine	1.158	1.158		0.0	127	0.00
82	TM	2,3,4,6-Tetrachlorophenol	0.282	0.291		-3.2	124	0.00
83	TM	Fluorene	1.307	1.315		-0.6	129	0.00
84	TM	4-Chlorophenyl-phenylether	0.621	0.621		0.0	130	0.00
85	TM	Diethylphthalate	1.361	1.384		-1.7	128	0.00
86	TM	4-Nitroaniline	0.387	0.400		-3.4	127	0.00
87	TM	5-Nitro-o-toluidine	0.418	0.429		-2.6	126	0.00
88	S	SURR3,2,4,6-TRIBROMOPHENOL	0.231	0.232		-0.4	128	0.00
89	TM	Sulfotepp	0.225	0.225		0.0	124	0.00
90	TM	Octachlorocyclopentene	0.223	0.233		-4.5	121	0.00
91	IR	d10-Phenanthrene	1.000	1.000		0.0	121	0.00
92	TM	Thionazin	0.134	0.141		-5.2	125	0.00
93	TM	4,6-Dinitro-2-methylphenol	0.139	0.158		-13.7	124	0.00
94	TM	Diphenylamine	0.665	0.672		-1.1	127	0.00
95	TM	1,2 Diphenylhydrazine	0.831	0.882		-6.1	135	0.00
96	TCM	N-Nitrosodiphenylamine	0.666	0.673		-1.1	127	0.00
97	TM	1,3,5-Trinirobenzene	0.072	0.079		-9.7	127	0.02
98	TM	Diallate	0.285	0.303		-6.3	131	0.00
99	TM	Phorate	0.160	0.164		-2.5	121	0.00
100	TM	Phenacetin	0.457	0.485		-6.1	126	0.01
101	TM	4-Bromophenyl-phenylether	0.228	0.227		0.4	127	0.00

1st DM 09/26/18
2nd MP 09/26/18

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Data File : BP381.D
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Operator : J.Misiurewicz
Sample : CCV
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ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%D	%Dev	Area%	Dev(min)
102	TM	Hexachlorobenzene	0.269	0.264		1.9	126	0.00
103	TM	Dimethoate	0.239	0.239		0.0	127	0.00
104	TM	Atrazine	0.000	0.000		0.0	119	0.00
105	TCM	Pentachlorophenol	0.123	0.151	-11.2	-22.8	131	0.00
106	TM	4-Aminobiphenyl	0.823	0.873		-6.1	126	0.00
107	TM	Pentachloronitrobenzene	0.100	0.113		-13.0	127	0.00
108	TM	Pronamide	0.393	0.429		-9.2	127	0.00
109	TM	Dinoseb	0.188	0.215		-14.4	130	0.00
110	TM	Disulfoton	0.410	0.444		-8.3	132	0.00
111	TM	Phenanthrene	1.090	1.162		-6.6	131	0.00
112	TM	Anthracene	1.076	1.151		-7.0	130	0.00
113	TM	Carbazole	1.159	1.235		-6.6	127	0.00
114	TM	Di-n-butylphthalate	1.370	1.539		-12.3	129	0.00
115	TM	4-Nitroquinonline-1-oxide	0.053	0.042		20.8#	91	0.00
116	TCM	Fluoranthene	1.187	1.308		-10.2	128	0.00
117	IR	d12-Chrysene	1.000	1.000		0.0	119	0.00
118	TM	Methyl Parathion	0.196	0.213		-8.7	131	0.00
119	TM	Ethyl Parathion	0.187	0.209		-11.8	129	0.00
120	TM	Methapyrilene	0.235	0.238		-1.3	121	0.00
121	TM	Isodrin	0.120	0.124		-3.3	128	0.00
122	TM	Benzidine	0.760	0.781		-2.8	120	0.00
123	TM	Pyrene	1.187	1.292		-8.8	126	0.00
124	S	SURR6,TERPHENYL-D14	0.912	0.967		-6.0	128	0.00
125	TM	Aramite	0.155	0.171		-10.3	137	0.00
126	TM	p-(Dimethylamino)azobenzene	0.333	0.373		-12.0	130	0.00
127	TM	Chlorobenzilate	0.404	0.447		-10.6	134	0.00
128	TM	Butyl benzyl phthalate	0.611	0.649		-6.2	126	0.00
129	TM	3,3-Dimethylbenzidine	0.736	0.783		-6.4	123	0.00
130	TM	2-Acetylaminofluorene	0.553	0.615		-11.2	126	0.01
131	TM	3,3'-Dichlorobenzidine	0.488	0.519		-6.4	129	0.00
132	TM	Benzo(a)anthracene	1.149	1.183		-3.0	126	0.00
133	TM	Chrysene	1.104	1.170		-6.0	128	0.00
134	TM	bis(2-Ethylhexyl)phthalate	0.853	0.926		-8.6	129	0.00
135	IR	d12-Perylene	1.000	1.000		0.0	119	0.00
136	TCM	Di-n-octyl phthalate	1.351	1.547		-14.5	131	0.00
137	TM	7,12-Dimethylbenz(a)anthrac	0.586	0.625		-6.7	124	0.01
138	TM	Benzo(b)Fluoranthene	1.159	1.282		-10.6	128	0.02
139	TM	Benzo(k)fluoranthene	1.125	1.202		-6.8	128	0.01
140	TCM	Benzo(a)pyrene	1.001	1.110		-10.9	129	0.01
141	TM	3-Methylcholanthrene	0.580	0.646		-11.4	128	0.01
142	TM	Indeno(1,2,3-cd)Pyrene	0.937	1.093		-16.6	134	0.02
143	TM	Dibenz(a,h)anthracene	0.961	1.134		-18.0	137	0.02
144	TM	Benzo(g,h,i)perylene	0.907	1.101		-21.4#	146	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.779	152	92691	40.00	ppm		0.00
33) d8-Naphthalene	5.945	136	370612	40.00	ppm		0.00
57) d10-Acenaphthene	7.652	164	196185	40.00	ppm		0.00
91) d10-Phenanthrene	9.123	188	321155	40.00	ppm		0.00
117) d12-Chrysene	12.412	240	331132	40.00	ppm		0.00
135) d12-Perylene	15.364	264	335604	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.720	112	264297	86.18	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 43.09%				
12) SURR2,PHENOL-D6	4.469	99	316300	84.04	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 42.02%				
34) SURR4,NITROBENZENE-D5	5.277	82	282327	82.75	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 82.75%				
63) SURR5,2-FLUOROBIPHENYL	6.988	172	571851	83.31	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 83.31%				
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	91041	80.31	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 40.16%				
124) SURR6,TERPHENYL-D14	10.818	244	640659	84.82	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 84.82%				
Target Compounds							Qvalue
2) Pyridine	2.709	79	284377	88.120	ppm		93
3) N-Nitrosodimethylamine	2.677	74	144550	85.808	ppm		88
4) 2-Picoline	3.266	93	272991	84.923	ppm		100
5) N-Nitrosomethylamine	3.346	42	132159	82.266	ppm		83
6) Methyl Methansulfonate	3.576	80	120856	81.092	ppm		98
8) N-Nitrosodiethylamine	3.886	102	121180	85.405	ppm		83
9) Ethyl Mathanesulfonate	4.122	79	205609	86.280	ppm		98
11) Aniline	4.501	93	427352	86.315	ppm		89
13) Phenol	4.480	94	344364	85.465	ppm		85
14) bis(2-Clethyl)Ether	4.539	93	234107	86.985	ppm		92
15) Pentachloroethane	4.539	117	92585	84.203	ppm		95
16) 2-Chlorophenol	4.608	128	271677	83.938	ppm		96
17) 1,3-Diclbenzene	4.731	146	278891	81.802	ppm		94
18) 1,4-Dichlorobenzene	4.795	146	280025	82.146	ppm		98
19) 1,2-Diclbenzene	4.929	146	264444	82.985	ppm		93
20) Benzyl Alcohol	4.902	79	216124	88.969	ppm		95
21) 1-Methyl-2-pyrrolidinone	4.929	99	182835	87.393	ppm		93
22) 2,2'-oxybis(1-Chloropr...	5.004	45	302154	87.669	ppm	#	77
23) 2-Methylphenol	5.015	108	231627	84.066	ppm		96
24) 3+4-Methylphenol	5.148	108	273822	87.746	ppm		98
25) Acetophenone	5.138	105	371754	86.057	ppm		87
26) N-Nitroso-Di-n-propyla...	5.132	70	208442	84.548	ppm		82
27) N-Nitrosopyrrolidine	5.127	100	145069	86.697	ppm	#	52
28) N-Nitrosomorpholine	5.159	56	170096	87.061	ppm		93
29) o-Toluidine	5.170	106	411808	84.214	ppm		70
30) Hexachloroethane	5.229	117	121381	84.327	ppm	#	73
31) o,o,o-Triethylphosphor...	5.673	198	125216	81.882	ppm		57
32) Alpha-terpinol	5.967	121	102145	81.219	ppm		84
35) Nitrobenzene	5.298	77	266724	82.534	ppm		99
36) N-Nitrosopiperidine	5.432	42	180553	84.309	ppm		88
37) Isophorone	5.512	82	404404	82.735	ppm		97
38) 2-Nitrophenol	5.587	139	141287	78.539	ppm		83
40) 2,4-Dimethylphenol	5.630	107	275601	82.784	ppm		97

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) bis(-2-Chloroethoxy)Me...	5.705	93	289145	81.114	ppm		98
42) 2,4-Dichlorophenol	5.828	162	216458	81.391	ppm		98
43) a,a-Dimethylphenethyla...	6.314	58	586556m	92.180	ppm		
44) 1,2,4-Trichlorobenzene	5.892	180	220761	78.696	ppm		95
45) Naphthalene	5.967	128	760985	80.223	ppm		99
46) 4-Chloroaniline	6.020	127	339383	84.173	ppm		97
47) 2,6-Dichlorophenol	6.031	162	213430	81.423	ppm		97
48) Hexachlorobutadiene	6.074	225	140585	83.559	ppm		97
49) Hexachloropropene	6.042	213	159926	79.873	ppm		98
50) 4-Chloro-3-methylphenol	6.507	107	219803	78.706	ppm		96
51) N-N-di-n-butylamine	6.331	84	194699	76.195	ppm		93
52) Caprolactam	6.368	113	76707	77.136	ppm	#	71
53) p-Phenylenediamine	6.373	80	331708	240.971	ppm		88
54) Safrole	6.544	162	198169	83.041	ppm		92
55) 2-Methylnaphthalene	6.635	142	481728	79.847	ppm		93
56) 1-Methylnaphthalene	6.732	142	482645	80.676	ppm		99
58) Hexachlorocyclopentadiene	6.774	237	70062	68.620	ppm		98
59) 1,2,4,5-Tetrachloroben...	6.796	216	222834	81.782	ppm		99
60) 1,2,3,4-Tetrachloroben...	7.074	216	240867	81.538	ppm		97
61) 2,4,6-Trichlorophenol	6.919	196	145081	81.711	ppm		95
62) 2,4,5-Trichlorophenol	6.972	196	141422	83.094	ppm		96
64) Isosafrole	7.047	104	108168	81.441	ppm		86
65) 1,1'-Biphenyl	7.085	154	661872	80.667	ppm		97
66) 2-Chloronaphthalene	7.111	162	462306	83.833	ppm		98
67) 2-Nitroaniline	7.218	65	152113	83.797	ppm		82
68) 1,4-Naphthoquinone	7.293	158	79994	85.117	ppm		88
69) m-Dinitrobenzene	7.438	168	82968	81.904	ppm		89
70) Acenaphthylene	7.518	152	764212	83.419	ppm		99
71) Dimethyl phthalate	7.384	163	504783	78.529	ppm		98
72) 2,6-Dinitrotoluene	7.454	165	114903	78.330	ppm		82
73) Acenaphthene	7.684	153	483832	81.078	ppm		98
74) 3-Nitroaniline	7.625	138	149219	81.530	ppm		90
75) 2,4-Dinitrophenol	7.743	184	52600	80.527	ppm		86
76) Dibenzofuran	7.855	168	662764	81.712	ppm		89
77) 2,4-Dinitrotoluene	7.855	165	166104	84.359	ppm		68
78) 4-Nitrophenol	7.833	65	54854	53.201	ppm	#	39
79) Pentachlorobenzene	7.817	250	208068	81.213	ppm		97
80) 1-Napthylamine	7.940	143	415276	78.068	ppm		98
81) 2-Napthylamine	8.021	143	454238	79.980	ppm		98
82) 2,3,4,6-Tetrachlorophenol	7.989	232	114180	82.618	ppm		90
83) Fluorene	8.197	166	516079	80.525	ppm		99
84) 4-Chlorophenyl-phenyle...	8.192	204	243507	79.922	ppm		93
85) Diethylphthalate	8.080	149	543181	81.367	ppm		97
86) 4-Nitroaniline	8.235	138	156958	82.778	ppm		90
87) 5-Nitro-o-toluidine	8.219	152	168322	82.062	ppm		83
89) Sulfotepp	8.459	322	88298	80.170	ppm		96
90) Octachlorocyclopentene	8.438	307	91342	83.636	ppm		97
92) Thionazin	8.160	107	90506	84.027	ppm		89
93) 4,6-Dinitro-2-methylph...	8.261	198	101304	90.465	ppm		84
94) Diphenylamine	8.315	169	863833	161.703	ppm		97
95) 1,2 Diphenylhydrazine	8.347	77	566281	84.894	ppm		87
96) N-Nitrosodiphenylamine	8.315	169	864162	161.724	ppm		97
97) 1,3,5-Trinirobenzene	8.630	213	50434	87.087	ppm		93
98) Diallate	8.588	86	194529	85.117	ppm		100
99) Phorate	8.598	121	105479	82.032	ppm		92
100) Phenacetin	8.636	108	311592	84.979	ppm		94

1st DM 09/26/18
2nd MP 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

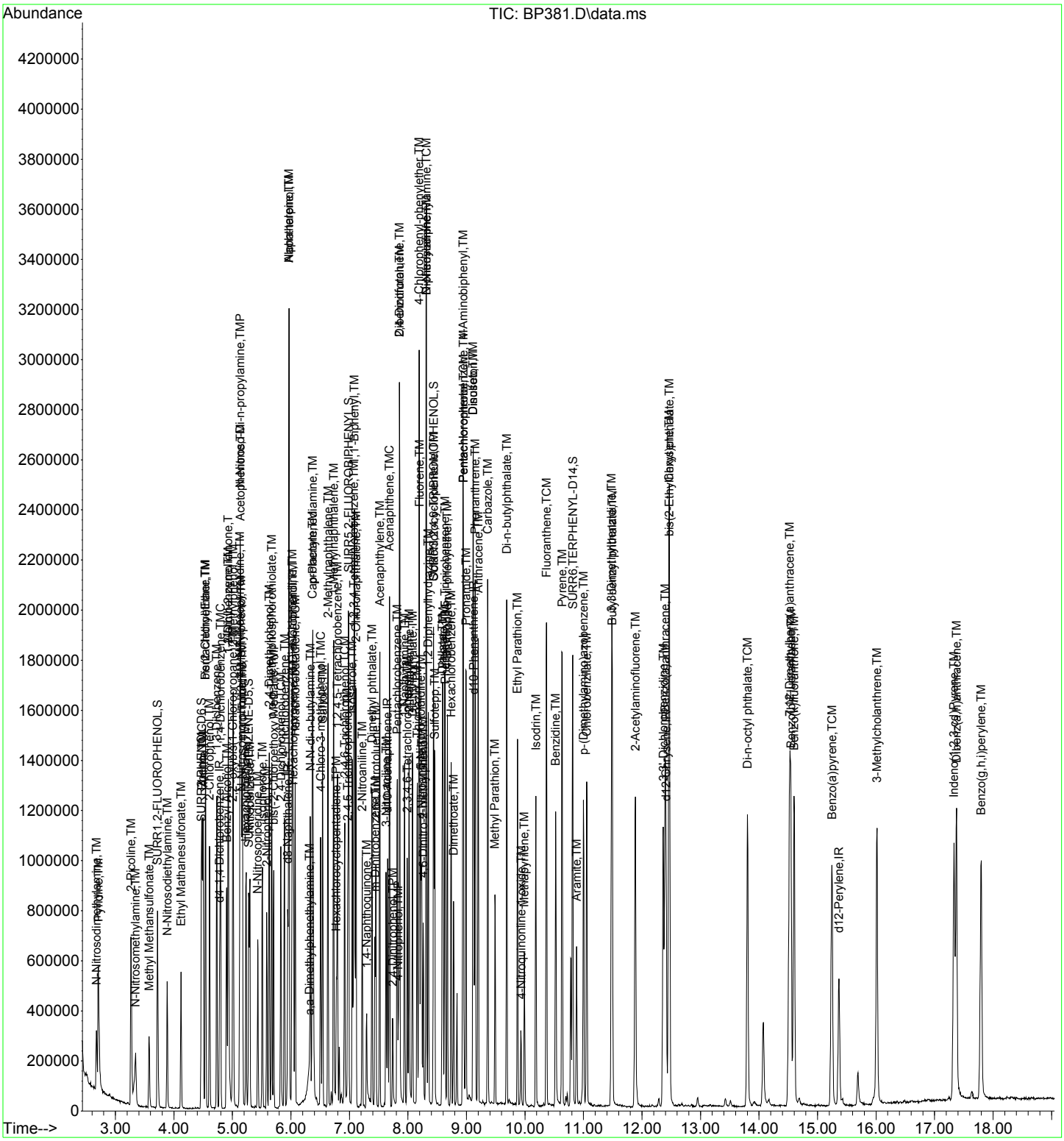
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) 4-Bromophenyl-phenylether	8.673	248	145575	79.520	ppm	#	86
102) Hexachlorobenzene	8.737	284	169497	78.446	ppm		94
103) Dimethoate	8.780	87	153532	79.962	ppm		94
105) Pentachlorophenol	8.946	266	97030	88.961	ppm		94
106) 4-Aminobiphenyl	8.941	169	560744	84.815	ppm		99
107) Pentachloronitrobenzene	8.946	237	72296	89.945	ppm		90
108) Pronamide	8.994	173	275343	87.306	ppm		98
109) Dinoseb	9.112	211	137956	91.365	ppm		97
110) Disulfoton	9.112	88	285016	86.585	ppm		94
111) Phenanthrene	9.149	178	746384	85.258	ppm		98
112) Anthracene	9.203	178	738987	85.538	ppm		98
113) Carbazole	9.363	167	793289	85.231	ppm		100
114) Di-n-butylphthalate	9.689	149	988448	89.839	ppm		98
115) 4-Nitroquinonline-1-oxide	9.935	190	26780	63.136	ppm		95
116) Fluoranthene	10.369	202	840271	88.146	ppm		99
118) Methyl Parathion	9.486	109	141192	87.036	ppm		82
119) Ethyl Parathion	9.871	97	138459	89.371	ppm		98
120) Methapyrilene	9.989	58	157823	80.993	ppm		96
121) Isodrin	10.187	193	82170	82.628	ppm		93
122) Benzidine	10.524	184	517374	82.238	ppm		99
123) Pyrene	10.636	202	855601	87.062	ppm		98
125) Aramite	10.882	185	113031m	88.121	ppm		
126) p-(Dimethylamino)azobe...	11.000	120	247014	89.493	ppm		87
127) Chlorobenzilate	11.053	139	295831	88.379	ppm		77
128) Butyl benzyl phthalate	11.492	149	429622	84.985	ppm		94
129) 3,3-Dimethylbenzidine	11.481	212	518700	85.148	ppm		98
130) 2-Acetylaminofluorene	11.888	181	407033	88.923	ppm		94
131) 3,3'-Dichlorobenzidine	12.364	252	343956	85.209	ppm		96
132) Benzo(a)anthracene	12.396	228	783585	82.401	ppm		98
133) Chrysene	12.460	228	774923	84.765	ppm		99
134) bis(2-Ethylhexyl)phtha...	12.471	149	613316	86.808	ppm		96
136) Di-n-octyl phthalate	13.803	149	1038296	91.624	ppm		96
137) 7,12-Dimethylbenz(a)an...	14.525	256	419421	85.294	ppm		94
138) Benzo(b)Fluoranthene	14.546	252	860651	88.472	ppm		99
139) Benzo(k)fluoranthene	14.600	252	806646	85.454	ppm		99
140) Benzo(a)pyrene	15.247	252	745288	88.770	ppm		98
141) 3-Methylcholanthrene	16.017	268	433321	89.059	ppm		98
142) Indeno(1,2,3-cd)Pyrene	17.333	276	733714	93.299	ppm		99
143) Dibenz(a,h)anthracene	17.375	278	760972	94.337	ppm		97
144) Benzo(g,h,i)perylene	17.798	276	739120	97.132	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP381.D
Acq On : 24 Sep 2018 4:14 pm
Operator : J.Misiurewicz
Sample : CCV
Misc : 80ppm STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

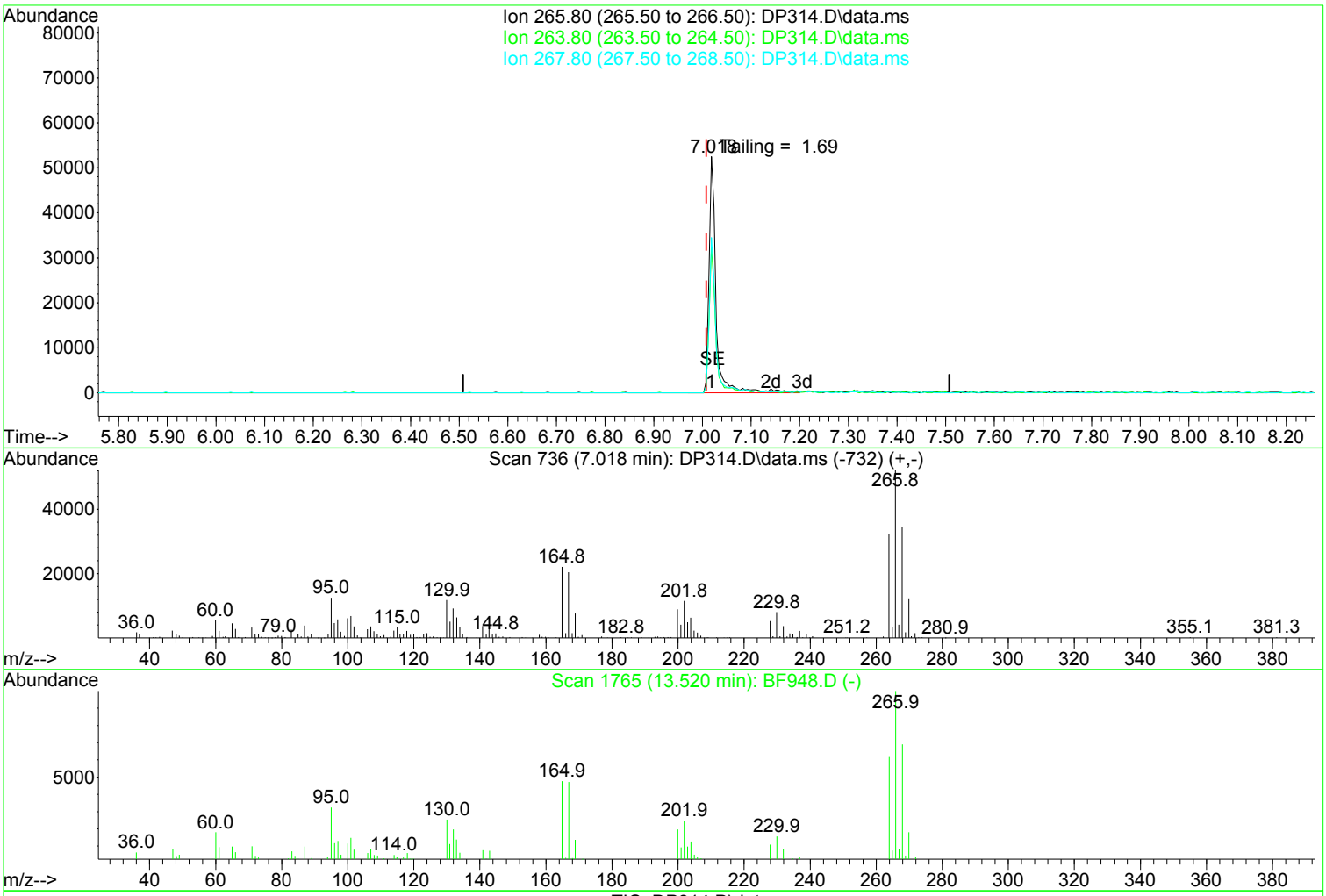
Quant Time: Sep 24 16:50:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP314.D
Acq On : 24 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 24 15:08:35 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Fri Sep 21 08:20:00 2018
Response via : Initial Calibration



TIC: DP314.D\data.ms

(5) Pentachlorophenol (TCM)

7.018min (+ 0.010) 39.02 ppm

response 51274

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	61.71
267.80	64.20	65.79
0.00	0.00	0.00

Manual Integration:

After

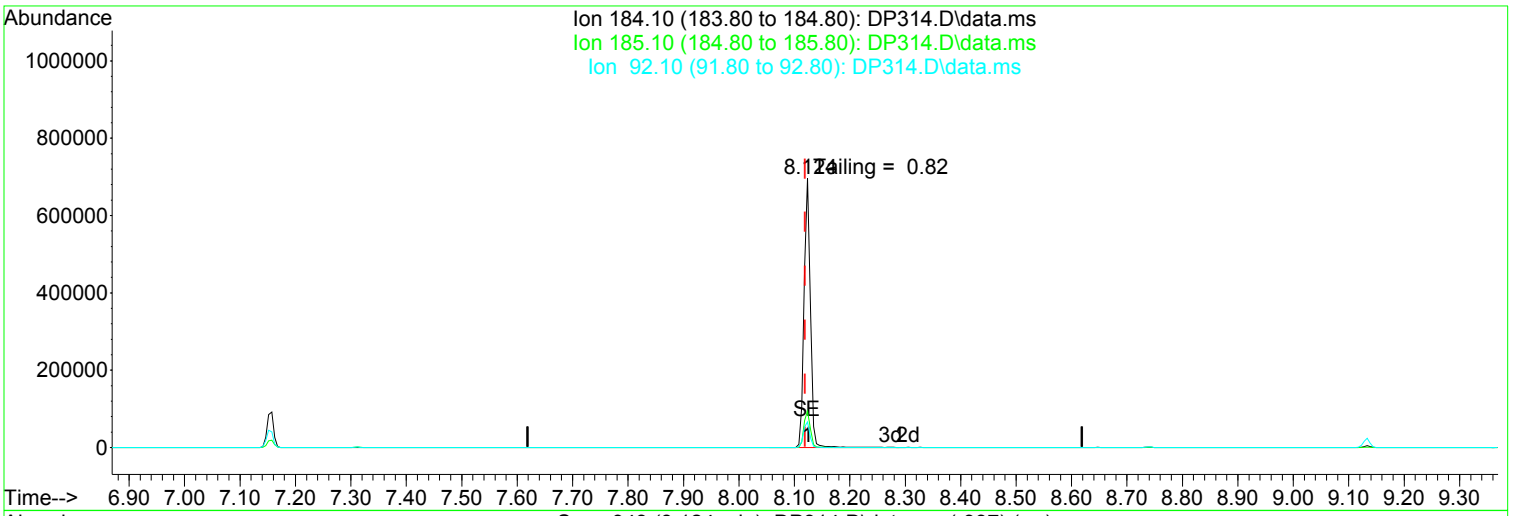
Other - Tailing

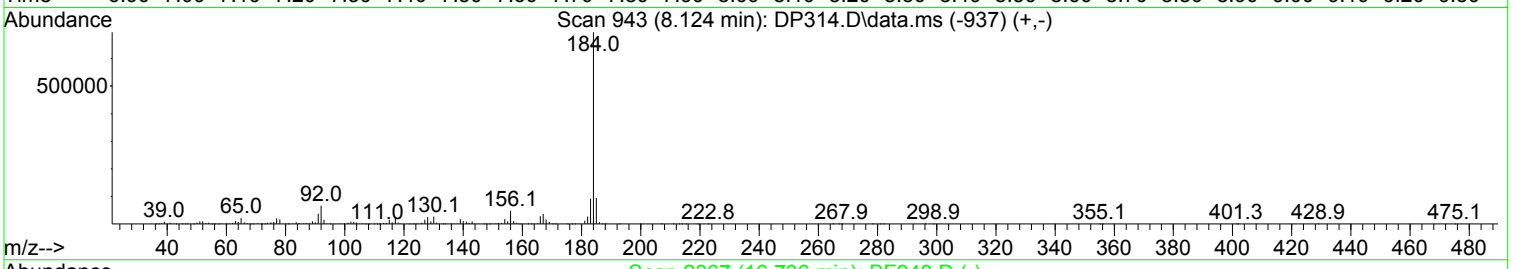
09/26/18

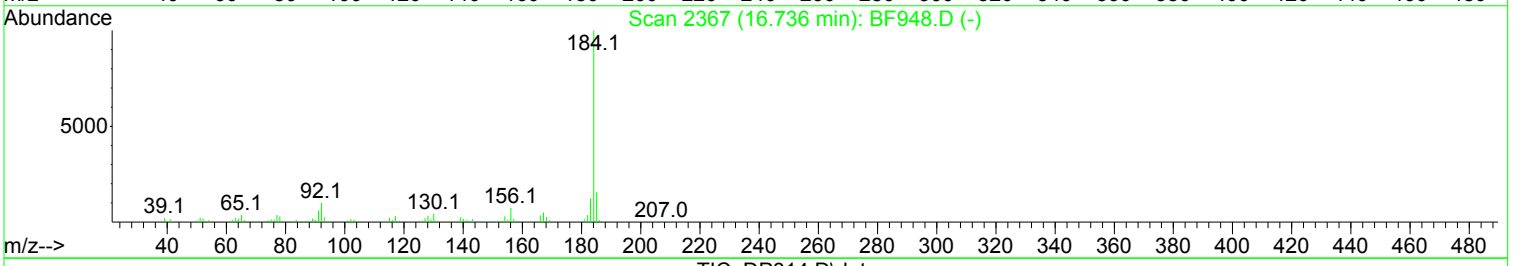
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP314.D
Acq On : 24 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 24 15:08:35 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Fri Sep 21 08:20:00 2018
Response via : Initial Calibration







TIC: DP314.D\data.ms

(8) Benzidine (T)

8.124min (+ 0.005) 57.22 ppm

response 547630

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	13.59
92.10	10.10	9.47
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

09/26/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP314.D
Acq On : 24 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 24 15:08:35 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Fri Sep 21 08:20:00 2018
Response via : Initial Calibration

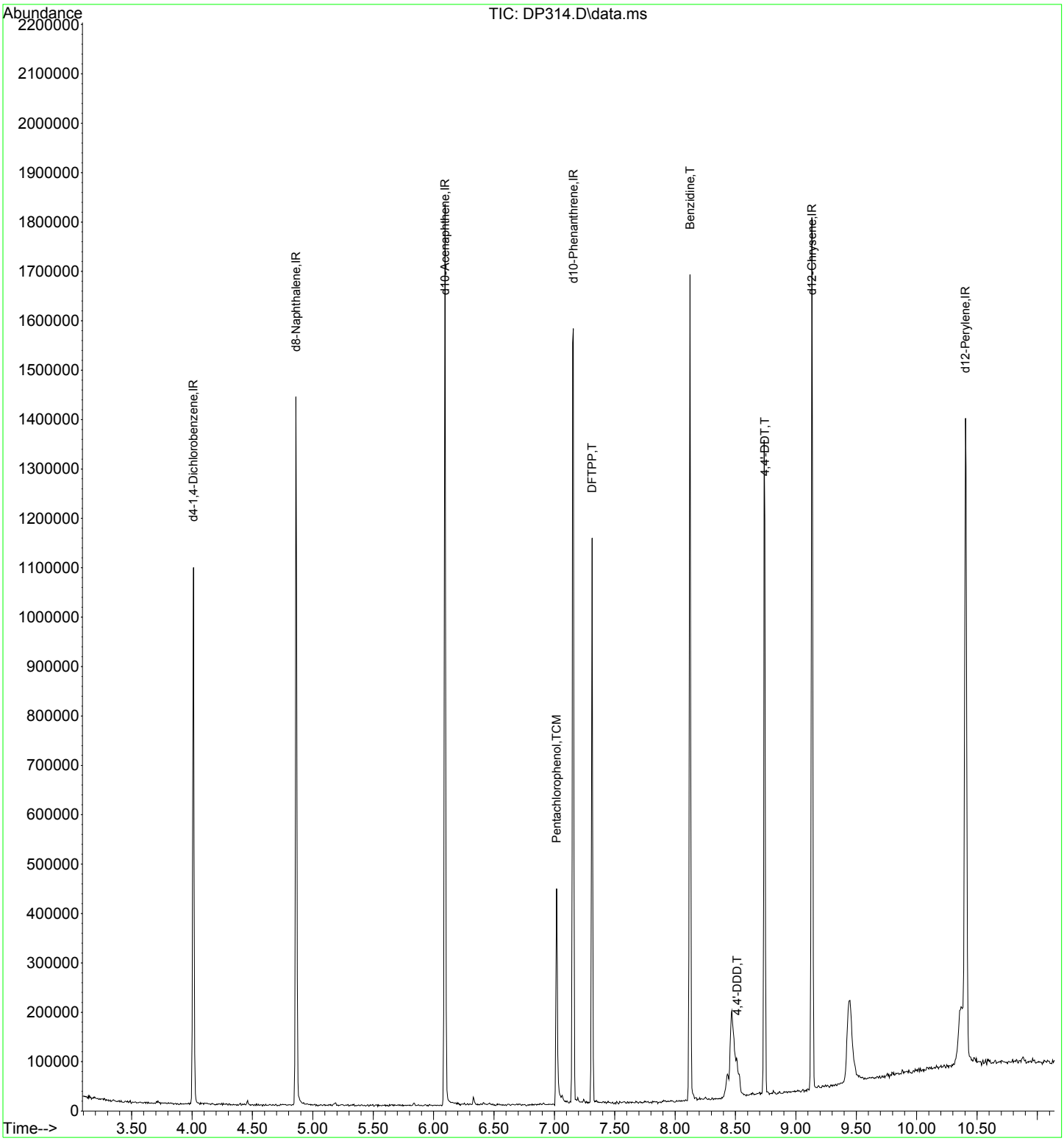
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.011	152	154710	40.00	ppm		0.00
2) d8-Naphthalene	4.860	136	579364	40.00	ppm		0.00
3) d10-Acenaphthene	6.094	164	312173	40.00	ppm		0.00
4) d10-Phenanthrene	7.157	188	520051	40.00	ppm		0.00
7) d12-Chrysene	9.133	240	492829	40.00	ppm		-0.01
12) d12-Perylene	10.404	264	506187	40.00	ppm		-0.01
Target Compounds							Qvalue
5) Pentachlorophenol	7.018	266	51274	39.020	ppm		98
6) DFTPP	7.312	198	91301	55.897	ppm	#	67
8) Benzidine	8.124	184	547630	57.224	ppm		98
9) 4,4'-DDE	7.312	246	1363	N.D.			
10) 4,4'-DDD	8.514	235	4654	1.066	ppm		85
11) 4,4'-DDT	8.743	235	203849	46.677	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP314.D
Acq On : 24 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 24 15:08:35 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Fri Sep 21 08:20:00 2018
Response via : Initial Calibration

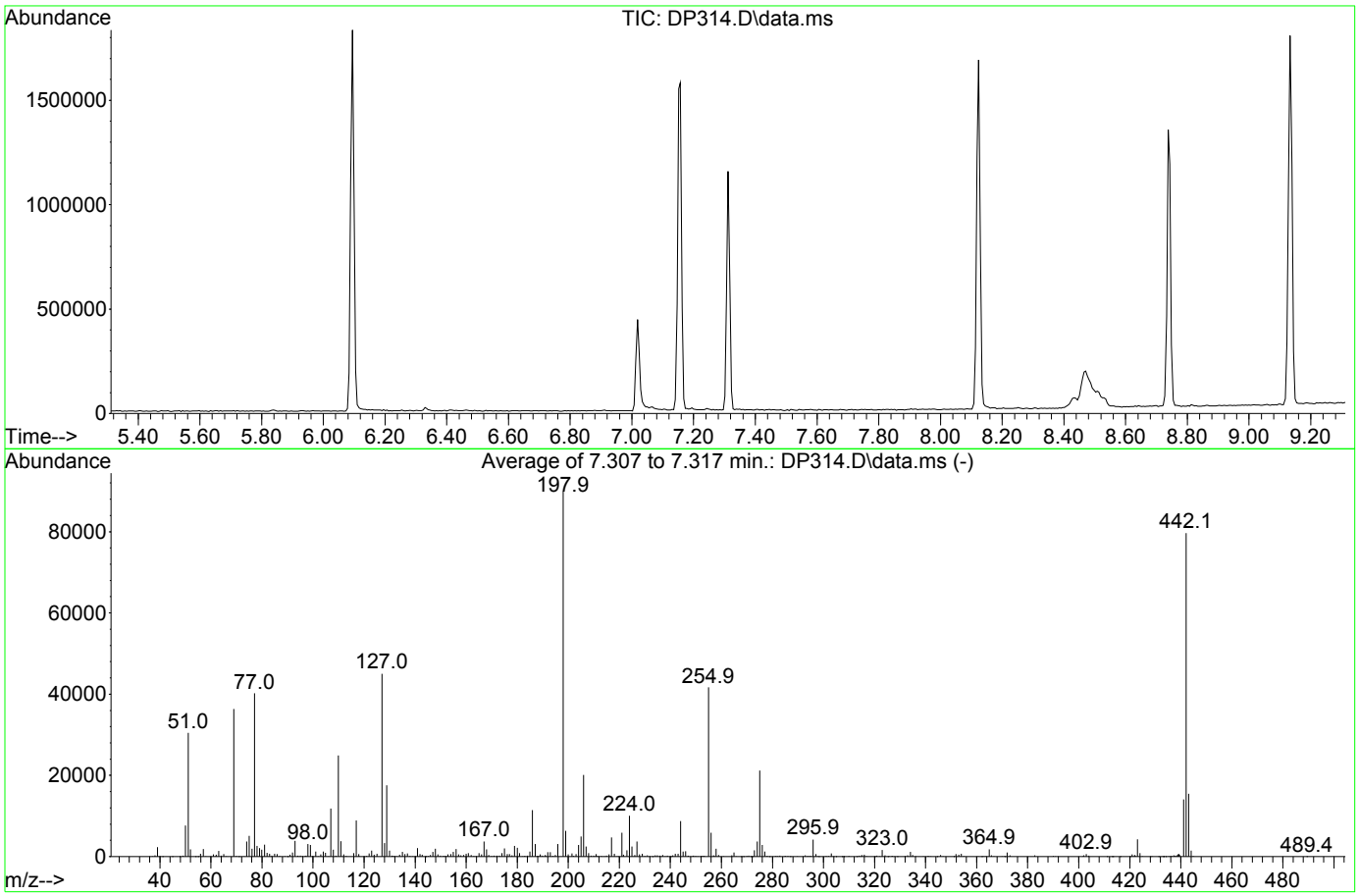


1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973A\DATA\092418\
Data File : DP314.D
Acq On : 24 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Title : TUNE CHECK
Last Update : Fri Sep 21 08:20:00 2018



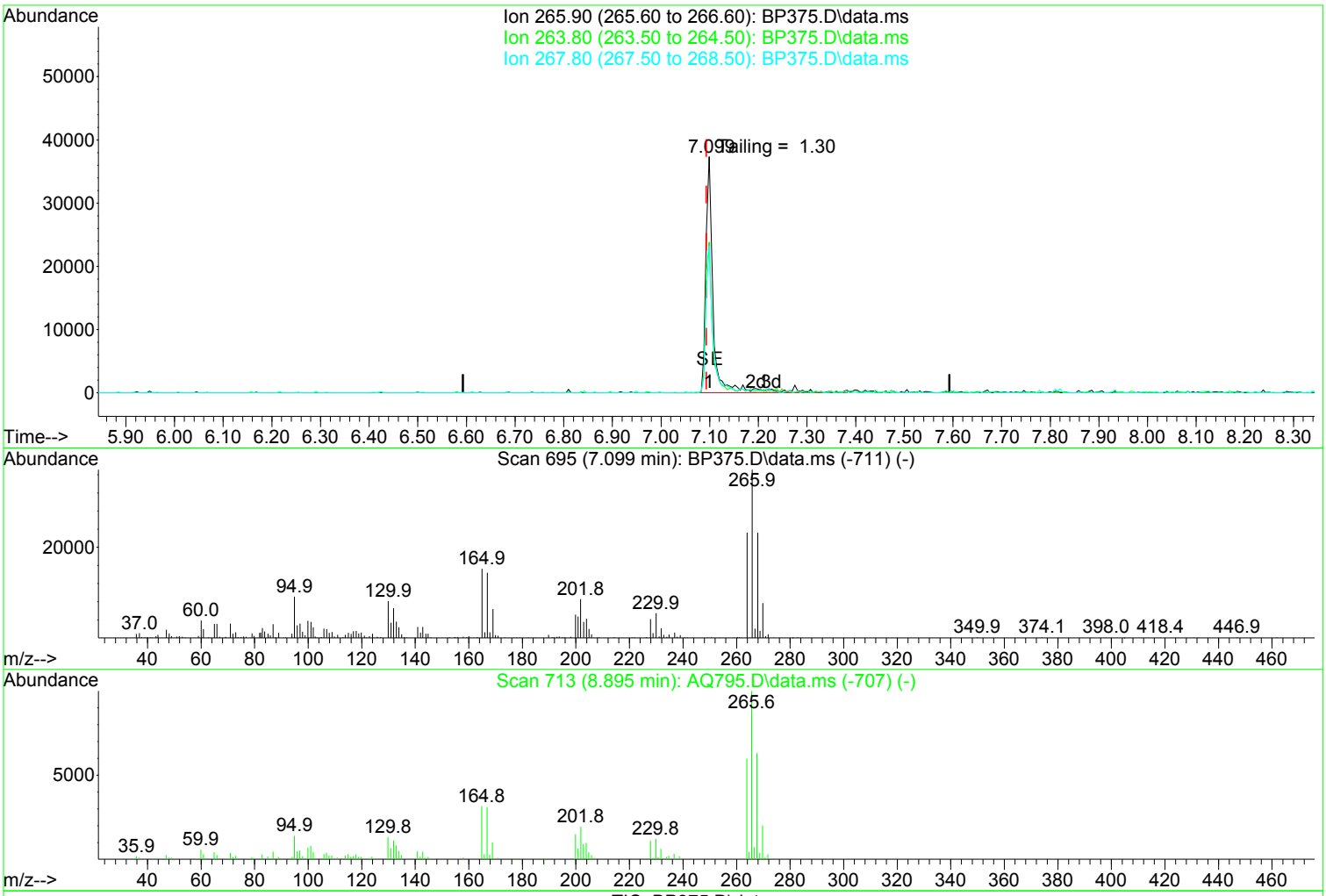
AutoFind: Scans 790, 791, 792; Background Corrected with Scan 786

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.9	30476	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.4	36345	PASS
70	69	0.00	2	0.4	142	PASS
127	198	10	80	50.1	45021	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	89931	PASS
199	198	5	9	7.1	6372	PASS
275	198	10	60	23.6	21181	PASS
365	198	1	500	2.0	1817	PASS
441	442	0.01	24	17.6	14058	PASS
442	442	100	100	100.0	79669	PASS
443	442	15	24	19.4	15456	PASS

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP375.D
Acq On : 24 Sep 2018 12:13 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFFTPP
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 26 08:38:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Thu Sep 20 14:00:18 2018
Response via : Initial Calibration



TIC: BP375.D\data.ms

(5) Pentachlorophenol (TCM)

7.099min (+ 0.005) 50.71 ppm

response 37065

Ion	Exp%	Act%
265.90	100.00	100.00
263.80	57.70	63.90
267.80	58.60	61.90
0.00	0.00	0.00

Manual Integration:

After

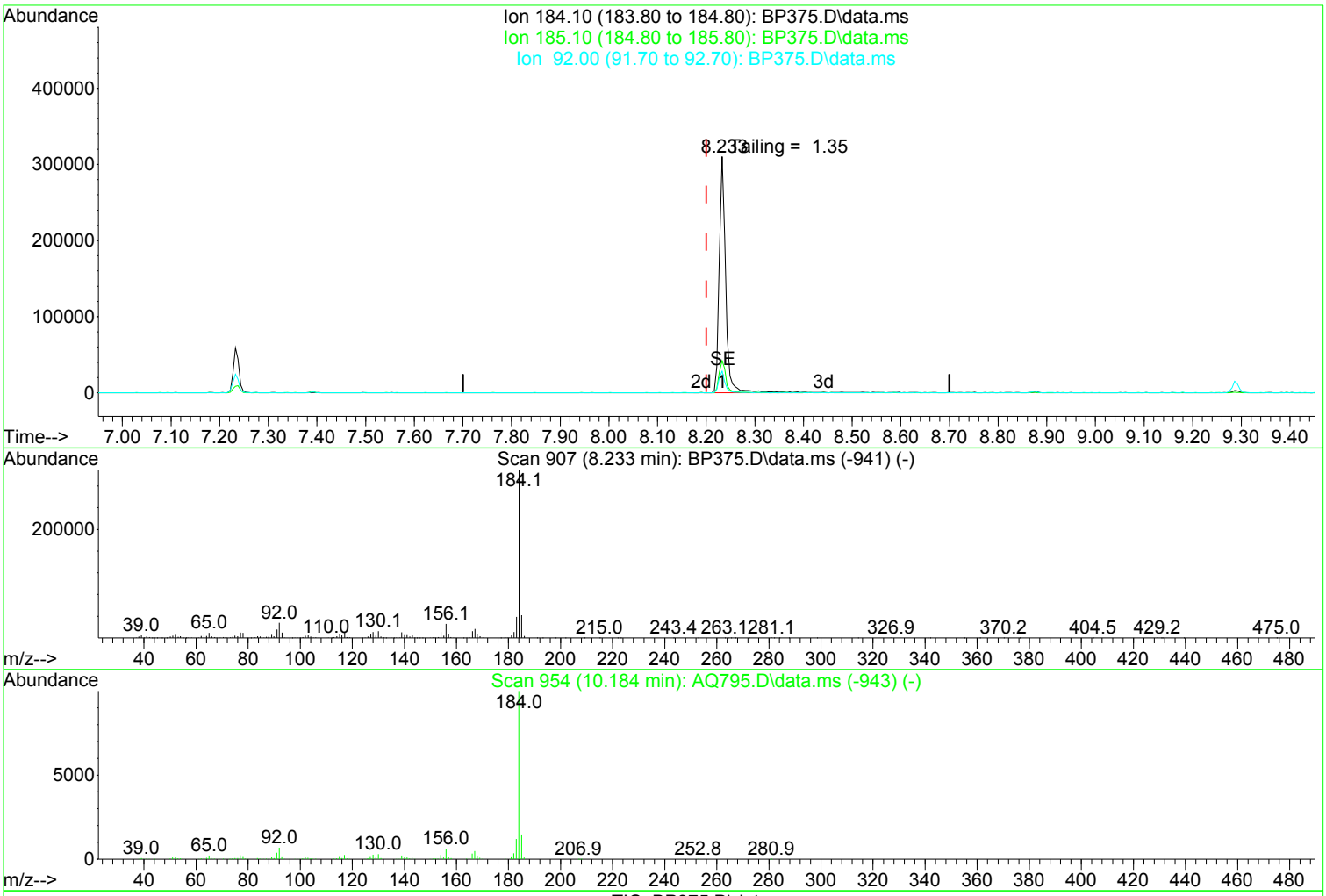
Other - Tailing

09/26/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP375.D
Acq On : 24 Sep 2018 12:13 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFFTPP
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 26 08:38:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Thu Sep 20 14:00:18 2018
Response via : Initial Calibration



TIC: BP375.D\data.ms

(8) Benzidine (T)

8.233min (+ 0.032) 43.34 ppm

response 285626

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.90	13.59
92.00	8.00	9.14
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

09/26/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP375.D
Acq On : 24 Sep 2018 12:13 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFFTPP
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 26 08:38:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Thu Sep 20 14:00:18 2018
Response via : Initial Calibration

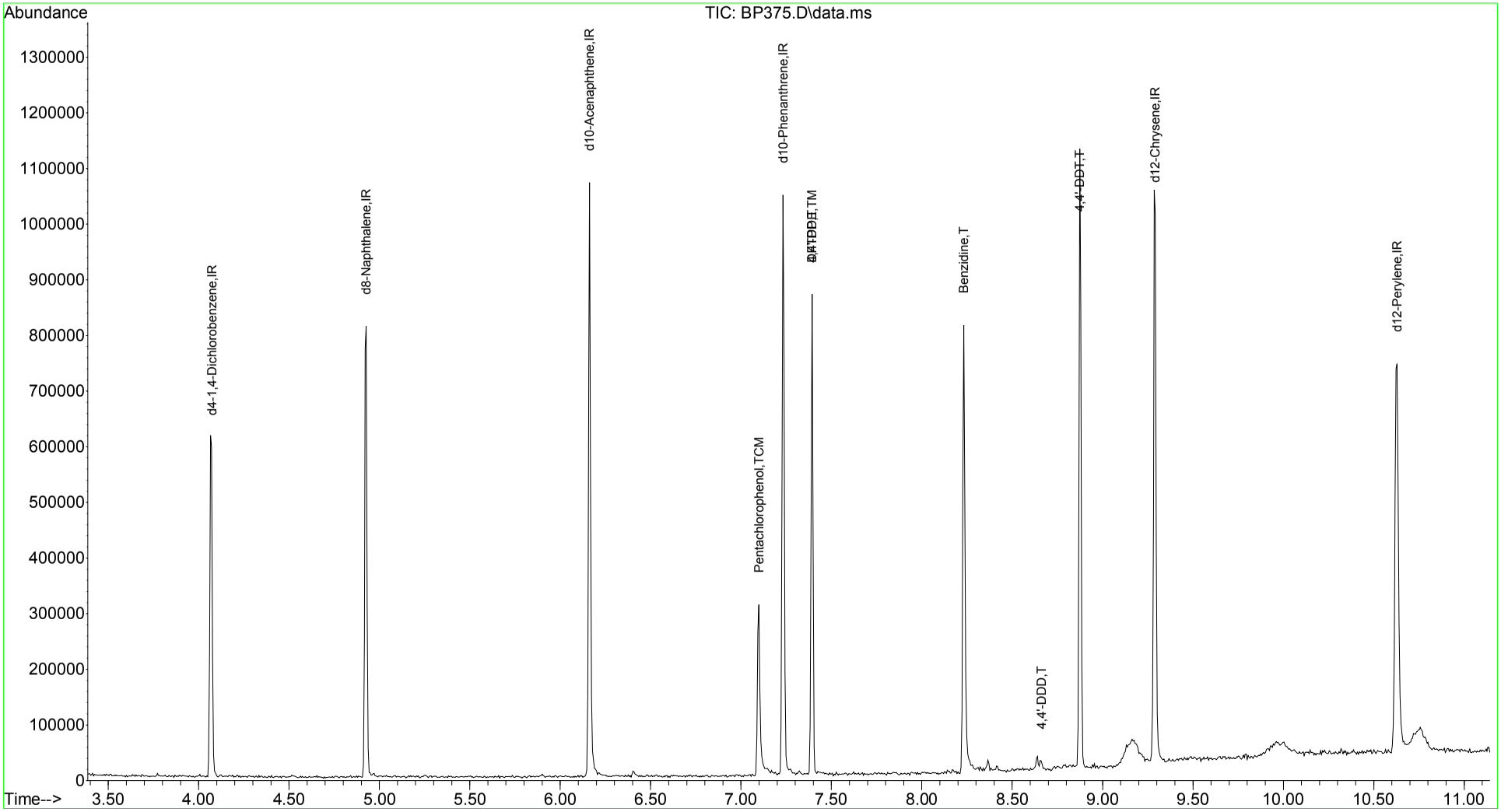
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.071	152	91021	40.00	ppm		0.00
2) d8-Naphthalene	4.927	136	341167	40.00	ppm		0.00
3) d10-Acenaphthene	6.163	164	185664	40.00	ppm		0.00
4) d10-Phenanthrene	7.232	188	318974	40.00	ppm		0.00
7) d12-Chrysene	9.292	240	337957	40.00	ppm		0.07
12) d12-Perylene	10.629	264	336781	40.00	ppm		0.10
Target Compounds							Qvalue
5) Pentachlorophenol	7.099	266	37065	50.707	ppm		94
6) DFTPP	7.393	198	57191	56.589	ppm		88
8) Benzidine	8.233	184	285626	43.343	ppm		97
9) 4,4'-DDE	7.393	246	1112	0.369	ppm	#	1
10) 4,4'-DDD	8.660	235	1953	0.649	ppm		78
11) 4,4'-DDT	8.874	235	153903	51.108	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP375.D
Acq On : 24 Sep 2018 12:13 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFFTPP
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 26 08:38:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Thu Sep 20 14:00:18 2018
Response via : Initial Calibration



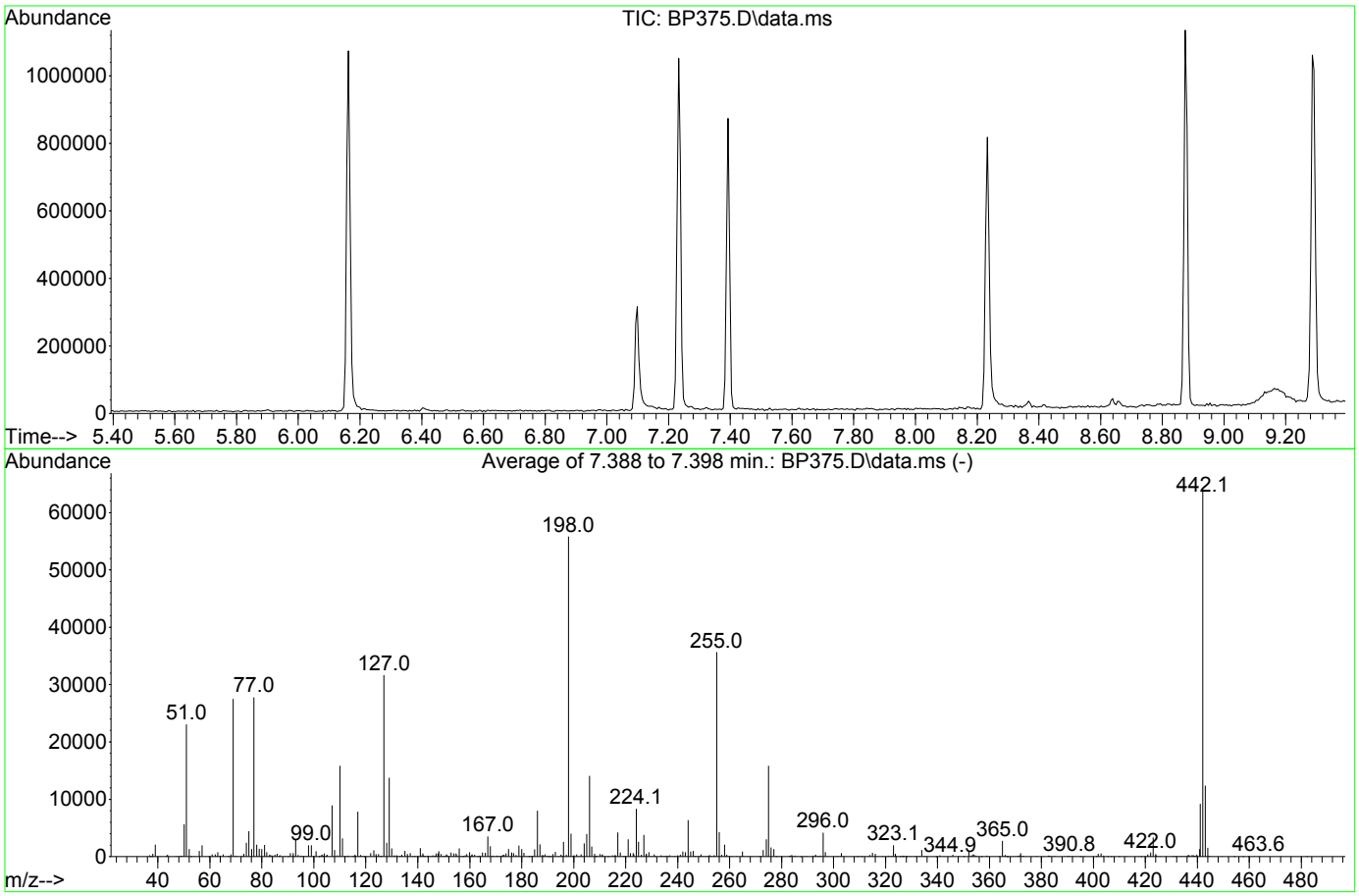
1st 09/26/18
2nd 09/26/18

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP375.D
Acq On : 24 Sep 2018 12:13 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFFTPP
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973D\Methods\TUNCHECK.M
Title : TUNE CHECK
Last Update : Wed Sep 19 10:00:53 2018



AutoFind: Scans 749, 750, 751; Background Corrected with Scan 744

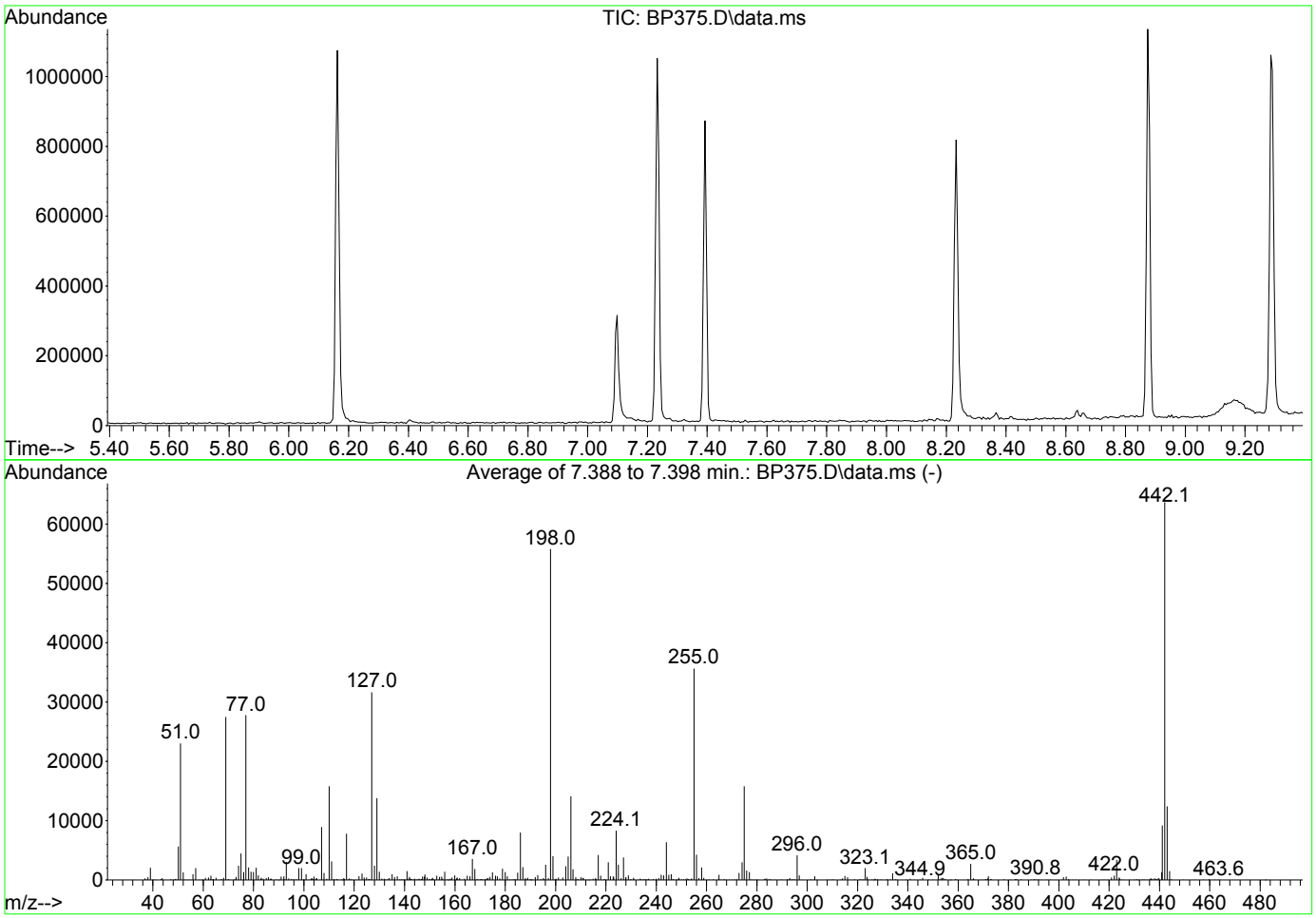
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.3	23048	PASS
68	69	0.00	2	1.3	363	PASS
69	198	0.00	100	49.3	27520	PASS
70	69	0.00	2	0.5	150	PASS
127	198	40	60	56.7	31664	PASS
197	198	0.00	1	0.6	324	PASS
198	198	100	100	100.0	55827	PASS
199	198	5	9	7.2	4019	PASS
275	198	10	30	28.3	15817	PASS
365	198	1	500	4.9	2728	PASS
441	443	0.01	100	74.1	9201	PASS
442	198	50	500	114.1	63712	PASS
443	442	17	23	19.5	12411	PASS

1st 09/26/18
2nd 09/26/18

Data Path : I:\ACQUDATA\5973D\Data\092418\
Data File : BP375.D
Acq On : 24 Sep 2018 12:13 pm
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFFTPP
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Title : TUNE CHECK
Last Update : Thu Sep 20 14:00:18 2018



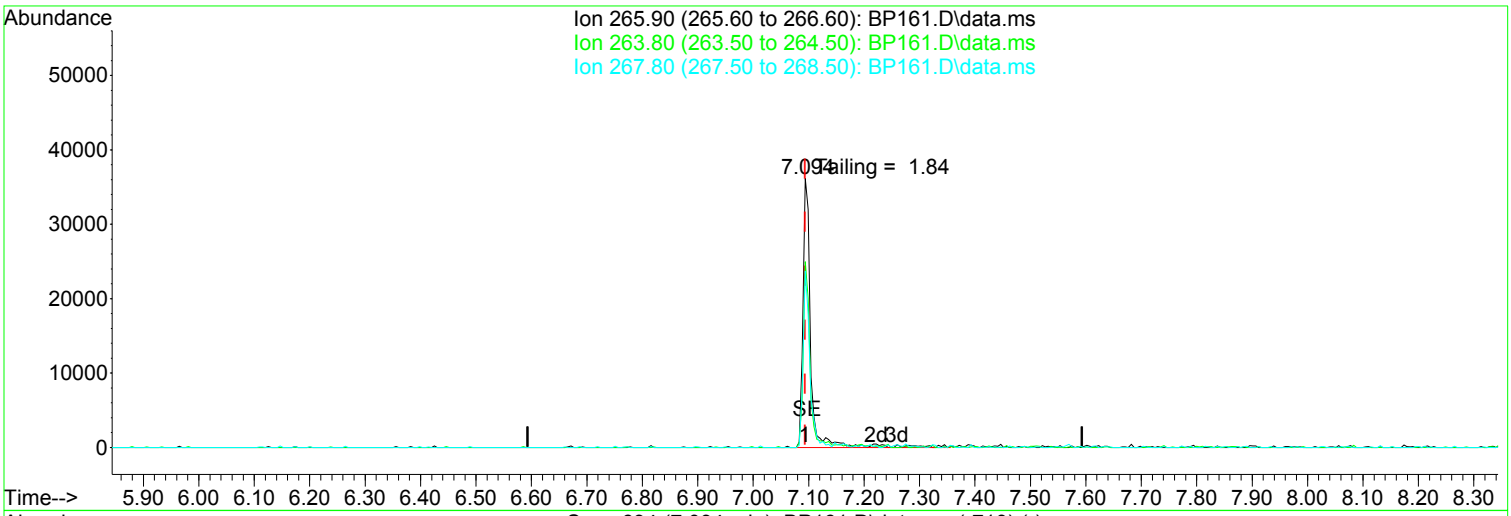
AutoFind: Scans 749, 750, 751; Background Corrected with Scan 744

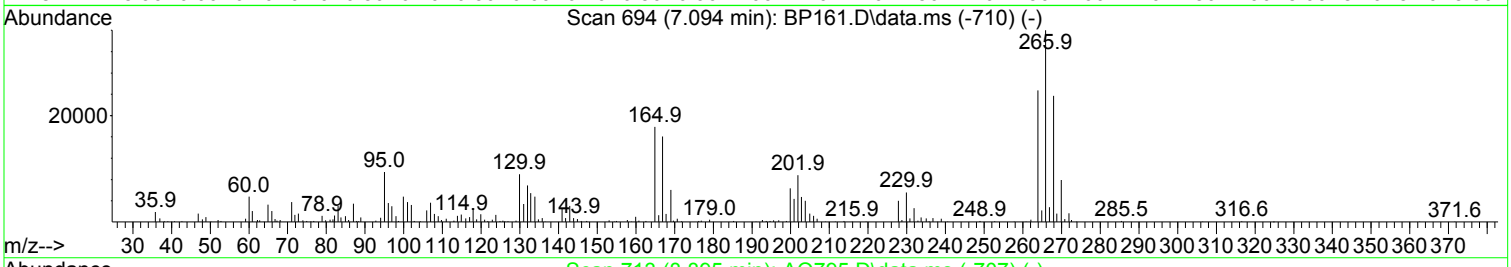
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	41.3	23048	PASS
68	69	0.00	2	1.3	363	PASS
70	69	0.00	2	0.5	150	PASS
127	198	10	80	56.7	31664	PASS
197	198	0.00	2	0.6	324	PASS
198	198	100	100	100.0	55827	PASS
199	198	5	9	7.2	4019	PASS
275	198	10	60	28.3	15817	PASS
365	198	1	500	4.9	2728	PASS
441	442	0.01	24	14.4	9201	PASS
442	442	100	100	100.0	63712	PASS
443	442	15	24	19.5	12411	PASS

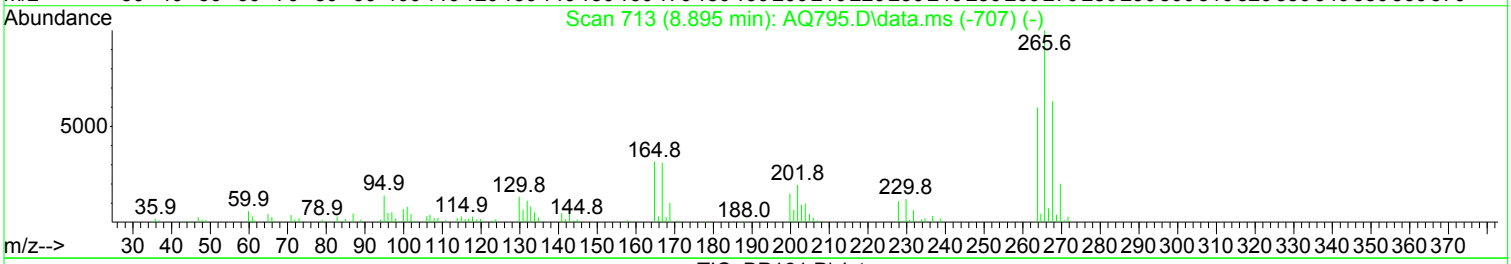
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP161.D
Acq On : 17 Sep 2018 8:33 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 10:04:40 2018
Quant Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Wed Sep 19 10:04:16 2018
Response via : Initial Calibration







TIC: BP161.D\data.ms

(5) Pentachlorophenol (TCM)

7.094min (0.000) 50.00 ppm

response 33535

Ion	Exp%	Act%
265.90	100.00	100.00
263.80	57.70	69.17
267.80	58.60	65.61
0.00	0.00	0.00

Manual Integration:

After

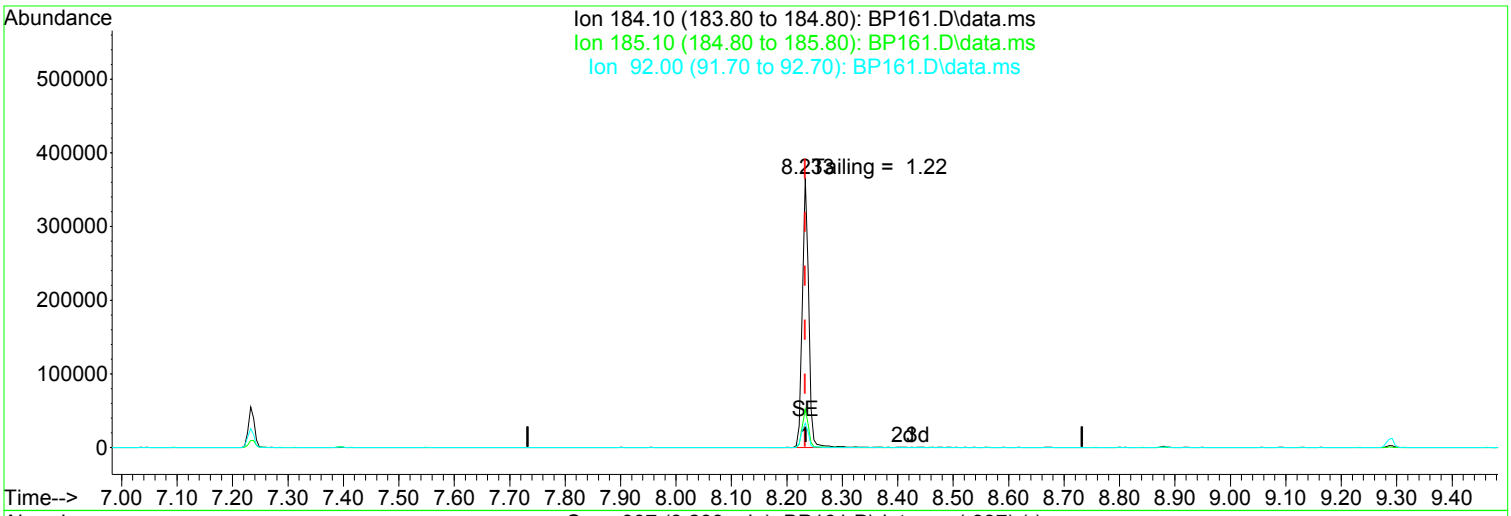
Other - Tailing

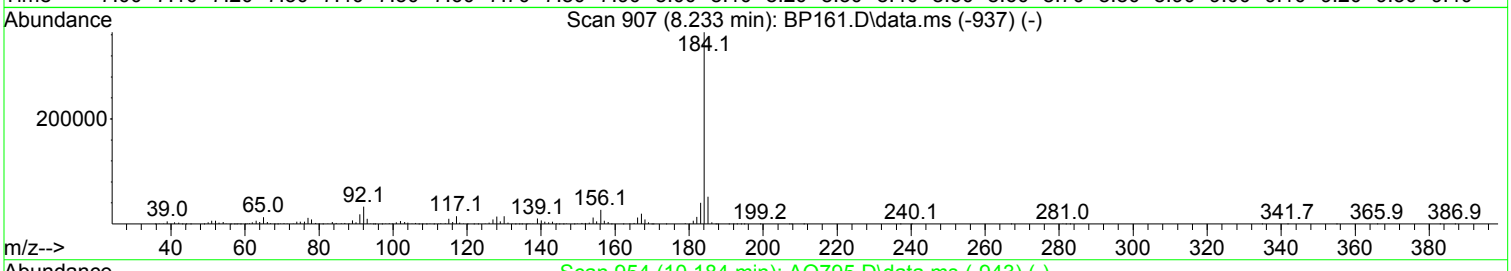
09/19/18

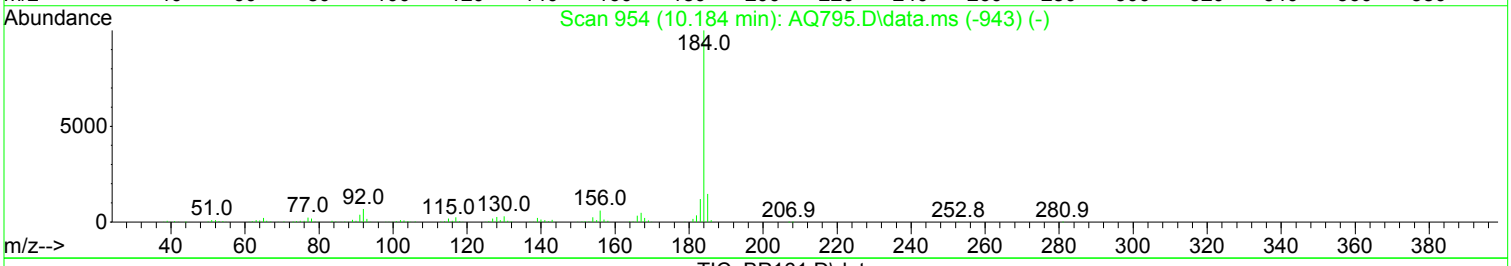
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP161.D
Acq On : 17 Sep 2018 8:33 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 10:04:40 2018
Quant Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Wed Sep 19 10:04:16 2018
Response via : Initial Calibration







TIC: BP161.D\data.ms

(8) Benzidine (T)

8.233min (0.000) 50.00 ppm

response 291809

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.90	14.24
92.00	8.00	9.06
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP161.D
Acq On : 17 Sep 2018 8:33 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 10:04:40 2018
Quant Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Wed Sep 19 10:04:16 2018
Response via : Initial Calibration

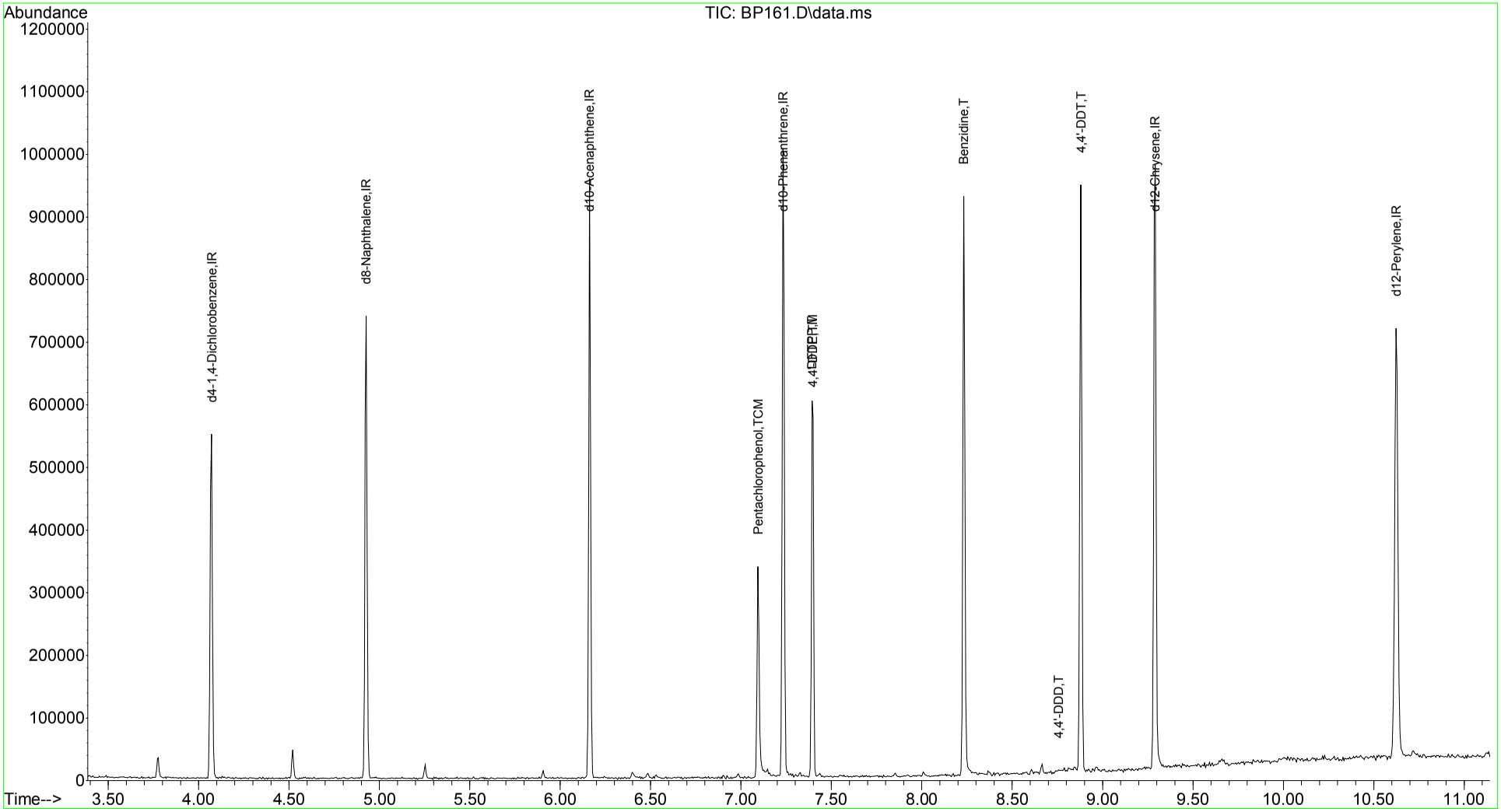
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.072	152	77000	40.00	ppm		0.00
2) d8-Naphthalene	4.927	136	296621	40.00	ppm		0.00
3) d10-Acenaphthene	6.163	164	151412	40.00	ppm		0.00
4) d10-Phenanthrene	7.233	188	292676	40.00	ppm		0.00
7) d12-Chrysene	9.292	240	299302	40.00	ppm		0.00
12) d12-Perylene	10.624	264	291537	40.00	ppm		0.00
Target Compounds							Qvalue
5) Pentachlorophenol	7.094	266	33535	50.000	ppm		88
6) DFTPP	7.393	198	46366	50.000	ppm	#	70
8) Benzidine	8.233	184	291809	50.000	ppm		98
9) 4,4'-DDE	7.398	246	1115	0.418	ppm		99
10) 4,4'-DDD	8.757	235	428	0.160	ppm		82
11) 4,4'-DDT	8.880	235	133345	50.000	ppm		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP161.D
Acq On : 17 Sep 2018 8:33 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 10:04:40 2018
Quant Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Wed Sep 19 10:04:16 2018
Response via : Initial Calibration



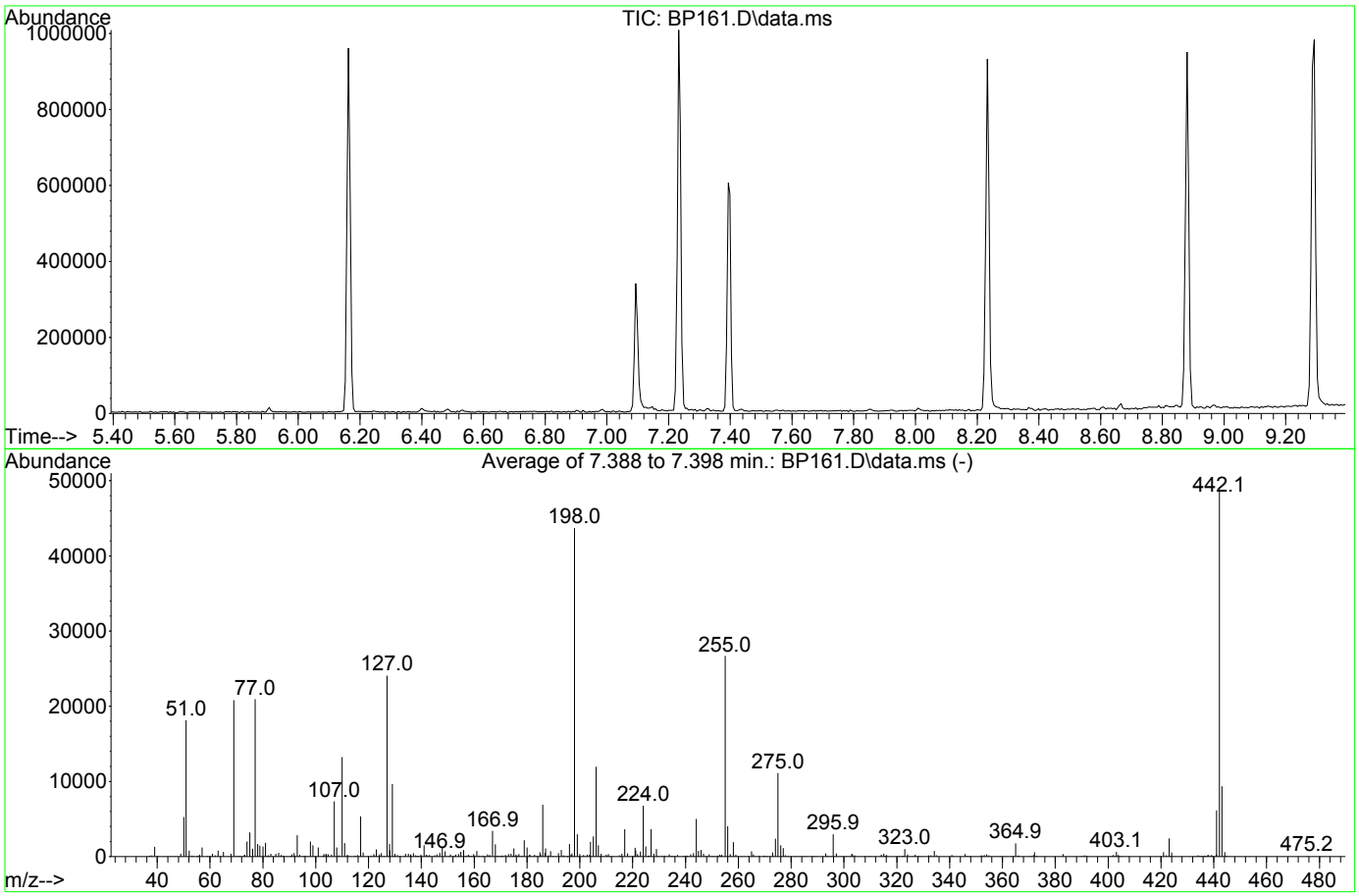
1st 09/19/18
2nd 09/21/18

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP161.D
Acq On : 17 Sep 2018 8:33 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973D\Methods\TUNCHECK.M
Title : TUNE CHECK
Last Update : Wed Sep 19 10:00:53 2018



AutoFind: Scans 749, 750, 751; Background Corrected with Scan 742

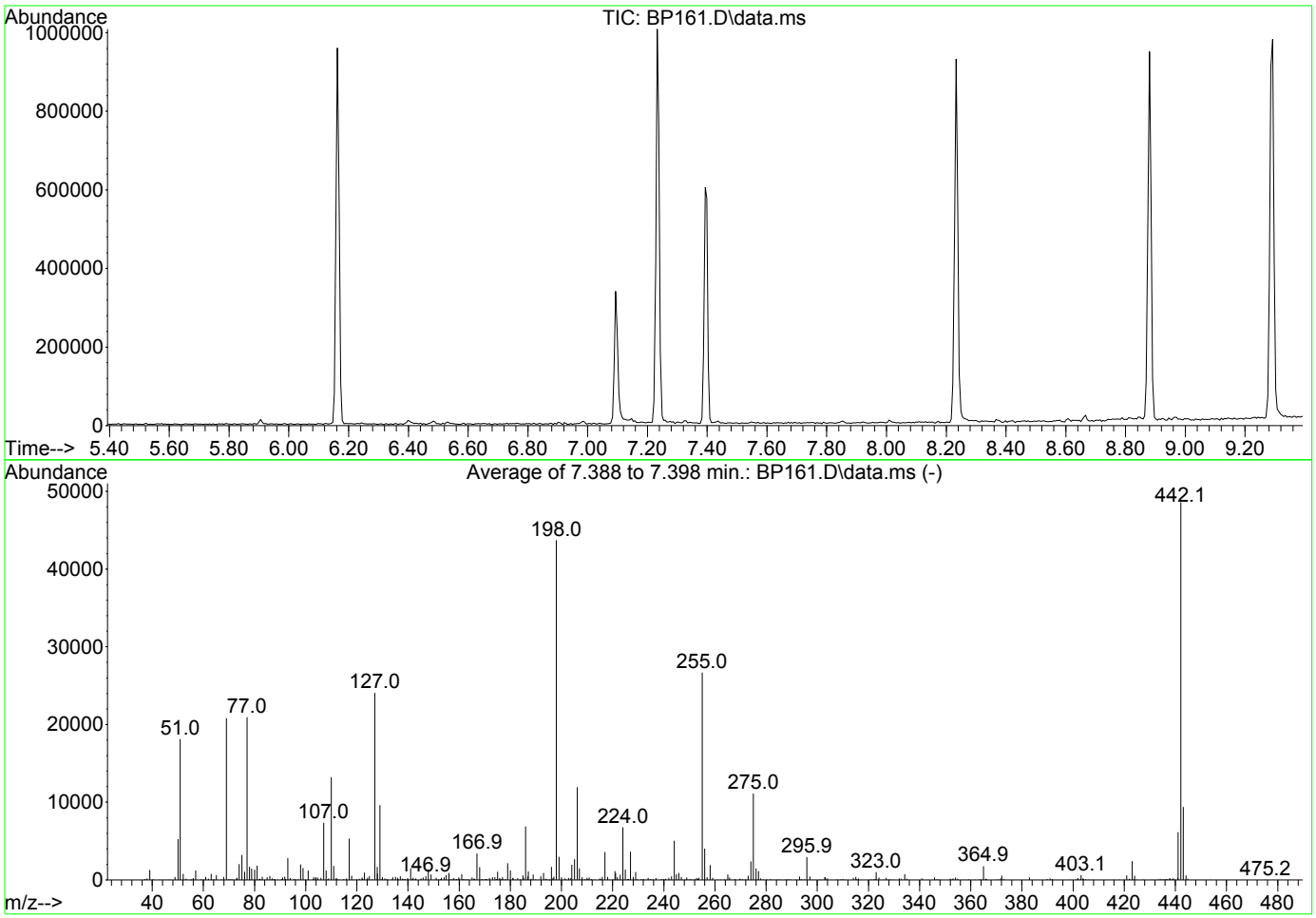
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.5	18131	PASS
68	69	0.00	2	1.8	380	PASS
69	198	0.00	100	47.6	20803	PASS
70	69	0.00	2	0.6	128	PASS
127	198	40	60	55.1	24081	PASS
197	198	0.00	1	0.9	414	PASS
198	198	100	100	100.0	43702	PASS
199	198	5	9	6.8	2961	PASS
275	198	10	30	25.4	11098	PASS
365	198	1	500	4.0	1765	PASS
441	443	0.01	100	65.5	6140	PASS
442	198	50	500	111.2	48593	PASS
443	442	17	23	19.3	9377	PASS

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP161.D
Acq On : 17 Sep 2018 8:33 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973D\Methods\TUNED.M
Title : TUNE CHECK
Last Update : Wed Sep 19 10:04:16 2018



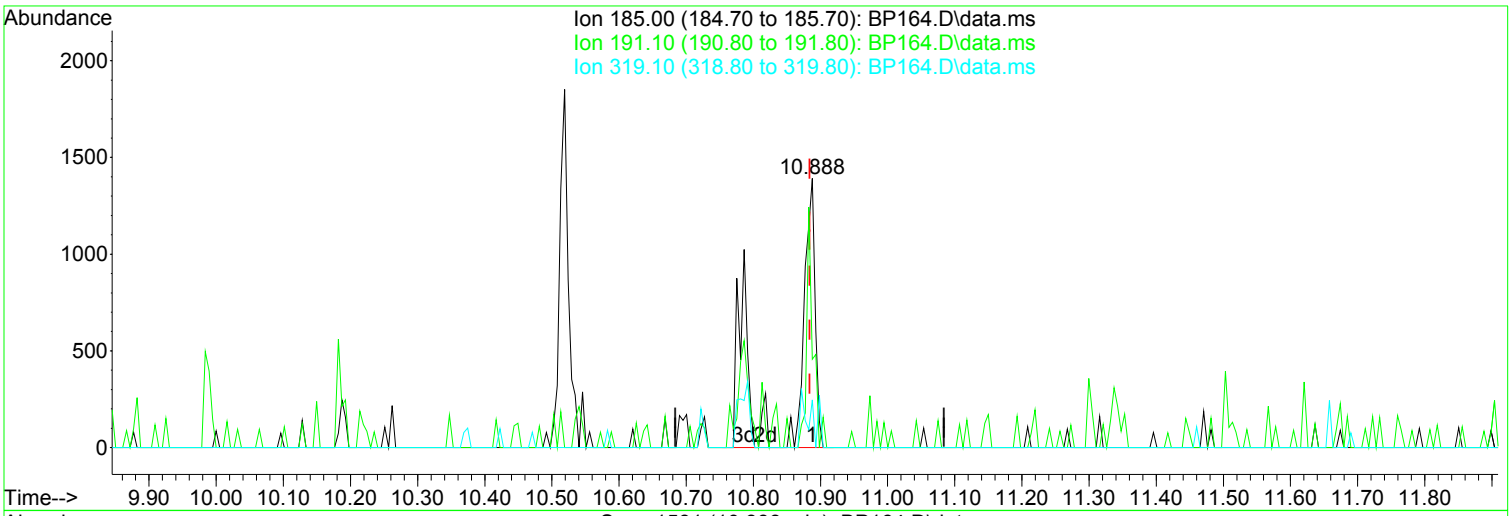
AutoFind: Scans 749, 750, 751; Background Corrected with Scan 742

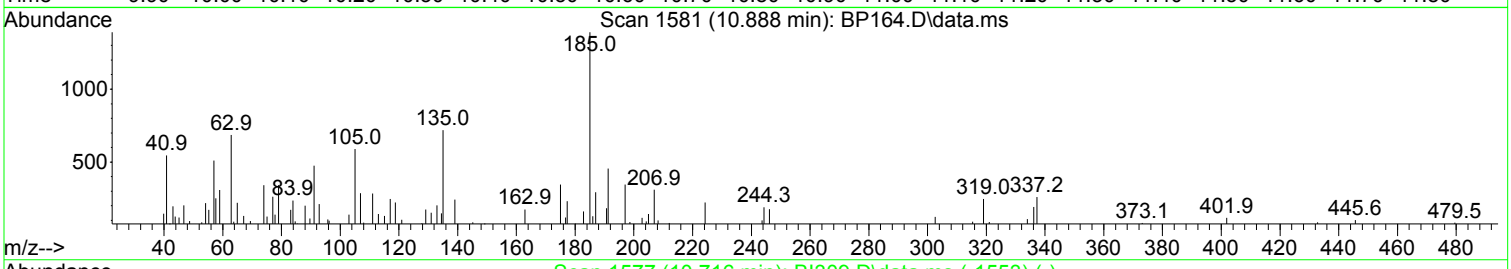
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	41.5	18131	PASS
68	69	0.00	2	1.8	380	PASS
70	69	0.00	2	0.6	128	PASS
127	198	10	80	55.1	24081	PASS
197	198	0.00	2	0.9	414	PASS
198	198	100	100	100.0	43702	PASS
199	198	5	9	6.8	2961	PASS
275	198	10	60	25.4	11098	PASS
365	198	1	500	4.0	1765	PASS
441	442	0.01	24	12.6	6140	PASS
442	442	100	100	100.0	48593	PASS
443	442	15	24	19.3	9377	PASS

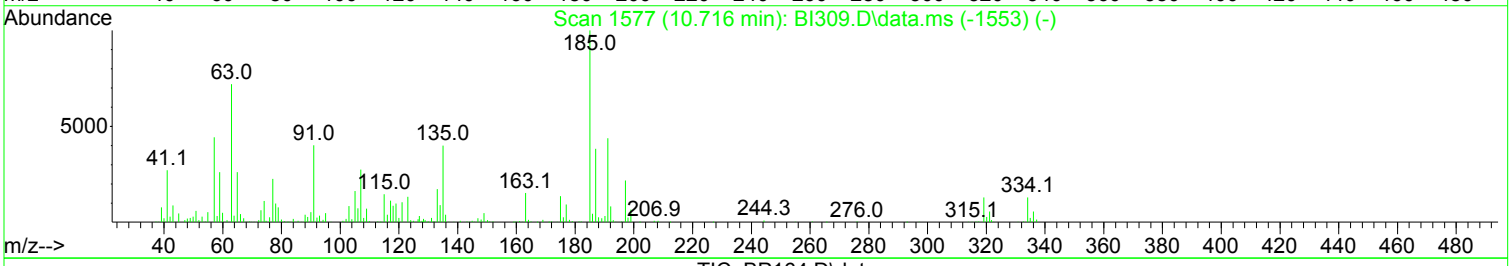
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP164.D\data.ms

(125) Aramite (TM)

10.888min (+ 0.003) 2.61 ppm m

response 2666

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	32.78
319.10	20.20	17.69
0.00	0.00	0.00

Manual Integration:

After

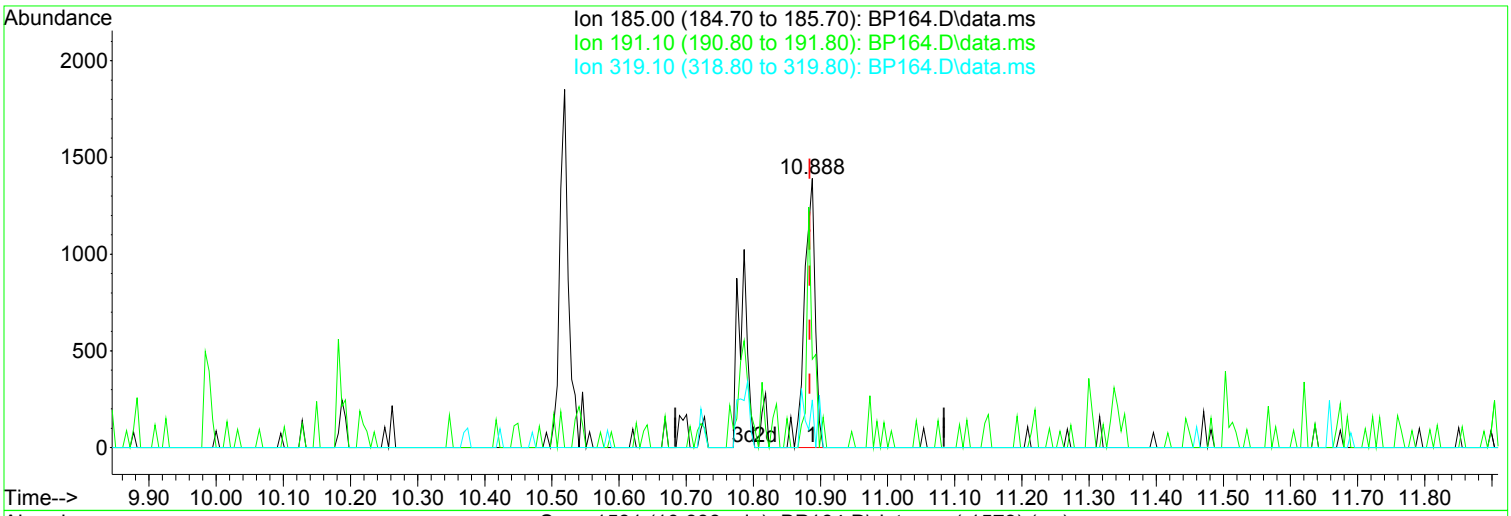
Split Peak.

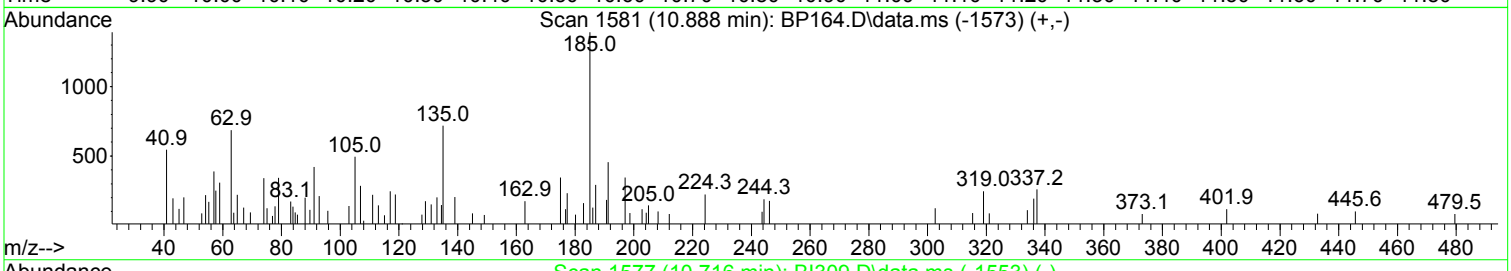
09/19/18

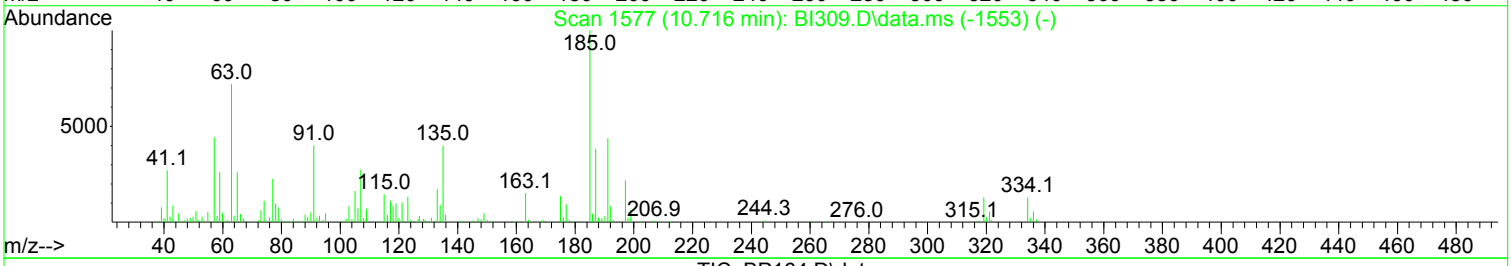
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP164.D\data.ms

(125) Aramite (TM)

10.888min (+ 0.003) 1.52 ppm

response 1552

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	32.78
319.10	20.20	17.69
0.00	0.00	0.00

Manual Integration:

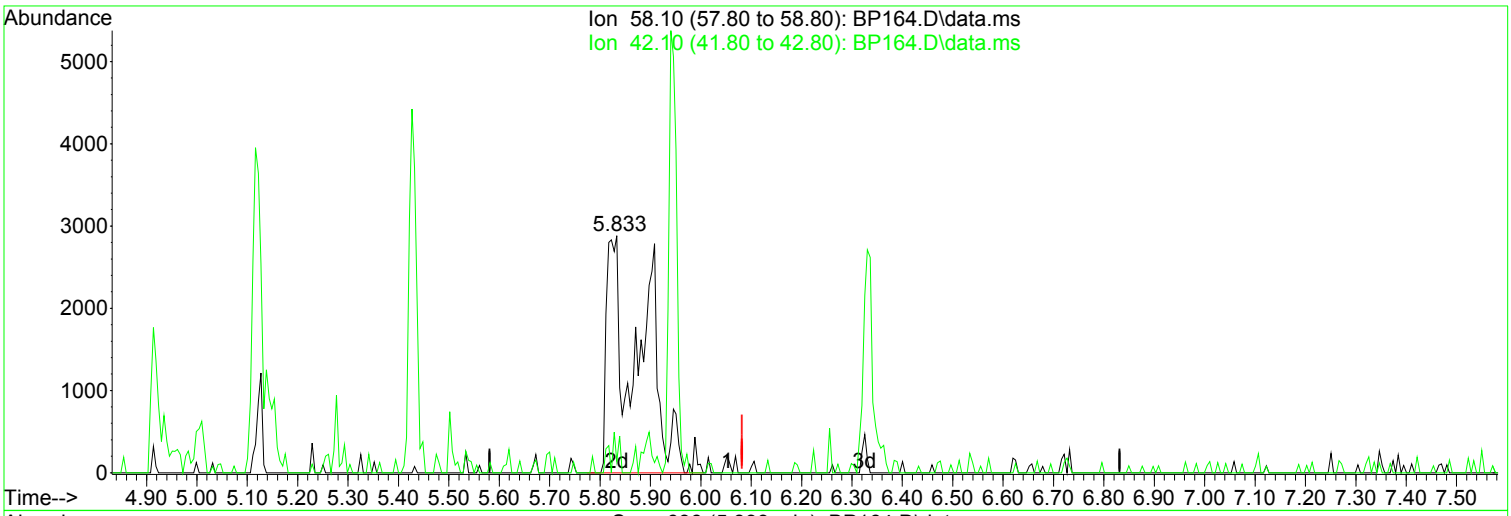
Before

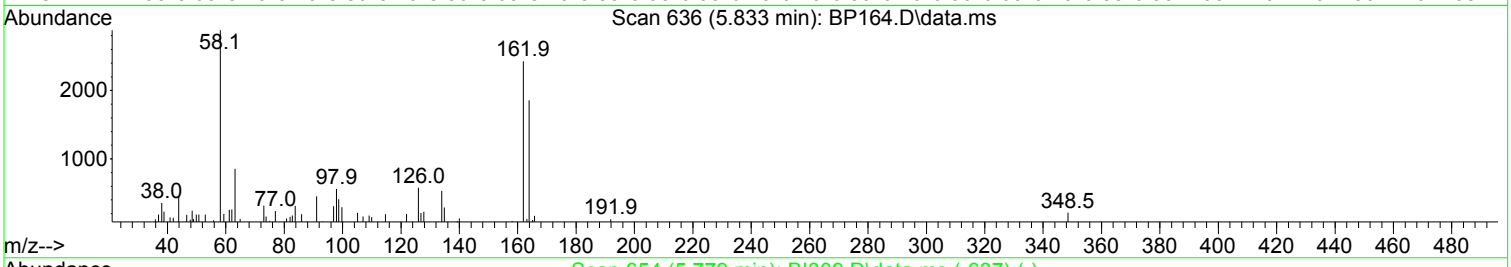
09/19/18

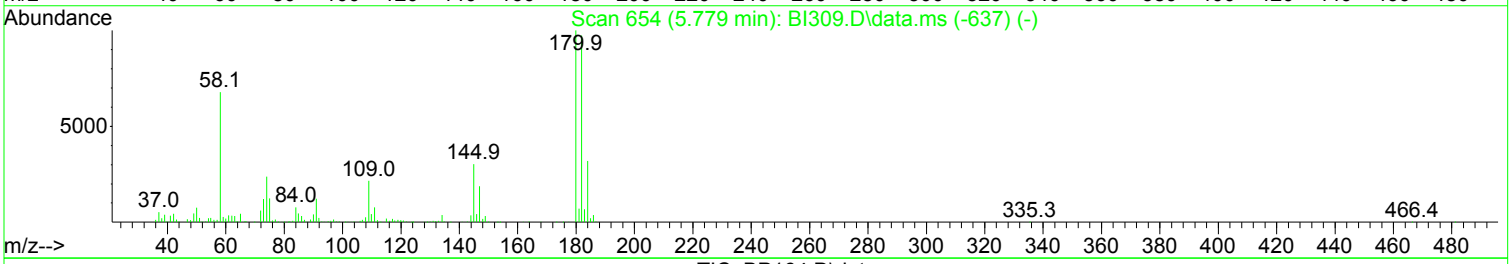
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP164.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.833min (-0.248) 2.75 ppm m

response 12780

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	4.82
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

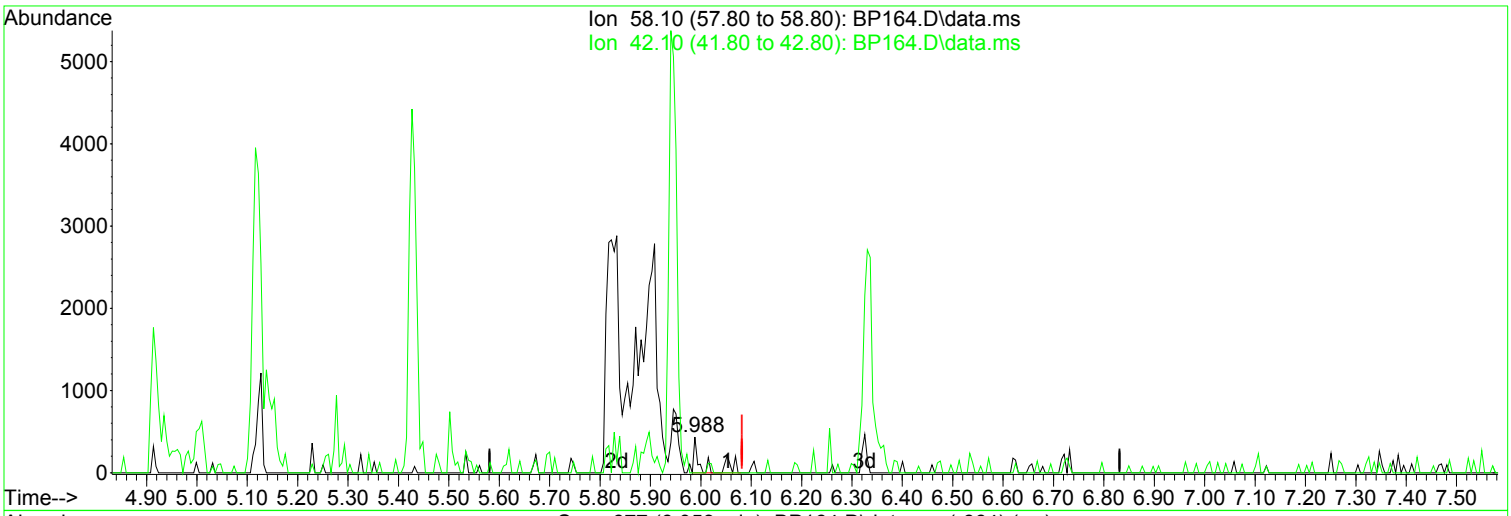
Poor integration.

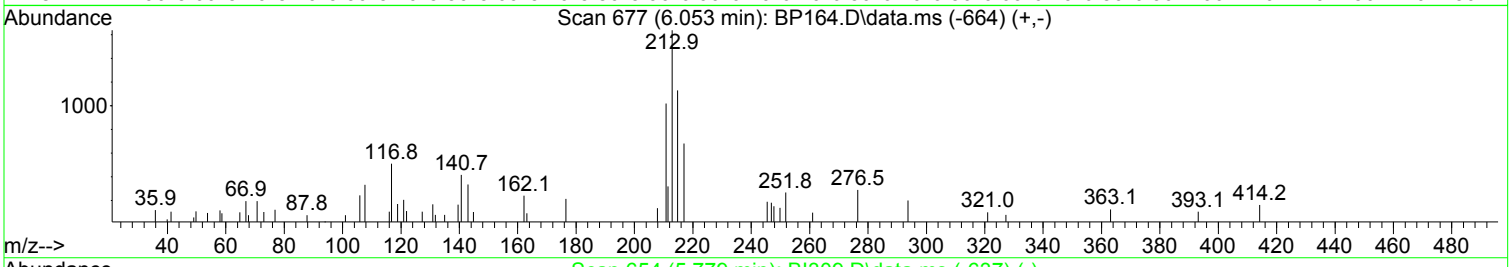
09/19/18

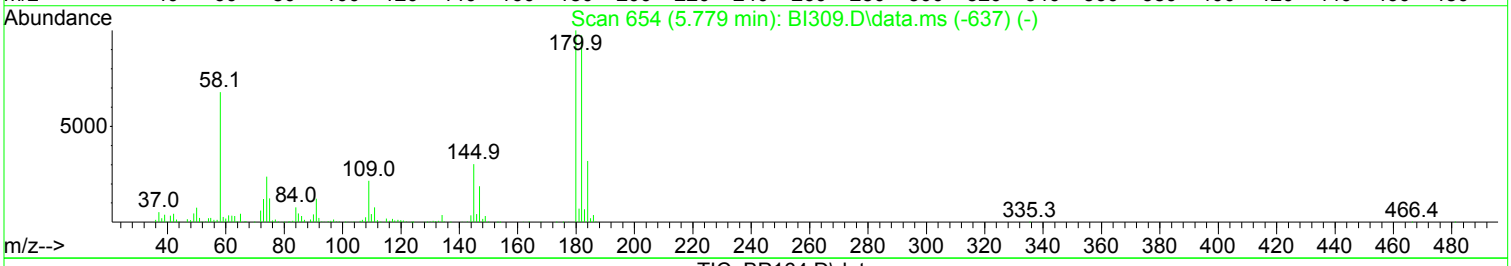
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP164.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.053min (-0.029) 0.10 ppm

response 462

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

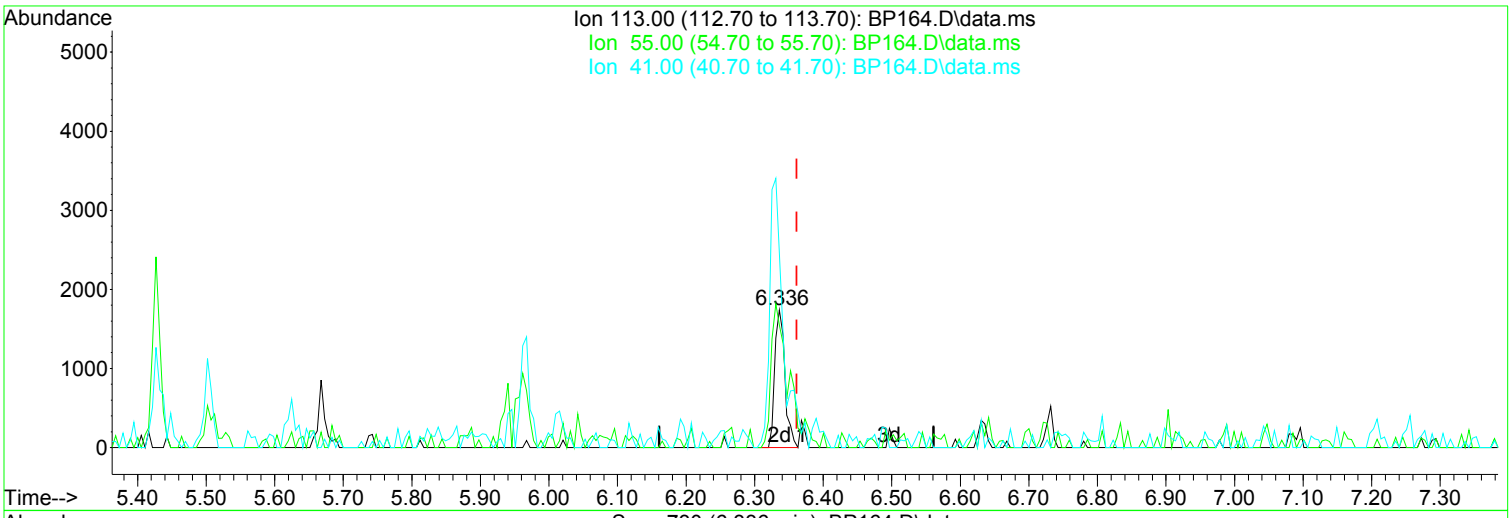
Before

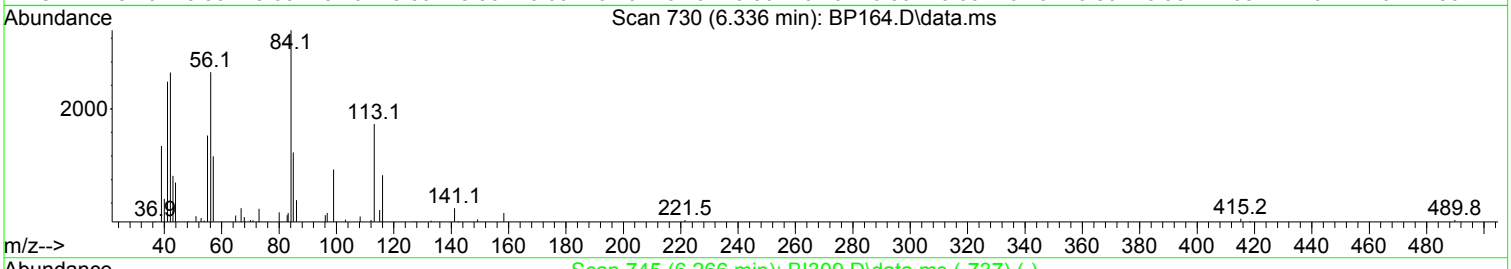
09/19/18

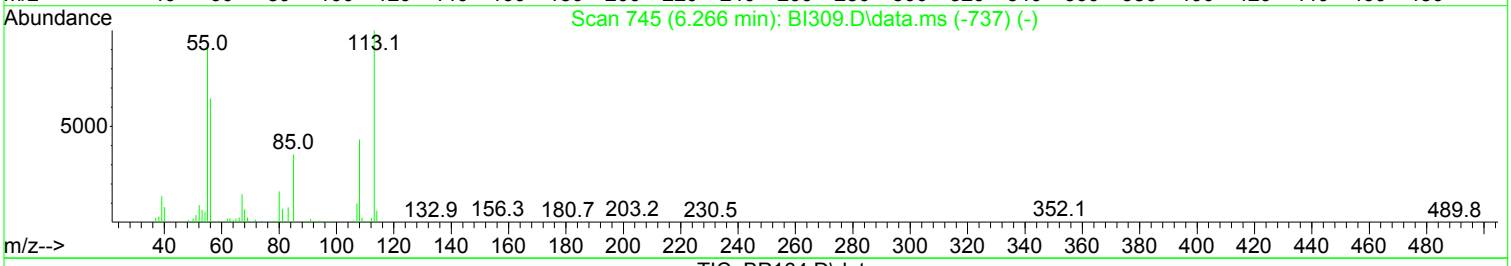
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP164.D\data.ms

(52) Caprolactam (TM)

6.336min (-0.025) 2.44 ppm m

response 1786

Ion	Exp%	Act%
113.00	100.00	100.00
55.00	123.70	88.97
41.00	65.00	141.30#
0.00	0.00	0.00

Manual Integration:

After

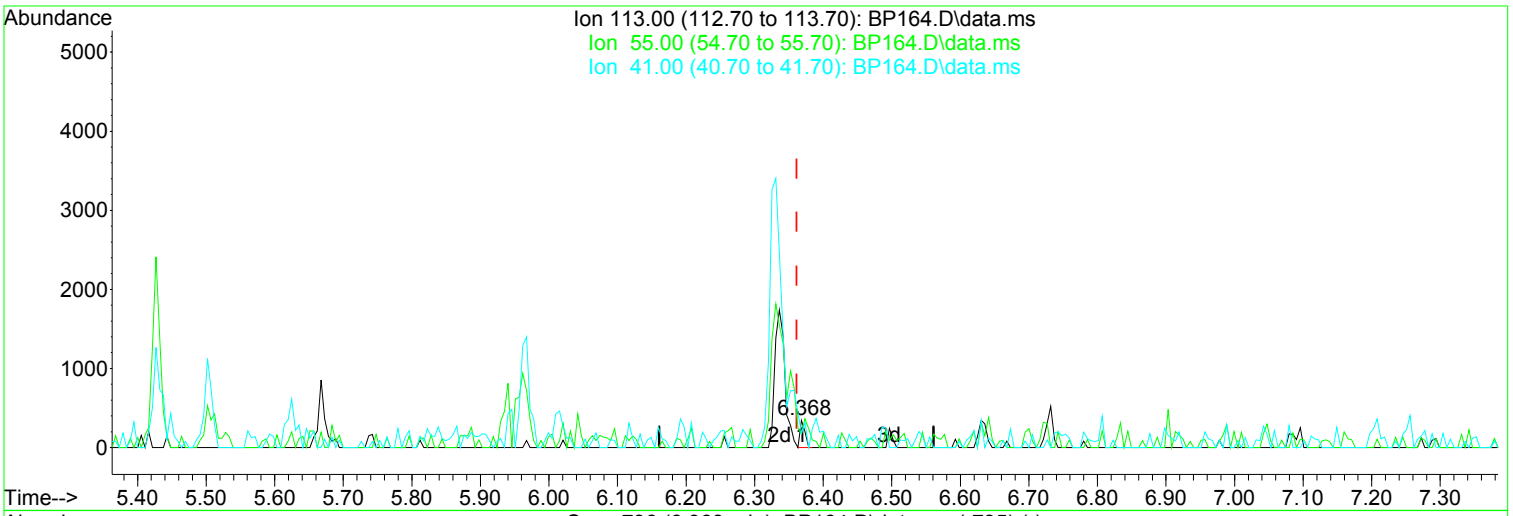
Peak not found.

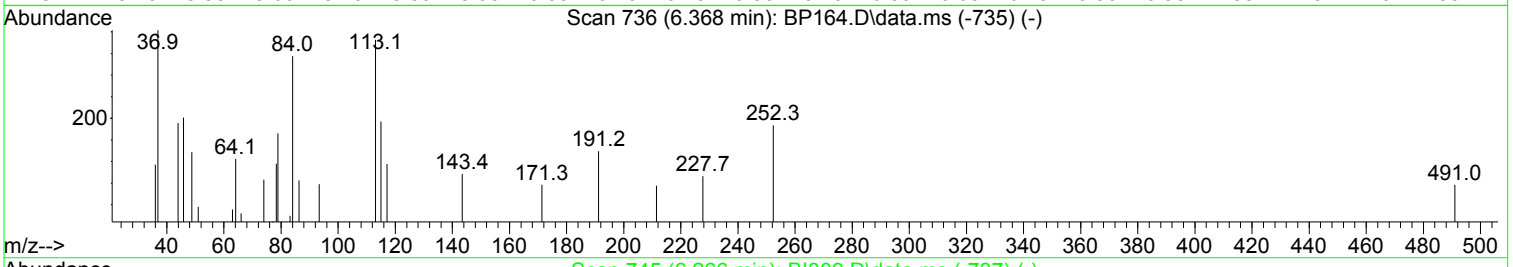
09/19/18

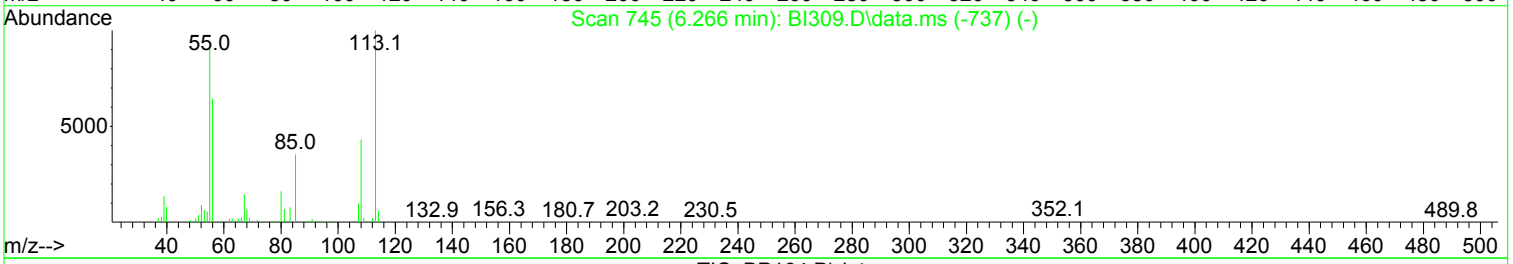
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP164.D\data.ms

(52) Caprolactam (TM)

6.368min (+ 0.007) 0.24 ppm

response 175

Ion	Exp%	Act%
113.00	100.00	100.00
55.00	123.70	22.90#
41.00	65.00	0.00#
0.00	0.00	0.00

Manual Integration:

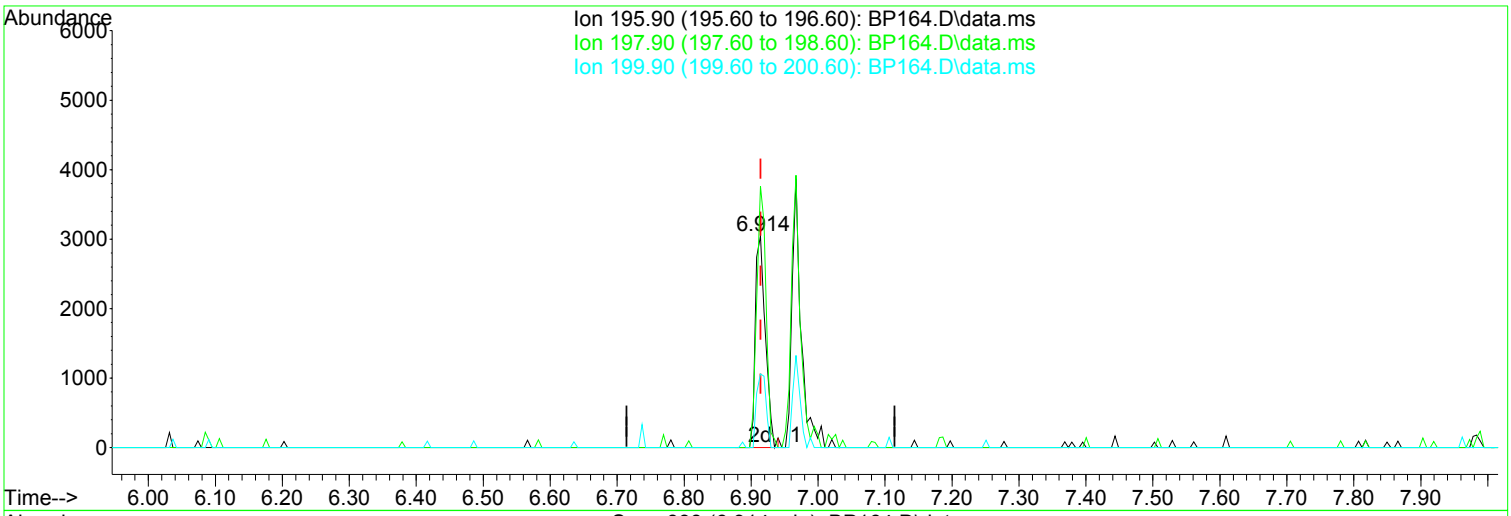
Before

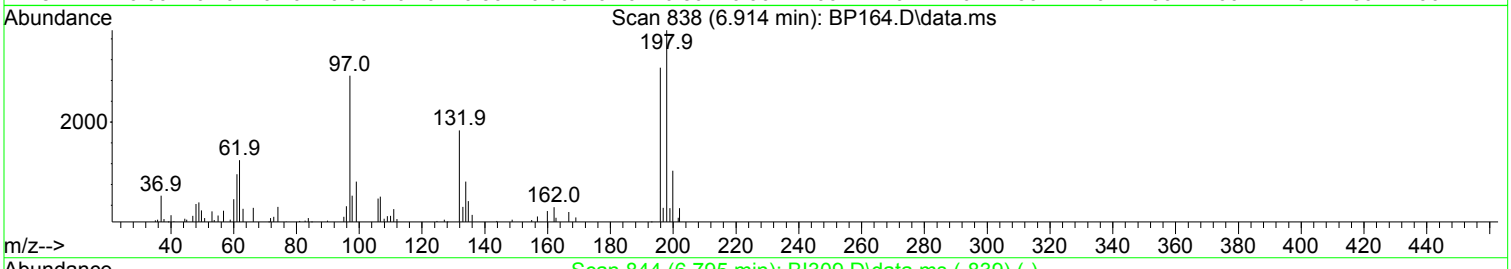
09/19/18

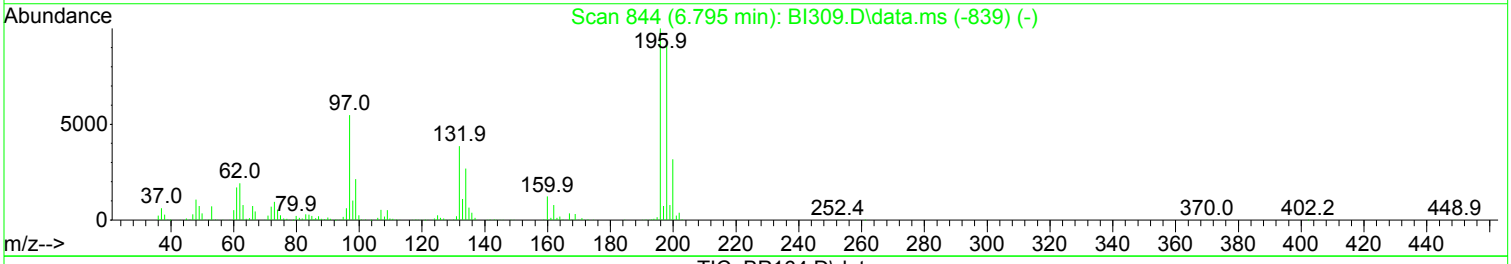
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP164.D\data.ms

(61) 2,4,6-Trichlorophenol (TCM)

6.914min (-0.001) 2.31 ppm m

response 3159

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	94.60	123.73#
199.90	29.30	34.83
0.00	0.00	0.00

Manual Integration:

After

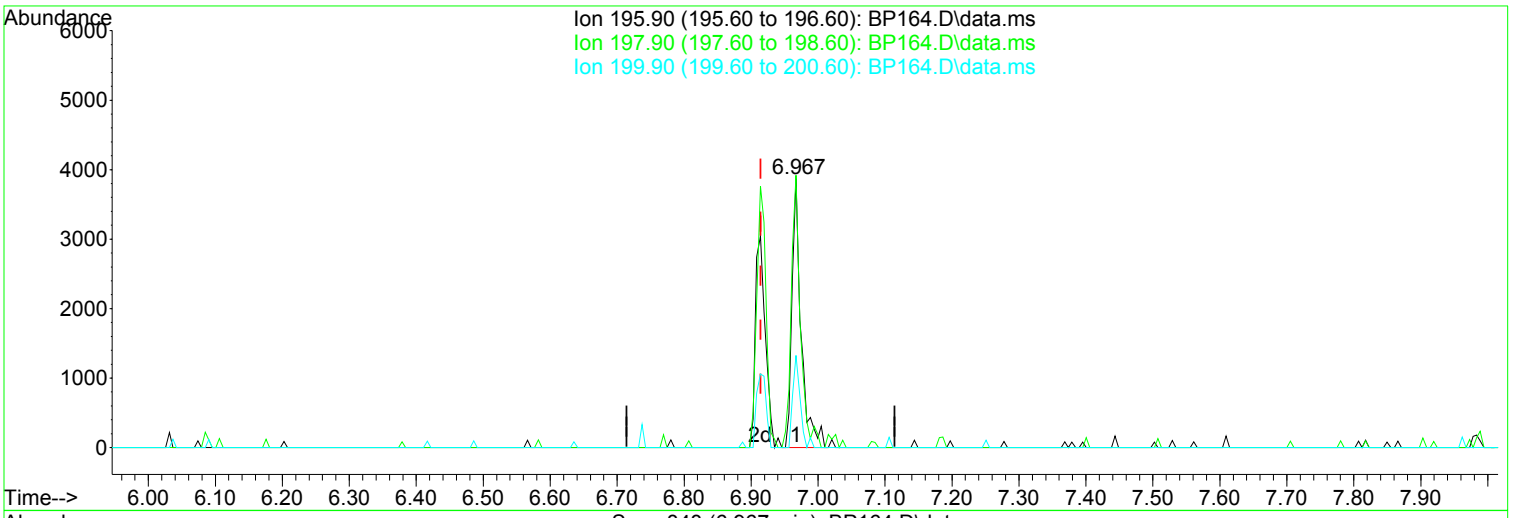
Wrong peak selected.

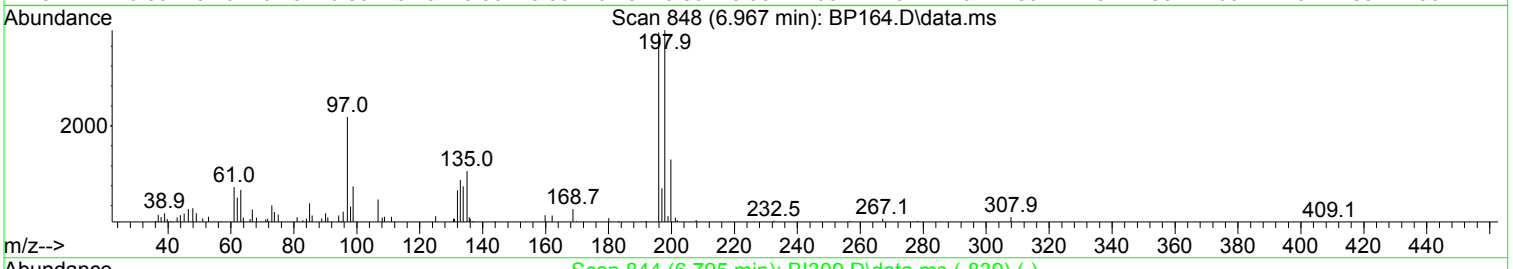
09/19/18

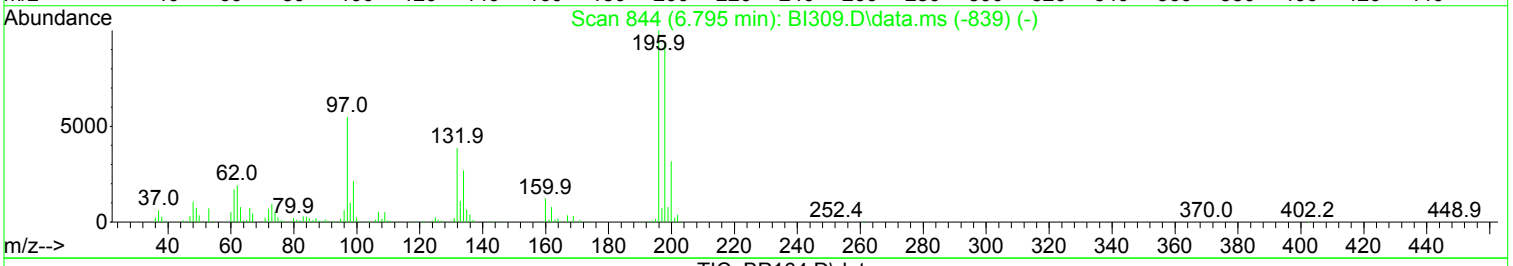
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP164.D\data.ms

(61) 2,4,6-Trichlorophenol (TCM)

6.967min (+ 0.053) 2.68 ppm

response 3656

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	94.60	101.21
199.90	29.30	34.30
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	70814	40.00	ppm		0.00
33) d8-Naphthalene	5.946	136	271509	40.00	ppm		0.00
57) d10-Acenaphthene	7.652	164	150888	40.00	ppm		0.00
91) d10-Phenanthrene	9.123	188	259743	40.00	ppm		0.00
117) d12-Chrysene	12.407	240	264092	40.00	ppm		0.00
135) d12-Perylene	15.359	264	281681	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.715	112	6276	2.68	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 1.34%#				
12) SURR2,PHENOL-D6	4.469	99	6888	2.40	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 1.20%#				
34) SURR4,NITROBENZENE-D5	5.277	82	6950	2.78	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 2.78%#				
63) SURR5,2-FLUOROBIPHENYL	6.983	172	13289	2.52	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 2.52%#				
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	2192	2.51	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 1.25%#				
124) SURR6,TERPHENYL-D14	10.813	244	15320	2.54	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 2.54%#				
Target Compounds							Qvalue
2) Pyridine	2.726	79	5867	2.380	ppm		84
3) N-Nitrosodimethylamine	2.688	74	3236	2.514	ppm		93
4) 2-Picoline	3.282	93	5751	2.342	ppm		91
5) N-Nitrosomethylamine	3.352	42	3324	2.708	ppm	#	48
6) Methyl Methansulfonate	3.576	80	2500	2.196	ppm		92
8) N-Nitrosodiethylamine	3.886	102	3036	2.801	ppm		82
9) Ethyl Mathanesulfonate	4.116	79	4621	2.538	ppm		94
10) Benzaldehyde	4.411	106	8067	5.925	ppm		76
11) Aniline	4.496	93	9604	2.539	ppm		74
13) Phenol	4.475	94	6579	2.137	ppm		81
14) bis(2-Clethyl)Ether	4.539	93	5198	2.528	ppm		98
15) Pentachloroethane	4.539	117	2269	2.701	ppm		85
16) 2-Chlorophenol	4.608	128	6540	2.645	ppm		93
17) 1,3-Diclbenzene	4.731	146	7343	2.819	ppm		80
18) 1,4-Dichlorobenzene	4.796	146	6799	2.611	ppm		94
19) 1,2-Diclbenzene	4.929	146	6814	2.799	ppm		91
20) Benzyl Alcohol	4.897	79	4124	2.222	ppm		89
21) 1-Methyl-2-pyrrolidinone	4.913	99	3491	2.184	ppm	#	65
22) 2,2'-oxybis(1-Chloropr...	5.004	45	7128	2.707	ppm		89
23) 2-Methylphenol	4.999	108	5941	2.820	ppm		87
24) 3+4-Methylphenol	5.138	108	6297	2.642	ppm	#	36
25) Acetophenone	5.133	105	9093	2.755	ppm	#	73
26) N-Nitroso-Di-n-propyla...	5.122	70	5001	2.655	ppm		81
27) N-Nitrosopyrrolidine	5.117	100	3169	2.479	ppm		83
28) N-Nitrosomorpholine	5.149	56	3833	2.568	ppm		100
29) o-Toluidine	5.165	106	8990	2.406	ppm		69
30) Hexachloroethane	5.234	117	3033	2.758	ppm	#	77
31) o,o,o-Triethylphosphor...	5.668	198	2858	2.446	ppm	#	1
32) Alpha-terpinol	5.962	121	2373	2.470	ppm		92
35) Nitrobenzene	5.293	77	5700	2.408	ppm		85
36) N-Nitrosopiperidine	5.427	42	4585	2.922	ppm		89
37) Isophorone	5.507	82	9514	2.657	ppm		95
38) 2-Nitrophenol	5.587	139	2997	2.274	ppm	#	57

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 2,4-Dimethylphenol	5.619	107	5785	2.372	ppm		88
41) bis(-2-Chloroethoxy)Me...	5.700	93	6604	2.529	ppm		89
42) 2,4-Dichlorophenol	5.823	162	4868	2.499	ppm	#	77
43) a,a-Dimethylphenethyla...	5.833	58	12780m	2.750	ppm		
44) 1,2,4-Trichlorobenzene	5.892	180	5663	2.756	ppm		94
45) Naphthalene	5.967	128	18881	2.717	ppm		92
46) 4-Chloroaniline	6.021	127	7806	2.643	ppm		86
47) 2,6-Dichlorophenol	6.026	162	4751	2.474	ppm		83
48) Hexachlorobutadiene	6.074	225	3256	2.642	ppm		78
49) Hexachloropropene	6.042	213	3734	2.546	ppm		77
50) 4-Chloro-3-methylphenol	6.502	107	5346	2.613	ppm		80
51) N-N-di-n-butylamine	6.331	84	5251	2.805	ppm		90
52) Caprolactam	6.336	113	1786m	2.443	ppm		
53) p-Phenylenediamine	6.357	80	9646	5.265	ppm		89
54) Safrole	6.539	162	4077	2.332	ppm		81
55) 2-Methylnaphthalene	6.630	142	11887	2.689	ppm		96
56) 1-Methylnaphthalene	6.727	142	10808	2.466	ppm		97
58) Hexachlorocyclopentadiene	6.780	237	602	4.293	ppm		73
59) 1,2,4,5-Tetrachloroben...	6.791	216	5500	2.625	ppm		95
60) 1,2,3,4-Tetrachloroben...	7.069	216	6263	2.757	ppm		85
61) 2,4,6-Trichlorophenol	6.914	196	3159m	2.314	ppm		
62) 2,4,5-Trichlorophenol	6.967	196	3656	2.793	ppm		96
64) Isosafrole	7.047	104	2937	2.875	ppm	#	64
65) 1,1'-Biphenyl	7.085	154	17054	2.702	ppm		93
66) 2-Chloronaphthalene	7.106	162	11097	2.616	ppm		97
67) 2-Nitroaniline	7.213	65	3750	2.686	ppm	#	75
68) 1,4-Naphthoquinone	7.288	158	2505	3.460	ppm		81
69) m-Dinitrobenzene	7.427	168	1874	2.405	ppm	#	67
70) Acenaphthylene	7.518	152	17097	2.427	ppm		96
71) Dimethyl phthalate	7.379	163	13526	2.736	ppm		94
72) 2,6-Dinitrotoluene	7.449	165	2938	2.604	ppm	#	79
73) Acenaphthene	7.684	153	12612	2.748	ppm		93
74) 3-Nitroaniline	7.614	138	3367	2.392	ppm		93
76) Dibenzofuran	7.855	168	17133	2.746	ppm		97
77) 2,4-Dinitrotoluene	7.850	165	3865	2.552	ppm		69
79) Pentachlorobenzene	7.818	250	5292	2.686	ppm		91
80) 1-Napthylamine	7.935	143	11852	2.897	ppm		94
81) 2-Napthylamine	8.016	143	12368	2.831	ppm		92
82) 2,3,4,6-Tetrachlorophenol	7.983	232	2551	2.400	ppm		87
83) Fluorene	8.192	166	14152	2.871	ppm		83
84) 4-Chlorophenyl-phenyle...	8.187	204	7058	3.012	ppm		92
85) Diethylphthalate	8.074	149	13295	2.589	ppm		94
86) 4-Nitroaniline	8.224	138	3984	2.732	ppm		81
87) 5-Nitro-o-toluidine	8.208	152	4193	2.658	ppm		99
89) Sulfotepp	8.459	322	1931	2.280	ppm		91
90) Octachlorocyclopentene	8.438	307	1832	2.181	ppm		80
92) Thionazin	8.155	107	2267	2.602	ppm		81
93) 4,6-Dinitro-2-methylph...	8.251	198	1509	1.666	ppm	#	60
94) Diphenylamine	8.304	169	22376	5.179	ppm		95
95) 1,2 Diphenylhydrazine	8.347	77	14678	2.721	ppm		90
96) N-Nitrosodiphenylamine	8.304	169	22376	5.178	ppm		95
97) 1,3,5-Trinirobenzene	8.609	213	565	1.206	ppm	#	1
98) Diallate	8.588	86	4617	2.498	ppm		92
99) Phorate	8.593	121	2579	2.480	ppm		76
100) Phenacetin	8.615	108	6824	2.301	ppm		84
101) 4-Bromophenyl-phenylether	8.673	248	3929	2.654	ppm	#	83

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

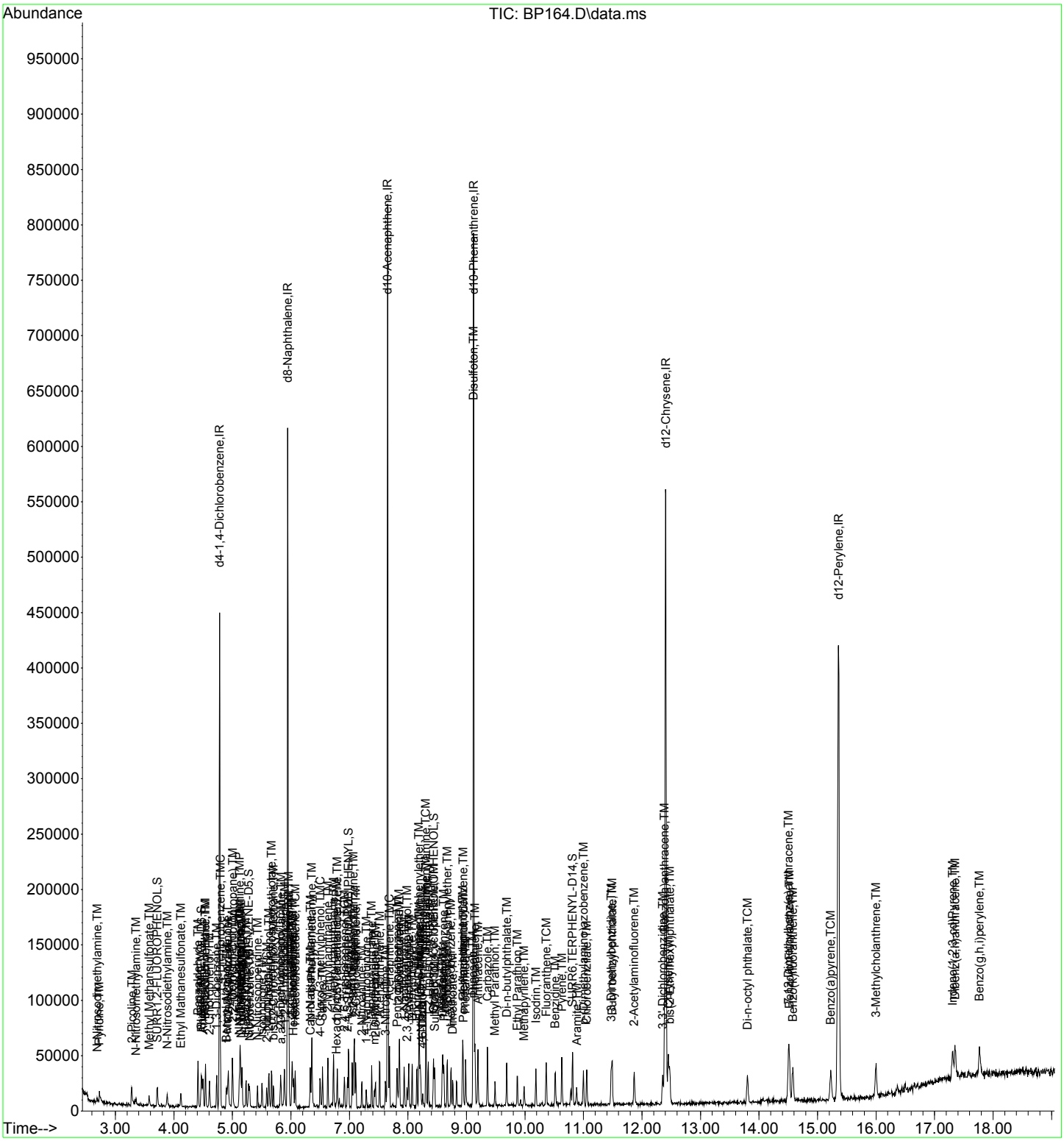
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
102) Hexachlorobenzene	8.732	284	4779	2.735	ppm		88
103) Dimethoate	8.764	87	3969	2.556	ppm		93
105) Pentachlorophenol	8.946	266	1120	1.350	ppm		87
106) 4-Aminobiphenyl	8.936	169	14394	2.692	ppm		95
107) Pentachloronitrobenzene	8.941	237	1589	2.444	ppm		96
108) Pronamide	8.984	173	5529	2.168	ppm		91
109) Dinoseb	9.107	211	1715	1.404	ppm		80
110) Disulfoton	9.117	88	9528	3.579	ppm		86
111) Phenanthrene	9.144	178	18262	2.579	ppm		94
112) Anthracene	9.198	178	17002	2.433	ppm		95
113) Carbazole	9.358	167	19351	2.571	ppm		93
114) Di-n-butylphthalate	9.690	149	18799	2.113	ppm		99
116) Fluoranthene	10.364	202	17253	2.238	ppm		91
118) Methyl Parathion	9.486	109	3256	2.517	ppm		85
119) Ethyl Parathion	9.872	97	3239	2.621	ppm	#	52
120) Methapyrilene	9.984	58	4288	2.759	ppm		89
121) Isodrin	10.187	193	2398	3.024	ppm		66
122) Benzidine	10.513	184	12160	2.423	ppm		96
123) Pyrene	10.631	202	18107	2.310	ppm		89
125) Aramite	10.888	185	2666m	2.615	ppm		
126) p-(Dimethylamino)azobe...	11.000	120	5700	2.589	ppm		86
127) Chlorobenzilate	11.054	139	6494	2.433	ppm	#	61
128) Butyl benzyl phthalate	11.492	149	9631	2.389	ppm		83
129) 3,3-Dimethylbenzidine	11.476	212	11616	2.391	ppm		83
130) 2-Acetylaminofluorene	11.867	181	8042	2.203	ppm		90
131) 3,3'-Dichlorobenzidine	12.353	252	7791	2.420	ppm		87
132) Benzo(a)anthracene	12.385	228	20153	2.657	ppm		97
133) Chrysene	12.450	228	18246	2.502	ppm		81
134) bis(2-Ethylhexyl)phtha...	12.476	149	14391	2.554	ppm		89
136) Di-n-octyl phthalate	13.803	149	20918	2.199	ppm		98
137) 7,12-Dimethylbenz(a)an...	14.503	256	10229	2.478	ppm		91
138) Benzo(b)Fluoranthene	14.520	252	20117	2.464	ppm		93
139) Benzo(k)fluoranthene	14.578	252	19581	2.471	ppm		80
140) Benzo(a)pyrene	15.226	252	17788	2.524	ppm		98
141) 3-Methylcholanthrene	16.001	268	10283	2.518	ppm		85
142) Indeno(1,2,3-cd)Pyrene	17.311	276	15661	2.373	ppm		84
143) Dibenz(a,h)anthracene	17.349	278	16800	2.481	ppm		84
144) Benzo(g,h,i)perylene	17.766	276	16388	2.566	ppm		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP164.D
Acq On : 17 Sep 2018 10:22 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

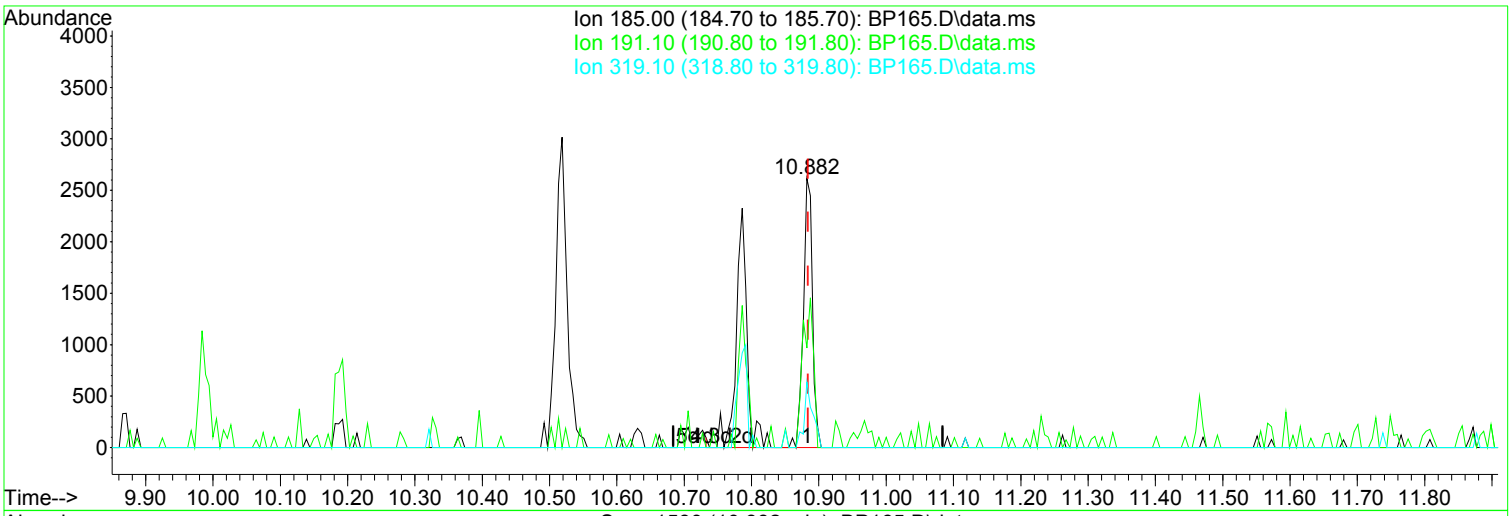
Quant Time: Sep 19 11:00:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

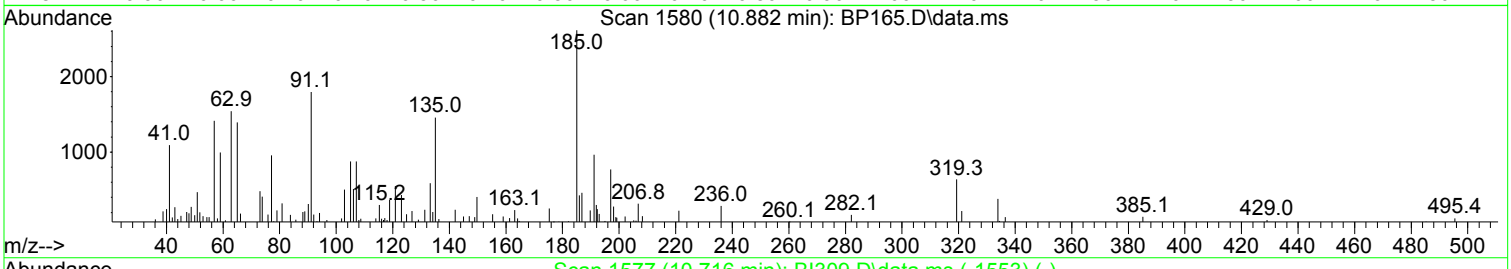


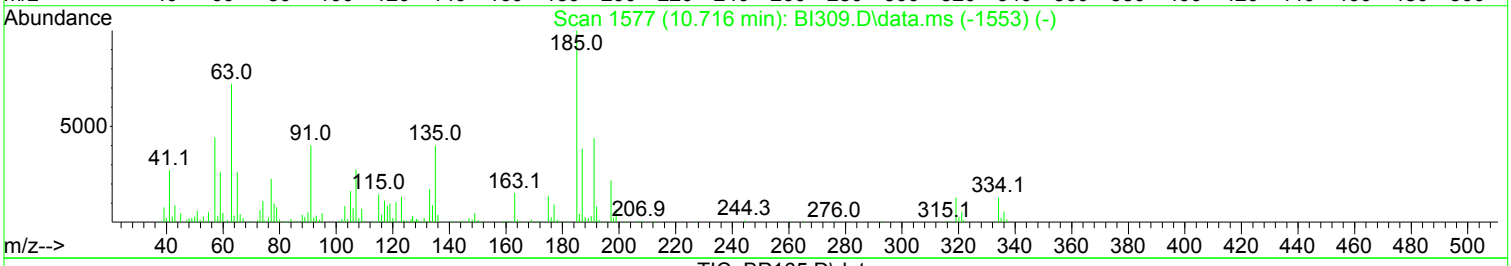
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP165.D
Acq On : 17 Sep 2018 11:10 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:00:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP165.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 5.08 ppm m

response 5064

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	36.99
319.10	20.20	24.37
0.00	0.00	0.00

Manual Integration:

After

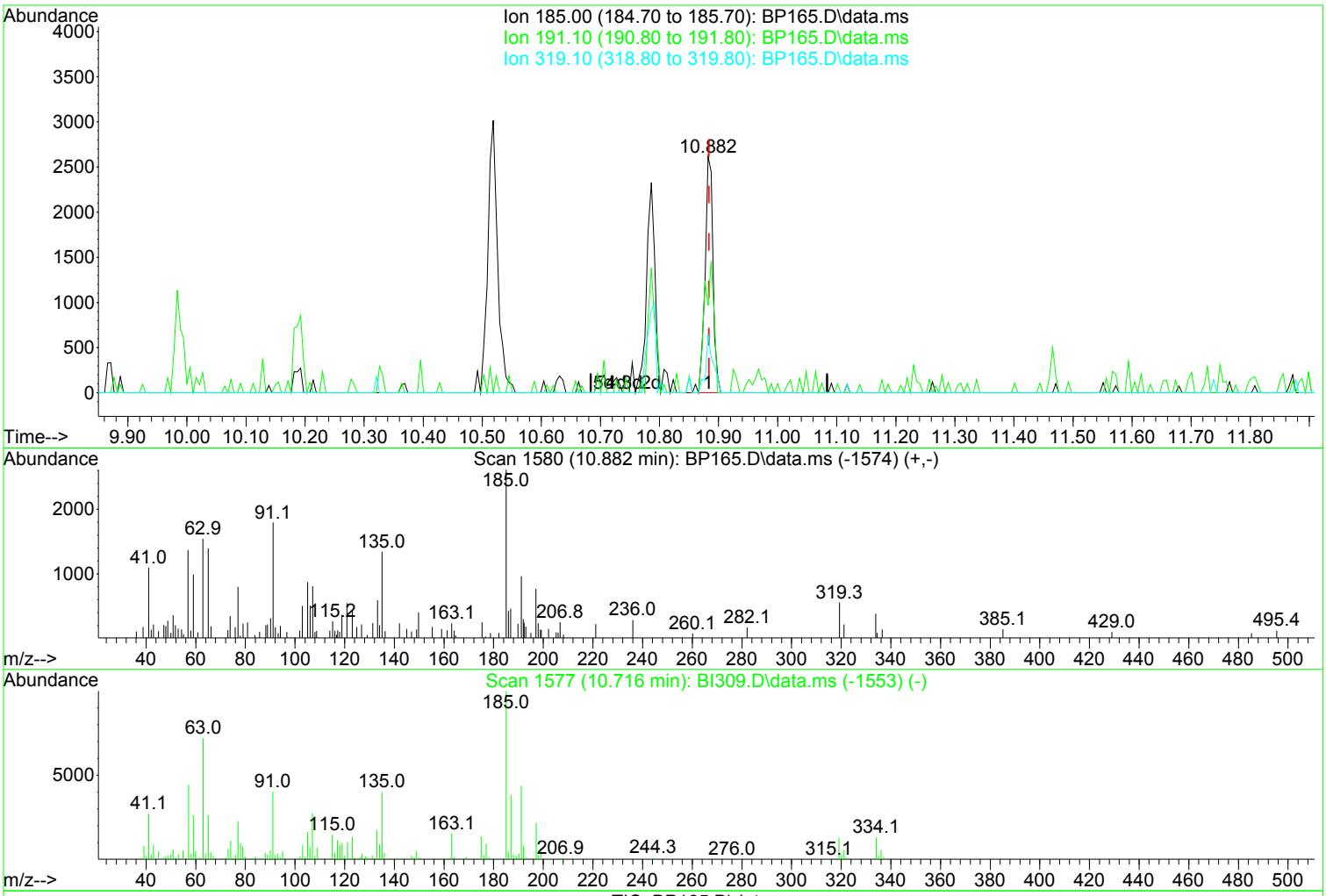
Split Peak.

09/19/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP165.D
Acq On : 17 Sep 2018 11:10 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:00:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration



TIC: BP165.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 2.47 ppm

response 2464

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	33.47
319.10	20.20	21.23
0.00	0.00	0.00

Manual Integration:

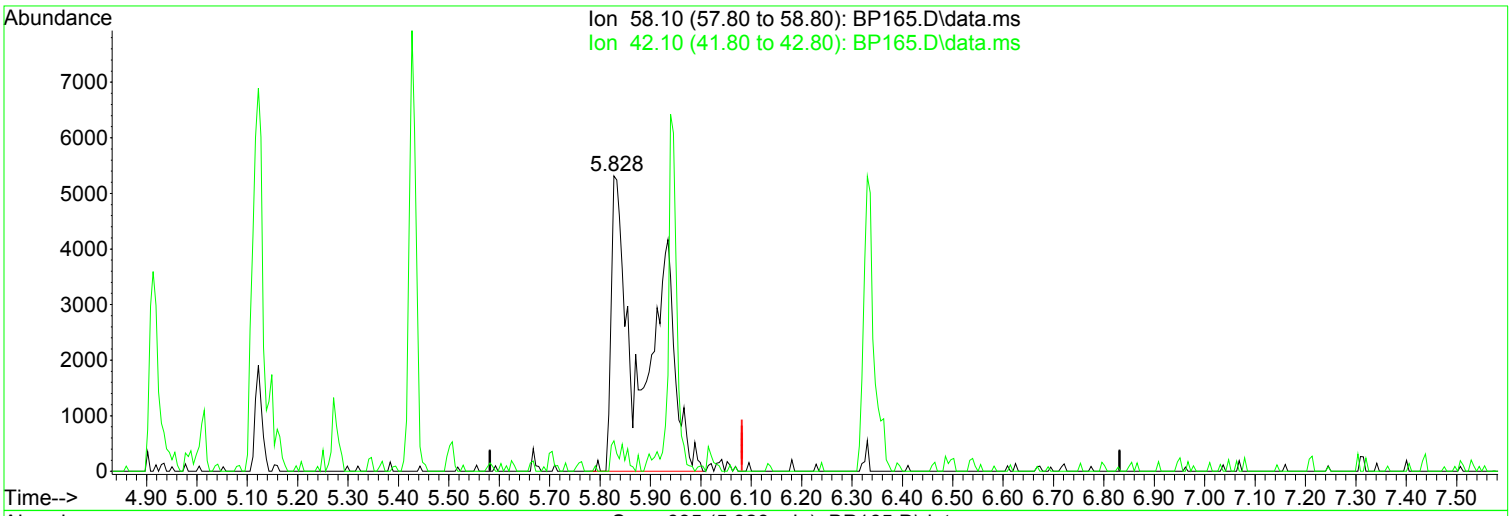
Before

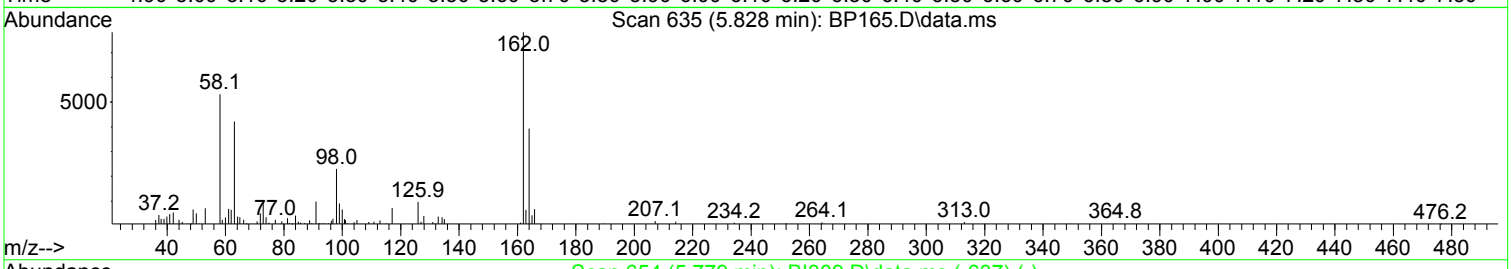
09/19/18

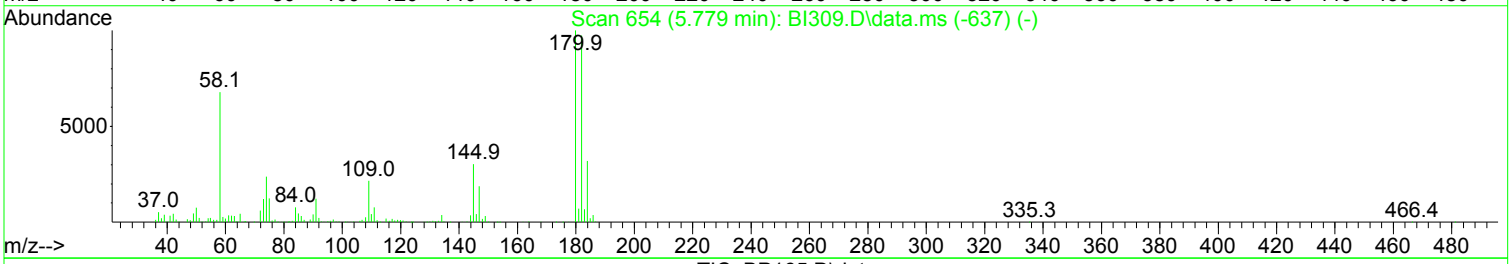
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP165.D
Acq On : 17 Sep 2018 11:10 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:00:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP165.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.828min (-0.254) 5.18 ppm m

response 23979

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	10.33
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

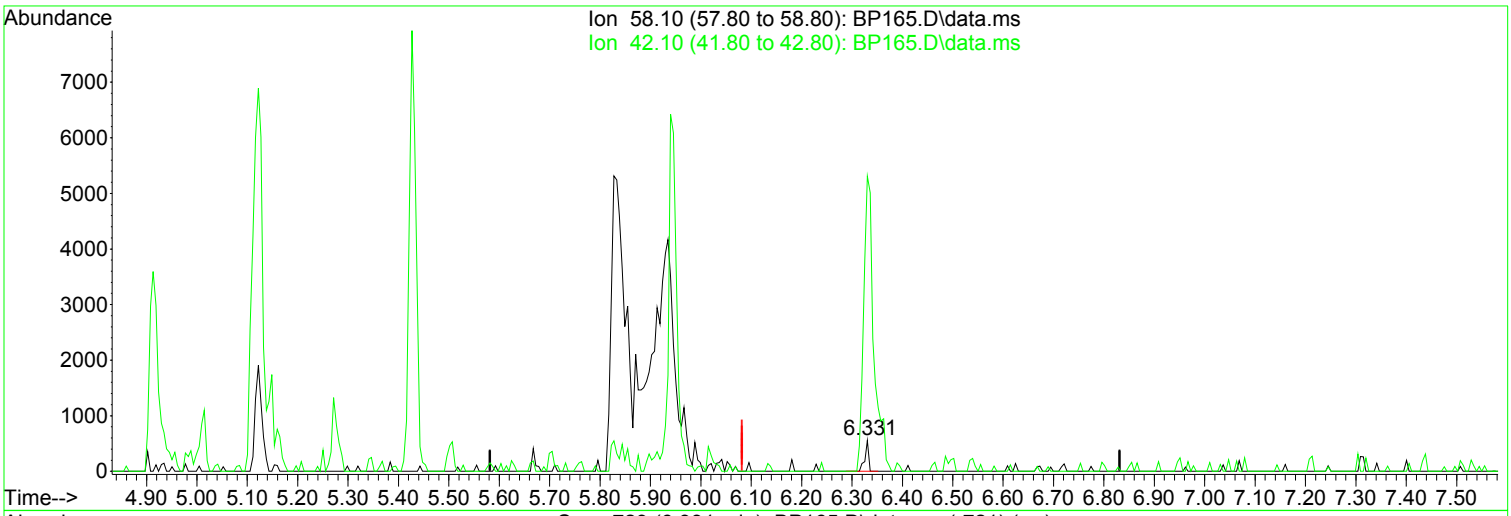
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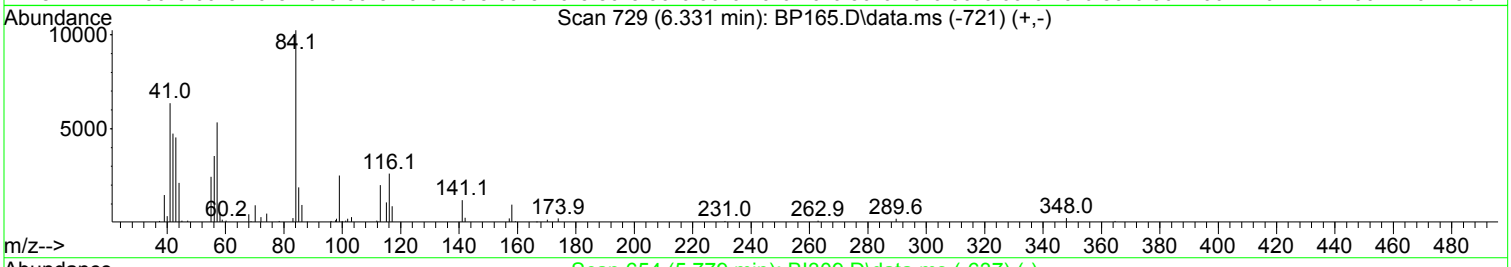
09/19/18

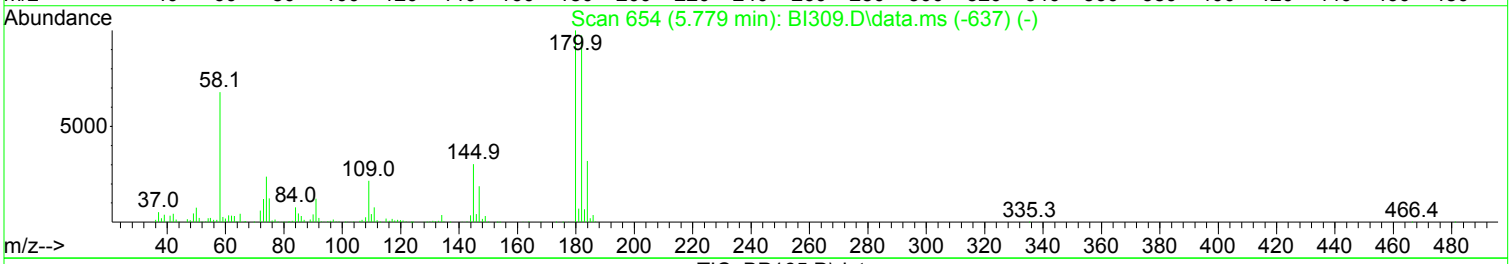
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP165.D
Acq On : 17 Sep 2018 11:10 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:00:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP165.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.331min (+ 0.249) 0.06 ppm

response 280

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	852.16#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

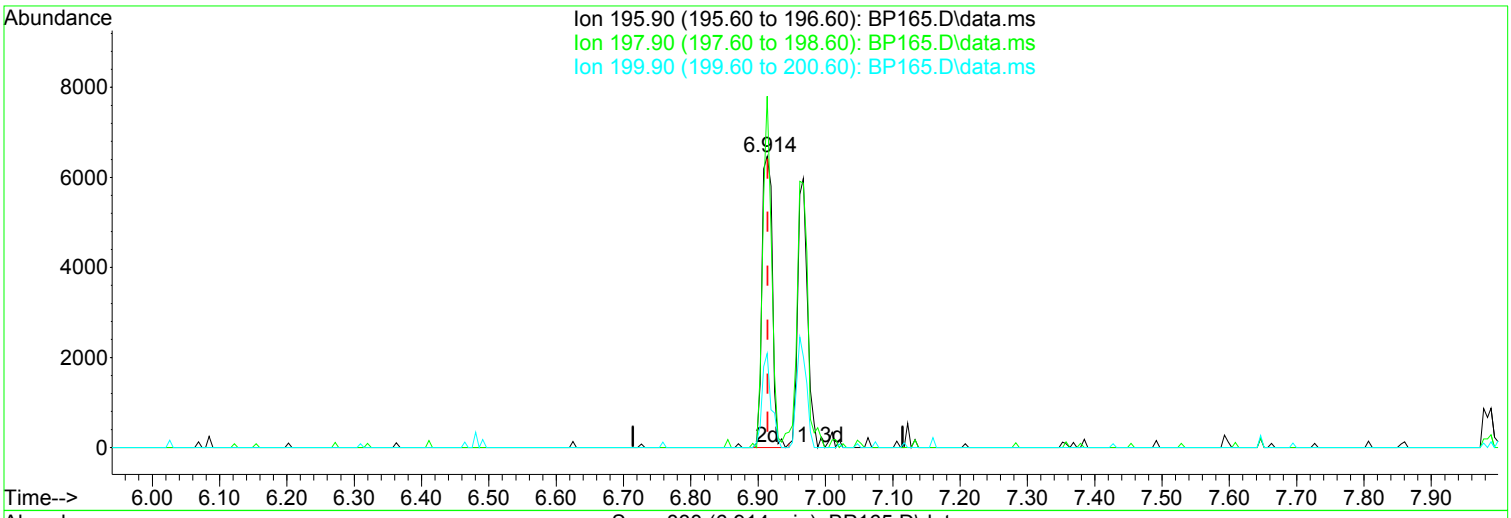
Before

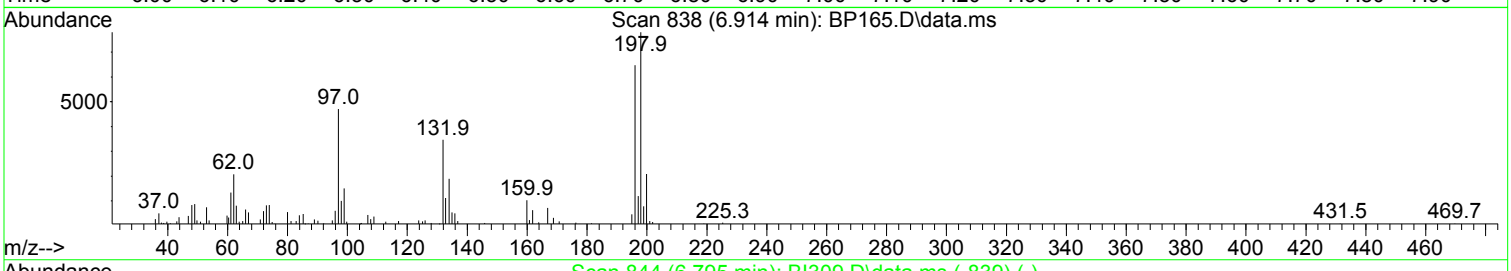
09/19/18

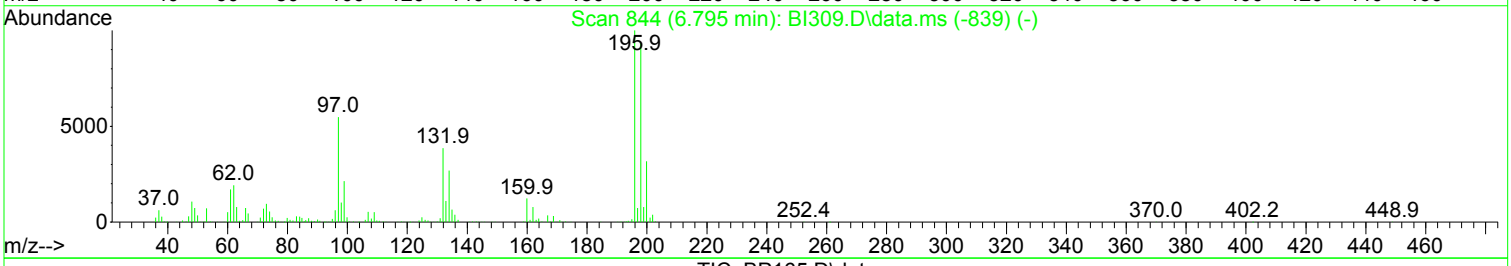
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP165.D
Acq On : 17 Sep 2018 11:10 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:00:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP165.D\data.ms

(61) 2,4,6-Trichlorophenol (TCM)

6.914min (-0.001) 5.13 ppm m

response 6929

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	94.60	120.63#
199.90	29.30	32.29
0.00	0.00	0.00

Manual Integration:

After

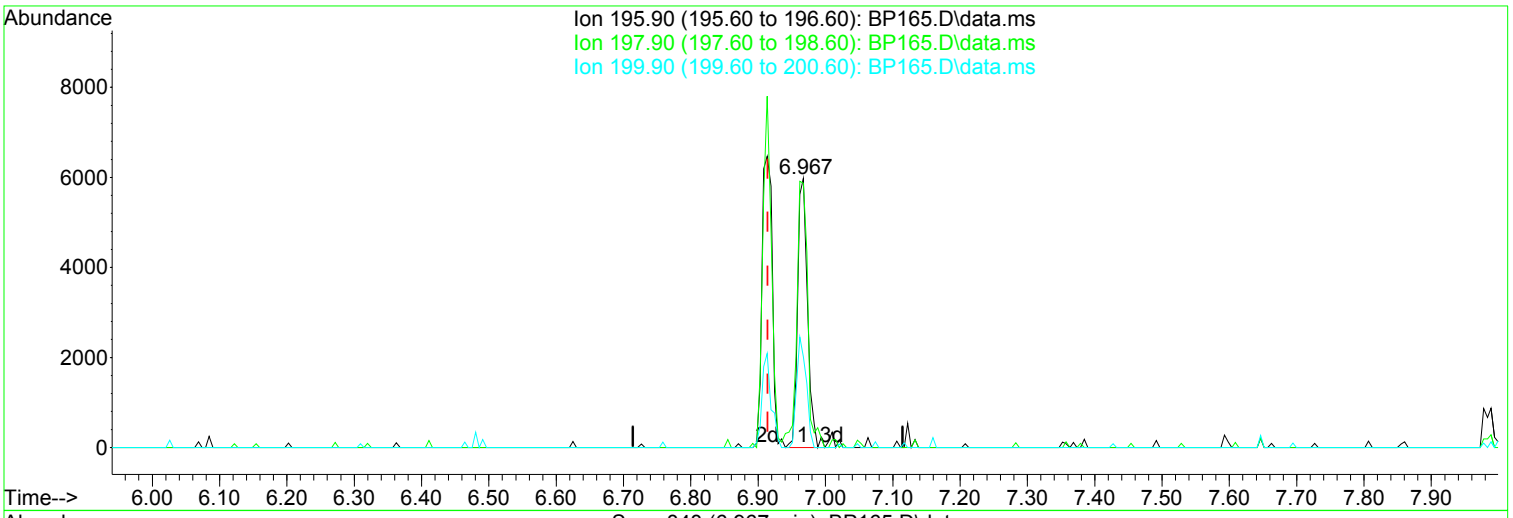
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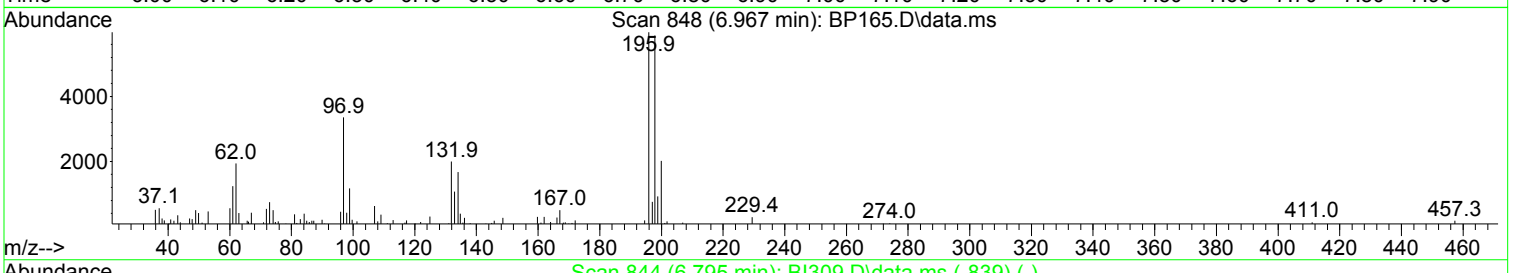
09/19/18

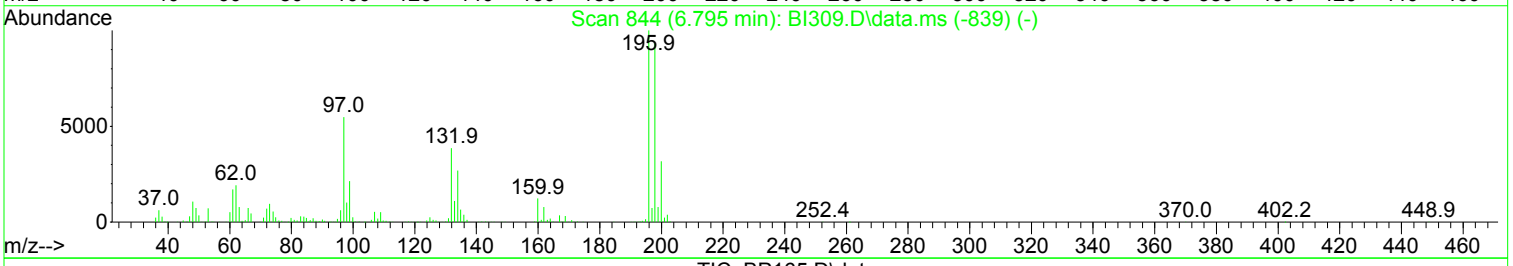
1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP165.D
Acq On : 17 Sep 2018 11:10 am
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ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:00:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP165.D\data.ms

(61) 2,4,6-Trichlorophenol (TCM)

6.967min (+ 0.052) 4.51 ppm

response 6103

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	94.60	98.28
199.90	29.30	33.81
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP165.D
Acq On : 17 Sep 2018 11:10 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 11:00:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.779	152	70898	40.00	ppm		0.00
33) d8-Naphthalene	5.945	136	270301	40.00	ppm		0.00
57) d10-Acenaphthene	7.652	164	149426	40.00	ppm		0.00
91) d10-Phenanthrene	9.123	188	258090	40.00	ppm		0.00
117) d12-Chrysene	12.401	240	258006	40.00	ppm		0.00
135) d12-Perylene	15.359	264	281471	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.715	112	10999	4.69	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery =	2.35%#			
12) SURR2,PHENOL-D6	4.464	99	14317	4.97	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery =	2.48%#			
34) SURR4,NITROBENZENE-D5	5.277	82	11793	4.74	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery =	4.74%#			
63) SURR5,2-FLUOROBIPHENYL	6.983	172	26547	5.08	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery =	5.08%#			
88) SURR3,2,4,6-TRIBROMOPH...	8.433	330	3901	4.52	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery =	2.26%#			
124) SURR6,TERPHENYL-D14	10.813	244	28981	4.92	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery =	4.92%#			
Target Compounds							Qvalue
2) Pyridine	2.720	79	12968	5.254	ppm		84
3) N-Nitrosodimethylamine	2.683	74	6058	4.702	ppm		91
4) 2-Picoline	3.277	93	11797	4.798	ppm		92
5) N-Nitrosomethylamine	3.346	42	6476	5.270	ppm		77
6) Methyl Methansulfonate	3.576	80	6024	5.284	ppm		92
8) N-Nitrosodiethylamine	3.881	102	5310	4.893	ppm		82
9) Ethyl Mathanesulfonate	4.122	79	9104	4.995	ppm		88
10) Benzaldehyde	4.410	106	16249	11.919	ppm		96
11) Aniline	4.496	93	18610	4.914	ppm		88
13) Phenol	4.475	94	17286	5.609	ppm		96
14) bis(2-Clethyl)Ether	4.539	93	10593	5.146	ppm		87
15) Pentachloroethane	4.539	117	4179	4.969	ppm		73
16) 2-Chlorophenol	4.608	128	12709	5.134	ppm		89
17) 1,3-Diclbenzene	4.731	146	13233	5.075	ppm		97
18) 1,4-Dichlorobenzene	4.796	146	13464	5.164	ppm		91
19) 1,2-Diclbenzene	4.935	146	11842	4.858	ppm		98
20) Benzyl Alcohol	4.897	79	8310	4.472	ppm		84
21) 1-Methyl-2-pyrrolidinone	4.913	99	7666	4.791	ppm		90
22) 2,2'-oxybis(1-Chloropr...	5.009	45	13334	5.058	ppm	#	72
23) 2-Methylphenol	4.999	108	10144	4.809	ppm		94
24) 3+4-Methylphenol	5.138	108	11677	4.893	ppm	#	53
25) Acetophenone	5.133	105	15669	4.742	ppm		99
26) N-Nitroso-Di-n-propyla...	5.122	70	9085	4.818	ppm		88
27) N-Nitrosopyrrolidine	5.111	100	6031	4.712	ppm		94
28) N-Nitrosomorpholine	5.149	56	8083	5.409	ppm		94
29) o-Toluidine	5.165	106	18394	4.918	ppm		85
30) Hexachloroethane	5.234	117	6182	5.615	ppm	#	89
31) o,o,o-Triethylphosphor...	5.667	198	5634	4.817	ppm	#	7
32) Alpha-terpinol	5.967	121	5123	5.326	ppm		83
35) Nitrobenzene	5.293	77	12496	5.302	ppm		95
36) N-Nitrosopiperidine	5.427	42	7476	4.786	ppm		84
37) Isophorone	5.507	82	18789	5.270	ppm		89
38) 2-Nitrophenol	5.587	139	7009	5.342	ppm		93

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Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 2,4-Dimethylphenol	5.619	107	13545	5.578	ppm		84
41) bis(-2-Chloroethoxy)Me...	5.699	93	14322	5.509	ppm		90
42) 2,4-Dichlorophenol	5.822	162	9725	5.014	ppm		98
43) a,a-Dimethylphenethyla...	5.828	58	23979m	5.183	ppm		
44) 1,2,4-Trichlorobenzene	5.887	180	10472	5.118	ppm		97
45) Naphthalene	5.967	128	35911	5.191	ppm		99
46) 4-Chloroaniline	6.015	127	14200	4.829	ppm		95
47) 2,6-Dichlorophenol	6.026	162	9970	5.215	ppm		80
48) Hexachlorobutadiene	6.074	225	6484	5.284	ppm		89
49) Hexachloropropene	6.042	213	7107	4.867	ppm		93
50) 4-Chloro-3-methylphenol	6.496	107	11053	5.427	ppm		88
51) N-N-di-n-butylamine	6.325	84	11431	6.134	ppm		82
52) Caprolactam	6.336	113	3990	5.481	ppm	#	58
53) p-Phenylenediamine	6.357	80	18953	10.392	ppm		87
54) Safrole	6.539	162	9177	5.273	ppm		81
55) 2-Methylnaphthalene	6.630	142	23652	5.375	ppm		96
56) 1-Methylnaphthalene	6.726	142	23288	5.337	ppm		94
58) Hexachlorocyclopentadiene	6.780	237	1672	5.758	ppm		95
59) 1,2,4,5-Tetrachloroben...	6.796	216	10659	5.136	ppm		88
60) 1,2,3,4-Tetrachloroben...	7.069	216	11019	4.897	ppm		95
61) 2,4,6-Trichlorophenol	6.914	196	6929m	5.126	ppm		
62) 2,4,5-Trichlorophenol	6.967	196	6103	4.708	ppm		98
64) Isosafrole	7.047	104	5195	5.135	ppm		88
65) 1,1'-Biphenyl	7.085	154	32079	5.133	ppm		91
66) 2-Chloronaphthalene	7.106	162	21691	5.164	ppm		96
67) 2-Nitroaniline	7.213	65	6976	5.046	ppm	#	82
68) 1,4-Naphthoquinone	7.288	158	5962	8.316	ppm		94
69) m-Dinitrobenzene	7.427	168	4687	6.075	ppm		76
70) Acenaphthylene	7.513	152	38037	5.451	ppm		95
71) Dimethyl phthalate	7.379	163	27097	5.535	ppm		97
72) 2,6-Dinitrotoluene	7.443	165	5841	5.228	ppm		74
73) Acenaphthene	7.684	153	24300	5.346	ppm		91
74) 3-Nitroaniline	7.614	138	7118	5.106	ppm		93
75) 2,4-Dinitrophenol	7.732	184	1067	7.719	ppm	#	16
76) Dibenzofuran	7.855	168	33046	5.349	ppm		98
77) 2,4-Dinitrotoluene	7.844	165	7266	4.845	ppm		97
78) 4-Nitrophenol	7.828	65	3404	3.578	ppm	#	61
79) Pentachlorobenzene	7.812	250	10376	5.317	ppm		88
80) 1-Napthylamine	7.935	143	22918	5.657	ppm		98
81) 2-Napthylamine	8.010	143	22562	5.216	ppm		94
82) 2,3,4,6-Tetrachlorophenol	7.983	232	4556	4.328	ppm		77
83) Fluorene	8.192	166	25827	5.291	ppm		91
84) 4-Chlorophenyl-phenyle...	8.187	204	12298	5.299	ppm		89
85) Diethylphthalate	8.074	149	28262	5.558	ppm		93
86) 4-Nitroaniline	8.219	138	6547	4.533	ppm		91
87) 5-Nitro-o-toluidine	8.208	152	7624	4.880	ppm		77
89) Sulfotepp	8.459	322	4967	5.921	ppm		77
90) Octachlorocyclopentene	8.438	307	3862	4.643	ppm		96
92) Thionazin	8.154	107	4189	4.839	ppm		76
93) 4,6-Dinitro-2-methylph...	8.251	198	2924	3.249	ppm		75
94) Diphenylamine	8.310	169	44211	10.298	ppm		97
95) 1,2 Diphenylhydrazine	8.347	77	27000	5.037	ppm		90
96) N-Nitrosodiphenylamine	8.310	169	44211	10.296	ppm		97
97) 1,3,5-Trinirobenzene	8.609	213	1451	3.118	ppm	#	59
98) Diallate	8.588	86	9427	5.133	ppm		85
99) Phorate	8.598	121	5682	5.499	ppm	#	72

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP165.D
Acq On : 17 Sep 2018 11:10 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

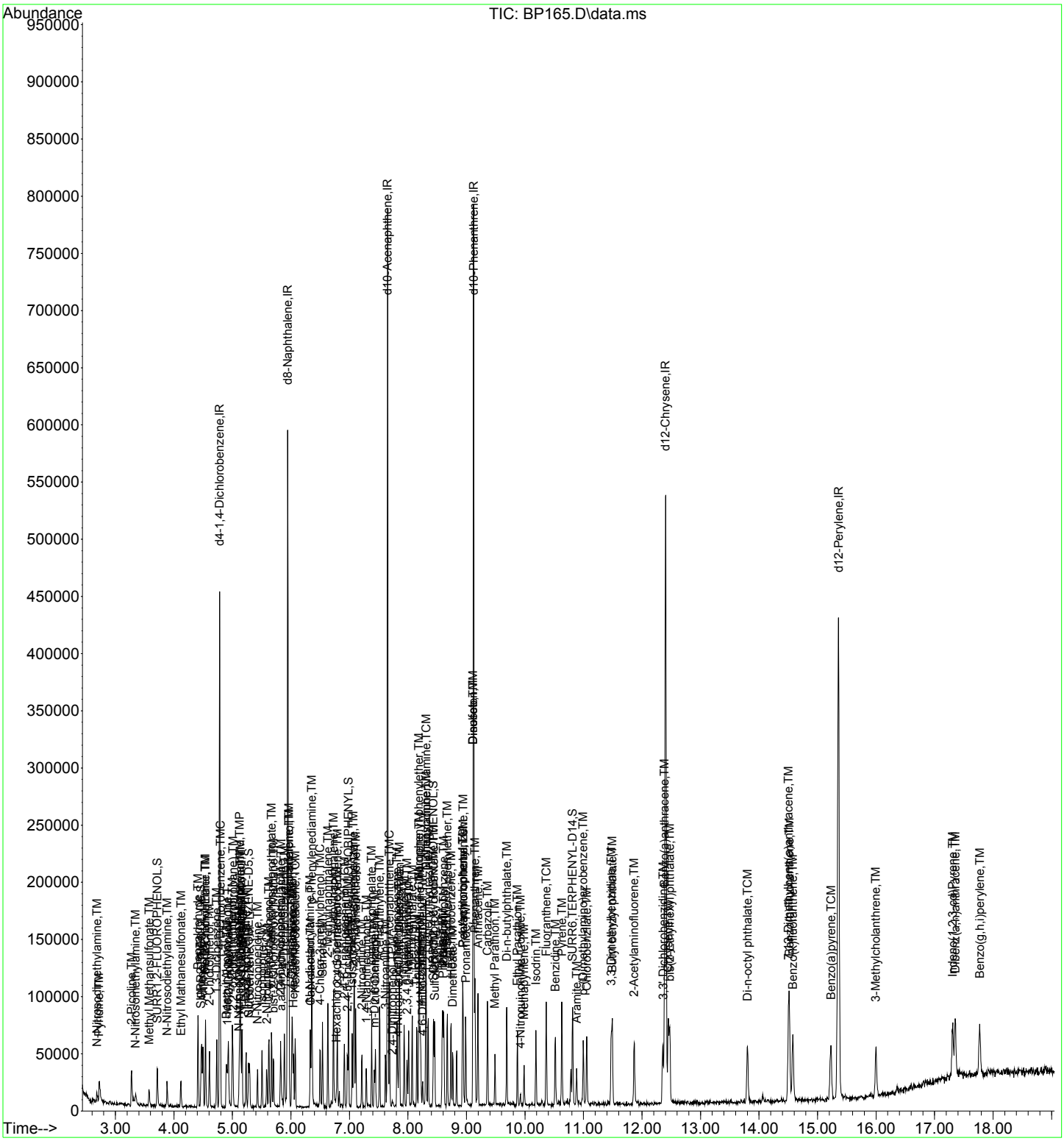
Quant Time: Sep 19 11:00:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
100) Phenacetin	8.609	108	13623	4.623	ppm		85
101) 4-Bromophenyl-phenylether	8.673	248	7723	5.249	ppm	#	85
102) Hexachlorobenzene	8.737	284	9510	5.477	ppm		93
103) Dimethoate	8.764	87	8275	5.363	ppm		89
105) Pentachlorophenol	8.941	266	3056	3.707	ppm		89
106) 4-Aminobiphenyl	8.935	169	23829	4.485	ppm		92
107) Pentachloronitrobenzene	8.941	237	2885	4.466	ppm		94
108) Pronamide	8.989	173	11164	4.405	ppm		92
109) Dinoseb	9.112	211	3869	3.188	ppm		91
110) Disulfoton	9.112	88	14911	5.637	ppm		98
111) Phenanthrene	9.144	178	35589	5.059	ppm		94
112) Anthracene	9.197	178	34519	4.972	ppm		96
113) Carbazole	9.358	167	34266	4.581	ppm		97
114) Di-n-butylphthalate	9.690	149	42415	4.797	ppm		99
115) 4-Nitroquinonline-1-oxide	9.925	190	424	1.244	ppm	#	12
116) Fluoranthene	10.363	202	36595	4.777	ppm		97
118) Methyl Parathion	9.486	109	7629	6.036	ppm		73
119) Ethyl Parathion	9.871	97	5383	4.459	ppm		94
120) Methapyrilene	9.984	58	7765	5.114	ppm		87
121) Isodrin	10.187	193	4294	5.542	ppm		86
122) Benzidine	10.519	184	25366	5.175	ppm		99
123) Pyrene	10.631	202	37210	4.859	ppm		94
125) Aramite	10.882	185	5064m	5.084	ppm		
126) p-(Dimethylamino)azobe...	10.995	120	10588	4.923	ppm		82
127) Chlorobenzilate	11.053	139	12363	4.740	ppm		79
128) Butyl benzyl phthalate	11.492	149	20370	5.172	ppm		94
129) 3,3-Dimethylbenzidine	11.476	212	23422	4.935	ppm		97
130) 2-Acetylaminofluorene	11.866	181	17457	4.895	ppm		93
131) 3,3'-Dichlorobenzidine	12.358	252	16332	5.193	ppm		90
132) Benzo(a)anthracene	12.385	228	39775	5.368	ppm		95
133) Chrysene	12.449	228	37084	5.204	ppm		99
134) bis(2-Ethylhexyl)phtha...	12.476	149	28288	5.139	ppm		96
136) Di-n-octyl phthalate	13.803	149	45258	4.762	ppm		100
137) 7,12-Dimethylbenz(a)an...	14.503	256	18268	4.429	ppm		97
138) Benzo(b)Fluoranthene	14.519	252	37863	4.641	ppm		91
139) Benzo(k)fluoranthene	14.578	252	40313	5.092	ppm		89
140) Benzo(a)pyrene	15.231	252	31419	4.462	ppm		96
141) 3-Methylcholanthrene	15.996	268	15687	3.844	ppm		96
142) Indeno(1,2,3-cd)Pyrene	17.311	276	30773	4.666	ppm		99
143) Dibenz(a,h)anthracene	17.354	278	28924	4.275	ppm		94
144) Benzo(g,h,i)perylene	17.771	276	30276	4.744	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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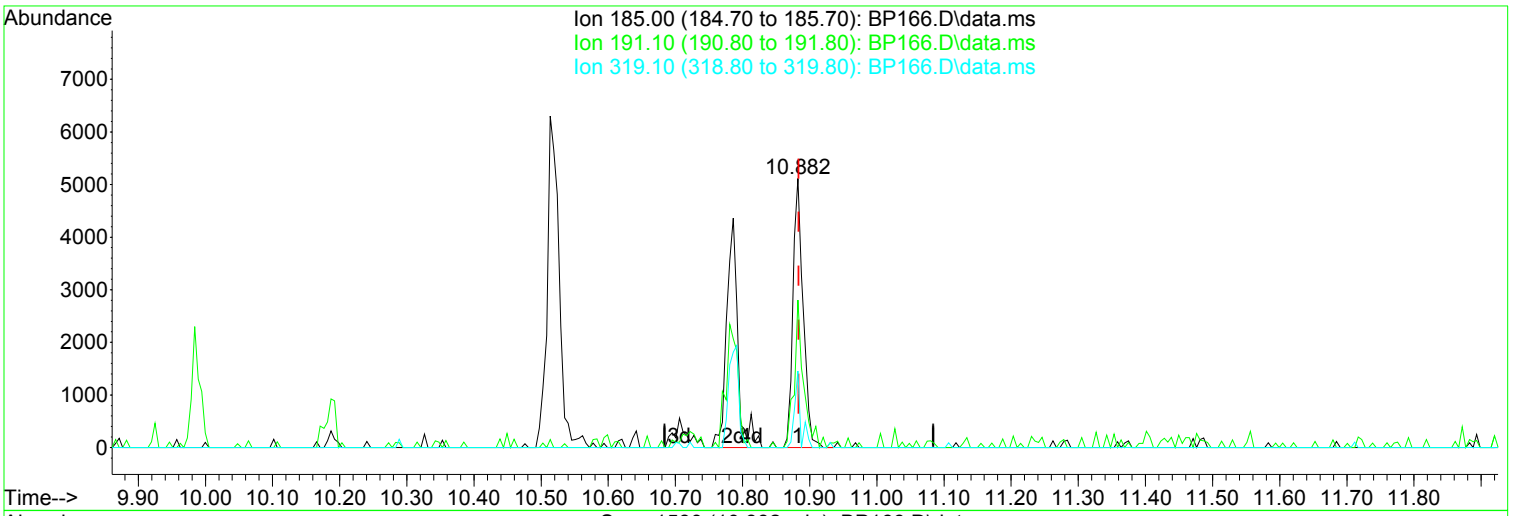
Quant Time: Sep 19 11:00:15 2018
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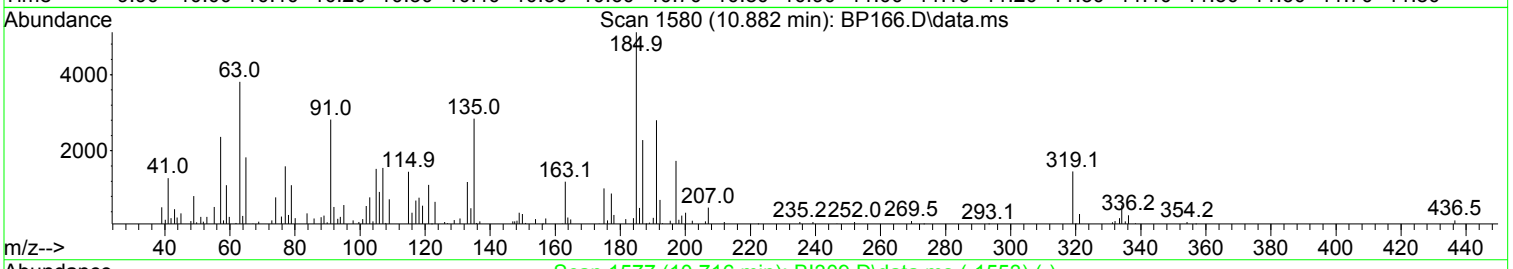


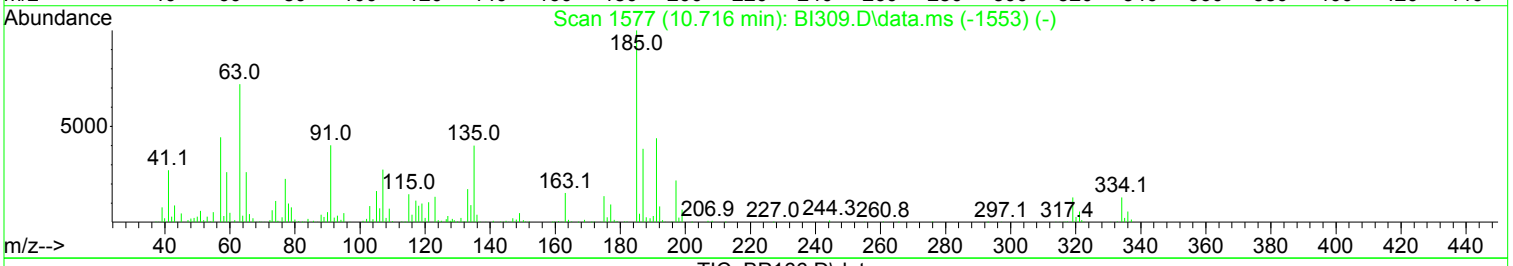
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP166.D
Acq On : 17 Sep 2018 11:46 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP166.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 9.89 ppm m

response 10515

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	54.87
319.10	20.20	28.49
0.00	0.00	0.00

Manual Integration:

After

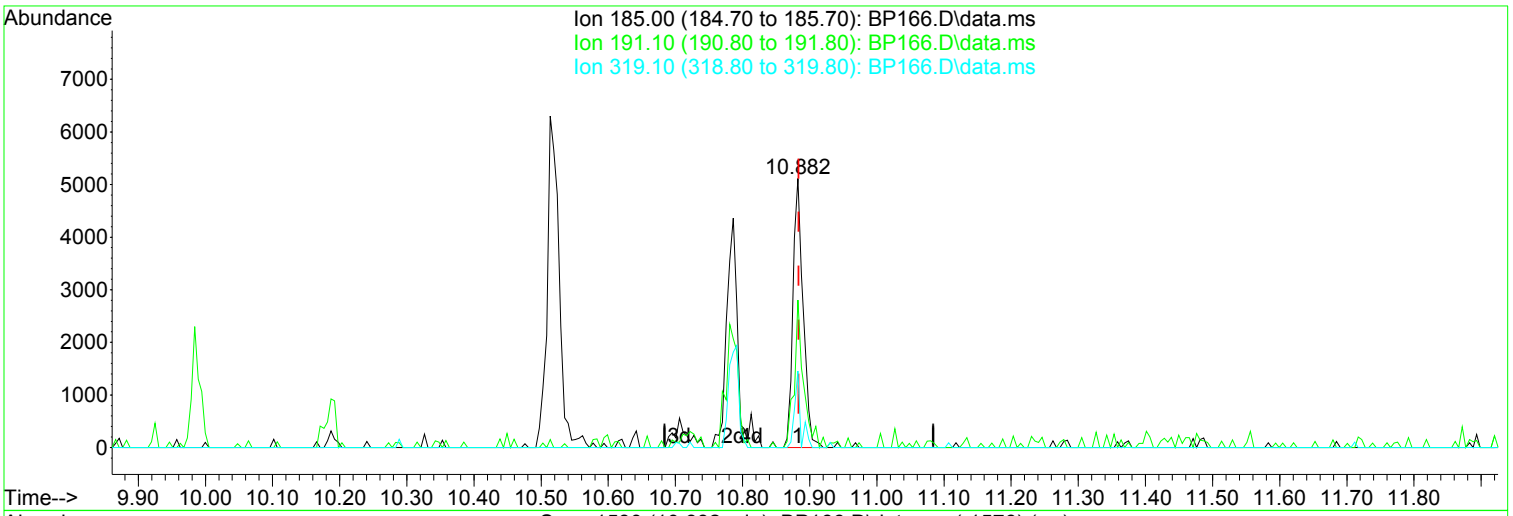
Split Peak.

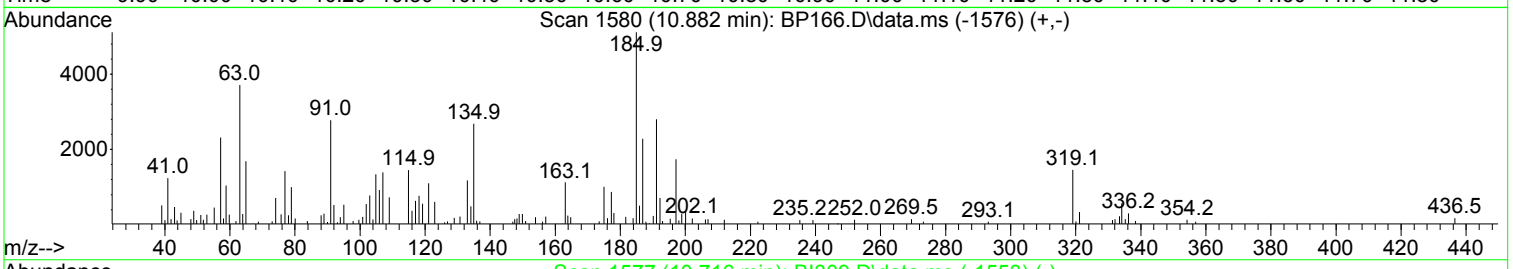
09/19/18

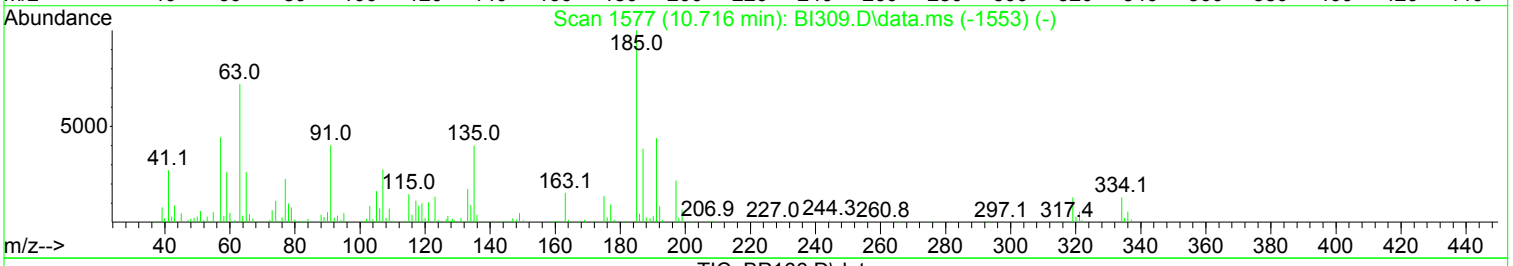
Quantitation Report (Qedit)

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TIC: BP166.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 5.07 ppm

response 5388

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	54.87
319.10	20.20	28.49
0.00	0.00	0.00

Manual Integration:

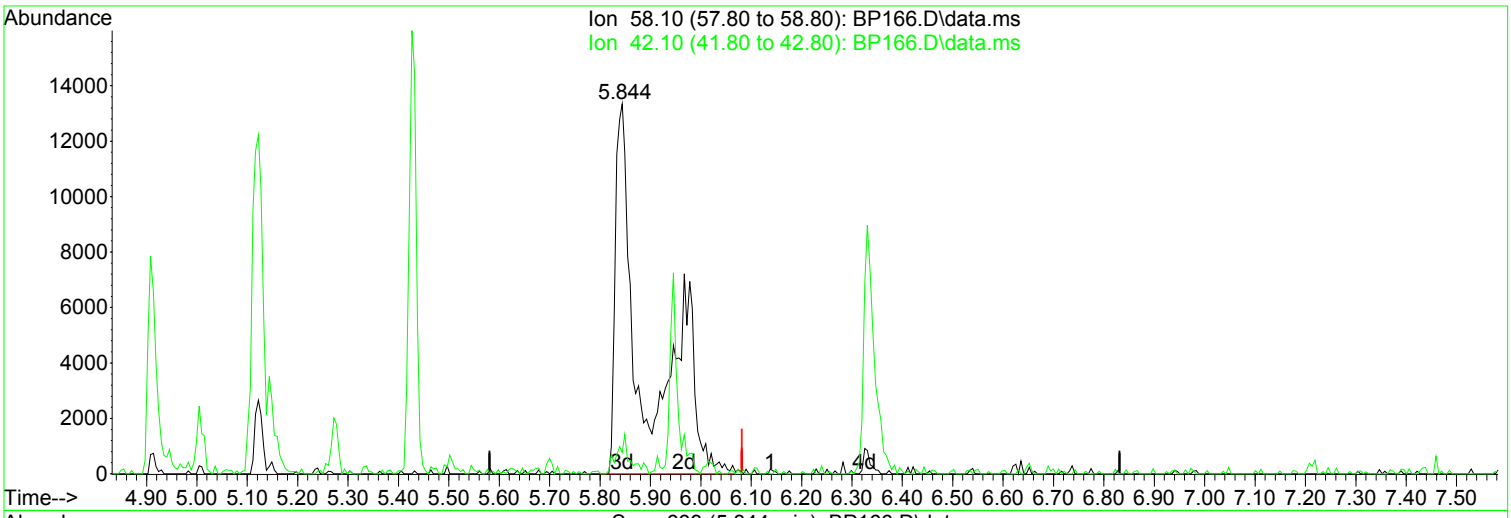
Before

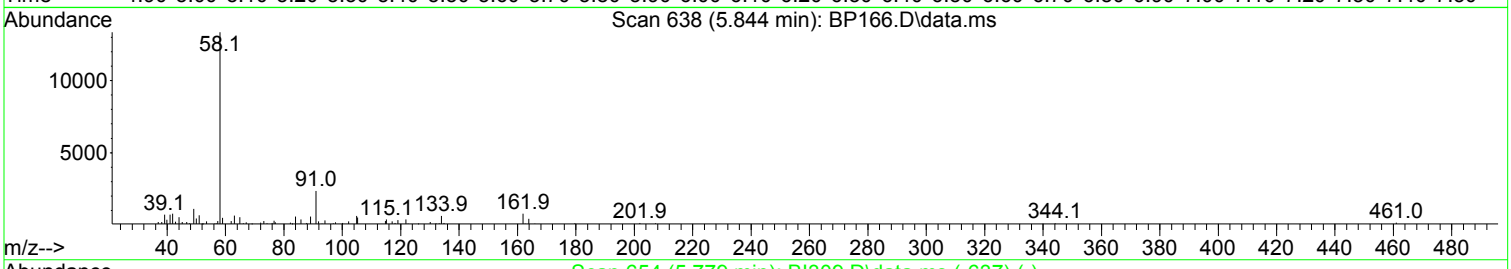
09/19/18

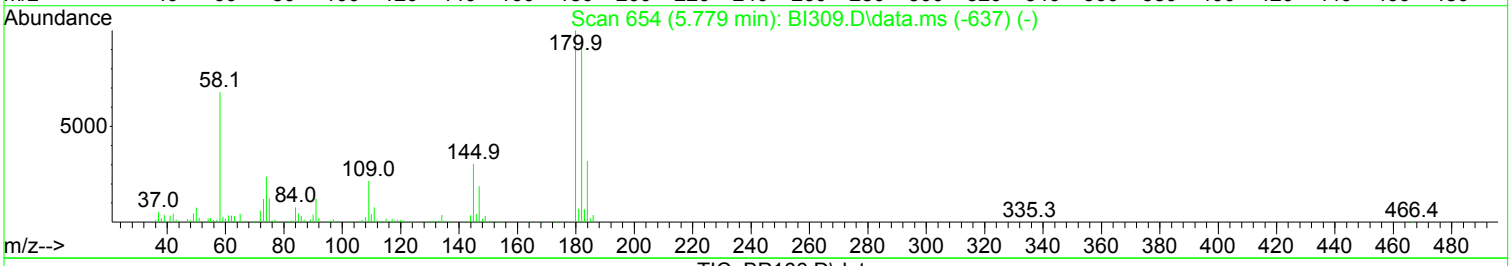
Quantitation Report (Qedit)

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ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP166.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.844min (-0.238) 10.99 ppm m

response 52172

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	5.82
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

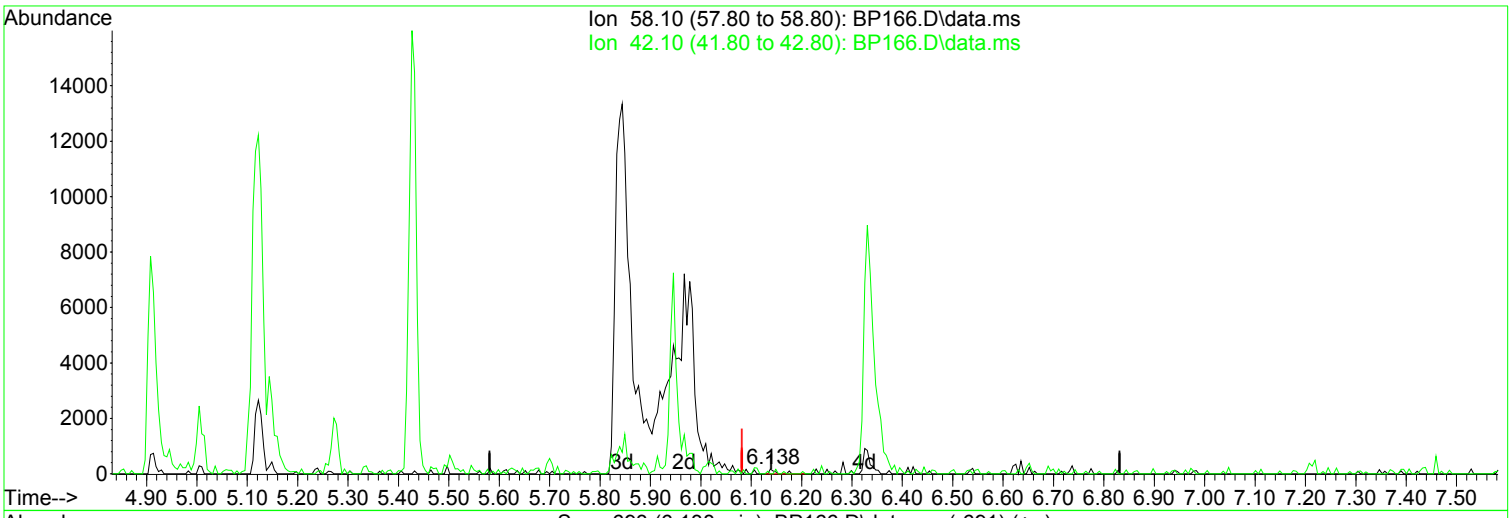
Poor integration.

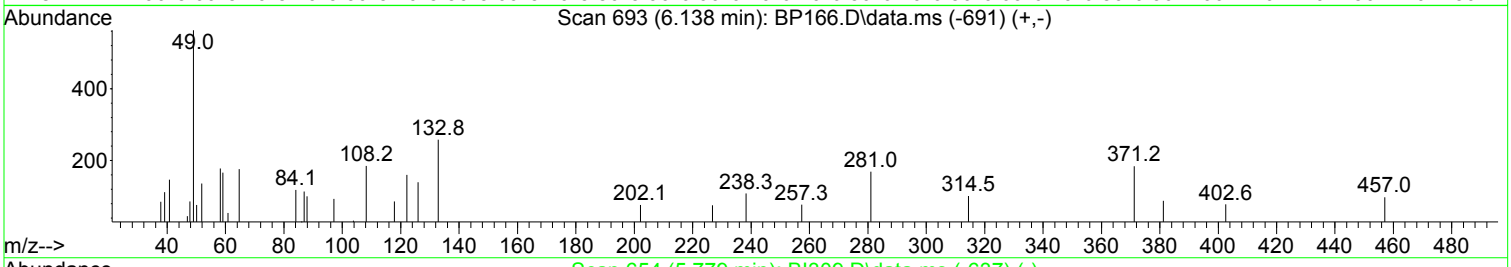
09/19/18

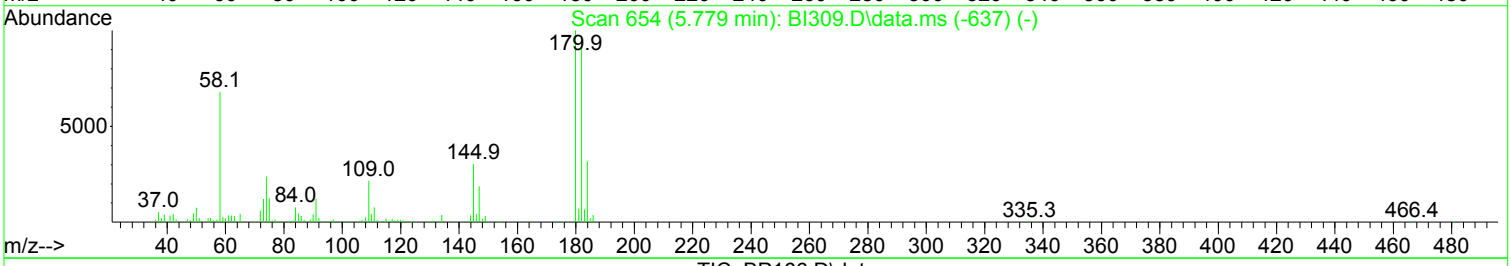
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP166.D
Acq On : 17 Sep 2018 11:46 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP166.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.138min (+ 0.056) 0.03 ppm

response 151

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

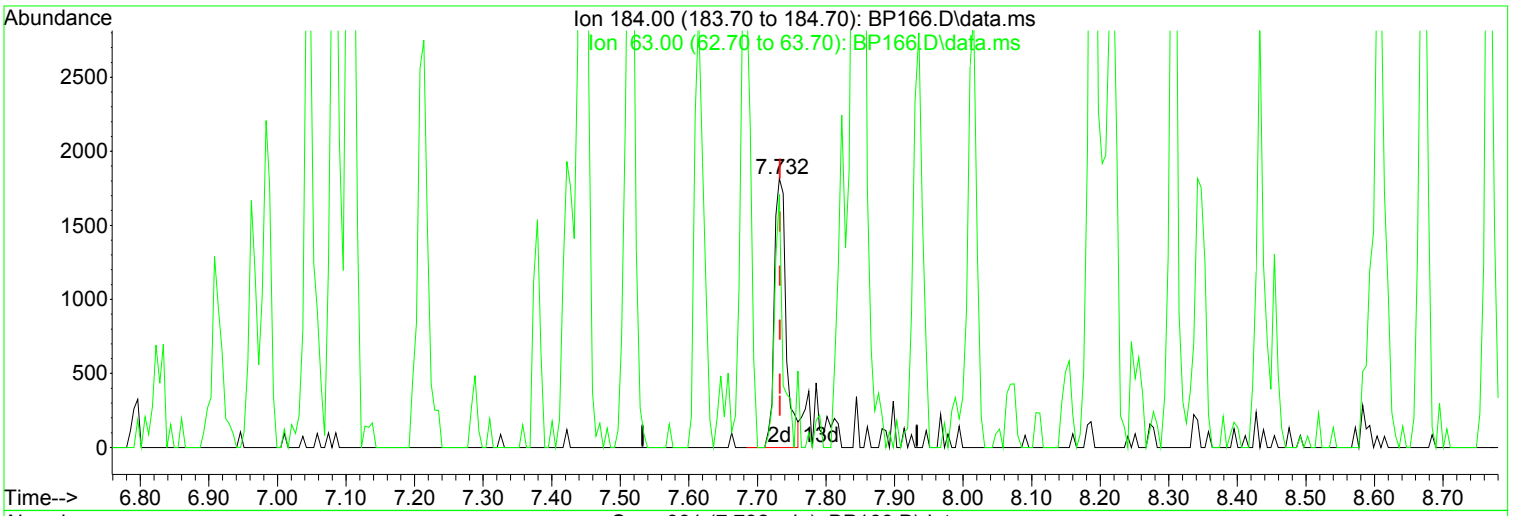
Before

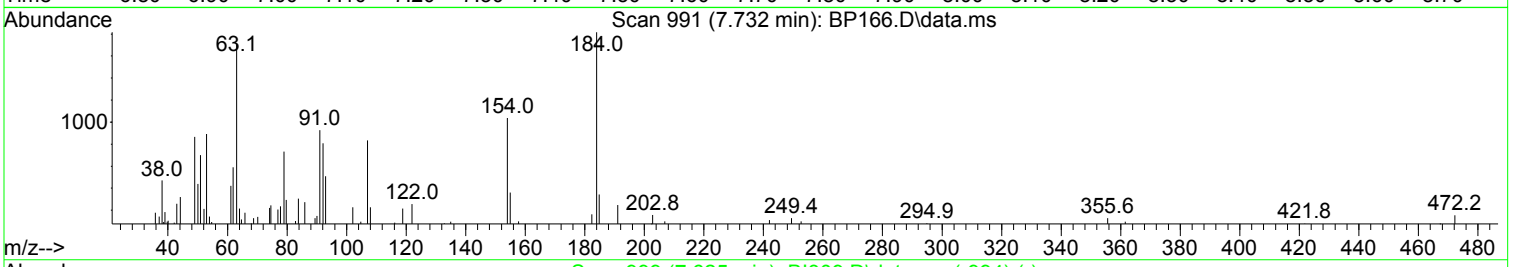
09/19/18

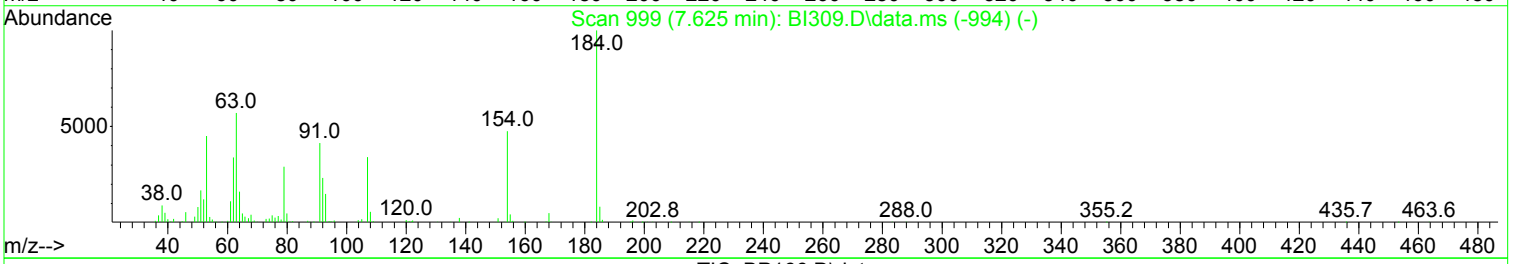
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP166.D
Acq On : 17 Sep 2018 11:46 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP166.D\data.ms

(75) 2,4-Dinitrophenol (TPM)

7.732min (-0.001) 10.03 ppm m

response 2168

Ion	Exp%	Act%
184.00	100.00	100.00
63.00	49.90	94.05#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

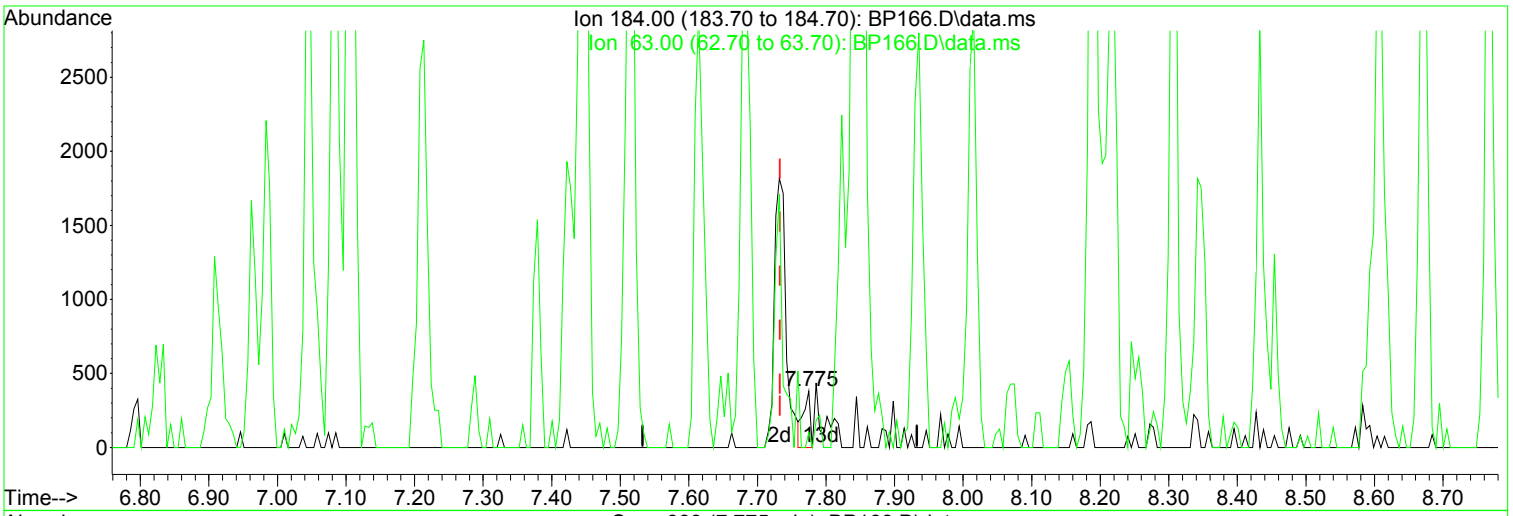
Peak not found.

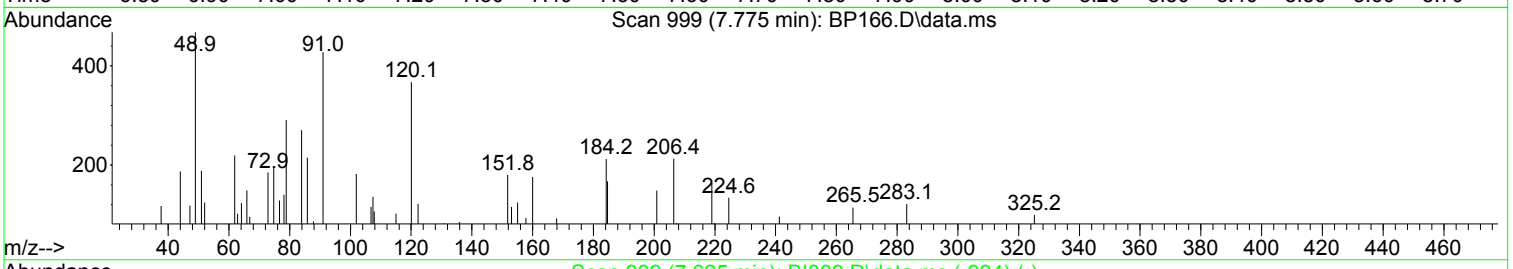
09/19/18

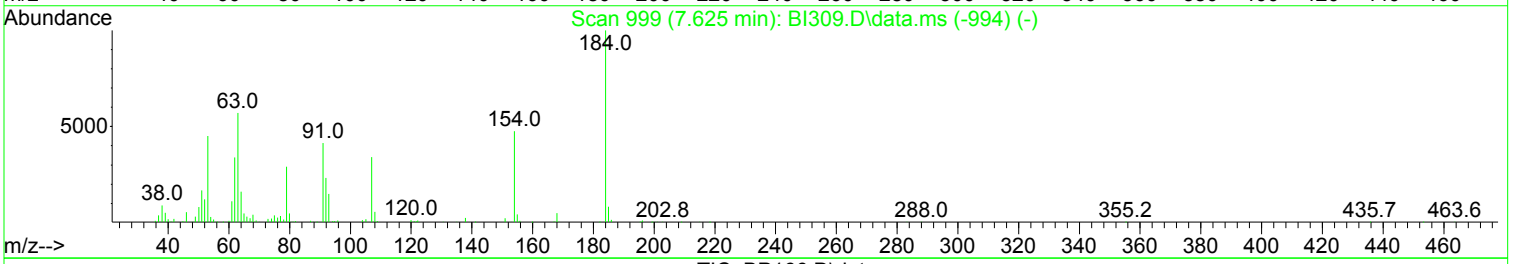
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP166.D
Acq On : 17 Sep 2018 11:46 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP166.D\data.ms

(75) 2,4-Dinitrophenol (TPM)

7.775min (+ 0.042) 5.96 ppm

response 269

Ion	Exp%	Act%
184.00	100.00	100.00
63.00	49.90	26.91
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP166.D
Acq On : 17 Sep 2018 11:46 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	72077	40.00	ppm		0.00
33) d8-Naphthalene	5.946	136	277429	40.00	ppm		0.00
57) d10-Acenaphthene	7.652	164	151665	40.00	ppm		0.00
91) d10-Phenanthrene	9.123	188	248076	40.00	ppm		0.00
117) d12-Chrysene	12.407	240	275496	40.00	ppm		0.00
135) d12-Perylene	15.354	264	263260	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.715	112	23549	9.87	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 4.93%#				
12) SURR2,PHENOL-D6	4.464	99	30858	10.54	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 5.27%#				
34) SURR4,NITROBENZENE-D5	5.272	82	25489	9.98	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 9.98%#				
63) SURR5,2-FLUOROBIPHENYL	6.983	172	56683	10.68	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 10.68%#				
88) SURR3,2,4,6-TRIBROMOPH...	8.433	330	8725	9.96	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 4.98%#				
124) SURR6,TERPHENYL-D14	10.813	244	62215	9.90	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 9.90%#				
Target Compounds							Qvalue
2) Pyridine	2.715	79	24158	9.627	ppm		94
3) N-Nitrosodimethylamine	2.678	74	12819	9.786	ppm		88
4) 2-Picoline	3.271	93	26655	10.663	ppm		97
5) N-Nitrosomethylamine	3.341	42	13071	10.463	ppm		76
6) Methyl Methansulfonate	3.576	80	12174	10.505	ppm		73
8) N-Nitrosodiethylamine	3.881	102	10986	9.957	ppm		96
9) Ethyl Mathanesulfonate	4.116	79	17561	9.477	ppm		92
10) Benzaldehyde	4.411	106	30693	22.147	ppm		95
11) Aniline	4.496	93	37019	9.615	ppm		88
13) Phenol	4.475	94	30923	9.869	ppm		90
14) bis(2-Clethyl)Ether	4.539	93	19943	9.529	ppm		92
15) Pentachloroethane	4.539	117	8413	9.840	ppm		97
16) 2-Chlorophenol	4.609	128	23472	9.326	ppm		95
17) 1,3-Diclbenzene	4.732	146	25988	9.803	ppm		94
18) 1,4-Dichlorobenzene	4.796	146	26228	9.895	ppm		96
19) 1,2-Diclbenzene	4.929	146	23754	9.586	ppm		91
20) Benzyl Alcohol	4.897	79	18213	9.642	ppm		86
21) 1-Methyl-2-pyrrolidinone	4.908	99	16436	10.103	ppm		93
22) 2,2'-oxybis(1-Chloropr...	5.010	45	26344	9.830	ppm	#	81
23) 2-Methylphenol	4.999	108	21330	9.947	ppm		97
24) 3+4-Methylphenol	5.138	108	21671	8.932	ppm		90
25) Acetophenone	5.133	105	34694	10.328	ppm		99
26) N-Nitroso-Di-n-propyla...	5.122	70	20026	10.446	ppm		91
27) N-Nitrosopyrrolidine	5.111	100	12798	9.836	ppm		75
28) N-Nitrosomorpholine	5.143	56	14554	9.580	ppm		99
29) o-Toluidine	5.165	106	38097	10.019	ppm		83
30) Hexachloroethane	5.234	117	10389	9.282	ppm		97
31) o,o,o-Triethylphosphor...	5.668	198	12851	10.807	ppm	#	28
32) Alpha-terpinol	5.967	121	9870	10.092	ppm		96
35) Nitrobenzene	5.293	77	24831	10.264	ppm		93
36) N-Nitrosopiperidine	5.427	42	16273	10.151	ppm		94
37) Isophorone	5.507	82	35227	9.628	ppm		97
38) 2-Nitrophenol	5.587	139	13281	9.862	ppm		96

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP166.D
Acq On : 17 Sep 2018 11:46 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 2,4-Dimethylphenol	5.619	107	24382	9.784	ppm		91
41) bis(-2-Chloroethoxy)Me...	5.700	93	26904	10.082	ppm		100
42) 2,4-Dichlorophenol	5.823	162	19328	9.709	ppm		92
43) a,a-Dimethylphenethyla...	5.844	58	52172m	10.987	ppm		
44) 1,2,4-Trichlorobenzene	5.887	180	20678	9.847	ppm		93
45) Naphthalene	5.967	128	71558	10.077	ppm		98
46) 4-Chloroaniline	6.021	127	29897	9.906	ppm		93
47) 2,6-Dichlorophenol	6.026	162	18368	9.361	ppm		93
48) Hexachlorobutadiene	6.074	225	11662	9.260	ppm		95
49) Hexachloropropene	6.047	213	14698	9.806	ppm		95
50) 4-Chloro-3-methylphenol	6.497	107	20997	10.044	ppm		94
51) N-N-di-n-butylamine	6.331	84	22901	11.972	ppm		96
52) Caprolactam	6.341	113	7817	10.463	ppm		84
53) p-Phenylenediamine	6.358	80	40656	21.719	ppm		86
54) Safrole	6.539	162	18934	10.599	ppm		94
55) 2-Methylnaphthalene	6.630	142	43904	9.721	ppm		90
56) 1-Methylnaphthalene	6.727	142	45728	10.211	ppm		97
58) Hexachlorocyclopentadiene	6.780	237	3756	8.490	ppm		99
59) 1,2,4,5-Tetrachloroben...	6.796	216	20669	9.812	ppm		92
60) 1,2,3,4-Tetrachloroben...	7.074	216	23130	10.128	ppm		99
61) 2,4,6-Trichlorophenol	6.914	196	12541	9.141	ppm		98
62) 2,4,5-Trichlorophenol	6.967	196	13402	10.186	ppm		84
64) Isosafrole	7.047	104	10646	10.368	ppm		93
65) 1,1'-Biphenyl	7.085	154	64643	10.191	ppm		99
66) 2-Chloronaphthalene	7.106	162	41499	9.734	ppm		95
67) 2-Nitroaniline	7.208	65	15651	11.153	ppm	#	67
68) 1,4-Naphthoquinone	7.288	158	12278	16.874	ppm		90
69) m-Dinitrobenzene	7.427	168	6989	8.925	ppm		79
70) Acenaphthylene	7.513	152	69042	9.749	ppm		97
71) Dimethyl phthalate	7.379	163	51651	10.394	ppm		98
72) 2,6-Dinitrotoluene	7.449	165	12186	10.746	ppm		93
73) Acenaphthene	7.684	153	44278	9.598	ppm		93
74) 3-Nitroaniline	7.614	138	15185	10.732	ppm		96
75) 2,4-Dinitrophenol	7.732	184	2168m	10.030	ppm		
76) Dibenzofuran	7.855	168	61652	9.832	ppm		97
77) 2,4-Dinitrotoluene	7.844	165	14078	9.248	ppm		89
78) 4-Nitrophenol	7.823	65	7509	7.776	ppm	#	45
79) Pentachlorobenzene	7.812	250	19735	9.964	ppm		94
80) 1-Napthylamine	7.935	143	43046	10.468	ppm		98
81) 2-Napthylamine	8.016	143	45773	10.425	ppm		88
82) 2,3,4,6-Tetrachlorophenol	7.984	232	11287	10.564	ppm		88
83) Fluorene	8.192	166	50141	10.120	ppm		100
84) 4-Chlorophenyl-phenyle...	8.192	204	23456	9.958	ppm		96
85) Diethylphthalate	8.074	149	50939	9.870	ppm		95
86) 4-Nitroaniline	8.219	138	14502	9.893	ppm		79
87) 5-Nitro-o-toluidine	8.208	152	14809	9.339	ppm		73
89) Sulfotepp	8.454	322	7746	9.097	ppm		86
90) Octachlorocyclopentene	8.438	307	7681	9.097	ppm		97
92) Thionazin	8.155	107	7786	9.358	ppm		79
93) 4,6-Dinitro-2-methylph...	8.251	198	6780	7.838	ppm		80
94) Diphenylamine	8.310	169	90819	22.009	ppm		98
95) 1,2 Diphenylhydrazine	8.347	77	58014	11.260	ppm		90
96) N-Nitrosodiphenylamine	8.310	169	90819	22.003	ppm		98
97) 1,3,5-Trinirobenzene	8.609	213	3680	8.226	ppm		80
98) Diallate	8.583	86	18438	10.444	ppm		99
99) Phorate	8.593	121	10134	10.203	ppm	#	76

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP166.D
Acq On : 17 Sep 2018 11:46 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

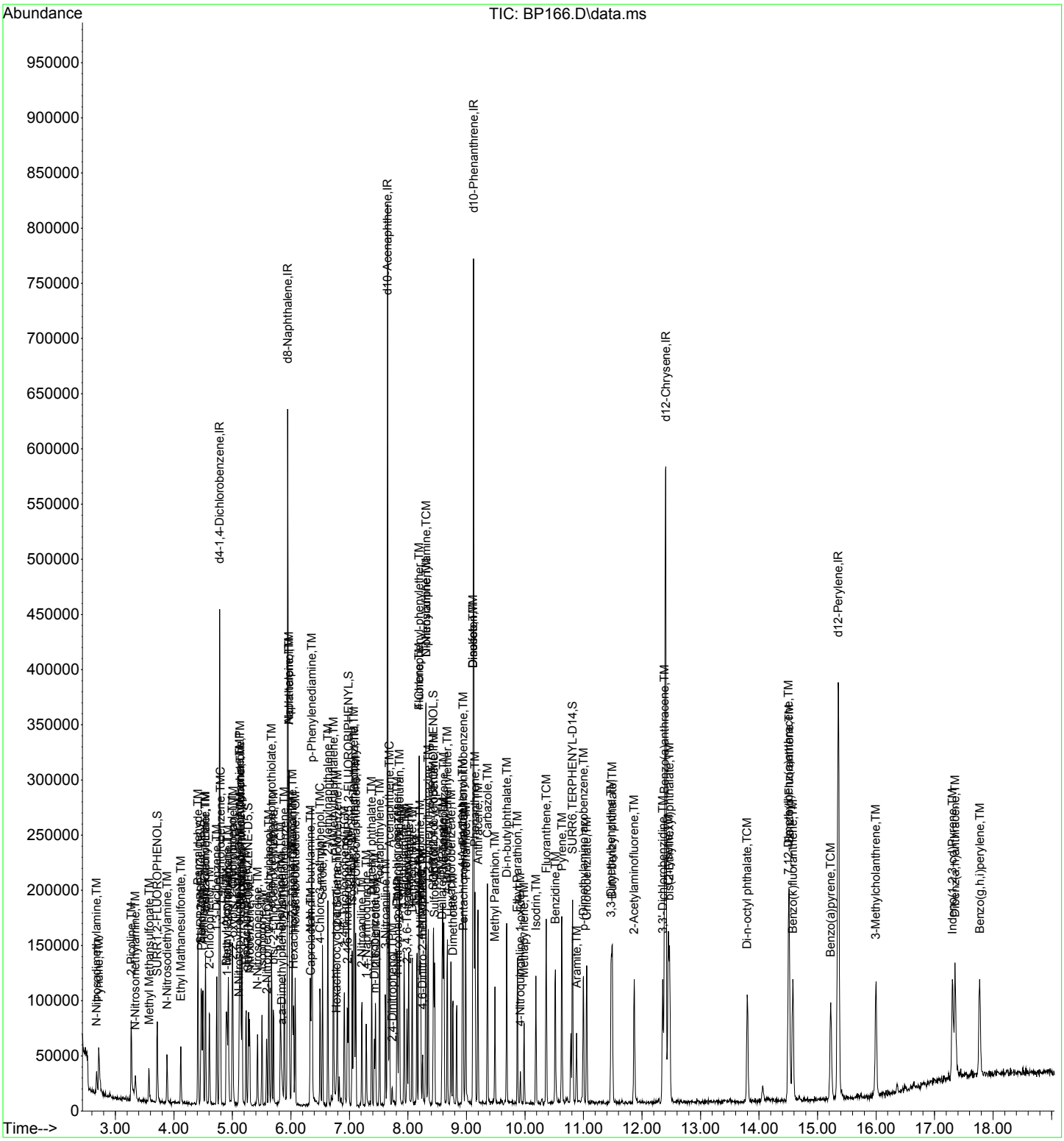
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Phenacetin	8.615	108	31085	10.975	ppm	95
101) 4-Bromophenyl-phenylether	8.673	248	14635	10.349	ppm	89
102) Hexachlorobenzene	8.738	284	17708	10.610	ppm	93
103) Dimethoate	8.770	87	18045	12.167	ppm	96
105) Pentachlorophenol	8.946	266	5612	7.083	ppm	87
106) 4-Aminobiphenyl	8.930	169	53107	10.399	ppm	99
107) Pentachloronitrobenzene	8.941	237	5672	9.135	ppm	85
108) Pronamide	8.989	173	25855	10.613	ppm	93
109) Dinoseb	9.112	211	8604	7.377	ppm	88
110) Disulfoton	9.112	88	24584	9.668	ppm	93
111) Phenanthrene	9.144	178	66388	9.817	ppm	100
112) Anthracene	9.198	178	64689	9.694	ppm	95
113) Carbazole	9.358	167	73075	10.164	ppm	97
114) Di-n-butylphthalate	9.690	149	83704	9.849	ppm	98
115) 4-Nitroquinonline-1-oxide	9.920	190	2410	7.356	ppm	78
116) Fluoranthene	10.364	202	71416	9.699	ppm	98
118) Methyl Parathion	9.486	109	13991	10.366	ppm	80
119) Ethyl Parathion	9.872	97	12289	9.534	ppm	80
120) Methapyrilene	9.984	58	16042	9.895	ppm	95
121) Isodrin	10.187	193	6810	8.231	ppm	81
122) Benzidine	10.519	184	54025	10.321	ppm	94
123) Pyrene	10.631	202	78611	9.615	ppm	95
125) Aramite	10.882	185	10515m	9.886	ppm	
126) p-(Dimethylamino)azobe...	11.000	120	22666	9.870	ppm	86
127) Chlorobenzilate	11.054	139	27260	9.789	ppm	73
128) Butyl benzyl phthalate	11.492	149	40251	9.570	ppm	91
129) 3,3-Dimethylbenzidine	11.471	212	49925	9.851	ppm	96
130) 2-Acetylaminofluorene	11.867	181	33267	8.735	ppm	94
131) 3,3'-Dichlorobenzidine	12.353	252	32866	9.786	ppm	89
132) Benzo(a)anthracene	12.385	228	75708	9.569	ppm	94
133) Chrysene	12.450	228	75640	9.941	ppm	95
134) bis(2-Ethylhexyl)phtha...	12.471	149	55533	9.447	ppm	98
136) Di-n-octyl phthalate	13.797	149	86757	9.760	ppm	97
137) 7,12-Dimethylbenz(a)an...	14.504	256	40292	10.446	ppm	95
138) Benzo(b)Fluoranthene	14.514	252	71236	9.335	ppm	93
139) Benzo(k)fluoranthene	14.578	252	74896	10.115	ppm	98
140) Benzo(a)pyrene	15.226	252	62825	9.539	ppm	97
141) 3-Methylcholanthrene	15.996	268	38683	10.136	ppm	93
142) Indeno(1,2,3-cd)Pyrene	17.306	276	60262	9.769	ppm	84
143) Dibenz(a,h)anthracene	17.349	278	62103	9.814	ppm	92
144) Benzo(g,h,i)perylene	17.772	276	64005	10.722	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP166.D
Acq On : 17 Sep 2018 11:46 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

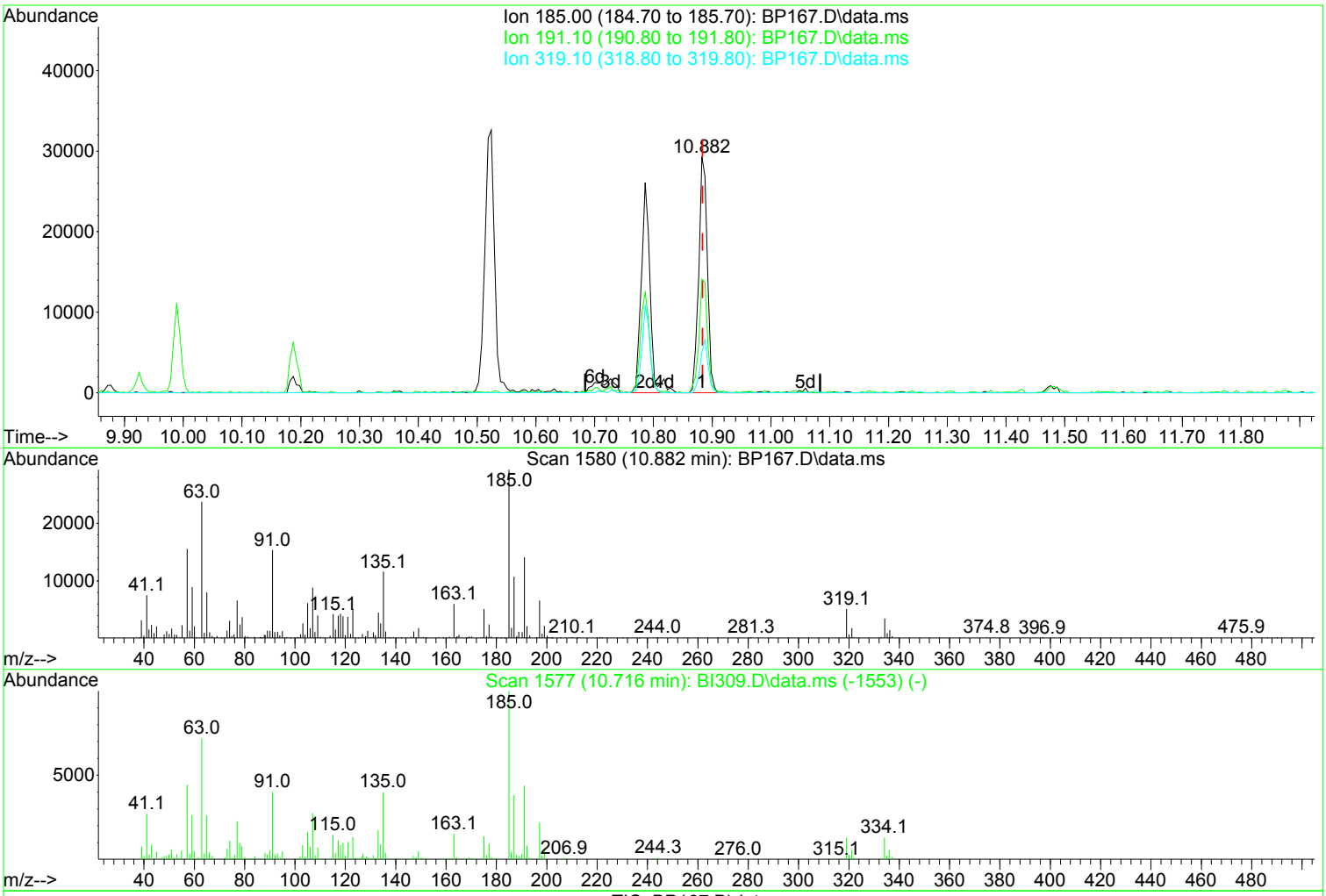
Quant Time: Sep 19 11:00:21 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration



TIC: BP167.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 55.65 ppm m

response 57398

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	48.08
319.10	20.20	17.41
0.00	0.00	0.00

Manual Integration:

After

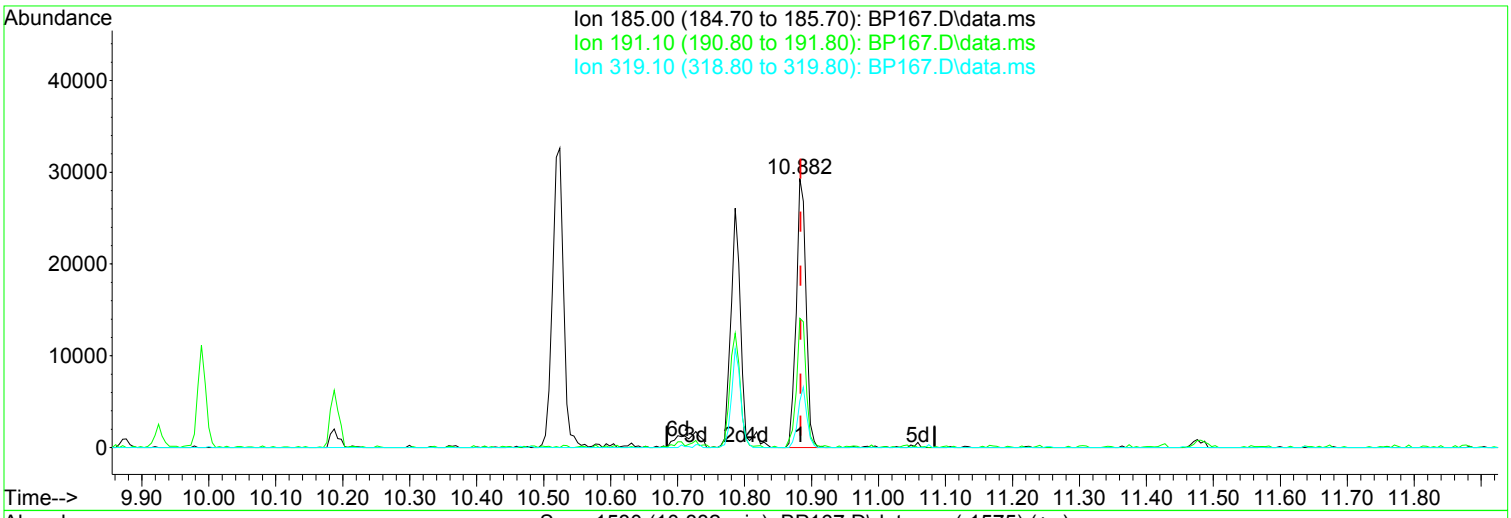
Split Peak.

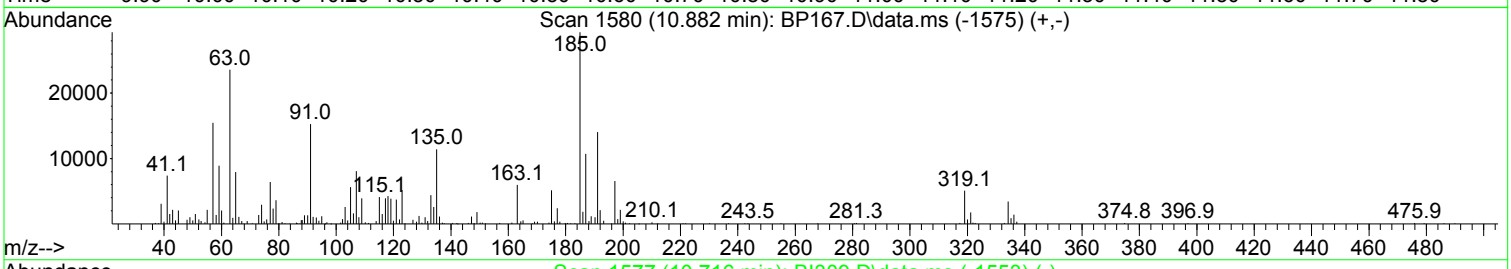
09/19/18

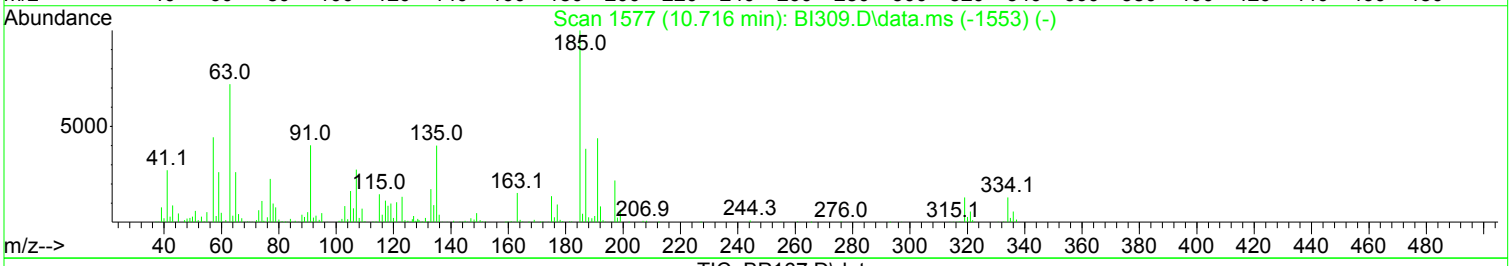
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP167.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 29.07 ppm

response 29982

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	47.91
319.10	20.20	17.41
0.00	0.00	0.00

Manual Integration:

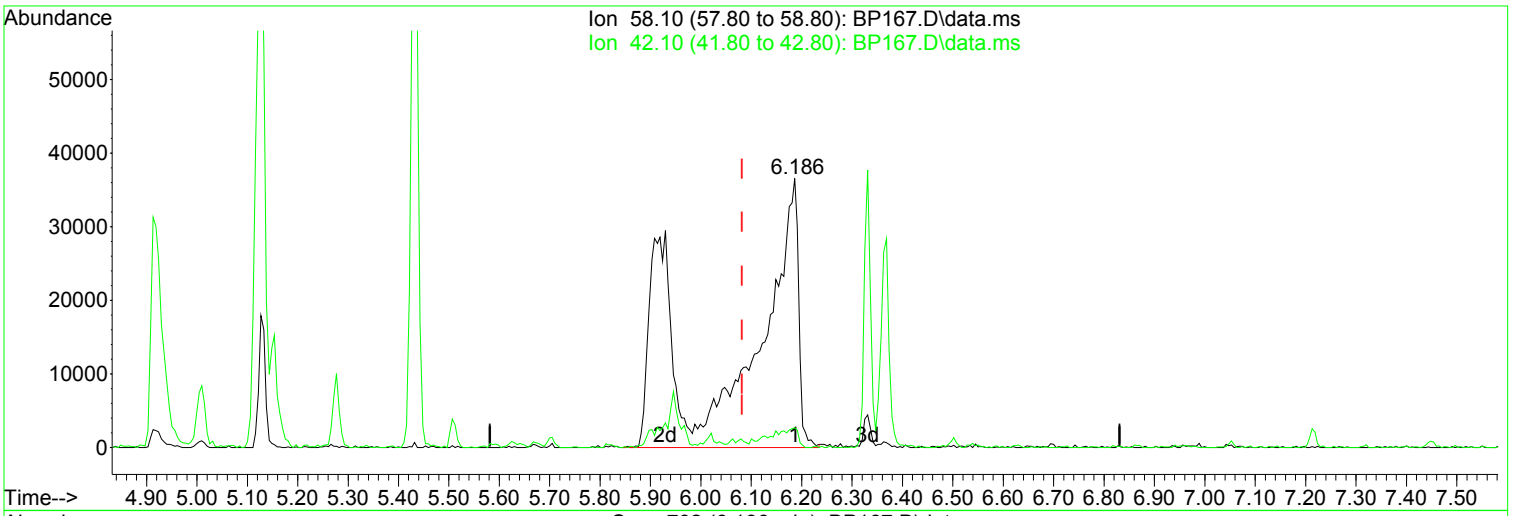
Before

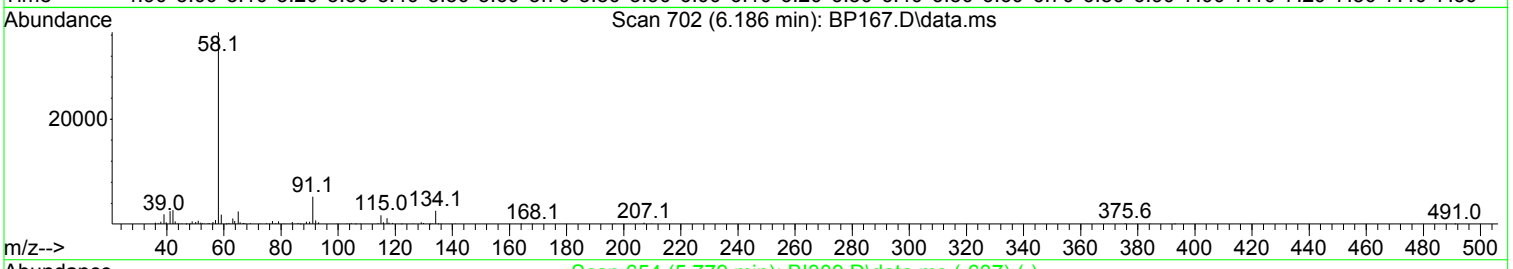
09/19/18

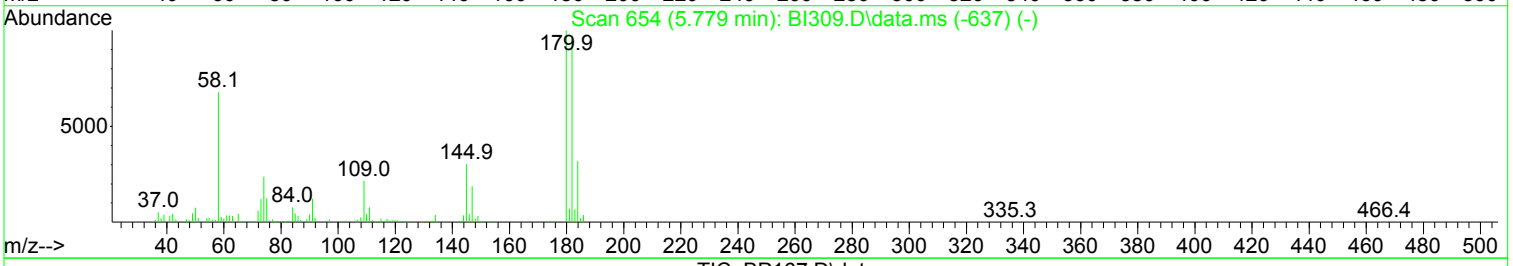
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP167.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.186min (+ 0.105) 53.30 ppm m

response 265534

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	7.39
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

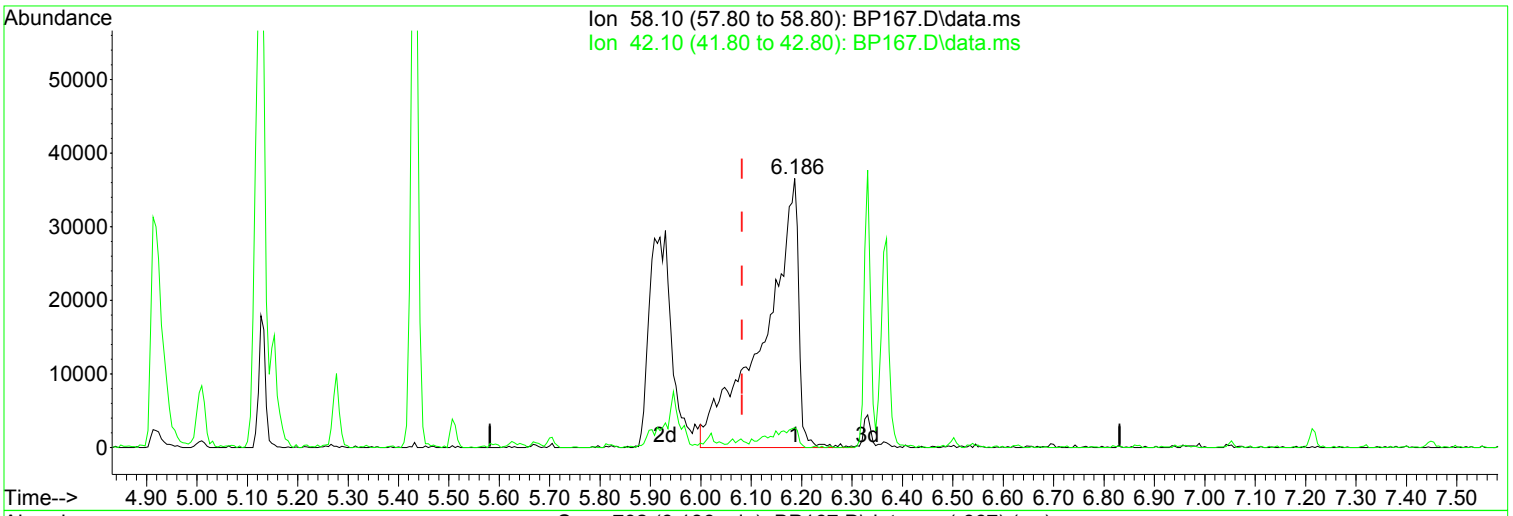
Poor integration.

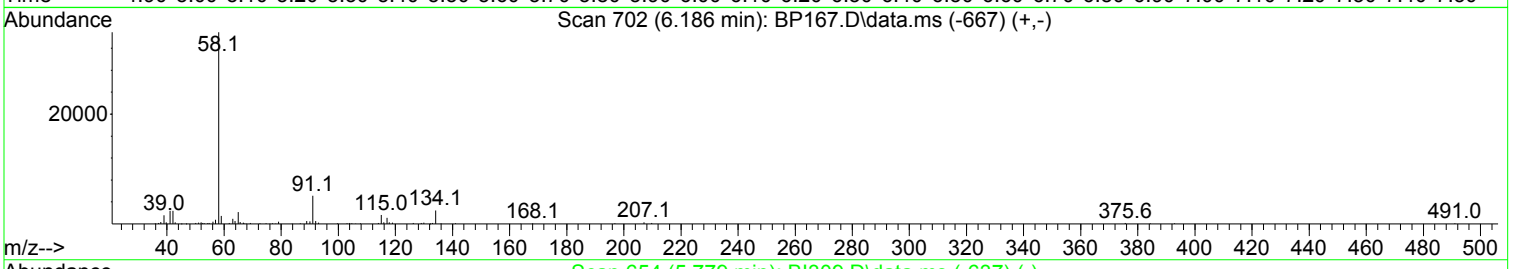
09/19/18

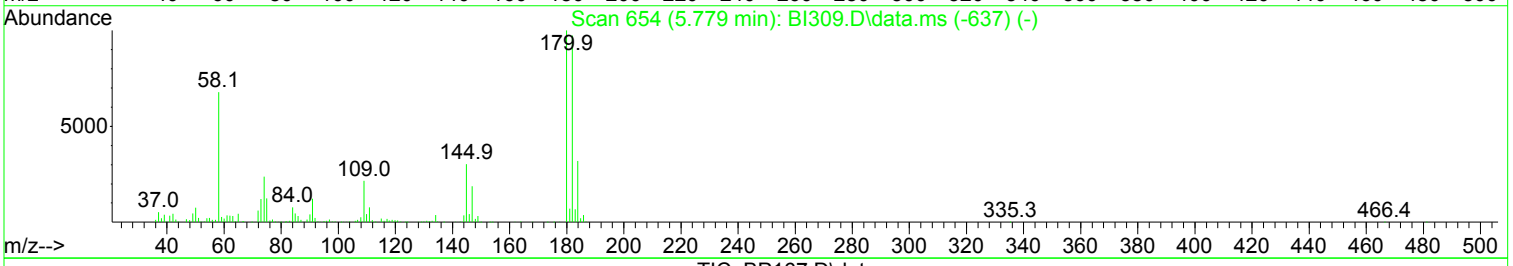
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP167.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.186min (+ 0.105) 34.82 ppm

response 173483

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	6.86
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

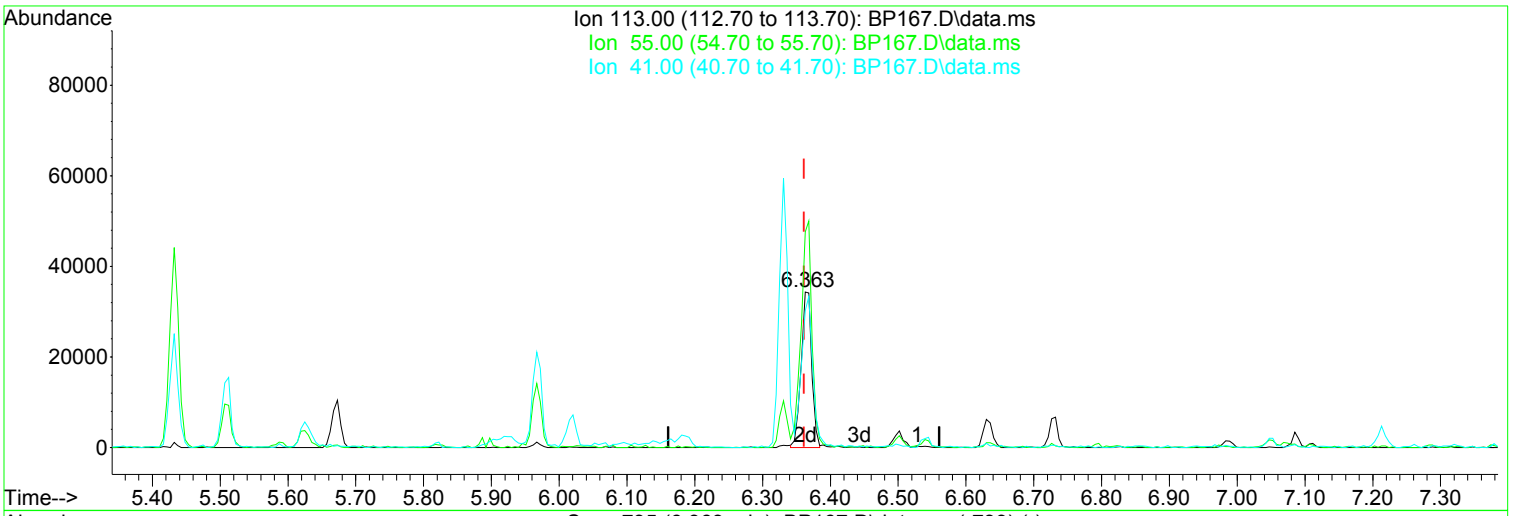
Before

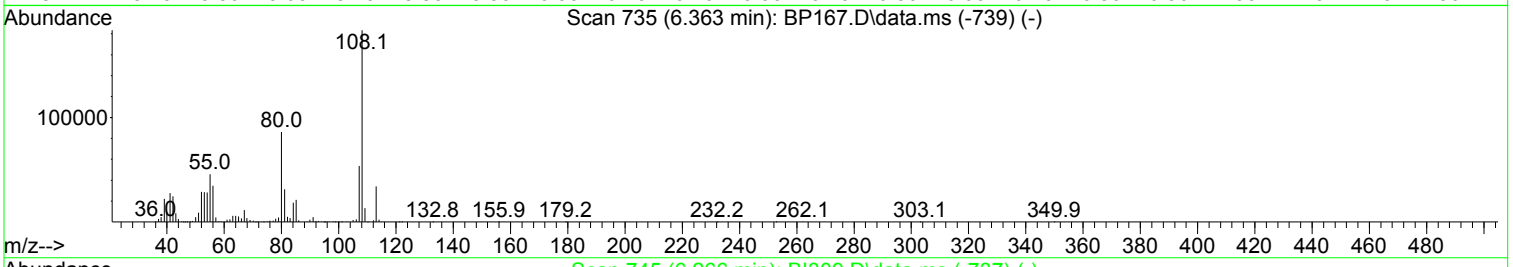
09/19/18

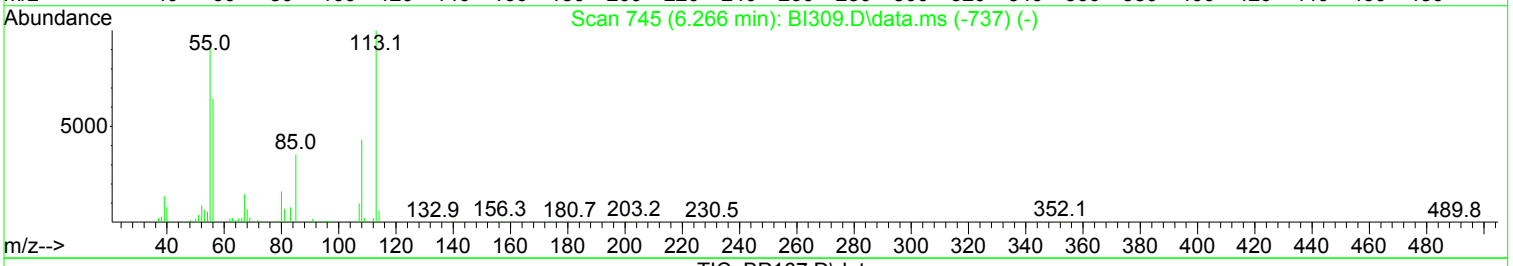
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP167.D\data.ms

(52) Caprolactam (TM)

6.363min (+ 0.002) 47.43 ppm m

response 37176

Ion	Exp%	Act%
113.00	100.00	100.00
55.00	123.70	138.58
41.00	65.00	87.95#
0.00	0.00	0.00

Manual Integration:

After

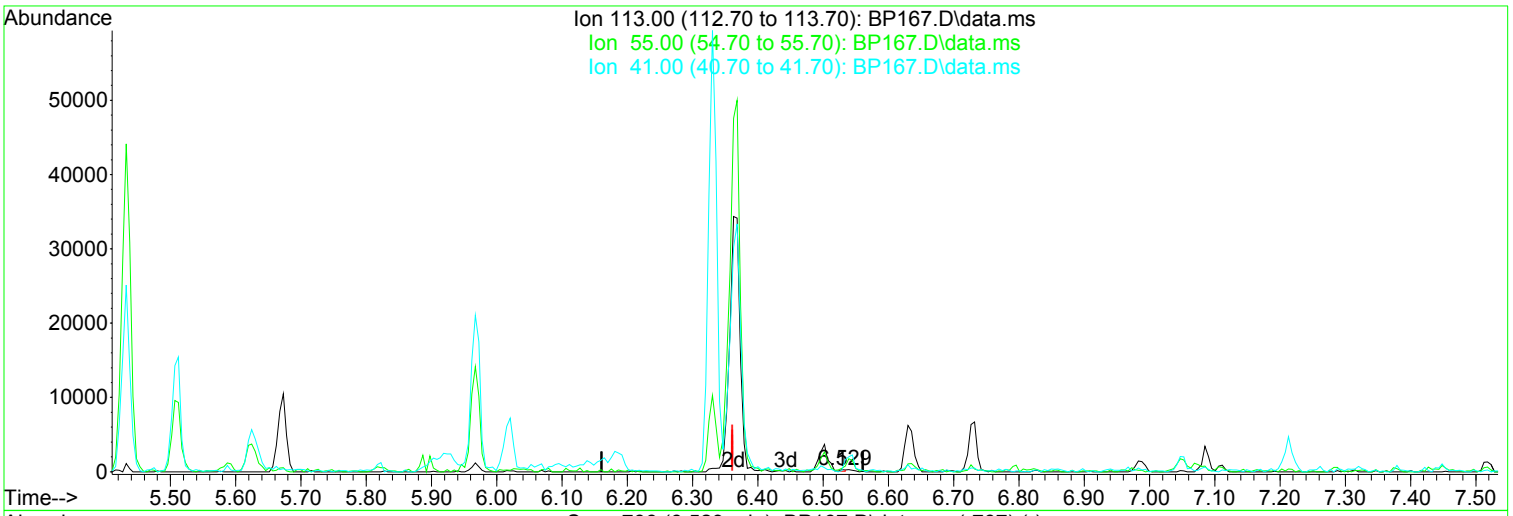
Peak not found.

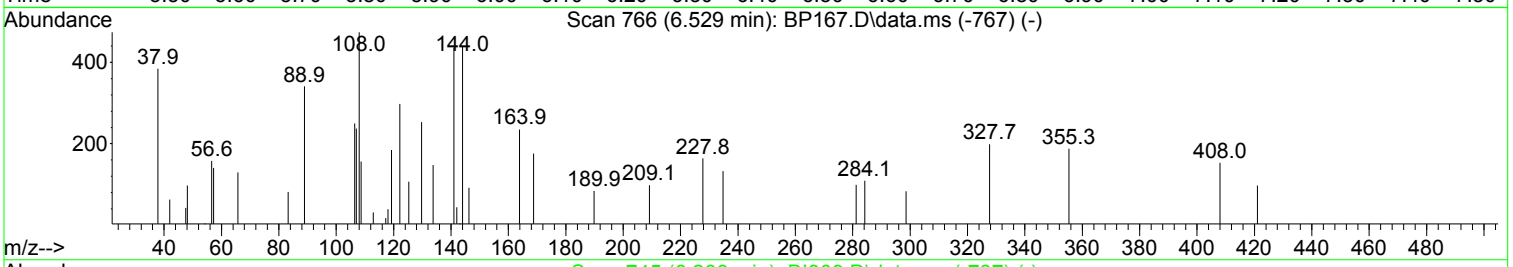
09/19/18

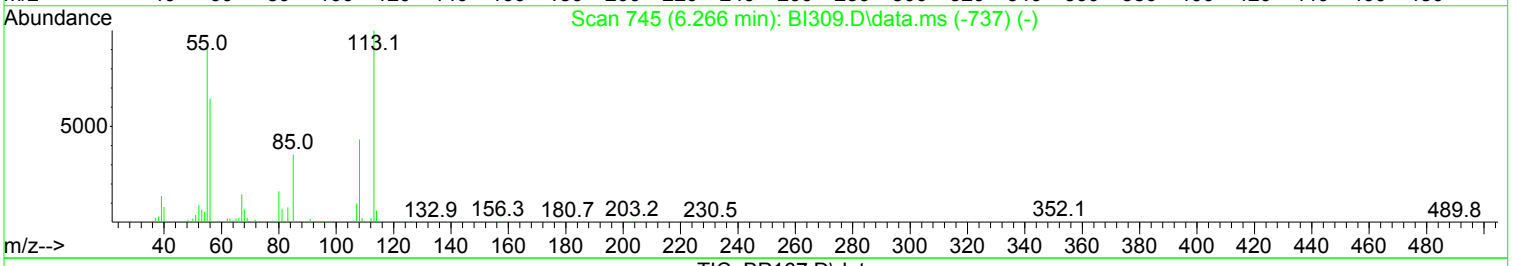
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP167.D\data.ms

(52) Caprolactam (TM)

6.529min (+ 0.167) 0.14 ppm

response 106

Ion	Exp%	Act%
113.00	100.00	100.00
55.00	123.70	124.86
41.00	65.00	79.01
0.00	0.00	0.00

Manual Integration:

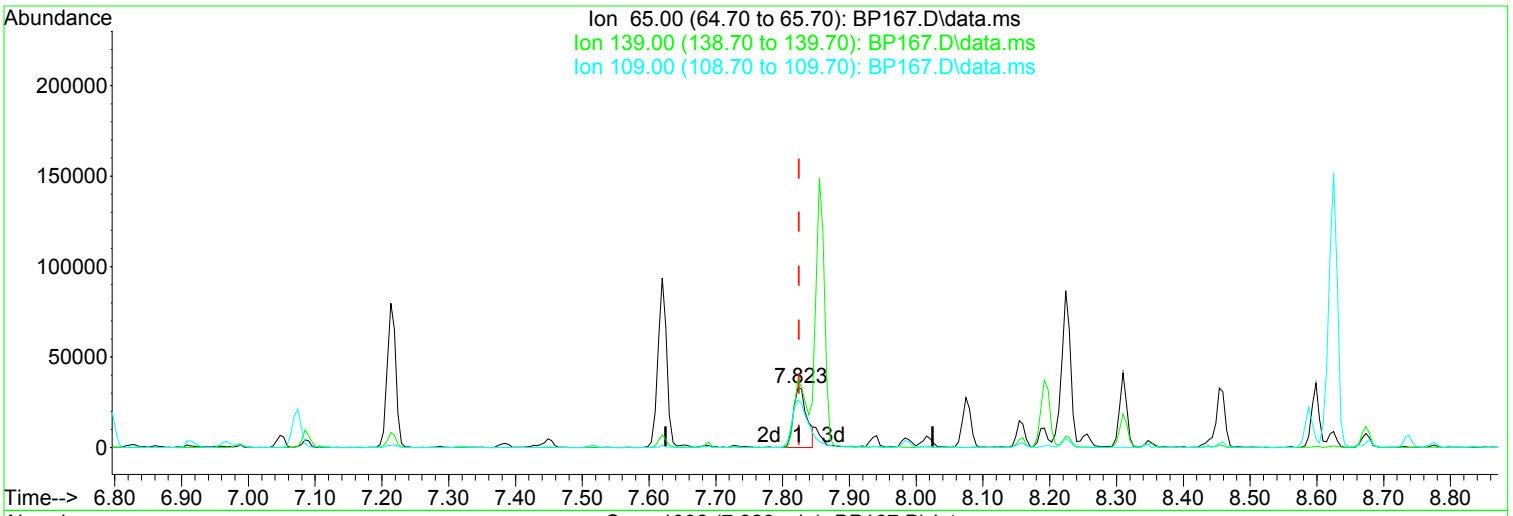
Before

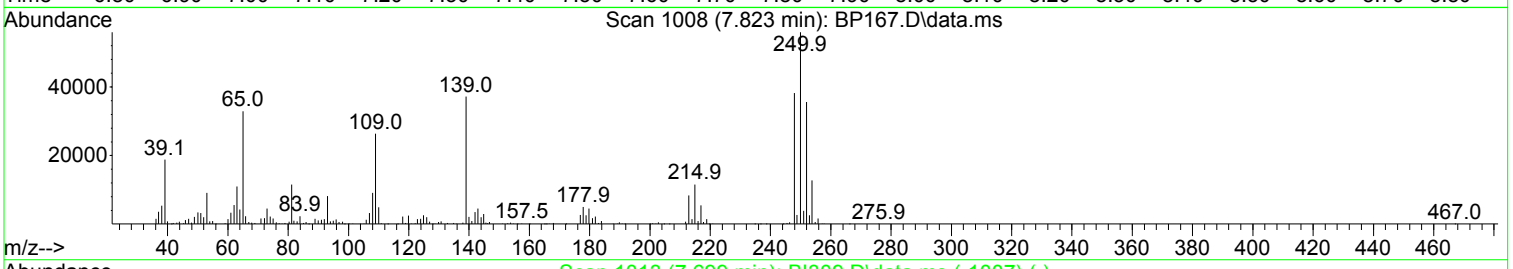
09/19/18

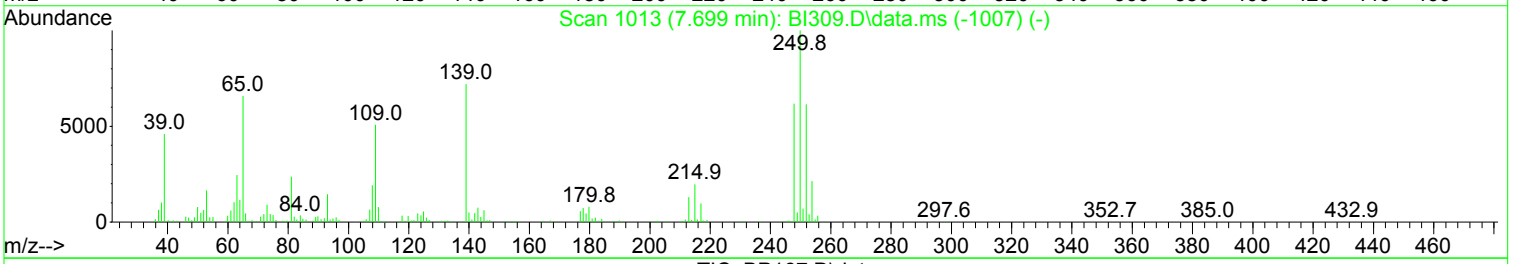
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP167.D\data.ms

(78) 4-Nitrophenol (TMP)

7.823min (-0.002) 46.24 ppm m

response 46007

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	113.01
109.00	86.40	80.11
0.00	0.00	0.00

Manual Integration:

After

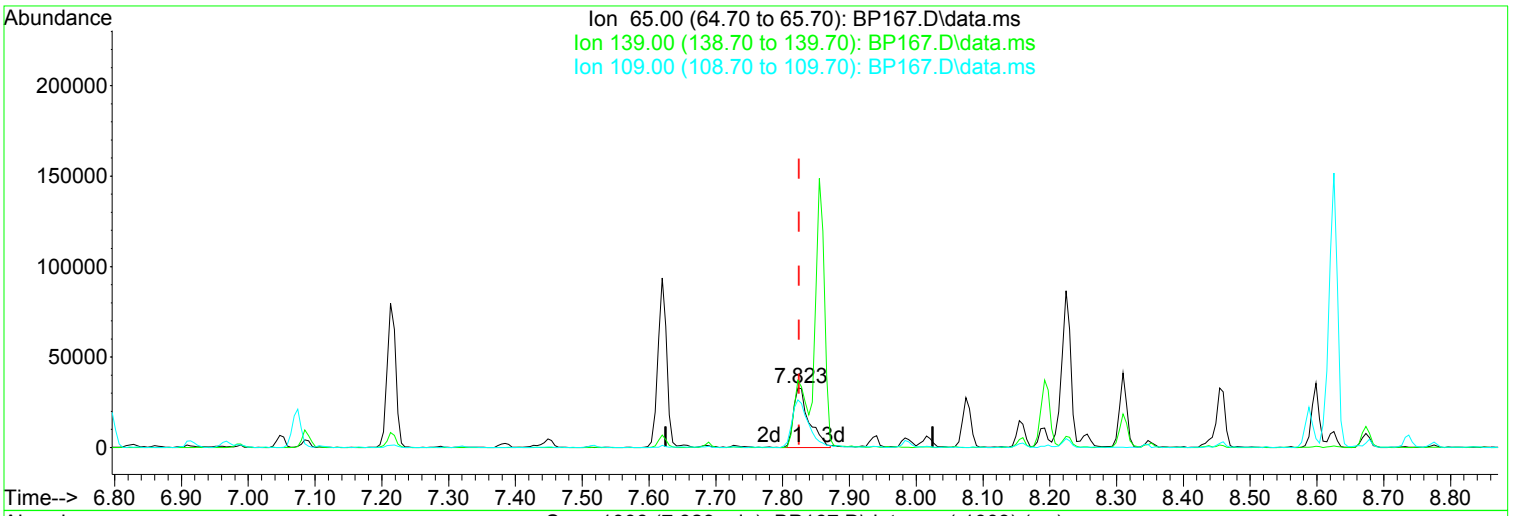
Poor integration.

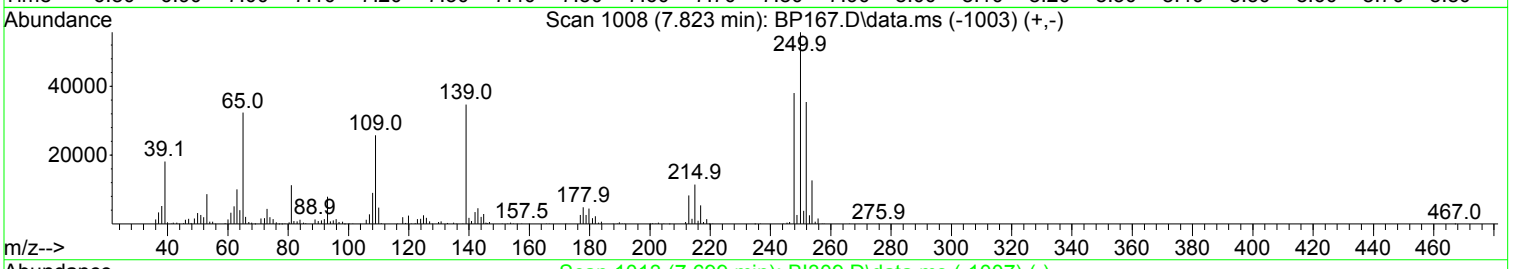
09/19/18

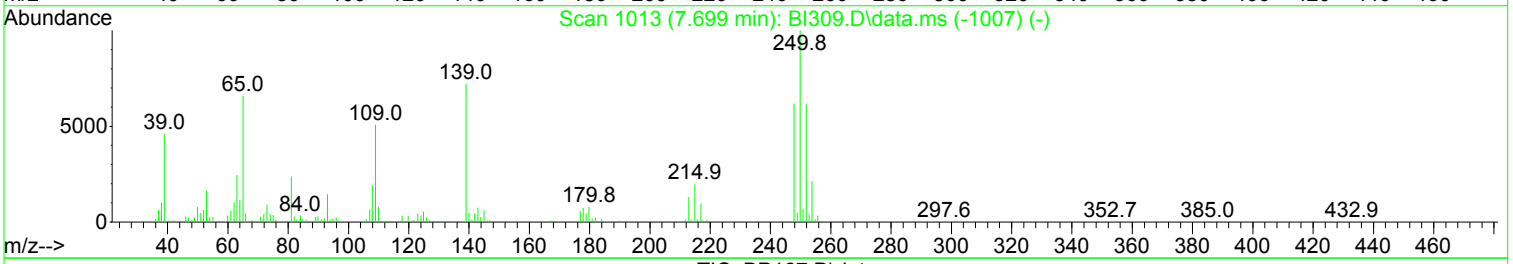
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP167.D\data.ms

(78) 4-Nitrophenol (TMP)

7.823min (-0.002) 54.43 ppm

response 54151

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	107.27
109.00	86.40	79.57
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.785	152	72797	40.00	ppm		0.00
33) d8-Naphthalene	5.946	136	291086	40.00	ppm		0.00
57) d10-Acenaphthene	7.652	164	156256	40.00	ppm		0.00
91) d10-Phenanthrene	9.123	188	262125	40.00	ppm		0.00
117) d12-Chrysene	12.407	240	267169	40.00	ppm		0.00
135) d12-Perylene	15.359	264	280493	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.715	112	120919	50.20	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 25.10%				
12) SURR2,PHENOL-D6	4.464	99	150493	50.91	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 25.45%				
34) SURR4,NITROBENZENE-D5	5.277	82	133401	49.78	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 49.78%				
63) SURR5,2-FLUOROBIPHENYL	6.989	172	274425	50.19	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 50.19%				
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	45991	50.93	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 25.47%#				
124) SURR6,TERPHENYL-D14	10.818	244	321532	52.76	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 52.76%				
Target Compounds							Qvalue
2) Pyridine	2.710	79	127537	50.320	ppm		86
3) N-Nitrosodimethylamine	2.672	74	67106	50.722	ppm		93
4) 2-Picoline	3.266	93	129799	51.413	ppm		97
5) N-Nitrosomethylamine	3.341	42	61773	48.960	ppm		82
6) Methyl Methansulfonate	3.571	80	60873	52.007	ppm		95
8) N-Nitrosodiethylamine	3.886	102	54548	48.950	ppm		97
9) Ethyl Mathanesulfonate	4.122	79	95577	51.067	ppm		93
10) Benzaldehyde	4.410	106	66248	47.329	ppm		92
11) Aniline	4.496	93	192906	49.610	ppm		90
13) Phenol	4.475	94	162612	51.386	ppm		88
14) bis(2-Clethyl)Ether	4.539	93	107118	50.678	ppm		94
15) Pentachloroethane	4.544	117	42561	49.286	ppm		96
16) 2-Chlorophenol	4.608	128	129871	51.091	ppm		98
17) 1,3-Diclbenzene	4.731	146	132688	49.555	ppm		93
18) 1,4-Dichlorobenzene	4.796	146	135336	50.551	ppm		96
19) 1,2-Diclbenzene	4.929	146	124369	49.694	ppm		94
20) Benzyl Alcohol	4.897	79	100723	52.795	ppm		97
21) 1-Methyl-2-pyrrolidinone	4.919	99	86823	52.841	ppm		91
22) 2,2'-oxybis(1-Chloropr...	5.010	45	136724	50.511	ppm		92
23) 2-Methylphenol	5.004	108	105319	48.629	ppm		93
24) 3+4-Methylphenol	5.143	108	115045	46.948	ppm	#	81
25) Acetophenone	5.138	105	172421	50.821	ppm		94
26) N-Nitroso-Di-n-propyla...	5.127	70	96051	49.607	ppm		81
27) N-Nitrosopyrrolidine	5.122	100	68244	51.930	ppm		99
28) N-Nitrosomorpholine	5.154	56	76840	50.078	ppm		96
29) o-Toluidine	5.170	106	196301	51.114	ppm		79
30) Hexachloroethane	5.234	117	55383	48.991	ppm		88
31) o,o,o-Triethylphosphor...	5.673	198	62451	51.999	ppm	#	16
32) Alpha-terpinol	5.967	121	50845	51.477	ppm		98
35) Nitrobenzene	5.293	77	123906	48.816	ppm		95
36) N-Nitrosopiperidine	5.432	42	81578	48.500	ppm		89
37) Isophorone	5.507	82	188152	49.010	ppm		93
38) 2-Nitrophenol	5.587	139	69039	48.862	ppm		90

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 2,4-Dimethylphenol	5.625	107	128914	49.302	ppm		99
41) bis(-2-Chloroethoxy)Me...	5.705	93	139192	49.716	ppm		95
42) 2,4-Dichlorophenol	5.823	162	103400	49.502	ppm		98
43) a,a-Dimethylphenethyla...	6.186	58	265534m	53.298	ppm		
44) 1,2,4-Trichlorobenzene	5.892	180	106929	48.531	ppm		97
45) Naphthalene	5.967	128	363910	48.844	ppm		100
46) 4-Chloroaniline	6.020	127	156773	49.506	ppm		95
47) 2,6-Dichlorophenol	6.026	162	102995	50.027	ppm		92
48) Hexachlorobutadiene	6.074	225	65684	49.707	ppm		97
49) Hexachloropropene	6.047	213	78111	49.669	ppm		96
50) 4-Chloro-3-methylphenol	6.502	107	111920	51.024	ppm		90
51) N-N-di-n-butylamine	6.331	84	90611	45.148	ppm		94
52) Caprolactam	6.363	113	37176m	47.425	ppm		
53) p-Phenylenediamine	6.368	80	191018	97.257	ppm		89
54) Safrole	6.545	162	91017	48.560	ppm		89
55) 2-Methylnaphthalene	6.636	142	230783	48.703	ppm		94
56) 1-Methylnaphthalene	6.732	142	229426	48.827	ppm		98
58) Hexachlorocyclopentadiene	6.780	237	39243	49.277	ppm		93
59) 1,2,4,5-Tetrachloroben...	6.796	216	107438	49.507	ppm		97
60) 1,2,3,4-Tetrachloroben...	7.074	216	118920	50.544	ppm		96
61) 2,4,6-Trichlorophenol	6.914	196	71709	50.731	ppm		99
62) 2,4,5-Trichlorophenol	6.967	196	66933	49.377	ppm		93
64) Isosafrole	7.047	104	50098	47.358	ppm		96
65) 1,1'-Biphenyl	7.085	154	320283	49.010	ppm		99
66) 2-Chloronaphthalene	7.112	162	220188	50.131	ppm		96
67) 2-Nitroaniline	7.213	65	70999	49.107	ppm	#	80
68) 1,4-Naphthoquinone	7.288	158	44746	59.688	ppm		88
69) m-Dinitrobenzene	7.427	168	40306	49.957	ppm		82
70) Acenaphthylene	7.518	152	373649	51.209	ppm		99
71) Dimethyl phthalate	7.384	163	244633	47.783	ppm		99
72) 2,6-Dinitrotoluene	7.449	165	57485	49.201	ppm		81
73) Acenaphthene	7.684	153	232924	49.006	ppm		97
74) 3-Nitroaniline	7.620	138	72351	49.632	ppm		87
75) 2,4-Dinitrophenol	7.732	184	22845	48.130	ppm		65
76) Dibenzofuran	7.855	168	319938	49.524	ppm		98
77) 2,4-Dinitrotoluene	7.850	165	78441	50.014	ppm		83
78) 4-Nitrophenol	7.823	65	46007m	46.241	ppm		
79) Pentachlorobenzene	7.818	250	103567	50.754	ppm		97
80) 1-Napthylamine	7.935	143	202208	47.727	ppm		98
81) 2-Napthylamine	8.015	143	214975	47.524	ppm		94
82) 2,3,4,6-Tetrachlorophenol	7.989	232	55822	50.713	ppm		94
83) Fluorene	8.197	166	262207	51.367	ppm		95
84) 4-Chlorophenyl-phenyle...	8.192	204	125239	51.609	ppm		92
85) Diethylphthalate	8.074	149	257191	48.371	ppm		97
86) 4-Nitroaniline	8.224	138	75329	49.879	ppm		80
87) 5-Nitro-o-toluidine	8.213	152	82581	50.546	ppm		93
89) Sulfotepp	8.459	322	43369	49.439	ppm		99
90) Octachlorocyclopentene	8.438	307	44943	51.667	ppm		97
92) Thionazin	8.155	107	44578	50.707	ppm		97
93) 4,6-Dinitro-2-methylph...	8.256	198	45665	49.962	ppm		81
94) Diphenylamine	8.310	169	421634	96.701	ppm		99
95) 1,2 Diphenylhydrazine	8.347	77	273839	50.302	ppm		92
96) N-Nitrosodiphenylamine	8.310	169	421975	96.755	ppm		99
97) 1,3,5-Trinirobenzene	8.614	213	23707	50.155	ppm	#	14
98) Diallate	8.588	86	91689	49.154	ppm		98
99) Phorate	8.598	121	50150	47.786	ppm		84

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

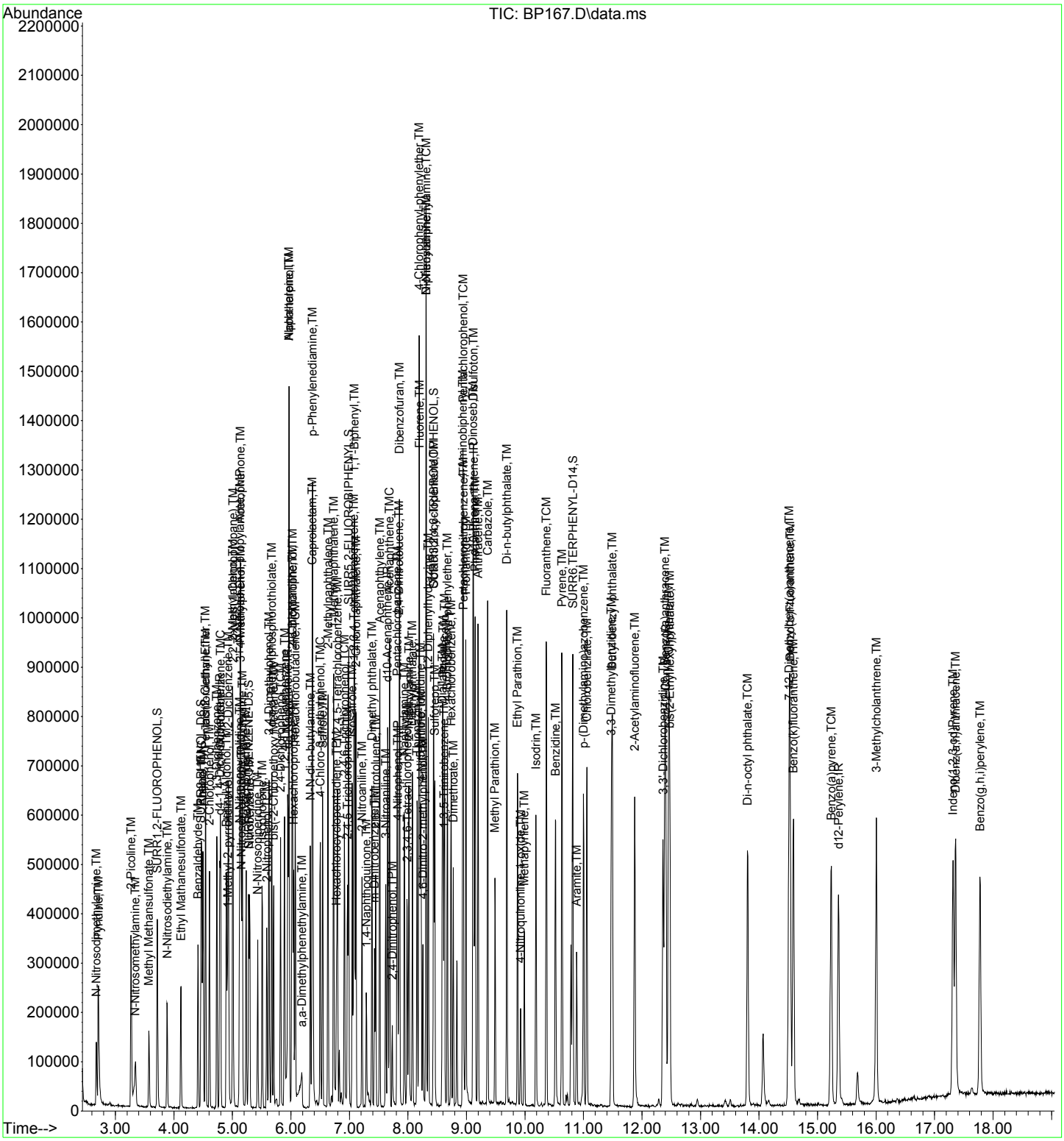
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Phenacetin	8.625	108	153662	51.345	ppm	93
101) 4-Bromophenyl-phenylether	8.673	248	72343	48.416	ppm	91
102) Hexachlorobenzene	8.738	284	87140	49.412	ppm	97
103) Dimethoate	8.775	87	85229	54.385	ppm	95
105) Pentachlorophenol	8.941	266	41920	50.072	ppm	92
106) 4-Aminobiphenyl	8.935	169	279077	51.717	ppm	99
107) Pentachloronitrobenzene	8.946	237	33941	51.736	ppm	98
108) Pronamide	8.989	173	132766	51.578	ppm	96
109) Dinoseb	9.112	211	63163	51.252	ppm	89
110) Disulfoton	9.117	88	133991	49.872	ppm	96
111) Phenanthrene	9.149	178	353721	49.504	ppm	99
112) Anthracene	9.198	178	359807	51.027	ppm	99
113) Carbazole	9.363	167	379738	49.987	ppm	99
114) Di-n-butylphthalate	9.690	149	478712	53.308	ppm	99
115) 4-Nitroquinonline-1-oxide	9.925	190	18539	53.550	ppm	82
116) Fluoranthene	10.364	202	406458	52.240	ppm	97
118) Methyl Parathion	9.486	109	73666	56.282	ppm	88
119) Ethyl Parathion	9.871	97	67689	54.151	ppm	95
120) Methapyrilene	9.989	58	84282	53.608	ppm	92
121) Isodrin	10.187	193	40456	50.421	ppm	91
122) Benzidine	10.524	184	263156	51.842	ppm	99
123) Pyrene	10.631	202	419173	52.865	ppm	99
125) Aramite	10.882	185	57398m	55.646	ppm	
126) p-(Dimethylamino)azobe...	11.000	120	125645	56.419	ppm	90
127) Chlorobenzilate	11.059	139	147002	54.432	ppm	87
128) Butyl benzyl phthalate	11.492	149	218773	53.637	ppm	93
129) 3,3-Dimethylbenzidine	11.476	212	261315	53.166	ppm	98
130) 2-Acetylaminofluorene	11.877	181	198036	53.622	ppm	99
131) 3,3'-Dichlorobenzidine	12.359	252	168837	51.840	ppm	99
132) Benzo(a)anthracene	12.391	228	390661	50.917	ppm	96
133) Chrysene	12.455	228	372674	50.505	ppm	99
134) bis(2-Ethylhexyl)phtha...	12.476	149	294008	51.576	ppm	99
136) Di-n-octyl phthalate	13.803	149	472322	49.869	ppm	97
137) 7,12-Dimethylbenz(a)an...	14.514	256	205425	49.984	ppm	99
138) Benzo(b)Fluoranthene	14.530	252	412130	50.690	ppm	96
139) Benzo(k)fluoranthene	14.589	252	394490	50.003	ppm	98
140) Benzo(a)pyrene	15.236	252	355698	50.691	ppm	97
141) 3-Methylcholanthrene	16.006	268	212757	52.321	ppm	95
142) Indeno(1,2,3-cd)Pyrene	17.317	276	335384	51.027	ppm	89
143) Dibenz(a,h)anthracene	17.360	278	354380	52.564	ppm	96
144) Benzo(g,h,i)perylene	17.777	276	330273	51.929	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP167.D
Acq On : 17 Sep 2018 12:24 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

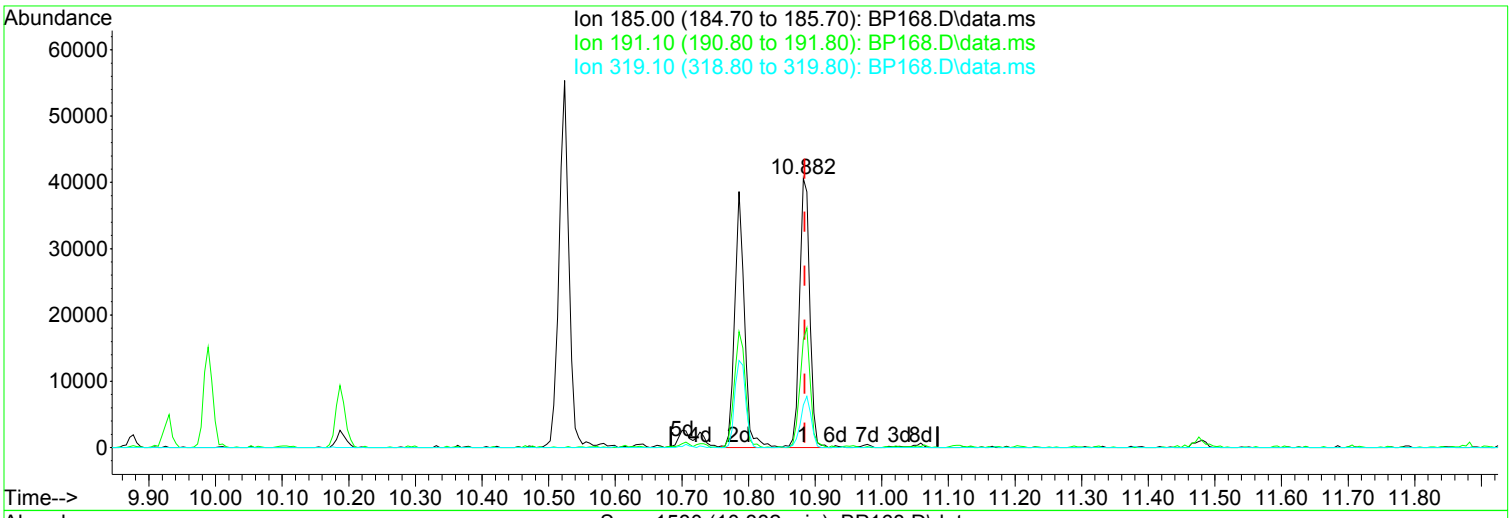
Quant Time: Sep 19 11:00:27 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

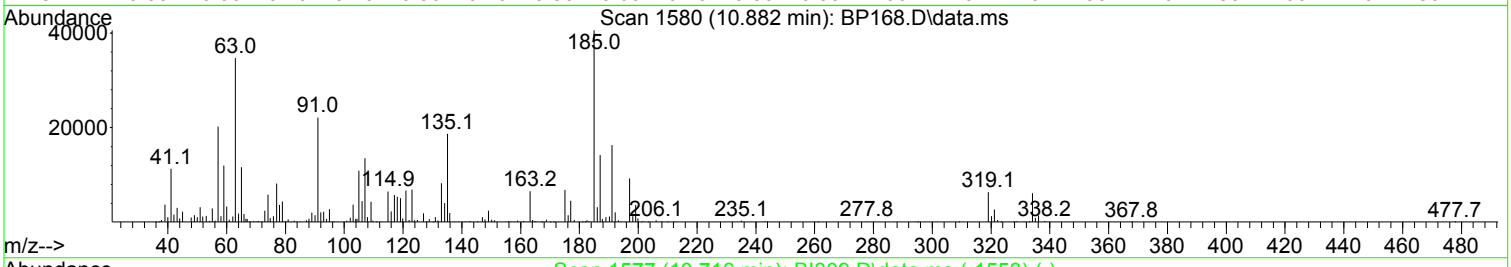


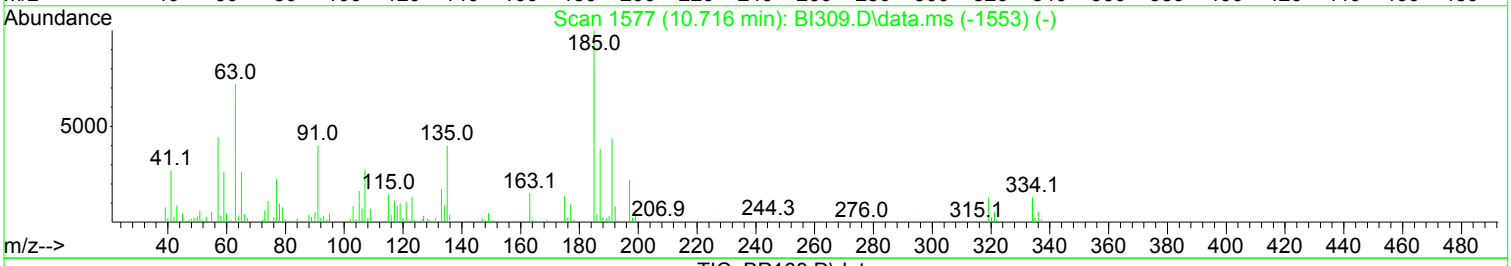
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP168.D
Acq On : 17 Sep 2018 12:53 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 11:00:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP168.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 76.79 ppm m

response 82619

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	40.19
319.10	20.20	15.78
0.00	0.00	0.00

Manual Integration:

After

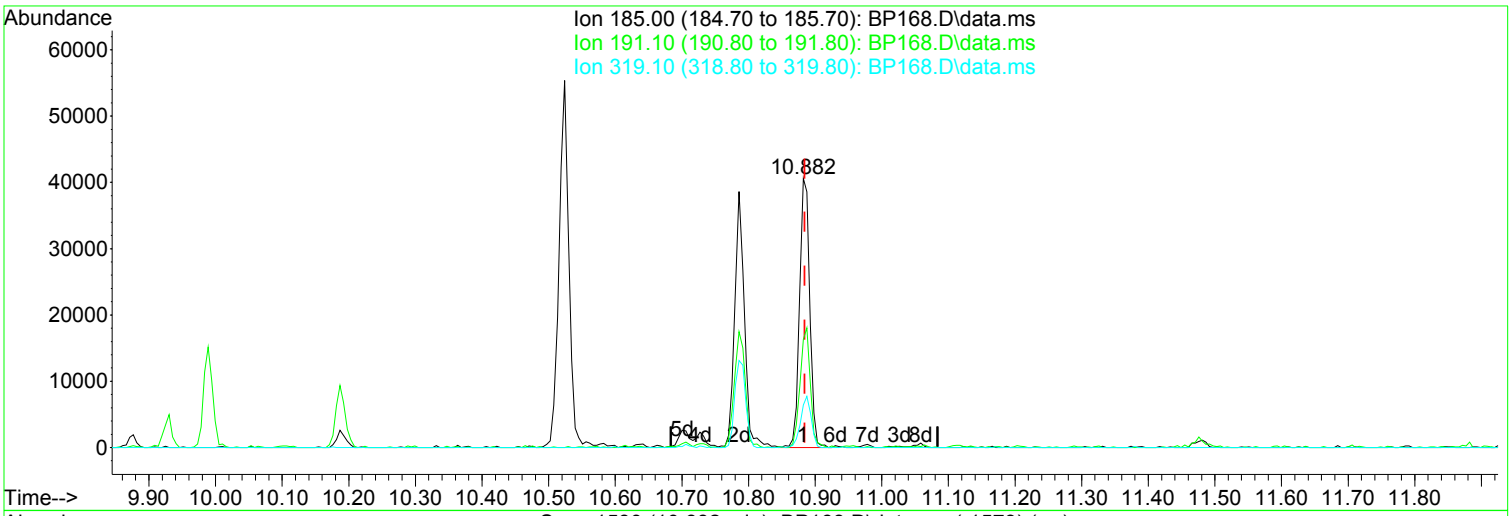
Split Peak.

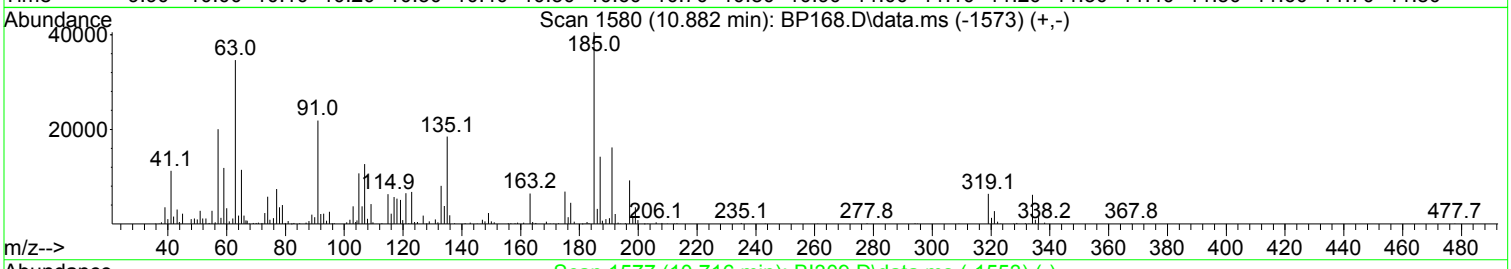
09/19/18

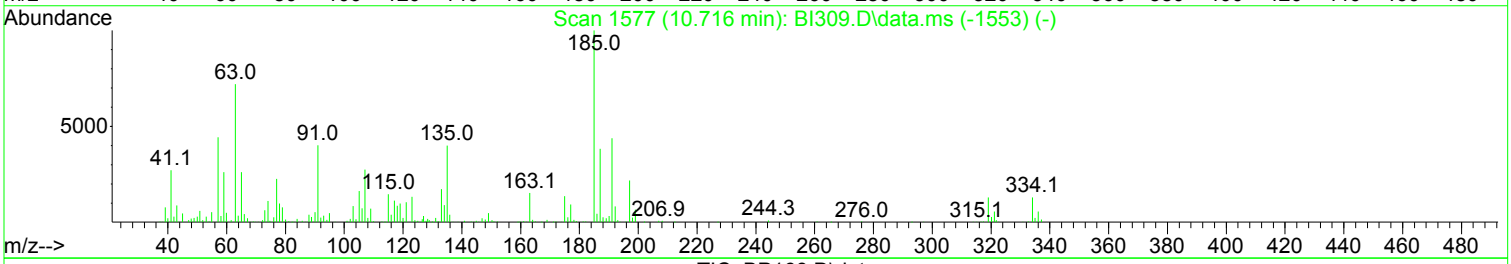
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP168.D
Acq On : 17 Sep 2018 12:53 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 11:00:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP168.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 40.57 ppm

response 43648

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	39.83
319.10	20.20	15.80
0.00	0.00	0.00

Manual Integration:

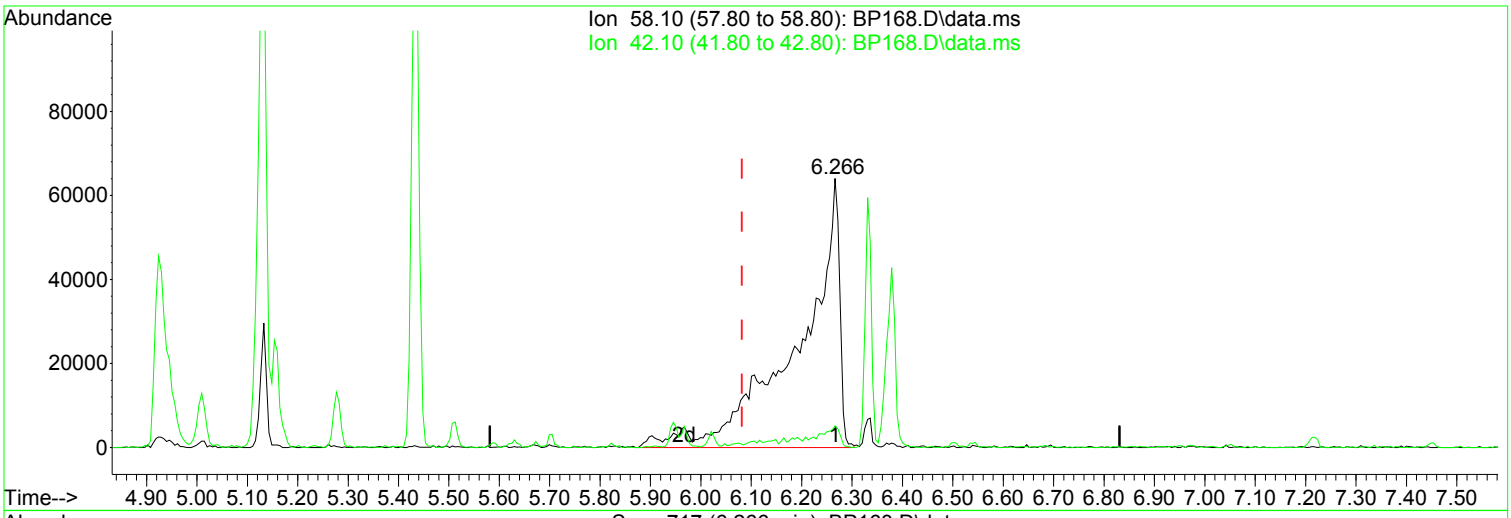
Before

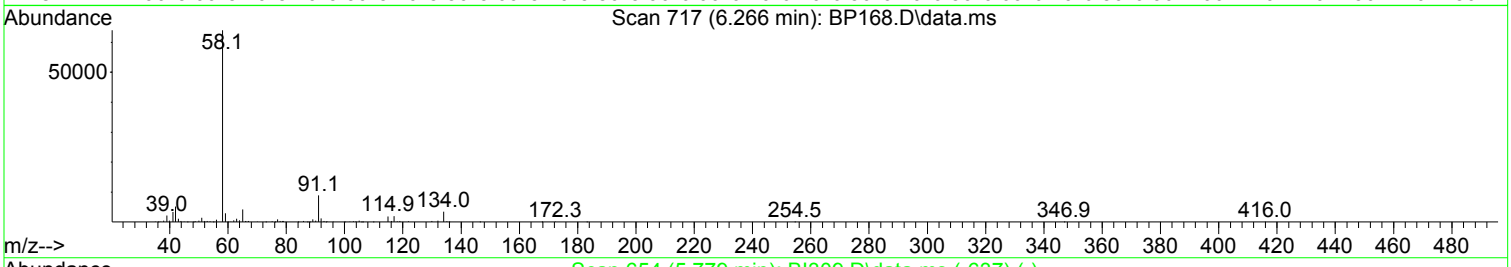
09/19/18

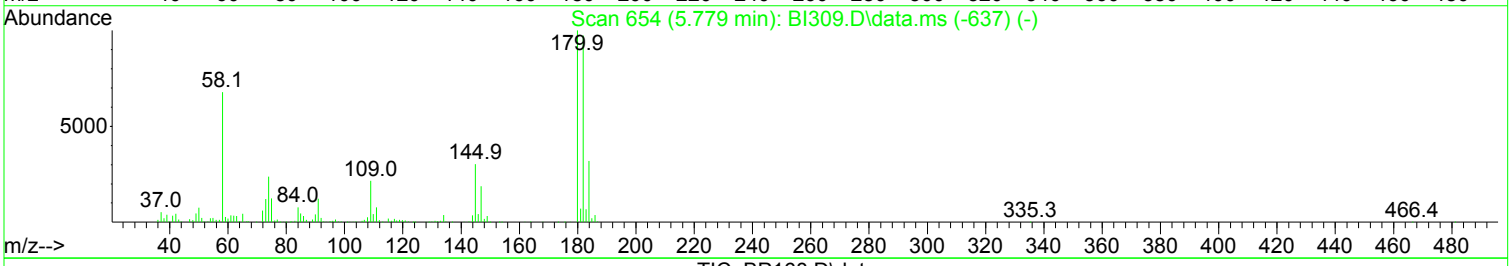
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP168.D
Acq On : 17 Sep 2018 12:53 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 11:00:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP168.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.266min (+ 0.185) 70.73 ppm m

response 354075

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	8.06
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

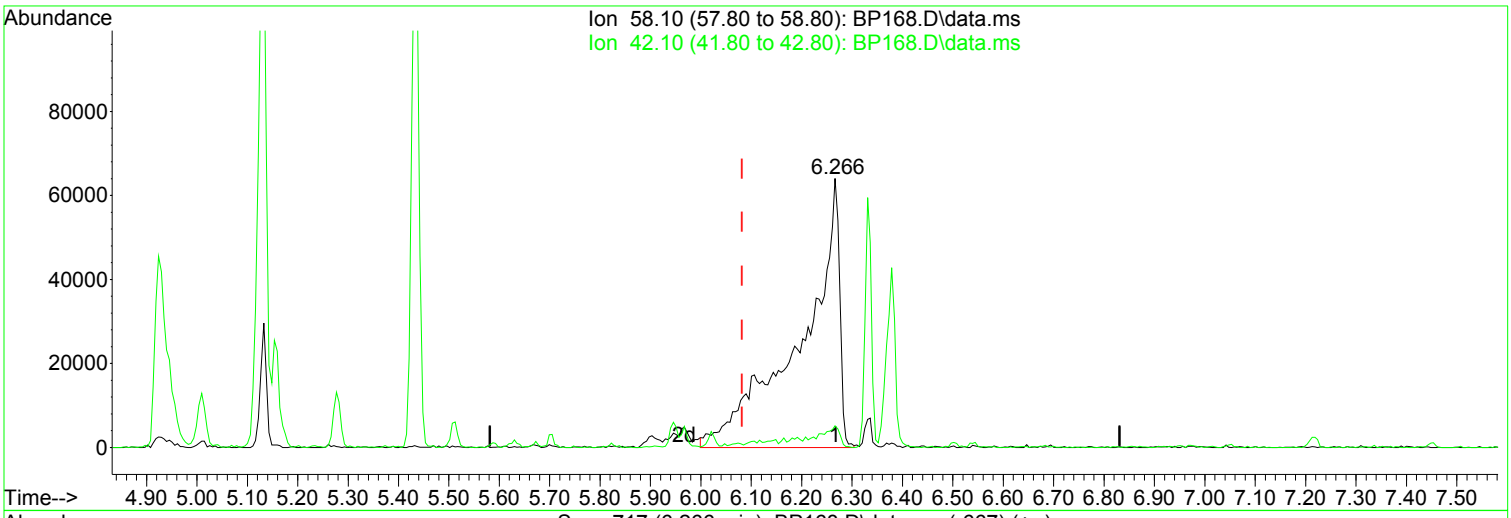
Poor integration.

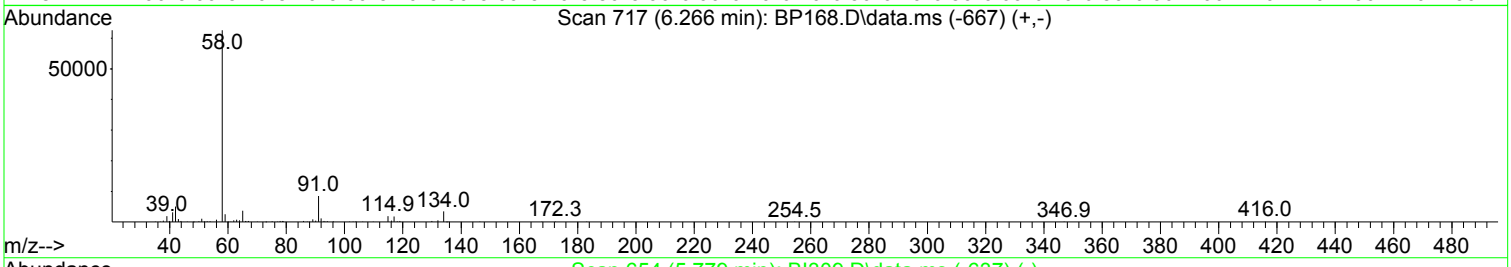
09/19/18

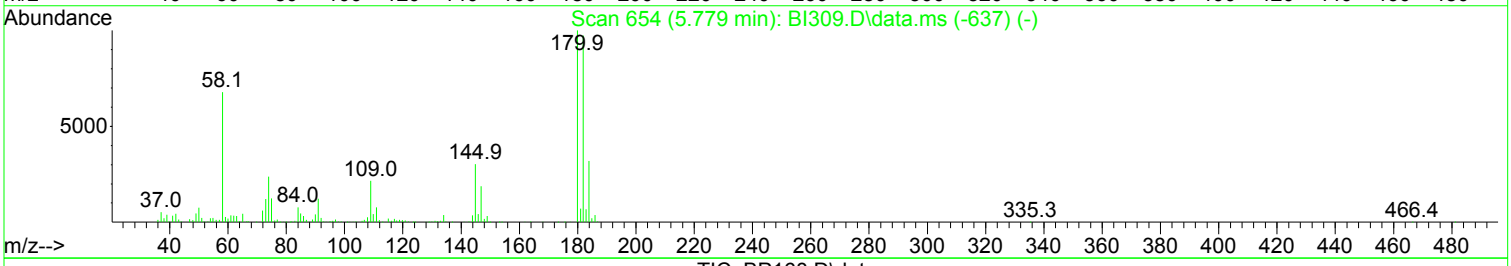
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP168.D
Acq On : 17 Sep 2018 12:53 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 11:00:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP168.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.266min (+ 0.185) 67.24 ppm

response 336622

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	8.11
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP168.D
Acq On : 17 Sep 2018 12:53 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 11:00:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.779	152	73673	40.00	ppm		0.00
33) d8-Naphthalene	5.945	136	292484	40.00	ppm		0.00
57) d10-Acenaphthene	7.652	164	159006	40.00	ppm		0.00
91) d10-Phenanthrene	9.123	188	264745	40.00	ppm		0.00
117) d12-Chrysene	12.407	240	278668	40.00	ppm		0.00
135) d12-Perylene	15.359	264	280881	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.720	112	196697	80.69	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 40.34%				
12) SURR2,PHENOL-D6	4.464	99	238649	79.78	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 39.89%				
34) SURR4,NITROBENZENE-D5	5.277	82	210943	78.34	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 78.34%				
63) SURR5,2-FLUOROBIPHENYL	6.988	172	436324	78.43	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 78.43%				
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	71110	77.39	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 38.70%				
124) SURR6,TERPHENYL-D14	10.818	244	499125	78.53	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 78.53%				
Target Compounds							Qvalue
2) Pyridine	2.710	79	206285	80.422	ppm		98
3) N-Nitrosodimethylamine	2.672	74	109865	82.053	ppm		92
4) 2-Picoline	3.266	93	206082	80.658	ppm		99
5) N-Nitrosomethylamine	3.346	42	100483	78.694	ppm		82
6) Methyl Methansulfonate	3.576	80	94768	80.002	ppm		92
8) N-Nitrosodiethylamine	3.886	102	89476	79.339	ppm		91
9) Ethyl Mathanesulfonate	4.122	79	153684	81.138	ppm		93
10) Benzaldehyde	4.410	106	91447	64.554	ppm		87
11) Aniline	4.501	93	316195	80.350	ppm		93
13) Phenol	4.475	94	261883	81.773	ppm		86
14) bis(2-Clethyl)Ether	4.539	93	170582	79.743	ppm		96
15) Pentachloroethane	4.544	117	68210	78.049	ppm		96
16) 2-Chlorophenol	4.608	128	205090	79.722	ppm		97
17) 1,3-Diclbenzene	4.731	146	211814	78.166	ppm		93
18) 1,4-Dichlorobenzene	4.795	146	214377	79.122	ppm		98
19) 1,2-Diclbenzene	4.929	146	203783	80.457	ppm		96
20) Benzyl Alcohol	4.897	79	166266	86.113	ppm		96
21) 1-Methyl-2-pyrrolidinone	4.924	99	137609	82.754	ppm		90
22) 2,2'-oxybis(1-Chloropr...	5.009	45	214348	78.247	ppm		89
23) 2-Methylphenol	5.009	108	170768	77.911	ppm		96
24) 3+4-Methylphenol	5.143	108	205098	82.702	ppm		99
25) Acetophenone	5.138	105	270154	78.682	ppm		93
26) N-Nitroso-Di-n-propyla...	5.132	70	158311	80.790	ppm		84
27) N-Nitrosopyrrolidine	5.127	100	108778	81.790	ppm		68
28) N-Nitrosomorpholine	5.154	56	121718	78.382	ppm		89
29) o-Toluidine	5.170	106	316304	81.381	ppm		74
30) Hexachloroethane	5.234	117	89574	78.294	ppm		86
31) o,o,o-Triethylphosphor...	5.673	198	99242	81.649	ppm	#	15
32) Alpha-terpinol	5.967	121	79676	79.707	ppm		87
35) Nitrobenzene	5.298	77	203095	79.632	ppm		98
36) N-Nitrosopiperidine	5.432	42	130558	77.248	ppm		88
37) Isophorone	5.512	82	305408	79.172	ppm		96
38) 2-Nitrophenol	5.587	139	114574	80.702	ppm		90

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP168.D
Acq On : 17 Sep 2018 12:53 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 11:00:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 2,4-Dimethylphenol	5.625	107	208007	79.170	ppm		98
41) bis(-2-Chloroethoxy)Me...	5.705	93	217242	77.222	ppm		99
42) 2,4-Dichlorophenol	5.822	162	168873	80.461	ppm		98
43) a,a-Dimethylphenethyla...	6.266	58	354075m	70.730	ppm		
44) 1,2,4-Trichlorobenzene	5.892	180	173137	78.205	ppm		95
45) Naphthalene	5.967	128	588228	78.575	ppm		99
46) 4-Chloroaniline	6.020	127	253349	79.620	ppm		96
47) 2,6-Dichlorophenol	6.031	162	166516	80.494	ppm		96
48) Hexachlorobutadiene	6.074	225	105761	79.652	ppm		87
49) Hexachloropropene	6.047	213	123766	78.324	ppm		99
50) 4-Chloro-3-methylphenol	6.502	107	171617	77.866	ppm		97
51) N-N-di-n-butylamine	6.331	84	142915	70.869	ppm		97
52) Caprolactam	6.379	113	60029	76.212	ppm	#	68
53) p-Phenylenediamine	6.373	80	293190	148.564	ppm		89
54) Safrole	6.545	162	148981	79.105	ppm		92
55) 2-Methylnaphthalene	6.635	142	374758	78.709	ppm		99
56) 1-Methylnaphthalene	6.732	142	374726	79.369	ppm		99
58) Hexachlorocyclopentadiene	6.780	237	70651	79.037	ppm		95
59) 1,2,4,5-Tetrachloroben...	6.796	216	172418	78.075	ppm		99
60) 1,2,3,4-Tetrachloroben...	7.074	216	185646	77.539	ppm		98
61) 2,4,6-Trichlorophenol	6.914	196	117889	81.958	ppm		97
62) 2,4,5-Trichlorophenol	6.967	196	106435	77.160	ppm		95
64) Isosafrole	7.053	104	82283	76.437	ppm		94
65) 1,1'-Biphenyl	7.090	154	519813	78.167	ppm		99
66) 2-Chloronaphthalene	7.111	162	350006	78.309	ppm		96
67) 2-Nitroaniline	7.218	65	110677	75.226	ppm		94
68) 1,4-Naphthoquinone	7.288	158	63677	83.472	ppm	#	58
69) m-Dinitrobenzene	7.432	168	59687	72.699	ppm		84
70) Acenaphthylene	7.518	152	584776	78.758	ppm		99
71) Dimethyl phthalate	7.384	163	397487	76.296	ppm		99
72) 2,6-Dinitrotoluene	7.454	165	93335	78.504	ppm		96
73) Acenaphthene	7.684	153	373218	77.165	ppm		99
74) 3-Nitroaniline	7.625	138	114977	77.510	ppm		92
75) 2,4-Dinitrophenol	7.732	184	45248	81.771	ppm		61
76) Dibenzofuran	7.855	168	514601	78.279	ppm		98
77) 2,4-Dinitrotoluene	7.855	165	126922	79.526	ppm		80
78) 4-Nitrophenol	7.823	65	76413	75.473	ppm	#	32
79) Pentachlorobenzene	7.817	250	161405	77.730	ppm		95
80) 1-Napthylamine	7.941	143	317809	73.715	ppm		97
81) 2-Napthylamine	8.021	143	357920	77.756	ppm		97
82) 2,3,4,6-Tetrachlorophenol	7.989	232	91925	82.067	ppm		96
83) Fluorene	8.197	166	399086	76.830	ppm		95
84) 4-Chlorophenyl-phenyle...	8.192	204	186968	75.714	ppm		93
85) Diethylphthalate	8.080	149	425319	78.609	ppm		97
86) 4-Nitroaniline	8.229	138	123291	80.226	ppm		90
87) 5-Nitro-o-toluidine	8.219	152	133405	80.242	ppm		98
89) Sulfotepp	8.459	322	71436	80.025	ppm		89
90) Octachlorocyclopentene	8.438	307	75789	85.621	ppm		97
92) Thionazin	8.160	107	72479	81.628	ppm		92
93) 4,6-Dinitro-2-methylph...	8.256	198	81832	88.647	ppm		81
94) Diphenylamine	8.315	169	678684	154.114	ppm		99
95) 1,2 Diphenylhydrazine	8.347	77	418524	76.119	ppm		89
96) N-Nitrosodiphenylamine	8.315	169	678684	154.076	ppm		99
97) 1,3,5-Trinirobenzene	8.620	213	39695	83.148	ppm	#	7
98) Diallate	8.588	86	149003	79.089	ppm		97
99) Phorate	8.598	121	87219	82.284	ppm		94

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP168.D
Acq On : 17 Sep 2018 12:53 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 11:00:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

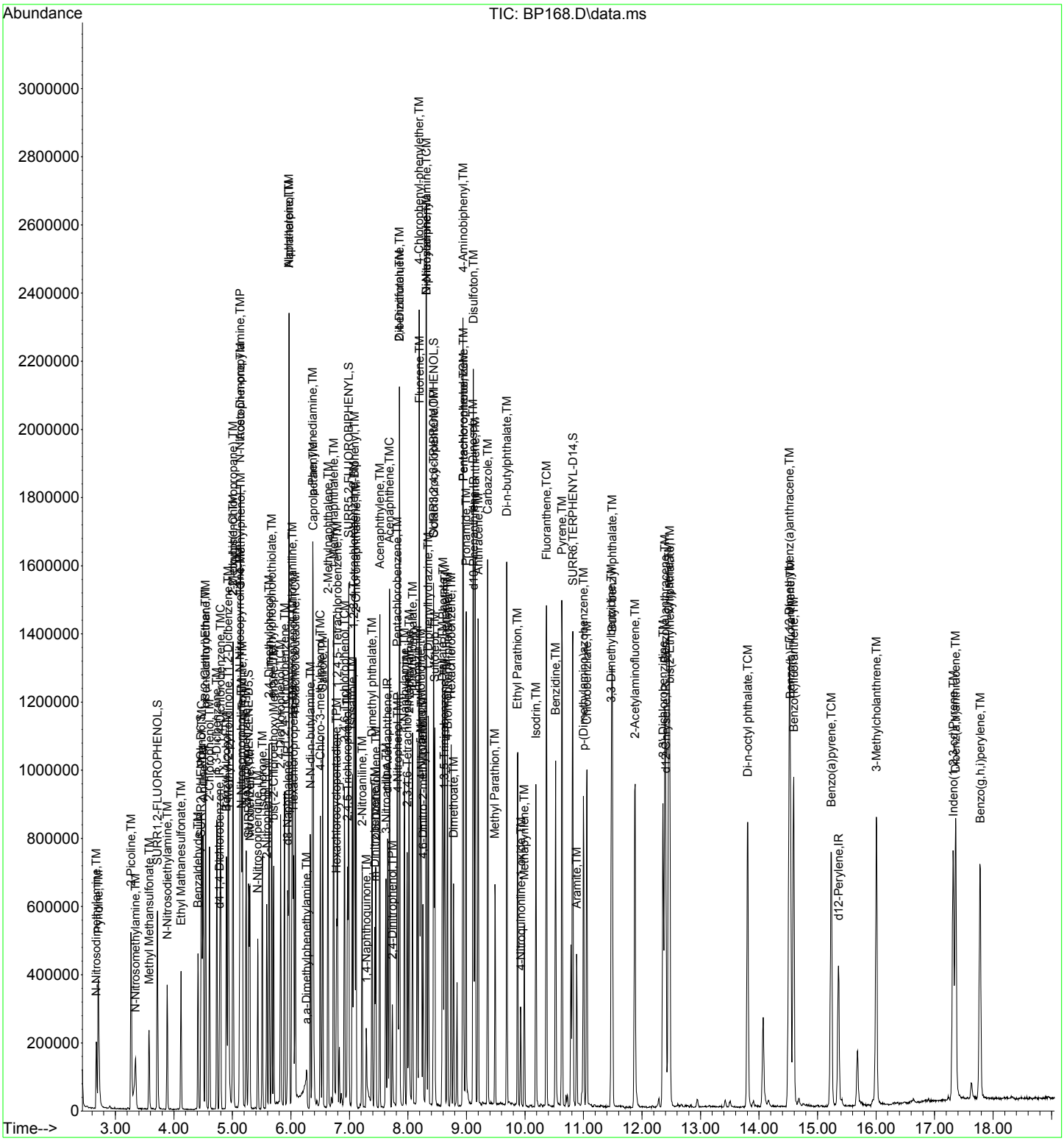
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Phenacetin	8.630	108	247034	81.728	ppm	97
101) 4-Bromophenyl-phenylether	8.679	248	115035	76.226	ppm	93
102) Hexachlorobenzene	8.737	284	134051	75.261	ppm	95
103) Dimethoate	8.780	87	121004	76.449	ppm	96
105) Pentachlorophenol	8.946	266	74180	87.729	ppm	96
106) 4-Aminobiphenyl	8.941	169	443683	81.408	ppm	99
107) Pentachloronitrobenzene	8.946	237	56790	85.708	ppm	96
108) Pronamide	8.994	173	217316	83.589	ppm	98
109) Dinoseb	9.112	211	106518	85.575	ppm	98
110) Disulfoton	9.117	88	216337	79.724	ppm	94
111) Phenanthrene	9.149	178	571528	79.195	ppm	99
112) Anthracene	9.203	178	570110	80.052	ppm	99
113) Carbazole	9.363	167	623440	81.254	ppm	100
114) Di-n-butylphthalate	9.690	149	764976	84.343	ppm	99
115) 4-Nitroquinonline-1-oxide	9.930	190	29565	84.554	ppm	91
116) Fluoranthene	10.369	202	657729	83.698	ppm	98
118) Methyl Parathion	9.486	109	107683	78.877	ppm	89
119) Ethyl Parathion	9.871	97	107115	82.156	ppm	99
120) Methapyrilene	9.989	58	130291	79.452	ppm	90
121) Isodrin	10.187	193	64155	76.659	ppm	88
122) Benzidine	10.524	184	429759	81.170	ppm	98
123) Pyrene	10.631	202	676926	81.849	ppm	99
125) Aramite	10.882	185	82619m	76.792	ppm	
126) p-(Dimethylamino)azobe...	11.000	120	190731	82.111	ppm	88
127) Chlorobenzilate	11.059	139	220978	78.447	ppm	79
128) Butyl benzyl phthalate	11.492	149	340026	79.925	ppm	91
129) 3,3-Dimethylbenzidine	11.476	212	420199	81.964	ppm	98
130) 2-Acetylaminofluorene	11.882	181	323242	83.912	ppm	98
131) 3,3'-Dichlorobenzidine	12.358	252	266856	78.555	ppm	98
132) Benzo(a)anthracene	12.391	228	619487	77.409	ppm	98
133) Chrysene	12.455	228	605548	78.678	ppm	99
134) bis(2-Ethylhexyl)phtha...	12.476	149	474168	79.748	ppm	95
136) Di-n-octyl phthalate	13.808	149	792478	83.557	ppm	96
137) 7,12-Dimethylbenz(a)an...	14.519	256	338855	82.335	ppm	98
138) Benzo(b)Fluoranthene	14.535	252	670033	82.296	ppm	97
139) Benzo(k)fluoranthene	14.594	252	630464	79.802	ppm	98
140) Benzo(a)pyrene	15.236	252	578668	82.353	ppm	96
141) 3-Methylcholanthrene	16.006	268	337996	83.005	ppm	98
142) Indeno(1,2,3-cd)Pyrene	17.322	276	546864	83.088	ppm	99
143) Dibenz(a,h)anthracene	17.359	278	555859	82.334	ppm	97
144) Benzo(g,h,i)perylene	17.782	276	507794	79.731	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP168.D
Acq On : 17 Sep 2018 12:53 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

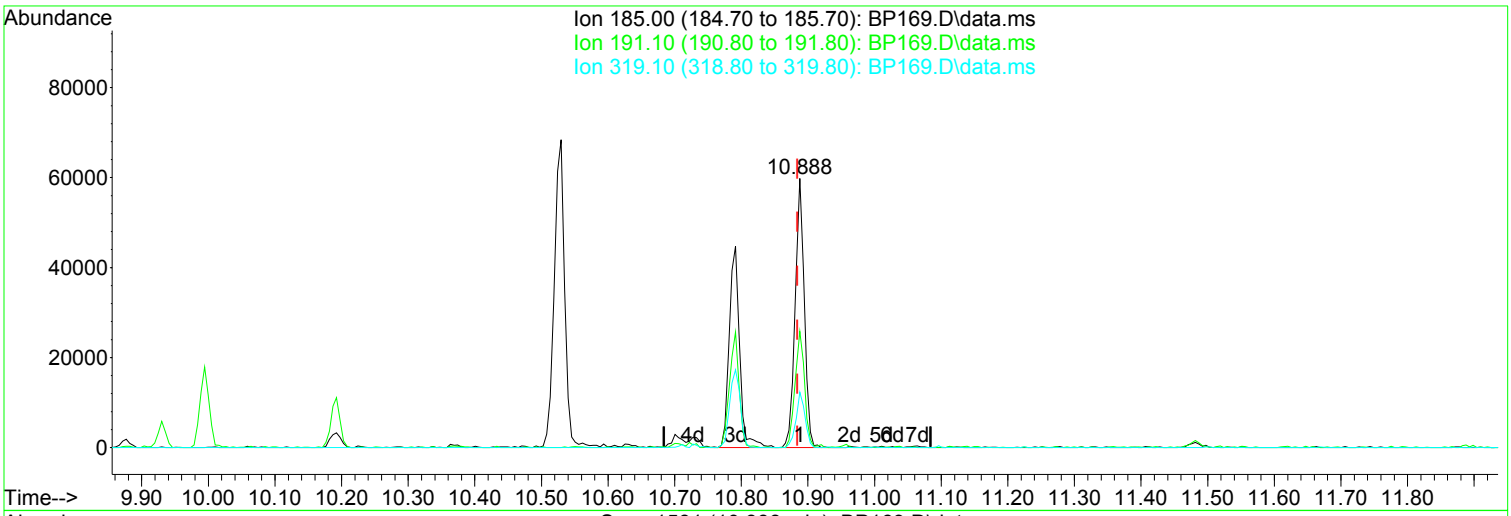
Quant Time: Sep 19 11:00:34 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

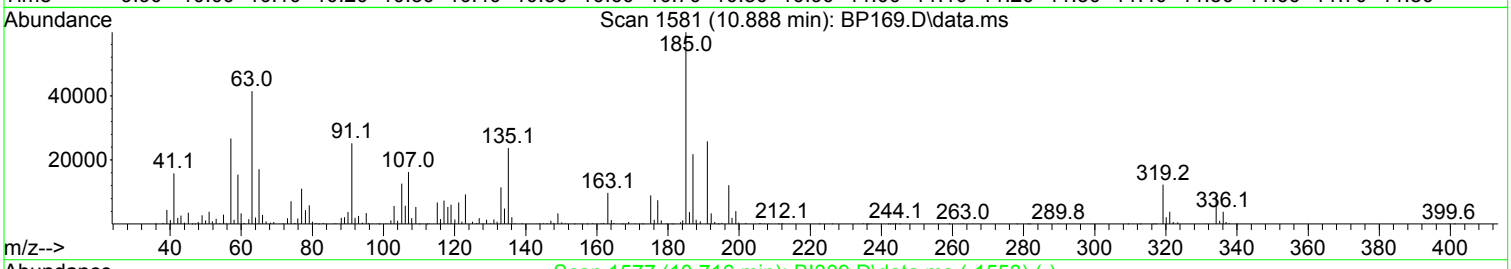


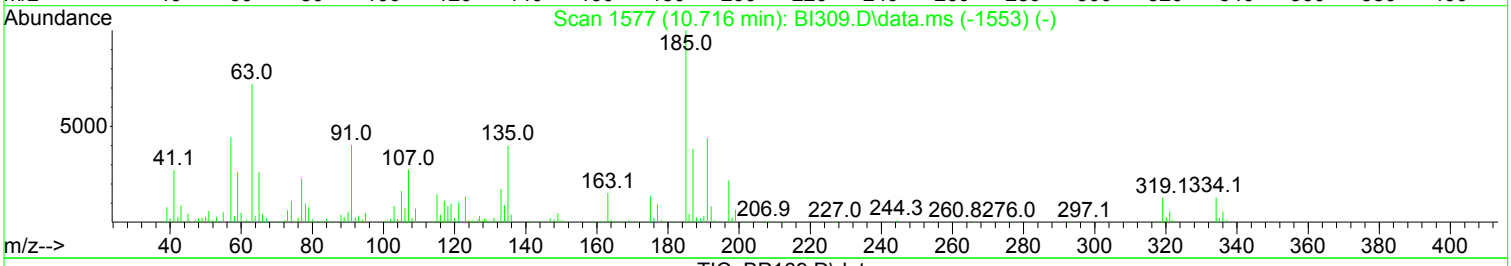
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP169.D
Acq On : 17 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 11:00:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP169.D\data.ms

(125) Aramite (TM)

10.888min (+ 0.003) 101.62 ppm m

response 105989

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	43.23
319.10	20.20	20.56
0.00	0.00	0.00

Manual Integration:

After

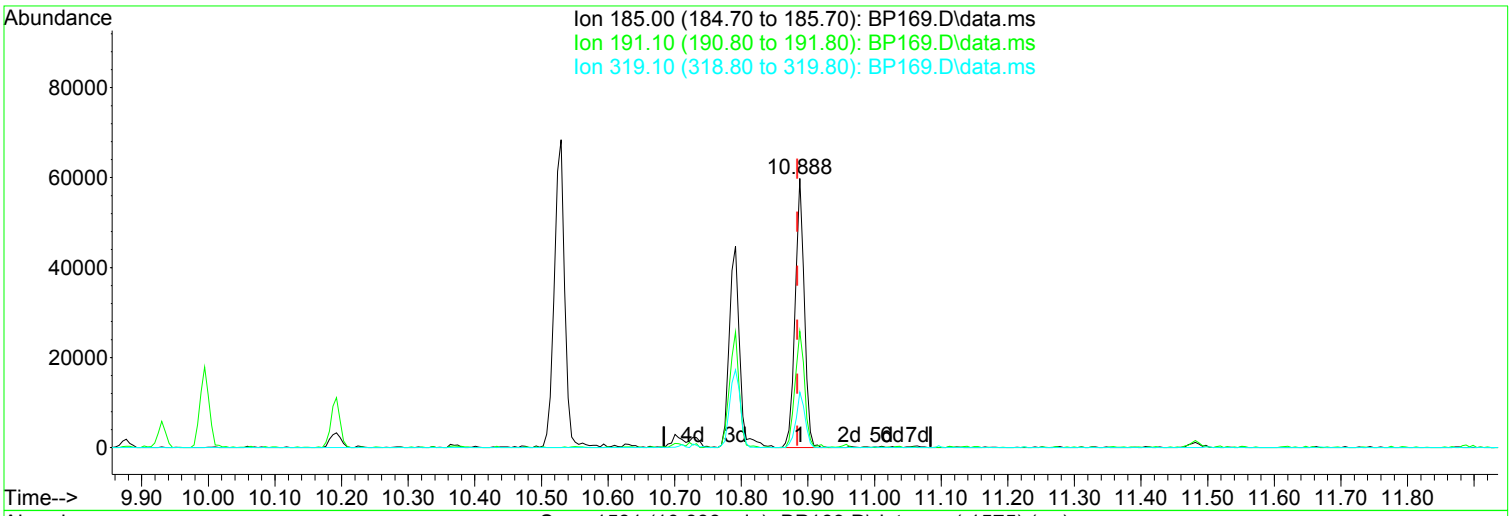
Split Peak.

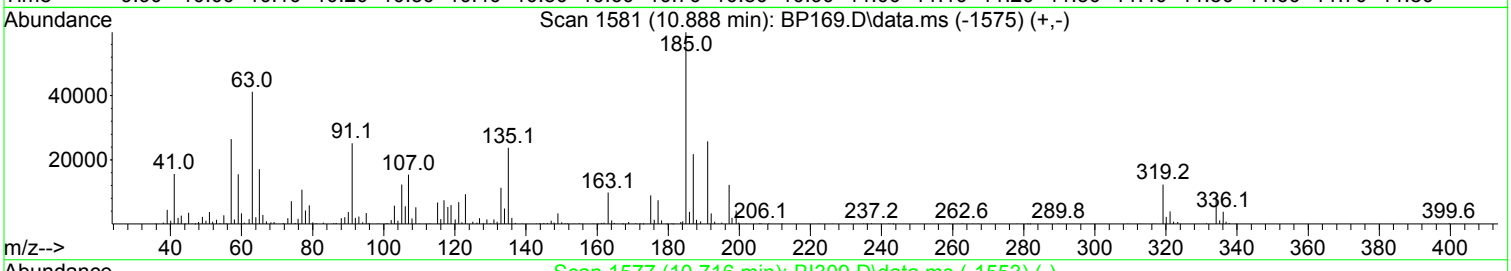
09/19/18

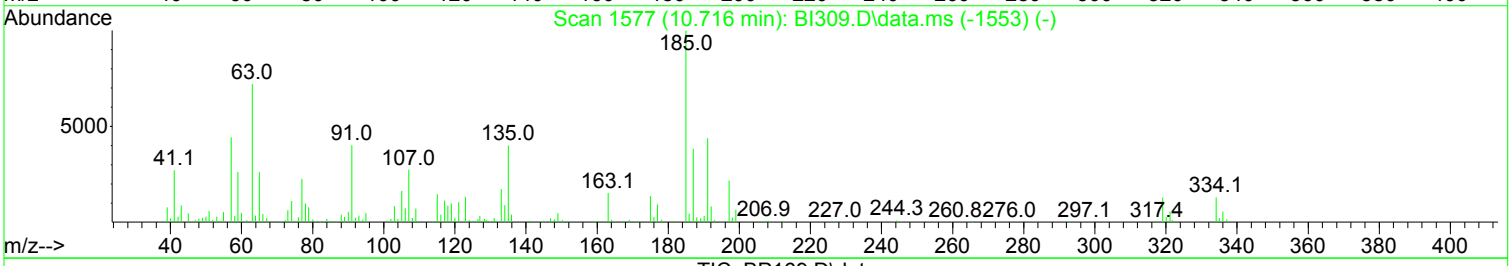
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP169.D
Acq On : 17 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 11:00:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP169.D\data.ms

(125) Aramite (TM)

10.888min (+ 0.003) 54.95 ppm

response 57310

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	43.14
319.10	20.20	20.56
0.00	0.00	0.00

Manual Integration:

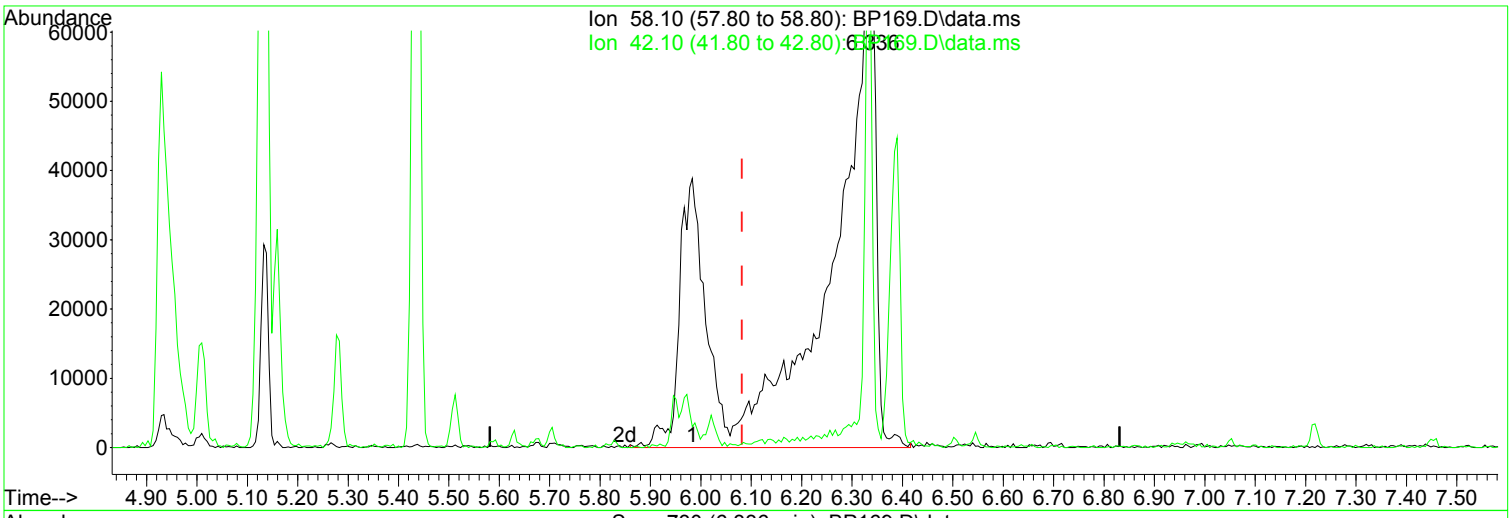
Before

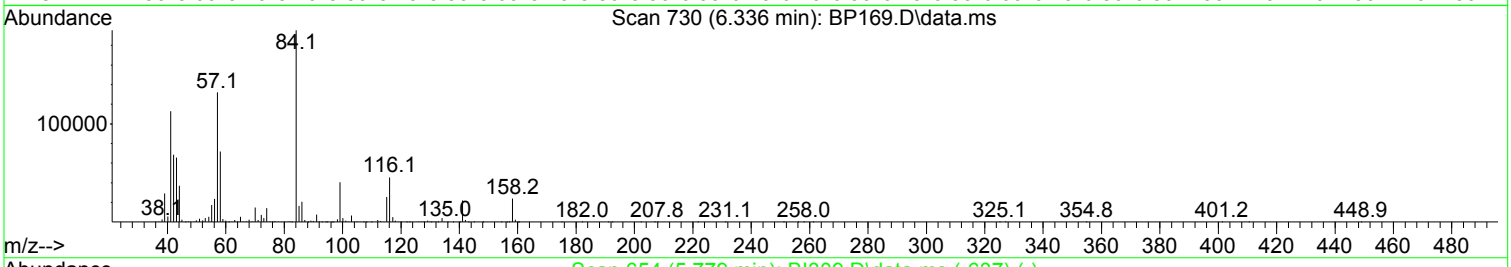
09/19/18

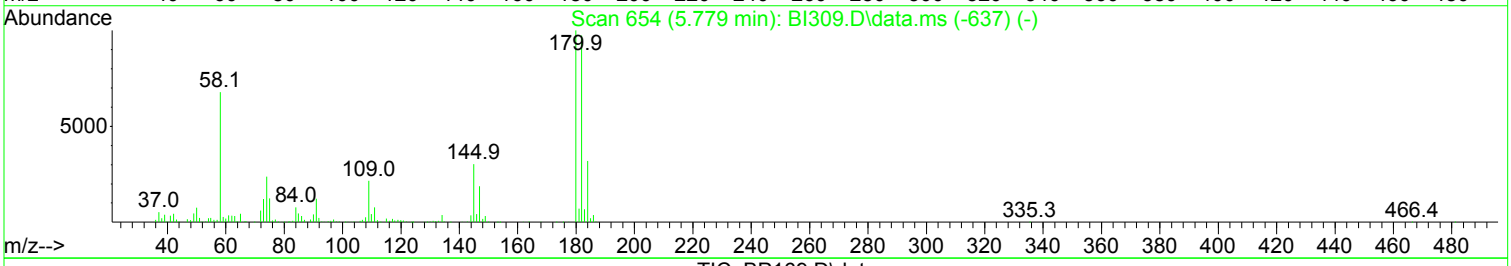
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP169.D
Acq On : 17 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 11:00:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP169.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.336min (+ 0.254) 104.69 ppm m

response 533758

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	95.12#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

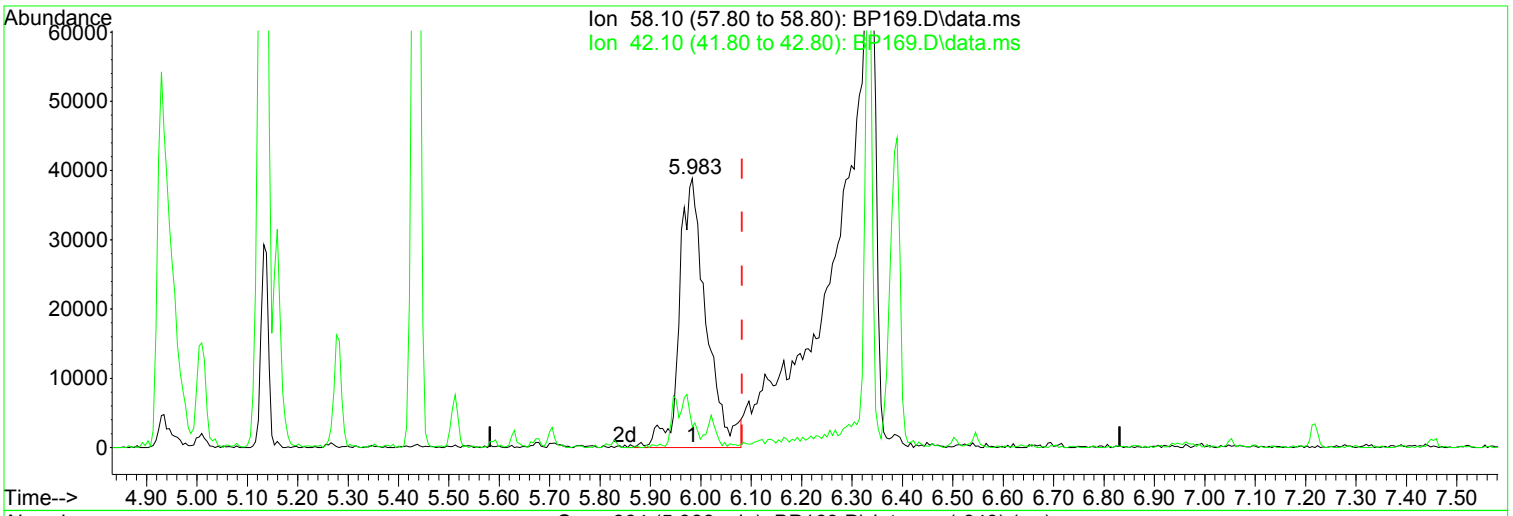
Poor integration.

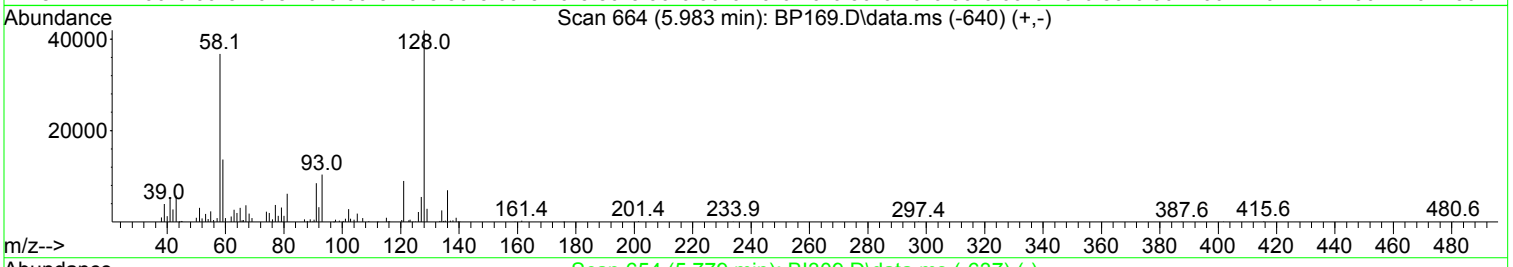
09/19/18

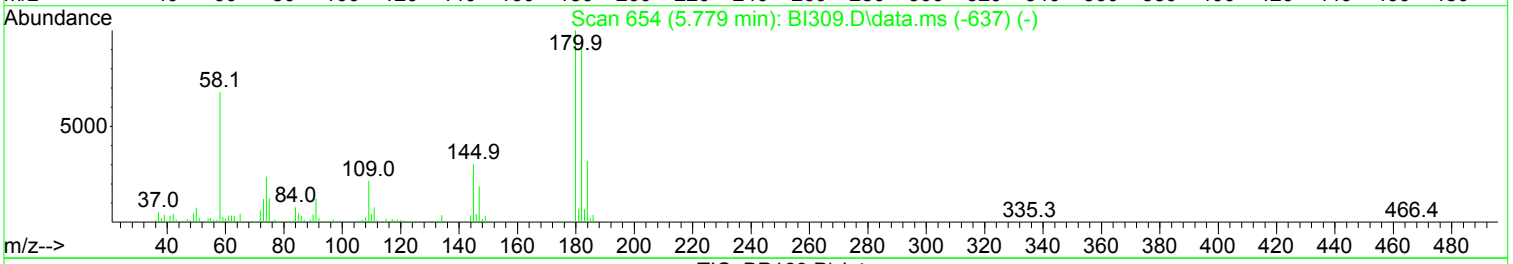
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP169.D
Acq On : 17 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 11:00:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP169.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.983min (-0.099) 28.18 ppm

response 143670

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	7.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

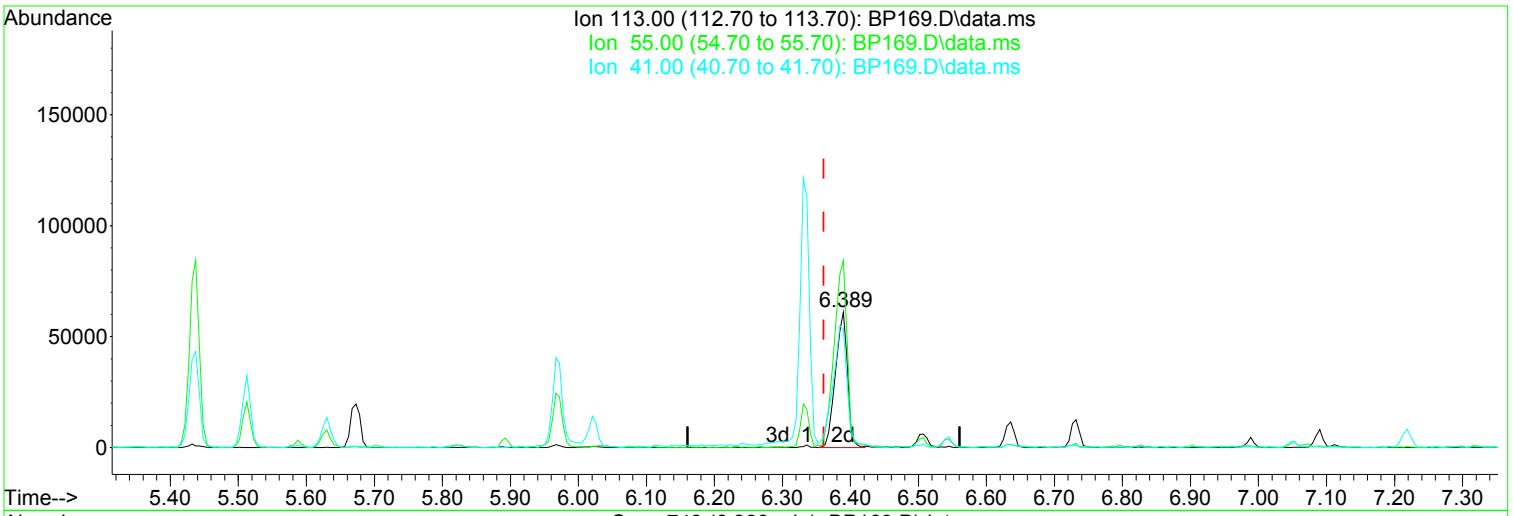
Before

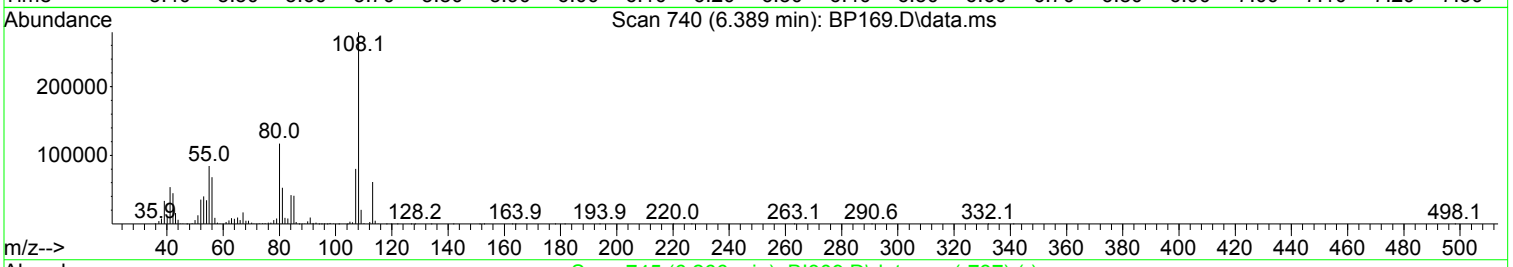
09/19/18

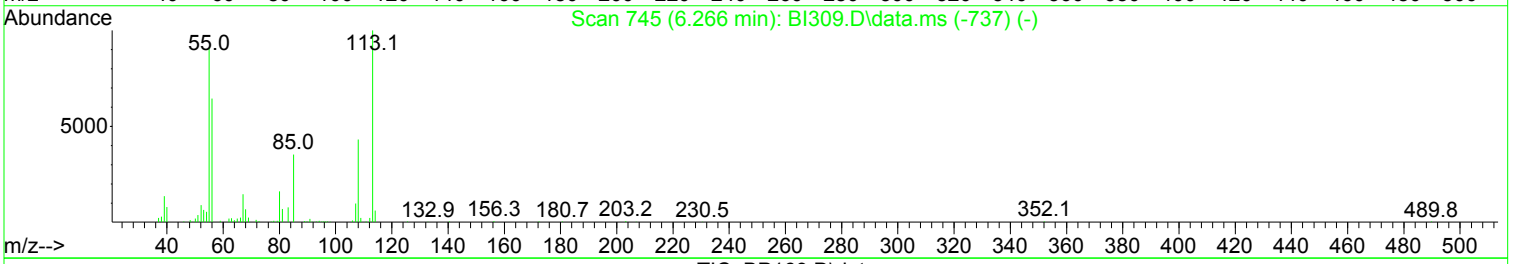
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP169.D
Acq On : 17 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 11:00:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP169.D\data.ms

(52) Caprolactam (TM)

6.389min (+ 0.028) 93.26 ppm m

response 74816

Ion	Exp%	Act%
113.00	100.00	100.00
55.00	123.70	138.12
41.00	65.00	87.59#
0.00	0.00	0.00

Manual Integration:

After

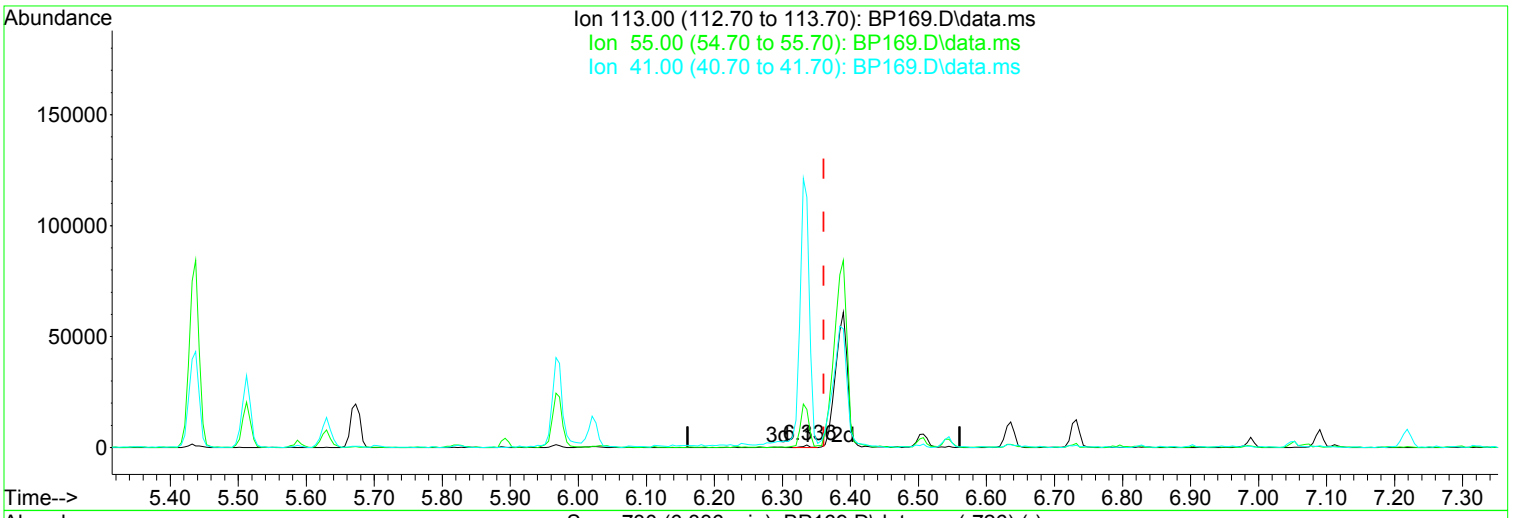
Poor integration.

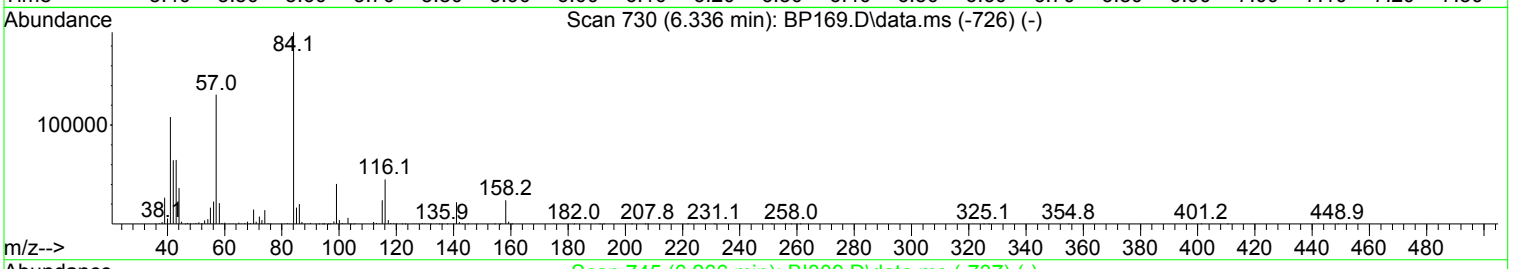
09/19/18

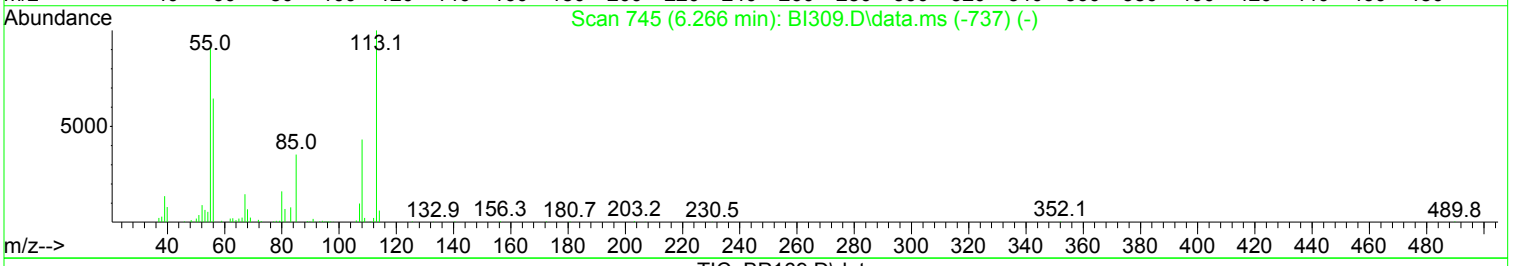
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP169.D
Acq On : 17 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 11:00:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP169.D\data.ms

(52) Caprolactam (TM)

6.336min (-0.025) 0.83 ppm

response 663

Ion	Exp%	Act%
113.00	100.00	100.00
55.00	123.70	1514.73#
41.00	65.00	10084.73#
0.00	0.00	0.00

Manual Integration:

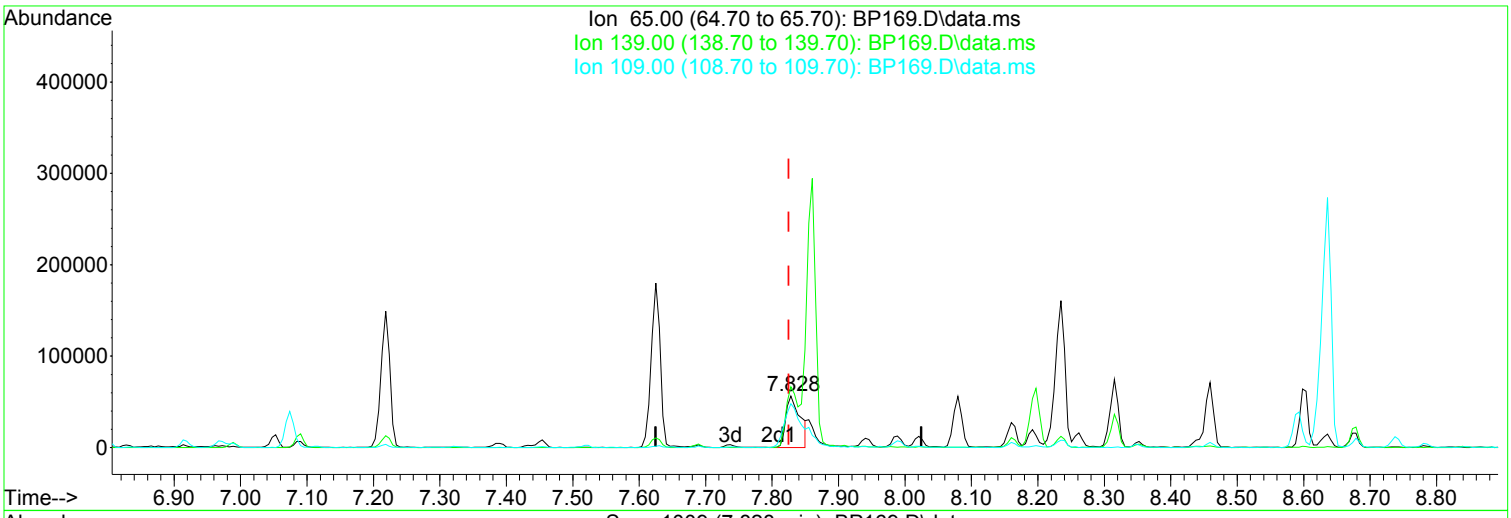
Before

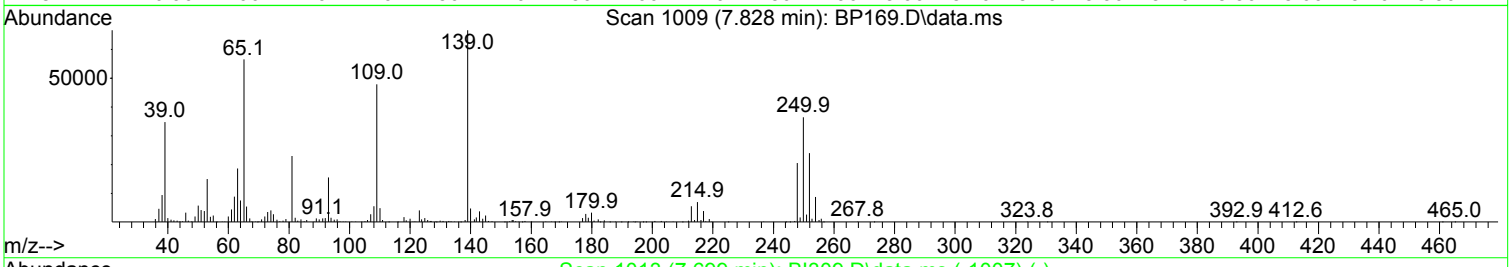
09/19/18

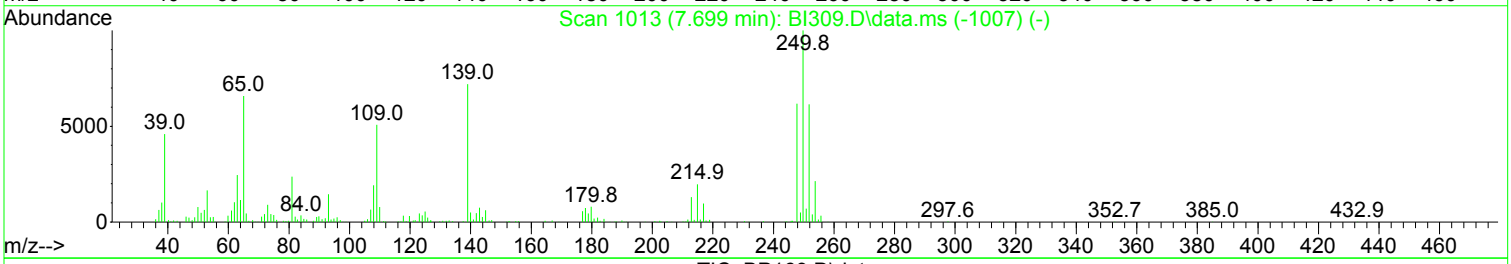
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP169.D
Acq On : 17 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 11:00:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP169.D\data.ms

(78) 4-Nitrophenol (TMP)

7.828min (+ 0.003) 82.51 ppm m

response 85110

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	117.97
109.00	86.40	84.82
0.00	0.00	0.00

Manual Integration:

After

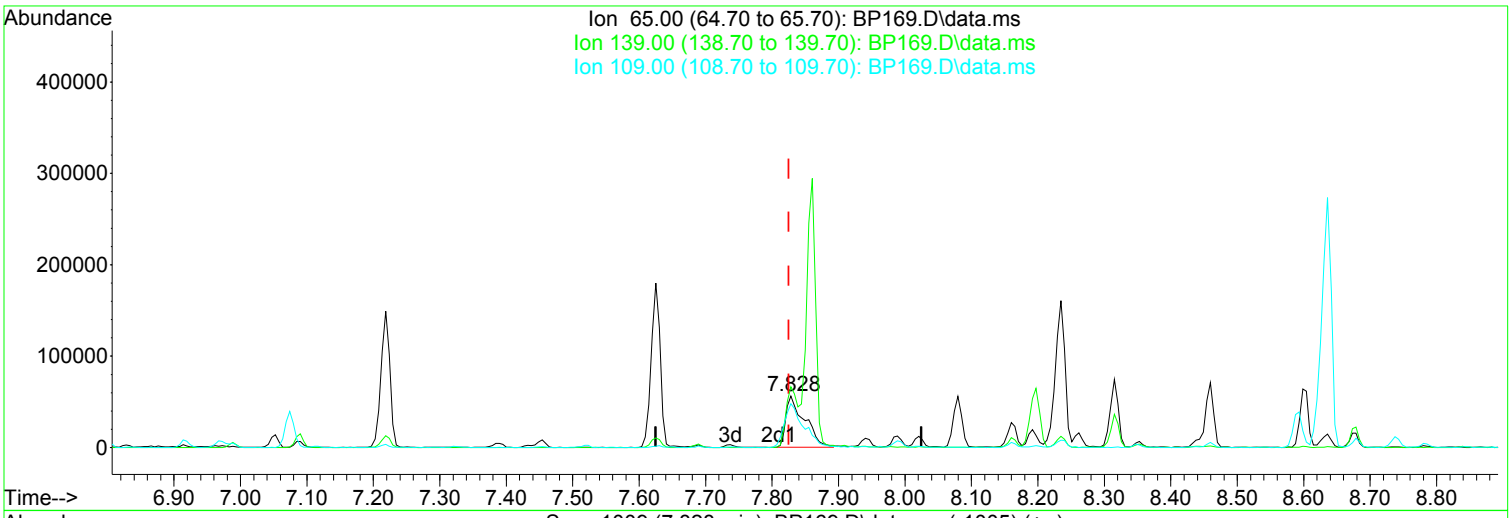
Poor integration.

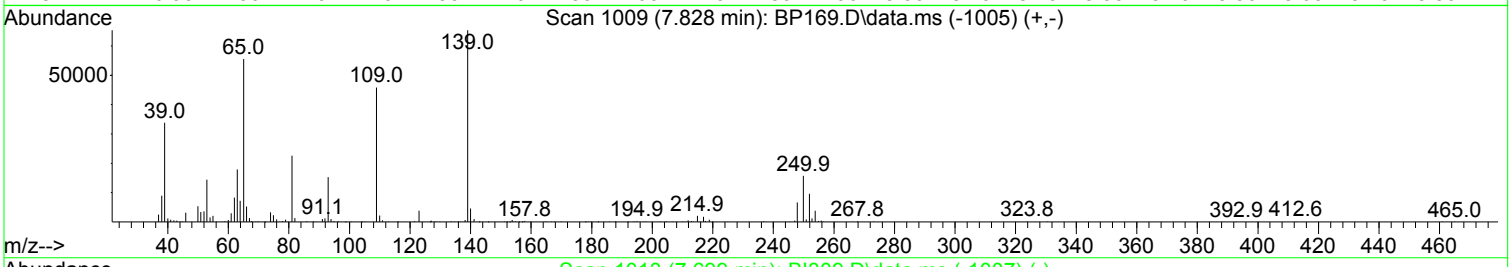
09/19/18

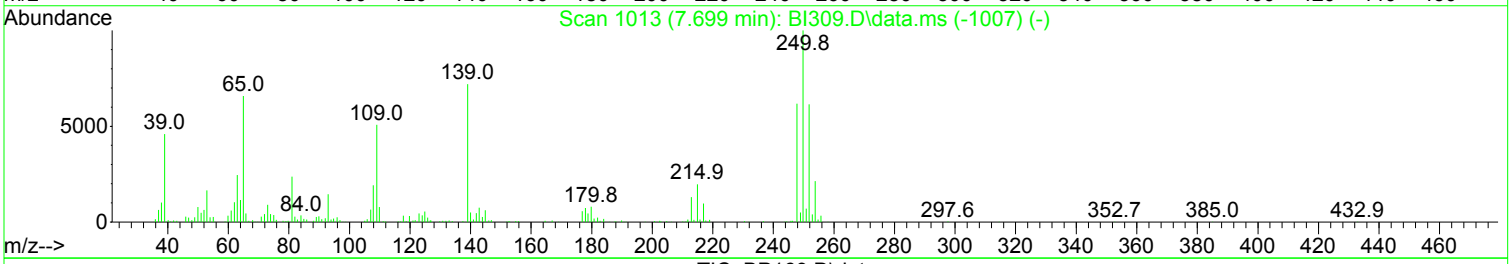
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP169.D
Acq On : 17 Sep 2018 2:05 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 11:00:42 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP169.D\data.ms

(78) 4-Nitrophenol (TMP)

7.828min (+ 0.003) 106.46 ppm

response 109810

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	117.47
109.00	86.40	82.53
0.00	0.00	0.00

Manual Integration:

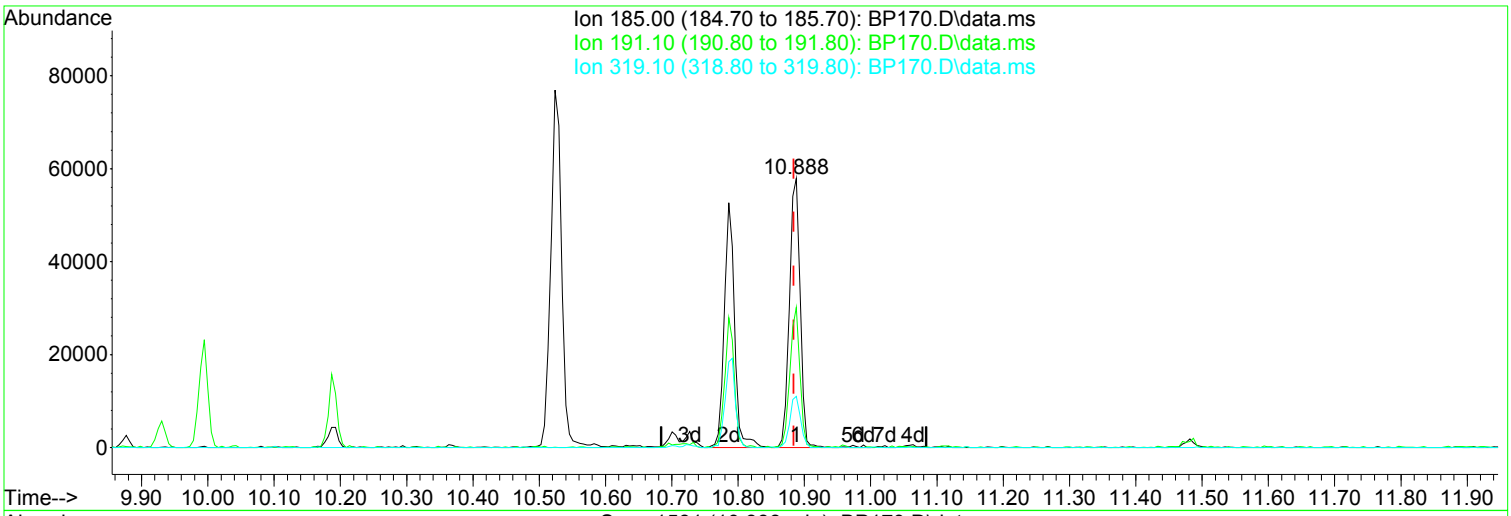
Before

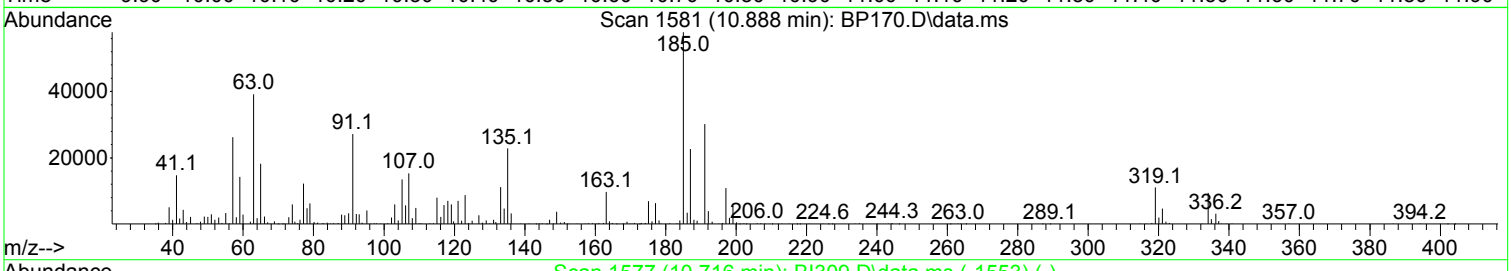
09/19/18

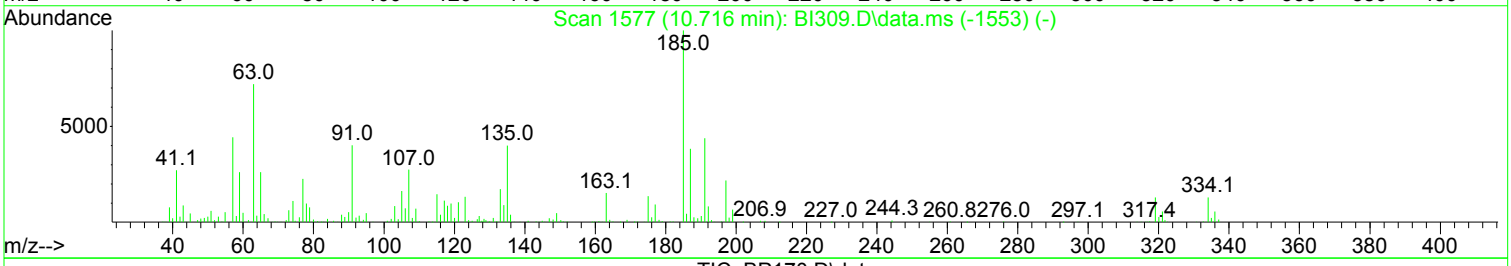
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP170.D\data.ms

(125) Aramite (TM)

10.888min (+ 0.003) 112.33 ppm m

response 122910

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	52.11
319.10	20.20	19.07
0.00	0.00	0.00

Manual Integration:

After

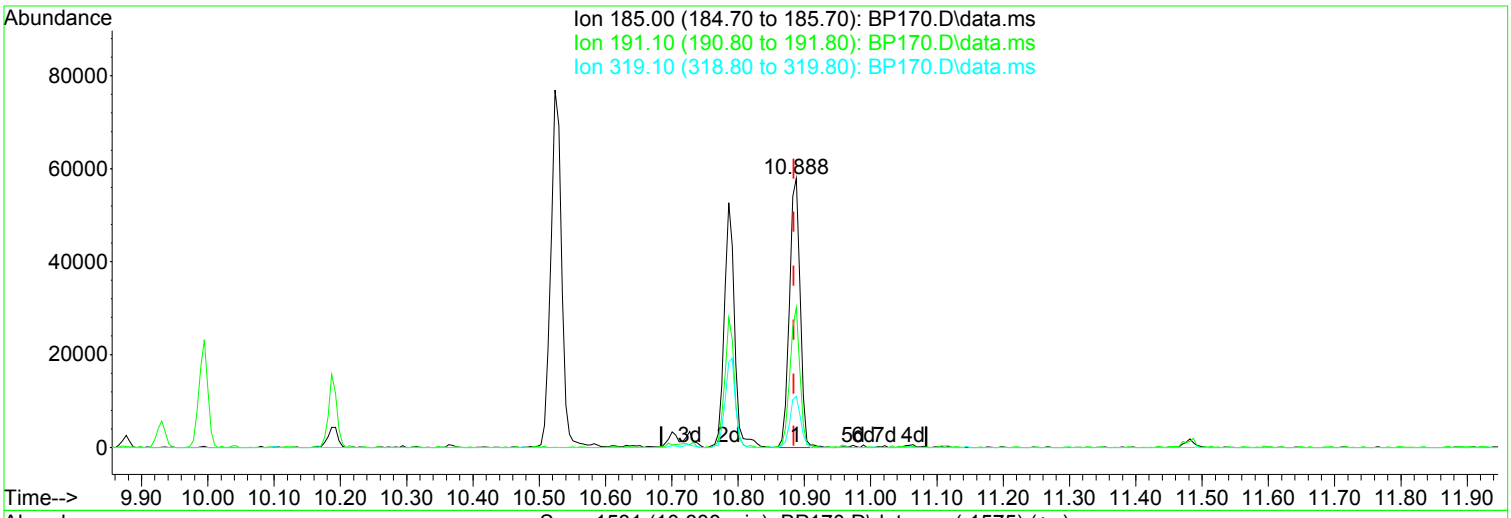
Split Peak.

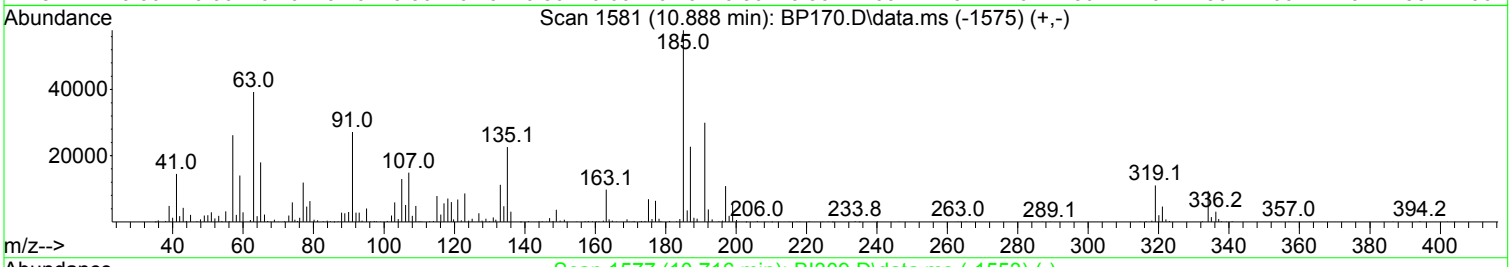
09/19/18

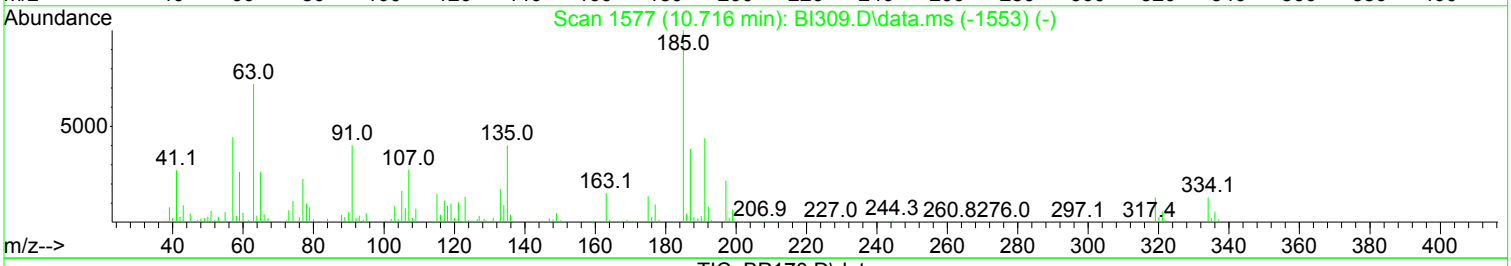
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP170.D\data.ms

(125) Aramite (TM)

10.888min (+ 0.003) 59.38 ppm

response 64971

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	51.81
319.10	20.20	19.07
0.00	0.00	0.00

Manual Integration:

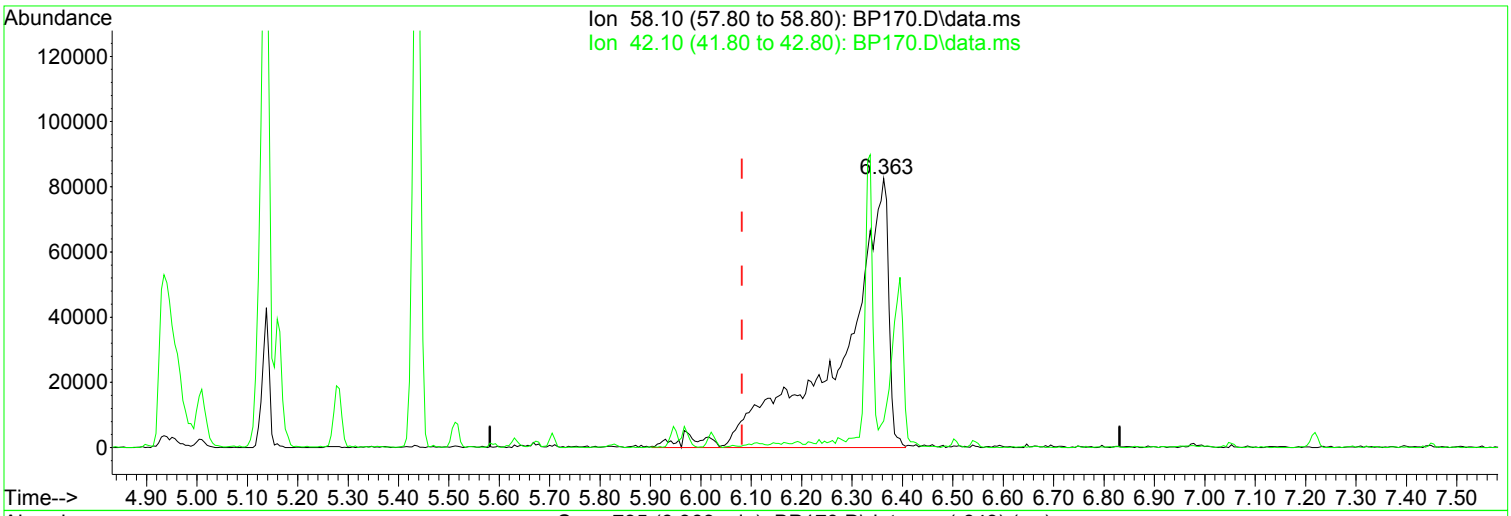
Before

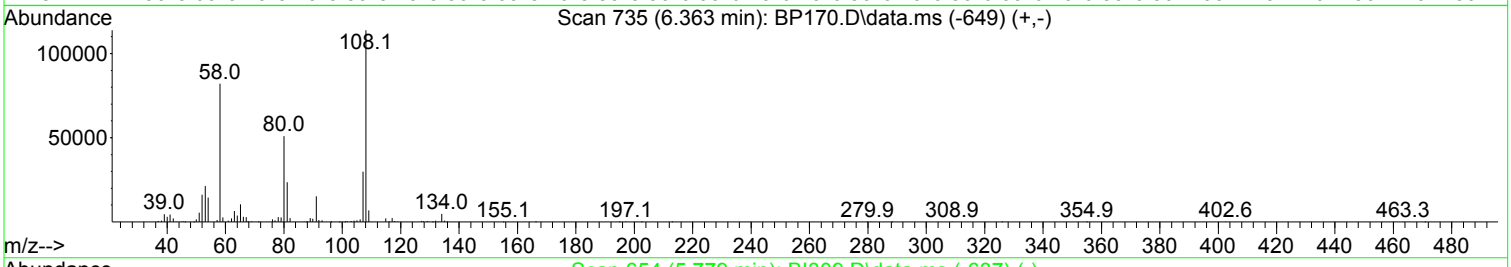
09/19/18

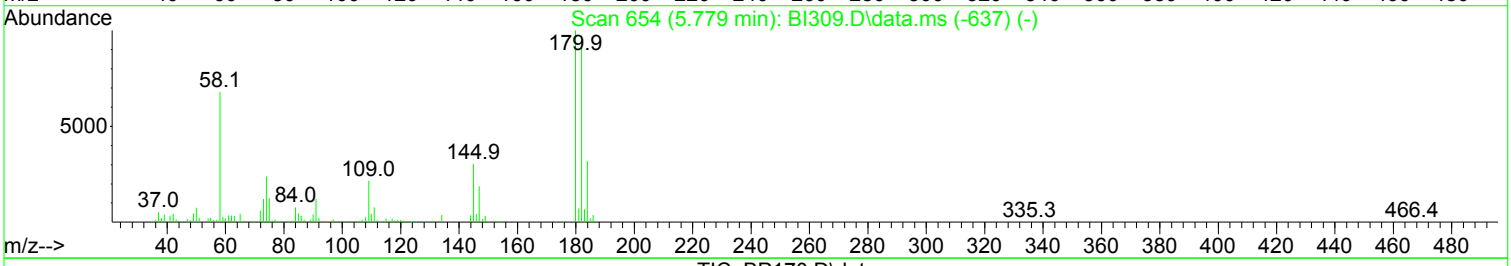
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
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Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP170.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.363min (+ 0.281) 105.69 ppm m

response 538169

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	9.86
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

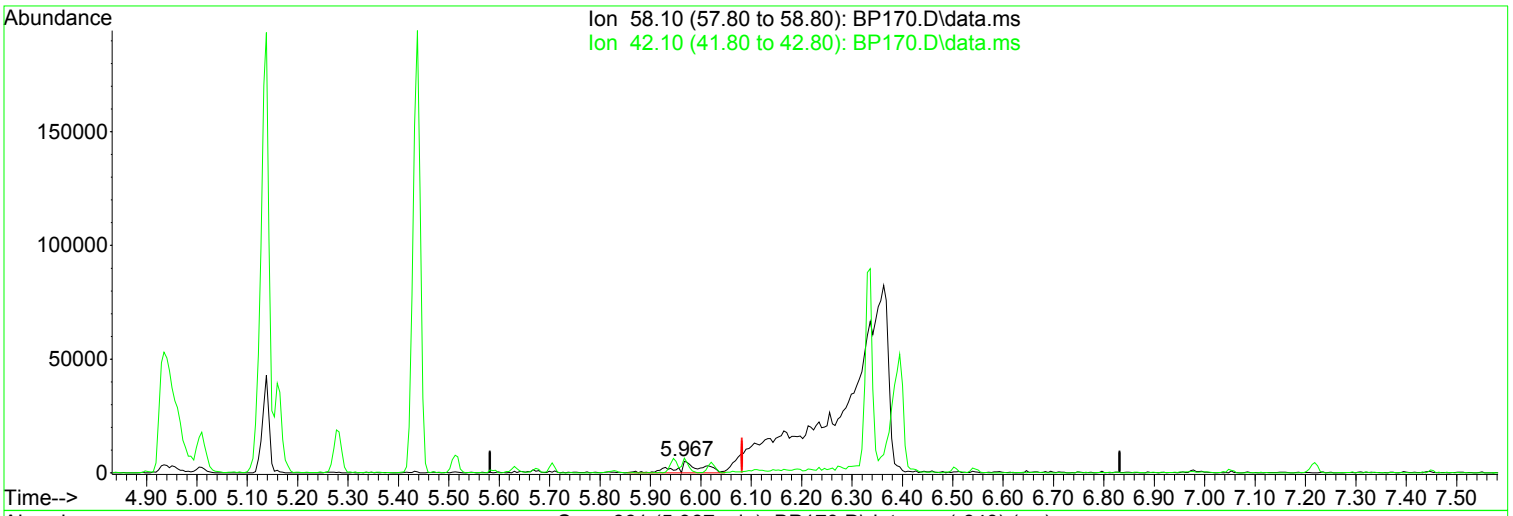
Poor integration.

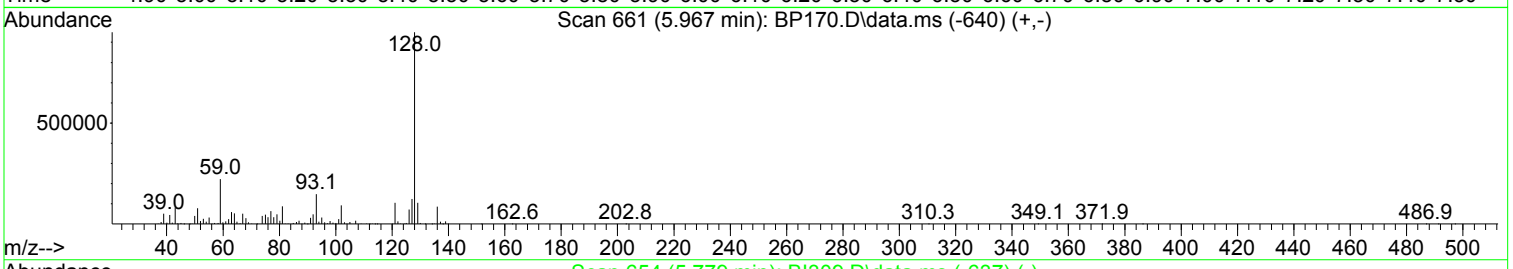
09/19/18

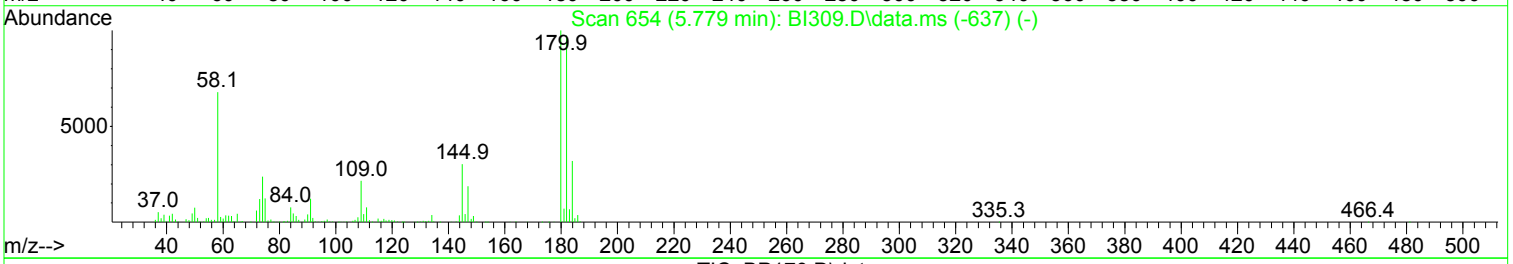
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
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Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP170.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.967min (-0.115) 3.55 ppm

response 18053

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	134.01#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

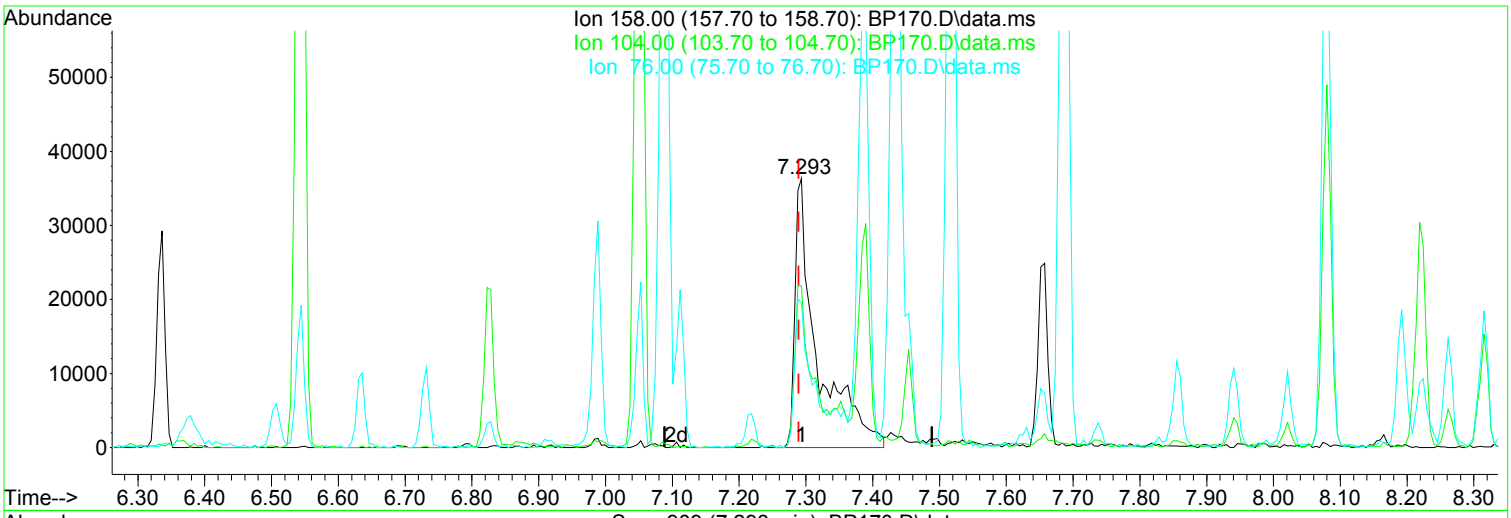
Before

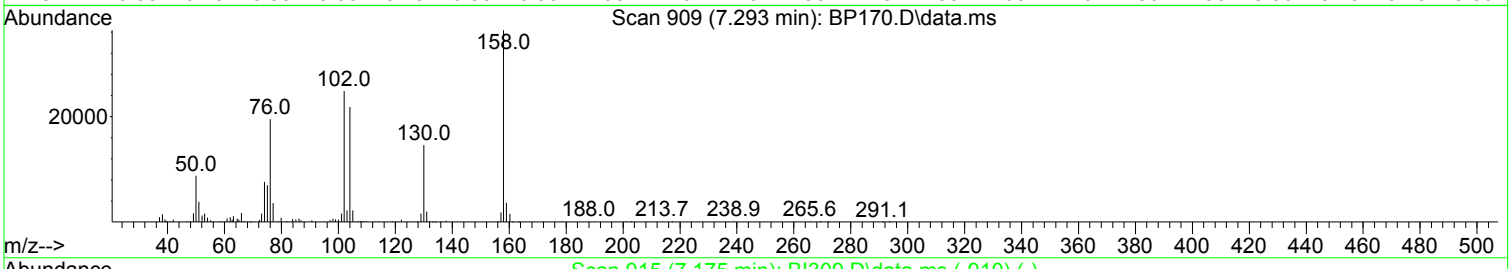
09/19/18

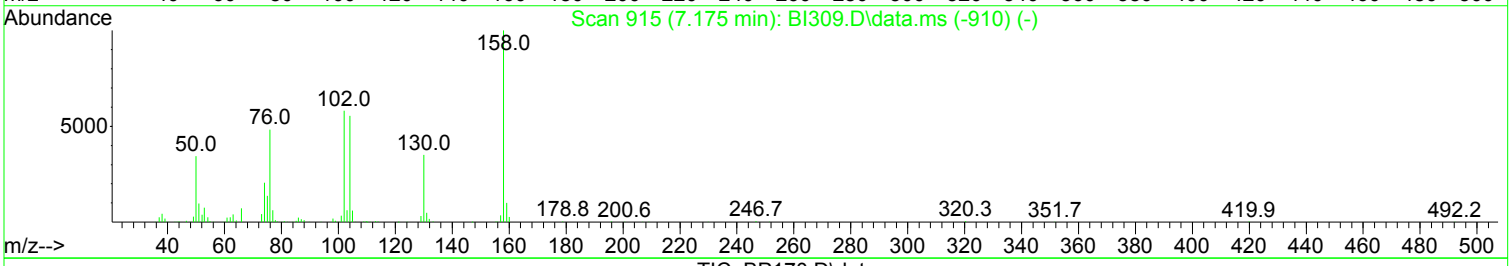
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
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Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP170.D\data.ms

(68) 1,4-Naphthoquinone (TM)

7.293min (+ 0.004) 110.15 ppm m

response 85081

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	61.40	60.05
76.00	50.60	53.64
0.00	0.00	0.00

Manual Integration:

After

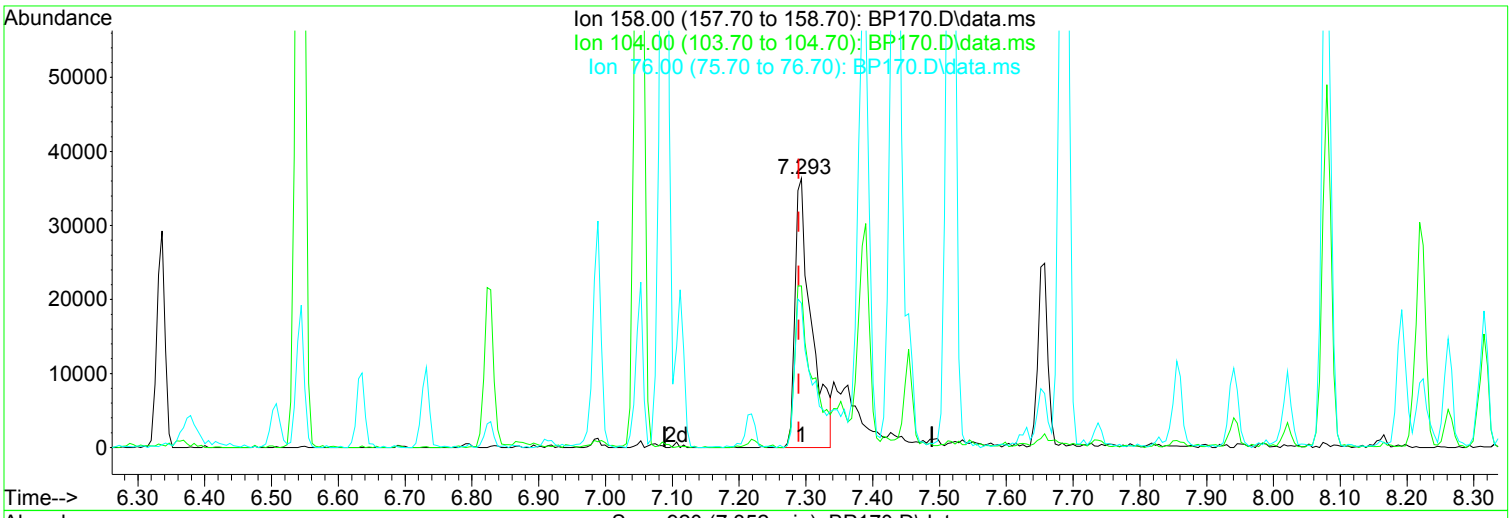
Poor integration.

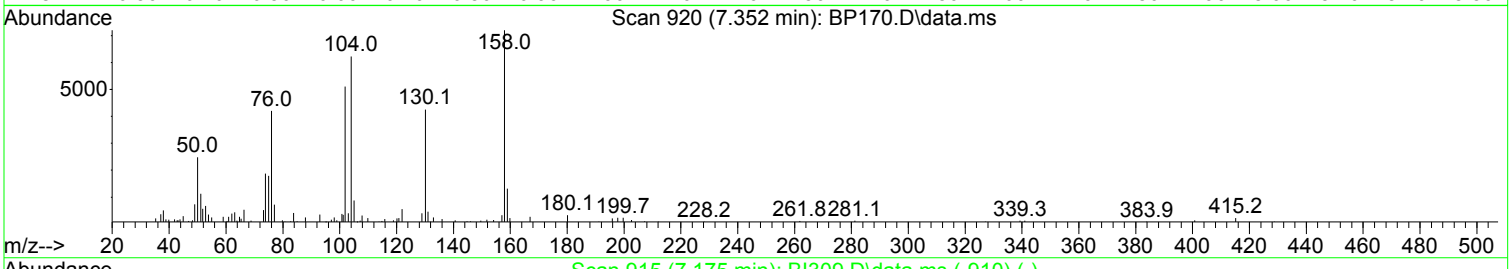
09/19/18

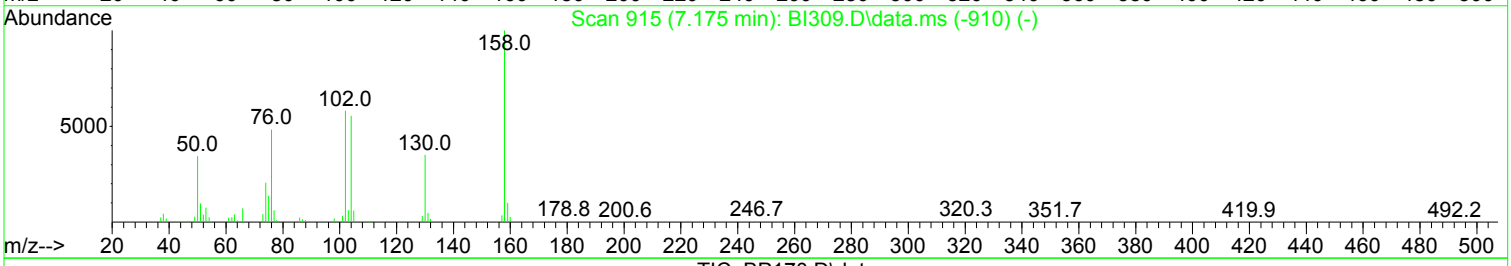
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
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Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP170.D\data.ms

(68) 1,4-Naphthoquinone (TM)

7.293min (+ 0.004) 80.28 ppm

response 62008

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	61.40	59.46
76.00	50.60	51.25
0.00	0.00	0.00

Manual Integration:

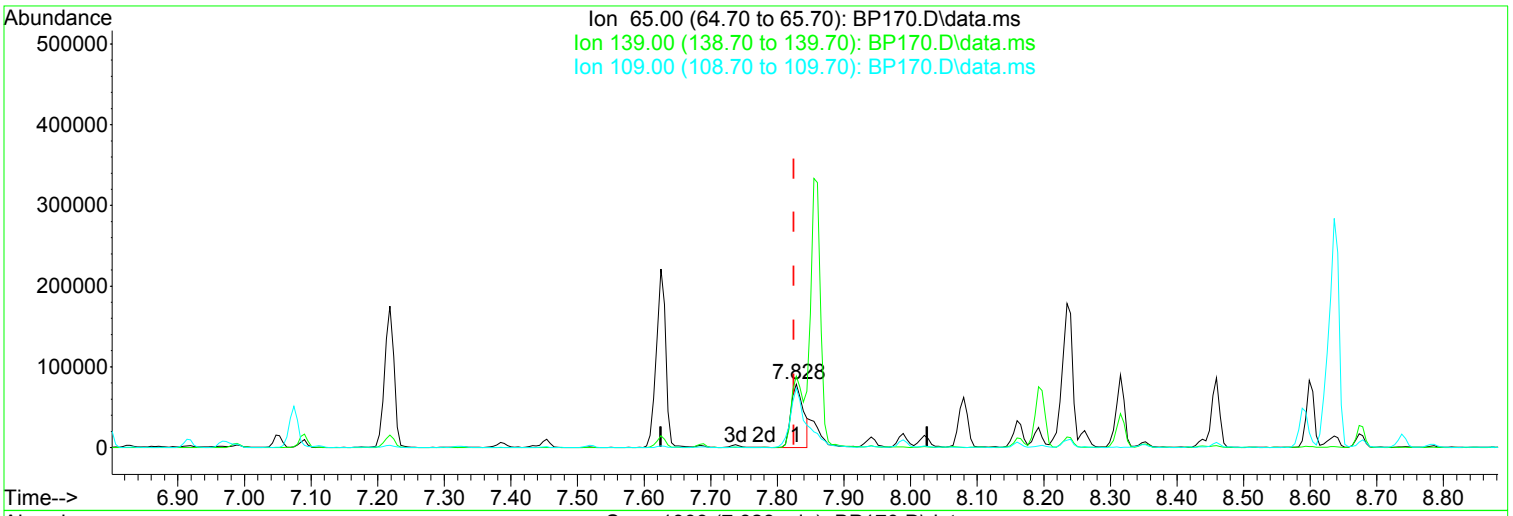
Before

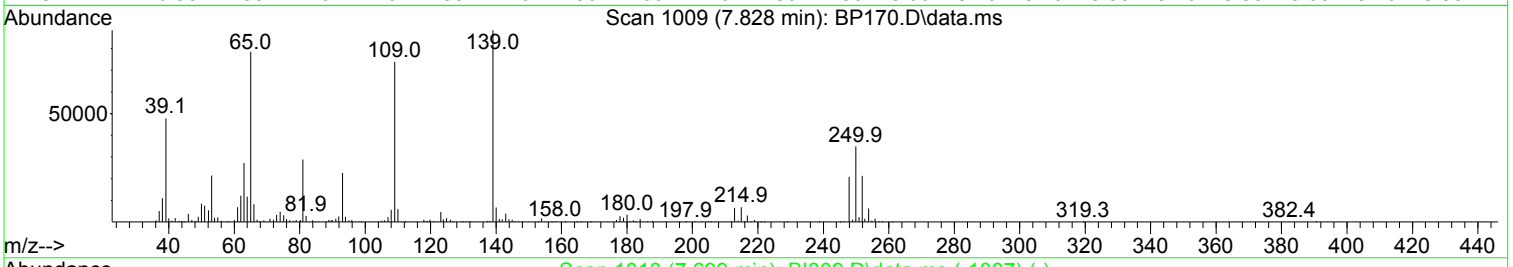
09/19/18

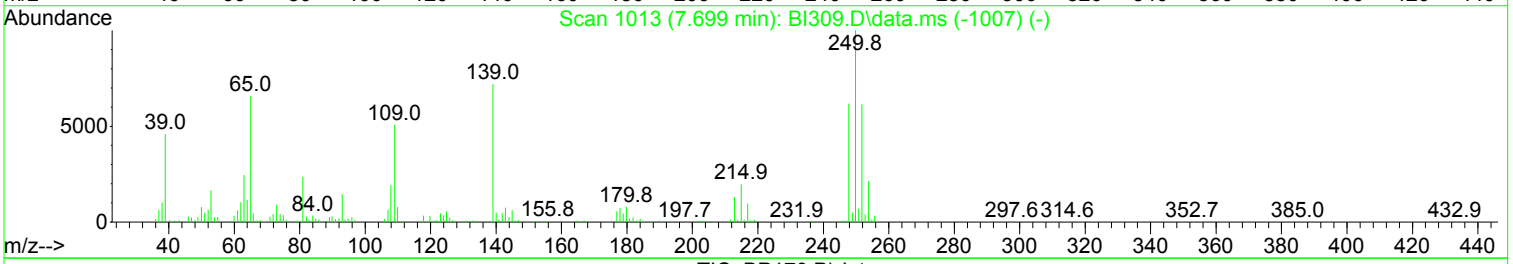
1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP170.D\data.ms

(78) 4-Nitrophenol (TMP)

7.828min (+ 0.003) 99.73 ppm m

response 102244

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	112.48
109.00	86.40	93.93
0.00	0.00	0.00

Manual Integration:

After

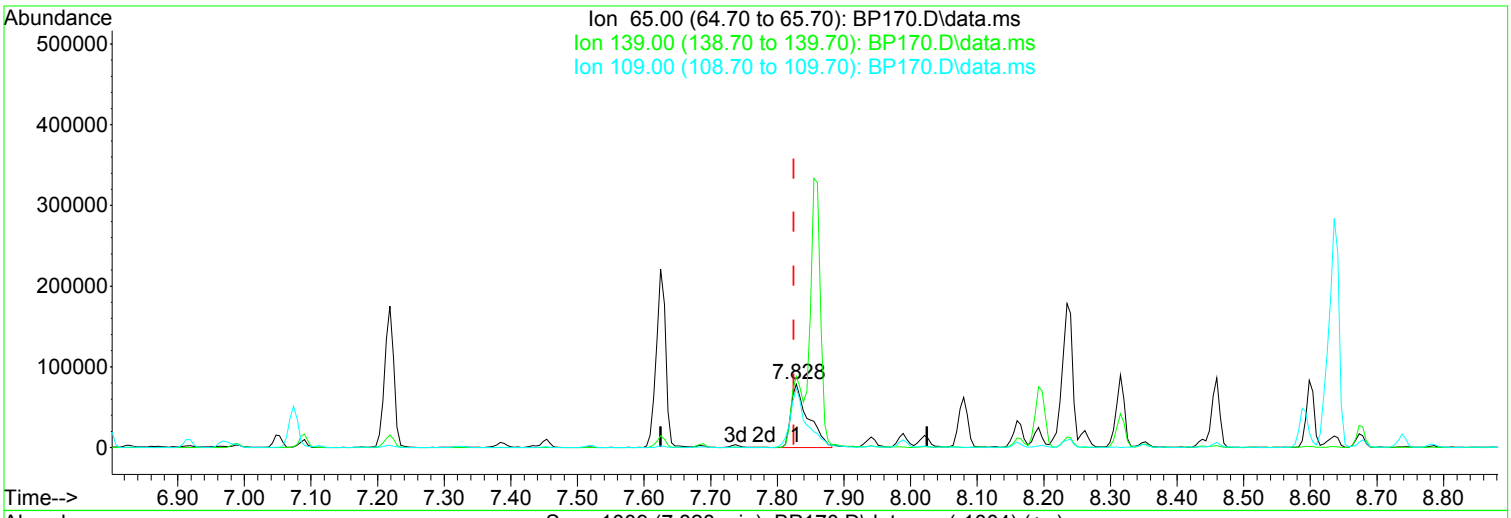
Poor integration.

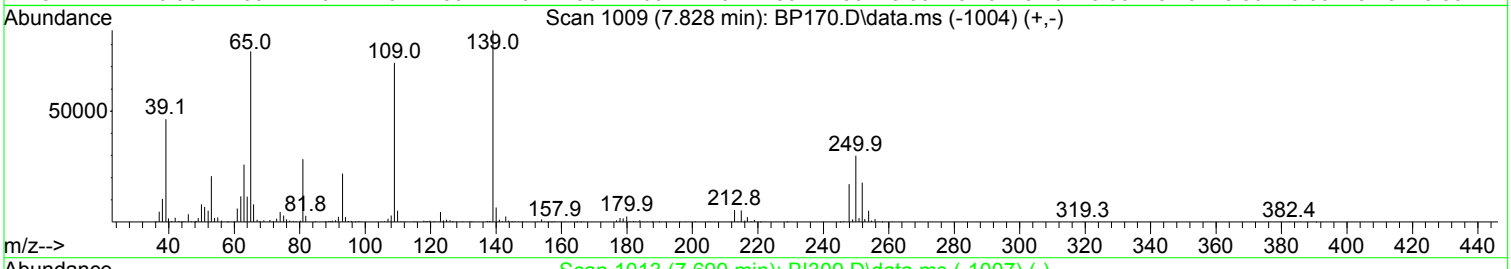
09/19/18

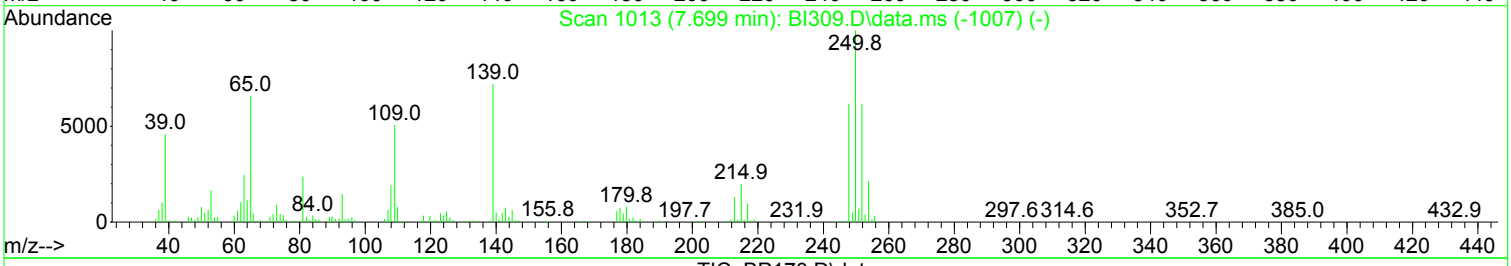
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP170.D\data.ms

(78) 4-Nitrophenol (TMP)

7.828min (+ 0.003) 137.22 ppm

response 140674

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	112.39
109.00	86.40	93.26
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	75254	40.00	ppm		0.00
33) d8-Naphthalene	5.946	136	297513	40.00	ppm		0.00
57) d10-Acenaphthene	7.652	164	161001	40.00	ppm		0.00
91) d10-Phenanthrene	9.128	188	266525	40.00	ppm		0.00
117) d12-Chrysene	12.412	240	283410	40.00	ppm		0.00
135) d12-Perylene	15.359	264	280095	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.720	112	301280	121.00	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 60.50%				
12) SURR2,PHENOL-D6	4.469	99	362674	118.69	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 59.35%				
34) SURR4,NITROBENZENE-D5	5.282	82	320334	116.96	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 116.96%#				
63) SURR5,2-FLUOROBIPHENYL	6.989	172	662513	117.61	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 117.61%				
88) SURR3,2,4,6-TRIBROMOPH...	8.443	330	116651	125.38	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 62.69%				
124) SURR6,TERPHENYL-D14	10.818	244	741156	114.65	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 114.65%				
Target Compounds							Qvalue
2) Pyridine	2.704	79	316485	120.793	ppm		94
3) N-Nitrosodimethylamine	2.672	74	166118	121.460	ppm		88
4) 2-Picoline	3.266	93	309789	118.700	ppm		99
5) N-Nitrosomethylamine	3.346	42	149265	114.443	ppm		88
6) Methyl Methansulfonate	3.576	80	144603	119.508	ppm		92
8) N-Nitrosodiethylamine	3.886	102	136100	118.146	ppm		92
9) Ethyl Mathanesulfonate	4.122	79	231660	119.736	ppm		95
10) Benzaldehyde	4.410	106	127171	87.887	ppm		93
11) Aniline	4.501	93	487480	121.274	ppm		91
13) Phenol	4.480	94	387426	118.432	ppm		84
14) bis(2-Clethyl)Ether	4.539	93	263361	120.528	ppm		97
15) Pentachloroethane	4.544	117	106065	118.814	ppm		99
16) 2-Chlorophenol	4.608	128	311367	118.491	ppm		96
17) 1,3-Diclbenzene	4.731	146	319189	115.316	ppm		96
18) 1,4-Dichlorobenzene	4.796	146	325361	117.561	ppm		97
19) 1,2-Diclbenzene	4.935	146	306189	118.349	ppm		95
20) Benzyl Alcohol	4.903	79	243591	123.511	ppm		98
21) 1-Methyl-2-pyrrolidinone	4.935	99	208009	122.463	ppm		89
22) 2,2'-oxybis(1-Chloropr...	5.010	45	326058	116.525	ppm	#	82
23) 2-Methylphenol	5.020	108	265394	118.539	ppm		96
24) 3+4-Methylphenol	5.149	108	314997	124.348	ppm		98
25) Acetophenone	5.138	105	411411	117.305	ppm		86
26) N-Nitroso-Di-n-propyla...	5.138	70	234566	117.190	ppm		80
27) N-Nitrosopyrrolidine	5.133	100	163375	120.260	ppm		63
28) N-Nitrosomorpholine	5.159	56	188352	118.744	ppm		89
29) o-Toluidine	5.170	106	479603	120.804	ppm		64
30) Hexachloroethane	5.234	117	133656	114.370	ppm		90
31) o,o,o-Triethylphosphor...	5.673	198	145115	116.882	ppm	#	10
32) Alpha-terpinol	5.972	121	117012	114.598	ppm		89
35) Nitrobenzene	5.298	77	303904	117.144	ppm		95
36) N-Nitrosopiperidine	5.437	42	196112	114.074	ppm		91
37) Isophorone	5.512	82	460552	117.373	ppm		97
38) 2-Nitrophenol	5.587	139	176066	121.919	ppm		92

Data Path : I:\ACQUDATA\5973D\Data\091718\
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Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 2,4-Dimethylphenol	5.630	107	320446	119.903	ppm		99
41) bis(-2-Chloroethoxy)Me...	5.705	93	331168	115.729	ppm		99
42) 2,4-Dichlorophenol	5.828	162	258950	121.293	ppm		99
43) a,a-Dimethylphenethyla...	6.363	58	538169m	105.688	ppm		
44) 1,2,4-Trichlorobenzene	5.892	180	262840	116.717	ppm		97
45) Naphthalene	5.967	128	880048	115.569	ppm		99
46) 4-Chloroaniline	6.020	127	386319	119.356	ppm		97
47) 2,6-Dichlorophenol	6.031	162	247805	117.764	ppm		96
48) Hexachlorobutadiene	6.074	225	158219	117.146	ppm		96
49) Hexachloropropene	6.047	213	195835	121.838	ppm		99
50) 4-Chloro-3-methylphenol	6.507	107	260868	116.361	ppm		96
51) N-N-di-n-butylamine	6.336	84	221021	107.748	ppm		97
52) Caprolactam	6.395	113	94739	118.247	ppm		88
53) p-Phenylenediamine	6.379	80	412768	205.621	ppm		89
54) Safrole	6.545	162	231159	120.665	ppm		90
55) 2-Methylnaphthalene	6.636	142	561864	116.011	ppm		94
56) 1-Methylnaphthalene	6.732	142	561600	116.939	ppm		99
58) Hexachlorocyclopentadiene	6.780	237	123683	122.413	ppm		94
59) 1,2,4,5-Tetrachloroben...	6.796	216	262294	117.301	ppm		97
60) 1,2,3,4-Tetrachloroben...	7.074	216	288394	118.961	ppm		98
61) 2,4,6-Trichlorophenol	6.919	196	182090	125.023	ppm		100
62) 2,4,5-Trichlorophenol	6.972	196	160674	115.036	ppm		96
64) Isosafrole	7.053	104	123700	113.488	ppm		95
65) 1,1'-Biphenyl	7.090	154	790335	117.374	ppm		99
66) 2-Chloronaphthalene	7.112	162	536215	118.485	ppm		97
67) 2-Nitroaniline	7.219	65	170449	114.417	ppm		86
68) 1,4-Naphthoquinone	7.293	158	85081m	110.148	ppm		
69) m-Dinitrobenzene	7.438	168	99433	119.609	ppm		94
70) Acenaphthylene	7.518	152	890668	118.469	ppm		99
71) Dimethyl phthalate	7.390	163	597242	113.218	ppm		99
72) 2,6-Dinitrotoluene	7.454	165	137612	114.311	ppm		87
73) Acenaphthene	7.689	153	568186	116.021	ppm		97
74) 3-Nitroaniline	7.625	138	179383	119.429	ppm		91
75) 2,4-Dinitrophenol	7.737	184	74868	119.664	ppm		78
76) Dibenzofuran	7.860	168	762763	114.591	ppm		98
77) 2,4-Dinitrotoluene	7.860	165	194752	120.514	ppm		90
78) 4-Nitrophenol	7.828	65	102244m	99.735	ppm		
79) Pentachlorobenzene	7.818	250	247744	117.831	ppm		97
80) 1-Napthylamine	7.941	143	483972	110.865	ppm		95
81) 2-Napthylamine	8.021	143	533884	114.546	ppm		94
82) 2,3,4,6-Tetrachlorophenol	7.989	232	142144	125.328	ppm		92
83) Fluorene	8.197	166	585003	111.227	ppm		96
84) 4-Chlorophenyl-phenyle...	8.192	204	276155	110.445	ppm		93
85) Diethylphthalate	8.080	149	626553	114.367	ppm		98
86) 4-Nitroaniline	8.240	138	184913	118.832	ppm		90
87) 5-Nitro-o-toluidine	8.224	152	199908	118.753	ppm		93
89) Sulfotepp	8.459	322	107251	118.658	ppm		92
90) Octachlorocyclopentene	8.438	307	113800	126.971	ppm		94
92) Thionazin	8.160	107	105346	117.852	ppm		96
93) 4,6-Dinitro-2-methylph...	8.261	198	120984	130.184	ppm		77
94) Diphenylamine	8.315	169	1030510	232.443	ppm		96
95) 1,2 Diphenylhydrazine	8.352	77	624302	112.786	ppm		93
96) N-Nitrosodiphenylamine	8.315	169	1031803	232.677	ppm		96
97) 1,3,5-Trinirobenzene	8.625	213	60196	125.249	ppm	#	6
98) Diallate	8.588	86	226435	119.386	ppm		98
99) Phorate	8.604	121	124885	117.033	ppm		96

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

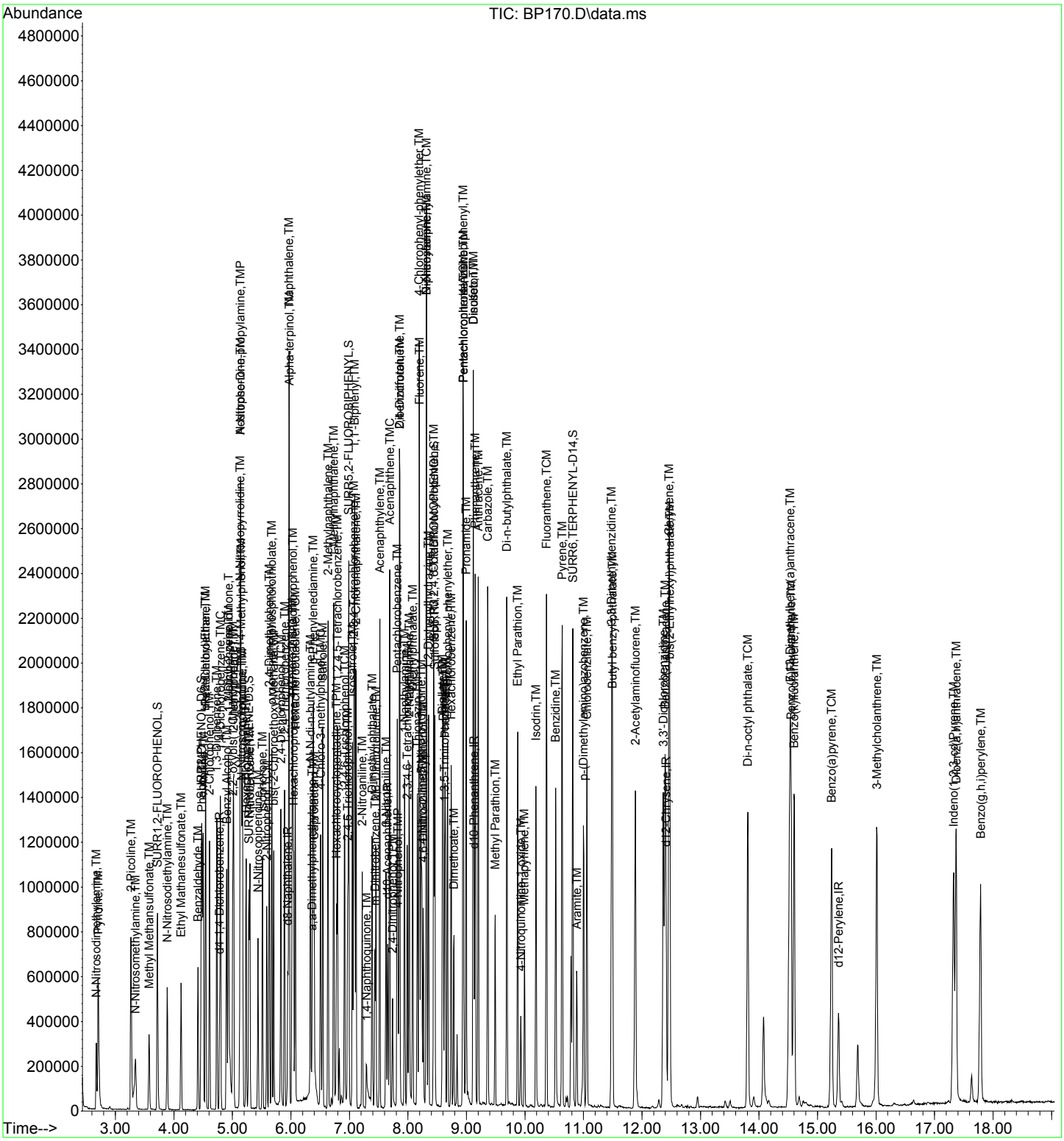
Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Phenacetin	8.636	108	346291	113.800	ppm	93
101) 4-Bromophenyl-phenylether	8.679	248	179052	117.854	ppm	93
102) Hexachlorobenzene	8.738	284	199425	111.216	ppm	93
103) Dimethoate	8.786	87	147379	92.490	ppm	92
105) Pentachlorophenol	8.946	266	119084	139.895	ppm	90
106) 4-Aminobiphenyl	8.941	169	635502	115.824	ppm	98
107) Pentachloronitrobenzene	8.946	237	82591	123.814	ppm	94
108) Pronamide	8.994	173	328858	125.649	ppm	98
109) Dinoseb	9.117	211	160595	128.158	ppm	99
110) Disulfoton	9.117	88	319241	116.860	ppm	95
111) Phenanthrene	9.149	178	866567	119.275	ppm	99
112) Anthracene	9.203	178	877330	122.367	ppm	99
113) Carbazole	9.363	167	948359	122.776	ppm	99
114) Di-n-butylphthalate	9.690	149	1145317	125.434	ppm	98
115) 4-Nitroquinonline-1-oxide	9.930	190	44354	126.002	ppm	92
116) Fluoranthene	10.369	202	982500	124.192	ppm	99
118) Methyl Parathion	9.492	109	139768	100.666	ppm	97
119) Ethyl Parathion	9.877	97	153725	115.933	ppm	100
120) Methapyrilene	9.989	58	186942	112.091	ppm	88
121) Isodrin	10.187	193	95894	112.666	ppm	88
122) Benzidine	10.524	184	618745	114.909	ppm	97
123) Pyrene	10.636	202	991011	117.821	ppm	99
125) Aramite	10.888	185	122910m	112.330	ppm	
126) p-(Dimethylamino)azobe...	11.000	120	265818	112.522	ppm	90
127) Chlorobenzilate	11.059	139	333002	116.237	ppm	83
128) Butyl benzyl phthalate	11.497	149	510070	117.889	ppm	97
129) 3,3-Dimethylbenzidine	11.481	212	615325	118.018	ppm	97
130) 2-Acetylaminofluorene	11.888	181	475226	121.302	ppm	94
131) 3,3'-Dichlorobenzidine	12.364	252	407359	117.909	ppm	99
132) Benzo(a)anthracene	12.396	228	938968	115.367	ppm	98
133) Chrysene	12.460	228	915310	116.935	ppm	99
134) bis(2-Ethylhexyl)phtha...	12.476	149	717468	118.648	ppm	96
136) Di-n-octyl phthalate	13.808	149	1199989	126.879	ppm	96
137) 7,12-Dimethylbenz(a)an...	14.530	256	496477	120.973	ppm	92
138) Benzo(b)Fluoranthene	14.546	252	987495	121.629	ppm	98
139) Benzo(k)fluoranthene	14.600	252	949359	120.505	ppm	98
140) Benzo(a)pyrene	15.241	252	856412	122.222	ppm	99
141) 3-Methylcholanthrene	16.017	268	502154	123.665	ppm	97
142) Indeno(1,2,3-cd)Pyrene	17.327	276	798632	121.680	ppm	95
143) Dibenz(a,h)anthracene	17.370	278	827847	122.966	ppm	98
144) Benzo(g,h,i)perylene	17.787	276	731483	115.176	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP170.D
Acq On : 17 Sep 2018 2:34 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

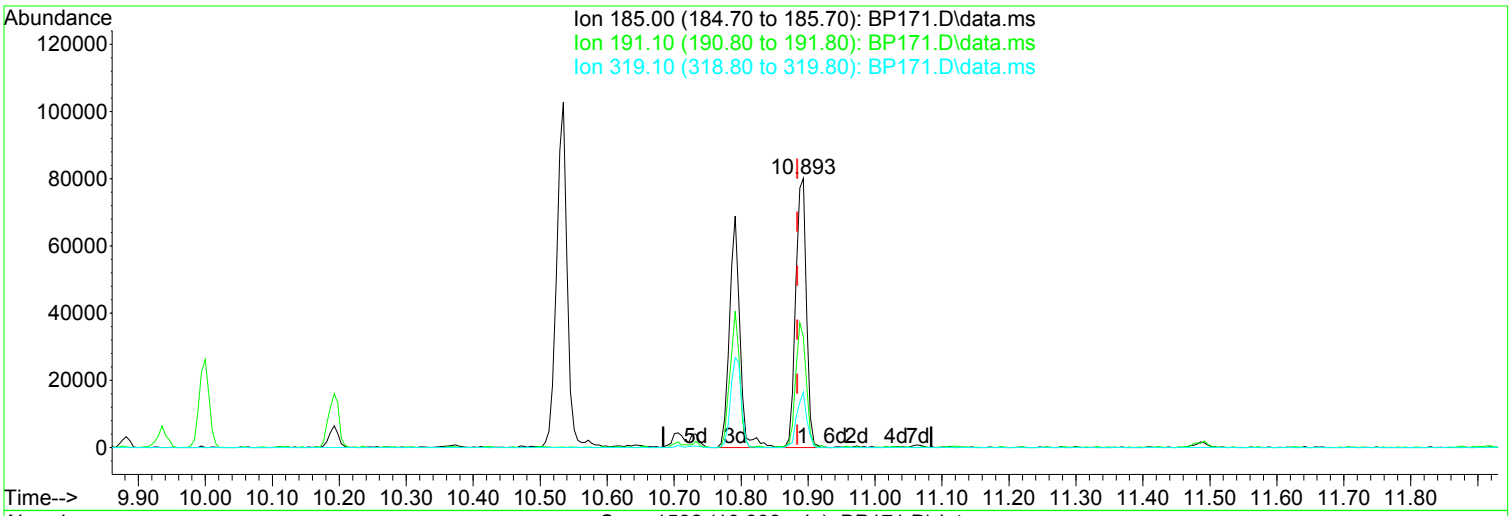
Quant Time: Sep 19 11:00:49 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

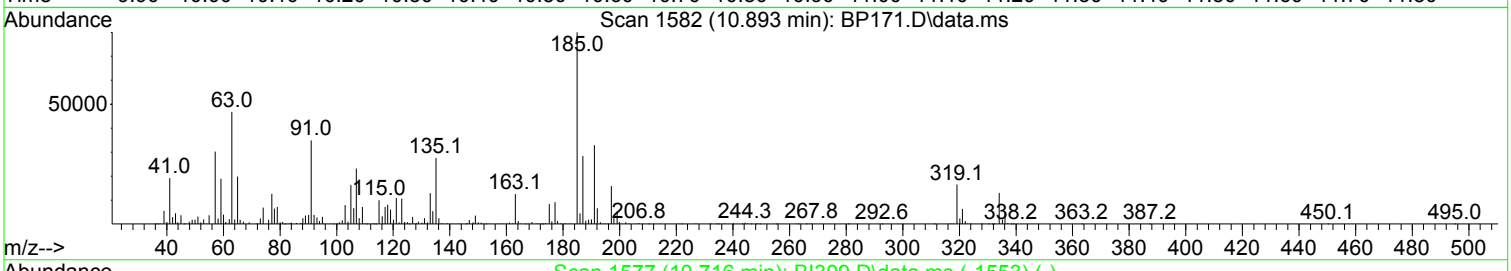


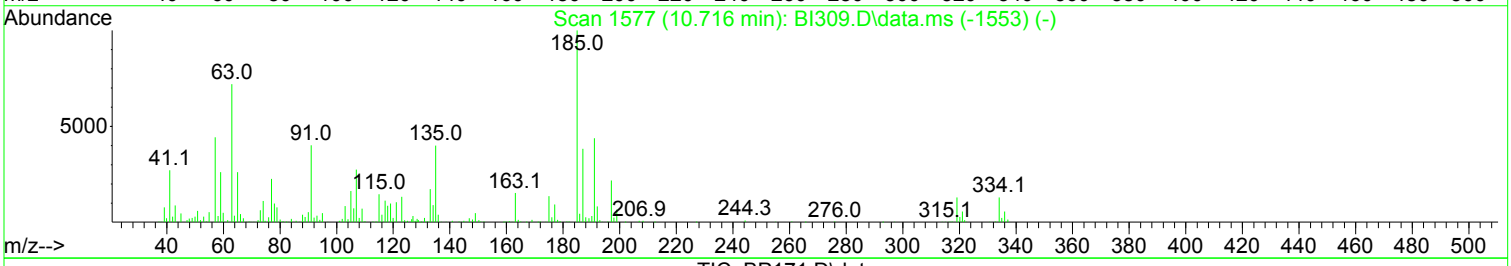
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP171.D\data.ms

(125) Aramite (TM)

10.893min (+ 0.009) 152.02 ppm m

response 163477

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	41.17
319.10	20.20	20.61
0.00	0.00	0.00

Manual Integration:

After

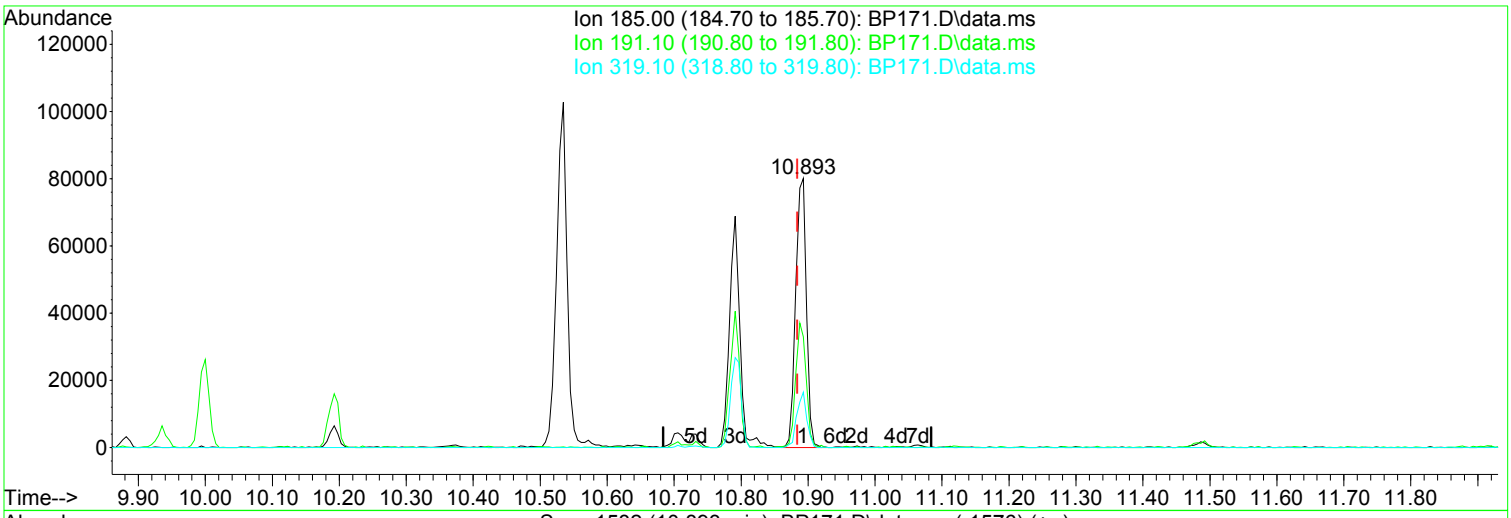
Split Peak.

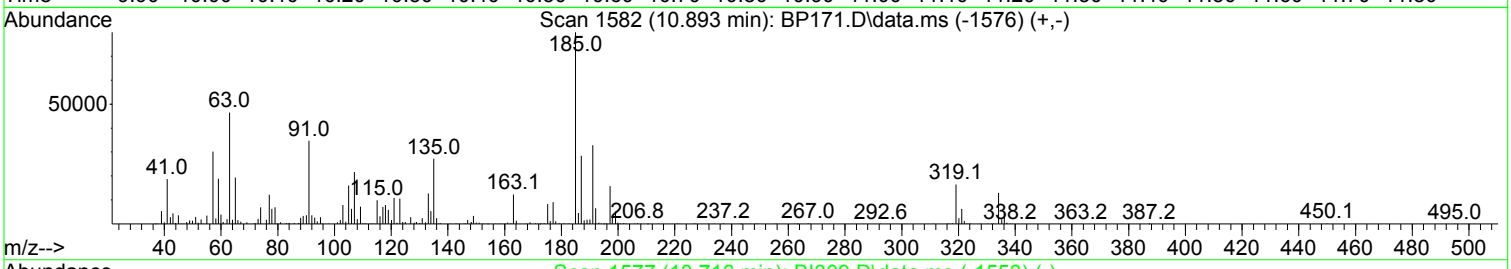
09/19/18

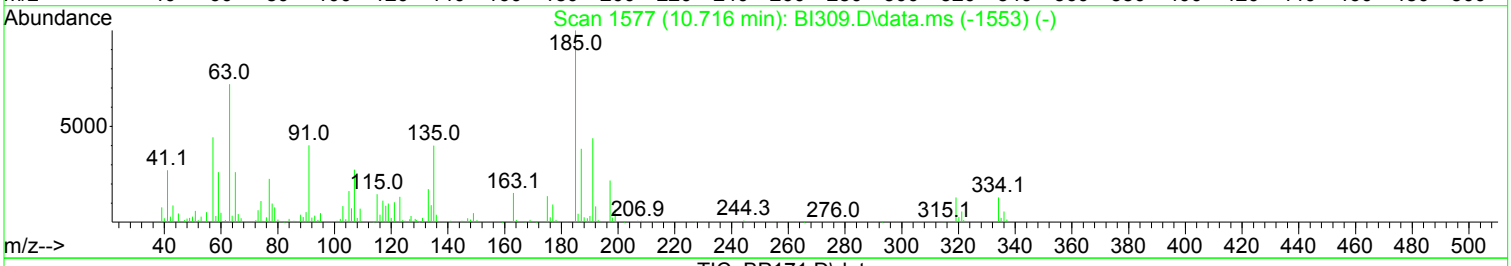
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP171.D\data.ms

(125) Aramite (TM)

10.893min (+ 0.009) 82.18 ppm

response 88371

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	41.03
319.10	20.20	20.66
0.00	0.00	0.00

Manual Integration:

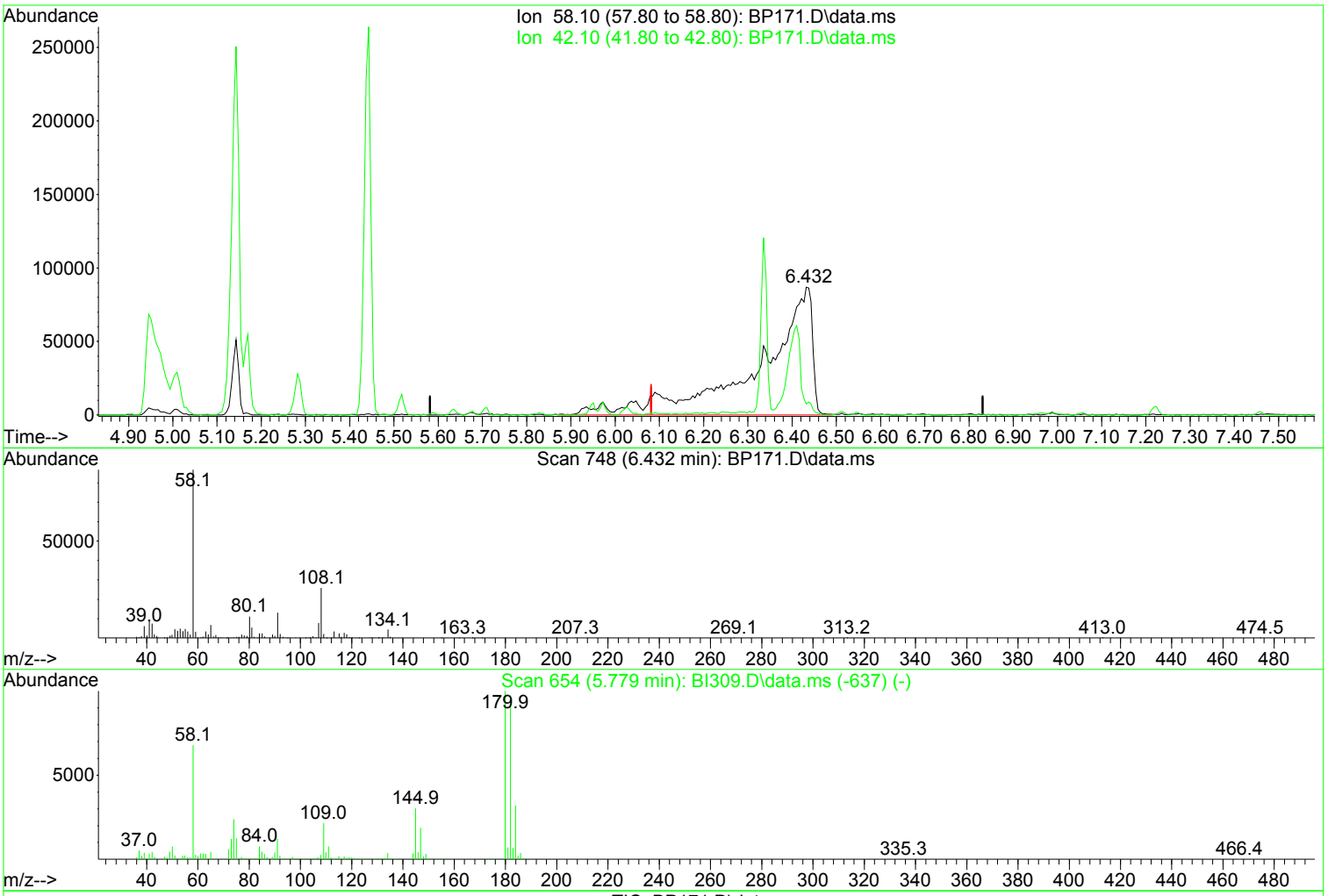
Before

09/19/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration



TIC: BP171.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.432min (+ 0.350) 145.93 ppm m

response 725085

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	8.66
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

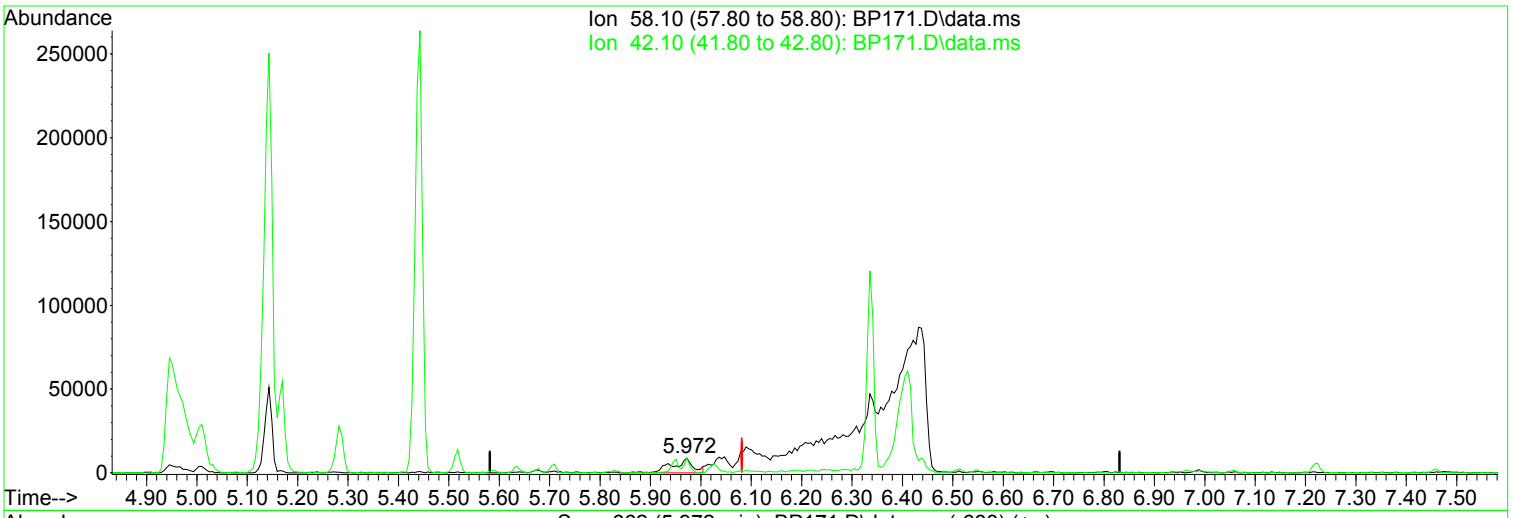
Poor integration.

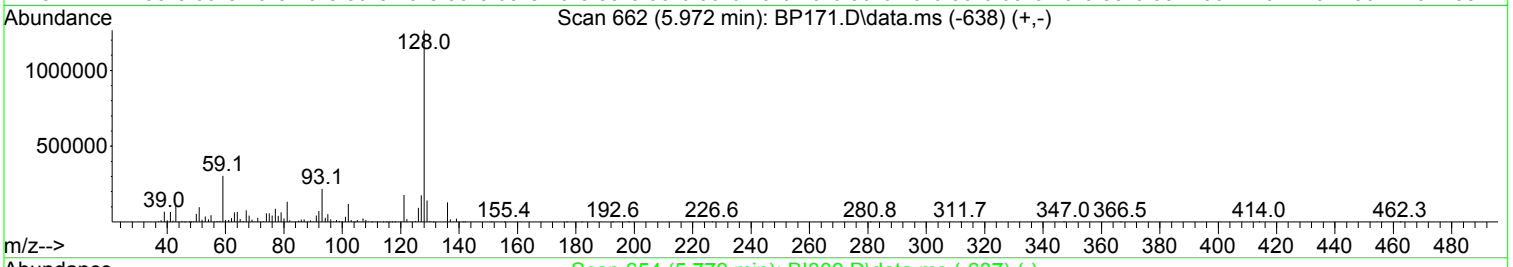
09/19/18

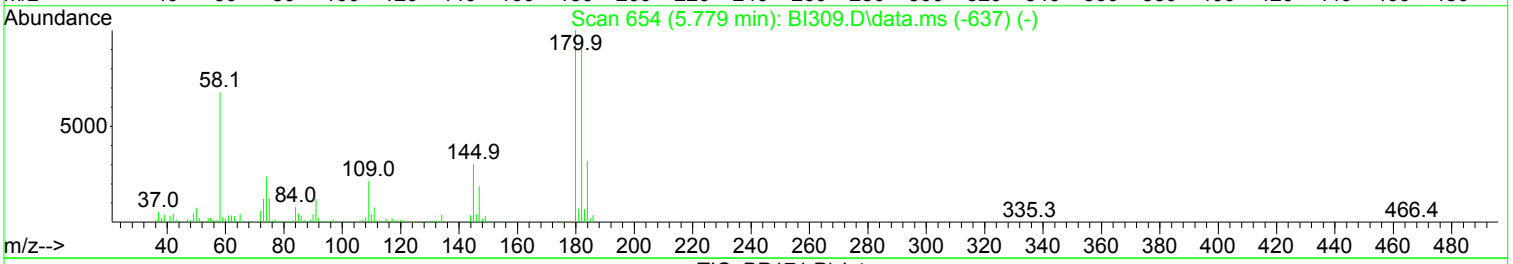
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP171.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.972min (-0.110) 4.94 ppm

response 24546

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	125.70#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

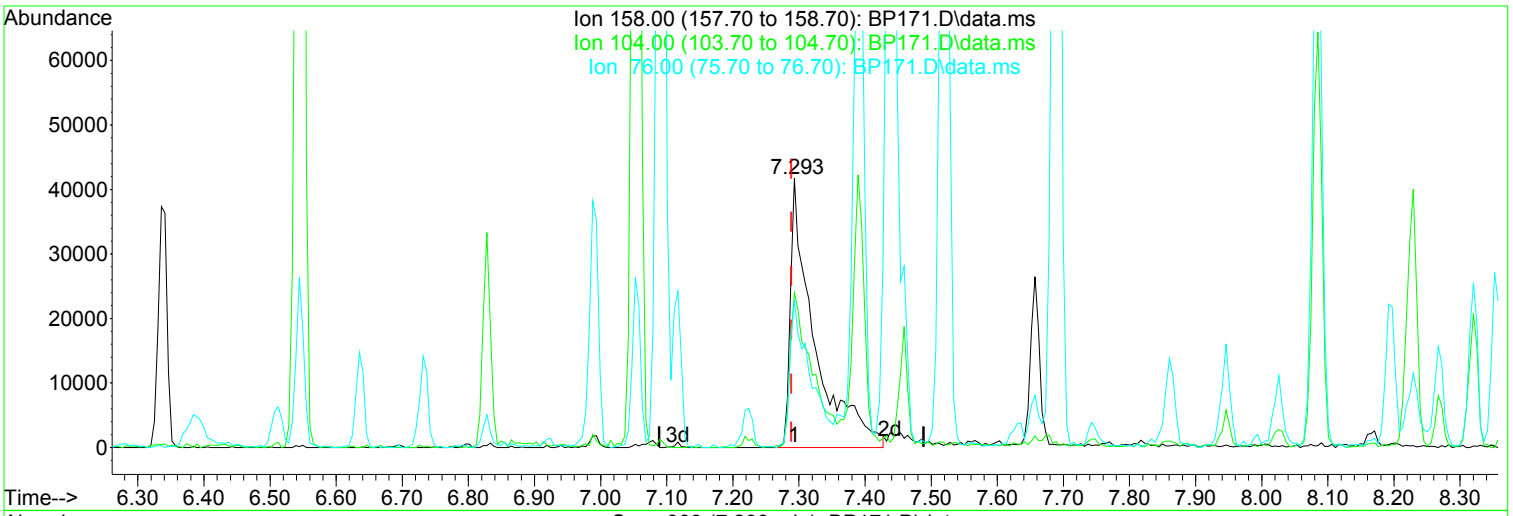
Before

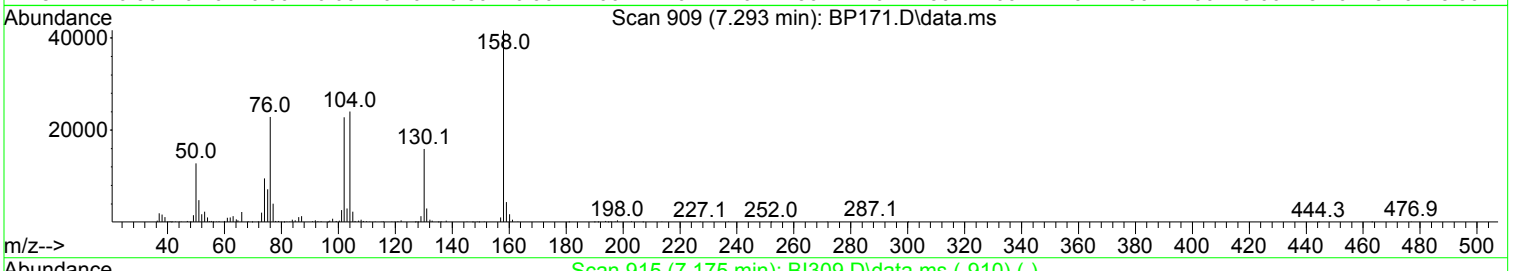
09/19/18

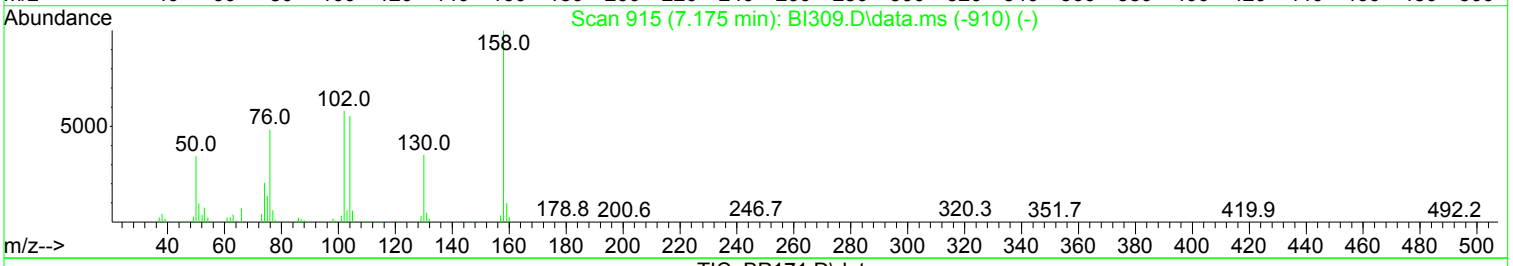
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP171.D\data.ms

(68) 1,4-Naphthoquinone (TM)

7.293min (+ 0.004) 137.23 ppm m

response 104443

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	61.40	57.60
76.00	50.60	54.83
0.00	0.00	0.00

Manual Integration:

After

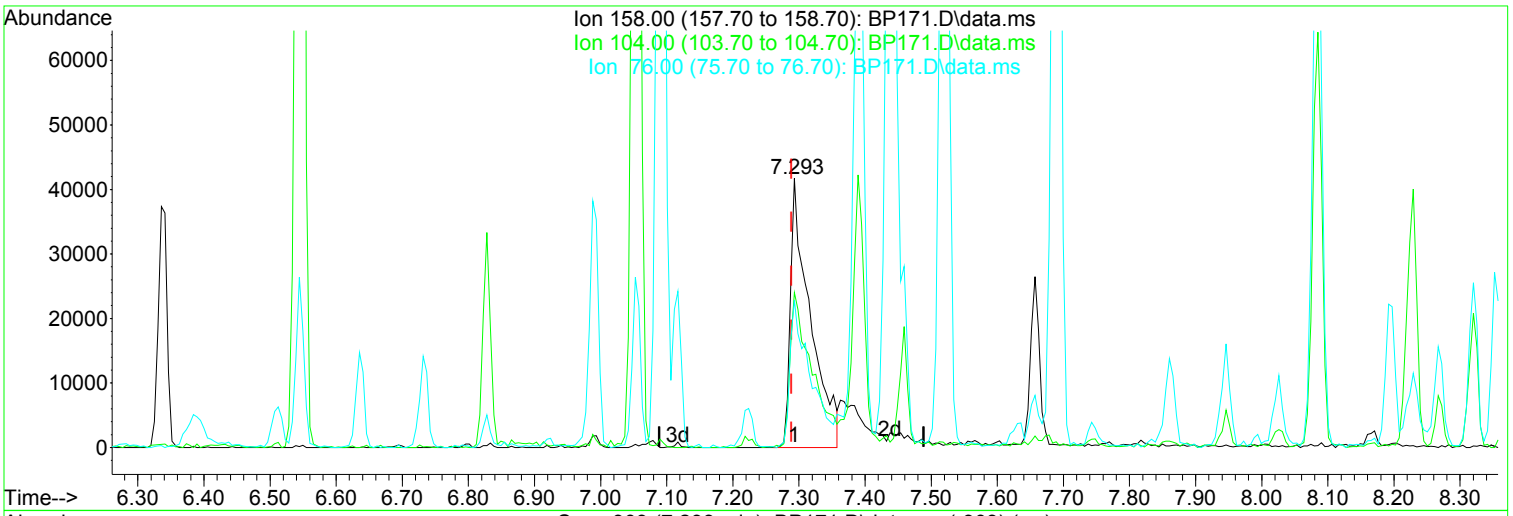
Poor integration.

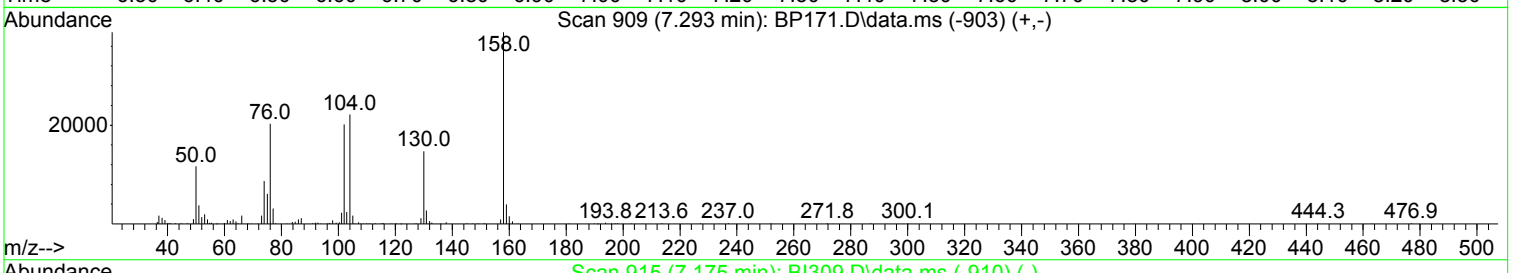
09/19/18

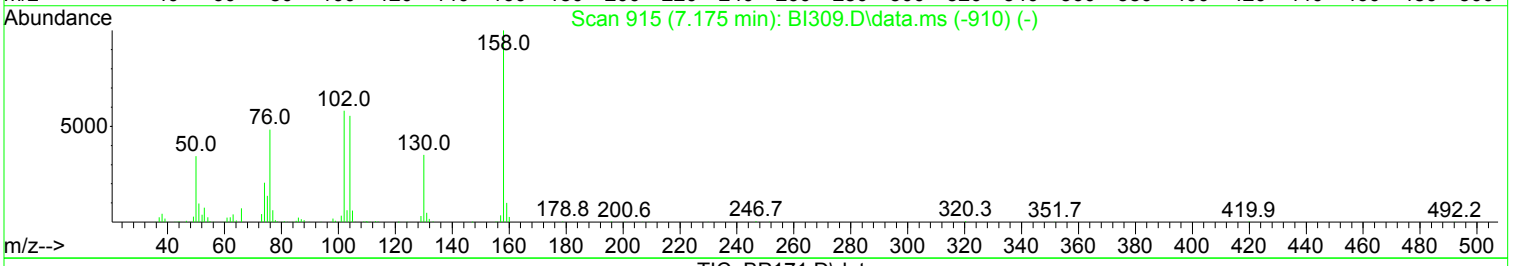
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP171.D\data.ms

(68) 1,4-Naphthoquinone (TM)

7.293min (+ 0.004) 112.84 ppm

response 85881

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	61.40	57.08
76.00	50.60	52.05
0.00	0.00	0.00

Manual Integration:

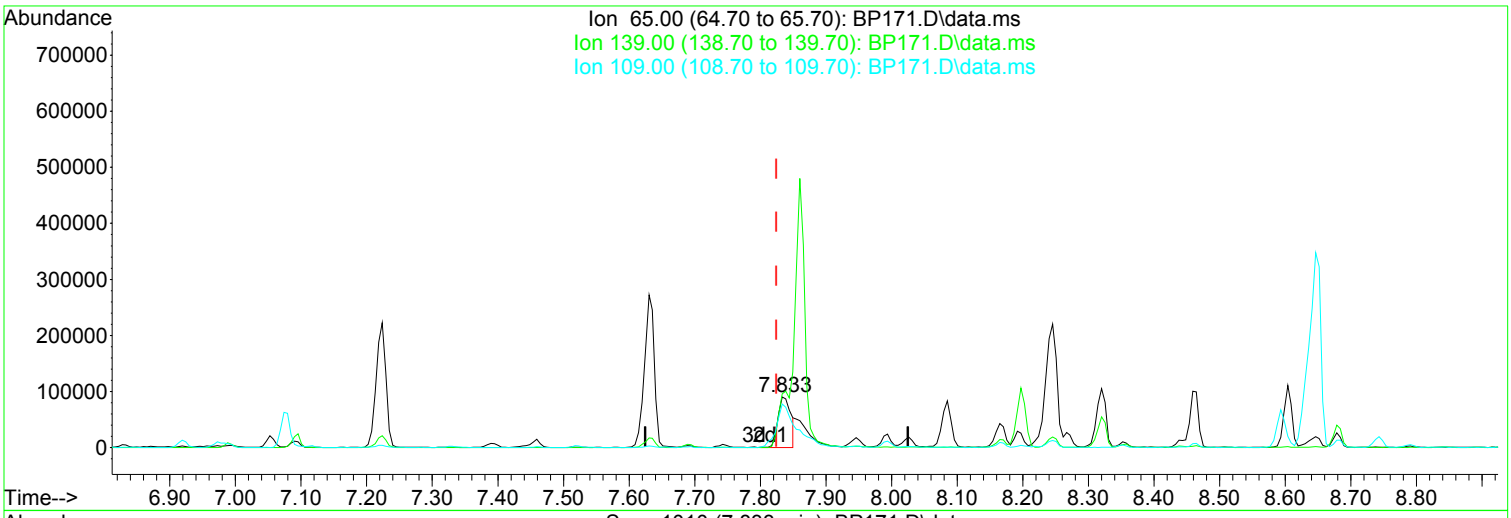
Before

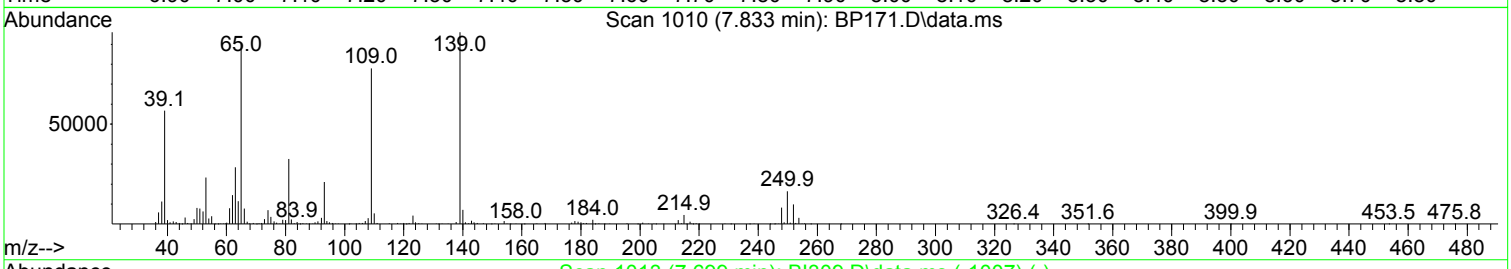
09/19/18

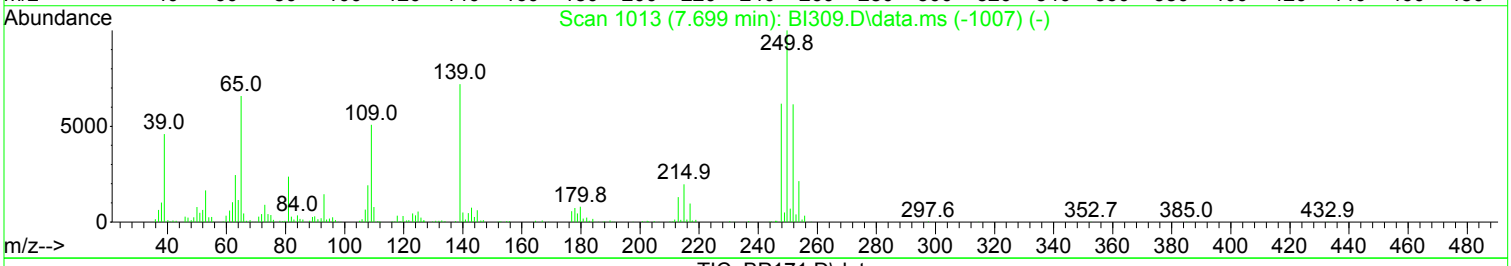
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP171.D\data.ms

(78) 4-Nitrophenol (TMP)

7.833min (+ 0.008) 121.63 ppm m

response 122856

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	106.47
109.00	86.40	86.42
0.00	0.00	0.00

Manual Integration:

After

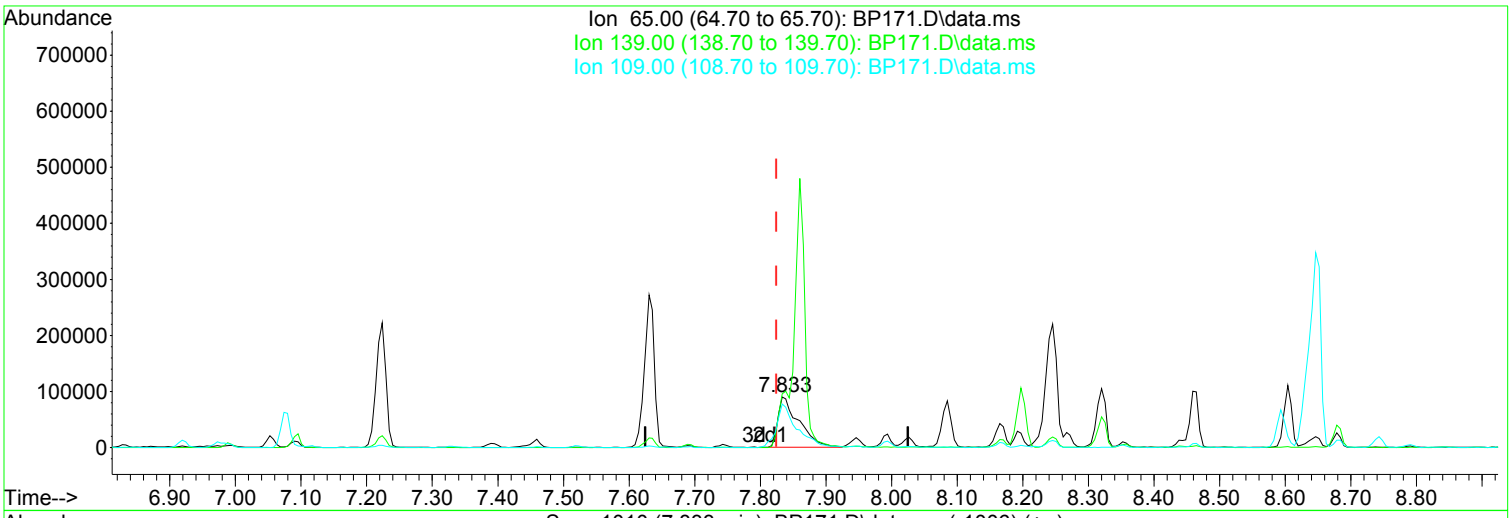
Poor integration.

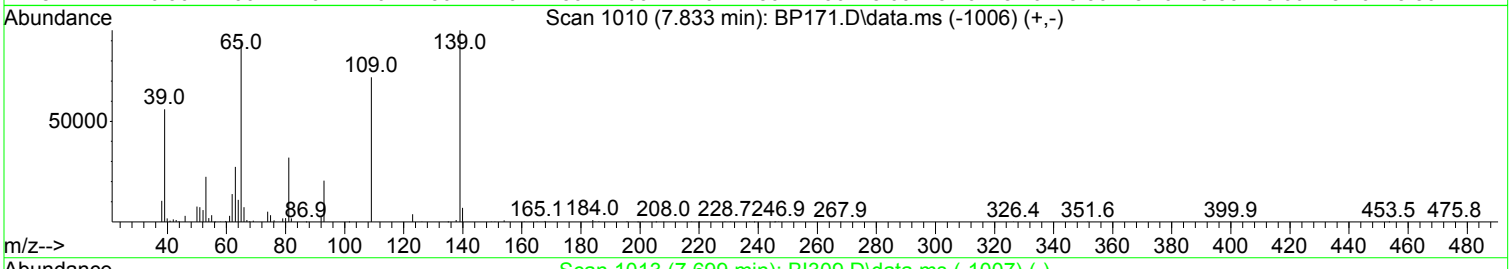
09/19/18

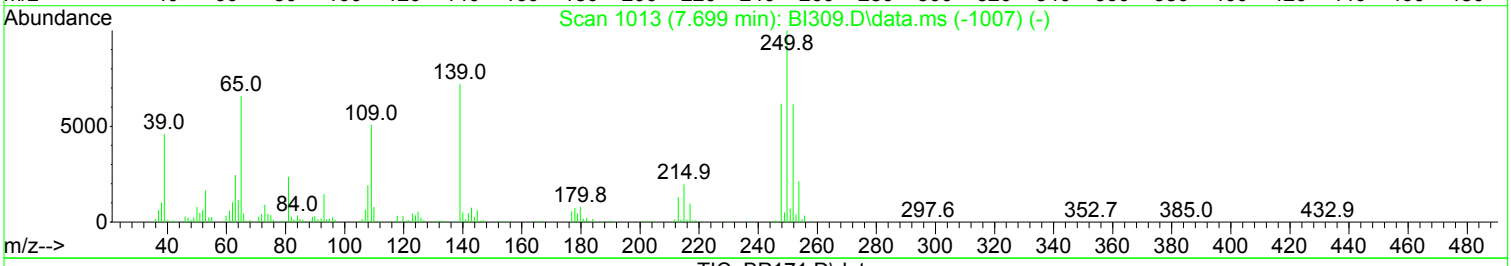
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration







TIC: BP171.D\data.ms

(78) 4-Nitrophenol (TMP)

7.833min (+ 0.008) 195.16 ppm

response 197131

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	106.56
109.00	86.40	80.51
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.785	152	74684	40.00	ppm		0.00
33) d8-Naphthalene	5.951	136	290315	40.00	ppm		0.00
57) d10-Acenaphthene	7.657	164	158636	40.00	ppm		0.00
91) d10-Phenanthrene	9.128	188	269243	40.00	ppm		0.00
117) d12-Chrysene	12.417	240	278530	40.00	ppm		0.00
135) d12-Perylene	15.364	264	279910	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.720	112	398635	161.32	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 80.66%#				
12) SURR2,PHENOL-D6	4.469	99	494082	162.93	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 81.47%				
34) SURR4,NITROBENZENE-D5	5.282	82	436059	163.16	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 163.16%#				
63) SURR5,2-FLUOROBIPHENYL	6.994	172	890653	160.46	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 160.46%#				
88) SURR3,2,4,6-TRIBROMOPH...	8.443	330	157488	171.80	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 85.90%				
124) SURR6,TERPHENYL-D14	10.823	244	1019800	160.52	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 160.52%				
Target Compounds							Qvalue
2) Pyridine	2.704	79	425813	163.760	ppm		92
3) N-Nitrosodimethylamine	2.672	74	223937	164.984	ppm		88
4) 2-Picoline	3.260	93	426464	164.653	ppm		99
5) N-Nitrosomethylamine	3.341	42	201464	155.643	ppm		89
6) Methyl Methansulfonate	3.576	80	191521	159.491	ppm		97
8) N-Nitrosodiethylamine	3.886	102	183183	160.231	ppm		95
9) Ethyl Mathanesulfonate	4.127	79	315201	164.159	ppm		95
11) Aniline	4.501	93	666908	167.177	ppm		89
13) Phenol	4.480	94	526666	162.224	ppm		85
14) bis(2-Clethyl)Ether	4.544	93	356588	164.440	ppm		99
15) Pentachloroethane	4.544	117	143186	161.621	ppm		98
16) 2-Chlorophenol	4.608	128	419806	160.977	ppm		98
17) 1,3-Diclbenzene	4.737	146	433124	157.672	ppm		96
18) 1,4-Dichlorobenzene	4.801	146	441526	160.753	ppm		99
19) 1,2-Diclbenzene	4.934	146	415542	161.842	ppm		96
20) Benzyl Alcohol	4.902	79	332429	169.843	ppm		97
21) 1-Methyl-2-pyrrolidinone	4.951	99	281559	167.030	ppm		93
22) 2,2'-oxybis(1-Chloropr...	5.009	45	444084	159.916	ppm	#	75
23) 2-Methylphenol	5.031	108	359933	161.992	ppm		97
24) 3+4-Methylphenol	5.159	108	422467	168.046	ppm		91
25) Acetophenone	5.138	105	546236	156.936	ppm		82
26) N-Nitroso-Di-n-propyla...	5.143	70	313171	157.656	ppm	#	77
27) N-Nitrosopyrrolidine	5.143	100	224843	166.770	ppm	#	31
28) N-Nitrosomorpholine	5.170	56	249479	158.481	ppm		94
29) o-Toluidine	5.175	106	646469	164.078	ppm		81
30) Hexachloroethane	5.234	117	184951	159.472	ppm		80
31) o,o,o-Triethylphosphor...	5.678	198	197944	160.650	ppm	#	29
32) Alpha-terpinol	5.972	121	165697	163.518	ppm		91
35) Nitrobenzene	5.304	77	409771	161.868	ppm		95
36) N-Nitrosopiperidine	5.443	42	269946	160.915	ppm		91
37) Isophorone	5.517	82	610271	159.385	ppm		99
38) 2-Nitrophenol	5.592	139	236783	168.028	ppm		92
40) 2,4-Dimethylphenol	5.635	107	424906	162.932	ppm		99

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) bis(-2-Chloroethoxy)Me...	5.710	93	446940	160.059	ppm	98
42) 2,4-Dichlorophenol	5.833	162	345695	165.939	ppm	99
43) a,a-Dimethylphenethyla...	6.432	58	725085m	145.926	ppm	
44) 1,2,4-Trichlorobenzene	5.892	180	355156	161.621	ppm	98
45) Naphthalene	5.972	128	1160304	156.150	ppm	98
46) 4-Chloroaniline	6.026	127	519341	164.432	ppm	97
47) 2,6-Dichlorophenol	6.036	162	344786	167.915	ppm	98
48) Hexachlorobutadiene	6.074	225	212043	160.890	ppm	98
49) Hexachloropropene	6.047	213	261897	166.978	ppm	97
50) 4-Chloro-3-methylphenol	6.512	107	333053	152.242	ppm	100
51) N-N-di-n-butylamine	6.336	84	286249	143.007	ppm	95
52) Caprolactam	6.411	113	129120	165.154	ppm	96
53) p-Phenylenediamine	6.389	80	532748	271.969	ppm	95
54) Safrole	6.544	162	302602	161.874	ppm	87
55) 2-Methylnaphthalene	6.635	142	761587	161.148	ppm	97
56) 1-Methylnaphthalene	6.732	142	758128	161.775	ppm	97
58) Hexachlorocyclopentadiene	6.780	237	170001	158.025	ppm	93
59) 1,2,4,5-Tetrachloroben...	6.796	216	360983	163.842	ppm	98
60) 1,2,3,4-Tetrachloroben...	7.079	216	379485	158.870	ppm	98
61) 2,4,6-Trichlorophenol	6.919	196	237124	165.237	ppm	98
62) 2,4,5-Trichlorophenol	6.972	196	227209	165.098	ppm	99
64) Isosafrole	7.053	104	171820	159.985	ppm	83
65) 1,1'-Biphenyl	7.095	154	1052569	158.649	ppm	99
66) 2-Chloronaphthalene	7.117	162	708779	158.950	ppm	93
67) 2-Nitroaniline	7.224	65	230857	157.278	ppm	87
68) 1,4-Naphthoquinone	7.293	158	104443m	137.230	ppm	
69) m-Dinitrobenzene	7.443	168	137609	167.999	ppm	98
70) Acenaphthylene	7.523	152	1175495	158.685	ppm	99
71) Dimethyl phthalate	7.395	163	809307	155.705	ppm	100
72) 2,6-Dinitrotoluene	7.459	165	188841	159.204	ppm	92
73) Acenaphthene	7.689	153	758997	157.294	ppm	98
74) 3-Nitroaniline	7.630	138	241616	163.261	ppm	86
75) 2,4-Dinitrophenol	7.743	184	107088	158.166	ppm	79
76) Dibenzofuran	7.860	168	996293	151.906	ppm	87
77) 2,4-Dinitrotoluene	7.866	165	275133	172.793	ppm	91
78) 4-Nitrophenol	7.833	65	122856m	121.627	ppm	
79) Pentachlorobenzene	7.817	250	314679	151.897	ppm	99
80) 1-Napthylamine	7.946	143	662159	153.944	ppm	97
81) 2-Napthylamine	8.026	143	711101	154.843	ppm	96
82) 2,3,4,6-Tetrachlorophenol	7.994	232	187384	167.679	ppm	93
83) Fluorene	8.203	166	779021	150.324	ppm	97
84) 4-Chlorophenyl-phenyle...	8.197	204	364531	147.964	ppm	97
85) Diethylphthalate	8.085	149	865173	160.277	ppm	96
86) 4-Nitroaniline	8.245	138	252729	164.835	ppm	89
87) 5-Nitro-o-toluidine	8.229	152	270858	163.299	ppm	90
89) Sulfotepp	8.465	322	149139	167.461	ppm	97
90) Octachlorocyclopentene	8.443	307	153757	174.110	ppm	98
92) Thionazin	8.165	107	149325	165.365	ppm	98
93) 4,6-Dinitro-2-methylph...	8.272	198	156694	166.908	ppm	90
94) Diphenylamine	8.320	169	1392013	310.815	ppm	98
95) 1,2 Diphenylhydrazine	8.352	77	840751	150.356	ppm	90
96) N-Nitrosodiphenylamine	8.320	169	1392013	310.737	ppm	98
97) 1,3,5-Trinirobenzene	8.636	213	82728	170.393	ppm	85
98) Diallate	8.593	86	308627	161.078	ppm	97
99) Phorate	8.604	121	168025	155.870	ppm	95
100) Phenacetin	8.646	108	505097	164.312	ppm	92

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

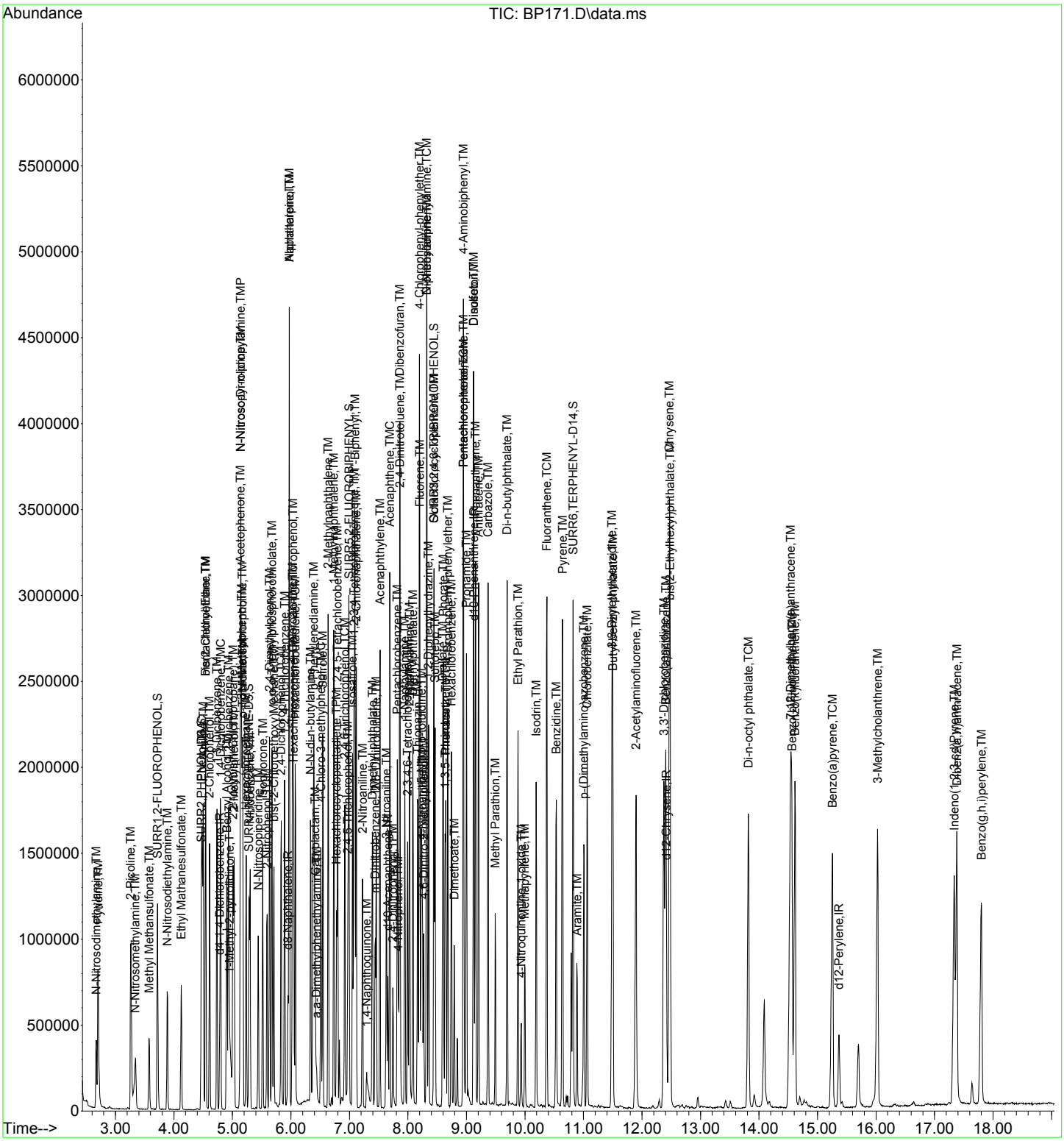
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) 4-Bromophenyl-phenylether	8.679	248	243546	158.686	ppm	#	89
102) Hexachlorobenzene	8.743	284	277590	153.244	ppm		98
103) Dimethoate	8.791	87	186780	116.034	ppm		97
105) Pentachlorophenol	8.951	266	147266	171.255	ppm		96
106) 4-Aminobiphenyl	8.946	169	858761	154.935	ppm		98
107) Pentachloronitrobenzene	8.951	237	112644	167.163	ppm		96
108) Pronamide	8.999	173	436675	165.159	ppm		97
109) Dinoseb	9.122	211	218475	172.588	ppm		97
110) Disulfoton	9.122	88	423901	153.605	ppm		94
111) Phenanthrene	9.155	178	1180335	160.823	ppm		99
112) Anthracene	9.208	178	1171454	161.741	ppm		99
113) Carbazole	9.368	167	1248028	159.941	ppm		100
114) Di-n-butylphthalate	9.695	149	1508164	163.505	ppm		99
115) 4-Nitroquinonline-1-oxide	9.935	190	57432	161.507	ppm		91
116) Fluoranthene	10.374	202	1317111	164.807	ppm		99
118) Methyl Parathion	9.492	109	176841	129.599	ppm		87
119) Ethyl Parathion	9.882	97	210862	161.809	ppm		97
120) Methapyrilene	9.994	58	240009	146.431	ppm		93
121) Isodrin	10.192	193	128697	153.856	ppm		88
122) Benzidine	10.535	184	798786	150.944	ppm		99
123) Pyrene	10.641	202	1355358	163.962	ppm		99
125) Aramite	10.893	185	163477m	152.022	ppm		
126) p-(Dimethylamino)azobe...	11.005	120	327801	141.191	ppm		88
127) Chlorobenzilate	11.064	139	456007	161.962	ppm		80
128) Butyl benzyl phthalate	11.503	149	684090	160.879	ppm		96
129) 3,3-Dimethylbenzidine	11.487	212	805292	157.159	ppm		97
130) 2-Acetylaminofluorene	11.898	181	649678	168.737	ppm		95
131) 3,3'-Dichlorobenzidine	12.374	252	543916	160.193	ppm		99
132) Benzo(a)anthracene	12.407	228	1243234	155.428	ppm		98
133) Chrysene	12.471	228	1228790	159.734	ppm		98
134) bis(2-Ethylhexyl)phtha...	12.481	149	947851	159.493	ppm		98
136) Di-n-octyl phthalate	13.819	149	1604583	169.770	ppm		96
137) 7,12-Dimethylbenz(a)an...	14.541	256	675379	164.674	ppm		96
138) Benzo(b)Fluoranthene	14.562	252	1359660	167.579	ppm		99
139) Benzo(k)fluoranthene	14.616	252	1240984	157.625	ppm		98
140) Benzo(a)pyrene	15.257	252	1162731	166.048	ppm		99
141) 3-Methylcholanthrene	16.028	268	679375	167.420	ppm		99
142) Indeno(1,2,3-cd)Pyrene	17.338	276	1073550	163.675	ppm		98
143) Dibenz(a,h)anthracene	17.381	278	1093276	162.499	ppm		97
144) Benzo(g,h,i)perylene	17.803	276	944032	148.741	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP171.D
Acq On : 17 Sep 2018 3:20 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

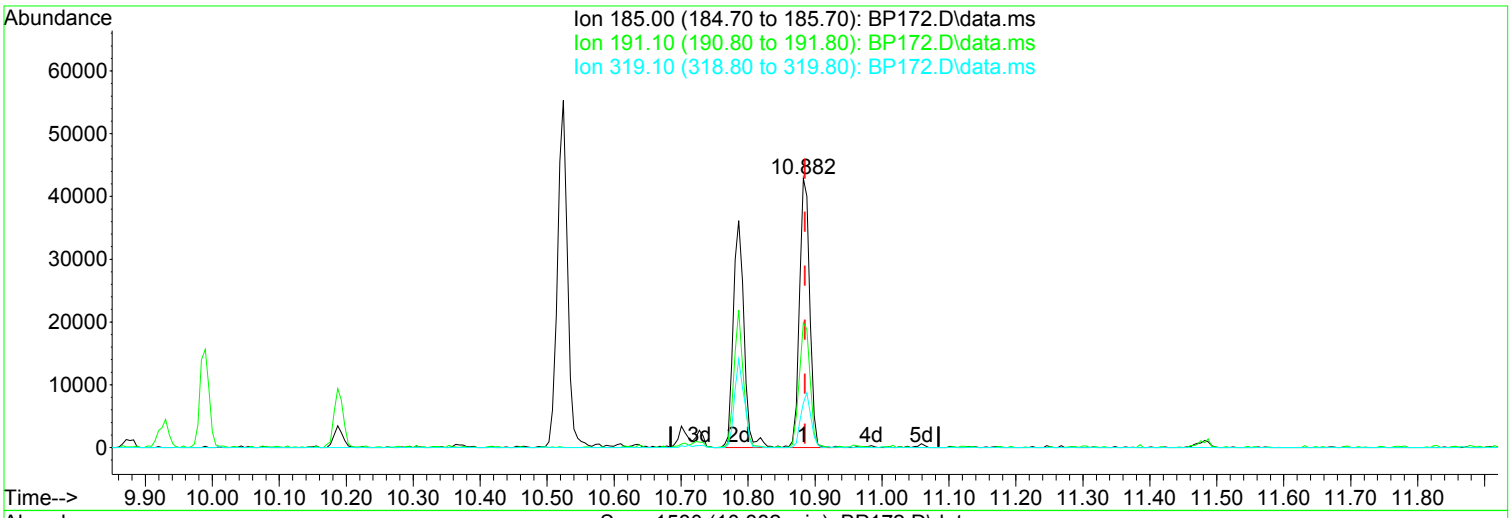
Quant Time: Sep 19 11:00:57 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:26:54 2018
Response via : Initial Calibration

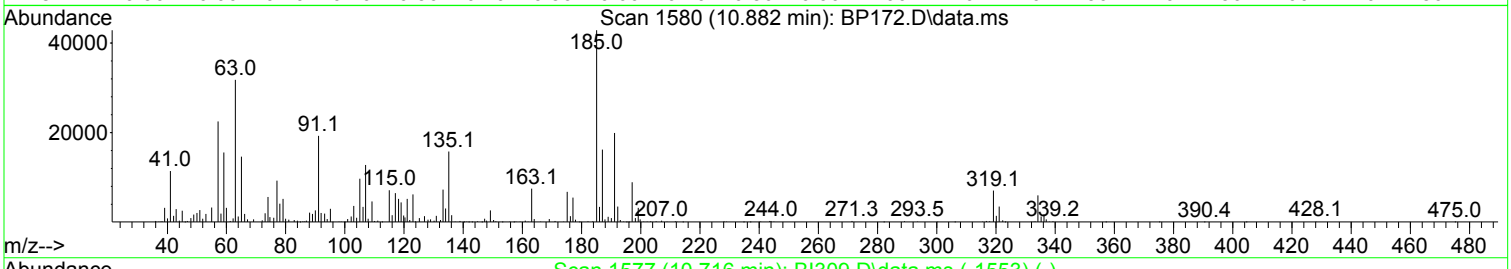


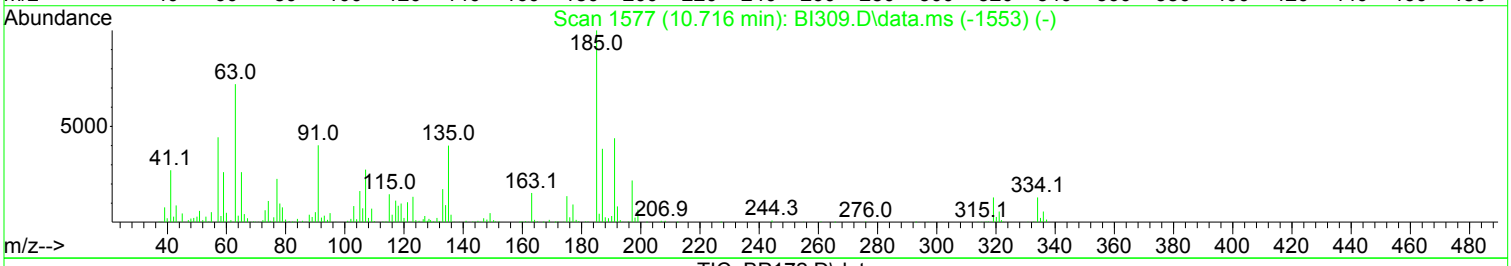
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP172.D
Acq On : 17 Sep 2018 3:49 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 11:40:28 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration







TIC: BP172.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 80.03 ppm m

response 86211

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	46.44
319.10	20.20	16.49
0.00	0.00	0.00

Manual Integration:

After

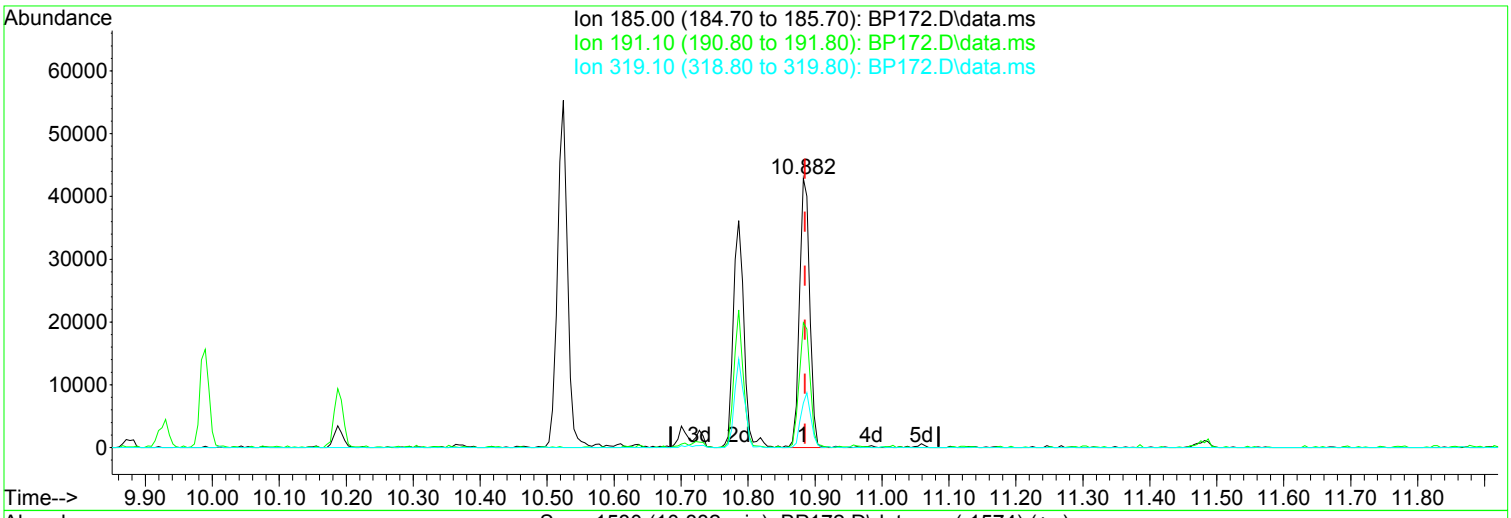
Split Peak.

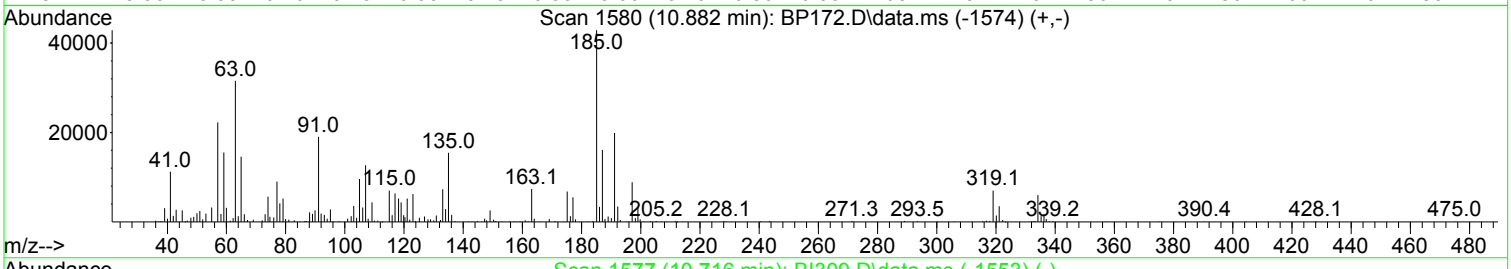
09/19/18

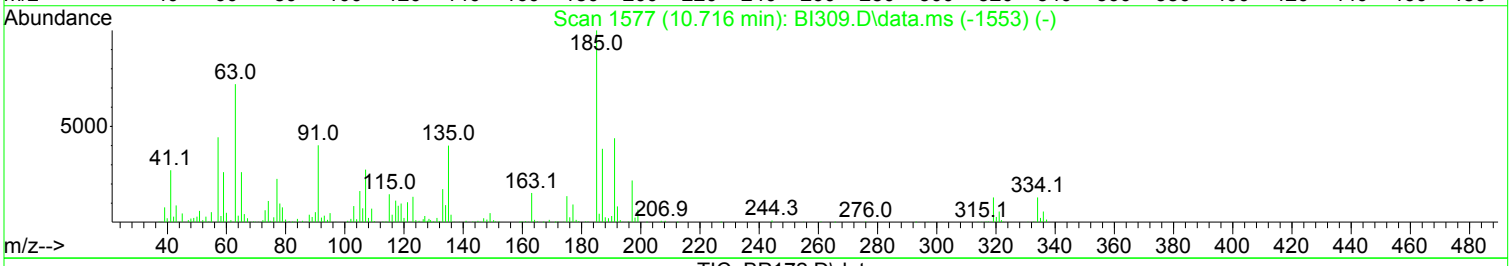
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP172.D
Acq On : 17 Sep 2018 3:49 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 11:40:28 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration







TIC: BP172.D\data.ms

(125) Aramite (TM)

10.882min (-0.002) 42.39 ppm

response 45664

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.60	46.09
319.10	20.20	16.39
0.00	0.00	0.00

Manual Integration:

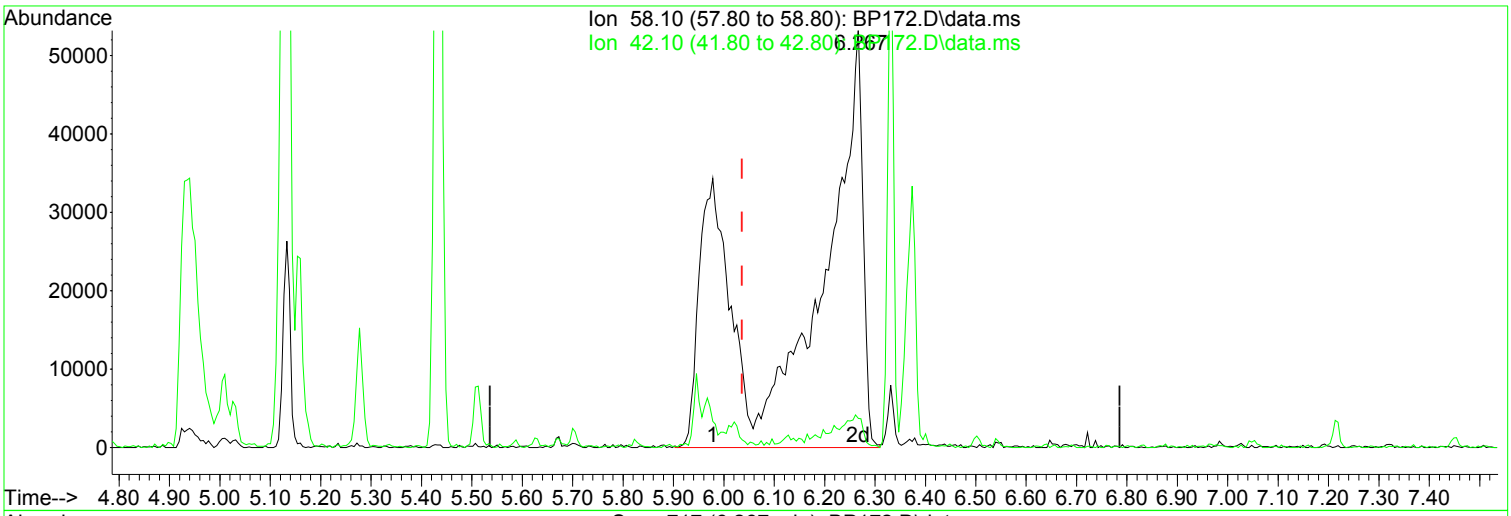
Before

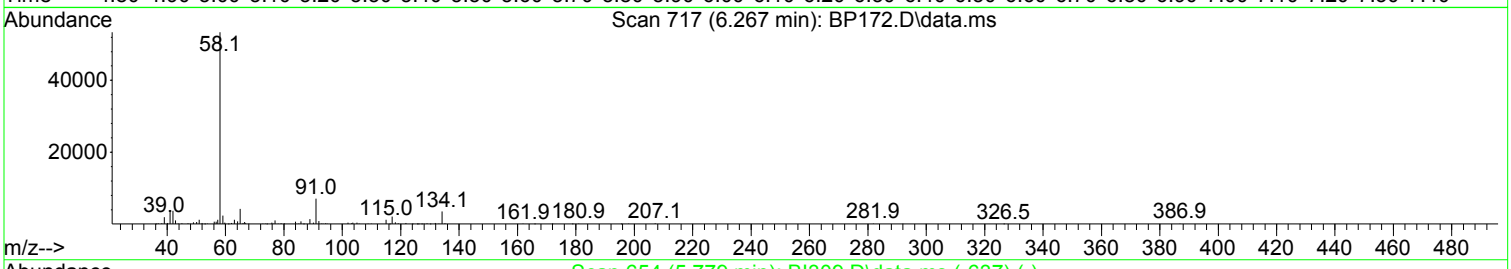
09/19/18

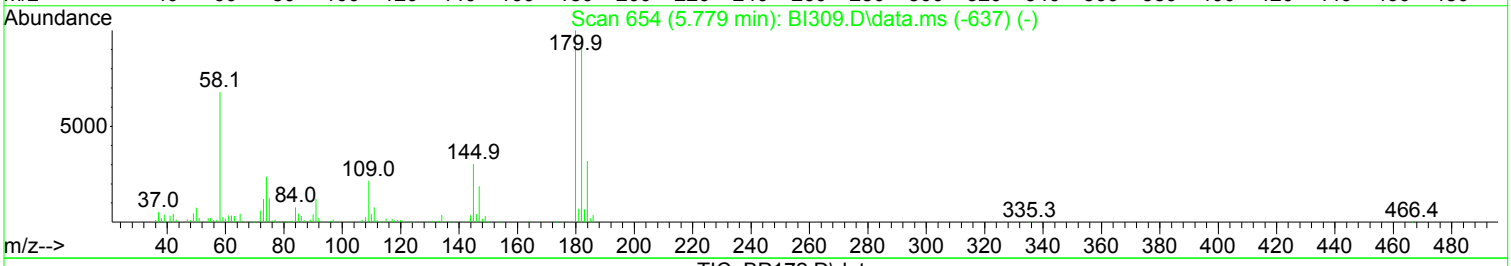
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP172.D
Acq On : 17 Sep 2018 3:49 pm
Operator : J.Misiurewicz
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TIC: BP172.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.267min (+ 0.230) 79.24 ppm m

response 410749

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	6.98
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

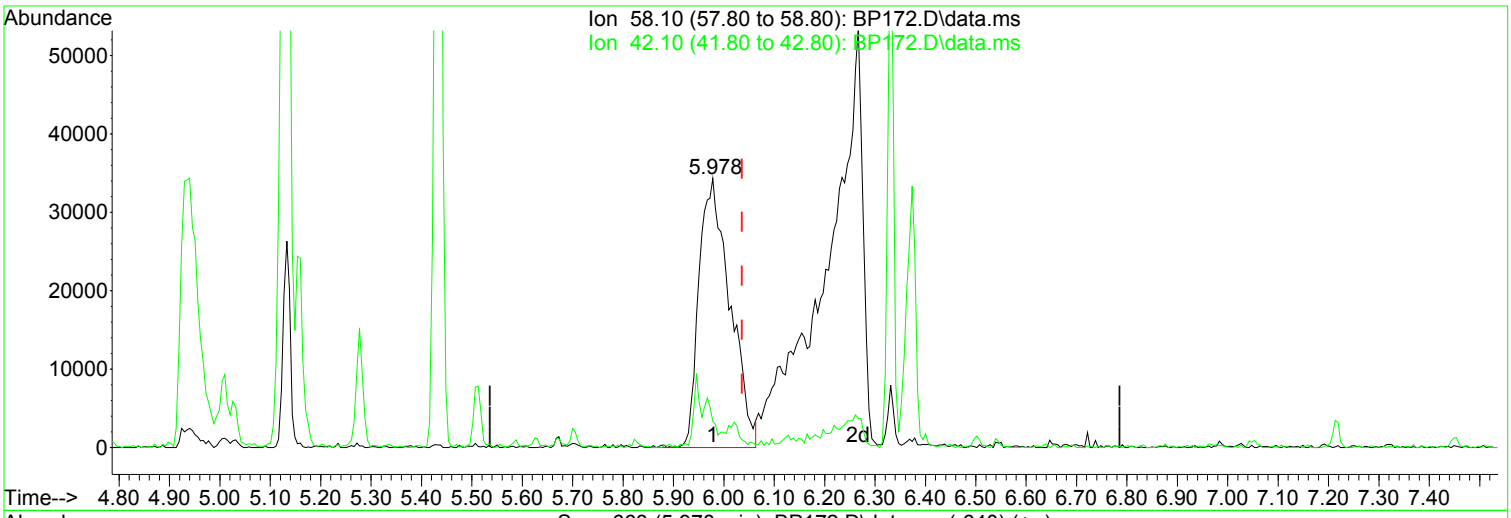
Poor integration.

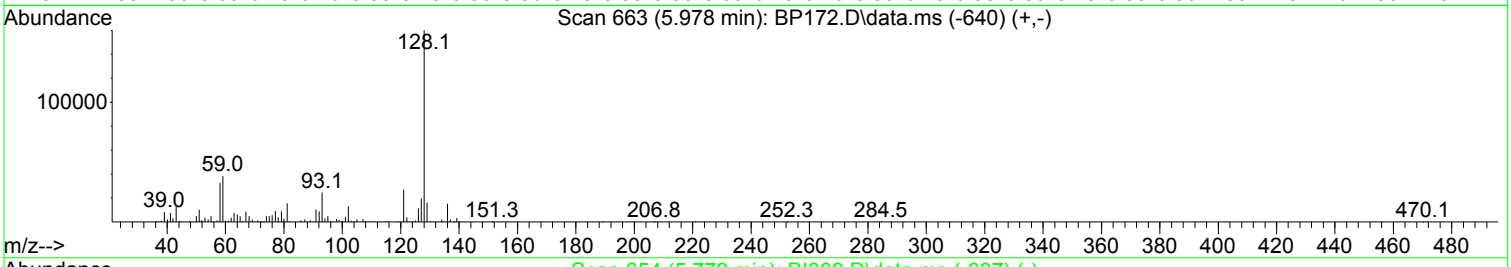
09/19/18

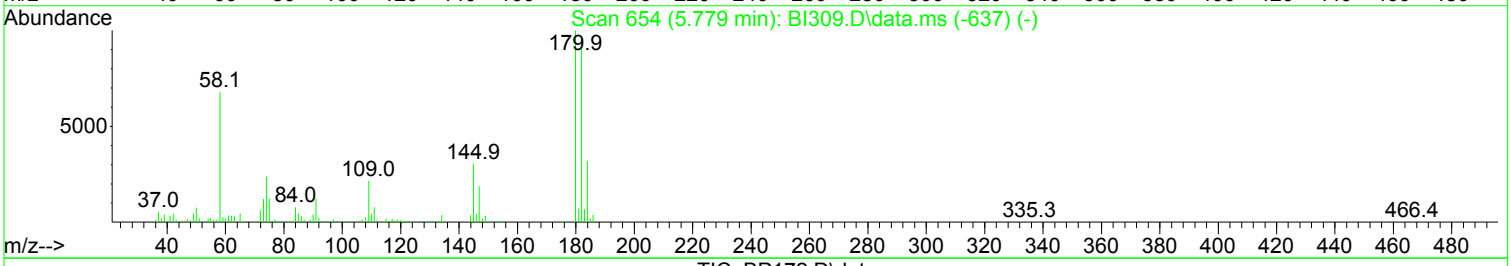
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP172.D
Acq On : 17 Sep 2018 3:49 pm
Operator : J.Misiurewicz
Sample : ICV
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ALS Vial : 14 Sample Multiplier: 1

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TIC: BP172.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.978min (-0.058) 28.31 ppm

response 146724

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	14.60	9.47
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

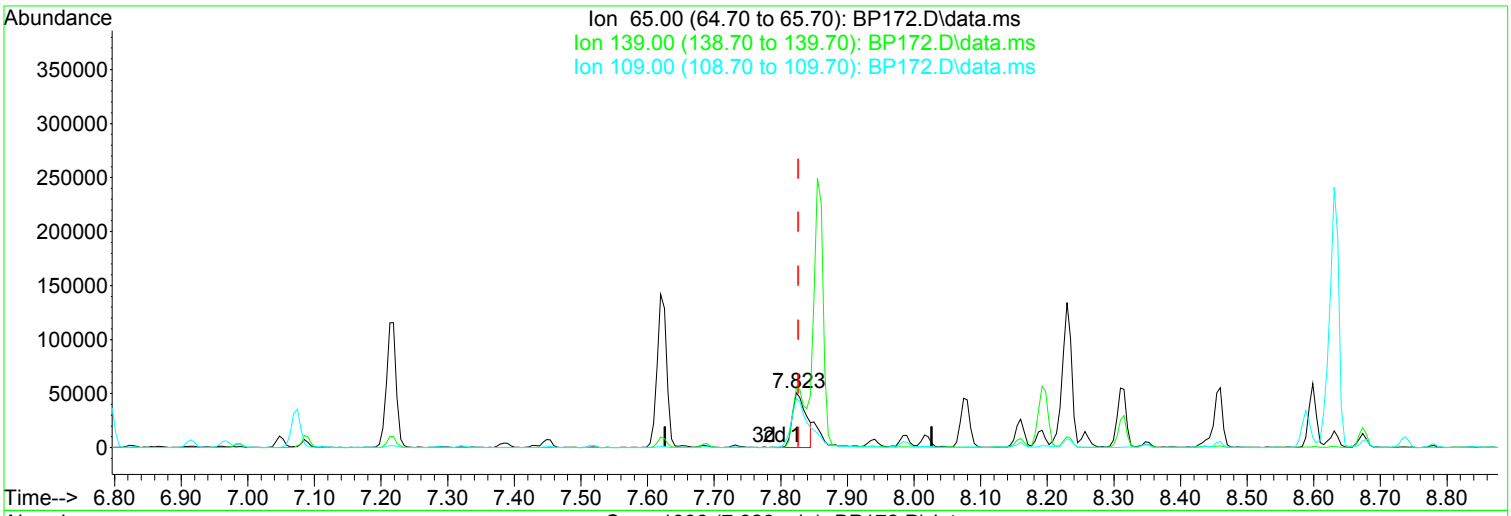
Before

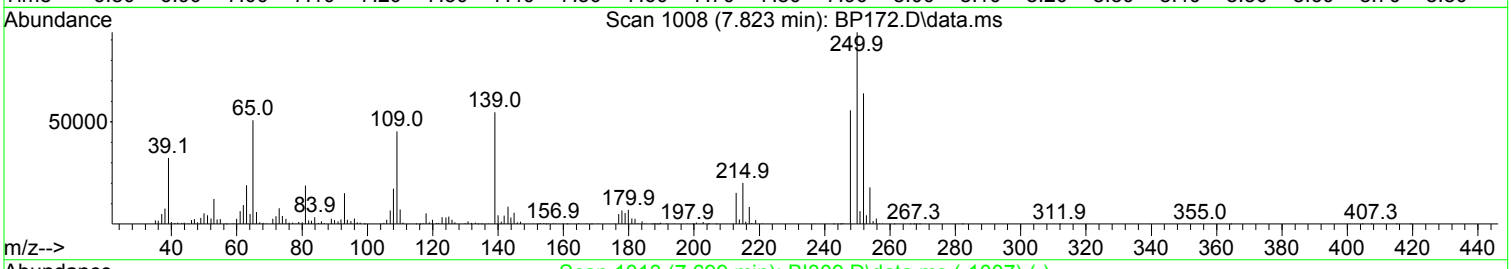
09/19/18

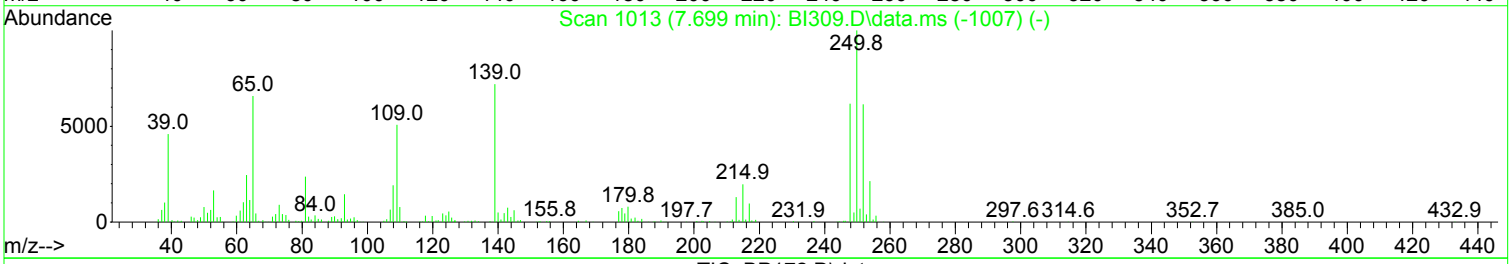
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP172.D
Acq On : 17 Sep 2018 3:49 pm
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TIC: BP172.D\data.ms

(78) 4-Nitrophenol (TMP)

7.823min (-0.003) 84.15 ppm m

response 72188

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	107.46
109.00	86.40	89.20
0.00	0.00	0.00

Manual Integration:

After

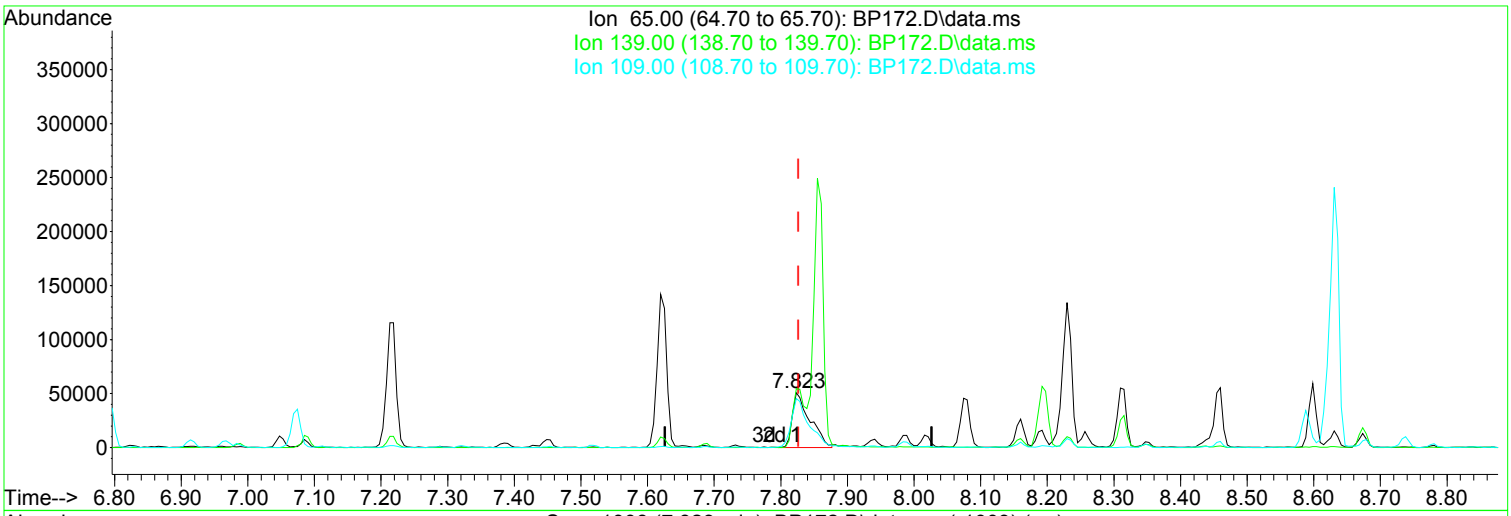
Poor integration.

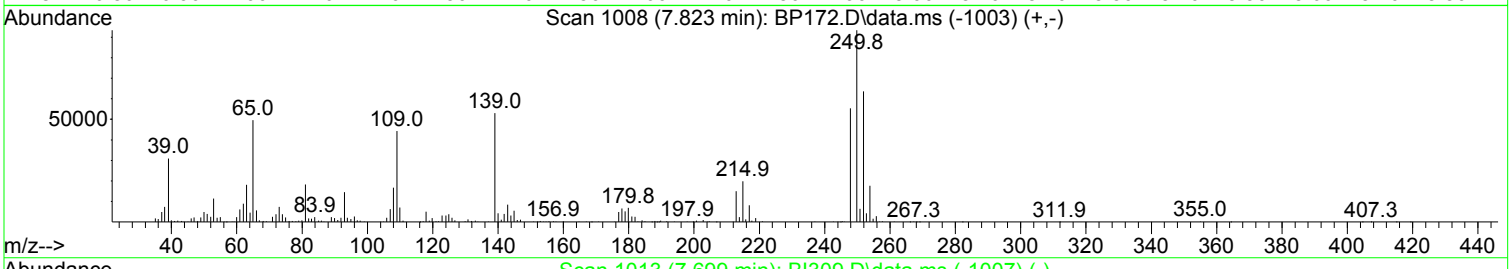
09/19/18

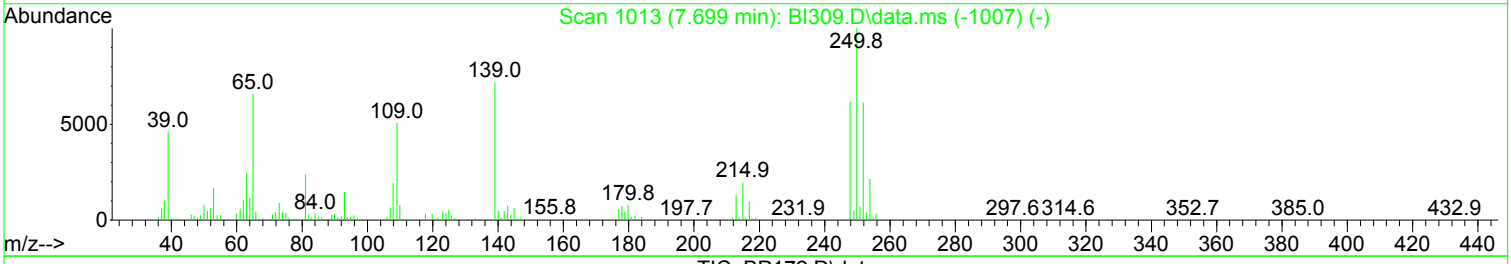
1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP172.D
Acq On : 17 Sep 2018 3:49 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 11:40:28 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration







TIC: BP172.D\data.ms

(78) 4-Nitrophenol (TMP)

7.823min (-0.003) 108.34 ppm

response 92940

Ion	Exp%	Act%
65.00	100.00	100.00
139.00	131.80	106.86
109.00	86.40	89.33
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st 09/19/18
2nd 09/21/18

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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	101	0.00
2	TM	Pyridine	80.000	79.011	1.2	99	0.00
3	TM	N-Nitrosodimethylamine	80.000	93.641	-17.1	116	0.00
4	TM	2-Picoline	80.000	79.726	0.3	100	0.00
5	TM	N-Nitrosomethylamine	80.000	77.412	3.2	100	0.00
6	TM	Methyl Methansulfonate	80.000	70.030	12.5	89	0.00
7	S	SURR1,2-FLUOROPHENOL	80.000	84.647	-5.8	106	0.00
8	TM	N-Nitrosodiethylamine	80.000	79.762	0.3	102	0.00
9	TM	Ethyl Mathanesulfonate	80.000	80.696	-0.9	101	0.00
10	TM	Benzaldehyde	80.000	90.991	-13.7	143	0.00
11	TM	Aniline	80.000	81.396	-1.7	103	0.00
12	S	SURR2,PHENOL-D6	80.000	84.377	-5.5	107	0.00
13	TMC	Phenol	80.000	83.458	-4.3	103	0.00
14	TM	bis(2-Clethyl)Ether	80.000	81.515	-1.9	104	0.00
15	TM	Pentachloroethane	80.000	90.346	-12.9	117	0.00
16	TM	2-Chlorophenol	80.000	83.974	-5.0	107	0.00
17	TM	1,3-Diclbenzene	80.000	86.530	-8.2	112	0.00
18	TMC	1,4-Dichlorobenzene	80.000	87.967	-10.0	113	0.00
19	TM	1,2-Diclbenzene	80.000	87.874	-9.8	111	0.00
20	TM	Benzyl Alcohol	80.000	91.637	-14.5	108	0.00
21	T	1-Methyl-2-pyrrolidinone	80.000	82.463	-3.1	101	0.02
22	TM	2,2'-oxybis(1-Chloropropane	80.000	65.109	18.6	84	0.00
23	TM	2-Methylphenol	80.000	84.441	-5.6	110	0.00
24	TM	3+4-Methylphenol	80.000	91.498	-14.4	112	0.00
25	TM	Acetophenone	80.000	83.420	-4.3	107	0.00
26	TMP	N-Nitroso-Di-n-propylamine	80.000	77.666	2.9	97	0.00
27	TM	N-Nitrosopyrrolidine	80.000	80.121	-0.2	99	0.00
28	TM	N-Nitrosomorpholine	80.000	77.717	2.9	100	0.00
29	TM	o-Toluidine	80.000	83.682	-4.6	104	0.00
30	TM	Hexachloroethane	80.000	83.282	-4.1	108	0.00
31	TM	o,o,o-Triethylphosphorothio	80.000	79.095	1.1	98	0.00
32	TM	Alpha-terpinol	80.000	75.583	5.5	96	0.00
33	IR	d8-Naphthalene	40.000	40.000	0.0	103	0.00
34	S	SURR4,NITROBENZENE-D5	80.000	79.358	0.8	105	0.00
35	TM	Nitrobenzene	80.000	87.369	-9.2	113	0.00
36	TM	N-Nitrosopiperidine	80.000	75.099	6.1	100	0.00
37	TM	Isophorone	80.000	97.488	-21.9#	127	0.00
38	TCM	2-Nitrophenol	80.000	81.707	-2.1	105	0.00
39	TM	Benzoic Acid	-1.000	0.000	0.0	0	-0.01
40	TM	2,4-Dimethylphenol	80.000	82.075	-2.6	107	0.00
41	TM	bis(-2-Chloroethoxy)Methane	80.000	79.341	0.8	106	0.00
42	TCM	2,4-Dichlorophenol	80.000	80.593	-0.7	103	0.00
43	TM	a,a-Dimethylphenethylamine	80.000	79.242	0.9	116	0.23
44	TM	1,2,4-Trichlorobenzene	80.000	82.515	-3.1	109	0.00
45	TM	Naphthalene	80.000	80.863	-1.1	106	0.00
46	TM	4-Chloroaniline	80.000	79.493	0.6	103	0.00
47	TM	2,6-Dichlorophenol	80.000	86.094	-7.6	110	0.00
48	TCM	Hexachlorobutadiene	80.000	82.405	-3.0	107	0.00
49	TM	Hexachloropropene	80.000	91.004	-13.8	120	0.00
50	TMC	4-Chloro-3-methylphenol	80.000	82.622	-3.3	110	0.00
51	TM	N-N-di-n-butylamine	80.000	68.791	14.0	100	0.00

1st DM 09/19/18
2nd MP 09/21/18

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Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	Caprolactam	80.000	78.698	1.6	106	0.02
53	TM	p-Phenylenediamine	280.000	34.961	87.5#	13	0.00
54	TM	Safrole	80.000	76.679	4.2	100	0.00
55	TM	2-Methylnaphthalene	80.000	84.766	-6.0	111	0.00
56	TM	1-Methylnaphthalene	80.000	81.228	-1.5	106	0.00
57	IR	d10-Acenaphthene	40.000	40.000	0.0	103	0.00
58	TPM	Hexachlorocyclopentadiene	80.000	95.134	-18.9	127	0.00
59	TM	1,2,4,5-Tetrachlorobenzene	80.000	88.411	-10.5	116	0.00
60	TM	1,2,3,4-Tetrachlorobenzene	80.000	80.002	-0.0	106	0.00
61	TCM	2,4,6-Trichlorophenol	80.000	84.097	-5.1	105	0.00
62	TM	2,4,5-Trichlorophenol	80.000	88.540	-10.7	118	0.00
63	S	SURR5,2-FLUOROBIPHENYL	80.000	81.816	-2.3	107	0.00
64	TM	Isosafrole	80.000	75.073	6.2	101	0.00
65	TM	1,1'-Biphenyl	80.000	76.274	4.7	100	0.00
66	TM	2-Chloronaphthalene	80.000	84.542	-5.7	111	0.00
67	TM	2-Nitroaniline	80.000	78.297	2.1	107	0.00
68	TM	1,4-Naphthoquinone	80.000	138.708	-73.4#	170	0.00
69	TM	m-Dinitrobenzene	80.000	90.121	-12.7	127	0.00
70	TM	Acenaphthylene	80.000	83.693	-4.6	109	0.00
71	TM	Dimethyl phthalate	80.000	84.200	-5.3	113	0.00
72	TM	2,6-Dinitrotoluene	80.000	84.065	-5.1	110	0.00
73	TMC	Acenaphthene	80.000	88.932	-11.2	118	0.00
74	TM	3-Nitroaniline	80.000	77.977	2.5	103	0.00
75	TPM	2,4-Dinitrophenol	80.000	77.006	3.7	91	0.00
76	TM	Dibenzofuran	80.000	82.950	-3.7	109	0.00
77	TM	2,4-Dinitrotoluene	80.000	90.799	-13.5	117	0.00
78	TMP	4-Nitrophenol	80.000	84.151	-5.2	94	0.00
79	TM	Pentachlorobenzene	80.000	88.374	-10.5	117	0.00
80	TM	1-Napthylamine	80.000	59.876	25.2#	83	0.00
81	TM	2-Napthylamine	80.000	81.357	-1.7	107	0.00
82	TM	2,3,4,6-Tetrachlorophenol	80.000	81.057	-1.3	101	0.00
83	TM	Fluorene	80.000	85.490	-6.9	114	0.00
84	TM	4-Chlorophenyl-phenylether	80.000	77.059	3.7	104	0.00
85	TM	Diethylphthalate	80.000	88.024	-10.0	115	0.00
86	TM	4-Nitroaniline	80.000	80.402	-0.5	103	0.00
87	TM	5-Nitro-o-toluidine	80.000	80.774	-1.0	103	0.00
88	S	SURR3,2,4,6-TRIBROMOPHENOL	80.000	82.672	-3.3	110	0.00
89	TM	Sulfotepp	80.000	82.173	-2.7	105	0.00
90	TM	Octachlorocyclopentene	80.000	87.121	-8.9	104	0.00
91	IR	d10-Phenanthrene	40.000	40.000	0.0	103	0.00
92	TM	Thionazin	80.000	80.686	-0.9	102	0.00
93	TM	4,6-Dinitro-2-methylphenol	80.000	88.153	-10.2	102	0.00
94	TM	Diphenylamine	160.000	155.205	3.0	104	0.00
95	TM	1,2 Diphenylhydrazine	80.000	75.714	5.4	102	0.00
96	TCM	N-Nitrosodiphenylamine	160.000	155.166	3.0	104	0.00
97	TM	1,3,5-Trinirobenzene	80.000	107.070	-33.8#	132	0.00
98	TM	Diallate	80.000	80.421	-0.5	105	0.00
99	TM	Phorate	80.000	76.191	4.8	95	0.00
100	TM	Phenacetin	80.000	86.107	-7.6	108	0.00
101	TM	4-Bromophenyl-phenylether	80.000	76.544	4.3	103	0.00

Evaluate Continuing Calibration Report

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Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 11:40:28 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	Hexachlorobenzene	80.000	80.558	-0.7	110	0.00
103	TM	Dimethoate	80.000	72.016	10.0	97	0.00
104	TM	Atrazine	-1.000	0.000	0.0	93	0.00
105	TCM	Pentachlorophenol	80.000	76.103	4.9	90	0.00
106	TM	4-Aminobiphenyl	80.000	84.959	-6.2	107	0.00
107	TM	Pentachloronitrobenzene	80.000	94.220	-17.8	113	0.00
108	TM	Pronamide	80.000	82.400	-3.0	101	0.00
109	TM	Dinoseb	80.000	86.629	-8.3	104	0.00
110	TM	Disulfoton	80.000	80.381	-0.5	104	0.00
111	TM	Phenanthrene	80.000	88.127	-10.2	114	0.00
112	TM	Anthracene	80.000	88.648	-10.8	114	0.00
113	TM	Carbazole	80.000	82.907	-3.6	105	0.00
114	TM	Di-n-butylphthalate	80.000	94.267	-17.8	115	0.00
115	TM	4-Nitroquinonline-1-oxide	80.000	101.459	-26.8#	123	0.00
116	TCM	Fluoranthene	80.000	90.924	-13.7	112	0.00
117	IR	d12-Chrysene	40.000	40.000	0.0	100	0.00
118	TM	Methyl Parathion	80.000	82.069	-2.6	104	0.00
119	TM	Ethyl Parathion	80.000	82.054	-2.6	100	0.00
120	TM	Methapyrilene	80.000	78.724	1.6	99	0.00
121	TM	Isodrin	80.000	83.771	-4.7	109	0.00
122	TM	Benzidine	80.000	77.944	2.6	96	0.00
123	TM	Pyrene	80.000	93.667	-17.1	114	0.00
124	S	SURR6,TERPHENYL-D14	80.000	85.484	-6.9	109	0.00
125	TM	Aramite	80.000	80.032	-0.0	104	0.00
126	TM	p-(Dimethylamino)azobenzene	80.000	88.863	-11.1	108	0.00
127	TM	Chlorobenzilate	80.000	83.529	-4.4	106	0.00
128	TM	Butyl benzyl phthalate	80.000	91.593	-14.5	114	0.00
129	TM	3,3-Dimethylbenzidine	80.000	82.829	-3.5	101	0.00
130	TM	2-Acetylaminofluorene	80.000	84.059	-5.1	100	0.00
131	TM	3,3'-Dichlorobenzidine	80.000	81.766	-2.2	104	0.00
132	TM	Benzo(a)anthracene	80.000	86.873	-8.6	112	0.00
133	TM	Chrysene	80.000	84.606	-5.8	107	0.00
134	TM	bis(2-Ethylhexyl)phthalate	80.000	91.301	-14.1	114	0.00
135	IR	d12-Perylene	40.000	40.000	0.0	102	0.00
136	TCM	Di-n-octyl phthalate	80.000	97.908	-22.4	120	0.00
137	TM	7,12-Dimethylbenz(a)anthrac	80.000	82.813	-3.5	103	0.00
138	TM	Benzo(b)Fluoranthene	80.000	89.322	-11.7	111	0.01
139	TM	Benzo(k)fluoranthene	80.000	87.622	-9.5	112	0.00
140	TCM	Benzo(a)pyrene	80.000	90.045	-12.6	112	0.00
141	TM	3-Methylcholanthrene	80.000	85.003	-6.3	105	0.00
142	TM	Indeno(1,2,3-cd)Pyrene	80.000	86.546	-8.2	106	0.00
143	TM	Dibenz(a,h)anthracene	80.000	91.007	-13.8	113	0.00
144	TM	Benzo(g,h,i)perylene	80.000	84.349	-5.4	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1st DM 09/19/18
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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	74595	40.00	ppm		0.00
33) d8-Naphthalene	5.946	136	301902	40.00	ppm		0.00
57) d10-Acenaphthene	7.657	164	163225	40.00	ppm		0.00
91) d10-Phenanthrene	9.123	188	272267	40.00	ppm		0.00
117) d12-Chrysene	12.412	240	278090	40.00	ppm		0.00
135) d12-Perylene	15.359	264	287131	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.715	112	208916	84.65	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 42.33%				
12) SURR2,PHENOL-D6	4.464	99	255560	84.38	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 42.19%				
34) SURR4,NITROBENZENE-D5	5.277	82	220560	79.36	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 79.36%				
63) SURR5,2-FLUOROBIPHENYL	6.989	172	467253	81.82	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 81.82%				
88) SURR3,2,4,6-TRIBROMOPH...	8.438	330	77978	82.67	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 41.34%				
124) SURR6,TERPHENYL-D14	10.818	244	542231	85.48	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 85.48%				
Target Compounds							Qvalue
2) Pyridine	2.704	79	205202	79.011	ppm		96
3) N-Nitrosodimethylamine	2.672	74	126949	93.641	ppm		93
4) 2-Picoline	3.266	93	206252	79.726	ppm		98
5) N-Nitrosomethylamine	3.341	42	100082	77.412	ppm		90
6) Methyl Methansulfonate	3.576	80	83994	70.030	ppm		98
8) N-Nitrosodiethylamine	3.886	102	91078	79.762	ppm		98
9) Ethyl Mathanesulfonate	4.122	79	154760	80.696	ppm		98
10) Benzaldehyde	4.411	106	130510	90.991	ppm		92
11) Aniline	4.496	93	324322	81.396	ppm		89
13) Phenol	4.475	94	270625	83.458	ppm		86
14) bis(2-Clethyl)Ether	4.539	93	176555	81.515	ppm		96
15) Pentachloroethane	4.539	117	79945	90.346	ppm		97
16) 2-Chlorophenol	4.609	128	218731	83.974	ppm		100
17) 1,3-Diclbenzene	4.732	146	237416	86.530	ppm		94
18) 1,4-Dichlorobenzene	4.796	146	241325	87.967	ppm		99
19) 1,2-Diclbenzene	4.929	146	225355	87.874	ppm		95
20) Benzyl Alcohol	4.897	79	179145	91.637	ppm		96
21) 1-Methyl-2-pyrrolidinone	4.935	99	138841	82.463	ppm		90
22) 2,2'-oxybis(1-Chloropr...	5.010	45	180591	65.109	ppm	#	74
23) 2-Methylphenol	5.015	108	187239	84.441	ppm		97
24) 3+4-Methylphenol	5.143	108	229785	91.498	ppm		100
25) Acetophenone	5.138	105	290009	83.420	ppm		92
26) N-Nitroso-Di-n-propyla...	5.133	70	154093	77.666	ppm		85
27) N-Nitrosopyrrolidine	5.127	100	107893	80.121	ppm	#	56
28) N-Nitrosomorpholine	5.159	56	122195	77.717	ppm		95
29) o-Toluidine	5.170	106	329317	83.682	ppm		69
30) Hexachloroethane	5.234	117	96473	83.282	ppm		90
31) o,o,o-Triethylphosphor...	5.673	198	97340	79.095	ppm	#	21
32) Alpha-terpinol	5.967	121	76499	75.583	ppm		85
35) Nitrobenzene	5.298	77	230003	87.369	ppm		97
36) N-Nitrosopiperidine	5.432	42	131013	75.099	ppm		89
37) Isophorone	5.512	82	388170	97.488	ppm		98
38) 2-Nitrophenol	5.587	139	119736	81.707	ppm		90

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 2,4-Dimethylphenol	5.625	107	222584	82.075	ppm		96
41) bis(-2-Chloroethoxy)Me...	5.705	93	230389	79.341	ppm		97
42) 2,4-Dichlorophenol	5.823	162	174598	80.593	ppm		98
43) a,a-Dimethylphenethyla...	6.267	58	410749m	79.242	ppm		
44) 1,2,4-Trichlorobenzene	5.892	180	188561	82.515	ppm		90
45) Naphthalene	5.967	128	624846	80.863	ppm		98
46) 4-Chloroaniline	6.021	127	261092	79.493	ppm		97
47) 2,6-Dichlorophenol	6.031	162	183836	86.094	ppm		97
48) Hexachlorobutadiene	6.074	225	112939	82.405	ppm		97
49) Hexachloropropene	6.047	213	148433	91.004	ppm		96
50) 4-Chloro-3-methylphenol	6.502	107	187961	82.622	ppm		98
51) N-N-di-n-butylamine	6.331	84	143192	68.791	ppm		98
52) Caprolactam	6.374	113	63751	78.698	ppm		89
53) p-Phenylenediamine	6.374	80	39203	34.961	ppm		79
54) Safrole	6.545	162	149061	76.679	ppm		98
55) 2-Methylnaphthalene	6.636	142	416594	84.766	ppm		97
56) 1-Methylnaphthalene	6.732	142	395851	81.228	ppm		97
58) Hexachlorocyclopentadiene	6.780	237	89383	95.134	ppm		93
59) 1,2,4,5-Tetrachloroben...	6.796	216	200426	88.411	ppm		97
60) 1,2,3,4-Tetrachloroben...	7.074	216	196626	80.002	ppm		98
61) 2,4,6-Trichlorophenol	6.914	196	124232	84.097	ppm		95
62) 2,4,5-Trichlorophenol	6.967	196	125374	88.540	ppm		97
64) Isosafrole	7.048	104	82959	75.073	ppm	#	2
65) 1,1'-Biphenyl	7.085	154	520684	76.274	ppm		98
66) 2-Chloronaphthalene	7.112	162	387889	84.542	ppm		95
67) 2-Nitroaniline	7.219	65	118251	78.297	ppm		83
68) 1,4-Naphthoquinone	7.294	158	108459	138.708	ppm		97
69) m-Dinitrobenzene	7.433	168	75954	90.121	ppm		91
70) Acenaphthylene	7.518	152	637907	83.693	ppm		99
71) Dimethyl phthalate	7.384	163	450303	84.200	ppm		98
72) 2,6-Dinitrotoluene	7.454	165	102599	84.065	ppm		93
73) Acenaphthene	7.689	153	441539	88.932	ppm		99
74) 3-Nitroaniline	7.625	138	118739	77.977	ppm		87
75) 2,4-Dinitrophenol	7.732	184	41209	77.006	ppm		66
76) Dibenzofuran	7.855	168	559776	82.950	ppm		100
77) 2,4-Dinitrotoluene	7.855	165	148749	90.799	ppm		81
78) 4-Nitrophenol	7.823	65	72188m	84.151	ppm		
79) Pentachlorobenzene	7.818	250	188376	88.374	ppm		99
80) 1-Napthylamine	7.941	143	264995	59.876	ppm		98
81) 2-Napthylamine	8.021	143	384433	81.357	ppm		97
82) 2,3,4,6-Tetrachlorophenol	7.989	232	93203	81.057	ppm		98
83) Fluorene	8.197	166	455853	85.490	ppm		97
84) 4-Chlorophenyl-phenyle...	8.192	204	195338	77.059	ppm		91
85) Diethylphthalate	8.080	149	488895	88.024	ppm		96
86) 4-Nitroaniline	8.230	138	126840	80.402	ppm		95
87) 5-Nitro-o-toluidine	8.219	152	137845	80.774	ppm		96
89) Sulfotepp	8.460	322	75299	82.173	ppm		99
90) Octachlorocyclopentene	8.438	307	79163	87.121	ppm		94
92) Thionazin	8.160	107	73678	80.686	ppm		96
93) 4,6-Dinitro-2-methylph...	8.256	198	83688	88.153	ppm		80
94) Diphenylamine	8.315	169	702906	155.205	ppm		99
95) 1,2 Diphenylhydrazine	8.347	77	428165	75.714	ppm		89
96) N-Nitrosodiphenylamine	8.315	169	702906	155.166	ppm		99
97) 1,3,5-Trinirobenzene	8.620	213	52568	107.070	ppm	#	68
98) Diallate	8.588	86	155818	80.421	ppm		95
99) Phorate	8.599	121	83055	76.191	ppm		94

1st DM 09/19/18
2nd MP 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP172.D
Acq On : 17 Sep 2018 3:49 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 11:40:28 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration

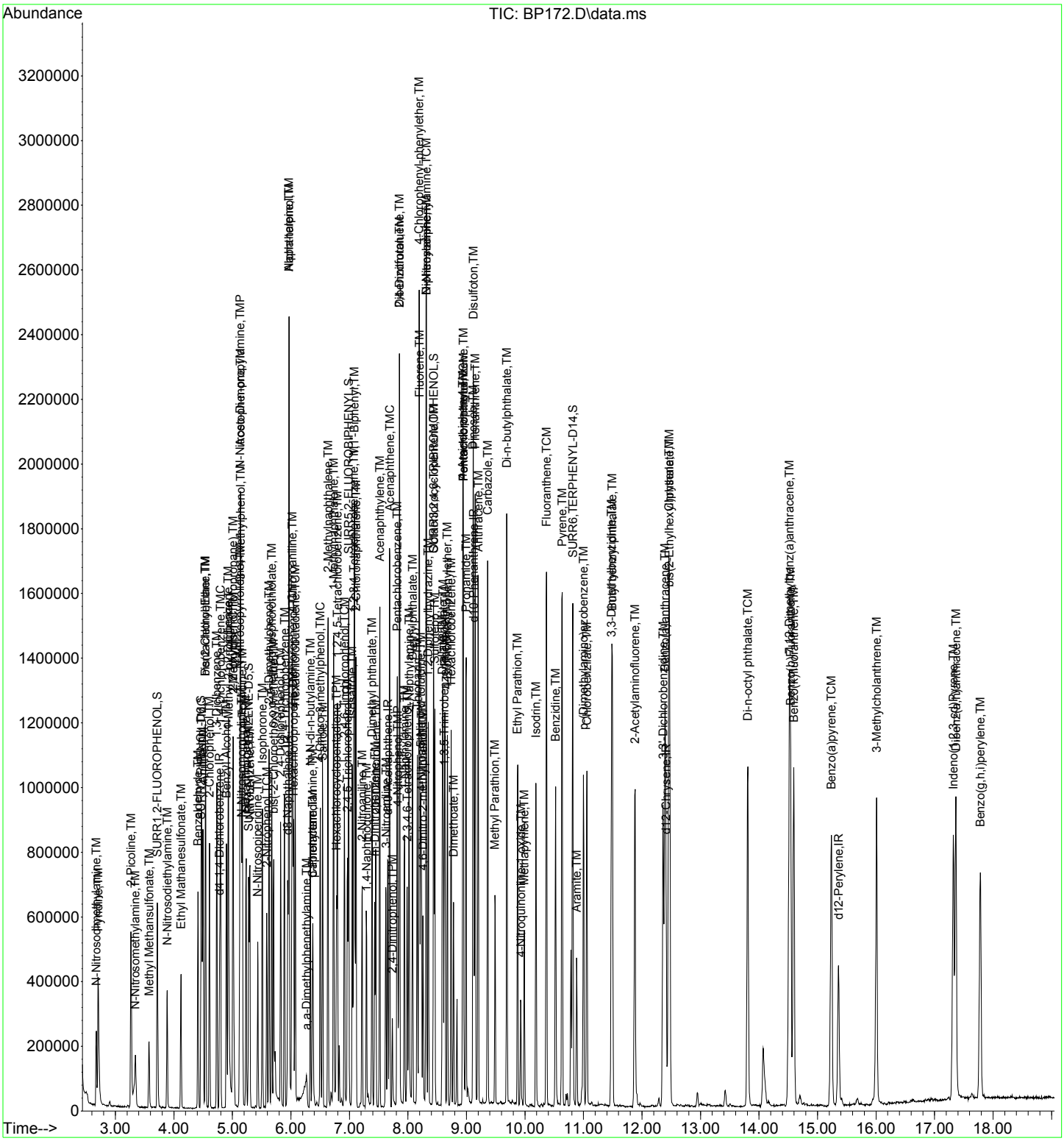
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Phenacetin	8.631	108	267665	86.107	ppm	93
101) 4-Bromophenyl-phenylether	8.673	248	118797	76.544	ppm	88
102) Hexachlorobenzene	8.738	284	147564	80.558	ppm	93
103) Dimethoate	8.780	87	117226	72.016	ppm	92
105) Pentachlorophenol	8.946	266	66776	76.103	ppm	93
106) 4-Aminobiphenyl	8.936	169	476195	84.959	ppm	99
107) Pentachloronitrobenzene	8.946	237	64204	94.220	ppm	92
108) Pronamide	8.994	173	220311	82.400	ppm	97
109) Dinoseb	9.112	211	110893	86.629	ppm	91
110) Disulfoton	9.117	88	224318	80.381	ppm	95
111) Phenanthrene	9.150	178	654061	88.127	ppm	99
112) Anthracene	9.203	178	649269	88.648	ppm	99
113) Carbazole	9.363	167	654193	82.907	ppm	98
114) Di-n-butylphthalate	9.690	149	879282	94.267	ppm	99
115) 4-Nitroquinonline-1-oxide	9.930	190	36484	101.459	ppm	95
116) Fluoranthene	10.369	202	734811	90.924	ppm	99
118) Methyl Parathion	9.486	109	111808	82.069	ppm	84
119) Ethyl Parathion	9.872	97	106760	82.054	ppm	98
120) Methapyrilene	9.989	58	128829	78.724	ppm	96
121) Isodrin	10.187	193	69962	83.771	ppm	86
122) Benzidine	10.524	184	411815	77.944	ppm	99
123) Pyrene	10.636	202	773060	93.667	ppm	98
125) Aramite	10.882	185	86211m	80.032	ppm	
126) p-(Dimethylamino)azobe...	11.000	120	205985	88.863	ppm	92
127) Chlorobenzilate	11.059	139	234812	83.529	ppm	83
128) Butyl benzyl phthalate	11.492	149	388855	91.593	ppm	93
129) 3,3-Dimethylbenzidine	11.482	212	423752	82.829	ppm	97
130) 2-Acetylaminofluorene	11.883	181	323135	84.059	ppm	93
131) 3,3'-Dichlorobenzidine	12.359	252	277187	81.766	ppm	96
132) Benzo(a)anthracene	12.391	228	693778	86.873	ppm	99
133) Chrysene	12.460	228	649574	84.606	ppm	99
134) bis(2-Ethylhexyl)phtha...	12.471	149	541737	91.301	ppm	94
136) Di-n-octyl phthalate	13.808	149	949251	97.908	ppm	96
137) 7,12-Dimethylbenz(a)an...	14.520	256	348402	82.813	ppm	95
138) Benzo(b)Fluoranthene	14.541	252	743417	89.322	ppm	96
139) Benzo(k)fluoranthene	14.594	252	707644	87.622	ppm	97
140) Benzo(a)pyrene	15.236	252	646797	90.045	ppm	98
141) 3-Methylcholanthrene	16.012	268	353849	85.003	ppm	96
142) Indeno(1,2,3-cd)Pyrene	17.322	276	582303	86.546	ppm	92
143) Dibenz(a,h)anthracene	17.365	278	628080	91.007	ppm	97
144) Benzo(g,h,i)perylene	17.782	276	549142	84.349	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP172.D
Acq On : 17 Sep 2018 3:49 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 11:40:28 2018
Quant Method : I:\ACQUDATA\5973D\Methods\8270091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 11:26:08 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP173.D
Acq On : 17 Sep 2018 4:17 pm
Operator : J.Misiurewicz
Sample : BLK
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 10:59:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

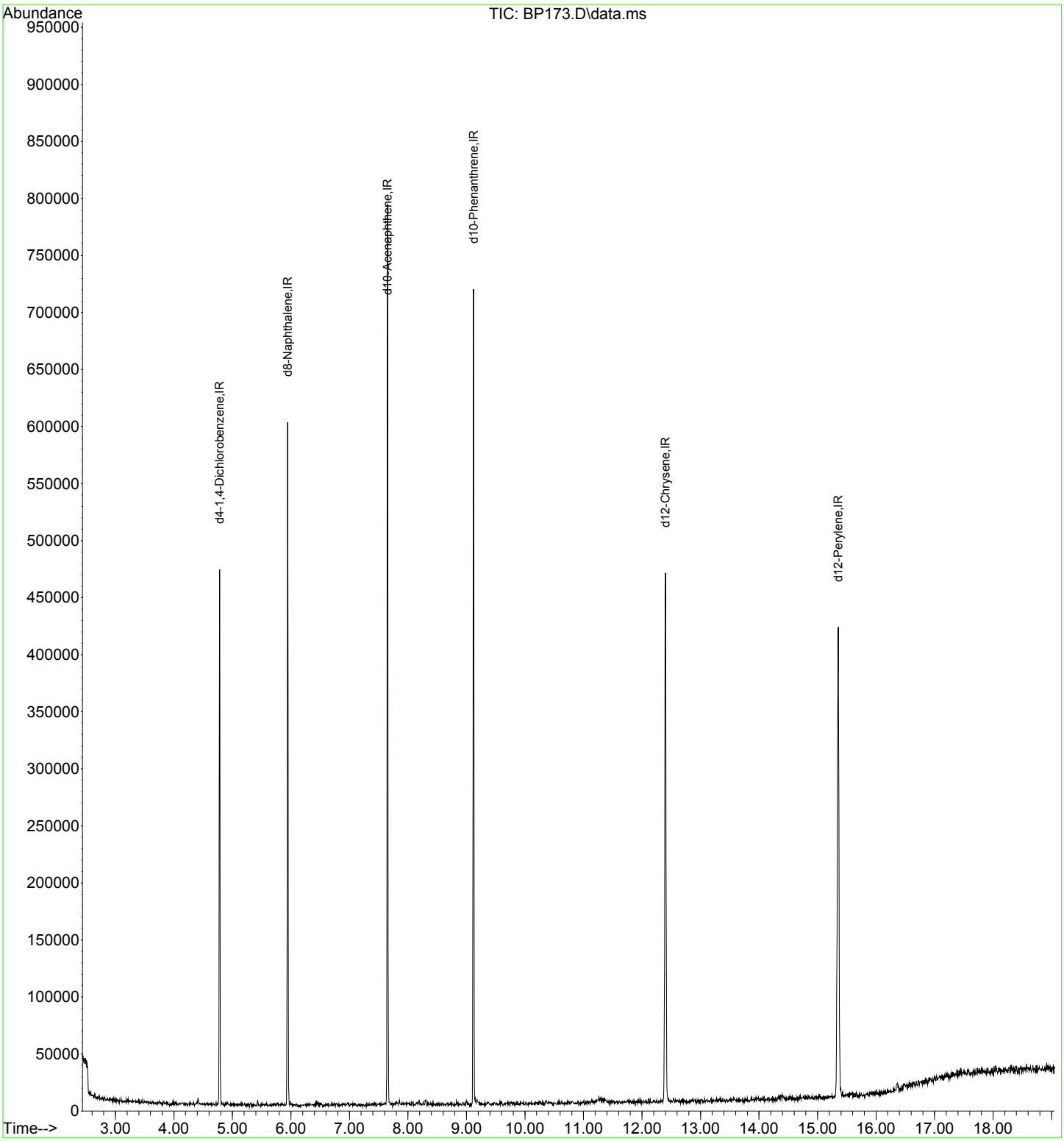
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.779	152	70126	40.00	ppm	0.00
3) d8-Naphthalene	5.945	136	268446	40.00	ppm	0.00
5) d10-Acenaphthene	7.652	164	149830	40.00	ppm	0.00
6) d10-Phenanthrene	9.123	188	255784	40.00	ppm	0.00
8) d12-Chrysene	12.401	240	228007	40.00	ppm	0.00
9) d12-Perylene	15.354	264	272805	40.00	ppm	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP173.D
Acq On : 17 Sep 2018 4:17 pm
Operator : J.Misiurewicz
Sample : BLK
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 10:59:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP174.D
Acq On : 17 Sep 2018 4:46 pm
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 10:51:02 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration

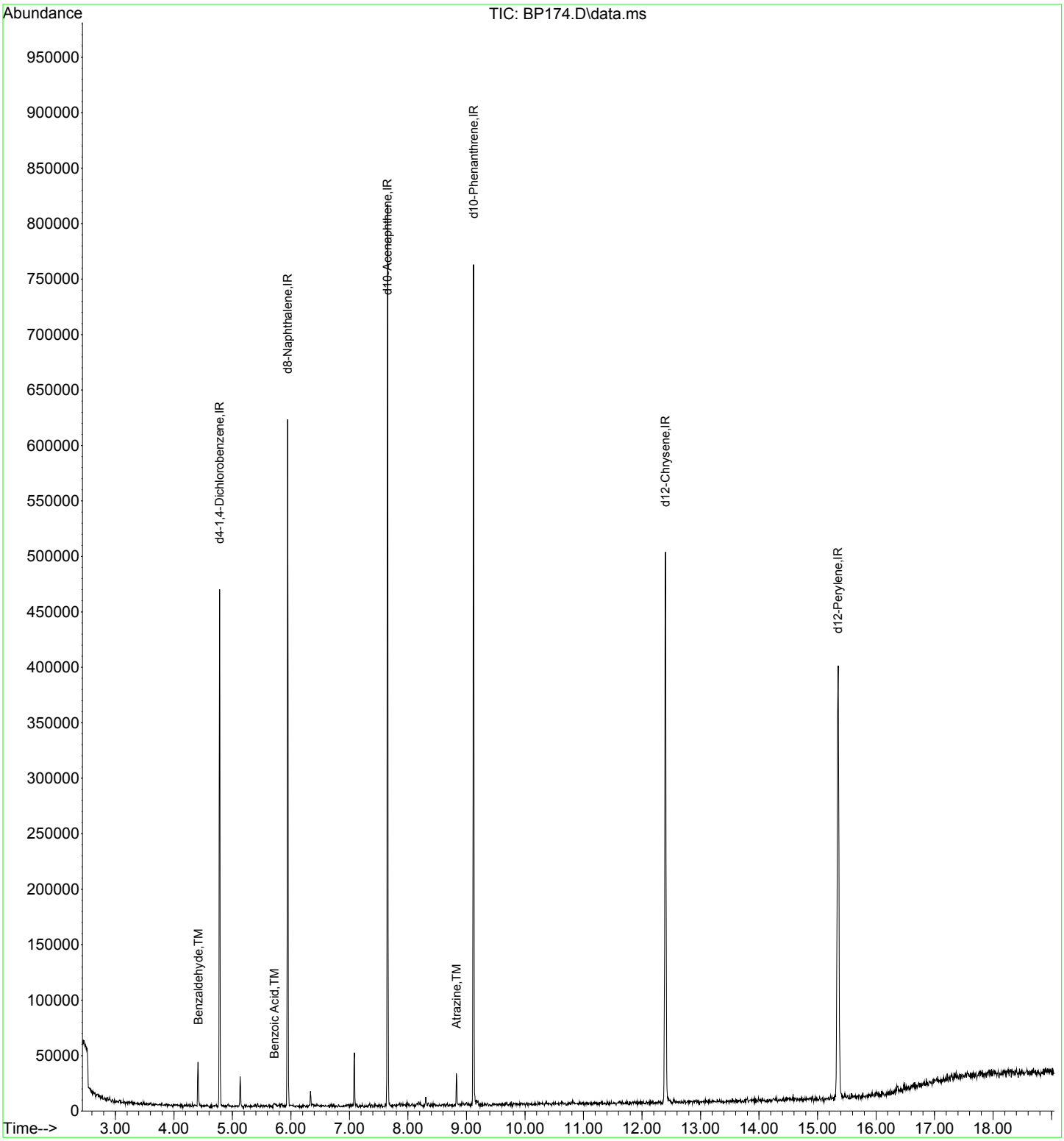
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	70198	40.00	ppm		0.00
3) d8-Naphthalene	5.946	136	274586	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	153098	40.00	ppm		0.00
6) d10-Phenanthrene	9.123	188	263359	40.00	ppm		0.00
8) d12-Chrysene	12.401	240	232609	40.00	ppm		0.00
9) d12-Perylene	15.349	264	276464	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.416	106	7412	2.237	ppm		88
4) Benzoic Acid	5.716	105	2023	1.572	ppm	#	65
7) Atrazine	8.829	215	1734	2.312	ppm		87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP174.D
Acq On : 17 Sep 2018 4:46 pm
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 10:51:02 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP175.D
Acq On : 17 Sep 2018 5:14 pm
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 19 10:51:05 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration

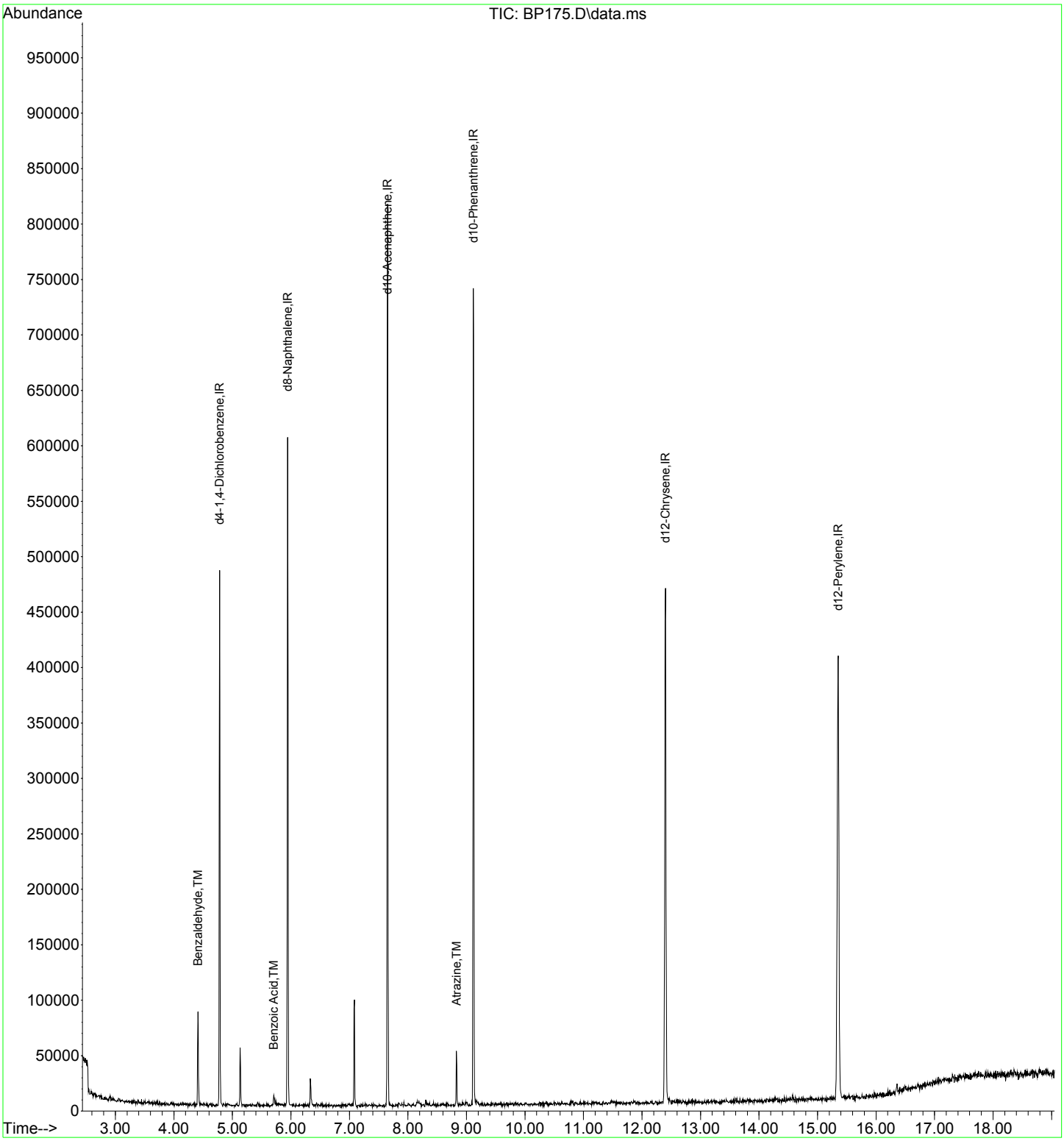
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	72120	40.00	ppm		0.00
3) d8-Naphthalene	5.946	136	277062	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	156866	40.00	ppm		0.00
6) d10-Phenanthrene	9.117	188	264188	40.00	ppm		0.00
8) d12-Chrysene	12.401	240	225996	40.00	ppm		0.00
9) d12-Perylene	15.354	264	279819	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.411	106	17160	5.041	ppm		91
4) Benzoic Acid	5.705	105	5128	3.950	ppm		86
7) Atrazine	8.829	215	2449	4.453	ppm	#	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP175.D
Acq On : 17 Sep 2018 5:14 pm
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 19 10:51:05 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP176.D
Acq On : 17 Sep 2018 5:42 pm
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 10:51:07 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration

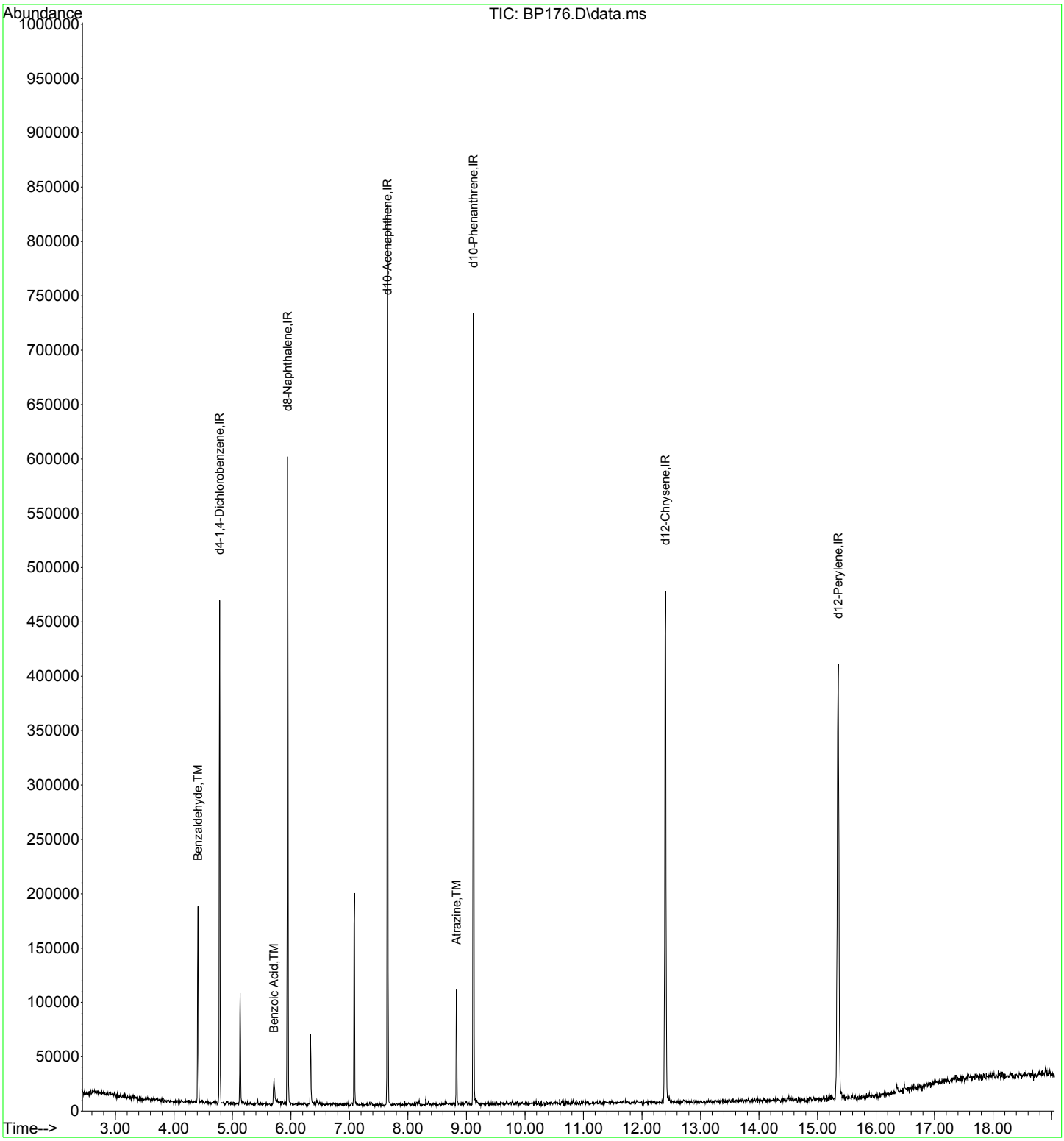
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	69080	40.00	ppm		0.00
3) d8-Naphthalene	5.946	136	269664	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	157535	40.00	ppm		0.00
6) d10-Phenanthrene	9.117	188	262716	40.00	ppm		0.00
8) d12-Chrysene	12.401	240	234730	40.00	ppm		0.00
9) d12-Perylene	15.354	264	280120	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.411	106	35555	10.905	ppm		93
4) Benzoic Acid	5.710	105	10995	8.702	ppm		95
7) Atrazine	8.829	215	5472	11.729	ppm	#	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/18
2nd 09/21/18

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP176.D
Acq On : 17 Sep 2018 5:42 pm
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 10:51:07 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP177.D
Acq On : 17 Sep 2018 6:10 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 19 10:51:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration

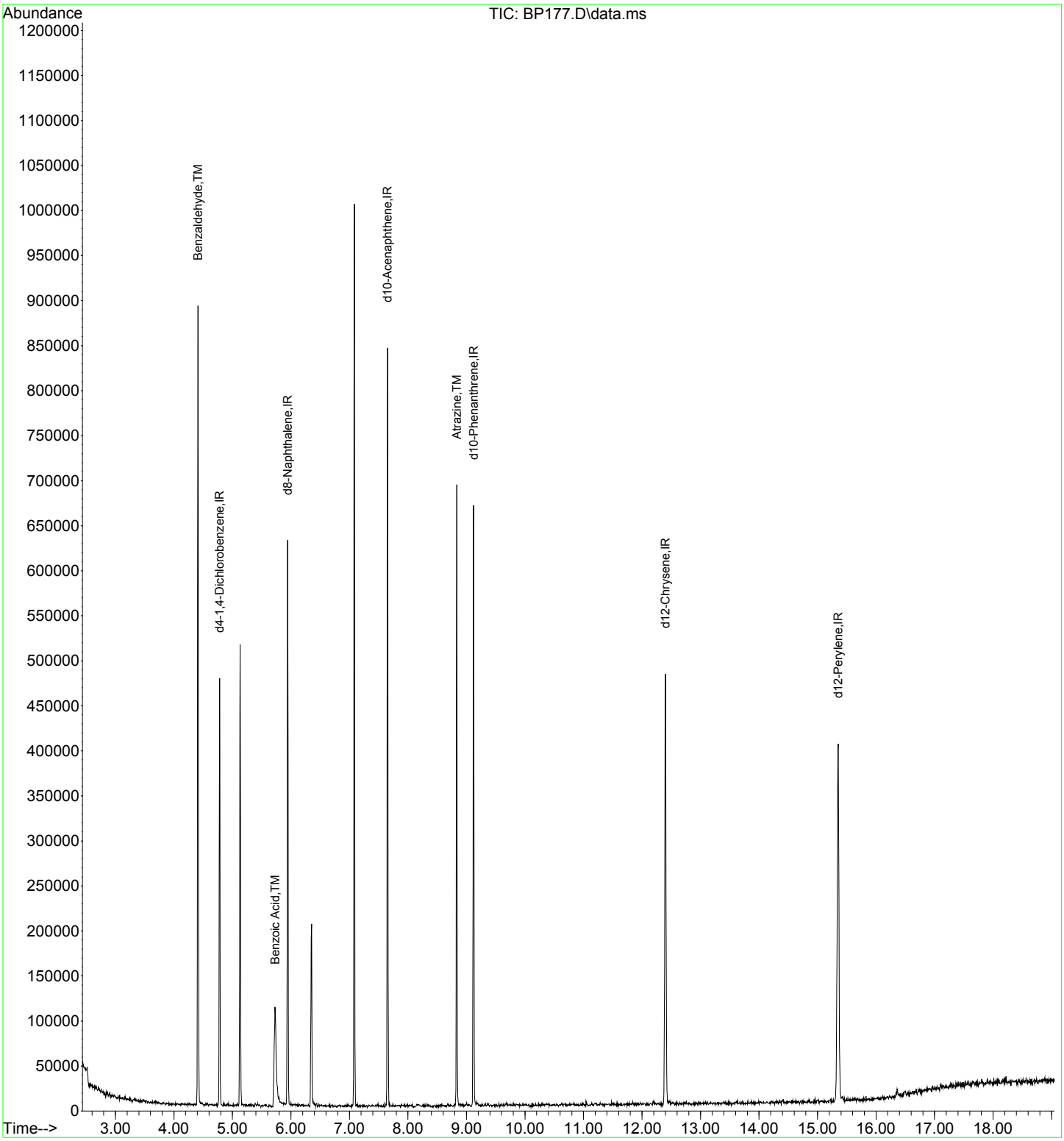
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.779	152	74699	40.00	ppm		0.00
3) d8-Naphthalene	5.946	136	282212	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	156660	40.00	ppm		0.00
6) d10-Phenanthrene	9.123	188	234251	40.00	ppm		0.00
8) d12-Chrysene	12.401	240	231201	40.00	ppm		0.00
9) d12-Perylene	15.354	264	280370	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.410	106	173361	49.170	ppm		95
4) Benzoic Acid	5.732	105	72723	54.997	ppm		94
7) Atrazine	8.834	215	36268	52.437	ppm	#	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP177.D
Acq On : 17 Sep 2018 6:10 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 19 10:51:09 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP178.D
Acq On : 17 Sep 2018 6:39 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 19 10:51:11 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration

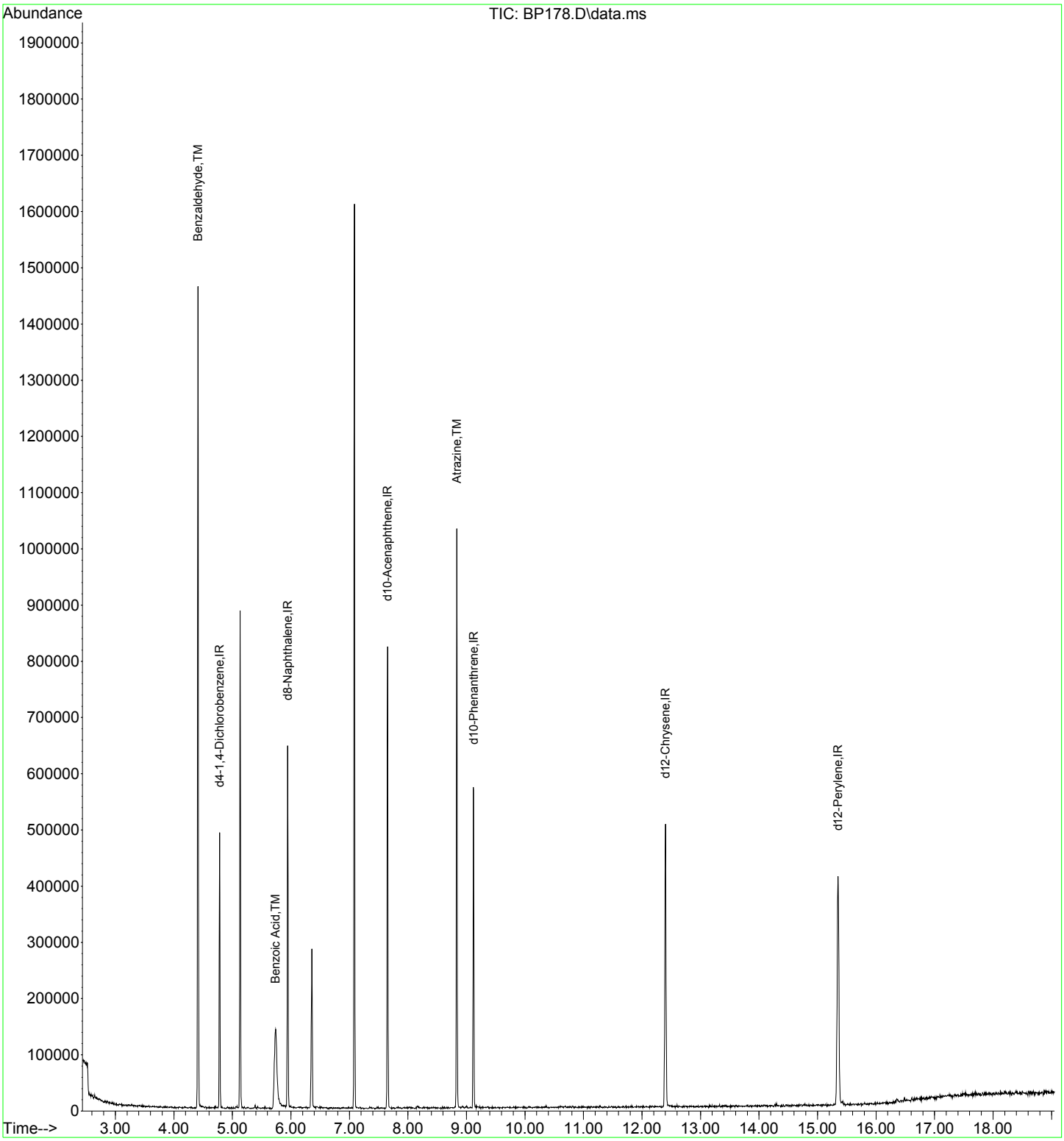
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	72730	40.00	ppm		0.00
3) d8-Naphthalene	5.946	136	289719	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	161137	40.00	ppm		0.00
6) d10-Phenanthrene	9.123	188	206285	40.00	ppm		0.00
8) d12-Chrysene	12.401	240	235105	40.00	ppm		0.00
9) d12-Perylene	15.348	264	285159	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.410	106	278529	81.138	ppm		91
4) Benzoic Acid	5.737	105	118808	87.521	ppm		96
7) Atrazine	8.834	215	57408	74.767	ppm	#	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP178.D
Acq On : 17 Sep 2018 6:39 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 19 10:51:11 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP179.D
Acq On : 17 Sep 2018 7:07 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 19 10:51:13 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration

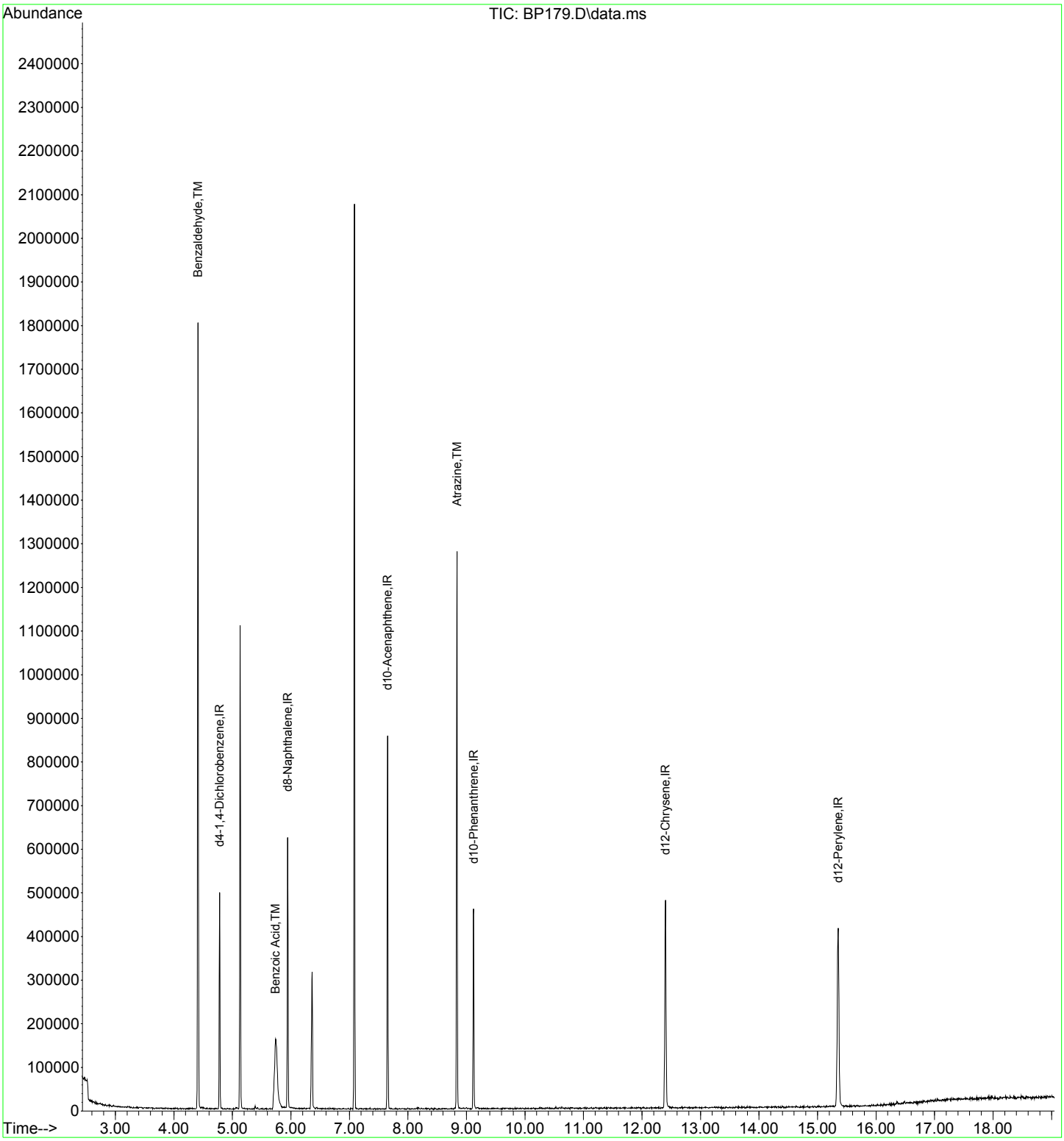
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.780	152	75469	40.00	ppm		0.00
3) d8-Naphthalene	5.946	136	283070	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	161425	40.00	ppm		0.00
6) d10-Phenanthrene	9.123	188	163253	40.00	ppm		0.00
8) d12-Chrysene	12.401	240	234568	40.00	ppm		0.00
9) d12-Perylene	15.354	264	282903	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.411	106	349318	98.066	ppm		89
4) Benzoic Acid	5.737	105	142939	107.771	ppm		95
7) Atrazine	8.839	215	73706	98.895	ppm	#	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP179.D
Acq On : 17 Sep 2018 7:07 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 19 10:51:13 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP180.D
Acq On : 17 Sep 2018 7:35 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 10:51:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration

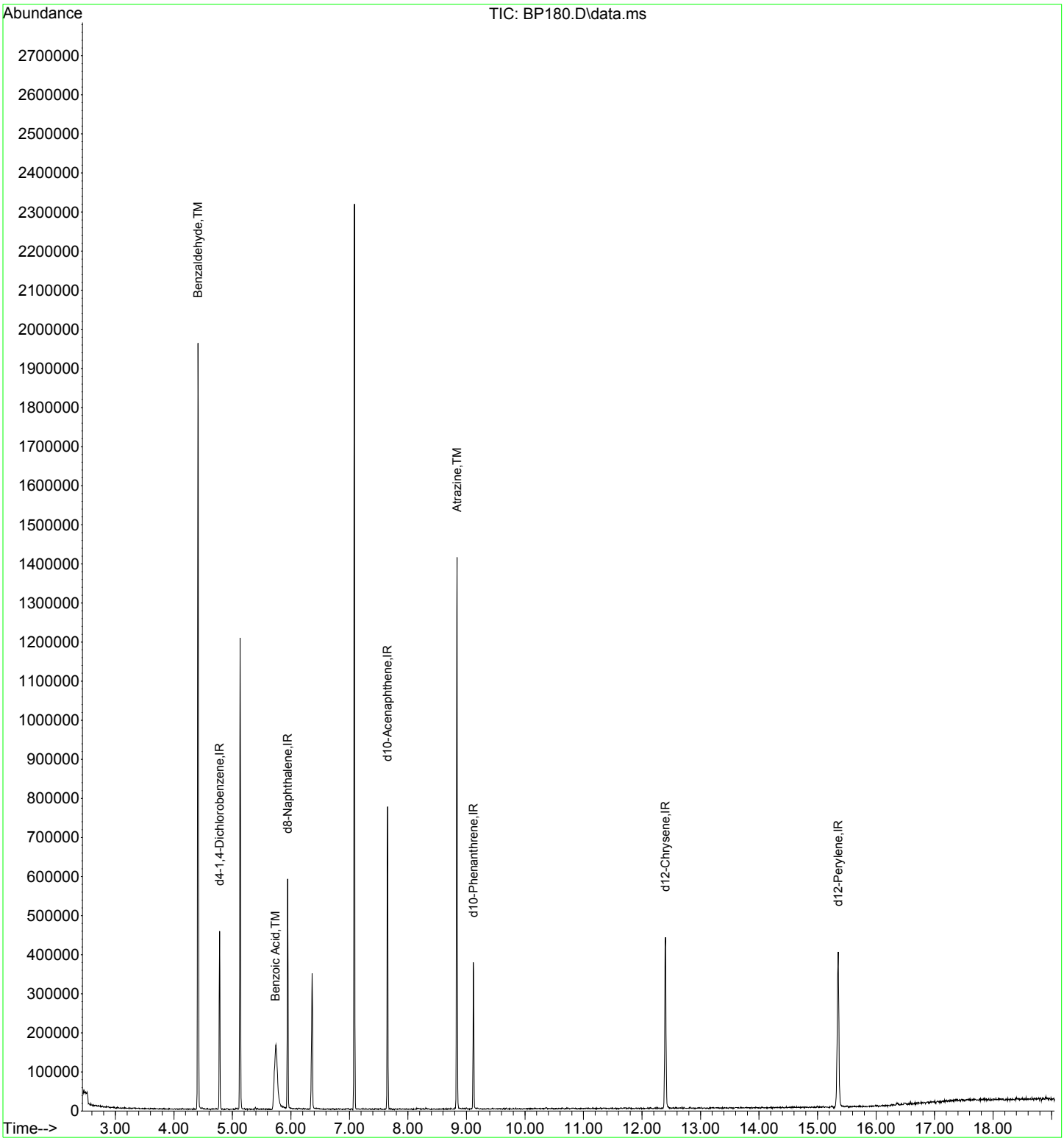
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.780	152	69021	40.00	ppm	0.00
3) d8-Naphthalene	5.946	136	269001	40.00	ppm	0.00
5) d10-Acenaphthene	7.652	164	149650	40.00	ppm	0.00
6) d10-Phenanthrene	9.117	188	130811	40.00	ppm	0.00
8) d12-Chrysene	12.401	240	217375	40.00	ppm	0.00
9) d12-Perylene	15.354	264	268947	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.411	106	397390	121.984	ppm	92
4) Benzoic Acid	5.737	105	161010	127.745	ppm	93
7) Atrazine	8.839	215	79794	117.151	ppm	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP180.D
Acq On : 17 Sep 2018 7:35 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 10:51:15 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP181.D
Acq On : 17 Sep 2018 8:04 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 10:51:17 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration

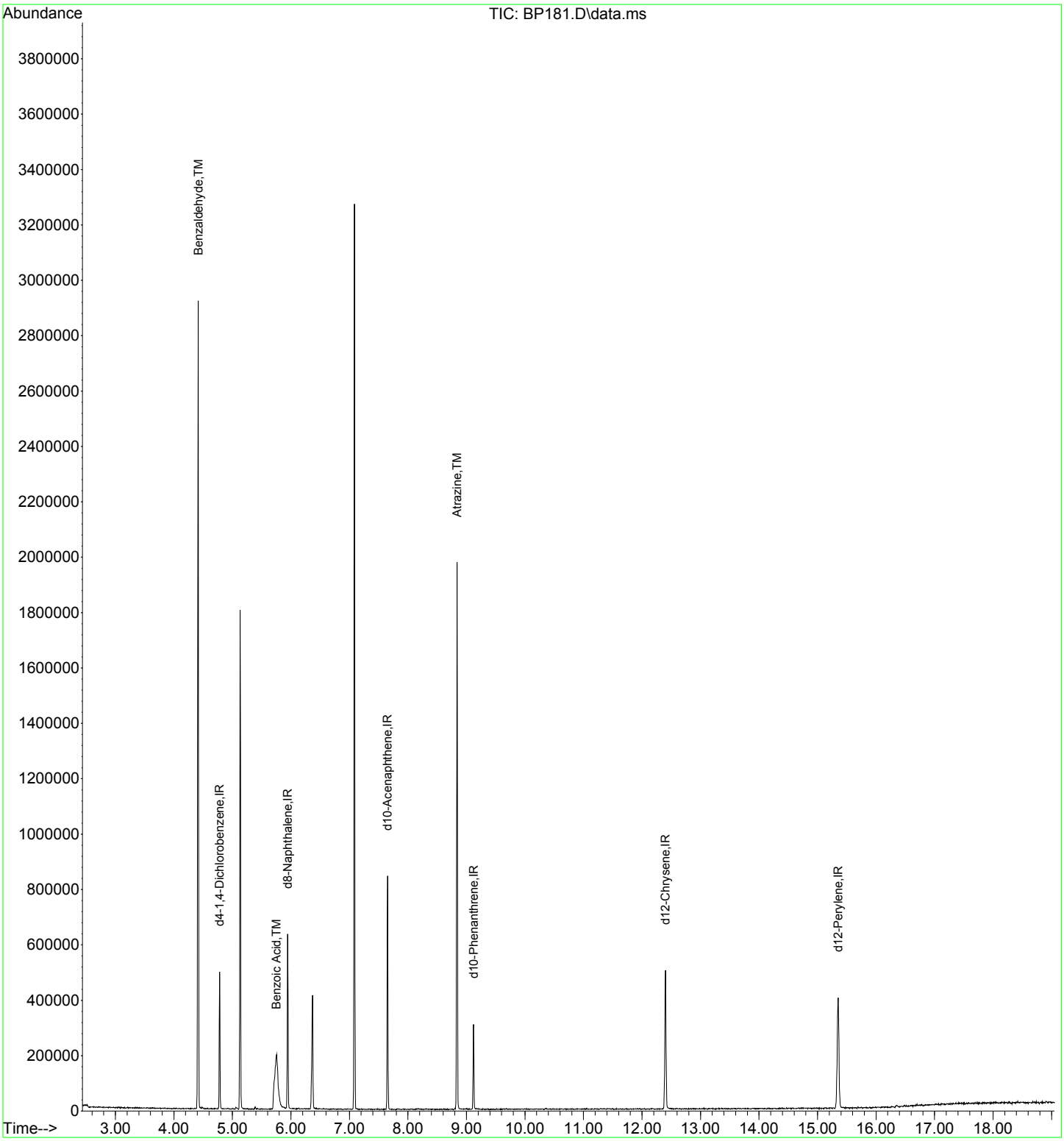
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.779	152	74760	40.00	ppm		0.00
3) d8-Naphthalene	5.945	136	288519	40.00	ppm		0.00
5) d10-Acenaphthene	7.652	164	160466	40.00	ppm		0.00
6) d10-Phenanthrene	9.122	188	111066	40.00	ppm		0.00
8) d12-Chrysene	12.401	240	239305	40.00	ppm		0.00
9) d12-Perylene	15.354	264	283951	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.416	106	571164	161.867	ppm		97
4) Benzoic Acid	5.753	105	213529	157.953	ppm		95
7) Atrazine	8.839	215	125631	164.482	ppm	#	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP181.D
Acq On : 17 Sep 2018 8:04 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 10:51:17 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:47:03 2018
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP182.D
Acq On : 17 Sep 2018 8:32 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 13:22:44 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	99	0.00
2	TM	Benzaldehyde	160.000	163.091	-1.9	99	0.00
3	IR	d8-Naphthalene	40.000	40.000	0.0	91	0.00
4	TM	Benzoic Acid	80.000	84.988	-6.2	88	0.00
5	IR	d10-Acenaphthene	40.000	40.000	0.0	90	0.00
6	IR	d10-Phenanthrene	40.000	40.000	0.0	87	0.00
7	TM	Atrazine	80.000	78.337	2.1	94	0.00
8	IR	d12-Chrysene	40.000	40.000	0.0	92	0.00
9	IR	d12-Perylene	40.000	40.000	0.0	91	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP182.D
Acq On : 17 Sep 2018 8:32 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 13:22:44 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration

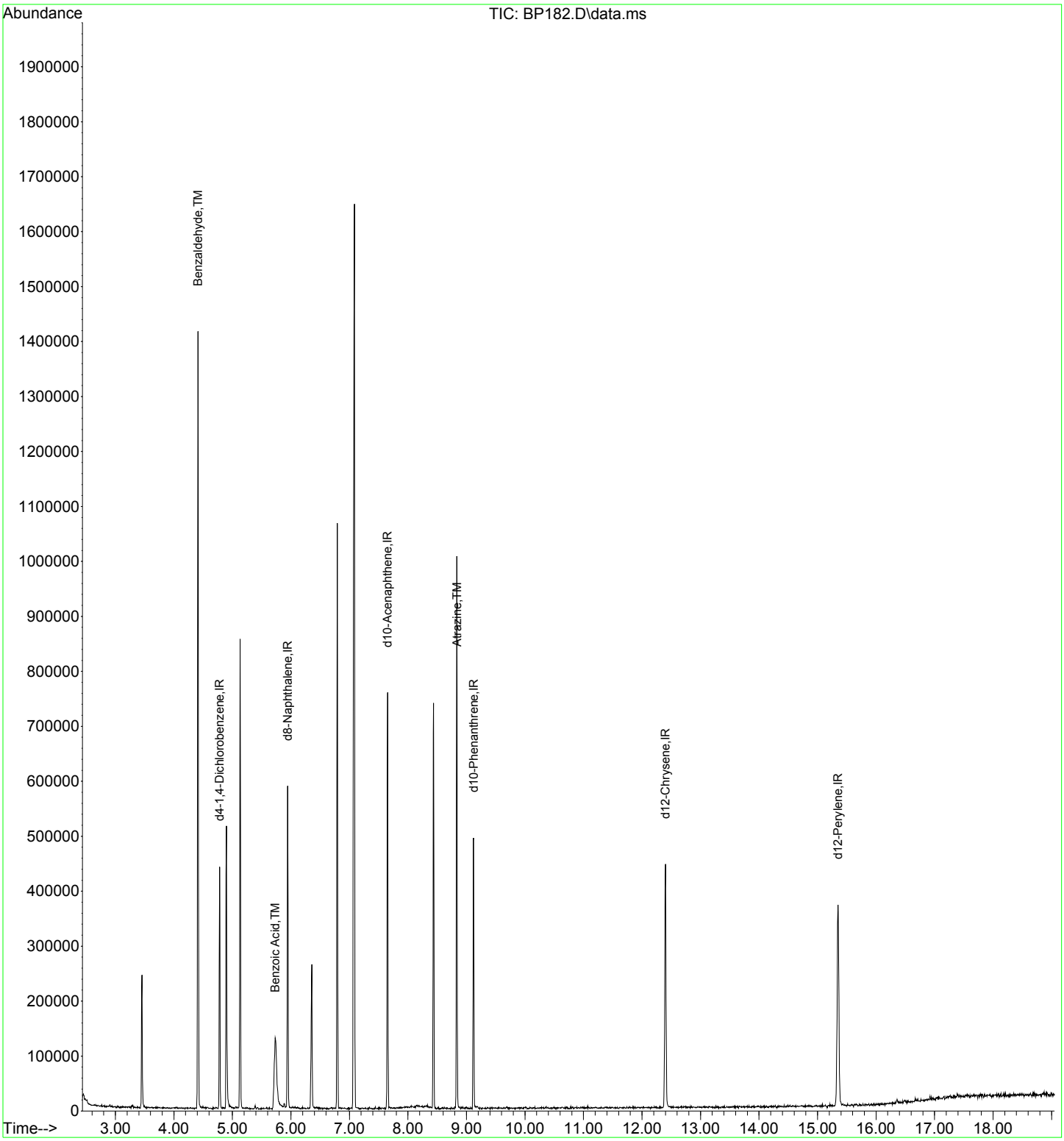
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.779	152	71773	40.00	ppm	0.00
3) d8-Naphthalene	5.945	136	262392	40.00	ppm	0.00
5) d10-Acenaphthene	7.652	164	145487	40.00	ppm	0.00
6) d10-Phenanthrene	9.123	188	178549	40.00	ppm	0.00
8) d12-Chrysene	12.401	240	217056	40.00	ppm	0.00
9) d12-Perylene	15.348	264	258783	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.410	106	276246	163.091	ppm	91
4) Benzoic Acid	5.731	105	104243	84.988	ppm	94
7) Atrazine	8.839	215	53799	78.337	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\091718\
Data File : BP182.D
Acq On : 17 Sep 2018 8:32 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625 Benz/Atrazine
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 13:22:44 2018
Quant Method : I:\ACQUDATA\5973D\Methods\BENZ091718D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 10:55:27 2018
Response via : Initial Calibration



ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 9/17/18 8:33

ICAL Tune Summary

Semi Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\DATA\091718\BP161.D Analytical Method: 8270D

Instrument ID: R-MS-04

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Results Pass/Fail
51	198	10	80	41.5	18131	PASS
68	69	0	2	1.8	380	PASS
69	198	0	100	47.6	20803	PASS
70	69	0	2	0.6	128	PASS
127	198	10	80	55.1	24081	PASS
197	198	0	2	0.9	414	PASS
198	198	100	100	100.0	43702	PASS
199	198	5	9	6.8	2961	PASS
275	198	10	60	25.4	11098	PASS
365	198	1	100	4.0	1765	PASS
441	442	0.01	24	12.6	6140	PASS
442	442	100	100	100.0	48593	PASS
443	442	15	24	19.3	9377	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
BLK	BLK	I:\ACQUDATA\5973D\DATA\091718\BP162.D	9/17/18 9:14	
2.5 ppm STD	2.5 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP164.D	9/17/18 10:22	
5.0 ppm STD	5.0 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP165.D	9/17/18 11:10	
10 ppm STD	10 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP166.D	9/17/18 11:46	
50 ppm STD	50 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP167.D	9/17/18 12:24	
80 ppm STD	80 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP168.D	9/17/18 12:53	
100 ppm STD	100 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP169.D	9/17/18 14:05	
120 ppm STD	120 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP170.D	9/17/18 14:34	
160 ppm STD	160 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP171.D	9/17/18 15:20	
ICV	ICV	I:\ACQUDATA\5973D\DATA\091718\BP172.D	9/17/18 15:49	
BLK	BLK	I:\ACQUDATA\5973D\DATA\091718\BP173.D	9/17/18 16:17	
2.5 ppm STD	Benz 2.5 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP174.D	9/17/18 16:46	
5.0 ppm STD	Benz 5.0 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP175.D	9/17/18 17:14	
10 ppm STD	Benz 10 ppm 5TD	I:\ACQUDATA\5973D\DATA\091718\BP176.D	9/17/18 17:42	
50 ppm STD	Benz 50 ppm 5TD	I:\ACQUDATA\5973D\DATA\091718\BP177.D	9/17/18 18:10	
80 ppm STD	Benz 80 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP178.D	9/17/18 18:39	
100 ppm STD	Benz 100 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP179.D	9/17/18 19:07	
120 ppm STD	Benz 120 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP180.D	9/17/18 19:35	
160 ppm STD	Benz 160 ppm STD	I:\ACQUDATA\5973D\DATA\091718\BP181.D	9/17/18 20:04	
ICV	ICV	I:\ACQUDATA\5973D\DATA\091718\BP182.D	9/17/18 20:32	

Analysis: 8270/625	**Analyst:** [illegible]	**Run Method:** 8270D /Ne	
Date: 9/17/15	**Instr.** 5973D R-MS-54	**Quant Method:**	
Syringes:		**LIMS Run#:**	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	BLK			BP158	–	
2	Bromochloromethane			59	–	
3	Tune			60	(N)	
4	Tune			61	Y	
5	BLK			62	Y	
6	2.5 ppm SSD			63	Y	
7	2.5			64	Y	
8	5.0			65	Y	
9	10			66	Y	
10	50			67	Y	
11	80			68	Y	
12	100			69	Y	
13	120			70	Y	
14	160			71	Y	
15	ICV			72	Y Q	
15	BLK			73	Y	
16	2.5 ppm SSD			74	Y	
17	5.0			75	Y	
18	10			76	Y	
19	50			77	Y	
20	80			78	Y	
21	100			79	Y	
22	120			80	Y	
23	160			81	Y	
24	ICV			82	Y	
25	Tune			83	Y	
26	CCV Base/Neutrals			84	Y CC	
27	CCV 8270/625			85	Y CC	Hexachlorocyclopentadiene >20%
28	CCV Hexa			86	(N)	
29	RQ1509441-01	BLK	321561	87	(N)	RPT
30	-02	LCS		88	↓	↓
31	-03	LCSD		89	↓	↓
32	R1505563-001			90	↓	↓
33	RQ1509589-01	BLK	321695	91	(N)	
34	-02	LCS		92	↓	
35	-03	LCSD		93	↓	
36	R1505650-002			94	↓	
37	RQ1509654-01	BLK	321791	95	(N)	RPT
38	-02	LCS		96	↓	↓
39	-03	LCSD		97	↓	↓

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Runlog GCEXT r2 4/27/17

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Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP199.D
Acq On : 17 Sep 2018 8:26 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 12:28:06 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 14:17:06 2018
Response via : Initial Calibration

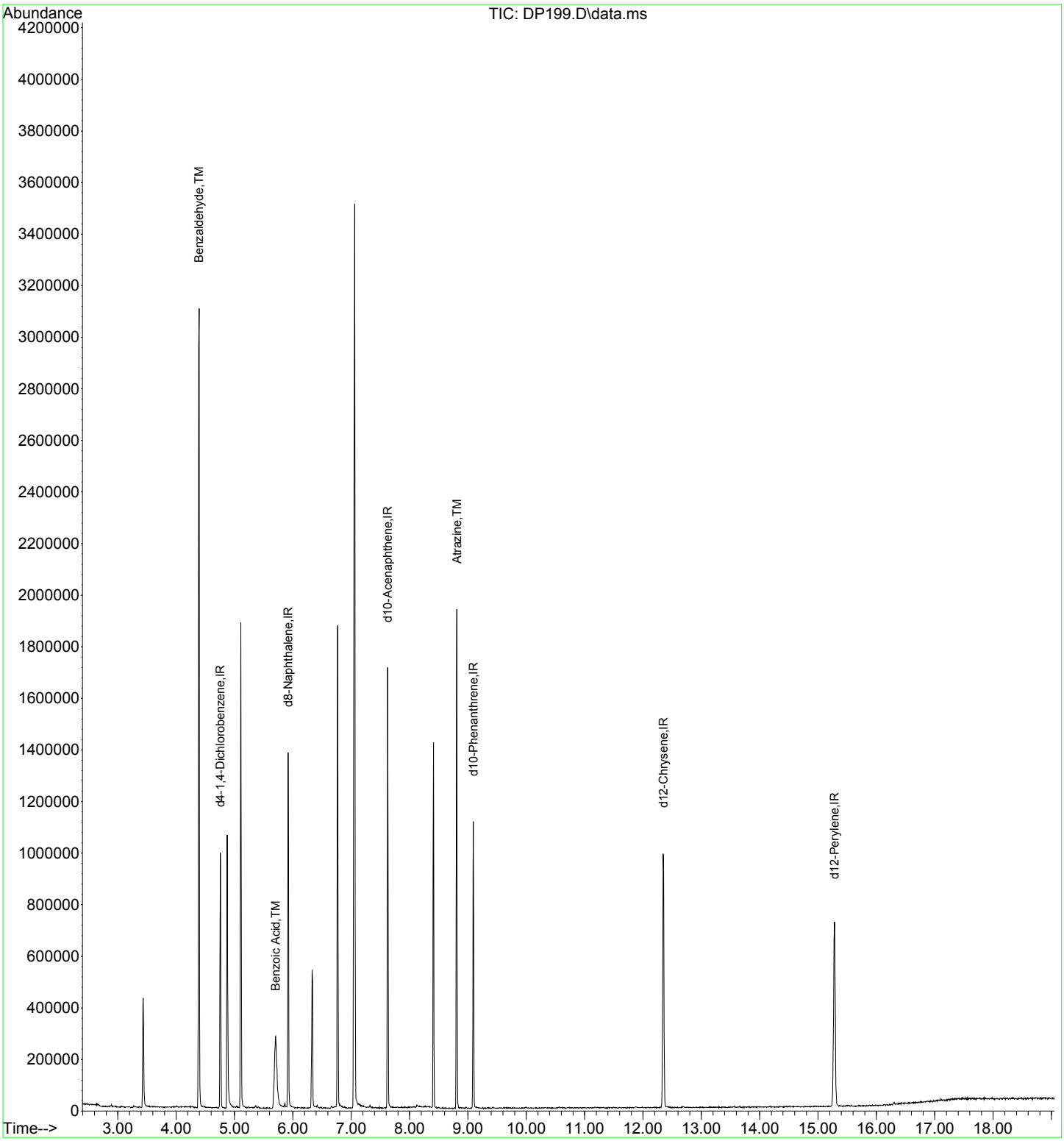
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.756	152	176268	40.00	ppm	0.00
3) d8-Naphthalene	5.920	136	677915	40.00	ppm	0.00
5) d10-Acenaphthene	7.624	164	337395	40.00	ppm	0.00
6) d10-Phenanthrene	9.094	188	390911	40.00	ppm	0.00
8) d12-Chrysene	12.347	240	475076	40.00	ppm	0.00
9) d12-Perylene	15.285	264	480586	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.393	106	743634	169.975	ppm	98
4) Benzoic Acid	5.707	105	247206	80.762	ppm	89
7) Atrazine	8.810	215	115592	78.163	ppm	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP199.D
Acq On : 17 Sep 2018 8:26 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 24 Sample Multiplier: 1

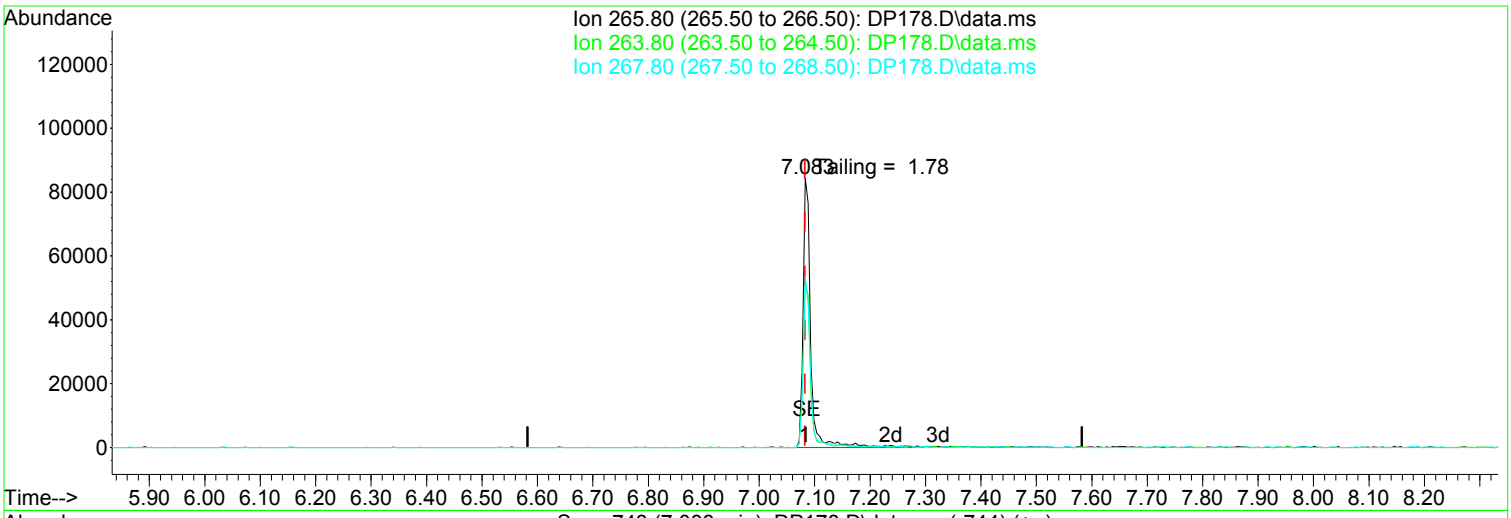
Quant Time: Sep 20 12:28:06 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 14:17:06 2018
Response via : Initial Calibration

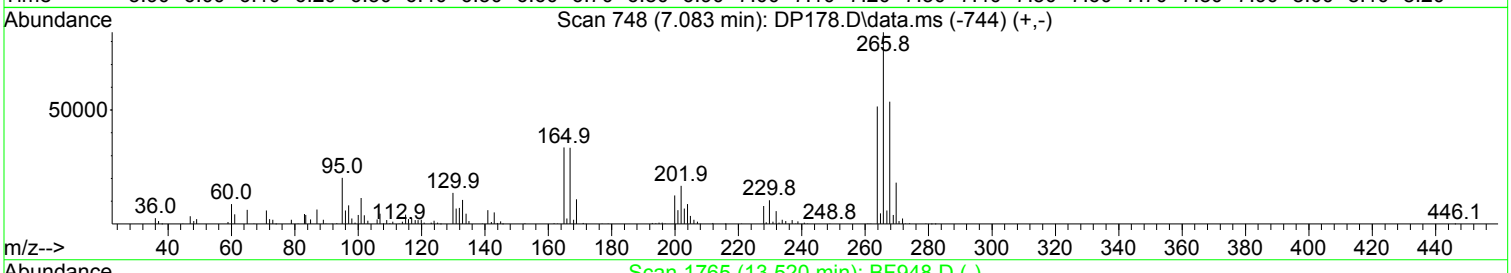


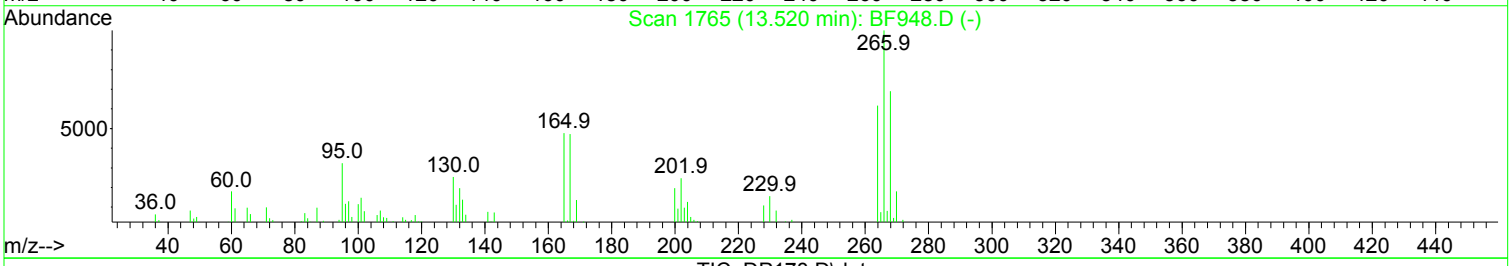
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP178.D
Acq On : 17 Sep 2018 7:43 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 14:25:59 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Wed Sep 19 14:25:15 2018
Response via : Initial Calibration







TIC: DP178.D\data.ms

(5) Pentachlorophenol (TCM)

7.083min (0.000) 50.00 ppm

response 79831

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	61.21
267.80	64.20	63.73
0.00	0.00	0.00

Manual Integration:

After

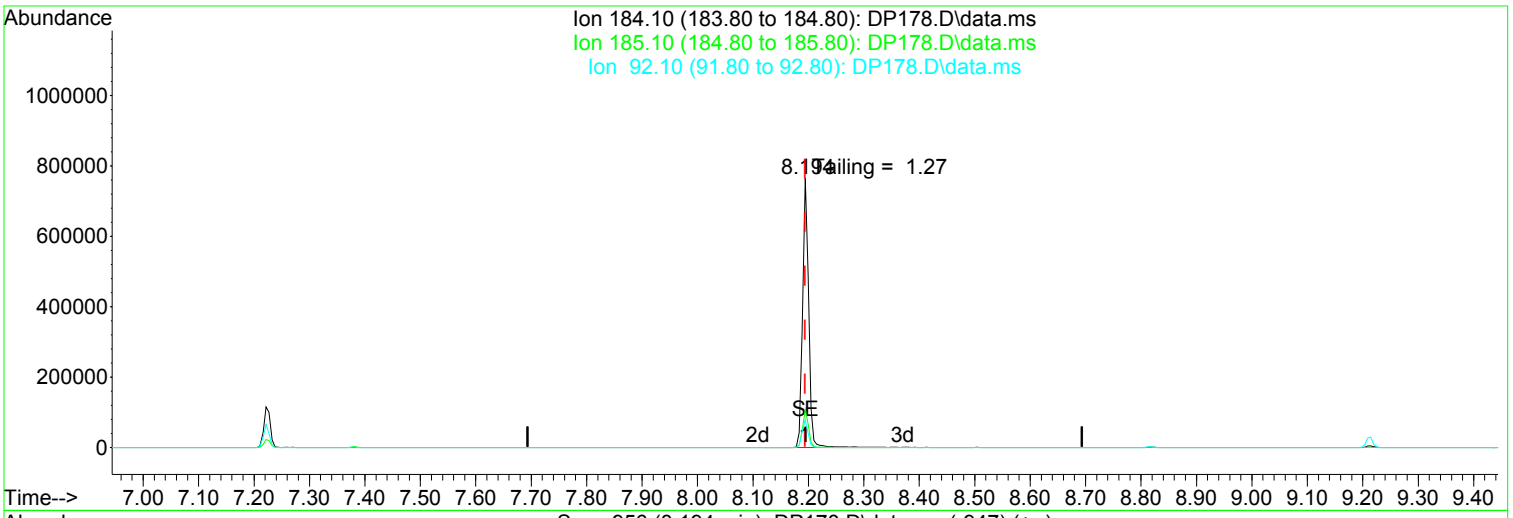
Other - Tailing

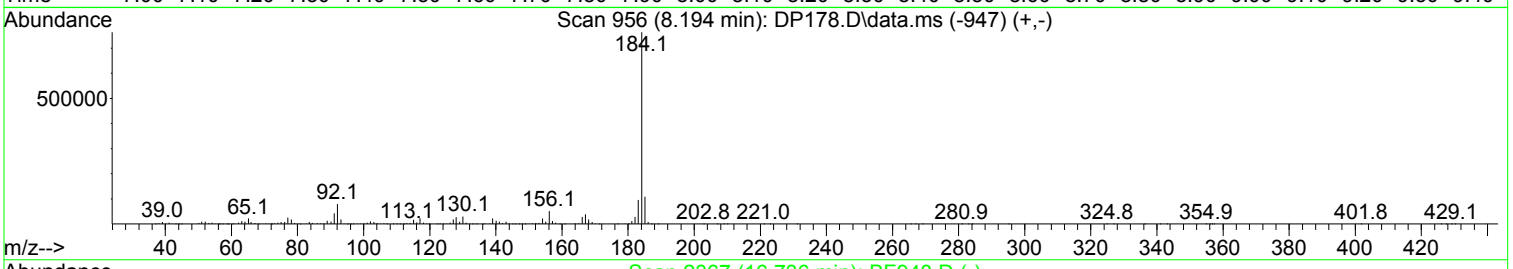
09/19/18

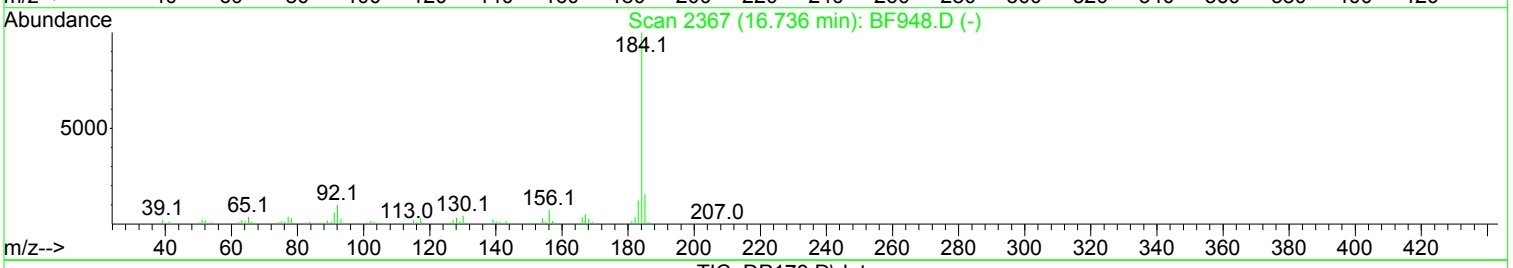
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP178.D
Acq On : 17 Sep 2018 7:43 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 14:25:59 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Wed Sep 19 14:25:15 2018
Response via : Initial Calibration







TIC: DP178.D\data.ms

(8) Benzidine (T)

8.194min (0.000) 50.00 ppm

response 579292

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	14.20
92.10	10.10	10.36
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP178.D
Acq On : 17 Sep 2018 7:43 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 14:25:59 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Wed Sep 19 14:25:15 2018
Response via : Initial Calibration

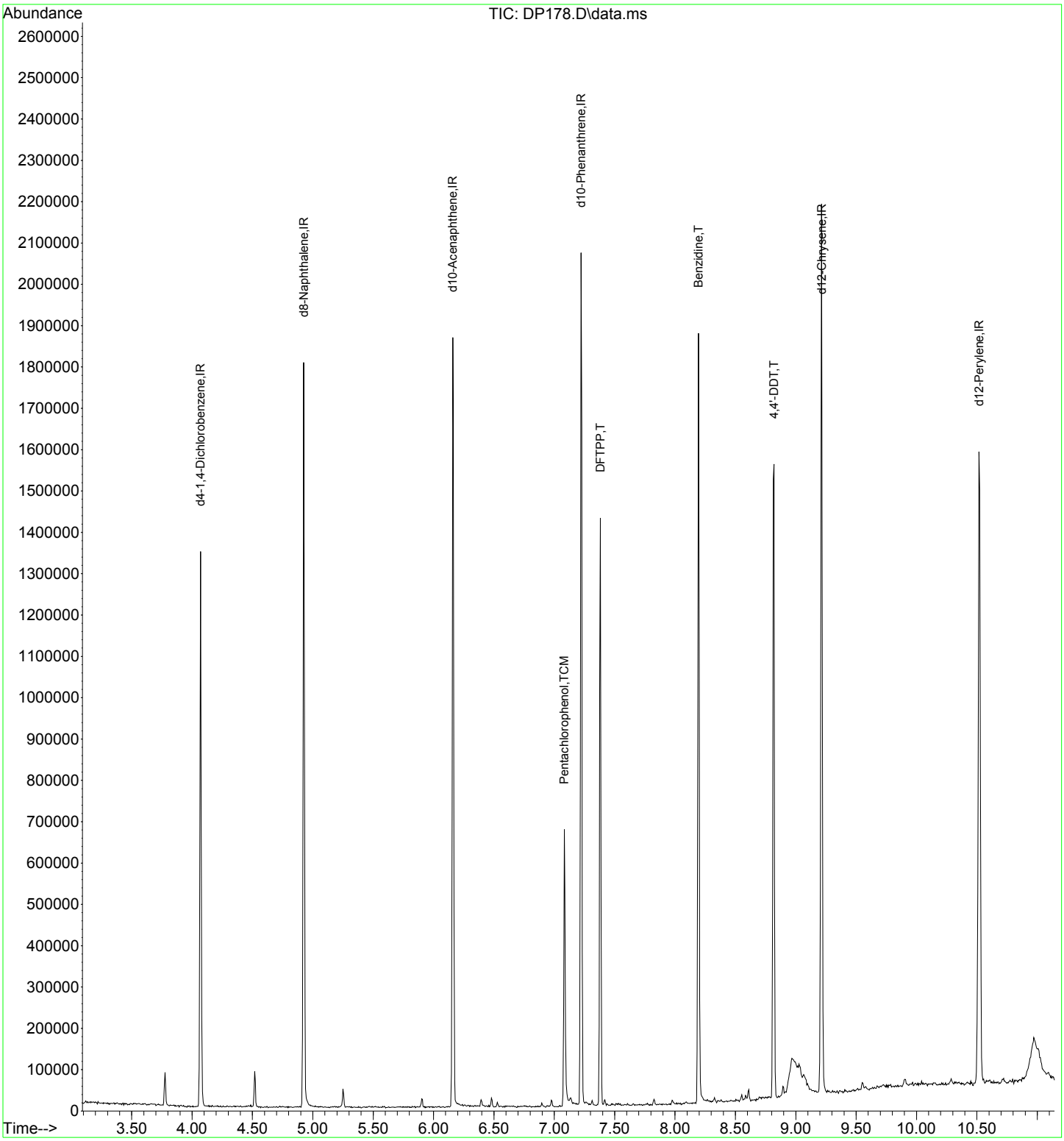
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.070	152	191962	40.00	ppm		0.00
2) d8-Naphthalene	4.925	136	708479	40.00	ppm		0.00
3) d10-Acenaphthene	6.159	164	346354	40.00	ppm		0.00
4) d10-Phenanthrene	7.222	188	631877	40.00	ppm		0.00
7) d12-Chrysene	9.214	240	596640	40.00	ppm		0.00
12) d12-Perylene	10.518	264	614810	40.00	ppm		0.00
Target Compounds							Qvalue
5) Pentachlorophenol	7.083	266	79831	50.000	ppm		98
6) DFTPP	7.382	198	99230	50.000	ppm	#	66
8) Benzidine	8.194	184	579292	50.000	ppm		99
9) 4,4'-DDE	7.382	246	1910	N.D.			
10) 4,4'-DDD	8.611	235	3358	N.D.			
11) 4,4'-DDT	8.819	235	264360	50.000	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP178.D
Acq On : 17 Sep 2018 7:43 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 14:25:59 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Quant Title : TUNE CHECK
QLast Update : Wed Sep 19 14:25:15 2018
Response via : Initial Calibration

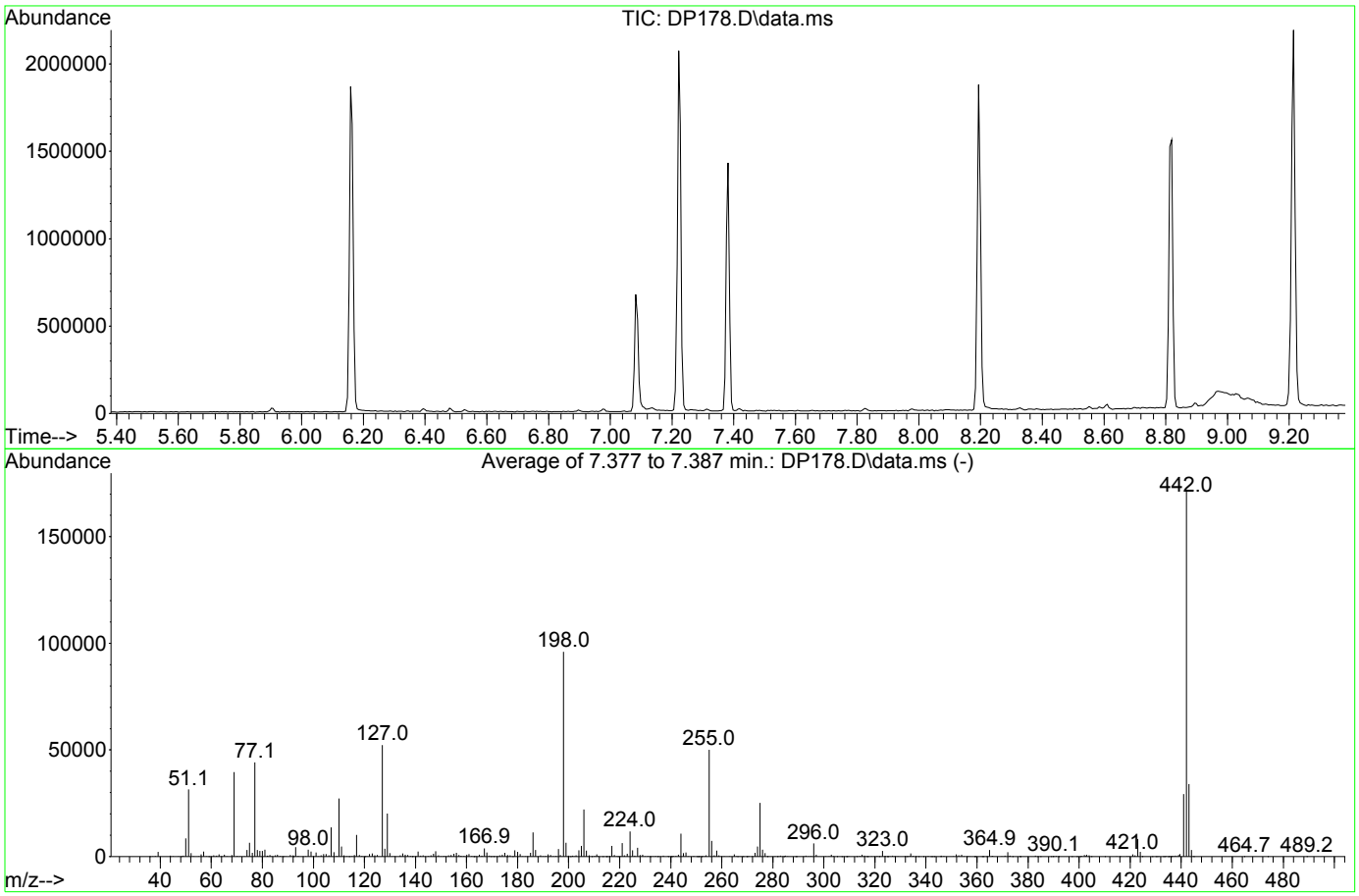


1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP178.D
Acq On : 17 Sep 2018 7:43 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973A\METHODS\TUNCHECK.M
Title : TUNE CHECK
Last Update : Wed Oct 03 16:33:08 2012



AutoFind: Scans 803, 804, 805; Background Corrected with Scan 798

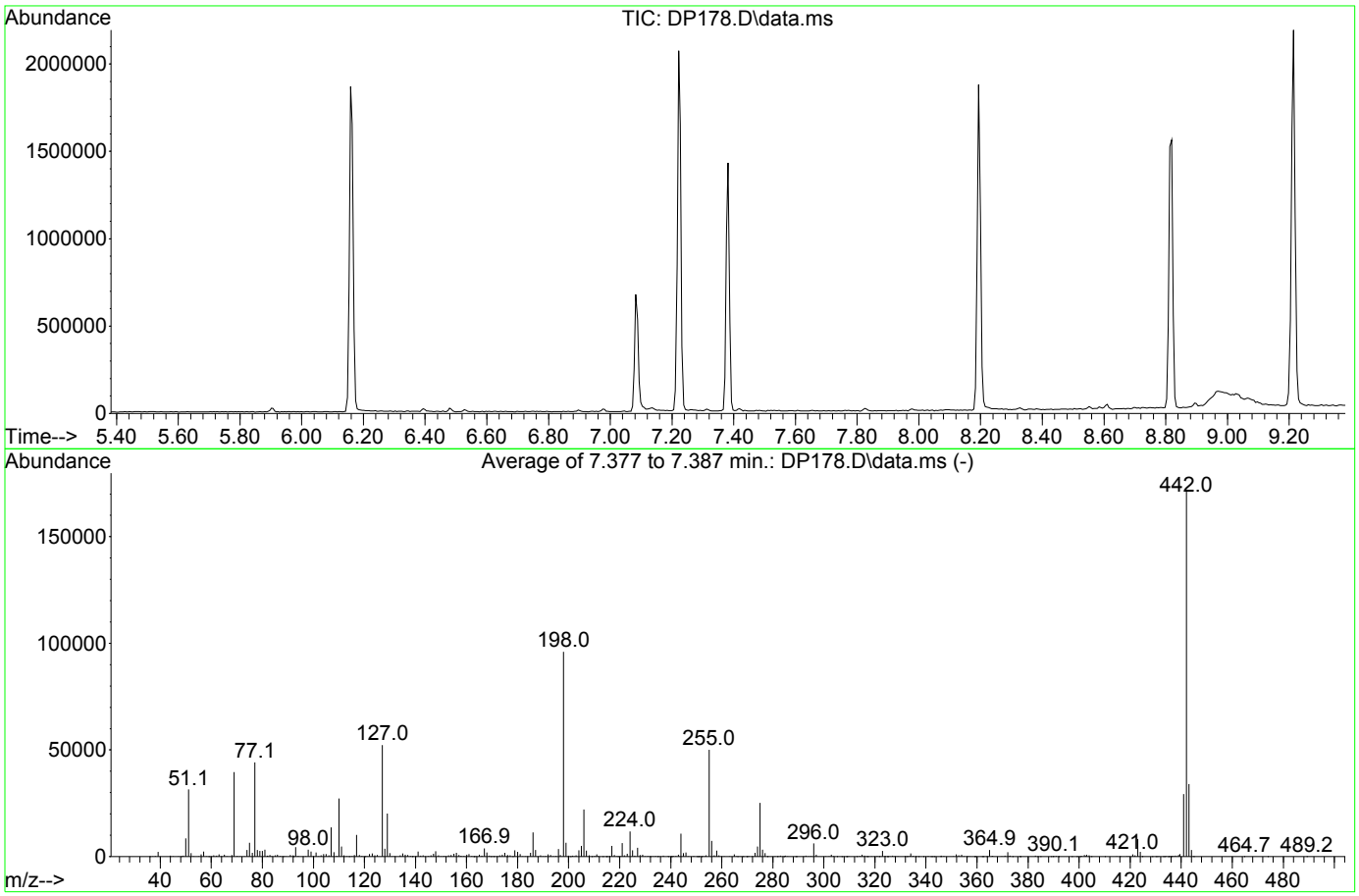
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.8	31492	PASS
68	69	0.00	2	1.8	697	PASS
69	198	0.00	100	41.3	39690	PASS
70	69	0.00	2	0.9	363	PASS
127	198	40	60	54.5	52344	PASS
197	198	0.00	1	0.7	691	PASS
198	198	100	100	100.0	96040	PASS
199	198	5	9	6.8	6504	PASS
275	198	10	30	26.2	25138	PASS
365	198	1	500	3.3	3165	PASS
441	443	0.01	100	85.9	29251	PASS
442	198	50	500	178.3	171232	PASS
443	442	17	23	19.9	34072	PASS

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP178.D
Acq On : 17 Sep 2018 7:43 am
Operator : J.Misiurewicz
Sample : TUNE
Misc : 50 ng DFTPP
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973A\METHODS\TUNED.M
Title : TUNE CHECK
Last Update : Wed Sep 19 14:25:15 2018



AutoFind: Scans 803, 804, 805; Background Corrected with Scan 798

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	32.8	31492	PASS
68	69	0.00	2	1.8	697	PASS
69	198	0.00	100	41.3	39690	PASS
70	69	0.00	2	0.9	363	PASS
127	198	10	80	54.5	52344	PASS
197	198	0.00	2	0.7	691	PASS
198	198	100	100	100.0	96040	PASS
199	198	5	9	6.8	6504	PASS
275	198	10	60	26.2	25138	PASS
365	198	1	500	3.3	3165	PASS
441	442	0.01	24	17.1	29251	PASS
442	442	100	100	100.0	171232	PASS
443	442	15	24	19.9	34072	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP179.D
Acq On : 17 Sep 2018 8:29 am
Operator : J.Misiurewicz
Sample : BLK
Misc : Initial Calibration 8270D/625
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 20 07:01:10 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.757	152	176135	40.00	ppm	0.00
33) d8-Naphthalene	5.921	136	665770	40.00	ppm	0.00
57) d10-Acenaphthene	7.626	164	339428	40.00	ppm	0.00
91) d10-Phenanthrene	9.095	188	539229	40.00	ppm	0.00
117) d12-Chrysene	12.348	240	513041	40.00	ppm	0.00
135) d12-Perylene	15.286	264	502006	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.582	112	107	0.02	ppm	-0.11
Spiked Amount 200.000	Range 10 - 70		Recovery =	0.01%#		
12) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 200.000	Range 10 - 107		Recovery =	0.00%#		
34) SURR4,NITROBENZENE-D5	5.227	82	102	0.02	ppm	-0.03
Spiked Amount 100.000	Range 31 - 110		Recovery =	0.02%#		
63) SURR5,2-FLUOROBIPHENYL	0.000	172	0	0.00	ppm	
Spiked Amount 100.000	Range 31 - 118		Recovery =	0.00%#		
88) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 200.000	Range 35 - 141		Recovery =	0.00%#		
124) SURR6,TERPHENYL-D14	10.777	244	305	0.03	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery =	0.03%#		

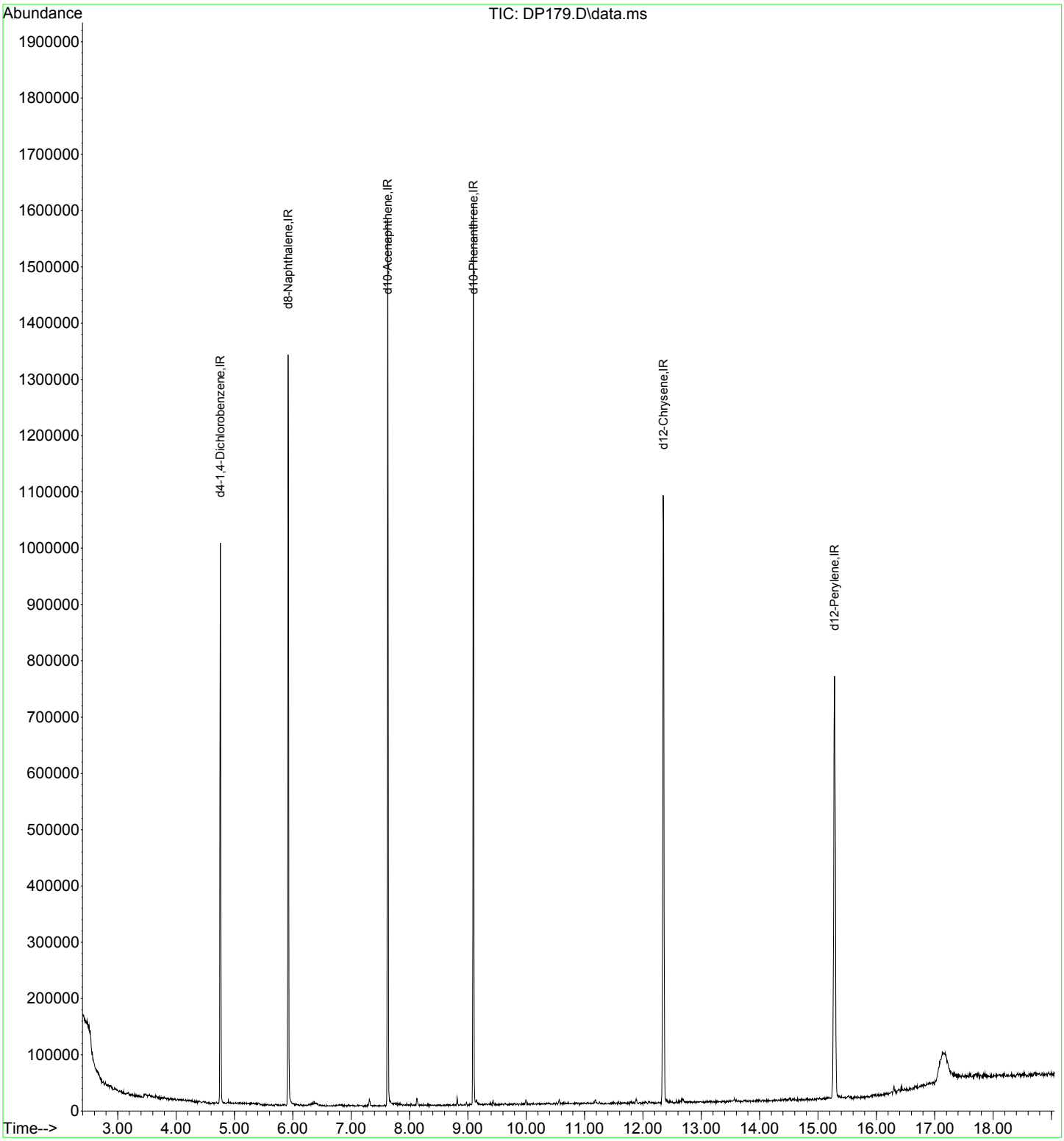
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP179.D
Acq On : 17 Sep 2018 8:29 am
Operator : J.Misiurewicz
Sample : BLK
Misc : Initial Calibration 8270D/625
ALS Vial : 4 Sample Multiplier: 1

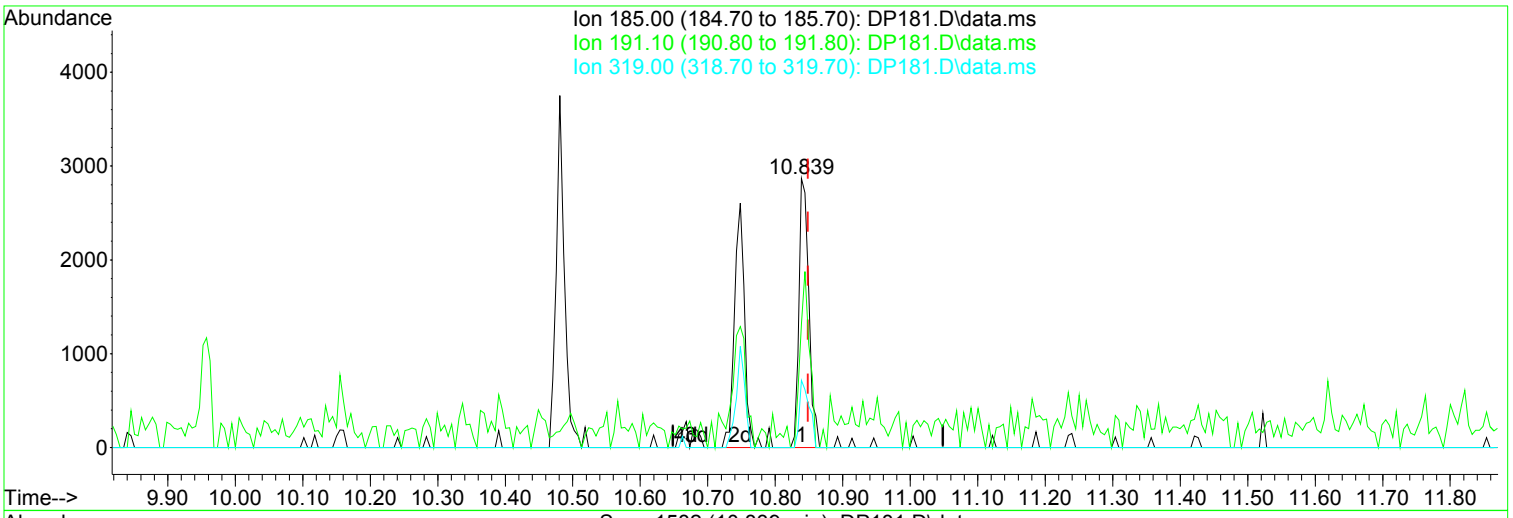
Quant Time: Sep 20 07:01:10 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration

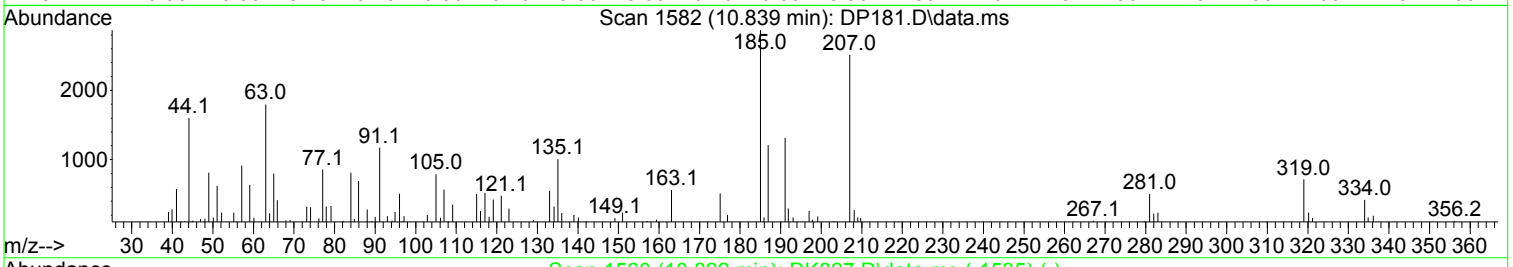


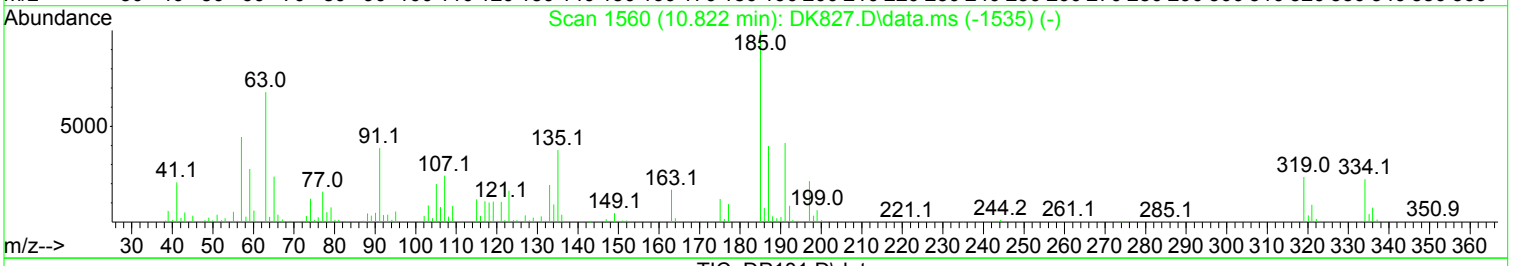
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP181.D\data.ms

(125) Aramite (TM)

10.839min (-0.010) 2.40 ppm m

response 5755

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	45.90
319.00	19.60	24.94
0.00	0.00	0.00

Manual Integration:

After

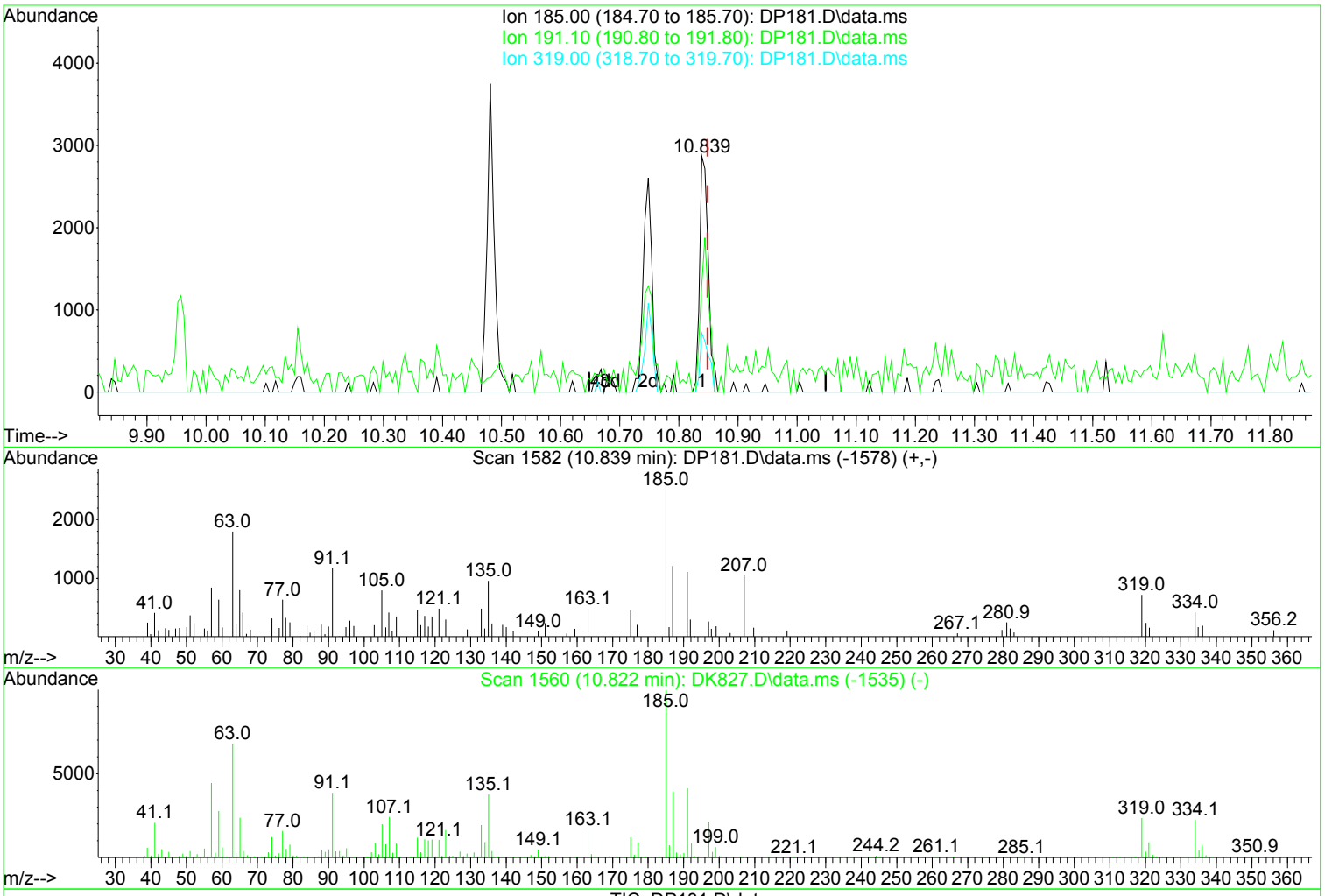
Split Peak.

09/19/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration



TIC: DP181.D\data.ms

(125) Aramite (TM)

10.839min (-0.010) 1.22 ppm

response 2925

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	38.70
319.00	19.60	24.94
0.00	0.00	0.00

Manual Integration:

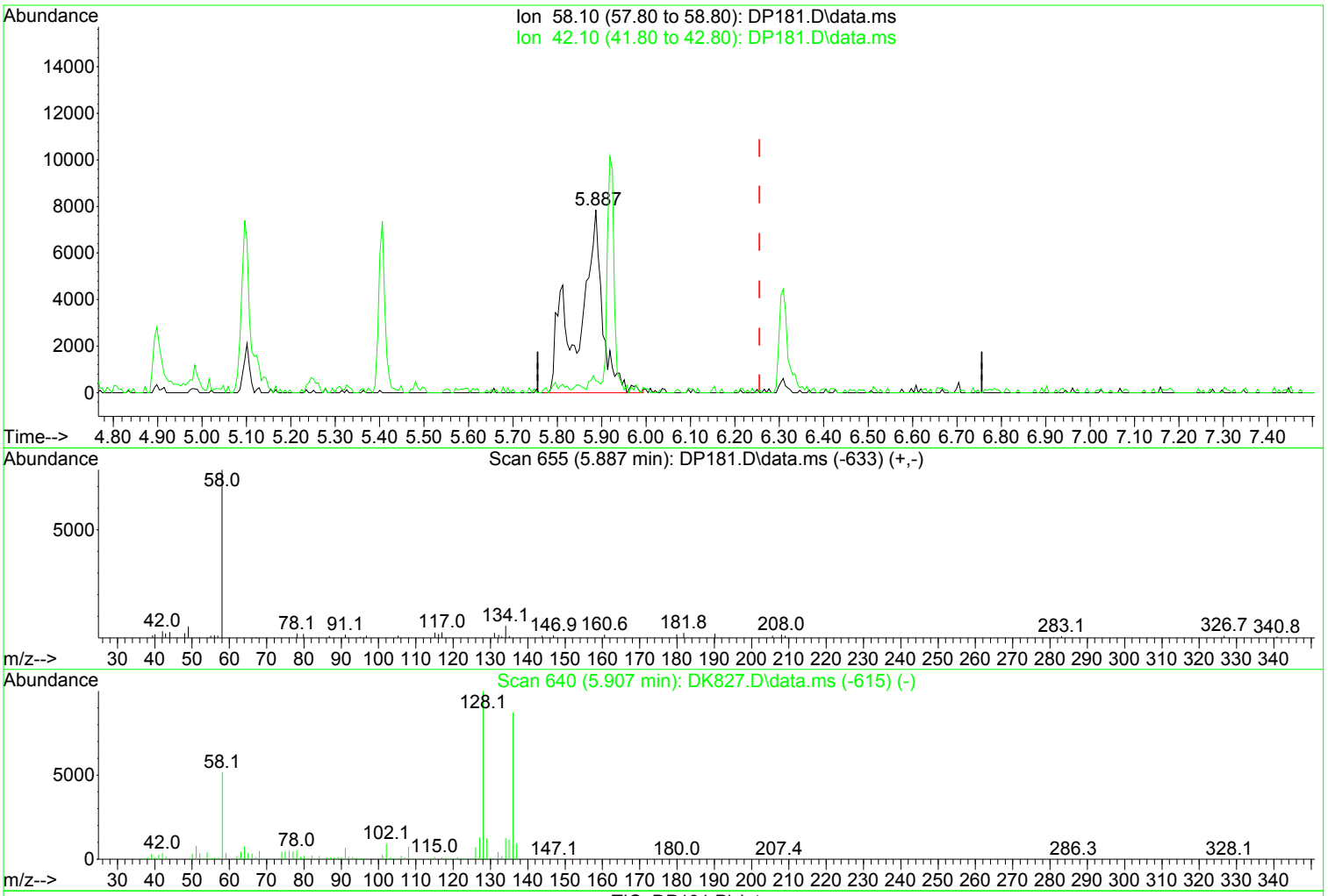
Before

09/19/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration



TIC: DP181.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.887min (-0.369) 1.26 ppm m

response 29096

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	6.46
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

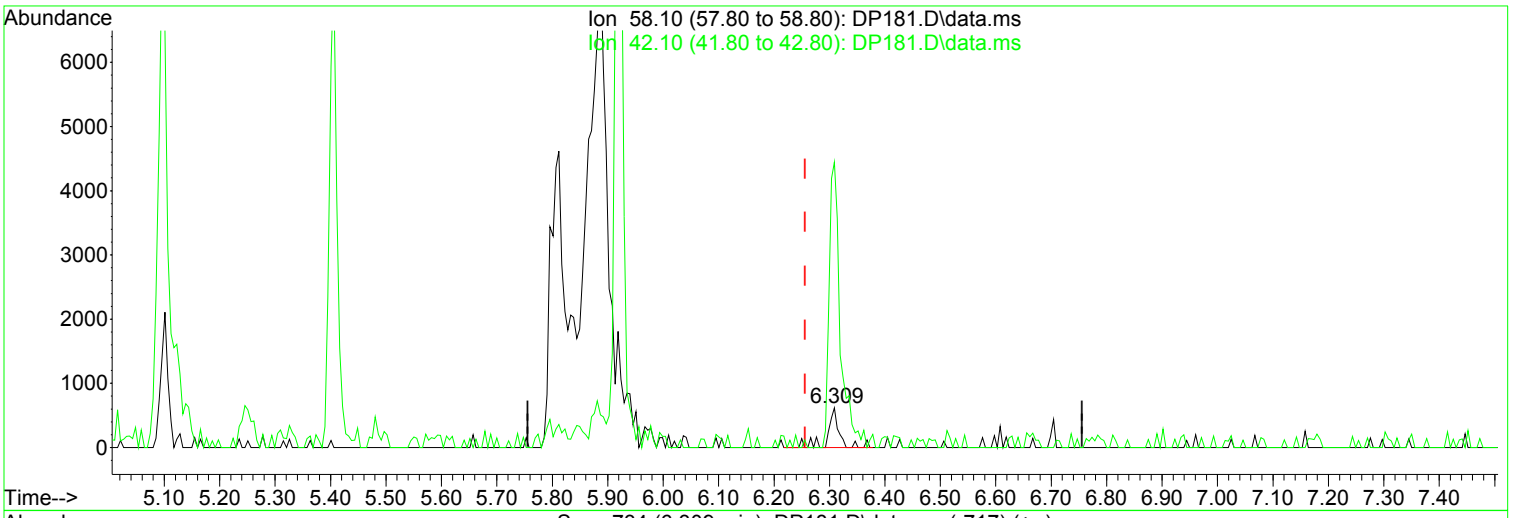
Peak not found.

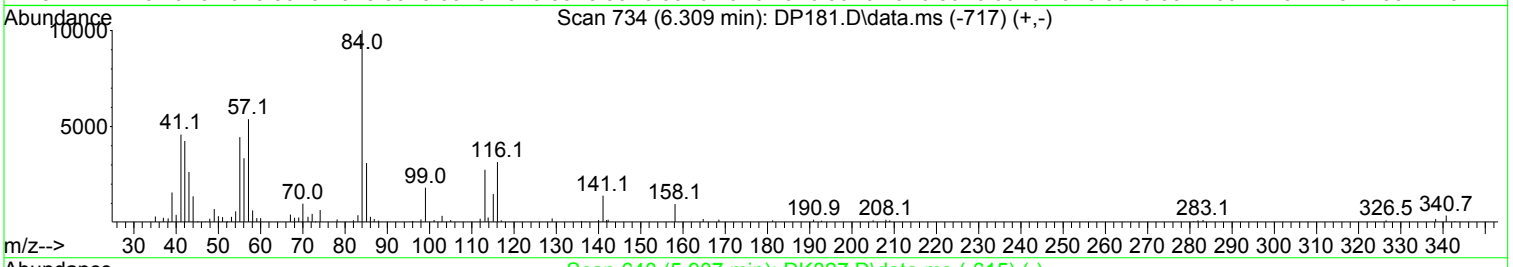
09/19/18

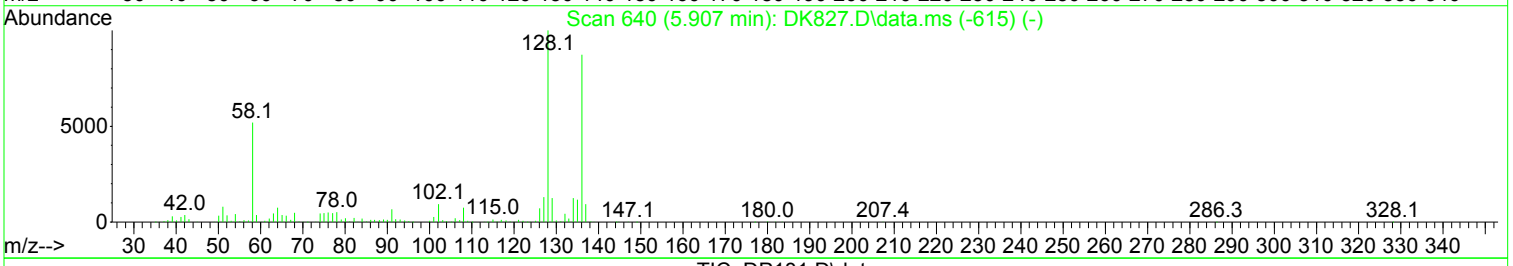
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP181.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.309min (+ 0.053) 0.04 ppm

response 841

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	686.05#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

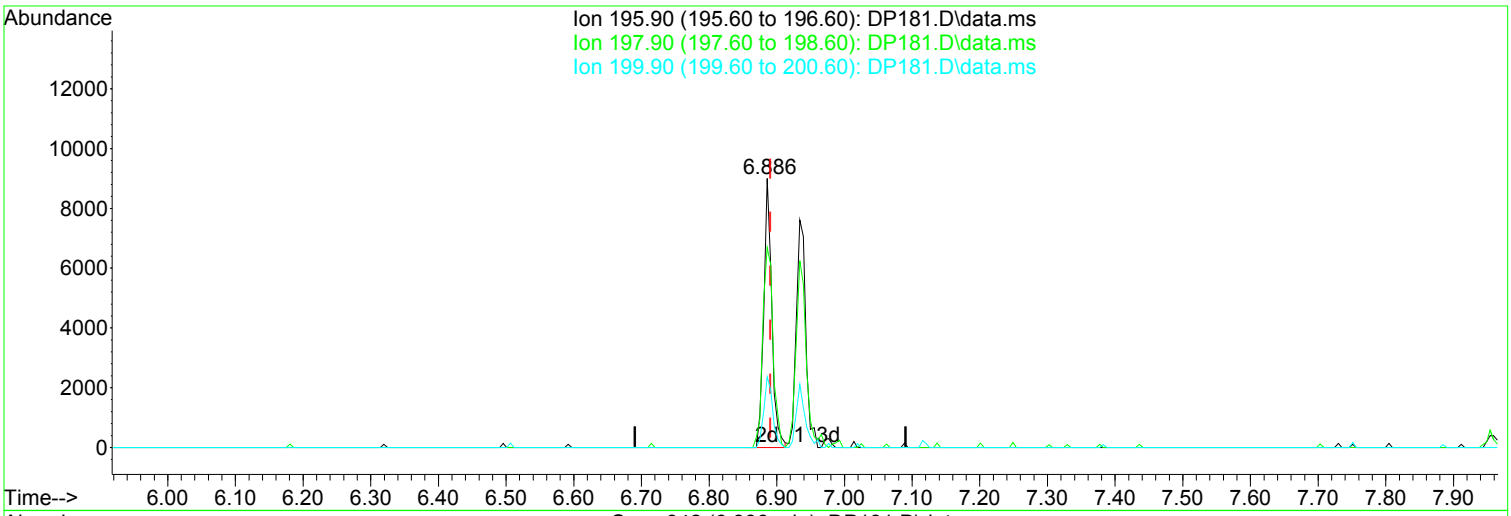
Before

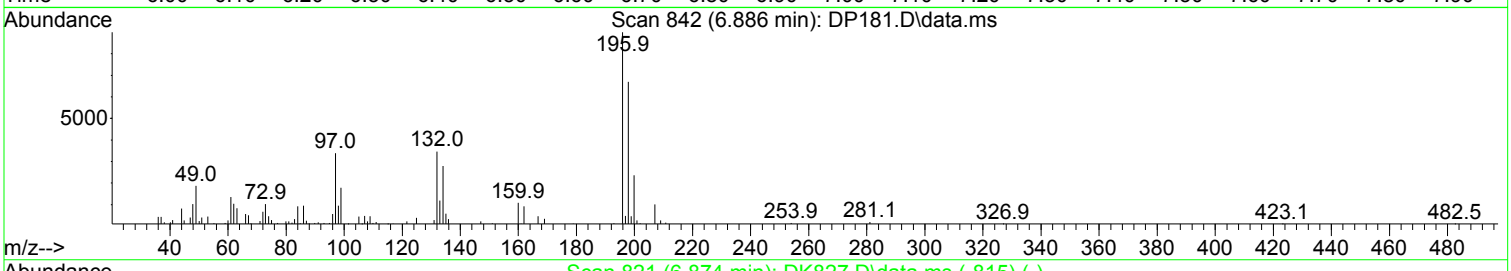
09/19/18

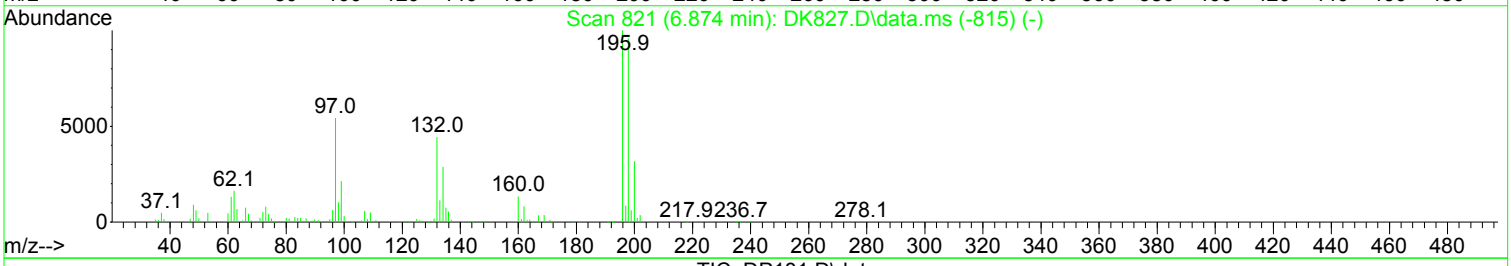
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP181.D\data.ms

(61) 2,4,6-Trichlorophenol (TCM)

6.886min (-0.005) 2.48 ppm m

response 7527

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	95.10	74.39#
199.90	29.80	26.31
0.00	0.00	0.00

Manual Integration:

After

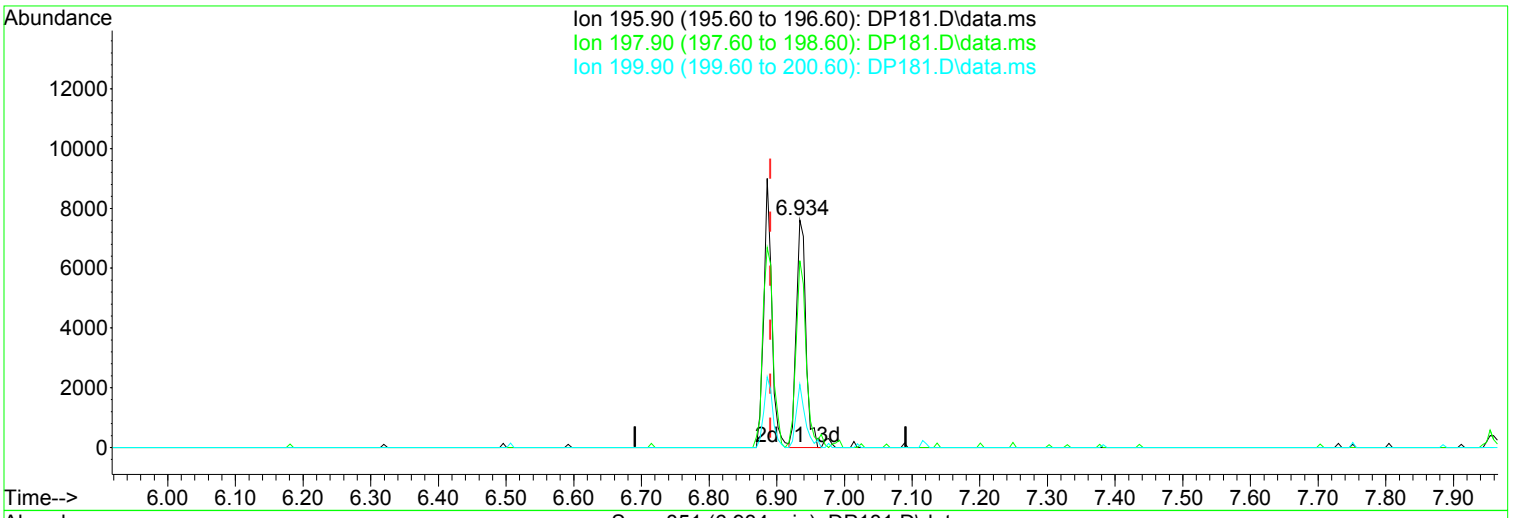
Wrong peak selected.

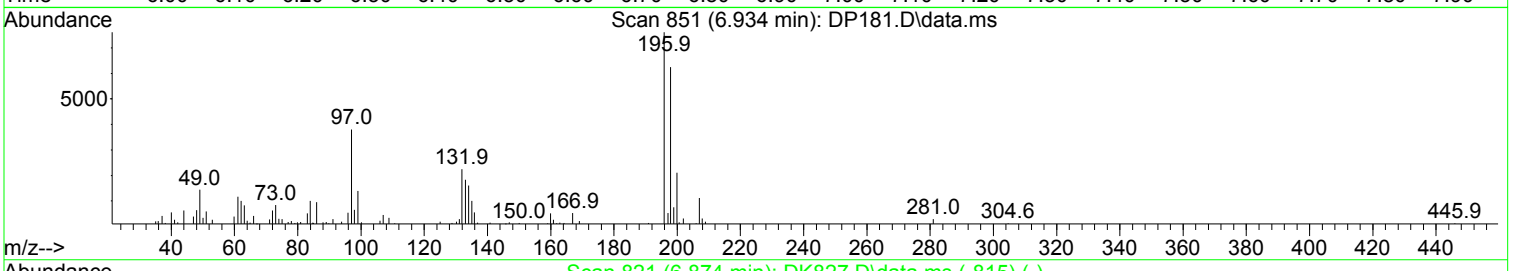
09/19/18

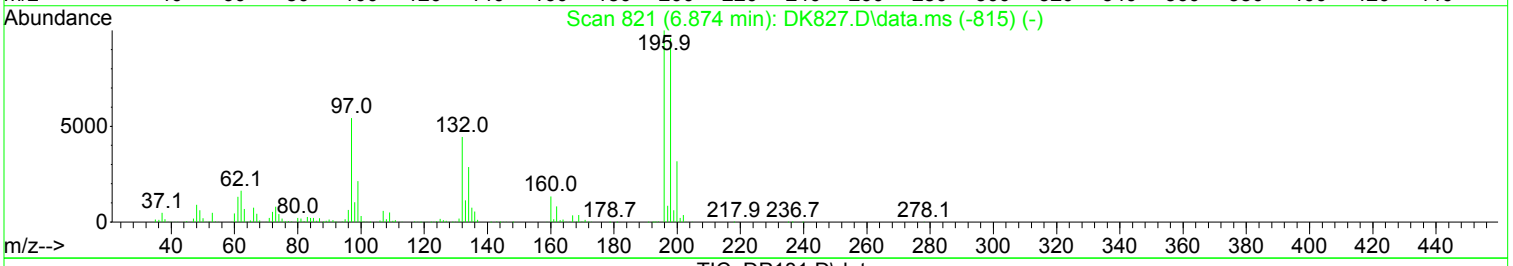
1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP181.D\data.ms

(61) 2,4,6-Trichlorophenol (TCM)

6.934min (+ 0.043) 2.45 ppm

response 7447

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	95.10	82.10
199.90	29.80	29.87
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.754	152	177486	40.00	ppm	0.00
33) d8-Naphthalene	5.919	136	677891	40.00	ppm	0.00
57) d10-Acenaphthene	7.628	164	350080	40.00	ppm	0.00
91) d10-Phenanthrene	9.092	188	546099	40.00	ppm	0.00
117) d12-Chrysene	12.351	240	534378	40.00	ppm	-0.01
135) d12-Perylene	15.284	264	548573	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.686	112	16145	2.62	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery =	1.31%#		
12) SURR2,PHENOL-D6	4.434	99	19035	2.54	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery =	1.27%#		
34) SURR4,NITROBENZENE-D5	5.251	82	15161	2.62	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery =	2.62%#		
63) SURR5,2-FLUOROBIPHENYL	6.960	172	31207	2.56	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery =	2.56%#		
88) SURR3,2,4,6-TRIBROMOPH...	8.408	330	4577	2.52	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery =	1.26%#		
124) SURR6,TERPHENYL-D14	10.775	244	30986	2.51	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery =	2.51%#		
Target Compounds						Qvalue
2) Pyridine	2.713	79	15954	2.491	ppm	95
3) N-Nitrosodimethylamine	2.665	74	6937	2.161	ppm	91
4) 2-Picoline	3.258	93	16609	2.501	ppm	93
5) N-Nitrosomethylamine	3.328	42	5943	2.730	ppm	83
6) Methyl Methansulfonate	3.552	80	6139	2.382	ppm	88
8) N-Nitrosodiethylamine	3.862	102	7300	2.443	ppm	87
9) Ethyl Mathanesulfonate	4.097	79	11383	2.578	ppm	88
11) Aniline	4.471	93	25971	2.622	ppm	97
13) Phenol	4.444	94	19775	2.463	ppm	95
14) bis(2-Clethyl)Ether	4.514	93	14796	2.562	ppm	97
15) Pentachloroethane	4.514	117	5388	2.582	ppm	95
16) 2-Chlorophenol	4.583	128	16340	2.571	ppm	85
17) 1,3-Diclbenzene	4.711	146	17813	2.688	ppm	89
18) 1,4-Dichlorobenzene	4.776	146	17810	2.679	ppm	98
19) 1,2-Diclbenzene	4.904	146	16666	2.664	ppm	94
20) Benzyl Alcohol	4.872	79	10131	2.369	ppm	89
21) 1-Methyl-2-pyrrolidinone	4.898	99	10560	2.439	ppm	90
22) 2,2'-oxybis(1-Chloropr...	4.984	45	16041	2.614	ppm	96
23) 2-Methylphenol	4.968	108	13196	2.370	ppm	97
24) 3+4-Methylphenol	5.107	108	14738	2.503	ppm	90
25) Acetophenone	5.107	105	22262	2.770	ppm	87
26) N-Nitroso-Di-n-propyla...	5.101	70	11144	2.558	ppm	96
27) N-Nitrosopyrrolidine	5.091	100	8128	2.370	ppm	94
28) N-Nitrosomorpholine	5.123	56	8489	2.703	ppm	87
29) o-Toluidine	5.139	106	25924	2.636	ppm	89
30) Hexachloroethane	5.208	117	6467	2.572	ppm	82
31) o,o,o-Triethylphosphor...	5.646	198	8065	2.853	ppm	99
32) Alpha-terpinol	5.940	121	5978	2.557	ppm	87
35) Nitrobenzene	5.267	77	14680	2.679	ppm	95
36) N-Nitrosopiperidine	5.406	42	7316	2.535	ppm	87
37) Isophorone	5.481	82	22787	2.602	ppm	96
38) 2-Nitrophenol	5.561	139	7015	2.246	ppm	96
39) 2,4-Dimethylphenol	5.598	107	14283	2.478	ppm	97

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	bis(-2-Chloroethoxy)Me...	5.678	93	17687	2.681	ppm		93
42)	2,4-Dichlorophenol	5.796	162	11303	2.437	ppm		97
43)	a,a-Dimethylphenethyla...	5.887	58	29096m	1.260	ppm		
44)	1,2,4-Trichlorobenzene	5.865	180	12337	2.603	ppm		91
45)	Naphthalene	5.940	128	49020	2.802	ppm		99
46)	4-Chloroaniline	5.994	127	18473	2.505	ppm		93
47)	2,6-Dichlorophenol	5.999	162	11503	2.477	ppm		96
48)	Hexachlorobutadiene	6.047	225	6646	2.758	ppm		85
49)	Hexachloropropene	6.020	213	6383	2.509	ppm		93
50)	4-Chloro-3-methylphenol	6.469	107	12228	2.627	ppm		79
51)	N-N-di-n-butylamine	6.303	84	12746	3.091	ppm		90
52)	Caprolactam	6.314	113	4941	2.530	ppm		91
53)	p-Phenylenediamine	6.335	80	20021	5.392	ppm		97
54)	Safrole	6.517	162	10286	2.396	ppm		91
55)	2-Methylnaphthalene	6.608	142	29271	2.671	ppm		95
56)	1-Methylnaphthalene	6.704	142	28288	2.610	ppm		94
58)	Hexachlorocyclopentadiene	6.757	237	1310	3.844	ppm		92
59)	1,2,4,5-Tetrachloroben...	6.768	216	11208	2.611	ppm		97
60)	1,2,3,4-Tetrachloroben...	7.046	216	11913	2.591	ppm		88
61)	2,4,6-Trichlorophenol	6.886	196	7527m	2.481	ppm		
62)	2,4,5-Trichlorophenol	6.934	196	7447	2.532	ppm		88
64)	Isosafrole	7.025	104	4836	2.458	ppm	#	58
65)	1,1'-Biphenyl	7.057	154	39807	2.672	ppm		91
66)	2-Chloronaphthalene	7.083	162	25285	2.528	ppm		96
67)	2-Nitroaniline	7.185	65	6723	2.483	ppm		93
68)	1,4-Naphthoquinone	7.260	158	5777	3.255	ppm		90
69)	m-Dinitrobenzene	7.399	168	4005	2.283	ppm		76
70)	Acenaphthylene	7.489	152	39988	2.428	ppm		99
71)	Dimethyl phthalate	7.356	163	29537	2.719	ppm		100
72)	2,6-Dinitrotoluene	7.420	165	5926	2.423	ppm		92
73)	Acenaphthene	7.660	153	28376	2.627	ppm		90
74)	3-Nitroaniline	7.591	138	7442	2.269	ppm		92
75)	2,4-Dinitrophenol	7.703	184	1043	2.997	ppm		74
76)	Dibenzofuran	7.831	168	38447	2.769	ppm		89
77)	2,4-Dinitrotoluene	7.821	165	7929	2.445	ppm		93
78)	4-Nitrophenol	7.789	65	3267	1.964	ppm		83
79)	Pentachlorobenzene	7.789	250	10553	2.675	ppm		93
80)	1-Napthylamine	7.906	143	24606	2.616	ppm		98
81)	2-Napthylamine	7.986	143	27271	2.654	ppm		98
82)	2,3,4,6-Tetrachlorophenol	7.959	232	5313	2.387	ppm		86
83)	Fluorene	8.168	166	29633	2.683	ppm		93
84)	4-Chlorophenyl-phenyle...	8.162	204	12564	2.637	ppm		88
85)	Diethylphthalate	8.045	149	29384	2.687	ppm		98
86)	4-Nitroaniline	8.189	138	8164	2.395	ppm		83
87)	5-Nitro-o-toluidine	8.184	152	8611	2.395	ppm		88
89)	Sulfotepp	8.430	322	5401	2.612	ppm		87
90)	Octachlorocyclopentene	8.408	307	3254	2.094	ppm		88
92)	Thionazin	8.125	107	5345	2.580	ppm		78
93)	4,6-Dinitro-2-methylph...	8.221	198	2969	1.639	ppm		88
94)	Diphenylamine	8.280	169	51306	5.471	ppm		97
95)	1,2 Diphenylhydrazine	8.317	77	30686	2.749	ppm		97
96)	N-Nitrosodiphenylamine	8.280	169	51306	5.471	ppm		97
97)	1,3,5-Trinirobenzene	8.574	74	2620	2.178	ppm	#	1
98)	Diallate	8.558	86	11803	2.643	ppm		90
99)	Phorate	8.568	121	6155	2.485	ppm		87
100)	Phenacetin	8.584	108	13924	2.230	ppm		93

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

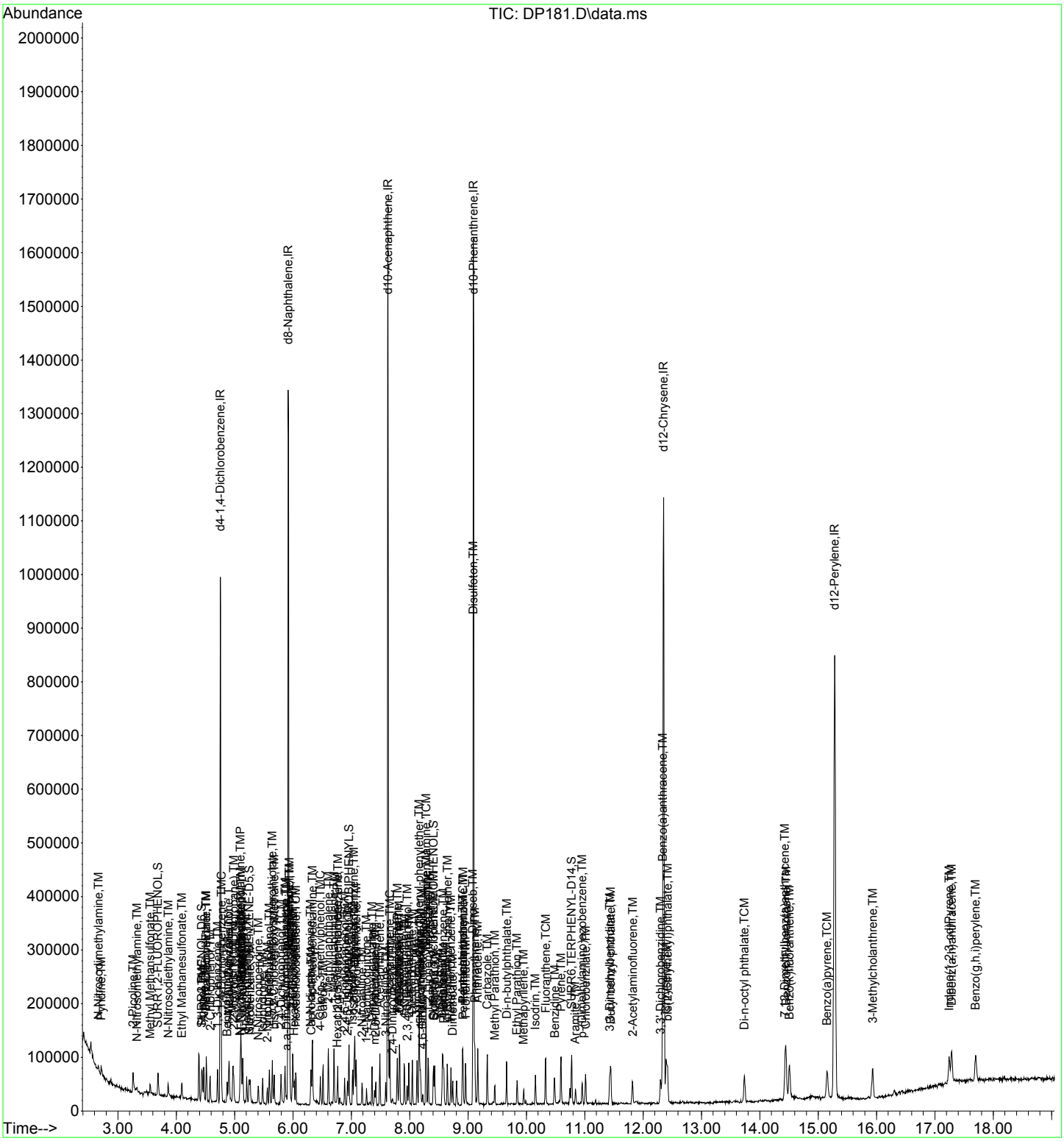
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.649	248	8021	2.670	ppm	91
102) Hexachlorobenzene	8.707	284	8666	2.469	ppm	89
103) Dimethoate	8.739	87	8900	2.548	ppm	87
105) Pentachlorophenol	8.910	266	3063	1.634	ppm	93
106) 4-Aminobiphenyl	8.905	169	28079	2.421	ppm	95
107) Pentachloronitrobenzene	8.916	237	1872	1.867	ppm	79
108) Pronamide	8.958	173	11357	2.200	ppm	97
109) Dinoseb	9.081	211	2992	1.266	ppm	99
110) Disulfoton	9.087	88	19609	3.082	ppm	95
111) Phenanthrene	9.119	178	41891	2.738	ppm	96
112) Anthracene	9.167	178	38204	2.557	ppm	98
113) Carbazole	9.332	167	39855	2.455	ppm	98
114) Di-n-butylphthalate	9.664	149	41686	2.214	ppm	99
116) Fluoranthene	10.331	202	36658	2.365	ppm	96
118) Methyl Parathion	9.461	109	5871	2.178	ppm	94
119) Ethyl Parathion	9.840	97	5340	2.200	ppm	87
120) Methapyrilene	9.952	58	7048	2.325	ppm	95
121) Isodrin	10.155	193	4767	3.004	ppm	93
122) Benzidine	10.486	184	22774	2.221	ppm	93
123) Pyrene	10.593	202	39646	2.435	ppm	99
125) Aramite	10.839	185	5755m	2.401	ppm	
126) p-(Dimethylamino)azobe...	10.956	120	8615	1.808	ppm	91
127) Chlorobenzilate	11.015	139	12429	2.252	ppm	90
128) Butyl benzyl phthalate	11.448	149	20676	2.370	ppm	90
129) 3,3-Dimethylbenzidine	11.427	212	20351	2.129	ppm	98
130) 2-Acetylaminofluorene	11.822	181	13849	1.909	ppm	96
131) 3,3'-Dichlorobenzidine	12.297	252	13738	2.160	ppm	86
132) Benzo(a)anthracene	12.335	228	37711	2.507	ppm	96
133) Chrysene	12.393	228	40239	2.732	ppm	96
134) bis(2-Ethylhexyl)phtha...	12.420	149	27843	2.337	ppm	99
136) Di-n-octyl phthalate	13.734	149	43663	2.270	ppm	94
137) 7,12-Dimethylbenz(a)an...	14.429	256	19321	2.395	ppm	92
138) Benzo(b)Fluoranthene	14.450	252	43920	2.680	ppm	99
139) Benzo(k)fluoranthene	14.509	252	38454	2.532	ppm	98
140) Benzo(a)pyrene	15.150	252	34160	2.475	ppm	99
141) 3-Methylcholanthrene	15.935	268	21584	2.581	ppm	97
142) Indeno(1,2,3-cd)Pyrene	17.244	276	32604	2.461	ppm	99
143) Dibenz(a,h)anthracene	17.287	278	38097	2.749	ppm	96
144) Benzo(g,h,i)perylene	17.698	276	34459	2.711	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP181.D
Acq On : 17 Sep 2018 10:16 am
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 6 Sample Multiplier: 1

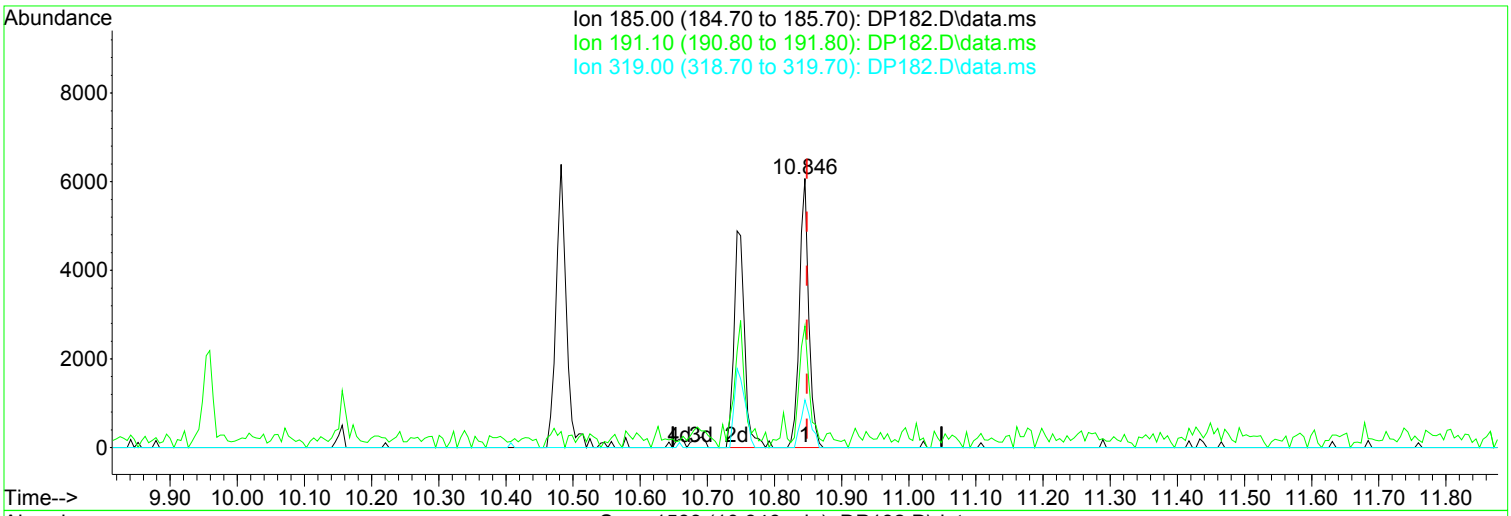
Quant Time: Sep 19 14:27:24 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

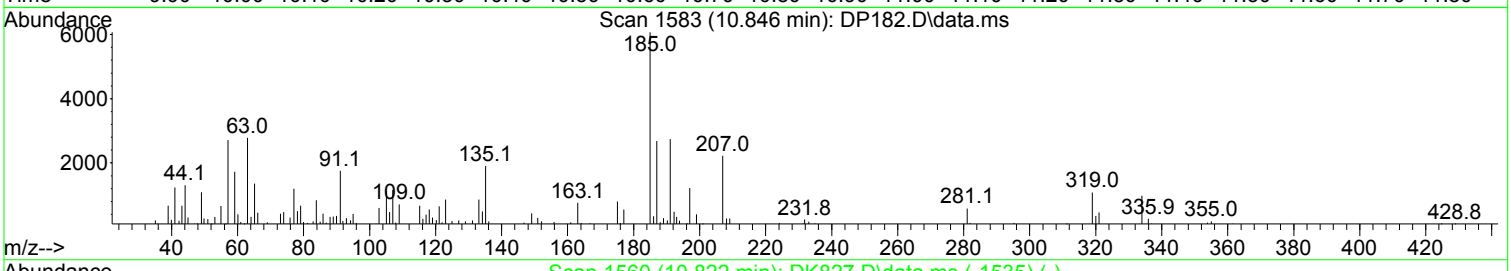


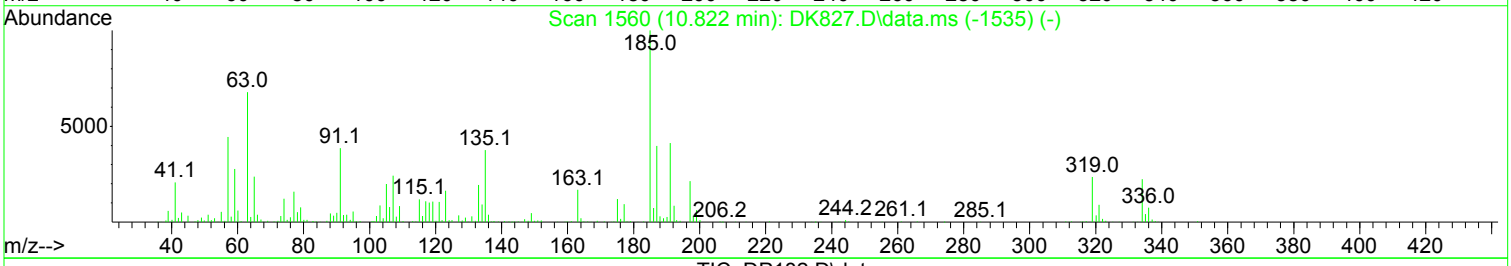
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP182.D
Acq On : 17 Sep 2018 11:04 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:27:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP182.D\data.ms

(125) Aramite (TM)

10.846min (-0.003) 4.85 ppm m

response 11306

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	45.17
319.00	19.60	17.77
0.00	0.00	0.00

Manual Integration:

After

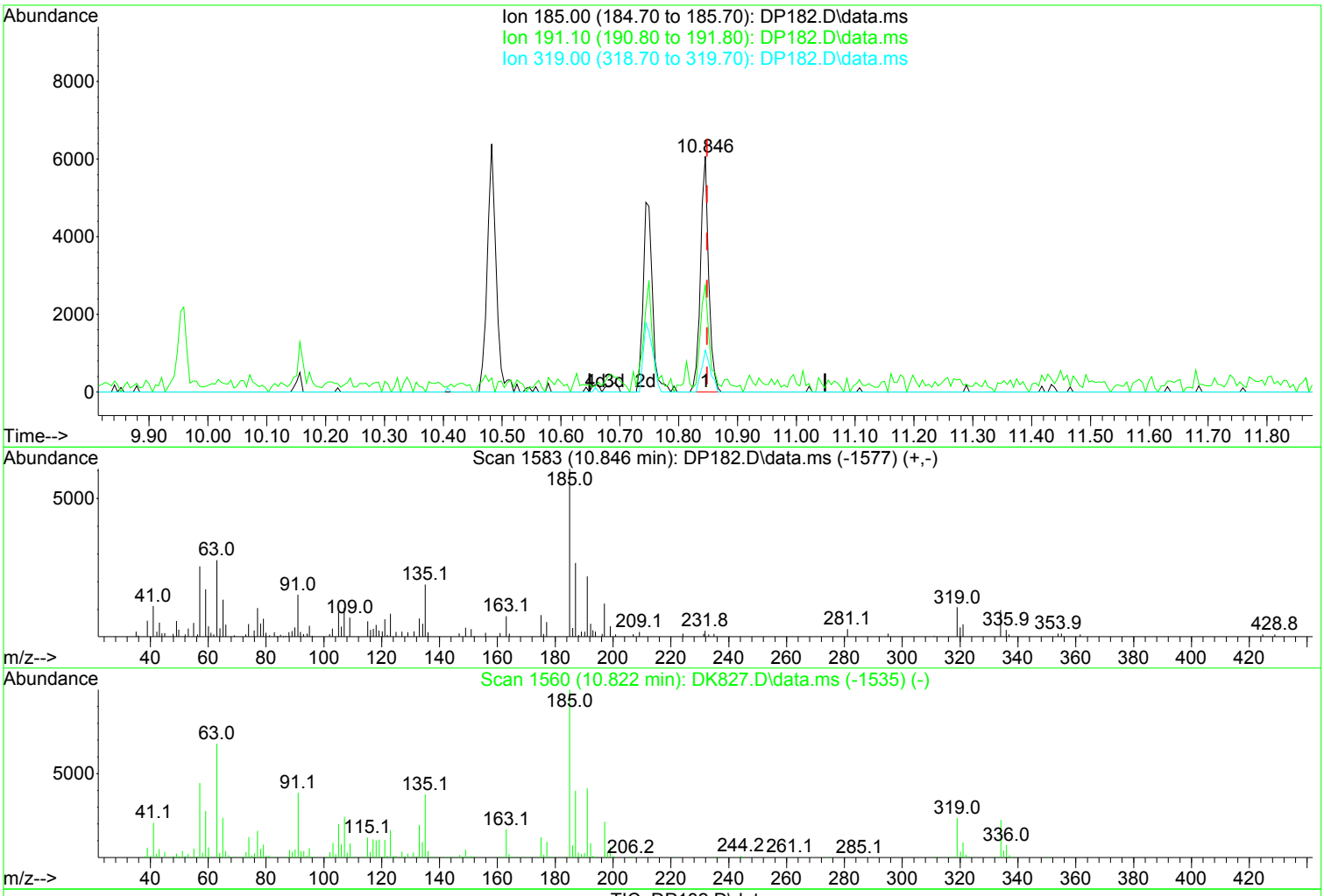
Split Peak.

09/19/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP182.D
Acq On : 17 Sep 2018 11:04 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:27:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration



TIC: DP182.D\data.ms

(125) Aramite (TM)

10.846min (-0.003) 2.51 ppm

response 5851

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	36.13
319.00	19.60	17.77
0.00	0.00	0.00

Manual Integration:

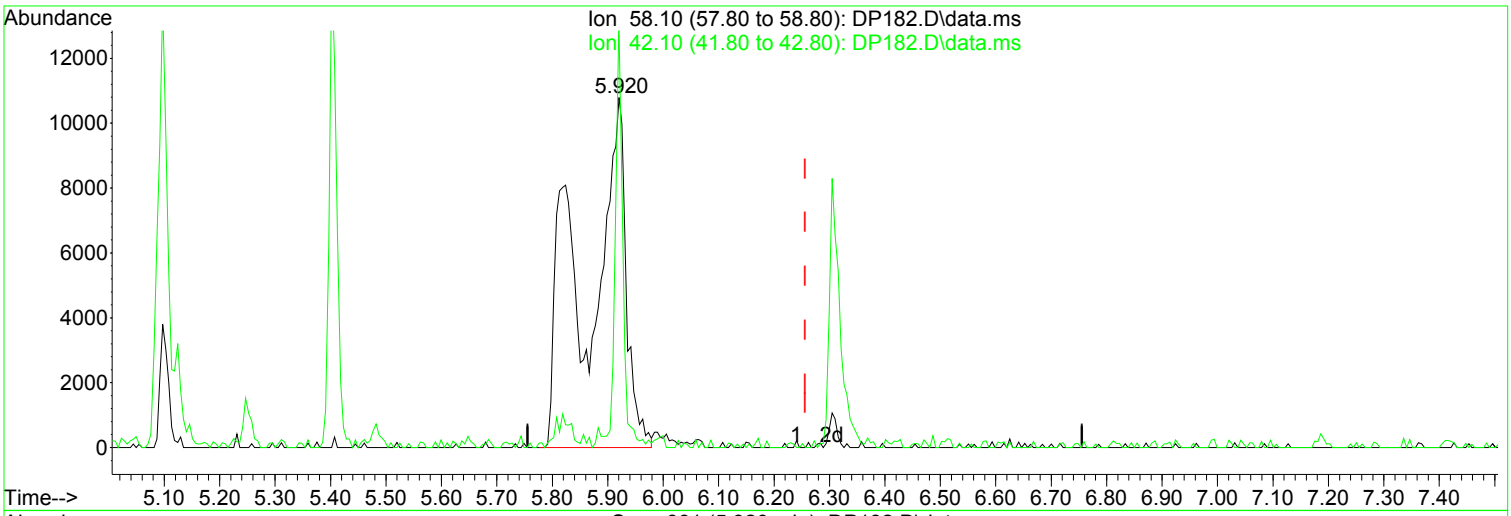
Before

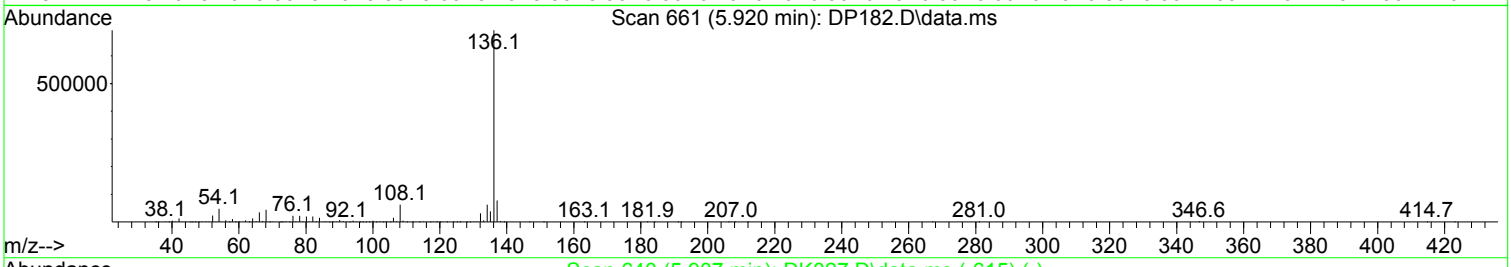
09/19/18

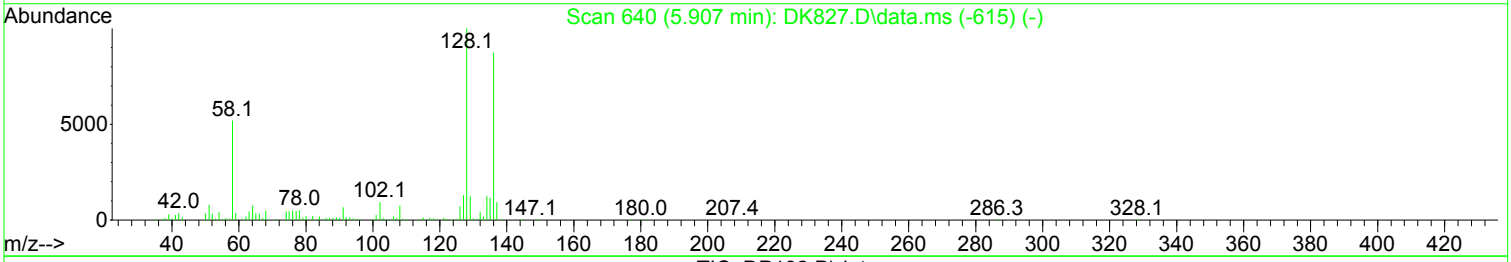
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP182.D
Acq On : 17 Sep 2018 11:04 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:27:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP182.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.920min (-0.336) 2.31 ppm m

response 53071

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	122.54#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

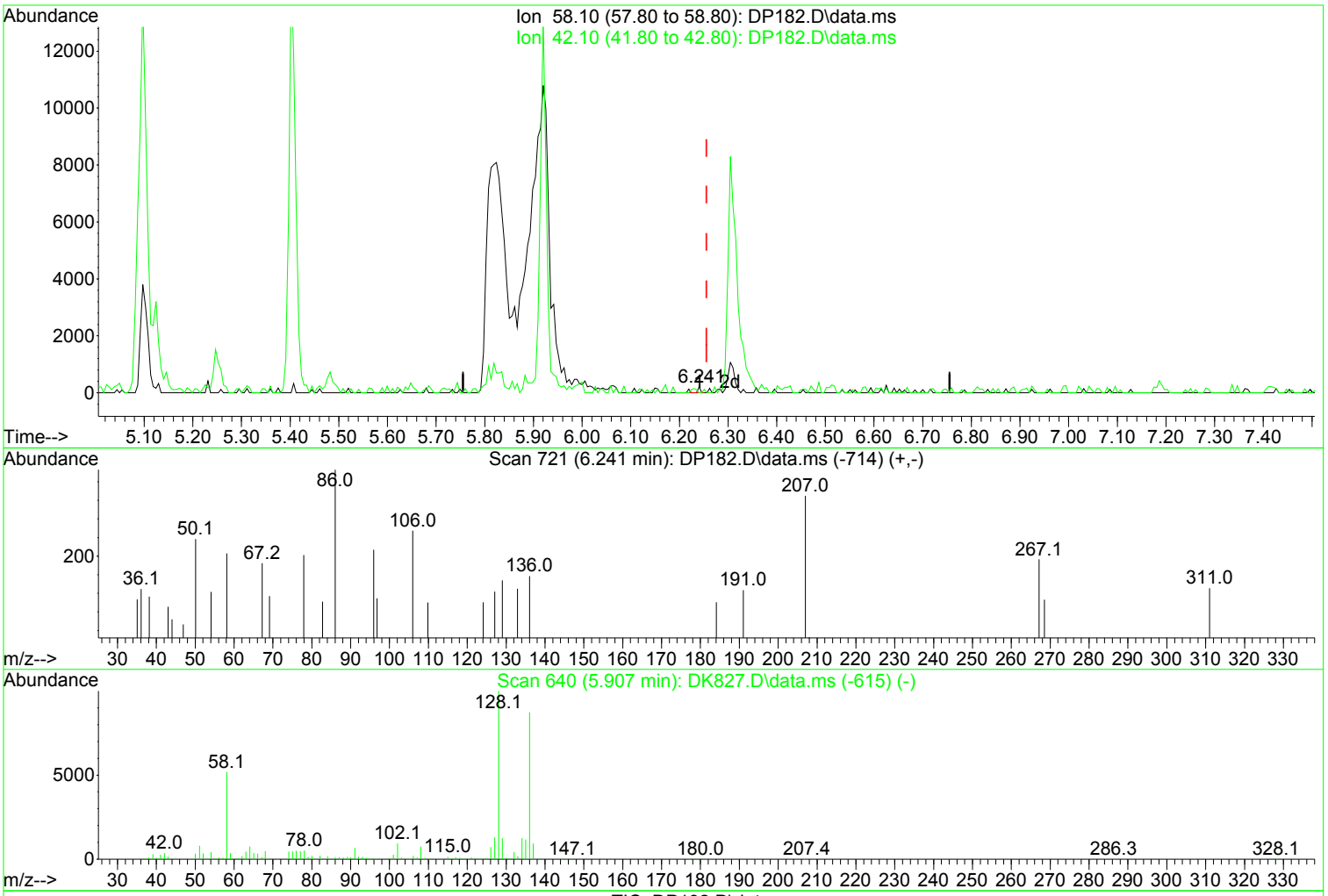
Peak not found.

09/19/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP182.D
Acq On : 17 Sep 2018 11:04 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:27:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration



TIC: DP182.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.241min (-0.015) 0.00 ppm

response 108

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP182.D
Acq On : 17 Sep 2018 11:04 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:27:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.756	152	174640	40.00	ppm		0.00
33) d8-Naphthalene	5.920	136	673677	40.00	ppm		0.00
57) d10-Acenaphthene	7.624	164	339156	40.00	ppm		0.00
91) d10-Phenanthrene	9.093	188	522236	40.00	ppm		0.00
117) d12-Chrysene	12.352	240	519677	40.00	ppm		0.00
135) d12-Perylene	15.280	264	553305	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.687	112	29949	4.93	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery =	2.46%#			
12) SURR2,PHENOL-D6	4.435	99	34759	4.72	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery =	2.36%#			
34) SURR4,NITROBENZENE-D5	5.252	82	29056	5.05	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery =	5.05%#			
63) SURR5,2-FLUOROBIPHENYL	6.962	172	59835	5.06	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery =	5.06%#			
88) SURR3,2,4,6-TRIBROMOPH...	8.404	330	9048	5.14	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery =	2.57%#			
124) SURR6,TERPHENYL-D14	10.776	244	59803	4.99	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery =	4.99%#			
Target Compounds							Qvalue
2) Pyridine	2.709	79	30136	4.783	ppm		90
3) N-Nitrosodimethylamine	2.661	74	14232	4.506	ppm		93
4) 2-Picoline	3.254	93	32546	4.980	ppm		94
5) N-Nitrosomethylamine	3.324	42	10449	4.879	ppm		83
6) Methyl Methansulfonate	3.554	80	13573	5.352	ppm		88
8) N-Nitrosodiethylamine	3.863	102	14829	5.044	ppm		83
9) Ethyl Mathanesulfonate	4.093	79	20484	4.714	ppm		88
11) Aniline	4.472	93	46793	4.801	ppm		99
13) Phenol	4.446	94	40113	5.077	ppm		96
14) bis(2-Clethyl)Ether	4.515	93	30728	5.407	ppm		96
15) Pentachloroethane	4.515	117	10424	5.078	ppm		90
16) 2-Chlorophenol	4.579	128	30392	4.860	ppm		95
17) 1,3-Diclbenzene	4.707	146	33752	5.177	ppm		96
18) 1,4-Dichlorobenzene	4.772	146	34040	5.204	ppm		95
19) 1,2-Diclbenzene	4.905	146	31212	5.070	ppm		96
20) Benzyl Alcohol	4.873	79	19143	4.549	ppm		91
21) 1-Methyl-2-pyrrolidinone	4.894	99	20324	4.770	ppm		89
22) 2,2'-oxybis(1-Chloropr...	4.980	45	32748	5.424	ppm		91
23) 2-Methylphenol	4.969	108	29510	5.386	ppm		93
24) 3+4-Methylphenol	5.108	108	27779	4.796	ppm		92
25) Acetophenone	5.108	105	38842	4.911	ppm	#	80
26) N-Nitroso-Di-n-propyla...	5.097	70	21173	4.939	ppm		95
27) N-Nitrosopyrrolidine	5.092	100	16437	4.870	ppm		97
28) N-Nitrosomorpholine	5.124	56	14738	4.769	ppm		83
29) o-Toluidine	5.140	106	48182	4.979	ppm		92
30) Hexachloroethane	5.210	117	12933	5.228	ppm		91
31) o,o,o-Triethylphosphor...	5.648	198	13550	4.872	ppm		96
32) Alpha-terpinol	5.941	121	11792	5.126	ppm		92
35) Nitrobenzene	5.268	77	28211	5.180	ppm		96
36) N-Nitrosopiperidine	5.402	42	14022	4.890	ppm		98
37) Isophorone	5.482	82	45150	5.188	ppm		97
38) 2-Nitrophenol	5.562	139	14504	4.673	ppm		96
39) 2,4-Dimethylphenol	5.594	107	29058	5.073	ppm		95

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP182.D
Acq On : 17 Sep 2018 11:04 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:27:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	bis(-2-Chloroethoxy)Me...	5.680	93	33267	5.075	ppm		98
42)	2,4-Dichlorophenol	5.792	162	22929	4.974	ppm		92
43)	a,a-Dimethylphenethyla...	5.920	58	53071m	2.313	ppm		
44)	1,2,4-Trichlorobenzene	5.861	180	24453	5.191	ppm		96
45)	Naphthalene	5.941	128	92477	5.320	ppm		98
46)	4-Chloroaniline	5.995	127	38034	5.189	ppm		95
47)	2,6-Dichlorophenol	6.000	162	22818	4.944	ppm		96
48)	Hexachlorobutadiene	6.048	225	12487	5.215	ppm		98
49)	Hexachloropropene	6.022	213	12275	4.855	ppm		82
50)	4-Chloro-3-methylphenol	6.470	107	24281	5.248	ppm		95
51)	N-N-di-n-butylamine	6.305	84	22973	5.605	ppm		99
52)	Caprolactam	6.315	113	9684	4.989	ppm		81
53)	p-Phenylenediamine	6.331	80	40738	11.040	ppm		95
54)	Safrole	6.518	162	22041	5.166	ppm		88
55)	2-Methylnaphthalene	6.604	142	57955	5.321	ppm		98
56)	1-Methylnaphthalene	6.700	142	56833	5.276	ppm		90
58)	Hexachlorocyclopentadiene	6.753	237	3045	5.128	ppm		97
59)	1,2,4,5-Tetrachloroben...	6.770	216	21153	5.086	ppm		98
60)	1,2,3,4-Tetrachloroben...	7.047	216	23167	5.201	ppm		95
61)	2,4,6-Trichlorophenol	6.887	196	14497	4.931	ppm		92
62)	2,4,5-Trichlorophenol	6.935	196	14288	5.014	ppm		96
64)	Isosafrole	7.021	104	9462	4.964	ppm		90
65)	1,1'-Biphenyl	7.058	154	75085	5.203	ppm		94
66)	2-Chloronaphthalene	7.085	162	53006	5.470	ppm		97
67)	2-Nitroaniline	7.186	65	12726	4.852	ppm		91
68)	1,4-Naphthoquinone	7.261	158	11658	6.781	ppm		76
69)	m-Dinitrobenzene	7.400	168	8314	4.891	ppm		81
70)	Acenaphthylene	7.491	152	83524	5.235	ppm		98
71)	Dimethyl phthalate	7.357	163	57263	5.441	ppm		98
72)	2,6-Dinitrotoluene	7.421	165	11799	4.981	ppm		90
73)	Acenaphthene	7.656	153	56207	5.371	ppm		97
74)	3-Nitroaniline	7.587	138	14853	4.675	ppm		97
75)	2,4-Dinitrophenol	7.699	184	2896	5.185	ppm		87
76)	Dibenzofuran	7.827	168	71164	5.290	ppm		100
77)	2,4-Dinitrotoluene	7.822	165	15181	4.832	ppm		94
78)	4-Nitrophenol	7.785	65	6640	4.120	ppm		85
79)	Pentachlorobenzene	7.790	250	21169	5.538	ppm		93
80)	1-Napthylamine	7.907	143	46982	5.156	ppm		99
81)	2-Napthylamine	7.988	143	51442	5.168	ppm		96
82)	2,3,4,6-Tetrachlorophenol	7.955	232	10122	4.694	ppm		88
83)	Fluorene	8.164	166	56505	5.280	ppm		99
84)	4-Chlorophenyl-phenyle...	8.164	204	25186	5.457	ppm		95
85)	Diethylphthalate	8.046	149	55149	5.205	ppm		98
86)	4-Nitroaniline	8.191	138	15736	4.765	ppm		90
87)	5-Nitro-o-toluidine	8.180	152	15626	4.486	ppm		95
89)	Sulfotepp	8.431	322	10092	5.037	ppm		96
90)	Octachlorocyclopentene	8.410	307	6904	4.586	ppm		93
92)	Thionazin	8.126	107	9673	4.883	ppm		95
93)	4,6-Dinitro-2-methylph...	8.223	198	5316	3.068	ppm		73
94)	Diphenylamine	8.281	169	94666	10.555	ppm		98
95)	1,2 Diphenylhydrazine	8.319	77	55145	5.167	ppm		98
96)	N-Nitrosodiphenylamine	8.281	169	94666	10.555	ppm		98
97)	1,3,5-Trinirobenzene	8.570	74	5867	5.099	ppm	#	1
98)	Diallate	8.559	86	21354	5.000	ppm		84
99)	Phorate	8.570	121	12257	5.174	ppm	#	81
100)	Phenacetin	8.586	108	27518	4.609	ppm		92

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP182.D
Acq On : 17 Sep 2018 11:04 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:27:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

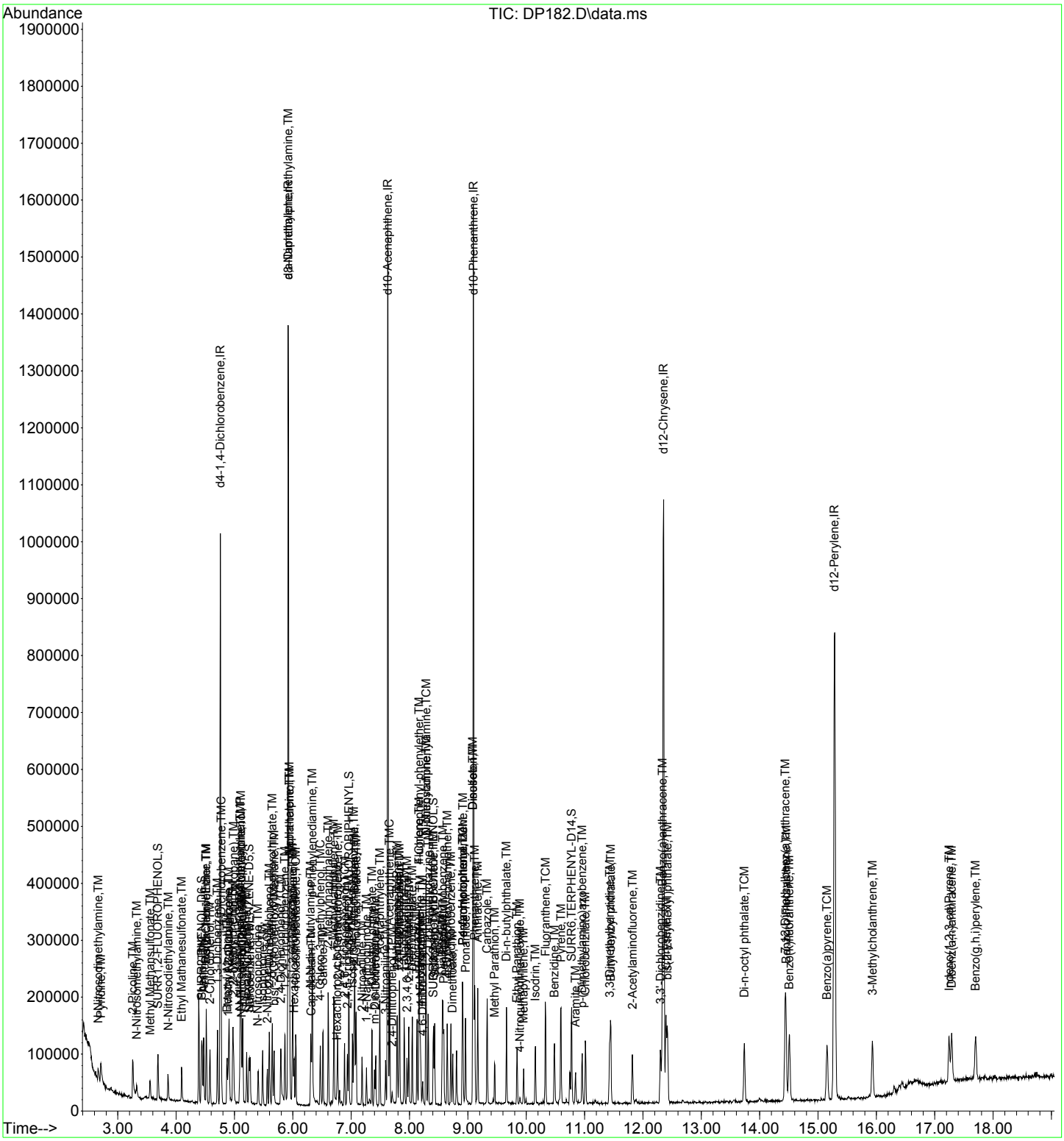
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.645	248	16272	5.664	ppm	94
102) Hexachlorobenzene	8.709	284	19068	5.681	ppm	95
103) Dimethoate	8.735	87	18243	5.462	ppm	94
105) Pentachlorophenol	8.912	266	7884	4.399	ppm	88
106) 4-Aminobiphenyl	8.906	169	52316	4.716	ppm	98
107) Pentachloronitrobenzene	8.912	237	4792	4.998	ppm	79
108) Pronamide	8.960	173	22182	4.493	ppm	96
109) Dinoseb	9.083	211	7358	3.255	ppm	92
110) Disulfoton	9.083	88	31566	5.188	ppm	94
111) Phenanthrene	9.115	178	76897	5.256	ppm	96
112) Anthracene	9.168	178	71541	5.006	ppm	97
113) Carbazole	9.328	167	75241	4.846	ppm	98
114) Di-n-butylphthalate	9.660	149	86981	4.830	ppm	99
115) 4-Nitroquinonline-1-oxide	9.889	190	803	1.207	ppm	85
116) Fluoranthene	10.327	202	72985	4.924	ppm	95
118) Methyl Parathion	9.457	109	12629	4.817	ppm	94
119) Ethyl Parathion	9.841	97	9595	4.064	ppm	98
120) Methapyrilene	9.953	58	15546	5.273	ppm	94
121) Isodrin	10.156	193	8163	5.290	ppm	94
122) Benzidine	10.482	184	48177	4.831	ppm	99
123) Pyrene	10.594	202	79222	5.004	ppm	98
125) Aramite	10.846	185	11306m	4.850	ppm	
126) p-(Dimethylamino)azobe...	10.958	120	19005	4.102	ppm	86
127) Chlorobenzilate	11.011	139	25218	4.699	ppm	91
128) Butyl benzyl phthalate	11.449	149	42875	5.053	ppm	95
129) 3,3-Dimethylbenzidine	11.428	212	44289	4.764	ppm	96
130) 2-Acetylaminofluorene	11.818	181	28224	4.002	ppm	98
131) 3,3'-Dichlorobenzidine	12.299	252	30371	4.909	ppm	96
132) Benzo(a)anthracene	12.331	228	76903	5.258	ppm	96
133) Chrysene	12.395	228	76168	5.318	ppm	97
134) bis(2-Ethylhexyl)phtha...	12.416	149	57690	4.979	ppm	99
136) Di-n-octyl phthalate	13.736	149	87472	4.508	ppm	96
137) 7,12-Dimethylbenz(a)an...	14.435	256	36852	4.529	ppm	98
138) Benzo(b)Fluoranthene	14.451	252	83539	5.054	ppm	93
139) Benzo(k)fluoranthene	14.505	252	79758	5.206	ppm	94
140) Benzo(a)pyrene	15.151	252	69252	4.975	ppm	94
141) 3-Methylcholanthrene	15.931	268	38278	4.539	ppm	96
142) Indeno(1,2,3-cd)Pyrene	17.245	276	51826	3.879	ppm	94
143) Dibenz(a,h)anthracene	17.288	278	57335	4.102	ppm	96
144) Benzo(g,h,i)perylene	17.700	276	55628	4.339	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP182.D
Acq On : 17 Sep 2018 11:04 am
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 7 Sample Multiplier: 1

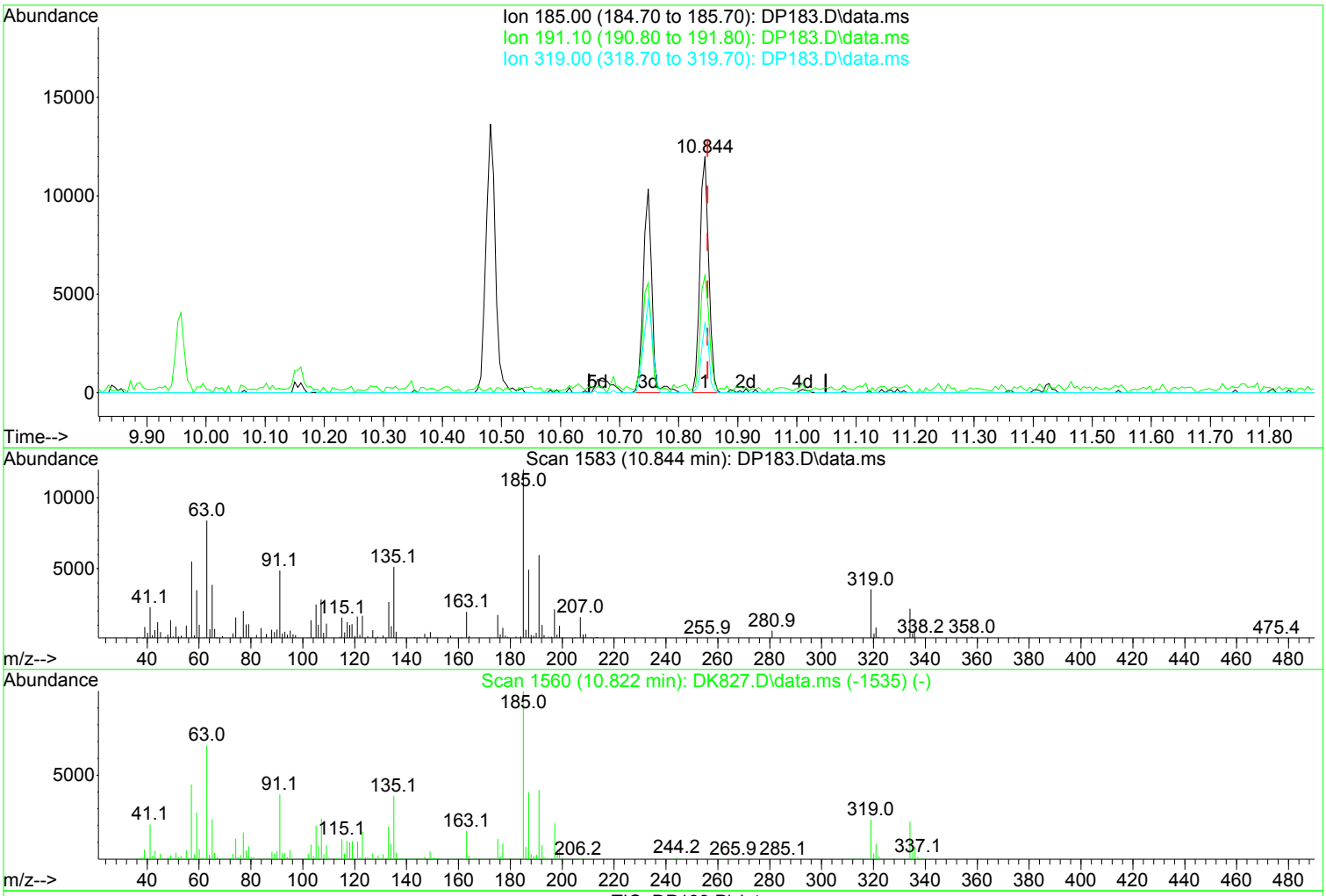
Quant Time: Sep 19 14:27:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP183.D
Acq On : 17 Sep 2018 11:40 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 14:27:37 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration



TIC: DP183.D\data.ms

(125) Aramite (TM)

10.844min (-0.005) 9.53 ppm m

response 22891

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	49.71
319.00	19.60	29.45
0.00	0.00	0.00

Manual Integration:

After

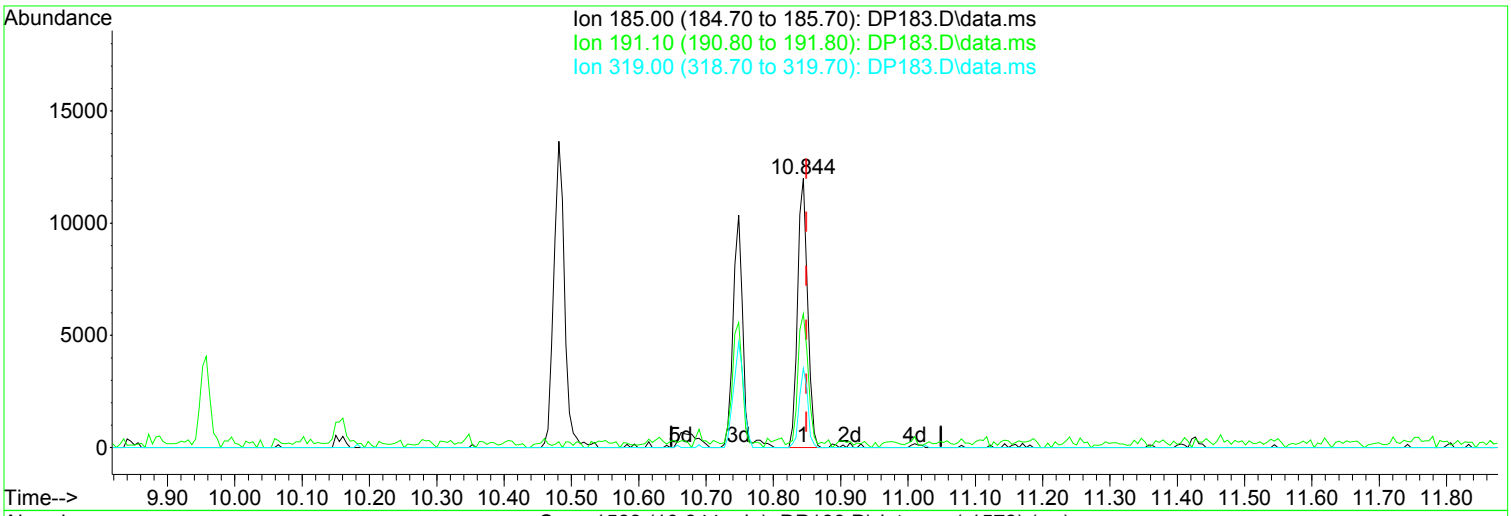
Split Peak.

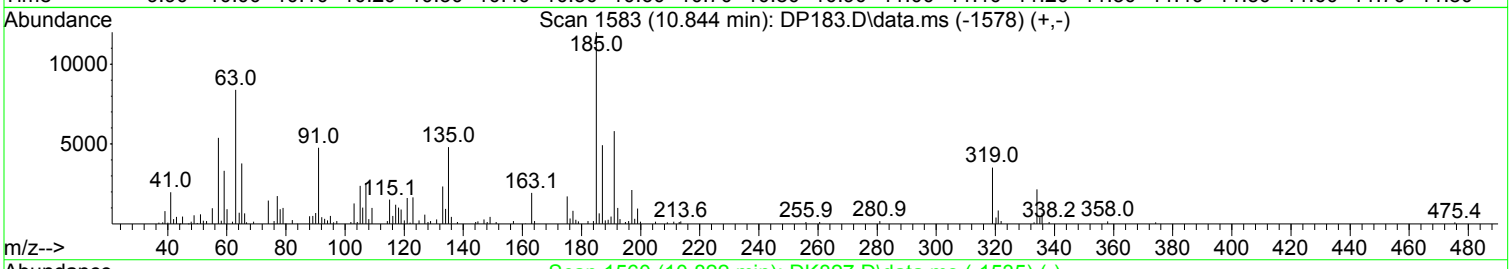
09/19/18

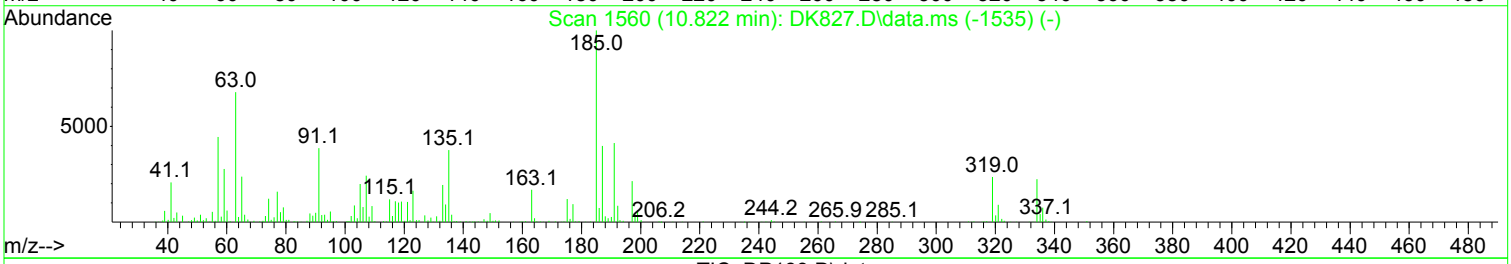
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP183.D
Acq On : 17 Sep 2018 11:40 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 14:27:37 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP183.D\data.ms

(125) Aramite (TM)

10.844min (-0.005) 5.17 ppm

response 12404

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	47.84
319.00	19.60	29.45
0.00	0.00	0.00

Manual Integration:

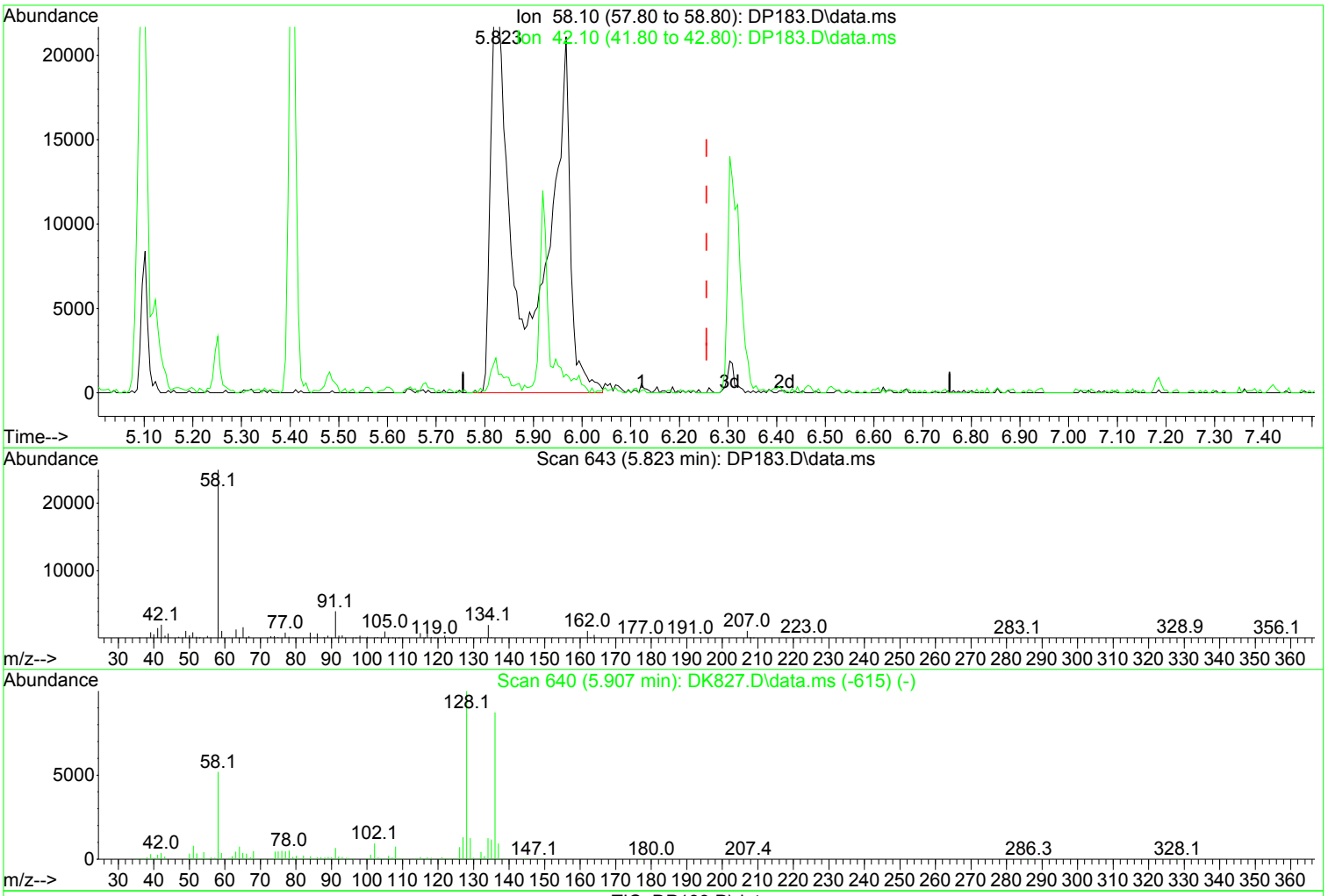
Before

09/19/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP183.D
Acq On : 17 Sep 2018 11:40 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 14:27:37 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration



TIC: DP183.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.823min (-0.433) 5.03 ppm m

response 119232

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	8.29
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

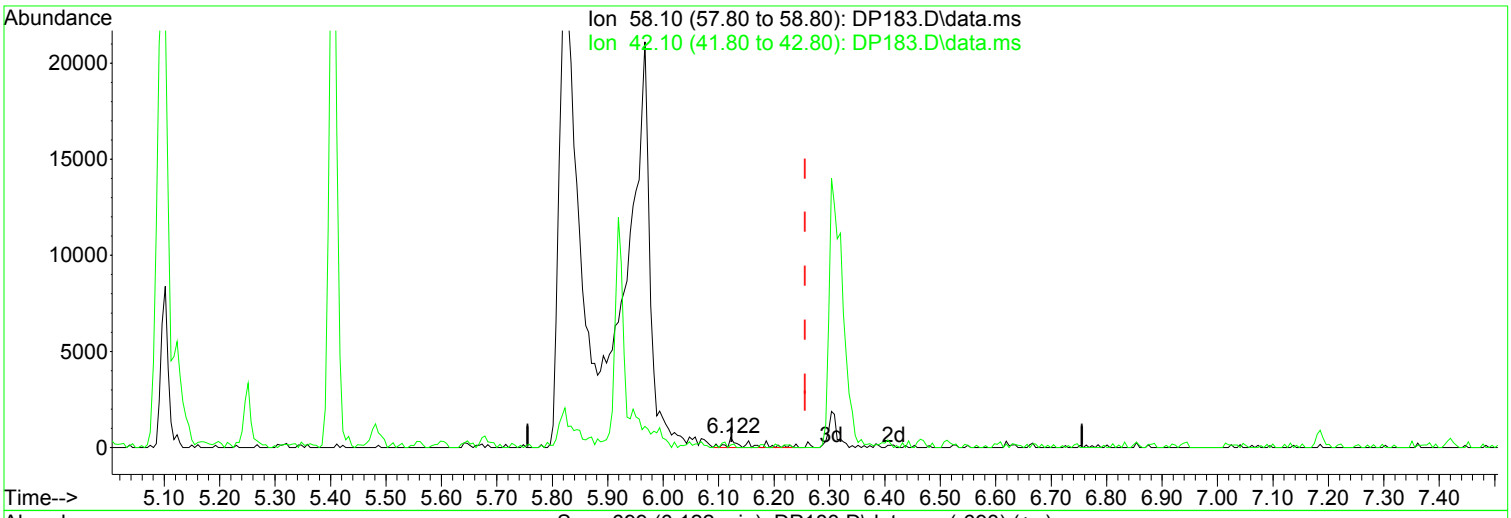
Peak not found.

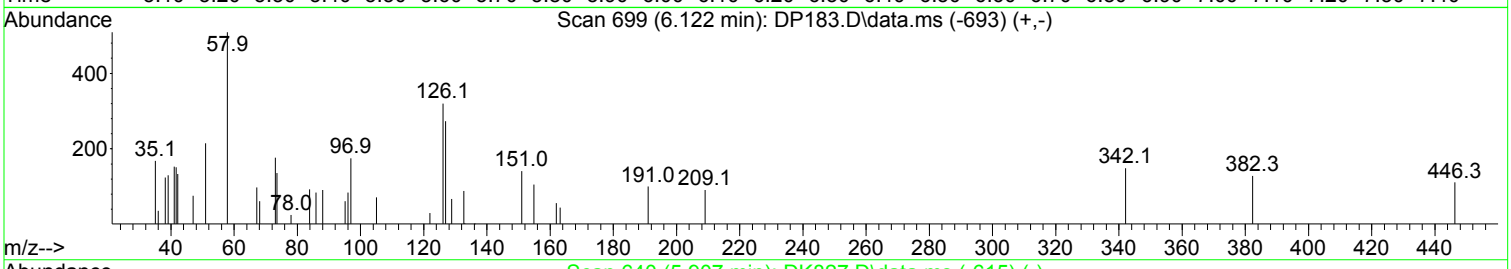
09/19/18

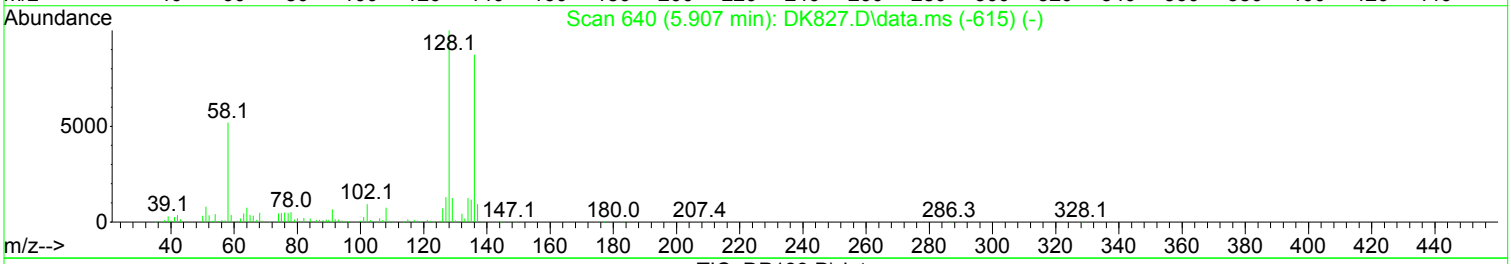
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP183.D
Acq On : 17 Sep 2018 11:40 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 14:27:37 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP183.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.122min (-0.134) 0.04 ppm

response 1058

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	26.13
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP183.D
Acq On : 17 Sep 2018 11:40 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 14:27:37 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.760	152	174726	40.00	ppm	0.00
33) d8-Naphthalene	5.919	136	695838	40.00	ppm	0.00
57) d10-Acenaphthene	7.628	164	342645	40.00	ppm	0.00
91) d10-Phenanthrene	9.092	188	505113	40.00	ppm	0.00
117) d12-Chrysene	12.351	240	535421	40.00	ppm	0.00
135) d12-Perylene	15.284	264	504036	40.00	ppm	0.00
System Monitoring Compounds						
7) SURR1,2-FLUOROPHENOL	3.686	112	62867	10.35	ppm	0.00
Spiked Amount 200.000	Range 10 - 70		Recovery =	5.17%#		
12) SURR2,PHENOL-D6	4.434	99	74919	10.17	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery =	5.09%#		
34) SURR4,NITROBENZENE-D5	5.251	82	59569	10.03	ppm	0.00
Spiked Amount 100.000	Range 31 - 110		Recovery =	10.03%#		
63) SURR5,2-FLUOROBIPHENYL	6.961	172	125931	10.54	ppm	0.00
Spiked Amount 100.000	Range 31 - 118		Recovery =	10.54%#		
88) SURR3,2,4,6-TRIBROMOPH...	8.408	330	19250	10.82	ppm	0.00
Spiked Amount 200.000	Range 35 - 141		Recovery =	5.41%#		
124) SURR6,TERPHENYL-D14	10.775	244	129297	10.46	ppm	0.00
Spiked Amount 100.000	Range 10 - 165		Recovery =	10.46%		
Target Compounds						Qvalue
2) Pyridine	2.703	79	65775	10.434	ppm	96
3) N-Nitrosodimethylamine	2.660	74	31206	9.876	ppm	82
4) 2-Picoline	3.253	93	67774	10.365	ppm	96
5) N-Nitrosomethylamine	3.323	42	21930	10.234	ppm	80
6) Methyl Methansulfonate	3.552	80	26187	10.321	ppm	92
8) N-Nitrosodiethylamine	3.862	102	30017	10.205	ppm	92
9) Ethyl Mathanesulfonate	4.092	79	45615	10.493	ppm	94
11) Aniline	4.471	93	99461	10.199	ppm	96
13) Phenol	4.445	94	77738	9.833	ppm	100
14) bis(2-Clethyl)Ether	4.514	93	57698	10.147	ppm	95
15) Pentachloroethane	4.514	117	20417	9.940	ppm	91
16) 2-Chlorophenol	4.578	128	62758	10.031	ppm	100
17) 1,3-Diclbenzene	4.706	146	64264	9.852	ppm	99
18) 1,4-Dichlorobenzene	4.770	146	66231	10.121	ppm	95
19) 1,2-Diclbenzene	4.909	146	61187	9.934	ppm	94
20) Benzyl Alcohol	4.872	79	40174	9.541	ppm	86
21) 1-Methyl-2-pyrrolidinone	4.888	99	43733	10.259	ppm	95
22) 2,2'-oxybis(1-Chloropr...	4.984	45	61967	10.258	ppm	94
23) 2-Methylphenol	4.973	108	54221	9.891	ppm	96
24) 3+4-Methylphenol	5.107	108	56780	9.797	ppm	97
25) Acetophenone	5.107	105	81786	10.336	ppm	88
26) N-Nitroso-Di-n-propyla...	5.102	70	45413	10.588	ppm	91
27) N-Nitrosopyrrolidine	5.091	100	35395	10.482	ppm	93
28) N-Nitrosomorpholine	5.123	56	32608	10.546	ppm	91
29) o-Toluidine	5.139	106	100693	10.400	ppm	95
30) Hexachloroethane	5.208	117	24389	9.854	ppm	98
31) o,o,o-Triethylphosphor...	5.647	198	28460	10.227	ppm	88
32) Alpha-terpinol	5.940	121	23928	10.397	ppm	93
35) Nitrobenzene	5.267	77	53459	9.504	ppm	95
36) N-Nitrosopiperidine	5.406	42	30067	10.151	ppm	86
37) Isophorone	5.481	82	86538	9.627	ppm	99
38) 2-Nitrophenol	5.561	139	29355	9.157	ppm	97
39) 2,4-Dimethylphenol	5.593	107	57222	9.672	ppm	91

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP183.D
Acq On : 17 Sep 2018 11:40 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 14:27:37 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	bis(-2-Chloroethoxy)Me...	5.679	93	67928	10.032	ppm		98
42)	2,4-Dichlorophenol	5.796	162	44157	9.273	ppm		96
43)	a,a-Dimethylphenethyla...	5.823	58	119232m	5.030	ppm		
44)	1,2,4-Trichlorobenzene	5.866	180	46935	9.647	ppm		86
45)	Naphthalene	5.940	128	178109	9.920	ppm		99
46)	4-Chloroaniline	5.994	127	76319	10.081	ppm		96
47)	2,6-Dichlorophenol	5.999	162	47219	9.905	ppm		96
48)	Hexachlorobutadiene	6.047	225	23906	9.666	ppm		98
49)	Hexachloropropene	6.021	213	25717	9.848	ppm		100
50)	4-Chloro-3-methylphenol	6.469	107	46774	9.788	ppm		98
51)	N-N-di-n-butylamine	6.304	84	52866	12.488	ppm		98
52)	Caprolactam	6.320	113	20038	9.994	ppm		92
53)	p-Phenylenediamine	6.336	80	81930	21.496	ppm		95
54)	Safrole	6.517	162	44791	10.164	ppm		97
55)	2-Methylnaphthalene	6.608	142	112286	9.980	ppm		94
56)	1-Methylnaphthalene	6.704	142	111274	10.001	ppm		98
58)	Hexachlorocyclopentadiene	6.752	237	9227	9.462	ppm		94
59)	1,2,4,5-Tetrachloroben...	6.768	216	40876	9.729	ppm		97
60)	1,2,3,4-Tetrachloroben...	7.046	216	47032	10.451	ppm		97
61)	2,4,6-Trichlorophenol	6.886	196	29727	10.009	ppm		95
62)	2,4,5-Trichlorophenol	6.934	196	29850	10.369	ppm		98
64)	Isosafrole	7.025	104	20285	10.533	ppm		86
65)	1,1'-Biphenyl	7.062	154	154734	10.614	ppm		99
66)	2-Chloronaphthalene	7.084	162	98539	10.066	ppm		99
67)	2-Nitroaniline	7.185	65	26872	10.141	ppm		81
68)	1,4-Naphthoquinone	7.260	158	30456	17.534	ppm		87
69)	m-Dinitrobenzene	7.399	168	16043	9.342	ppm	#	56
70)	Acenaphthylene	7.490	152	161628	10.027	ppm		98
71)	Dimethyl phthalate	7.356	163	111533	10.490	ppm		99
72)	2,6-Dinitrotoluene	7.420	165	22833	9.540	ppm		98
73)	Acenaphthene	7.661	153	109029	10.313	ppm		93
74)	3-Nitroaniline	7.591	138	32743	10.200	ppm		96
75)	2,4-Dinitrophenol	7.703	184	6521	9.208	ppm		97
76)	Dibenzofuran	7.826	168	137790	10.138	ppm		97
77)	2,4-Dinitrotoluene	7.821	165	28327	8.925	ppm		86
78)	4-Nitrophenol	7.789	65	14851	9.121	ppm		93
79)	Pentachlorobenzene	7.789	250	38743	10.033	ppm		98
80)	1-Napthylamine	7.906	143	101808	11.059	ppm		98
81)	2-Napthylamine	7.986	143	107085	10.649	ppm		98
82)	2,3,4,6-Tetrachlorophenol	7.954	232	19779	9.078	ppm		95
83)	Fluorene	8.168	166	114521	10.592	ppm		96
84)	4-Chlorophenyl-phenyle...	8.163	204	48560	10.415	ppm		98
85)	Diethylphthalate	8.045	149	104684	9.779	ppm		99
86)	4-Nitroaniline	8.189	138	33644	10.084	ppm		94
87)	5-Nitro-o-toluidine	8.184	152	32579	9.259	ppm		99
89)	Sulfotepp	8.430	322	20154	9.958	ppm		96
90)	Octachlorocyclopentene	8.414	307	15367	10.103	ppm		97
92)	Thionazin	8.125	107	19800	10.335	ppm		98
93)	4,6-Dinitro-2-methylph...	8.221	198	12255	7.313	ppm		81
94)	Diphenylamine	8.280	169	198781	22.916	ppm		99
95)	1,2 Diphenylhydrazine	8.318	77	117667	11.398	ppm		98
96)	N-Nitrosodiphenylamine	8.280	169	198781	22.916	ppm		99
97)	1,3,5-Trinirobenzene	8.574	74	11931	10.722	ppm	#	1
98)	Diallate	8.558	86	47190	11.425	ppm		97
99)	Phorate	8.569	121	24615	10.743	ppm	#	74
100)	Phenacetin	8.585	108	62880	10.889	ppm		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP183.D
Acq On : 17 Sep 2018 11:40 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 14:27:37 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

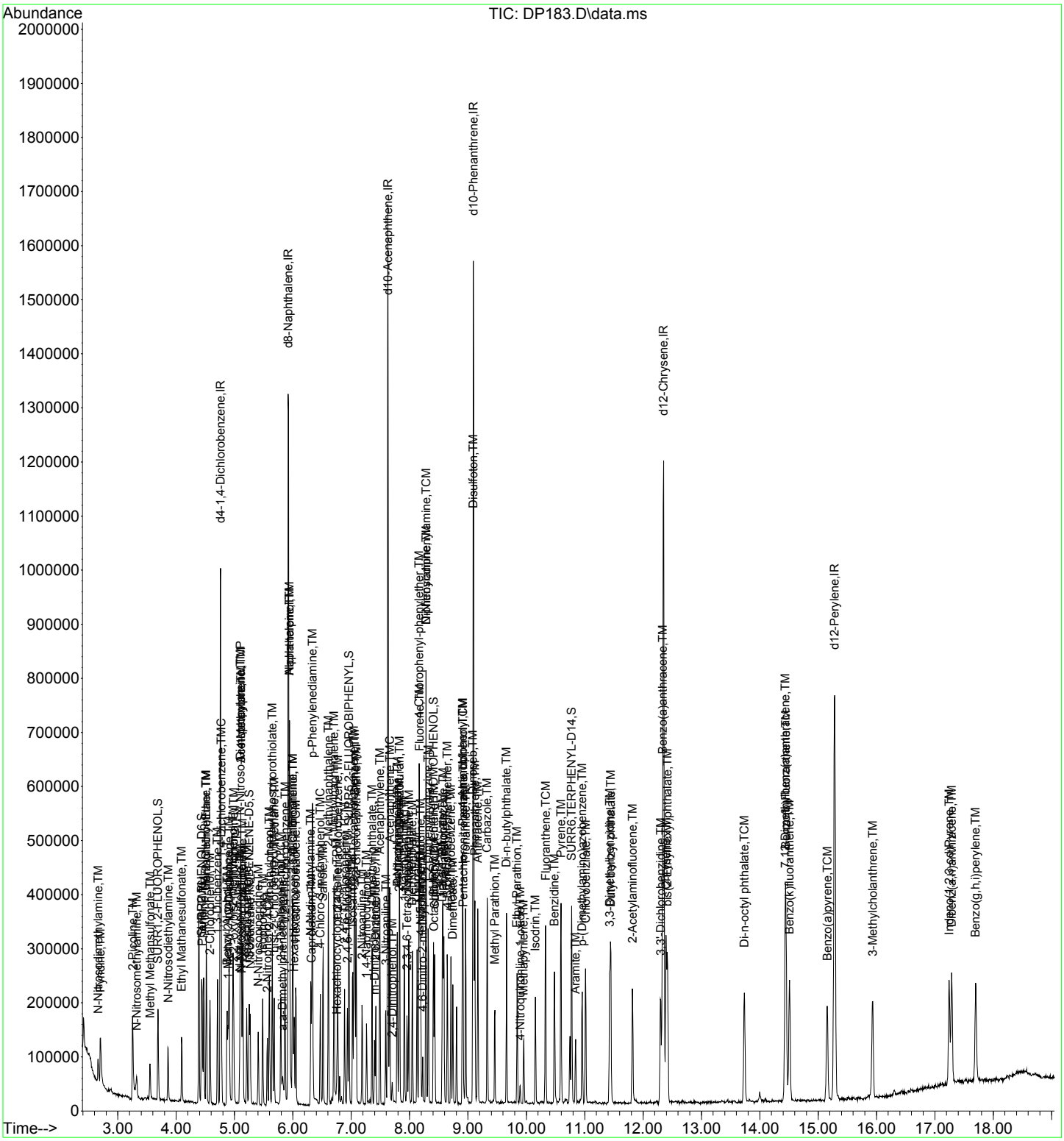
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.643	248	29881	10.754	ppm	94
102) Hexachlorobenzene	8.708	284	35285	10.869	ppm	99
103) Dimethoate	8.740	87	39974	12.375	ppm	98
105) Pentachlorophenol	8.911	266	14925	8.609	ppm	94
106) 4-Aminobiphenyl	8.905	169	121595	11.333	ppm	99
107) Pentachloronitrobenzene	8.916	237	8678	9.357	ppm	98
108) Pronamide	8.959	173	51787	10.845	ppm	95
109) Dinoseb	9.082	211	16579	7.582	ppm	97
110) Disulfoton	9.087	88	62281	10.584	ppm	97
111) Phenanthrene	9.119	178	142794	10.091	ppm	96
112) Anthracene	9.167	178	137317	9.935	ppm	99
113) Carbazole	9.327	167	158281	10.541	ppm	98
114) Di-n-butylphthalate	9.659	149	186112	10.686	ppm	99
115) 4-Nitroquinonline-1-oxide	9.894	190	2400	3.730	ppm	75
116) Fluoranthene	10.332	202	149185	10.406	ppm	99
118) Methyl Parathion	9.461	109	29463	10.908	ppm	97
119) Ethyl Parathion	9.840	97	23201	9.538	ppm	92
120) Methapyrilene	9.952	58	32950	10.847	ppm	97
121) Isodrin	10.155	193	14204	8.934	ppm	95
122) Benzidine	10.481	184	101741	9.901	ppm	96
123) Pyrene	10.593	202	159370	9.770	ppm	97
125) Aramite	10.844	185	22891m	9.532	ppm	
126) p-(Dimethylamino)azobe...	10.957	120	45963	9.629	ppm	92
127) Chlorobenzilate	11.015	139	55488	10.036	ppm	98
128) Butyl benzyl phthalate	11.448	149	87488	10.007	ppm	96
129) 3,3-Dimethylbenzidine	11.427	212	95821	10.004	ppm	96
130) 2-Acetylaminofluorene	11.817	181	66903	9.206	ppm	98
131) 3,3'-Dichlorobenzidine	12.303	252	63131	9.905	ppm	91
132) Benzo(a)anthracene	12.335	228	148152	9.831	ppm	98
133) Chrysene	12.394	228	145587	9.866	ppm	96
134) bis(2-Ethylhexyl)phtha...	12.415	149	116336	9.746	ppm	95
136) Di-n-octyl phthalate	13.735	149	184201	10.420	ppm	97
137) 7,12-Dimethylbenz(a)an...	14.434	256	85131	11.486	ppm	97
138) Benzo(b)Fluoranthene	14.445	252	159237	10.575	ppm	95
139) Benzo(k)fluoranthene	14.509	252	151929	10.886	ppm	99
140) Benzo(a)pyrene	15.156	252	124187	9.793	ppm	95
141) 3-Methylcholanthrene	15.935	268	76038	9.898	ppm	98
142) Indeno(1,2,3-cd)Pyrene	17.244	276	126772	10.415	ppm	93
143) Dibenz(a,h)anthracene	17.287	278	128873	10.122	ppm	97
144) Benzo(g,h,i)perylene	17.698	276	126328	10.817	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP183.D
Acq On : 17 Sep 2018 11:40 am
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 8 Sample Multiplier: 1

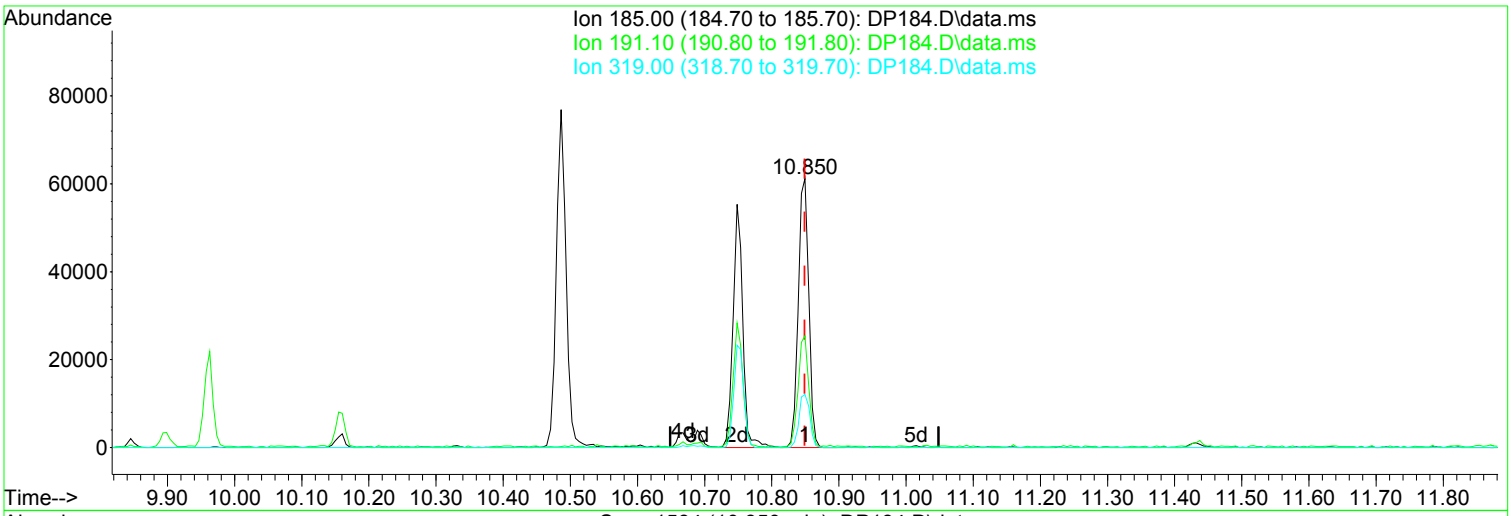
Quant Time: Sep 19 14:27:37 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

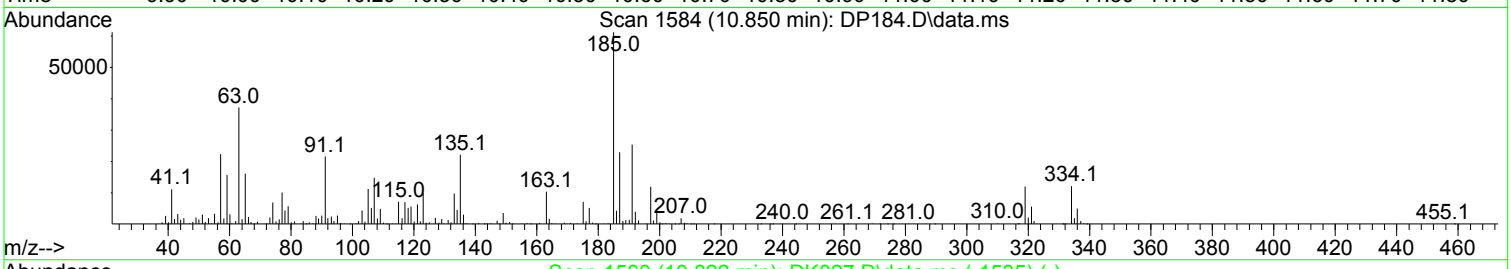


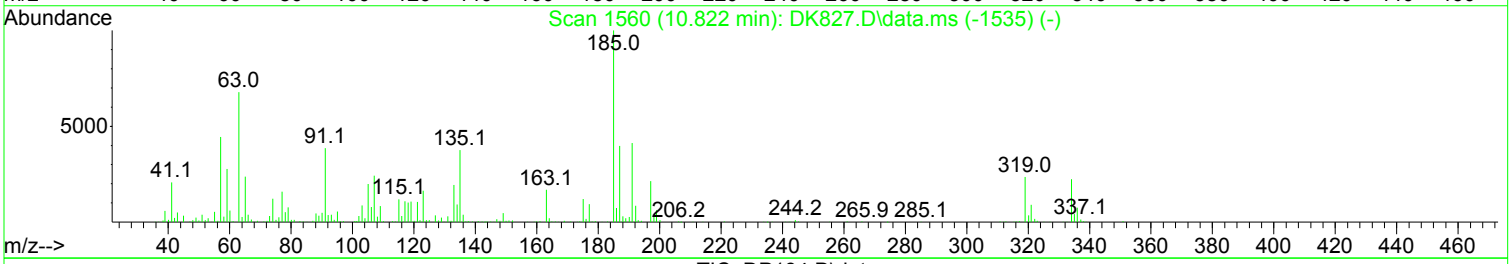
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP184.D
Acq On : 17 Sep 2018 12:18 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:27:44 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP184.D\data.ms

(125) Aramite (TM)

10.850min (+ 0.001) 50.66 ppm m

response 121678

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	41.47
319.00	19.60	19.69
0.00	0.00	0.00

Manual Integration:

After

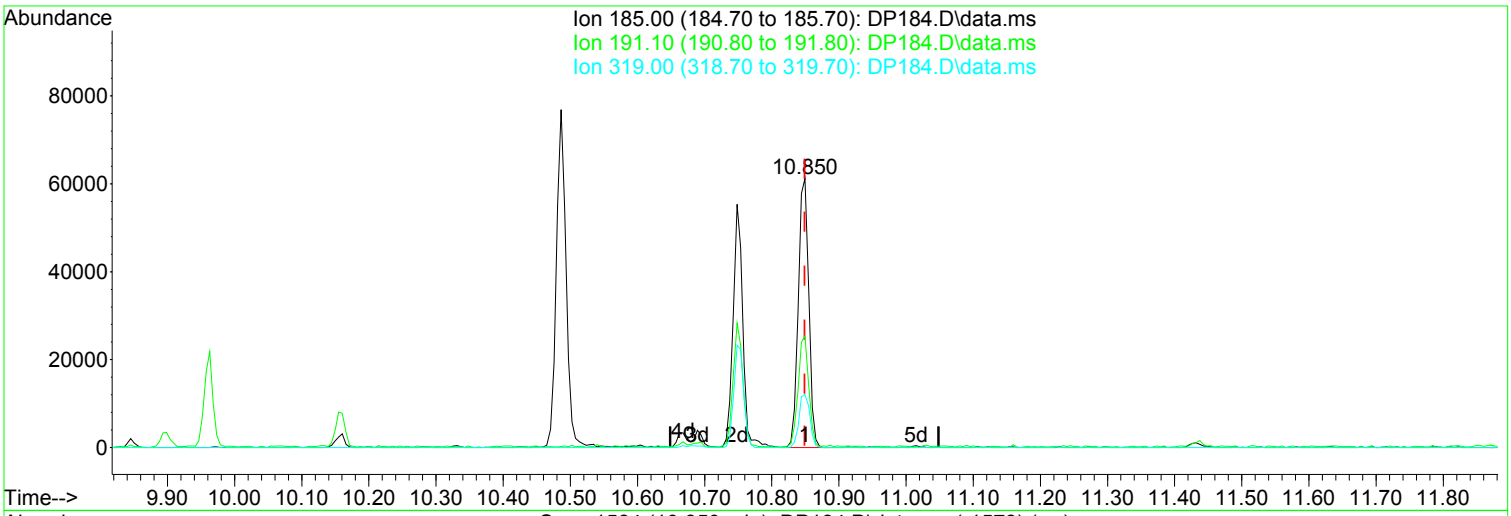
Split Peak.

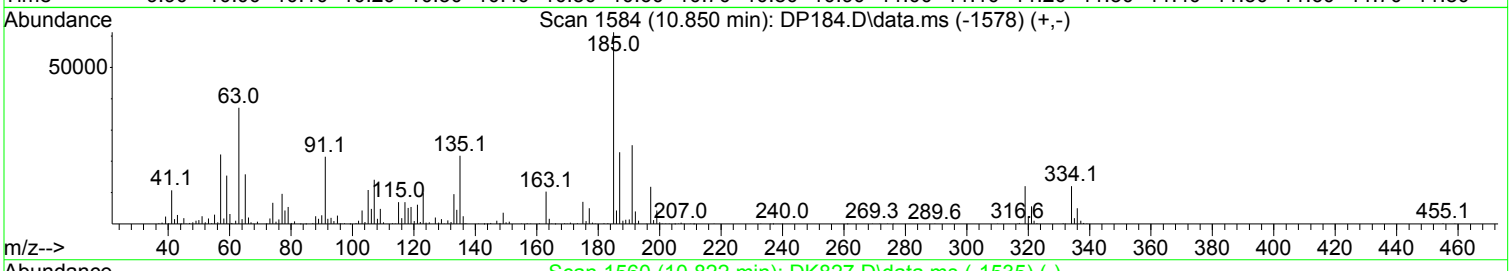
09/19/18

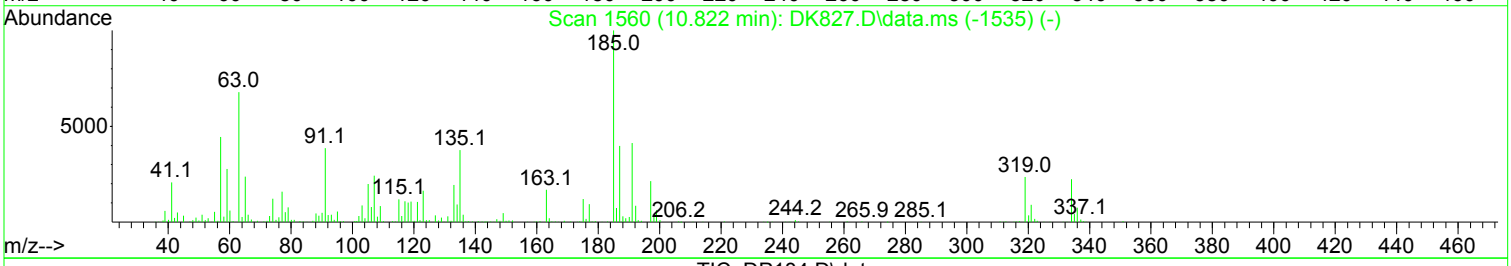
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP184.D
Acq On : 17 Sep 2018 12:18 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:27:44 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP184.D\data.ms

(125) Aramite (TM)

10.850min (+ 0.001) 27.49 ppm

response 66039

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	41.02
319.00	19.60	19.69
0.00	0.00	0.00

Manual Integration:

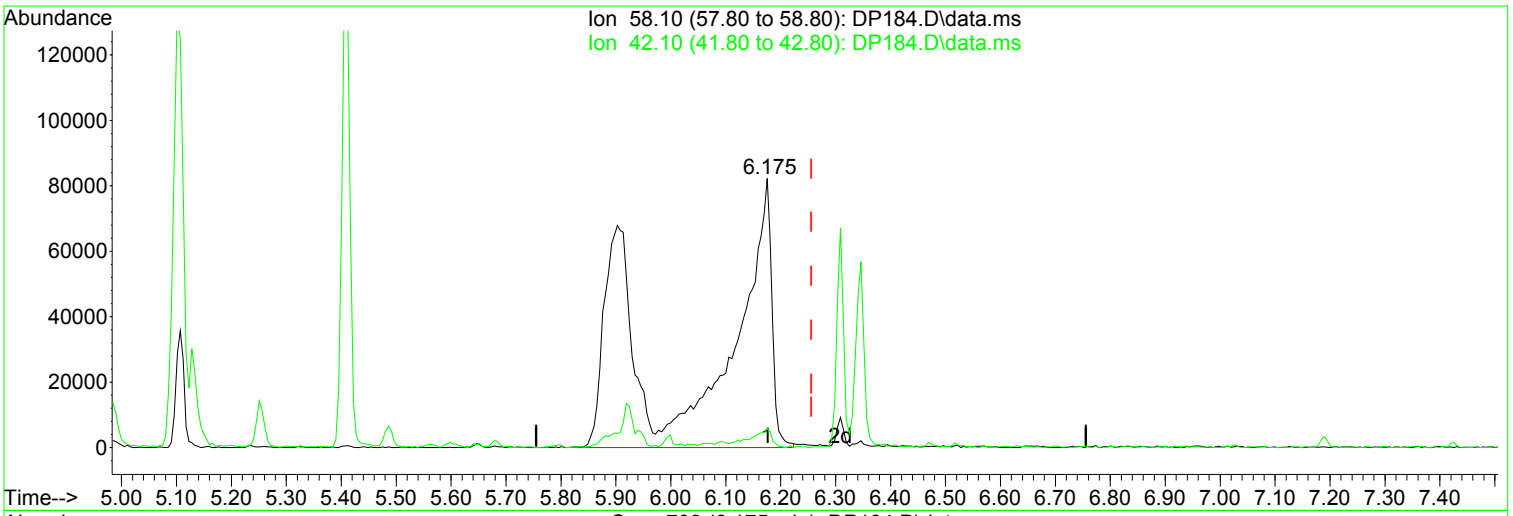
Before

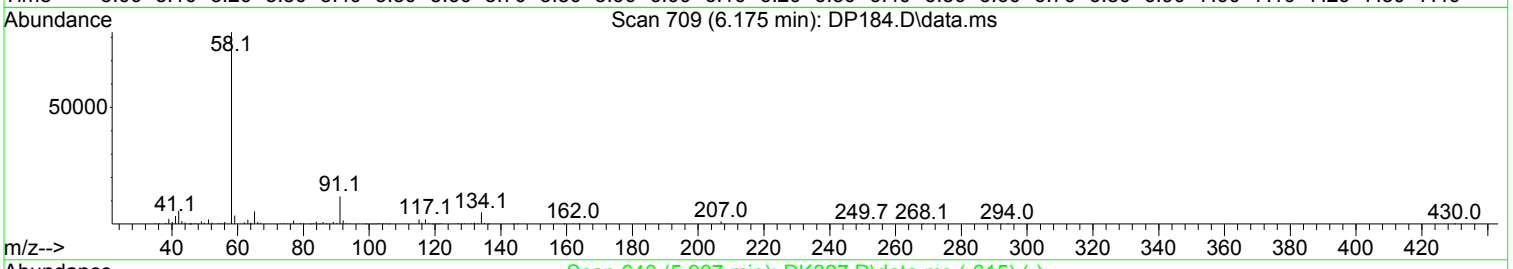
09/19/18

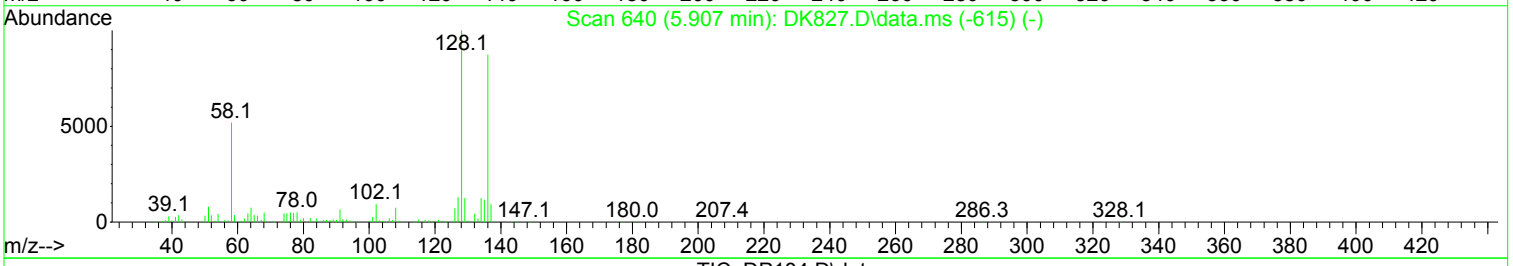
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP184.D
Acq On : 17 Sep 2018 12:18 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:27:44 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP184.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.175min (-0.081) 24.45 ppm m

response 593008

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	7.04
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

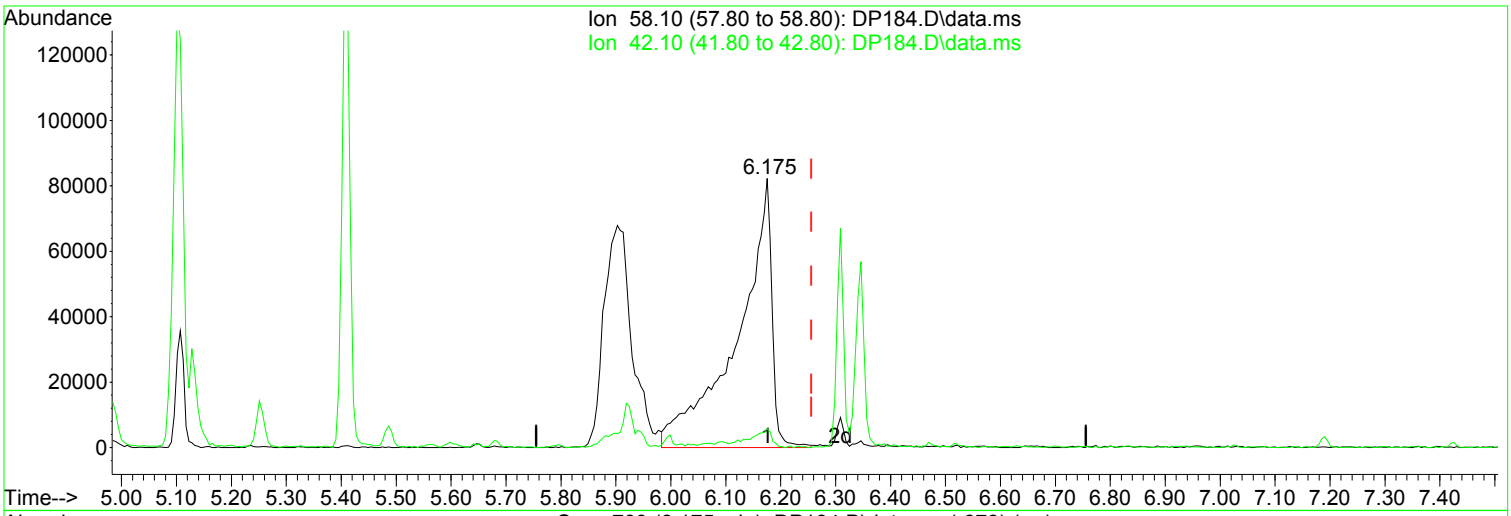
Poor integration.

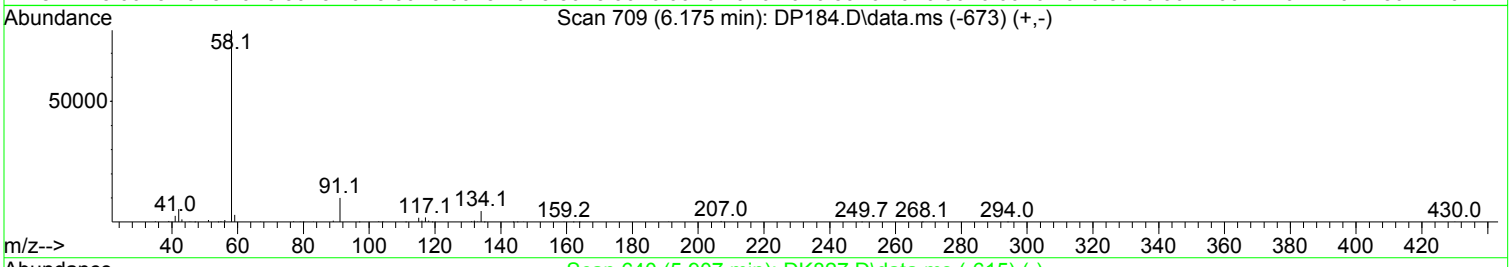
09/19/18

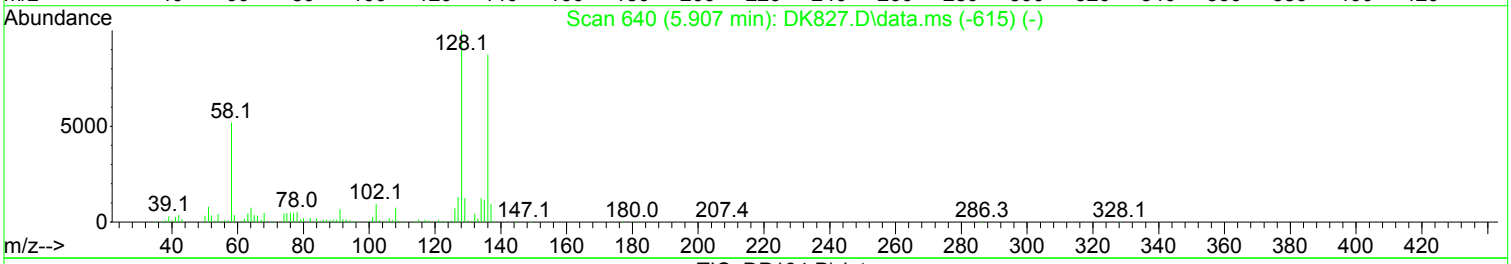
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP184.D
Acq On : 17 Sep 2018 12:18 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:27:44 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP184.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.175min (-0.081) 14.58 ppm

response 353499

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	6.72
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP184.D
Acq On : 17 Sep 2018 12:18 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:27:44 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.760	152	182075	40.00	ppm		0.00
33) d8-Naphthalene	5.924	136	711903	40.00	ppm		0.00
57) d10-Acenaphthene	7.628	164	354182	40.00	ppm		0.00
91) d10-Phenanthrene	9.097	188	531163	40.00	ppm		0.00
117) d12-Chrysene	12.356	240	535516	40.00	ppm		0.00
135) d12-Perylene	15.284	264	553177	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.691	112	312432	49.35	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 24.68%				
12) SURR2,PHENOL-D6	4.434	99	386901	50.42	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 25.21%				
34) SURR4,NITROBENZENE-D5	5.251	82	296991	48.89	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 48.89%				
63) SURR5,2-FLUOROBIPHENYL	6.961	172	602680	48.81	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 48.81%				
88) SURR3,2,4,6-TRIBROMOPH...	8.414	330	91942	50.01	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 25.00%#				
124) SURR6,TERPHENYL-D14	10.780	244	615102	49.77	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 49.77%				
Target Compounds							Qvalue
2) Pyridine	2.692	79	331035	50.393	ppm		99
3) N-Nitrosodimethylamine	2.655	74	169059	51.342	ppm		93
4) 2-Picoline	3.248	93	338683	49.706	ppm		99
5) N-Nitrosomethylamine	3.323	42	107637	48.204	ppm		87
6) Methyl Methansulfonate	3.552	80	128880	48.743	ppm		99
8) N-Nitrosodiethylamine	3.862	102	151726	49.500	ppm		89
9) Ethyl Mathanesulfonate	4.097	79	222377	49.091	ppm		99
11) Aniline	4.476	93	503068	49.506	ppm		96
13) Phenol	4.450	94	416263	50.530	ppm		95
14) bis(2-Clethyl)Ether	4.519	93	288529	48.695	ppm		98
15) Pentachloroethane	4.519	117	105533	49.307	ppm		96
16) 2-Chlorophenol	4.583	128	325111	49.869	ppm		96
17) 1,3-Diclbenzene	4.712	146	334288	49.179	ppm		98
18) 1,4-Dichlorobenzene	4.776	146	336988	49.415	ppm		99
19) 1,2-Diclbenzene	4.909	146	318621	49.644	ppm		99
20) Benzyl Alcohol	4.872	79	223453	50.927	ppm		99
21) 1-Methyl-2-pyrrolidinone	4.898	99	221508	49.865	ppm		95
22) 2,2'-oxybis(1-Chloropr...	4.984	45	309008	49.090	ppm	#	72
23) 2-Methylphenol	4.979	108	287005	50.242	ppm		92
24) 3+4-Methylphenol	5.117	108	296288	49.060	ppm		93
25) Acetophenone	5.112	105	407689	49.445	ppm		84
26) N-Nitroso-Di-n-propyla...	5.107	70	219105	49.022	ppm		96
27) N-Nitrosopyrrolidine	5.101	100	177461	50.432	ppm		70
28) N-Nitrosomorpholine	5.128	56	157472	48.872	ppm		97
29) o-Toluidine	5.144	106	492972	48.860	ppm		83
30) Hexachloroethane	5.208	117	129694	50.288	ppm		93
31) o,o,o-Triethylphosphor...	5.652	198	138777	47.858	ppm		92
32) Alpha-terpinol	5.946	121	116760	48.686	ppm		96
35) Nitrobenzene	5.272	77	279780	48.618	ppm		95
36) N-Nitrosopiperidine	5.406	42	150058	49.517	ppm		91
37) Isophorone	5.486	82	457128	49.706	ppm		98
38) 2-Nitrophenol	5.561	139	166475	50.759	ppm		100
39) 2,4-Dimethylphenol	5.598	107	296448	48.976	ppm		93

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP184.D
Acq On : 17 Sep 2018 12:18 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:27:44 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) bis(-2-Chloroethoxy)Me...	5.678	93	339322	48.982	ppm		97
42) 2,4-Dichlorophenol	5.796	162	245988	50.494	ppm		99
43) a,a-Dimethylphenethyla...	6.175	58	593008m	24.453	ppm		
44) 1,2,4-Trichlorobenzene	5.865	180	241788	48.574	ppm		98
45) Naphthalene	5.946	128	908522	49.459	ppm		98
46) 4-Chloroaniline	5.994	127	384302	49.618	ppm		99
47) 2,6-Dichlorophenol	6.004	162	244579	50.145	ppm		97
48) Hexachlorobutadiene	6.052	225	124341	49.143	ppm		99
49) Hexachloropropene	6.020	213	131671	49.283	ppm		97
50) 4-Chloro-3-methylphenol	6.474	107	245158	50.146	ppm		97
51) N-N-di-n-butylamine	6.309	84	200711	46.343	ppm		98
52) Caprolactam	6.346	113	98840	48.186	ppm		97
53) p-Phenylenediamine	6.346	80	384548	98.619	ppm		98
54) Safrole	6.517	162	223079	49.481	ppm		97
55) 2-Methylnaphthalene	6.608	142	565155	49.098	ppm		99
56) 1-Methylnaphthalene	6.704	142	553219	48.600	ppm		98
58) Hexachlorocyclopentadiene	6.758	237	75517	49.442	ppm		97
59) 1,2,4,5-Tetrachloroben...	6.768	216	217461	50.071	ppm		99
60) 1,2,3,4-Tetrachloroben...	7.051	216	227153	48.834	ppm		99
61) 2,4,6-Trichlorophenol	6.891	196	156148	50.862	ppm		99
62) 2,4,5-Trichlorophenol	6.939	196	137999	46.376	ppm		99
64) Isosafrole	7.025	104	97680	49.070	ppm		89
65) 1,1'-Biphenyl	7.062	154	742949	49.300	ppm		99
66) 2-Chloronaphthalene	7.089	162	498686	49.280	ppm		99
67) 2-Nitroaniline	7.190	65	137453	50.180	ppm		91
68) 1,4-Naphthoquinone	7.265	158	114728	63.901	ppm		94
69) m-Dinitrobenzene	7.404	168	86170	48.541	ppm		73
70) Acenaphthylene	7.495	152	855930	51.368	ppm		99
71) Dimethyl phthalate	7.361	163	513874	46.755	ppm		99
72) 2,6-Dinitrotoluene	7.425	165	122379	49.467	ppm		92
73) Acenaphthene	7.660	153	541705	49.569	ppm		97
74) 3-Nitroaniline	7.596	138	164554	49.593	ppm		97
75) 2,4-Dinitrophenol	7.703	184	51905	50.425	ppm		90
76) Dibenzofuran	7.831	168	701202	49.909	ppm		97
77) 2,4-Dinitrotoluene	7.826	165	164767	50.221	ppm		93
78) 4-Nitrophenol	7.789	65	88491	52.581	ppm		86
79) Pentachlorobenzene	7.789	250	200491	50.229	ppm		98
80) 1-Napthylamine	7.911	143	451538	47.451	ppm		98
81) 2-Napthylamine	7.992	143	501204	48.220	ppm		98
82) 2,3,4,6-Tetrachlorophenol	7.960	232	112243	49.840	ppm		94
83) Fluorene	8.168	166	564897	50.546	ppm		98
84) 4-Chlorophenyl-phenyle...	8.163	204	242397	50.293	ppm		96
85) Diethylphthalate	8.050	149	539155	48.724	ppm		99
86) 4-Nitroaniline	8.200	138	170726	49.504	ppm		98
87) 5-Nitro-o-toluidine	8.189	152	186373	51.240	ppm		97
89) Sulfotepp	8.435	322	105871	50.604	ppm		100
90) Octachlorocyclopentene	8.414	307	85340	54.278	ppm		95
92) Thionazin	8.130	107	101940	50.599	ppm		92
93) 4,6-Dinitro-2-methylph...	8.227	198	87098	49.426	ppm		89
94) Diphenylamine	8.285	169	889160	97.476	ppm		99
95) 1,2 Diphenylhydrazine	8.323	77	550170	50.681	ppm		98
96) N-Nitrosodiphenylamine	8.285	169	889160	97.476	ppm		99
97) 1,3,5-Trinirobenzene	8.585	74	70852	60.548	ppm	#	74
98) Diallate	8.563	86	214376	49.355	ppm		94
99) Phorate	8.574	121	118150	49.038	ppm		94
100) Phenacetin	8.601	108	315688	51.988	ppm		97

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP184.D
Acq On : 17 Sep 2018 12:18 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:27:44 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

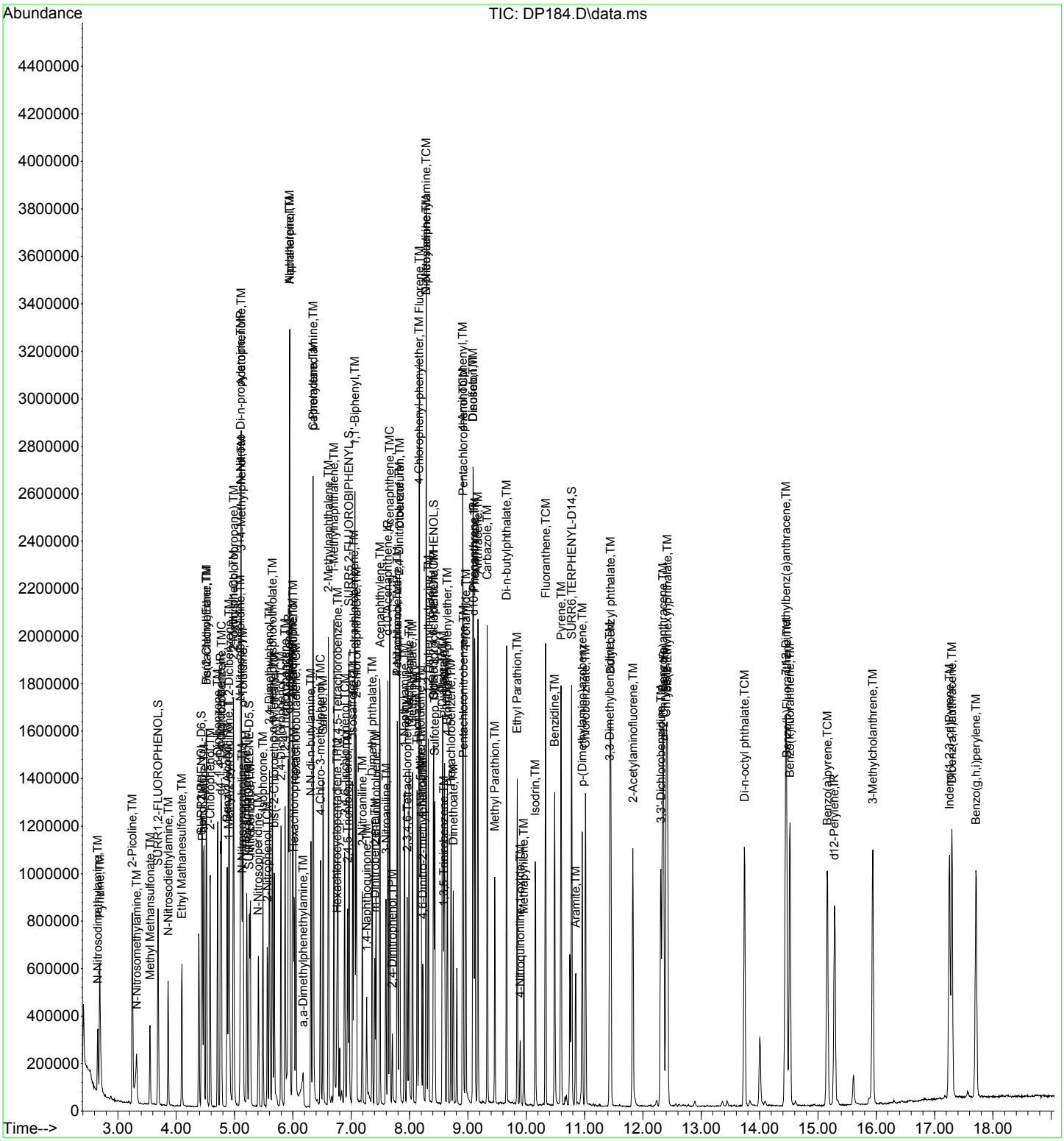
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.649	248	140880	48.217	ppm	98
102) Hexachlorobenzene	8.713	284	169485	49.649	ppm	96
103) Dimethoate	8.750	87	180139	53.032	ppm	95
105) Pentachlorophenol	8.916	266	98560	54.065	ppm	97
106) 4-Aminobiphenyl	8.910	169	576189	51.070	ppm	100
107) Pentachloronitrobenzene	8.921	237	50860	52.152	ppm	95
108) Pronamide	8.964	173	260182	51.814	ppm	98
109) Dinoseb	9.087	211	114573	49.830	ppm	96
110) Disulfoton	9.087	88	300233	48.518	ppm	90
111) Phenanthrene	9.119	178	745649	50.107	ppm	100
112) Anthracene	9.172	178	749522	51.566	ppm	99
113) Carbazole	9.332	167	813115	51.494	ppm	99
114) Di-n-butylphthalate	9.664	149	982474	53.643	ppm	100
115) 4-Nitroquinonline-1-oxide	9.899	190	28889	42.693	ppm	97
116) Fluoranthene	10.331	202	793194	52.612	ppm	99
118) Methyl Parathion	9.461	109	152575	56.476	ppm	97
119) Ethyl Parathion	9.845	97	128209	52.698	ppm	98
120) Methapyrilene	9.957	58	159448	52.481	ppm	100
121) Isodrin	10.155	193	77433	48.692	ppm	94
122) Benzidine	10.486	184	558131	54.308	ppm	99
123) Pyrene	10.599	202	825186	50.579	ppm	99
125) Aramite	10.850	185	121678m	50.658	ppm	
126) p-(Dimethylamino)azobe...	10.962	120	256080	53.640	ppm	93
127) Chlorobenzilate	11.015	139	284891	51.520	ppm	94
128) Butyl benzyl phthalate	11.448	149	460327	52.646	ppm	100
129) 3,3-Dimethylbenzidine	11.432	212	519737	54.250	ppm	97
130) 2-Acetylaminofluorene	11.827	181	357148	49.138	ppm	97
131) 3,3'-Dichlorobenzidine	12.308	252	331916	52.065	ppm	97
132) Benzo(a)anthracene	12.340	228	768689	51.001	ppm	99
133) Chrysene	12.399	228	726763	49.244	ppm	100
134) bis(2-Ethylhexyl)phtha...	12.420	149	639531	53.566	ppm	99
136) Di-n-octyl phthalate	13.740	149	980972	50.565	ppm	98
137) 7,12-Dimethylbenz(a)an...	14.450	256	403853	49.649	ppm	99
138) Benzo(b)Fluoranthene	14.466	252	812909	49.190	ppm	96
139) Benzo(k)fluoranthene	14.520	252	757875	49.479	ppm	97
140) Benzo(a)pyrene	15.161	252	707548	50.837	ppm	98
141) 3-Methylcholanthrene	15.941	268	432857	51.338	ppm	97
142) Indeno(1,2,3-cd)Pyrene	17.255	276	704117	52.709	ppm	98
143) Dibenz(a,h)anthracene	17.298	278	729398	52.201	ppm	98
144) Benzo(g,h,i)perylene	17.709	276	670764	52.332	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP184.D
Acq On : 17 Sep 2018 12:18 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 9 Sample Multiplier: 1

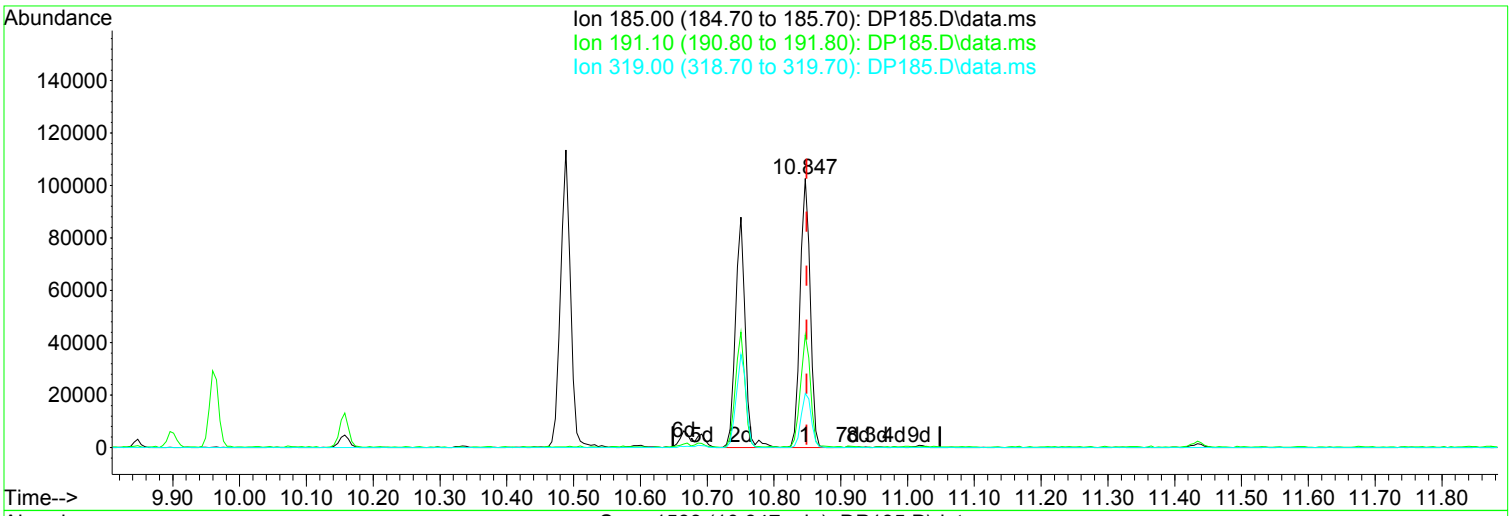
Quant Time: Sep 19 14:27:44 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

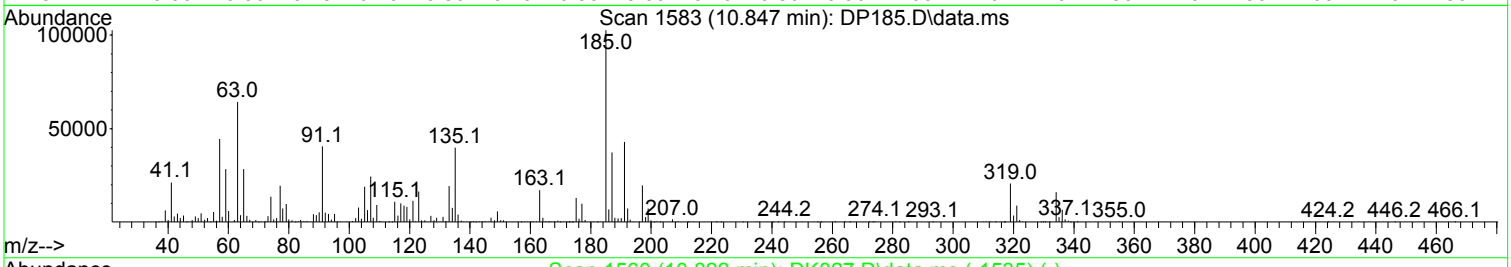


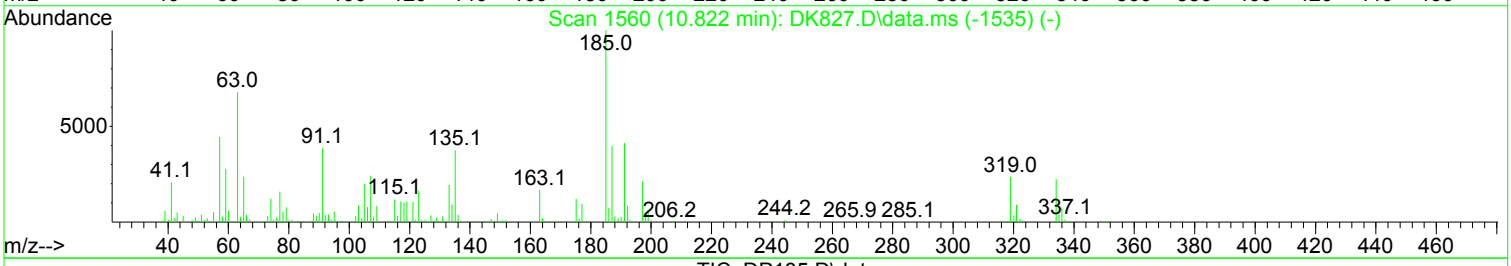
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP185.D\data.ms

(125) Aramite (TM)

10.847min (-0.002) 84.80 ppm m

response 195255

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	41.86
319.00	19.60	20.10
0.00	0.00	0.00

Manual Integration:

After

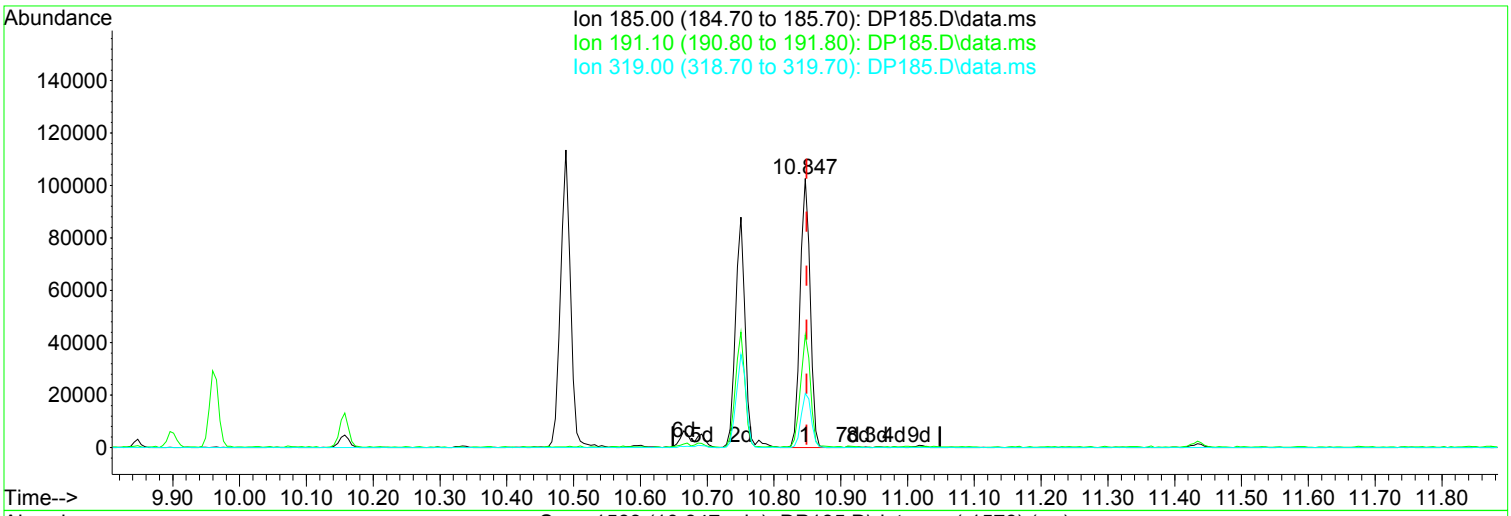
Split Peak.

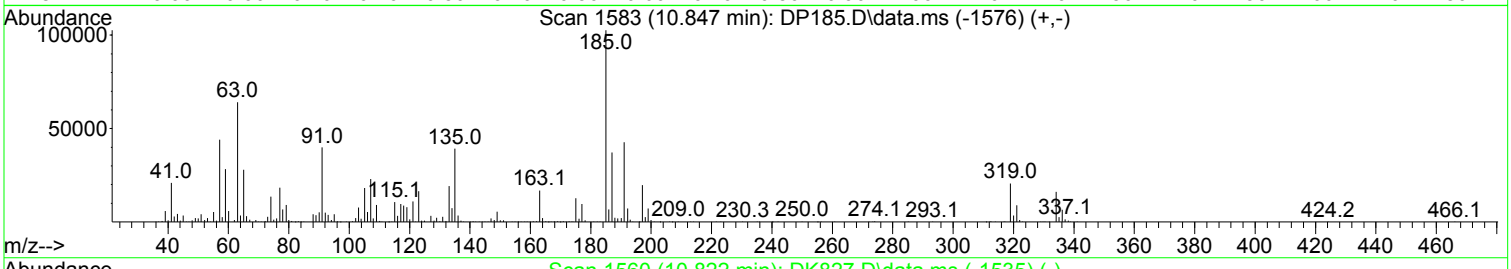
09/19/18

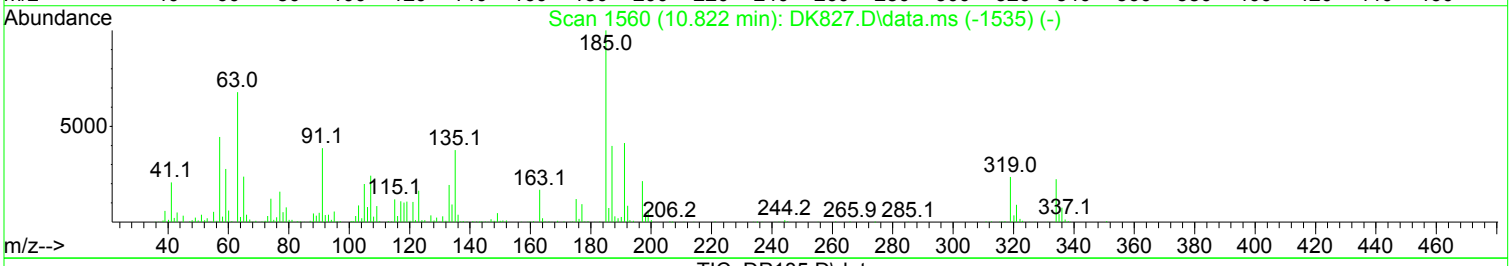
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP185.D\data.ms

(125) Aramite (TM)

10.847min (-0.002) 45.91 ppm

response 105698

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	41.58
319.00	19.60	20.10
0.00	0.00	0.00

Manual Integration:

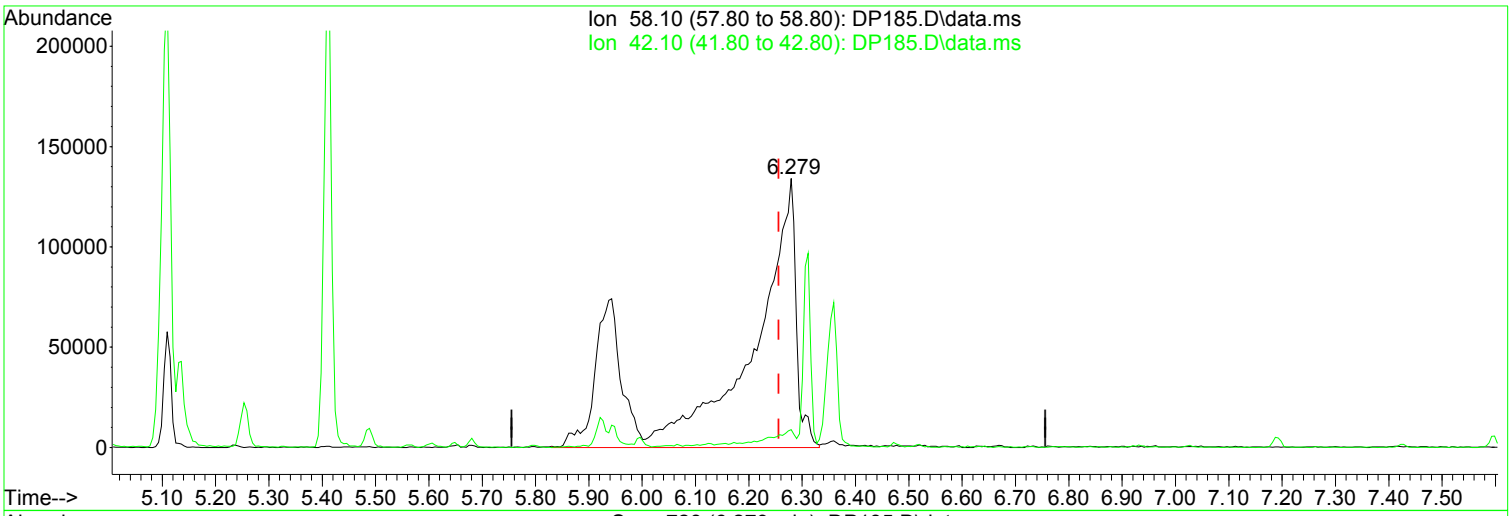
Before

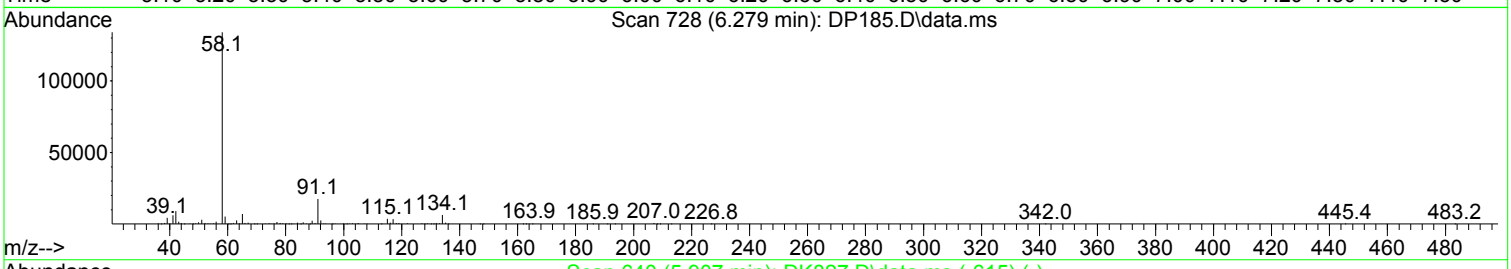
09/19/18

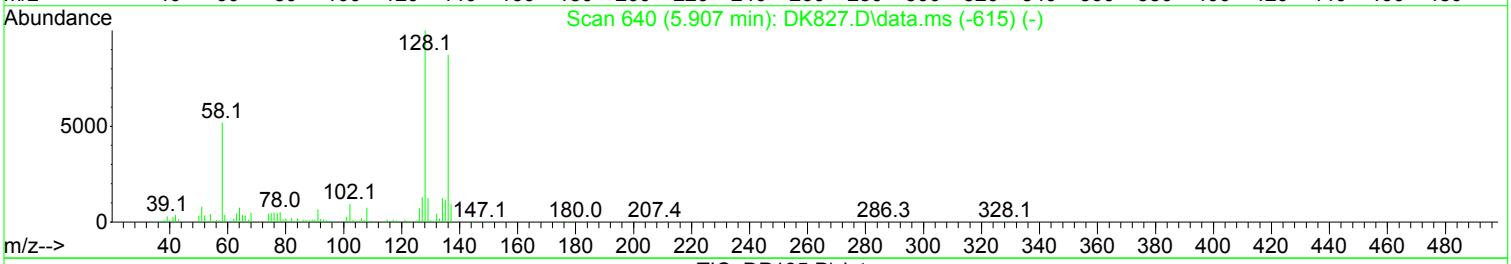
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP185.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.279min (+ 0.023) 40.50 ppm m

response 958378

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	6.68
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

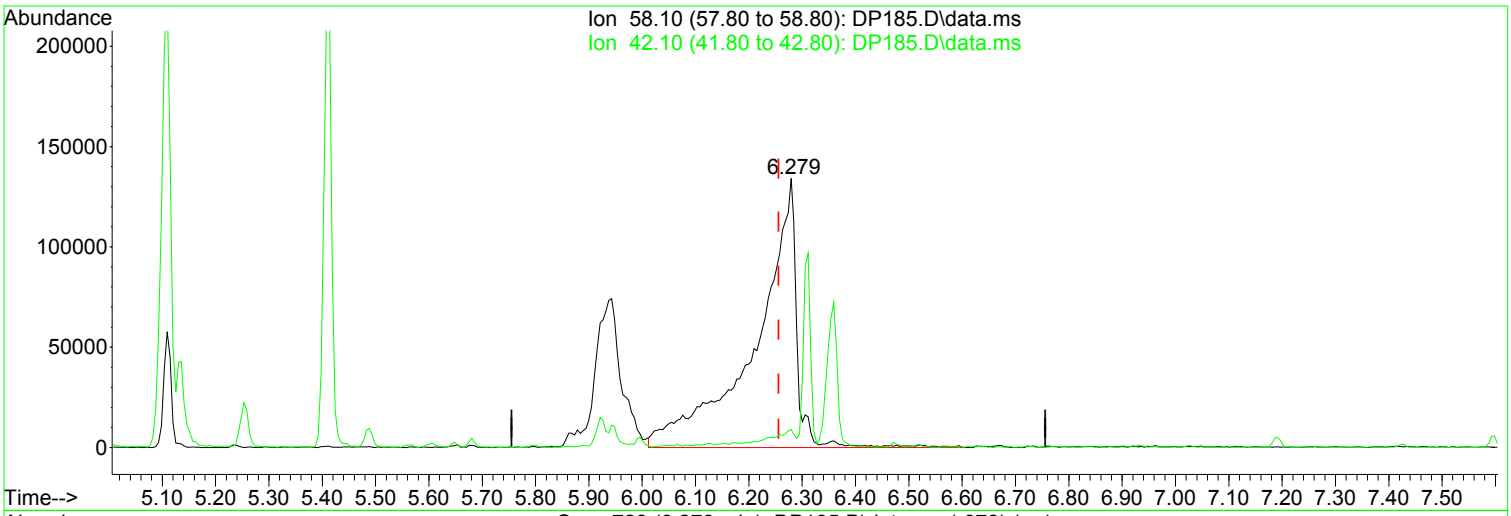
Poor integration.

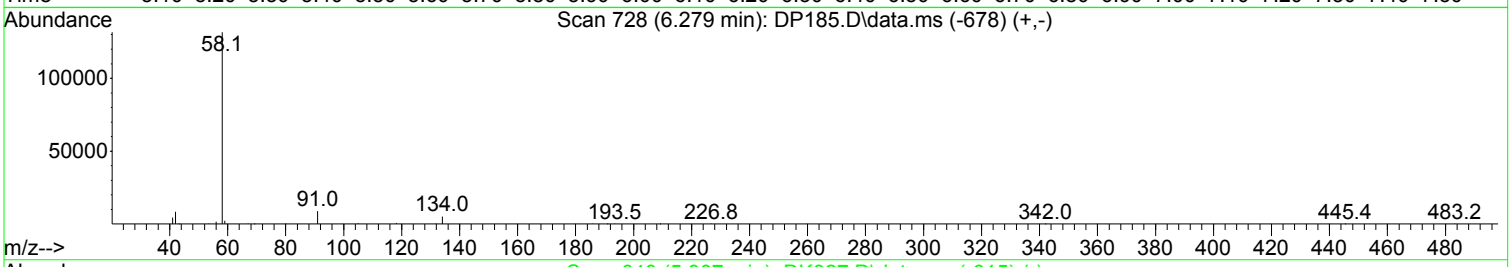
09/19/18

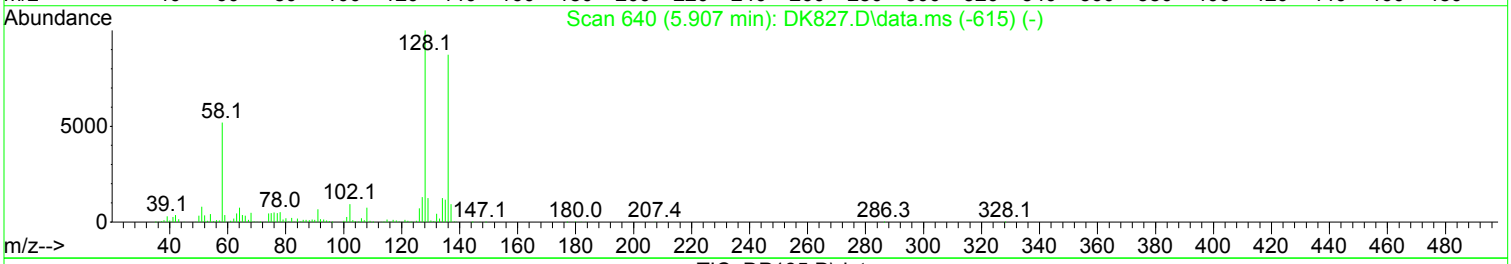
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP185.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.279min (+ 0.023) 30.28 ppm

response 716562

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	6.38
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

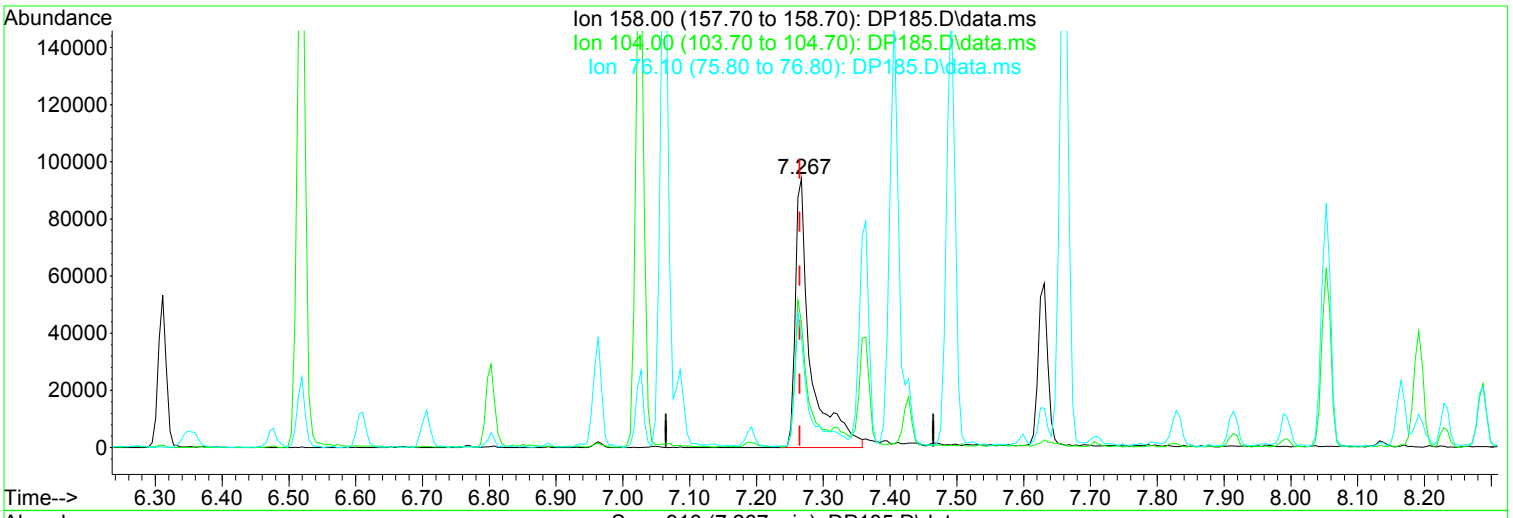
Before

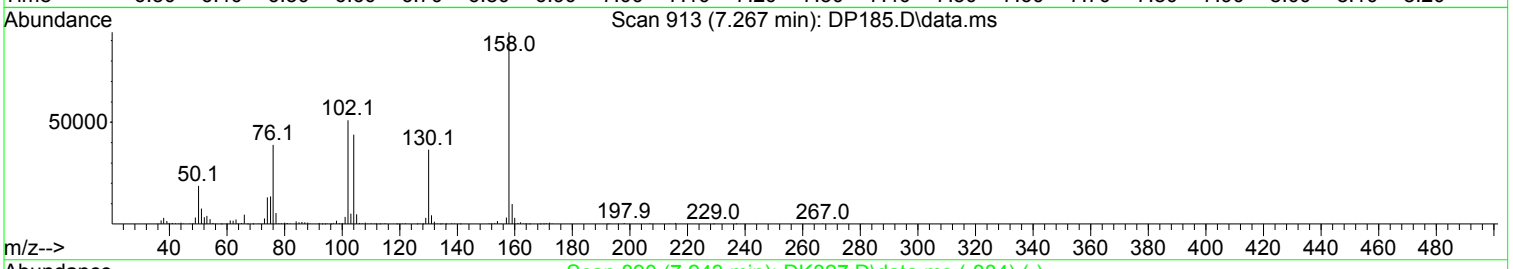
09/19/18

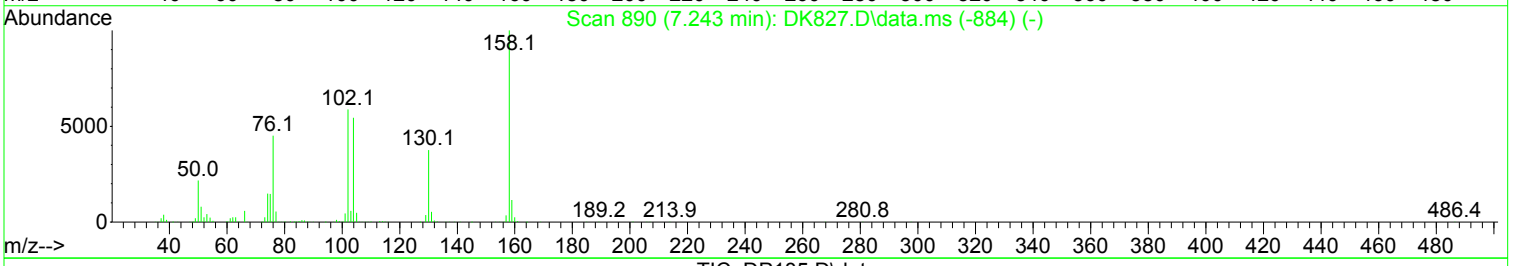
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP185.D\data.ms

(68) 1,4-Naphthoquinone (TM)

7.267min (+ 0.002) 84.79 ppm m

response 148909

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	53.70	46.58
76.10	34.40	41.38
0.00	0.00	0.00

Manual Integration:

After

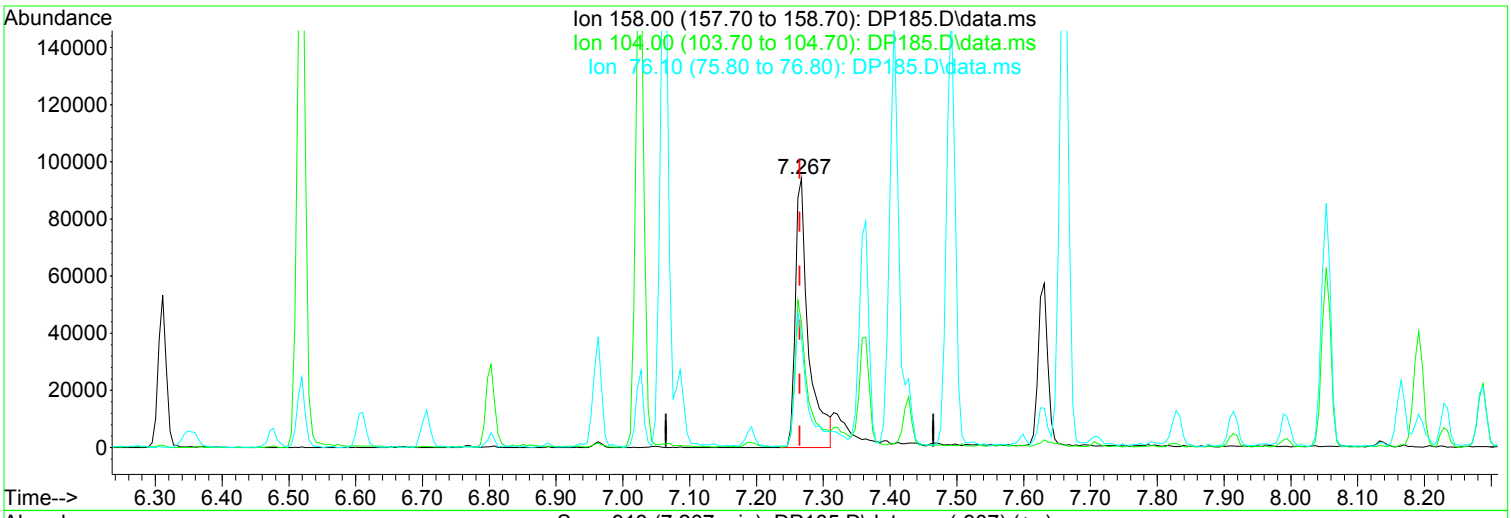
Poor integration.

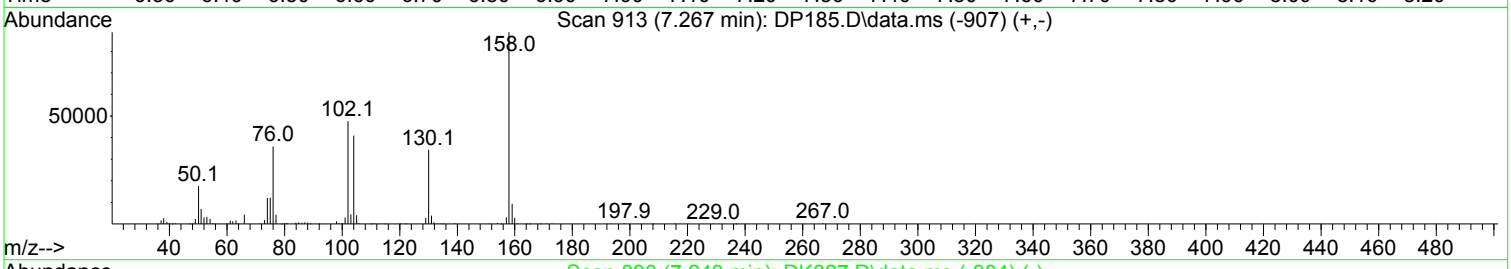
09/19/18

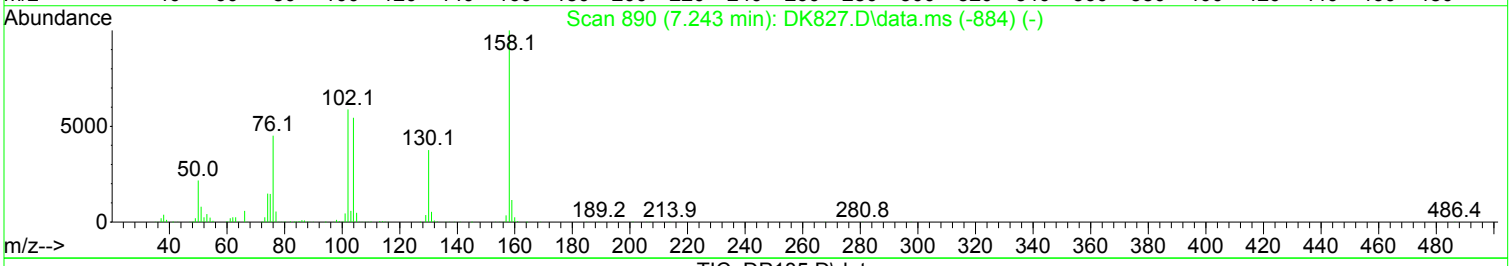
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP185.D\data.ms

(68) 1,4-Naphthoquinone (TM)

7.267min (+ 0.002) 73.23 ppm

response 128598

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	53.70	46.07
76.10	34.40	40.47
0.00	0.00	0.00

Manual Integration:

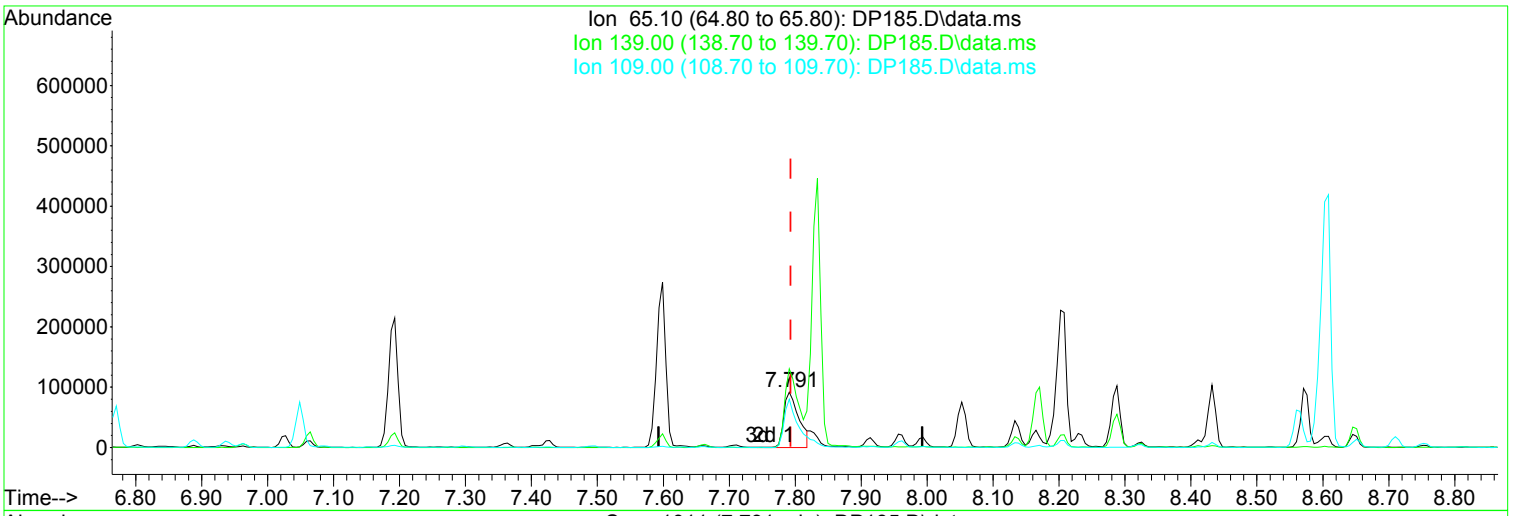
Before

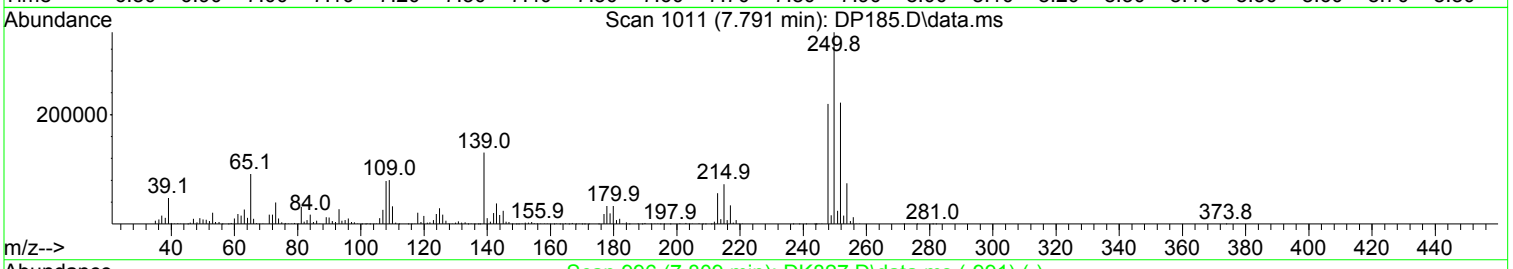
09/19/18

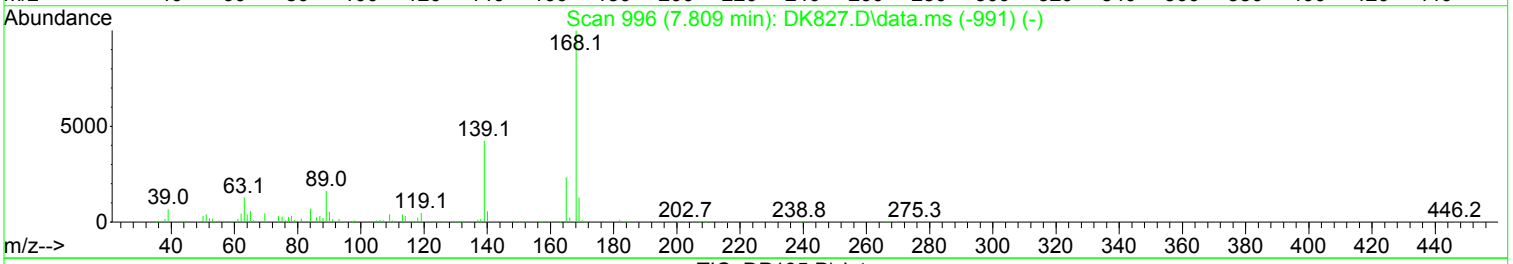
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP185.D\data.ms

(78) 4-Nitrophenol (TMP)

7.791min (-0.002) 88.27 ppm m

response 145303

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	119.70	142.44
109.00	66.00	87.42
0.00	0.00	0.00

Manual Integration:

After

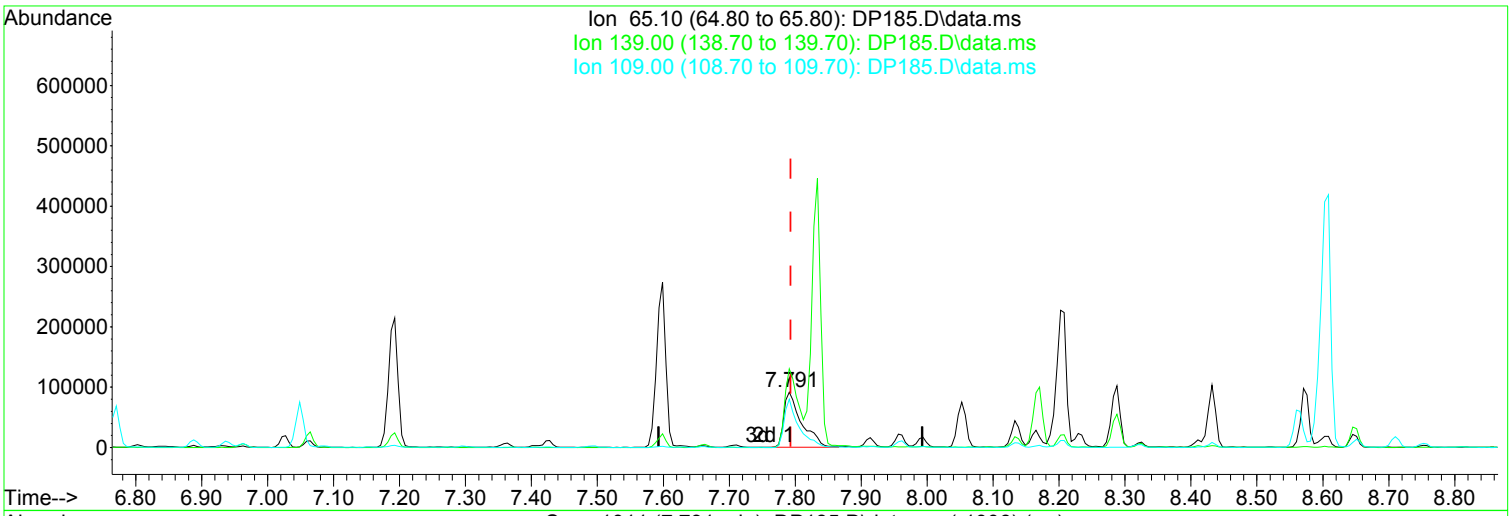
Poor integration.

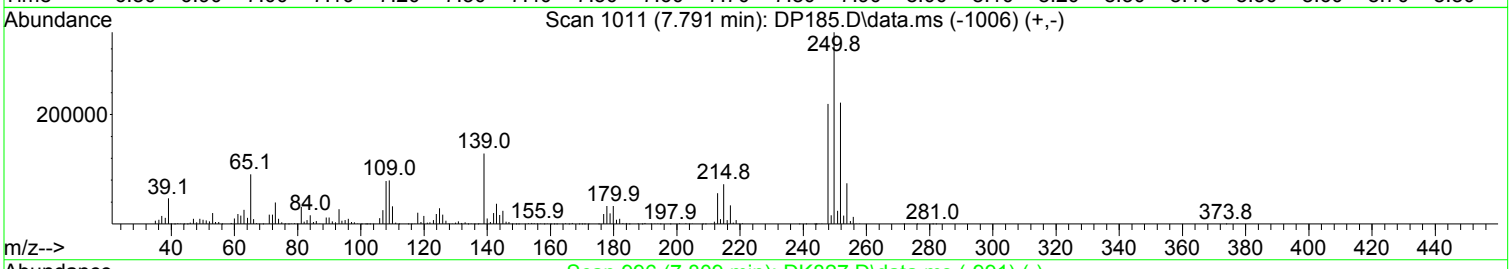
09/19/18

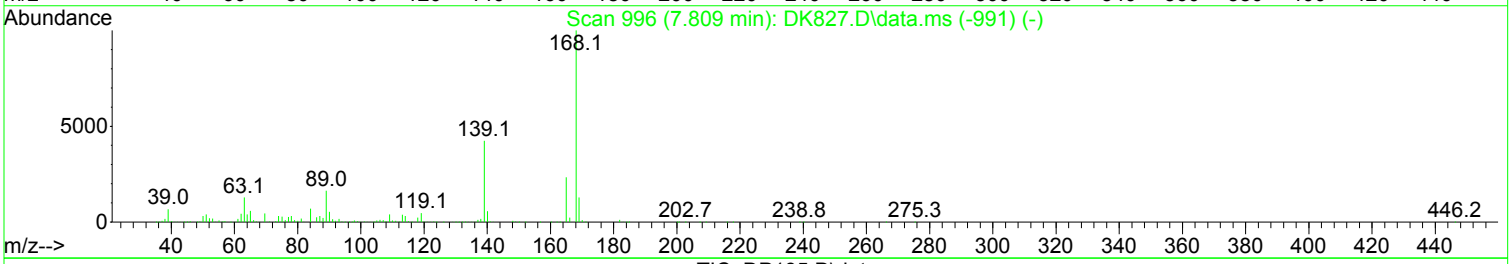
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
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Response via : Initial Calibration







TIC: DP185.D\data.ms

(78) 4-Nitrophenol (TMP)

7.791min (-0.002) 103.44 ppm

response 170278

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	119.70	142.00
109.00	66.00	87.81
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.757	152	179148	40.00	ppm		0.00
33) d8-Naphthalene	5.921	136	694622	40.00	ppm		0.00
57) d10-Acenaphthene	7.631	164	346445	40.00	ppm		0.00
91) d10-Phenanthrene	9.100	188	529859	40.00	ppm		0.00
117) d12-Chrysene	12.358	240	513324	40.00	ppm		0.00
135) d12-Perylene	15.286	264	543868	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.688	112	486728	78.13	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 39.06%				
12) SURR2,PHENOL-D6	4.436	99	600003	79.47	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 39.73%				
34) SURR4,NITROBENZENE-D5	5.253	82	470357	79.36	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 79.36%				
63) SURR5,2-FLUOROBIPHENYL	6.963	172	962565	79.69	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 79.69%				
88) SURR3,2,4,6-TRIBROMOPH...	8.411	330	145001	80.62	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 40.31%				
124) SURR6,TERPHENYL-D14	10.777	244	976200	82.40	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 82.40%				
Target Compounds							Qvalue
2) Pyridine	2.689	79	514199	79.555	ppm		98
3) N-Nitrosodimethylamine	2.652	74	274664	84.776	ppm		90
4) 2-Picoline	3.245	93	524127	78.179	ppm		99
5) N-Nitrosomethylamine	3.320	42	170352	77.537	ppm		81
6) Methyl Methansulfonate	3.549	80	204986	78.793	ppm		97
8) N-Nitrosodiethylamine	3.864	102	241967	80.231	ppm		85
9) Ethyl Mathanesulfonate	4.099	79	353478	79.307	ppm		98
11) Aniline	4.473	93	796873	79.700	ppm		99
13) Phenol	4.447	94	649486	80.129	ppm		98
14) bis(2-Clethyl)Ether	4.516	93	453039	77.708	ppm		95
15) Pentachloroethane	4.516	117	166573	79.098	ppm		98
16) 2-Chlorophenol	4.580	128	513177	80.003	ppm		98
17) 1,3-Diclbenzene	4.708	146	529171	79.122	ppm		99
18) 1,4-Dichlorobenzene	4.773	146	525809	78.364	ppm		99
19) 1,2-Diclbenzene	4.906	146	500172	79.204	ppm		100
20) Benzyl Alcohol	4.874	79	357189	82.737	ppm		99
21) 1-Methyl-2-pyrrolidinone	4.906	99	352386	80.623	ppm		95
22) 2,2'-oxybis(1-Chloropr...	4.986	45	481319	77.713	ppm	#	67
23) 2-Methylphenol	4.986	108	445774	79.310	ppm		90
24) 3+4-Methylphenol	5.120	108	475524	80.025	ppm		82
25) Acetophenone	5.114	105	634037	78.153	ppm		84
26) N-Nitroso-Di-n-propyla...	5.109	70	352422	80.138	ppm		98
27) N-Nitrosopyrrolidine	5.104	100	276886	79.973	ppm		72
28) N-Nitrosomorpholine	5.136	56	252143	79.532	ppm		94
29) o-Toluidine	5.147	106	772544	77.821	ppm		81
30) Hexachloroethane	5.211	117	199753	78.719	ppm		99
31) o,o,o-Triethylphosphor...	5.649	198	222367	77.938	ppm		85
32) Alpha-terpinol	5.948	121	188121	79.724	ppm		94
35) Nitrobenzene	5.275	77	447448	79.689	ppm		91
36) N-Nitrosopiperidine	5.408	42	235240	79.556	ppm		88
37) Isophorone	5.488	82	708201	78.922	ppm		96
38) 2-Nitrophenol	5.563	139	267724	83.661	ppm		97
39) 2,4-Dimethylphenol	5.601	107	478634	81.042	ppm		95

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) bis(-2-Chloroethoxy)Me...	5.681	93	530670	78.509	ppm		98
42) 2,4-Dichlorophenol	5.798	162	389473	81.937	ppm		99
43) a,a-Dimethylphenethyla...	6.279	58	958378m	40.502	ppm		
44) 1,2,4-Trichlorobenzene	5.868	180	385041	79.278	ppm		97
45) Naphthalene	5.943	128	1403570	78.309	ppm		98
46) 4-Chloroaniline	5.996	127	607692	80.412	ppm		99
47) 2,6-Dichlorophenol	6.007	162	387697	81.465	ppm		96
48) Hexachlorobutadiene	6.049	225	194269	78.690	ppm		99
49) Hexachloropropene	6.023	213	211451	81.113	ppm		100
50) 4-Chloro-3-methylphenol	6.471	107	374592	78.527	ppm		98
51) N-N-di-n-butylamine	6.311	84	313958	74.294	ppm		99
52) Caprolactam	6.359	113	162147	81.016	ppm		95
53) p-Phenylenediamine	6.354	80	583474	153.357	ppm		98
54) Safrole	6.519	162	358887	81.584	ppm		99
55) 2-Methylnaphthalene	6.610	142	884492	78.752	ppm		97
56) 1-Methylnaphthalene	6.706	142	887773	79.931	ppm		99
58) Hexachlorocyclopentadiene	6.755	237	134720	81.378	ppm		99
59) 1,2,4,5-Tetrachloroben...	6.771	216	337067	79.344	ppm		97
60) 1,2,3,4-Tetrachloroben...	7.048	216	356012	78.245	ppm		98
61) 2,4,6-Trichlorophenol	6.888	196	244805	81.522	ppm		96
62) 2,4,5-Trichlorophenol	6.936	196	227857	78.284	ppm		97
64) Isosafrole	7.027	104	154550	79.373	ppm		83
65) 1,1'-Biphenyl	7.064	154	1153387	78.245	ppm		99
66) 2-Chloronaphthalene	7.086	162	783044	79.109	ppm		98
67) 2-Nitroaniline	7.193	65	213605	79.723	ppm		86
68) 1,4-Naphthoquinone	7.267	158	148909m	84.791	ppm		
69) m-Dinitrobenzene	7.406	168	141682	81.594	ppm	#	67
70) Acenaphthylene	7.492	152	1309448	80.341	ppm		100
71) Dimethyl phthalate	7.364	163	820756	76.345	ppm		99
72) 2,6-Dinitrotoluene	7.428	165	197930	81.793	ppm		90
73) Acenaphthene	7.663	153	841720	78.742	ppm		98
74) 3-Nitroaniline	7.599	138	267618	82.456	ppm		92
75) 2,4-Dinitrophenol	7.711	184	92661	81.656	ppm		95
76) Dibenzofuran	7.834	168	1098363	79.923	ppm		96
77) 2,4-Dinitrotoluene	7.828	165	266159	82.937	ppm		92
78) 4-Nitrophenol	7.791	65	145303m	88.266	ppm		
79) Pentachlorobenzene	7.791	250	306701	78.553	ppm		98
80) 1-Napthylamine	7.914	143	713821	76.688	ppm		98
81) 2-Napthylamine	7.994	143	797704	78.460	ppm		99
82) 2,3,4,6-Tetrachlorophenol	7.962	232	182302	82.757	ppm		96
83) Fluorene	8.170	166	861010	78.763	ppm		96
84) 4-Chlorophenyl-phenyle...	8.165	204	375930	79.741	ppm		96
85) Diethylphthalate	8.053	149	844186	77.994	ppm		99
86) 4-Nitroaniline	8.208	138	274016	81.229	ppm		96
87) 5-Nitro-o-toluidine	8.192	152	297822	83.709	ppm		96
89) Sulfotepp	8.437	322	164088	80.182	ppm		99
90) Octachlorocyclopentene	8.416	307	132355	86.060	ppm		98
92) Thionazin	8.133	107	161051	80.136	ppm		94
93) 4,6-Dinitro-2-methylph...	8.234	198	149166	84.857	ppm		97
94) Diphenylamine	8.288	169	1407919	154.726	ppm		99
95) 1,2 Diphenylhydrazine	8.325	77	837327	77.324	ppm		96
96) N-Nitrosodiphenylamine	8.288	169	1407919	154.726	ppm		99
97) 1,3,5-Trinirobenzene	8.592	74	114714	98.272	ppm		89
98) Diallate	8.560	86	334162	77.122	ppm		99
99) Phorate	8.576	121	188854	78.576	ppm		96
100) Phenacetin	8.603	108	501499	82.792	ppm		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

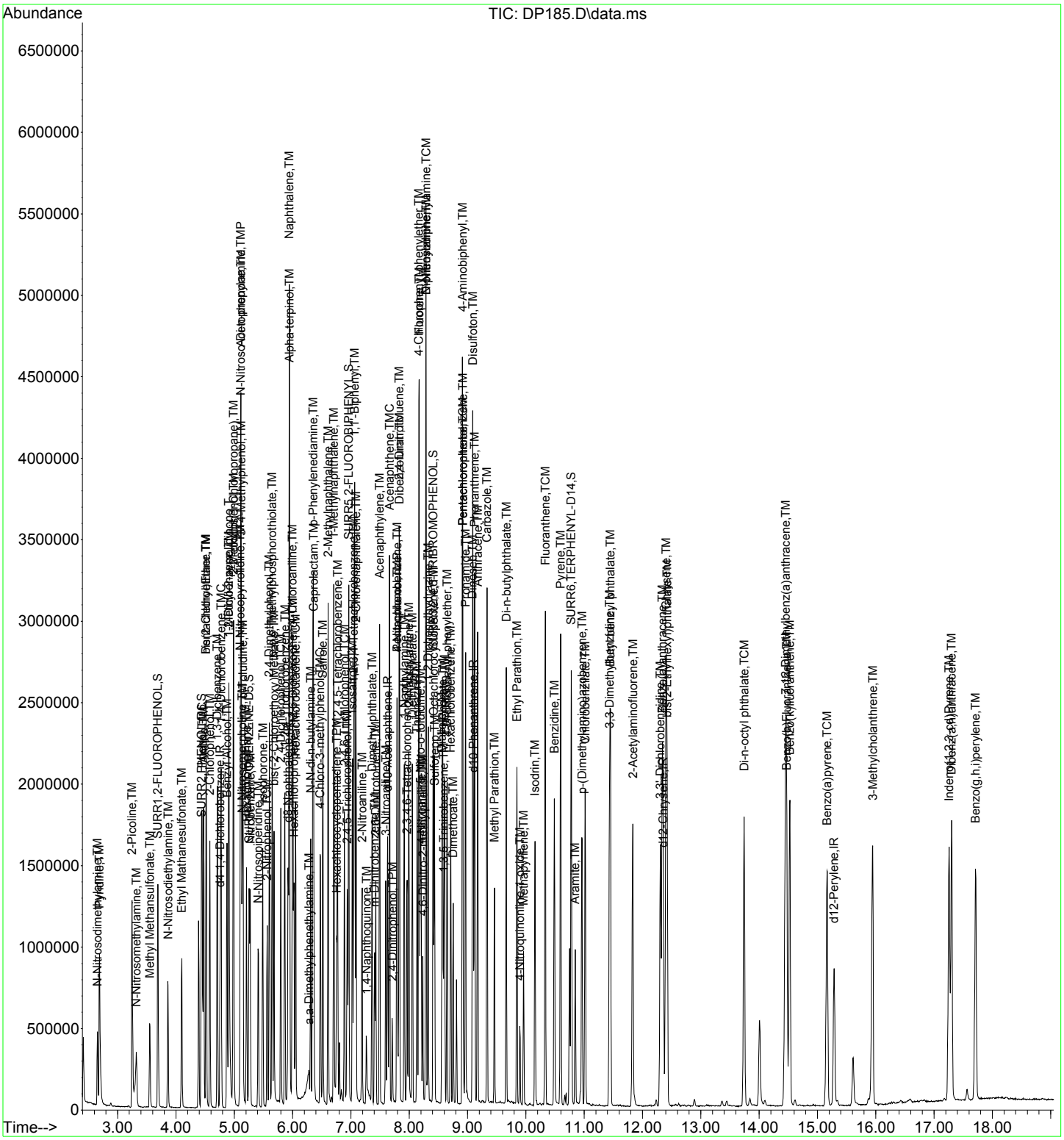
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.651	248	222330	76.281	ppm	95
102) Hexachlorobenzene	8.710	284	265453	77.953	ppm	94
103) Dimethoate	8.752	87	254068	74.981	ppm	99
105) Pentachlorophenol	8.918	266	153475	84.395	ppm	96
106) 4-Aminobiphenyl	8.913	169	922278	81.946	ppm	100
107) Pentachloronitrobenzene	8.918	237	82431	84.733	ppm	90
108) Pronamide	8.966	173	421374	84.121	ppm	98
109) Dinoseb	9.084	211	196028	85.466	ppm	93
110) Disulfoton	9.089	88	466815	75.624	ppm	92
111) Phenanthrene	9.121	178	1178464	79.387	ppm	99
112) Anthracene	9.175	178	1179845	81.372	ppm	99
113) Carbazole	9.335	167	1283695	81.495	ppm	99
114) Di-n-butylphthalate	9.666	149	1529289	83.705	ppm	99
115) 4-Nitroquinonline-1-oxide	9.896	190	55382	82.047	ppm	92
116) Fluoranthene	10.334	202	1227922	81.647	ppm	99
118) Methyl Parathion	9.463	109	228040	88.059	ppm	96
119) Ethyl Parathion	9.848	97	200359	85.914	ppm	95
120) Methapyrilene	9.960	58	226125	77.644	ppm	94
121) Isodrin	10.157	193	118986	78.057	ppm	99
122) Benzidine	10.489	184	807918	82.011	ppm	99
123) Pyrene	10.596	202	1296008	82.871	ppm	100
125) Aramite	10.847	185	195255m	84.804	ppm	
126) p-(Dimethylamino)azobe...	10.964	120	392419	85.752	ppm	94
127) Chlorobenzilate	11.018	139	447440	84.414	ppm	99
128) Butyl benzyl phthalate	11.450	149	666336	79.501	ppm	99
129) 3,3-Dimethylbenzidine	11.434	212	773538	84.233	ppm	98
130) 2-Acetylaminofluorene	11.835	181	597322	85.735	ppm	98
131) 3,3'-Dichlorobenzidine	12.305	252	515646	84.382	ppm	97
132) Benzo(a)anthracene	12.337	228	1150812	79.655	ppm	99
133) Chrysene	12.406	228	1118088	79.035	ppm	99
134) bis(2-Ethylhexyl)phtha...	12.423	149	908947	79.423	ppm	99
136) Di-n-octyl phthalate	13.742	149	1571031	82.366	ppm	98
137) 7,12-Dimethylbenz(a)an...	14.453	256	646822	80.880	ppm	98
138) Benzo(b)Fluoranthene	14.474	252	1273428	78.376	ppm	93
139) Benzo(k)fluoranthene	14.527	252	1198207	79.566	ppm	97
140) Benzo(a)pyrene	15.163	252	1113325	81.361	ppm	98
141) 3-Methylcholanthrene	15.948	268	678821	81.888	ppm	99
142) Indeno(1,2,3-cd)Pyrene	17.257	276	1100021	83.755	ppm	99
143) Dibenz(a,h)anthracene	17.300	278	1128471	82.143	ppm	97
144) Benzo(g,h,i)perylene	17.711	276	1016352	80.651	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP185.D
Acq On : 17 Sep 2018 12:47 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 10 Sample Multiplier: 1

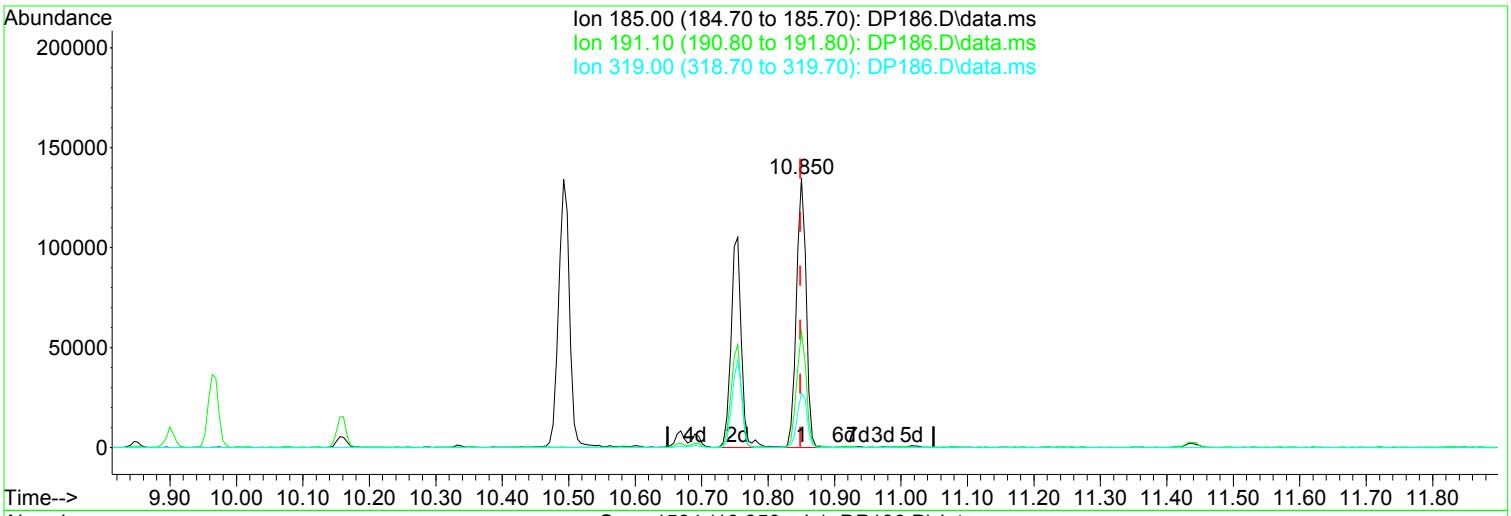
Quant Time: Sep 19 14:27:51 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
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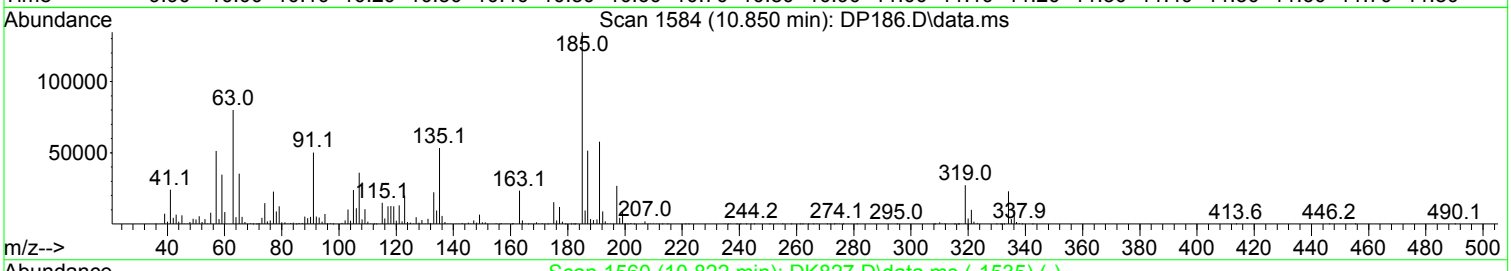


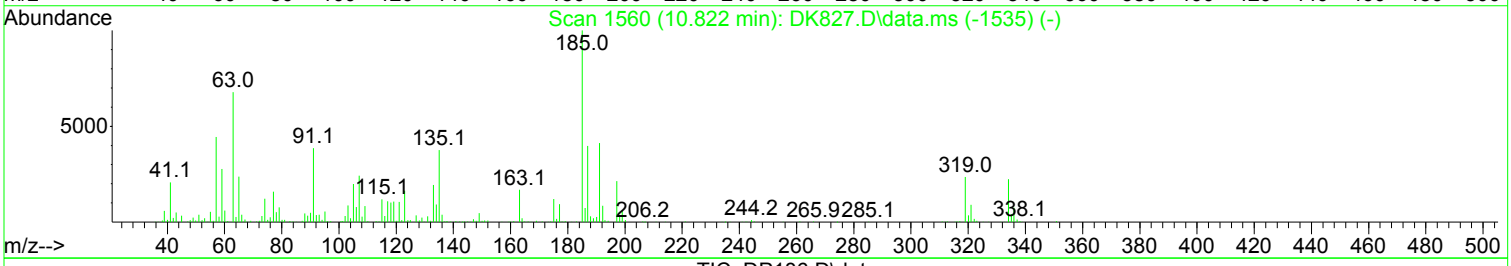
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP186.D
Acq On : 17 Sep 2018 1:58 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:27:58 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP186.D\data.ms

(125) Aramite (TM)

10.850min (+ 0.001) 101.08 ppm m

response 248993

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	43.00
319.00	19.60	20.28
0.00	0.00	0.00

Manual Integration:

After

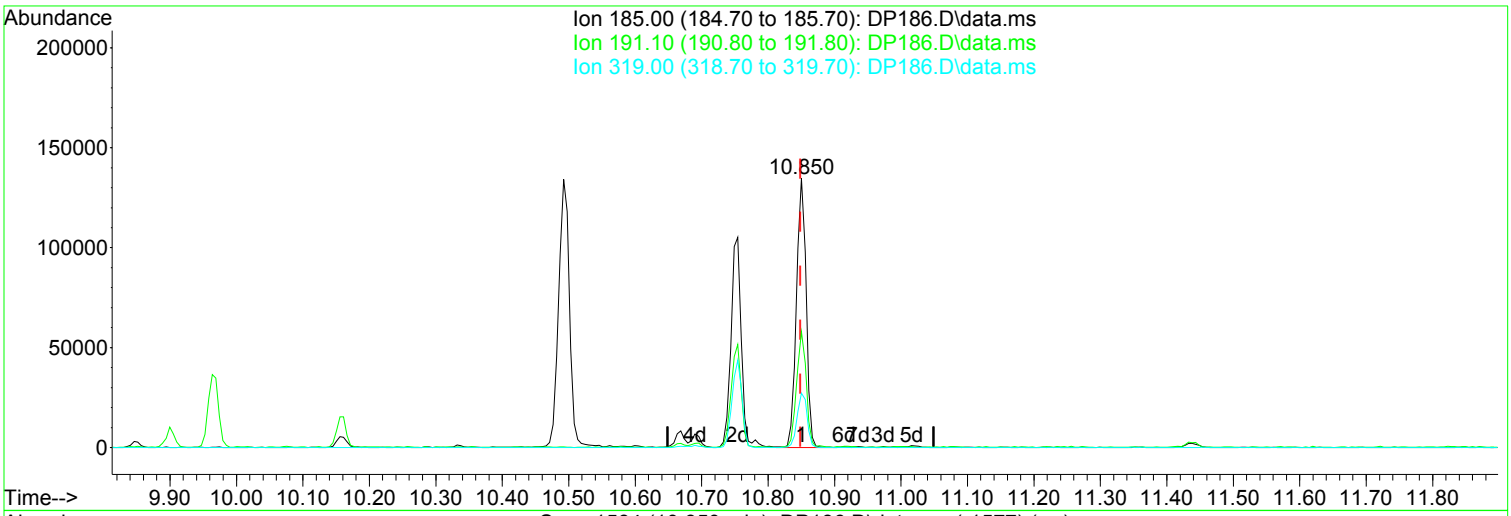
Split Peak.

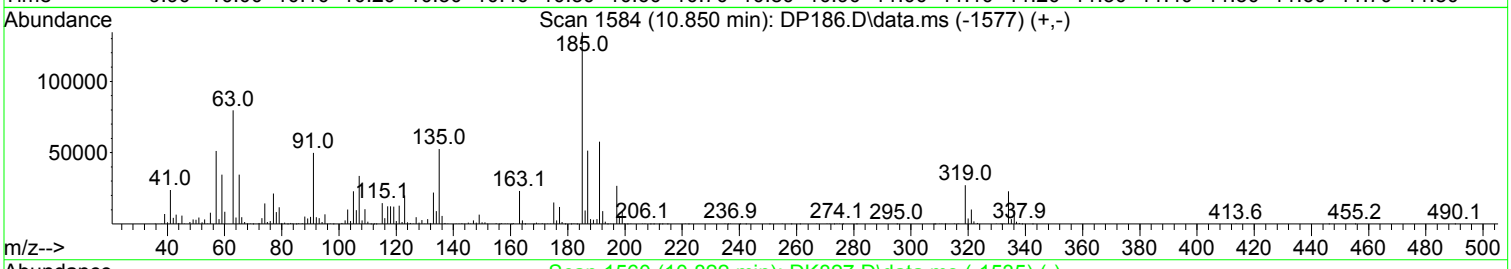
09/19/18

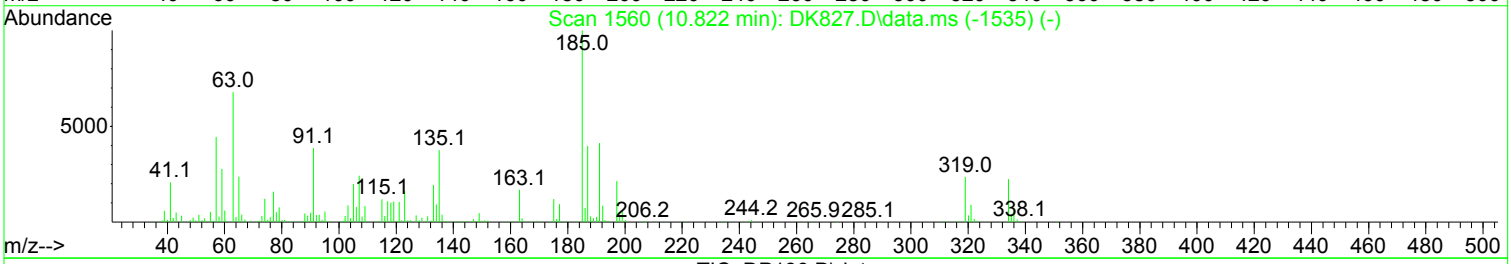
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP186.D
Acq On : 17 Sep 2018 1:58 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:27:58 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
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TIC: DP186.D\data.ms

(125) Aramite (TM)

10.850min (+ 0.001) 54.67 ppm

response 134678

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	42.97
319.00	19.60	20.30
0.00	0.00	0.00

Manual Integration:

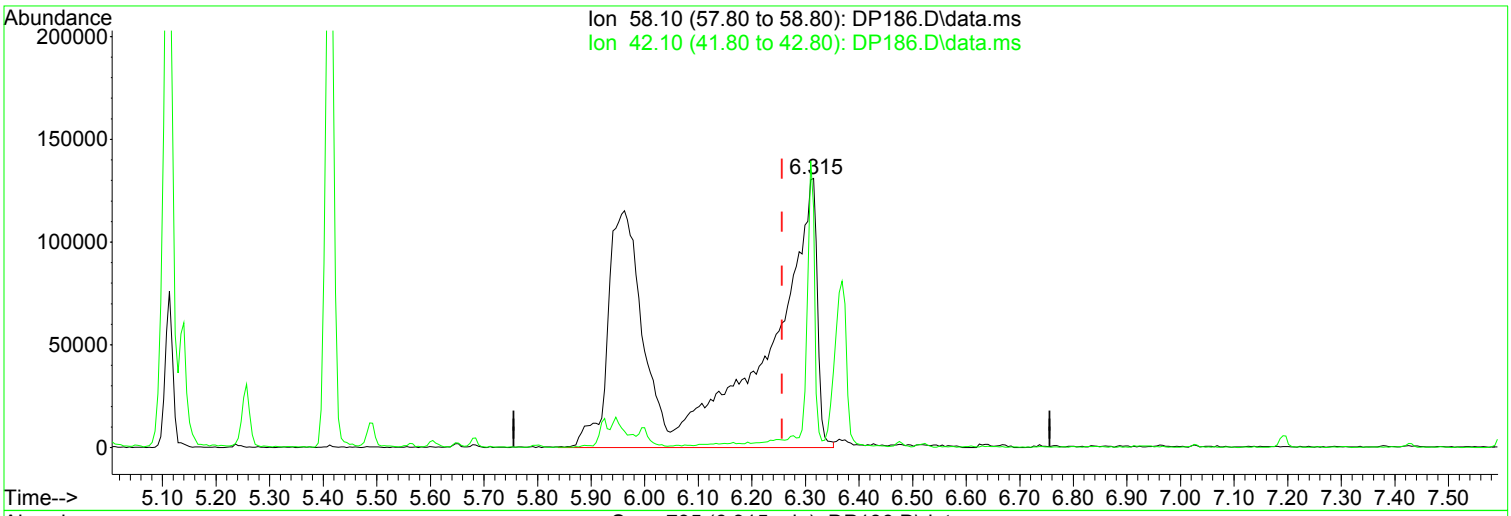
Before

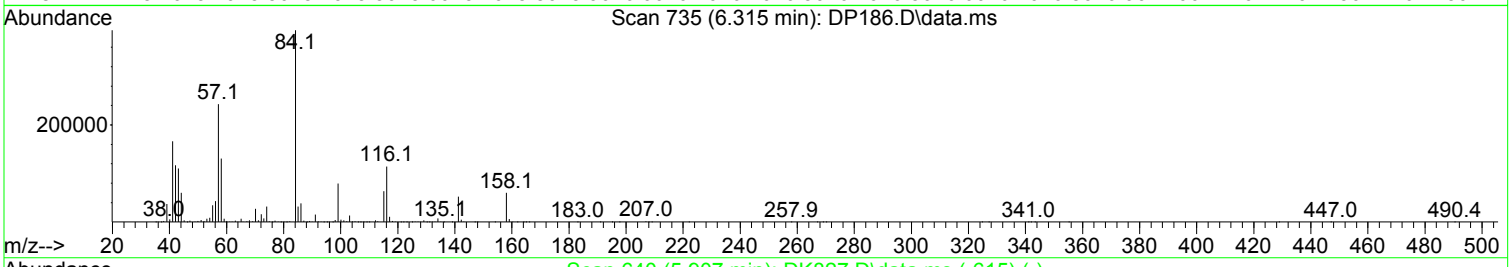
09/19/18

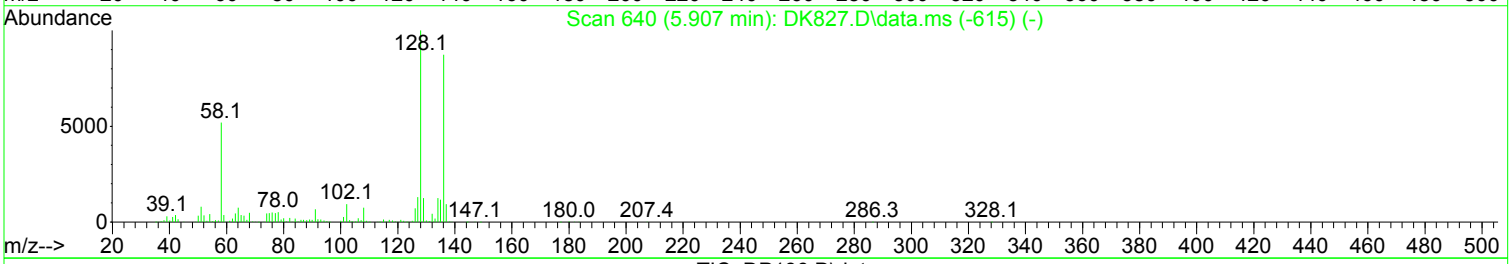
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP186.D
Acq On : 17 Sep 2018 1:58 pm
Operator : J.Misiurewicz
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TIC: DP186.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.315min (+ 0.059) 48.87 ppm m

response 1270532

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	89.06#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

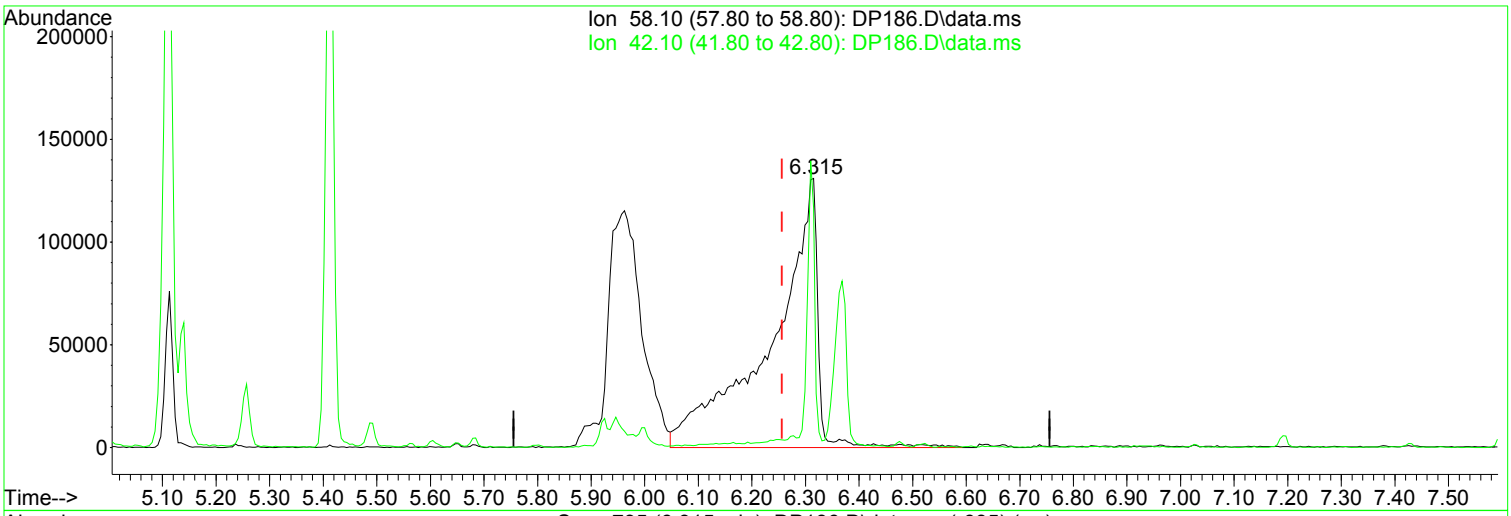
Poor integration.

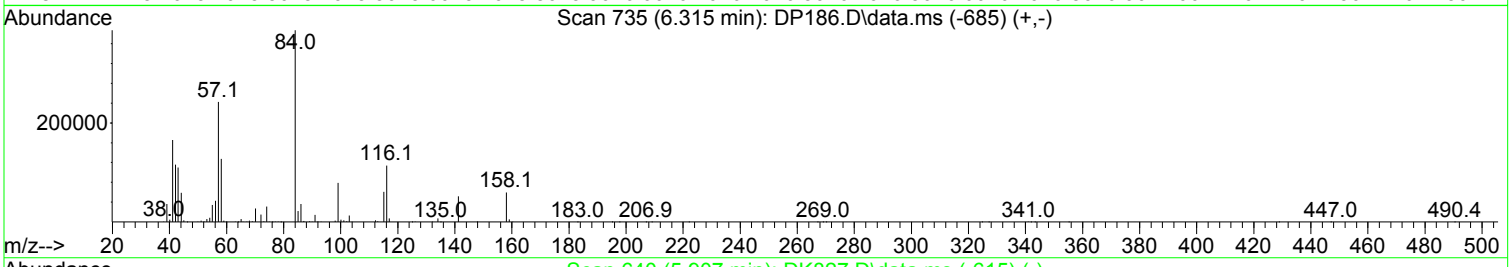
09/19/18

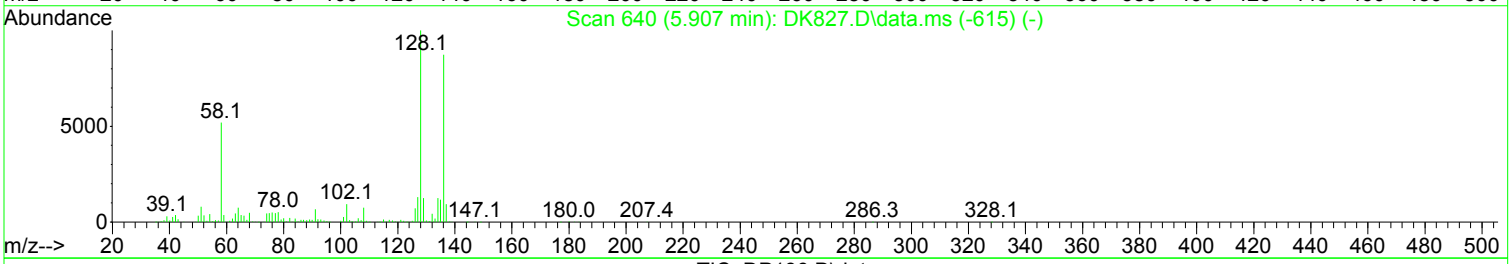
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP186.D
Acq On : 17 Sep 2018 1:58 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:27:58 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
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TIC: DP186.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.315min (+ 0.059) 30.04 ppm

response 780873

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	91.18#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP186.D
Acq On : 17 Sep 2018 1:58 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
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Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.760	152	188884	40.00	ppm		0.00
33) d8-Naphthalene	5.925	136	763163	40.00	ppm		0.00
57) d10-Acenaphthene	7.629	164	358400	40.00	ppm		0.00
91) d10-Phenanthrene	9.098	188	572924	40.00	ppm		0.00
117) d12-Chrysene	12.362	240	549198	40.00	ppm		0.00
135) d12-Perylene	15.290	264	571965	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.692	112	653319	99.47	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 49.73%				
12) SURR2,PHENOL-D6	4.440	99	796559	100.07	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 50.03%				
34) SURR4,NITROBENZENE-D5	5.257	82	613971	94.28	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 94.28%				
63) SURR5,2-FLUOROBIPHENYL	6.967	172	1239247	99.18	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 99.18%				
88) SURR3,2,4,6-TRIBROMOPH...	8.414	330	183012	98.37	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 49.19%				
124) SURR6,TERPHENYL-D14	10.781	244	1227692	96.86	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 96.86%				
Target Compounds							Qvalue
2) Pyridine	2.688	79	686595	100.752	ppm		97
3) N-Nitrosodimethylamine	2.650	74	355484	104.066	ppm		94
4) 2-Picoline	3.243	93	702195	99.341	ppm		99
5) N-Nitrosomethylamine	3.318	42	226522	97.788	ppm		87
6) Methyl Methansulfonate	3.553	80	268785	97.991	ppm		99
8) N-Nitrosodiethylamine	3.863	102	315661	99.272	ppm		91
9) Ethyl Mathanesulfonate	4.098	79	467460	99.474	ppm		99
11) Aniline	4.477	93	1036626	98.335	ppm		99
13) Phenol	4.450	94	867129	101.466	ppm		98
14) bis(2-Clethyl)Ether	4.520	93	604214	98.297	ppm		96
15) Pentachloroethane	4.520	117	223574	100.692	ppm		95
16) 2-Chlorophenol	4.584	128	678352	100.303	ppm		97
17) 1,3-Diclbenzene	4.707	146	686848	97.404	ppm		97
18) 1,4-Dichlorobenzene	4.771	146	683884	96.669	ppm		98
19) 1,2-Diclbenzene	4.910	146	652944	98.067	ppm		98
20) Benzyl Alcohol	4.878	79	478911	105.213	ppm		98
21) 1-Methyl-2-pyrrolidinone	4.915	99	465202	100.949	ppm		93
22) 2,2'-oxybis(1-Chloropr...	4.985	45	627844	96.145	ppm	#	78
23) 2-Methylphenol	4.990	108	593002	100.066	ppm		93
24) 3+4-Methylphenol	5.124	108	622437	99.350	ppm	#	73
25) Acetophenone	5.113	105	830482	97.091	ppm		92
26) N-Nitroso-Di-n-propyla...	5.113	70	459176	99.031	ppm		94
27) N-Nitrosopyrrolidine	5.108	100	366724	100.461	ppm		61
28) N-Nitrosomorpholine	5.134	56	327413	97.951	ppm		97
29) o-Toluidine	5.150	106	1028764	98.289	ppm		64
30) Hexachloroethane	5.209	117	262249	98.020	ppm		98
31) o,o,o-Triethylphosphor...	5.652	198	286990	95.403	ppm		91
32) Alpha-terpinol	5.946	121	242709	97.556	ppm		98
35) Nitrobenzene	5.273	77	586856	95.130	ppm		94
36) N-Nitrosopiperidine	5.412	42	306844	94.452	ppm		88
37) Isophorone	5.492	82	946726	96.027	ppm		97
38) 2-Nitrophenol	5.562	139	353925	100.665	ppm		99
39) 2,4-Dimethylphenol	5.604	107	623854	96.144	ppm		92

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP186.D
Acq On : 17 Sep 2018 1:58 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:27:58 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) bis(-2-Chloroethoxy)Me...	5.684	93	702911	94.651	ppm		99
42) 2,4-Dichlorophenol	5.802	162	509137	97.491	ppm		99
43) a,a-Dimethylphenethyla...	6.315	58	1270532m	48.872	ppm		
44) 1,2,4-Trichlorobenzene	5.866	180	506957	95.005	ppm		99
45) Naphthalene	5.946	128	1816590	92.250	ppm		97
46) 4-Chloroaniline	6.000	127	777928	93.693	ppm		98
47) 2,6-Dichlorophenol	6.005	162	495925	94.847	ppm		97
48) Hexachlorobutadiene	6.053	225	249829	92.107	ppm		97
49) Hexachloropropene	6.021	213	275106	96.053	ppm		97
50) 4-Chloro-3-methylphenol	6.480	107	495363	94.519	ppm		98
51) N-N-di-n-butylamine	6.309	84	411150	88.555	ppm		99
52) Caprolactam	6.368	113	206301	93.820	ppm		89
53) p-Phenylenediamine	6.358	80	768913	183.946	ppm		97
54) Safrole	6.523	162	452291	93.583	ppm		97
55) 2-Methylnaphthalene	6.609	142	1140669	92.440	ppm		94
56) 1-Methylnaphthalene	6.705	142	1156381	94.764	ppm		99
58) Hexachlorocyclopentadiene	6.753	237	189998	104.377	ppm		99
59) 1,2,4,5-Tetrachloroben...	6.774	216	437528	99.557	ppm		99
60) 1,2,3,4-Tetrachloroben...	7.052	216	456922	97.073	ppm		99
61) 2,4,6-Trichlorophenol	6.892	196	317079	102.067	ppm		100
62) 2,4,5-Trichlorophenol	6.940	196	308048	102.305	ppm		98
64) Isosafrole	7.025	104	204161	101.354	ppm		93
65) 1,1'-Biphenyl	7.063	154	1484257	97.333	ppm		99
66) 2-Chloronaphthalene	7.089	162	1016419	99.261	ppm		99
67) 2-Nitroaniline	7.191	65	280770	101.295	ppm		97
68) 1,4-Naphthoquinone	7.266	158	187044	102.953	ppm		92
69) m-Dinitrobenzene	7.410	168	188001	104.658	ppm		76
70) Acenaphthylene	7.495	152	1688702	100.154	ppm		99
71) Dimethyl phthalate	7.367	163	1074948	96.654	ppm		99
72) 2,6-Dinitrotoluene	7.431	165	254219	101.550	ppm		82
73) Acenaphthene	7.661	153	1065867	96.385	ppm		100
74) 3-Nitroaniline	7.602	138	342481	102.002	ppm		97
75) 2,4-Dinitrophenol	7.709	184	131329	103.917	ppm		100
76) Dibenzofuran	7.832	168	1377462	96.888	ppm		98
77) 2,4-Dinitrotoluene	7.832	165	345492	104.066	ppm		89
78) 4-Nitrophenol	7.795	65	181007	106.287	ppm	#	72
79) Pentachlorobenzene	7.789	250	386354	95.654	ppm		98
80) 1-Napthylamine	7.917	143	932965	96.888	ppm		100
81) 2-Napthylamine	7.998	143	1025642	97.515	ppm		100
82) 2,3,4,6-Tetrachlorophenol	7.966	232	239679	105.174	ppm		92
83) Fluorene	8.174	166	1065518	94.219	ppm		99
84) 4-Chlorophenyl-phenyle...	8.169	204	475184	97.433	ppm		99
85) Diethylphthalate	8.056	149	1113368	99.432	ppm		99
86) 4-Nitroaniline	8.211	138	355742	101.938	ppm		94
87) 5-Nitro-o-toluidine	8.195	152	385345	104.696	ppm		99
89) Sulfotepp	8.436	322	211614	99.956	ppm		91
90) Octachlorocyclopentene	8.414	307	169879	106.775	ppm		98
92) Thionazin	8.137	107	209425	96.373	ppm		96
93) 4,6-Dinitro-2-methylph...	8.238	198	195293	102.747	ppm		98
94) Diphenylamine	8.291	169	1809715	183.933	ppm		99
95) 1,2 Diphenylhydrazine	8.323	77	1065664	91.013	ppm		98
96) N-Nitrosodiphenylamine	8.291	169	1809715	183.933	ppm		99
97) 1,3,5-Trinirobenzene	8.596	74	116293	92.136	ppm	#	12
98) Diallate	8.564	86	429083	91.585	ppm		97
99) Phorate	8.575	121	250242	96.291	ppm		94
100) Phenacetin	8.612	108	647188	98.812	ppm		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP186.D
Acq On : 17 Sep 2018 1:58 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 14:27:58 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

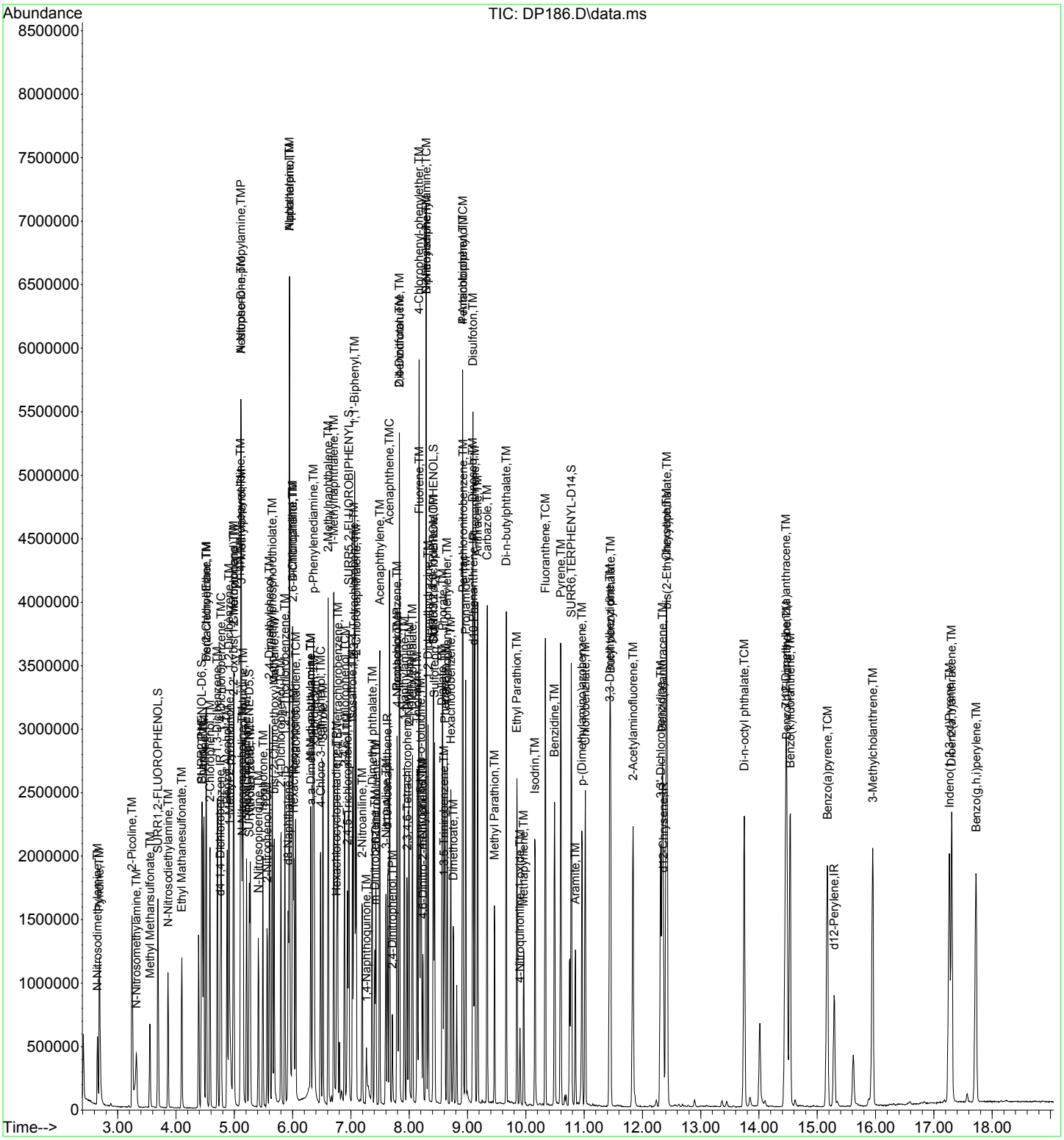
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.649	248	292034	92.665	ppm	97
102) Hexachlorobenzene	8.713	284	346722	94.165	ppm	96
103) Dimethoate	8.756	87	309126	84.372	ppm	98
105) Pentachlorophenol	8.916	266	209745	106.668	ppm	96
106) 4-Aminobiphenyl	8.916	169	1179899	96.956	ppm	99
107) Pentachloronitrobenzene	8.922	237	104370	99.220	ppm	91
108) Pronamide	8.970	173	539828	99.668	ppm	99
109) Dinoseb	9.087	211	251299	101.328	ppm	95
110) Disulfoton	9.093	88	611981	91.689	ppm	93
111) Phenanthrene	9.125	178	1515127	94.395	ppm	99
112) Anthracene	9.173	178	1530921	97.649	ppm	98
113) Carbazole	9.338	167	1648406	96.782	ppm	100
114) Di-n-butylphthalate	9.664	149	1957818	99.105	ppm	98
115) 4-Nitroquinonline-1-oxide	9.899	190	72872	99.843	ppm	95
116) Fluoranthene	10.337	202	1592580	97.934	ppm	99
118) Methyl Parathion	9.461	109	275783	99.539	ppm	94
119) Ethyl Parathion	9.846	97	261796	104.925	ppm	97
120) Methapyrilene	9.964	58	322352	103.455	ppm	99
121) Isodrin	10.156	193	158734	97.330	ppm	93
122) Benzidine	10.492	184	1097637	104.142	ppm	99
123) Pyrene	10.599	202	1654567	98.888	ppm	99
125) Aramite	10.850	185	248993m	101.080	ppm	
126) p-(Dimethylamino)azobe...	10.963	120	509034	103.969	ppm	92
127) Chlorobenzilate	11.021	139	567386	100.051	ppm	99
128) Butyl benzyl phthalate	11.454	149	928926	103.591	ppm	99
129) 3,3-Dimethylbenzidine	11.438	212	995210	101.292	ppm	97
130) 2-Acetylaminofluorene	11.839	181	769721	103.263	ppm	99
131) 3,3'-Dichlorobenzidine	12.314	252	648466	99.185	ppm	98
132) Benzo(a)anthracene	12.341	228	1546653	100.061	ppm	99
133) Chrysene	12.410	228	1469235	97.073	ppm	100
134) bis(2-Ethylhexyl)phtha...	12.421	149	1280847	104.608	ppm	98
136) Di-n-octyl phthalate	13.746	149	2009184	100.163	ppm	98
137) 7,12-Dimethylbenz(a)an...	14.462	256	811958	96.542	ppm	96
138) Benzo(b)Fluoranthene	14.478	252	1642046	96.099	ppm	96
139) Benzo(k)fluoranthene	14.536	252	1511904	95.465	ppm	98
140) Benzo(a)pyrene	15.172	252	1435542	99.755	ppm	97
141) 3-Methylcholanthrene	15.952	268	874125	100.268	ppm	98
142) Indeno(1,2,3-cd)Pyrene	17.266	276	1450910	105.045	ppm	99
143) Dibenz(a,h)anthracene	17.304	278	1458423	100.946	ppm	96
144) Benzo(g,h,i)perylene	17.726	276	1346007	101.564	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP186.D
Acq On : 17 Sep 2018 1:58 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 11 Sample Multiplier: 1

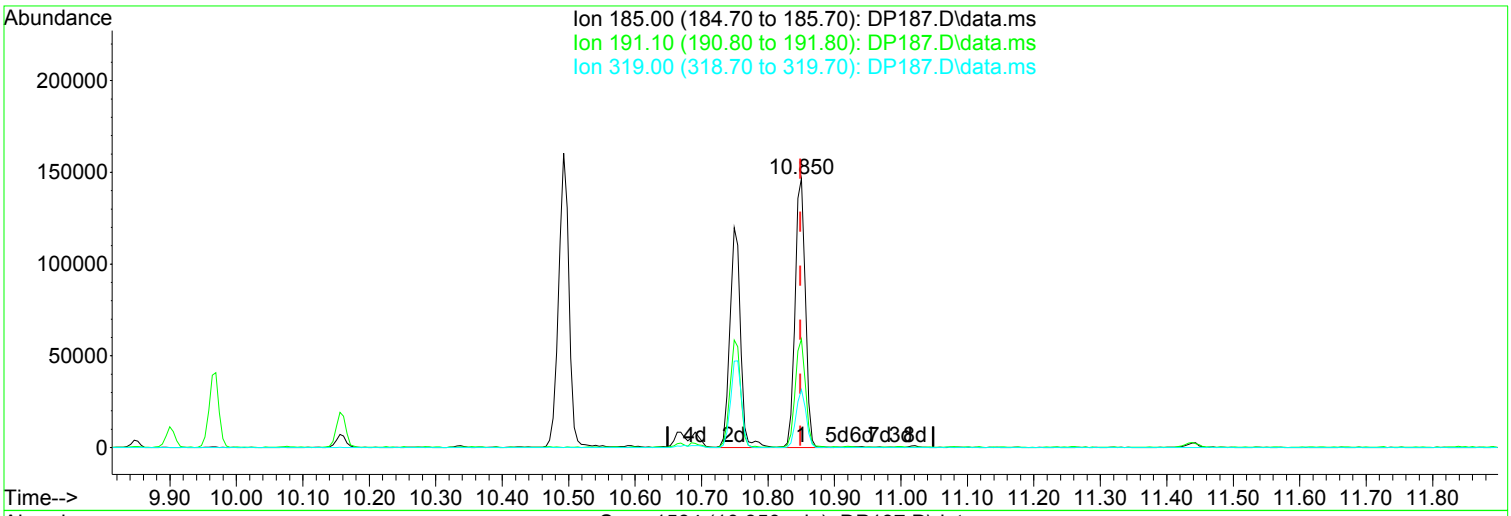
Quant Time: Sep 19 14:27:58 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

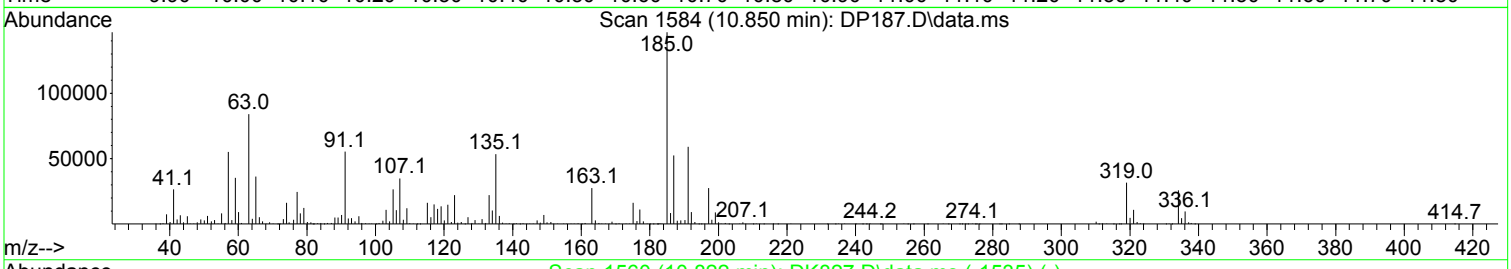


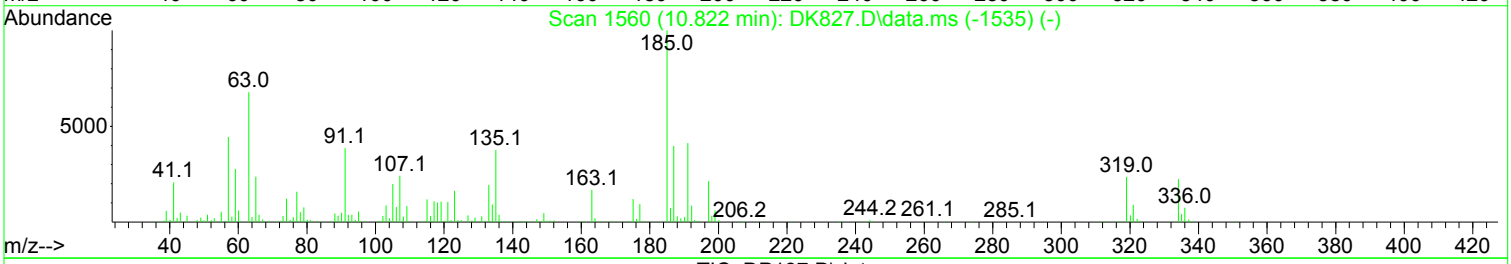
1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP187.D
Acq On : 17 Sep 2018 2:28 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 14:28:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP187.D\data.ms

(125) Aramite (TM)

10.850min (+ 0.001) 123.60 ppm m

response 288955

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	40.36
319.00	19.60	21.52
0.00	0.00	0.00

Manual Integration:

After

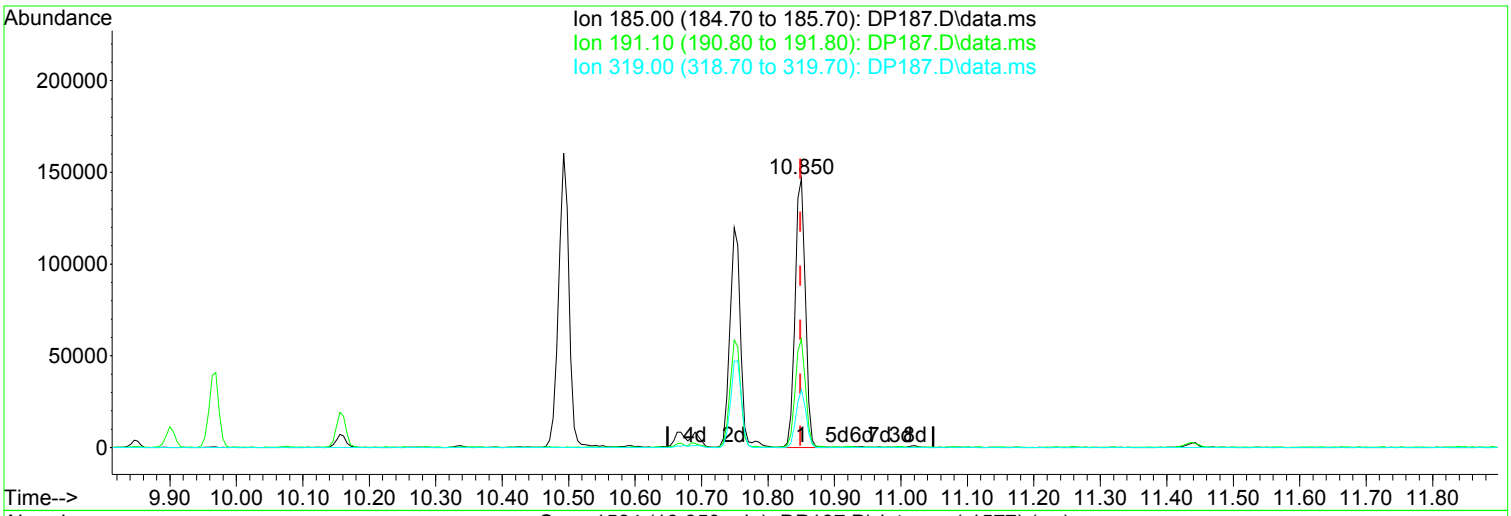
Split Peak.

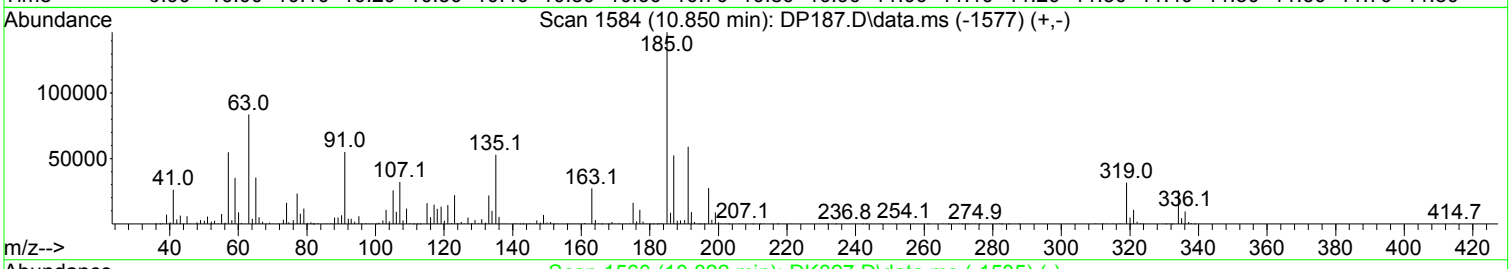
09/20/18

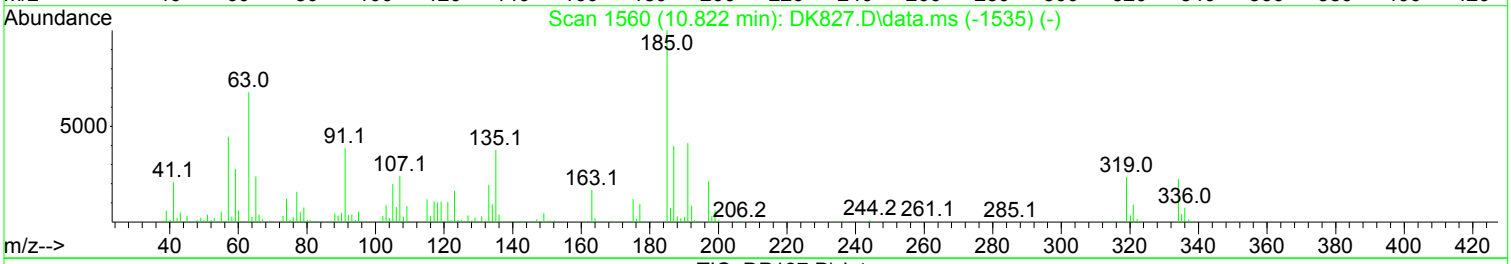
1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP187.D
Acq On : 17 Sep 2018 2:28 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 14:28:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP187.D\data.ms

(125) Aramite (TM)

10.850min (+ 0.001) 66.32 ppm

response 155038

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	40.16
319.00	19.60	21.53
0.00	0.00	0.00

Manual Integration:

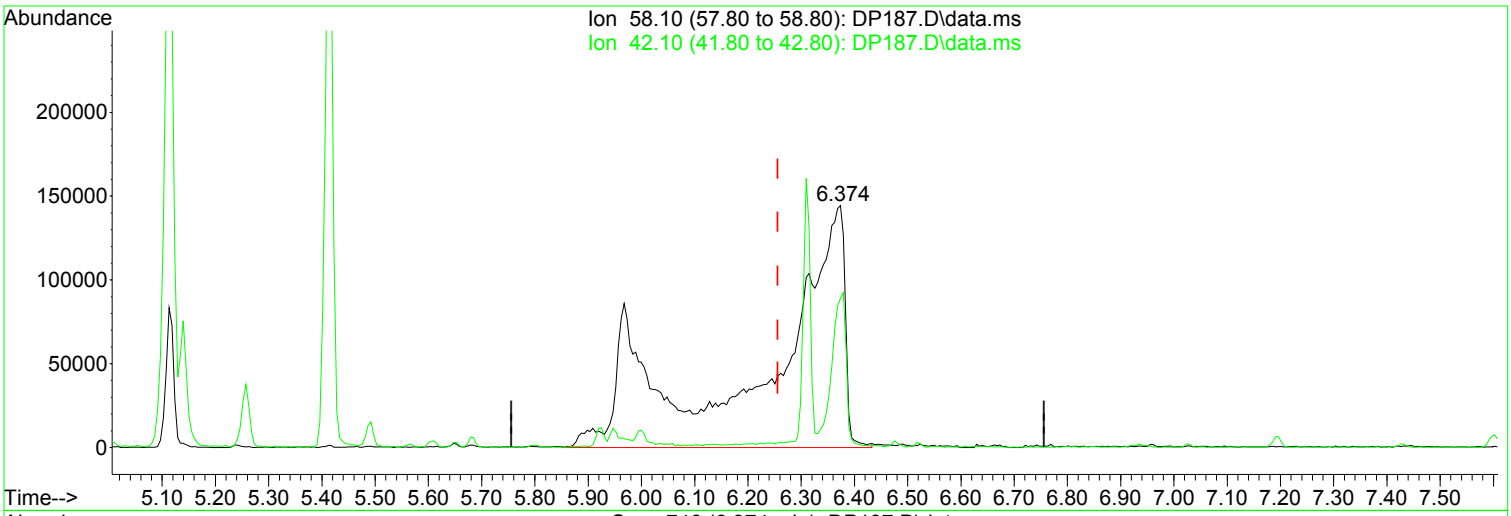
Before

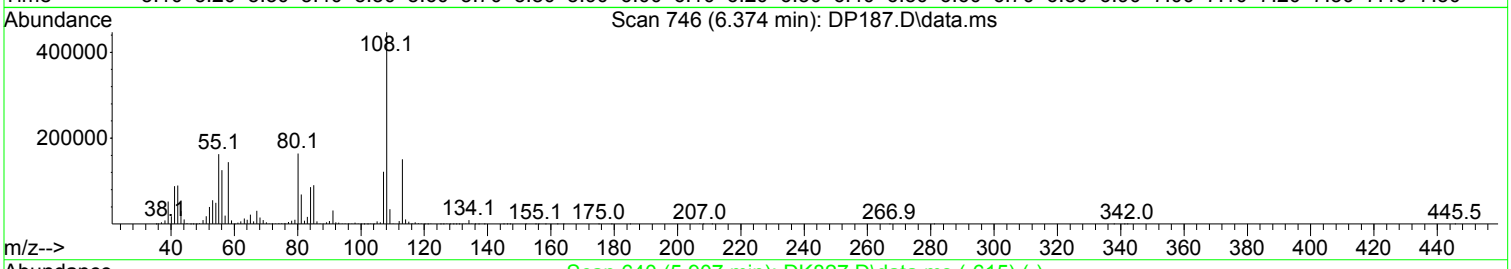
09/20/18

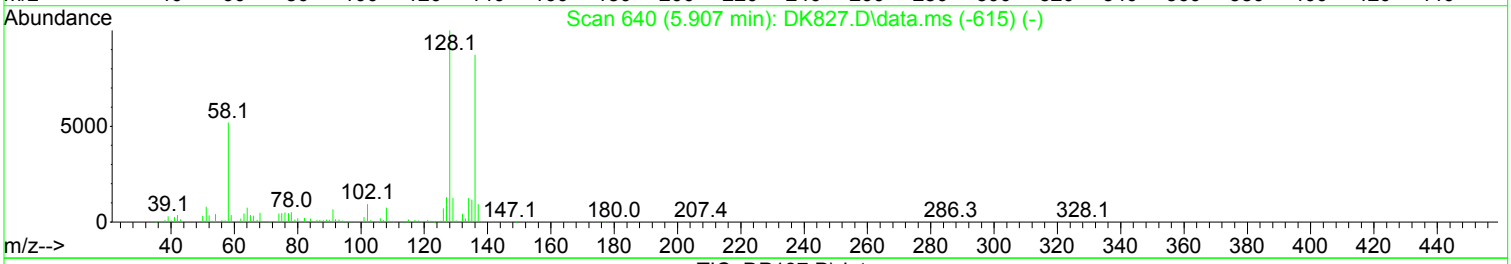
1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP187.D
Acq On : 17 Sep 2018 2:28 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 14:28:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP187.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.374min (+ 0.118) 61.02 ppm m

response 1431937

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	61.84
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

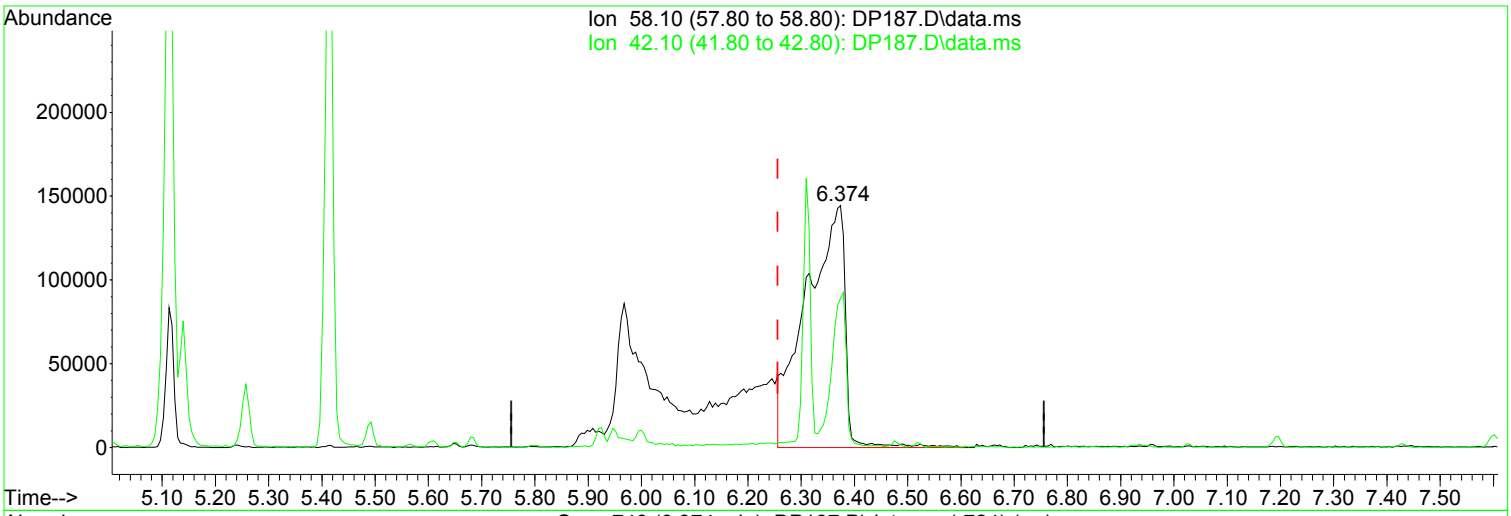
Poor integration.

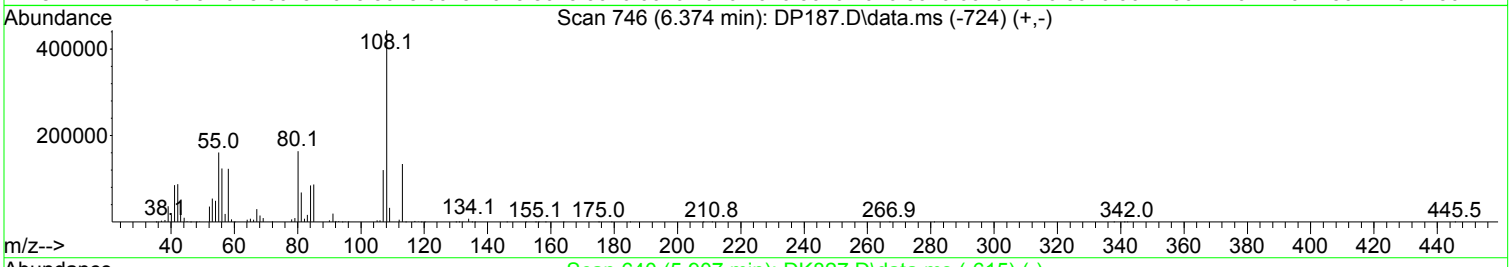
09/20/18

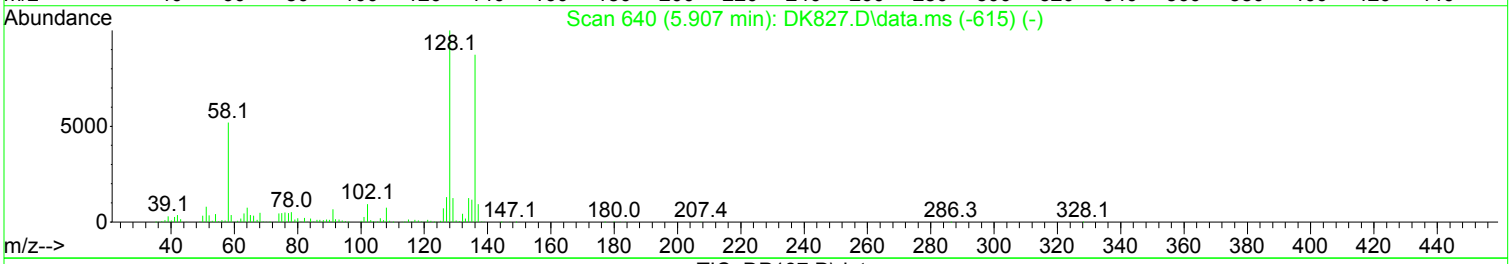
1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP187.D
Acq On : 17 Sep 2018 2:28 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 14:28:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP187.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.374min (+ 0.118) 31.36 ppm

response 735819

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	71.01
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/20/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP187.D
Acq On : 17 Sep 2018 2:28 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 14:28:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.760	152	182483	40.00	ppm		0.00
33) d8-Naphthalene	5.925	136	688839	40.00	ppm		0.00
57) d10-Acenaphthene	7.629	164	360575	40.00	ppm		0.00
91) d10-Phenanthrene	9.098	188	549764	40.00	ppm		0.00
117) d12-Chrysene	12.362	240	521222	40.00	ppm		0.00
135) d12-Perylene	15.290	264	547272	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.692	112	750855	118.33	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 59.16%				
12) SURR2,PHENOL-D6	4.440	99	932929	121.31	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 60.66%				
34) SURR4,NITROBENZENE-D5	5.257	82	712126	121.16	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 121.16%#				
63) SURR5,2-FLUOROBIPHENYL	6.967	172	1446167	115.04	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 115.04%				
88) SURR3,2,4,6-TRIBROMOPH...	8.414	330	214403	114.54	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 57.27%				
124) SURR6,TERPHENYL-D14	10.781	244	1449569	120.50	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 120.50%				
Target Compounds							Qvalue
2) Pyridine	2.688	79	789243	119.877	ppm		99
3) N-Nitrosodimethylamine	2.656	74	417848	126.613	ppm		92
4) 2-Picoline	3.243	93	817920	119.772	ppm		98
5) N-Nitrosomethylamine	3.323	42	269215	120.295	ppm		91
6) Methyl Methansulfonate	3.553	80	321572	121.348	ppm		97
8) N-Nitrosodiethylamine	3.863	102	372171	121.149	ppm		90
9) Ethyl Mathanesulfonate	4.098	79	552348	121.660	ppm		98
11) Aniline	4.477	93	1226547	120.432	ppm		99
13) Phenol	4.450	94	992566	120.217	ppm		98
14) bis(2-Clethyl)Ether	4.520	93	698507	117.623	ppm		97
15) Pentachloroethane	4.520	117	252977	117.931	ppm		96
16) 2-Chlorophenol	4.584	128	789840	120.884	ppm		98
17) 1,3-Diclbenzene	4.712	146	806843	118.434	ppm		98
18) 1,4-Dichlorobenzene	4.771	146	796863	116.590	ppm		98
19) 1,2-Diclbenzene	4.910	146	763700	118.725	ppm		99
20) Benzyl Alcohol	4.878	79	557430	126.759	ppm		97
21) 1-Methyl-2-pyrrolidinone	4.915	99	550557	123.661	ppm		95
22) 2,2'-oxybis(1-Chloropr...	4.985	45	732866	116.164	ppm		85
23) 2-Methylphenol	4.995	108	684511	119.560	ppm		94
24) 3+4-Methylphenol	5.124	108	740795	122.389	ppm	#	56
25) Acetophenone	5.113	105	967195	117.040	ppm		96
26) N-Nitroso-Di-n-propyla...	5.113	70	530104	118.338	ppm		88
27) N-Nitrosopyrrolidine	5.113	100	428800	121.586	ppm	#	48
28) N-Nitrosomorpholine	5.140	56	382168	118.343	ppm		97
29) o-Toluidine	5.150	106	1210593	119.718	ppm		66
30) Hexachloroethane	5.209	117	306658	118.640	ppm		99
31) o,o,o-Triethylphosphor...	5.652	198	345654	118.935	ppm		94
32) Alpha-terpinol	5.946	121	284371	118.311	ppm		98
35) Nitrobenzene	5.273	77	681222	122.342	ppm		96
36) N-Nitrosopiperidine	5.412	42	363266	123.885	ppm		94
37) Isophorone	5.492	82	1082710	121.670	ppm		98
38) 2-Nitrophenol	5.567	139	414969	130.763	ppm		96
39) 2,4-Dimethylphenol	5.604	107	731743	124.939	ppm		95

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP187.D
Acq On : 17 Sep 2018 2:28 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 14:28:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	bis(-2-Chloroethoxy)Me...	5.684	93	808358	120.595	ppm		99
42)	2,4-Dichlorophenol	5.802	162	595162	126.260	ppm		100
43)	a,a-Dimethylphenethyla...	6.374	58	1431937m	61.023	ppm		
44)	1,2,4-Trichlorobenzene	5.866	180	597444	124.043	ppm		99
45)	Naphthalene	5.946	128	2109364	118.676	ppm		100
46)	4-Chloroaniline	6.000	127	927936	123.818	ppm		99
47)	2,6-Dichlorophenol	6.005	162	599058	126.934	ppm		96
48)	Hexachlorobutadiene	6.053	225	296658	121.172	ppm		100
49)	Hexachloropropene	6.021	213	327873	126.828	ppm		100
50)	4-Chloro-3-methylphenol	6.480	107	569634	120.418	ppm		98
51)	N-N-di-n-butylamine	6.310	84	479673	114.461	ppm		99
52)	Caprolactam	6.379	113	248991	125.452	ppm		84
53)	p-Phenylenediamine	6.358	80	860643	228.105	ppm		94
54)	Safrole	6.523	162	542734	124.413	ppm		93
55)	2-Methylnaphthalene	6.609	142	1344903	120.751	ppm		98
56)	1-Methylnaphthalene	6.705	142	1329336	120.692	ppm		99
58)	Hexachlorocyclopentadiene	6.753	237	227345	119.612	ppm		97
59)	1,2,4,5-Tetrachloroben...	6.769	216	519040	117.392	ppm		99
60)	1,2,3,4-Tetrachloroben...	7.052	216	546917	115.492	ppm		100
61)	2,4,6-Trichlorophenol	6.892	196	366679	117.321	ppm		98
62)	2,4,5-Trichlorophenol	6.940	196	356080	117.543	ppm		99
64)	Isosafrole	7.025	104	236093	116.499	ppm		94
65)	1,1'-Biphenyl	7.063	154	1728162	112.644	ppm		99
66)	2-Chloronaphthalene	7.089	162	1174083	113.966	ppm		99
67)	2-Nitroaniline	7.196	65	329029	117.990	ppm		88
68)	1,4-Naphthoquinone	7.266	158	199535	109.166	ppm		95
69)	m-Dinitrobenzene	7.410	168	224957	124.475	ppm		81
70)	Acenaphthylene	7.495	152	2006256	118.270	ppm		99
71)	Dimethyl phthalate	7.367	163	1257596	112.395	ppm		99
72)	2,6-Dinitrotoluene	7.431	165	300032	119.127	ppm		89
73)	Acenaphthene	7.661	153	1265973	113.789	ppm		99
74)	3-Nitroaniline	7.602	138	415197	122.913	ppm		97
75)	2,4-Dinitrophenol	7.715	184	155739	117.475	ppm		94
76)	Dibenzofuran	7.832	168	1602027	112.004	ppm		100
77)	2,4-Dinitrotoluene	7.832	165	409697	122.661	ppm		82
78)	4-Nitrophenol	7.795	65	222612	129.929	ppm	#	22
79)	Pentachlorobenzene	7.789	250	460646	113.359	ppm		96
80)	1-Napthylamine	7.918	143	1111883	114.772	ppm		98
81)	2-Napthylamine	7.998	143	1211992	114.537	ppm		97
82)	2,3,4,6-Tetrachlorophenol	7.966	232	288450	125.812	ppm		93
83)	Fluorene	8.169	166	1258879	110.646	ppm		97
84)	4-Chlorophenyl-phenyle...	8.163	204	536550	109.352	ppm		93
85)	Diethylphthalate	8.056	149	1308127	116.121	ppm		99
86)	4-Nitroaniline	8.211	138	426018	121.339	ppm		96
87)	5-Nitro-o-toluidine	8.195	152	455500	123.011	ppm		100
89)	Sulfotepp	8.436	322	249390	117.089	ppm		88
90)	Octachlorocyclopentene	8.414	307	195833	122.345	ppm		98
92)	Thionazin	8.137	107	249426	119.616	ppm		94
93)	4,6-Dinitro-2-methylph...	8.238	198	237617	130.281	ppm		97
94)	Diphenylamine	8.291	169	2112233	223.723	ppm		97
95)	1,2 Diphenylhydrazine	8.324	77	1244176	110.735	ppm		98
96)	N-Nitrosodiphenylamine	8.291	169	2112233	223.723	ppm		97
97)	1,3,5-Trinirobenzene	8.596	74	136363	112.589	ppm		83
98)	Diallate	8.564	86	516728	114.939	ppm		96
99)	Phorate	8.575	121	296124	118.747	ppm		95
100)	Phenacetin	8.617	108	774287	123.198	ppm		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP187.D
Acq On : 17 Sep 2018 2:28 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 14:28:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

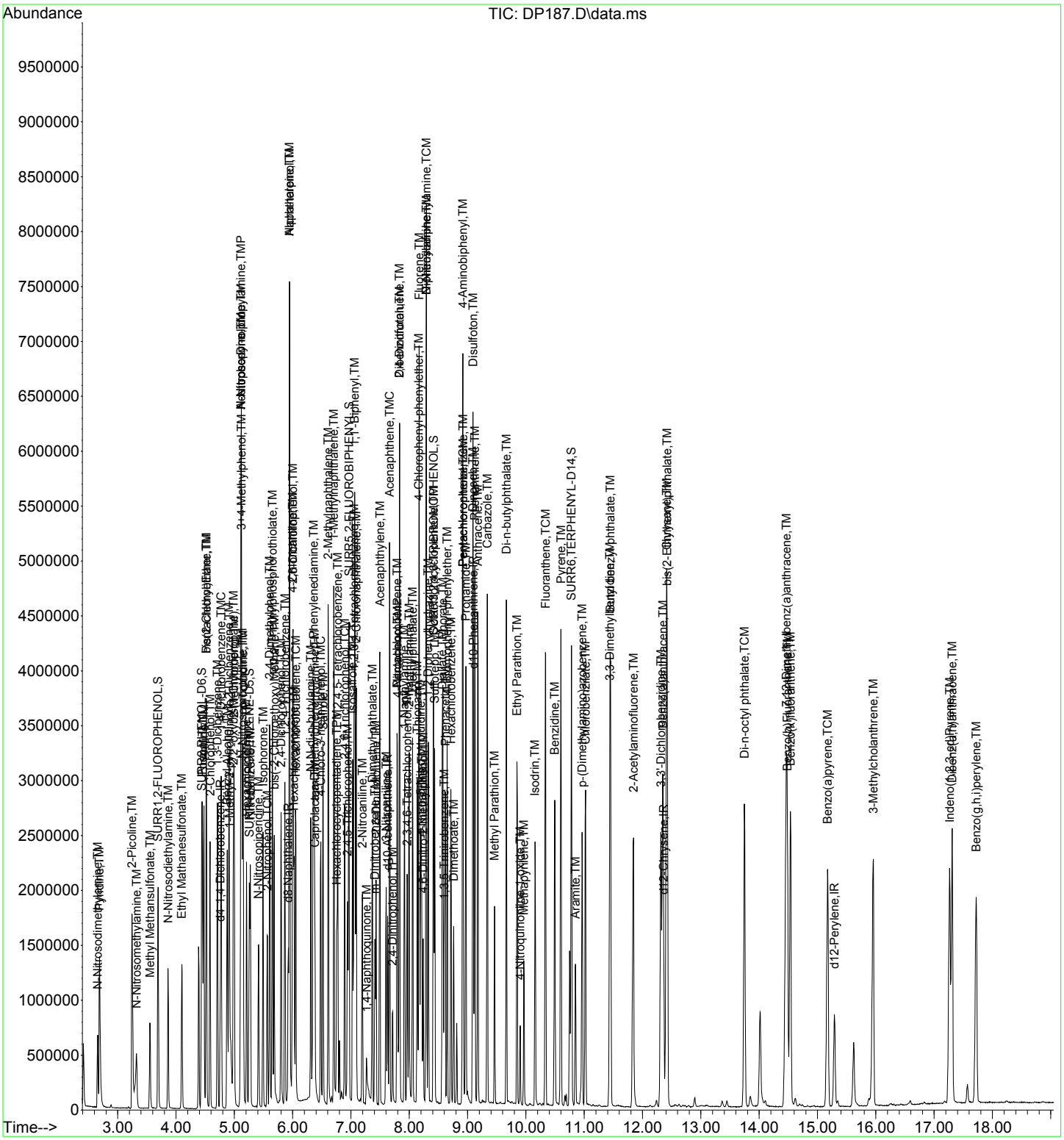
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.649	248	341950	113.075	ppm	96
102) Hexachlorobenzene	8.713	284	400254	113.283	ppm	94
103) Dimethoate	8.762	87	341297	97.077	ppm	98
105) Pentachlorophenol	8.922	266	229126	121.434	ppm	98
106) 4-Aminobiphenyl	8.916	169	1378612	118.057	ppm	99
107) Pentachloronitrobenzene	8.922	237	121425	120.297	ppm	89
108) Pronamide	8.970	173	642075	123.540	ppm	99
109) Dinoseb	9.087	211	309095	129.882	ppm	92
110) Disulfoton	9.093	88	714733	111.594	ppm	94
111) Phenanthrene	9.125	178	1769314	114.875	ppm	99
112) Anthracene	9.173	178	1786275	118.736	ppm	99
113) Carbazole	9.339	167	1957842	119.793	ppm	99
114) Di-n-butylphthalate	9.664	149	2286077	120.597	ppm	98
115) 4-Nitroquinonline-1-oxide	9.899	190	91395	130.496	ppm	97
116) Fluoranthene	10.338	202	1870929	119.898	ppm	99
118) Methyl Parathion	9.461	109	315846	120.118	ppm	96
119) Ethyl Parathion	9.846	97	315524	133.246	ppm	98
120) Methapyrilene	9.964	58	336777	113.886	ppm	95
121) Isodrin	10.156	193	179051	115.681	ppm	92
122) Benzidine	10.492	184	1249145	124.879	ppm	99
123) Pyrene	10.599	202	1948333	122.695	ppm	98
125) Aramite	10.850	185	288955m	123.599	ppm	
126) p-(Dimethylamino)azobe...	10.963	120	573407	123.403	ppm	92
127) Chlorobenzilate	11.021	139	663075	123.201	ppm	98
128) Butyl benzyl phthalate	11.449	149	995939	117.025	ppm	99
129) 3,3-Dimethylbenzidine	11.438	212	1167536	125.210	ppm	96
130) 2-Acetylaminofluorene	11.844	181	930271	131.500	ppm	97
131) 3,3'-Dichlorobenzidine	12.314	252	783439	126.261	ppm	98
132) Benzo(a)anthracene	12.346	228	1723657	117.497	ppm	98
133) Chrysene	12.410	228	1683576	117.205	ppm	99
134) bis(2-Ethylhexyl)phtha...	12.421	149	1397096	120.227	ppm	96
136) Di-n-octyl phthalate	13.746	149	2440029	127.130	ppm	99
137) 7,12-Dimethylbenz(a)an...	14.467	256	983425	122.205	ppm	97
138) Benzo(b)Fluoranthene	14.483	252	1914054	117.072	ppm	96
139) Benzo(k)fluoranthene	14.536	252	1773724	117.050	ppm	96
140) Benzo(a)pyrene	15.172	252	1653371	120.076	ppm	98
141) 3-Methylcholanthrene	15.957	268	1012101	121.333	ppm	98
142) Indeno(1,2,3-cd)Pyrene	17.266	276	1605646	121.493	ppm	100
143) Dibenz(a,h)anthracene	17.309	278	1653654	119.624	ppm	97
144) Benzo(g,h,i)perylene	17.720	276	1434080	113.092	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP187.D
Acq On : 17 Sep 2018 2:28 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 12 Sample Multiplier: 1

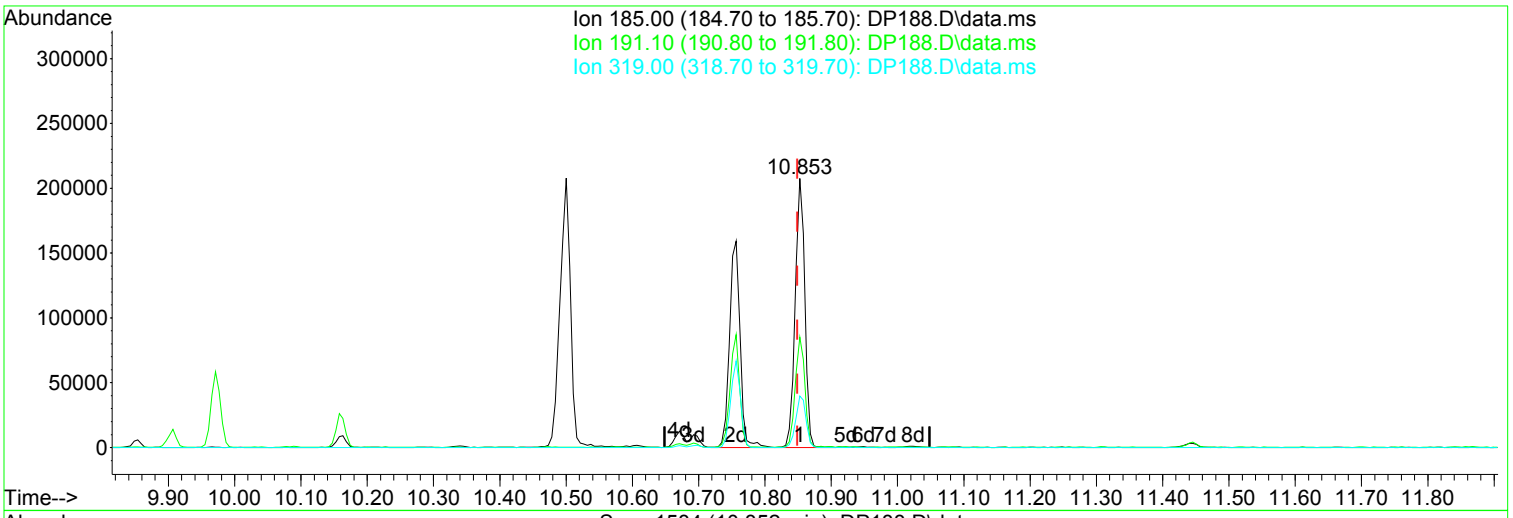
Quant Time: Sep 19 14:28:05 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
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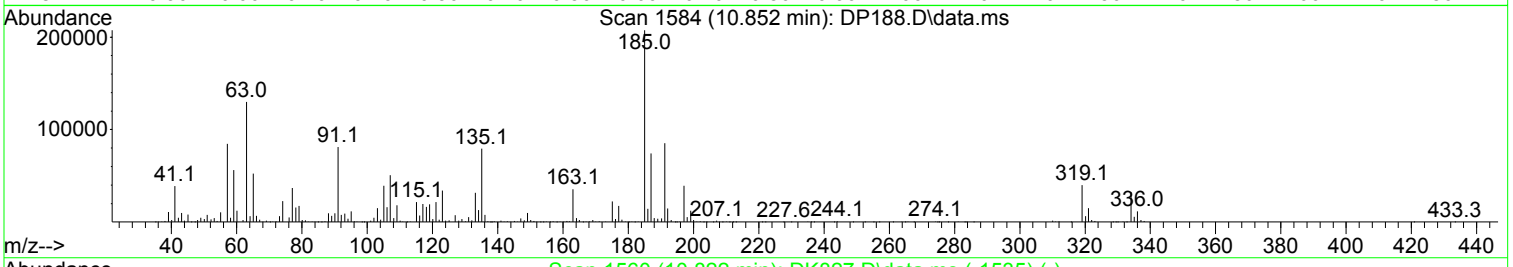


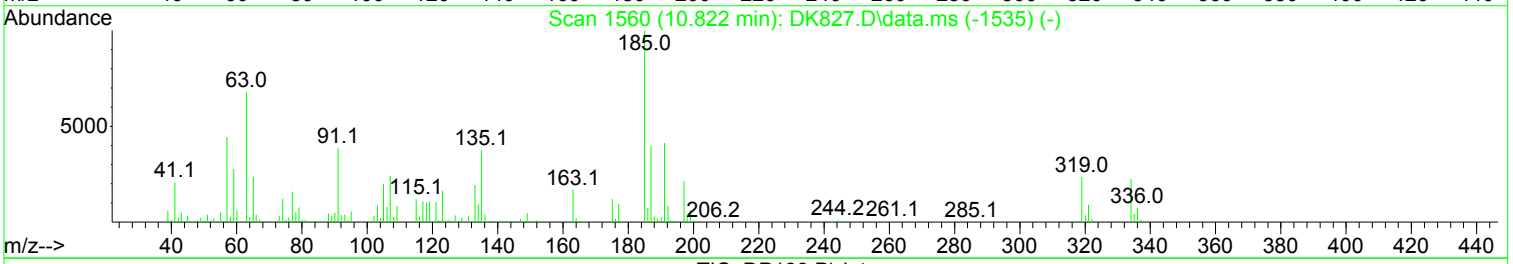
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP188.D\data.ms

(125) Aramite (TM)

10.852min (+ 0.003) 161.35 ppm m

response 387610

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	41.10
319.00	19.60	19.19
0.00	0.00	0.00

Manual Integration:

After

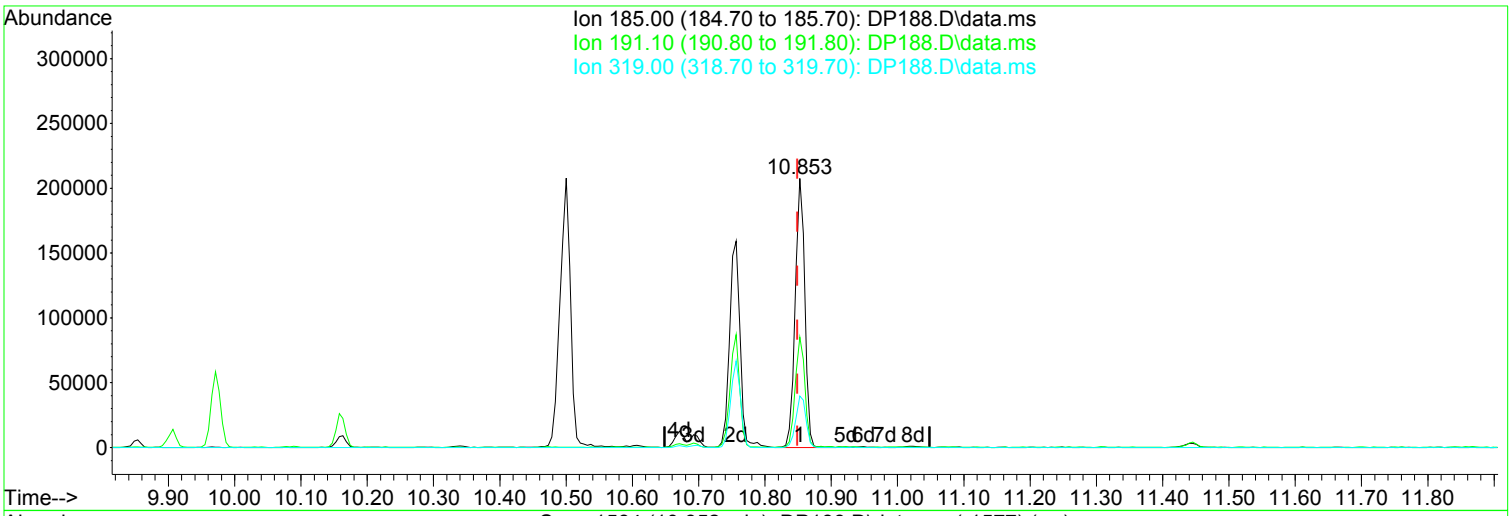
Split Peak.

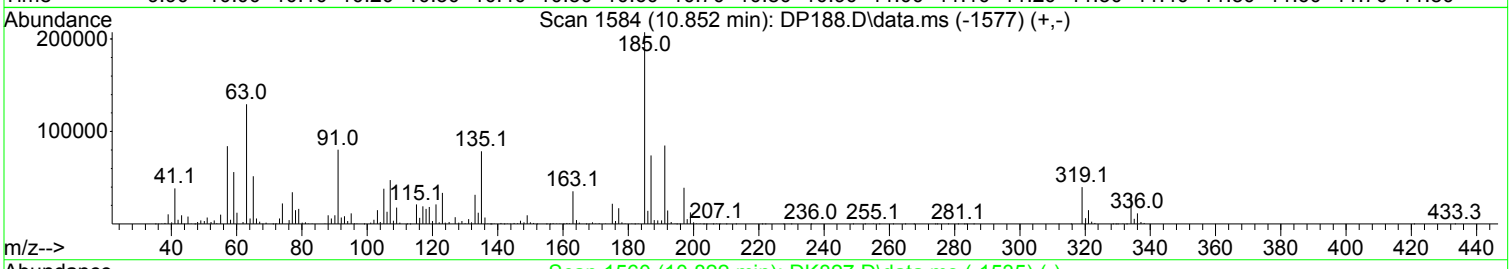
09/20/18

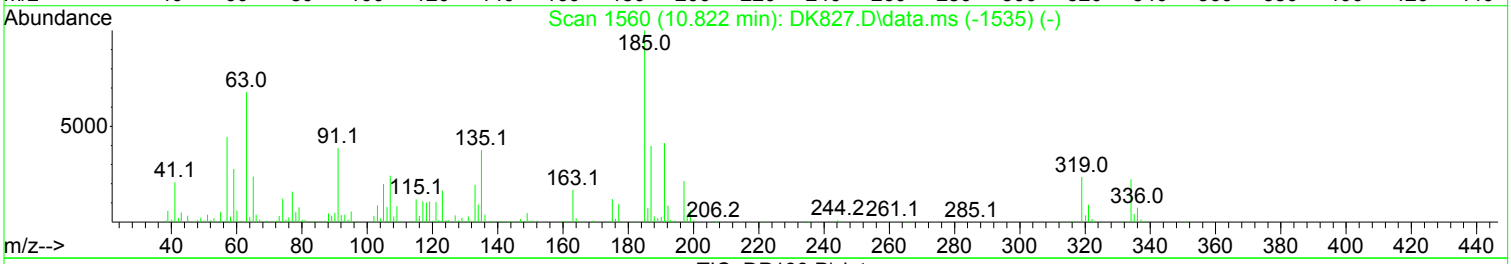
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
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Response via : Initial Calibration







TIC: DP188.D\data.ms

(125) Aramite (TM) **Manual Integration:**

10.852min (+ 0.003) 87.29 ppm **Before**

response 209692

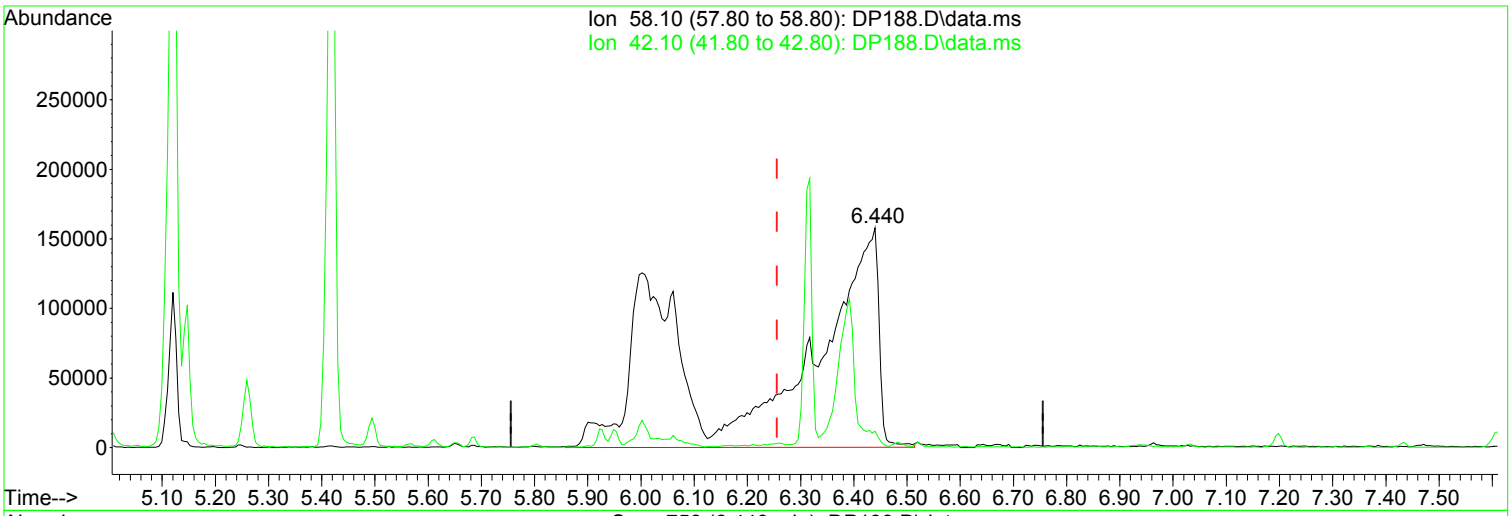
Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	40.94
319.00	19.60	19.20
0.00	0.00	0.00

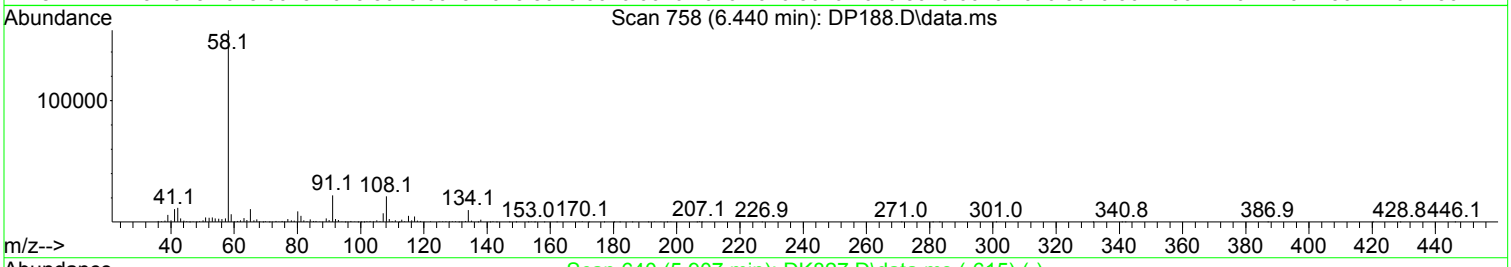
09/20/18

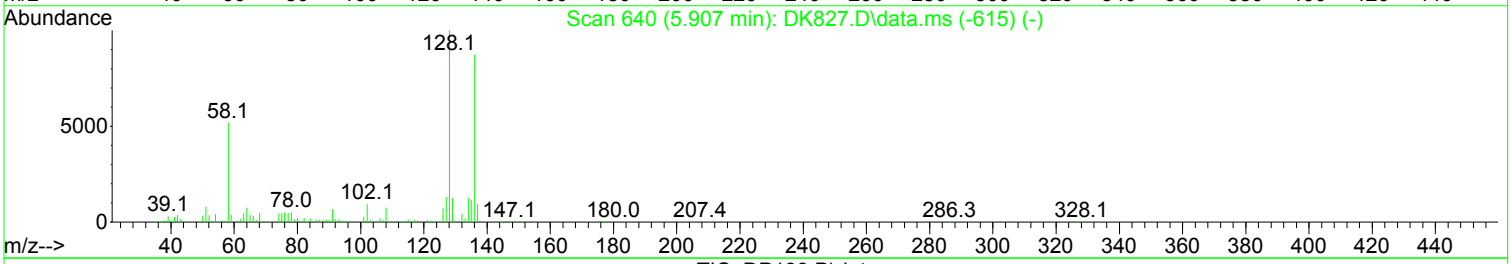
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP188.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.440min (+ 0.184) 83.20 ppm m

response 1983053

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	7.43
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

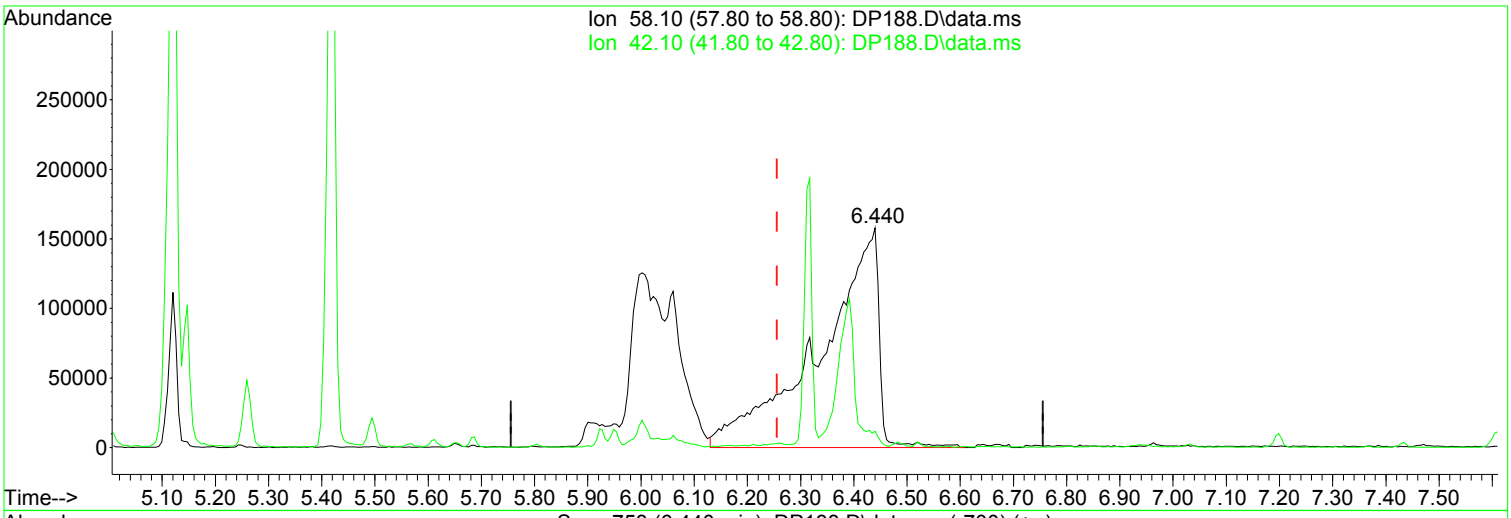
Poor integration.

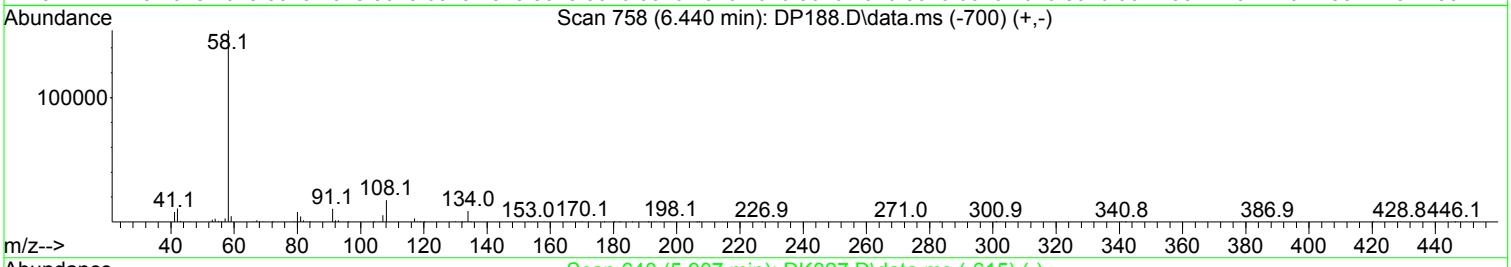
09/20/18

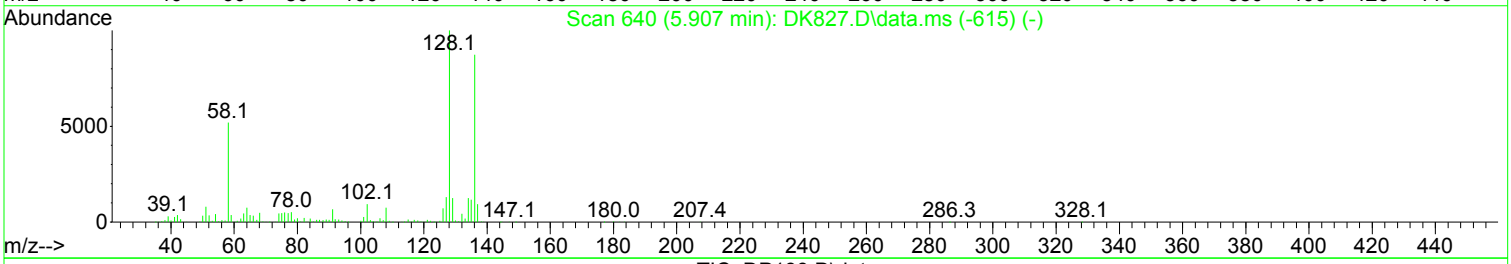
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP188.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.440min (+ 0.184) 50.43 ppm

response 1202102

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	7.01
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

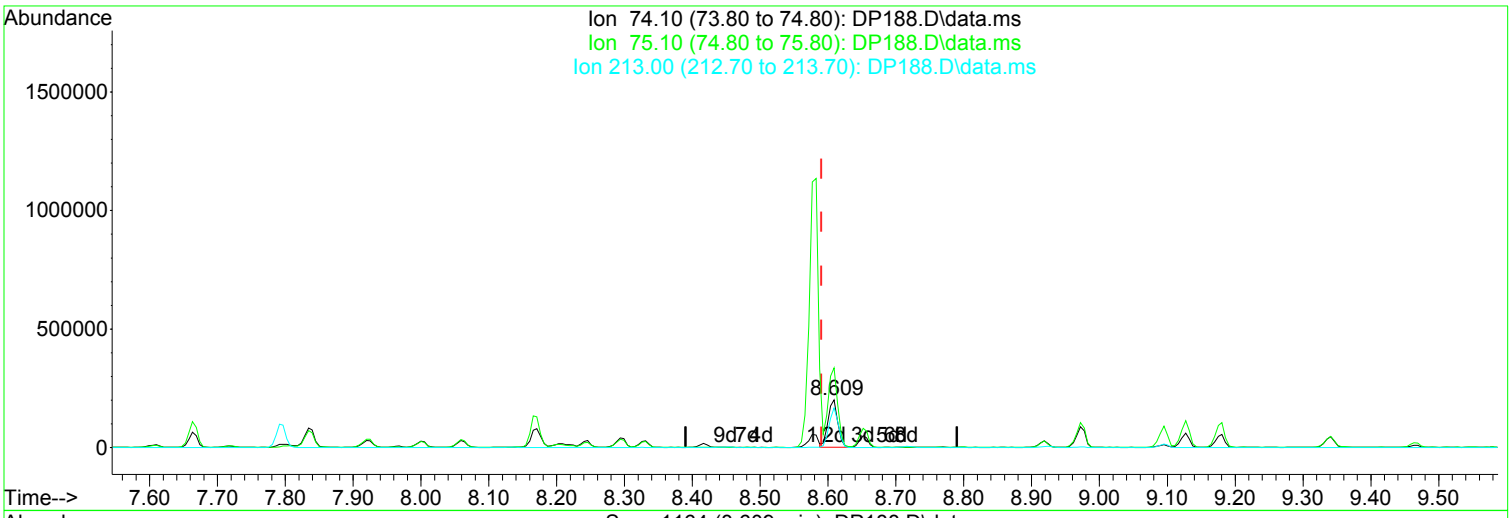
Before

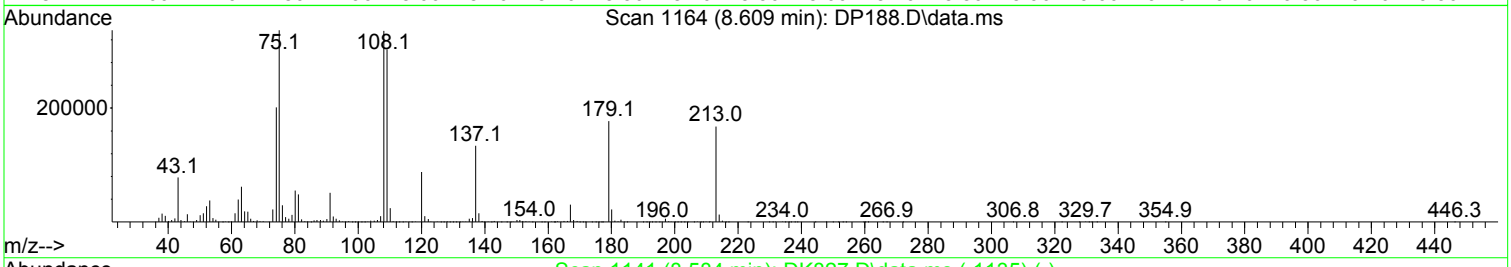
09/20/18

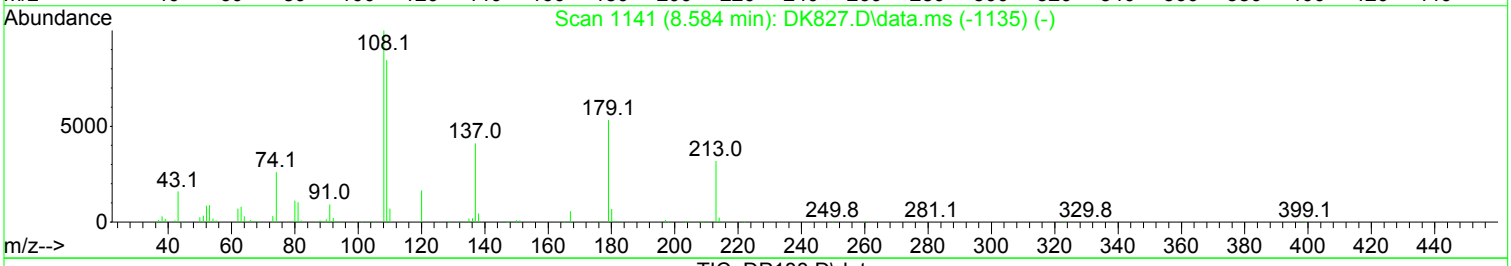
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP188.D\data.ms

(97) 1,3,5-Trinirobenzene (TM)

8.609min (+ 0.019) 160.32 ppm m

response 196637

Ion	Exp%	Act%
74.10	100.00	100.00
75.10	162.90	167.10
213.00	76.00	83.20
0.00	0.00	0.00

Manual Integration:

After

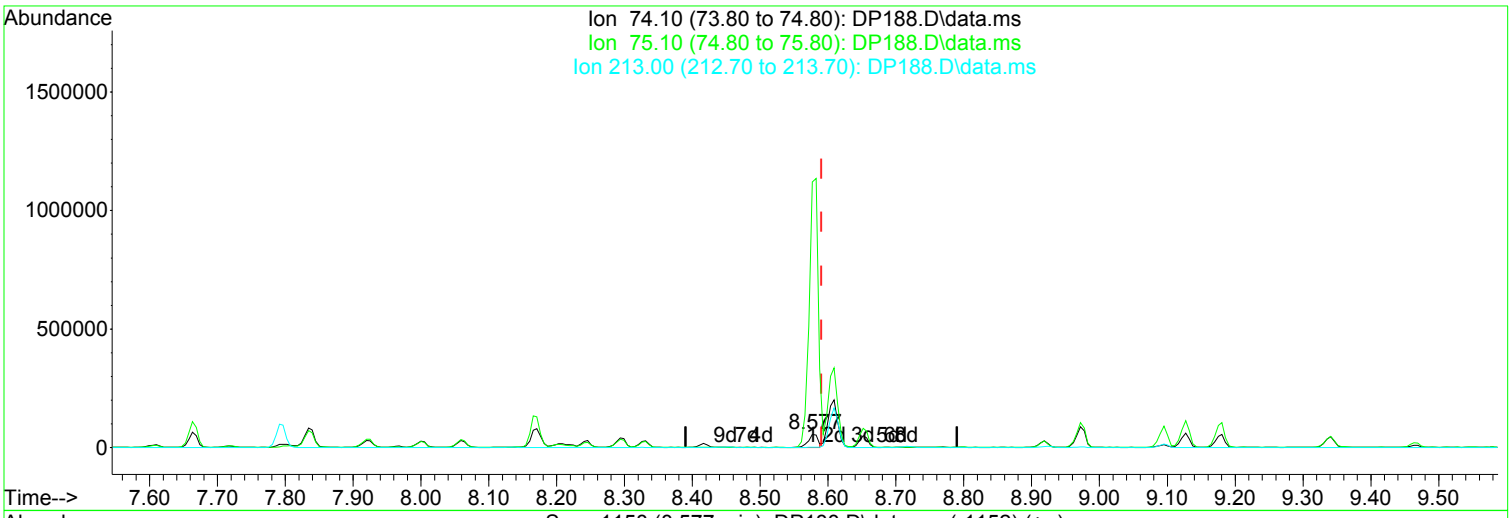
Wrong peak selected.

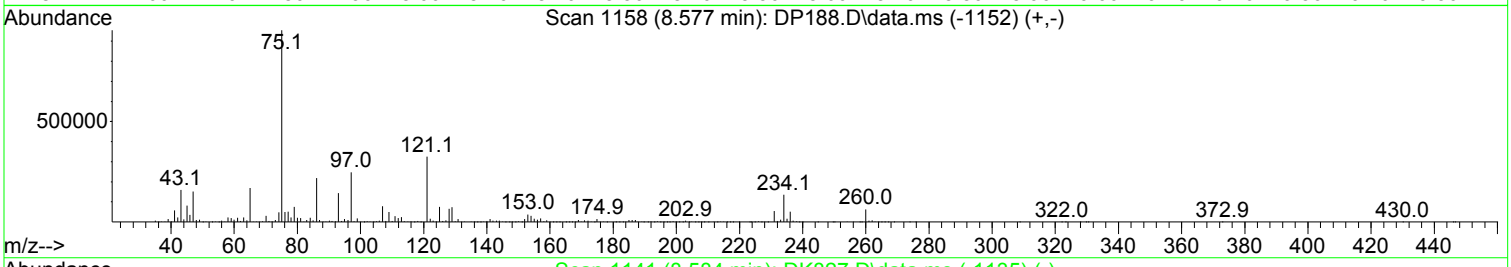
09/20/18

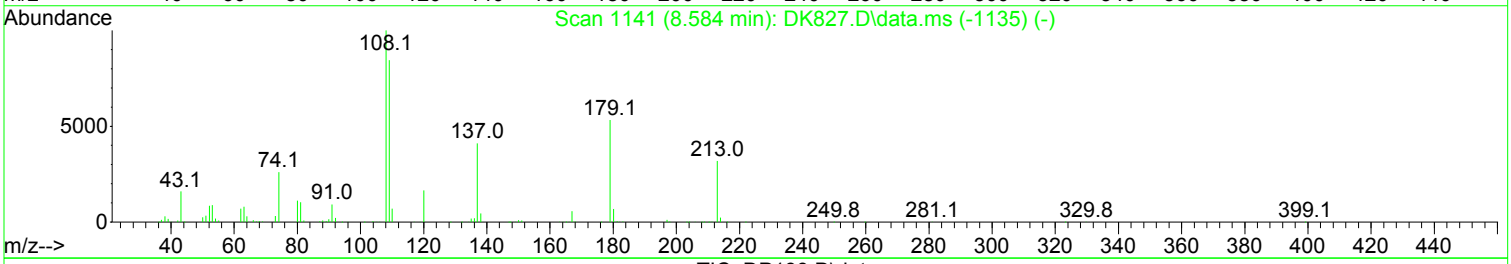
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration







TIC: DP188.D\data.ms

(97) 1,3,5-Trinirobenzene (TM)

8.577min (-0.013) 44.27 ppm

response 54303

Ion	Exp%	Act%
74.10	100.00	100.00
75.10	162.90	2005.11#
213.00	76.00	1.35#
0.00	0.00	0.00

Manual Integration:

Before

09/20/18

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.757	152	185868	40.00	ppm		0.00
33) d8-Naphthalene	5.927	136	699711	40.00	ppm		0.00
57) d10-Acenaphthene	7.631	164	350484	40.00	ppm		0.00
91) d10-Phenanthrene	9.100	188	556741	40.00	ppm		0.00
117) d12-Chrysene	12.370	240	535587	40.00	ppm		0.00
135) d12-Perylene	15.297	264	560064	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.694	112	1022050	158.13	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 79.06%#				
12) SURR2,PHENOL-D6	4.442	99	1261832	161.09	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 80.55%				
34) SURR4,NITROBENZENE-D5	5.259	82	969684	162.41	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 162.41%#				
63) SURR5,2-FLUOROBIPHENYL	6.969	172	1932404	158.14	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 158.14%#				
88) SURR3,2,4,6-TRIBROMOPH...	8.416	330	272619	149.84	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 74.92%				
124) SURR6,TERPHENYL-D14	10.783	244	1885619	152.54	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 152.54%				
Target Compounds							Qvalue
2) Pyridine	2.684	79	1067181	159.141	ppm		99
3) N-Nitrosodimethylamine	2.652	74	572483	170.310	ppm		91
4) 2-Picoline	3.245	93	1117795	160.703	ppm		99
5) N-Nitrosomethylamine	3.320	42	362922	159.214	ppm		92
6) Methyl Methansulfonate	3.555	80	429246	159.029	ppm		99
8) N-Nitrosodiethylamine	3.865	102	499771	159.722	ppm		92
9) Ethyl Mathanesulfonate	4.105	79	736561	159.281	ppm		96
11) Aniline	4.479	93	1656154	159.653	ppm		100
13) Phenol	4.458	94	1328917	158.024	ppm		98
14) bis(2-Clethyl)Ether	4.522	93	939844	155.380	ppm		96
15) Pentachloroethane	4.517	117	347103	158.864	ppm		94
16) 2-Chlorophenol	4.586	128	1052534	158.155	ppm		97
17) 1,3-Diclbenzene	4.709	146	1077494	155.282	ppm		98
18) 1,4-Dichlorobenzene	4.773	146	1079710	155.096	ppm		98
19) 1,2-Diclbenzene	4.907	146	1021044	155.841	ppm		100
20) Benzyl Alcohol	4.880	79	736370	164.400	ppm		97
21) 1-Methyl-2-pyrrolidinone	4.933	99	725581	160.005	ppm		96
22) 2,2'-oxybis(1-Chloropr...	4.987	45	988072	153.764	ppm		88
23) 2-Methylphenol	5.008	108	926144	158.819	ppm		96
24) 3+4-Methylphenol	5.131	108	1051530	170.562	ppm		92
25) Acetophenone	5.115	105	1298416	154.260	ppm		99
26) N-Nitroso-Di-n-propyla...	5.120	70	709387	155.476	ppm		91
27) N-Nitrosopyrrolidine	5.120	100	576953	160.616	ppm	#	43
28) N-Nitrosomorpholine	5.147	56	512224	155.727	ppm		96
29) o-Toluidine	5.152	106	1613967	156.702	ppm		74
30) Hexachloroethane	5.211	117	413374	157.013	ppm		99
31) o,o,o-Triethylphosphor...	5.655	198	466570	157.616	ppm		93
32) Alpha-terpinol	5.948	121	384595	157.095	ppm		99
35) Nitrobenzene	5.281	77	907322	160.416	ppm		91
36) N-Nitrosopiperidine	5.420	42	491459	164.999	ppm		87
37) Isophorone	5.494	82	1452166	160.652	ppm		98
38) 2-Nitrophenol	5.569	139	564170	175.016	ppm		97
39) 2,4-Dimethylphenol	5.612	107	982158	165.089	ppm		93

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
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Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	bis(-2-Chloroethoxy)Me...	5.687	93	1086072	159.508	ppm		99
42)	2,4-Dichlorophenol	5.804	162	799632	167.001	ppm		98
43)	a,a-Dimethylphenethyla...	6.440	58	1983053m	83.196	ppm		
44)	1,2,4-Trichlorobenzene	5.868	180	790420	161.559	ppm		98
45)	Naphthalene	5.948	128	2725560	150.961	ppm		96
46)	4-Chloroaniline	6.002	127	1200862	157.746	ppm		99
47)	2,6-Dichlorophenol	6.013	162	769084	160.428	ppm		97
48)	Hexachlorobutadiene	6.050	225	393772	158.340	ppm		99
49)	Hexachloropropene	6.023	213	430080	163.779	ppm		99
50)	4-Chloro-3-methylphenol	6.488	107	759794	158.121	ppm	#	29
51)	N-N-di-n-butylamine	6.317	84	636970	149.634	ppm		99
52)	Caprolactam	6.392	113	332803	165.074	ppm		85
53)	p-Phenylenediamine	6.365	80	1112270	290.216	ppm		93
54)	Safrole	6.525	162	716015	161.585	ppm		97
55)	2-Methylnaphthalene	6.611	142	1760704	155.627	ppm		95
56)	1-Methylnaphthalene	6.707	142	1747542	156.196	ppm		97
58)	Hexachlorocyclopentadiene	6.755	237	313401	156.259	ppm		97
59)	1,2,4,5-Tetrachloroben...	6.776	216	686564	159.751	ppm		99
60)	1,2,3,4-Tetrachloroben...	7.054	216	729338	158.448	ppm		100
61)	2,4,6-Trichlorophenol	6.894	196	479337	157.783	ppm		99
62)	2,4,5-Trichlorophenol	6.942	196	489400	166.204	ppm		98
64)	Isosafrole	7.033	104	319217	162.052	ppm	#	79
65)	1,1'-Biphenyl	7.070	154	2273666	152.467	ppm		98
66)	2-Chloronaphthalene	7.092	162	1556455	155.432	ppm		98
67)	2-Nitroaniline	7.198	65	444967	164.159	ppm		93
68)	1,4-Naphthoquinone	7.268	158	246573	138.785	ppm		96
69)	m-Dinitrobenzene	7.418	168	309182	176.005	ppm		76
70)	Acenaphthylene	7.498	152	2533759	153.667	ppm		98
71)	Dimethyl phthalate	7.369	163	1709997	157.228	ppm		99
72)	2,6-Dinitrotoluene	7.434	165	415397	169.681	ppm		93
73)	Acenaphthene	7.663	153	1654114	152.957	ppm		99
74)	3-Nitroaniline	7.610	138	562400	171.284	ppm		97
75)	2,4-Dinitrophenol	7.717	184	228017	157.894	ppm		96
76)	Dibenzofuran	7.834	168	2049695	147.429	ppm		89
77)	2,4-Dinitrotoluene	7.840	165	550162	169.458	ppm		93
78)	4-Nitrophenol	7.802	65	256891	154.254	ppm		86
79)	Pentachlorobenzene	7.797	250	588623	149.023	ppm		98
80)	1-Napthylamine	7.920	143	1481911	157.372	ppm		98
81)	2-Napthylamine	8.000	143	1623264	157.821	ppm		96
82)	2,3,4,6-Tetrachlorophenol	7.968	232	380556	170.764	ppm		94
83)	Fluorene	8.176	166	1684569	152.324	ppm		94
84)	4-Chlorophenyl-phenyle...	8.171	204	705035	147.827	ppm		97
85)	Diethylphthalate	8.059	149	1743478	159.222	ppm		98
86)	4-Nitroaniline	8.219	138	572661	167.803	ppm		97
87)	5-Nitro-o-toluidine	8.203	152	619643	172.156	ppm		99
89)	Sulfotepp	8.443	322	318787	153.981	ppm		99
90)	Octachlorocyclopentene	8.416	307	245569	157.834	ppm		99
92)	Thionazin	8.144	107	332286	157.355	ppm		98
93)	4,6-Dinitro-2-methylph...	8.246	198	326942	177.009	ppm		98
94)	Diphenylamine	8.299	169	2786948	291.488	ppm		97
95)	1,2 Diphenylhydrazine	8.331	77	1663459	146.197	ppm		93
96)	N-Nitrosodiphenylamine	8.299	169	2786948	291.488	ppm		97
97)	1,3,5-Trinirobenzene	8.609	74	196637m	160.319	ppm		
98)	Diallate	8.566	86	710576	156.077	ppm		96
99)	Phorate	8.582	121	396600	157.045	ppm		84
100)	Phenacetin	8.625	108	1026158	161.227	ppm		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
Response via : Initial Calibration

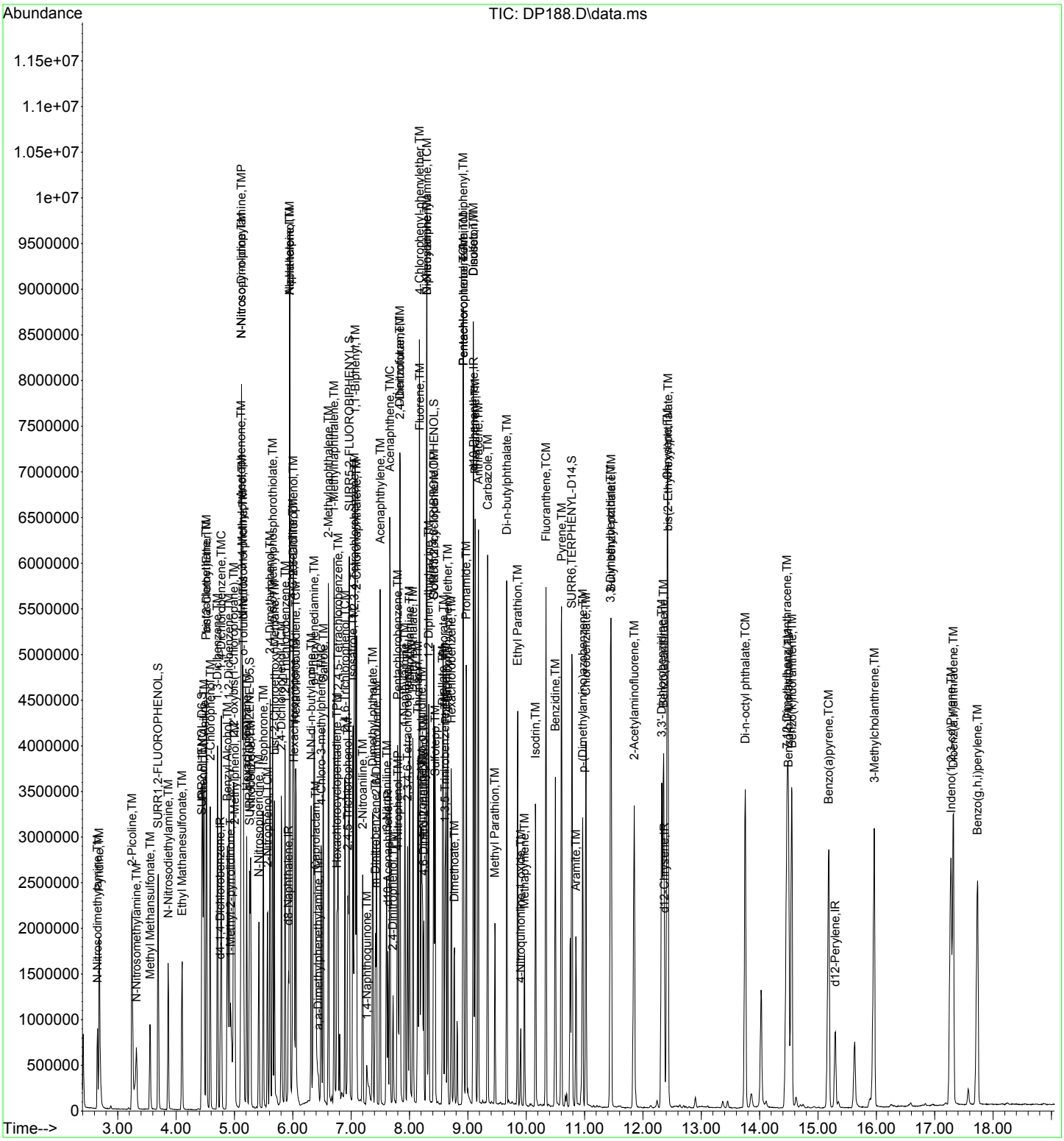
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.657	248	459043	149.892	ppm	95
102) Hexachlorobenzene	8.716	284	535893	149.772	ppm	90
103) Dimethoate	8.769	87	399415	112.184	ppm	98
105) Pentachlorophenol	8.924	266	319324	167.116	ppm	97
106) 4-Aminobiphenyl	8.919	169	1809036	152.975	ppm	98
107) Pentachloronitrobenzene	8.924	237	158290	154.854	ppm	87
108) Pronamide	8.972	173	861481	163.678	ppm	99
109) Dinoseb	9.095	211	416919	172.995	ppm	89
110) Disulfoton	9.095	88	942892	145.373	ppm	90
111) Phenanthrene	9.127	178	2367886	151.811	ppm	97
112) Anthracene	9.180	178	2360321	154.927	ppm	96
113) Carbazole	9.341	167	2595265	156.804	ppm	98
114) Di-n-butylphthalate	9.667	149	2962894	154.342	ppm	97
115) 4-Nitroquinonline-1-oxide	9.907	190	117414	165.546	ppm	98
116) Fluoranthene	10.340	202	2471247	156.384	ppm	97
118) Methyl Parathion	9.464	109	366609	135.684	ppm	97
119) Ethyl Parathion	9.854	97	415041	170.571	ppm	97
120) Methapyrilene	9.971	58	450734	148.334	ppm	97
121) Isodrin	10.158	193	244359	153.640	ppm	93
122) Benzidine	10.500	184	1580983	153.814	ppm	99
123) Pyrene	10.607	202	2582903	158.294	ppm	97
125) Aramite	10.852	185	387610m	161.351	ppm	
126) p-(Dimethylamino)azobe...	10.970	120	766904	160.619	ppm	93
127) Chlorobenzilate	11.023	139	922109	166.735	ppm	97
128) Butyl benzyl phthalate	11.456	149	1375425	157.281	ppm	99
129) 3,3-Dimethylbenzidine	11.445	212	1534775	160.179	ppm	97
130) 2-Acetylaminofluorene	11.851	181	1274903	175.383	ppm	97
131) 3,3'-Dichlorobenzidine	12.322	252	1044399	163.804	ppm	99
132) Benzo(a)anthracene	12.354	228	2331962	154.701	ppm	99
133) Chrysene	12.418	228	2211649	149.838	ppm	99
134) bis(2-Ethylhexyl)phtha...	12.428	149	1877533	157.237	ppm	97
136) Di-n-octyl phthalate	13.753	149	3289331	167.466	ppm	99
137) 7,12-Dimethylbenz(a)an...	14.469	256	1317177	159.940	ppm	96
138) Benzo(b)Fluoranthene	14.496	252	2568943	153.539	ppm	95
139) Benzo(k)fluoranthene	14.555	252	2340750	150.940	ppm	97
140) Benzo(a)pyrene	15.185	252	2263393	160.624	ppm	98
141) 3-Methylcholanthrene	15.965	268	1373704	160.922	ppm	97
142) Indeno(1,2,3-cd)Pyrene	17.279	276	2238208	165.488	ppm	98
143) Dibenz(a,h)anthracene	17.322	278	2241866	158.470	ppm	97
144) Benzo(g,h,i)perylene	17.733	276	1980443	152.611	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP188.D
Acq On : 17 Sep 2018 3:10 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
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ALS Vial : 13 Sample Multiplier: 1

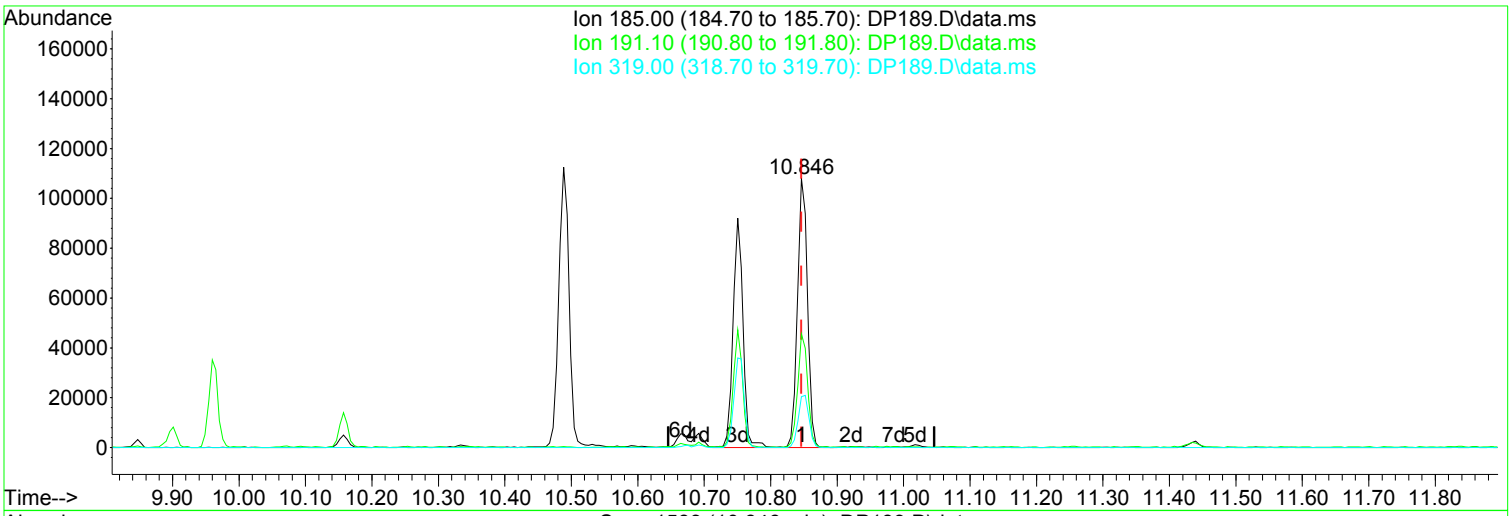
Quant Time: Sep 19 14:28:12 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:02:22 2018
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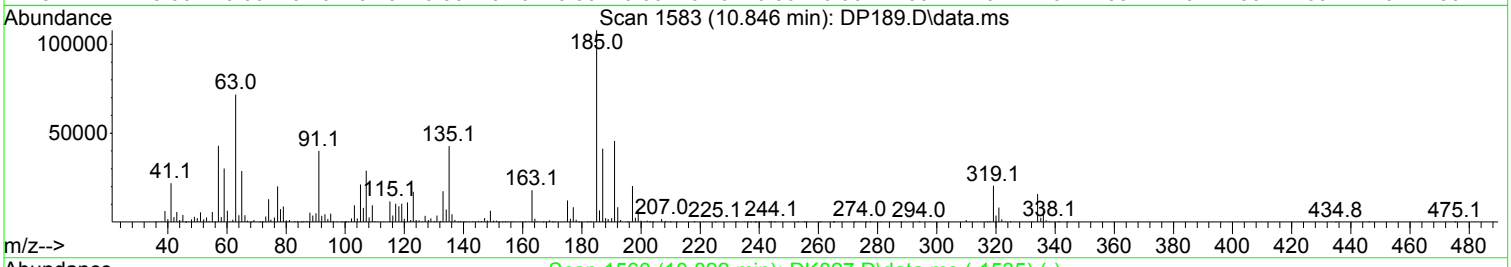


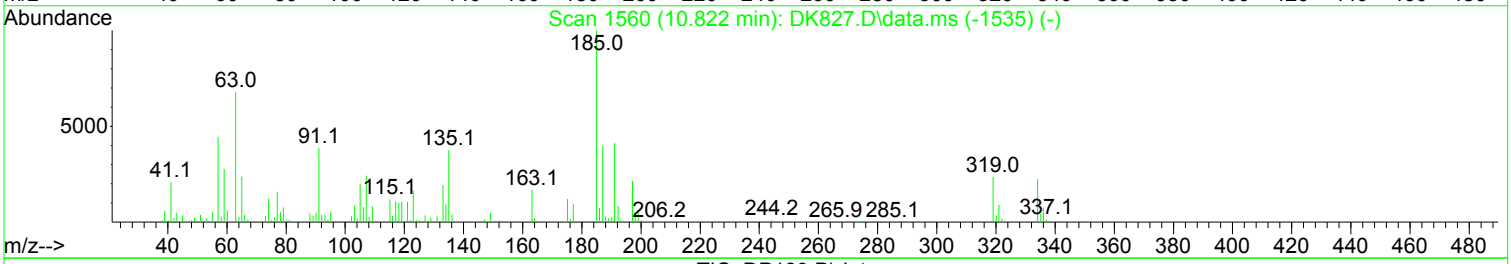
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP189.D
Acq On : 17 Sep 2018 3:43 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 20 07:01:49 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration







TIC: DP189.D\data.ms

(125) Aramite (TM)

10.846min (+ 0.000) 83.44 ppm m

response 207558

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	42.23
319.00	19.60	18.92
0.00	0.00	0.00

Manual Integration:

After

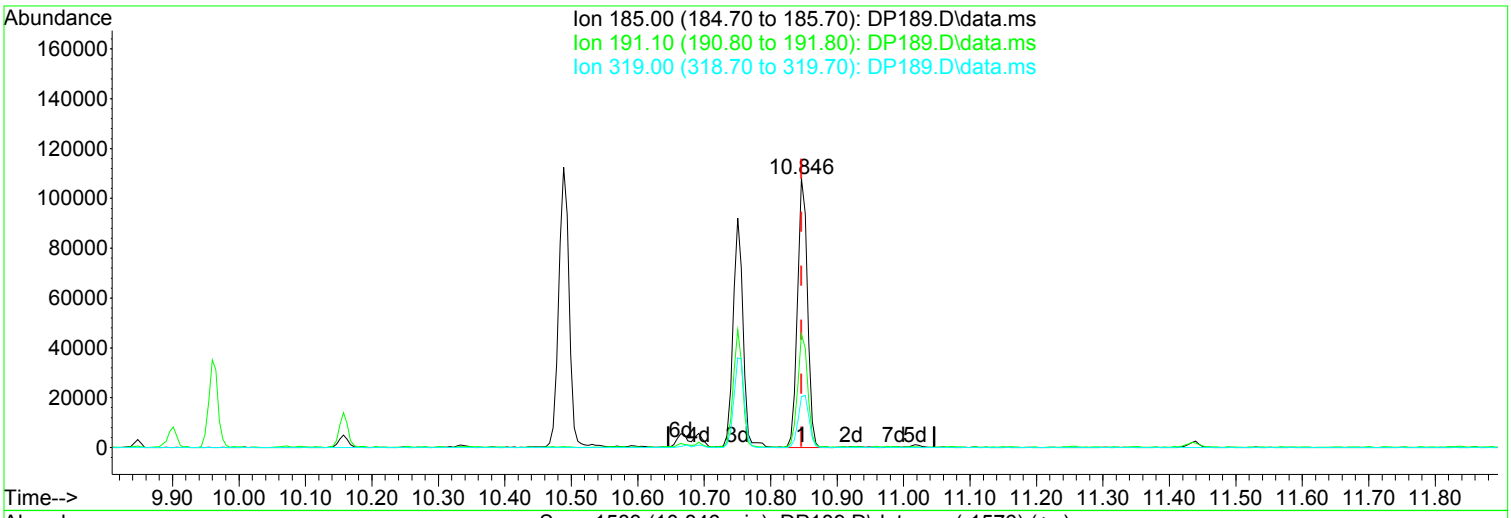
Split Peak.

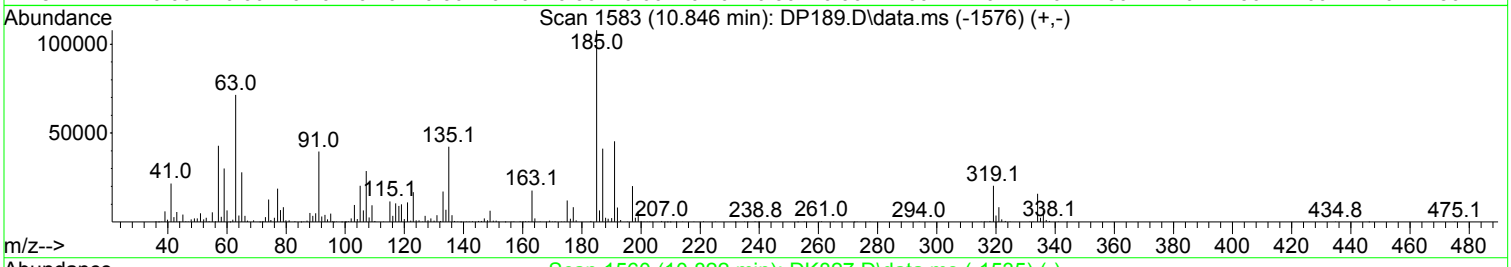
09/20/18

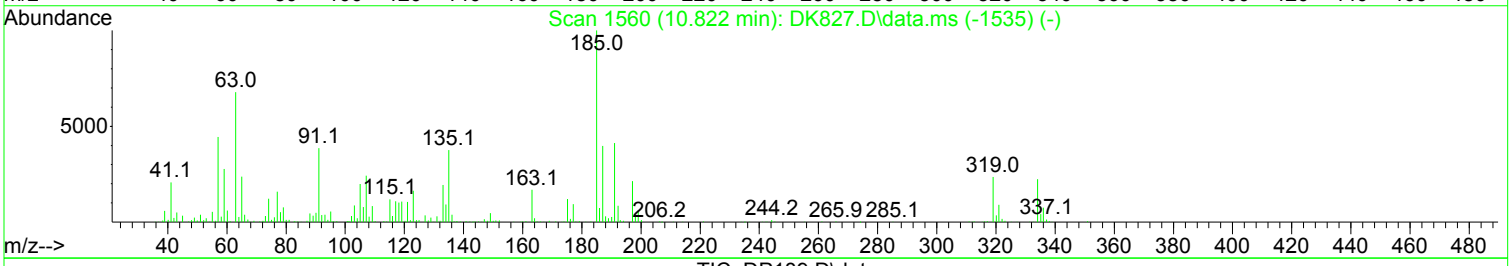
Quantitation Report (Qedit)

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Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration







TIC: DP189.D\data.ms

(125) Aramite (TM)

10.846min (+ 0.000) 44.74 ppm

response 111286

Ion	Exp%	Act%
185.00	100.00	100.00
191.10	41.00	42.12
319.00	19.60	18.94
0.00	0.00	0.00

Manual Integration:

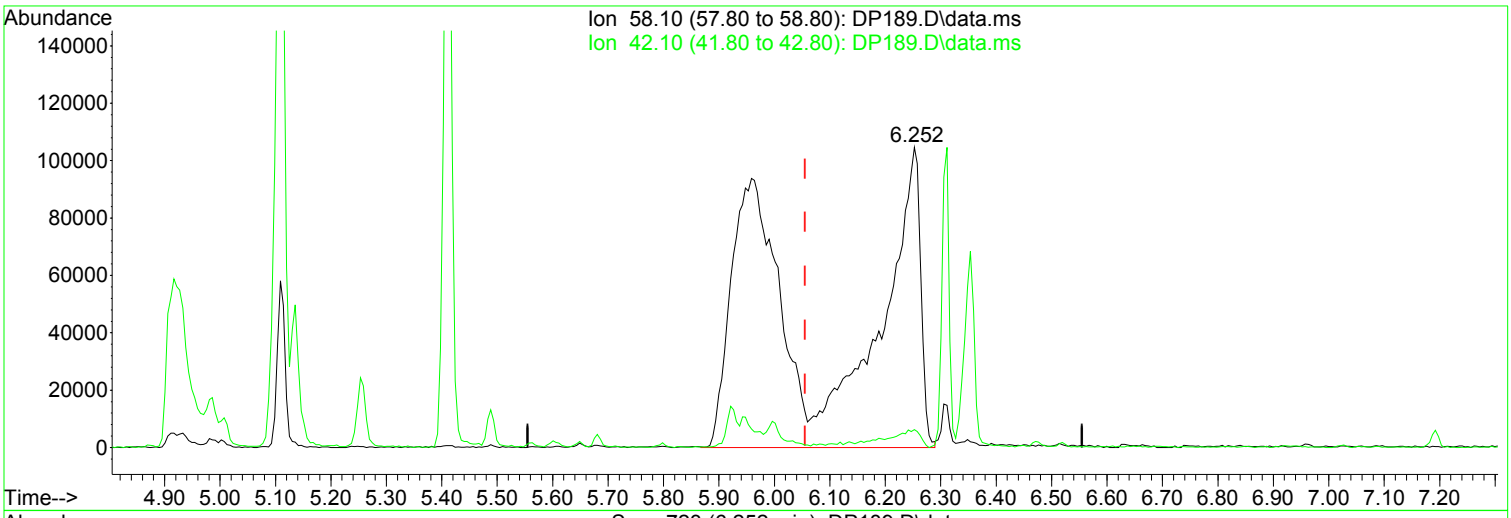
Before

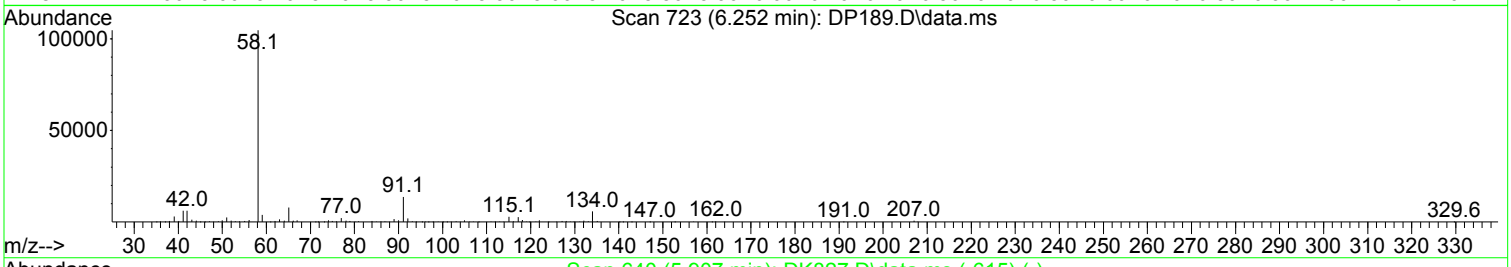
09/20/18

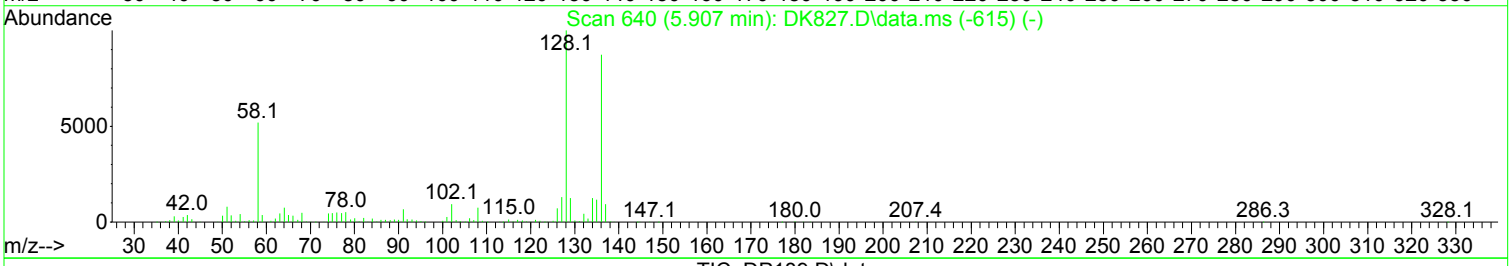
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP189.D
Acq On : 17 Sep 2018 3:43 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 20 07:01:49 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration







TIC: DP189.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

6.252min (+ 0.197) 42.93 ppm m

response 1067956

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	5.99
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

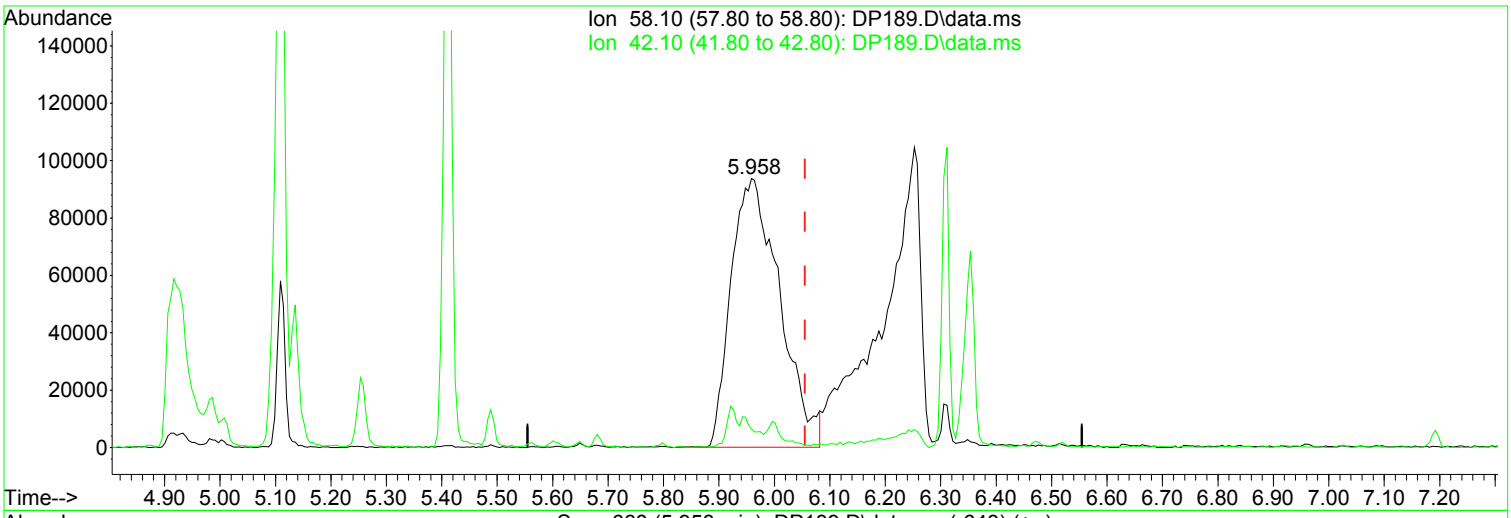
Poor integration.

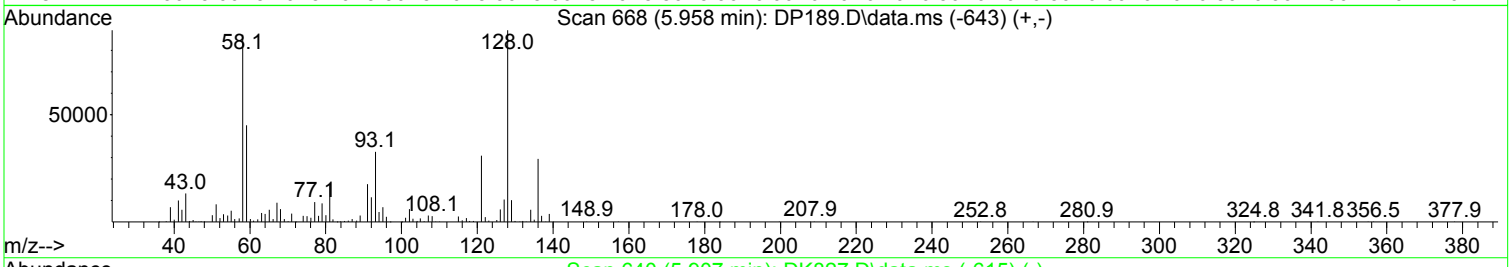
09/20/18

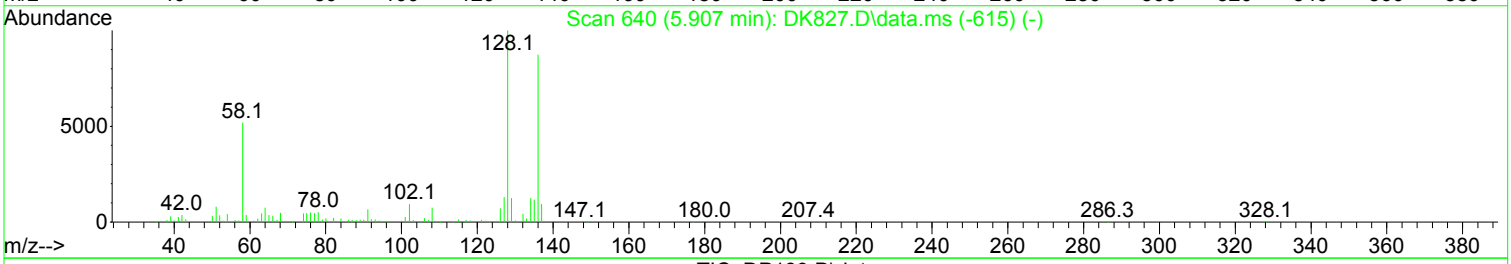
Quantitation Report (Qedit)

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Acq On : 17 Sep 2018 3:43 pm
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TIC: DP189.D\data.ms

(43) a,a-Dimethylphenethylamine (TM)

5.958min (-0.097) 22.90 ppm

response 569697

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	33.20	6.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/20/18

1st DM 09/20/18
2nd BA 09/20/18

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Data File : DP189.D
Acq On : 17 Sep 2018 3:43 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 20 07:01:49 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	104	0.00
2	TM	Pyridine	80.000	78.697	1.6	103	-0.01
3	TM	N-Nitrosodimethylamine	80.000	94.423	-18.0	116	0.00
4	TM	2-Picoline	80.000	78.845	1.4	105	0.00
5	TM	N-Nitrosomethylamine	80.000	80.258	-0.3	108	0.00
6	TM	Methyl Methansulfonate	80.000	70.767	11.5	94	0.00
7	S	SURR1,2-FLUOROPHENOL	80.000	82.095	-2.6	109	0.00
8	TM	N-Nitrosodiethylamine	80.000	81.220	-1.5	105	0.00
9	TM	Ethyl Mathanesulfonate	80.000	82.504	-3.1	108	0.00
10	TM	Benzaldehyde	-1.000	0.000	0.0	0	0.00
11	TM	Aniline	80.000	79.535	0.6	104	0.00
12	S	SURR2,PHENOL-D6	80.000	84.547	-5.7	111	0.00
13	TMC	Phenol	80.000	84.724	-5.9	110	0.00
14	TM	bis(2-Clethyl)Ether	80.000	79.624	0.5	107	0.00
15	TM	Pentachloroethane	80.000	88.092	-10.1	116	0.00
16	TM	2-Chlorophenol	80.000	84.533	-5.7	110	0.00
17	TM	1,3-Diclbenzene	80.000	84.765	-6.0	112	0.00
18	TMC	1,4-Dichlorobenzene	80.000	84.919	-6.1	113	0.00
19	TM	1,2-Diclbenzene	80.000	86.566	-8.2	114	0.00
20	TM	Benzyl Alcohol	80.000	89.092	-11.4	112	0.00
21	T	1-Methyl-2-pyrrolidinone	80.000	80.332	-0.4	104	0.02
22	TM	2,2'-oxybis(1-Chloropropane	80.000	64.289	19.6	86	0.00
23	TM	2-Methylphenol	80.000	84.102	-5.1	110	0.00
24	TM	3+4-Methylphenol	80.000	87.518	-9.4	114	0.00
25	TM	Acetophenone	80.000	82.908	-3.6	110	0.00
26	TMP	N-Nitroso-Di-n-propylamine	80.000	79.138	1.1	103	0.00
27	TM	N-Nitrosopyrrolidine	80.000	81.306	-1.6	106	0.00
28	TM	N-Nitrosomorpholine	80.000	79.475	0.7	104	0.00
29	TM	o-Toluidine	80.000	82.630	-3.3	111	0.00
30	TM	Hexachloroethane	80.000	84.976	-6.2	112	0.00
31	TM	o,o,o-Triethylphosphorothio	80.000	77.426	3.2	103	0.00
32	TM	Alpha-terpinol	80.000	76.325	4.6	100	0.00
33	IR	d8-Naphthalene	40.000	40.000	0.0	106	0.00
34	S	SURR4,NITROBENZENE-D5	80.000	83.290	-4.1	111	0.00
35	TM	Nitrobenzene	80.000	88.096	-10.1	117	0.00
36	TM	N-Nitrosopiperidine	80.000	77.841	2.7	103	0.00
37	TM	Isophorone	80.000	97.862	-22.3#	131	0.00
38	TCM	2-Nitrophenol	80.000	88.148	-10.2	111	0.00
39	TM	2,4-Dimethylphenol	80.000	83.883	-4.9	109	0.00
40	TM	bis(-2-Chloroethoxy)Methane	80.000	80.227	-0.3	108	0.00
41	TM	Benzoic Acid	-1.000	0.000	0.0	0	0.02
42	TCM	2,4-Dichlorophenol	80.000	85.440	-6.8	110	0.00
43	TM	a,a-Dimethylphenethylamine	40.000	42.934	-7.3	111	0.20
44	TM	1,2,4-Trichlorobenzene	80.000	86.077	-7.6	115	0.00
45	TM	Naphthalene	80.000	82.809	-3.5	112	0.00
46	TM	4-Chloroaniline	80.000	79.807	0.2	105	0.00
47	TM	2,6-Dichlorophenol	80.000	88.618	-10.8	115	0.00
48	TCM	Hexachlorobutadiene	80.000	83.068	-3.8	111	0.00
49	TM	Hexachloropropene	80.000	92.301	-15.4	120	0.00
50	TMC	4-Chloro-3-methylphenol	80.000	85.857	-7.3	115	0.00
51	TM	N-N-di-n-butylamine	80.000	71.758	10.3	105	0.00

1st DM 09/20/18
2nd BA 09/20/18

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Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

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Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	Caprolactam	80.000	77.482	3.1	101	0.02
53	TM	p-Phenylenediamine	280.000	22.278	92.0#	15	0.01
54	TM	Safrole	80.000	76.779	4.0	99	0.00
55	TM	2-Methylnaphthalene	80.000	86.130	-7.7	115	0.00
56	TM	1-Methylnaphthalene	80.000	80.659	-0.8	107	0.00
57	IR	d10-Acenaphthene	40.000	40.000	0.0	106	0.00
58	TPM	Hexachlorocyclopentadiene	80.000	93.219	-16.5	123	0.00
59	TM	1,2,4,5-Tetrachlorobenzene	80.000	89.708	-12.1	120	0.00
60	TM	1,2,3,4-Tetrachlorobenzene	80.000	80.431	-0.5	109	0.00
61	TCM	2,4,6-Trichlorophenol	80.000	82.522	-3.2	108	0.00
62	TM	2,4,5-Trichlorophenol	80.000	86.387	-8.0	117	0.00
63	S	SURR5,2-FLUOROBIPHENYL	80.000	81.180	-1.5	108	0.00
64	TM	Isosafrole	80.000	77.840	2.7	104	0.00
65	TM	1,1'-Biphenyl	80.000	77.231	3.5	105	0.00
66	TM	2-Chloronaphthalene	80.000	83.805	-4.8	113	0.00
67	TM	2-Nitroaniline	80.000	79.036	1.2	105	0.00
68	TM	1,4-Naphthoquinone	80.000	142.741	-78.4#	184	0.00
69	TM	m-Dinitrobenzene	80.000	95.399	-19.2	124	0.00
70	TM	Acenaphthylene	80.000	84.233	-5.3	112	0.00
71	TM	Dimethyl phthalate	80.000	84.318	-5.4	118	0.00
72	TM	2,6-Dinitrotoluene	80.000	91.278	-14.1	119	0.00
73	TMC	Acenaphthene	80.000	88.499	-10.6	120	0.00
74	TM	3-Nitroaniline	80.000	81.096	-1.4	105	0.00
75	TPM	2,4-Dinitrophenol	80.000	77.402	3.2	99	0.00
76	TM	Dibenzofuran	80.000	83.696	-4.6	111	0.00
77	TM	2,4-Dinitrotoluene	80.000	92.969	-16.2	119	0.00
78	TMP	4-Nitrophenol	80.000	92.328	-15.4	111	0.00
79	TM	Pentachlorobenzene	80.000	85.522	-6.9	116	0.00
80	TM	1-Napthylamine	80.000	64.007	20.0	89	0.00
81	TM	2-Napthylamine	80.000	80.269	-0.3	109	0.00
82	TM	2,3,4,6-Tetrachlorophenol	80.000	81.013	-1.3	104	0.00
83	TM	Fluorene	80.000	83.740	-4.7	113	0.00
84	TM	4-Chlorophenyl-phenylether	80.000	78.139	2.3	104	0.00
85	TM	Diethylphthalate	80.000	88.718	-10.9	121	0.00
86	TM	4-Nitroaniline	80.000	78.848	1.4	103	0.00
87	TM	5-Nitro-o-toluidine	80.000	84.859	-6.1	108	0.00
88	S	SURR3,2,4,6-TRIBROMOPHENOL	80.000	80.115	-0.1	106	0.00
89	TM	Sulfotepp	80.000	83.005	-3.8	110	0.00
90	TM	Octachlorocyclopentene	80.000	87.843	-9.8	109	0.00
91	IR	d10-Phenanthrene	40.000	40.000	0.0	106	0.00
92	TM	Thionazin	80.000	81.573	-2.0	108	0.00
93	TM	4,6-Dinitro-2-methylphenol	80.000	87.456	-9.3	109	0.00
94	TM	Diphenylamine	160.000	154.810	3.2	106	0.00
95	TM	1,2 Diphenylhydrazine	80.000	76.345	4.6	105	0.00
96	TCM	N-Nitrosodiphenylamine	160.000	154.810	3.2	106	0.00
97	TM	1,3,5-Trinirobenzene	80.000	100.555	-25.7#	115	0.01
98	TM	Diallate	80.000	78.573	1.8	108	0.00
99	TM	Phorate	80.000	78.892	1.4	107	0.00
100	TM	Phenacetin	80.000	85.044	-6.3	109	0.01
101	TM	4-Bromophenyl-phenylether	80.000	75.797	5.3	105	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP189.D
Acq On : 17 Sep 2018 3:43 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 20 07:01:49 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
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Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	Hexachlorobenzene	80.000	82.791	-3.5	113	0.00
103	TM	Dimethoate	80.000	71.903	10.1	102	0.00
104	TM	Atrazine	-1.000	0.000	0.0	0	0.00
105	TCM	Pentachlorophenol	80.000	77.815	2.7	98	0.00
106	TM	4-Aminobiphenyl	80.000	85.936	-7.4	111	0.00
107	TM	Pentachloronitrobenzene	80.000	93.957	-17.4	114	0.00
108	TM	Pronamide	80.000	81.921	-2.4	103	0.00
109	TM	Dinoseb	80.000	88.259	-10.3	110	0.00
110	TM	Disulfoton	80.000	77.929	2.6	109	0.00
111	TM	Phenanthrene	80.000	86.629	-8.3	116	0.00
112	TM	Anthracene	80.000	88.980	-11.2	116	0.00
113	TM	Carbazole	80.000	82.612	-3.3	108	0.00
114	TM	Di-n-butylphthalate	80.000	92.420	-15.5	117	0.00
115	TM	4-Nitroquinonline-1-oxide	80.000	96.956	-21.2#	125	0.00
116	TCM	Fluoranthene	80.000	89.298	-11.6	116	0.00
117	IR	d12-Chrysene	40.000	40.000	0.0	108	0.00
118	TM	Methyl Parathion	80.000	83.907	-4.9	103	0.00
119	TM	Ethyl Parathion	80.000	84.604	-5.8	106	0.00
120	TM	Methapyrilene	80.000	85.677	-7.1	119	0.00
121	TM	Isodrin	80.000	80.236	-0.3	111	0.00
122	TM	Benzidine	80.000	82.587	-3.2	109	0.00
123	TM	Pyrene	80.000	87.838	-9.8	114	0.00
124	S	SURR6,TERPHENYL-D14	80.000	82.544	-3.2	108	0.00
125	TM	Aramite	80.000	83.439	-4.3	106	0.00
126	TM	p-(Dimethylamino)azobenzene	80.000	92.779	-16.0	117	0.00
127	TM	Chlorobenzilate	80.000	83.974	-5.0	107	0.00
128	TM	Butyl benzyl phthalate	80.000	91.701	-14.6	125	0.00
129	TM	3,3-Dimethylbenzidine	80.000	82.503	-3.1	106	0.00
130	TM	2-Acetylaminofluorene	80.000	82.814	-3.5	104	0.00
131	TM	3,3'-Dichlorobenzidine	80.000	83.108	-3.9	106	0.00
132	TM	Benzo(a)anthracene	80.000	87.854	-9.8	119	0.00
133	TM	Chrysene	80.000	83.660	-4.6	114	0.00
134	TM	bis(2-Ethylhexyl)phthalate	80.000	90.072	-12.6	122	0.00
135	IR	d12-Perylene	40.000	40.000	0.0	105	0.00
136	TCM	Di-n-octyl phthalate	80.000	96.926	-21.2	124	0.00
137	TM	7,12-Dimethylbenz(a)anthrac	80.000	81.185	-1.5	106	0.01
138	TM	Benzo(b)Fluoranthene	80.000	86.710	-8.4	116	0.01
139	TM	Benzo(k)fluoranthene	80.000	86.180	-7.7	114	0.01
140	TCM	Benzo(a)pyrene	80.000	88.804	-11.0	115	0.00
141	TM	3-Methylcholanthrene	80.000	83.719	-4.6	107	0.00
142	TM	Indeno(1,2,3-cd)Pyrene	80.000	91.470	-14.3	115	0.00
143	TM	Dibenz(a,h)anthracene	80.000	91.670	-14.6	117	0.00
144	TM	Benzo(g,h,i)perylene	80.000	90.123	-12.7	117	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1st DM 09/20/18
2nd BA 09/20/18

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.756	152	186600	40.00	ppm		0.00
33) d8-Naphthalene	5.921	136	733483	40.00	ppm		0.00
57) d10-Acenaphthene	7.630	164	368643	40.00	ppm		0.00
91) d10-Phenanthrene	9.100	188	562314	40.00	ppm		0.00
117) d12-Chrysene	12.358	240	554168	40.00	ppm		0.00
135) d12-Perylene	15.291	264	571787	40.00	ppm		0.00
System Monitoring Compounds							
7) SURR1,2-FLUOROPHENOL	3.688	112	532692	82.09	ppm		0.00
Spiked Amount 200.000	Range 10 - 70		Recovery = 41.05%				
12) SURR2,PHENOL-D6	4.436	99	664888	84.55	ppm		0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 42.27%				
34) SURR4,NITROBENZENE-D5	5.253	82	521283	83.29	ppm		0.00
Spiked Amount 100.000	Range 31 - 110		Recovery = 83.29%				
63) SURR5,2-FLUOROBIPHENYL	6.963	172	1043374	81.18	ppm		0.00
Spiked Amount 100.000	Range 31 - 118		Recovery = 81.18%				
88) SURR3,2,4,6-TRIBROMOPH...	8.410	330	153316	80.11	ppm		0.00
Spiked Amount 200.000	Range 35 - 141		Recovery = 40.06%				
124) SURR6,TERPHENYL-D14	10.782	244	1055737	82.54	ppm		0.00
Spiked Amount 100.000	Range 10 - 165		Recovery = 82.54%				
Target Compounds							Qvalue
2) Pyridine	2.689	79	529809	78.697	ppm		98
3) N-Nitrosodimethylamine	2.657	74	318644	94.423	ppm		90
4) 2-Picoline	3.245	93	550581	78.845	ppm		99
5) N-Nitrosomethylamine	3.319	42	183665	80.258	ppm		88
6) Methyl Methansulfonate	3.549	80	191763	70.767	ppm		97
8) N-Nitrosodiethylamine	3.864	102	255139	81.220	ppm		89
9) Ethyl Mathanesulfonate	4.099	79	383052	82.504	ppm		98
11) Aniline	4.473	93	828301	79.535	ppm		99
13) Phenol	4.447	94	715299	84.724	ppm		98
14) bis(2-Clethyl)Ether	4.516	93	483531	79.624	ppm		96
15) Pentachloroethane	4.516	117	193231	88.092	ppm		96
16) 2-Chlorophenol	4.580	128	564787	84.533	ppm		99
17) 1,3-Diclbenzene	4.708	146	590500	84.765	ppm		97
18) 1,4-Dichlorobenzene	4.772	146	593495	84.919	ppm		99
19) 1,2-Diclbenzene	4.906	146	569398	86.566	ppm		100
20) Benzyl Alcohol	4.874	79	400626	89.092	ppm		99
21) 1-Methyl-2-pyrrolidinone	4.922	99	365739	80.332	ppm		95
22) 2,2'-oxybis(1-Chloropr...	4.986	45	414740	64.289	ppm	#	53
23) 2-Methylphenol	4.986	108	492369	84.102	ppm		89
24) 3+4-Methylphenol	5.120	108	541758	87.518	ppm	#	68
25) Acetophenone	5.114	105	700587	82.908	ppm		87
26) N-Nitroso-Di-n-propyla...	5.109	70	362502	79.138	ppm		91
27) N-Nitrosopyrrolidine	5.104	100	293210	81.306	ppm		81
28) N-Nitrosomorpholine	5.136	56	262441	79.475	ppm		98
29) o-Toluidine	5.146	106	854406	82.630	ppm		77
30) Hexachloroethane	5.210	117	224599	84.976	ppm		98
31) o,o,o-Triethylphosphor...	5.649	198	230096	77.426	ppm		100
32) Alpha-terpinol	5.948	121	187625	76.325	ppm		96
35) Nitrobenzene	5.275	77	522325	88.096	ppm		92
36) N-Nitrosopiperidine	5.413	42	243045	77.841	ppm		82
37) Isophorone	5.488	82	927286	97.862	ppm		96
38) 2-Nitrophenol	5.563	139	297862	88.148	ppm		97
39) 2,4-Dimethylphenol	5.600	107	523129	83.883	ppm		94

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP189.D
Acq On : 17 Sep 2018 3:43 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 20 07:01:49 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	bis(-2-Chloroethoxy)Me...	5.681	93	572625	80.227	ppm		98
42)	2,4-Dichlorophenol	5.798	162	428936	85.440	ppm		98
43)	a,a-Dimethylphenethyla...	6.252	58	1067956m	42.934	ppm		
44)	1,2,4-Trichlorobenzene	5.868	180	441451	86.077	ppm		97
45)	Naphthalene	5.942	128	1567261	82.809	ppm		98
46)	4-Chloroaniline	5.996	127	636869	79.807	ppm		99
47)	2,6-Dichlorophenol	6.006	162	445333	88.618	ppm		97
48)	Hexachlorobutadiene	6.049	225	216551	83.068	ppm		100
49)	Hexachloropropene	6.022	213	254079	92.301	ppm		99
50)	4-Chloro-3-methylphenol	6.471	107	432502	85.857	ppm		98
51)	N-N-di-n-butylamine	6.311	84	329661	71.758	ppm		96
52)	Caprolactam	6.354	113	163767	77.482	ppm		87
53)	p-Phenylenediamine	6.354	80	89266	22.278	ppm		99
54)	Safrole	6.519	162	356644	76.779	ppm		99
55)	2-Methylnaphthalene	6.610	142	1021481	86.130	ppm		97
56)	1-Methylnaphthalene	6.706	142	945979	80.659	ppm		99
58)	Hexachlorocyclopentadiene	6.754	237	165540	93.219	ppm		100
59)	1,2,4,5-Tetrachloroben...	6.770	216	405513	89.708	ppm		99
60)	1,2,3,4-Tetrachloroben...	7.048	216	389406	80.431	ppm		99
61)	2,4,6-Trichlorophenol	6.888	196	263692	82.522	ppm		99
62)	2,4,5-Trichlorophenol	6.936	196	267553	86.387	ppm		99
64)	Isosafrole	7.027	104	161277	77.840	ppm		84
65)	1,1'-Biphenyl	7.064	154	1211381	77.231	ppm		98
66)	2-Chloronaphthalene	7.086	162	882684	83.805	ppm		98
67)	2-Nitroaniline	7.192	65	225333	79.036	ppm		94
68)	1,4-Naphthoquinone	7.267	158	274454	142.741	ppm		93
69)	m-Dinitrobenzene	7.406	168	176267	95.399	ppm		74
70)	Acenaphthylene	7.492	152	1460841	84.233	ppm		99
71)	Dimethyl phthalate	7.363	163	964554	84.318	ppm		100
72)	2,6-Dinitrotoluene	7.427	165	235036	91.278	ppm		92
73)	Acenaphthene	7.662	153	1006633	88.499	ppm		99
74)	3-Nitroaniline	7.598	138	280069	81.096	ppm		98
75)	2,4-Dinitrophenol	7.711	184	92072	77.402	ppm		92
76)	Dibenzofuran	7.833	168	1223916	83.696	ppm		98
77)	2,4-Dinitrotoluene	7.828	165	317472	92.969	ppm		86
78)	4-Nitrophenol	7.791	65	161748	92.328	ppm	#	51
79)	Pentachlorobenzene	7.791	250	355303	85.522	ppm		99
80)	1-Napthylamine	7.914	143	633962	64.007	ppm		100
81)	2-Napthylamine	7.994	143	870724	80.269	ppm		99
82)	2,3,4,6-Tetrachlorophenol	7.962	232	189896	81.013	ppm		93
83)	Fluorene	8.170	166	974074	83.740	ppm		96
84)	4-Chlorophenyl-phenyle...	8.165	204	391979	78.139	ppm		96
85)	Diethylphthalate	8.052	149	1021795	88.718	ppm		99
86)	4-Nitroaniline	8.207	138	283174	78.848	ppm		97
87)	5-Nitro-o-toluidine	8.191	152	321272	84.859	ppm		100
89)	Sulfotepp	8.437	322	180750	83.005	ppm		98
90)	Octachlorocyclopentene	8.416	307	143753	87.843	ppm		98
92)	Thionazin	8.138	107	173982	81.573	ppm		99
93)	4,6-Dinitro-2-methylph...	8.234	198	163152	87.456	ppm		98
94)	Diphenylamine	8.288	169	1494965	154.810	ppm		99
95)	1,2 Diphenylhydrazine	8.325	77	877348	76.345	ppm		96
96)	N-Nitrosodiphenylamine	8.288	169	1494965	154.810	ppm		99
97)	1,3,5-Trinirobenzene	8.592	74	131562	100.555	ppm	#	15
98)	Diallate	8.565	86	361301	78.573	ppm		94
99)	Phorate	8.576	121	201228	78.892	ppm		96
100)	Phenacetin	8.608	108	546696	85.044	ppm		99

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP189.D
Acq On : 17 Sep 2018 3:43 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 20 07:01:49 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 4-Bromophenyl-phenylether	8.651	248	234452	75.797	ppm	96
102) Hexachlorobenzene	8.715	284	299197	82.791	ppm	96
103) Dimethoate	8.752	87	258561	71.903	ppm	98
105) Pentachlorophenol	8.918	266	150177	77.815	ppm	98
106) 4-Aminobiphenyl	8.913	169	1026430	85.936	ppm	100
107) Pentachloronitrobenzene	8.918	237	93933	93.957	ppm	90
108) Pronamide	8.966	173	435485	81.921	ppm	100
109) Dinoseb	9.089	211	214834	88.259	ppm	95
110) Disulfoton	9.089	88	510509	77.929	ppm	91
111) Phenanthrene	9.121	178	1364736	86.629	ppm	100
112) Anthracene	9.174	178	1369181	88.980	ppm	98
113) Carbazole	9.335	167	1380999	82.612	ppm	99
114) Di-n-butylphthalate	9.666	149	1791942	92.420	ppm	99
115) 4-Nitroquinonline-1-oxide	9.901	190	69455	96.956	ppm	97
116) Fluoranthene	10.334	202	1425256	89.298	ppm	99
118) Methyl Parathion	9.463	109	234576	83.907	ppm	96
119) Ethyl Parathion	9.847	97	213003	84.604	ppm	98
120) Methapyrilene	9.960	58	269373	85.677	ppm	99
121) Isodrin	10.157	193	132040	80.236	ppm	96
122) Benzidine	10.488	184	878244	82.587	ppm	99
123) Pyrene	10.601	202	1482983	87.838	ppm	100
125) Aramite	10.846	185	207558m	83.439	ppm	
126) p-(Dimethylamino)azobe...	10.964	120	458357	92.779	ppm	96
127) Chlorobenzilate	11.017	139	480485	83.974	ppm	94
128) Butyl benzyl phthalate	11.450	149	829749	91.701	ppm	99
129) 3,3-Dimethylbenzidine	11.434	212	817940	82.503	ppm	98
130) 2-Acetylaminofluorene	11.835	181	622881	82.814	ppm	97
131) 3,3'-Dichlorobenzidine	12.310	252	548269	83.108	ppm	96
132) Benzo(a)anthracene	12.342	228	1370254	87.854	ppm	98
133) Chrysene	12.406	228	1277689	83.660	ppm	100
134) bis(2-Ethylhexyl)phtha...	12.422	149	1112852	90.072	ppm	97
136) Di-n-octyl phthalate	13.747	149	1943649	96.926	ppm	98
137) 7,12-Dimethylbenz(a)an...	14.458	256	682592	81.185	ppm	98
138) Benzo(b)Fluoranthene	14.474	252	1481165	86.710	ppm	96
139) Benzo(k)fluoranthene	14.532	252	1364444	86.180	ppm	98
140) Benzo(a)pyrene	15.168	252	1277551	88.804	ppm	99
141) 3-Methylcholanthrene	15.948	268	729620	83.719	ppm	98
142) Indeno(1,2,3-cd)Pyrene	17.262	276	1263019	91.470	ppm	99
143) Dibenz(a,h)anthracene	17.305	278	1323987	91.670	ppm	95
144) Benzo(g,h,i)perylene	17.716	276	1194094	90.123	ppm	93

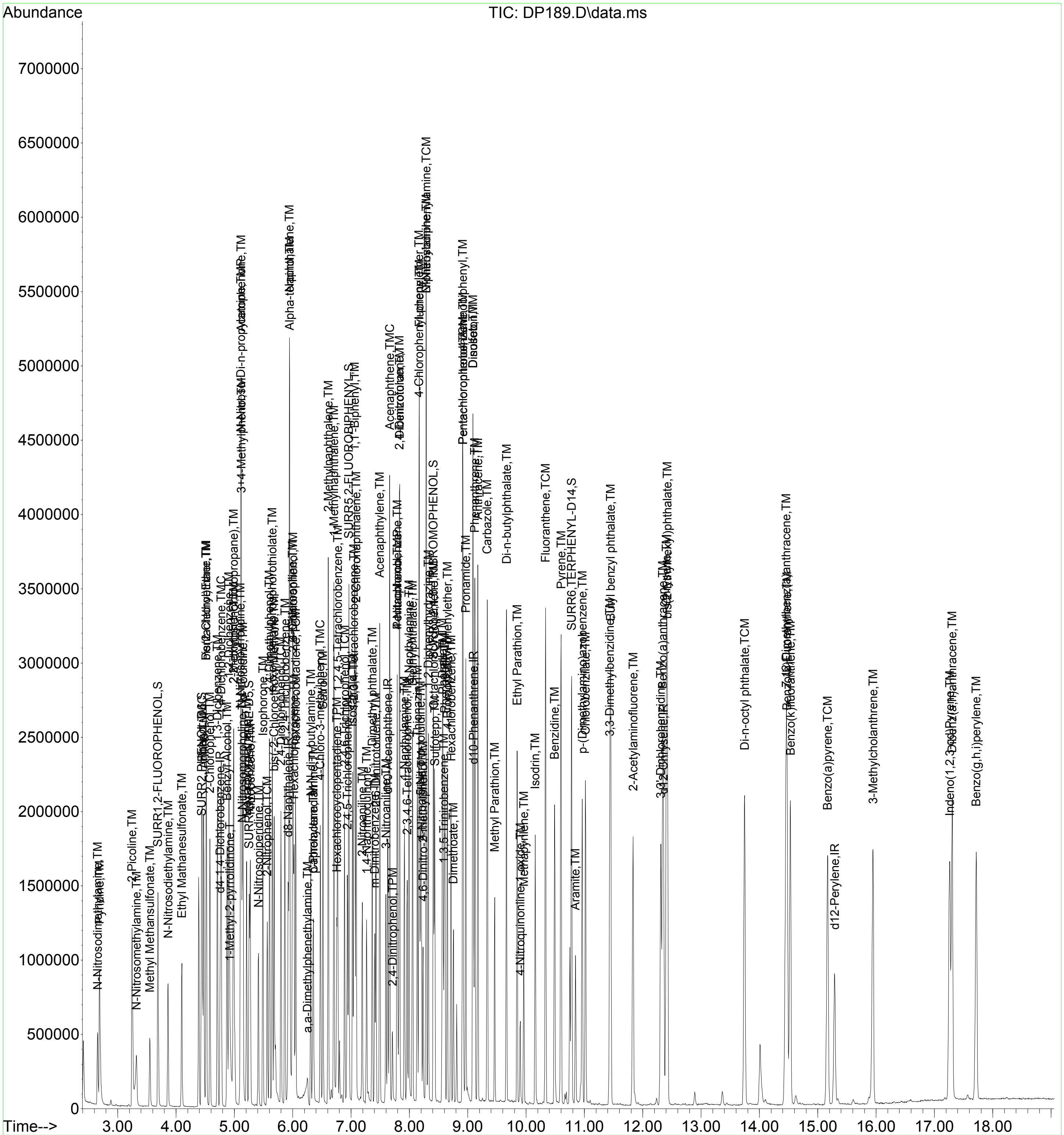
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

1st DM 09/20/18
2nd BA 09/20/18

```
Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP189.D
Acq On    : 17 Sep 2018   3:43 pm
Operator  : J.Misiurewicz
Sample    : ICV
Misc      : Initial Calibration 8270D/625
ALS Vial  : 14   Sample Multiplier: 1

Quant Time: Sep 20 07:01:49 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\8270091718A.M
Quant Title  : 8270 BNA ANALYSIS
QLast Update : Thu Sep 20 06:56:43 2018
Response via : Initial Calibration
```



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP190.D
Acq On : 17 Sep 2018 4:11 pm
Operator : J.Misiurewicz
Sample : BLK
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 14:18:01 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 14:17:06 2018
Response via : Initial Calibration

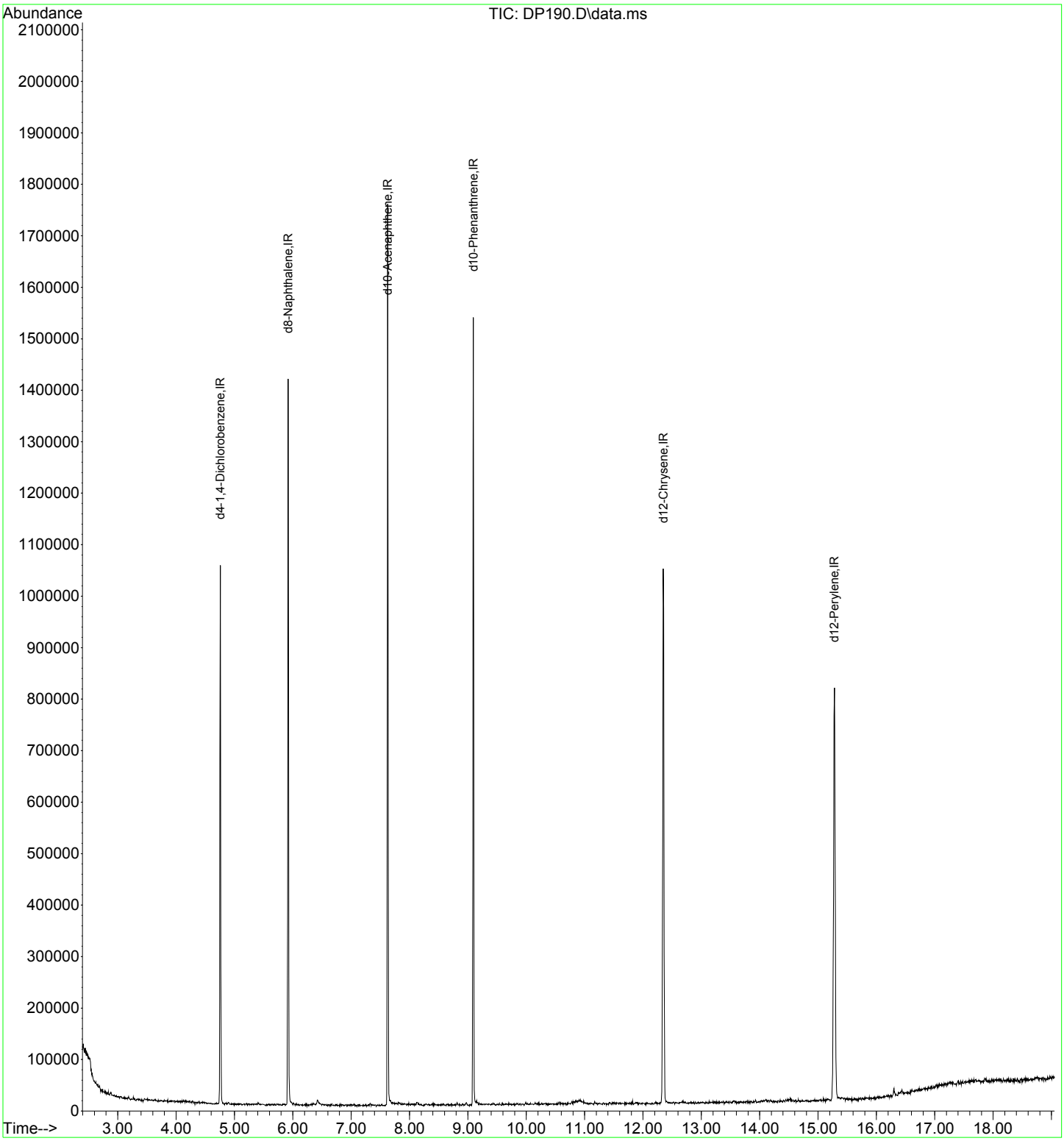
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.756	152	174142	40.00	ppm	0.00
3) d8-Naphthalene	5.921	136	680971	40.00	ppm	0.00
5) d10-Acenaphthene	7.625	164	349038	40.00	ppm	0.00
6) d10-Phenanthrene	9.094	188	543492	40.00	ppm	0.00
8) d12-Chrysene	12.348	240	513460	40.00	ppm	0.00
9) d12-Perylene	15.280	264	526240	40.00	ppm	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP190.D
Acq On : 17 Sep 2018 4:11 pm
Operator : J.Misiurewicz
Sample : BLK
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 14:18:01 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 14:17:06 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP191.D
Acq On : 17 Sep 2018 4:40 pm
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 14:13:17 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

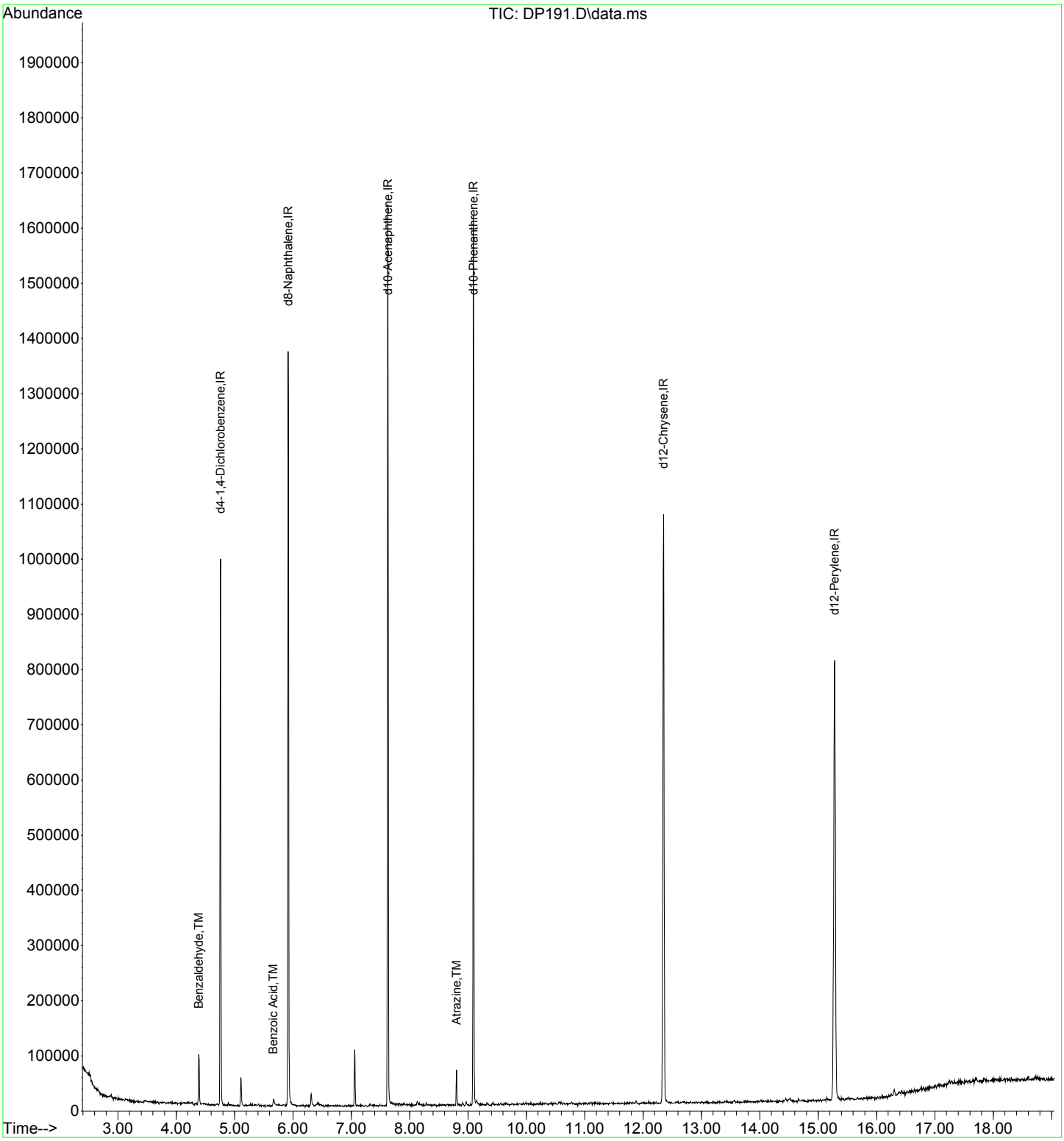
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.760	152	176316	40.00	ppm	0.00
3) d8-Naphthalene	5.919	136	683069	40.00	ppm	0.00
5) d10-Acenaphthene	7.628	164	350680	40.00	ppm	0.00
6) d10-Phenanthrene	9.092	188	556632	40.00	ppm	0.00
8) d12-Chrysene	12.351	240	521471	40.00	ppm	0.00
9) d12-Perylene	15.284	264	538649	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.386	106	20837	2.381	ppm	91
4) Benzoic Acid	5.662	105	6036	1.969	ppm	76
7) Atrazine	8.804	215	3336	1.536	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP191.D
Acq On : 17 Sep 2018 4:40 pm
Operator : J.Misiurewicz
Sample : 2.5 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 14:13:17 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP192.D
Acq On : 17 Sep 2018 5:08 pm
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 19 14:13:19 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

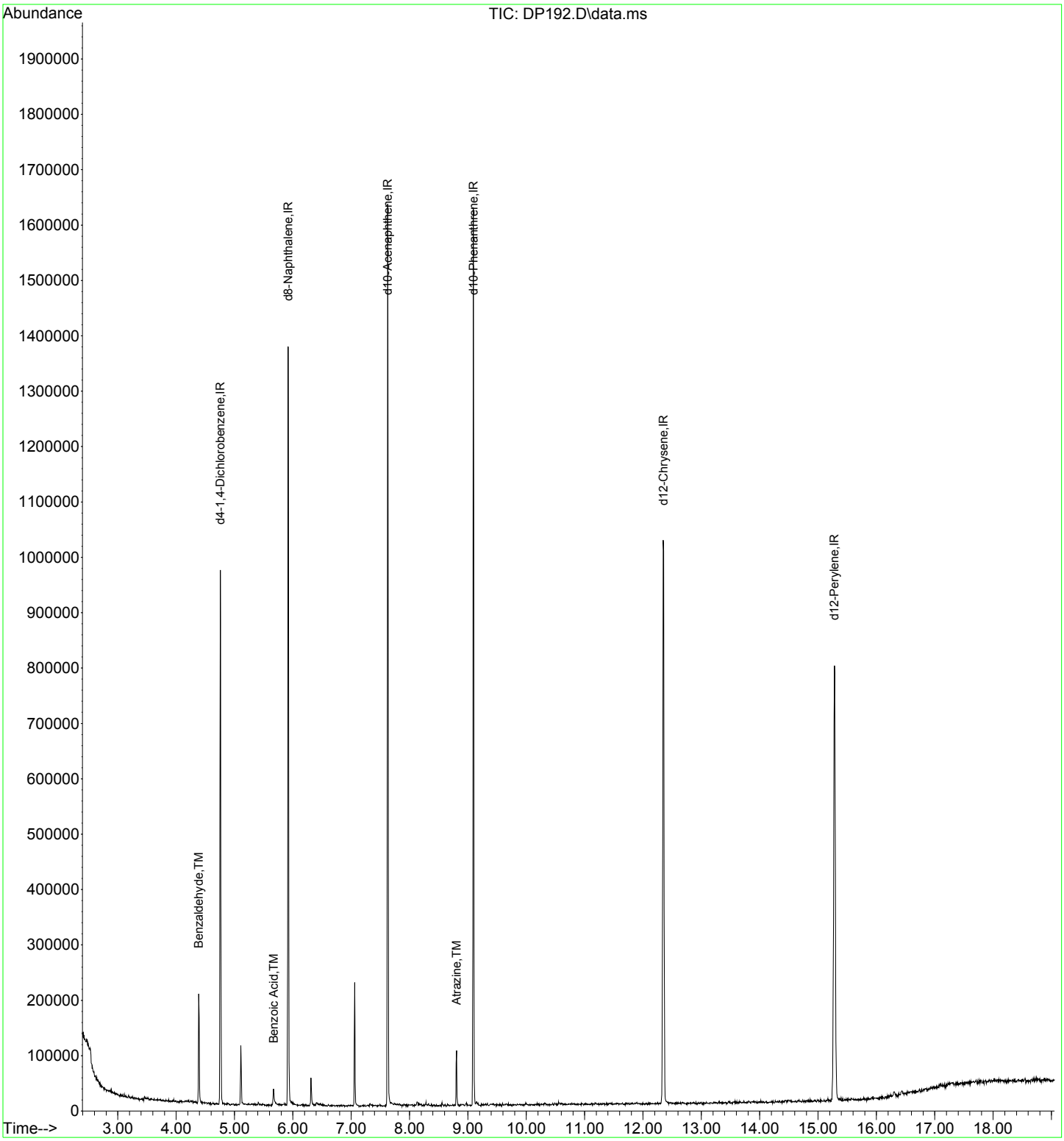
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.755	152	174024	40.00	ppm		0.00
3) d8-Naphthalene	5.920	136	660271	40.00	ppm		0.00
5) d10-Acenaphthene	7.624	164	335352	40.00	ppm		0.00
6) d10-Phenanthrene	9.093	188	538747	40.00	ppm		0.00
8) d12-Chrysene	12.352	240	508356	40.00	ppm		0.00
9) d12-Perylene	15.279	264	523686	40.00	ppm		0.00
Target Compounds							Qvalue
2) Benzaldehyde	4.387	106	44942	5.203	ppm		94
4) Benzoic Acid	5.669	105	13022	4.395	ppm	#	72
7) Atrazine	8.805	215	5596	4.474	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP192.D
Acq On : 17 Sep 2018 5:08 pm
Operator : J.Misiurewicz
Sample : 5.0 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 19 14:13:19 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP193.D
Acq On : 17 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 14:13:21 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

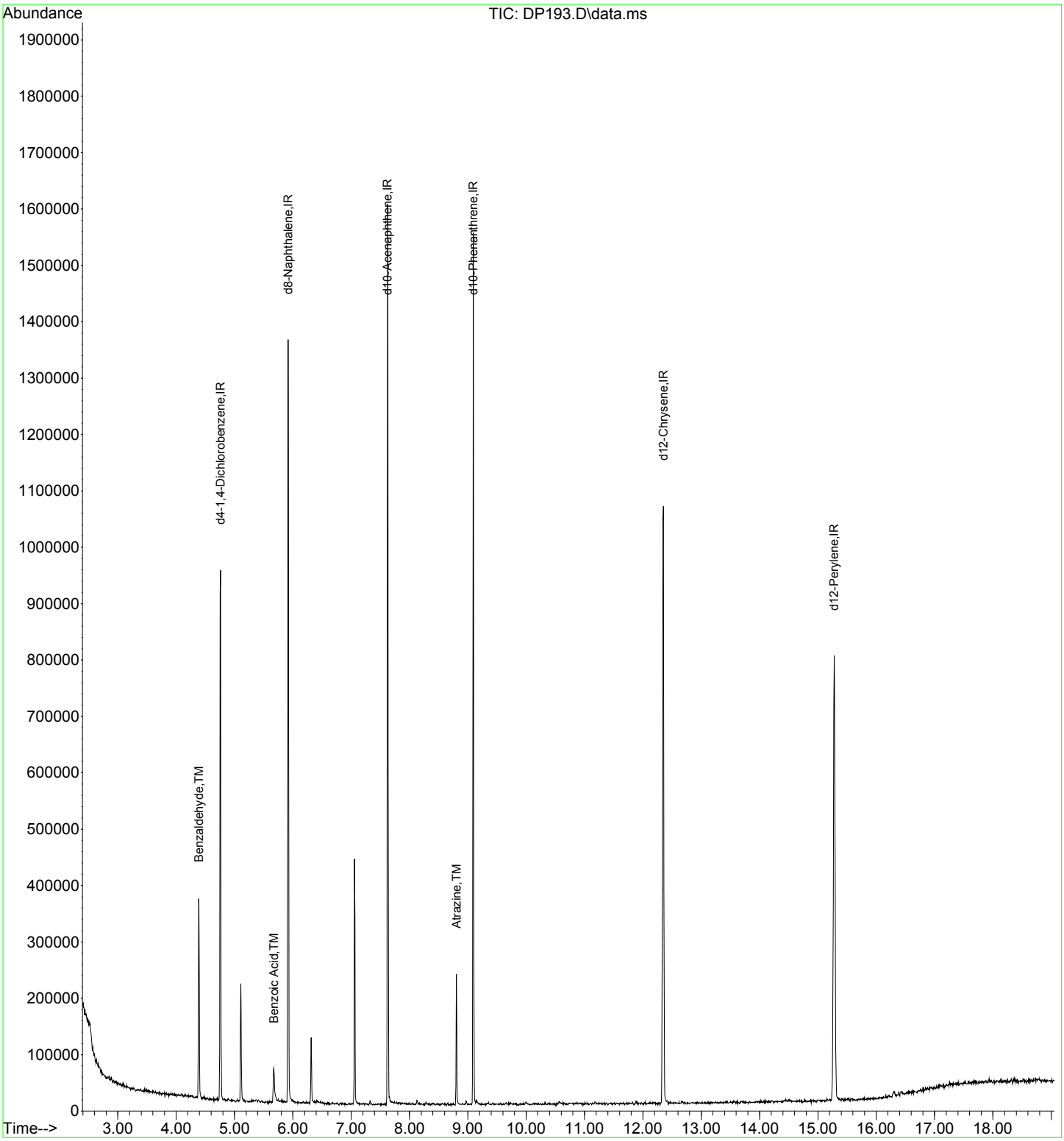
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.760	152	167609	40.00	ppm	0.00
3) d8-Naphthalene	5.919	136	666547	40.00	ppm	0.00
5) d10-Acenaphthene	7.623	164	340507	40.00	ppm	0.00
6) d10-Phenanthrene	9.092	188	537925	40.00	ppm	0.00
8) d12-Chrysene	12.351	240	524012	40.00	ppm	0.00
9) d12-Perylene	15.279	264	524449	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.391	106	86141	10.353	ppm	96
4) Benzoic Acid	5.673	105	32800	10.965	ppm	85
7) Atrazine	8.804	215	12836	11.892	ppm	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP193.D
Acq On : 17 Sep 2018 5:36 pm
Operator : J.Misiurewicz
Sample : 10 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 14:13:21 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

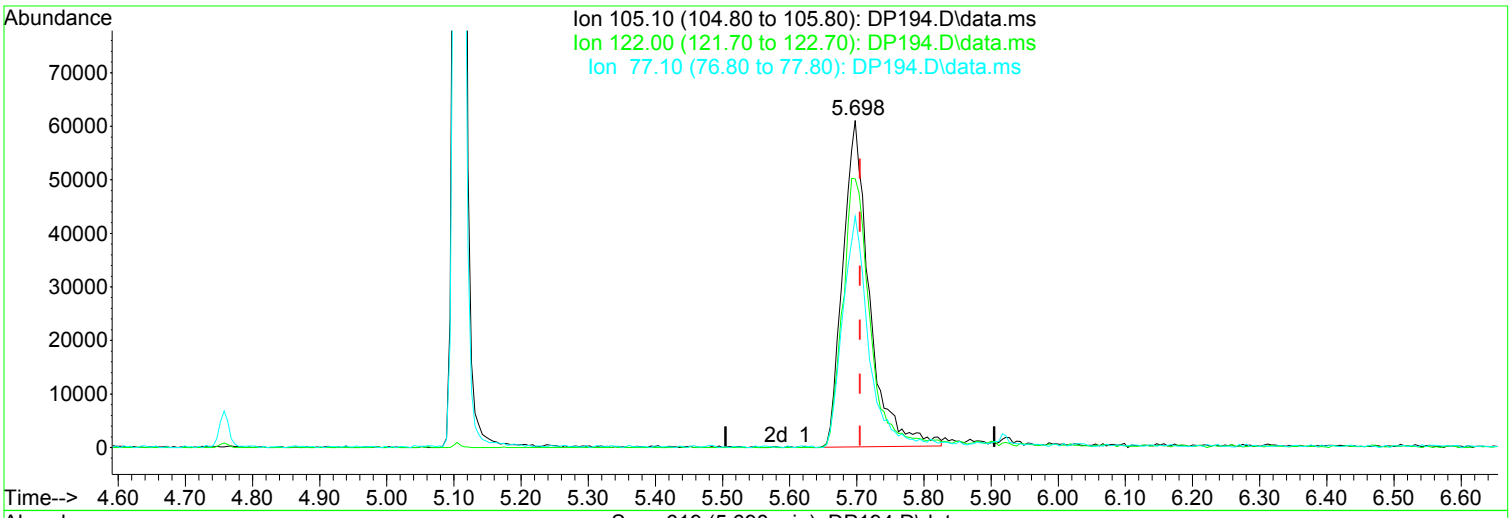


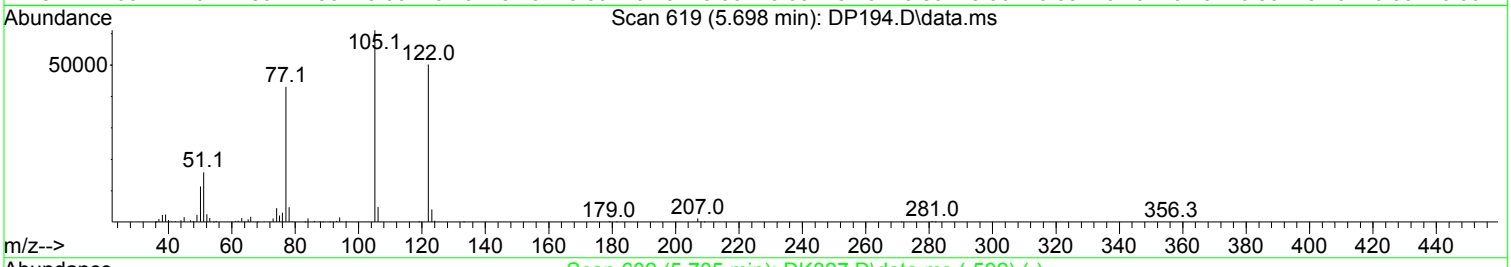
1st DM 09/20/18
2nd BA 09/20/18

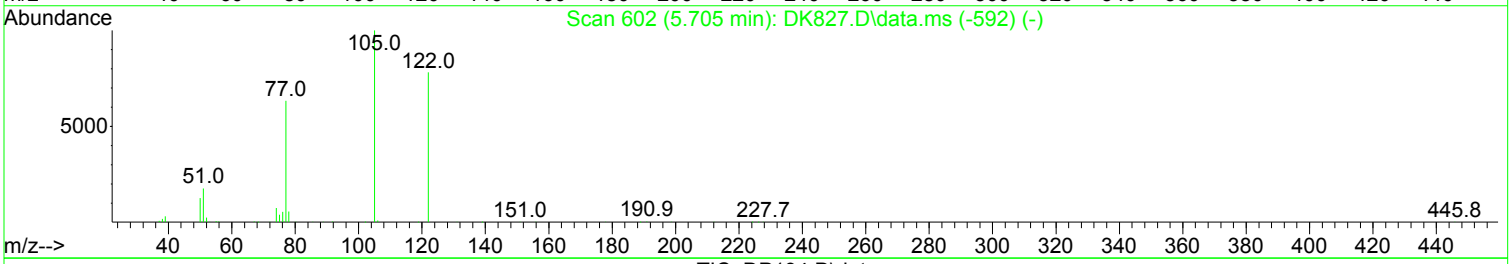
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP194.D
Acq On : 17 Sep 2018 6:05 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 19 14:13:23 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP194.D\data.ms

(4) Benzoic Acid (TM)

5.698min (-0.007) 52.45 ppm m

response 167576

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	82.12
77.10	66.70	70.57
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

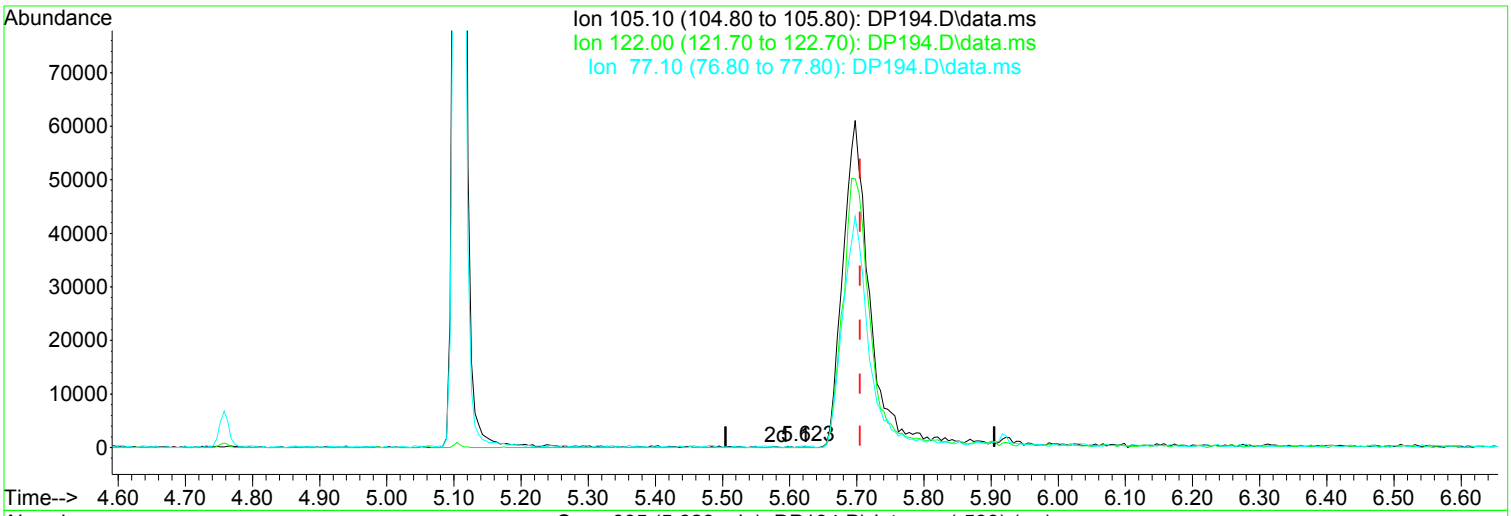
09/19/18

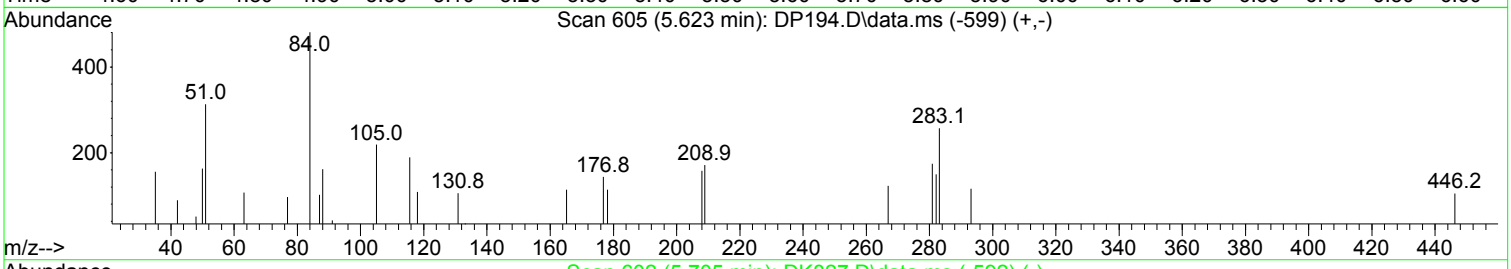
1st DM 09/20/18
2nd BA 09/20/18

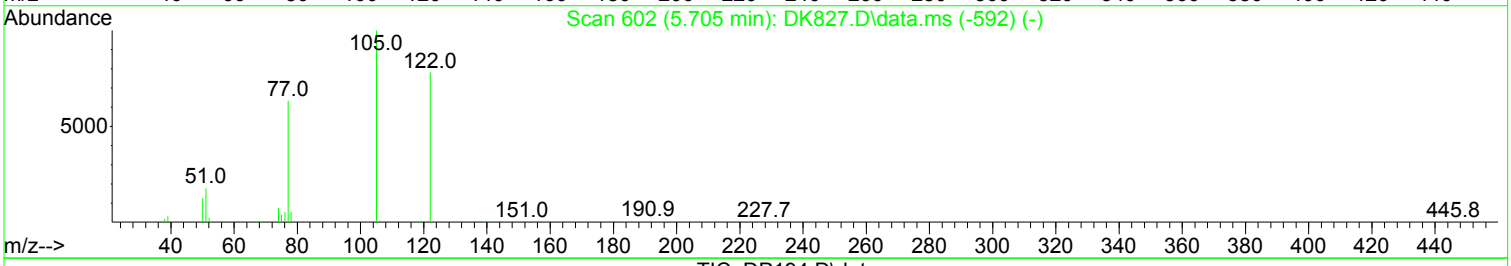
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP194.D
Acq On : 17 Sep 2018 6:05 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 19 14:13:23 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP194.D\data.ms

(4) Benzoic Acid (TM)

5.623min (-0.082) 0.08 ppm

response 267

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	0.00#
77.10	66.70	44.29
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP194.D
Acq On : 17 Sep 2018 6:05 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 19 14:13:23 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

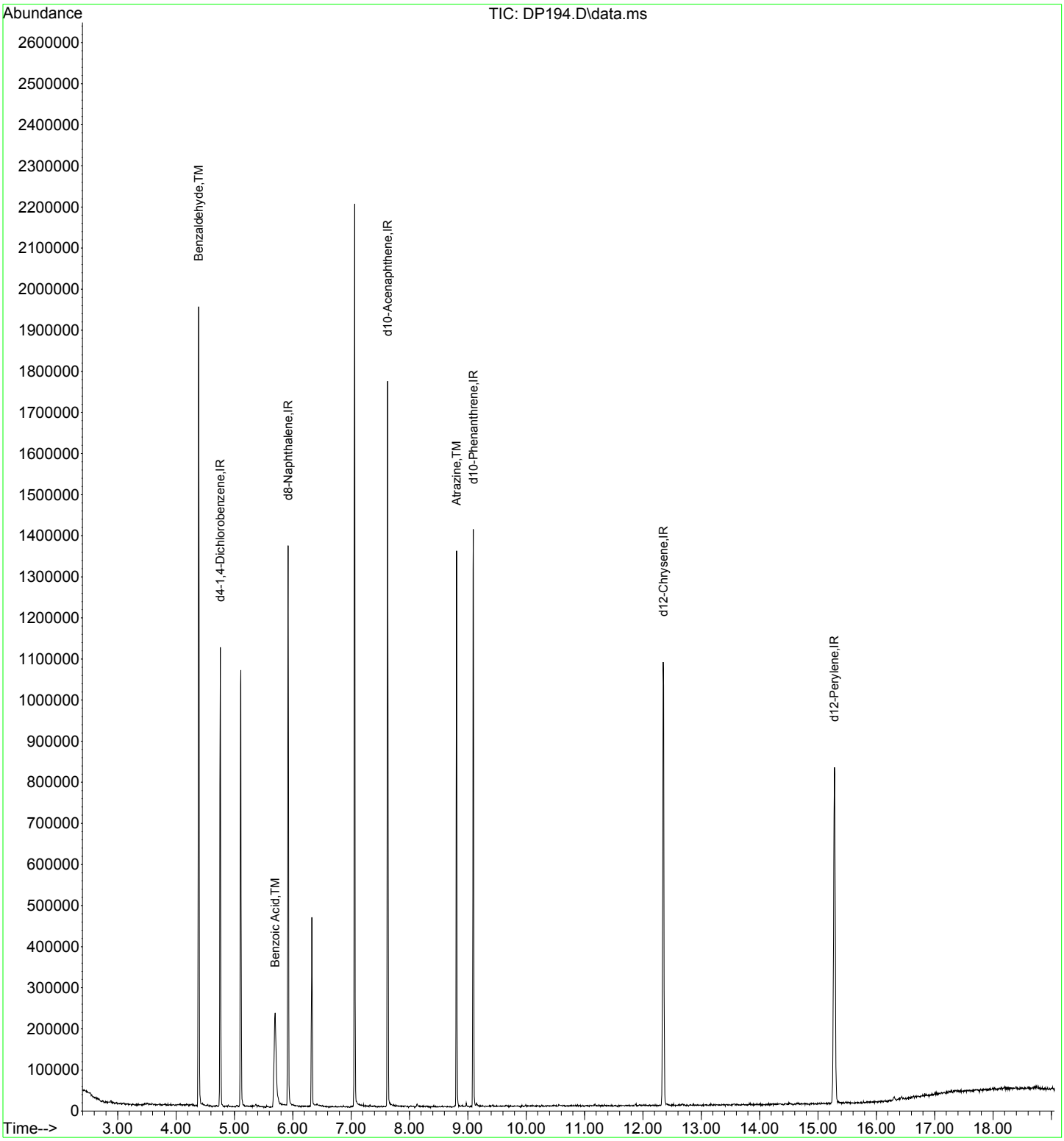
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.758	152	184974	40.00	ppm	0.00
3) d8-Naphthalene	5.922	136	711918	40.00	ppm	0.00
5) d10-Acenaphthene	7.626	164	362874	40.00	ppm	0.00
6) d10-Phenanthrene	9.095	188	516177	40.00	ppm	0.00
8) d12-Chrysene	12.349	240	530509	40.00	ppm	0.00
9) d12-Perylene	15.282	264	551139	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.389	106	455120	49.566	ppm	97
4) Benzoic Acid	5.698	105	167576m	52.450	ppm	
7) Atrazine	8.807	215	75586	49.896	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP194.D
Acq On : 17 Sep 2018 6:05 pm
Operator : J.Misiurewicz
Sample : 50 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 19 Sample Multiplier: 1

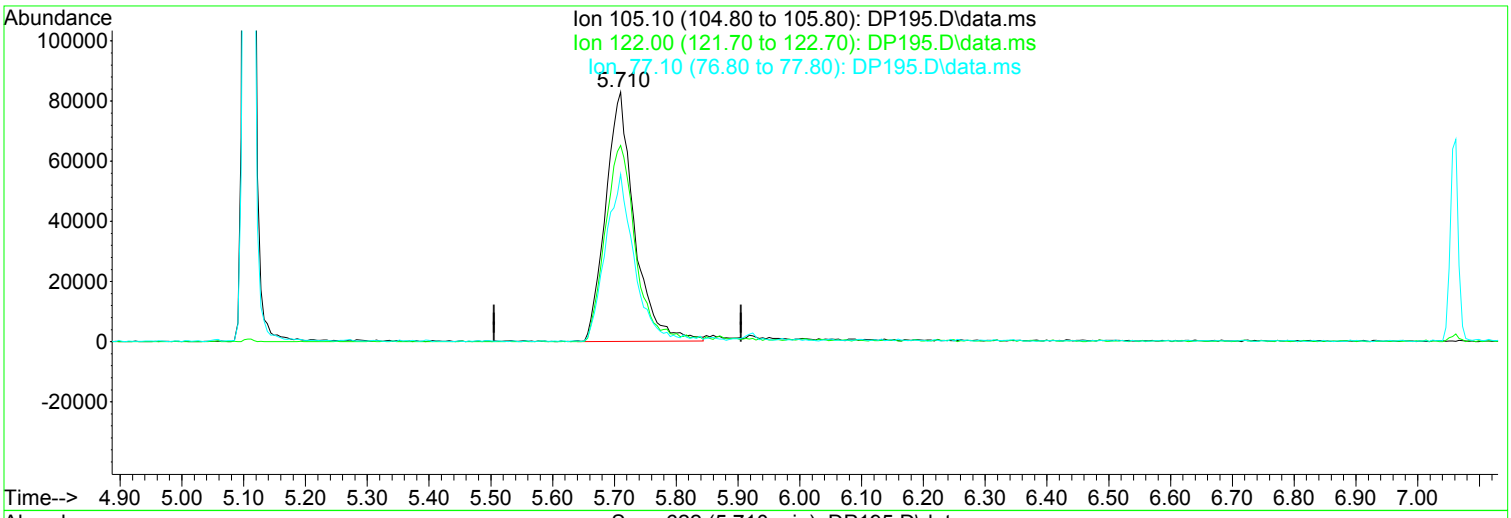
Quant Time: Sep 19 14:13:23 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

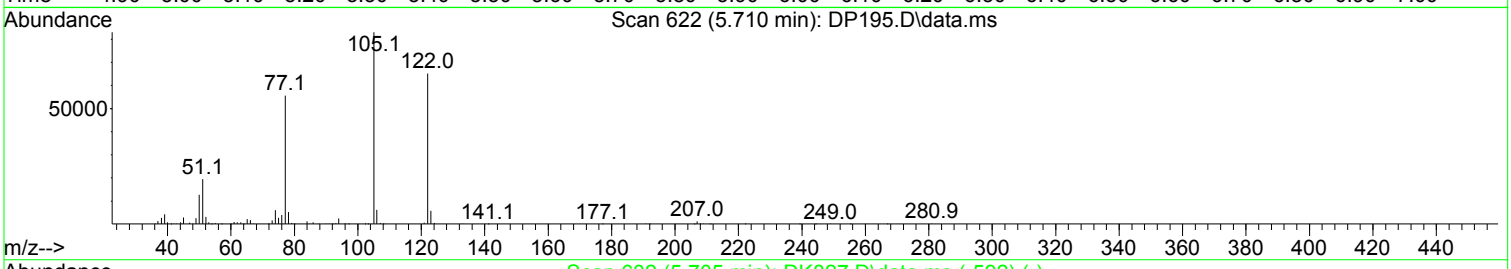


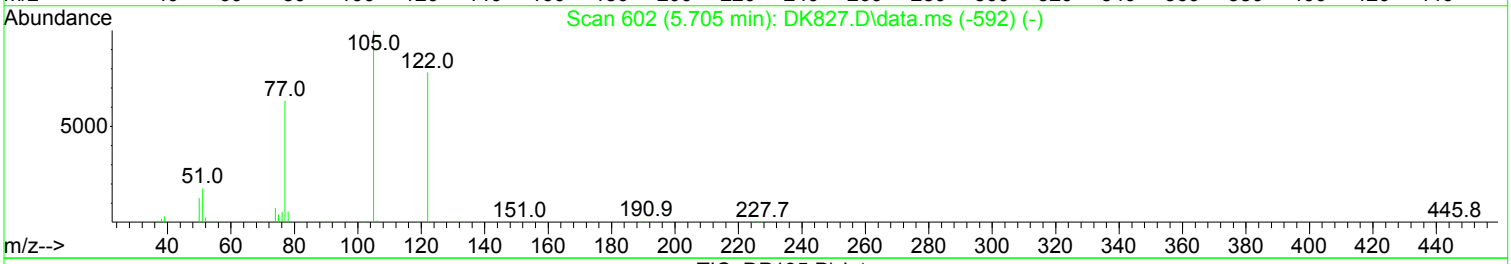
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP195.D
Acq On : 17 Sep 2018 6:33 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 19 14:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP195.D\data.ms

(4) Benzoic Acid (TM)

5.710min (+ 0.005) 86.97 ppm m

response 268966

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	78.51
77.10	66.70	67.06
0.00	0.00	0.00

Manual Integration:

After

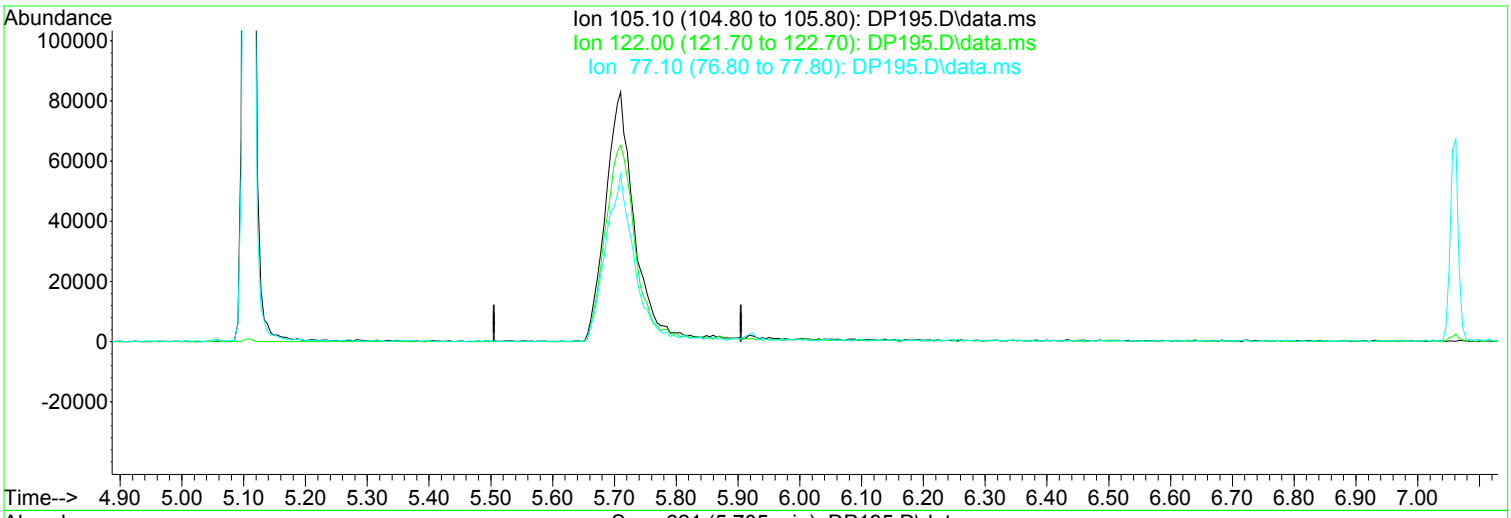
Peak not found.

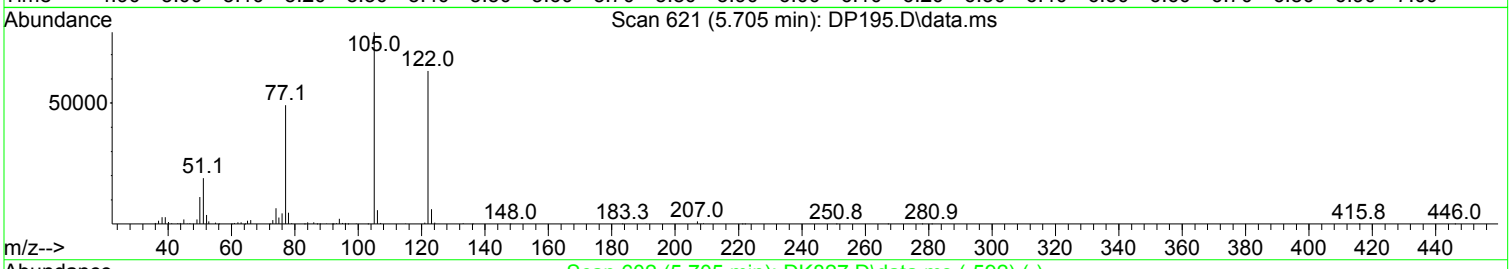
09/19/18

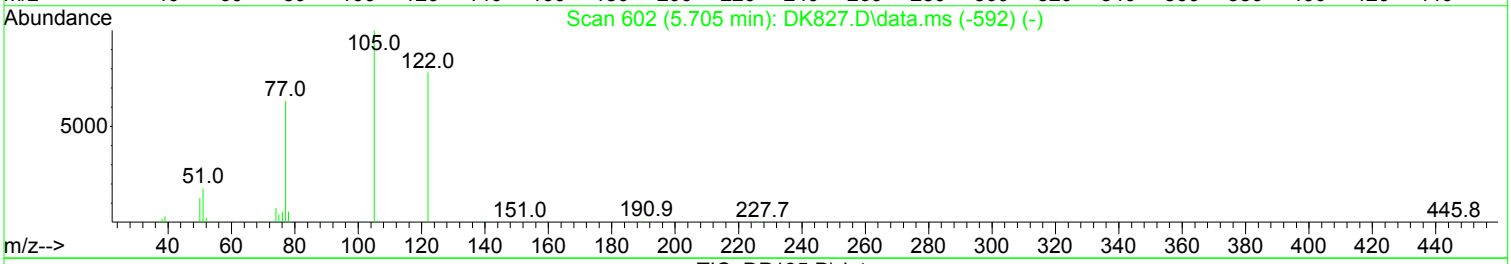
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP195.D
Acq On : 17 Sep 2018 6:33 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 19 14:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP195.D\data.ms

(4) Benzoic Acid (TM)

5.705min (-5.705) 0.00 ppm

response 0

Ion	Exp%	Act%
105.10	100.00	0.00
122.00	70.10	0.00#
77.10	66.70	0.00#
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP195.D
Acq On : 17 Sep 2018 6:33 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 19 14:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

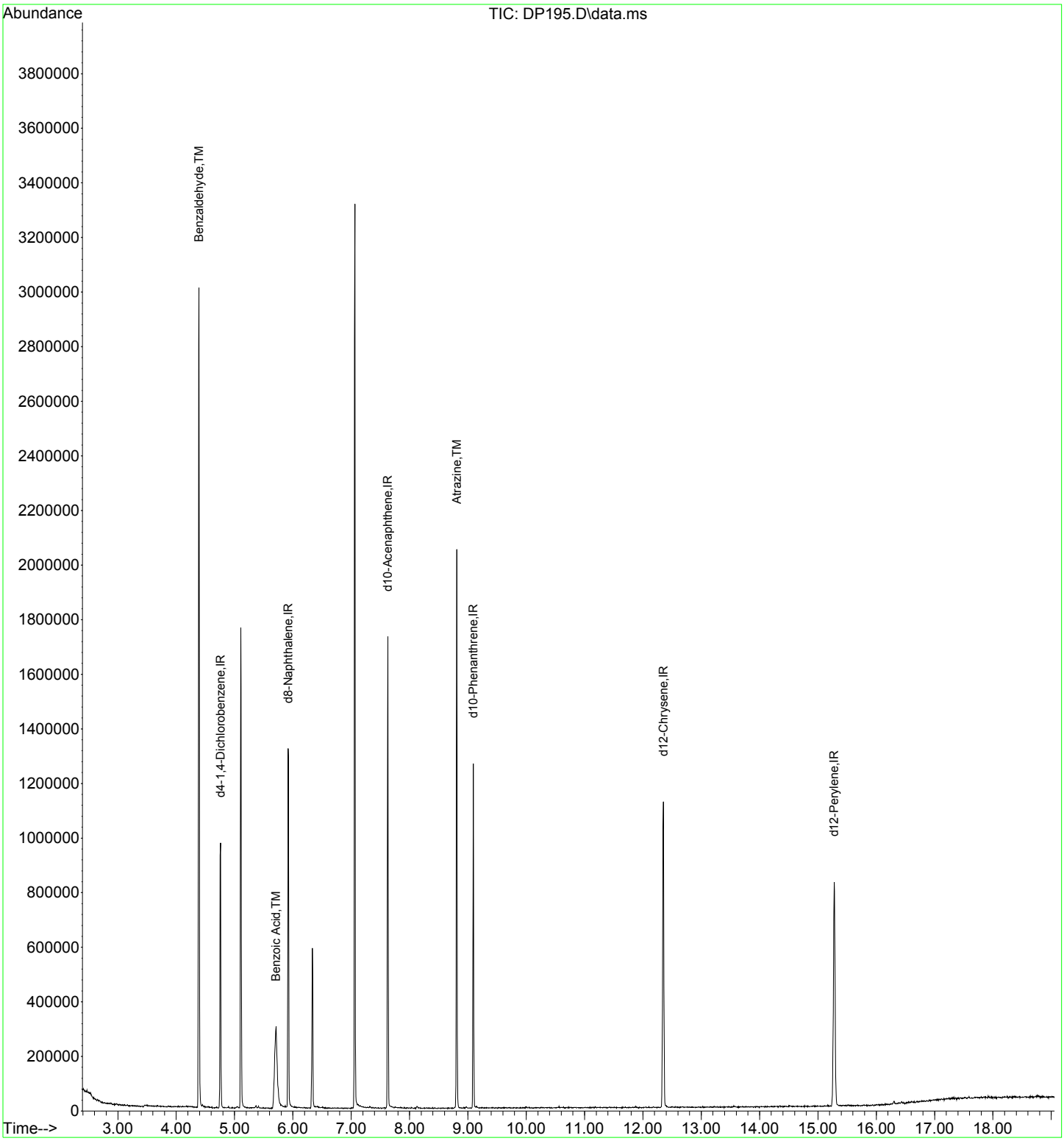
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.759	152	178746	40.00	ppm	0.00
3) d8-Naphthalene	5.918	136	689140	40.00	ppm	0.00
5) d10-Acenaphthene	7.628	164	352310	40.00	ppm	0.00
6) d10-Phenanthrene	9.092	188	438855	40.00	ppm	0.00
8) d12-Chrysene	12.350	240	529483	40.00	ppm	0.00
9) d12-Perylene	15.278	264	540269	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.391	106	710689	80.096	ppm	98
4) Benzoic Acid	5.710	105	268966m	86.967	ppm	
7) Atrazine	8.808	215	120494	74.669	ppm	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st DM 09/20/18
2nd BA 09/20/18

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP195.D
Acq On : 17 Sep 2018 6:33 pm
Operator : J.Misiurewicz
Sample : 80 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 20 Sample Multiplier: 1

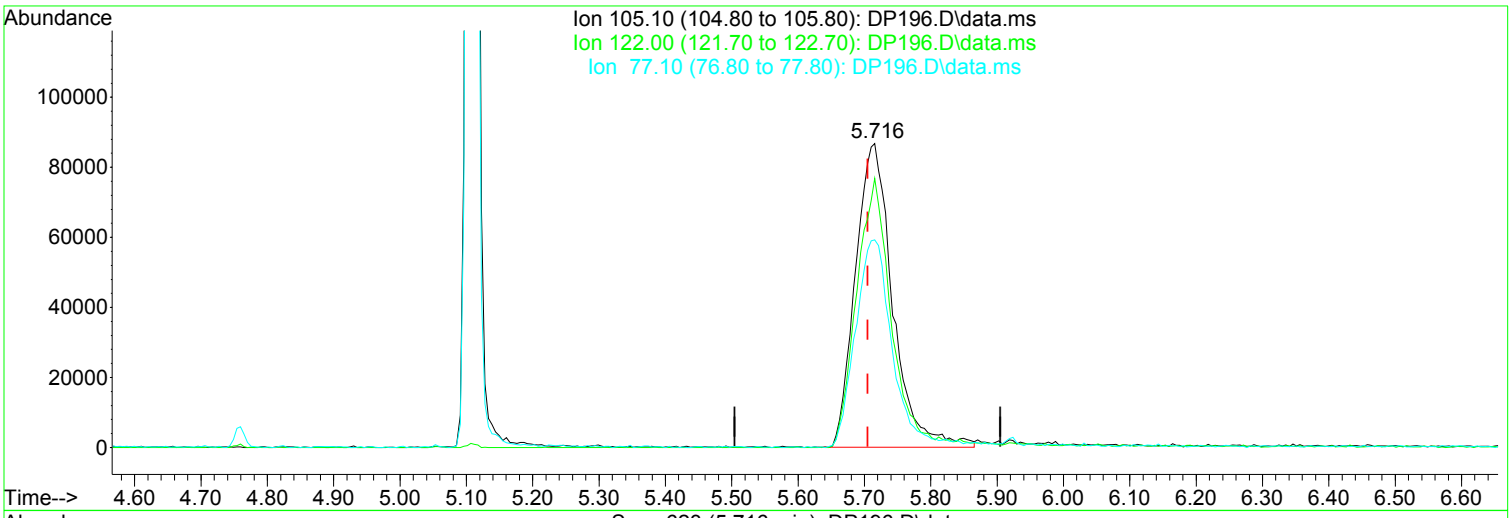
Quant Time: Sep 19 14:13:25 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

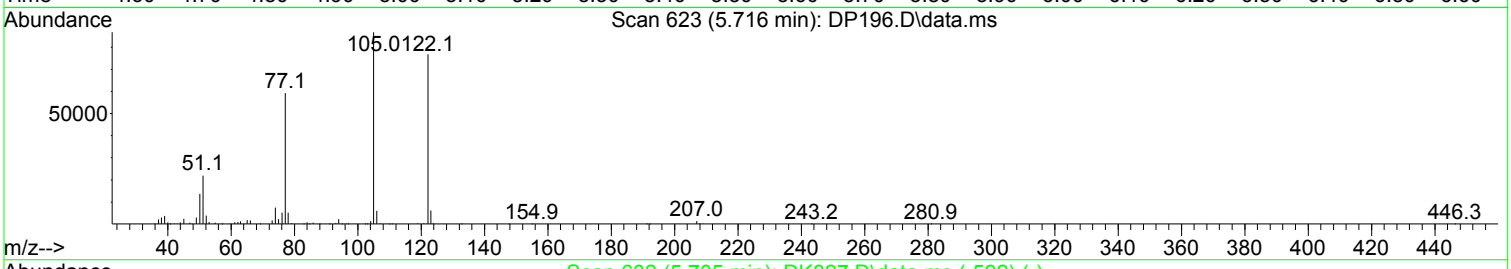


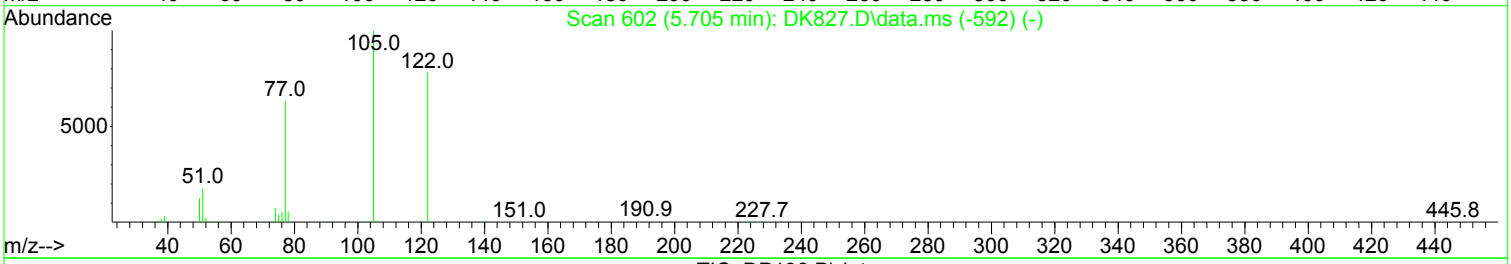
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP196.D
Acq On : 17 Sep 2018 7:01 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 19 14:13:27 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP196.D\data.ms

(4) Benzoic Acid (TM)

5.716min (+ 0.011) 110.67 ppm m

response 337852

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	88.46
77.10	66.70	68.33
0.00	0.00	0.00

Manual Integration:

After

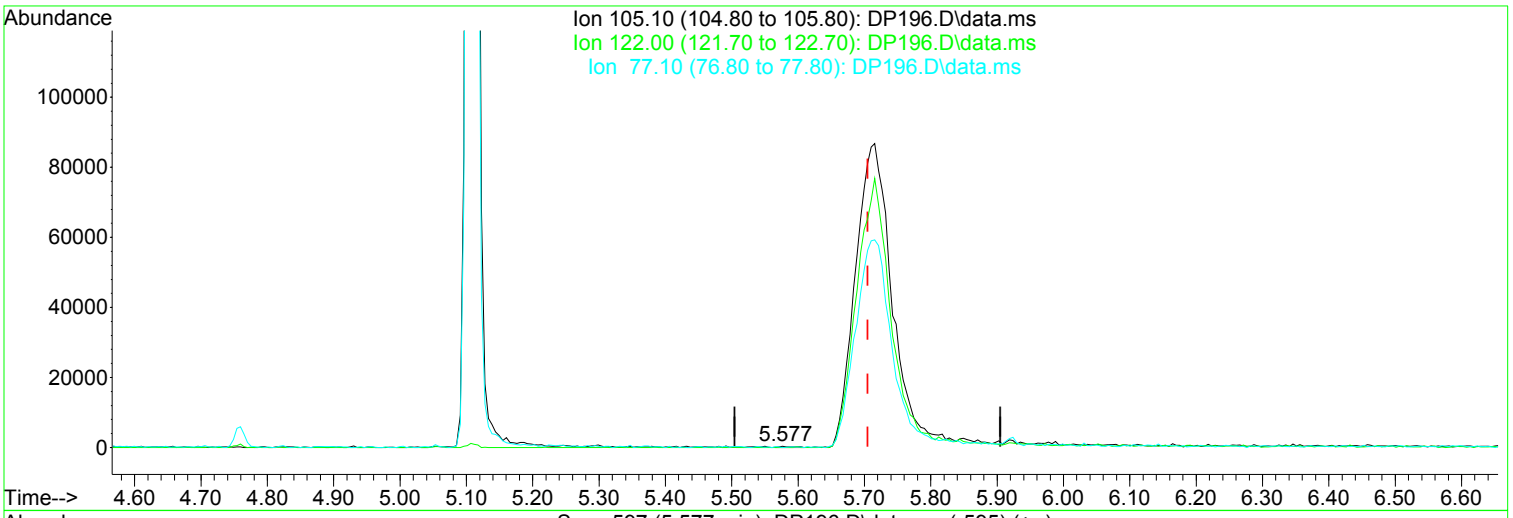
Peak not found.

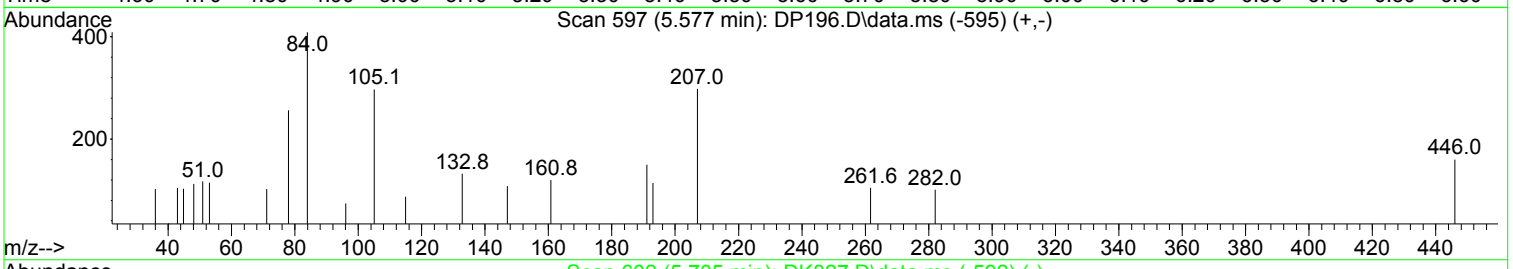
09/19/18

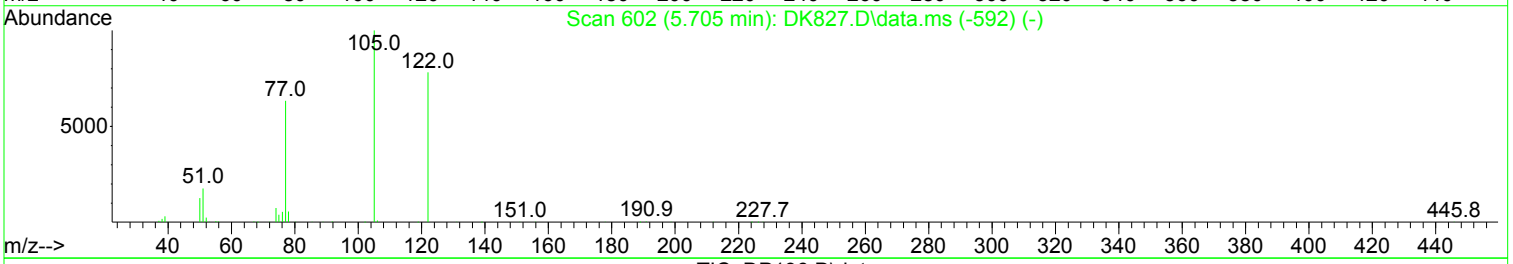
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP196.D
Acq On : 17 Sep 2018 7:01 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 19 14:13:27 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP196.D\data.ms

(4) Benzoic Acid (TM)

5.577min (-0.128) 0.16 ppm

response 488

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	0.00#
77.10	66.70	0.00#
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP196.D
Acq On : 17 Sep 2018 7:01 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 19 14:13:27 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

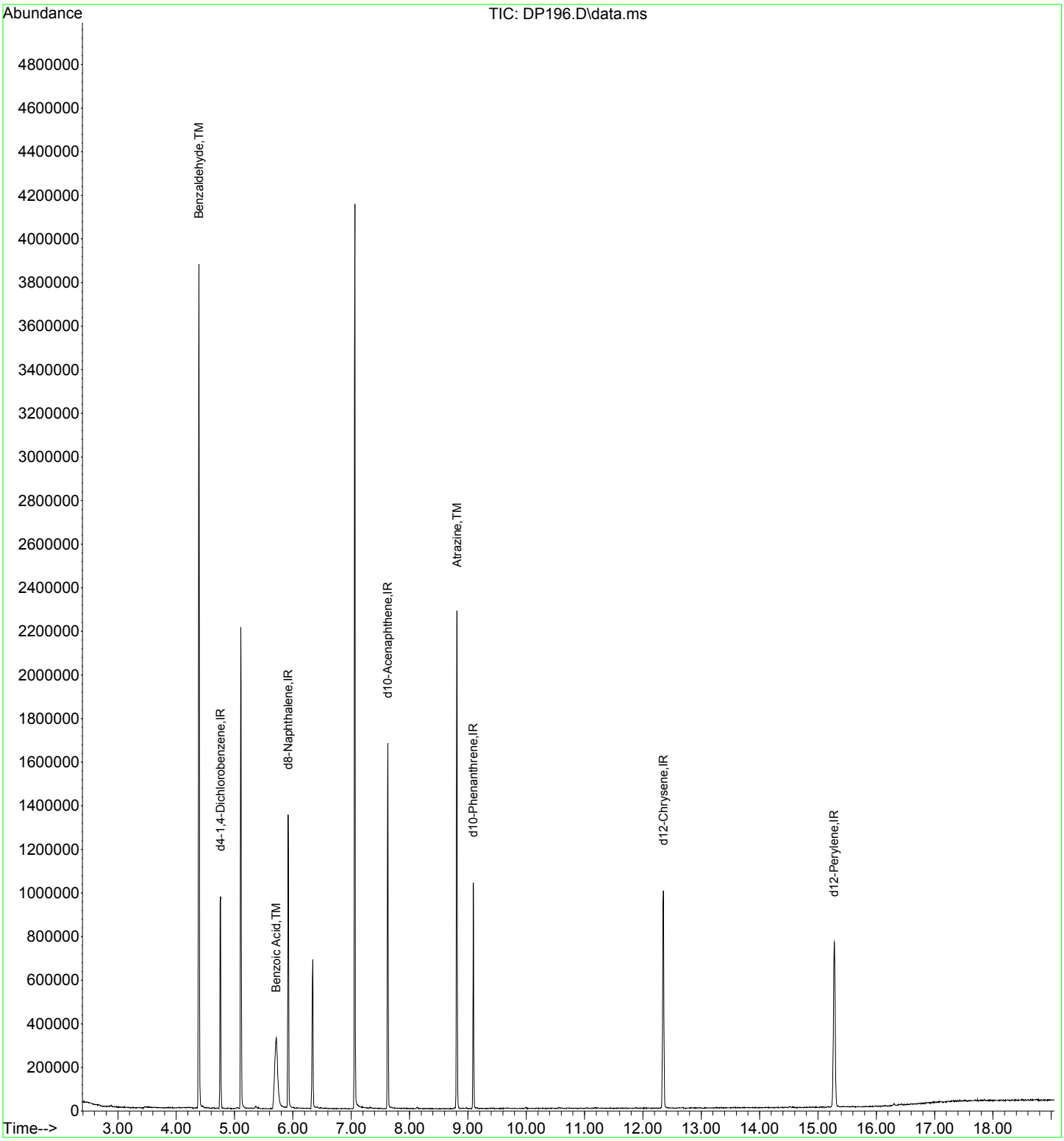
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.759	152	178909	40.00	ppm	0.00
3) d8-Naphthalene	5.919	136	680249	40.00	ppm	0.00
5) d10-Acenaphthene	7.628	164	357676	40.00	ppm	0.00
6) d10-Phenanthrene	9.092	188	362602	40.00	ppm	0.00
8) d12-Chrysene	12.351	240	484135	40.00	ppm	0.00
9) d12-Perylene	15.278	264	531074	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.391	106	892247	100.467	ppm	97
4) Benzoic Acid	5.716	105	337852m	110.668	ppm	
7) Atrazine	8.814	215	154380	97.418	ppm	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP196.D
Acq On : 17 Sep 2018 7:01 pm
Operator : J.Misiurewicz
Sample : 100 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 21 Sample Multiplier: 1

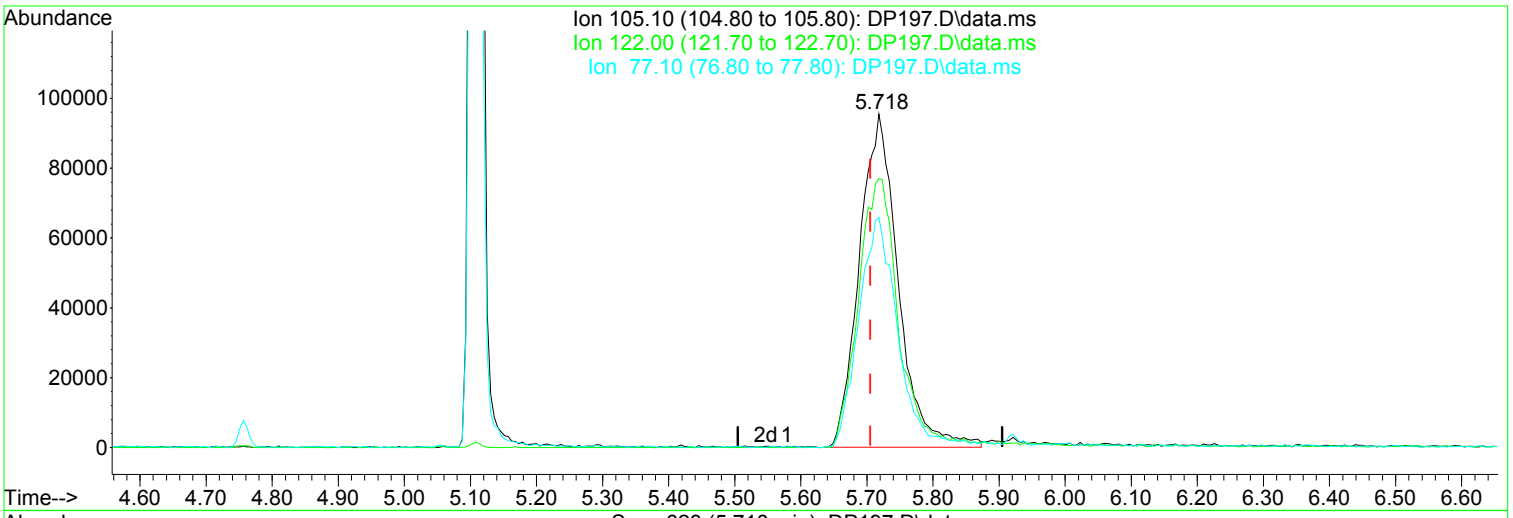
Quant Time: Sep 19 14:13:27 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

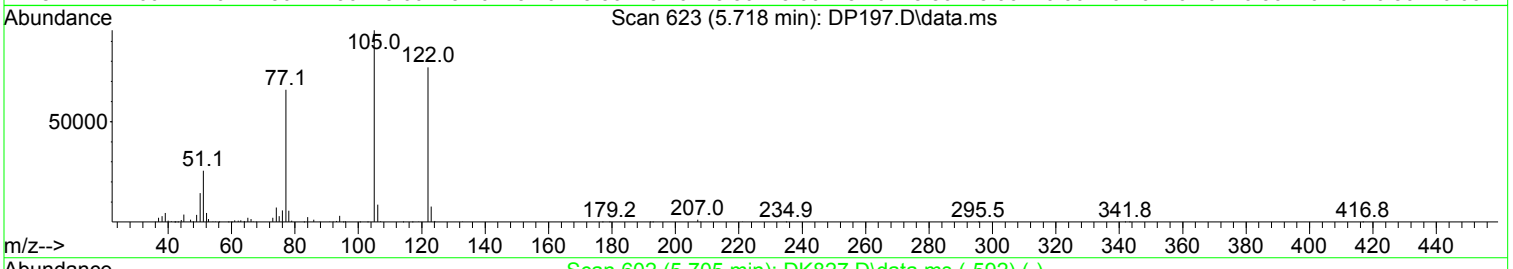


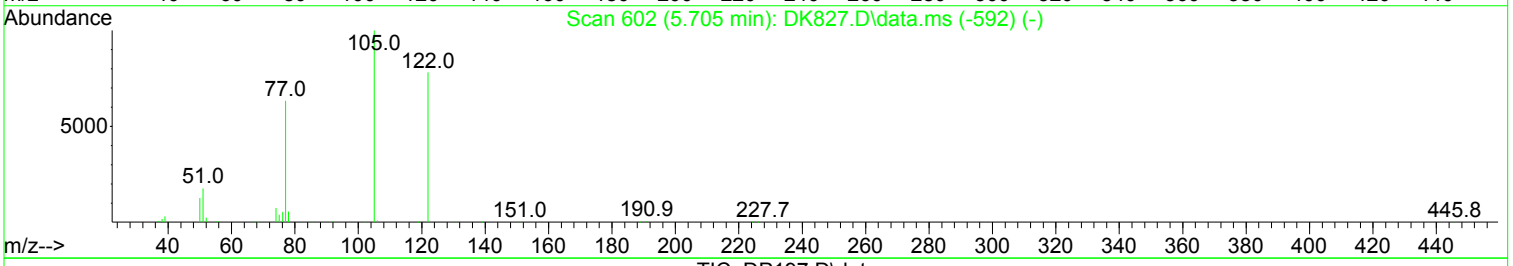
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP197.D
Acq On : 17 Sep 2018 7:29 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 14:13:29 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP197.D\data.ms

(4) Benzoic Acid (TM)

5.718min (+ 0.013) 126.45 ppm m

response 390787

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	80.67
77.10	66.70	68.95
0.00	0.00	0.00

Manual Integration:

After

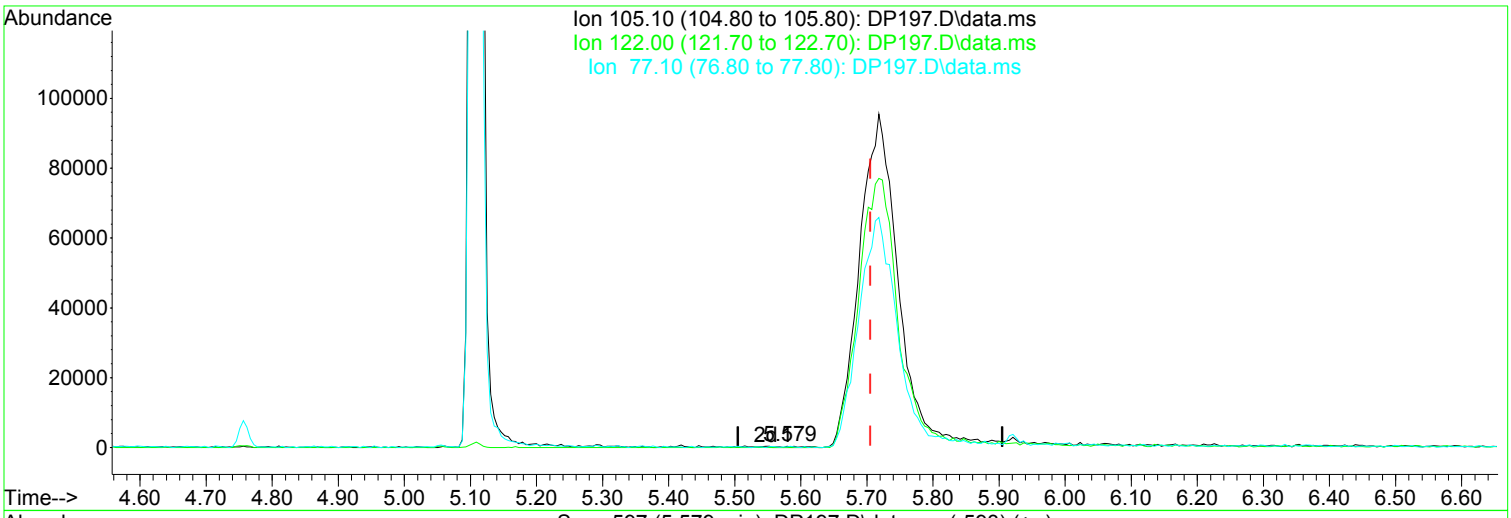
Peak not found.

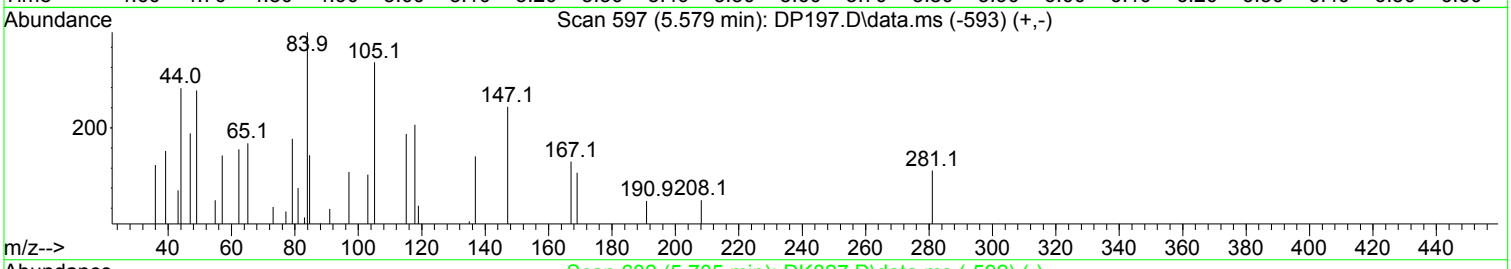
09/19/18

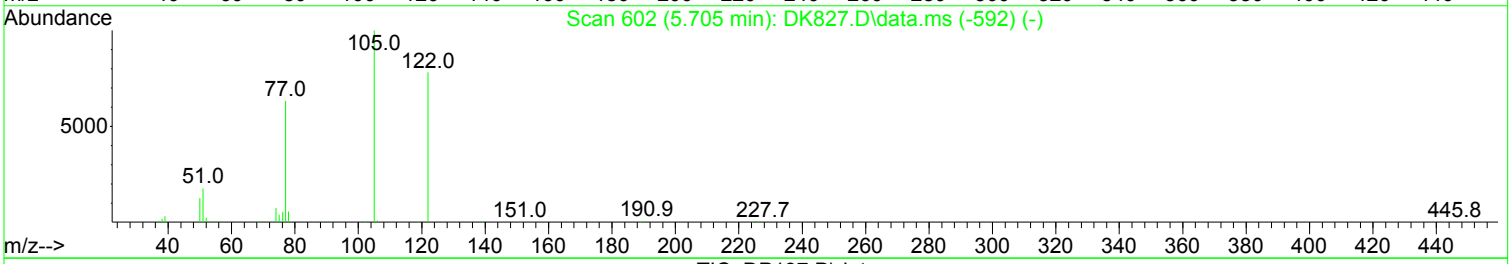
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP197.D
Acq On : 17 Sep 2018 7:29 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 14:13:29 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP197.D\data.ms

(4) Benzoic Acid (TM)

5.579min (-0.126) 0.25 ppm

response 787

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	0.00#
77.10	66.70	13.32#
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP197.D
Acq On : 17 Sep 2018 7:29 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 14:13:29 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

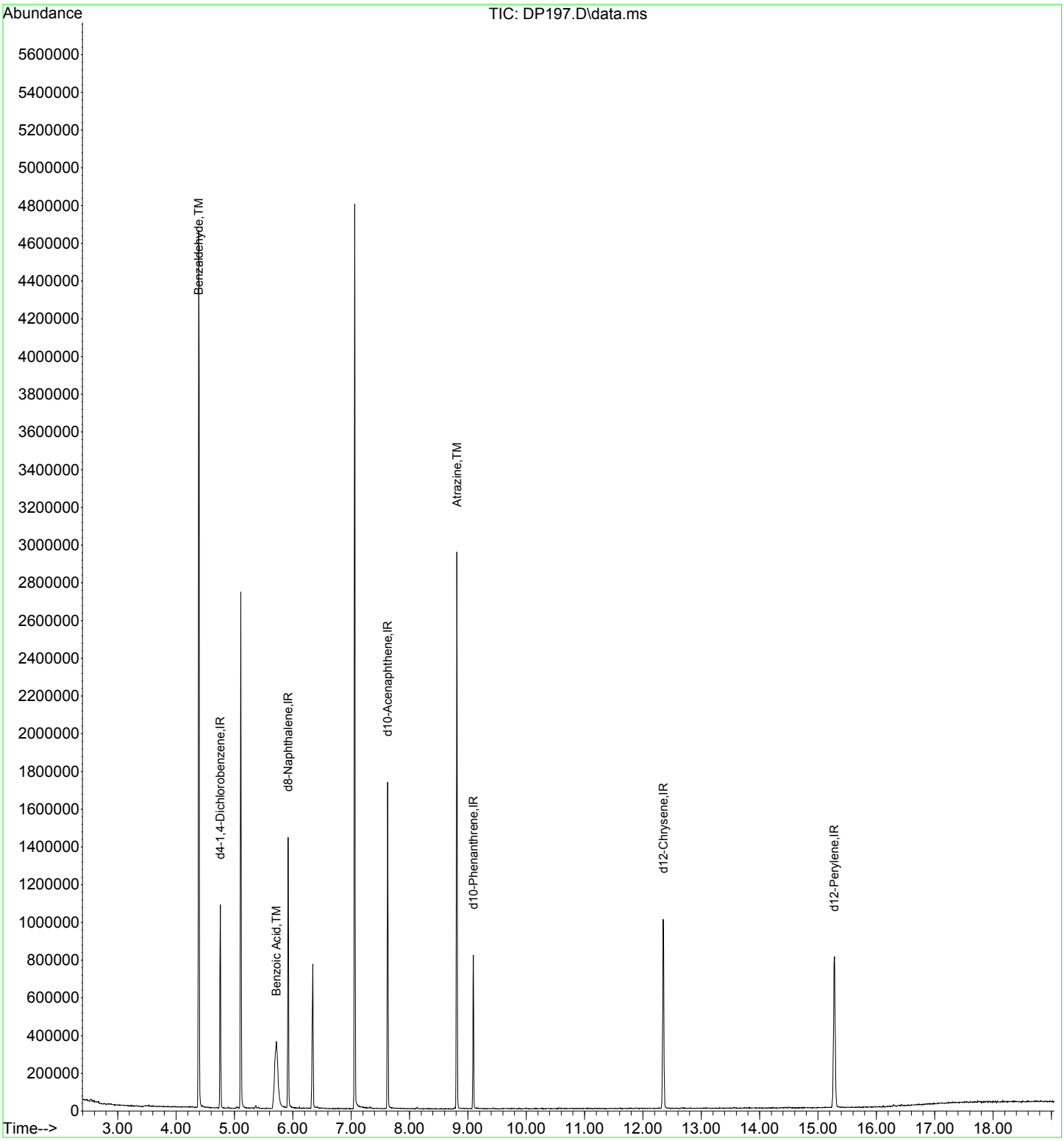
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.756	152	181848	40.00	ppm	0.00
3) d8-Naphthalene	5.921	136	688651	40.00	ppm	0.00
5) d10-Acenaphthene	7.625	164	351496	40.00	ppm	0.00
6) d10-Phenanthrene	9.094	188	285300	40.00	ppm	0.00
8) d12-Chrysene	12.348	240	477958	40.00	ppm	0.00
9) d12-Perylene	15.280	264	535779	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.388	106	1076367	119.240	ppm	95
4) Benzoic Acid	5.718	105	390787m	126.445	ppm	
7) Atrazine	8.811	215	185987	124.975	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP197.D
Acq On : 17 Sep 2018 7:29 pm
Operator : J.Misiurewicz
Sample : 120 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 22 Sample Multiplier: 1

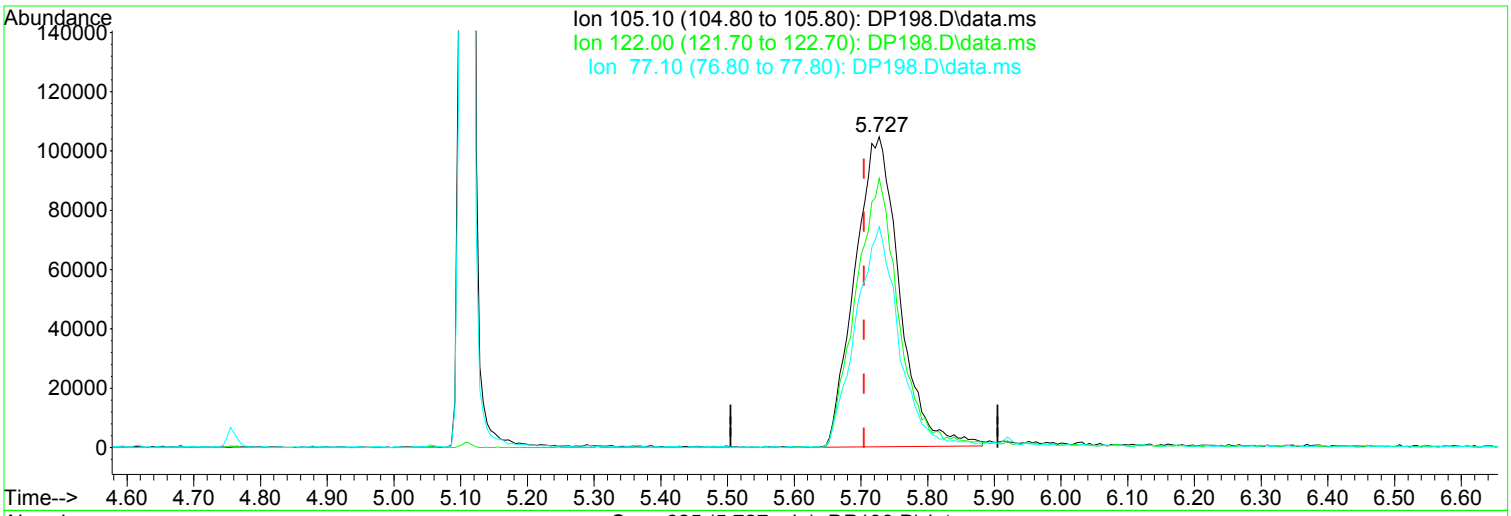
Quant Time: Sep 19 14:13:29 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

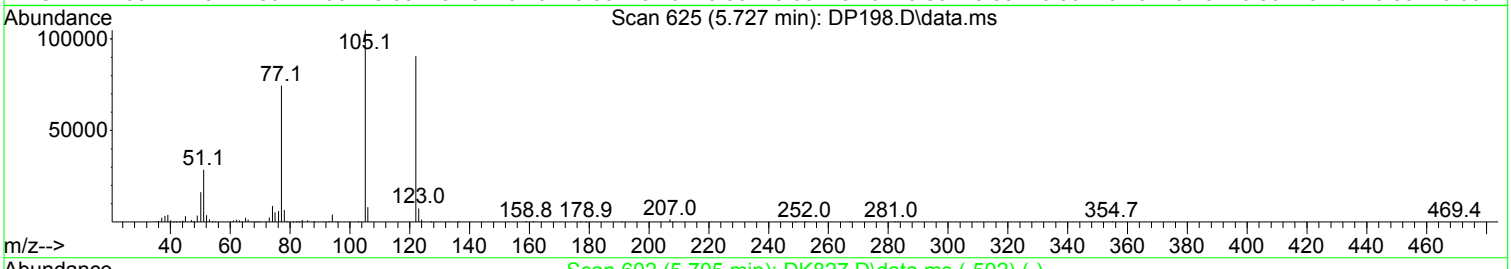


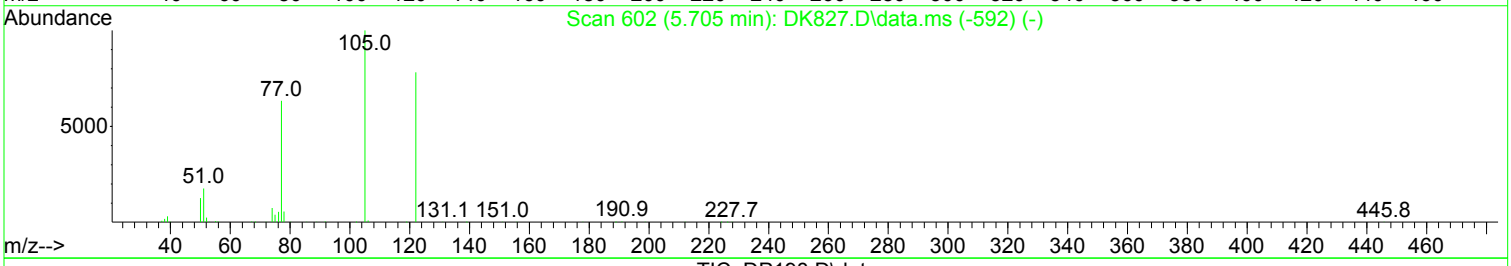
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP198.D
Acq On : 17 Sep 2018 7:58 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 14:13:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP198.D\data.ms

(4) Benzoic Acid (TM)

5.727min (+ 0.022) 158.28 ppm m

response 487368

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	86.58
77.10	66.70	71.12
0.00	0.00	0.00

Manual Integration:

After

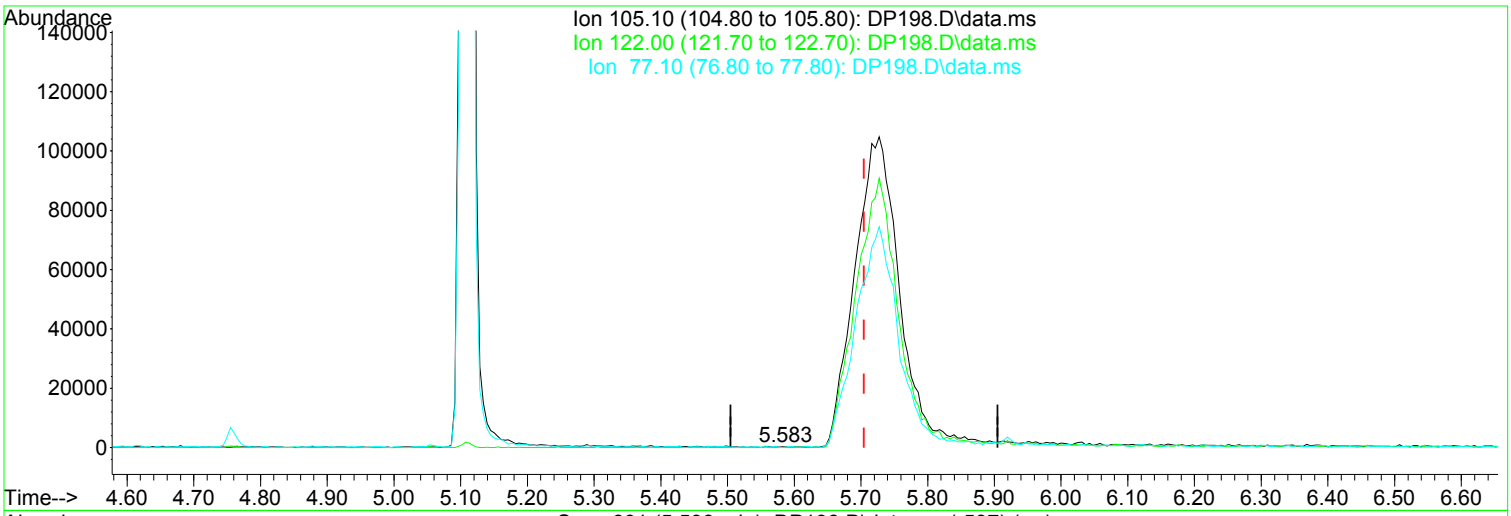
Poor integration.

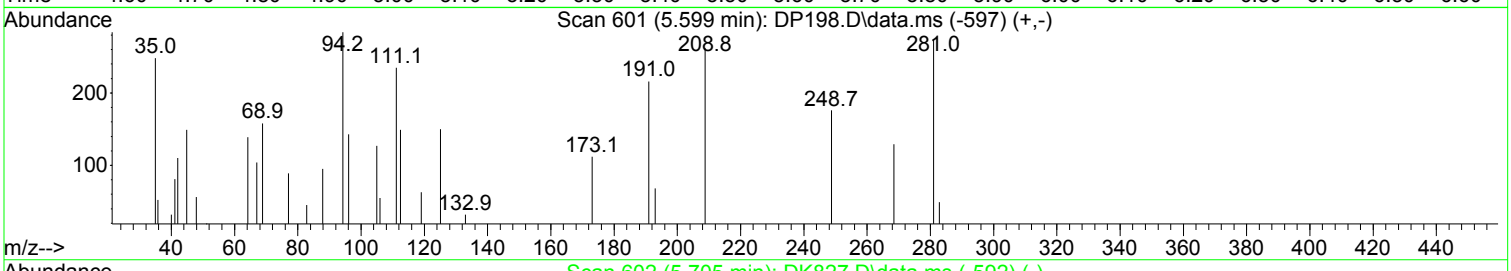
09/19/18

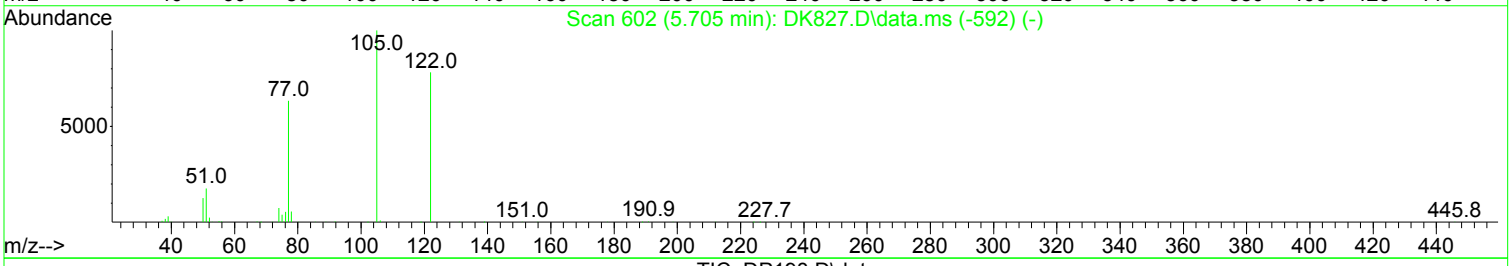
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP198.D
Acq On : 17 Sep 2018 7:58 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 14:13:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration







TIC: DP198.D\data.ms

(4) Benzoic Acid (TM)

5.599min (-0.106) 0.05 ppm

response 150

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	70.10	0.00#
77.10	66.70	70.20
0.00	0.00	0.00

Manual Integration:

Before

09/19/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP198.D
Acq On : 17 Sep 2018 7:58 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 14:13:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration

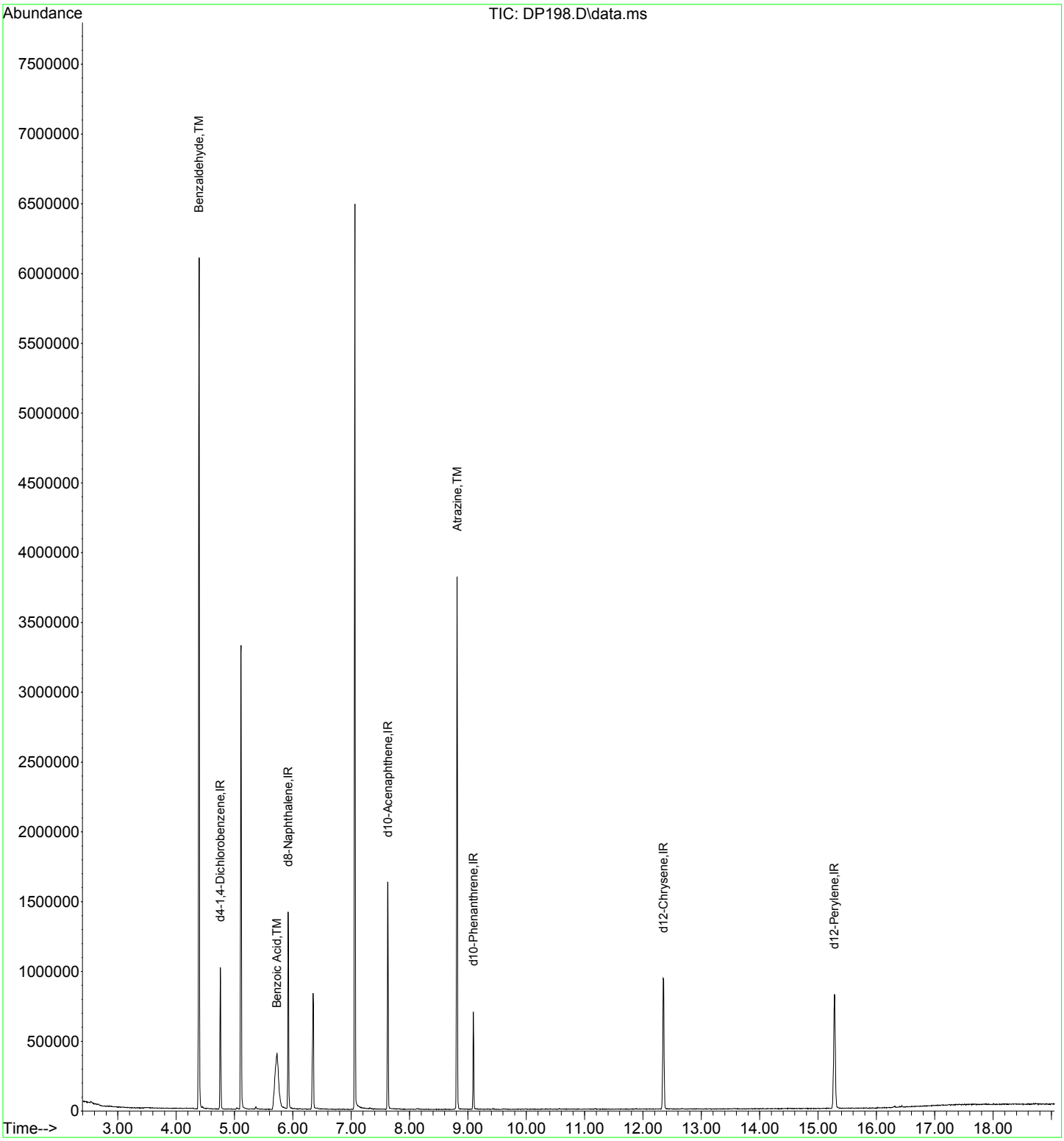
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.755	152	179725	40.00	ppm	0.00
3) d8-Naphthalene	5.919	136	686121	40.00	ppm	0.00
5) d10-Acenaphthene	7.629	164	353746	40.00	ppm	0.00
6) d10-Phenanthrene	9.093	188	240080	40.00	ppm	0.00
8) d12-Chrysene	12.346	240	474631	40.00	ppm	0.00
9) d12-Perylene	15.279	264	532189	40.00	ppm	0.00
Target Compounds						Qvalue
2) Benzaldehyde	4.392	106	1400330	156.961	ppm	96
4) Benzoic Acid	5.727	105	487368m	158.277	ppm	
7) Atrazine	8.815	215	243025	160.442	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP198.D
Acq On : 17 Sep 2018 7:58 pm
Operator : J.Misiurewicz
Sample : 160 ppm STD
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 14:13:31 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Sep 18 09:18:28 2018
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973A\DATA\091718\
Data File : DP199.D
Acq On : 17 Sep 2018 8:26 pm
Operator : J.Misiurewicz
Sample : ICV
Misc : Initial Calibration 8270D/625 Benzo/Atrazine
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 12:28:06 2018
Quant Method : I:\ACQUDATA\5973A\METHODS\Benz091718A.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 19 14:17:06 2018
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	1.000	1.000	0.0	99	0.00
2	TM	Benzaldehyde	0.993	1.055	-6.2	105	0.00
3	IR	d8-Naphthalene	1.000	1.000	0.0	98	0.00
4	TM	Benzoic Acid	0.181	0.182	-0.6	92	0.00
5	IR	d10-Acenaphthene	1.000	1.000	0.0	96	0.00
6	IR	d10-Phenanthrene	1.000	1.000	0.0	89	0.00
7	TM	Atrazine	0.153	0.148	3.3	96	0.00
8	IR	d12-Chrysene	1.000	1.000	0.0	90	0.00
9	IR	d12-Perylene	1.000	1.000	0.0	89	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 9/17/18 7:43

ICAL Tune Summary

Semi Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973A\DATA\091718\DP178.D Analytical Method: 8270D

Instrument ID: R-MS-01

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Results Pass/Fail
51	198	10	80	32.8	31492	PASS
68	69	0	2	1.8	697	PASS
69	198	0	100	41.3	39690	PASS
70	69	0	2	0.9	363	PASS
127	198	10	80	54.5	52344	PASS
197	198	0	2	0.7	691	PASS
198	198	100	100	100.0	96040	PASS
199	198	5	9	6.8	6504	PASS
275	198	10	60	26.2	25138	PASS
365	198	1	100	3.3	3165	PASS
441	442	0.01	24	17.1	29251	PASS
442	442	100	100	100.0	171232	PASS
443	442	15	24	19.9	34072	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
BLK	BLK	I:\ACQUDATA\5973A\DATA\091718\DP179.D	9/17/18 8:29	
2.5 ppm STD	2.5 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP181.D	9/17/18 10:16	
5.0 ppm STD	5.0 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP182.D	9/17/18 11:04	
10 ppm STD	10 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP183.D	9/17/18 11:40	
50 ppm STD	50 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP184.D	9/17/18 12:18	
80 ppm STD	80 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP185.D	9/17/18 12:47	
100 ppm STD	100 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP186.D	9/17/18 13:58	
120 ppm STD	120 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP187.D	9/17/18 14:28	
160 ppm STD	160 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP188.D	9/17/18 15:10	
ICV	ICV	I:\ACQUDATA\5973A\DATA\091718\DP189.D	9/17/18 15:43	
BLK	BLK	I:\ACQUDATA\5973A\DATA\091718\DP190.D	9/17/18 16:11	
2.5 ppm STD	BENZ 2.5 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP191.D	9/17/18 16:40	
5.0 ppm STD	BENZ 5.0 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP192.D	9/17/18 17:08	
10 ppm STD	BENZ 10 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP193.D	9/17/18 17:36	
50 ppm STD	BENZ 50 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP194.D	9/17/18 18:05	
80 ppm STD	BENZ 80 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP195.D	9/17/18 18:33	
100 ppm STD	BENZ 100 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP196.D	9/17/18 19:01	
120 ppm STD	BENZ 120 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP197.D	9/17/18 19:29	
160 ppm STD	BENZ 160 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP198.D	9/17/18 19:58	
ICV	BENZ ICV	I:\ACQUDATA\5973A\DATA\091718\DP199.D	9/17/18 20:26	

Analysis: 8270/625 Analyst: Mississippi Run Method: 8270A/Tune

Date: 9/17/18 Instr. 5973A R-MS-51 Quant Method: B7709171#A5.M / L00792715A.M

Syringes: LIMS Run#: 607061

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	Blk			DP176	—	
2	Benzoic Acid STD			77	Y	
3	Tune			78	YT	
4	Blk			79		
5	2.5 ppm STD			80	(2)	
6	2.5 ppm STD (8270/625)			81	Y	
7	5.0			82	Y	
8	10			83	Y	
9	50			84	Y	
10	80			85	Y	
11	100			86	Y	
12	120			87	Y	
13	160			88	Y	
14	ICV			89	YQ	
15	Blk			90	Y	
16	2.5 ppm STD (Benz/Abazine)			91	Y	
17	5.0			92	Y	
18	10			93	Y	
19	50			94	Y	
20	80			95	Y	
21	100			96	Y	
22	120			97	Y	
23	160			98	Y	
24	ICV			99	YQ	
25	Tune			200	YT	
26	CCV 625 KO			01		
27	R150 9588-01	Blk	321694	02		
28	-02	LCS		03		
29	-03	LCSD		04		
30	-04	MDLV		05		
31	-05	MDLV		06		
32	-06	MDLV		07		
33	R150 8635-001			08		R150 8635-004
34	-002			09		

(B7709171#A5.M)
(B7709171#A5.M)
(Benz0917#5A.M)

All samples = 1 mL + 5 uL (625 KO) Combined IS/Surr.: 192733

Primary : exp: Secondary : exp:

Primary: exp: Secondary : exp:

Reagents:

Runlog GCEXT r2 4/27/17

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Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1800107-01	2.5 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP164.D	09/17/2018 10:22
02	RC1800107-02	5.0 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP165.D	09/17/2018 11:10
03	RC1800107-03	10 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP166.D	09/17/2018 11:46
04	RC1800107-04	50 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP167.D	09/17/2018 12:24
05	RC1800107-05	80 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP168.D	09/17/2018 12:53
06	RC1800107-06	100 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP169.D	09/17/2018 14:05
07	RC1800107-07	120 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP170.D	09/17/2018 14:34
08	RC1800107-08	160 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP171.D	09/17/2018 15:20
10	RC1800107-10	2.5 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP174.D	09/17/2018 16:46
11	RC1800107-11	5.0 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP175.D	09/17/2018 17:14
12	RC1800107-12	10 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP176.D	09/17/2018 17:42
13	RC1800107-13	50 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP177.D	09/17/2018 18:10
14	RC1800107-14	80 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP178.D	09/17/2018 18:39
15	RC1800107-15	100 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP179.D	09/17/2018 19:07
16	RC1800107-16	120 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP180.D	09/17/2018 19:35
17	RC1800107-17	160 ppm STD	I:\ACQUDATA\5973D\Data\091718\BP181.D	09/17/2018 20:04

Analyte

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3337	02	5.000	0.3099	03	10.000	0.2981	04	50.000	0.2939
05	80.000	0.296	06	100.000	0.2902	07	120.000	0.2945	08	160.000	0.3058

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.54	02	5.000	1.336	03	10.000	1.318	04	50.000	1.367
05	80.000	1.383	06	100.000	1.31	07	120.000	1.356	08	160.000	1.391

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.659	02	5.000	1.493	03	10.000	1.442	04	50.000	1.458
05	80.000	1.438	06	100.000	1.416	07	120.000	1.414	08	160.000	1.45

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.536	02	5.000	1.519	03	10.000	1.456	04	50.000	1.487
05	80.000	1.455	06	100.000	1.396	07	120.000	1.441	08	160.000	1.478

2,2'-Oxybis(1-chloropropane)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.611	02	5.000	1.505	03	10.000	1.462	04	50.000	1.503
05	80.000	1.455	06	100.000	1.433	07	120.000	1.444	08	160.000	1.487

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

Analyte

2,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3877	02	5.000	0.3267	03	10.000	0.3535	04	50.000	0.3427
05	80.000	0.3347	06	100.000	0.3401	07	120.000	0.3327	08	160.000	0.3581

2,4,6-Tribromophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2324	02	5.000	0.2089	03	10.000	0.2301	04	50.000	0.2355
05	80.000	0.2236	06	100.000	0.229	07	120.000	0.2415	08	160.000	0.2482

2,4,6-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.335	02	5.000	0.371	03	10.000	0.3308	04	50.000	0.3671
05	80.000	0.3707	06	100.000	0.3709	07	120.000	0.377	08	160.000	0.3737

2,4-Dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2869	02	5.000	0.2878	03	10.000	0.2787	04	50.000	0.2842
05	80.000	0.2887	06	100.000	0.2822	07	120.000	0.2901	08	160.000	0.2977

2,4-Dimethylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3409	02	5.000	0.4009	03	10.000	0.3515	04	50.000	0.3543
05	80.000	0.3556	06	100.000	0.3464	07	120.000	0.359	08	160.000	0.3659

2,4-Dinitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.05713	03	10.000	0.05718	04	50.000	0.117	05	80.000	0.1423
06	100.000	0.1519	07	120.000	0.155	08	160.000	0.1688			

2,4-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.4098	02	5.000	0.389	03	10.000	0.3713	04	50.000	0.4016
05	80.000	0.3991	06	100.000	0.404	07	120.000	0.4032	08	160.000	0.4336

2,6-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3115	02	5.000	0.3127	03	10.000	0.3214	04	50.000	0.2943
05	80.000	0.2935	06	100.000	0.2767	07	120.000	0.2849	08	160.000	0.2976

2-Chloronaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.177	02	5.000	1.161	03	10.000	1.094	04	50.000	1.127
05	80.000	1.101	06	100.000	1.107	07	120.000	1.11	08	160.000	1.117

2-Chlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.478	02	5.000	1.434	03	10.000	1.303	04	50.000	1.427
05	80.000	1.392	06	100.000	1.356	07	120.000	1.379	08	160.000	1.405

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

Analyte

2-Fluorobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.409	02	5.000	1.421	03	10.000	1.495	04	50.000	1.405
05	80.000	1.372	06	100.000	1.319	07	120.000	1.372	08	160.000	1.404

2-Fluorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.418	02	5.000	1.241	03	10.000	1.307	04	50.000	1.329
05	80.000	1.335	06	100.000	1.289	07	120.000	1.335	08	160.000	1.334

2-Methylnaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.7005	02	5.000	0.7	03	10.000	0.633	04	50.000	0.6343
05	80.000	0.6406	06	100.000	0.6155	07	120.000	0.6295	08	160.000	0.6558

2-Methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.342	02	5.000	1.145	03	10.000	1.184	04	50.000	1.157
05	80.000	1.159	06	100.000	1.145	07	120.000	1.176	08	160.000	1.205

2-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3976	02	5.000	0.3735	03	10.000	0.4128	04	50.000	0.3635
05	80.000	0.348	06	100.000	0.3488	07	120.000	0.3529	08	160.000	0.3638

2-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1766	02	5.000	0.2074	03	10.000	0.1915	04	50.000	0.1897
05	80.000	0.1959	06	100.000	0.191	07	120.000	0.1973	08	160.000	0.2039

3,3'-Dichlorobenzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.472	02	5.000	0.5064	03	10.000	0.4772	04	50.000	0.5056
05	80.000	0.4788	06	100.000	0.4936	07	120.000	0.4791	08	160.000	0.4882

3- and 4-Methylphenol Coelution

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.423	02	5.000	1.318	03	10.000	1.203	04	50.000	1.264
05	80.000	1.392	06	100.000	1.365	07	120.000	1.395	08	160.000	1.414

3-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.357	02	5.000	0.3811	03	10.000	0.4005	04	50.000	0.3704
05	80.000	0.3615	06	100.000	0.3626	07	120.000	0.3714	08	160.000	0.3808

4,6-Dinitro-2-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.1093	04	50.000	0.1394	05	80.000	0.1545	06	100.000	0.1368
07	120.000	0.1513	08	160.000	0.1455						

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

Analyte

4-Bromophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.242	02	5.000	0.2394	03	10.000	0.236	04	50.000	0.2208
05	80.000	0.2173	06	100.000	0.2186	07	120.000	0.2239	08	160.000	0.2261

4-Chloro-3-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.315	02	5.000	0.3271	03	10.000	0.3027	04	50.000	0.3076
05	80.000	0.2934	06	100.000	0.2864	07	120.000	0.2923	08	160.000	0.2868

4-Chloroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.46	02	5.000	0.4203	03	10.000	0.4311	04	50.000	0.4309
05	80.000	0.4331	06	100.000	0.426	07	120.000	0.4328	08	160.000	0.4472

4-Chlorophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.7484	02	5.000	0.6584	03	10.000	0.6186	04	50.000	0.6412
05	80.000	0.5879	06	100.000	0.5689	07	120.000	0.5717	08	160.000	0.5745

4-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.4225	02	5.000	0.3505	03	10.000	0.3825	04	50.000	0.3857
05	80.000	0.3877	06	100.000	0.3829	07	120.000	0.3828	08	160.000	0.3983

4-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.1822	03	10.000	0.198	04	50.000	0.2355	05	80.000	0.2403
06	100.000	0.2102	07	120.000	0.2117	08	160.000	0.1936			

Acenaphthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.337	02	5.000	1.301	03	10.000	1.168	04	50.000	1.193
05	80.000	1.174	06	100.000	1.189	07	120.000	1.176	08	160.000	1.196

Acenaphthylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.813	02	5.000	2.036	03	10.000	1.821	04	50.000	1.913
05	80.000	1.839	06	100.000	1.824	07	120.000	1.844	08	160.000	1.853

Anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.047	02	5.000	1.07	03	10.000	1.043	04	50.000	1.098
05	80.000	1.077	06	100.000	1.088	07	120.000	1.097	08	160.000	1.088

Benz(a)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.221	02	5.000	1.233	03	10.000	1.099	04	50.000	1.17
05	80.000	1.112	06	100.000	1.135	07	120.000	1.104	08	160.000	1.116

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

Analyte

Benzo(a)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.01	02	5.000	0.893	03	10.000	0.9546	04	50.000	1.014
05	80.000	1.03	06	100.000	1.045	07	120.000	1.019	08	160.000	1.038

Benzo(b)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.143	02	5.000	1.076	03	10.000	1.082	04	50.000	1.175
05	80.000	1.193	06	100.000	1.217	07	120.000	1.175	08	160.000	1.214

Benzo(g,h,i)perylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.9309	02	5.000	0.8605	03	10.000	0.9725	04	50.000	0.942
05	80.000	0.9039	06	100.000	0.9322	07	120.000	0.8705	08	160.000	0.8432

Benzo(k)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.112	02	5.000	1.146	03	10.000	1.138	04	50.000	1.125
05	80.000	1.122	06	100.000	1.119	07	120.000	1.13	08	160.000	1.108

Benzyl Alcohol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.9318	02	5.000	0.9377	03	10.000	1.011	04	50.000	1.107
05	80.000	1.128	06	100.000	1.079	07	120.000	1.079	08	160.000	1.113

Bis(2-chloroethoxy)methane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3892	02	5.000	0.4239	03	10.000	0.3879	04	50.000	0.3825
05	80.000	0.3714	06	100.000	0.3671	07	120.000	0.371	08	160.000	0.3849

Bis(2-chloroethyl) Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.174	02	5.000	1.195	03	10.000	1.107	04	50.000	1.177
05	80.000	1.158	06	100.000	1.12	07	120.000	1.167	08	160.000	1.194

Bis(2-ethylhexyl) Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.8719	02	5.000	0.8771	03	10.000	0.8063	04	50.000	0.8804
05	80.000	0.8508	06	100.000	0.8467	07	120.000	0.8439	08	160.000	0.8508

Butyl Benzyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.5835	02	5.000	0.6316	03	10.000	0.5844	04	50.000	0.6551
05	80.000	0.6101	06	100.000	0.6067	07	120.000	0.5999	08	160.000	0.614

Carbazole

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.192	02	5.000	1.062	03	10.000	1.178	04	50.000	1.159
05	80.000	1.177	06	100.000	1.16	07	120.000	1.186	08	160.000	1.159

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Project: Union Road **Calibration Date:** 9/17/2018

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Analyte

Chrysene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.105	02	5.000	1.15	03	10.000	1.098	04	50.000	1.116
05	80.000	1.087	06	100.000	1.099	07	120.000	1.077	08	160.000	1.103

Di-n-butyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.158	02	5.000	1.315	03	10.000	1.35	04	50.000	1.461
05	80.000	1.445	06	100.000	1.402	07	120.000	1.432	08	160.000	1.4

Di-n-octyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.188	02	5.000	1.286	03	10.000	1.318	04	50.000	1.347
05	80.000	1.411	06	100.000	1.393	07	120.000	1.428	08	160.000	1.433

Dibenz(a,h)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.9543	02	5.000	0.8221	03	10.000	0.9436	04	50.000	1.011
05	80.000	0.9895	06	100.000	1.01	07	120.000	0.9852	08	160.000	0.9765

Dibenzofuran

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.817	02	5.000	1.769	03	10.000	1.626	04	50.000	1.638
05	80.000	1.618	06	100.000	1.612	07	120.000	1.579	08	160.000	1.57

Diethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.41	02	5.000	1.513	03	10.000	1.343	04	50.000	1.317
05	80.000	1.337	06	100.000	1.308	07	120.000	1.297	08	160.000	1.363

Dimethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.434	02	5.000	1.451	03	10.000	1.362	04	50.000	1.252
05	80.000	1.25	06	100.000	1.223	07	120.000	1.237	08	160.000	1.275

Fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.063	02	5.000	1.134	03	10.000	1.152	04	50.000	1.241
05	80.000	1.242	06	100.000	1.215	07	120.000	1.229	08	160.000	1.223

Fluorene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.501	02	5.000	1.383	03	10.000	1.322	04	50.000	1.342
05	80.000	1.255	06	100.000	1.212	07	120.000	1.211	08	160.000	1.228

Hexachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2944	02	5.000	0.2948	03	10.000	0.2855	04	50.000	0.2659
05	80.000	0.2532	06	100.000	0.2519	07	120.000	0.2494	08	160.000	0.2578

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

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Semivolatile Organic Compounds by GC/MS

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Analyte

Hexachlorobutadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1919	02	5.000	0.1919	03	10.000	0.1681	04	50.000	0.1805
05	80.000	0.1808	06	100.000	0.1796	07	120.000	0.1773	08	160.000	0.1826

Hexachlorocyclopentadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.08952	03	10.000	0.09906	04	50.000	0.2009	05	80.000	0.2222
06	100.000	0.2432	07	120.000	0.2561	08	160.000	0.2679			

Hexachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.6853	02	5.000	0.6976	03	10.000	0.5766	04	50.000	0.6086
05	80.000	0.6079	06	100.000	0.5822	07	120.000	0.592	08	160.000	0.6191

Indeno(1,2,3-cd)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.8896	02	5.000	0.8746	03	10.000	0.9156	04	50.000	0.9566
05	80.000	0.9735	06	100.000	0.9793	07	120.000	0.9504	08	160.000	0.9588

Isophorone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.5607	02	5.000	0.5561	03	10.000	0.5079	04	50.000	0.5171
05	80.000	0.5221	06	100.000	0.515	07	120.000	0.516	08	160.000	0.5255

N-Nitrosodi-n-propylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.13	02	5.000	1.025	03	10.000	1.111	04	50.000	1.056
05	80.000	1.074	06	100.000	1.028	07	120.000	1.039	08	160.000	1.048

N-Nitrosodimethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.7312	02	5.000	0.6836	03	10.000	0.7114	04	50.000	0.7375
05	80.000	0.7456	06	100.000	0.7211	07	120.000	0.7358	08	160.000	0.7496

N-Nitrosodiphenylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.000	0.6892	02	10.000	0.6852	03	20.000	0.7322	04	100.000	0.6439
05	160.000	0.6409	06	200.000	0.6414	07	240.000	0.6452	08	320.000	0.6463

Naphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.113	02	5.000	1.063	03	10.000	1.032	04	50.000	1
05	80.000	1.006	06	100.000	0.9923	07	120.000	0.986	08	160.000	0.9992

Nitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3359	02	5.000	0.3698	03	10.000	0.358	04	50.000	0.3405
05	80.000	0.3472	06	100.000	0.3455	07	120.000	0.3405	08	160.000	0.3529

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

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Analyte

Nitrobenzene-d5

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.4096	02	5.000	0.349	03	10.000	0.3675	04	50.000	0.3666
05	80.000	0.3606	06	100.000	0.3582	07	120.000	0.3589	08	160.000	0.3755

Pentachlorophenol (PCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.09473	03	10.000	0.09049	04	50.000	0.1279	05	80.000	0.1401
06	100.000	0.1223	07	120.000	0.1489	08	160.000	0.1367			

Phenanthrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.125	02	5.000	1.103	03	10.000	1.07	04	50.000	1.08
05	80.000	1.079	06	100.000	1.086	07	120.000	1.084	08	160.000	1.096

Phenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.486	02	5.000	1.951	03	10.000	1.716	04	50.000	1.787
05	80.000	1.777	06	100.000	1.714	07	120.000	1.716	08	160.000	1.763

Phenol-d6

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.556	02	5.000	1.616	03	10.000	1.713	04	50.000	1.654
05	80.000	1.62	06	100.000	1.575	07	120.000	1.606	08	160.000	1.654

Pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.097	02	5.000	1.154	03	10.000	1.141	04	50.000	1.255
05	80.000	1.215	06	100.000	1.253	07	120.000	1.166	08	160.000	1.217

p-Terphenyl-d14

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.9282	02	5.000	0.8986	03	10.000	0.9033	04	50.000	0.9628
05	80.000	0.8956	06	100.000	0.9235	07	120.000	0.8717	08	160.000	0.9153

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	4.7	≤20	0.3028	
1,2-Dichlorobenzene	TRG	Average RF	% RSD	5.3	≤20	1.375	
1,3-Dichlorobenzene	TRG	Average RF	% RSD	5.4	≤20	1.471	
1,4-Dichlorobenzene	TRG	Average RF	% RSD	3.0	≤20	1.471	
2,2'-Oxybis(1-chloropropane)	TRG	Average RF	% RSD	3.8	≤20	1.487	0.010
2,4,5-Trichlorophenol	TRG	Average RF	% RSD	5.6	≤20	0.347	0.200
2,4,6-Tribromophenol	SURR	Average RF	% RSD	5.1	≤20	0.2311	
2,4,6-Trichlorophenol	TRG	Average RF	% RSD	5.0	≤20	0.362	0.200
2,4-Dichlorophenol	TRG	Average RF	% RSD	2.0	≤20	0.287	0.200
2,4-Dimethylphenol	TRG	Average RF	% RSD	5.1	≤20	0.3593	0.200
2,4-Dinitrophenol	TRG	Quadratic	COD	0.9934	≥0.99	0.1213	0.010
2,4-Dinitrotoluene	TRG	Average RF	% RSD	4.4	≤20	0.4015	0.200
2,6-Dinitrotoluene	TRG	Average RF	% RSD	5.0	≤20	0.2991	0.200
2-Chloronaphthalene	TRG	Average RF	% RSD	2.6	≤20	1.124	0.800
2-Chlorophenol	TRG	Average RF	% RSD	3.8	≤20	1.397	0.800
2-Fluorobiphenyl	SURR	Average RF	% RSD	3.6	≤20	1.4	
2-Fluorophenol	SURR	Average RF	% RSD	3.8	≤20	1.323	
2-Methylnaphthalene	TRG	Average RF	% RSD	5.0	≤20	0.6512	0.400
2-Methylphenol	TRG	Average RF	% RSD	5.5	≤20	1.189	0.700
2-Nitroaniline	TRG	Average RF	% RSD	6.4	≤20	0.3701	0.010
2-Nitrophenol	TRG	Average RF	% RSD	4.9	≤20	0.1942	0.100
3,3'-Dichlorobenzidine	TRG	Average RF	% RSD	2.7	≤20	0.4876	0.010
3- and 4-Methylphenol Coelution	TRG	Average RF	% RSD	5.9	≤20	1.347	0.600
3-Nitroaniline	TRG	Average RF	% RSD	3.8	≤20	0.3732	0.010
4,6-Dinitro-2-methylphenol	TRG	Average RF	% RSD	11.6	≤20	0.1395	0.010
4-Bromophenyl Phenyl Ether	TRG	Average RF	% RSD	4.3	≤20	0.228	0.100
4-Chloro-3-methylphenol	TRG	Average RF	% RSD	4.8	≤20	0.3014	0.200
4-Chloroaniline	TRG	Average RF	% RSD	2.9	≤20	0.4352	0.010
4-Chlorophenyl Phenyl Ether	TRG	Average RF	% RSD	9.9	≤20	0.6212	0.400
4-Nitroaniline	TRG	Average RF	% RSD	5.1	≤20	0.3866	0.010
4-Nitrophenol	TRG	Average RF	% RSD	10.2	≤20	0.2102	0.010
Acenaphthene	TRG	Average RF	% RSD	5.3	≤20	1.217	0.900
Acenaphthylene	TRG	Average RF	% RSD	4.0	≤20	1.868	0.900
Anthracene	TRG	Average RF	% RSD	2.0	≤20	1.076	0.700

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Benz(a)anthracene	TRG	Average RF	% RSD	4.6	≤20	1.149	0.800
Benzo(a)pyrene	TRG	Average RF	% RSD	5.2	≤20	1.001	0.700
Benzo(b)fluoranthene	TRG	Average RF	% RSD	4.7	≤20	1.159	0.700
Benzo(g,h,i)perylene	TRG	Average RF	% RSD	5.0	≤20	0.907	0.500
Benzo(k)fluoranthene	TRG	Average RF	% RSD	1.1	≤20	1.125	0.700
Benzyl Alcohol	TRG	Average RF	% RSD	7.5	≤20	1.048	
Bis(2-chloroethoxy)methane	TRG	Average RF	% RSD	4.7	≤20	0.3847	0.300
Bis(2-chloroethyl) Ether	TRG	Average RF	% RSD	2.8	≤20	1.161	0.700
Bis(2-ethylhexyl) Phthalate	TRG	Average RF	% RSD	2.8	≤20	0.8535	0.010
Butyl Benzyl Phthalate	TRG	Average RF	% RSD	3.9	≤20	0.6107	0.010
Carbazole	TRG	Average RF	% RSD	3.6	≤20	1.159	0.010
Chrysene	TRG	Average RF	% RSD	2.0	≤20	1.104	0.700
Di-n-butyl Phthalate	TRG	Average RF	% RSD	7.2	≤20	1.37	0.010
Di-n-octyl Phthalate	TRG	Average RF	% RSD	6.2	≤20	1.351	0.010
Dibenz(a,h)anthracene	TRG	Average RF	% RSD	6.4	≤20	0.9614	0.400
Dibenzofuran	TRG	Average RF	% RSD	5.4	≤20	1.654	0.800
Diethyl Phthalate	TRG	Average RF	% RSD	5.2	≤20	1.361	0.010
Dimethyl Phthalate	TRG	Average RF	% RSD	7.0	≤20	1.311	0.010
Fluoranthene	TRG	Average RF	% RSD	5.4	≤20	1.187	0.600
Fluorene	TRG	Average RF	% RSD	7.8	≤20	1.307	0.900
Hexachlorobenzene	TRG	Average RF	% RSD	7.2	≤20	0.2691	0.100
Hexachlorobutadiene	TRG	Average RF	% RSD	4.3	≤20	0.1816	0.010
Hexachlorocyclopentadiene	TRG	Quadratic	COD	0.9946	≥0.99	0.197	0.050
Hexachloroethane	TRG	Average RF	% RSD	7.4	≤20	0.6212	0.300
Indeno(1,2,3-cd)pyrene	TRG	Average RF	% RSD	4.2	≤20	0.9373	0.500
Isophorone	TRG	Average RF	% RSD	3.7	≤20	0.5276	0.400
N-Nitrosodi-n-propylamine	TRG	Average RF	% RSD	3.6	≤20	1.064	0.500
N-Nitrosodimethylamine	TRG	Average RF	% RSD	3.0	≤20	0.727	
N-Nitrosodiphenylamine	TRG	Average RF	% RSD	5.0	≤20	0.6655	0.010
Naphthalene	TRG	Average RF	% RSD	4.3	≤20	1.024	0.700
Nitrobenzene	TRG	Average RF	% RSD	3.2	≤20	0.3488	0.200
Nitrobenzene-d5	SURR	Average RF	% RSD	5.0	≤20	0.3682	
Pentachlorophenol (PCP)	TRG	Linear	R2	0.9941	≥0.99	0.123	0.050
Phenanthrene	TRG	Average RF	% RSD	1.6	≤20	1.09	0.700
Phenol	TRG	Average RF	% RSD	7.4	≤20	1.739	0.800

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Phenol-d6	SURR	Average RF	% RSD	3.0	≤20	1.624	
Pyrene	TRG	Average RF	% RSD	4.8	≤20	1.187	0.600
p-Terphenyl-d14	SURR	Average RF	% RSD	3.0	≤20	0.9124	

ALS Group USA, Corp.
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QA/QC Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1800106-01	2.5 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP181.D	09/17/2018 10:16
02	RC1800106-02	5.0 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP182.D	09/17/2018 11:04
03	RC1800106-03	10 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP183.D	09/17/2018 11:40
04	RC1800106-04	50 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP184.D	09/17/2018 12:18
05	RC1800106-05	80 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP185.D	09/17/2018 12:47
06	RC1800106-06	100 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP186.D	09/17/2018 13:58
07	RC1800106-07	120 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP187.D	09/17/2018 14:28
08	RC1800106-08	160 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP188.D	09/17/2018 15:10
10	RC1800106-10	2.5 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP191.D	09/17/2018 16:40
11	RC1800106-11	5.0 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP192.D	09/17/2018 17:08
12	RC1800106-12	10 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP193.D	09/17/2018 17:36
13	RC1800106-13	50 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP194.D	09/17/2018 18:05
14	RC1800106-14	80 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP195.D	09/17/2018 18:33
15	RC1800106-15	100 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP196.D	09/17/2018 19:01
16	RC1800106-16	120 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP197.D	09/17/2018 19:29
17	RC1800106-17	160 ppm STD	I:\ACQUDATA\5973A\DATA\091718\DP198.D	09/17/2018 19:58

Analyte

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2912	02	5.000	0.2904	03	10.000	0.2698	04	50.000	0.2717
05	80.000	0.2772	06	100.000	0.2657	07	120.000	0.2891	08	160.000	0.2824

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.502	02	5.000	1.43	03	10.000	1.401	04	50.000	1.4
05	80.000	1.396	06	100.000	1.383	07	120.000	1.395	08	160.000	1.373

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.606	02	5.000	1.546	03	10.000	1.471	04	50.000	1.469
05	80.000	1.477	06	100.000	1.455	07	120.000	1.474	08	160.000	1.449

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.606	02	5.000	1.559	03	10.000	1.516	04	50.000	1.481
05	80.000	1.468	06	100.000	1.448	07	120.000	1.456	08	160.000	1.452

2,2'-Oxybis(1-chloropropane)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.446	02	5.000	1.5	03	10.000	1.419	04	50.000	1.358
05	80.000	1.343	06	100.000	1.33	07	120.000	1.339	08	160.000	1.329

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte

2,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3404	02	5.000	0.337	03	10.000	0.3485	04	50.000	0.3117
05	80.000	0.3289	06	100.000	0.3438	07	120.000	0.3292	08	160.000	0.3491

2,4,6-Tribromophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2092	02	5.000	0.2134	03	10.000	0.2247	04	50.000	0.2077
05	80.000	0.2093	06	100.000	0.2043	07	120.000	0.1982	08	160.000	0.1945

2,4,6-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.344	02	5.000	0.342	03	10.000	0.347	04	50.000	0.3527
05	80.000	0.3533	06	100.000	0.3539	07	120.000	0.339	08	160.000	0.3419

2,4-Dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2668	02	5.000	0.2723	03	10.000	0.2538	04	50.000	0.2764
05	80.000	0.2803	06	100.000	0.2669	07	120.000	0.288	08	160.000	0.2857

2,4-Dimethylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3371	02	5.000	0.3451	03	10.000	0.3289	04	50.000	0.3331
05	80.000	0.3445	06	100.000	0.327	07	120.000	0.3541	08	160.000	0.3509

2,4-Dinitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.06831	03	10.000	0.07613	04	50.000	0.1172	05	80.000	0.1337
06	100.000	0.1466	07	120.000	0.144	08	160.000	0.1626			

2,4-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3624	02	5.000	0.3581	03	10.000	0.3307	04	50.000	0.3722
05	80.000	0.3841	06	100.000	0.3856	07	120.000	0.3787	08	160.000	0.3924

2,6-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2708	02	5.000	0.2783	03	10.000	0.2665	04	50.000	0.2764
05	80.000	0.2857	06	100.000	0.2837	07	120.000	0.2774	08	160.000	0.2963

2-Chloronaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.156	02	5.000	1.25	03	10.000	1.15	04	50.000	1.126
05	80.000	1.13	06	100.000	1.134	07	120.000	1.085	08	160.000	1.11

2-Chlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.473	02	5.000	1.392	03	10.000	1.437	04	50.000	1.428
05	80.000	1.432	06	100.000	1.437	07	120.000	1.443	08	160.000	1.416

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte

2-Fluorobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.426	02	5.000	1.411	03	10.000	1.47	04	50.000	1.361
05	80.000	1.389	06	100.000	1.383	07	120.000	1.337	08	160.000	1.378

2-Fluorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.455	02	5.000	1.372	03	10.000	1.439	04	50.000	1.373
05	80.000	1.358	06	100.000	1.384	07	120.000	1.372	08	160.000	1.375

2-Methylnaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.6909	02	5.000	0.6882	03	10.000	0.6455	04	50.000	0.6351
05	80.000	0.6367	06	100.000	0.5979	07	120.000	0.6508	08	160.000	0.6291

2-Methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.19	02	5.000	1.352	03	10.000	1.241	04	50.000	1.261
05	80.000	1.244	06	100.000	1.256	07	120.000	1.25	08	160.000	1.246

2-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3073	02	5.000	0.3002	03	10.000	0.3137	04	50.000	0.3105
05	80.000	0.3083	06	100.000	0.3134	07	120.000	0.3042	08	160.000	0.3174

2-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1656	02	5.000	0.1722	03	10.000	0.1687	04	50.000	0.1871
05	80.000	0.1927	06	100.000	0.1855	07	120.000	0.2008	08	160.000	0.2016

3,3'-Dichlorobenzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.4113	02	5.000	0.4675	03	10.000	0.4716	04	50.000	0.4958
05	80.000	0.5023	06	100.000	0.4723	07	120.000	0.501	08	160.000	0.4875

3- and 4-Methylphenol Coelution

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.329	02	5.000	1.273	03	10.000	1.3	04	50.000	1.302
05	80.000	1.327	06	100.000	1.318	07	120.000	1.353	08	160.000	1.414

3-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3401	02	5.000	0.3504	03	10.000	0.3822	04	50.000	0.3717
05	80.000	0.3862	06	100.000	0.3822	07	120.000	0.3838	08	160.000	0.4012

4,6-Dinitro-2-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.09705	04	50.000	0.1312	05	80.000	0.1408	06	100.000	0.1363
07	120.000	0.1441	08	160.000	0.1468						

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte

4-Bromophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.235	02	5.000	0.2493	03	10.000	0.2366	04	50.000	0.2122
05	80.000	0.2098	06	100.000	0.2039	07	120.000	0.2073	08	160.000	0.2061

4-Chloro-3-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2886	02	5.000	0.2883	03	10.000	0.2689	04	50.000	0.2755
05	80.000	0.2696	06	100.000	0.2596	07	120.000	0.2756	08	160.000	0.2715

4-Chloroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.436	02	5.000	0.4517	03	10.000	0.4387	04	50.000	0.4319
05	80.000	0.4374	06	100.000	0.4077	07	120.000	0.449	08	160.000	0.4291

4-Chlorophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.5742	02	5.000	0.5941	03	10.000	0.5669	04	50.000	0.5475
05	80.000	0.5426	06	100.000	0.5303	07	120.000	0.496	08	160.000	0.5029

4-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3731	02	5.000	0.3712	03	10.000	0.3928	04	50.000	0.3856
05	80.000	0.3955	06	100.000	0.397	07	120.000	0.3938	08	160.000	0.4085

4-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.1566	03	10.000	0.1734	04	50.000	0.1999	05	80.000	0.2097
06	100.000	0.202	07	120.000	0.2058	08	160.000	0.1832			

Acenaphthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.297	02	5.000	1.326	03	10.000	1.273	04	50.000	1.224
05	80.000	1.215	06	100.000	1.19	07	120.000	1.17	08	160.000	1.18

Acenaphthylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.828	02	5.000	1.97	03	10.000	1.887	04	50.000	1.933
05	80.000	1.89	06	100.000	1.885	07	120.000	1.855	08	160.000	1.807

Anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.119	02	5.000	1.096	03	10.000	1.087	04	50.000	1.129
05	80.000	1.113	06	100.000	1.069	07	120.000	1.083	08	160.000	1.06

Benz(a)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.129	02	5.000	1.184	03	10.000	1.107	04	50.000	1.148
05	80.000	1.121	06	100.000	1.126	07	120.000	1.102	08	160.000	1.089

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte

Benzo(a)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.9963	02	5.000	1.001	03	10.000	0.9855	04	50.000	1.023
05	80.000	1.024	06	100.000	1.004	07	120.000	1.007	08	160.000	1.01

Benzo(b)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.281	02	5.000	1.208	03	10.000	1.264	04	50.000	1.176
05	80.000	1.171	06	100.000	1.148	07	120.000	1.166	08	160.000	1.147

Benzo(g,h,i)perylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.005	02	5.000	0.8043	03	10.000	1.003	04	50.000	0.9701
05	80.000	0.9344	06	100.000	0.9413	07	120.000	0.8735	08	160.000	0.884

Benzo(k)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.122	02	5.000	1.153	03	10.000	1.206	04	50.000	1.096
05	80.000	1.102	06	100.000	1.057	07	120.000	1.08	08	160.000	1.045

Benzyl Alcohol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.9133	02	5.000	0.8769	03	10.000	0.9197	04	50.000	0.9818
05	80.000	0.9969	06	100.000	1.014	07	120.000	1.018	08	160.000	0.9904

Bis(2-chloroethoxy)methane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.4175	02	5.000	0.395	03	10.000	0.3905	04	50.000	0.3813
05	80.000	0.382	06	100.000	0.3684	07	120.000	0.3912	08	160.000	0.388

Bis(2-chloroethyl) Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.334	02	5.000	1.408	03	10.000	1.321	04	50.000	1.268
05	80.000	1.264	06	100.000	1.28	07	120.000	1.276	08	160.000	1.264

Bis(2-ethylhexyl) Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.8337	02	5.000	0.8881	03	10.000	0.8691	04	50.000	0.9554
05	80.000	0.8854	06	100.000	0.9329	07	120.000	0.8935	08	160.000	0.8764

Butyl Benzyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.6191	02	5.000	0.66	03	10.000	0.6536	04	50.000	0.6877
05	80.000	0.649	06	100.000	0.6766	07	120.000	0.6369	08	160.000	0.642

Carbazole

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.168	02	5.000	1.153	03	10.000	1.253	04	50.000	1.225
05	80.000	1.211	06	100.000	1.151	07	120.000	1.187	08	160.000	1.165

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte

Chrysene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.205	02	5.000	1.173	03	10.000	1.088	04	50.000	1.086
05	80.000	1.089	06	100.000	1.07	07	120.000	1.077	08	160.000	1.032

Di-n-butyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.221	02	5.000	1.332	03	10.000	1.474	04	50.000	1.48
05	80.000	1.443	06	100.000	1.367	07	120.000	1.386	08	160.000	1.33

Di-n-octyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.274	02	5.000	1.265	03	10.000	1.462	04	50.000	1.419
05	80.000	1.444	06	100.000	1.405	07	120.000	1.486	08	160.000	1.468

Dibenz(a,h)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.111	02	5.000	0.829	03	10.000	1.023	04	50.000	1.055
05	80.000	1.037	06	100.000	1.02	07	120.000	1.007	08	160.000	1.001

Dibenzofuran

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.757	02	5.000	1.679	03	10.000	1.609	04	50.000	1.584
05	80.000	1.585	06	100.000	1.537	07	120.000	1.481	08	160.000	1.462

Diethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.343	02	5.000	1.301	03	10.000	1.222	04	50.000	1.218
05	80.000	1.218	06	100.000	1.243	07	120.000	1.209	08	160.000	1.244

Dimethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.35	02	5.000	1.351	03	10.000	1.302	04	50.000	1.161
05	80.000	1.185	06	100.000	1.2	07	120.000	1.163	08	160.000	1.22

Fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.074	02	5.000	1.118	03	10.000	1.181	04	50.000	1.195
05	80.000	1.159	06	100.000	1.112	07	120.000	1.134	08	160.000	1.11

Fluorene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.354	02	5.000	1.333	03	10.000	1.337	04	50.000	1.276
05	80.000	1.243	06	100.000	1.189	07	120.000	1.164	08	160.000	1.202

Hexachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.2539	02	5.000	0.2921	03	10.000	0.2794	04	50.000	0.2553
05	80.000	0.2505	06	100.000	0.2421	07	120.000	0.2427	08	160.000	0.2406

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte

Hexachlorobutadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1569	02	5.000	0.1483	03	10.000	0.1374	04	50.000	0.1397
05	80.000	0.1398	06	100.000	0.1309	07	120.000	0.1436	08	160.000	0.1407

Hexachlorocyclopentadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.05987	02	5.000	0.07183	03	10.000	0.1077	04	50.000	0.1706
05	80.000	0.1944	06	100.000	0.2121	07	120.000	0.2102	08	160.000	0.2235

Hexachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.583	02	5.000	0.5924	03	10.000	0.5583	04	50.000	0.5698
05	80.000	0.5575	06	100.000	0.5554	07	120.000	0.5602	08	160.000	0.556

Indeno(1,2,3-cd)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.9509	02	5.000	0.7493	03	10.000	1.006	04	50.000	1.018
05	80.000	1.011	06	100.000	1.015	07	120.000	0.978	08	160.000	0.9991

Isophorone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.5378	02	5.000	0.5362	03	10.000	0.4975	04	50.000	0.5137
05	80.000	0.5098	06	100.000	0.4962	07	120.000	0.5239	08	160.000	0.5188

N-Nitrosodi-n-propylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.005	02	5.000	0.9699	03	10.000	1.04	04	50.000	0.9627
05	80.000	0.9836	06	100.000	0.9724	07	120.000	0.9683	08	160.000	0.9542

N-Nitrosodimethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.6254	02	5.000	0.6519	03	10.000	0.7144	04	50.000	0.7428
05	80.000	0.7666	06	100.000	0.7528	07	120.000	0.7633	08	160.000	0.77

N-Nitrosodiphenylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.000	0.7516	02	10.000	0.7251	03	20.000	0.7871	04	100.000	0.6696
05	160.000	0.6643	06	200.000	0.6317	07	240.000	0.6403	08	320.000	0.6257

Naphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.157	02	5.000	1.098	03	10.000	1.024	04	50.000	1.021
05	80.000	1.01	06	100.000	0.9521	07	120.000	1.021	08	160.000	0.9738

Nitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3465	02	5.000	0.335	03	10.000	0.3073	04	50.000	0.3144
05	80.000	0.3221	06	100.000	0.3076	07	120.000	0.3296	08	160.000	0.3242

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte

Nitrobenzene-d5

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.3578	02	5.000	0.345	03	10.000	0.3424	04	50.000	0.3337
05	80.000	0.3386	06	100.000	0.3218	07	120.000	0.3446	08	160.000	0.3465

Pentachlorophenol (PCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.1208	03	10.000	0.1182	04	50.000	0.1484	05	80.000	0.1448
06	100.000	0.1464	07	120.000	0.1389	08	160.000	0.1434			

Phenanthrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.227	02	5.000	1.178	03	10.000	1.131	04	50.000	1.123
05	80.000	1.112	06	100.000	1.058	07	120.000	1.073	08	160.000	1.063

Phenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.783	02	5.000	1.838	03	10.000	1.78	04	50.000	1.829
05	80.000	1.813	06	100.000	1.836	07	120.000	1.813	08	160.000	1.787

Phenol-d6

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.716	02	5.000	1.592	03	10.000	1.715	04	50.000	1.7
05	80.000	1.675	06	100.000	1.687	07	120.000	1.704	08	160.000	1.697

Pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	1.187	02	5.000	1.22	03	10.000	1.191	04	50.000	1.233
05	80.000	1.262	06	100.000	1.205	07	120.000	1.246	08	160.000	1.206

p-Terphenyl-d14

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.9278	02	5.000	0.9206	03	10.000	0.9659	04	50.000	0.9189
05	80.000	0.9509	06	100.000	0.8942	07	120.000	0.927	08	160.000	0.8802

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	3.6	≤20	0.2797	
1,2-Dichlorobenzene	TRG	Average RF	% RSD	2.9	≤20	1.41	
1,3-Dichlorobenzene	TRG	Average RF	% RSD	3.6	≤20	1.493	
1,4-Dichlorobenzene	TRG	Average RF	% RSD	3.8	≤20	1.498	
2,2'-Oxybis(1-chloropropane)	TRG	Average RF	% RSD	4.6	≤20	1.383	0.010
2,4,5-Trichlorophenol	TRG	Average RF	% RSD	3.7	≤20	0.3361	0.200
2,4,6-Tribromophenol	SURR	Average RF	% RSD	4.5	≤20	0.2076	
2,4,6-Trichlorophenol	TRG	Average RF	% RSD	1.7	≤20	0.3467	0.200
2,4-Dichlorophenol	TRG	Average RF	% RSD	4.1	≤20	0.2738	0.200
2,4-Dimethylphenol	TRG	Average RF	% RSD	3.0	≤20	0.3401	0.200
2,4-Dinitrophenol	TRG	Quadratic	COD	0.9974	≥0.99	0.1212	0.010
2,4-Dinitrotoluene	TRG	Average RF	% RSD	5.4	≤20	0.3705	0.200
2,6-Dinitrotoluene	TRG	Average RF	% RSD	3.3	≤20	0.2794	0.200
2-Chloronaphthalene	TRG	Average RF	% RSD	4.3	≤20	1.143	0.800
2-Chlorophenol	TRG	Average RF	% RSD	1.6	≤20	1.432	0.800
2-Fluorobiphenyl	SURR	Average RF	% RSD	3.0	≤20	1.395	
2-Fluorophenol	SURR	Average RF	% RSD	2.6	≤20	1.391	
2-Methylnaphthalene	TRG	Average RF	% RSD	4.8	≤20	0.6468	0.400
2-Methylphenol	TRG	Average RF	% RSD	3.6	≤20	1.255	0.700
2-Nitroaniline	TRG	Average RF	% RSD	1.8	≤20	0.3094	0.010
2-Nitrophenol	TRG	Average RF	% RSD	7.6	≤20	0.1843	0.100
3,3'-Dichlorobenzidine	TRG	Average RF	% RSD	6.2	≤20	0.4762	0.010
3- and 4-Methylphenol Coelution	TRG	Average RF	% RSD	3.2	≤20	1.327	0.600
3-Nitroaniline	TRG	Average RF	% RSD	5.4	≤20	0.3747	0.010
4,6-Dinitro-2-methylphenol	TRG	Average RF	% RSD	13.8	≤20	0.1327	0.010
4-Bromophenyl Phenyl Ether	TRG	Average RF	% RSD	7.9	≤20	0.22	0.100
4-Chloro-3-methylphenol	TRG	Average RF	% RSD	3.6	≤20	0.2747	0.200
4-Chloroaniline	TRG	Average RF	% RSD	3.1	≤20	0.4352	0.010
4-Chlorophenyl Phenyl Ether	TRG	Average RF	% RSD	6.3	≤20	0.5443	0.400
4-Nitroaniline	TRG	Average RF	% RSD	3.2	≤20	0.3897	0.010
4-Nitrophenol	TRG	Average RF	% RSD	10.3	≤20	0.1901	0.010
Acenaphthene	TRG	Average RF	% RSD	4.7	≤20	1.234	0.900
Acenaphthylene	TRG	Average RF	% RSD	2.8	≤20	1.882	0.900
Anthracene	TRG	Average RF	% RSD	2.2	≤20	1.095	0.700

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Benz(a)anthracene	TRG	Average RF	% RSD	2.6	≤20	1.126	0.800
Benzo(a)pyrene	TRG	Average RF	% RSD	1.3	≤20	1.006	0.700
Benzo(b)fluoranthene	TRG	Average RF	% RSD	4.3	≤20	1.195	0.700
Benzo(g,h,i)perylene	TRG	Average RF	% RSD	7.5	≤20	0.9269	0.500
Benzo(k)fluoranthene	TRG	Average RF	% RSD	4.7	≤20	1.108	0.700
Benzyl Alcohol	TRG	Average RF	% RSD	5.5	≤20	0.9639	
Bis(2-chloroethoxy)methane	TRG	Average RF	% RSD	3.6	≤20	0.3892	0.300
Bis(2-chloroethyl) Ether	TRG	Average RF	% RSD	3.9	≤20	1.302	0.700
Bis(2-ethylhexyl) Phthalate	TRG	Average RF	% RSD	4.2	≤20	0.8918	0.010
Butyl Benzyl Phthalate	TRG	Average RF	% RSD	3.4	≤20	0.6531	0.010
Carbazole	TRG	Average RF	% RSD	3.1	≤20	1.189	0.010
Chrysene	TRG	Average RF	% RSD	5.2	≤20	1.102	0.700
Di-n-butyl Phthalate	TRG	Average RF	% RSD	6.3	≤20	1.379	0.010
Di-n-octyl Phthalate	TRG	Average RF	% RSD	6.2	≤20	1.403	0.010
Dibenz(a,h)anthracene	TRG	Average RF	% RSD	8.0	≤20	1.01	0.400
Dibenzofuran	TRG	Average RF	% RSD	6.2	≤20	1.587	0.800
Diethyl Phthalate	TRG	Average RF	% RSD	3.8	≤20	1.25	0.010
Dimethyl Phthalate	TRG	Average RF	% RSD	6.5	≤20	1.241	0.010
Fluoranthene	TRG	Average RF	% RSD	3.6	≤20	1.135	0.600
Fluorene	TRG	Average RF	% RSD	5.9	≤20	1.262	0.900
Hexachlorobenzene	TRG	Average RF	% RSD	7.3	≤20	0.2571	0.100
Hexachlorobutadiene	TRG	Average RF	% RSD	5.4	≤20	0.1422	0.010
Hexachlorocyclopentadiene	TRG	Quadratic	COD	0.9911	≥0.99	0.1563	0.050
Hexachloroethane	TRG	Average RF	% RSD	2.5	≤20	0.5666	0.300
Indeno(1,2,3-cd)pyrene	TRG	Average RF	% RSD	9.4	≤20	0.966	0.500
Isophorone	TRG	Average RF	% RSD	3.0	≤20	0.5167	0.400
N-Nitrosodi-n-propylamine	TRG	Average RF	% RSD	2.8	≤20	0.9819	0.500
N-Nitrosodimethylamine	TRG	Average RF	% RSD	7.7	≤20	0.7234	
N-Nitrosodiphenylamine	TRG	Average RF	% RSD	8.8	≤20	0.6869	0.010
Naphthalene	TRG	Average RF	% RSD	6.4	≤20	1.032	0.700
Nitrobenzene	TRG	Average RF	% RSD	4.2	≤20	0.3233	0.200
Nitrobenzene-d5	SURR	Average RF	% RSD	3.1	≤20	0.3413	
Pentachlorophenol (PCP)	TRG	Average RF	% RSD	9.1	≤20	0.1373	0.050
Phenanthrene	TRG	Average RF	% RSD	5.3	≤20	1.121	0.700
Phenol	TRG	Average RF	% RSD	1.3	≤20	1.81	0.800

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Phenol-d6	SURR	Average RF	% RSD	2.4	≤20	1.686	
Pyrene	TRG	Average RF	% RSD	2.2	≤20	1.219	0.600
p-Terphenyl-d14	SURR	Average RF	% RSD	3.0	≤20	0.9232	

ALS Group USA, Corp.
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QA/QC Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

#	Lab Code	Sample Name	File Location	Acquisition Date
09	RC1800107-09	ICV	I:\ACQUDATA\5973D\Data\091718\BP172.D	09/17/2018 15:49
18	RC1800107-18	ICV	I:\ACQUDATA\5973D\Data\091718\BP182.D	09/17/2018 20:32

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,2,4-Trichlorobenzene	80.0	82.5	3.028E-1	3.123E-1	3.14	±30	Average RF
1,2-Dichlorobenzene	80.0	87.9	1.375E0	1.511E0	9.84	±30	Average RF
1,3-Dichlorobenzene	80.0	86.5	1.471E0	1.591E0	8.16	±30	Average RF
1,4-Dichlorobenzene	80.0	88.0	1.471E0	1.618E0	9.96	±30	Average RF
2,4,5-Trichlorophenol	80.0	88.5	3.47E-1	3.841E-1	10.68	±30	Average RF
2,4,6-Trichlorophenol	80.0	84.1	3.62E-1	3.806E-1	5.12	±30	Average RF
2,4-Dichlorophenol	80.0	80.6	2.87E-1	2.892E-1	0.741	±30	Average RF
2,4-Dimethylphenol	80.0	82.1	3.593E-1	3.686E-1	2.59	±30	Average RF
2,4-Dinitrophenol	80.0	77.0	1.213E-1	1.262E-1	-3.742	±30	Quadratic
2,4-Dinitrotoluene	80.0	90.8	4.015E-1	4.557E-1	13.50	±30	Average RF
2,6-Dinitrotoluene	80.0	84.1	2.991E-1	3.143E-1	5.08	±30	Average RF
2-Chloronaphthalene	80.0	84.5	1.124E0	1.188E0	5.68	±30	Average RF
2-Chlorophenol	80.0	84.0	1.397E0	1.466E0	4.97	±30	Average RF
2-Methylnaphthalene	80.0	84.8	6.512E-1	6.899E-1	5.96	±30	Average RF
2-Methylphenol	80.0	84.4	1.189E0	1.255E0	5.55	±30	Average RF
2-Nitroaniline	80.0	78.3	3.701E-1	3.622E-1	-2.129	±30	Average RF
2-Nitrophenol	80.0	81.7	1.942E-1	1.983E-1	2.13	±30	Average RF
3,3'-Dichlorobenzidine	80.0	81.8	4.876E-1	4.984E-1	2.21	±30	Average RF
3- and 4-Methylphenol Coelution	80.0	91.5	1.347E0	1.54E0	14.37	±30	Average RF
3-Nitroaniline	80.0	78.0	3.732E-1	3.637E-1	-2.529	±30	Average RF
4,6-Dinitro-2-methylphenol	80.0	88.2	1.395E-1	1.537E-1	10.19	±30	Average RF
4-Bromophenyl Phenyl Ether	80.0	76.5	2.28E-1	2.182E-1	-4.320	±30	Average RF
4-Chloro-3-methylphenol	80.0	82.6	3.014E-1	3.113E-1	3.28	±30	Average RF
4-Chloroaniline	80.0	79.5	4.352E-1	4.324E-1	-0.633	±30	Average RF
4-Chlorophenyl Phenyl Ether	80.0	77.1	6.212E-1	5.984E-1	-3.677	±30	Average RF
4-Nitroaniline	80.0	80.4	3.866E-1	3.885E-1	0.502	±30	Average RF
4-Nitrophenol	80.0	84.2	2.102E-1	2.211E-1	5.19	±30	Average RF
Acenaphthene	80.0	88.9	1.217E0	1.353E0	11.16	±30	Average RF
Acenaphthylene	80.0	83.7	1.868E0	1.954E0	4.62	±30	Average RF
Anthracene	80.0	88.6	1.076E0	1.192E0	10.81	±30	Average RF
Benz(a)anthracene	80.0	86.9	1.149E0	1.247E0	8.59	±30	Average RF
Benzo(a)pyrene	80.0	90.0	1.001E0	1.126E0	12.56	±30	Average RF

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Benzo(b)fluoranthene	80.0	89.3	1.159E0	1.295E0	11.65	±30	Average RF
Benzo(g,h,i)perylene	80.0	84.3	9.07E-1	9.563E-1	5.44	±30	Average RF
Benzo(k)fluoranthene	80.0	87.6	1.125E0	1.232E0	9.53	±30	Average RF
Benzyl Alcohol	80.0	91.6	1.048E0	1.201E0	14.55	±30	Average RF
2,2'-Oxybis(1-chloropropane)	80.0	65.1	1.487E0	1.21E0	-18.614	±30	Average RF
Bis(2-chloroethoxy)methane	80.0	79.3	3.847E-1	3.816E-1	-0.824	±30	Average RF
Bis(2-chloroethyl) Ether	80.0	81.5	1.161E0	1.183E0	1.89	±30	Average RF
Bis(2-ethylhexyl) Phthalate	80.0	91.3	8.535E-1	9.74E-1	14.13	±30	Average RF
Butyl Benzyl Phthalate	80.0	91.6	6.107E-1	6.992E-1	14.49	±30	Average RF
Carbazole	80.0	82.9	1.159E0	1.201E0	3.63	±30	Average RF
Chrysene	80.0	84.6	1.104E0	1.168E0	5.76	±30	Average RF
Di-n-butyl Phthalate	80.0	94.3	1.37E0	1.615E0	17.83	±30	Average RF
Di-n-octyl Phthalate	80.0	97.9	1.351E0	1.653E0	22.39	±30	Average RF
Dibenz(a,h)anthracene	80.0	91.0	9.614E-1	1.094E0	13.76	±30	Average RF
Dibenzofuran	80.0	83.0	1.654E0	1.715E0	3.69	±30	Average RF
Diethyl Phthalate	80.0	88.0	1.361E0	1.498E0	10.03	±30	Average RF
Dimethyl Phthalate	80.0	84.2	1.311E0	1.379E0	5.25	±30	Average RF
Fluoranthene	80.0	90.9	1.187E0	1.349E0	13.66	±30	Average RF
Fluorene	80.0	85.5	1.307E0	1.396E0	6.86	±30	Average RF
Hexachlorobenzene	80.0	80.6	2.691E-1	2.71E-1	0.698	±30	Average RF
Hexachlorobutadiene	80.0	82.4	1.816E-1	1.87E-1	3.01	±30	Average RF
Hexachlorocyclopentadiene	80.0	95.1	1.97E-1	2.738E-1	18.92	±30	Quadratic
Hexachloroethane	80.0	83.3	6.212E-1	6.466E-1	4.10	±30	Average RF
Indeno(1,2,3-cd)pyrene	80.0	86.5	9.373E-1	1.014E0	8.18	±30	Average RF
Isophorone	80.0	97.5	5.276E-1	6.429E-1	21.86	±30	Average RF
N-Nitrosodi-n-propylamine	80.0	77.7	1.064E0	1.033E0	-2.918	±30	Average RF
N-Nitrosodimethylamine	80.0	93.6	7.27E-1	8.509E-1	17.05	±30	Average RF
N-Nitrosodiphenylamine	160	155	6.655E-1	6.454E-1	-3.021	±30	Average RF
Naphthalene	80.0	80.9	1.024E0	1.035E0	1.08	±30	Average RF
Nitrobenzene	80.0	87.4	3.488E-1	3.809E-1	9.21	±30	Average RF
Pentachlorophenol (PCP)	80.0	72.7	1.23E-1	1.226E-1	-9.187	±30	Linear
Phenanthrene	80.0	88.1	1.09E0	1.201E0	10.16	±30	Average RF
Phenol	80.0	83.5	1.739E0	1.814E0	4.32	±30	Average RF
Pyrene	80.0	93.7	1.187E0	1.39E0	17.08	±30	Average RF

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800107 **Signal ID:** 1
Instrument ID: R-MS-54

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
2,4,6-Tribromophenol	80.0	82.7	2.311E-1	2.389E-1	3.34	±30	Average RF
2-Fluorobiphenyl	80.0	81.8	1.4E0	1.431E0	2.27	±30	Average RF
2-Fluorophenol	80.0	84.6	1.323E0	1.4E0	5.81	±30	Average RF
Nitrobenzene-d5	80.0	79.4	3.682E-1	3.653E-1	-0.803	±30	Average RF
Phenol-d6	80.0	84.4	1.624E0	1.713E0	5.47	±30	Average RF
p-Terphenyl-d14	80.0	85.5	9.124E-1	9.749E-1	6.86	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

#	Lab Code	Sample Name	File Location	Acquisition Date
09	RC1800106-09	ICV	I:\ACQUDATA\5973A\DATA\091718\DP189.D	09/17/2018 15:43
18	RC1800106-18	ICV	I:\ACQUDATA\5973A\DATA\091718\DP199.D	09/17/2018 20:26

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,2,4-Trichlorobenzene	80.0	86.1	2.797E-1	3.009E-1	7.60	±30	Average RF
1,2-Dichlorobenzene	80.0	86.6	1.41E0	1.526E0	8.21	±30	Average RF
1,3-Dichlorobenzene	80.0	84.8	1.493E0	1.582E0	5.96	±30	Average RF
1,4-Dichlorobenzene	80.0	84.9	1.498E0	1.59E0	6.15	±30	Average RF
2,4,5-Trichlorophenol	80.0	86.4	3.361E-1	3.629E-1	7.98	±30	Average RF
2,4,6-Trichlorophenol	80.0	82.5	3.467E-1	3.577E-1	3.15	±30	Average RF
2,4-Dichlorophenol	80.0	85.4	2.738E-1	2.924E-1	6.80	±30	Average RF
2,4-Dimethylphenol	80.0	83.9	3.401E-1	3.566E-1	4.85	±30	Average RF
2,4-Dinitrophenol	80.0	77.4	1.212E-1	1.249E-1	-3.248	±30	Quadratic
2,4-Dinitrotoluene	80.0	93.0	3.705E-1	4.306E-1	16.21	±30	Average RF
2,6-Dinitrotoluene	80.0	91.3	2.794E-1	3.188E-1	14.10	±30	Average RF
2-Chloronaphthalene	80.0	83.8	1.143E0	1.197E0	4.76	±30	Average RF
2-Chlorophenol	80.0	84.5	1.432E0	1.513E0	5.67	±30	Average RF
2-Methylnaphthalene	80.0	86.1	6.468E-1	6.963E-1	7.66	±30	Average RF
2-Methylphenol	80.0	84.1	1.255E0	1.319E0	5.13	±30	Average RF
2-Nitroaniline	80.0	79.0	3.094E-1	3.056E-1	-1.205	±30	Average RF
2-Nitrophenol	80.0	88.1	1.843E-1	2.03E-1	10.19	±30	Average RF
3,3'-Dichlorobenzidine	80.0	83.1	4.762E-1	4.947E-1	3.88	±30	Average RF
3- and 4-Methylphenol Coelution	80.0	87.5	1.327E0	1.452E0	9.40	±30	Average RF
3-Nitroaniline	80.0	81.1	3.747E-1	3.799E-1	1.37	±30	Average RF
4,6-Dinitro-2-methylphenol	80.0	87.5	1.327E-1	1.451E-1	9.32	±30	Average RF
4-Bromophenyl Phenyl Ether	80.0	75.8	2.2E-1	2.085E-1	-5.253	±30	Average RF
4-Chloro-3-methylphenol	80.0	85.9	2.747E-1	2.948E-1	7.32	±30	Average RF
4-Chloroaniline	80.0	79.8	4.352E-1	4.341E-1	-0.241	±30	Average RF
4-Chlorophenyl Phenyl Ether	80.0	78.1	5.443E-1	5.317E-1	-2.326	±30	Average RF
4-Nitroaniline	80.0	78.8	3.897E-1	3.841E-1	-1.440	±30	Average RF
4-Nitrophenol	80.0	92.3	1.901E-1	2.194E-1	15.41	±30	Average RF
Acenaphthene	80.0	88.5	1.234E0	1.365E0	10.62	±30	Average RF
Acenaphthylene	80.0	84.2	1.882E0	1.981E0	5.29	±30	Average RF
Anthracene	80.0	89.0	1.095E0	1.217E0	11.23	±30	Average RF
Benz(a)anthracene	80.0	87.9	1.126E0	1.236E0	9.82	±30	Average RF
Benzo(a)pyrene	80.0	88.8	1.006E0	1.117E0	11.01	±30	Average RF

Client: Unicorn Management Consultants
Project: Union Road
Service Request: R1808910
Calibration Date: 9/17/2018

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106
Instrument ID: R-MS-51
Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Benzo(b)fluoranthene	80.0	86.7	1.195E0	1.295E0	8.39	±30	Average RF
Benzo(g,h,i)perylene	80.0	90.1	9.269E-1	1.044E0	12.65	±30	Average RF
Benzo(k)fluoranthene	80.0	86.2	1.108E0	1.193E0	7.73	±30	Average RF
Benzyl Alcohol	80.0	89.1	9.639E-1	1.073E0	11.37	±30	Average RF
2,2'-Oxybis(1-chloropropane)	80.0	64.3	1.383E0	1.111E0	-19.639	±30	Average RF
Bis(2-chloroethoxy)methane	80.0	80.2	3.892E-1	3.903E-1	0.284	±30	Average RF
Bis(2-chloroethyl) Ether	80.0	79.6	1.302E0	1.296E0	-0.471	±30	Average RF
Bis(2-ethylhexyl) Phthalate	80.0	90.1	8.918E-1	1.004E0	12.59	±30	Average RF
Butyl Benzyl Phthalate	80.0	91.7	6.531E-1	7.486E-1	14.63	±30	Average RF
Carbazole	80.0	82.6	1.189E0	1.228E0	3.27	±30	Average RF
Chrysene	80.0	83.7	1.102E0	1.153E0	4.58	±30	Average RF
Di-n-butyl Phthalate	80.0	92.4	1.379E0	1.593E0	15.53	±30	Average RF
Di-n-octyl Phthalate	80.0	96.9	1.403E0	1.7E0	21.16	±30	Average RF
Dibenz(a,h)anthracene	80.0	91.7	1.01E0	1.158E0	14.59	±30	Average RF
Dibenzofuran	80.0	83.7	1.587E0	1.66E0	4.62	±30	Average RF
Diethyl Phthalate	80.0	88.7	1.25E0	1.386E0	10.90	±30	Average RF
Dimethyl Phthalate	80.0	84.3	1.241E0	1.308E0	5.40	±30	Average RF
Fluoranthene	80.0	89.3	1.135E0	1.267E0	11.62	±30	Average RF
Fluorene	80.0	83.7	1.262E0	1.321E0	4.68	±30	Average RF
Hexachlorobenzene	80.0	82.8	2.571E-1	2.66E-1	3.49	±30	Average RF
Hexachlorobutadiene	80.0	83.1	1.422E-1	1.476E-1	3.84	±30	Average RF
Hexachlorocyclopentadiene	80.0	93.2	1.563E-1	2.245E-1	16.52	±30	Quadratic
Hexachloroethane	80.0	85.0	5.666E-1	6.018E-1	6.22	±30	Average RF
Indeno(1,2,3-cd)pyrene	80.0	91.5	9.66E-1	1.104E0	14.34	±30	Average RF
Isophorone	80.0	97.9	5.167E-1	6.321E-1	22.33	±30	Average RF
N-Nitrosodi-n-propylamine	80.0	79.1	9.819E-1	9.713E-1	-1.078	±30	Average RF
N-Nitrosodimethylamine	80.0	94.4	7.234E-1	8.538E-1	18.03	±30	Average RF
N-Nitrosodiphenylamine	160	155	6.869E-1	6.646E-1	-3.244	±30	Average RF
Naphthalene	80.0	82.8	1.032E0	1.068E0	3.51	±30	Average RF
Nitrobenzene	80.0	88.1	3.233E-1	3.561E-1	10.12	±30	Average RF
Pentachlorophenol (PCP)	80.0	77.8	1.373E-1	1.335E-1	-2.731	±30	Average RF
Phenanthrene	80.0	86.6	1.121E0	1.213E0	8.29	±30	Average RF
Phenol	80.0	84.7	1.81E0	1.917E0	5.91	±30	Average RF
Pyrene	80.0	87.8	1.219E0	1.338E0	9.80	±30	Average RF

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 9/17/2018

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC1800106 **Signal ID:** 1
Instrument ID: R-MS-51

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
2,4,6-Tribromophenol	80.0	80.1	2.076E-1	2.079E-1	0.143	±30	Average RF
2-Fluorobiphenyl	80.0	81.2	1.395E0	1.415E0	1.48	±30	Average RF
2-Fluorophenol	80.0	82.1	1.391E0	1.427E0	2.62	±30	Average RF
Nitrobenzene-d5	80.0	83.3	3.413E-1	3.553E-1	4.11	±30	Average RF
Phenol-d6	80.0	84.5	1.686E0	1.782E0	5.68	±30	Average RF
p-Terphenyl-d14	80.0	82.5	9.232E-1	9.525E-1	3.18	±30	Average RF

Client: Unicorn Management Consultants
Project: Union Road/2011-200

Service Request: R1808910
Date Analyzed: 09/24/18 15:11

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
File ID: I:\ACQUDATA\5973A\DATA\092418\DP315.D\
Signal ID: 1

Calibration Date: 9/17/2018
Calibration ID: RC1800106
Analysis Lot: 608264
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4-Trichlorobenzene	80.0	87.8	0.2797	0.3069	9.7	NA	±20	Average RF
1,2-Dichlorobenzene	80.0	84.1	1.41	1.4819	5.1	NA	±20	Average RF
1,3-Dichlorobenzene	80.0	84.3	1.4933	1.5738	5.4	NA	±20	Average RF
1,4-Dichlorobenzene	80.0	84.1	1.4982	1.5747	5.1	NA	±20	Average RF
2,4,5-Trichlorophenol	80.0	79.3	0.3361	0.3332	-0.9	NA	±20	Average RF
2,4,6-Trichlorophenol	80.0	84.5	0.3467	0.3664	5.7	NA	±20	Average RF
2,4-Dichlorophenol	80.0	88.4	0.2738	0.3024	10.5	NA	±20	Average RF
2,4-Dimethylphenol	80.0	85.2	0.3401	0.362	6.4	NA	±20	Average RF
2,4-Dinitrophenol	80.0	61.8	0.1212	0.0941	NA	-22.8*	±20	Quadratic
2,4-Dinitrotoluene	80.0	70.2	0.3705	0.325	-12.3	NA	±20	Average RF
2,6-Dinitrotoluene	80.0	73.8	0.2794	0.2577	-7.8	NA	±20	Average RF
2-Chloronaphthalene	80.0	82.8	1.1428	1.1832	3.5	NA	±20	Average RF
2-Chlorophenol	80.0	83.6	1.4322	1.4975	4.6	NA	±20	Average RF
2-Methylnaphthalene	80.0	82.2	0.6468	0.6643	2.7	NA	±20	Average RF
2-Methylphenol	80.0	85.4	1.255	1.3391	6.7	NA	±20	Average RF
2-Nitroaniline	80.0	79.4	0.3094	0.3072	-0.7	NA	±20	Average RF
2-Nitrophenol	80.0	80.1	0.1843	0.1844	0.1	NA	±20	Average RF
3,3'-Dichlorobenzidine	80.0	86.7	0.4762	0.5158	8.3	NA	±20	Average RF
3- and 4-Methylphenol Coelution	80.0	92.5	1.327	1.535	15.7	NA	±20	Average RF
3-Nitroaniline	80.0	76.8	0.3747	0.3597	-4.0	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	80.0	64.7	0.1327	0.1074	-19.1	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	80.0	78.5	0.22	0.216	-1.8	NA	±20	Average RF
4-Chloro-3-methylphenol	80.0	83.3	0.2747	0.2862	4.2	NA	±20	Average RF
4-Chloroaniline	80.0	84.0	0.4352	0.4568	5.0	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	80.0	90.6	0.5443	0.6164	13.2	NA	±20	Average RF
4-Nitroaniline	80.0	79.8	0.3897	0.389	-0.2	NA	±20	Average RF
4-Nitrophenol	80.0	74.5	0.1901	0.177	-6.9	NA	±20	Average RF
Acenaphthene	80.0	80.6	1.2342	1.2431	0.7	NA	±20	Average RF
Acenaphthylene	80.0	84.2	1.8818	1.9812	5.3	NA	±20	Average RF
Anthracene	80.0	85.7	1.0946	1.173	7.2	NA	±20	Average RF
Benz(a)anthracene	80.0	87.9	1.1258	1.2372	9.9	NA	±20	Average RF
Benzo(a)pyrene	80.0	88.3	1.0064	1.1102	10.3	NA	±20	Average RF
Benzo(b)fluoranthene	80.0	86.9	1.195	1.2986	8.7	NA	±20	Average RF
Benzo(g,h,i)perylene	80.0	90.7	0.9269	1.0509	13.4	NA	±20	Average RF
Benzo(k)fluoranthene	80.0	85.6	1.1076	1.1855	7.0	NA	±20	Average RF
Benzyl Alcohol	80.0	90.7	0.9639	1.0924	13.3	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	80.0	86.6	1.3829	1.4977	8.3	NA	±20	Average RF
Bis(2-chloroethoxy)methane	80.0	80.6	0.3892	0.392	0.7	NA	±20	Average RF
Bis(2-chloroethyl) Ether	80.0	79.0	1.3018	1.286	-1.2	NA	±20	Average RF

Client: Unicorn Management Consultants
Project: Union Road/2011-200

Service Request: R1808910
Date Analyzed: 09/24/18 15:11

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
File ID: I:\ACQUDATA\5973A\DATA\092418\DP315.D\
Signal ID: 1

Calibration Date: 9/17/2018
Calibration ID: RC1800106
Analysis Lot: 608264
Units: ppm

Bis(2-ethylhexyl) Phthalate	80.0	86.5	0.8918	0.9641	8.1	NA	±20	Average RF
Butyl Benzyl Phthalate	80.0	83.4	0.6531	0.6806	4.2	NA	±20	Average RF
Carbazole	80.0	85.6	1.1891	1.2731	7.1	NA	±20	Average RF
Chrysene	80.0	85.7	1.1024	1.1812	7.2	NA	±20	Average RF
Di-n-butyl Phthalate	80.0	84.7	1.3792	1.4602	5.9	NA	±20	Average RF
Di-n-octyl Phthalate	80.0	95.0	1.4028	1.6653	18.7	NA	±20	Average RF
Dibenz(a,h)anthracene	80.0	87.7	1.0104	1.1072	9.6	NA	±20	Average RF
Dibenzofuran	80.0	83.1	1.5867	1.6475	3.8	NA	±20	Average RF
Diethyl Phthalate	80.0	80.4	1.2497	1.2564	0.5	NA	±20	Average RF
Dimethyl Phthalate	80.0	81.8	1.2412	1.2687	2.2	NA	±20	Average RF
Fluoranthene	80.0	89.1	1.1354	1.2646	11.4	NA	±20	Average RF
Fluorene	80.0	83.1	1.2622	1.3113	3.9	NA	±20	Average RF
Hexachlorobenzene	80.0	69.9	0.2571	0.2245	-12.7	NA	±20	Average RF
Hexachlorobutadiene	80.0	86.3	0.1422	0.1534	7.9	NA	±20	Average RF
Hexachlorocyclopentadiene	80.0	65.1	0.1563	0.1403	NA	-18.7	±20	Quadratic
Hexachloroethane	80.0	79.6	0.5666	0.564	-0.5	NA	±20	Average RF
Indeno(1,2,3-cd)pyrene	80.0	93.9	0.966	1.1344	17.4	NA	±20	Average RF
Isophorone	80.0	84.6	0.5167	0.5465	5.8	NA	±20	Average RF
N-Nitrosodi-n-propylamine	80.0	85.2	0.9819	1.0456	6.5	NA	±20	Average RF
N-Nitrosodimethylamine	80.0	90.9	0.7234	0.822	13.6	NA	±20	Average RF
N-Nitrosodiphenylamine	160	160	0.6869	0.6865	-0.1	NA	±20	Average RF
Naphthalene	80.0	81.7	1.0321	1.0545	2.2	NA	±20	Average RF
Nitrobenzene	80.0	83.4	0.3233	0.3371	4.3	NA	±20	Average RF
Pentachlorophenol (PCP)	80.0	69.3	0.1373	0.1189	-13.4	NA	±20	Average RF
Phenanthrene	80.0	83.6	1.1206	1.171	4.5	NA	±20	Average RF
Phenol	80.0	86.2	1.8098	1.9507	7.8	NA	±20	Average RF
Pyrene	80.0	89.2	1.2186	1.3586	11.5	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	80.0	59.7	0.2076	0.155	-25.4*	NA	±20	Average RF
2-Fluorobiphenyl	80.0	84.1	1.3946	1.4662	5.1	NA	±20	Average RF
2-Fluorophenol	80.0	84.9	1.3909	1.4756	6.1	NA	±20	Average RF
Nitrobenzene-d5	80.0	80.3	0.3413	0.3428	0.4	NA	±20	Average RF
Phenol-d6	80.0	85.5	1.6858	1.8026	6.9	NA	±20	Average RF
p-Terphenyl-d14	80.0	81.6	0.9232	0.9417	2.0	NA	±20	Average RF

Client: Unicorn Management Consultants
Project: Union Road/2011-200

Service Request: R1808910
Date Analyzed: 09/24/18 16:14

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
File ID: I:\ACQUDATA\5973D\Data\092418\BP381.D\
Signal ID: 1

Calibration Date: 9/17/2018
Calibration ID: RC1800107
Analysis Lot: 608270
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4-Trichlorobenzene	80.0	78.7	0.3028	0.2978	-1.6	NA	±20	Average RF
1,2-Dichlorobenzene	80.0	83.0	1.3752	1.4265	3.7	NA	±20	Average RF
1,3-Dichlorobenzene	80.0	81.8	1.4713	1.5044	2.3	NA	±20	Average RF
1,4-Dichlorobenzene	80.0	82.1	1.4711	1.5105	2.7	NA	±20	Average RF
2,4,5-Trichlorophenol	80.0	83.1	0.347	0.3604	3.9	NA	±20	Average RF
2,4,6-Trichlorophenol	80.0	81.7	0.362	0.3698	2.1	NA	±20	Average RF
2,4-Dichlorophenol	80.0	81.4	0.287	0.292	1.7	NA	±20	Average RF
2,4-Dimethylphenol	80.0	82.8	0.3593	0.3718	3.5	NA	±20	Average RF
2,4-Dinitrophenol	80.0	80.5	0.1213	0.1341	NA	0.7	±20	Quadratic
2,4-Dinitrotoluene	80.0	84.4	0.4015	0.4233	5.4	NA	±20	Average RF
2,6-Dinitrotoluene	80.0	78.3	0.2991	0.2928	-2.1	NA	±20	Average RF
2-Chloronaphthalene	80.0	83.8	1.1244	1.1782	4.8	NA	±20	Average RF
2-Chlorophenol	80.0	83.9	1.3967	1.4655	4.9	NA	±20	Average RF
2-Methylnaphthalene	80.0	79.8	0.6512	0.6499	-0.2	NA	±20	Average RF
2-Methylphenol	80.0	84.1	1.189	1.2495	5.1	NA	±20	Average RF
2-Nitroaniline	80.0	83.8	0.3701	0.3877	4.7	NA	±20	Average RF
2-Nitrophenol	80.0	78.5	0.1942	0.1906	-1.8	NA	±20	Average RF
3,3'-Dichlorobenzidine	80.0	85.2	0.4876	0.5194	6.5	NA	±20	Average RF
3- and 4-Methylphenol Coelution	80.0	87.7	1.3467	1.4771	9.7	NA	±20	Average RF
3-Nitroaniline	80.0	81.5	0.3732	0.3803	1.9	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	80.0	90.5	0.1395	0.1577	13.1	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	80.0	79.5	0.228	0.2266	-0.6	NA	±20	Average RF
4-Chloro-3-methylphenol	80.0	78.7	0.3014	0.2965	-1.6	NA	±20	Average RF
4-Chloroaniline	80.0	84.2	0.4352	0.4579	5.2	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	80.0	79.9	0.6212	0.6206	-0.1	NA	±20	Average RF
4-Nitroaniline	80.0	82.8	0.3866	0.4	3.5	NA	±20	Average RF
4-Nitrophenol	80.0	53.2	0.2102	0.1398	-33.5*	NA	±20	Average RF
Acenaphthene	80.0	81.1	1.2167	1.2331	1.3	NA	±20	Average RF
Acenaphthylene	80.0	83.4	1.8679	1.9477	4.3	NA	±20	Average RF
Anthracene	80.0	85.5	1.076	1.1505	6.9	NA	±20	Average RF
Benz(a)anthracene	80.0	82.4	1.1487	1.1832	3.0	NA	±20	Average RF
Benzo(a)pyrene	80.0	88.8	1.0007	1.1104	11.0	NA	±20	Average RF
Benzo(b)fluoranthene	80.0	88.5	1.1595	1.2822	10.6	NA	±20	Average RF
Benzo(g,h,i)perylene	80.0	97.1	0.907	1.1012	21.4*	NA	±20	Average RF
Benzo(k)fluoranthene	80.0	85.5	1.1251	1.2018	6.8	NA	±20	Average RF
Benzyl Alcohol	80.0	89.0	1.0483	1.1658	11.2	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	80.0	87.7	1.4873	1.6299	9.6	NA	±20	Average RF
Bis(2-chloroethoxy)methane	80.0	81.1	0.3847	0.3901	1.4	NA	±20	Average RF
Bis(2-chloroethyl) Ether	80.0	87.0	1.1614	1.2628	8.7	NA	±20	Average RF

Client: Unicorn Management Consultants
Project: Union Road/2011-200

Service Request: R1808910
Date Analyzed: 09/24/18 16:14

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
File ID: I:\ACQUDATA\5973D\Data\092418\BP381.D\
Signal ID: 1

Calibration Date: 9/17/2018
Calibration ID: RC1800107
Analysis Lot: 608270
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Bis(2-ethylhexyl) Phthalate	80.0	86.8	0.8535	0.9261	8.5	NA	±20	Average RF
Butyl Benzyl Phthalate	80.0	85.0	0.6107	0.6487	6.2	NA	±20	Average RF
Carbazole	80.0	85.2	1.1593	1.2351	6.5	NA	±20	Average RF
Chrysene	80.0	84.8	1.1043	1.1701	6.0	NA	±20	Average RF
Di-n-butyl Phthalate	80.0	89.8	1.3704	1.5389	12.3	NA	±20	Average RF
Di-n-octyl Phthalate	80.0	91.6	1.3507	1.5469	14.5	NA	±20	Average RF
Dibenz(a,h)anthracene	80.0	94.3	0.9614	1.1337	17.9	NA	±20	Average RF
Dibenzofuran	80.0	81.7	1.6537	1.6891	2.1	NA	±20	Average RF
Diethyl Phthalate	80.0	81.4	1.3611	1.3844	1.7	NA	±20	Average RF
Dimethyl Phthalate	80.0	78.5	1.3106	1.2865	-1.8	NA	±20	Average RF
Fluoranthene	80.0	88.1	1.1873	1.3082	10.2	NA	±20	Average RF
Fluorene	80.0	80.5	1.3067	1.3153	0.7	NA	±20	Average RF
Hexachlorobenzene	80.0	78.4	0.2691	0.2639	-1.9	NA	±20	Average RF
Hexachlorobutadiene	80.0	83.6	0.1816	0.1897	4.4	NA	±20	Average RF
Hexachlorocyclopentadiene	80.0	68.6	0.197	0.1786	NA	-14.2	±20	Quadratic
Hexachloroethane	80.0	84.3	0.6212	0.6548	5.4	NA	±20	Average RF
Indeno(1,2,3-cd)pyrene	80.0	93.3	0.9373	1.0931	16.6	NA	±20	Average RF
Isophorone	80.0	82.7	0.5276	0.5456	3.4	NA	±20	Average RF
N-Nitrosodi-n-propylamine	80.0	84.5	1.0639	1.1244	5.7	NA	±20	Average RF
N-Nitrosodimethylamine	80.0	85.8	0.727	0.7797	7.3	NA	±20	Average RF
N-Nitrosodiphenylamine	160	162	0.6655	0.6727	1.1	NA	±20	Average RF
Naphthalene	80.0	80.2	1.0238	1.0267	0.3	NA	±20	Average RF
Nitrobenzene	80.0	82.5	0.3488	0.3598	3.2	NA	±20	Average RF
Pentachlorophenol (PCP)	80.0	89.0	0.123	0.1511	NA	11.2	±20	Linear
Phenanthrene	80.0	85.3	1.0904	1.162	6.6	NA	±20	Average RF
Phenol	80.0	85.5	1.7388	1.8576	6.8	NA	±20	Average RF
Pyrene	80.0	87.1	1.1871	1.2919	8.8	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	80.0	80.3	0.2311	0.232	0.4	NA	±20	Average RF
2-Fluorobiphenyl	80.0	83.3	1.3995	1.4574	4.1	NA	±20	Average RF
2-Fluorophenol	80.0	86.2	1.3235	1.4257	7.7	NA	±20	Average RF
Nitrobenzene-d5	80.0	82.7	0.3682	0.3809	3.4	NA	±20	Average RF
Phenol-d6	80.0	84.0	1.6241	1.7062	5.1	NA	±20	Average RF
p-Terphenyl-d14	80.0	84.8	0.9124	0.9674	6.0	NA	±20	Average RF

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**608264
Instrument ID:R-MS-51

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5973A\DATA\092418 \DP314.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	14:05:00	
I:\ACQUDATA\5973A\DATA\092418 \DP314.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	14:05:00	
I:\ACQUDATA\5973A\DATA\092418 \DP315.D\	Continuing Calibration Verification	RQ1810210-02	9/24/2018	15:11:00	
I:\ACQUDATA\5973A\DATA\092418 \DP315.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	15:11:00	
I:\ACQUDATA\5973A\DATA\092418 \DP316.D\	Method Blank	RQ1809963-01	9/24/2018	15:59:00	
I:\ACQUDATA\5973A\DATA\092418 \DP317.D\	Lab Control Sample	RQ1809963-02	9/24/2018	16:26:00	
I:\ACQUDATA\5973A\DATA\092418 \DP318.D\	Duplicate Lab Control Sample	RQ1809963-03	9/24/2018	16:54:00	
I:\ACQUDATA\5973A\DATA\092418 \DP319.D\	MW-14S	R1808910-006	9/24/2018	17:22:00	
I:\ACQUDATA\5973A\DATA\092418 \DP320.D\	MW-11S	R1808910-007	9/24/2018	17:49:00	
I:\ACQUDATA\5973A\DATA\092418 \DP321.D\	MW-10S	R1808910-008	9/24/2018	18:17:00	
I:\ACQUDATA\5973A\DATA\092418 \DP322.D\	MW-10M	R1808910-009	9/24/2018	18:46:00	
I:\ACQUDATA\5973A\DATA\092418 \DP323.D\	MW-12S	R1808910-010	9/24/2018	19:13:00	
I:\ACQUDATA\5973A\DATA\092418 \DP324.D\	MW-12M	R1808910-011	9/24/2018	19:41:00	
I:\ACQUDATA\5973A\DATA\092418 \DP325.D\	MW-10D	R1808910-017	9/24/2018	20:09:00	
I:\ACQUDATA\5973A\DATA\092418 \DP326.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	20:37:00	
I:\ACQUDATA\5973A\DATA\092418 \DP327.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	21:05:00	
I:\ACQUDATA\5973A\DATA\092418 \DP328.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	21:33:00	
I:\ACQUDATA\5973A\DATA\092418 \DP329.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	22:01:00	

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**608270
Instrument ID:R-MS-51

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5973D\Data\092418\BP375.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	12:13:00	
I:\ACQUDATA\5973D\Data\092418\BP376.D\	Continuing Calibration Verification	RQ1810222-04	9/24/2018	13:38:00	
I:\ACQUDATA\5973D\Data\092418\BP378.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	14:34:00	
I:\ACQUDATA\5973D\Data\092418\BP381.D\	Continuing Calibration Verification	RQ1810222-05	9/24/2018	16:14:00	
I:\ACQUDATA\5973D\Data\092418\BP382.D\	Method Blank	RQ1809900-01	9/24/2018	16:41:00	
I:\ACQUDATA\5973D\Data\092418\BP383.D\	Lab Control Sample	RQ1809900-02	9/24/2018	17:09:00	
I:\ACQUDATA\5973D\Data\092418\BP384.D\	Duplicate Lab Control Sample	RQ1809900-03	9/24/2018	17:36:00	
I:\ACQUDATA\5973D\Data\092418\BP385.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	18:04:00	
I:\ACQUDATA\5973D\Data\092418\BP386.D\	MW-12D	R1808910-001	9/24/2018	18:32:00	
I:\ACQUDATA\5973D\Data\092418\BP387.D\	MW-11M	R1808910-002	9/24/2018	19:00:00	
I:\ACQUDATA\5973D\Data\092418\BP388.D\	MW-13S	R1808910-003	9/24/2018	19:28:00	
I:\ACQUDATA\5973D\Data\092418\BP389.D\	MW-13M	R1808910-004	9/24/2018	19:56:00	
I:\ACQUDATA\5973D\Data\092418\BP390.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	20:24:00	
I:\ACQUDATA\5973D\Data\092418\BP391.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	20:52:00	
I:\ACQUDATA\5973D\Data\092418\BP392.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	21:19:00	
I:\ACQUDATA\5973D\Data\092418\BP393.D\	ZZZZZZZ	ZZZZZZZ	9/24/2018	21:47:00	

Analysis: 8270/625	**Analyst:** Omisurewicz	**Run Method:** 8270D/Tune	
Date: 9/24/18	**Instr.** 5973D R-MS-54	**Quant Method:** 8270	
Syringes:		**LIMS Run#:**	608270

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	Blk			BP372	—	
1	Blk			73	—	
2	Tune		189435	74	(N)	
2	Tune		↓	75	YT	
3	CCV Benz/Arom		193238	76	YCC	~~not needed~~ Omg/24/18
4	CCV 8270/625		193390	77	(N)	remake
5	CCV Hexa		193318	78	YCC	
6	CCV Phenols		191231	79	(N)	
7	CCV 8270/625		193503	80	(N)	4-nitrophenol >20%
7	CCV ↓		↓	81	YCC	
8	RQ1809900-01	Blk	322187	82	Y	
9	↓ -02	LCS	8270/625	83	YQ	
10	↓ -03	LCSD		84	YQ	
11	R1805898-001	5.0		85	Y	Surr ↓
12	R1805910-001			86	Y	
13	-002			87	Y	
14	↓ -003			88	Y	
15	↓ -004			89	Y	
16	R1805939-009			90	Y	
17	-016			91	Y	
18	↓ -023			92	Y	
19	↓ -030			93	Y	
20	R1805950-001			94	(N)	Run stopped
21	R1805590-001	10		95		
22	RQ1810099-01	Blk	322405	96		
23	-02	LCS	(8270/625)	97		
24	↓ -03	LCSD		98		
25	R1809064-001			99		
26	↓ -005			400		
27	R1809003-003			01		
28	RQ1809963-01	Blk	322300	02		
29	-02	LCS	(625)	03		
30	↓ -03	LCSD		04		
31	R1805927-002RE			05		
32	R1805927-002		322187	06		
33	Silent duck		193357	07	↓	

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Analysis: 8270D	**Analyst:** Omisurewiler	**Run Method:** 8270A /TUNE	
Date: 9/24/18	**Instr.** 5973A R-MS-51	**Quant Method:** 8270691718AS.M	
Syringes:		**LIMS Run#:**	6082634 on 9/26/18

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	Blk			DP313	—	
2	Tune		184435	14	YT	
3	CCV		193503	15	Ycc	
4	RQ1809963-01	Blk	322300	16	Y	
5	-02	LCS	(8270)	17	YQ	
6	-03	LCSD		18	YQ	
7	R1808910-006			19	Y	
8	-007			20	Y	
9	-008			21	Y	
10	-009			22	Y	
11	-010			23	Y	
12	-011			24	Y	
13	-017			25	Y	
14	R1808962-001			26	Y	
15	CCV Run2/Anal		193238	27	Ycc	
16	R1808917-006		322154	28	Y	
17	-007			29	Y	
18	R1805621-007	2.0	321616 (8270S)	30	(N)	Run stopped

On Analyst

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Prep Summary Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200
Sample Matrix: Water

Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 322187
Analytical Method: 8270D **Extraction Date:** 09/19/18 08:02

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-12D	R1808910-001	9/17/18	9/17/18	1060.0000	1 mL	
MW-11M	R1808910-002	9/17/18	9/17/18	1060.0000	1 mL	
MW-13S	R1808910-003	9/17/18	9/17/18	1060.0000	1 mL	
MW-13M	R1808910-004	9/17/18	9/17/18	1060.0000	1 mL	
Method Blank	RQ1809900-01MB	NA	NA	1000 mL	1 mL	
Lab Control Sample	RQ1809900-02LCS	NA	NA	1000 mL	1 mL	
Duplicate Lab Control Sample	RQ1809900-03DLCS	NA	NA	1000 mL	1 mL	

Prep Summary Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200
Sample Matrix: Water

Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 322300
Analytical Method: 8270D **Extraction Date:** 09/20/18 07:49

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-14S	R1808910-006	9/18/18	9/18/18	1060.0000	1 mL	
MW-11S	R1808910-007	9/18/18	9/18/18	1060.0000	1 mL	
MW-10S	R1808910-008	9/18/18	9/18/18	1060.0000	1 mL	
MW-10M	R1808910-009	9/18/18	9/18/18	1060.0000	1 mL	
MW-12S	R1808910-010	9/18/18	9/18/18	1060.0000	1 mL	
MW-12M	R1808910-011	9/18/18	9/18/18	1060.0000	1 mL	
MW-10D	R1808910-017	9/18/18	9/18/18	1060.0000	1 mL	
Method Blank	RQ1809963-01MB	NA	NA	1000 mL	1 mL	
Lab Control Sample	RQ1809963-02LCS	NA	NA	1000 mL	1 mL	
Duplicate Lab Control Sample	RQ1809963-03DLCS	NA	NA	1000 mL	1 mL	

Preparation Information Benchsheet

Prep Run#: 322187 **Prep WorkFlow:** OrgExtAq(7) **Status:** Prepped
Team: Semivoa GCMS/CHARRINGTON **Prep Method:** EPA 3510C **Prep Date/Time:** 9/19/18 08:02 AM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1809900-01	MB		1000mL	625/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
2	RQ1809900-01	MB		1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
3	RQ1809900-02	LCS		1000mL	625/SVO	7	x	x	1.00mL	clear	0.5000 mL/193122; 0.5000 mL/193287; 0.5000 mL/192587; 1.0000 mL/192929	
4	RQ1809900-02	LCS		1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587; 1.0000 mL/192929; 0.5000 mL/193122; 0.5000 mL/193287	
5	RQ1809900-03	DLCS		1000mL	625/SVO	7	x	x	1.00mL	clear	0.5000 mL/193122; 0.5000 mL/192587; 1.0000 mL/192929; 0.5000 mL/193287	
6	RQ1809900-03	DLCS		1000mL	8270D/SVO	7	x	x	1.00mL	clear	1.0000 mL/192929; 0.5000 mL/192587; 0.5000 mL/193122; 0.5000 mL/193287	
7	R1808898-001	Storm Drain Drums	.12	1000mL	8270D/SVO	7	x	x	1.00mL	brown/green	0.5000 mL/192587	
8	R1808910-001	MW-12D	.06	1060mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
9	R1808910-002	MW-11M	.06	1060mL	8270D/SVO	7	x	x	1.00mL	light brown	0.5000 mL/192587	
10	R1808910-003	MW-13S	.06	1060mL	8270D/SVO	7	x	x	1.00mL	brown	0.5000 mL/192587	
11	R1808910-004	MW-13M	.06	1060mL	8270D/SVO	7	x	x	1.00mL	orange	0.5000 mL/192587	
12	R1808927-002	006D-3Q3M-2X-GS	.01	1060mL	625/SVO	7	x	x	1.00mL	light yellow	0.5000 mL/192587	
13	R1808939-009	1809131030A ST-6-970	.01	1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
14	R1808939-016	1809140938 200-KV-150	.01	1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
15	R1808939-023	1809150822A WW-4-419	.01	1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
16	R1808939-030	1809150832A WW-4-589	.01	1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
17	R1808980-001	1809170953 300-A-120	.01	1000mL	8270D/SVO	7	x	x	0.00mL	clear	0.5000 mL/192587	

Spiking Solutions

Name:	8270 Soil Surrogate 100-200ppm	Inventory ID	192587	Logbook Ref:	Expires On:	02/16/2019	
Name:	Benzidine LCS Spike 100ppm	Inventory ID	192929	Logbook Ref:	Expires On:	03/05/2019	
Name:	OLM/SOM additionals Spike 100ppm	Inventory ID	193122	Logbook Ref:	Expires On:	12/01/2018	
Name:	8270 LCS-NSI	Inventory ID	193287	Logbook Ref:	Expires On:	03/31/2019	Lot #: 090618

Preparation Materials

Eppendorf Pipette Repeater	EXT #18 (184837)	Sulfuric Acid, 50% H2SO4	(191279)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	canister (192531)
Sodium Hydroxide 50% NaOH	(190722)	pH Paper 0-14	(190432)	Prepared Sodium Sulfate Na2SO4	(192839)

Preparation Information Benchsheet

Prep Run#: 322187
Team: Semivoa GCMS/CHARRINGTON

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 9/19/18 08:02 AM

Preparation Steps

Step:	Extraction	Step:	Concentration	Step:	Final Volume
Started:	9/19/18 08:02	Started:	9/20/18 08:00	Started:	9/20/18 10:57
Finished:	9/19/18 15:35	Finished:	9/20/18 09:30	Finished:	9/20/18 10:57
By:	CHARRINGTON	By:	DMURPHY	By:	DMURPHY
Comments		Comments		Comments	

Comments: _____

Reviewed By: _____ Date: 9/20/18 Spike Witness: DMURPHY Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 322300 **Prep WorkFlow:** OrgExtAq(7) **Status:** Prepped
Team: Semivoa GCMS/CHARRINGTON **Prep Method:** EPA 3510C **Prep Date/Time:** 9/20/18 07:49 AM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1809963-01	MB		1000mL	625/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
2	RQ1809963-01	MB		1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
3	RQ1809963-02	LCS		1000mL	625/SVO	7	x	x	1.00mL	clear	0.5000 mL/193287; 0.5000 mL/192587; 1.0000 mL/192929; 0.5000 mL/193122	
4	RQ1809963-02	LCS		1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/193122; 1.0000 mL/192929; 0.5000 mL/193287; 0.5000 mL/192587	
5	RQ1809963-03	DLCS		1000mL	625/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587; 0.5000 mL/193287; 0.5000 mL/193122; 1.0000 mL/192929	
6	RQ1809963-03	DLCS		1000mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587; 1.0000 mL/192929; 0.5000 mL/193287; 0.5000 mL/193122	
7	R1808910-006	MW-14S	.10	1060mL	8270D/SVO	7	x	x	1.00mL	brown	0.5000 mL/192587	
8	R1808910-007	MW-11S	.08	1060mL	8270D/SVO	7	x	x	1.00mL	yellow	0.5000 mL/192587	
9	R1808910-008	MW-10S	.08	1060mL	8270D/SVO	7	x	x	1.00mL	brown/green	0.5000 mL/192587	
10	R1808910-009	MW-10M	.08	1060mL	8270D/SVO	7	x	x	1.00mL	orange	0.5000 mL/192587	
11	R1808910-010	MW-12S	.06	1060mL	8270D/SVO	7	x	x	1.00mL	yellow	0.5000 mL/192587	
12	R1808910-011	MW-12M	.08	1060mL	8270D/SVO	7	x	x	1.00mL	light yellow	0.5000 mL/192587	
13	R1808910-017	MW-10D	.06	1060mL	8270D/SVO	7	x	x	1.00mL	clear	0.5000 mL/192587	
14	R1808962-001	MW-53	.03	1060mL	8270D/SVO	7	x	x	1.00mL	orange	0.5000 mL/192587	
15	R1808727-002RE	47th Street San.	.05	1060mL	625/SVO	7	x	x	1.00mL	Light Yellow	0.5000 mL/192587	

Spiking Solutions

Name:	8270 Soil Surrogate 100-200ppm	Inventory ID	192587	Logbook Ref:	Expires On:	02/16/2019	
Name:	Benzidine LCS Spike 100ppm	Inventory ID	192929	Logbook Ref:	Expires On:	03/05/2019	
Name:	OLM/SOM additionals Spike 100ppm	Inventory ID	193122	Logbook Ref:	Expires On:	12/01/2018	
Name:	8270 LCS-NSI	Inventory ID	193287	Logbook Ref:	Expires On:	03/31/2019	Lot #: 090618

Preparation Materials

Eppendorf Pipette Repeater	EXT #18 (184837)	2mL Graduated Vials	(192590)	Sulfuric Acid, 50% H2SO4	(191279)
Dichloromethane (Methylene Chloride) 99.9% MeCl2	canister (192531)	Sodium Hydroxide 50% NaOH	(190722)	Prepared Sodium Sulfate Na2SO4	(193227)
pH Paper 0-14	(190432)				

Preparation Information Benchsheet

Prep Run#: 322300
Team: Semivoa GCMS/CHARRINGTON

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 9/20/18 07:49 AM

Preparation Steps

Step:	Extraction	Step:	Concentration	Step:	Final Volume
Started:	9/20/18 07:49	Started:	9/21/18 08:00	Started:	9/21/18 11:13
Finished:	9/20/18 15:54	Finished:	9/21/18 09:30	Finished:	9/21/18 11:13
By:	CHARRINGTON	By:	DMURPHY	By:	DMURPHY
Comments		Comments		Comments	

Comments: _____

Reviewed By: _____ Date: 9/24/18 Spike Witness: DMURPHY Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Units:**	ug/L
Lab Code:	R1808910-006	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 19:42	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	101	64 - 124	09/21/18 19:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Units:**	ug/L
Lab Code:	R1808910-007	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 20:37	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	104	64 - 124	09/21/18 20:37	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Units:**	ug/L
Lab Code:	R1808910-008	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 20:55	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	99	64 - 124	09/21/18 20:55	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Units:**	ug/L
Lab Code:	R1808910-009	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 21:13	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	93	64 - 124	09/21/18 21:13	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Units:**	ug/L
Lab Code:	R1808910-010	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 21:31	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	112	64 - 124	09/21/18 21:31	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Units:**	ug/L
Lab Code:	R1808910-011	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 21:49	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	101	64 - 124	09/21/18 21:49	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:05
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	Dup 091818A	**Units:**	ug/L
Lab Code:	R1808910-012	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 22:08	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	104	64 - 124	09/21/18 22:08	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:20
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	FB 091818A	**Units:**	ug/L
Lab Code:	R1808910-013	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 22:28	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	109	64 - 124	09/21/18 22:28	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:55
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	EB 091818A	**Units:**	ug/L
Lab Code:	R1808910-014	**Basis:**	NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	ND U	0.040	1	09/21/18 22:48	9/21/18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	97	64 - 124	09/21/18 22:48	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ567.D
Acq On : 21 Sep 2018 7:42 pm
Operator : J.Misiurewicz
Sample : R1808910-006 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 22 11:19:01 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

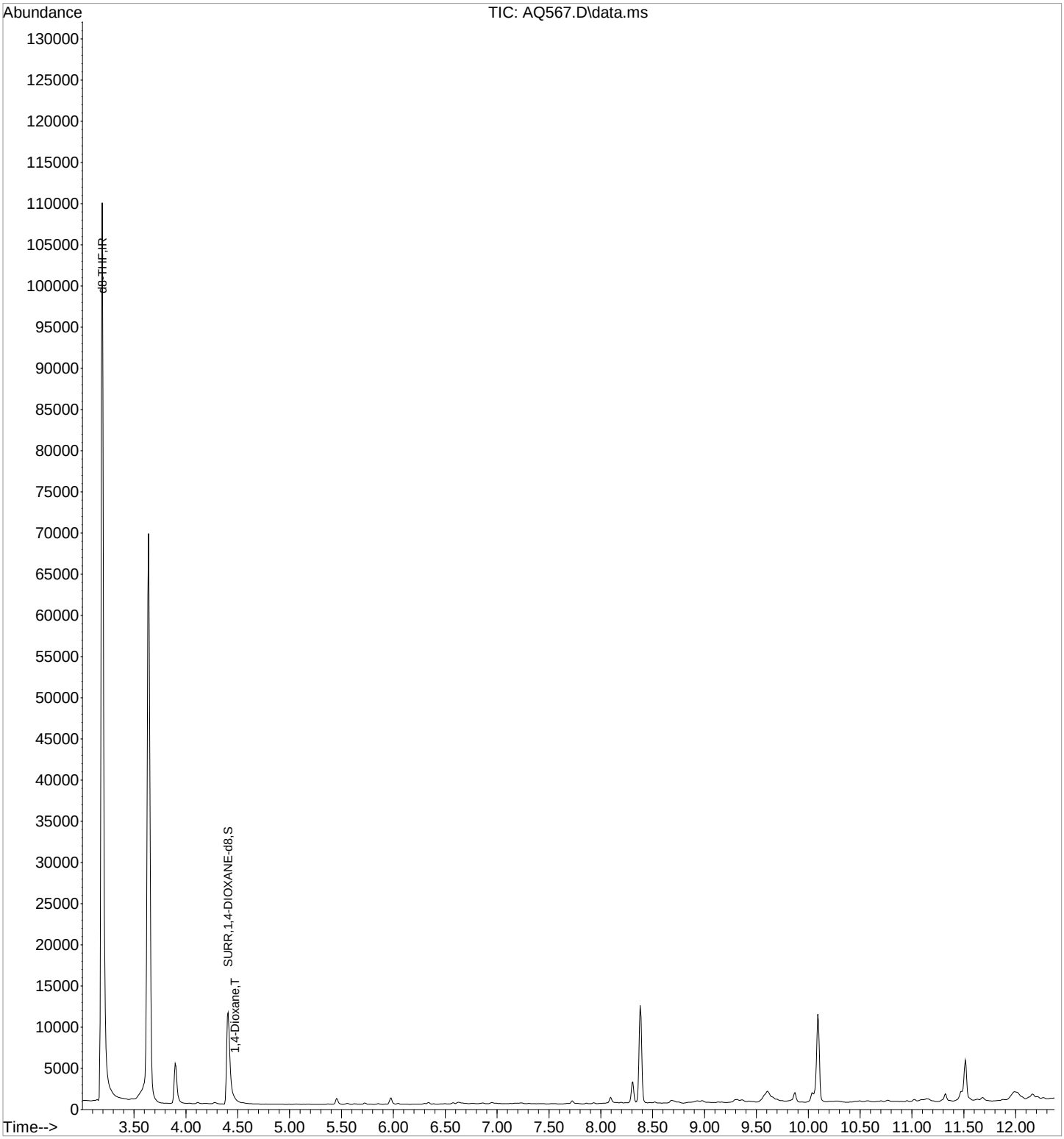
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.193	46	74111	500.00	PPB	-0.07
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.408	96	13414	100.92	PPB	-0.08
Spiked Amount 100.000	Range 70 - 130		Recovery = 100.92%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.472	88	146	1.01	PPB	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ567.D
Acq On : 21 Sep 2018 7:42 pm
Operator : J.Misiurewicz
Sample : R1808910-006 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 22 11:19:01 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ570.D
Acq On : 21 Sep 2018 8:37 pm
Operator : J.Misiurewicz
Sample : R1808910-007 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 22 11:19:07 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

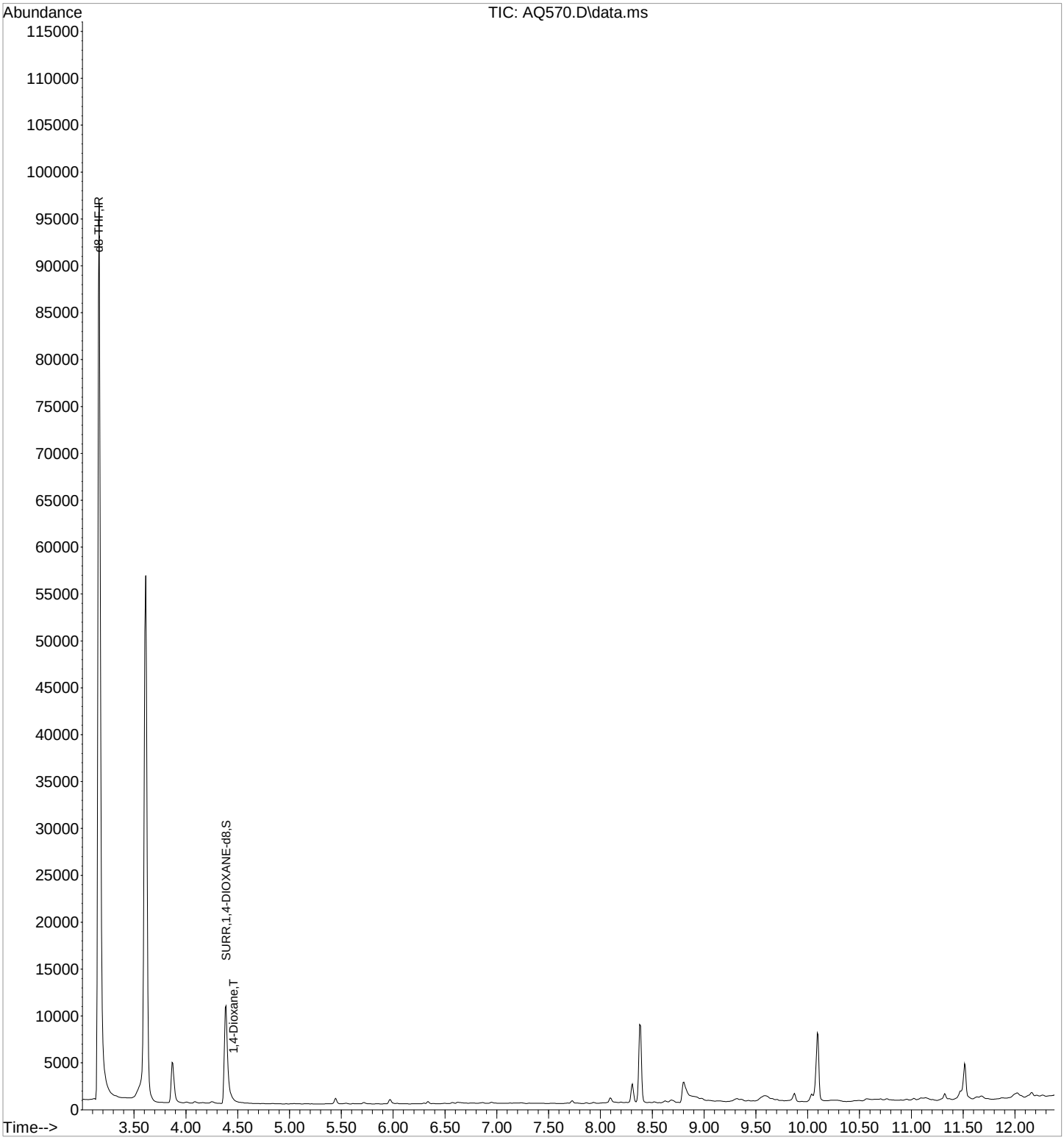
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.157	46	67247	500.00	PPB	-0.11
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.387	96	12568	104.20	PPB	-0.10
Spiked Amount 100.000	Range 70 - 130		Recovery = 104.20%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.458	88	91	0.70	PPB	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ570.D
Acq On : 21 Sep 2018 8:37 pm
Operator : J.Misiurewicz
Sample : R1808910-007 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 22 11:19:07 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ571.D
Acq On : 21 Sep 2018 8:55 pm
Operator : J.Misiurewicz
Sample : R1808910-008 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 22 11:19:09 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

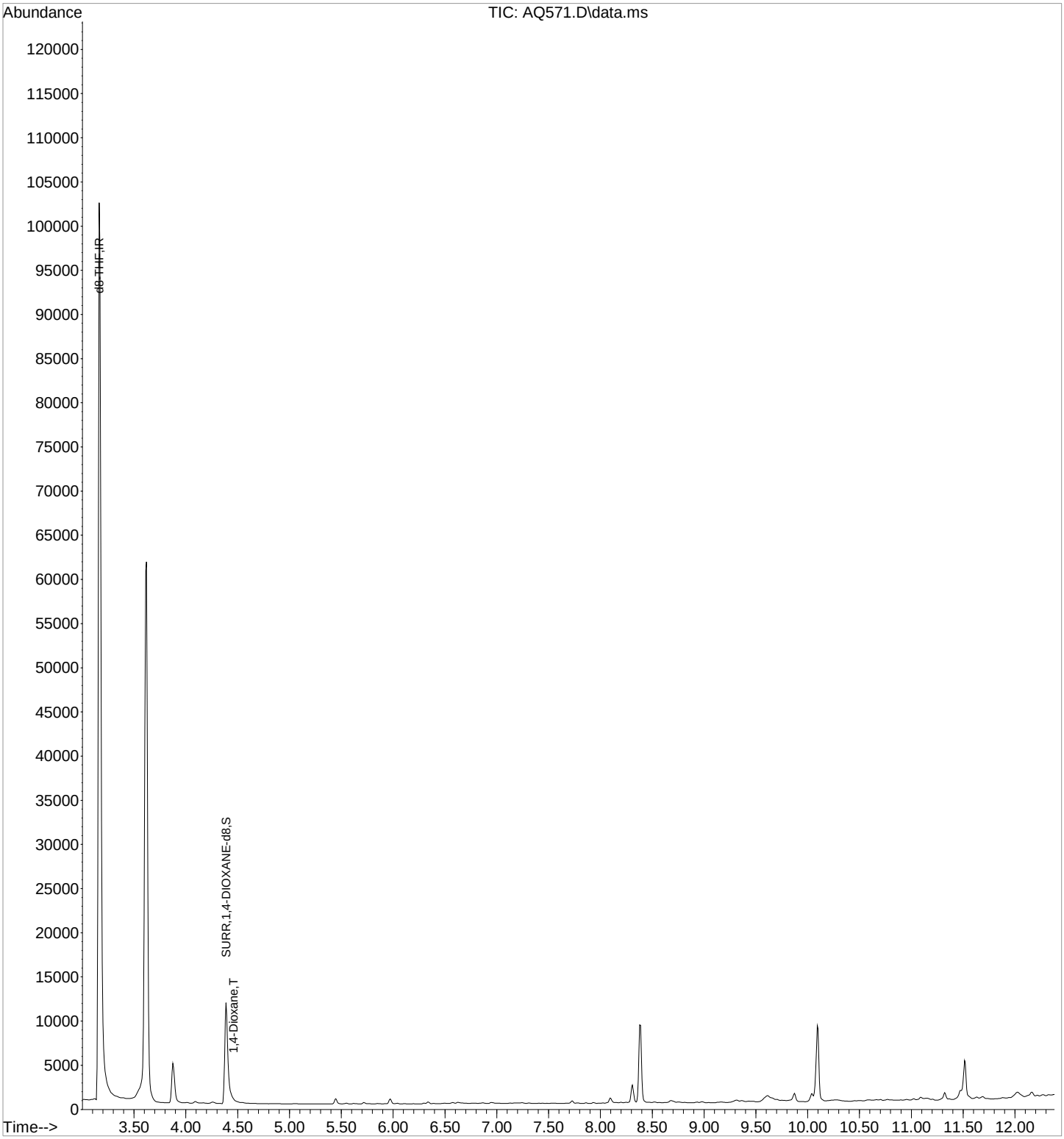
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.165	46	74030	500.00	PPB	-0.10
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.387	96	13109	98.74	PPB	-0.10
Spiked Amount 100.000	Range 70 - 130		Recovery = 98.74%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.458	88	102	0.71	PPB	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ571.D
Acq On : 21 Sep 2018 8:55 pm
Operator : J.Misiurewicz
Sample : R1808910-008 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 22 11:19:09 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ572.D
Acq On : 21 Sep 2018 9:13 pm
Operator : J.Misiurewicz
Sample : R1808910-009 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 22 11:19:11 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

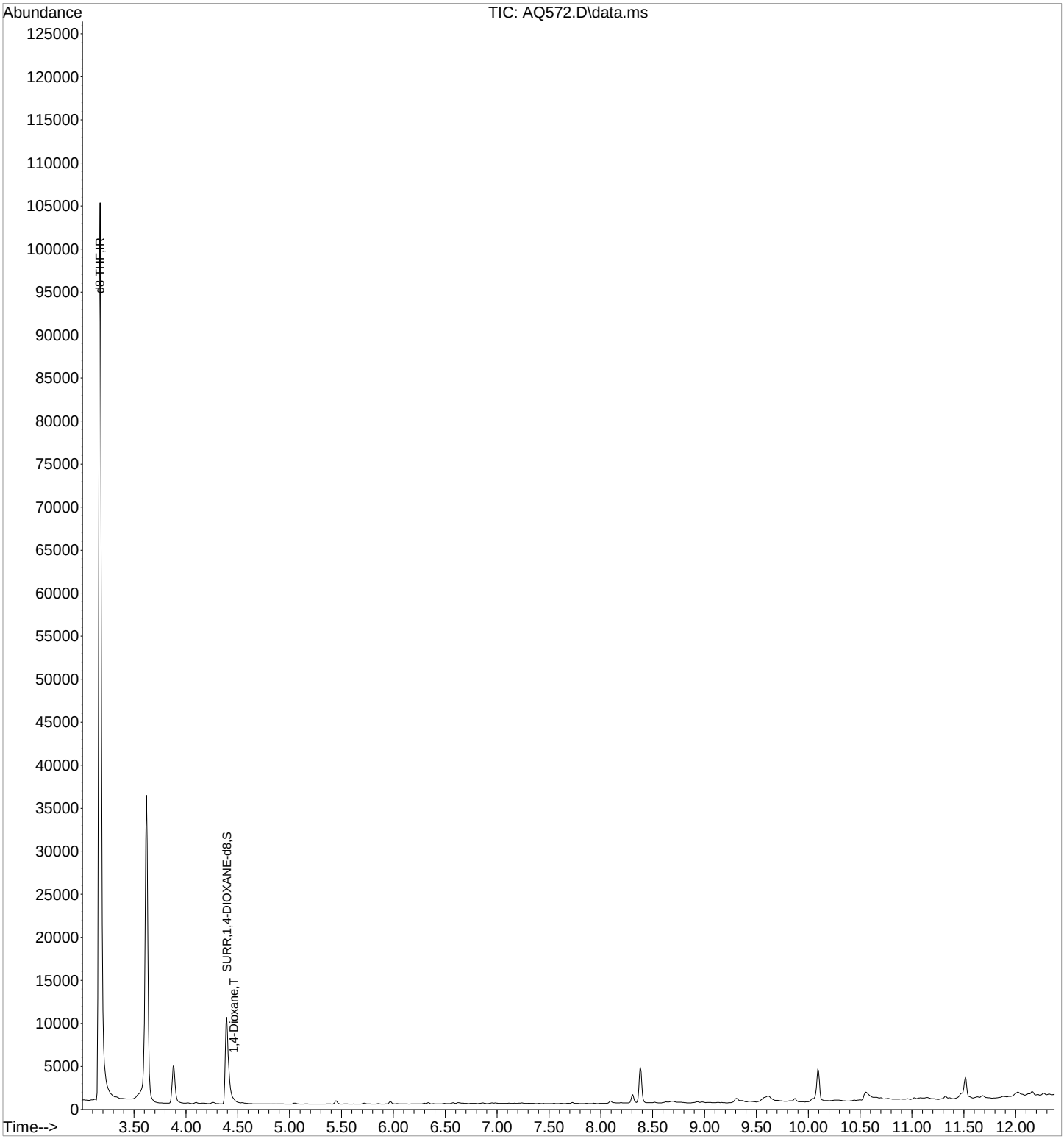
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.172	46	71759	500.00	PPB	-0.10
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.394	96	12012	93.35	PPB	-0.09
Spiked Amount 100.000	Range 70 - 130		Recovery = 93.35%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.458	88	106	0.76	PPB	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ572.D
Acq On : 21 Sep 2018 9:13 pm
Operator : J.Misiurewicz
Sample : R1808910-009 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 22 11:19:11 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ573.D
Acq On : 21 Sep 2018 9:31 pm
Operator : J.Misiurewicz
Sample : R1808910-010 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 22 11:19:13 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

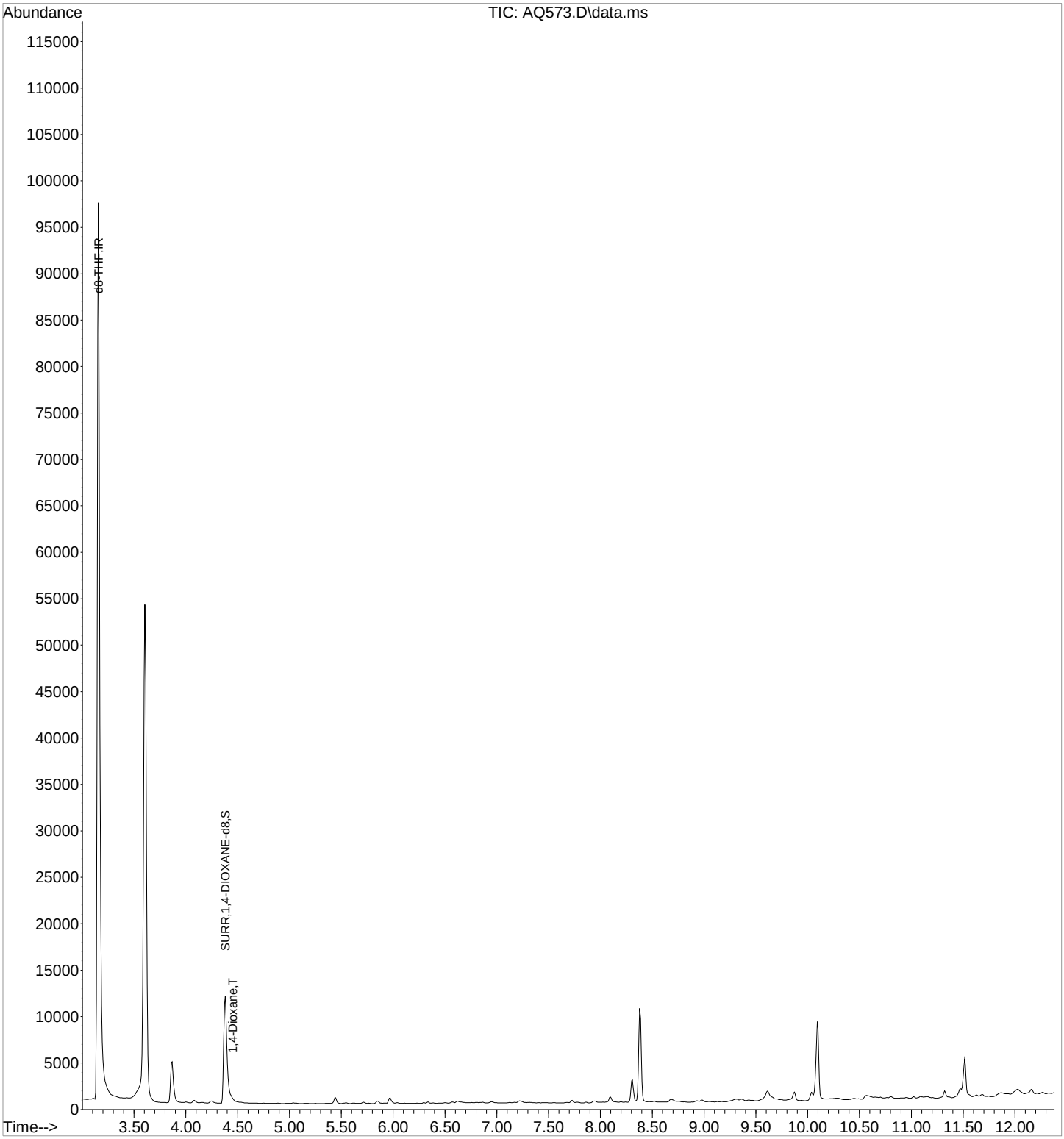
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.158	46	66640	500.00	PPB	-0.11
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.380	96	13371	111.85	PPB	-0.11
Spiked Amount 100.000	Range 70 - 130		Recovery = 111.85%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.451	88	132	1.01	PPB	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ573.D
Acq On : 21 Sep 2018 9:31 pm
Operator : J.Misiurewicz
Sample : R1808910-010 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 22 11:19:13 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ574.D
Acq On : 21 Sep 2018 9:49 pm
Operator : J.Misiurewicz
Sample : R1808910-011 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 22 11:19:15 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

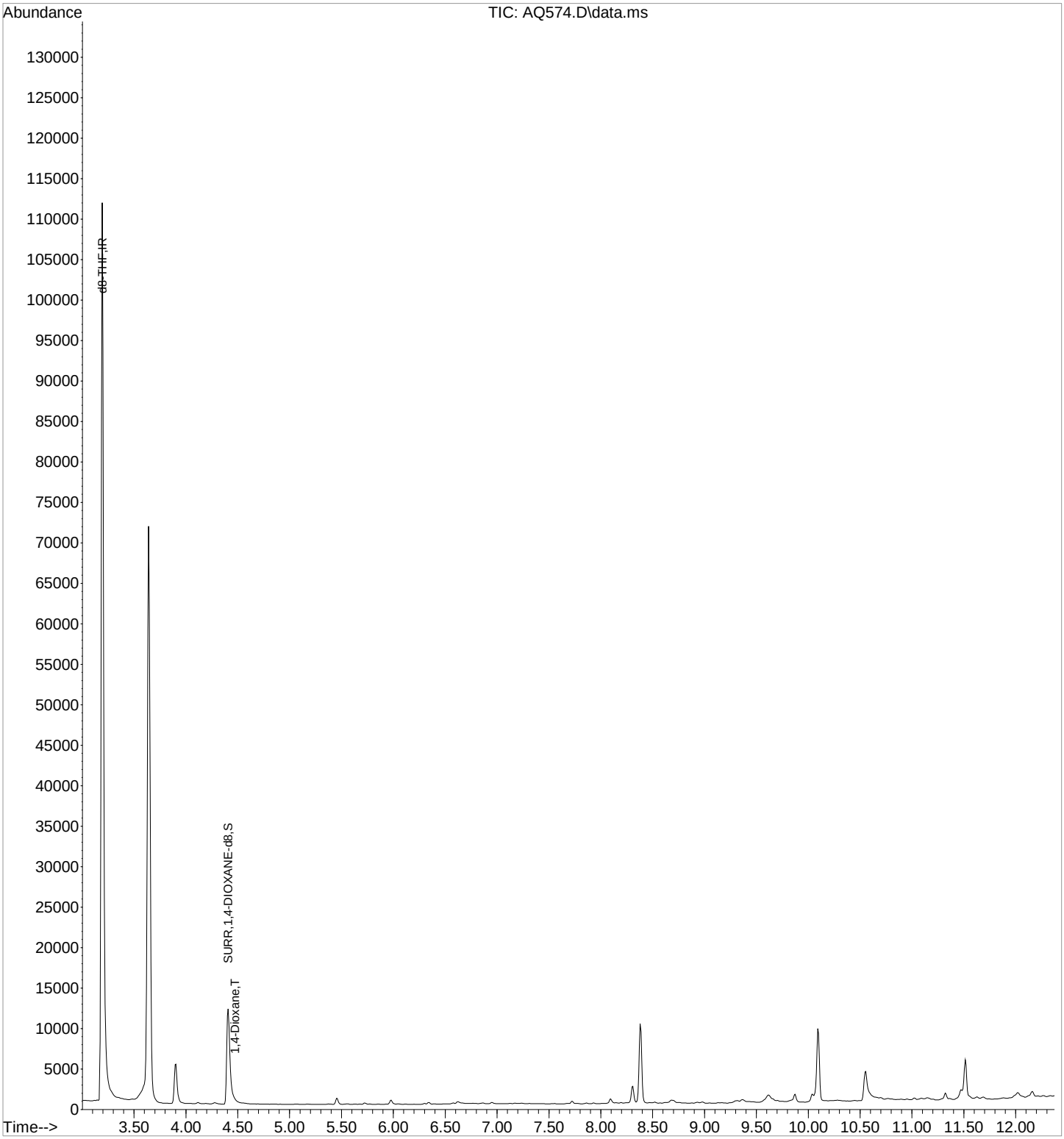
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.193	46	75310	500.00	PPB	-0.07
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.408	96	13612	100.78	PPB	-0.08
Spiked Amount 100.000	Range 70 - 130		Recovery = 100.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.472	88	88	0.61	PPB	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ574.D
Acq On : 21 Sep 2018 9:49 pm
Operator : J.Misiurewicz
Sample : R1808910-011 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 22 11:19:15 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ575.D
Acq On : 21 Sep 2018 10:08 pm
Operator : J.Misiurewicz
Sample : R1808910-012 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 22 11:19:17 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

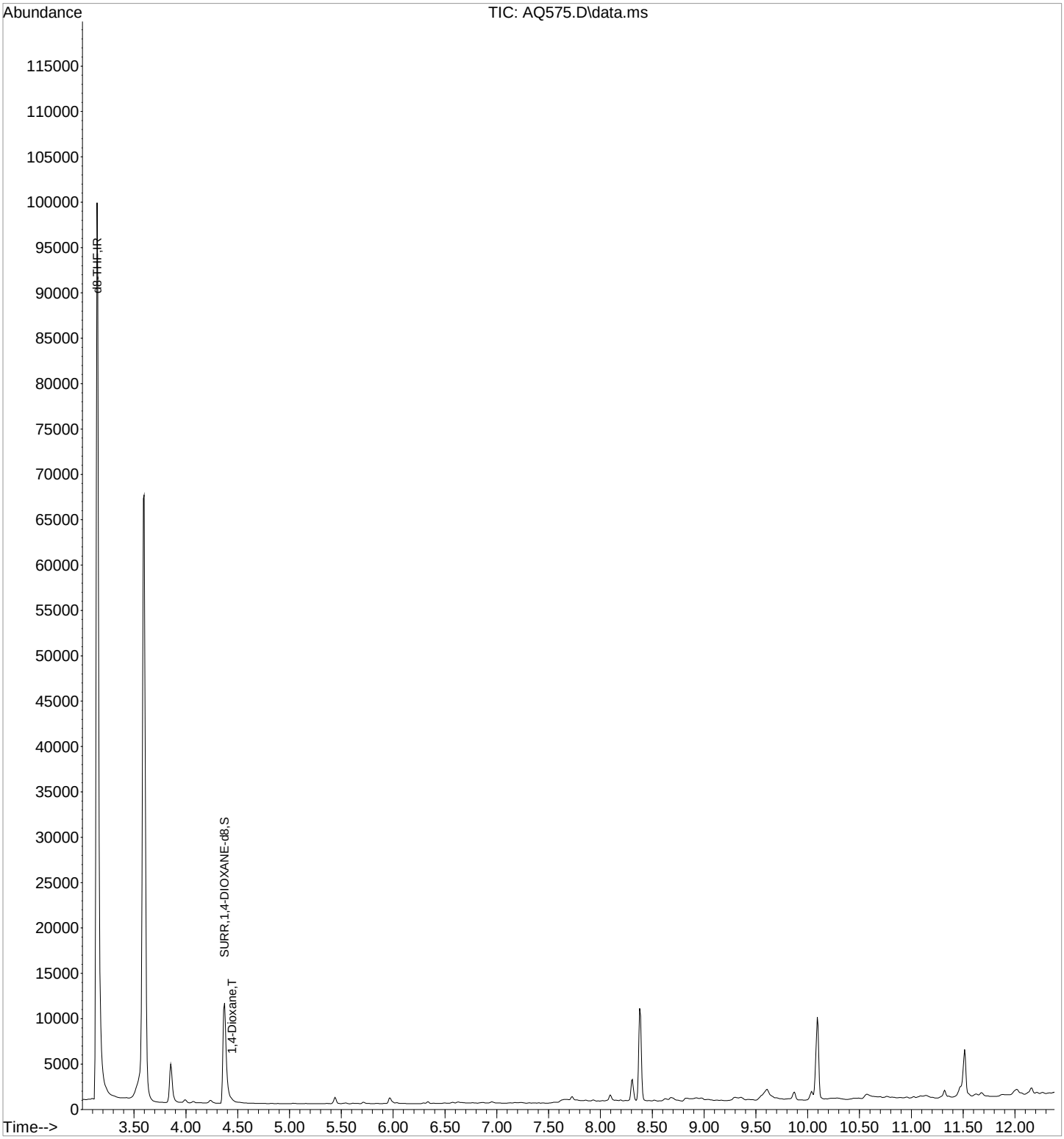
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.143	46	69248	500.00	PPB	-0.12
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.372	96	12905	103.91	PPB	-0.11
Spiked Amount 100.000	Range 70 - 130		Recovery = 103.91%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.443	88	111	0.82	PPB	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ575.D
Acq On : 21 Sep 2018 10:08 pm
Operator : J.Misiurewicz
Sample : R1808910-012 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 22 11:19:17 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ576.D
Acq On : 21 Sep 2018 10:28 pm
Operator : J.Misiurewicz
Sample : R1808910-013 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 22 11:19:19 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

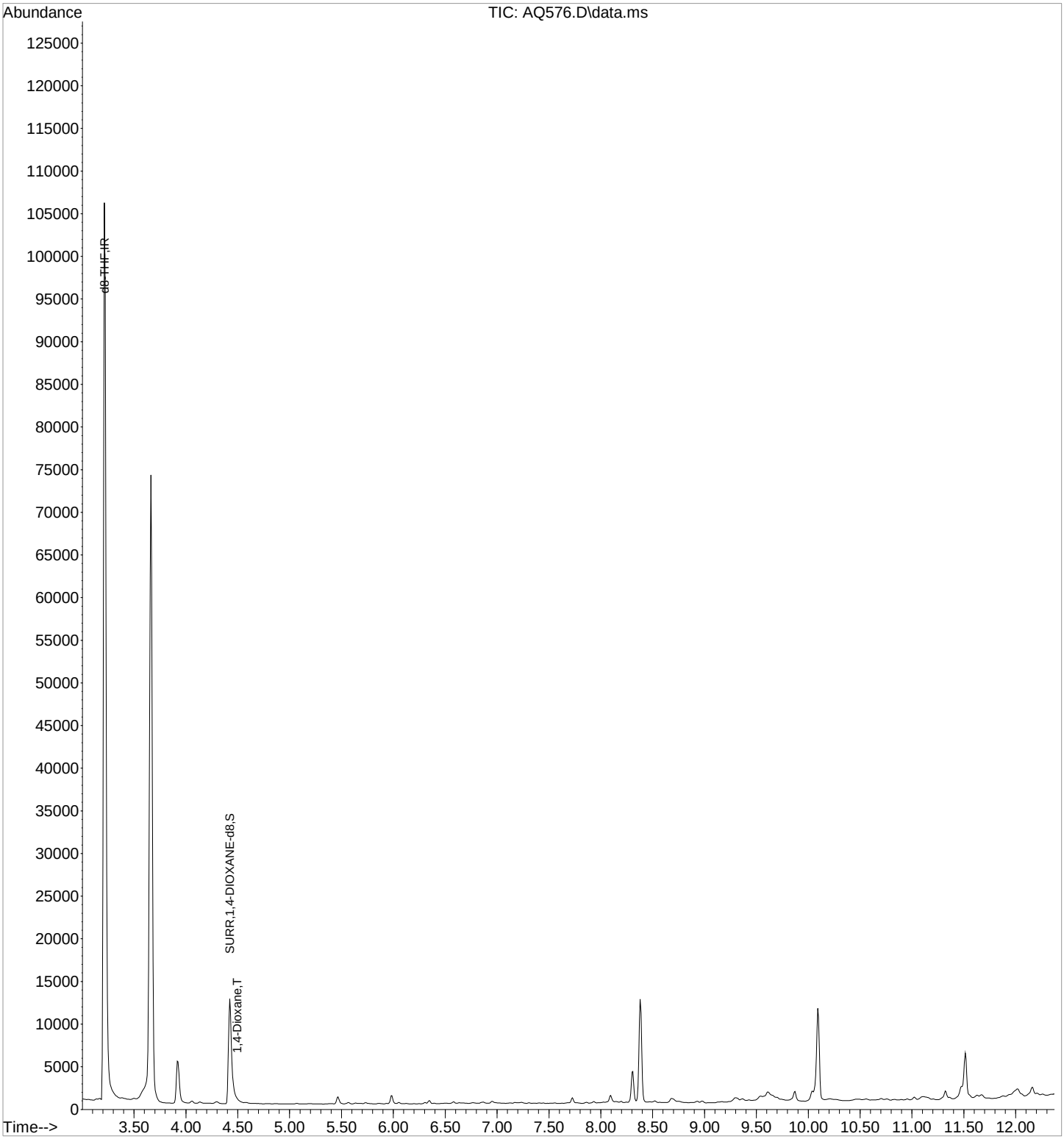
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.214	46	71611	500.00	PPB	-0.05
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.422	96	14057	109.43	PPB	-0.06
Spiked Amount 100.000	Range 70 - 130		Recovery = 109.43%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.493	88	212	1.50	PPB	97

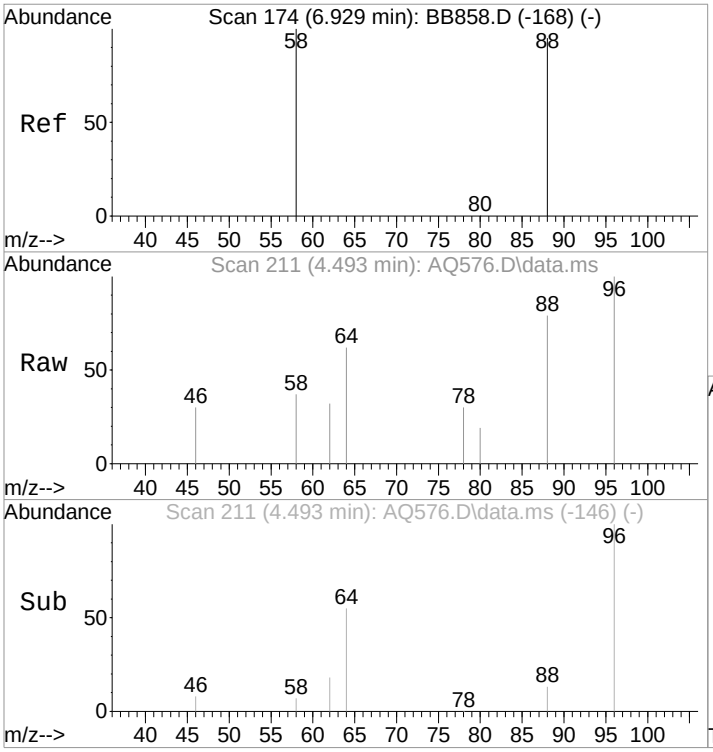
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ576.D
Acq On : 21 Sep 2018 10:28 pm
Operator : J.Misiurewicz
Sample : R1808910-013 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 22 11:19:19 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

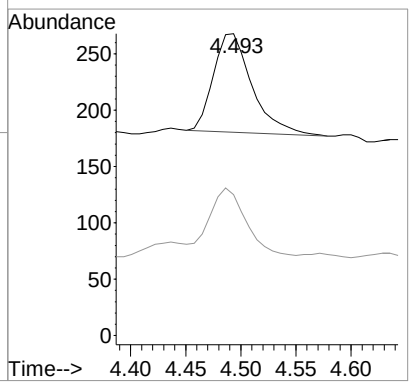




#2
1,4-Dioxane
Concen: 1.50 PPB
RT: 4.493 min Scan# 211
Delta R.T. -0.041 min
Lab File: AQ576.D
Acq: 21 Sep 2018 10:28 pm

Tgt Ion: 88 Resp: 212

Ion	Ratio	Lower	Upper
88	100		
58	54.8	37.0	77.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ577.D
Acq On : 21 Sep 2018 10:48 pm
Operator : J.Misiurewicz
Sample : R1808910-014 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 22 11:19:21 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

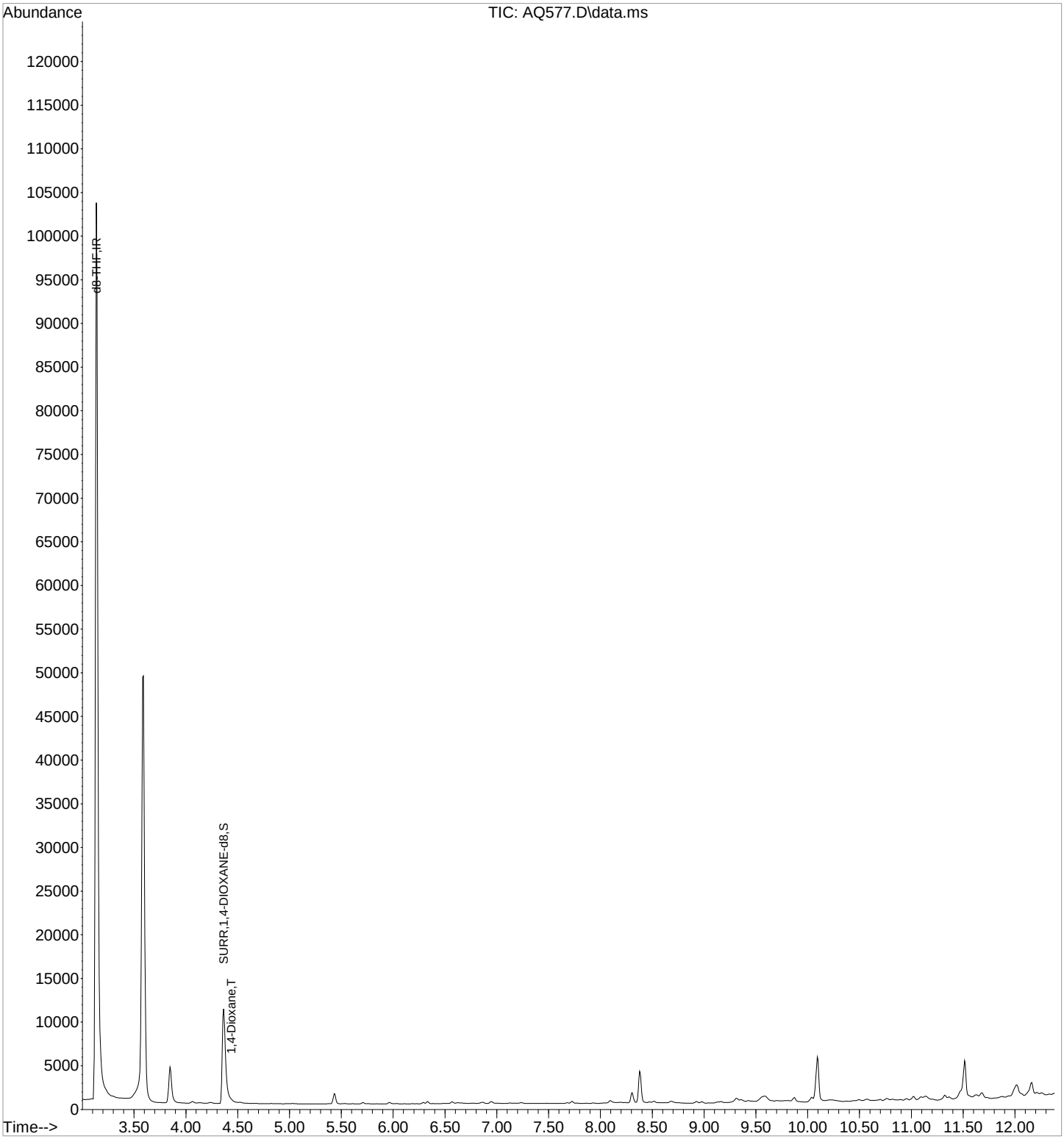
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.136	46	73421	500.00	PPB	-0.13
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.365	96	12715	96.57	PPB	-0.12
Spiked Amount 100.000	Range 70 - 130		Recovery = 96.57%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.436	88	121	0.84	PPB	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ577.D
Acq On : 21 Sep 2018 10:48 pm
Operator : J.Misiurewicz
Sample : R1808910-014 Inst : 5975 E
Misc : 322405 8270D DIOX
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 22 11:19:21 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ564.D
Acq On : 21 Sep 2018 6:47 pm
Operator : J.Misiurewicz
Sample : RQ1810048-01 Inst : 5975 E
Misc : 322405 8270D DIOX BLK
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 22 11:18:55 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

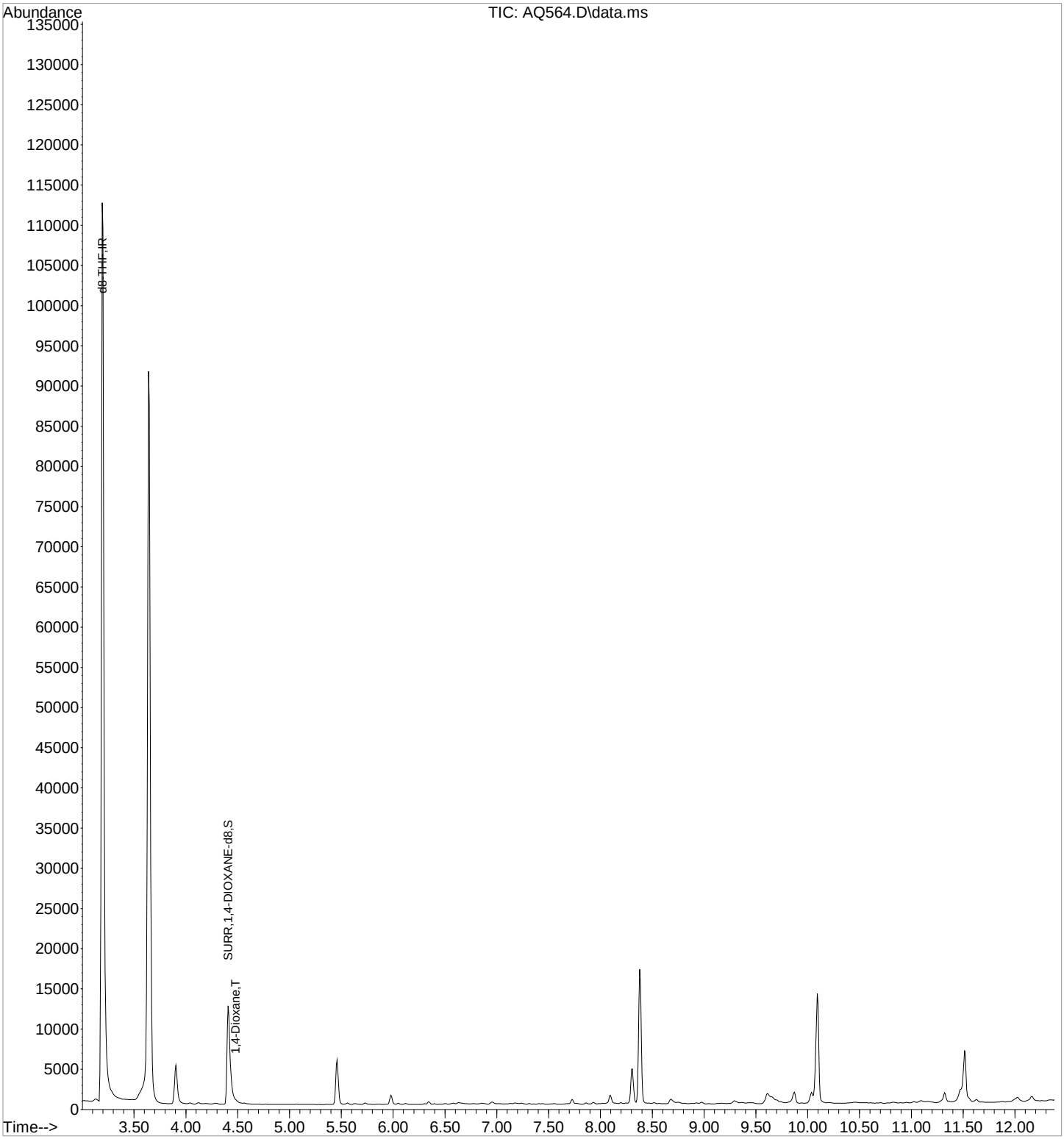
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.193	46	80474	500.00	PPB	-0.07
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.408	96	14177	98.24	PPB	-0.08
Spiked Amount 100.000	Range 70 - 130		Recovery = 98.24%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.479	88	129	0.82	PPB	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ564.D
Acq On : 21 Sep 2018 6:47 pm
Operator : J.Misiurewicz
Sample : RQ1810048-01 Inst : 5975 E
Misc : 322405 8270D DIOX BLK
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 22 11:18:55 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ565.D
Acq On : 21 Sep 2018 7:05 pm
Operator : J.Misiurewicz
Sample : RQ1810048-02 Inst : 5975 E
Misc : 322405 8270D DIOX LCS
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 22 11:18:57 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

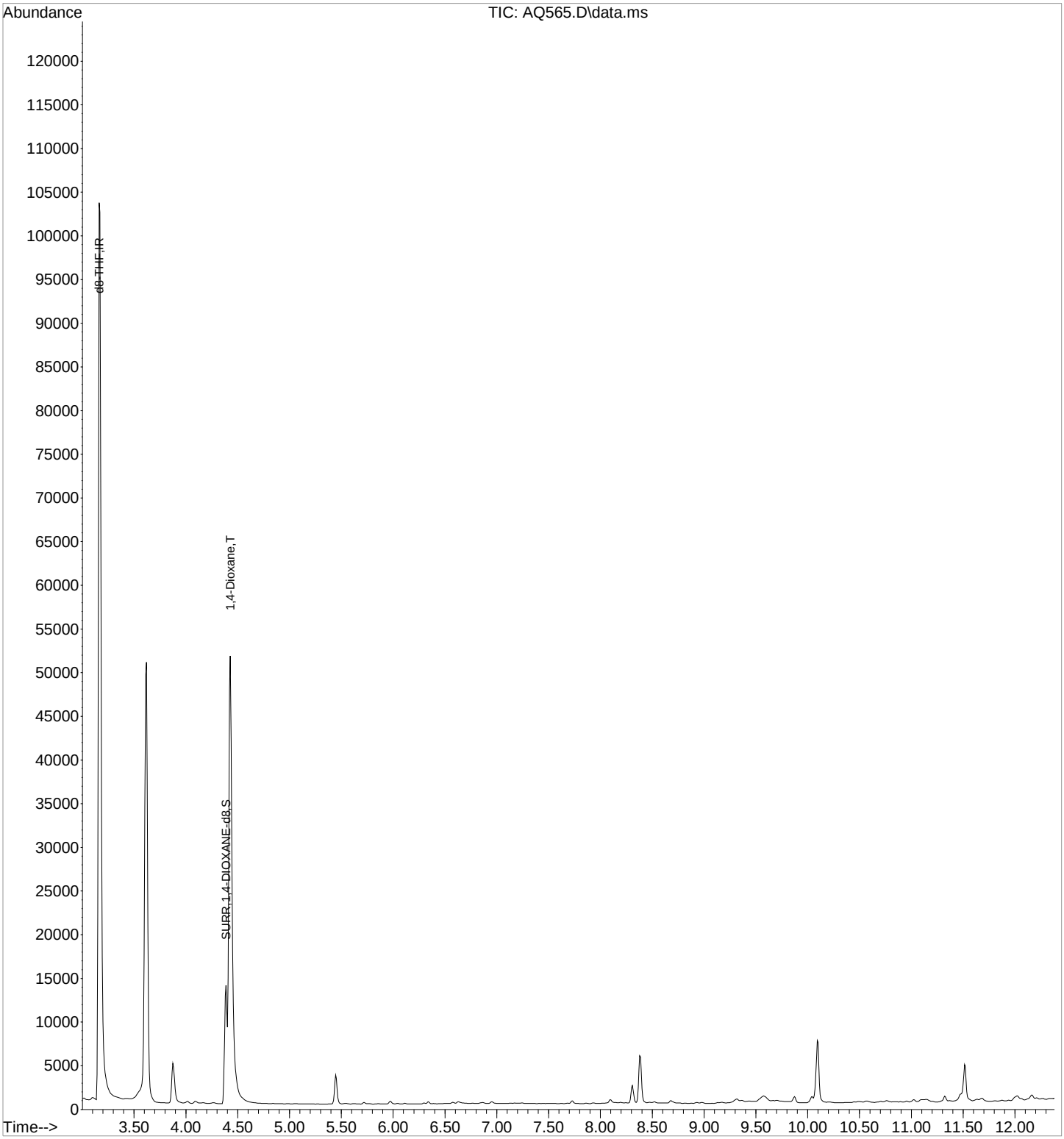
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.164	46	75361	500.00	PPB	-0.10
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.386	96	13662	101.08	PPB	-0.10
Spiked Amount 100.000	Range 70 - 130		Recovery = 101.08%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.429	88	70911	468.03	PPB	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ565.D
Acq On : 21 Sep 2018 7:05 pm
Operator : J.Misiurewicz
Sample : RQ1810048-02 Inst : 5975 E
Misc : 322405 8270D DIOX LCS
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 22 11:18:57 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



1st DM 09/24/18
2nd BA 09/24/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ566.D
Acq On : 21 Sep 2018 7:23 pm
Operator : J.Misiurewicz
Sample : RQ1810048-03 Inst : 5975 E
Misc : 322405 8270D DIOX LCSD
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 22 11:18:59 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

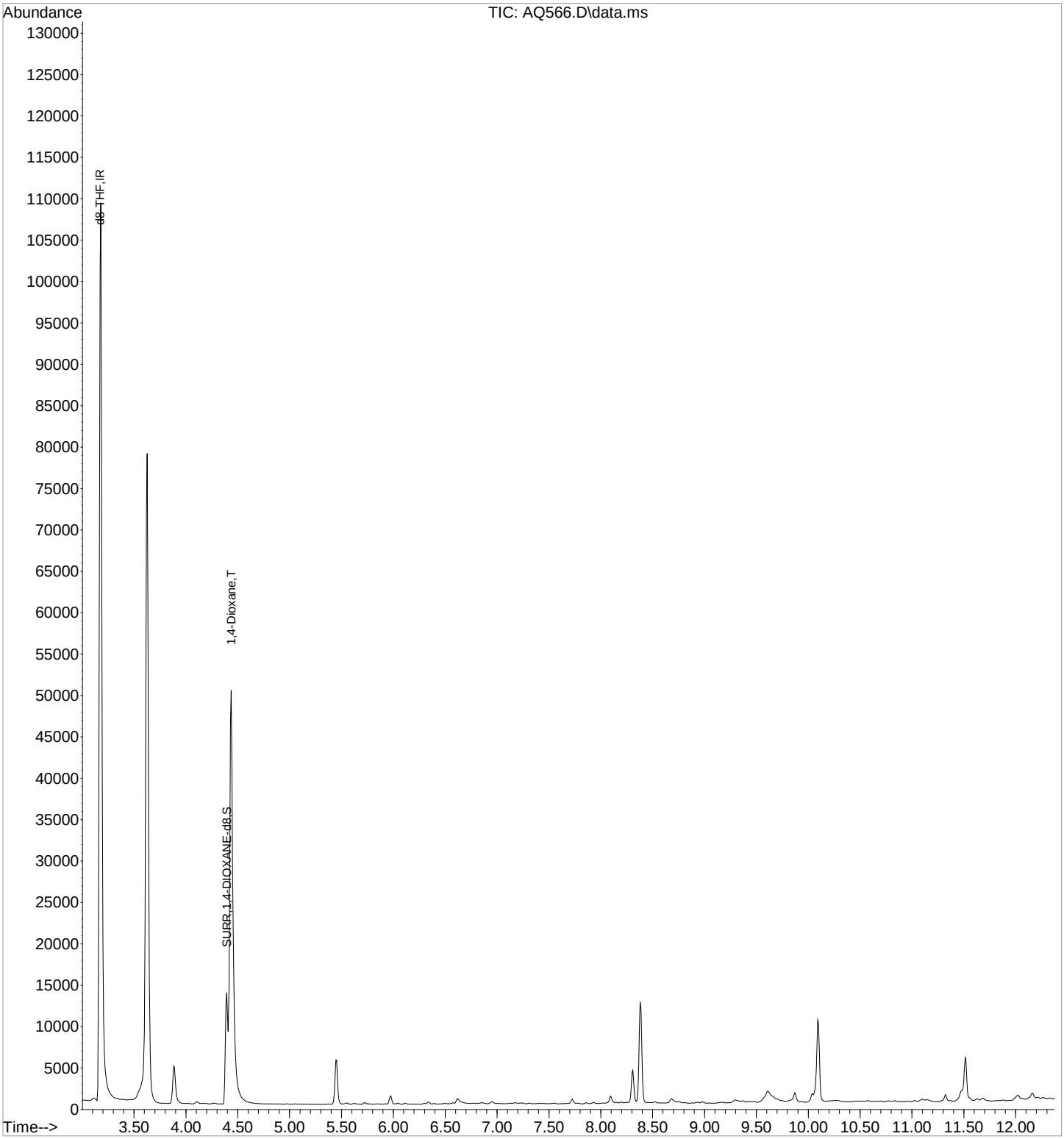
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.172	46	74835	500.00	PPB	-0.10
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.394	96	13613	101.43	PPB	-0.09
Spiked Amount 100.000	Range 70 - 130		Recovery = 101.43%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.436	88	69347	460.95	PPB	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ566.D
Acq On : 21 Sep 2018 7:23 pm
Operator : J.Misiurewicz
Sample : RQ1810048-03 Inst : 5975 E
Misc : 322405 8270D DIOX LCSD
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 22 11:18:59 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ568.D
Acq On : 21 Sep 2018 8:00 pm
Operator : J.Misiurewicz
Sample : RQ1810048-04 Inst : 5975 E
Misc : 322405 8270D DIOX R8910-006MS
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 22 11:19:03 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

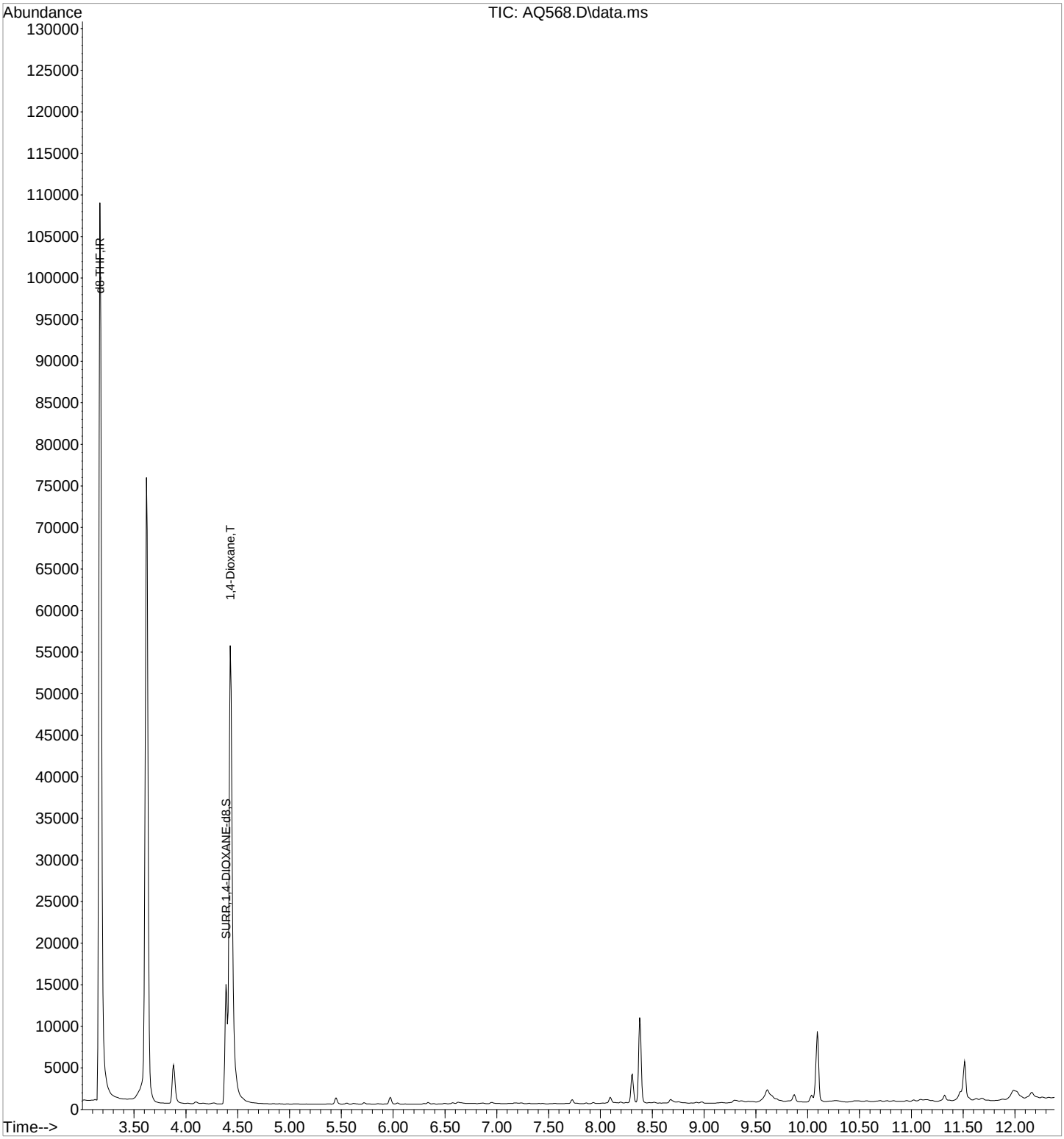
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.171	46	75369	500.00	PPB	-0.10
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.386	96	14322	105.95	PPB	-0.10
Spiked Amount 100.000	Range 70 - 130		Recovery = 105.95%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.429	88	75084	495.40	PPB	94

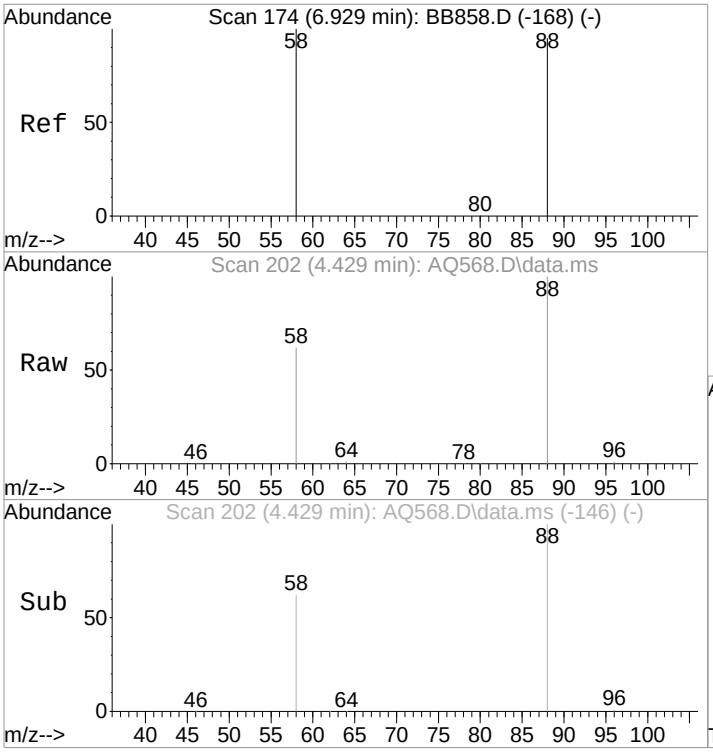
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ568.D
Acq On : 21 Sep 2018 8:00 pm
Operator : J.Misiurewicz
Sample : RQ1810048-04 Inst : 5975 E
Misc : 322405 8270D DIOX R8910-006MS
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 22 11:19:03 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

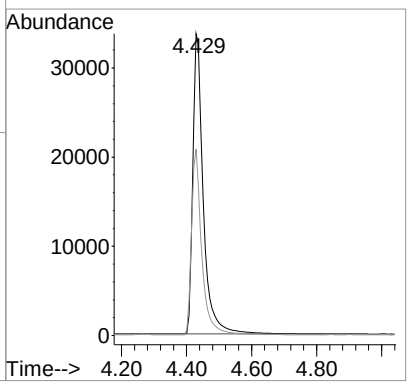




#2
1,4-Dioxane
Concen: 495.40 PPB
RT: 4.429 min Scan# 202
Delta R.T. -0.105 min
Lab File: AQ568.D
Acq: 21 Sep 2018 8:00 pm

Tgt Ion: 88 Resp: 75084

Ion	Ratio	Lower	Upper
88	100		
58	61.7	37.0	77.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ569.D
Acq On : 21 Sep 2018 8:18 pm
Operator : J.Misiurewicz
Sample : RQ1810048-05 Inst : 5975 E
Misc : 322405 8270D DIOX R8910-006MSD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 22 11:19:05 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

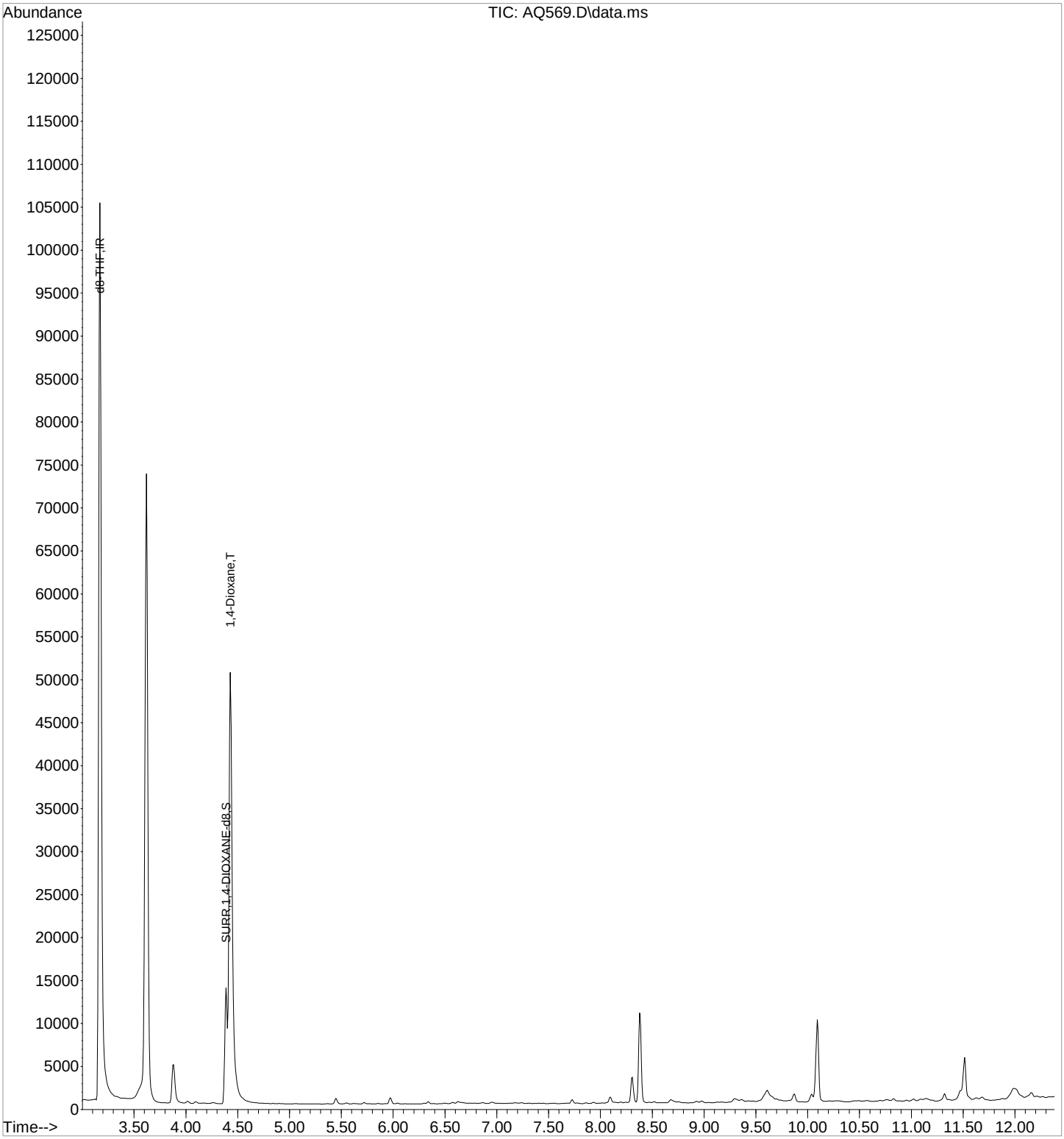
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.172	46	72665	500.00	PPB	-0.10
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.386	96	13561	104.05	PPB	-0.10
Spiked Amount 100.000	Range 70 - 130		Recovery = 104.05%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.429	88	68537	469.14	PPB	96

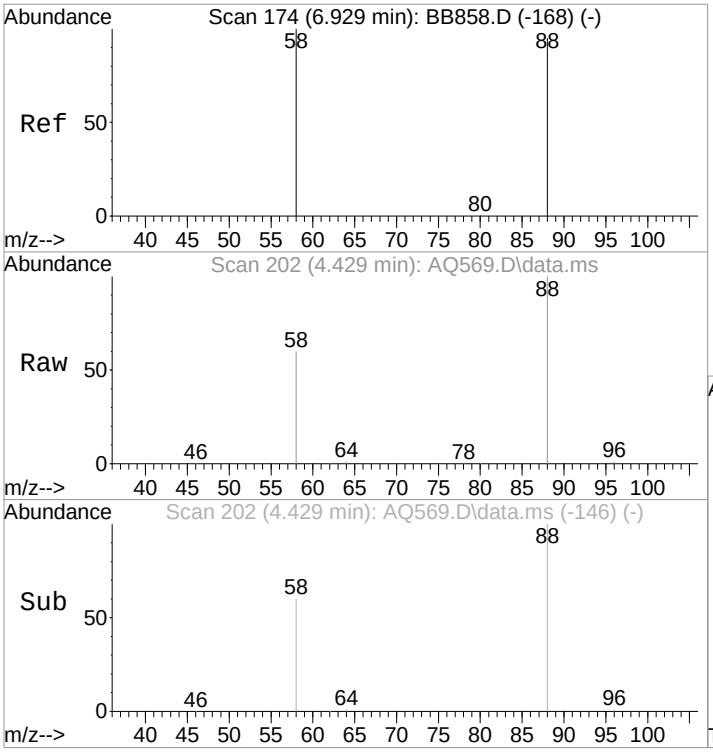
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ569.D
Acq On : 21 Sep 2018 8:18 pm
Operator : J.Misiurewicz
Sample : RQ1810048-05 Inst : 5975 E
Misc : 322405 8270D DIOX R8910-006MSD
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 22 11:19:05 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

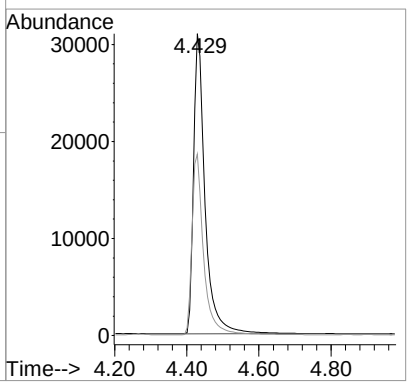




#2
1,4-Dioxane
Concen: 469.14 PPB
RT: 4.429 min Scan# 202
Delta R.T. -0.105 min
Lab File: AQ569.D
Acq: 21 Sep 2018 8:18 pm

Tgt Ion: 88 Resp: 68537

Ion	Ratio	Lower	Upper
88	100		
58	60.2	37.0	77.0



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ563.D
Acq On : 21 Sep 2018 6:28 pm
Operator : J.Misiurewicz
Sample : CCV Inst : 5975 E
Misc : 200ppb STD 8270D
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 22 11:18:53 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 IR	d8-THF	500.000	500.000	0.0	91	-0.06
2 T	1,4-Dioxane	200.000	216.896	-8.4	90	-0.07
3 S	SURR,1,4-DIOXANE-d8	200.000	242.158	-21.1#	102	-0.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ563.D
Acq On : 21 Sep 2018 6:28 pm
Operator : J.Misiurewicz
Sample : CCV Inst : 5975 E
Misc : 200ppb STD 8270D
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 22 11:18:53 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

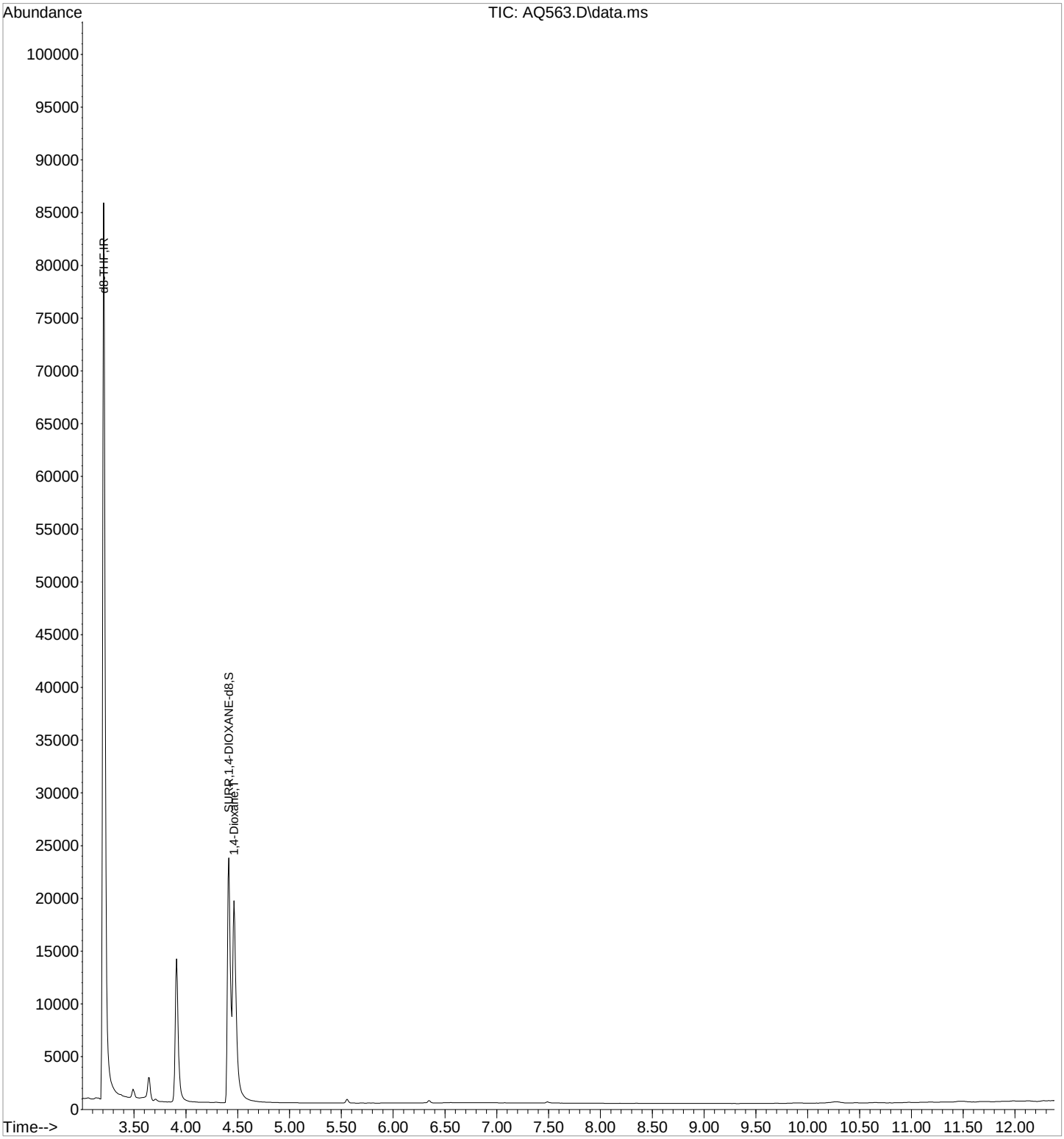
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.207	46	61116	500.00	PPB	-0.06
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.415	96	26612	242.16	PPB	-0.07
Spiked Amount 100.000	Range 70 - 130		Recovery = 242.16%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.464	88	26592	216.90	PPB	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ563.D
Acq On : 21 Sep 2018 6:28 pm
Operator : J.Misiurewicz
Sample : CCV Inst : 5975 E
Misc : 200ppb STD 8270D
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 22 11:18:53 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

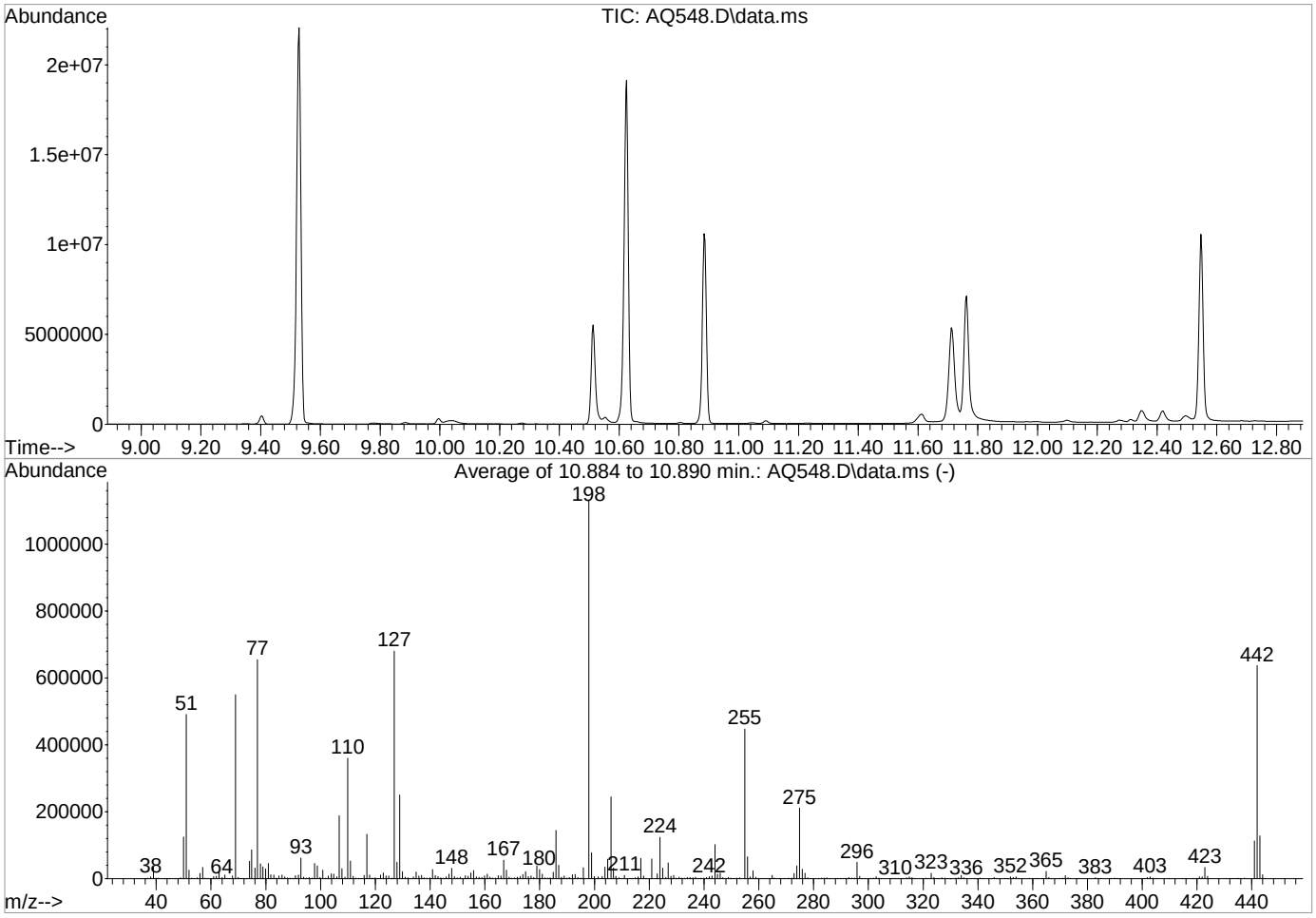


1st DM 09/24/18
2nd BA 09/24/18

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ548.D
Acq On : 21 Sep 2018 1:00 pm
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e

Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Title :
Last Update : Tue Feb 13 10:58:46 2018



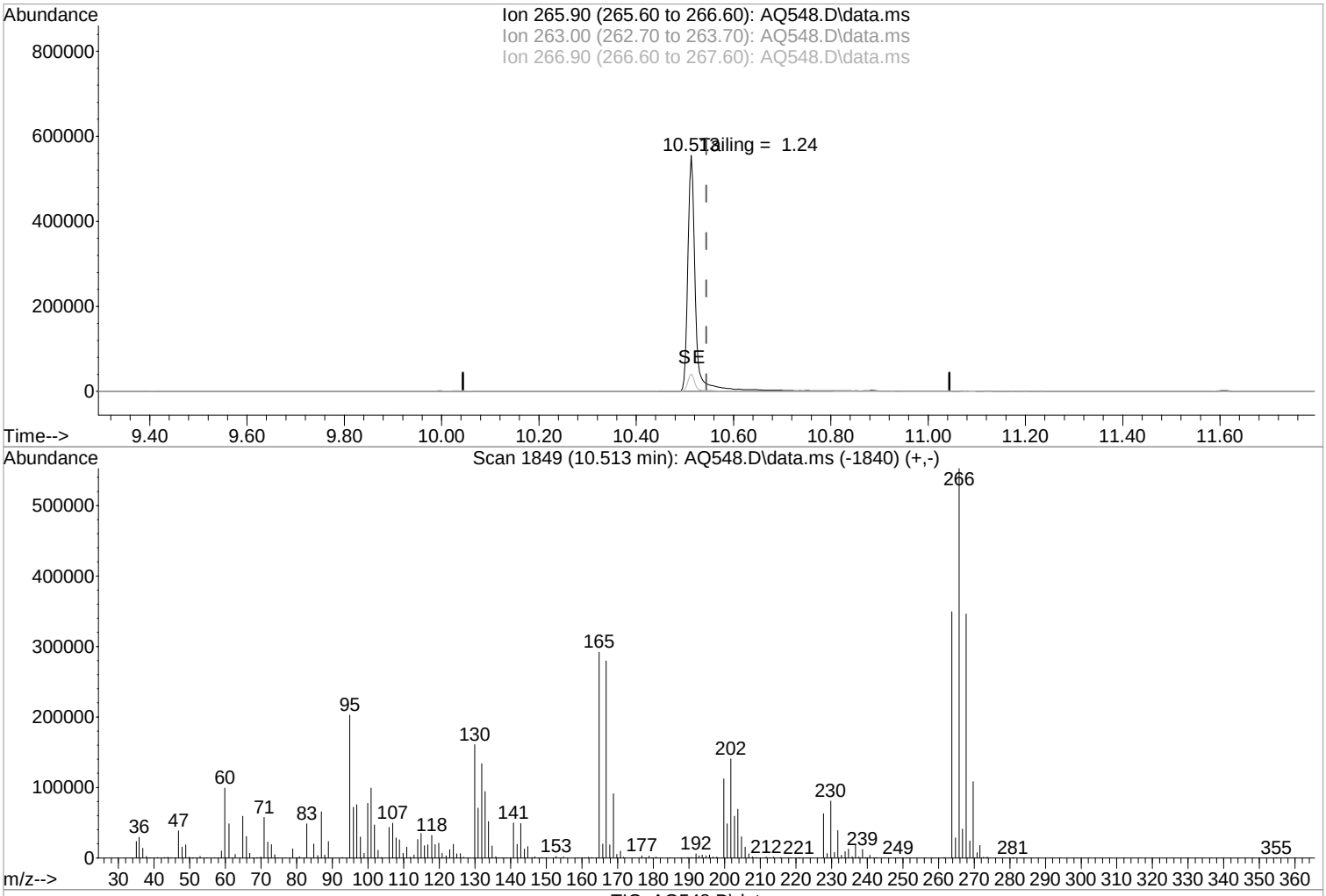
AutoFind: Scans 1975, 1976, 1977; Background Corrected with Scan 1961

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	43.5	491157	PASS
68	69	0.00	2	1.4	7912	PASS
70	69	0.00	2	0.5	2883	PASS
127	198	10	80	60.2	680167	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	1129664	PASS
199	198	5	9	6.8	76979	PASS
275	198	10	60	18.7	210709	PASS
365	198	1	500	1.9	21080	PASS
441	442	0.01	24	17.7	112728	PASS
442	442	100	100	100.0	637568	PASS
443	442	15	24	20.1	128029	PASS

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ548.D
Acq On : 21 Sep 2018 1:00 pm
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 13:48:24 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Quant Title :
QLast Update : Tue Feb 13 10:58:46 2018
Response via : Initial Calibration



(5) Pentachlorophenol (T)

10.514min (-0.030) 48.72 ppm

response 5663539

Ion	Exp%	Act%
265.90	100.00	100.00
263.00	0.00	0.00
266.90	7.70	7.37
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

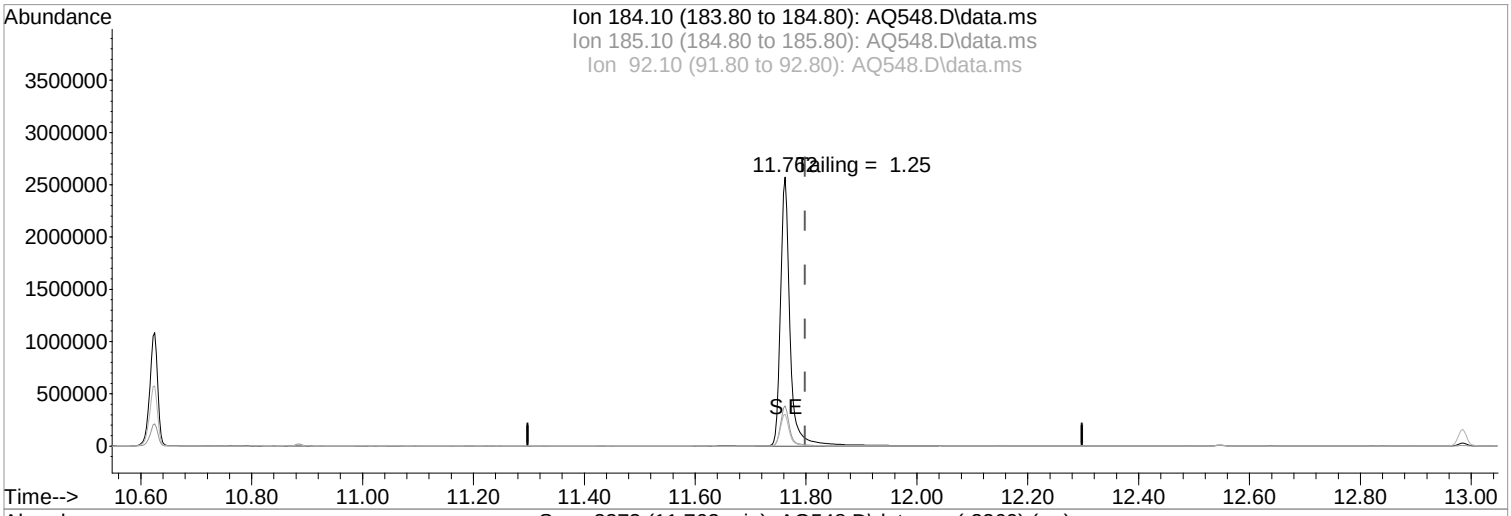
09/24/18

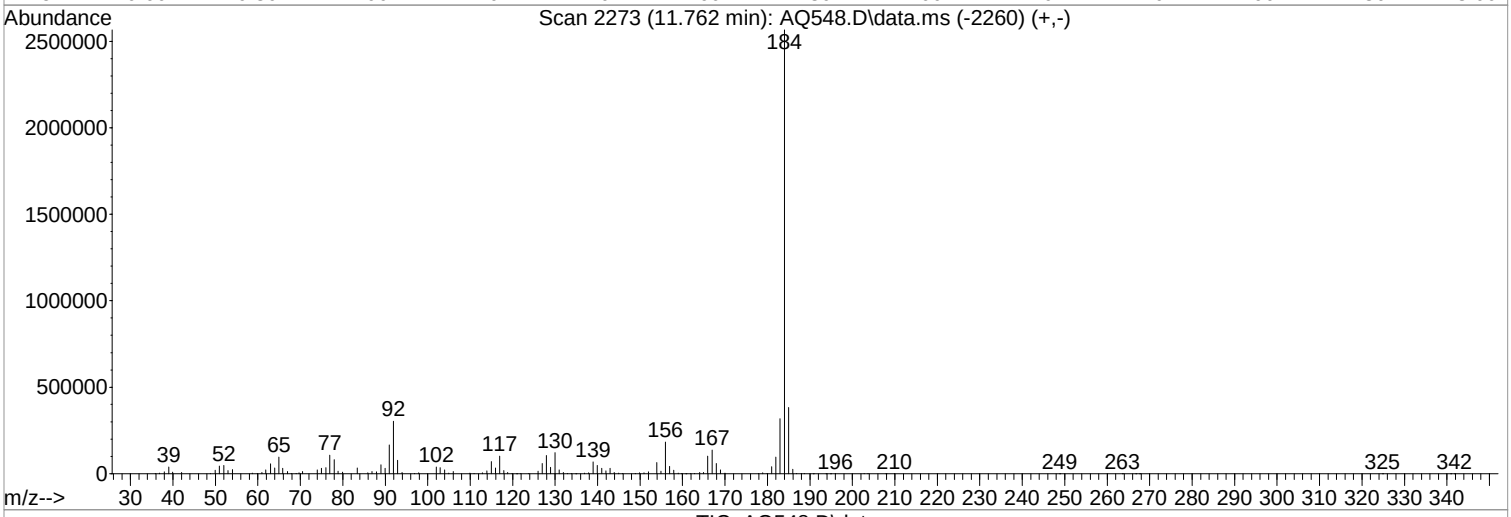
1st DM 09/24/18
2nd BA 09/24/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ548.D
Acq On : 21 Sep 2018 1:00 pm
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 13:48:24 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Quant Title :
QLast Update : Tue Feb 13 10:58:46 2018
Response via : Initial Calibration





TIC: AQ548.D\data.ms

(8) Benzidine (T)

11.763min (-0.035) 90.65 ppm

response 30008122

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	13.80	14.89
92.10	10.70	11.78
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

09/24/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ548.D
Acq On : 21 Sep 2018 1:00 pm
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 13:48:24 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Quant Title :
QLast Update : Tue Feb 13 10:58:46 2018
Response via : Initial Calibration

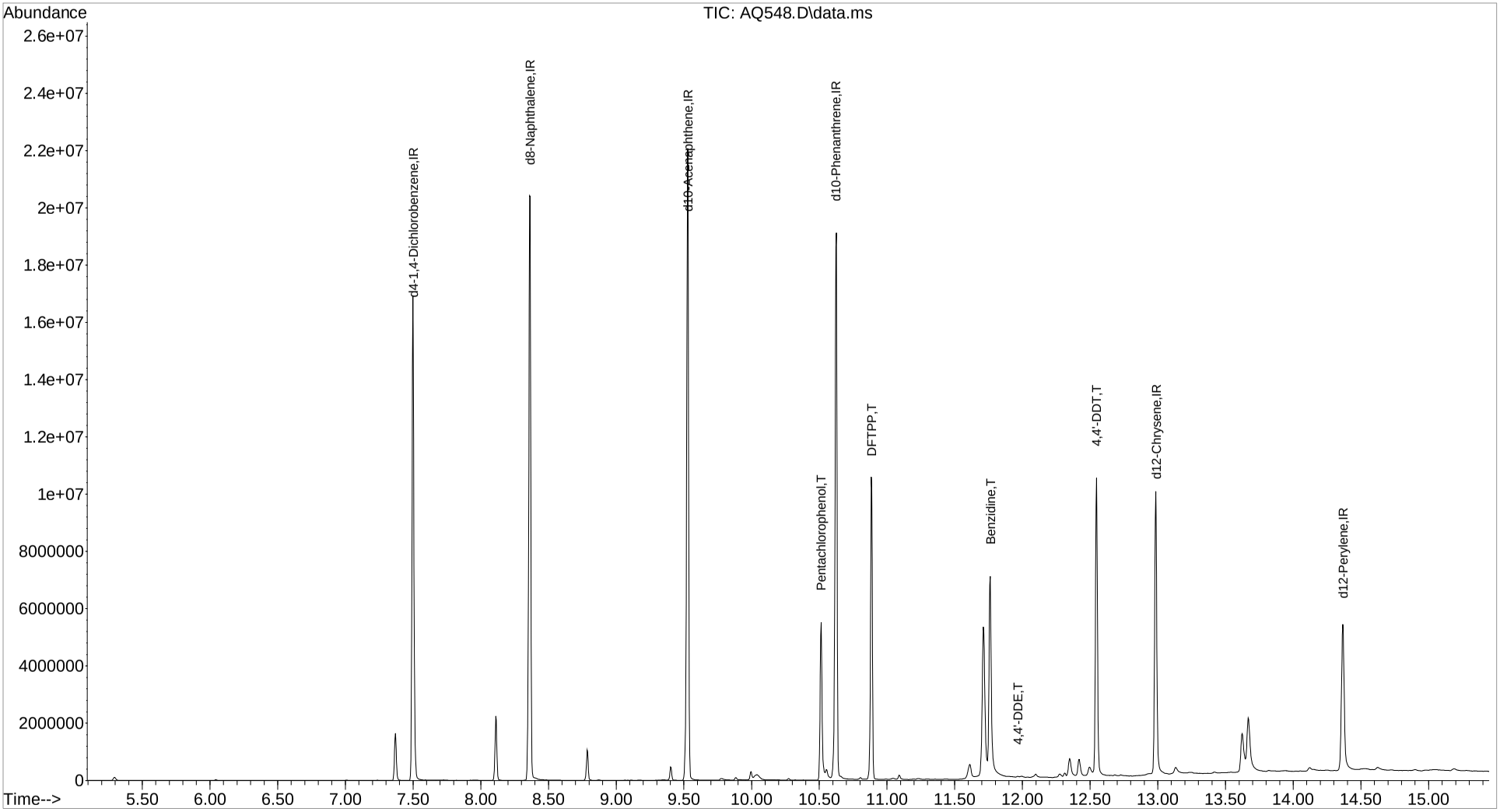
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	7.500	152	26960311	20.00	ppm		-0.04
2) d8-Naphthalene	8.363	136	88729728	20.00	ppm		-0.03
3) d10-Acenaphthene	9.529	164	45671842	20.00	ppm		-0.03
4) d10-Phenanthrene	10.625	188	67257823	20.00	ppm		-0.03
7) d12-Chrysene	12.986	240	33533589	20.00	ppm		-0.04
12) d12-Perylene	14.367	264	22030094	20.00	ppm		-0.05
Target Compounds							Qvalue
5) Pentachlorophenol	10.514	266	5663539	48.72	ppm		99
6) DFTPP	10.887	198	11631509	52.07	ppm	#	67
8) Benzidine	11.763	184	30008122	90.65	ppm		97
9) 4,4'-DDE	11.967	246	31284	0.09	ppm		81
10) 4,4'-DDD	0.000		0	N.D.			
11) 4,4'-DDT	12.548	235	15931571	48.17	ppm		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\092118\
Data File : AQ548.D
Acq On : 21 Sep 2018 1:00 pm
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 21 13:48:24 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Quant Title :
QLast Update : Tue Feb 13 10:58:46 2018
Response via : Initial Calibration



1st JM 09/24/18
2nd BA 09/24/18

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP482.D
Acq On : 20 Feb 2018 12:28 pm
Operator : J.Misiurewicz
Sample : ICV Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 20 13:43:18 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

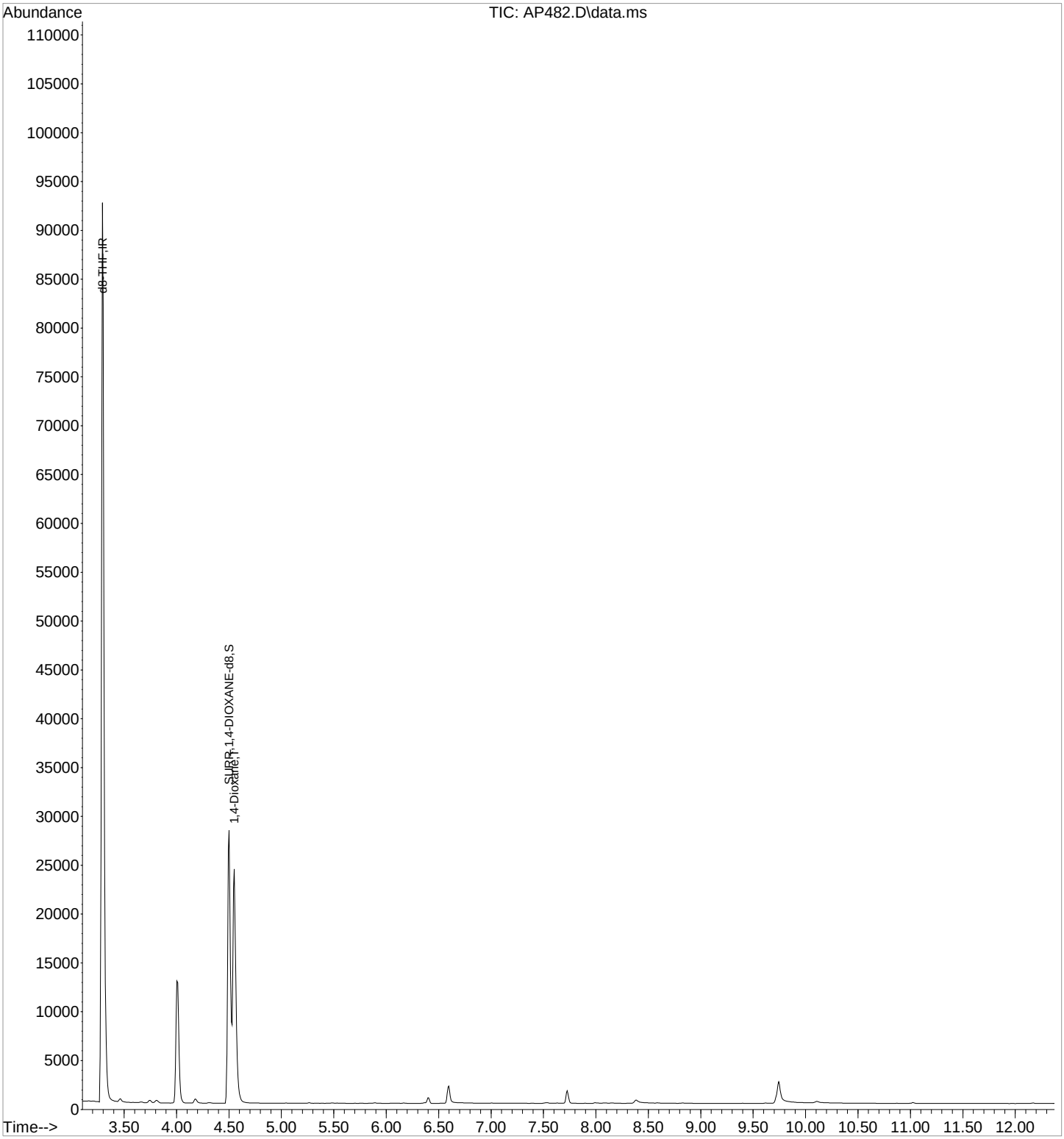
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.293	46	67752	500.00	PPB	0.03
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.501	96	26327	216.20	PPB	0.02
Spiked Amount 100.000	Range 70 - 130		Recovery = 216.20%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.550	88	29017	213.50	PPB	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP482.D
Acq On : 20 Feb 2018 12:28 pm
Operator : J.Misiurewicz
Sample : ICV Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 20 13:43:18 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP482.D
Acq On : 20 Feb 2018 12:28 pm
Operator : J.Misiurewicz
Sample : ICV Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 20 13:43:18 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d8-THF	500.000	500.000	0.0	100	0.03
2	T	1,4-Dioxane	200.000	213.500	-6.8	98	0.02
3	S	SURR,1,4-DIOXANE-d8	200.000	216.197	-8.1	101	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP480.D
Acq On : 20 Feb 2018 11:49 am
Operator : J.Misiurewicz
Sample : 1000 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 13:36:11 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

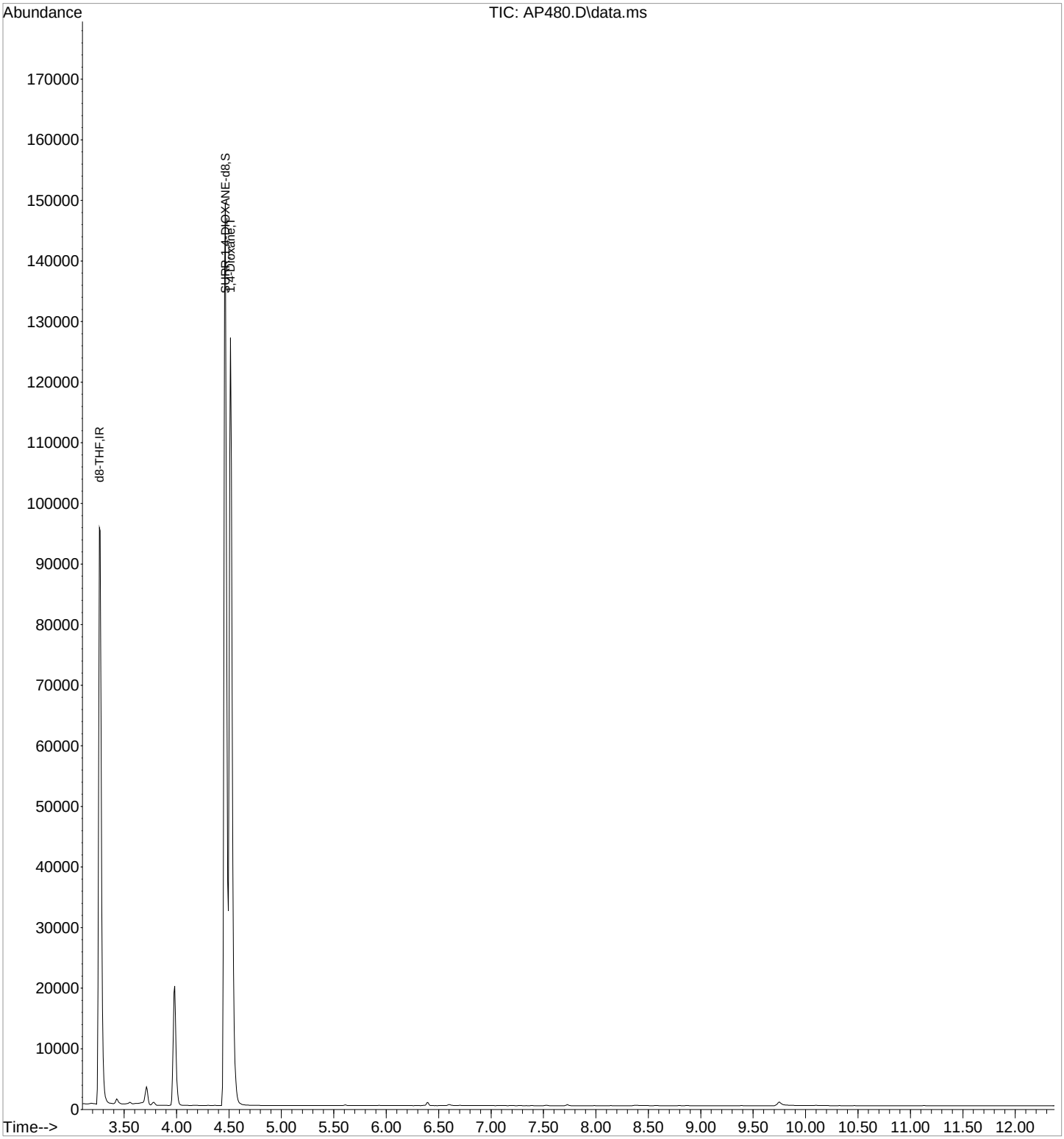
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.264	46	72120	500.00	PPB	0.00
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.465	96	133774	1018.80	PPB	-0.02
Spiked Amount 100.000	Range 70 - 130		Recovery = 1018.80%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.515	88	148093	1016.61	PPB	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP480.D
Acq On : 20 Feb 2018 11:49 am
Operator : J.Misiurewicz
Sample : 1000 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 13:36:11 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP481.D
Acq On : 20 Feb 2018 12:08 pm
Operator : J.Misiurewicz
Sample : 5000 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 13:36:13 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

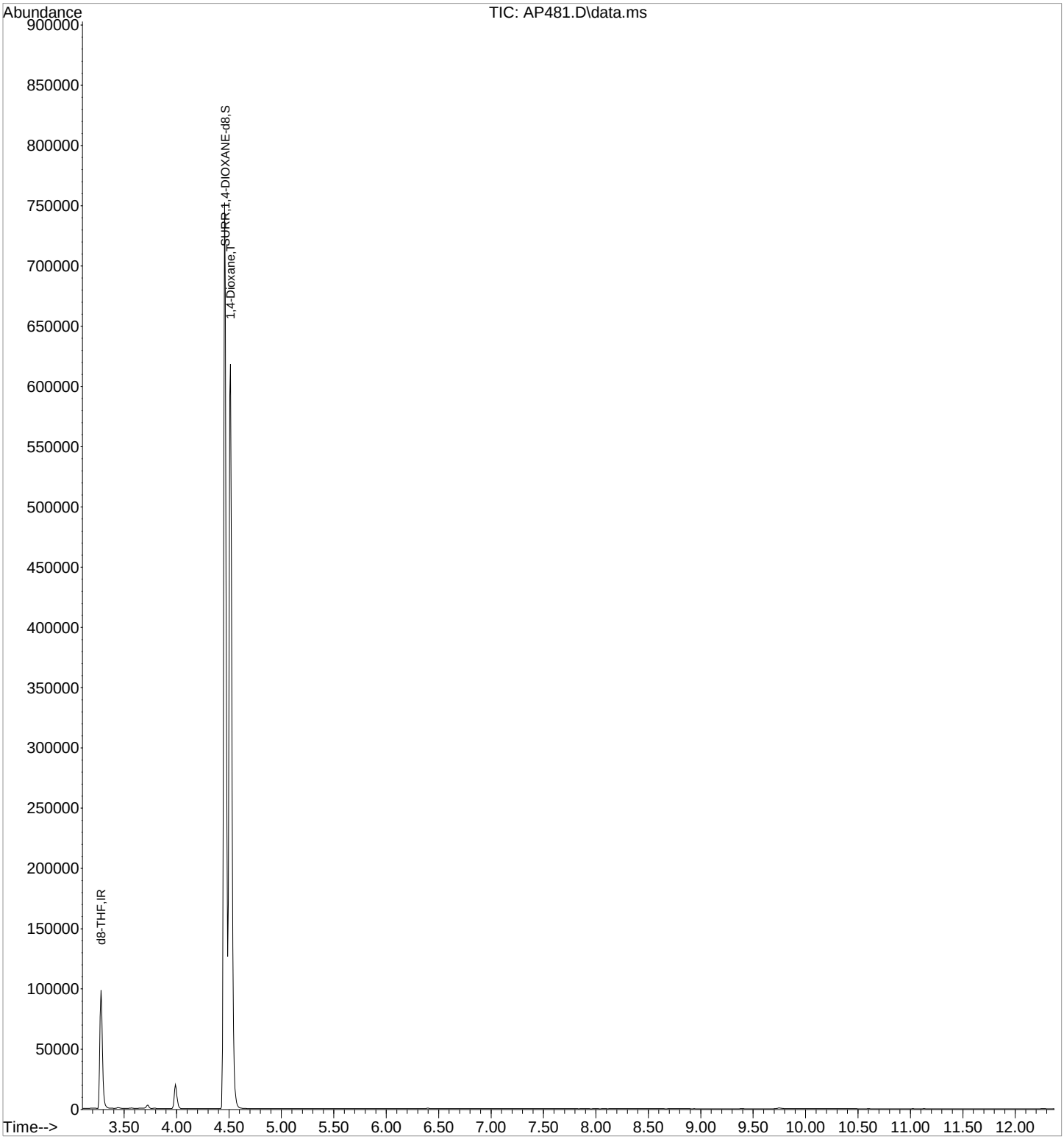
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.279	46	68823	500.00	PPB	0.00
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.465	96	653229	4913.43	PPB	-0.02
Spiked Amount 100.000	Range 70 - 130		Recovery = 4913.43%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.515	88	704166	4904.15	PPB	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP481.D
Acq On : 20 Feb 2018 12:08 pm
Operator : J.Misiurewicz
Sample : 5000 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 13:36:13 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP479.D
Acq On : 20 Feb 2018 11:30 am
Operator : J.Misiurewicz
Sample : 500 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 20 13:36:09 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

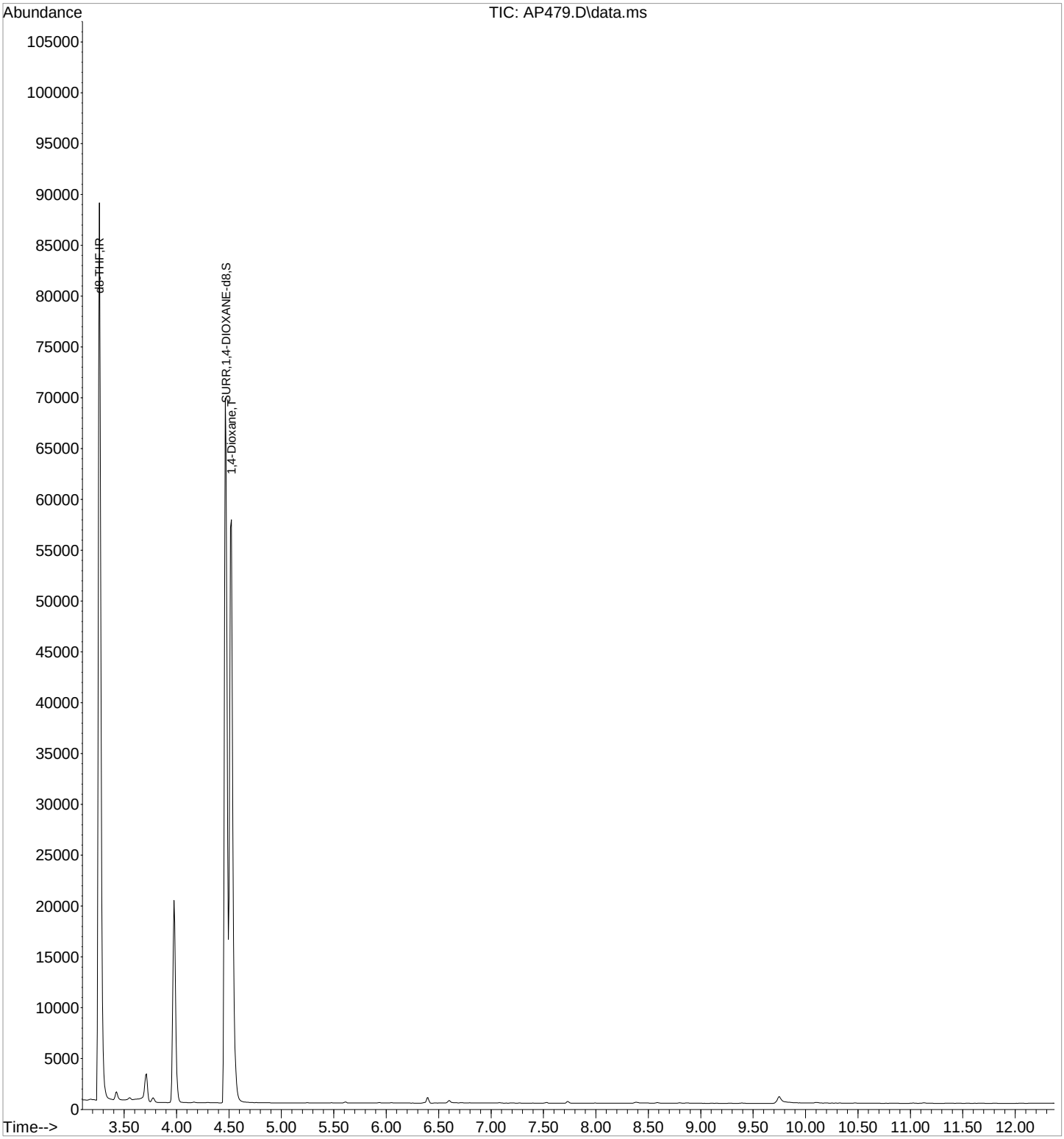
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.265	46	60830	500.00	PPB	0.00
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.472	96	62824	571.29	PPB	0.00
Spiked Amount 100.000	Range 70 - 130		Recovery = 571.29%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.522	88	70244	573.85	PPB	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP479.D
Acq On : 20 Feb 2018 11:30 am
Operator : J.Misiurewicz
Sample : 500 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 20 13:36:09 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP478.D
Acq On : 20 Feb 2018 11:11 am
Operator : J.Misiurewicz
Sample : 200 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 20 13:36:07 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

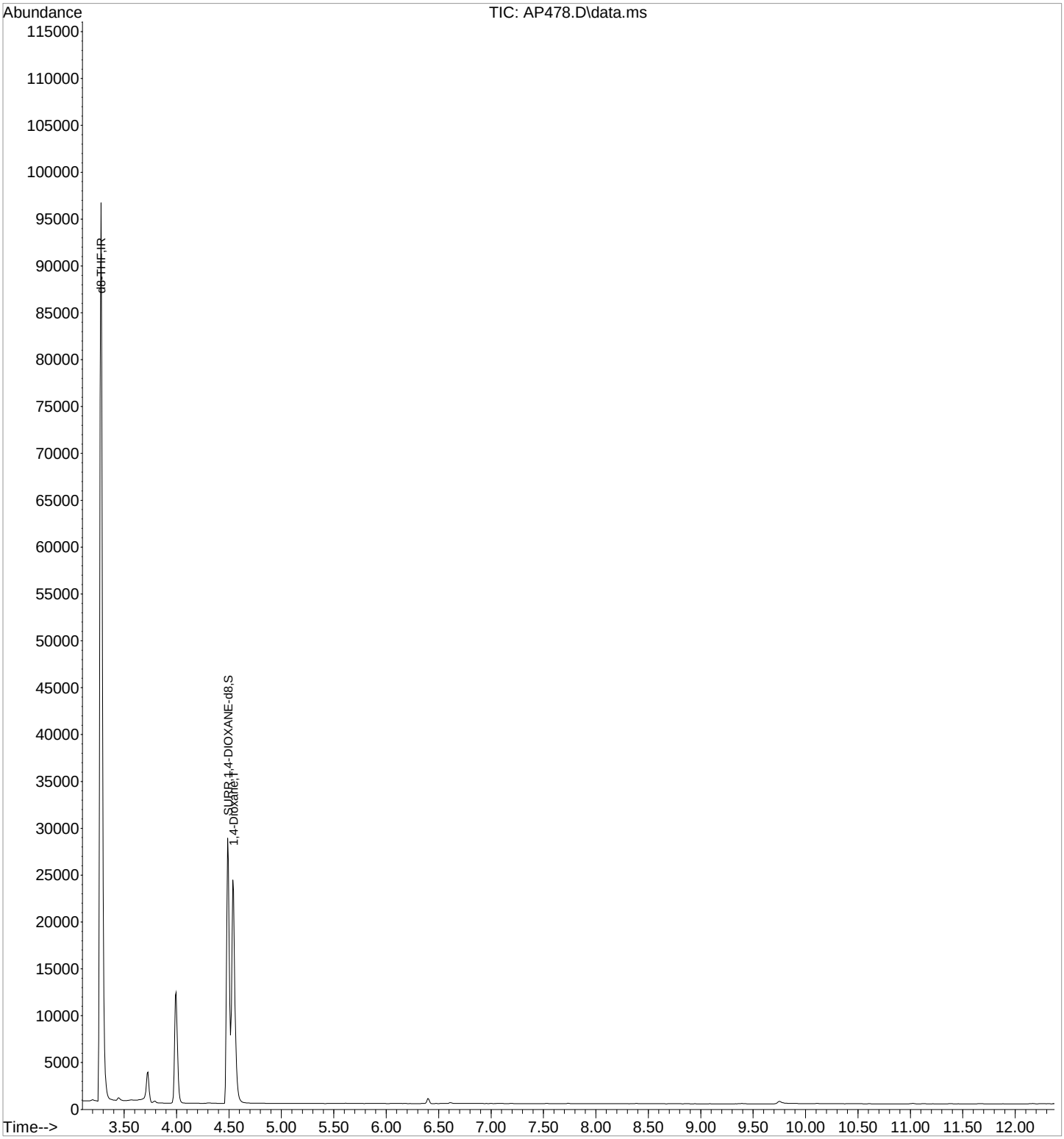
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.279	46	67470	500.00	PPB	0.00
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.494	96	26137	215.54	PPB	0.01
Spiked Amount 100.000	Range 70 - 130		Recovery = 215.54%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.544	88	29677	219.26	PPB	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP478.D
Acq On : 20 Feb 2018 11:11 am
Operator : J.Misiurewicz
Sample : 200 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 20 13:36:07 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP477.D
Acq On : 20 Feb 2018 10:52 am
Operator : J.Misiurewicz
Sample : 100 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 20 13:36:05 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

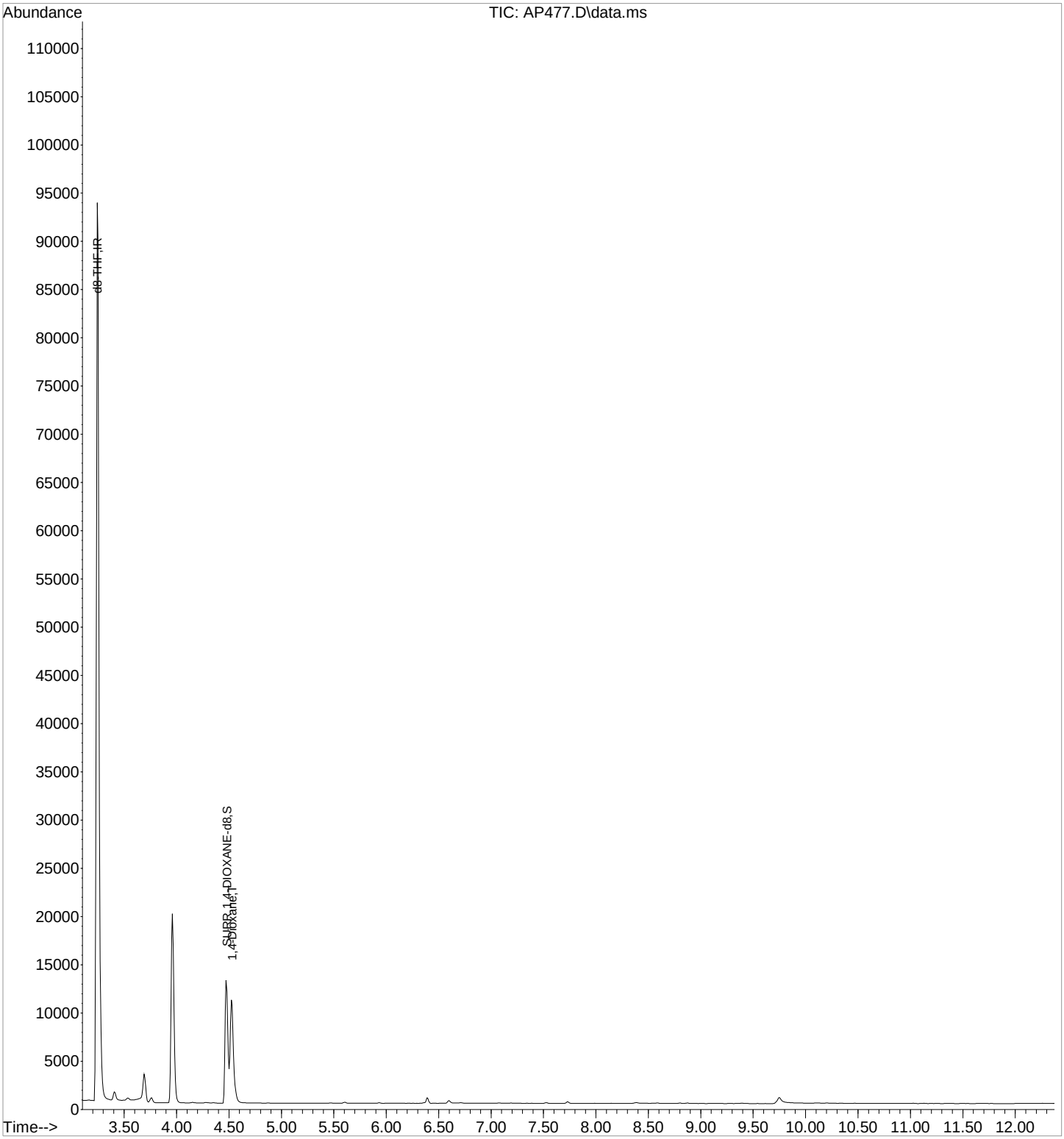
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.243	46	71017	500.00	PPB	-0.03
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.479	96	12008	94.30	PPB	0.00
Spiked Amount 100.000	Range 70 - 130		Recovery = 94.30%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.529	88	13579	95.43	PPB	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP477.D
Acq On : 20 Feb 2018 10:52 am
Operator : J.Misiurewicz
Sample : 100 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 20 13:36:05 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP476.D
Acq On : 20 Feb 2018 10:34 am
Operator : J.Misiurewicz
Sample : 20 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 20 13:36:03 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

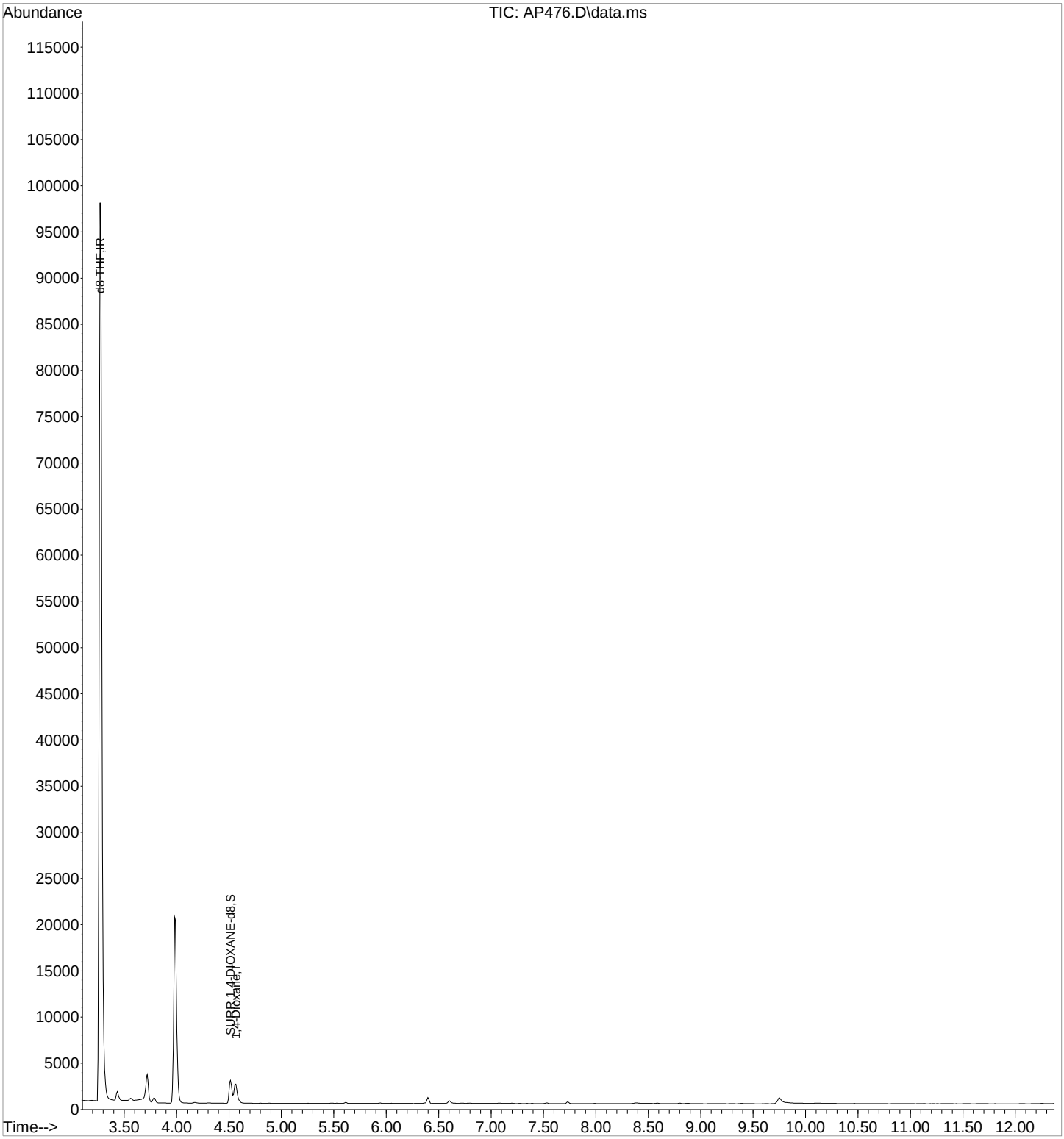
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.271	46	72759	500.00	PPB	0.00
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.515	96	2431	18.71	PPB	0.03
Spiked Amount 100.000	Range 70 - 130		Recovery = 18.71%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.564	88	2654	18.23	PPB	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP476.D
Acq On : 20 Feb 2018 10:34 am
Operator : J.Misiurewicz
Sample : 20 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 20 13:36:03 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP475.D
Acq On : 20 Feb 2018 10:15 am
Operator : J.Misiurewicz
Sample : 10 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 20 13:36:01 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

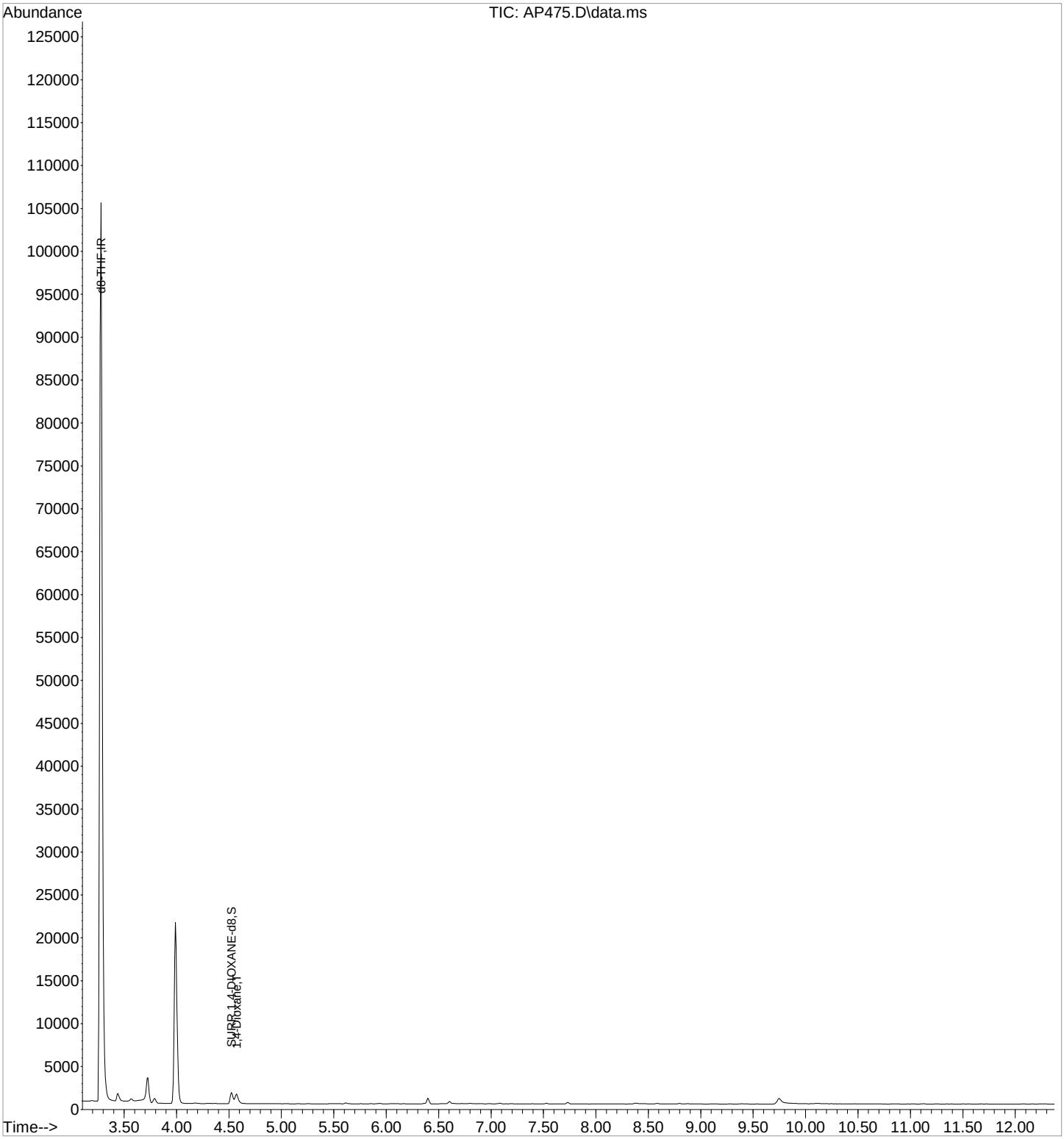
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.279	46	71182	500.00	PPB	0.00
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.522	96	1267	10.00	PPB	0.04
Spiked Amount 100.000	Range 70 - 130		Recovery = 10.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.572	88	1398	9.83	PPB	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP475.D
Acq On : 20 Feb 2018 10:15 am
Operator : J.Misiurewicz
Sample : 10 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 20 13:36:01 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP474.D
Acq On : 20 Feb 2018 9:56 am
Operator : J.Misiurewicz
Sample : 2 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 13:35:59 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

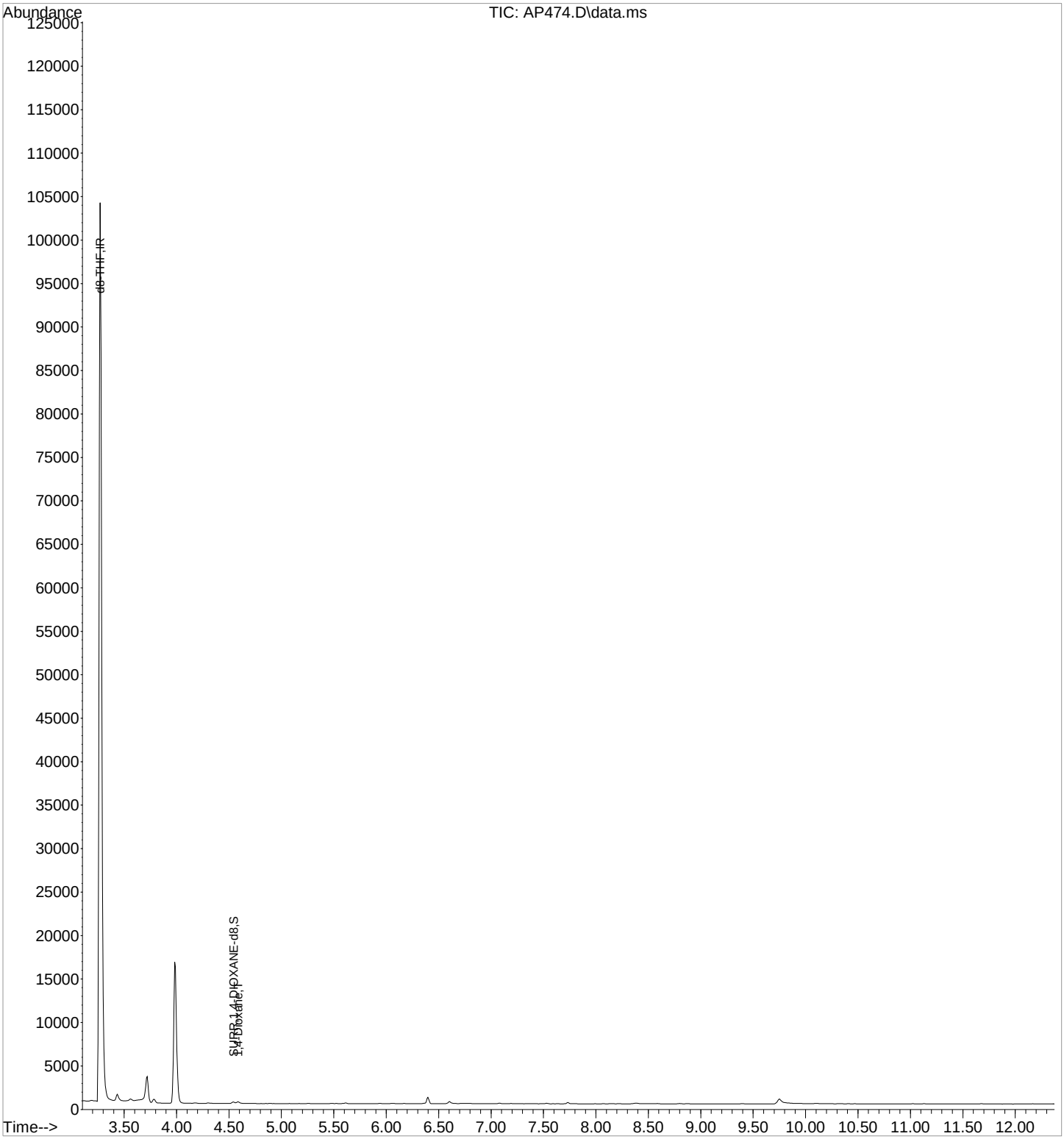
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.271	46	73987	500.00	PPB	0.00
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.543	96	201	1.58	PPB	0.06
Spiked Amount 100.000	Range 70 - 130		Recovery =	1.58%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	4.586	88	236	1.61	PPB	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP474.D
Acq On : 20 Feb 2018 9:56 am
Operator : J.Misiurewicz
Sample : 2 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 13:35:59 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP473.D
Acq On : 20 Feb 2018 9:38 am
Operator : J.Misiurewicz
Sample : 1 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 13:35:56 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration

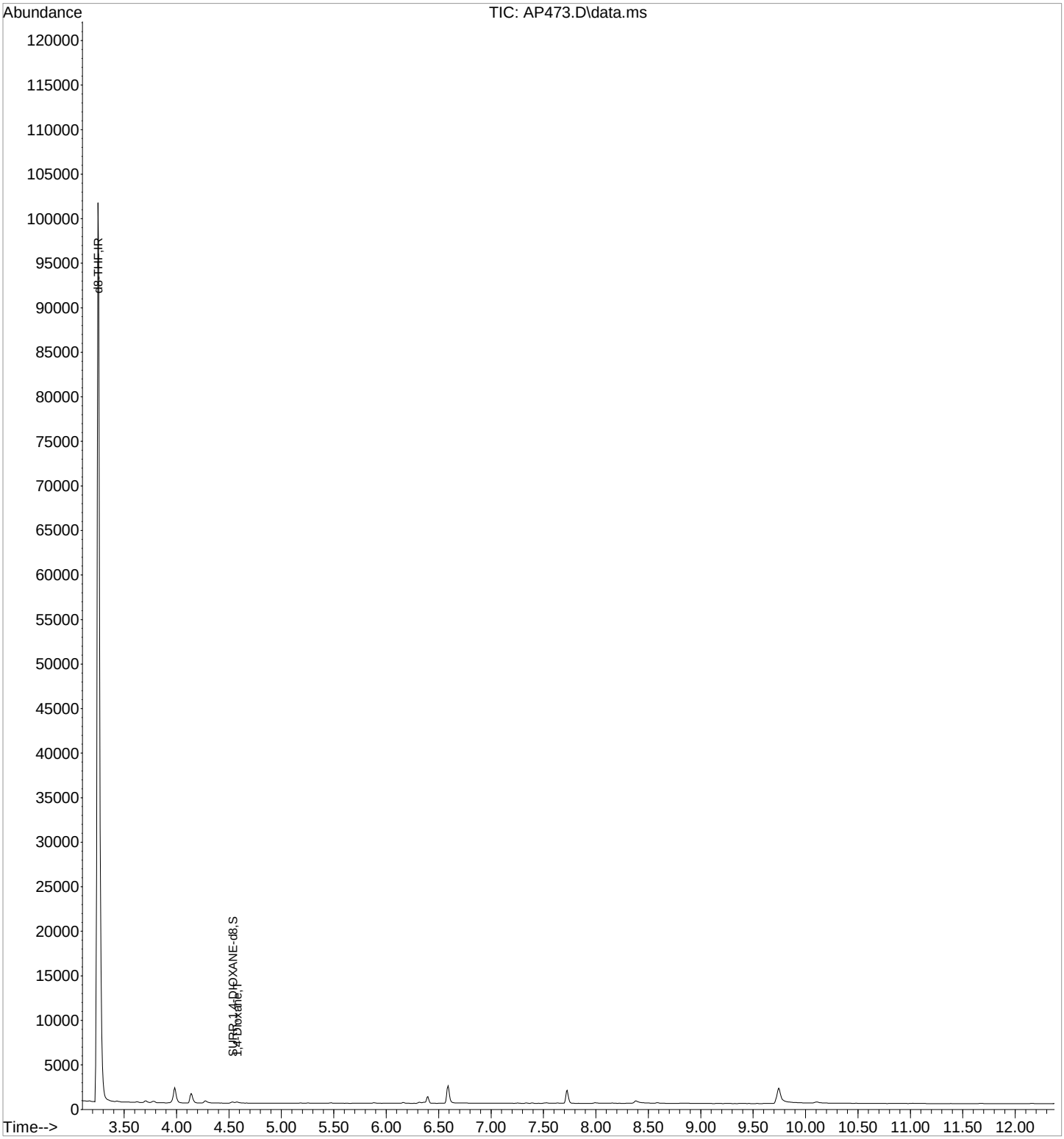
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.250	46	73049	500.00	PPB	-0.02
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	4.536	96	136	1.11	PPB	0.06
Spiked Amount 100.000	Range 70 - 130		Recovery = 1.11%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.579	88	158	1.10	PPB	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP473.D
Acq On : 20 Feb 2018 9:38 am
Operator : J.Misiurewicz
Sample : 1 ppb STD Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 13:35:56 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:17:00 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP472.D
Acq On : 20 Feb 2018 9:19 am
Operator : J.Misiurewicz
Sample : BLK Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 13:43:05 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration

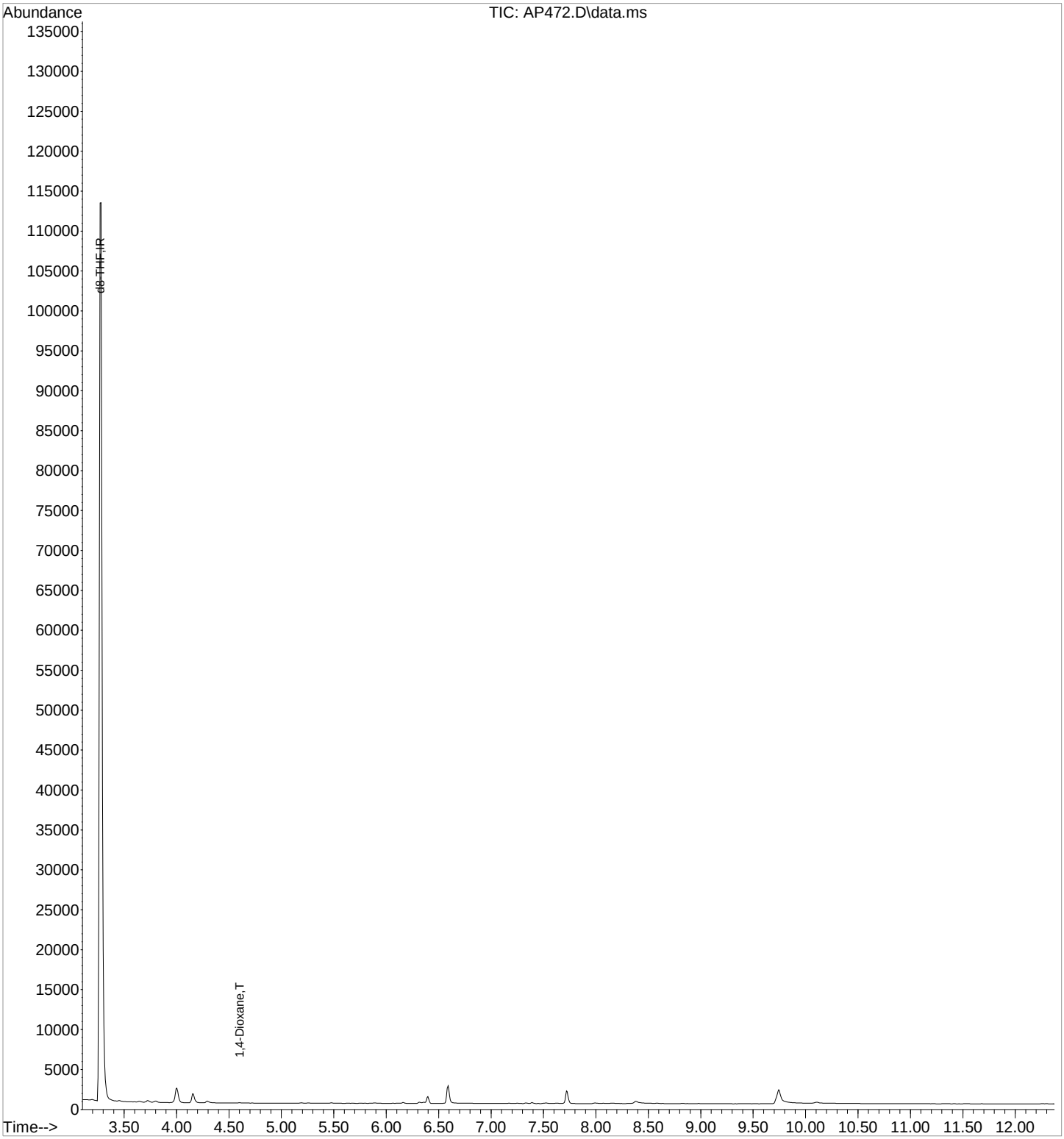
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d8-THF	3.272	46	80292	500.00	PPB	0.00
System Monitoring Compounds						
3) SURR,1,4-DIOXANE-d8	0.000	96	0	0.00	PPB	
Spiked Amount 100.000	Range 70 - 130		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	4.600	88	31	0.21	PPB	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP472.D
Acq On : 20 Feb 2018 9:19 am
Operator : J.Misiurewicz
Sample : BLK Inst : 5975 E
Misc : Initial Calibration 8270D/522 DIOX
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 13:43:05 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\SDIOX022018.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Feb 20 13:42:37 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP471.D
Acq On : 20 Feb 2018 8:40 am
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 09:10:11 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Quant Title :
QLast Update : Tue Feb 13 10:58:46 2018
Response via : Initial Calibration

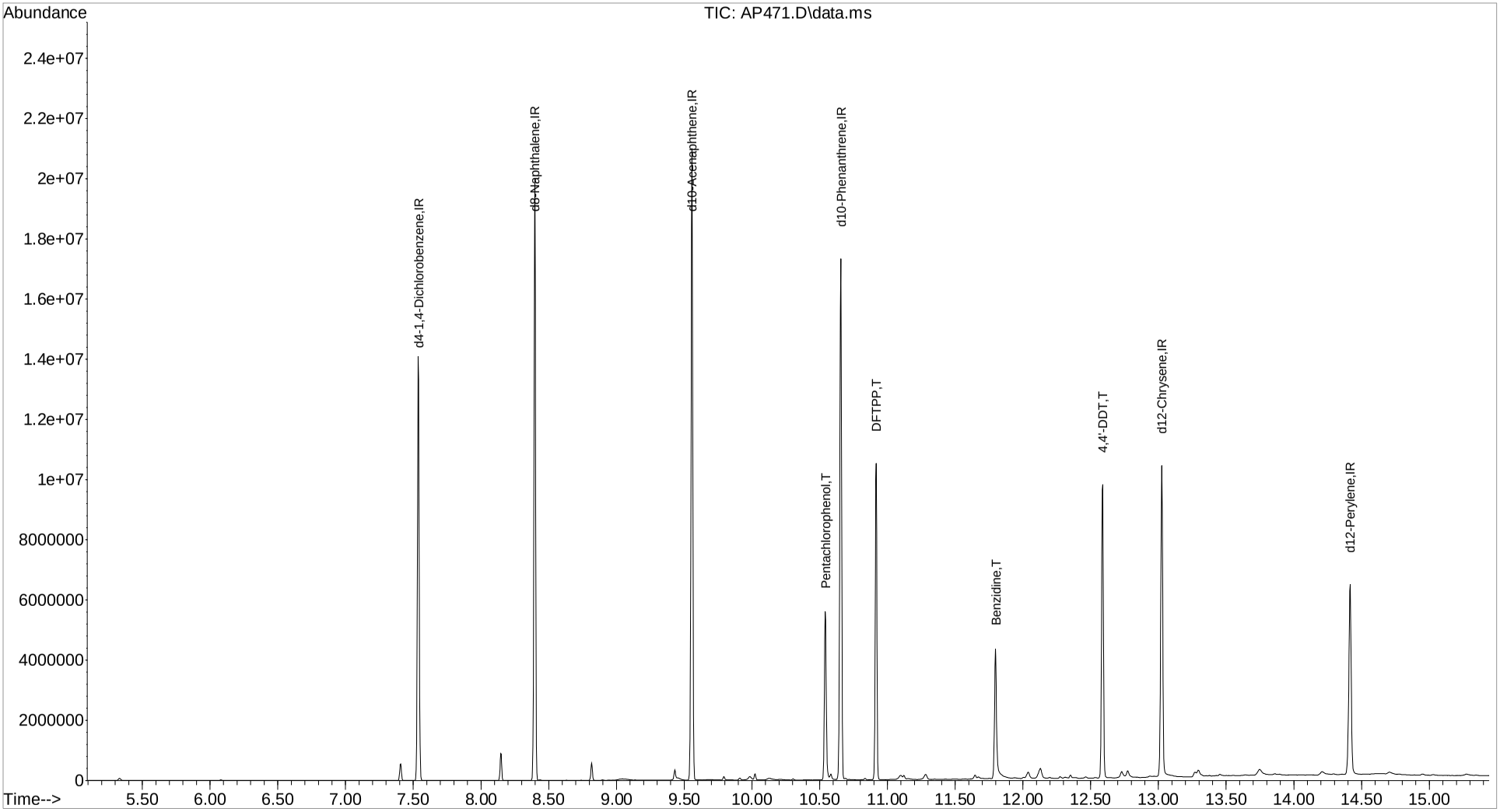
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	7.538	152	19729043	20.00	ppm		0.00
2) d8-Naphthalene	8.399	136	71383373	20.00	ppm		0.00
3) d10-Acenaphthene	9.558	164	37543869	20.00	ppm		0.00
4) d10-Phenanthrene	10.657	188	55511597	20.00	ppm		0.00
7) d12-Chrysene	13.026	240	30655225	20.00	ppm		0.00
12) d12-Perylene	14.416	264	23262945	20.00	ppm		0.00
Target Compounds							Qvalue
5) Pentachlorophenol	10.543	266	5157297	53.75	ppm		100
6) DFTPP	10.918	198	9773899	53.01	ppm	#	70
8) Benzidine	11.799	184	17633179	58.27	ppm		98
9) 4,4'-DDE	0.000		0	N.D.			
10) 4,4'-DDD	0.000		0	N.D.			
11) 4,4'-DDT	12.589	235	14827922	49.04	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP471.D
Acq On : 20 Feb 2018 8:40 am
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 09:10:11 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Quant Title :
QLast Update : Tue Feb 13 10:58:46 2018
Response via : Initial Calibration

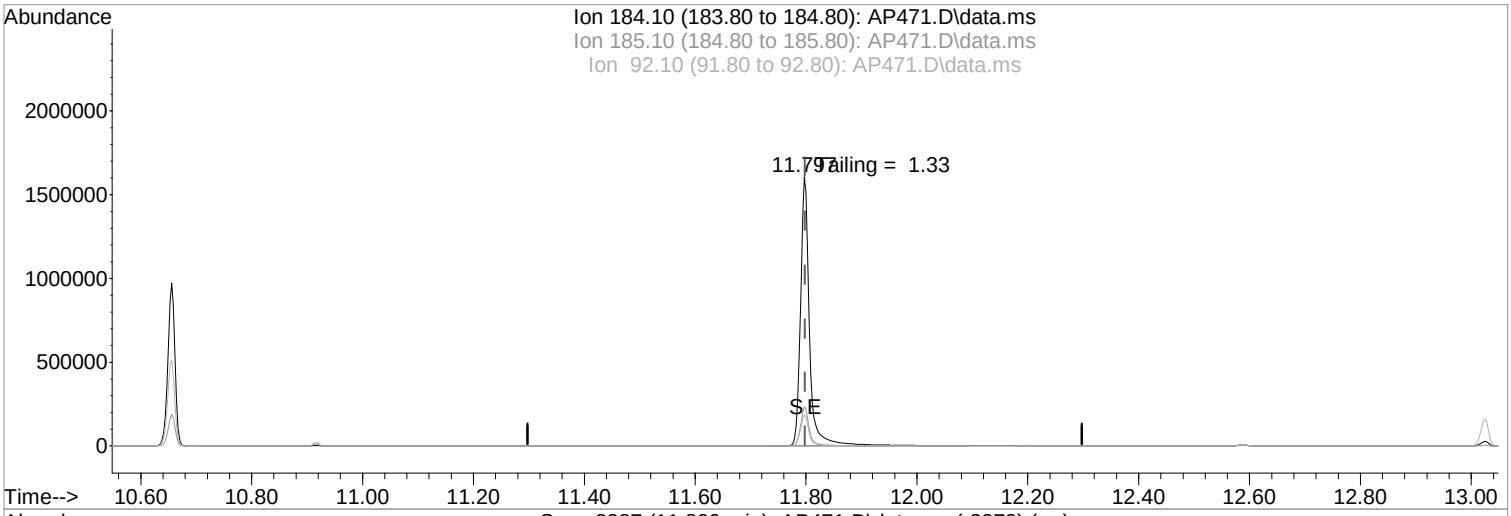


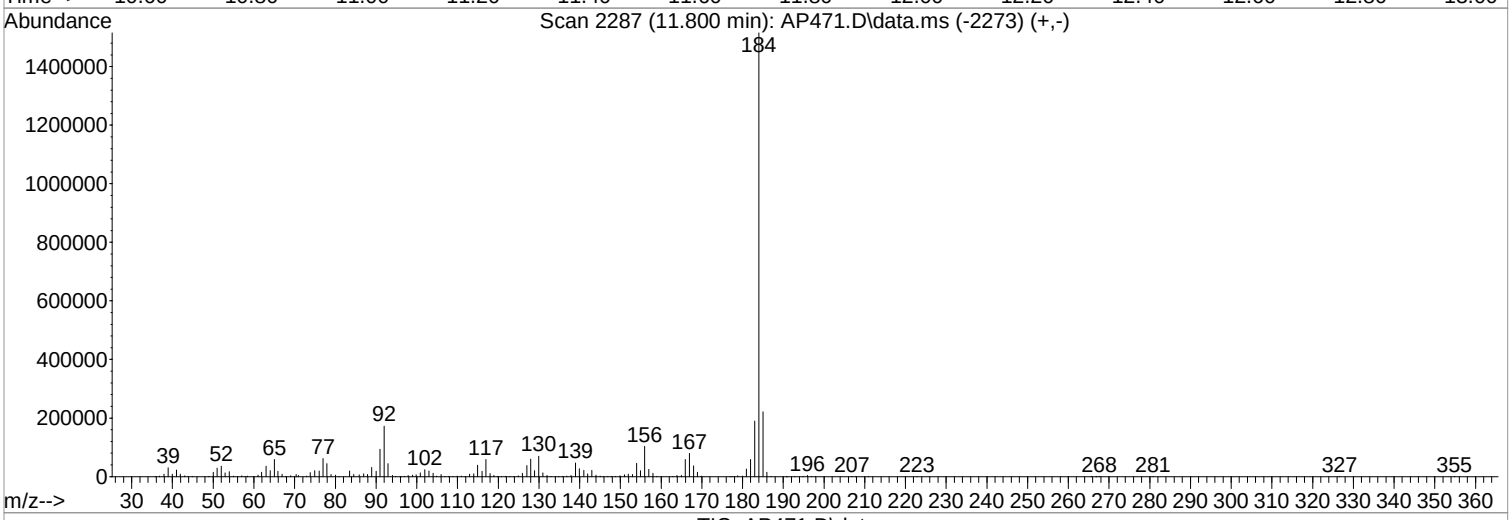
1st 02/21/18
2nd 02/21/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP471.D
Acq On : 20 Feb 2018 8:40 am
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 09:10:11 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Quant Title :
QLast Update : Tue Feb 13 10:58:46 2018
Response via : Initial Calibration





TIC: AP471.D\data.ms

(8) Benzidine (T)

11.799min (+ 0.001) 58.27 ppm

response 17633179

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	13.80	14.57
92.10	10.70	11.36
0.00	0.00	0.00

Manual Integration:

After

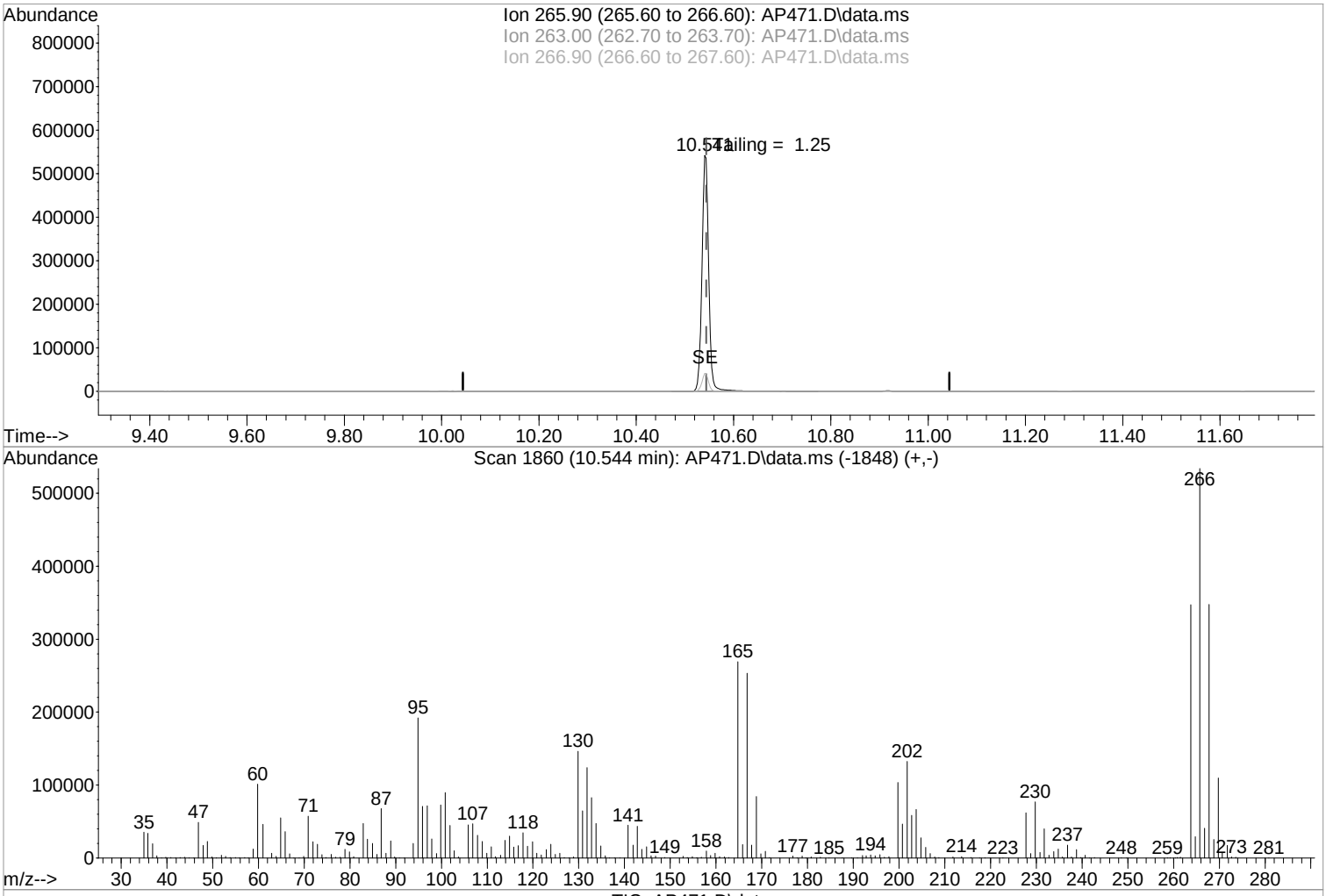
Other - Tailing

02/20/18

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP471.D
Acq On : 20 Feb 2018 8:40 am
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 09:10:11 2018
Quant Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Quant Title :
QLast Update : Tue Feb 13 10:58:46 2018
Response via : Initial Calibration



(5) Pentachlorophenol (T)

10.543min (-0.001) 53.75 ppm

response 5157297

Ion	Exp%	Act%
265.90	100.00	100.00
263.00	0.00	0.00
266.90	7.70	7.62
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

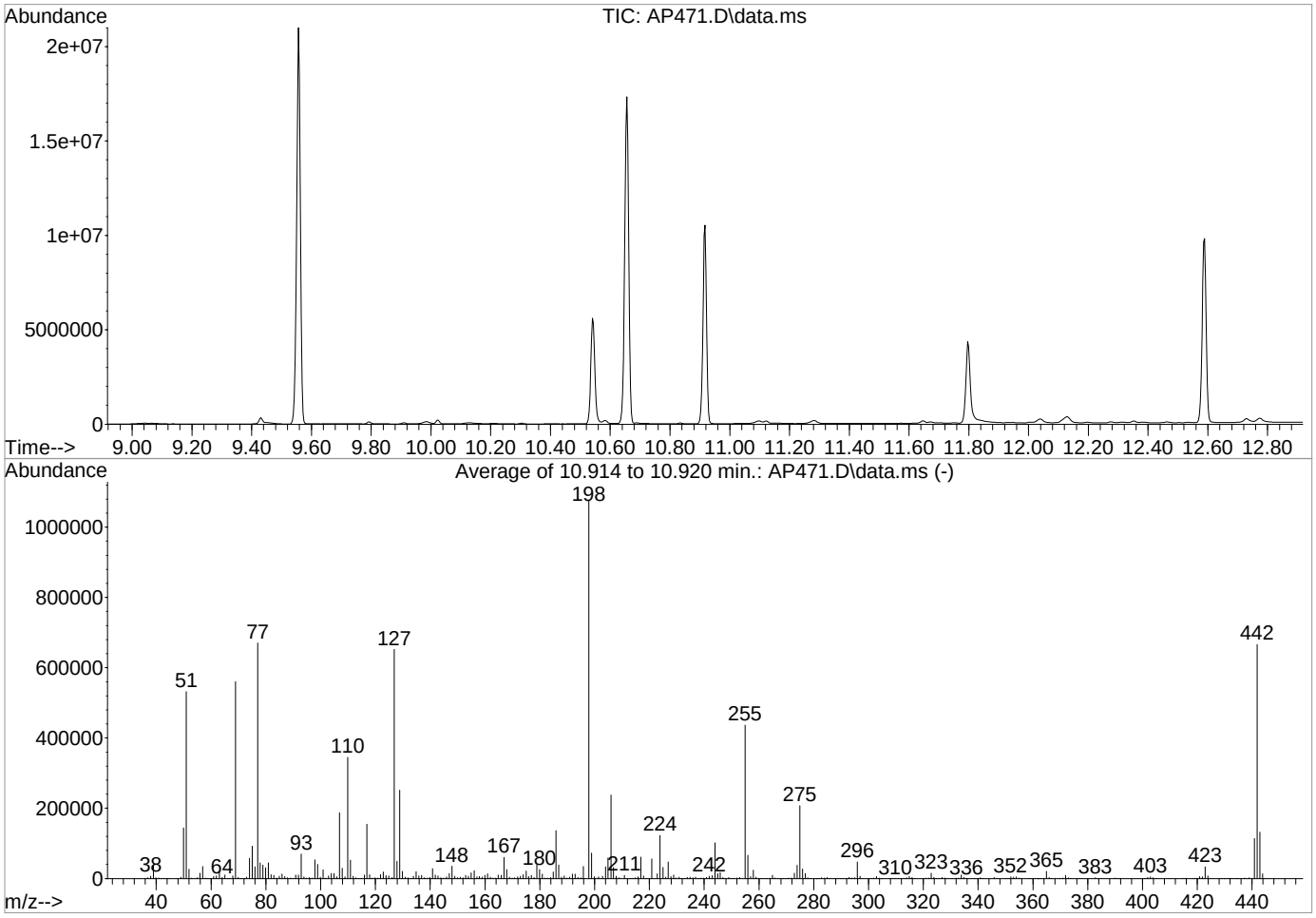
02/20/18

1st 02/21/18
2nd 02/21/18

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP471.D
Acq On : 20 Feb 2018 8:40 am
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : DFTPP
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e

Method : I:\ACQUDATA\5975E\METHODS\DFTPPDIO.M
Title :
Last Update : Tue Feb 13 10:58:46 2018



AutoFind: Scans 1986, 1987, 1988; Background Corrected with Scan 1975

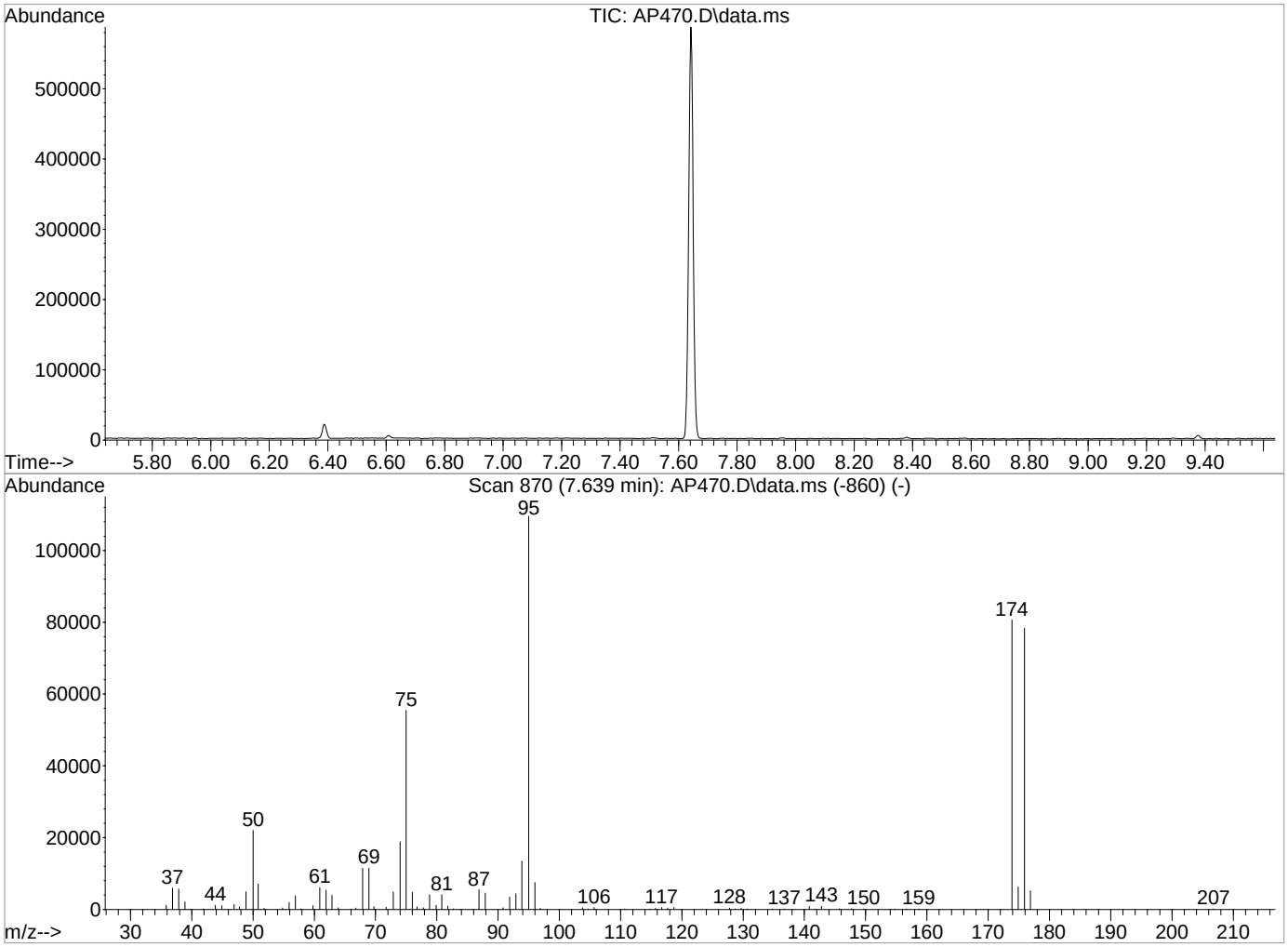
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	49.5	531883	PASS
68	69	0.00	2	1.4	7857	PASS
70	69	0.00	2	0.6	3227	PASS
127	198	10	80	60.7	652153	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	1074923	PASS
199	198	5	9	6.7	72459	PASS
275	198	10	60	19.3	206997	PASS
365	198	1	500	1.9	20533	PASS
441	442	0.01	24	17.0	113539	PASS
442	442	100	100	100.0	666453	PASS
443	442	15	24	19.8	132061	PASS

1st 02/21/18
2nd 02/21/18

Data Path : I:\ACQUDATA\5975E\data\022018\
Data File : AP470.D
Acq On : 20 Feb 2018 8:17 am
Operator : J.Misiurewicz
Sample : TUNE Inst : 5975 E
Misc : BFB
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : I:\ACQUDATA\5975E\METHODS\bfbtune.M
Title :
Last Update : Wed Mar 28 08:41:26 2012



Spectrum Information: Scan 870

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	22032	PASS
75	95	30	60	50.6	55440	PASS
95	95	100	100	100.0	109568	PASS
96	95	5	9	6.8	7486	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.6	80656	PASS
175	174	5	9	7.7	6231	PASS
176	174	95	101	97.1	78328	PASS
177	176	5	9	6.6	5171	PASS

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 2/20/2018

Initial Calibration Summary
1,4-Dioxane by GC/MS

Calibration ID: RC1800025 **Signal ID:** 1
Instrument ID: R-MS-56

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1800025-01	1 ppb STD	I:\ACQUDATA\5975E\data\022018\AP473.D	02/20/2018 09:38
02	RC1800025-02	2 ppb STD	I:\ACQUDATA\5975E\data\022018\AP474.D	02/20/2018 09:56
03	RC1800025-03	10 ppb STD	I:\ACQUDATA\5975E\data\022018\AP475.D	02/20/2018 10:15
04	RC1800025-04	20 ppb STD	I:\ACQUDATA\5975E\data\022018\AP476.D	02/20/2018 10:34
05	RC1800025-05	100 ppb STD	I:\ACQUDATA\5975E\data\022018\AP477.D	02/20/2018 10:52
06	RC1800025-06	200 ppb STD	I:\ACQUDATA\5975E\data\022018\AP478.D	02/20/2018 11:11
07	RC1800025-07	500 ppb STD	I:\ACQUDATA\5975E\data\022018\AP479.D	02/20/2018 11:30
08	RC1800025-08	1000 ppb STD	I:\ACQUDATA\5975E\data\022018\AP480.D	02/20/2018 11:49
09	RC1800025-09	5000 ppb STD	I:\ACQUDATA\5975E\data\022018\AP481.D	02/20/2018 12:08

Analyte

1,4-Dioxane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.081	02	2.000	0.7974	03	10.000	0.982	04	20.000	0.9119
05	100.000	0.956	06	200.000	1.1	07	500.000	1.155	08	1000.000	1.027
09	5000.000	1.023									

1,4-Dioxane-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9309	02	2.000	0.6792	03	10.000	0.89	04	20.000	0.8353
05	100.000	0.8454	06	200.000	0.9685	07	500.000	1.033	08	1000.000	0.9274
09	5000.000	0.9491									

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 2/20/2018

Initial Calibration Summary
1,4-Dioxane by GC/MS

Calibration ID: RC1800025 **Signal ID:** 1
Instrument ID: R-MS-56

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,4-Dioxane	TRG	Quadratic	COD	0.9991	≥0.99	1.004	
1,4-Dioxane-d8	SURR	Quadratic	COD	0.9992	≥0.99	0.8954	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Unicorn Management Consultants **Service Request:** R1808910
Project: Union Road **Calibration Date:** 2/20/2018

Initial Calibration Verification Summary
1,4-Dioxane by GC/MS

Calibration ID: RC1800025 **Signal ID:** 1
Instrument ID: R-MS-56

#	Lab Code	Sample Name	File Location	Acquisition Date
10	RC1800025-10	ICV	I:\ACQUDATA\5975E\data\022018\AP482.D	02/20/2018 12:28

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,4-Dioxane	200	214	1.004E0	1.071E0	6.75	±20	Quadratic

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,4-Dioxane-d8	200	216	8.954E-1	9.714E-1	8.10	±20	Quadratic

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Analyzed:**	09/21/18 18:28

Continuing Calibration Verification (CCV) Summary
1,4-Dioxane by GC/MS

Analysis Method:	8270D SIM	**Calibration Date:**	2/20/2018
File ID:	I:\ACQUDATA\5975E\data\092118\AQ563.D\	**Calibration ID:**	RC1800025
Signal ID:	1	**Analysis Lot:**	607876
		Units:	ppb

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
1,4-Dioxane	200	217	1.0037	1.0904	108	8.3	±20	Quadratic

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
1,4-Dioxane-d8	200	242	0.8954	1.0929	121	21.1*	±20	Quadratic

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200

Analysis Run Log
1,4-Dioxane by GC/MS

Analysis Method: **Analysis Lot:**607876
Instrument ID:R-MS-56

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5975E\data\092118\AQ547.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	12:37:00	
I:\ACQUDATA\5975E\data\092118\AQ548.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	13:00:00	
I:\ACQUDATA\5975E\data\092118\AQ549.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	13:27:00	
I:\ACQUDATA\5975E\data\092118\AQ550.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	14:24:00	
I:\ACQUDATA\5975E\data\092118\AQ551.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	14:42:00	
I:\ACQUDATA\5975E\data\092118\AQ552.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	15:02:00	
I:\ACQUDATA\5975E\data\092118\AQ553.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	15:21:00	
I:\ACQUDATA\5975E\data\092118\AQ554.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	15:40:00	
I:\ACQUDATA\5975E\data\092118\AQ555.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	15:59:00	
I:\ACQUDATA\5975E\data\092118\AQ556.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	16:18:00	
I:\ACQUDATA\5975E\data\092118\AQ557.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	16:37:00	
I:\ACQUDATA\5975E\data\092118\AQ558.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	16:56:00	
I:\ACQUDATA\5975E\data\092118\AQ559.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	17:14:00	
I:\ACQUDATA\5975E\data\092118\AQ560.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	17:33:00	
I:\ACQUDATA\5975E\data\092118\AQ561.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	17:51:00	
I:\ACQUDATA\5975E\data\092118\AQ562.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	18:10:00	
I:\ACQUDATA\5975E\data\092118\AQ563.D\	Continuing Calibration Verification	RQ1810106-05	9/21/2018	18:28:00	
I:\ACQUDATA\5975E\data\092118\AQ564.D\	Method Blank	RQ1810048-01	9/21/2018	18:47:00	
I:\ACQUDATA\5975E\data\092118\AQ565.D\	Lab Control Sample	RQ1810048-02	9/21/2018	19:05:00	
I:\ACQUDATA\5975E\data\092118\AQ566.D\	Duplicate Lab Control Sample	RQ1810048-03	9/21/2018	19:23:00	
I:\ACQUDATA\5975E\data\092118\AQ567.D\	MW-14S	R1808910-006	9/21/2018	19:42:00	
I:\ACQUDATA\5975E\data\092118\AQ568.D\	MW-14S MS	RQ1810048-04	9/21/2018	20:00:00	
I:\ACQUDATA\5975E\data\092118\AQ569.D\	MW-14S DMS	RQ1810048-05	9/21/2018	20:18:00	
I:\ACQUDATA\5975E\data\092118\AQ570.D\	MW-11S	R1808910-007	9/21/2018	20:37:00	
I:\ACQUDATA\5975E\data\092118\AQ571.D\	MW-10S	R1808910-008	9/21/2018	20:55:00	
I:\ACQUDATA\5975E\data\092118\AQ572.D\	MW-10M	R1808910-009	9/21/2018	21:13:00	
I:\ACQUDATA\5975E\data\092118\AQ573.D\	MW-12S	R1808910-010	9/21/2018	21:31:00	
I:\ACQUDATA\5975E\data\092118\AQ574.D\	MW-12M	R1808910-011	9/21/2018	21:49:00	
I:\ACQUDATA\5975E\data\092118\AQ575.D\	Dup 091818A	R1808910-012	9/21/2018	22:08:00	
I:\ACQUDATA\5975E\data\092118\AQ576.D\	FB 091818A	R1808910-013	9/21/2018	22:28:00	
I:\ACQUDATA\5975E\data\092118\AQ577.D\	EB 091818A	R1808910-014	9/21/2018	22:48:00	
I:\ACQUDATA\5975E\data\092118\AQ578.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	23:08:00	
I:\ACQUDATA\5975E\data\092118\AQ579.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	23:27:00	
I:\ACQUDATA\5975E\data\092118\AQ580.D\	ZZZZZZZ	ZZZZZZZ	9/21/2018	23:48:00	
I:\ACQUDATA\5975E\data\092118\AQ581.D\	ZZZZZZZ	ZZZZZZZ	9/22/2018	00:07:00	
I:\ACQUDATA\5975E\data\092118\AQ582.D\	ZZZZZZZ	ZZZZZZZ	9/22/2018	00:26:00	
I:\ACQUDATA\5975E\data\092118\AQ583.D\	ZZZZZZZ	ZZZZZZZ	9/22/2018	00:46:00	

Analysis: 522/8270D Analyst: Anisiewicz Run Method: 5D10xone2F/DFTPP/RFB Tune
Date: 9/21/18 Instr. 5975E MS-56 Quant Method: 5D10X022018.m
Syringes: _____ LIMS Run#: 607876

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	Blk			AQ595	–	
1	Blk			46	–	
2	Tune RFB		193393	47	YT	
3	Tune DFTPP		191701	48	YT	
4	CCV 2ppb		189699	49	Y CC	
5	RQ1810047-01	Blk	322404 (322)	50	Y	
6	" -02	LCS		51	YQ	
7	" -03	LCSD		52	Y	ISTD ↑
8	" -04 -06	LCSLL		53	Y	↑
9	R1808543-001			54	Y	
10	" -002			55	Y	
11	" -003			56	Y	
12	CCV 200ppb		191909	57	Y CC	
13	R1808578-001			58	Y	
14	" -003			59	Y	
15	RQ1810047 -04			60	YQ	
16	" -05			61	YQ	
17	CCV 1000ppb		190864	62	Y CC	
18	CCV 200ppb		191909	63	Y CC	Surr ↑
19	RQ1810048-01	Blk	322405 (8270)	64	Y	
20	" -02	LCS		65	YQ	
21	" -03	LCSD		66	YQ	
22	R1808910-006			67	Y	
23	RQ1810048-04			68	YQ	
24	" -05			69	YQ	
25	R1808910-007			70	Y	
26	" -008			71	Y	
27	" -009			72	Y	
28	" -010			73	Y	
29	" -011			74	Y	
30	" -012			75	Y	
31	" -013			76	Y	
32	" -BM			77	Y	
33	R1808979-001			78	Y	
34	" -002			79	Y	
35	RQ1810048-06			80	YQ	
36	" -07			81	YQ	
37	R1808979-003			82	Y	
38	" -004			83	Y	
39	" -005			84	N	out of Tune

All samples = _____mL + _____uL Combined IS/Surr.;

Primary: _____ exp: Secondary: _____ exp:
Primary: _____ exp: Secondary: _____ exp:
Reagents:

85 N out of Tune
40 R1809067-001
41 " -002
56 "

Analysis: 8270D/522 Analyst: DMS Rev. 12 Run Method: 5010Kgmc2-F | BFBTune | DFTPP010
Date: 2/20/18 Instr. 5975E Quant Method:
LIMS Run#:

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	Blk			Aq465	—	
1	Blk			69	—	
2	Tune BFB		184996	70	YT	
3	Tune DFTPP		186589	71	YT	
4	Blk		188117	72	Y	
5	1 ppb STD		~~187~~ 188	73	Y	
6	2		186494	74	Y	
7	10		95	75	Y	
8	20		96	76	Y	
9	100		97	77	Y	
10	200		186306	78	Y	
11	500		186498	79	Y	
12	1000		99	80	Y	
13	5000		186500	81	Y	
14	ICV		185021	82	YQ	
15	CCV		186306	83	YCC	
16	R01801489-01	Blk	308588	84	(N)	HT > PQL re-extract
17	-02	LCS		85		
18	-03	LCSD		86		
19	R1801349-001			87		
20	R1801489-04			88		
21	-05			89		
22	R1801349-002			90		
23	-003			91		
24	R1801393-001			92		
25	-002			93		
26	-003			94		

2/20/18

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:
Primary:_____ exp: Secondary :_____ exp:

Prep Summary Report

Client: Unicorn Management Consultants **Service Request:**R1808910
Project: Union Road/2011-200
Sample Matrix: Water

1,4-Dioxane by GC/MS

Prep Method: EPA 3535A **Extraction Lot:** 322405
Analytical Method: 8270D SIM **Extraction Date:** 09/21/18 10:35

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW-14S	R1808910-006	9/18/18	9/18/18	100 mL	2 mL	
MW-11S	R1808910-007	9/18/18	9/18/18	100 mL	2 mL	
MW-10S	R1808910-008	9/18/18	9/18/18	100 mL	2 mL	
MW-10M	R1808910-009	9/18/18	9/18/18	100 mL	2 mL	
MW-12S	R1808910-010	9/18/18	9/18/18	100 mL	2 mL	
MW-12M	R1808910-011	9/18/18	9/18/18	100 mL	2 mL	
Dup 091818A	R1808910-012	9/18/18	9/18/18	100 mL	2 mL	
FB 091818A	R1808910-013	9/18/18	9/18/18	100 mL	2 mL	
EB 091818A	R1808910-014	9/18/18	9/18/18	100 mL	2 mL	
Method Blank	RQ1810048-01MB	NA	NA	100 mL	2 mL	
Lab Control Sample	RQ1810048-02LCS	NA	NA	100 mL	2 mL	
Duplicate Lab Control Sample	RQ1810048-03DLCS	NA	NA	100 mL	2 mL	
Matrix Spike	RQ1810048-04MS	9/18/18	9/18/18	100 mL	2 mL	
Duplicate Matrix Spike	RQ1810048-05DMS	9/18/18	9/18/18	100 mL	2 mL	

Preparation Information Benchsheet

Prep Run#: 322405 **Prep WorkFlow:** OrgExtSPEaq(7) **Status:** Prepped
Team: Semivoa GCMS/JMISIUREWICZ **Prep Method:** EPA 3535A **Prep Date/Time:** 9/21/18 10:35 AM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1810048-01	MB		100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	
2	RQ1810048-02	LCS		100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/191972; 10.0000 uL/189204; 200.0000 uL/192910	
3	RQ1810048-03	DLCS		100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972; 200.0000 uL/192910	
4	R1808910-006	MW-14S	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	
5	RQ1810048-04	R1808910-006 MS	.08	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/192910; 10.0000 uL/189204; 200.0000 uL/191972	
6	RQ1810048-05	R1808910-006 DMS	.08	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/192910; 200.0000 uL/191972; 10.0000 uL/189204	
7	R1808910-007	MW-11S	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	
8	R1808910-008	MW-10S	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	
9	R1808910-009	MW-10M	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Light Yellow	200.0000 uL/191972; 10.0000 uL/189204	
10	R1808910-010	MW-12S	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	
11	R1808910-011	MW-12M	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/191972; 10.0000 uL/189204	
12	R1808910-012	Dup 091818A	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	
13	R1808910-013	FB 091818A	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/191972; 10.0000 uL/189204	
14	R1808910-014	EB 091818A	.07	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	
15	R1808979-001	Trip Blank	.04	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/191972; 10.0000 uL/189204	
16	R1808979-002	MW-9	.03	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	
17	RQ1810048-06	R1808979-002 MS	.04	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972; 200.0000 uL/192910	
18	RQ1810048-07	R1808979-002 DMS	.04	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972; 200.0000 uL/192910	
19	R1808979-003	MW-16	.03	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Light Yellow	200.0000 uL/191972; 10.0000 uL/189204	
20	R1808979-004	FB-091818	.04	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/191972; 10.0000 uL/189204	
21	R1808979-005	DUP-091818	.03	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/191972; 10.0000 uL/189204	
22	R1809067-001	TS Effluent 091918	.01	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	10.0000 uL/189204; 200.0000 uL/191972	

Preparation Information Benchsheet

Prep Run#: 322405 **Prep WorkFlow:** OrgExtSPEaq(7) **Status:** Prepped
Team: Semivoa GCMS/JMISIUREWICZ **Prep Method:** EPA 3535A **Prep Date/Time:** 9/21/18 10:35 AM

23	R1809067-002	HIPOx Discharge 091918	.01	100mL	8270D SIM/1,4-Dioxane	7	X		2.00mL	Colorless/Clear	200.0000 uL/191972; 10.0000 uL/189204	

Spiking Solutions

Name:	SVOA Tetrahydrofuran-D8 100ppm	Inventory ID	189204	Logbook Ref:		Expires On:	10/06/2018
Name:	1,4-Dioxane-d8 1ppm Surr. Std.	Inventory ID	191972	Logbook Ref:		Expires On:	01/22/2019
Name:	EPA 522 LCS Spike 5ppm	Inventory ID	192910	Logbook Ref:		Expires On:	03/04/2019

Preparation Materials

Method 522 400mg charcoal filters	(193175)	Eppendorf Pipette Repeater	EXT #17 (175854)	Water	(192908)
Dichloromethane (Methylene Chloride) 99.9% MeCl2	canister (193387)	Methanol Purge & Trap MeOH	(188509)	pH Paper 0-14	(190432)
Prepared Sodium Sulfate Na2SO4	(193227)				

Preparation Steps

Step: Extraction
Started: 9/21/18 10:35
Finished: 9/21/18 15:25
By: JMISIUREWICZ
Comments

Comments:

Reviewed By: Date: 9/24/18 Spike Witness: CHARRINGTON Date:

Chain of Custody

Relinquished By: Date:

Received By: Date:

Extracts Examined
Yes No

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-12D

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-001

Level (low/med): LOW Date Received: 9/17/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-11M

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-002

Level (low/med): LOW Date Received: 9/17/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-13S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-003

Level (low/med): LOW Date Received: 9/17/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-13M

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-004

Level (low/med): LOW Date Received: 9/17/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-14S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-006

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-11S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-007

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-10S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-008

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-10M

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-009

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-12S

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-010

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-12M

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-011

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-10D

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Matrix (soil/water): WATER Lab Sample ID: R1808910-017

Level (low/med): LOW Date Received: 9/18/2018

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7439-92-1	Lead	50.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

Metals Cover Page

Analyst: NM **Date:** 9/27/18 **Instrument:** ICP6

Data File: 6sep27A **Reviewed By:** CK 9/28/18 **Entered By:** CK 9/28/18

Starlims Run #	Analytes Used	Batch ID	Method	Failed Analytes	Repeats
608673	TAl+B	322634	6010C		
608674	TAl+BMoSnSr	322632	6010C		R8996-001,003,015 Ca
608675	TAl+B	322633 CK 9/28/18	6010C		R9111-001 AS R8989-002,003,006 Na -008,009→011 -007 Ca -013 K -015 KNa
608677	AsCaCdCoFeKMgMn NaNiPb	322635	6010C		R8906-001,007 Fe -002 MnFeAs -008 As -010 FeMn R9106-001,003,005 Ca

Package Data:

Client Sub#	TIER	Analytes Used	Batch ID	Raw Data Copied?
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No

ICP-6 Run Log

Serial number: MY15340001

Analyst: NM Date: 9/27/18 Data File: 6SEP27A

	Prep Date	Lot #
MRL	8/3/18	M7620096B
ICSA	6/18/18	M7620110A
ICSAB	8/3/18	M7620118C
Int. Std	9/24/18	M7620127P
HLCV3	9/19/18	M7620089H

	Prep Date	Lot #
Cal Std 1	7/10/18	M7620018B
Cal Std 2	7/10/18	M7620026B
Cal Std 5/ HLCCV1	8/9/18	M7620038C
ICV/CCV	9/27/18	M7620063V
HLCCV2	9/4/18	M7620077E

(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)

Blank Prep - Daily	NHO3	HCl	Pipet Used	DOD Pipet Verification	IEC Date
Lot	M7600006X	M7600005P	M25, M34	M7710028	-

1:6	PBW-322634	S1:6	Continuing Calibration Verification	1:57	PBW-322633
1:7	FBLK-322634	S1:7	Continuing Calibration Blank	1:58	LCSW-322633
1:8	LCSW-322634	1:33	PBW-322632	1:59	R1808899-001
1:9	R1808910-001	1:34	LCSW-322632	1:60	R1808899-002
1:10	R1808910-002	1:35	DLCSW-322632	2:1	R1808899-003
1:11	R1808910-003	1:36	R1808996-001	2:2	R1808899-003S
1:12	R1808910-004	1:37	R1808996-002	2:3	R1808899-003SD
1:13	R1808910-006	1:38	R1808996-003	2:4	R1808899-003A
1:14	R1808910-007	1:39	R1808996-004	2:5	R1808899-003L
1:15	R1808910-008	1:40	R1808996-005	2:6	R1808989-001
S1:6	Continuing Calibration Verification	1:41	R1808996-006	S1:8	Continuing Calibration Verification1
S1:7	Continuing Calibration Blank	1:42	R1808996-007	S1:9	Continuing Calibration Blank1
1:16	R1808910-009	S1:6	Continuing Calibration Verification	2:7	R1808989-002
1:17	R1808910-010	S1:7	Continuing Calibration Blank	2:8	R1808989-003
1:18	R1808910-011	1:43	R1808996-008	2:9	R1808989-006
1:19	R1808910-017	1:44	R1808996-009	2:10	R1808989-006S
1:20	R1808910-017L	1:45	R1808996-010	2:11	R1808989-006SD
1:21	R1808926-001	1:46	R1808996-011	2:12	R1808989-006A
1:22	R1808926-002	1:47	R1808996-012	2:13	R1808989-006L
1:23	R1808926-002S	1:48	R1808996-013	2:14	R1808989-007
1:24	R1808926-002SD	1:49	R1808996-014	2:15	R1808989-008
1:25	R1808926-002A	1:50	R1808996-015	2:16	R1808989-009
S1:6	Continuing Calibration Verification	1:51	R1808996-016	S1:8	Continuing Calibration Verification1
S1:7	Continuing Calibration Blank	1:52	R1808996-017	S1:9	Continuing Calibration Blank1
1:26	R1808926-002L	S1:6	Continuing Calibration Verification	2:17	R1808989-010
1:27	R1808926-003	S1:7	Continuing Calibration Blank	2:18	R1808989-011
1:28	R1808926-004	1:53	R1808996-018	2:19	R1808989-012
1:29	R1808926-006	1:54	R1809064-003	2:20	R1808989-013
1:30	R1808926-007	1:55	R1809064-010	2:21	R1808989-014
1:31	R1808926-009	1:56	R1809064-010L	2:22	R1808989-015
1:32	R1809066-002	S1:6	Continuing Calibration Verification	2:23	R1808989-016
S1:6	Continuing Calibration Verification	S1:7	Continuing Calibration Blank	2:24	R1809110-001 20X
S1:7	Continuing Calibration Blank	S1:3	Contract Required Detection Limit	2:25	R1809110-001 5X
S1:3	Contract Required Detection Limit	S1:4	Interference Check Solution A	2:26	R1809110-001D 5X
S1:4	Interference Check Solution A	S1:5	Interference Check Solution AB	S1:8	Continuing Calibration Verification1
S1:5	Interference Check Solution AB	S1:6	Continuing Calibration Verification	S1:9	Continuing Calibration Blank1
S1:21	HLCCV2	S1:7	Continuing Calibration Blank		
S1:22	HLCCV3				
S1:18	HLCCV1				

NM 9/27/18 1/2

ICP-6 Run Log

Serial number: MY15340001

Analyst: NM

Date: 9/27/18

Data File: 6SEP27A

	Prep Date	Lot #
MRL		
ICSA		
ICSAB	See Previous Page	
Int. Std		

	Prep Date	Lot #
Cal Std 1		
Cal Std 2		
Cal Std 5/ HLCCV1	NM 9/27/18	
ICV/CCV		
HLCCV2		

(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)

Blank Prep - Daily	NHO3	HCl

Pipet Used	DOD Pipet Verification	IEC Date

Lot	
27	R1809110-001
28	R1809111-001
29	R1809111-002
:30	R1809111-002L
S1:8	Continuing Calibration Verification1
S1:9	Continuing Calibration Blank1
S1:3	Contract Required Detection Limit
S1:4	Interference Check Solution A
S1:5	Interference Check Solution AB
S1:8	Continuing Calibration Verification1
S1:9	Continuing Calibration Blank1
2:31	PBW-322635
2:32	LCSW-322635
2:33	R1808906-001
2:34	R1808906-002
2:35	R1808906-003
2:36	R1808906-006
2:37	R1808906-007
2:38	R1808906-008
2:39	R1808906-009
2:40	R1808906-010
S1:8	Continuing Calibration Verification1
S1:9	Continuing Calibration Blank1
2:41	R1808906-010L
2:42	R1809106-001
2:43	R1809106-002
2:44	R1809106-003
2:45	R1809106-004
2:46	R1809106-005
2:47	R1809106-006
2:48	R1809106-007
2:49	R1809106-008
2:50	R1809106-009
S1:8	Continuing Calibration Verification1
S1:9	Continuing Calibration Blank1
2:51	R1809106-010
2:52	R1809106-010S
2:53	R1809106-010SD
2:54	R1809106-010A
2:55	R1809106-010L
2:56	R1809106-011
2:57	R1809106-012
S1:8	Continuing Calibration Verification1
S1:9	Continuing Calibration Blank1
S1:3	Contract Required Detection Limit
S1:4	Interference Check Solution A
S1:5	Interference Check Solution AB
S1:8	Continuing Calibration Verification1
S1:9	Continuing Calibration Blank1

NM 9/27/18

2/2

Agilent Technologies

Path: C:\Agilent\ICP Expert\My Results\6SEP27A.esws
Date created: 9/26/2018 6:20:27 PM
Instrument used: MY15340001
Software Version : 7.4.1.10449 Firmware Version : 3585
Notes:

analyst: NM 9/27/18
(CK 9/28/18)

Detailed Results

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 18:29:03	Blank	Ag (328.068 nm)	N/A	0.0000 (ppm)	-185.2081
9/27/2018 18:29:03	Blank	Al (394.401 nm)	N/A	0.0000 (ppm)	97.5906
9/27/2018 18:29:03	Blank	As (188.980 nm)	N/A	0.0000 (ppm)	-0.6161
9/27/2018 18:29:03	Blank	B (249.772 nm)	N/A	0.0000 (ppm)	22.1668
9/27/2018 18:29:03	Blank	Ba (230.424 nm)	N/A	0.0000 (ppm)	33.1039
9/27/2018 18:29:03	Blank	Be (313.107 nm)	N/A	0.0000 (ppm)	-392.4364
9/27/2018 18:29:03	Blank	Ca (227.547 nm)	N/A	0.0000 (ppm)	6.8486
9/27/2018 18:29:03	Blank	Cd (214.439 nm)	N/A	0.0000 (ppm)	13.5023
9/27/2018 18:29:03	Blank	Co (230.786 nm)	N/A	0.0000 (ppm)	-4.0829
9/27/2018 18:29:03	Blank	Cr (267.716 nm)	N/A	0.0000 (ppm)	9.7970
9/27/2018 18:29:03	Blank	Cu (327.395 nm)	N/A	0.0000 (ppm)	38.8623
9/27/2018 18:29:03	Blank	Fe (234.350 nm)	N/A	0.0000 (ppm)	66.5509
9/27/2018 18:29:03	Blank	K (766.491 nm)	N/A	0.0000 (ppm)	-44.4123
9/27/2018 18:29:03	Blank	Mg (279.078 nm)	N/A	0.0000 (ppm)	0.7316
9/27/2018 18:29:03	Blank	Mn (257.610 nm)	N/A	0.0000 (ppm)	14.9649
9/27/2018 18:29:03	Blank	Mo (202.032 nm)	N/A	0.0000 (ppm)	29.7821
9/27/2018 18:29:03	Blank	Na (588.995 nm)	N/A	0.0000 (ppm)	-6793.3946
9/27/2018 18:29:03	Blank	Ni (230.299 nm)	N/A	0.0000 (ppm)	-17.4106
9/27/2018 18:29:03	Blank	Pb (220.353 nm)	N/A	0.0000 (ppm)	2.9593
9/27/2018 18:29:03	Blank	Sb (217.582 nm)	N/A	0.0000 (ppm)	0.9712
9/27/2018 18:29:03	Blank	Se (196.026 nm)	N/A	0.0000 (ppm)	4.6897
9/27/2018 18:29:03	Blank	Sn (189.925 nm)	N/A	0.0000 (ppm)	0.6926
9/27/2018 18:29:03	Blank	Sr (216.596 nm)	N/A	0.0000 (ppm)	0.5780
9/27/2018 18:29:03	Blank	Ti (336.122 nm)	N/A	0.0000 (ppm)	251.0778
9/27/2018 18:29:03	Blank	Tl (351.923 nm)	N/A	0.0000 (ppm)	12.5908
9/27/2018 18:29:03	Blank	V (292.401 nm)	N/A	0.0000 (ppm)	128.0451
9/27/2018 18:29:03	Blank	Y (360.074 nm)	0.00	1.00 (Ratio)	1055315.42
9/27/2018 18:29:03	Blank	Y_R (360.074 nm)	0.00	1.00 (Ratio)	1055427.09
9/27/2018 18:29:03	Blank	Zn (213.857 nm)	N/A	0.0000 (ppm)	-25.8133
9/27/2018 18:32:18	Standard 1	Ag (328.068 nm)	N/A		-186.6245
9/27/2018 18:32:18	Standard 1	Al (394.401 nm)	N/A		305.3525
9/27/2018 18:32:18	Standard 1	As (188.980 nm)	N/A	0.0050 (ppm)	3.0031
9/27/2018 18:32:18	Standard 1	B (249.772 nm)	N/A		14.5815
9/27/2018 18:32:18	Standard 1	Ba (230.424 nm)	N/A	0.0200 (ppm)	635.2787
9/27/2018 18:32:18	Standard 1	Be (313.107 nm)	N/A		-423.6506
9/27/2018 18:32:18	Standard 1	Ca (227.547 nm)	N/A		31.6487
9/27/2018 18:32:18	Standard 1	Cd (214.439 nm)	N/A	0.0010 (ppm)	33.0342
9/27/2018 18:32:18	Standard 1	Co (230.786 nm)	N/A	0.0030 (ppm)	21.4449
9/27/2018 18:32:18	Standard 1	Cr (267.716 nm)	N/A	0.0050 (ppm)	237.9012
9/27/2018 18:32:18	Standard 1	Cu (327.395 nm)	N/A	0.0100 (ppm)	614.7912

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 18:32:18	Standard 1	Fe (234.350 nm)	N/A		58.4874
9/27/2018 18:32:18	Standard 1	K (766.491 nm)	N/A		5326.4236
9/27/2018 18:32:18	Standard 1	Mg (279.078 nm)	N/A		839.7980
9/27/2018 18:32:18	Standard 1	Mn (257.610 nm)	N/A	0.0100 (ppm)	3007.1194
9/27/2018 18:32:18	Standard 1	Mo (202.032 nm)	N/A	0.0250 (ppm)	102.5530
9/27/2018 18:32:18	Standard 1	Na (588.995 nm)	N/A		15636.9776
9/27/2018 18:32:18	Standard 1	Ni (230.299 nm)	N/A		-17.1937
9/27/2018 18:32:18	Standard 1	Pb (220.353 nm)	N/A	0.0050 (ppm)	12.2489
9/27/2018 18:32:18	Standard 1	Sb (217.582 nm)	N/A	0.0100 (ppm)	15.4734
9/27/2018 18:32:18	Standard 1	Se (196.026 nm)	N/A		7.0361
9/27/2018 18:32:18	Standard 1	Sn (189.925 nm)	N/A		0.7528
9/27/2018 18:32:18	Standard 1	Sr (216.596 nm)	N/A		-2.1353
9/27/2018 18:32:18	Standard 1	Ti (336.122 nm)	N/A		-292.2694
9/27/2018 18:32:18	Standard 1	Tl (351.923 nm)	N/A	0.0100 (ppm)	35.2823
9/27/2018 18:32:18	Standard 1	V (292.401 nm)	N/A	0.0030 (ppm)	220.7326
9/27/2018 18:32:18	Standard 1	Y (360.074 nm)	0.23	1.00 (Ratio)	1051479.52
9/27/2018 18:32:18	Standard 1	Y_R (360.074 nm)	0.23	1.00 (Ratio)	1051609.42
9/27/2018 18:32:18	Standard 1	Zn (213.857 nm)	N/A	0.0100 (ppm)	249.8621
9/27/2018 18:35:34	Standard 2	Ag (328.068 nm)	N/A		-187.9493
9/27/2018 18:35:34	Standard 2	Al (394.401 nm)	N/A	0.1000 (ppm)	1166.9340
9/27/2018 18:35:34	Standard 2	As (188.980 nm)	N/A	0.0100 (ppm)	4.0600
9/27/2018 18:35:34	Standard 2	B (249.772 nm)	N/A	0.2000 (ppm)	4351.5575
9/27/2018 18:35:34	Standard 2	Ba (230.424 nm)	N/A		-1.6471
9/27/2018 18:35:34	Standard 2	Be (313.107 nm)	N/A	0.0030 (ppm)	3292.5417
9/27/2018 18:35:34	Standard 2	Ca (227.547 nm)	N/A	1.0000 (ppm)	53.8400
9/27/2018 18:35:34	Standard 2	Cd (214.439 nm)	N/A	0.0050 (ppm)	113.2378
9/27/2018 18:35:34	Standard 2	Co (230.786 nm)	N/A		-6.0506
9/27/2018 18:35:34	Standard 2	Cr (267.716 nm)	N/A		-4.4529
9/27/2018 18:35:34	Standard 2	Cu (327.395 nm)	N/A	0.0200 (ppm)	1136.6518
9/27/2018 18:35:34	Standard 2	Fe (234.350 nm)	N/A		21.8595
9/27/2018 18:35:34	Standard 2	K (766.491 nm)	N/A	2.0000 (ppm)	5312.1541
9/27/2018 18:35:34	Standard 2	Mg (279.078 nm)	N/A	1.0000 (ppm)	1683.6734
9/27/2018 18:35:34	Standard 2	Mn (257.610 nm)	N/A		-3.2292
9/27/2018 18:35:34	Standard 2	Mo (202.032 nm)	N/A		-1.3051
9/27/2018 18:35:34	Standard 2	Na (588.995 nm)	N/A	1.0000 (ppm)	36474.6214
9/27/2018 18:35:34	Standard 2	Ni (230.299 nm)	N/A		-18.1948
9/27/2018 18:35:34	Standard 2	Pb (220.353 nm)	N/A	0.0500 (ppm)	103.2200
9/27/2018 18:35:34	Standard 2	Sb (217.582 nm)	N/A	0.0600 (ppm)	72.7937
9/27/2018 18:35:34	Standard 2	Se (196.026 nm)	N/A	0.0100 (ppm)	12.5198
9/27/2018 18:35:34	Standard 2	Sn (189.925 nm)	N/A	0.5000 (ppm)	582.8700
9/27/2018 18:35:34	Standard 2	Sr (216.596 nm)	N/A		2.0359
9/27/2018 18:35:34	Standard 2	Ti (336.122 nm)	N/A		-313.8740
9/27/2018 18:35:34	Standard 2	Tl (351.923 nm)	N/A		11.0662
9/27/2018 18:35:34	Standard 2	V (292.401 nm)	N/A		122.4873
9/27/2018 18:35:34	Standard 2	Y (360.074 nm)	0.21	1.00 (Ratio)	1050621.78
9/27/2018 18:35:34	Standard 2	Y_R (360.074 nm)	0.21	1.00 (Ratio)	1050778.77
9/27/2018 18:35:34	Standard 2	Zn (213.857 nm)	N/A		-18.5492
9/27/2018 18:38:50	Standard 3	Ag (328.068 nm)	N/A	0.0100 (ppm)	422.5158
9/27/2018 18:38:50	Standard 3	Al (394.401 nm)	N/A		2215.0383
9/27/2018 18:38:50	Standard 3	As (188.980 nm)	N/A		14.1754
9/27/2018 18:38:50	Standard 3	B (249.772 nm)	N/A		1083.3960

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 18:38:50	Standard 3	Ba (230.424 nm)	N/A		6128.6805
9/27/2018 18:38:50	Standard 3	Be (313.107 nm)	N/A	0.0050 (ppm)	5809.2282
9/27/2018 18:38:50	Standard 3	Ca (227.547 nm)	N/A	0.5000 (ppm)	28.4937
9/27/2018 18:38:50	Standard 3	Cd (214.439 nm)	N/A		206.1898
9/27/2018 18:38:50	Standard 3	Co (230.786 nm)	N/A	0.0500 (ppm)	439.8656
9/27/2018 18:38:50	Standard 3	Cr (267.716 nm)	N/A	0.0100 (ppm)	442.2430
9/27/2018 18:38:50	Standard 3	Cu (327.395 nm)	N/A		1359.5456
9/27/2018 18:38:50	Standard 3	Fe (234.350 nm)	N/A	0.1000 (ppm)	982.2790
9/27/2018 18:38:50	Standard 3	K (766.491 nm)	N/A	0.5000 (ppm)	1312.7764
9/27/2018 18:38:50	Standard 3	Mg (279.078 nm)	N/A	0.5000 (ppm)	827.9218
9/27/2018 18:38:50	Standard 3	Mn (257.610 nm)	N/A		4160.1554
9/27/2018 18:38:50	Standard 3	Mo (202.032 nm)	N/A		198.6657
9/27/2018 18:38:50	Standard 3	Na (588.995 nm)	N/A	0.5000 (ppm)	14361.9888
9/27/2018 18:38:50	Standard 3	Ni (230.299 nm)	N/A	0.0400 (ppm)	217.9036
9/27/2018 18:38:50	Standard 3	Pb (220.353 nm)	N/A		24.9940
9/27/2018 18:38:50	Standard 3	Sb (217.582 nm)	N/A		120.4601
9/27/2018 18:38:50	Standard 3	Se (196.026 nm)	N/A		13.0424
9/27/2018 18:38:50	Standard 3	Sn (189.925 nm)	N/A		117.4282
9/27/2018 18:38:50	Standard 3	Sr (216.596 nm)	N/A	0.0500 (ppm)	652.7597
9/27/2018 18:38:50	Standard 3	Ti (336.122 nm)	N/A	0.0500 (ppm)	8809.3264
9/27/2018 18:38:50	Standard 3	Tl (351.923 nm)	N/A	0.0200 (ppm)	59.0803
9/27/2018 18:38:50	Standard 3	V (292.401 nm)	N/A	0.0500 (ppm)	1775.3350
9/27/2018 18:38:50	Standard 3	Y (360.074 nm)	0.05	1.00 (Ratio)	1051292.71
9/27/2018 18:38:50	Standard 3	Y_R (360.074 nm)	0.05	1.00 (Ratio)	1051459.85
9/27/2018 18:38:50	Standard 3	Zn (213.857 nm)	N/A	0.0200 (ppm)	461.8969
9/27/2018 18:42:06	Standard 4	Ag (328.068 nm)	N/A	0.2000 (ppm)	11974.6456
9/27/2018 18:42:06	Standard 4	Al (394.401 nm)	N/A	4.0000 (ppm)	45154.1904
9/27/2018 18:42:06	Standard 4	As (188.980 nm)	N/A	0.4000 (ppm)	300.9529
9/27/2018 18:42:06	Standard 4	B (249.772 nm)	N/A	1.0000 (ppm)	22275.9992
9/27/2018 18:42:06	Standard 4	Ba (230.424 nm)	N/A	4.0000 (ppm)	122191.3220
9/27/2018 18:42:06	Standard 4	Be (313.107 nm)	N/A	0.1000 (ppm)	128678.9074
9/27/2018 18:42:06	Standard 4	Ca (227.547 nm)	N/A	10.0000 (ppm)	494.3050
9/27/2018 18:42:06	Standard 4	Cd (214.439 nm)	N/A	0.2000 (ppm)	3979.6946
9/27/2018 18:42:06	Standard 4	Co (230.786 nm)	N/A	1.0000 (ppm)	8846.4800
9/27/2018 18:42:06	Standard 4	Cr (267.716 nm)	N/A	0.2000 (ppm)	8698.5866
9/27/2018 18:42:06	Standard 4	Cu (327.395 nm)	N/A	0.5000 (ppm)	26877.5554
9/27/2018 18:42:06	Standard 4	Fe (234.350 nm)	N/A	2.0000 (ppm)	19305.3375
9/27/2018 18:42:06	Standard 4	K (766.491 nm)	N/A	10.0000 (ppm)	27961.3863
9/27/2018 18:42:06	Standard 4	Mg (279.078 nm)	N/A	10.0000 (ppm)	16855.7830
9/27/2018 18:42:06	Standard 4	Mn (257.610 nm)	N/A	0.3000 (ppm)	82131.0369
9/27/2018 18:42:06	Standard 4	Mo (202.032 nm)	N/A	1.0000 (ppm)	4120.0658
9/27/2018 18:42:06	Standard 4	Na (588.995 nm)	N/A	10.0000 (ppm)	421659.1331
9/27/2018 18:42:06	Standard 4	Ni (230.299 nm)	N/A	0.8000 (ppm)	4729.9947
9/27/2018 18:42:06	Standard 4	Pb (220.353 nm)	N/A	0.2000 (ppm)	400.2097
9/27/2018 18:42:06	Standard 4	Sb (217.582 nm)	N/A	2.0000 (ppm)	2431.5131
9/27/2018 18:42:06	Standard 4	Se (196.026 nm)	N/A	0.2000 (ppm)	162.7672
9/27/2018 18:42:06	Standard 4	Sn (189.925 nm)	N/A	2.0000 (ppm)	2366.7862
9/27/2018 18:42:06	Standard 4	Sr (216.596 nm)	N/A	1.0000 (ppm)	13255.8533
9/27/2018 18:42:06	Standard 4	Ti (336.122 nm)	N/A	1.0000 (ppm)	185644.6653
9/27/2018 18:42:06	Standard 4	Tl (351.923 nm)	N/A	0.4000 (ppm)	939.8210
9/27/2018 18:42:06	Standard 4	V (292.401 nm)	N/A	1.0000 (ppm)	33891.6390

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 18:42:06	Standard 4	Y (360.074 nm)	0.22	0.98 (Ratio)	1030399.86
9/27/2018 18:42:06	Standard 4	Y_R (360.074 nm)	0.22	0.98 (Ratio)	1030566.62
9/27/2018 18:42:06	Standard 4	Zn (213.857 nm)	N/A	0.4000 (ppm)	9849.5932
9/27/2018 18:45:21	Standard 5	Ag (328.068 nm)	N/A	1.0000 (ppm)	62190.0751
9/27/2018 18:45:21	Standard 5	Al (394.401 nm)	N/A	20.0000 (ppm)	243119.7640
9/27/2018 18:45:21	Standard 5	As (188.980 nm)	N/A	2.0000 (ppm)	1559.0067
9/27/2018 18:45:21	Standard 5	B (249.772 nm)	N/A	5.0000 (ppm)	115158.0786
9/27/2018 18:45:21	Standard 5	Ba (230.424 nm)	N/A	20.0000 (ppm)	592373.9909
9/27/2018 18:45:21	Standard 5	Be (313.107 nm)	N/A	0.5000 (ppm)	652718.7404
9/27/2018 18:45:21	Standard 5	Ca (227.547 nm)	N/A	50.0000 (ppm)	2586.3137
9/27/2018 18:45:21	Standard 5	Cd (214.439 nm)	N/A	1.0000 (ppm)	19661.1005
9/27/2018 18:45:21	Standard 5	Co (230.786 nm)	N/A	5.0000 (ppm)	43521.6020
9/27/2018 18:45:21	Standard 5	Cr (267.716 nm)	N/A	1.0000 (ppm)	43299.1560
9/27/2018 18:45:21	Standard 5	Cu (327.395 nm)	N/A	2.5000 (ppm)	137709.4770
9/27/2018 18:45:21	Standard 5	Fe (234.350 nm)	N/A	10.0000 (ppm)	94927.8641
9/27/2018 18:45:21	Standard 5	K (766.491 nm)	N/A	50.0000 (ppm)	148718.7279
9/27/2018 18:45:21	Standard 5	Mg (279.078 nm)	N/A	50.0000 (ppm)	85033.1605
9/27/2018 18:45:21	Standard 5	Mn (257.610 nm)	N/A	1.5000 (ppm)	405955.5932
9/27/2018 18:45:21	Standard 5	Mo (202.032 nm)	N/A	5.0000 (ppm)	21127.2025
9/27/2018 18:45:21	Standard 5	Na (588.995 nm)	N/A	50.0000 (ppm)	2181856.2235
9/27/2018 18:45:21	Standard 5	Ni (230.299 nm)	N/A	4.0000 (ppm)	23238.6394
9/27/2018 18:45:21	Standard 5	Pb (220.353 nm)	N/A	1.0000 (ppm)	1951.6855
9/27/2018 18:45:21	Standard 5	Sb (217.582 nm)	N/A	10.0000 (ppm)	12298.0906
9/27/2018 18:45:21	Standard 5	Se (196.026 nm)	N/A	1.0000 (ppm)	818.8285
9/27/2018 18:45:21	Standard 5	Sn (189.925 nm)	N/A	10.0000 (ppm)	11667.9986
9/27/2018 18:45:21	Standard 5	Sr (216.596 nm)	N/A	5.0000 (ppm)	65402.7163
9/27/2018 18:45:21	Standard 5	Ti (336.122 nm)	N/A	5.0000 (ppm)	933617.2768
9/27/2018 18:45:21	Standard 5	Tl (351.923 nm)	N/A	2.0000 (ppm)	4879.6933
9/27/2018 18:45:21	Standard 5	V (292.401 nm)	N/A	5.0000 (ppm)	169951.1244
9/27/2018 18:45:21	Standard 5	Y (360.074 nm)	0.31	0.93 (Ratio)	976886.74
9/27/2018 18:45:21	Standard 5	Y_R (360.074 nm)	0.31	0.93 (Ratio)	977055.43
9/27/2018 18:45:21	Standard 5	Zn (213.857 nm)	N/A	2.0000 (ppm)	50308.1957
9/27/2018 18:49:06	Initial Calibration Verification	Ag (328.068 nm)	0.41	0.5013 (ppm)	31054.2282
9/27/2018 18:49:06	Initial Calibration Verification	Al (394.401 nm)	0.42	9.5466 (ppm)	115773.6855
9/27/2018 18:49:06	Initial Calibration Verification	As (188.980 nm)	1.08	0.9847 (ppm)	766.2686
9/27/2018 18:49:06	Initial Calibration Verification	B (249.772 nm)	0.43	2.5069 (ppm)	57669.0218
9/27/2018 18:49:06	Initial Calibration Verification	Ba (230.424 nm)	0.49	10.2014 (ppm)	302531.8277
9/27/2018 18:49:06	Initial Calibration Verification	Be (313.107 nm)	0.81	0.2536 (ppm)	330652.8519
9/27/2018 18:49:06	Initial Calibration Verification	Ca (227.547 nm)	0.16	24.0886 (ppm)	1246.8699
9/27/2018 18:49:06	Initial Calibration Verification	Cd (214.439 nm)	0.52	0.5054 (ppm)	9947.1228
9/27/2018 18:49:06	Initial Calibration Verification	Co (230.786 nm)	0.51	2.6091 (ppm)	22722.7636
9/27/2018 18:49:06	Initial Calibration Verification	Cr (267.716 nm)	0.51	0.5231 (ppm)	22655.6155
9/27/2018 18:49:06	Initial Calibration Verification	Cu (327.395 nm)	0.45	1.2139 (ppm)	66821.5515
9/27/2018 18:49:06	Initial Calibration Verification	Fe (234.350 nm)	0.47	4.9102 (ppm)	46670.1637
9/27/2018 18:49:06	Initial Calibration Verification	K (766.491 nm)	0.31	24.1674 (ppm)	71686.1262
9/27/2018 18:49:06	Initial Calibration Verification	Mg (279.078 nm)	0.40	24.6299 (ppm)	41872.8652
9/27/2018 18:49:06	Initial Calibration Verification	Mn (257.610 nm)	0.61	0.7729 (ppm)	209266.1762
9/27/2018 18:49:06	Initial Calibration Verification	Mo (202.032 nm)	1.28	2.5795 (ppm)	10900.9745
9/27/2018 18:49:06	Initial Calibration Verification	Na (588.995 nm)	0.30	24.1716 (ppm)	1050399.7087
9/27/2018 18:49:06	Initial Calibration Verification	Ni (230.299 nm)	0.41	2.0705 (ppm)	12029.8039
9/27/2018 18:49:06	Initial Calibration Verification	Pb (220.353 nm)	0.45	0.5112 (ppm)	1000.0274

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 18:49:06	Initial Calibration Verification	Sb (217.582 nm)	0.46	4.9056 (ppm)	6030.7143
9/27/2018 18:49:06	Initial Calibration Verification	Se (196.026 nm)	0.67	0.4861 (ppm)	399.9892
9/27/2018 18:49:06	Initial Calibration Verification	Sn (189.925 nm)	0.65	5.0687 (ppm)	5917.6142
9/27/2018 18:49:06	Initial Calibration Verification	Sr (216.596 nm)	0.51	2.5765 (ppm)	33719.8748
9/27/2018 18:49:06	Initial Calibration Verification	Ti (336.122 nm)	0.42	2.5215 (ppm)	470820.9934
9/27/2018 18:49:06	Initial Calibration Verification	Tl (351.923 nm)	0.59	1.0012 (ppm)	2444.6126
9/27/2018 18:49:06	Initial Calibration Verification	V (292.401 nm)	0.55	2.5257 (ppm)	85892.8361
9/27/2018 18:49:06	Initial Calibration Verification	Y (360.074 nm)	0.29	0.95 (Ratio)	1005828.79
9/27/2018 18:49:06	Initial Calibration Verification	Y_R (360.074 nm)	0.29	0.95 (Ratio)	1006032.64
9/27/2018 18:49:06	Initial Calibration Verification	Zn (213.857 nm)	0.47	1.0032 (ppm)	25204.2547
9/27/2018 18:52:20	Initial Calibration Blank	Ag (328.068 nm)	> 100.00	0.0000 u (ppm)	-182.3910
9/27/2018 18:52:20	Initial Calibration Blank	Al (394.401 nm)	> 100.00	0.0001 u (ppm)	99.0341
9/27/2018 18:52:20	Initial Calibration Blank	As (188.980 nm)	> 100.00	0.0008 u (ppm)	-0.0041
9/27/2018 18:52:20	Initial Calibration Blank	B (249.772 nm)	14.17	0.0020 (ppm)	67.6184
9/27/2018 18:52:20	Initial Calibration Blank	Ba (230.424 nm)	> 100.00	0.0002 u (ppm)	37.6357
9/27/2018 18:52:20	Initial Calibration Blank	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-395.4588
9/27/2018 18:52:20	Initial Calibration Blank	Ca (227.547 nm)	85.46	-0.0722 u (ppm)	3.1327
9/27/2018 18:52:20	Initial Calibration Blank	Cd (214.439 nm)	> 100.00	0.0001 (ppm)	14.8705
9/27/2018 18:52:20	Initial Calibration Blank	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-3.9234
9/27/2018 18:52:20	Initial Calibration Blank	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	7.8358
9/27/2018 18:52:20	Initial Calibration Blank	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	36.8131
9/27/2018 18:52:20	Initial Calibration Blank	Fe (234.350 nm)	49.03	0.0026 (ppm)	90.8306
9/27/2018 18:52:20	Initial Calibration Blank	K (766.491 nm)	11.10	0.0489 (ppm)	100.7696
9/27/2018 18:52:20	Initial Calibration Blank	Mg (279.078 nm)	> 100.00	0.0000 u (ppm)	0.6795
9/27/2018 18:52:20	Initial Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 (ppm)	19.0979
9/27/2018 18:52:20	Initial Calibration Blank	Mo (202.032 nm)	> 100.00	0.0028 u (ppm)	41.6525
9/27/2018 18:52:20	Initial Calibration Blank	Na (588.995 nm)	> 100.00	-0.0017 u (ppm)	-6867.4912
9/27/2018 18:52:20	Initial Calibration Blank	Ni (230.299 nm)	> 100.00	-0.0002 u (ppm)	-18.4646
9/27/2018 18:52:20	Initial Calibration Blank	Pb (220.353 nm)	54.55	0.0010 (ppm)	4.9976
9/27/2018 18:52:20	Initial Calibration Blank	Sb (217.582 nm)	18.58	0.0052 (ppm)	7.3762
9/27/2018 18:52:20	Initial Calibration Blank	Se (196.026 nm)	> 100.00	0.0015 u (ppm)	5.9189
9/27/2018 18:52:20	Initial Calibration Blank	Sn (189.925 nm)	> 100.00	0.0010 u (ppm)	1.8582
9/27/2018 18:52:20	Initial Calibration Blank	Sr (216.596 nm)	> 100.00	0.0001 u (ppm)	2.0790
9/27/2018 18:52:20	Initial Calibration Blank	Ti (336.122 nm)	58.36	0.0027 (ppm)	759.4097
9/27/2018 18:52:20	Initial Calibration Blank	Tl (351.923 nm)	> 100.00	0.0018 (ppm)	16.9729
9/27/2018 18:52:20	Initial Calibration Blank	V (292.401 nm)	> 100.00	0.0000 u (ppm)	128.9915
9/27/2018 18:52:20	Initial Calibration Blank	Y (360.074 nm)	0.25	0.99 (Ratio)	1048935.78
9/27/2018 18:52:20	Initial Calibration Blank	Y_R (360.074 nm)	0.25	0.99 (Ratio)	1049178.75
9/27/2018 18:52:20	Initial Calibration Blank	Zn (213.857 nm)	> 100.00	0.0000 u (ppm)	-25.7745
9/27/2018 18:55:35	Contract Required Detection Limit	Ag (328.068 nm)	0.63	0.0099 (ppm)	433.4065
9/27/2018 18:55:35	Contract Required Detection Limit	Al (394.401 nm)	0.33	0.1778 (ppm)	2252.2321
9/27/2018 18:55:35	Contract Required Detection Limit	As (188.980 nm)	12.26	0.0181 (ppm)	13.4714
9/27/2018 18:55:35	Contract Required Detection Limit	B (249.772 nm)	0.41	0.1906 (ppm)	4403.9902
9/27/2018 18:55:35	Contract Required Detection Limit	Ba (230.424 nm)	0.07	0.2063 (ppm)	6151.6326
9/27/2018 18:55:35	Contract Required Detection Limit	Be (313.107 nm)	0.33	0.0048 (ppm)	5888.0507
9/27/2018 18:55:35	Contract Required Detection Limit	Ca (227.547 nm)	3.25	0.9318 (ppm)	54.8130
9/27/2018 18:55:35	Contract Required Detection Limit	Cd (214.439 nm)	0.80	0.0098 (ppm)	207.0451
9/27/2018 18:55:35	Contract Required Detection Limit	Co (230.786 nm)	0.81	0.0511 (ppm)	440.6594
9/27/2018 18:55:35	Contract Required Detection Limit	Cr (267.716 nm)	1.24	0.0112 (ppm)	496.4124
9/27/2018 18:55:35	Contract Required Detection Limit	Cu (327.395 nm)	0.15	0.0245 (ppm)	1384.0906
9/27/2018 18:55:35	Contract Required Detection Limit	Fe (234.350 nm)	0.98	0.1037 (ppm)	1051.1039

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 18:55:35	Contract Required Detection Limit	K (766.491 nm)	0.55	0.9430 (ppm)	2754.4555
9/27/2018 18:55:35	Contract Required Detection Limit	Mg (279.078 nm)	0.42	0.9948 (ppm)	1691.9014
9/27/2018 18:55:35	Contract Required Detection Limit	Mn (257.610 nm)	0.68	0.0155 (ppm)	4222.5178
9/27/2018 18:55:35	Contract Required Detection Limit	Mo (202.032 nm)	7.36	0.0204 (ppm)	115.8287
9/27/2018 18:55:35	Contract Required Detection Limit	Na (588.995 nm)	0.33	0.9942 (ppm)	36691.6979
9/27/2018 18:55:35	Contract Required Detection Limit	Ni (230.299 nm)	1.61	0.0423 (ppm)	228.4454
9/27/2018 18:55:35	Contract Required Detection Limit	Pb (220.353 nm)	14.31	0.0115 (ppm)	25.4166
9/27/2018 18:55:35	Contract Required Detection Limit	Sb (217.582 nm)	2.30	0.0618 (ppm)	76.9752
9/27/2018 18:55:35	Contract Required Detection Limit	Se (196.026 nm)	9.95	0.0106 (ppm)	13.2756
9/27/2018 18:55:35	Contract Required Detection Limit	Sn (189.925 nm)	0.71	0.5049 (ppm)	590.0449
9/27/2018 18:55:35	Contract Required Detection Limit	Sr (216.596 nm)	0.85	0.1015 (ppm)	1328.6153
9/27/2018 18:55:35	Contract Required Detection Limit	Ti (336.122 nm)	1.74	0.0486 (ppm)	9326.9592
9/27/2018 18:55:35	Contract Required Detection Limit	Tl (351.923 nm)	19.52	0.0182 (ppm)	56.8391
9/27/2018 18:55:35	Contract Required Detection Limit	V (292.401 nm)	0.30	0.0492 (ppm)	1798.8012
9/27/2018 18:55:35	Contract Required Detection Limit	Y (360.074 nm)	0.31	1.00 (Ratio)	1050147.41
9/27/2018 18:55:35	Contract Required Detection Limit	Y_R (360.074 nm)	0.31	1.00 (Ratio)	1050429.84
9/27/2018 18:55:35	Contract Required Detection Limit	Zn (213.857 nm)	0.38	0.0194 (ppm)	463.1225
9/27/2018 18:58:49	Interference Check Solution A	Ag (328.068 nm)	39.88	0.0003 (ppm)	-169.0569
9/27/2018 18:58:49	Interference Check Solution A	Al (394.401 nm)	0.37	267.7689 o (ppm)	3244642.2904
9/27/2018 18:58:49	Interference Check Solution A	As (188.980 nm)	> 100.00	-0.0006 u (ppm)	-1.0655
9/27/2018 18:58:49	Interference Check Solution A	B (249.772 nm)	0.97	0.0480 (ppm)	1124.9968
9/27/2018 18:58:49	Interference Check Solution A	Ba (230.424 nm)	6.12	-0.0004 u (ppm)	22.7233
9/27/2018 18:58:49	Interference Check Solution A	Be (313.107 nm)	14.95	-0.0001 u (ppm)	-509.2899
9/27/2018 18:58:49	Interference Check Solution A	Ca (227.547 nm)	0.59	271.4422 o (ppm)	13979.9917
9/27/2018 18:58:49	Interference Check Solution A	Cd (214.439 nm)	34.56	-0.0011 Ku (ppm)	-8.8490 K
9/27/2018 18:58:49	Interference Check Solution A	Co (230.786 nm)	5.91	-0.0028 u (ppm)	-28.3010
9/27/2018 18:58:49	Interference Check Solution A	Cr (267.716 nm)	50.30	-0.0003 u (ppm)	-2.4510
9/27/2018 18:58:49	Interference Check Solution A	Cu (327.395 nm)	25.20	0.0006 (ppm)	72.4531
9/27/2018 18:58:49	Interference Check Solution A	Fe (234.350 nm)	0.54	90.8382 o (ppm)	862232.1212
9/27/2018 18:58:49	Interference Check Solution A	K (766.491 nm)	6.55	0.0629 (ppm)	142.2470
9/27/2018 18:58:49	Interference Check Solution A	Mg (279.078 nm)	0.64	265.4779 o (ppm)	451327.8184
9/27/2018 18:58:49	Interference Check Solution A	Mn (257.610 nm)	3.08	0.0015 (ppm)	430.6226
9/27/2018 18:58:49	Interference Check Solution A	Mo (202.032 nm)	16.52	-0.0072 u (ppm)	-0.7124
9/27/2018 18:58:49	Interference Check Solution A	Na (588.995 nm)	6.76	-0.0204 u (ppm)	-7686.2718
9/27/2018 18:58:49	Interference Check Solution A	Ni (230.299 nm)	30.33	-0.0020 u (ppm)	-29.0314
9/27/2018 18:58:49	Interference Check Solution A	Pb (220.353 nm)	> 100.00	-0.0002 u (ppm)	2.5906
9/27/2018 18:58:49	Interference Check Solution A	Sb (217.582 nm)	31.42	-0.0026 u (ppm)	-2.2002
9/27/2018 18:58:49	Interference Check Solution A	Se (196.026 nm)	55.35	0.0047 (ppm)	8.4725
9/27/2018 18:58:49	Interference Check Solution A	Sn (189.925 nm)	67.73	-0.0033 u (ppm)	-3.1857
9/27/2018 18:58:49	Interference Check Solution A	Sr (216.596 nm)	0.96	0.0240 (ppm)	315.0408
9/27/2018 18:58:49	Interference Check Solution A	Ti (336.122 nm)	> 100.00	-0.0003 u (ppm)	191.4218
9/27/2018 18:58:49	Interference Check Solution A	Tl (351.923 nm)	65.47	0.0038 (ppm)	21.9315
9/27/2018 18:58:49	Interference Check Solution A	V (292.401 nm)	1.82	0.0032 K (ppm)	235.6780 K
9/27/2018 18:58:49	Interference Check Solution A	Y (360.074 nm)	0.12	0.87 (Ratio)	916534.86
9/27/2018 18:58:49	Interference Check Solution A	Y_R (360.074 nm)	0.12	0.87 (Ratio)	916789.59
9/27/2018 18:58:49	Interference Check Solution A	Zn (213.857 nm)	0.33	0.0114 K (ppm)	260.6158 K
9/27/2018 19:02:03	Interference Check Solution AB	Ag (328.068 nm)	0.50	0.2146 (ppm)	13189.0744
9/27/2018 19:02:03	Interference Check Solution AB	Al (394.401 nm)	0.37	265.5724 o (ppm)	3218027.5342
9/27/2018 19:02:03	Interference Check Solution AB	As (188.980 nm)	2.90	0.1013 (ppm)	78.2552
9/27/2018 19:02:03	Interference Check Solution AB	B (249.772 nm)	1.73	0.0455 (ppm)	1067.5472
9/27/2018 19:02:03	Interference Check Solution AB	Ba (230.424 nm)	0.22	0.5145 (ppm)	15288.6129

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:02:03	Interference Check Solution AB	Be (313.107 nm)	0.63	0.5003 (ppm)	652761.4156
9/27/2018 19:02:03	Interference Check Solution AB	Ca (227.547 nm)	0.33	269.8234 o (ppm)	13896.6628
9/27/2018 19:02:03	Interference Check Solution AB	Cd (214.439 nm)	0.64	0.9770 (ppm)	19216.4416
9/27/2018 19:02:03	Interference Check Solution AB	Co (230.786 nm)	0.68	0.4880 (ppm)	4246.8326
9/27/2018 19:02:03	Interference Check Solution AB	Cr (267.716 nm)	0.58	0.5025 (ppm)	21764.7157
9/27/2018 19:02:03	Interference Check Solution AB	Cu (327.395 nm)	0.33	0.5305 (ppm)	29226.2093
9/27/2018 19:02:03	Interference Check Solution AB	Fe (234.350 nm)	0.63	90.6825 o (ppm)	860754.4000
9/27/2018 19:02:03	Interference Check Solution AB	K (766.491 nm)	36.06	0.0282 (ppm)	39.1532
9/27/2018 19:02:03	Interference Check Solution AB	Mg (279.078 nm)	0.56	264.1302 o (ppm)	449036.7104
9/27/2018 19:02:03	Interference Check Solution AB	Mn (257.610 nm)	0.41	0.4997 (ppm)	135309.5980
9/27/2018 19:02:03	Interference Check Solution AB	Mo (202.032 nm)	10.49	-0.0074 u (ppm)	-1.4575
9/27/2018 19:02:03	Interference Check Solution AB	Na (588.995 nm)	10.96	-0.0065 u (ppm)	-7079.4443
9/27/2018 19:02:03	Interference Check Solution AB	Ni (230.299 nm)	0.43	0.9542 (ppm)	5534.5911
9/27/2018 19:02:03	Interference Check Solution AB	Pb (220.353 nm)	4.33	0.0494 (ppm)	99.3393
9/27/2018 19:02:03	Interference Check Solution AB	Sb (217.582 nm)	0.39	0.6122 (ppm)	753.4497
9/27/2018 19:02:03	Interference Check Solution AB	Se (196.026 nm)	7.54	0.0592 (ppm)	52.8057
9/27/2018 19:02:03	Interference Check Solution AB	Sn (189.925 nm)	56.01	-0.0012 u (ppm)	-0.7397
9/27/2018 19:02:03	Interference Check Solution AB	Sr (216.596 nm)	1.98	0.0242 (ppm)	316.7384
9/27/2018 19:02:03	Interference Check Solution AB	Ti (336.122 nm)	27.62	-0.0010 u (ppm)	67.8683
9/27/2018 19:02:03	Interference Check Solution AB	Tl (351.923 nm)	3.74	0.1169 (ppm)	296.4344
9/27/2018 19:02:03	Interference Check Solution AB	V (292.401 nm)	0.50	0.5083 (ppm)	17387.6099
9/27/2018 19:02:03	Interference Check Solution AB	Y (360.074 nm)	0.17	0.87 (Ratio)	917087.13
9/27/2018 19:02:03	Interference Check Solution AB	Y_R (360.074 nm)	0.17	0.87 (Ratio)	917390.05
9/27/2018 19:02:03	Interference Check Solution AB	Zn (213.857 nm)	0.51	1.0159 (ppm)	25522.9528
9/27/2018 19:05:18	Continuing Calibration Verification	Ag (328.068 nm)	0.47	0.5055 (ppm)	31313.2840
9/27/2018 19:05:18	Continuing Calibration Verification	Al (394.401 nm)	0.44	9.6371 (ppm)	116869.9077
9/27/2018 19:05:18	Continuing Calibration Verification	As (188.980 nm)	0.89	0.9762 (ppm)	759.6437
9/27/2018 19:05:18	Continuing Calibration Verification	B (249.772 nm)	0.51	2.5211 (ppm)	57995.9917
9/27/2018 19:05:18	Continuing Calibration Verification	Ba (230.424 nm)	0.50	10.2093 (ppm)	302765.1916
9/27/2018 19:05:18	Continuing Calibration Verification	Be (313.107 nm)	0.51	0.2553 (ppm)	332957.3409
9/27/2018 19:05:18	Continuing Calibration Verification	Ca (227.547 nm)	1.00	24.3076 (ppm)	1258.1425
9/27/2018 19:05:18	Continuing Calibration Verification	Cd (214.439 nm)	0.53	0.5076 (ppm)	9989.8456
9/27/2018 19:05:18	Continuing Calibration Verification	Co (230.786 nm)	0.39	2.6188 (ppm)	22807.7157
9/27/2018 19:05:18	Continuing Calibration Verification	Cr (267.716 nm)	0.51	0.5226 (ppm)	22634.2059
9/27/2018 19:05:18	Continuing Calibration Verification	Cu (327.395 nm)	0.23	1.2311 (ppm)	67766.9021
9/27/2018 19:05:18	Continuing Calibration Verification	Fe (234.350 nm)	0.45	4.9515 (ppm)	47061.9684
9/27/2018 19:05:18	Continuing Calibration Verification	K (766.491 nm)	0.40	24.3535 (ppm)	72238.6704
9/27/2018 19:05:18	Continuing Calibration Verification	Mg (279.078 nm)	0.41	24.7803 (ppm)	42128.5267
9/27/2018 19:05:18	Continuing Calibration Verification	Mn (257.610 nm)	0.61	0.7768 (ppm)	210325.3214
9/27/2018 19:05:18	Continuing Calibration Verification	Mo (202.032 nm)	1.13	2.7408 (ppm)	11580.7434
9/27/2018 19:05:18	Continuing Calibration Verification	Na (588.995 nm)	0.12	24.4906 (ppm)	1064352.4049
9/27/2018 19:05:18	Continuing Calibration Verification	Ni (230.299 nm)	0.50	2.0777 (ppm)	12071.7104
9/27/2018 19:05:18	Continuing Calibration Verification	Pb (220.353 nm)	0.47	0.5100 (ppm)	997.6299
9/27/2018 19:05:18	Continuing Calibration Verification	Sb (217.582 nm)	0.32	4.9269 (ppm)	6056.9263
9/27/2018 19:05:18	Continuing Calibration Verification	Se (196.026 nm)	0.46	0.4938 (ppm)	406.2762
9/27/2018 19:05:18	Continuing Calibration Verification	Sn (189.925 nm)	0.58	5.0706 (ppm)	5919.9091
9/27/2018 19:05:18	Continuing Calibration Verification	Sr (216.596 nm)	0.56	2.5704 (ppm)	33640.1287
9/27/2018 19:05:18	Continuing Calibration Verification	Ti (336.122 nm)	0.43	2.5215 (ppm)	470816.4437
9/27/2018 19:05:18	Continuing Calibration Verification	Tl (351.923 nm)	0.64	1.0052 (ppm)	2454.3636
9/27/2018 19:05:18	Continuing Calibration Verification	V (292.401 nm)	0.56	2.5361 (ppm)	86244.2788
9/27/2018 19:05:18	Continuing Calibration Verification	Y (360.074 nm)	0.17	0.95 (Ratio)	999776.35

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:05:18	Continuing Calibration Verification	Y_R (360.074 nm)	0.17	0.95 (Ratio)	1000144.16
9/27/2018 19:05:18	Continuing Calibration Verification	Zn (213.857 nm)	0.42	1.0047 (ppm)	25241.2525
9/27/2018 19:08:32	Continuing Calibration Blank	Ag (328.068 nm)	60.63	0.0003 (ppm)	-167.4619
9/27/2018 19:08:32	Continuing Calibration Blank	Al (394.401 nm)	7.87	0.0020 (ppm)	121.7675
9/27/2018 19:08:32	Continuing Calibration Blank	As (188.980 nm)	> 100.00	-0.0005 u (ppm)	-1.0348
9/27/2018 19:08:32	Continuing Calibration Blank	B (249.772 nm)	26.62	0.0012 (ppm)	50.5335
9/27/2018 19:08:32	Continuing Calibration Blank	Ba (230.424 nm)	> 100.00	-0.0001 u (ppm)	30.1422
9/27/2018 19:08:32	Continuing Calibration Blank	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-391.7592
9/27/2018 19:08:32	Continuing Calibration Blank	Ca (227.547 nm)	94.86	-0.0392 u (ppm)	4.8296
9/27/2018 19:08:32	Continuing Calibration Blank	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.6801
9/27/2018 19:08:32	Continuing Calibration Blank	Co (230.786 nm)	> 100.00	-0.0001 u (ppm)	-4.9816
9/27/2018 19:08:32	Continuing Calibration Blank	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	5.0708
9/27/2018 19:08:32	Continuing Calibration Blank	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	40.1582
9/27/2018 19:08:32	Continuing Calibration Blank	Fe (234.350 nm)	32.85	0.0062 (ppm)	125.0359
9/27/2018 19:08:32	Continuing Calibration Blank	K (766.491 nm)	26.68	0.0351 (ppm)	59.6490
9/27/2018 19:08:32	Continuing Calibration Blank	Mg (279.078 nm)	> 100.00	0.0015 u (ppm)	3.2699
9/27/2018 19:08:32	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	8.9307
9/27/2018 19:08:32	Continuing Calibration Blank	Mo (202.032 nm)	> 100.00	0.0005 u (ppm)	32.0651
9/27/2018 19:08:32	Continuing Calibration Blank	Na (588.995 nm)	59.51	-0.0019 u (ppm)	-6877.9506
9/27/2018 19:08:32	Continuing Calibration Blank	Ni (230.299 nm)	> 100.00	0.0001 u (ppm)	-16.9269
9/27/2018 19:08:32	Continuing Calibration Blank	Pb (220.353 nm)	> 100.00	-0.0006 u (ppm)	1.8799
9/27/2018 19:08:32	Continuing Calibration Blank	Sb (217.582 nm)	> 100.00	0.0021 u (ppm)	3.5048
9/27/2018 19:08:32	Continuing Calibration Blank	Se (196.026 nm)	> 100.00	-0.0001 u (ppm)	4.6265
9/27/2018 19:08:32	Continuing Calibration Blank	Sn (189.925 nm)	> 100.00	0.0003 u (ppm)	0.9847
9/27/2018 19:08:32	Continuing Calibration Blank	Sr (216.596 nm)	> 100.00	-0.0001 u (ppm)	-1.3360
9/27/2018 19:08:32	Continuing Calibration Blank	Ti (336.122 nm)	72.75	0.0018 (ppm)	582.9924
9/27/2018 19:08:32	Continuing Calibration Blank	Tl (351.923 nm)	46.85	0.0032 (ppm)	20.4598
9/27/2018 19:08:32	Continuing Calibration Blank	V (292.401 nm)	> 100.00	0.0000 u (ppm)	127.1988
9/27/2018 19:08:32	Continuing Calibration Blank	Y (360.074 nm)	0.36	0.99 (Ratio)	1046718.77
9/27/2018 19:08:32	Continuing Calibration Blank	Y_R (360.074 nm)	0.36	0.99 (Ratio)	1047157.16
9/27/2018 19:08:32	Continuing Calibration Blank	Zn (213.857 nm)	> 100.00	0.0000 u (ppm)	-26.3718
9/27/2018 19:11:47	PBW-322634	Ag (328.068 nm)	45.35	0.0003 (ppm)	-167.4433
9/27/2018 19:11:47	PBW-322634	Al (394.401 nm)	2.10	0.0107 (ppm)	226.6585
9/27/2018 19:11:47	PBW-322634	As (188.980 nm)	> 100.00	-0.0011 u (ppm)	-1.4872
9/27/2018 19:11:47	PBW-322634	B (249.772 nm)	8.55	0.0009 (ppm)	43.5155
9/27/2018 19:11:47	PBW-322634	Ba (230.424 nm)	5.37	-0.0010 u (ppm)	4.8239
9/27/2018 19:11:47	PBW-322634	Be (313.107 nm)	22.19	0.0000 u (ppm)	-430.2546
9/27/2018 19:11:47	PBW-322634	Ca (227.547 nm)	37.66	0.0297 (ppm)	8.3786
9/27/2018 19:11:47	PBW-322634	Cd (214.439 nm)	62.32	-0.0002 u (ppm)	10.4523
9/27/2018 19:11:47	PBW-322634	Co (230.786 nm)	77.62	-0.0003 u (ppm)	-6.8374
9/27/2018 19:11:47	PBW-322634	Cr (267.716 nm)	49.56	-0.0004 u (ppm)	-6.0362
9/27/2018 19:11:47	PBW-322634	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	39.6934
9/27/2018 19:11:47	PBW-322634	Fe (234.350 nm)	33.16	0.0019 (ppm)	84.2786
9/27/2018 19:11:47	PBW-322634	K (766.491 nm)	14.62	0.0533 (ppm)	113.6649
9/27/2018 19:11:47	PBW-322634	Mg (279.078 nm)	> 100.00	0.0020 (ppm)	4.1900
9/27/2018 19:11:47	PBW-322634	Mn (257.610 nm)	3.79	0.0005 (ppm)	162.2962
9/27/2018 19:11:47	PBW-322634	Mo (202.032 nm)	10.47	-0.0056 u (ppm)	6.1862
9/27/2018 19:11:47	PBW-322634	Na (588.995 nm)	4.40	0.0279 (ppm)	-5574.2766
9/27/2018 19:11:47	PBW-322634	Ni (230.299 nm)	22.49	0.0008 (ppm)	-13.0400
9/27/2018 19:11:47	PBW-322634	Pb (220.353 nm)	> 100.00	-0.0001 u (ppm)	2.7901
9/27/2018 19:11:47	PBW-322634	Sb (217.582 nm)	64.72	0.0024 (ppm)	3.8749

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:11:47	PBW-322634	Se (196.026 nm)	> 100.00	-0.0002 u (ppm)	4.5604
9/27/2018 19:11:47	PBW-322634	Sn (189.925 nm)	> 100.00	-0.0004 u (ppm)	0.2586
9/27/2018 19:11:47	PBW-322634	Sr (216.596 nm)	> 100.00	0.0000 u (ppm)	1.0052
9/27/2018 19:11:47	PBW-322634	Ti (336.122 nm)	29.39	-0.0015 u (ppm)	-32.1684
9/27/2018 19:11:47	PBW-322634	Tl (351.923 nm)	59.80	0.0028 (ppm)	19.4325
9/27/2018 19:11:47	PBW-322634	V (292.401 nm)	54.26	-0.0002 u (ppm)	122.0100
9/27/2018 19:11:47	PBW-322634	Y (360.074 nm)	1.68	1.01 (Ratio)	1064426.36
9/27/2018 19:11:47	PBW-322634	Y_R (360.074 nm)	1.68	1.01 (Ratio)	1064873.94
9/27/2018 19:11:47	PBW-322634	Zn (213.857 nm)	3.48	0.0041 (ppm)	77.1077
9/27/2018 19:15:01	FBLK-322634	Ag (328.068 nm)	27.57	0.0002 (ppm)	-173.3012
9/27/2018 19:15:01	FBLK-322634	Al (394.401 nm)	24.85	0.0019 (ppm)	120.8109
9/27/2018 19:15:01	FBLK-322634	As (188.980 nm)	> 100.00	-0.0009 u (ppm)	-1.3222
9/27/2018 19:15:01	FBLK-322634	B (249.772 nm)	5.64	0.0032 (ppm)	95.7900
9/27/2018 19:15:01	FBLK-322634	Ba (230.424 nm)	41.82	-0.0002 u (ppm)	27.6022
9/27/2018 19:15:01	FBLK-322634	Be (313.107 nm)	9.29	0.0000 u (ppm)	-431.4515
9/27/2018 19:15:01	FBLK-322634	Ca (227.547 nm)	> 100.00	0.0247 u (ppm)	8.1214
9/27/2018 19:15:01	FBLK-322634	Cd (214.439 nm)	32.59	-0.0003 u (ppm)	7.7752
9/27/2018 19:15:01	FBLK-322634	Co (230.786 nm)	19.27	-0.0002 u (ppm)	-5.9645
9/27/2018 19:15:01	FBLK-322634	Cr (267.716 nm)	31.40	0.0002 (ppm)	17.3896
9/27/2018 19:15:01	FBLK-322634	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	39.1371
9/27/2018 19:15:01	FBLK-322634	Fe (234.350 nm)	40.77	-0.0006 u (ppm)	61.2619
9/27/2018 19:15:01	FBLK-322634	K (766.491 nm)	5.44	0.0178 (ppm)	8.3086
9/27/2018 19:15:01	FBLK-322634	Mg (279.078 nm)	> 100.00	0.0005 u (ppm)	1.5016
9/27/2018 19:15:01	FBLK-322634	Mn (257.610 nm)	0.72	0.0006 (ppm)	181.1496
9/27/2018 19:15:01	FBLK-322634	Mo (202.032 nm)	3.45	-0.0063 u (ppm)	3.2907
9/27/2018 19:15:01	FBLK-322634	Na (588.995 nm)	3.11	0.0189 (ppm)	-5967.4344
9/27/2018 19:15:01	FBLK-322634	Ni (230.299 nm)	69.77	-0.0001 u (ppm)	-17.8708
9/27/2018 19:15:01	FBLK-322634	Pb (220.353 nm)	> 100.00	-0.0002 u (ppm)	2.6579
9/27/2018 19:15:01	FBLK-322634	Sb (217.582 nm)	57.63	0.0023 (ppm)	3.7962
9/27/2018 19:15:01	FBLK-322634	Se (196.026 nm)	98.01	-0.0017 u (ppm)	3.2928
9/27/2018 19:15:01	FBLK-322634	Sn (189.925 nm)	33.34	-0.0015 u (ppm)	-1.0925
9/27/2018 19:15:01	FBLK-322634	Sr (216.596 nm)	21.40	-0.0003 u (ppm)	-3.2888
9/27/2018 19:15:01	FBLK-322634	Ti (336.122 nm)	11.37	-0.0021 u (ppm)	-139.6113
9/27/2018 19:15:01	FBLK-322634	Tl (351.923 nm)	> 100.00	0.0002 u (ppm)	13.1177
9/27/2018 19:15:01	FBLK-322634	V (292.401 nm)	91.08	-0.0003 u (ppm)	118.4462
9/27/2018 19:15:01	FBLK-322634	Y (360.074 nm)	1.49	1.01 (Ratio)	1063441.22
9/27/2018 19:15:01	FBLK-322634	Y_R (360.074 nm)	1.49	1.01 (Ratio)	1063878.55
9/27/2018 19:15:01	FBLK-322634	Zn (213.857 nm)	0.91	0.0137 (ppm)	318.5570
9/27/2018 19:18:16	LCSW-322634	Ag (328.068 nm)	1.61	0.0506 (ppm)	2967.5735
9/27/2018 19:18:16	LCSW-322634	Al (394.401 nm)	1.29	1.8861 (ppm)	22951.8254
9/27/2018 19:18:16	LCSW-322634	As (188.980 nm)	16.54	0.0391 (ppm)	29.8506
9/27/2018 19:18:16	LCSW-322634	B (249.772 nm)	1.04	1.0099 (ppm)	23245.7519
9/27/2018 19:18:16	LCSW-322634	Ba (230.424 nm)	1.03	2.0538 (ppm)	60932.8871
9/27/2018 19:18:16	LCSW-322634	Be (313.107 nm)	1.13	0.0502 (ppm)	65183.9725
9/27/2018 19:18:16	LCSW-322634	Ca (227.547 nm)	0.69	2.1617 (ppm)	118.1288
9/27/2018 19:18:16	LCSW-322634	Cd (214.439 nm)	0.95	0.0515 (ppm)	1026.6870
9/27/2018 19:18:16	LCSW-322634	Co (230.786 nm)	1.26	0.5191 (ppm)	4517.5702
9/27/2018 19:18:16	LCSW-322634	Cr (267.716 nm)	1.13	0.2026 (ppm)	8780.3347
9/27/2018 19:18:16	LCSW-322634	Cu (327.395 nm)	1.08	0.2499 (ppm)	13789.1631
9/27/2018 19:18:16	LCSW-322634	Fe (234.350 nm)	1.11	0.9774 (ppm)	9342.8943
9/27/2018 19:18:16	LCSW-322634	K (766.491 nm)	1.25	19.1299 (ppm)	56734.5537

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:18:16	LCSW-322634	Mg (279.078 nm)	1.18	2.0123 (ppm)	3421.7146
9/27/2018 19:18:16	LCSW-322634	Mn (257.610 nm)	1.03	0.5036 (ppm)	136369.8186
9/27/2018 19:18:16	LCSW-322634	Mo (202.032 nm)	1.03	0.5262 (ppm)	2247.5389
9/27/2018 19:18:16	LCSW-322634	Na (588.995 nm)	1.30	19.5387 (ppm)	847769.7806
9/27/2018 19:18:16	LCSW-322634	Ni (230.299 nm)	1.16	0.5053 (ppm)	2922.9782
9/27/2018 19:18:16	LCSW-322634	Pb (220.353 nm)	0.98	0.5172 (ppm)	1011.6028
9/27/2018 19:18:16	LCSW-322634	Sb (217.582 nm)	1.92	0.4747 (ppm)	584.4922
9/27/2018 19:18:16	LCSW-322634	Se (196.026 nm)	1.45	1.0470 (ppm)	856.1221
9/27/2018 19:18:16	LCSW-322634	Sn (189.925 nm)	1.20	5.0736 (ppm)	5923.3485
9/27/2018 19:18:16	LCSW-322634	Sr (216.596 nm)	1.20	2.0360 (ppm)	26646.0221
9/27/2018 19:18:16	LCSW-322634	Ti (336.122 nm)	1.18	0.4941 (ppm)	92468.0211
9/27/2018 19:18:16	LCSW-322634	Tl (351.923 nm)	1.29	1.9174 (ppm)	4670.1200
9/27/2018 19:18:16	LCSW-322634	V (292.401 nm)	1.10	0.4939 (ppm)	16900.5853
9/27/2018 19:18:16	LCSW-322634	Y (360.074 nm)	1.33	0.98 (Ratio)	1031021.86
9/27/2018 19:18:16	LCSW-322634	Y_R (360.074 nm)	1.33	0.98 (Ratio)	1031422.55
9/27/2018 19:18:16	LCSW-322634	Zn (213.857 nm)	1.39	0.5307 (ppm)	13319.4281
9/27/2018 19:21:30	R1808910-001	Ag (328.068 nm)	32.25	0.0002 (ppm)	-174.7574
9/27/2018 19:21:30	R1808910-001	Al (394.401 nm)	3.30	0.0138 (ppm)	265.3715
9/27/2018 19:21:30	R1808910-001	As (188.980 nm)	> 100.00	-0.0008 u (ppm)	-1.2599
9/27/2018 19:21:30	R1808910-001	B (249.772 nm)	0.90	0.3402 (ppm)	7844.3647
9/27/2018 19:21:30	R1808910-001	Ba (230.424 nm)	2.15	0.0121 (ppm)	391.3709
9/27/2018 19:21:30	R1808910-001	Be (313.107 nm)	35.94	0.0000 u (ppm)	-439.7247
9/27/2018 19:21:30	R1808910-001	Ca (227.547 nm)	1.25	23.9949 (ppm)	1242.0426
9/27/2018 19:21:30	R1808910-001	Cd (214.439 nm)	> 100.00	-0.0002 u (ppm)	9.8615
9/27/2018 19:21:30	R1808910-001	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.5752
9/27/2018 19:21:30	R1808910-001	Cr (267.716 nm)	5.33	-0.0005 u (ppm)	-10.2822
9/27/2018 19:21:30	R1808910-001	Cu (327.395 nm)	42.04	0.0002 (ppm)	51.8472
9/27/2018 19:21:30	R1808910-001	Fe (234.350 nm)	6.68	0.0102 (ppm)	163.2916
9/27/2018 19:21:30	R1808910-001	K (766.491 nm)	1.26	3.3020 (ppm)	9756.1981
9/27/2018 19:21:30	R1808910-001	Mg (279.078 nm)	0.93	28.0761 (ppm)	47731.7244
9/27/2018 19:21:30	R1808910-001	Mn (257.610 nm)	2.12	0.0022 (ppm)	616.7973
9/27/2018 19:21:30	R1808910-001	Mo (202.032 nm)	42.14	-0.0021 u (ppm)	20.9348
9/27/2018 19:21:30	R1808910-001	Na (588.995 nm)	1.42	55.0241 o (ppm)	2399795.3496
9/27/2018 19:21:30	R1808910-001	Ni (230.299 nm)	4.62	-0.0137 u (ppm)	-97.3235
9/27/2018 19:21:30	R1808910-001	Pb (220.353 nm)	> 100.00	-0.0007 u (ppm)	1.5881
9/27/2018 19:21:30	R1808910-001	Sb (217.582 nm)	40.57	0.0014 (ppm)	2.7308
9/27/2018 19:21:30	R1808910-001	Se (196.026 nm)	> 100.00	0.0014 (ppm)	5.8609
9/27/2018 19:21:30	R1808910-001	Sn (189.925 nm)	65.00	0.0011 (ppm)	1.9934
9/27/2018 19:21:30	R1808910-001	Sr (216.596 nm)	0.71	2.3106 (ppm)	30239.8511
9/27/2018 19:21:30	R1808910-001	Ti (336.122 nm)	67.87	-0.0009 u (ppm)	88.2927
9/27/2018 19:21:30	R1808910-001	Tl (351.923 nm)	40.40	-0.0021 u (ppm)	7.4108
9/27/2018 19:21:30	R1808910-001	V (292.401 nm)	90.70	0.0002 (ppm)	133.5228
9/27/2018 19:21:30	R1808910-001	Y (360.074 nm)	1.17	0.95 (Ratio)	1006232.62
9/27/2018 19:21:30	R1808910-001	Y_R (360.074 nm)	1.17	0.95 (Ratio)	1006610.21
9/27/2018 19:21:30	R1808910-001	Zn (213.857 nm)	2.06	0.0061 (ppm)	127.6606
9/27/2018 19:24:45	R1808910-002	Ag (328.068 nm)	46.81	0.0004 (ppm)	-160.6840
9/27/2018 19:24:45	R1808910-002	Al (394.401 nm)	3.94	0.0243 (ppm)	392.2840
9/27/2018 19:24:45	R1808910-002	As (188.980 nm)	> 100.00	0.0020 u (ppm)	0.9259
9/27/2018 19:24:45	R1808910-002	B (249.772 nm)	1.11	0.2204 (ppm)	5090.1286
9/27/2018 19:24:45	R1808910-002	Be (230.424 nm)	1.55	0.0290 (ppm)	892.7048
9/27/2018 19:24:45	R1808910-002	Be (313.107 nm)	6.04	0.0000 u (ppm)	-451.7813

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:24:45	R1808910-002	Ca (227.547 nm)	1.15	147.2549 o (ppm)	7587.1492
9/27/2018 19:24:45	R1808910-002	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	12.5161
9/27/2018 19:24:45	R1808910-002	Co (230.786 nm)	> 100.00	-0.0003 u (ppm)	-6.3404
9/27/2018 19:24:45	R1808910-002	Cr (267.716 nm)	6.08	-0.0008 u (ppm)	-23.3757
9/27/2018 19:24:45	R1808910-002	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	38.0874
9/27/2018 19:24:45	R1808910-002	Fe (234.350 nm)	2.27	0.0096 (ppm)	157.2037
9/27/2018 19:24:45	R1808910-002	K (766.491 nm)	1.45	3.4921 (ppm)	10320.3724
9/27/2018 19:24:45	R1808910-002	Mg (279.078 nm)	0.92	85.2311 o (ppm)	144898.2723
9/27/2018 19:24:45	R1808910-002	Mn (257.610 nm)	0.93	0.0310 (ppm)	8410.5525
9/27/2018 19:24:45	R1808910-002	Mo (202.032 nm)	14.56	-0.0069 u (ppm)	0.5948
9/27/2018 19:24:45	R1808910-002	Na (588.995 nm)	1.43	56.3958 o (ppm)	2459791.2551
9/27/2018 19:24:45	R1808910-002	Ni (230.299 nm)	3.30	-0.0215 u (ppm)	-142.3308
9/27/2018 19:24:45	R1808910-002	Pb (220.353 nm)	78.70	-0.0020 u (ppm)	-1.0114
9/27/2018 19:24:45	R1808910-002	Sb (217.582 nm)	> 100.00	0.0008 u (ppm)	1.9539
9/27/2018 19:24:45	R1808910-002	Se (196.026 nm)	> 100.00	-0.0026 u (ppm)	2.5911
9/27/2018 19:24:45	R1808910-002	Sn (189.925 nm)	78.91	-0.0031 u (ppm)	-2.9725
9/27/2018 19:24:45	R1808910-002	Sr (216.596 nm)	1.16	2.0504 (ppm)	26834.8476
9/27/2018 19:24:45	R1808910-002	Ti (336.122 nm)	20.95	-0.0014 u (ppm)	-7.5466
9/27/2018 19:24:45	R1808910-002	Tl (351.923 nm)	62.18	0.0063 (ppm)	27.8607
9/27/2018 19:24:45	R1808910-002	V (292.401 nm)	83.71	0.0002 (ppm)	134.5226
9/27/2018 19:24:45	R1808910-002	Y (360.074 nm)	1.25	0.92 (Ratio)	969341.18
9/27/2018 19:24:45	R1808910-002	Y_R (360.074 nm)	1.25	0.92 (Ratio)	969676.25
9/27/2018 19:24:45	R1808910-002	Zn (213.857 nm)	2.24	0.0064 (ppm)	135.6834
9/27/2018 19:28:01	R1808910-003	Ag (328.068 nm)	16.74	0.0003 (ppm)	-166.6819
9/27/2018 19:28:01	R1808910-003	Al (394.401 nm)	2.04	0.0465 (ppm)	660.7361
9/27/2018 19:28:01	R1808910-003	As (188.980 nm)	57.37	-0.0010 u (ppm)	-1.4321
9/27/2018 19:28:01	R1808910-003	B (249.772 nm)	0.94	0.1122 (ppm)	2602.6195
9/27/2018 19:28:01	R1808910-003	Ba (230.424 nm)	0.70	0.0364 (ppm)	1112.0525
9/27/2018 19:28:01	R1808910-003	Be (313.107 nm)	23.38	0.0000 u (ppm)	-434.3696
9/27/2018 19:28:01	R1808910-003	Ca (227.547 nm)	1.22	202.6324 o (ppm)	10437.8394
9/27/2018 19:28:01	R1808910-003	Cd (214.439 nm)	65.43	-0.0001 u (ppm)	11.4335
9/27/2018 19:28:01	R1808910-003	Co (230.786 nm)	> 100.00	-0.0001 u (ppm)	-4.8025
9/27/2018 19:28:01	R1808910-003	Cr (267.716 nm)	15.03	-0.0011 u (ppm)	-37.6741
9/27/2018 19:28:01	R1808910-003	Cu (327.395 nm)	34.45	0.0005 (ppm)	65.5041
9/27/2018 19:28:01	R1808910-003	Fe (234.350 nm)	0.86	3.7209 (ppm)	35382.4963
9/27/2018 19:28:01	R1808910-003	K (766.491 nm)	1.07	7.5173 (ppm)	22267.4955
9/27/2018 19:28:01	R1808910-003	Mg (279.078 nm)	0.95	22.2098 (ppm)	37758.6310
9/27/2018 19:28:01	R1808910-003	Mn (257.610 nm)	0.86	1.5353 (ppm)	415697.8867
9/27/2018 19:28:01	R1808910-003	Mo (202.032 nm)	11.50	-0.0051 u (ppm)	8.1066
9/27/2018 19:28:01	R1808910-003	Na (588.995 nm)	1.30	9.7241 (ppm)	418510.9862
9/27/2018 19:28:01	R1808910-003	Ni (230.299 nm)	12.76	-0.0126 u (ppm)	-90.5920
9/27/2018 19:28:01	R1808910-003	Pb (220.353 nm)	65.89	-0.0001 u (ppm)	2.7713
9/27/2018 19:28:01	R1808910-003	Sb (217.582 nm)	18.86	0.0027 (ppm)	4.3058
9/27/2018 19:28:01	R1808910-003	Se (196.026 nm)	82.64	-0.0066 u (ppm)	-0.6496
9/27/2018 19:28:01	R1808910-003	Sn (189.925 nm)	53.65	-0.0021 u (ppm)	-1.7078
9/27/2018 19:28:01	R1808910-003	Sr (216.596 nm)	1.17	2.3634 (ppm)	30930.5134
9/27/2018 19:28:01	R1808910-003	Ti (336.122 nm)	20.93	-0.0009 u (ppm)	86.6358
9/27/2018 19:28:01	R1808910-003	Tl (351.923 nm)	> 100.00	0.0026 u (ppm)	18.9118
9/27/2018 19:28:01	R1808910-003	V (292.401 nm)	> 100.00	0.0002 (ppm)	134.9255
9/27/2018 19:28:01	R1808910-003	Y (360.074 nm)	1.19	0.93 (Ratio)	986193.58
9/27/2018 19:28:01	R1808910-003	Y_R (360.074 nm)	1.19	0.93 (Ratio)	986499.46

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:28:01	R1808910-003	Zn (213.857 nm)	2.47	0.0085 (ppm)	186.8846
9/27/2018 19:31:17	R1808910-004	Ag (328.068 nm)	36.20	0.0002 (ppm)	-174.7781
9/27/2018 19:31:17	R1808910-004	Al (394.401 nm)	3.16	0.0665 (ppm)	903.6510
9/27/2018 19:31:17	R1808910-004	As (188.980 nm)	> 100.00	-0.0001 u (ppm)	-0.7174
9/27/2018 19:31:17	R1808910-004	B (249.772 nm)	1.02	0.1538 (ppm)	3558.8448
9/27/2018 19:31:17	R1808910-004	Ba (230.424 nm)	1.50	0.0869 (ppm)	2610.3875
9/27/2018 19:31:17	R1808910-004	Be (313.107 nm)	10.44	0.0000 u (ppm)	-448.9209
9/27/2018 19:31:17	R1808910-004	Ca (227.547 nm)	1.27	104.3152 o (ppm)	5376.7272
9/27/2018 19:31:17	R1808910-004	Cd (214.439 nm)	68.50	-0.0002 u (ppm)	10.4086
9/27/2018 19:31:17	R1808910-004	Co (230.786 nm)	35.16	-0.0005 u (ppm)	-8.2212
9/27/2018 19:31:17	R1808910-004	Cr (267.716 nm)	24.17	-0.0006 u (ppm)	-17.8491
9/27/2018 19:31:17	R1808910-004	Cu (327.395 nm)	6.62	0.0009 (ppm)	90.4422
9/27/2018 19:31:17	R1808910-004	Fe (234.350 nm)	0.22	0.1519 (ppm)	1508.2029
9/27/2018 19:31:17	R1808910-004	K (766.491 nm)	1.72	1.2751 (ppm)	3740.2413
9/27/2018 19:31:17	R1808910-004	Mg (279.078 nm)	0.91	58.7192 o (ppm)	99826.5857
9/27/2018 19:31:17	R1808910-004	Mn (257.610 nm)	0.91	0.2418 (ppm)	65475.2861
9/27/2018 19:31:17	R1808910-004	Mo (202.032 nm)	2.75	0.0067 (ppm)	58.1539
9/27/2018 19:31:17	R1808910-004	Na (588.995 nm)	1.19	43.0720 (ppm)	1877044.6841
9/27/2018 19:31:17	R1808910-004	Ni (230.299 nm)	2.10	-0.0086 u (ppm)	-67.6663
9/27/2018 19:31:17	R1808910-004	Pb (220.353 nm)	> 100.00	-0.0015 u (ppm)	0.0353
9/27/2018 19:31:17	R1808910-004	Sb (217.582 nm)	> 100.00	0.0010 u (ppm)	2.1639
9/27/2018 19:31:17	R1808910-004	Se (196.026 nm)	55.40	-0.0048 u (ppm)	0.7789
9/27/2018 19:31:17	R1808910-004	Sn (189.925 nm)	31.12	-0.0025 u (ppm)	-2.2527
9/27/2018 19:31:17	R1808910-004	Sr (216.596 nm)	1.06	2.8462 (ppm)	37249.2001
9/27/2018 19:31:17	R1808910-004	Ti (336.122 nm)	12.23	-0.0010 u (ppm)	58.4467
9/27/2018 19:31:17	R1808910-004	Tl (351.923 nm)	> 100.00	-0.0002 u (ppm)	12.0133
9/27/2018 19:31:17	R1808910-004	V (292.401 nm)	> 100.00	0.0002 u (ppm)	133.2453
9/27/2018 19:31:17	R1808910-004	Y (360.074 nm)	1.17	0.94 (Ratio)	989219.61
9/27/2018 19:31:17	R1808910-004	Y_R (360.074 nm)	1.17	0.94 (Ratio)	989506.69
9/27/2018 19:31:17	R1808910-004	Zn (213.857 nm)	2.68	0.0107 (ppm)	244.1625
9/27/2018 19:34:32	R1808910-006	Ag (328.068 nm)	42.35	0.0003 (ppm)	-165.3450
9/27/2018 19:34:32	R1808910-006	Al (394.401 nm)	2.25	0.0319 (ppm)	484.5050
9/27/2018 19:34:32	R1808910-006	As (188.980 nm)	> 100.00	-0.0019 u (ppm)	-2.1058
9/27/2018 19:34:32	R1808910-006	B (249.772 nm)	0.34	0.0229 (ppm)	549.2712
9/27/2018 19:34:32	R1808910-006	Ba (230.424 nm)	0.94	0.1094 (ppm)	3277.4695
9/27/2018 19:34:32	R1808910-006	Be (313.107 nm)	47.56	0.0000 u (ppm)	-447.1493
9/27/2018 19:34:32	R1808910-006	Ca (227.547 nm)	0.96	219.1878 o (ppm)	11290.0709
9/27/2018 19:34:32	R1808910-006	Cd (214.439 nm)	36.33	0.0003 (ppm)	19.4685
9/27/2018 19:34:32	R1808910-006	Co (230.786 nm)	2.54	0.0126 (ppm)	105.9058
9/27/2018 19:34:32	R1808910-006	Cr (267.716 nm)	12.03	-0.0008 u (ppm)	-25.0232
9/27/2018 19:34:32	R1808910-006	Cu (327.395 nm)	35.61	0.0007 (ppm)	78.6003
9/27/2018 19:34:32	R1808910-006	Fe (234.350 nm)	20.14	0.0047 (ppm)	111.6296
9/27/2018 19:34:32	R1808910-006	K (766.491 nm)	1.37	1.2625 (ppm)	3702.7650
9/27/2018 19:34:32	R1808910-006	Mg (279.078 nm)	0.78	62.4097 o (ppm)	106100.7277
9/27/2018 19:34:32	R1808910-006	Mn (257.610 nm)	0.87	0.3559 (ppm)	96362.6015
9/27/2018 19:34:32	R1808910-006	Mo (202.032 nm)	18.01	-0.0058 u (ppm)	5.4128
9/27/2018 19:34:32	R1808910-006	Na (588.995 nm)	1.11	38.2334 (ppm)	1665418.4821
9/27/2018 19:34:32	R1808910-006	Ni (230.299 nm)	0.32	0.2818 (ppm)	1622.3416
9/27/2018 19:34:32	R1808910-006	Pb (220.353 nm)	38.20	-0.0017 u (ppm)	-0.3241
9/27/2018 19:34:32	R1808910-006	Sb (217.582 nm)	93.18	0.0038 (ppm)	5.5949
9/27/2018 19:34:32	R1808910-006	Se (196.026 nm)	94.28	-0.0040 u (ppm)	1.4569

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:34:32	R1808910-006	Sn (189.925 nm)	79.51	-0.0020 u (ppm)	-1.6907
9/27/2018 19:34:32	R1808910-006	Sr (216.596 nm)	0.42	0.4053 (ppm)	5304.3022
9/27/2018 19:34:32	R1808910-006	Ti (336.122 nm)	9.29	-0.0012 u (ppm)	19.8726
9/27/2018 19:34:32	R1808910-006	Tl (351.923 nm)	32.76	0.0035 (ppm)	21.0259
9/27/2018 19:34:32	R1808910-006	V (292.401 nm)	16.30	0.0013 (ppm)	170.7807
9/27/2018 19:34:32	R1808910-006	Y (360.074 nm)	1.10	0.92 (Ratio)	969337.41
9/27/2018 19:34:32	R1808910-006	Y_R (360.074 nm)	1.10	0.92 (Ratio)	969602.26
9/27/2018 19:34:32	R1808910-006	Zn (213.857 nm)	1.66	0.0096 (ppm)	214.5570
9/27/2018 19:37:47	R1808910-007	Ag (328.068 nm)	64.40	0.0002 (ppm)	-169.7426
9/27/2018 19:37:47	R1808910-007	Al (394.401 nm)	3.22	0.0273 (ppm)	428.1179
9/27/2018 19:37:47	R1808910-007	As (188.980 nm)	> 100.00	0.0000 u (ppm)	-0.5979
9/27/2018 19:37:47	R1808910-007	B (249.772 nm)	0.59	0.0489 (ppm)	1147.2269
9/27/2018 19:37:47	R1808910-007	Ba (230.424 nm)	1.82	0.0355 (ppm)	1084.5388
9/27/2018 19:37:47	R1808910-007	Be (313.107 nm)	6.69	0.0000 u (ppm)	-438.9189
9/27/2018 19:37:47	R1808910-007	Ca (227.547 nm)	1.35	196.5976 o (ppm)	10127.1874
9/27/2018 19:37:47	R1808910-007	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	12.0368
9/27/2018 19:37:47	R1808910-007	Co (230.786 nm)	> 100.00	0.0003 u (ppm)	-1.1875
9/27/2018 19:37:47	R1808910-007	Cr (267.716 nm)	26.86	-0.0009 u (ppm)	-31.1329
9/27/2018 19:37:47	R1808910-007	Cu (327.395 nm)	26.00	0.0003 (ppm)	56.8775
9/27/2018 19:37:47	R1808910-007	Fe (234.350 nm)	3.34	0.0106 (ppm)	166.9152
9/27/2018 19:37:47	R1808910-007	K (766.491 nm)	1.76	1.0920 (ppm)	3196.5818
9/27/2018 19:37:47	R1808910-007	Mg (279.078 nm)	1.02	57.3566 o (ppm)	97510.1585
9/27/2018 19:37:47	R1808910-007	Mn (257.610 nm)	1.04	0.4120 (ppm)	111576.2618
9/27/2018 19:37:47	R1808910-007	Mo (202.032 nm)	12.87	-0.0058 u (ppm)	5.2495
9/27/2018 19:37:47	R1808910-007	Na (588.995 nm)	1.36	42.7002 (ppm)	1860783.4836
9/27/2018 19:37:47	R1808910-007	Ni (230.299 nm)	17.57	-0.0062 u (ppm)	-53.2224
9/27/2018 19:37:47	R1808910-007	Pb (220.353 nm)	> 100.00	0.0007 u (ppm)	4.3044
9/27/2018 19:37:47	R1808910-007	Sb (217.582 nm)	> 100.00	0.0009 u (ppm)	2.1057
9/27/2018 19:37:47	R1808910-007	Se (196.026 nm)	56.49	-0.0057 u (ppm)	0.0421
9/27/2018 19:37:47	R1808910-007	Sn (189.925 nm)	43.76	-0.0020 u (ppm)	-1.5930
9/27/2018 19:37:47	R1808910-007	Sr (216.596 nm)	1.35	0.3219 (ppm)	4213.8653
9/27/2018 19:37:47	R1808910-007	Ti (336.122 nm)	13.91	-0.0015 u (ppm)	-26.7793
9/27/2018 19:37:47	R1808910-007	Tl (351.923 nm)	25.13	0.0079 (ppm)	31.8339
9/27/2018 19:37:47	R1808910-007	V (292.401 nm)	28.00	0.0004 (ppm)	140.3604
9/27/2018 19:37:47	R1808910-007	Y (360.074 nm)	1.25	0.92 (Ratio)	973052.34
9/27/2018 19:37:47	R1808910-007	Y_R (360.074 nm)	1.25	0.92 (Ratio)	973352.31
9/27/2018 19:37:47	R1808910-007	Zn (213.857 nm)	0.69	0.0066 (ppm)	139.6393
9/27/2018 19:41:02	R1808910-008	Ag (328.068 nm)	29.57	0.0001 (ppm)	-178.6274
9/27/2018 19:41:02	R1808910-008	Al (394.401 nm)	2.95	0.0471 (ppm)	668.2988
9/27/2018 19:41:02	R1808910-008	As (188.980 nm)	> 100.00	0.0011 u (ppm)	0.2632
9/27/2018 19:41:02	R1808910-008	B (249.772 nm)	0.95	0.1165 (ppm)	2701.5221
9/27/2018 19:41:02	R1808910-008	Ba (230.424 nm)	1.35	0.1265 (ppm)	3784.6885
9/27/2018 19:41:02	R1808910-008	Be (313.107 nm)	10.81	0.0000 u (ppm)	-430.4616
9/27/2018 19:41:02	R1808910-008	Ca (227.547 nm)	1.10	128.9734 o (ppm)	6646.0668
9/27/2018 19:41:02	R1808910-008	Cd (214.439 nm)	15.03	-0.0002 u (ppm)	10.0842
9/27/2018 19:41:02	R1808910-008	Co (230.786 nm)	78.02	-0.0003 u (ppm)	-6.8512
9/27/2018 19:41:02	R1808910-008	Cr (267.716 nm)	5.23	-0.0008 u (ppm)	-24.9634
9/27/2018 19:41:02	R1808910-008	Cu (327.395 nm)	51.86	0.0002 (ppm)	52.2070
9/27/2018 19:41:02	R1808910-008	Fe (234.350 nm)	1.05	0.9797 (ppm)	9365.1575
9/27/2018 19:41:02	R1808910-008	K (766.491 nm)	1.31	3.1848 (ppm)	9408.2540
9/27/2018 19:41:02	R1808910-008	Mg (279.078 nm)	1.04	38.8092 (ppm)	65978.5697

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:41:02	R1808910-008	Mn (257.610 nm)	1.11	0.5739 (ppm)	155394.8255
9/27/2018 19:41:02	R1808910-008	Mo (202.032 nm)	21.10	-0.0044 u (ppm)	11.4454
9/27/2018 19:41:02	R1808910-008	Na (588.995 nm)	1.25	26.5966 (ppm)	1156460.9788
9/27/2018 19:41:02	R1808910-008	Ni (230.299 nm)	6.12	-0.0141 u (ppm)	-99.2901
9/27/2018 19:41:02	R1808910-008	Pb (220.353 nm)	72.02	-0.0011 u (ppm)	0.9091
9/27/2018 19:41:02	R1808910-008	Sb (217.582 nm)	> 100.00	0.0022 u (ppm)	3.7120
9/27/2018 19:41:02	R1808910-008	Se (196.026 nm)	70.24	-0.0036 u (ppm)	1.7620
9/27/2018 19:41:02	R1808910-008	Sn (189.925 nm)	> 100.00	-0.0018 u (ppm)	-1.3713
9/27/2018 19:41:02	R1808910-008	Sr (216.596 nm)	1.14	0.6329 (ppm)	8283.4344
9/27/2018 19:41:02	R1808910-008	Ti (336.122 nm)	6.34	-0.0015 u (ppm)	-21.4167
9/27/2018 19:41:02	R1808910-008	Tl (351.923 nm)	> 100.00	0.0005 u (ppm)	13.8231
9/27/2018 19:41:02	R1808910-008	V (292.401 nm)	> 100.00	0.0001 u (ppm)	131.3229
9/27/2018 19:41:02	R1808910-008	Y (360.074 nm)	1.50	0.94 (Ratio)	991806.91
9/27/2018 19:41:02	R1808910-008	Y_R (360.074 nm)	1.50	0.94 (Ratio)	992123.22
9/27/2018 19:41:02	R1808910-008	Zn (213.857 nm)	2.16	0.0089 (ppm)	197.2447
9/27/2018 19:44:16	Continuing Calibration Verification	Ag (328.068 nm)	0.61	0.5036 (ppm)	31196.2829
9/27/2018 19:44:16	Continuing Calibration Verification	Al (394.401 nm)	0.49	9.6006 (ppm)	116427.9638
9/27/2018 19:44:16	Continuing Calibration Verification	As (188.980 nm)	1.06	0.9709 (ppm)	755.5177
9/27/2018 19:44:16	Continuing Calibration Verification	B (249.772 nm)	0.66	2.5055 (ppm)	57637.6781
9/27/2018 19:44:16	Continuing Calibration Verification	Ba (230.424 nm)	0.72	10.1493 (ppm)	300986.4472
9/27/2018 19:44:16	Continuing Calibration Verification	Be (313.107 nm)	0.67	0.2532 (ppm)	330155.9219
9/27/2018 19:44:16	Continuing Calibration Verification	Ca (227.547 nm)	0.44	24.3389 (ppm)	1259.7498
9/27/2018 19:44:16	Continuing Calibration Verification	Cd (214.439 nm)	0.75	0.5031 (ppm)	9901.7803
9/27/2018 19:44:16	Continuing Calibration Verification	Co (230.786 nm)	0.55	2.6027 (ppm)	22667.0722
9/27/2018 19:44:16	Continuing Calibration Verification	Cr (267.716 nm)	0.73	0.5191 (ppm)	22483.0863
9/27/2018 19:44:16	Continuing Calibration Verification	Cu (327.395 nm)	0.48	1.2268 (ppm)	67530.0697
9/27/2018 19:44:16	Continuing Calibration Verification	Fe (234.350 nm)	0.71	4.8781 (ppm)	46366.1216
9/27/2018 19:44:16	Continuing Calibration Verification	K (766.491 nm)	0.26	24.3324 (ppm)	72175.9696
9/27/2018 19:44:16	Continuing Calibration Verification	Mg (279.078 nm)	0.60	24.5829 (ppm)	41793.0313
9/27/2018 19:44:16	Continuing Calibration Verification	Mn (257.610 nm)	0.68	0.7703 (ppm)	208581.0940
9/27/2018 19:44:16	Continuing Calibration Verification	Mo (202.032 nm)	0.54	2.6610 (ppm)	11244.7040
9/27/2018 19:44:16	Continuing Calibration Verification	Na (588.995 nm)	0.34	24.4880 (ppm)	1064239.7071
9/27/2018 19:44:16	Continuing Calibration Verification	Ni (230.299 nm)	0.69	2.0642 (ppm)	11993.4346
9/27/2018 19:44:16	Continuing Calibration Verification	Pb (220.353 nm)	0.53	0.5102 (ppm)	997.9407
9/27/2018 19:44:16	Continuing Calibration Verification	Sb (217.582 nm)	0.64	4.9195 (ppm)	6047.8347
9/27/2018 19:44:16	Continuing Calibration Verification	Se (196.026 nm)	0.83	0.4874 (ppm)	401.0430
9/27/2018 19:44:16	Continuing Calibration Verification	Sn (189.925 nm)	0.64	5.0446 (ppm)	5889.4839
9/27/2018 19:44:16	Continuing Calibration Verification	Sr (216.596 nm)	0.74	2.5475 (ppm)	33340.0467
9/27/2018 19:44:16	Continuing Calibration Verification	Ti (336.122 nm)	0.53	2.5206 (ppm)	470655.8442
9/27/2018 19:44:16	Continuing Calibration Verification	Tl (351.923 nm)	0.80	1.0035 (ppm)	2450.1553
9/27/2018 19:44:16	Continuing Calibration Verification	V (292.401 nm)	0.77	2.5190 (ppm)	85666.3412
9/27/2018 19:44:16	Continuing Calibration Verification	Y (360.074 nm)	0.14	0.95 (Ratio)	1002118.81
9/27/2018 19:44:16	Continuing Calibration Verification	Y_R (360.074 nm)	0.14	0.95 (Ratio)	1002430.70
9/27/2018 19:44:16	Continuing Calibration Verification	Zn (213.857 nm)	0.75	0.9968 (ppm)	25043.2038
9/27/2018 19:47:30	Continuing Calibration Blank	Ag (328.068 nm)	31.12	0.0002 (ppm)	-175.5061
9/27/2018 19:47:30	Continuing Calibration Blank	Al (394.401 nm)	> 100.00	0.0002 u (ppm)	100.1180
9/27/2018 19:47:30	Continuing Calibration Blank	As (188.980 nm)	> 100.00	0.0003 u (ppm)	-0.3467
9/27/2018 19:47:30	Continuing Calibration Blank	B (249.772 nm)	24.45	0.0012 (ppm)	49.3166
9/27/2018 19:47:30	Continuing Calibration Blank	Ba (230.424 nm)	> 100.00	-0.0001 u (ppm)	31.4324
9/27/2018 19:47:30	Continuing Calibration Blank	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-397.9503
9/27/2018 19:47:30	Continuing Calibration Blank	Ca (227.547 nm)	> 100.00	-0.0153 u (ppm)	6.0634

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:47:30	Continuing Calibration Blank	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.1711
9/27/2018 19:47:30	Continuing Calibration Blank	Co (230.786 nm)	> 100.00	0.0001 u (ppm)	-3.5868
9/27/2018 19:47:30	Continuing Calibration Blank	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	10.3538
9/27/2018 19:47:30	Continuing Calibration Blank	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	36.7516
9/27/2018 19:47:30	Continuing Calibration Blank	Fe (234.350 nm)	48.10	0.0023 (ppm)	88.4012
9/27/2018 19:47:30	Continuing Calibration Blank	K (766.491 nm)	18.02	0.0273 (ppm)	36.5325
9/27/2018 19:47:30	Continuing Calibration Blank	Mg (279.078 nm)	> 100.00	0.0002 u (ppm)	1.0372
9/27/2018 19:47:30	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	15.6401
9/27/2018 19:47:30	Continuing Calibration Blank	Mo (202.032 nm)	> 100.00	0.0011 u (ppm)	34.6141
9/27/2018 19:47:30	Continuing Calibration Blank	Na (588.995 nm)	> 100.00	0.0017 u (ppm)	-6718.0711
9/27/2018 19:47:30	Continuing Calibration Blank	Ni (230.299 nm)	50.37	-0.0002 u (ppm)	-18.4904
9/27/2018 19:47:30	Continuing Calibration Blank	Pb (220.353 nm)	> 100.00	-0.0006 u (ppm)	1.7711
9/27/2018 19:47:30	Continuing Calibration Blank	Sb (217.582 nm)	36.92	0.0041 (ppm)	5.9793
9/27/2018 19:47:30	Continuing Calibration Blank	Se (196.026 nm)	73.75	-0.0015 u (ppm)	3.4722
9/27/2018 19:47:30	Continuing Calibration Blank	Sn (189.925 nm)	> 100.00	-0.0005 u (ppm)	0.1656
9/27/2018 19:47:30	Continuing Calibration Blank	Sr (216.596 nm)	> 100.00	0.0000 u (ppm)	1.1985
9/27/2018 19:47:30	Continuing Calibration Blank	Ti (336.122 nm)	68.52	0.0018 (ppm)	593.9222
9/27/2018 19:47:30	Continuing Calibration Blank	Tl (351.923 nm)	> 100.00	0.0023 u (ppm)	18.2437
9/27/2018 19:47:30	Continuing Calibration Blank	V (292.401 nm)	> 100.00	0.0000 u (ppm)	126.7738
9/27/2018 19:47:30	Continuing Calibration Blank	Y (360.074 nm)	0.44	0.99 (Ratio)	1050032.33
9/27/2018 19:47:30	Continuing Calibration Blank	Y_R (360.074 nm)	0.44	1.00 (Ratio)	1050348.58
9/27/2018 19:47:30	Continuing Calibration Blank	Zn (213.857 nm)	76.67	0.0001 (ppm)	-24.2890
9/27/2018 19:50:45	R1808910-009	Ag (328.068 nm)	13.89	0.0003 (ppm)	-168.0967
9/27/2018 19:50:45	R1808910-009	Al (394.401 nm)	3.98	0.0327 (ppm)	493.2747
9/27/2018 19:50:45	R1808910-009	As (188.980 nm)	> 100.00	-0.0007 u (ppm)	-1.1946
9/27/2018 19:50:45	R1808910-009	B (249.772 nm)	1.68	0.0550 (ppm)	1287.2914
9/27/2018 19:50:45	R1808910-009	Ba (230.424 nm)	2.39	0.2971 (ppm)	8842.3787
9/27/2018 19:50:45	R1808910-009	Be (313.107 nm)	10.18	0.0000 u (ppm)	-451.9160
9/27/2018 19:50:45	R1808910-009	Ca (227.547 nm)	1.39	244.5954 o (ppm)	12597.9890
9/27/2018 19:50:45	R1808910-009	Cd (214.439 nm)	> 100.00	0.0001 u (ppm)	15.5713
9/27/2018 19:50:45	R1808910-009	Co (230.786 nm)	> 100.00	0.0002 u (ppm)	-2.2449
9/27/2018 19:50:45	R1808910-009	Cr (267.716 nm)	12.94	-0.0015 u (ppm)	-56.4715
9/27/2018 19:50:45	R1808910-009	Cu (327.395 nm)	34.40	0.0002 (ppm)	47.5238
9/27/2018 19:50:45	R1808910-009	Fe (234.350 nm)	1.05	4.9519 (ppm)	47066.5829
9/27/2018 19:50:45	R1808910-009	K (766.491 nm)	2.40	2.0797 (ppm)	6128.2818
9/27/2018 19:50:45	R1808910-009	Mg (279.078 nm)	1.10	81.5786 o (ppm)	138688.8195
9/27/2018 19:50:45	R1808910-009	Mn (257.610 nm)	1.25	3.1994 o (ppm)	866233.1828
9/27/2018 19:50:45	R1808910-009	Mo (202.032 nm)	14.76	-0.0056 u (ppm)	6.0750
9/27/2018 19:50:45	R1808910-009	Na (588.995 nm)	1.41	182.0182 o (ppm)	7954134.2292
9/27/2018 19:50:45	R1808910-009	Ni (230.299 nm)	10.07	-0.0113 u (ppm)	-83.0433
9/27/2018 19:50:45	R1808910-009	Pb (220.353 nm)	> 100.00	0.0007 u (ppm)	4.3736
9/27/2018 19:50:45	R1808910-009	Sb (217.582 nm)	> 100.00	-0.0006 u (ppm)	0.2940
9/27/2018 19:50:45	R1808910-009	Se (196.026 nm)	65.16	-0.0037 u (ppm)	1.6667
9/27/2018 19:50:45	R1808910-009	Sn (189.925 nm)	56.34	-0.0030 u (ppm)	-2.8212
9/27/2018 19:50:45	R1808910-009	Sr (216.596 nm)	1.82	3.4400 (ppm)	45020.7102
9/27/2018 19:50:45	R1808910-009	Ti (336.122 nm)	> 100.00	-0.0002 u (ppm)	209.7321
9/27/2018 19:50:45	R1808910-009	Tl (351.923 nm)	16.48	0.0064 (ppm)	28.0342
9/27/2018 19:50:45	R1808910-009	V (292.401 nm)	54.63	0.0004 (ppm)	140.4108
9/27/2018 19:50:45	R1808910-009	Y (360.074 nm)	1.40	0.89 (Ratio)	942852.37
9/27/2018 19:50:45	R1808910-009	Y_R (360.074 nm)	1.40	0.89 (Ratio)	943107.44
9/27/2018 19:50:45	R1808910-009	Zn (213.857 nm)	2.33	0.0082 (ppm)	180.0696

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:54:00	R1808910-010	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-179.8486
9/27/2018 19:54:00	R1808910-010	Al (394.401 nm)	1.34	0.0383 (ppm)	562.2232
9/27/2018 19:54:00	R1808910-010	As (188.980 nm)	> 100.00	-0.0009 u (ppm)	-1.3501
9/27/2018 19:54:00	R1808910-010	B (249.772 nm)	0.67	0.0946 (ppm)	2197.6802
9/27/2018 19:54:00	R1808910-010	Ba (230.424 nm)	1.00	0.0886 (ppm)	2661.1502
9/27/2018 19:54:00	R1808910-010	Be (313.107 nm)	41.60	0.0000 u (ppm)	-435.8645
9/27/2018 19:54:00	R1808910-010	Ca (227.547 nm)	1.17	207.5346 o (ppm)	10690.1930
9/27/2018 19:54:00	R1808910-010	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.0616
9/27/2018 19:54:00	R1808910-010	Co (230.786 nm)	27.35	0.0011 (ppm)	5.5024
9/27/2018 19:54:00	R1808910-010	Cr (267.716 nm)	10.61	-0.0009 u (ppm)	-28.8704
9/27/2018 19:54:00	R1808910-010	Cu (327.395 nm)	3.12	0.0022 (ppm)	161.4073
9/27/2018 19:54:00	R1808910-010	Fe (234.350 nm)	1.30	0.0669 (ppm)	701.6870
9/27/2018 19:54:00	R1808910-010	K (766.491 nm)	1.59	1.4163 (ppm)	4159.1992
9/27/2018 19:54:00	R1808910-010	Mg (279.078 nm)	0.97	70.5791 o (ppm)	119989.1709
9/27/2018 19:54:00	R1808910-010	Mn (257.610 nm)	0.96	0.6667 (ppm)	180516.0155
9/27/2018 19:54:00	R1808910-010	Mo (202.032 nm)	29.88	-0.0058 u (ppm)	5.2879
9/27/2018 19:54:00	R1808910-010	Na (588.995 nm)	1.37	33.5452 (ppm)	1460374.3397
9/27/2018 19:54:00	R1808910-010	Ni (230.299 nm)	21.71	-0.0060 u (ppm)	-52.0355
9/27/2018 19:54:00	R1808910-010	Pb (220.353 nm)	> 100.00	-0.0002 u (ppm)	2.4742
9/27/2018 19:54:00	R1808910-010	Sb (217.582 nm)	> 100.00	0.0019 u (ppm)	3.2461
9/27/2018 19:54:00	R1808910-010	Se (196.026 nm)	25.27	-0.0078 u (ppm)	-1.6382
9/27/2018 19:54:00	R1808910-010	Sn (189.925 nm)	30.51	-0.0022 u (ppm)	-1.8602
9/27/2018 19:54:00	R1808910-010	Sr (216.596 nm)	0.67	1.1997 (ppm)	15700.6041
9/27/2018 19:54:00	R1808910-010	Ti (336.122 nm)	34.63	-0.0009 u (ppm)	90.5184
9/27/2018 19:54:00	R1808910-010	Tl (351.923 nm)	58.11	0.0051 (ppm)	24.9802
9/27/2018 19:54:00	R1808910-010	V (292.401 nm)	77.70	0.0004 (ppm)	140.0141
9/27/2018 19:54:00	R1808910-010	Y (360.074 nm)	1.30	0.92 (Ratio)	971959.03
9/27/2018 19:54:00	R1808910-010	Y_R (360.074 nm)	1.30	0.92 (Ratio)	972198.33
9/27/2018 19:54:00	R1808910-010	Zn (213.857 nm)	0.44	0.0096 (ppm)	214.4486
9/27/2018 19:57:14	R1808910-011	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-178.8913
9/27/2018 19:57:14	R1808910-011	Al (394.401 nm)	5.42	0.0166 (ppm)	299.2667
9/27/2018 19:57:14	R1808910-011	As (188.980 nm)	> 100.00	0.0006 u (ppm)	-0.1480
9/27/2018 19:57:14	R1808910-011	B (249.772 nm)	0.78	0.2613 (ppm)	6030.7229
9/27/2018 19:57:14	R1808910-011	Ba (230.424 nm)	0.96	0.2423 (ppm)	7218.7537
9/27/2018 19:57:14	R1808910-011	Be (313.107 nm)	1.51	0.0000 u (ppm)	-445.2008
9/27/2018 19:57:14	R1808910-011	Ca (227.547 nm)	1.09	38.9879 (ppm)	2013.8433
9/27/2018 19:57:14	R1808910-011	Cd (214.439 nm)	43.98	-0.0002 u (ppm)	9.5088
9/27/2018 19:57:14	R1808910-011	Co (230.786 nm)	> 100.00	-0.0003 u (ppm)	-6.8780
9/27/2018 19:57:14	R1808910-011	Cr (267.716 nm)	36.22	-0.0004 u (ppm)	-9.3691
9/27/2018 19:57:14	R1808910-011	Cu (327.395 nm)	75.98	0.0002 (ppm)	48.2106
9/27/2018 19:57:14	R1808910-011	Fe (234.350 nm)	2.73	0.0314 (ppm)	364.5586
9/27/2018 19:57:14	R1808910-011	K (766.491 nm)	1.26	2.1039 (ppm)	6200.0913
9/27/2018 19:57:14	R1808910-011	Mg (279.078 nm)	0.92	31.4223 (ppm)	53420.3065
9/27/2018 19:57:14	R1808910-011	Mn (257.610 nm)	1.27	0.0091 (ppm)	2482.2108
9/27/2018 19:57:14	R1808910-011	Mo (202.032 nm)	5.31	-0.0075 u (ppm)	-1.7558
9/27/2018 19:57:14	R1808910-011	Na (588.995 nm)	1.21	36.9978 (ppm)	1611379.7172
9/27/2018 19:57:14	R1808910-011	Ni (230.299 nm)	8.76	-0.0138 u (ppm)	-97.7538
9/27/2018 19:57:14	R1808910-011	Pb (220.353 nm)	> 100.00	-0.0016 u (ppm)	-0.2035
9/27/2018 19:57:14	R1808910-011	Sb (217.582 nm)	26.40	0.0010 (ppm)	2.1403
9/27/2018 19:57:14	R1808910-011	Se (196.026 nm)	82.87	-0.0029 u (ppm)	2.3251
9/27/2018 19:57:14	R1808910-011	Sn (189.925 nm)	23.71	-0.0031 u (ppm)	-2.8792

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 19:57:14	R1808910-011	Sr (216.596 nm)	1.19	1.9825 (ppm)	25945.3220
9/27/2018 19:57:14	R1808910-011	Ti (336.122 nm)	6.24	-0.0021 u (ppm)	-149.2498
9/27/2018 19:57:14	R1808910-011	Tl (351.923 nm)	91.56	0.0011 (ppm)	15.2303
9/27/2018 19:57:14	R1808910-011	V (292.401 nm)	76.78	0.0001 (ppm)	132.9562
9/27/2018 19:57:14	R1808910-011	Y (360.074 nm)	1.18	0.96 (Ratio)	1011016.57
9/27/2018 19:57:14	R1808910-011	Y_R (360.074 nm)	1.18	0.96 (Ratio)	1011266.43
9/27/2018 19:57:14	R1808910-011	Zn (213.857 nm)	0.83	0.0063 (ppm)	133.7864
9/27/2018 20:00:29	R1808910-017	Ag (328.068 nm)	78.25	0.0002 (ppm)	-173.0258
9/27/2018 20:00:29	R1808910-017	Al (394.401 nm)	4.40	0.0249 (ppm)	399.2096
9/27/2018 20:00:29	R1808910-017	As (188.980 nm)	> 100.00	0.0011 u (ppm)	0.2080
9/27/2018 20:00:29	R1808910-017	B (249.772 nm)	0.96	0.1962 (ppm)	4533.0469
9/27/2018 20:00:29	R1808910-017	Ba (230.424 nm)	0.99	0.2251 (ppm)	6709.2922
9/27/2018 20:00:29	R1808910-017	Be (313.107 nm)	13.64	0.0000 u (ppm)	-449.1005
9/27/2018 20:00:29	R1808910-017	Ca (227.547 nm)	1.02	97.4473 o (ppm)	5023.1855
9/27/2018 20:00:29	R1808910-017	Cd (214.439 nm)	> 100.00	-0.0002 u (ppm)	10.4371
9/27/2018 20:00:29	R1808910-017	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-6.0599
9/27/2018 20:00:29	R1808910-017	Cr (267.716 nm)	6.87	0.0004 (ppm)	27.4561
9/27/2018 20:00:29	R1808910-017	Cu (327.395 nm)	41.70	0.0003 (ppm)	55.6728
9/27/2018 20:00:29	R1808910-017	Fe (234.350 nm)	28.75	0.0010 (ppm)	75.8143
9/27/2018 20:00:29	R1808910-017	K (766.491 nm)	1.17	6.5093 (ppm)	19275.7226
9/27/2018 20:00:29	R1808910-017	Mg (279.078 nm)	0.91	25.5746 (ppm)	43478.9673
9/27/2018 20:00:29	R1808910-017	Mn (257.610 nm)	1.48	0.0010 (ppm)	298.9603
9/27/2018 20:00:29	R1808910-017	Mo (202.032 nm)	25.70	-0.0052 u (ppm)	7.8965
9/27/2018 20:00:29	R1808910-017	Na (588.995 nm)	1.17	97.7860 o (ppm)	4270070.4066
9/27/2018 20:00:29	R1808910-017	Ni (230.299 nm)	> 100.00	-0.0003 u (ppm)	-18.9544
9/27/2018 20:00:29	R1808910-017	Pb (220.353 nm)	> 100.00	-0.0011 u (ppm)	0.7938
9/27/2018 20:00:29	R1808910-017	Sb (217.582 nm)	45.45	0.0029 (ppm)	4.4916
9/27/2018 20:00:29	R1808910-017	Se (196.026 nm)	34.64	-0.0046 u (ppm)	0.9301
9/27/2018 20:00:29	R1808910-017	Sn (189.925 nm)	92.42	-0.0013 u (ppm)	-0.8515
9/27/2018 20:00:29	R1808910-017	Sr (216.596 nm)	0.82	3.6928 (ppm)	48328.8784
9/27/2018 20:00:29	R1808910-017	Ti (336.122 nm)	9.68	-0.0019 u (ppm)	-108.0452
9/27/2018 20:00:29	R1808910-017	Tl (351.923 nm)	64.48	0.0022 (ppm)	17.8645
9/27/2018 20:00:29	R1808910-017	V (292.401 nm)	50.87	0.0003 (ppm)	136.9547
9/27/2018 20:00:29	R1808910-017	Y (360.074 nm)	1.25	0.93 (Ratio)	982756.60
9/27/2018 20:00:29	R1808910-017	Y_R (360.074 nm)	1.26	0.93 (Ratio)	983000.01
9/27/2018 20:00:29	R1808910-017	Zn (213.857 nm)	1.92	0.0060 (ppm)	125.7443
9/27/2018 20:03:43	R1808910-017L	Ag (328.068 nm)	51.80	0.0001 (ppm)	-177.7493
9/27/2018 20:03:43	R1808910-017L	Al (394.401 nm)	1.71	0.0089 (ppm)	205.4348
9/27/2018 20:03:43	R1808910-017L	As (188.980 nm)	> 100.00	-0.0004 u (ppm)	-0.9568
9/27/2018 20:03:43	R1808910-017L	B (249.772 nm)	0.44	0.0354 (ppm)	836.4958
9/27/2018 20:03:43	R1808910-017L	Ba (230.424 nm)	1.22	0.0430 (ppm)	1308.3474
9/27/2018 20:03:43	R1808910-017L	Be (313.107 nm)	21.46	0.0000 u (ppm)	-436.4721
9/27/2018 20:03:43	R1808910-017L	Ca (227.547 nm)	0.59	17.5598 (ppm)	910.7806
9/27/2018 20:03:43	R1808910-017L	Cd (214.439 nm)	30.13	-0.0002 u (ppm)	9.1674
9/27/2018 20:03:43	R1808910-017L	Co (230.786 nm)	> 100.00	-0.0001 u (ppm)	-5.2265
9/27/2018 20:03:43	R1808910-017L	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	8.5320
9/27/2018 20:03:43	R1808910-017L	Cu (327.395 nm)	> 100.00	-0.0001 u (ppm)	34.9324
9/27/2018 20:03:43	R1808910-017L	Fe (234.350 nm)	14.60	-0.0026 u (ppm)	41.6649
9/27/2018 20:03:43	R1808910-017L	K (766.491 nm)	0.15	1.1213 (ppm)	3283.8367
9/27/2018 20:03:43	R1808910-017L	Mg (279.078 nm)	0.65	4.8492 (ppm)	8244.5543
9/27/2018 20:03:43	R1808910-017L	Mn (257.610 nm)	7.59	0.0001 (ppm)	54.9178

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:03:43	R1808910-017L	Mo (202.032 nm)	7.64	-0.0075 u (ppm)	-2.0180
9/27/2018 20:03:43	R1808910-017L	Na (588.995 nm)	0.09	18.8343 (ppm)	816960.4180
9/27/2018 20:03:43	R1808910-017L	Ni (230.299 nm)	67.17	-0.0007 u (ppm)	-21.4321
9/27/2018 20:03:43	R1808910-017L	Pb (220.353 nm)	> 100.00	0.0000 u (ppm)	2.9978
9/27/2018 20:03:43	R1808910-017L	Sb (217.582 nm)	> 100.00	-0.0003 u (ppm)	0.5686
9/27/2018 20:03:43	R1808910-017L	Se (196.026 nm)	> 100.00	0.0002 u (ppm)	4.8441
9/27/2018 20:03:43	R1808910-017L	Sn (189.925 nm)	76.73	-0.0019 u (ppm)	-1.5825
9/27/2018 20:03:43	R1808910-017L	Sr (216.596 nm)	1.87	0.7211 (ppm)	9438.2069
9/27/2018 20:03:43	R1808910-017L	Ti (336.122 nm)	2.09	-0.0028 u (ppm)	-267.6116
9/27/2018 20:03:43	R1808910-017L	Tl (351.923 nm)	15.51	-0.0014 u (ppm)	9.1741
9/27/2018 20:03:43	R1808910-017L	V (292.401 nm)	> 100.00	0.0001 u (ppm)	130.6031
9/27/2018 20:03:43	R1808910-017L	Y (360.074 nm)	0.41	0.98 (Ratio)	1030815.86
9/27/2018 20:03:43	R1808910-017L	Y_R (360.074 nm)	0.41	0.98 (Ratio)	1031092.34
9/27/2018 20:03:43	R1808910-017L	Zn (213.857 nm)	3.31	0.0021 (ppm)	26.0859
9/27/2018 20:06:58	R1808926-001	Ag (328.068 nm)	22.10	0.0003 (ppm)	-165.0434
9/27/2018 20:06:58	R1808926-001	Al (394.401 nm)	2.06	0.0489 (ppm)	690.0327
9/27/2018 20:06:58	R1808926-001	As (188.980 nm)	> 100.00	0.0017 u (ppm)	0.6948
9/27/2018 20:06:58	R1808926-001	B (249.772 nm)	1.03	0.1065 (ppm)	2470.0772
9/27/2018 20:06:58	R1808926-001	Ba (230.424 nm)	1.45	0.1001 (ppm)	3001.7600
9/27/2018 20:06:58	R1808926-001	Be (313.107 nm)	16.41	0.0000 u (ppm)	-445.5553
9/27/2018 20:06:58	R1808926-001	Ca (227.547 nm)	1.22	124.4454 o (ppm)	6412.9772
9/27/2018 20:06:58	R1808926-001	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.1969
9/27/2018 20:06:58	R1808926-001	Co (230.786 nm)	14.00	0.0021 (ppm)	14.4980
9/27/2018 20:06:58	R1808926-001	Cr (267.716 nm)	35.35	-0.0002 u (ppm)	1.8291
9/27/2018 20:06:58	R1808926-001	Cu (327.395 nm)	5.11	0.0024 (ppm)	169.6161
9/27/2018 20:06:58	R1808926-001	Fe (234.350 nm)	1.42	0.0970 (ppm)	987.5229
9/27/2018 20:06:58	R1808926-001	K (766.491 nm)	1.51	3.5071 (ppm)	10364.7790
9/27/2018 20:06:58	R1808926-001	Mg (279.078 nm)	1.16	30.9085 (ppm)	52546.9082
9/27/2018 20:06:58	R1808926-001	Mn (257.610 nm)	1.11	0.0921 (ppm)	24942.5865
9/27/2018 20:06:58	R1808926-001	Mo (202.032 nm)	8.81	-0.0072 u (ppm)	-0.7262
9/27/2018 20:06:58	R1808926-001	Na (588.995 nm)	1.44	115.3713 o (ppm)	5039200.7962
9/27/2018 20:06:58	R1808926-001	Ni (230.299 nm)	17.10	-0.0085 u (ppm)	-67.0371
9/27/2018 20:06:58	R1808926-001	Pb (220.353 nm)	29.13	-0.0027 u (ppm)	-2.3813
9/27/2018 20:06:58	R1808926-001	Sb (217.582 nm)	> 100.00	0.0014 u (ppm)	2.7019
9/27/2018 20:06:58	R1808926-001	Se (196.026 nm)	41.16	-0.0041 u (ppm)	1.3415
9/27/2018 20:06:58	R1808926-001	Sn (189.925 nm)	16.83	-0.0023 u (ppm)	-1.9998
9/27/2018 20:06:58	R1808926-001	Sr (216.596 nm)	0.98	0.4258 (ppm)	5572.7393
9/27/2018 20:06:58	R1808926-001	Ti (336.122 nm)	5.77	-0.0006 u (ppm)	144.5110
9/27/2018 20:06:58	R1808926-001	Tl (351.923 nm)	44.61	0.0016 (ppm)	16.3899
9/27/2018 20:06:58	R1808926-001	V (292.401 nm)	10.75	0.0007 (ppm)	150.8497
9/27/2018 20:06:58	R1808926-001	Y (360.074 nm)	1.35	0.92 (Ratio)	975796.04
9/27/2018 20:06:58	R1808926-001	Y_R (360.074 nm)	1.34	0.92 (Ratio)	976053.48
9/27/2018 20:06:58	R1808926-001	Zn (213.857 nm)	0.81	0.0132 (ppm)	306.9758
9/27/2018 20:10:13	R1808926-002	Ag (328.068 nm)	> 100.00	0.0000 u (ppm)	-184.0961
9/27/2018 20:10:13	R1808926-002	Al (394.401 nm)	0.66	0.0339 (ppm)	508.3485
9/27/2018 20:10:13	R1808926-002	As (188.980 nm)	> 100.00	-0.0009 u (ppm)	-1.3241
9/27/2018 20:10:13	R1808926-002	B (249.772 nm)	1.70	0.0206 (ppm)	495.2346
9/27/2018 20:10:13	R1808926-002	Ba (230.424 nm)	> 100.00	0.0001 u (ppm)	34.8233
9/27/2018 20:10:13	R1808926-002	Be (313.107 nm)	36.63	0.0000 u (ppm)	-430.2247
9/27/2018 20:10:13	R1808926-002	Ca (227.547 nm)	1.34	16.9744 (ppm)	880.6462
9/27/2018 20:10:13	R1808926-002	Cd (214.439 nm)	50.80	0.0002 (ppm)	18.3729

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:10:13	R1808926-002	Co (230.786 nm)	50.73	-0.0007 u (ppm)	-10.0676
9/27/2018 20:10:13	R1808926-002	Cr (267.716 nm)	20.06	0.0006 (ppm)	35.6017
9/27/2018 20:10:13	R1808926-002	Cu (327.395 nm)	17.61	0.0004 (ppm)	62.2509
9/27/2018 20:10:13	R1808926-002	Fe (234.350 nm)	1.04	38.0380 o (ppm)	361093.2917
9/27/2018 20:10:13	R1808926-002	K (766.491 nm)	2.22	0.7087 (ppm)	2059.1855
9/27/2018 20:10:13	R1808926-002	Mg (279.078 nm)	1.11	5.4355 (ppm)	9241.3537
9/27/2018 20:10:13	R1808926-002	Mn (257.610 nm)	1.08	0.2547 (ppm)	68987.7217
9/27/2018 20:10:13	R1808926-002	Mo (202.032 nm)	0.62	-0.0057 u (ppm)	5.7939
9/27/2018 20:10:13	R1808926-002	Na (588.995 nm)	1.43	8.7136 (ppm)	374314.4058
9/27/2018 20:10:13	R1808926-002	Ni (230.299 nm)	8.16	-0.0134 u (ppm)	-95.3270
9/27/2018 20:10:13	R1808926-002	Pb (220.353 nm)	88.63	0.0008 (ppm)	4.6095
9/27/2018 20:10:13	R1808926-002	Sb (217.582 nm)	> 100.00	-0.0001 u (ppm)	0.8994
9/27/2018 20:10:13	R1808926-002	Se (196.026 nm)	38.49	-0.0011 u (ppm)	3.8054
9/27/2018 20:10:13	R1808926-002	Sn (189.925 nm)	> 100.00	-0.0004 u (ppm)	0.2674
9/27/2018 20:10:13	R1808926-002	Sr (216.596 nm)	1.02	0.0440 (ppm)	576.9959
9/27/2018 20:10:13	R1808926-002	Ti (336.122 nm)	4.46	-0.0017 u (ppm)	-57.6285
9/27/2018 20:10:13	R1808926-002	Tl (351.923 nm)	84.42	-0.0025 u (ppm)	6.5774
9/27/2018 20:10:13	R1808926-002	V (292.401 nm)	4.57	0.0013 (ppm)	170.5722
9/27/2018 20:10:13	R1808926-002	Y (360.074 nm)	1.32	0.99 (Ratio)	1040073.54
9/27/2018 20:10:13	R1808926-002	Y_R (360.074 nm)	1.32	0.99 (Ratio)	1040343.15
9/27/2018 20:10:13	R1808926-002	Zn (213.857 nm)	1.53	0.0103 (ppm)	234.3565
9/27/2018 20:13:27	R1808926-002S	Ag (328.068 nm)	1.18	0.0502 (ppm)	2944.5489
9/27/2018 20:13:27	R1808926-002S	Al (394.401 nm)	1.30	1.9187 (ppm)	23346.0206
9/27/2018 20:13:27	R1808926-002S	As (188.980 nm)	29.05	0.0341 (ppm)	25.9691
9/27/2018 20:13:27	R1808926-002S	B (249.772 nm)	1.04	1.0273 (ppm)	23645.8042
9/27/2018 20:13:27	R1808926-002S	Ba (230.424 nm)	1.05	2.0497 (ppm)	60812.2538
9/27/2018 20:13:27	R1808926-002S	Be (313.107 nm)	1.12	0.0500 (ppm)	64852.3435
9/27/2018 20:13:27	R1808926-002S	Ca (227.547 nm)	1.00	18.8548 (ppm)	977.4451
9/27/2018 20:13:27	R1808926-002S	Cd (214.439 nm)	0.97	0.0510 (ppm)	1016.5686
9/27/2018 20:13:27	R1808926-002S	Co (230.786 nm)	1.23	0.5121 (ppm)	4456.5177
9/27/2018 20:13:27	R1808926-002S	Cr (267.716 nm)	1.14	0.2023 (ppm)	8767.5628
9/27/2018 20:13:27	R1808926-002S	Cu (327.395 nm)	1.49	0.2462 (ppm)	13582.1931
9/27/2018 20:13:27	R1808926-002S	Fe (234.350 nm)	1.04	28.9014 o (ppm)	274376.0409
9/27/2018 20:13:27	R1808926-002S	K (766.491 nm)	1.15	19.9779 (ppm)	59251.4246
9/27/2018 20:13:27	R1808926-002S	Mg (279.078 nm)	1.08	7.3376 (ppm)	12475.1392
9/27/2018 20:13:27	R1808926-002S	Mn (257.610 nm)	1.08	0.7143 (ppm)	193400.8916
9/27/2018 20:13:27	R1808926-002S	Mo (202.032 nm)	1.04	0.5014 (ppm)	2143.1145
9/27/2018 20:13:27	R1808926-002S	Na (588.995 nm)	1.44	27.8953 (ppm)	1213264.4299
9/27/2018 20:13:27	R1808926-002S	Ni (230.299 nm)	1.17	0.4896 (ppm)	2831.5432
9/27/2018 20:13:27	R1808926-002S	Pb (220.353 nm)	0.32	0.5053 (ppm)	988.4424
9/27/2018 20:13:27	R1808926-002S	Sb (217.582 nm)	2.44	0.4674 (ppm)	575.4614
9/27/2018 20:13:27	R1808926-002S	Se (196.026 nm)	1.08	1.0332 (ppm)	844.9085
9/27/2018 20:13:27	R1808926-002S	Sn (189.925 nm)	1.42	5.0769 (ppm)	5927.1583
9/27/2018 20:13:27	R1808926-002S	Sr (216.596 nm)	1.16	2.0588 (ppm)	26944.6081
9/27/2018 20:13:27	R1808926-002S	Ti (336.122 nm)	1.20	0.4915 (ppm)	91977.7201
9/27/2018 20:13:27	R1808926-002S	Tl (351.923 nm)	1.09	1.9169 (ppm)	4668.8232
9/27/2018 20:13:27	R1808926-002S	V (292.401 nm)	1.14	0.4938 (ppm)	16896.7363
9/27/2018 20:13:27	R1808926-002S	Y (360.074 nm)	1.36	0.97 (Ratio)	1021255.01
9/27/2018 20:13:27	R1808926-002S	Y_R (360.074 nm)	1.36	0.97 (Ratio)	1021527.63
9/27/2018 20:13:27	R1808926-002S	Zn (213.857 nm)	1.07	0.5047 (ppm)	12666.3290
9/27/2018 20:16:43	R1808926-002SD	Ag (328.068 nm)	1.55	0.0503 (ppm)	2947.1902

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:16:43	R1808926-002SD	Al (394.401 nm)	1.46	1.9249 (ppm)	23421.7199
9/27/2018 20:16:43	R1808926-002SD	As (188.980 nm)	15.02	0.0430 (ppm)	32.9037
9/27/2018 20:16:43	R1808926-002SD	B (249.772 nm)	1.27	1.0322 (ppm)	23758.2617
9/27/2018 20:16:43	R1808926-002SD	Ba (230.424 nm)	1.78	2.0575 (ppm)	61043.4289
9/27/2018 20:16:43	R1808926-002SD	Be (313.107 nm)	1.43	0.0501 (ppm)	65060.9206
9/27/2018 20:16:43	R1808926-002SD	Ca (227.547 nm)	1.90	18.8372 (ppm)	976.5411
9/27/2018 20:16:43	R1808926-002SD	Cd (214.439 nm)	1.37	0.0513 (ppm)	1020.8839
9/27/2018 20:16:43	R1808926-002SD	Co (230.786 nm)	1.59	0.5145 (ppm)	4477.4608
9/27/2018 20:16:43	R1808926-002SD	Cr (267.716 nm)	1.13	0.2029 (ppm)	8793.4976
9/27/2018 20:16:43	R1808926-002SD	Cu (327.395 nm)	1.49	0.2463 (ppm)	13591.3076
9/27/2018 20:16:43	R1808926-002SD	Fe (234.350 nm)	1.29	28.8139 o (ppm)	273545.8933
9/27/2018 20:16:43	R1808926-002SD	K (766.491 nm)	1.35	20.0601 (ppm)	59495.5963
9/27/2018 20:16:43	R1808926-002SD	Mg (279.078 nm)	1.42	7.3645 (ppm)	12520.8180
9/27/2018 20:16:43	R1808926-002SD	Mn (257.610 nm)	1.38	0.7157 (ppm)	193798.9612
9/27/2018 20:16:43	R1808926-002SD	Mo (202.032 nm)	1.92	0.5045 (ppm)	2155.9193
9/27/2018 20:16:43	R1808926-002SD	Na (588.995 nm)	1.47	28.0011 (ppm)	1217890.9325
9/27/2018 20:16:43	R1808926-002SD	Ni (230.299 nm)	1.41	0.4915 (ppm)	2842.2289
9/27/2018 20:16:43	R1808926-002SD	Pb (220.353 nm)	1.15	0.5113 (ppm)	1000.2331
9/27/2018 20:16:43	R1808926-002SD	Sb (217.582 nm)	2.39	0.4744 (ppm)	584.1035
9/27/2018 20:16:43	R1808926-002SD	Se (196.026 nm)	0.99	1.0450 (ppm)	854.4954
9/27/2018 20:16:43	R1808926-002SD	Sn (189.925 nm)	1.37	5.1157 (ppm)	5972.5365
9/27/2018 20:16:43	R1808926-002SD	Sr (216.596 nm)	1.76	2.0755 (ppm)	27163.1646
9/27/2018 20:16:43	R1808926-002SD	Ti (336.122 nm)	1.51	0.4956 (ppm)	92734.8253
9/27/2018 20:16:43	R1808926-002SD	Tl (351.923 nm)	1.20	1.9247 (ppm)	4687.9545
9/27/2018 20:16:43	R1808926-002SD	V (292.401 nm)	1.32	0.4961 (ppm)	16974.7190
9/27/2018 20:16:43	R1808926-002SD	Y (360.074 nm)	1.61	0.97 (Ratio)	1019422.56
9/27/2018 20:16:43	R1808926-002SD	Y_R (360.074 nm)	1.61	0.97 (Ratio)	1019677.25
9/27/2018 20:16:43	R1808926-002SD	Zn (213.857 nm)	1.61	0.5065 (ppm)	12711.2766
9/27/2018 20:19:58	R1808926-002A	Ag (328.068 nm)	1.05	0.0525 (ppm)	3088.8570
9/27/2018 20:19:58	R1808926-002A	Al (394.401 nm)	1.21	1.8850 (ppm)	22938.5190
9/27/2018 20:19:58	R1808926-002A	As (188.980 nm)	22.48	0.0399 (ppm)	30.4431
9/27/2018 20:19:58	R1808926-002A	B (249.772 nm)	1.07	1.0148 (ppm)	23356.7556
9/27/2018 20:19:58	R1808926-002A	Ba (230.424 nm)	1.28	2.0040 (ppm)	59456.2637
9/27/2018 20:19:58	R1808926-002A	Be (313.107 nm)	1.01	0.0489 (ppm)	63425.5184
9/27/2018 20:19:58	R1808926-002A	Ca (227.547 nm)	1.19	18.6814 (ppm)	968.5195
9/27/2018 20:19:58	R1808926-002A	Cd (214.439 nm)	1.58	0.0499 (ppm)	994.3683
9/27/2018 20:19:58	R1808926-002A	Co (230.786 nm)	0.96	0.5006 (ppm)	4356.5235
9/27/2018 20:19:58	R1808926-002A	Cr (267.716 nm)	1.02	0.1982 (ppm)	8590.6017
9/27/2018 20:19:58	R1808926-002A	Cu (327.395 nm)	1.54	0.2405 (ppm)	13269.8404
9/27/2018 20:19:58	R1808926-002A	Fe (234.350 nm)	1.03	37.9157 o (ppm)	359933.0172
9/27/2018 20:19:58	R1808926-002A	K (766.491 nm)	1.42	19.5685 (ppm)	58036.2551
9/27/2018 20:19:58	R1808926-002A	Mg (279.078 nm)	1.06	7.2293 (ppm)	12291.0040
9/27/2018 20:19:58	R1808926-002A	Mn (257.610 nm)	1.04	0.7350 (ppm)	199008.0299
9/27/2018 20:19:58	R1808926-002A	Mo (202.032 nm)	0.20	0.5014 (ppm)	2143.0350
9/27/2018 20:19:58	R1808926-002A	Na (588.995 nm)	1.41	27.3416 (ppm)	1189045.8381
9/27/2018 20:19:58	R1808926-002A	Ni (230.299 nm)	1.09	0.4759 (ppm)	2751.5264
9/27/2018 20:19:58	R1808926-002A	Pb (220.353 nm)	0.87	0.4957 (ppm)	969.7911
9/27/2018 20:19:58	R1808926-002A	Sb (217.582 nm)	1.89	0.4652 (ppm)	572.7990
9/27/2018 20:19:58	R1808926-002A	Se (196.026 nm)	1.13	1.1312 o (ppm)	924.6135
9/27/2018 20:19:58	R1808926-002A	Sn (189.925 nm)	1.04	5.0180 (ppm)	5858.4937
9/27/2018 20:19:58	R1808926-002A	Sr (216.596 nm)	1.51	2.1252 (ppm)	27813.3539

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:19:58	R1808926-002A	Ti (336.122 nm)	1.11	0.4864 (ppm)	91022.7878
9/27/2018 20:19:58	R1808926-002A	Tl (351.923 nm)	1.22	1.8826 (ppm)	4585.5770
9/27/2018 20:19:58	R1808926-002A	V (292.401 nm)	1.16	0.4829 (ppm)	16525.3763
9/27/2018 20:19:58	R1808926-002A	Y (360.074 nm)	1.24	0.97 (Ratio)	1019601.74
9/27/2018 20:19:58	R1808926-002A	Y_R (360.074 nm)	1.24	0.97 (Ratio)	1019887.71
9/27/2018 20:19:58	R1808926-002A	Zn (213.857 nm)	1.50	0.4985 (ppm)	12510.0657
9/27/2018 20:23:12	Continuing Calibration Verification	Ag (328.068 nm)	0.29	0.5017 (ppm)	31075.5643
9/27/2018 20:23:12	Continuing Calibration Verification	Al (394.401 nm)	0.16	9.5594 (ppm)	115927.8791
9/27/2018 20:23:12	Continuing Calibration Verification	As (188.980 nm)	0.71	0.9785 (ppm)	761.4183
9/27/2018 20:23:12	Continuing Calibration Verification	B (249.772 nm)	0.36	2.5012 (ppm)	57538.0447
9/27/2018 20:23:12	Continuing Calibration Verification	Ba (230.424 nm)	0.53	10.1515 (ppm)	301051.1635
9/27/2018 20:23:12	Continuing Calibration Verification	Be (313.107 nm)	0.65	0.2529 (ppm)	329855.4758
9/27/2018 20:23:12	Continuing Calibration Verification	Ca (227.547 nm)	0.20	24.0803 (ppm)	1246.4417
9/27/2018 20:23:12	Continuing Calibration Verification	Cd (214.439 nm)	0.61	0.5028 (ppm)	9895.5678
9/27/2018 20:23:12	Continuing Calibration Verification	Co (230.786 nm)	0.53	2.5991 (ppm)	22636.1637
9/27/2018 20:23:12	Continuing Calibration Verification	Cr (267.716 nm)	0.48	0.5194 (ppm)	22498.0751
9/27/2018 20:23:12	Continuing Calibration Verification	Cu (327.395 nm)	0.25	1.2202 (ppm)	67169.3832
9/27/2018 20:23:12	Continuing Calibration Verification	Fe (234.350 nm)	0.60	4.9047 (ppm)	46618.6077
9/27/2018 20:23:12	Continuing Calibration Verification	K (766.491 nm)	0.14	24.1547 (ppm)	71648.5849
9/27/2018 20:23:12	Continuing Calibration Verification	Mg (279.078 nm)	0.46	24.5464 (ppm)	41730.8886
9/27/2018 20:23:12	Continuing Calibration Verification	Mn (257.610 nm)	0.44	0.7705 (ppm)	208622.1036
9/27/2018 20:23:12	Continuing Calibration Verification	Mo (202.032 nm)	1.22	2.6613 (ppm)	11245.9482
9/27/2018 20:23:12	Continuing Calibration Verification	Na (588.995 nm)	0.15	24.2576 (ppm)	1054161.1972
9/27/2018 20:23:12	Continuing Calibration Verification	Ni (230.299 nm)	0.50	2.0592 (ppm)	11964.3738
9/27/2018 20:23:12	Continuing Calibration Verification	Pb (220.353 nm)	0.60	0.5101 (ppm)	997.8068
9/27/2018 20:23:12	Continuing Calibration Verification	Sb (217.582 nm)	0.27	4.8892 (ppm)	6010.5727
9/27/2018 20:23:12	Continuing Calibration Verification	Se (196.026 nm)	1.21	0.4880 (ppm)	401.5822
9/27/2018 20:23:12	Continuing Calibration Verification	Sn (189.925 nm)	0.89	5.0508 (ppm)	5896.7969
9/27/2018 20:23:12	Continuing Calibration Verification	Sr (216.596 nm)	0.58	2.5556 (ppm)	33446.3694
9/27/2018 20:23:12	Continuing Calibration Verification	Ti (336.122 nm)	0.36	2.5101 (ppm)	468683.5357
9/27/2018 20:23:12	Continuing Calibration Verification	Tl (351.923 nm)	0.40	1.0005 (ppm)	2443.0183
9/27/2018 20:23:12	Continuing Calibration Verification	V (292.401 nm)	0.43	2.5182 (ppm)	85636.6934
9/27/2018 20:23:12	Continuing Calibration Verification	Y (360.074 nm)	0.27	0.95 (Ratio)	1004923.44
9/27/2018 20:23:12	Continuing Calibration Verification	Y_R (360.074 nm)	0.27	0.95 (Ratio)	1005226.71
9/27/2018 20:23:12	Continuing Calibration Verification	Zn (213.857 nm)	0.49	0.9977 (ppm)	25063.9583
9/27/2018 20:26:26	Continuing Calibration Blank	Ag (328.068 nm)	35.19	0.0002 (ppm)	-171.9634
9/27/2018 20:26:26	Continuing Calibration Blank	Al (394.401 nm)	> 100.00	-0.0007 u (ppm)	88.9872
9/27/2018 20:26:26	Continuing Calibration Blank	As (188.980 nm)	53.91	-0.0007 u (ppm)	-1.1557
9/27/2018 20:26:26	Continuing Calibration Blank	B (249.772 nm)	38.53	0.0013 (ppm)	52.3583
9/27/2018 20:26:26	Continuing Calibration Blank	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	33.3888
9/27/2018 20:26:26	Continuing Calibration Blank	Be (313.107 nm)	83.67	0.0000 u (ppm)	-399.8510
9/27/2018 20:26:26	Continuing Calibration Blank	Ca (227.547 nm)	> 100.00	-0.0020 u (ppm)	6.7448
9/27/2018 20:26:26	Continuing Calibration Blank	Cd (214.439 nm)	46.37	-0.0001 u (ppm)	12.2141
9/27/2018 20:26:26	Continuing Calibration Blank	Co (230.786 nm)	88.59	0.0002 (ppm)	-2.4768
9/27/2018 20:26:26	Continuing Calibration Blank	Cr (267.716 nm)	30.36	-0.0001 u (ppm)	3.9016
9/27/2018 20:26:26	Continuing Calibration Blank	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	37.6323
9/27/2018 20:26:26	Continuing Calibration Blank	Fe (234.350 nm)	34.97	0.0050 (ppm)	114.3838
9/27/2018 20:26:26	Continuing Calibration Blank	K (766.491 nm)	15.06	0.0378 (ppm)	67.7119
9/27/2018 20:26:26	Continuing Calibration Blank	Mg (279.078 nm)	> 100.00	-0.0005 u (ppm)	-0.1534
9/27/2018 20:26:26	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	19.2671
9/27/2018 20:26:26	Continuing Calibration Blank	Mo (202.032 nm)	> 100.00	0.0008 u (ppm)	33.1981

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:26:26	Continuing Calibration Blank	Na (588.995 nm)	> 100.00	-0.0001 u (ppm)	-6796.6772
9/27/2018 20:26:26	Continuing Calibration Blank	Ni (230.299 nm)	> 100.00	0.0000 u (ppm)	-17.2296
9/27/2018 20:26:26	Continuing Calibration Blank	Pb (220.353 nm)	32.56	0.0011 (ppm)	5.1347
9/27/2018 20:26:26	Continuing Calibration Blank	Sb (217.582 nm)	34.42	0.0035 (ppm)	5.2356
9/27/2018 20:26:26	Continuing Calibration Blank	Se (196.026 nm)	84.50	0.0018 (ppm)	6.1761
9/27/2018 20:26:26	Continuing Calibration Blank	Sn (189.925 nm)	76.92	0.0013 (ppm)	2.2647
9/27/2018 20:26:26	Continuing Calibration Blank	Sr (216.596 nm)	> 100.00	0.0000 u (ppm)	0.2580
9/27/2018 20:26:26	Continuing Calibration Blank	Ti (336.122 nm)	74.63	0.0016 (ppm)	548.8170
9/27/2018 20:26:26	Continuing Calibration Blank	Tl (351.923 nm)	> 100.00	0.0020 u (ppm)	17.5139
9/27/2018 20:26:26	Continuing Calibration Blank	V (292.401 nm)	76.37	0.0002 (ppm)	134.6705
9/27/2018 20:26:26	Continuing Calibration Blank	Y (360.074 nm)	0.37	1.00 (Ratio)	1051500.33
9/27/2018 20:26:26	Continuing Calibration Blank	Y_R (360.074 nm)	0.37	1.00 (Ratio)	1051834.48
9/27/2018 20:26:26	Continuing Calibration Blank	Zn (213.857 nm)	> 100.00	0.0001 u (ppm)	-24.3507
9/27/2018 20:29:41	R1808926-002L	Ag (328.068 nm)	35.36	0.0002 (ppm)	-174.4338
9/27/2018 20:29:41	R1808926-002L	Al (394.401 nm)	7.23	0.0070 (ppm)	182.1917
9/27/2018 20:29:41	R1808926-002L	As (188.980 nm)	> 100.00	0.0010 u (ppm)	0.1835
9/27/2018 20:29:41	R1808926-002L	B (249.772 nm)	5.29	0.0043 (ppm)	121.4251
9/27/2018 20:29:41	R1808926-002L	Ba (230.424 nm)	8.05	-0.0007 u (ppm)	10.8822
9/27/2018 20:29:41	R1808926-002L	Be (313.107 nm)	19.36	0.0000 u (ppm)	-421.1658
9/27/2018 20:29:41	R1808926-002L	Ca (227.547 nm)	1.74	3.1932 (ppm)	171.2265
9/27/2018 20:29:41	R1808926-002L	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	12.3952
9/27/2018 20:29:41	R1808926-002L	Co (230.786 nm)	51.78	-0.0006 u (ppm)	-9.3828
9/27/2018 20:29:41	R1808926-002L	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	8.7231
9/27/2018 20:29:41	R1808926-002L	Cu (327.395 nm)	> 100.00	0.0001 u (ppm)	42.4721
9/27/2018 20:29:41	R1808926-002L	Fe (234.350 nm)	0.83	7.4646 (ppm)	70915.0452
9/27/2018 20:29:41	R1808926-002L	K (766.491 nm)	2.69	0.1515 (ppm)	405.3199
9/27/2018 20:29:41	R1808926-002L	Mg (279.078 nm)	0.98	1.0451 (ppm)	1777.4326
9/27/2018 20:29:41	R1808926-002L	Mn (257.610 nm)	0.66	0.0499 (ppm)	13516.3796
9/27/2018 20:29:41	R1808926-002L	Mo (202.032 nm)	0.62	-0.0052 u (ppm)	7.7671
9/27/2018 20:29:41	R1808926-002L	Na (588.995 nm)	0.45	1.6723 (ppm)	66345.9588
9/27/2018 20:29:41	R1808926-002L	Ni (230.299 nm)	19.13	-0.0029 u (ppm)	-34.5696
9/27/2018 20:29:41	R1808926-002L	Pb (220.353 nm)	> 100.00	0.0004 u (ppm)	3.6637
9/27/2018 20:29:41	R1808926-002L	Sb (217.582 nm)	> 100.00	-0.0009 u (ppm)	-0.1543
9/27/2018 20:29:41	R1808926-002L	Se (196.026 nm)	> 100.00	0.0008 u (ppm)	5.3289
9/27/2018 20:29:41	R1808926-002L	Sn (189.925 nm)	38.55	-0.0017 u (ppm)	-1.2565
9/27/2018 20:29:41	R1808926-002L	Sr (216.596 nm)	2.86	0.0086 (ppm)	113.1195
9/27/2018 20:29:41	R1808926-002L	Ti (336.122 nm)	25.01	-0.0018 u (ppm)	-89.5199
9/27/2018 20:29:41	R1808926-002L	Tl (351.923 nm)	> 100.00	-0.0007 u (ppm)	10.8009
9/27/2018 20:29:41	R1808926-002L	V (292.401 nm)	> 100.00	0.0001 u (ppm)	130.2665
9/27/2018 20:29:41	R1808926-002L	Y (360.074 nm)	0.49	1.00 (Ratio)	1054030.12
9/27/2018 20:29:41	R1808926-002L	Y_R (360.074 nm)	0.49	1.00 (Ratio)	1054398.61
9/27/2018 20:29:41	R1808926-002L	Zn (213.857 nm)	2.20	0.0027 (ppm)	42.0417
9/27/2018 20:32:55	R1808926-003	Ag (328.068 nm)	85.80	0.0002 (ppm)	-171.8617
9/27/2018 20:32:55	R1808926-003	Al (394.401 nm)	1.47	0.0824 (ppm)	1096.3092
9/27/2018 20:32:55	R1808926-003	As (188.980 nm)	64.91	-0.0038 u (ppm)	-3.6045
9/27/2018 20:32:55	R1808926-003	B (249.772 nm)	1.14	0.1693 (ppm)	3916.1510
9/27/2018 20:32:55	R1808926-003	Ba (230.424 nm)	1.20	0.0256 (ppm)	790.7384
9/27/2018 20:32:55	R1808926-003	Be (313.107 nm)	13.05	0.0000 u (ppm)	-439.9544
9/27/2018 20:32:55	R1808926-003	Ca (227.547 nm)	1.74	82.3208 o (ppm)	4244.5115
9/27/2018 20:32:55	R1808926-003	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	12.3564
9/27/2018 20:32:55	R1808926-003	Co (230.786 nm)	16.71	0.0019 (ppm)	12.3831

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:32:55	R1808926-003	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	6.6918
9/27/2018 20:32:55	R1808926-003	Cu (327.395 nm)	4.07	0.0048 (ppm)	305.6076
9/27/2018 20:32:55	R1808926-003	Fe (234.350 nm)	0.62	0.1425 (ppm)	1419.1429
9/27/2018 20:32:55	R1808926-003	K (766.491 nm)	1.58	2.2639 (ppm)	6675.0863
9/27/2018 20:32:55	R1808926-003	Mg (279.078 nm)	1.25	24.6072 (ppm)	41834.3383
9/27/2018 20:32:55	R1808926-003	Mn (257.610 nm)	1.33	1.3924 (ppm)	377000.3861
9/27/2018 20:32:55	R1808926-003	Mo (202.032 nm)	11.39	-0.0067 u (ppm)	1.3918
9/27/2018 20:32:55	R1808926-003	Na (588.995 nm)	1.59	52.9842 (ppm)	2310574.8542
9/27/2018 20:32:55	R1808926-003	Ni (230.299 nm)	4.57	-0.0122 u (ppm)	-88.2872
9/27/2018 20:32:55	R1808926-003	Pb (220.353 nm)	> 100.00	-0.0001 u (ppm)	2.7702
9/27/2018 20:32:55	R1808926-003	Sb (217.582 nm)	> 100.00	-0.0006 u (ppm)	0.2808
9/27/2018 20:32:55	R1808926-003	Se (196.026 nm)	44.05	-0.0049 u (ppm)	0.7281
9/27/2018 20:32:55	R1808926-003	Sn (189.925 nm)	53.24	-0.0010 u (ppm)	-0.5285
9/27/2018 20:32:55	R1808926-003	Sr (216.596 nm)	1.45	0.2862 (ppm)	3746.3184
9/27/2018 20:32:55	R1808926-003	Ti (336.122 nm)	17.95	0.0017 (ppm)	567.2467
9/27/2018 20:32:55	R1808926-003	Tl (351.923 nm)	> 100.00	0.0005 u (ppm)	13.9188
9/27/2018 20:32:55	R1808926-003	V (292.401 nm)	56.42	0.0004 (ppm)	142.3974
9/27/2018 20:32:55	R1808926-003	Y (360.074 nm)	1.52	0.95 (Ratio)	998315.92
9/27/2018 20:32:55	R1808926-003	Y_R (360.074 nm)	1.52	0.95 (Ratio)	998670.64
9/27/2018 20:32:55	R1808926-003	Zn (213.857 nm)	1.53	0.0166 (ppm)	391.2373
9/27/2018 20:36:10	R1808926-004	Ag (328.068 nm)	54.99	0.0003 (ppm)	-165.0114
9/27/2018 20:36:10	R1808926-004	Al (394.401 nm)	2.01	0.0878 (ppm)	1161.5644
9/27/2018 20:36:10	R1808926-004	As (188.980 nm)	> 100.00	0.0004 u (ppm)	-0.2881
9/27/2018 20:36:10	R1808926-004	B (249.772 nm)	1.44	0.1070 (ppm)	2482.5075
9/27/2018 20:36:10	R1808926-004	Ba (230.424 nm)	1.29	0.1018 (ppm)	3050.3455
9/27/2018 20:36:10	R1808926-004	Be (313.107 nm)	15.92	0.0000 u (ppm)	-444.1139
9/27/2018 20:36:10	R1808926-004	Ca (227.547 nm)	1.48	125.3282 o (ppm)	6458.4191
9/27/2018 20:36:10	R1808926-004	Cd (214.439 nm)	97.04	-0.0001 u (ppm)	11.6182
9/27/2018 20:36:10	R1808926-004	Co (230.786 nm)	17.34	0.0028 (ppm)	20.2043
9/27/2018 20:36:10	R1808926-004	Cr (267.716 nm)	91.45	0.0001 (ppm)	12.0661
9/27/2018 20:36:10	R1808926-004	Cu (327.395 nm)	9.27	0.0026 (ppm)	183.5124
9/27/2018 20:36:10	R1808926-004	Fe (234.350 nm)	1.11	0.2302 (ppm)	2251.7635
9/27/2018 20:36:10	R1808926-004	K (766.491 nm)	1.38	3.7026 (ppm)	10945.2009
9/27/2018 20:36:10	R1808926-004	Mg (279.078 nm)	1.29	30.9337 (ppm)	52589.6603
9/27/2018 20:36:10	R1808926-004	Mn (257.610 nm)	1.32	0.1709 (ppm)	46294.6646
9/27/2018 20:36:10	R1808926-004	Mo (202.032 nm)	7.59	-0.0068 u (ppm)	0.9640
9/27/2018 20:36:10	R1808926-004	Na (588.995 nm)	1.46	116.2812 o (ppm)	5078995.2215
9/27/2018 20:36:10	R1808926-004	Ni (230.299 nm)	6.92	-0.0086 u (ppm)	-67.6910
9/27/2018 20:36:10	R1808926-004	Pb (220.353 nm)	> 100.00	-0.0009 u (ppm)	1.2324
9/27/2018 20:36:10	R1808926-004	Sb (217.582 nm)	> 100.00	0.0031 u (ppm)	4.8087
9/27/2018 20:36:10	R1808926-004	Se (196.026 nm)	61.02	-0.0062 u (ppm)	-0.3284
9/27/2018 20:36:10	R1808926-004	Sn (189.925 nm)	72.07	-0.0019 u (ppm)	-1.5523
9/27/2018 20:36:10	R1808926-004	Sr (216.596 nm)	1.24	0.4362 (ppm)	5709.7478
9/27/2018 20:36:10	R1808926-004	Ti (336.122 nm)	1.31	0.0027 (ppm)	757.5962
9/27/2018 20:36:10	R1808926-004	Tl (351.923 nm)	> 100.00	0.0002 u (ppm)	13.1692
9/27/2018 20:36:10	R1808926-004	V (292.401 nm)	31.33	0.0009 (ppm)	158.6849
9/27/2018 20:36:10	R1808926-004	Y (360.074 nm)	1.53	0.92 (Ratio)	973537.16
9/27/2018 20:36:10	R1808926-004	Y_R (360.074 nm)	1.53	0.92 (Ratio)	973891.47
9/27/2018 20:36:10	R1808926-004	Zn (213.857 nm)	1.61	0.0157 (ppm)	368.2857
9/27/2018 20:39:23	R1808926-006	Ag (328.068 nm)	20.69	0.0003 (ppm)	-165.7375
9/27/2018 20:39:23	R1808926-006	Al (394.401 nm)	1.42	9.7555 (ppm)	118304.3199

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:39:23	R1808926-005	As (188.980 nm)	42.61	0.0037 (ppm)	2.2870
9/27/2018 20:39:23	R1808926-005	B (249.772 nm)	1.29	0.0428 (ppm)	1007.0426
9/27/2018 20:39:23	R1808926-005	Ba (230.424 nm)	1.26	0.0909 (ppm)	2728.9398
9/27/2018 20:39:23	R1808926-005	Be (313.107 nm)	2.46	0.0004 (ppm)	74.8988
9/27/2018 20:39:23	R1808926-005	Ca (227.547 nm)	1.57	92.3803 o (ppm)	4762.3478
9/27/2018 20:39:23	R1808926-005	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	14.2327
9/27/2018 20:39:23	R1808926-005	Co (230.786 nm)	7.12	0.0067 (ppm)	54.0424
9/27/2018 20:39:23	R1808926-005	Cr (267.716 nm)	1.16	0.0805 (ppm)	3497.0895
9/27/2018 20:39:23	R1808926-005	Cu (327.395 nm)	1.81	0.0307 (ppm)	1726.8047
9/27/2018 20:39:23	R1808926-005	Fe (234.350 nm)	1.22	14.8625 o (ppm)	141130.0087
9/27/2018 20:39:23	R1808926-005	K (766.491 nm)	1.71	7.0694 (ppm)	20938.0848
9/27/2018 20:39:23	R1808926-005	Mg (279.078 nm)	1.40	14.7338 (ppm)	25049.0561
9/27/2018 20:39:23	R1808926-005	Mn (257.610 nm)	1.31	0.4150 (ppm)	112380.5215
9/27/2018 20:39:23	R1808926-005	Mo (202.032 nm)	> 100.00	0.0000 u (ppm)	29.8195
9/27/2018 20:39:23	R1808926-005	Na (588.995 nm)	1.60	26.0692 (ppm)	1133393.5924
9/27/2018 20:39:23	R1808926-005	Ni (230.299 nm)	22.44	-0.0111 u (ppm)	-81.9163
9/27/2018 20:39:23	R1808926-005	Pb (220.353 nm)	25.41	0.0039 (ppm)	10.5246
9/27/2018 20:39:23	R1808926-005	Sb (217.582 nm)	78.61	0.0011 (ppm)	2.3265
9/27/2018 20:39:23	R1808926-005	Se (196.026 nm)	24.28	-0.0027 u (ppm)	2.5323
9/27/2018 20:39:23	R1808926-005	Sn (189.925 nm)	54.63	-0.0023 u (ppm)	-2.0155
9/27/2018 20:39:23	R1808926-005	Sr (216.596 nm)	1.23	0.2866 (ppm)	3751.2303
9/27/2018 20:39:23	R1808926-005	Ti (336.122 nm)	1.37	0.4726 (ppm)	88456.7256
9/27/2018 20:39:23	R1808926-005	Tl (351.923 nm)	> 100.00	-0.0012 u (ppm)	9.5669
9/27/2018 20:39:23	R1808926-005	V (292.401 nm)	1.81	0.0212 (ppm)	849.1672
9/27/2018 20:39:23	R1808926-005	Y (360.074 nm)	1.56	0.96 (Ratio)	1010462.92
9/27/2018 20:39:23	R1808926-005	Y_R (360.074 nm)	1.56	0.96 (Ratio)	1010845.77
9/27/2018 20:39:23	R1808926-005	Zn (213.857 nm)	1.53	0.0613 (ppm)	1516.9869
9/27/2018 20:42:38	R1808926-007	Ag (328.068 nm)	5.27	0.0002 (ppm)	-171.8470
9/27/2018 20:42:38	R1808926-007	Al (394.401 nm)	1.56	0.1897 (ppm)	2395.8927
9/27/2018 20:42:38	R1808926-007	As (188.980 nm)	99.47	-0.0017 u (ppm)	-1.9619
9/27/2018 20:42:38	R1808926-007	B (249.772 nm)	22.02	0.0006 (ppm)	35.4067
9/27/2018 20:42:38	R1808926-007	Ba (230.424 nm)	4.84	0.0012 (ppm)	67.3873
9/27/2018 20:42:38	R1808926-007	Be (313.107 nm)	49.16	0.0000 u (ppm)	-423.4321
9/27/2018 20:42:38	R1808926-007	Ca (227.547 nm)	19.40	0.1505 (ppm)	14.5985
9/27/2018 20:42:38	R1808926-007	Cd (214.439 nm)	19.20	-0.0003 u (ppm)	6.9164
9/27/2018 20:42:38	R1808926-007	Co (230.786 nm)	> 100.00	-0.0003 u (ppm)	-6.9015
9/27/2018 20:42:38	R1808926-007	Cr (267.716 nm)	18.80	0.0002 (ppm)	20.4015
9/27/2018 20:42:38	R1808926-007	Cu (327.395 nm)	9.48	0.0015 (ppm)	122.7326
9/27/2018 20:42:38	R1808926-007	Fe (234.350 nm)	0.59	0.2779 (ppm)	2704.2227
9/27/2018 20:42:38	R1808926-007	K (766.491 nm)	9.03	0.0678 (ppm)	156.7570
9/27/2018 20:42:38	R1808926-007	Mg (279.078 nm)	2.35	0.0604 (ppm)	103.4462
9/27/2018 20:42:38	R1808926-007	Mn (257.610 nm)	1.00	0.0140 (ppm)	3799.9731
9/27/2018 20:42:38	R1808926-007	Mo (202.032 nm)	6.57	-0.0072 u (ppm)	-0.7278
9/27/2018 20:42:38	R1808926-007	Na (588.995 nm)	2.21	0.2924 (ppm)	5994.8955
9/27/2018 20:42:38	R1808926-007	Ni (230.299 nm)	> 100.00	0.0002 u (ppm)	-16.0765
9/27/2018 20:42:38	R1808926-007	Pb (220.353 nm)	> 100.00	0.0009 u (ppm)	4.7847
9/27/2018 20:42:38	R1808926-007	Sb (217.582 nm)	> 100.00	0.0012 u (ppm)	2.5018
9/27/2018 20:42:38	R1808926-007	Se (196.026 nm)	45.78	0.0020 (ppm)	6.2865
9/27/2018 20:42:38	R1808926-007	Sn (189.925 nm)	28.31	-0.0005 u (ppm)	0.1489
9/27/2018 20:42:38	R1808926-007	Sr (216.596 nm)	81.95	0.0003 (ppm)	4.8046
9/27/2018 20:42:38	R1808926-007	Ti (336.122 nm)	3.81	0.0094 (ppm)	2003.1112

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:42:38	R1808926-007	Tl (351.923 nm)	> 100.00	-0.0004 u (ppm)	11.6861
9/27/2018 20:42:38	R1808926-007	V (292.401 nm)	97.26	0.0001 (ppm)	132.8821
9/27/2018 20:42:38	R1808926-007	Y (360.074 nm)	1.29	1.01 (Ratio)	1062356.57
9/27/2018 20:42:38	R1808926-007	Y_R (360.074 nm)	1.29	1.01 (Ratio)	1062737.00
9/27/2018 20:42:38	R1808926-007	Zn (213.857 nm)	0.61	0.0060 (ppm)	125.7794
9/27/2018 20:45:52	R1808926-009	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-181.7934
9/27/2018 20:45:52	R1808926-009	Al (394.401 nm)	7.10	0.0039 (ppm)	144.8084
9/27/2018 20:45:52	R1808926-009	As (188.980 nm)	> 100.00	-0.0005 u (ppm)	-1.0047
9/27/2018 20:45:52	R1808926-009	B (249.772 nm)	19.92	0.0002 (ppm)	27.1712
9/27/2018 20:45:52	R1808926-009	Ba (230.424 nm)	8.43	-0.0009 u (ppm)	7.5608
9/27/2018 20:45:52	R1808926-009	Be (313.107 nm)	51.73	0.0000 u (ppm)	-423.3079
9/27/2018 20:45:52	R1808926-009	Ca (227.547 nm)	> 100.00	0.0035 u (ppm)	7.0277
9/27/2018 20:45:52	R1808926-009	Cd (214.439 nm)	8.07	-0.0002 u (ppm)	9.0403
9/27/2018 20:45:52	R1808926-009	Co (230.786 nm)	92.51	-0.0002 u (ppm)	-5.7533
9/27/2018 20:45:52	R1808926-009	Cr (267.716 nm)	17.38	-0.0004 u (ppm)	-9.6792
9/27/2018 20:45:52	R1808926-009	Cu (327.395 nm)	5.85	0.0023 (ppm)	163.1250
9/27/2018 20:45:52	R1808926-009	Fe (234.350 nm)	31.38	0.0027 (ppm)	92.3027
9/27/2018 20:45:52	R1808926-009	K (766.491 nm)	26.24	0.0166 (ppm)	4.9492
9/27/2018 20:45:52	R1808926-009	Mg (279.078 nm)	30.76	0.0045 (ppm)	8.3760
9/27/2018 20:45:52	R1808926-009	Mn (257.610 nm)	1.18	0.0007 (ppm)	206.4343
9/27/2018 20:45:52	R1808926-009	Mo (202.032 nm)	2.51	-0.0072 u (ppm)	-0.7546
9/27/2018 20:45:52	R1808926-009	Na (588.995 nm)	0.33	0.1156 (ppm)	-1738.0606
9/27/2018 20:45:52	R1808926-009	Ni (230.299 nm)	93.56	0.0004 u (ppm)	-15.2629
9/27/2018 20:45:52	R1808926-009	Pb (220.353 nm)	> 100.00	0.0001 u (ppm)	3.1849
9/27/2018 20:45:52	R1808926-009	Sb (217.582 nm)	> 100.00	0.0008 u (ppm)	1.9760
9/27/2018 20:45:52	R1808926-009	Se (196.026 nm)	60.30	-0.0032 u (ppm)	2.0668
9/27/2018 20:45:52	R1808926-009	Sn (189.925 nm)	> 100.00	-0.0011 u (ppm)	-0.5467
9/27/2018 20:45:52	R1808926-009	Sr (216.596 nm)	63.48	-0.0002 u (ppm)	-1.5230
9/27/2018 20:45:52	R1808926-009	Ti (336.122 nm)	7.94	-0.0021 u (ppm)	-141.9308
9/27/2018 20:45:52	R1808926-009	Tl (351.923 nm)	84.86	-0.0028 u (ppm)	5.8587
9/27/2018 20:45:52	R1808926-009	V (292.401 nm)	35.04	-0.0003 u (ppm)	117.1876
9/27/2018 20:45:52	R1808926-009	Y (360.074 nm)	1.30	1.01 (Ratio)	1064545.43
9/27/2018 20:45:52	R1808926-009	Y_R (360.074 nm)	1.30	1.01 (Ratio)	1064896.52
9/27/2018 20:45:52	R1808926-009	Zn (213.857 nm)	2.76	0.0041 (ppm)	78.4448
9/27/2018 20:49:06	R1809066-002	Ag (328.068 nm)	40.52	0.0002 (ppm)	-170.5897
9/27/2018 20:49:06	R1809066-002	Al (394.401 nm)	1.44	0.4599 (ppm)	5670.2610
9/27/2018 20:49:06	R1809066-002	As (188.980 nm)	99.21	0.0028 u (ppm)	1.5355
9/27/2018 20:49:06	R1809066-002	B (249.772 nm)	1.41	0.0619 (ppm)	1445.4915
9/27/2018 20:49:06	R1809066-002	Ba (230.424 nm)	1.07	0.1027 (ppm)	3077.0916
9/27/2018 20:49:06	R1809066-002	Be (313.107 nm)	33.67	0.0000 u (ppm)	-417.1027
9/27/2018 20:49:06	R1809066-002	Ca (227.547 nm)	1.33	82.6403 o (ppm)	4260.9595
9/27/2018 20:49:06	R1809066-002	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.5389
9/27/2018 20:49:06	R1809066-002	Co (230.786 nm)	92.43	-0.0004 u (ppm)	-7.2023
9/27/2018 20:49:06	R1809066-002	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	8.3032
9/27/2018 20:49:06	R1809066-002	Cu (327.395 nm)	2.10	0.0066 (ppm)	399.7459
9/27/2018 20:49:06	R1809066-002	Fe (234.350 nm)	1.11	0.3166 (ppm)	3071.3192
9/27/2018 20:49:06	R1809066-002	K (766.491 nm)	1.48	2.7860 (ppm)	8224.5412
9/27/2018 20:49:06	R1809066-002	Mg (279.078 nm)	1.06	8.0306 (ppm)	13653.2135
9/27/2018 20:49:06	R1809066-002	Mn (257.610 nm)	1.24	0.0168 (ppm)	4571.2883
9/27/2018 20:49:06	R1809066-002	Mo (202.032 nm)	12.51	-0.0063 u (ppm)	3.2094
9/27/2018 20:49:06	R1809066-002	Na (588.995 nm)	1.20	81.9838 o (ppm)	3578933.1008

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:49:06	R1809066-002	Ni (230.299 nm)	47.52	-0.0041 u (ppm)	-40.9835
9/27/2018 20:49:06	R1809066-002	Pb (220.353 nm)	> 100.00	0.0010 u (ppm)	4.9637
9/27/2018 20:49:06	R1809066-002	Sb (217.582 nm)	54.58	0.0017 (ppm)	3.0762
9/27/2018 20:49:06	R1809066-002	Se (196.026 nm)	40.06	-0.0051 u (ppm)	0.5761
9/27/2018 20:49:06	R1809066-002	Sn (189.925 nm)	65.92	-0.0018 u (ppm)	-1.4062
9/27/2018 20:49:06	R1809066-002	Sr (216.596 nm)	0.93	0.3640 (ppm)	4764.1705
9/27/2018 20:49:06	R1809066-002	Ti (336.122 nm)	3.89	0.0069 (ppm)	1539.8466
9/27/2018 20:49:06	R1809066-002	Tl (351.923 nm)	> 100.00	-0.0008 u (ppm)	10.6980
9/27/2018 20:49:06	R1809066-002	V (292.401 nm)	8.96	0.0010 (ppm)	162.4776
9/27/2018 20:49:06	R1809066-002	Y (360.074 nm)	1.43	0.94 (Ratio)	995861.53
9/27/2018 20:49:06	R1809066-002	Y_R (360.074 nm)	1.43	0.94 (Ratio)	996143.55
9/27/2018 20:49:06	R1809066-002	Zn (213.857 nm)	0.80	0.0077 (ppm)	168.8460
9/27/2018 20:52:21	Continuing Calibration Verification	Ag (328.068 nm)	0.57	0.5008 (ppm)	31024.7992
9/27/2018 20:52:21	Continuing Calibration Verification	Al (394.401 nm)	0.46	9.5305 (ppm)	115577.7986
9/27/2018 20:52:21	Continuing Calibration Verification	As (188.980 nm)	0.64	0.9732 (ppm)	757.3489
9/27/2018 20:52:21	Continuing Calibration Verification	B (249.772 nm)	0.54	2.4926 (ppm)	57340.8224
9/27/2018 20:52:21	Continuing Calibration Verification	Ba (230.424 nm)	0.70	10.1388 (ppm)	300673.7406
9/27/2018 20:52:21	Continuing Calibration Verification	Be (313.107 nm)	0.51	0.2529 (ppm)	329757.6765
9/27/2018 20:52:21	Continuing Calibration Verification	Ca (227.547 nm)	0.44	24.0400 (ppm)	1244.3638
9/27/2018 20:52:21	Continuing Calibration Verification	Cd (214.439 nm)	0.51	0.5010 (ppm)	9859.6968
9/27/2018 20:52:21	Continuing Calibration Verification	Co (230.786 nm)	0.61	2.5947 (ppm)	22597.7276
9/27/2018 20:52:21	Continuing Calibration Verification	Cr (267.716 nm)	0.60	0.5190 (ppm)	22481.0406
9/27/2018 20:52:21	Continuing Calibration Verification	Cu (327.395 nm)	0.38	1.2164 (ppm)	66961.1955
9/27/2018 20:52:21	Continuing Calibration Verification	Fe (234.350 nm)	0.65	4.8621 (ppm)	46214.2736
9/27/2018 20:52:21	Continuing Calibration Verification	K (766.491 nm)	0.18	24.1312 (ppm)	71578.9051
9/27/2018 20:52:21	Continuing Calibration Verification	Mg (279.078 nm)	0.55	24.4936 (ppm)	41641.1216
9/27/2018 20:52:21	Continuing Calibration Verification	Mn (257.610 nm)	0.59	0.7679 (ppm)	207919.0560
9/27/2018 20:52:21	Continuing Calibration Verification	Mo (202.032 nm)	1.09	2.6154 (ppm)	11052.4815
9/27/2018 20:52:21	Continuing Calibration Verification	Na (588.995 nm)	0.22	24.3024 (ppm)	1056121.1357
9/27/2018 20:52:21	Continuing Calibration Verification	Ni (230.299 nm)	0.50	2.0548 (ppm)	11938.8882
9/27/2018 20:52:21	Continuing Calibration Verification	Pb (220.353 nm)	0.54	0.5063 (ppm)	990.4551
9/27/2018 20:52:21	Continuing Calibration Verification	Sb (217.582 nm)	0.30	4.8898 (ppm)	6011.3039
9/27/2018 20:52:21	Continuing Calibration Verification	Se (196.026 nm)	0.77	0.4857 (ppm)	399.6398
9/27/2018 20:52:21	Continuing Calibration Verification	Sn (189.925 nm)	0.41	5.0375 (ppm)	5881.1774
9/27/2018 20:52:21	Continuing Calibration Verification	Sr (216.596 nm)	0.80	2.5480 (ppm)	33346.9497
9/27/2018 20:52:21	Continuing Calibration Verification	Ti (336.122 nm)	0.56	2.5070 (ppm)	468114.4720
9/27/2018 20:52:21	Continuing Calibration Verification	Tl (351.923 nm)	0.51	0.9961 (ppm)	2432.2881
9/27/2018 20:52:21	Continuing Calibration Verification	V (292.401 nm)	0.64	2.5091 (ppm)	85330.0991
9/27/2018 20:52:21	Continuing Calibration Verification	Y (360.074 nm)	0.29	0.95 (Ratio)	1006269.97
9/27/2018 20:52:21	Continuing Calibration Verification	Y_R (360.074 nm)	0.29	0.95 (Ratio)	1006539.07
9/27/2018 20:52:21	Continuing Calibration Verification	Zn (213.857 nm)	0.55	0.9949 (ppm)	24995.5870
9/27/2018 20:55:36	Continuing Calibration Blank	Ag (328.068 nm)	43.91	0.0002 (ppm)	-170.8232
9/27/2018 20:55:36	Continuing Calibration Blank	Al (394.401 nm)	> 100.00	0.0001 u (ppm)	98.4688
9/27/2018 20:55:36	Continuing Calibration Blank	As (188.980 nm)	> 100.00	0.0000 u (ppm)	-0.5991
9/27/2018 20:55:36	Continuing Calibration Blank	B (249.772 nm)	10.45	0.0011 (ppm)	48.0957
9/27/2018 20:55:36	Continuing Calibration Blank	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	33.0104
9/27/2018 20:55:36	Continuing Calibration Blank	Be (313.107 nm)	44.07	0.0000 u (ppm)	-401.0928
9/27/2018 20:55:36	Continuing Calibration Blank	Ca (227.547 nm)	> 100.00	0.0049 u (ppm)	7.1025
9/27/2018 20:55:36	Continuing Calibration Blank	Cd (214.439 nm)	74.71	0.0000 u (ppm)	12.8008
9/27/2018 20:55:36	Continuing Calibration Blank	Co (230.786 nm)	> 100.00	0.0001 u (ppm)	-2.9171
9/27/2018 20:55:36	Continuing Calibration Blank	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	6.5177

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 20:55:36	Continuing Calibration Blank	Cu (327.395 nm)	> 100.00	-0.0001 u (ppm)	35.3507
9/27/2018 20:55:36	Continuing Calibration Blank	Fe (234.350 nm)	34.64	0.0032 (ppm)	96.6388
9/27/2018 20:55:36	Continuing Calibration Blank	K (766.491 nm)	31.36	0.0258 (ppm)	32.2890
9/27/2018 20:55:36	Continuing Calibration Blank	Mg (279.078 nm)	73.85	-0.0010 u (ppm)	-0.9426
9/27/2018 20:55:36	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	18.6318
9/27/2018 20:55:36	Continuing Calibration Blank	Mo (202.032 nm)	> 100.00	0.0010 u (ppm)	33.9083
9/27/2018 20:55:36	Continuing Calibration Blank	Na (588.995 nm)	47.44	0.0027 (ppm)	-6675.5723
9/27/2018 20:55:36	Continuing Calibration Blank	Ni (230.299 nm)	56.38	0.0005 (ppm)	-14.6895
9/27/2018 20:55:36	Continuing Calibration Blank	Pb (220.353 nm)	78.32	0.0020 (ppm)	6.8028
9/27/2018 20:55:36	Continuing Calibration Blank	Sb (217.582 nm)	61.23	0.0015 (ppm)	2.8430
9/27/2018 20:55:36	Continuing Calibration Blank	Se (196.026 nm)	> 100.00	0.0023 (ppm)	6.5986
9/27/2018 20:55:36	Continuing Calibration Blank	Sn (189.925 nm)	> 100.00	-0.0003 u (ppm)	0.2940
9/27/2018 20:55:36	Continuing Calibration Blank	Sr (216.596 nm)	> 100.00	0.0000 u (ppm)	1.0891
9/27/2018 20:55:36	Continuing Calibration Blank	Ti (336.122 nm)	69.14	0.0019 (ppm)	605.4463
9/27/2018 20:55:36	Continuing Calibration Blank	Tl (351.923 nm)	> 100.00	0.0003 u (ppm)	13.4294
9/27/2018 20:55:36	Continuing Calibration Blank	V (292.401 nm)	> 100.00	0.0001 u (ppm)	130.2281
9/27/2018 20:55:36	Continuing Calibration Blank	Y (360.074 nm)	0.52	0.99 (Ratio)	1048704.85
9/27/2018 20:55:36	Continuing Calibration Blank	Y_R (360.074 nm)	0.52	0.99 (Ratio)	1049000.22
9/27/2018 20:55:36	Continuing Calibration Blank	Zn (213.857 nm)	16.42	0.0001 (ppm)	-23.5183
9/27/2018 20:58:50	Contract Required Detection Limit	Ag (328.068 nm)	0.80	0.0098 (ppm)	428.0221
9/27/2018 20:58:50	Contract Required Detection Limit	Al (394.401 nm)	0.30	0.1766 (ppm)	2237.6694
9/27/2018 20:58:50	Contract Required Detection Limit	As (188.980 nm)	10.36	0.0199 (ppm)	14.9204
9/27/2018 20:58:50	Contract Required Detection Limit	B (249.772 nm)	0.30	0.1899 (ppm)	4388.5976
9/27/2018 20:58:50	Contract Required Detection Limit	Ba (230.424 nm)	0.35	0.2054 (ppm)	6122.5939
9/27/2018 20:58:50	Contract Required Detection Limit	Be (313.107 nm)	0.48	0.0048 (ppm)	5864.7407
9/27/2018 20:58:50	Contract Required Detection Limit	Ca (227.547 nm)	2.80	0.9516 (ppm)	55.8331
9/27/2018 20:58:50	Contract Required Detection Limit	Cd (214.439 nm)	0.57	0.0098 (ppm)	207.0526
9/27/2018 20:58:50	Contract Required Detection Limit	Co (230.786 nm)	1.18	0.0503 (ppm)	434.1675
9/27/2018 20:58:50	Contract Required Detection Limit	Cr (267.716 nm)	1.65	0.0111 (ppm)	492.2212
9/27/2018 20:58:50	Contract Required Detection Limit	Cu (327.395 nm)	0.29	0.0244 (ppm)	1378.6625
9/27/2018 20:58:50	Contract Required Detection Limit	Fe (234.350 nm)	0.62	0.1029 (ppm)	1042.8444
9/27/2018 20:58:50	Contract Required Detection Limit	K (766.491 nm)	0.99	0.9253 (ppm)	2702.0289
9/27/2018 20:58:50	Contract Required Detection Limit	Mg (279.078 nm)	0.47	0.9903 (ppm)	1684.2514
9/27/2018 20:58:50	Contract Required Detection Limit	Mn (257.610 nm)	0.50	0.0154 (ppm)	4196.5102
9/27/2018 20:58:50	Contract Required Detection Limit	Mo (202.032 nm)	6.92	0.0198 R (ppm) 79%	113.4058 R
9/27/2018 20:58:50	Contract Required Detection Limit	Na (588.995 nm)	0.45	1.0011 (ppm)	36992.4883
9/27/2018 20:58:50	Contract Required Detection Limit	Ni (230.299 nm)	2.74	0.0416 (ppm)	224.4232
9/27/2018 20:58:50	Contract Required Detection Limit	Pb (220.353 nm)	8.39	0.0093 (ppm)	21.0865
9/27/2018 20:58:50	Contract Required Detection Limit	Sb (217.582 nm)	2.34	0.0596 (ppm)	74.1765
9/27/2018 20:58:50	Contract Required Detection Limit	Se (196.026 nm)	18.06	0.0083 (ppm)	11.4544
9/27/2018 20:58:50	Contract Required Detection Limit	Sn (189.925 nm)	0.65	0.5022 (ppm)	586.9685
9/27/2018 20:58:50	Contract Required Detection Limit	Sr (216.596 nm)	0.91	0.1015 (ppm)	1329.4792
9/27/2018 20:58:50	Contract Required Detection Limit	Ti (336.122 nm)	1.15	0.0480 (ppm)	9203.6651
9/27/2018 20:58:50	Contract Required Detection Limit	Tl (351.923 nm)	7.64	0.0189 (ppm)	58.4843
9/27/2018 20:58:50	Contract Required Detection Limit	V (292.401 nm)	0.26	0.0489 (ppm)	1789.4208
9/27/2018 20:58:50	Contract Required Detection Limit	Y (360.074 nm)	0.41	1.00 (Ratio)	1051658.43
9/27/2018 20:58:50	Contract Required Detection Limit	Y_R (360.074 nm)	0.41	1.00 (Ratio)	1051944.91
9/27/2018 20:58:50	Contract Required Detection Limit	Zn (213.857 nm)	0.61	0.0195 (ppm)	463.5297
9/27/2018 21:02:05	Interference Check Solution A	Ag (328.068 nm)	73.81	0.0002 (ppm)	-174.8507
9/27/2018 21:02:05	Interference Check Solution A	Al (394.401 nm)	0.27	267.0546 o (ppm)	3235988.2659
9/27/2018 21:02:05	Interference Check Solution A	As (188.980 nm)	> 100.00	-0.0001 u (ppm)	-0.6645

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:02:05	Interference Check Solution A	B (249.772 nm)	1.18	0.0469 (ppm)	1101.7901
9/27/2018 21:02:05	Interference Check Solution A	Ba (230.424 nm)	49.07	-0.0004 u (ppm)	22.3999
9/27/2018 21:02:05	Interference Check Solution A	Be (313.107 nm)	2.09	-0.0001 u (ppm)	-504.5030
9/27/2018 21:02:05	Interference Check Solution A	Ca (227.547 nm)	0.15	271.9727 o (ppm)	14007.2999
9/27/2018 21:02:05	Interference Check Solution A	Cd (214.439 nm)	16.80	-0.0012 Ku (ppm)	-10.8346 K
9/27/2018 21:02:05	Interference Check Solution A	Co (230.786 nm)	19.15	-0.0025 u (ppm)	-25.7482
9/27/2018 21:02:05	Interference Check Solution A	Cr (267.716 nm)	9.17	-0.0005 u (ppm)	-12.6161
9/27/2018 21:02:05	Interference Check Solution A	Cu (327.395 nm)	17.99	0.0007 (ppm)	79.7209
9/27/2018 21:02:05	Interference Check Solution A	Fe (234.350 nm)	0.76	90.3300 o (ppm)	857408.9259
9/27/2018 21:02:05	Interference Check Solution A	K (766.491 nm)	16.73	0.0307 (ppm)	46.7660
9/27/2018 21:02:05	Interference Check Solution A	Mg (279.078 nm)	0.48	263.7293 o (ppm)	448355.0532
9/27/2018 21:02:05	Interference Check Solution A	Mn (257.610 nm)	2.07	0.0015 (ppm)	427.3883
9/27/2018 21:02:05	Interference Check Solution A	Mo (202.032 nm)	7.78	-0.0073 u (ppm)	-0.8980
9/27/2018 21:02:05	Interference Check Solution A	Na (588.995 nm)	18.90	-0.0151 u (ppm)	-7454.1289
9/27/2018 21:02:05	Interference Check Solution A	Ni (230.299 nm)	33.94	-0.0025 u (ppm)	-31.9597
9/27/2018 21:02:05	Interference Check Solution A	Pb (220.353 nm)	98.36	0.0009 u (ppm)	4.7322
9/27/2018 21:02:05	Interference Check Solution A	Sb (217.582 nm)	> 100.00	0.0014 u (ppm)	2.6787
9/27/2018 21:02:05	Interference Check Solution A	Se (196.026 nm)	> 100.00	0.0031 u (ppm)	7.1726
9/27/2018 21:02:05	Interference Check Solution A	Sn (189.925 nm)	65.89	-0.0023 u (ppm)	-2.0262
9/27/2018 21:02:05	Interference Check Solution A	Sr (216.596 nm)	3.27	0.0242 (ppm)	317.2380
9/27/2018 21:02:05	Interference Check Solution A	Ti (336.122 nm)	49.91	-0.0007 u (ppm)	127.6037
9/27/2018 21:02:05	Interference Check Solution A	Tl (351.923 nm)	60.15	0.0030 (ppm)	19.9622
9/27/2018 21:02:05	Interference Check Solution A	V (292.401 nm)	5.34	0.0033 K (ppm)	238.8862 K
9/27/2018 21:02:05	Interference Check Solution A	Y (360.074 nm)	0.20	0.87 (Ratio)	919842.20
9/27/2018 21:02:05	Interference Check Solution A	Y_R (360.074 nm)	0.20	0.87 (Ratio)	920060.11
9/27/2018 21:02:05	Interference Check Solution A	Zn (213.857 nm)	2.22	0.0113 K (ppm)	258.7195 K
9/27/2018 21:05:20	Interference Check Solution AB	Ag (328.068 nm)	0.33	0.2130 (ppm)	13087.1170
9/27/2018 21:05:20	Interference Check Solution AB	Al (394.401 nm)	0.17	264.2877 o (ppm)	3202460.9530
9/27/2018 21:05:20	Interference Check Solution AB	As (188.980 nm)	2.27	0.0981 (ppm)	75.7798
9/27/2018 21:05:20	Interference Check Solution AB	B (249.772 nm)	0.48	0.0444 (ppm)	1044.0231
9/27/2018 21:05:20	Interference Check Solution AB	Ba (230.424 nm)	0.34	0.5123 (ppm)	15223.0067
9/27/2018 21:05:20	Interference Check Solution AB	Be (313.107 nm)	0.48	0.4955 (ppm)	646554.8033
9/27/2018 21:05:20	Interference Check Solution AB	Ca (227.547 nm)	0.21	269.4855 o (ppm)	13879.2663
9/27/2018 21:05:20	Interference Check Solution AB	Cd (214.439 nm)	0.59	0.9681 (ppm)	19040.7988
9/27/2018 21:05:20	Interference Check Solution AB	Co (230.786 nm)	0.21	0.4854 (ppm)	4223.8653
9/27/2018 21:05:20	Interference Check Solution AB	Cr (267.716 nm)	0.46	0.4999 (ppm)	21655.1731
9/27/2018 21:05:20	Interference Check Solution AB	Cu (327.395 nm)	0.14	0.5257 (ppm)	28960.5392
9/27/2018 21:05:20	Interference Check Solution AB	Fe (234.350 nm)	0.53	89.8981 o (ppm)	853309.7432
9/27/2018 21:05:20	Interference Check Solution AB	K (766.491 nm)	80.14	0.0166 (ppm)	4.9062
9/27/2018 21:05:20	Interference Check Solution AB	Mg (279.078 nm)	0.41	262.1417 o (ppm)	445656.1110
9/27/2018 21:05:20	Interference Check Solution AB	Mn (257.610 nm)	0.37	0.4951 (ppm)	134051.7379
9/27/2018 21:05:20	Interference Check Solution AB	Mo (202.032 nm)	13.64	-0.0078 u (ppm)	-2.9618
9/27/2018 21:05:20	Interference Check Solution AB	Na (588.995 nm)	34.22	-0.0037 u (ppm)	-6953.9950
9/27/2018 21:05:20	Interference Check Solution AB	Ni (230.299 nm)	0.39	0.9484 (ppm)	5501.2765
9/27/2018 21:05:20	Interference Check Solution AB	Pb (220.353 nm)	2.34	0.0470 (ppm)	94.6754
9/27/2018 21:05:20	Interference Check Solution AB	Sb (217.582 nm)	0.31	0.6152 (ppm)	757.1010
9/27/2018 21:05:20	Interference Check Solution AB	Se (196.026 nm)	5.36	0.0473 (ppm)	43.1472
9/27/2018 21:05:20	Interference Check Solution AB	Sn (189.925 nm)	> 100.00	-0.0011 u (ppm)	-0.5537
9/27/2018 21:05:20	Interference Check Solution AB	Sr (216.596 nm)	2.60	0.0246 (ppm)	323.1184
9/27/2018 21:05:20	Interference Check Solution AB	Ti (336.122 nm)	19.29	-0.0011 u (ppm)	53.7708
9/27/2018 21:05:20	Interference Check Solution AB	Tl (351.923 nm)	3.54	0.1137 (ppm)	288.8012

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:05:20	Interference Check Solution AB	V (292.401 nm)	0.28	0.5046 (ppm)	17263.5708
9/27/2018 21:05:20	Interference Check Solution AB	Y (360.074 nm)	0.33	0.87 (Ratio)	920970.90
9/27/2018 21:05:20	Interference Check Solution AB	Y_R (360.074 nm)	0.33	0.87 (Ratio)	921154.15
9/27/2018 21:05:20	Interference Check Solution AB	Zn (213.857 nm)	0.40	1.0100 (ppm)	25374.6045
9/27/2018 21:08:35	HLCCV2	Ag (328.068 nm)	0.64	2.1887 o (ppm)	136205.2787
9/27/2018 21:08:35	HLCCV2	Al (394.401 nm)	0.66	542.8206 o (ppm)	6577433.1321
9/27/2018 21:08:35	HLCCV2	As (188.980 nm)	0.96	4.1597 o (ppm)	3238.9798
9/27/2018 21:08:35	HLCCV2	B (249.772 nm)	0.71	10.5244 o (ppm)	242035.1539
9/27/2018 21:08:35	HLCCV2	Ba (230.424 nm)	0.72	37.8304 o (ppm)	1121798.6103
9/27/2018 21:08:35	HLCCV2	Be (313.107 nm)	0.77	0.9865 o (ppm)	1287594.4762
9/27/2018 21:08:35	HLCCV2	Ca (227.547 nm)	0.53	282.4386 Qo (ppm)	14546.0587 Q
9/27/2018 21:08:35	HLCCV2	Cd (214.439 nm)	0.75	1.8824 o (ppm)	37011.8102
9/27/2018 21:08:35	HLCCV2	Co (230.786 nm)	0.68	9.4076 o (ppm)	81943.4755
9/27/2018 21:08:35	HLCCV2	Cr (267.716 nm)	0.83	9.8736 o (ppm)	427488.6609
9/27/2018 21:08:35	HLCCV2	Cu (327.395 nm)	0.50	5.4953 o (ppm)	302364.0366
9/27/2018 21:08:35	HLCCV2	Fe (234.350 nm)	0.76	46.2600 o (ppm)	439130.6972
9/27/2018 21:08:35	HLCCV2	K (766.491 nm)	0.69	174.6574 Qo (ppm)	518351.8044 Q
9/27/2018 21:08:35	HLCCV2	Mg (279.078 nm)	1.02	513.9616 o (ppm)	873763.8579
9/27/2018 21:08:35	HLCCV2	Mn (257.610 nm)	0.68	9.5373 o (ppm)	2582200.3210
9/27/2018 21:08:35	HLCCV2	Mo (202.032 nm)	1.21	9.8507 o (ppm)	41545.5062
9/27/2018 21:08:35	HLCCV2	Na (588.995 nm)	0.07	210.2075 o (ppm)	9187050.6842
9/27/2018 21:08:35	HLCCV2	Ni (230.299 nm)	0.60	7.3890 o (ppm)	42976.8089
9/27/2018 21:08:35	HLCCV2	Pb (220.353 nm)	0.74	9.3999 o (ppm)	18335.6669
9/27/2018 21:08:35	HLCCV2	Sb (217.582 nm)	6.89	0.0428 (ppm)	53.6187
9/27/2018 21:08:35	HLCCV2	Se (196.026 nm)	0.22	2.0774 o (ppm)	1694.0949
9/27/2018 21:08:35	HLCCV2	Sn (189.925 nm)	6.52	-0.0179 u (ppm)	-20.1749
9/27/2018 21:08:35	HLCCV2	Sr (216.596 nm)	0.51	9.6267 o (ppm)	125986.4715
9/27/2018 21:08:35	HLCCV2	Ti (336.122 nm)	0.38	10.0311 o (ppm)	1872281.0063
9/27/2018 21:08:35	HLCCV2	Tl (351.923 nm)	0.81	4.4571 Qo (ppm)	10839.4154 Q
9/27/2018 21:08:35	HLCCV2	V (292.401 nm)	0.67	9.9006 o (ppm)	336321.4048
9/27/2018 21:08:35	HLCCV2	Y (360.074 nm)	0.24	0.81 (Ratio)	859840.33
9/27/2018 21:08:35	HLCCV2	Y_R (360.074 nm)	0.24	0.81 (Ratio)	859989.20
9/27/2018 21:08:35	HLCCV2	Zn (213.857 nm)	0.56	4.1756 o (ppm)	104985.3531
9/27/2018 21:11:50	HLCCV3	Ag (328.068 nm)	36.94	0.0004 (ppm)	-158.3241
9/27/2018 21:11:50	HLCCV3	Al (394.401 nm)	22.95	0.0809 (ppm)	1077.7907
9/27/2018 21:11:50	HLCCV3	As (188.980 nm)	> 100.00	0.0041 u (ppm)	2.5776
9/27/2018 21:11:50	HLCCV3	B (249.772 nm)	4.55	0.0229 (ppm)	548.1047
9/27/2018 21:11:50	HLCCV3	Ba (230.424 nm)	47.43	0.0042 (ppm)	157.4539
9/27/2018 21:11:50	HLCCV3	Be (313.107 nm)	47.61	0.0001 (ppm)	-301.5942
9/27/2018 21:11:50	HLCCV3	Ca (227.547 nm)	0.09	208.5666 o (ppm)	10743.3187
9/27/2018 21:11:50	HLCCV3	Cd (214.439 nm)	31.52	0.0007 (ppm)	27.0285
9/27/2018 21:11:50	HLCCV3	Co (230.786 nm)	> 100.00	-0.0006 u (ppm)	-9.1674
9/27/2018 21:11:50	HLCCV3	Cr (267.716 nm)	41.96	0.0010 (ppm)	54.9210
9/27/2018 21:11:50	HLCCV3	Cu (327.395 nm)	0.82	4.1543 o (ppm)	228588.4965
9/27/2018 21:11:50	HLCCV3	Fe (234.350 nm)	0.22	37.6257 o (ppm)	357180.1701
9/27/2018 21:11:50	HLCCV3	K (766.491 nm)	0.29	105.1819 o (ppm)	312143.2814
9/27/2018 21:11:50	HLCCV3	Mg (279.078 nm)	31.53	0.0491 (ppm)	84.2070
9/27/2018 21:11:50	HLCCV3	Mn (257.610 nm)	30.63	0.0012 (ppm)	333.0414
9/27/2018 21:11:50	HLCCV3	Mo (202.032 nm)	24.65	0.0129 (ppm)	84.2108
9/27/2018 21:11:50	HLCCV3	Na (588.995 nm)	0.28	145.8939 o (ppm)	6374166.5961
9/27/2018 21:11:50	HLCCV3	Ni (230.299 nm)	3.65	-0.0278 u (ppm)	-179.1937

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:11:50	HLCCV3	Pb (220.353 nm)	> 100.00	0.0003 u (ppm)	3.5419
9/27/2018 21:11:50	HLCCV3	Sb (217.582 nm)	45.62	0.0076 (ppm)	10.3621
9/27/2018 21:11:50	HLCCV3	Se (196.026 nm)	> 100.00	-0.0005 u (ppm)	4.3229
9/27/2018 21:11:50	HLCCV3	Sn (189.925 nm)	59.69	-0.0026 u (ppm)	-2.3577
9/27/2018 21:11:50	HLCCV3	Sr (216.596 nm)	4.47	0.0063 (ppm)	82.8666
9/27/2018 21:11:50	HLCCV3	Ti (336.122 nm)	25.04	0.0083 (ppm)	1798.3096
9/27/2018 21:11:50	HLCCV3	Tl (351.923 nm)	0.08	3.0360 o (ppm)	7387.2196
9/27/2018 21:11:50	HLCCV3	V (292.401 nm)	12.08	0.0022 (ppm)	202.6632
9/27/2018 21:11:50	HLCCV3	Y (360.074 nm)	0.54	0.89 (Ratio)	944093.26
9/27/2018 21:11:50	HLCCV3	Y_R (360.074 nm)	0.55	0.89 (Ratio)	944299.83
9/27/2018 21:11:50	HLCCV3	Zn (213.857 nm)	2.22	0.0075 (ppm)	163.7423
9/27/2018 21:15:05	HLCCV1	Ag (328.068 nm)	0.28	0.9974 (ppm)	61968.0179
9/27/2018 21:15:05	HLCCV1	Al (394.401 nm)	0.23	20.0387 (ppm)	242905.9668
9/27/2018 21:15:05	HLCCV1	As (188.980 nm)	0.14	2.0069 (ppm)	1562.4117
9/27/2018 21:15:05	HLCCV1	B (249.772 nm)	0.29	4.9895 (ppm)	114757.4386
9/27/2018 21:15:05	HLCCV1	Ba (230.424 nm)	0.78	19.8719 (ppm)	589285.4886
9/27/2018 21:15:05	HLCCV1	Be (313.107 nm)	0.77	0.4982 (ppm)	650098.2549
9/27/2018 21:15:05	HLCCV1	Ca (227.547 nm)	0.09	50.3307 (ppm)	2597.7452
9/27/2018 21:15:05	HLCCV1	Cd (214.439 nm)	0.48	0.9920 (ppm)	19510.1460
9/27/2018 21:15:05	HLCCV1	Co (230.786 nm)	0.39	4.9743 (ppm)	43325.4925
9/27/2018 21:15:05	HLCCV1	Cr (267.716 nm)	0.54	0.9928 (ppm)	42992.9042
9/27/2018 21:15:05	HLCCV1	Cu (327.395 nm)	0.14	2.5009 (ppm)	137623.7853
9/27/2018 21:15:05	HLCCV1	Fe (234.350 nm)	0.46	9.9764 (ppm)	94755.2425
9/27/2018 21:15:05	HLCCV1	K (766.491 nm)	0.09	50.2770 (ppm)	149181.3450
9/27/2018 21:15:05	HLCCV1	Mg (279.078 nm)	0.17	49.7443 (ppm)	84568.7619
9/27/2018 21:15:05	HLCCV1	Mn (257.610 nm)	0.44	1.4943 (ppm)	404585.8301
9/27/2018 21:15:05	HLCCV1	Mo (202.032 nm)	0.79	5.1009 (ppm)	21527.4473
9/27/2018 21:15:05	HLCCV1	Na (588.995 nm)	0.49	49.9010 (ppm)	2175725.0772
9/27/2018 21:15:05	HLCCV1	Ni (230.299 nm)	0.50	3.9737 (ppm)	23104.1565
9/27/2018 21:15:05	HLCCV1	Pb (220.353 nm)	0.36	0.9956 (ppm)	1944.6038
9/27/2018 21:15:05	HLCCV1	Sb (217.582 nm)	0.08	9.9782 (ppm)	12265.6758
9/27/2018 21:15:05	HLCCV1	Se (196.026 nm)	0.51	1.0001 (ppm)	817.9675
9/27/2018 21:15:05	HLCCV1	Sn (189.925 nm)	0.73	9.9738 (ppm)	11643.5905
9/27/2018 21:15:05	HLCCV1	Sr (216.596 nm)	0.63	4.9681 (ppm)	65019.1246
9/27/2018 21:15:05	HLCCV1	Ti (336.122 nm)	0.48	4.9908 (ppm)	931641.1155
9/27/2018 21:15:05	HLCCV1	Tl (351.923 nm)	0.52	2.0041 (ppm)	4880.8313
9/27/2018 21:15:05	HLCCV1	V (292.401 nm)	0.36	4.9778 (ppm)	169158.9702
9/27/2018 21:15:05	HLCCV1	Y (360.074 nm)	0.34	0.93 (Ratio)	981216.07
9/27/2018 21:15:05	HLCCV1	Y_R (360.074 nm)	0.34	0.93 (Ratio)	981429.77
9/27/2018 21:15:05	HLCCV1	Zn (213.857 nm)	0.39	1.9910 (ppm)	50045.4831
9/27/2018 21:18:20	Continuing Calibration Verification	Ag (328.068 nm)	0.47	0.5006 (ppm)	31012.2104
9/27/2018 21:18:20	Continuing Calibration Verification	Al (394.401 nm)	0.43	9.5387 (ppm)	115678.1066
9/27/2018 21:18:20	Continuing Calibration Verification	As (188.980 nm)	0.52	0.9882 (ppm)	768.9930
9/27/2018 21:18:20	Continuing Calibration Verification	B (249.772 nm)	0.46	2.4989 (ppm)	57485.7332
9/27/2018 21:18:20	Continuing Calibration Verification	Ba (230.424 nm)	0.62	10.1603 (ppm)	301311.5273
9/27/2018 21:18:20	Continuing Calibration Verification	Be (313.107 nm)	0.64	0.2519 (ppm)	328548.8900
9/27/2018 21:18:20	Continuing Calibration Verification	Ca (227.547 nm)	0.29	24.1774 (ppm)	1251.4401
9/27/2018 21:18:20	Continuing Calibration Verification	Cd (214.439 nm)	0.60	0.5016 (ppm)	9872.2040
9/27/2018 21:18:20	Continuing Calibration Verification	Co (230.786 nm)	0.56	2.5969 (ppm)	22616.7014
9/27/2018 21:18:20	Continuing Calibration Verification	Cr (267.716 nm)	0.55	0.5191 (ppm)	22484.7988
9/27/2018 21:18:20	Continuing Calibration Verification	Cu (327.395 nm)	0.39	1.2163 (ppm)	66953.6941

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:18:20	Continuing Calibration Verification	Fe (234.350 nm)	0.55	4.8828 (ppm)	46410.2820
9/27/2018 21:18:20	Continuing Calibration Verification	K (766.491 nm)	0.04	24.2310 (ppm)	71874.9554
9/27/2018 21:18:20	Continuing Calibration Verification	Mg (279.078 nm)	0.49	24.5144 (ppm)	41676.5109
9/27/2018 21:18:20	Continuing Calibration Verification	Mn (257.610 nm)	0.41	0.7690 (ppm)	208224.0371
9/27/2018 21:18:20	Continuing Calibration Verification	Mo (202.032 nm)	0.87	2.6167 (ppm)	11057.8344
9/27/2018 21:18:20	Continuing Calibration Verification	Na (588.995 nm)	0.32	24.2583 (ppm)	1054190.4899
9/27/2018 21:18:20	Continuing Calibration Verification	Ni (230.299 nm)	0.53	2.0581 (ppm)	11958.0660
9/27/2018 21:18:20	Continuing Calibration Verification	Pb (220.353 nm)	0.32	0.5062 (ppm)	990.2564
9/27/2018 21:18:20	Continuing Calibration Verification	Sb (217.582 nm)	0.55	4.9127 (ppm)	6039.4883
9/27/2018 21:18:20	Continuing Calibration Verification	Se (196.026 nm)	0.41	0.4861 (ppm)	400.0171
9/27/2018 21:18:20	Continuing Calibration Verification	Sn (189.925 nm)	0.55	5.0492 (ppm)	5894.8769
9/27/2018 21:18:20	Continuing Calibration Verification	Sr (216.596 nm)	0.58	2.5452 (ppm)	33310.0478
9/27/2018 21:18:20	Continuing Calibration Verification	Ti (336.122 nm)	0.64	2.5191 (ppm)	470372.8335
9/27/2018 21:18:20	Continuing Calibration Verification	Tl (351.923 nm)	0.95	1.0004 (ppm)	2442.5713
9/27/2018 21:18:20	Continuing Calibration Verification	V (292.401 nm)	0.42	2.5117 (ppm)	85418.0944
9/27/2018 21:18:20	Continuing Calibration Verification	Y (360.074 nm)	0.25	0.95 (Ratio)	1006846.67
9/27/2018 21:18:20	Continuing Calibration Verification	Y_R (360.074 nm)	0.25	0.95 (Ratio)	1007092.36
9/27/2018 21:18:20	Continuing Calibration Verification	Zn (213.857 nm)	0.49	0.9968 (ppm)	25041.6578
9/27/2018 21:21:34	Continuing Calibration Blank	Ag (328.068 nm)	60.19	0.0002 (ppm)	-174.9535
9/27/2018 21:21:34	Continuing Calibration Blank	Al (394.401 nm)	25.07	0.0010 (ppm)	109.6303
9/27/2018 21:21:34	Continuing Calibration Blank	As (188.980 nm)	66.88	0.0004 (ppm)	-0.3052
9/27/2018 21:21:34	Continuing Calibration Blank	B (249.772 nm)	11.50	0.0027 (ppm)	84.1379
9/27/2018 21:21:34	Continuing Calibration Blank	Be (230.424 nm)	> 100.00	0.0002 u (ppm)	37.8830
9/27/2018 21:21:34	Continuing Calibration Blank	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-388.0013
9/27/2018 21:21:34	Continuing Calibration Blank	Ca (227.547 nm)	> 100.00	-0.0283 u (ppm)	5.3924
9/27/2018 21:21:34	Continuing Calibration Blank	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.6559
9/27/2018 21:21:34	Continuing Calibration Blank	Co (230.786 nm)	65.32	0.0005 (ppm)	0.0601
9/27/2018 21:21:34	Continuing Calibration Blank	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	8.4610
9/27/2018 21:21:34	Continuing Calibration Blank	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	41.0687
9/27/2018 21:21:34	Continuing Calibration Blank	Fe (234.350 nm)	38.91	0.0040 (ppm)	104.4780
9/27/2018 21:21:34	Continuing Calibration Blank	K (766.491 nm)	16.30	0.0650 (ppm)	148.6286
9/27/2018 21:21:34	Continuing Calibration Blank	Mg (279.078 nm)	> 100.00	0.0013 u (ppm)	2.9035
9/27/2018 21:21:34	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	22.8939
9/27/2018 21:21:34	Continuing Calibration Blank	Mo (202.032 nm)	91.28	0.0029 (ppm)	42.1482
9/27/2018 21:21:34	Continuing Calibration Blank	Na (588.995 nm)	40.73	0.0037 (ppm)	-6631.5133
9/27/2018 21:21:34	Continuing Calibration Blank	Ni (230.299 nm)	> 100.00	0.0002 u (ppm)	-16.4777
9/27/2018 21:21:34	Continuing Calibration Blank	Pb (220.353 nm)	> 100.00	0.0006 (ppm)	4.0479
9/27/2018 21:21:34	Continuing Calibration Blank	Sb (217.582 nm)	40.58	0.0061 (ppm)	8.5303
9/27/2018 21:21:34	Continuing Calibration Blank	Se (196.026 nm)	> 100.00	-0.0007 u (ppm)	4.1214
9/27/2018 21:21:34	Continuing Calibration Blank	Sn (189.925 nm)	> 100.00	0.0014 u (ppm)	2.3178
9/27/2018 21:21:34	Continuing Calibration Blank	Sr (216.596 nm)	72.60	0.0002 (ppm)	3.8183
9/27/2018 21:21:34	Continuing Calibration Blank	Ti (336.122 nm)	58.48	0.0027 (ppm)	764.0413
9/27/2018 21:21:34	Continuing Calibration Blank	Tl (351.923 nm)	91.59	0.0023 u (ppm)	18.0598
9/27/2018 21:21:34	Continuing Calibration Blank	V (292.401 nm)	> 100.00	0.0001 u (ppm)	130.2262
9/27/2018 21:21:34	Continuing Calibration Blank	Y (360.074 nm)	0.44	0.99 (Ratio)	1049961.68
9/27/2018 21:21:34	Continuing Calibration Blank	Y_R (360.074 nm)	0.44	1.00 (Ratio)	1050250.00
9/27/2018 21:21:34	Continuing Calibration Blank	Zn (213.857 nm)	22.69	0.0002 (ppm)	-20.3870
9/27/2018 21:24:49	PBW-322632	Ag (328.068 nm)	43.48	0.0002 (ppm)	-175.6448
9/27/2018 21:24:49	PBW-322632	Al (394.401 nm)	3.48	0.0088 (ppm)	204.5743
9/27/2018 21:24:49	PBW-322632	As (188.980 nm)	> 100.00	0.0000 u (ppm)	-0.6039
9/27/2018 21:24:49	PBW-322632	B (249.772 nm)	21.63	0.0019 (ppm)	66.5057

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:24:49	PBW-322632	Ba (230.424 nm)	8.42	-0.0008 u (ppm)	8.6938
9/27/2018 21:24:49	PBW-322632	Be (313.107 nm)	53.96	0.0000 u (ppm)	-426.7812
9/27/2018 21:24:49	PBW-322632	Ca (227.547 nm)	92.19	0.0439 u (ppm)	9.1062
9/27/2018 21:24:49	PBW-322632	Cd (214.439 nm)	48.90	-0.0002 u (ppm)	10.1464
9/27/2018 21:24:49	PBW-322632	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-4.4338
9/27/2018 21:24:49	PBW-322632	Cr (267.716 nm)	26.85	-0.0004 u (ppm)	-9.4829
9/27/2018 21:24:49	PBW-322632	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	40.3519
9/27/2018 21:24:49	PBW-322632	Fe (234.350 nm)	12.41	0.0052 (ppm)	115.4885
9/27/2018 21:24:49	PBW-322632	K (766.491 nm)	8.69	0.0797 (ppm)	192.2084
9/27/2018 21:24:49	PBW-322632	Mg (279.078 nm)	38.50	0.0006 (ppm)	1.7693
9/27/2018 21:24:49	PBW-322632	Mn (257.610 nm)	3.40	0.0004 (ppm)	127.4417
9/27/2018 21:24:49	PBW-322632	Mo (202.032 nm)	24.05	-0.0053 u (ppm)	7.2925
9/27/2018 21:24:49	PBW-322632	Na (588.995 nm)	2.85	0.0344 (ppm)	-5288.2176
9/27/2018 21:24:49	PBW-322632	Ni (230.299 nm)	> 100.00	-0.0001 u (ppm)	-17.9659
9/27/2018 21:24:49	PBW-322632	Pb (220.353 nm)	> 100.00	-0.0010 u (ppm)	0.9526
9/27/2018 21:24:49	PBW-322632	Sb (217.582 nm)	80.95	0.0032 (ppm)	4.8780
9/27/2018 21:24:49	PBW-322632	Se (196.026 nm)	> 100.00	-0.0001 u (ppm)	4.6156
9/27/2018 21:24:49	PBW-322632	Sn (189.925 nm)	> 100.00	-0.0017 u (ppm)	-1.2478
9/27/2018 21:24:49	PBW-322632	Sr (216.596 nm)	> 100.00	-0.0001 u (ppm)	-1.1491
9/27/2018 21:24:49	PBW-322632	Ti (336.122 nm)	55.92	-0.0011 u (ppm)	42.4116
9/27/2018 21:24:49	PBW-322632	Tl (351.923 nm)	> 100.00	-0.0021 u (ppm)	7.4862
9/27/2018 21:24:49	PBW-322632	V (292.401 nm)	44.12	-0.0003 u (ppm)	118.9572
9/27/2018 21:24:49	PBW-322632	Y (360.074 nm)	1.85	1.01 (Ratio)	1069555.87
9/27/2018 21:24:49	PBW-322632	Y_R (360.074 nm)	1.85	1.01 (Ratio)	1069859.24
9/27/2018 21:24:49	PBW-322632	Zn (213.857 nm)	2.22	0.0048 (ppm)	94.8422
9/27/2018 21:28:03	LCSW-322632	Ag (328.068 nm)	1.31	0.0504 (ppm)	2954.8318
9/27/2018 21:28:03	LCSW-322632	Al (394.401 nm)	1.49	1.8867 (ppm)	22958.2807
9/27/2018 21:28:03	LCSW-322632	As (188.980 nm)	9.63	0.0439 (ppm)	33.5974
9/27/2018 21:28:03	LCSW-322632	B (249.772 nm)	1.46	1.0076 (ppm)	23191.5129
9/27/2018 21:28:03	LCSW-322632	Ba (230.424 nm)	1.28	2.0548 (ppm)	60962.4023
9/27/2018 21:28:03	LCSW-322632	Be (313.107 nm)	1.45	0.0501 (ppm)	64982.8964
9/27/2018 21:28:03	LCSW-322632	Ca (227.547 nm)	2.28	1.9373 (ppm)	106.5779
9/27/2018 21:28:03	LCSW-322632	Cd (214.439 nm)	1.59	0.0513 (ppm)	1021.9733
9/27/2018 21:28:03	LCSW-322632	Co (230.786 nm)	1.41	0.5202 (ppm)	4526.8763
9/27/2018 21:28:03	LCSW-322632	Cr (267.716 nm)	1.38	0.2031 (ppm)	8803.9279
9/27/2018 21:28:03	LCSW-322632	Cu (327.395 nm)	1.77	0.2503 (ppm)	13811.1861
9/27/2018 21:28:03	LCSW-322632	Fe (234.350 nm)	1.32	0.9816 (ppm)	9382.9947
9/27/2018 21:28:03	LCSW-322632	K (766.491 nm)	1.67	19.1389 (ppm)	56761.3337
9/27/2018 21:28:03	LCSW-322632	Mg (279.078 nm)	1.45	2.0061 (ppm)	3411.2628
9/27/2018 21:28:03	LCSW-322632	Mn (257.610 nm)	1.37	0.5032 (ppm)	136264.8721
9/27/2018 21:28:03	LCSW-322632	Mo (202.032 nm)	1.32	0.5024 (ppm)	2147.0827
9/27/2018 21:28:03	LCSW-322632	Na (588.995 nm)	1.83	19.4799 (ppm)	845199.5287
9/27/2018 21:28:03	LCSW-322632	Ni (230.299 nm)	1.44	0.5061 (ppm)	2927.1780
9/27/2018 21:28:03	LCSW-322632	Pb (220.353 nm)	1.56	0.5183 (ppm)	1013.7857
9/27/2018 21:28:03	LCSW-322632	Sb (217.582 nm)	2.34	0.4737 (ppm)	583.2674
9/27/2018 21:28:03	LCSW-322632	Se (196.026 nm)	1.57	1.0444 (ppm)	854.0323
9/27/2018 21:28:03	LCSW-322632	Sn (189.925 nm)	1.65	5.0788 (ppm)	5929.4181
9/27/2018 21:28:03	LCSW-322632	Sr (216.596 nm)	1.24	2.0211 (ppm)	26450.7940
9/27/2018 21:28:03	LCSW-322632	Ti (336.122 nm)	1.55	0.4942 (ppm)	92488.8513
9/27/2018 21:28:03	LCSW-322632	Tl (351.923 nm)	1.44	1.9155 (ppm)	4665.4052
9/27/2018 21:28:03	LCSW-322632	V (292.401 nm)	1.33	0.4943 (ppm)	16911.3245

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:28:03	LCSW-322632	Y (360.074 nm)	1.68	0.98 (Ratio)	1035312.50
9/27/2018 21:28:03	LCSW-322632	Y_R (360.074 nm)	1.68	0.98 (Ratio)	1035597.73
9/27/2018 21:28:03	LCSW-322632	Zn (213.857 nm)	1.44	0.5054 (ppm)	12683.6047
9/27/2018 21:31:19	DLCSW-322632	Ag (328.068 nm)	1.37	0.0503 (ppm)	2946.8690
9/27/2018 21:31:19	DLCSW-322632	Al (394.401 nm)	1.49	1.8765 (ppm)	22834.9071
9/27/2018 21:31:19	DLCSW-322632	As (188.980 nm)	4.73	0.0400 (ppm)	30.5284
9/27/2018 21:31:19	DLCSW-322632	B (249.772 nm)	1.28	1.0030 (ppm)	23085.6819
9/27/2018 21:31:19	DLCSW-322632	Ba (230.424 nm)	1.11	2.0453 (ppm)	60681.0594
9/27/2018 21:31:19	DLCSW-322632	Be (313.107 nm)	1.17	0.0498 (ppm)	64690.8384
9/27/2018 21:31:19	DLCSW-322632	Ca (227.547 nm)	2.26	1.9619 (ppm)	107.8416
9/27/2018 21:31:19	DLCSW-322632	Cd (214.439 nm)	1.41	0.0513 (ppm)	1021.3576
9/27/2018 21:31:19	DLCSW-322632	Co (230.786 nm)	1.27	0.5169 (ppm)	4498.7175
9/27/2018 21:31:19	DLCSW-322632	Cr (267.716 nm)	1.03	0.2021 (ppm)	8759.2098
9/27/2018 21:31:19	DLCSW-322632	Cu (327.395 nm)	1.47	0.2472 (ppm)	13638.3335
9/27/2018 21:31:19	DLCSW-322632	Fe (234.350 nm)	1.14	0.9768 (ppm)	9337.3237
9/27/2018 21:31:19	DLCSW-322632	K (766.491 nm)	1.43	19.0413 (ppm)	56471.4363
9/27/2018 21:31:19	DLCSW-322632	Mg (279.078 nm)	1.39	1.9987 (ppm)	3398.6423
9/27/2018 21:31:19	DLCSW-322632	Mn (257.610 nm)	1.09	0.5017 (ppm)	135846.5826
9/27/2018 21:31:19	DLCSW-322632	Mo (202.032 nm)	1.19	0.5030 (ppm)	2149.8017
9/27/2018 21:31:19	DLCSW-322632	Na (588.995 nm)	1.71	19.3909 (ppm)	841305.7708
9/27/2018 21:31:19	DLCSW-322632	Ni (230.299 nm)	1.35	0.5027 (ppm)	2907.8281
9/27/2018 21:31:19	DLCSW-322632	Pb (220.353 nm)	0.97	0.5127 (ppm)	1002.8912
9/27/2018 21:31:19	DLCSW-322632	Sb (217.582 nm)	1.22	0.4728 (ppm)	582.1598
9/27/2018 21:31:19	DLCSW-322632	Se (196.026 nm)	1.68	1.0345 (ppm)	845.9382
9/27/2018 21:31:19	DLCSW-322632	Sn (189.925 nm)	1.54	5.0387 (ppm)	5882.5944
9/27/2018 21:31:19	DLCSW-322632	Sr (216.596 nm)	1.25	2.0181 (ppm)	26411.7095
9/27/2018 21:31:19	DLCSW-322632	Ti (336.122 nm)	1.37	0.4932 (ppm)	92284.5277
9/27/2018 21:31:19	DLCSW-322632	Tl (351.923 nm)	1.40	1.9116 (ppm)	4656.0207
9/27/2018 21:31:19	DLCSW-322632	V (292.401 nm)	1.24	0.4923 (ppm)	16844.5717
9/27/2018 21:31:19	DLCSW-322632	Y (360.074 nm)	1.43	0.98 (Ratio)	1035546.29
9/27/2018 21:31:19	DLCSW-322632	Y_R (360.074 nm)	1.43	0.98 (Ratio)	1035830.11
9/27/2018 21:31:19	DLCSW-322632	Zn (213.857 nm)	1.32	0.5104 (ppm)	12810.4398
9/27/2018 21:34:34	R1808996-001	Ag (328.068 nm)	26.22	0.0002 (ppm)	-169.7073
9/27/2018 21:34:34	R1808996-001	Al (394.401 nm)	2.74	0.0770 (ppm)	1030.8249
9/27/2018 21:34:34	R1808996-001	As (188.980 nm)	79.63	-0.0026 u (ppm)	-2.6238
9/27/2018 21:34:34	R1808996-001	B (249.772 nm)	1.79	0.0424 (ppm)	996.5014
9/27/2018 21:34:34	R1808996-001	Ba (230.424 nm)	2.72	0.0260 (ppm)	804.6152
9/27/2018 21:34:34	R1808996-001	Be (313.107 nm)	42.52	0.0000 u (ppm)	-431.6447
9/27/2018 21:34:34	R1808996-001	Ca (227.547 nm)	1.50	259.8332 o (ppm)	13382.3897
9/27/2018 21:34:34	R1808996-001	Cd (214.439 nm)	86.65	-0.0001 u (ppm)	11.2914
9/27/2018 21:34:34	R1808996-001	Co (230.786 nm)	58.93	-0.0004 u (ppm)	-7.2022
9/27/2018 21:34:34	R1808996-001	Cr (267.716 nm)	17.43	-0.0004 u (ppm)	-9.6711
9/27/2018 21:34:34	R1808996-001	Cu (327.395 nm)	9.60	0.0008 (ppm)	85.3247
9/27/2018 21:34:34	R1808996-001	Fe (234.350 nm)	0.74	0.0458 (ppm)	501.5185
9/27/2018 21:34:34	R1808996-001	K (766.491 nm)	1.93	2.6509 (ppm)	7823.6540
9/27/2018 21:34:34	R1808996-001	Mg (279.078 nm)	1.08	91.6887 o (ppm)	155876.5519
9/27/2018 21:34:34	R1808996-001	Mn (257.610 nm)	1.92	0.0041 (ppm)	1125.0676
9/27/2018 21:34:34	R1808996-001	Mo (202.032 nm)	> 100.00	0.0013 u (ppm)	35.4640
9/27/2018 21:34:34	R1808996-001	Na (588.995 nm)	1.62	18.7588 (ppm)	813661.8751
9/27/2018 21:34:34	R1808996-001	Ni (230.299 nm)	6.25	-0.0086 u (ppm)	-67.2559
9/27/2018 21:34:34	R1808996-001	Pb (220.353 nm)	82.05	-0.0010 u (ppm)	0.9345

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:34:34	R1808996-001	Sb (217.582 nm)	49.05	0.0044 (ppm)	6.3683
9/27/2018 21:34:34	R1808996-001	Se (196.026 nm)	85.22	-0.0064 u (ppm)	-0.5049
9/27/2018 21:34:34	R1808996-001	Sn (189.925 nm)	> 100.00	0.0000 u (ppm)	0.6599
9/27/2018 21:34:34	R1808996-001	Sr (216.596 nm)	0.98	1.4915 (ppm)	19520.6062
9/27/2018 21:34:34	R1808996-001	Ti (336.122 nm)	30.57	0.0019 (ppm)	602.2105
9/27/2018 21:34:34	R1808996-001	Tl (351.923 nm)	29.99	0.0104 (ppm)	37.9662
9/27/2018 21:34:34	R1808996-001	V (292.401 nm)	25.88	0.0006 (ppm)	149.1137
9/27/2018 21:34:34	R1808996-001	Y (360.074 nm)	1.36	0.92 (Ratio)	967739.63
9/27/2018 21:34:34	R1808996-001	Y_R (360.074 nm)	1.36	0.92 (Ratio)	967975.44
9/27/2018 21:34:34	R1808996-001	Zn (213.857 nm)	0.54	0.0091 (ppm)	202.9608
9/27/2018 21:37:49	R1808996-002	Ag (328.068 nm)	42.74	0.0002 (ppm)	-169.9607
9/27/2018 21:37:49	R1808996-002	Al (394.401 nm)	1.34	1.0017 (ppm)	12234.8988
9/27/2018 21:37:49	R1808996-002	As (188.980 nm)	76.45	0.0033 (ppm)	1.9618
9/27/2018 21:37:49	R1808996-002	B (249.772 nm)	1.39	0.2095 (ppm)	4840.6111
9/27/2018 21:37:49	R1808996-002	Ba (230.424 nm)	1.72	0.7226 (ppm)	21460.8004
9/27/2018 21:37:49	R1808996-002	Be (313.107 nm)	31.61	0.0000 u (ppm)	-404.3398
9/27/2018 21:37:49	R1808996-002	Ca (227.547 nm)	1.38	54.2658 o (ppm)	2800.3094
9/27/2018 21:37:49	R1808996-002	Cd (214.439 nm)	37.19	0.0000 u (ppm)	12.8843
9/27/2018 21:37:49	R1808996-002	Co (230.786 nm)	70.20	0.0005 (ppm)	0.3094
9/27/2018 21:37:49	R1808996-002	Cr (267.716 nm)	8.69	0.0009 (ppm)	47.3931
9/27/2018 21:37:49	R1808996-002	Cu (327.395 nm)	4.36	0.0043 (ppm)	275.5186
9/27/2018 21:37:49	R1808996-002	Fe (234.350 nm)	1.08	0.6465 (ppm)	6202.2237
9/27/2018 21:37:49	R1808996-002	K (766.491 nm)	1.61	17.8644 (ppm)	52978.4963
9/27/2018 21:37:49	R1808996-002	Mg (279.078 nm)	1.08	19.4088 (ppm)	32996.6840
9/27/2018 21:37:49	R1808996-002	Mn (257.610 nm)	1.24	0.0444 (ppm)	12044.6362
9/27/2018 21:37:49	R1808996-002	Mo (202.032 nm)	3.75	-0.0037 u (ppm)	14.1353
9/27/2018 21:37:49	R1808996-002	Na (588.995 nm)	1.66	113.8760 o (ppm)	4973801.3785
9/27/2018 21:37:49	R1808996-002	Ni (230.299 nm)	3.66	-0.0147 u (ppm)	-102.9337
9/27/2018 21:37:49	R1808996-002	Pb (220.353 nm)	40.10	-0.0010 u (ppm)	1.0579
9/27/2018 21:37:49	R1808996-002	Sb (217.582 nm)	90.39	-0.0006 u (ppm)	0.2045
9/27/2018 21:37:49	R1808996-002	Se (196.026 nm)	74.74	-0.0026 u (ppm)	2.6091
9/27/2018 21:37:49	R1808996-002	Sn (189.925 nm)	> 100.00	0.0002 u (ppm)	0.9473
9/27/2018 21:37:49	R1808996-002	Sr (216.596 nm)	1.51	2.4838 (ppm)	32506.7667
9/27/2018 21:37:49	R1808996-002	Ti (336.122 nm)	7.66	0.0159 (ppm)	3227.1067
9/27/2018 21:37:49	R1808996-002	Tl (351.923 nm)	96.15	0.0020 u (ppm)	17.5442
9/27/2018 21:37:49	R1808996-002	V (292.401 nm)	3.46	0.0038 (ppm)	257.8237
9/27/2018 21:37:49	R1808996-002	Y (360.074 nm)	1.39	0.94 (Ratio)	989652.07
9/27/2018 21:37:49	R1808996-002	Y_R (360.074 nm)	1.39	0.94 (Ratio)	989871.58
9/27/2018 21:37:49	R1808996-002	Zn (213.857 nm)	0.03	0.0060 (ppm)	124.3064
9/27/2018 21:41:04	R1808996-003	Ag (328.068 nm)	25.41	0.0001 (ppm)	-176.4671
9/27/2018 21:41:04	R1808996-003	Al (394.401 nm)	1.68	0.1400 (ppm)	1794.0016
9/27/2018 21:41:04	R1808996-003	As (188.980 nm)	> 100.00	0.0009 u (ppm)	0.0510
9/27/2018 21:41:04	R1808996-003	B (249.772 nm)	1.15	0.2369 (ppm)	5469.8102
9/27/2018 21:41:04	R1808996-003	Ba (230.424 nm)	0.43	0.0368 (ppm)	1124.6055
9/27/2018 21:41:04	R1808996-003	Be (313.107 nm)	33.94	0.0000 u (ppm)	-435.1235
9/27/2018 21:41:04	R1808996-003	Ca (227.547 nm)	1.13	445.0229 o (ppm)	22915.4803
9/27/2018 21:41:04	R1808996-003	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	12.5672
9/27/2018 21:41:04	R1808996-003	Co (230.786 nm)	19.44	0.0015 (ppm)	9.1770
9/27/2018 21:41:04	R1808996-003	Cr (267.716 nm)	7.37	-0.0009 u (ppm)	-28.0640
9/27/2018 21:41:04	R1808996-003	Cu (327.395 nm)	11.05	0.0012 (ppm)	102.8658
9/27/2018 21:41:04	R1808996-003	Fe (234.350 nm)	1.10	0.2578 (ppm)	2513.7129

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:41:04	R1808996-003	K (766.491 nm)	1.27	5.0479 (ppm)	14938.1131
9/27/2018 21:41:04	R1808996-003	Mg (279.078 nm)	1.06	210.6221 o (ppm)	358069.8981
9/27/2018 21:41:04	R1808996-003	Mn (257.610 nm)	1.02	0.5013 (ppm)	135731.6536
9/27/2018 21:41:04	R1808996-003	Mo (202.032 nm)	9.75	-0.0042 u (ppm)	12.1054
9/27/2018 21:41:04	R1808996-003	Na (588.995 nm)	1.09	35.9903 (ppm)	1567312.2183
9/27/2018 21:41:04	R1808996-003	Ni (230.299 nm)	70.07	-0.0018 u (ppm)	-27.6533
9/27/2018 21:41:04	R1808996-003	Pb (220.353 nm)	> 100.00	0.0000 u (ppm)	2.8957
9/27/2018 21:41:04	R1808996-003	Sb (217.582 nm)	> 100.00	0.0018 u (ppm)	3.1424
9/27/2018 21:41:04	R1808996-003	Se (196.026 nm)	65.03	-0.0057 u (ppm)	0.0278
9/27/2018 21:41:04	R1808996-003	Sn (189.925 nm)	> 100.00	-0.0027 u (ppm)	-2.4130
9/27/2018 21:41:04	R1808996-003	Sr (216.596 nm)	0.85	15.1449 o (ppm)	198204.3585
9/27/2018 21:41:04	R1808996-003	Ti (336.122 nm)	8.23	0.0038 (ppm)	959.8872
9/27/2018 21:41:04	R1808996-003	Tl (351.923 nm)	21.81	0.0112 (ppm)	39.8426
9/27/2018 21:41:04	R1808996-003	V (292.401 nm)	11.83	0.0003 (ppm)	137.9591
9/27/2018 21:41:04	R1808996-003	Y (360.074 nm)	1.42	0.89 (Ratio)	937584.48
9/27/2018 21:41:04	R1808996-003	Y_R (360.074 nm)	1.42	0.89 (Ratio)	937802.98
9/27/2018 21:41:04	R1808996-003	Zn (213.857 nm)	2.65	0.0096 (ppm)	214.4265
9/27/2018 21:44:19	R1808996-004	Ag (328.068 nm)	28.01	0.0002 (ppm)	-174.4715
9/27/2018 21:44:19	R1808996-004	Al (394.401 nm)	1.71	0.2380 (ppm)	2981.5947
9/27/2018 21:44:19	R1808996-004	As (188.980 nm)	> 100.00	0.0006 u (ppm)	-0.1196
9/27/2018 21:44:19	R1808996-004	B (249.772 nm)	0.90	0.2330 (ppm)	5380.1857
9/27/2018 21:44:19	R1808996-004	Ba (230.424 nm)	1.44	0.4348 (ppm)	12927.4741
9/27/2018 21:44:19	R1808996-004	Be (313.107 nm)	22.94	0.0000 u (ppm)	-420.8108
9/27/2018 21:44:19	R1808996-004	Ca (227.547 nm)	1.07	45.9028 (ppm)	2369.8044
9/27/2018 21:44:19	R1808996-004	Cd (214.439 nm)	80.43	-0.0002 u (ppm)	9.9610
9/27/2018 21:44:19	R1808996-004	Co (230.786 nm)	49.85	0.0008 (ppm)	2.5051
9/27/2018 21:44:19	R1808996-004	Cr (267.716 nm)	62.65	-0.0001 u (ppm)	3.6697
9/27/2018 21:44:19	R1808996-004	Cu (327.395 nm)	14.22	0.0017 (ppm)	132.3861
9/27/2018 21:44:19	R1808996-004	Fe (234.350 nm)	1.17	0.2051 (ppm)	2013.2607
9/27/2018 21:44:19	R1808996-004	K (766.491 nm)	1.45	3.9155 (ppm)	11576.9636
9/27/2018 21:44:19	R1808996-004	Mg (279.078 nm)	1.14	16.6643 (ppm)	28331.0035
9/27/2018 21:44:19	R1808996-004	Mn (257.610 nm)	0.98	0.0895 (ppm)	24256.9013
9/27/2018 21:44:19	R1808996-004	Mo (202.032 nm)	3.11	0.0225 (ppm)	124.8173
9/27/2018 21:44:19	R1808996-004	Na (588.995 nm)	1.35	67.0617 o (ppm)	2926282.0902
9/27/2018 21:44:19	R1808996-004	Ni (230.299 nm)	9.85	-0.0077 u (ppm)	-61.9721
9/27/2018 21:44:19	R1808996-004	Pb (220.353 nm)	> 100.00	-0.0009 u (ppm)	1.2323
9/27/2018 21:44:19	R1808996-004	Sb (217.582 nm)	> 100.00	0.0021 u (ppm)	3.5908
9/27/2018 21:44:19	R1808996-004	Se (196.026 nm)	81.01	-0.0039 u (ppm)	1.5508
9/27/2018 21:44:19	R1808996-004	Sn (189.925 nm)	16.17	-0.0022 u (ppm)	-1.8230
9/27/2018 21:44:19	R1808996-004	Sr (216.596 nm)	1.42	2.1985 (ppm)	28773.1938
9/27/2018 21:44:19	R1808996-004	Ti (336.122 nm)	16.37	0.0012 (ppm)	465.9858
9/27/2018 21:44:19	R1808996-004	Tl (351.923 nm)	> 100.00	-0.0001 u (ppm)	12.3091
9/27/2018 21:44:19	R1808996-004	V (292.401 nm)	3.40	0.0044 (ppm)	276.7314
9/27/2018 21:44:19	R1808996-004	Y (360.074 nm)	1.38	0.96 (Ratio)	1009061.98
9/27/2018 21:44:19	R1808996-004	Y_R (360.074 nm)	1.38	0.96 (Ratio)	1009328.82
9/27/2018 21:44:19	R1808996-004	Zn (213.857 nm)	2.78	0.0043 (ppm)	82.8222
9/27/2018 21:47:33	R1808996-005	Ag (328.068 nm)	55.38	0.0003 (ppm)	-165.6048
9/27/2018 21:47:33	R1808996-005	Al (394.401 nm)	1.48	0.3038 (ppm)	3778.4778
9/27/2018 21:47:33	R1808996-005	As (188.980 nm)	> 100.00	0.0000 u (ppm)	-0.6445
9/27/2018 21:47:33	R1808996-005	B (249.772 nm)	1.45	0.1020 (ppm)	2366.8430
9/27/2018 21:47:33	R1808996-005	Ba (230.424 nm)	1.37	0.0600 (ppm)	1810.9340

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:47:33	R1808996-005	Be (313.107 nm)	24.91	0.0000 u (ppm)	-434.2383
9/27/2018 21:47:33	R1808996-005	Ca (227.547 nm)	1.48	109.8380 o (ppm)	5661.0238
9/27/2018 21:47:33	R1808996-005	Cd (214.439 nm)	43.18	-0.0002 u (ppm)	9.3557
9/27/2018 21:47:33	R1808996-005	Co (230.786 nm)	> 100.00	0.0002 u (ppm)	-2.2420
9/27/2018 21:47:33	R1808996-005	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	3.3100
9/27/2018 21:47:33	R1808996-005	Cu (327.395 nm)	16.05	0.0011 (ppm)	100.7249
9/27/2018 21:47:33	R1808996-005	Fe (234.350 nm)	1.25	0.8136 (ppm)	7788.7005
9/27/2018 21:47:33	R1808996-005	K (766.491 nm)	1.61	2.6093 (ppm)	7700.1054
9/27/2018 21:47:33	R1808996-005	Mg (279.078 nm)	1.25	63.8470 o (ppm)	108544.2229
9/27/2018 21:47:33	R1808996-005	Mn (257.610 nm)	1.13	0.0936 (ppm)	25369.2081
9/27/2018 21:47:33	R1808996-005	Mo (202.032 nm)	10.01	0.0053 (ppm)	52.1997
9/27/2018 21:47:33	R1808996-005	Na (588.995 nm)	1.68	21.0201 (ppm)	912561.4853
9/27/2018 21:47:33	R1808996-005	Ni (230.299 nm)	9.88	-0.0104 u (ppm)	-77.7374
9/27/2018 21:47:33	R1808996-005	Pb (220.353 nm)	> 100.00	-0.0006 u (ppm)	1.7967
9/27/2018 21:47:33	R1808996-005	Sb (217.582 nm)	39.51	0.0030 (ppm)	4.6076
9/27/2018 21:47:33	R1808996-005	Se (196.026 nm)	> 100.00	-0.0022 u (ppm)	2.9282
9/27/2018 21:47:33	R1808996-005	Sn (189.925 nm)	13.08	-0.0035 u (ppm)	-3.3530
9/27/2018 21:47:33	R1808996-005	Sr (216.596 nm)	1.29	16.4852 o (ppm)	215745.0787
9/27/2018 21:47:33	R1808996-005	Ti (336.122 nm)	5.62	0.0050 (ppm)	1186.7993
9/27/2018 21:47:33	R1808996-005	Tl (351.923 nm)	> 100.00	0.0012 u (ppm)	15.4631
9/27/2018 21:47:33	R1808996-005	V (292.401 nm)	66.51	0.0005 (ppm)	145.3992
9/27/2018 21:47:33	R1808996-005	Y (360.074 nm)	1.37	0.94 (Ratio)	996704.05
9/27/2018 21:47:33	R1808996-005	Y_R (360.074 nm)	1.37	0.94 (Ratio)	996976.25
9/27/2018 21:47:33	R1808996-005	Zn (213.857 nm)	2.36	0.0071 (ppm)	152.8682
9/27/2018 21:50:47	R1808996-006	Ag (328.068 nm)	23.95	0.0003 (ppm)	-167.9242
9/27/2018 21:50:47	R1808996-006	Al (394.401 nm)	1.53	1.4160 (ppm)	17255.3145
9/27/2018 21:50:47	R1808996-006	As (188.980 nm)	> 100.00	0.0015 u (ppm)	0.5177
9/27/2018 21:50:47	R1808996-006	B (249.772 nm)	1.22	0.8666 (ppm)	19951.0694
9/27/2018 21:50:47	R1808996-006	Be (230.424 nm)	1.34	2.3117 (ppm)	68582.0794
9/27/2018 21:50:47	R1808996-006	Be (313.107 nm)	78.05	0.0000 (ppm)	-378.2418
9/27/2018 21:50:47	R1808996-006	Ca (227.547 nm)	1.72	52.0869 (ppm)	2688.1484
9/27/2018 21:50:47	R1808996-006	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.1151
9/27/2018 21:50:47	R1808996-006	Co (230.786 nm)	23.99	0.0011 (ppm)	5.5835
9/27/2018 21:50:47	R1808996-006	Cr (267.716 nm)	1.76	0.0038 (ppm)	172.3574
9/27/2018 21:50:47	R1808996-006	Cu (327.395 nm)	3.55	0.0049 (ppm)	308.4167
9/27/2018 21:50:47	R1808996-006	Fe (234.350 nm)	1.14	2.2654 (ppm)	21568.4255
9/27/2018 21:50:47	R1808996-006	K (766.491 nm)	1.55	4.8217 (ppm)	14266.7825
9/27/2018 21:50:47	R1808996-006	Mg (279.078 nm)	1.26	23.0355 (ppm)	39162.2935
9/27/2018 21:50:47	R1808996-006	Mn (257.610 nm)	1.34	0.0428 (ppm)	11615.0564
9/27/2018 21:50:47	R1808996-006	Mo (202.032 nm)	8.70	-0.0038 u (ppm)	13.6063
9/27/2018 21:50:47	R1808996-006	Na (588.995 nm)	1.85	96.9044 o (ppm)	4231513.6637
9/27/2018 21:50:47	R1808996-006	Ni (230.299 nm)	9.72	-0.0062 u (ppm)	-53.6868
9/27/2018 21:50:47	R1808996-006	Pb (220.353 nm)	> 100.00	-0.0005 u (ppm)	1.9939
9/27/2018 21:50:47	R1808996-006	Sb (217.582 nm)	99.03	0.0021 (ppm)	3.5165
9/27/2018 21:50:47	R1808996-006	Se (196.026 nm)	21.25	-0.0085 u (ppm)	-2.2235
9/27/2018 21:50:47	R1808996-006	Sn (189.925 nm)	16.38	-0.0030 u (ppm)	-2.8271
9/27/2018 21:50:47	R1808996-006	Sr (216.596 nm)	1.60	2.4575 (ppm)	32162.1800
9/27/2018 21:50:47	R1808996-006	Ti (336.122 nm)	3.62	0.0291 (ppm)	5678.5414
9/27/2018 21:50:47	R1808996-006	Tl (351.923 nm)	> 100.00	0.0001 u (ppm)	12.7938
9/27/2018 21:50:47	R1808996-006	V (292.401 nm)	6.69	0.0025 (ppm)	212.1509
9/27/2018 21:50:47	R1808996-006	Y (360.074 nm)	1.58	0.94 (Ratio)	995403.46

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:50:47	R1808996-006	Y_R (360.074 nm)	1.58	0.94 (Ratio)	995668.99
9/27/2018 21:50:47	R1808996-006	Zn (213.857 nm)	1.81	0.0156 (ppm)	367.0921
9/27/2018 21:54:02	R1808996-007	Ag (328.068 nm)	52.13	0.0002 (ppm)	-175.6213
9/27/2018 21:54:02	R1808996-007	Al (394.401 nm)	1.61	0.2802 (ppm)	3492.8691
9/27/2018 21:54:02	R1808996-007	As (188.980 nm)	> 100.00	-0.0007 u (ppm)	-1.1493
9/27/2018 21:54:02	R1808996-007	B (249.772 nm)	1.73	0.0180 (ppm)	435.1234
9/27/2018 21:54:02	R1808996-007	Ba (230.424 nm)	1.86	0.0587 (ppm)	1774.2652
9/27/2018 21:54:02	R1808996-007	Be (313.107 nm)	30.53	0.0000 u (ppm)	-440.5842
9/27/2018 21:54:02	R1808996-007	Ca (227.547 nm)	1.35	158.0461 o (ppm)	8142.6551
9/27/2018 21:54:02	R1808996-007	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.9811
9/27/2018 21:54:02	R1808996-007	Co (230.786 nm)	> 100.00	0.0002 u (ppm)	-1.9416
9/27/2018 21:54:02	R1808996-007	Cr (267.716 nm)	39.91	-0.0002 u (ppm)	3.0915
9/27/2018 21:54:02	R1808996-007	Cu (327.395 nm)	12.51	0.0007 (ppm)	79.9592
9/27/2018 21:54:02	R1808996-007	Fe (234.350 nm)	0.96	0.2958 (ppm)	2874.0311
9/27/2018 21:54:02	R1808996-007	K (766.491 nm)	1.94	2.0847 (ppm)	6143.2339
9/27/2018 21:54:02	R1808996-007	Mg (279.078 nm)	1.12	62.3968 o (ppm)	106078.6943
9/27/2018 21:54:02	R1808996-007	Mn (257.610 nm)	1.21	0.0407 (ppm)	11034.2076
9/27/2018 21:54:02	R1808996-007	Mo (202.032 nm)	4.38	-0.0026 u (ppm)	18.6931
9/27/2018 21:54:02	R1808996-007	Na (588.995 nm)	1.63	33.4607 (ppm)	1456678.5250
9/27/2018 21:54:02	R1808996-007	Ni (230.299 nm)	13.99	-0.0090 u (ppm)	-69.6987
9/27/2018 21:54:02	R1808996-007	Pb (220.353 nm)	28.97	-0.0019 u (ppm)	-0.7790
9/27/2018 21:54:02	R1808996-007	Sb (217.582 nm)	85.50	0.0014 (ppm)	2.7371
9/27/2018 21:54:02	R1808996-007	Se (196.026 nm)	66.69	-0.0040 u (ppm)	1.4684
9/27/2018 21:54:02	R1808996-007	Sn (189.925 nm)	43.10	-0.0026 u (ppm)	-2.2952
9/27/2018 21:54:02	R1808996-007	Sr (216.596 nm)	0.67	0.8559 (ppm)	11201.3067
9/27/2018 21:54:02	R1808996-007	Ti (336.122 nm)	5.39	0.0037 (ppm)	935.9301
9/27/2018 21:54:02	R1808996-007	Tl (351.923 nm)	66.12	0.0042 (ppm)	22.7951
9/27/2018 21:54:02	R1808996-007	V (292.401 nm)	45.50	0.0005 (ppm)	143.9143
9/27/2018 21:54:02	R1808996-007	Y (360.074 nm)	1.33	0.93 (Ratio)	986429.51
9/27/2018 21:54:02	R1808996-007	Y_R (360.074 nm)	1.33	0.93 (Ratio)	986681.79
9/27/2018 21:54:02	R1808996-007	Zn (213.857 nm)	1.28	0.0107 (ppm)	242.3308
9/27/2018 21:57:17	Continuing Calibration Verification	Ag (328.068 nm)	0.05	0.4992 (ppm)	30921.1757
9/27/2018 21:57:17	Continuing Calibration Verification	Al (394.401 nm)	0.19	9.5255 (ppm)	115517.3570
9/27/2018 21:57:17	Continuing Calibration Verification	As (188.980 nm)	1.46	0.9813 (ppm)	763.6037
9/27/2018 21:57:17	Continuing Calibration Verification	B (249.772 nm)	0.07	2.4843 (ppm)	57148.8244
9/27/2018 21:57:17	Continuing Calibration Verification	Ba (230.424 nm)	0.26	10.1079 (ppm)	299756.7578
9/27/2018 21:57:17	Continuing Calibration Verification	Be (313.107 nm)	0.66	0.2508 (ppm)	327102.1701
9/27/2018 21:57:17	Continuing Calibration Verification	Ca (227.547 nm)	0.28	24.1261 (ppm)	1248.7998
9/27/2018 21:57:17	Continuing Calibration Verification	Cd (214.439 nm)	0.16	0.4987 (ppm)	9815.8092
9/27/2018 21:57:17	Continuing Calibration Verification	Co (230.786 nm)	0.18	2.5840 (ppm)	22504.0559
9/27/2018 21:57:17	Continuing Calibration Verification	Cr (267.716 nm)	0.16	0.5157 (ppm)	22338.1089
9/27/2018 21:57:17	Continuing Calibration Verification	Cu (327.395 nm)	0.17	1.2137 (ppm)	66809.2401
9/27/2018 21:57:17	Continuing Calibration Verification	Fe (234.350 nm)	0.18	4.8393 (ppm)	45997.0035
9/27/2018 21:57:17	Continuing Calibration Verification	K (766.491 nm)	0.24	24.1152 (ppm)	71531.1583
9/27/2018 21:57:17	Continuing Calibration Verification	Mg (279.078 nm)	0.20	24.3878 (ppm)	41461.4121
9/27/2018 21:57:17	Continuing Calibration Verification	Mn (257.610 nm)	0.16	0.7652 (ppm)	207193.5287
9/27/2018 21:57:17	Continuing Calibration Verification	Mo (202.032 nm)	0.36	2.6040 (ppm)	11004.3199
9/27/2018 21:57:17	Continuing Calibration Verification	Na (588.995 nm)	0.70	24.0913 (ppm)	1046886.7950
9/27/2018 21:57:17	Continuing Calibration Verification	Ni (230.299 nm)	0.16	2.0468 (ppm)	11892.4496
9/27/2018 21:57:17	Continuing Calibration Verification	Pb (220.353 nm)	0.22	0.5036 (ppm)	985.1640
9/27/2018 21:57:17	Continuing Calibration Verification	Sb (217.582 nm)	0.35	4.8828 (ppm)	6002.6589

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 21:57:17	Continuing Calibration Verification	Se (196.026 nm)	0.36	0.4838 (ppm)	398.1065
9/27/2018 21:57:17	Continuing Calibration Verification	Sn (189.925 nm)	0.12	4.9902 (ppm)	5825.9492
9/27/2018 21:57:17	Continuing Calibration Verification	Sr (216.596 nm)	0.64	2.5291 (ppm)	33099.5360
9/27/2018 21:57:17	Continuing Calibration Verification	Ti (336.122 nm)	0.07	2.5026 (ppm)	467290.2495
9/27/2018 21:57:17	Continuing Calibration Verification	Tl (351.923 nm)	0.41	0.9929 (ppm)	2424.5068
9/27/2018 21:57:17	Continuing Calibration Verification	V (292.401 nm)	0.24	2.5033 (ppm)	85132.2364
9/27/2018 21:57:17	Continuing Calibration Verification	Y (360.074 nm)	0.59	0.96 (Ratio)	1009541.81
9/27/2018 21:57:17	Continuing Calibration Verification	Y_R (360.074 nm)	0.59	0.96 (Ratio)	1009809.10
9/27/2018 21:57:17	Continuing Calibration Verification	Zn (213.857 nm)	0.14	0.9896 (ppm)	24860.9400
9/27/2018 22:00:32	Continuing Calibration Blank	Ag (328.068 nm)	86.67	0.0002 (ppm)	-173.4948
9/27/2018 22:00:32	Continuing Calibration Blank	Al (394.401 nm)	> 100.00	-0.0001 u (ppm)	95.9887
9/27/2018 22:00:32	Continuing Calibration Blank	As (188.980 nm)	> 100.00	-0.0013 u (ppm)	-1.5944
9/27/2018 22:00:32	Continuing Calibration Blank	B (249.772 nm)	21.19	0.0015 (ppm)	55.7441
9/27/2018 22:00:32	Continuing Calibration Blank	Ba (230.424 nm)	> 100.00	0.0002 u (ppm)	37.8754
9/27/2018 22:00:32	Continuing Calibration Blank	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-395.7051
9/27/2018 22:00:32	Continuing Calibration Blank	Ca (227.547 nm)	27.24	-0.0408 u (ppm)	4.7506
9/27/2018 22:00:32	Continuing Calibration Blank	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.9961
9/27/2018 22:00:32	Continuing Calibration Blank	Co (230.786 nm)	> 100.00	0.0001 u (ppm)	-2.9195
9/27/2018 22:00:32	Continuing Calibration Blank	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	9.9604
9/27/2018 22:00:32	Continuing Calibration Blank	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	36.7661
9/27/2018 22:00:32	Continuing Calibration Blank	Fe (234.350 nm)	32.15	0.0027 (ppm)	91.7213
9/27/2018 22:00:32	Continuing Calibration Blank	K (766.491 nm)	33.59	0.0299 (ppm)	44.3263
9/27/2018 22:00:32	Continuing Calibration Blank	Mg (279.078 nm)	> 100.00	-0.0001 u (ppm)	0.5931
9/27/2018 22:00:32	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	18.9432
9/27/2018 22:00:32	Continuing Calibration Blank	Mo (202.032 nm)	> 100.00	0.0009 u (ppm)	33.6649
9/27/2018 22:00:32	Continuing Calibration Blank	Na (588.995 nm)	12.48	0.0043 (ppm)	-6606.6849
9/27/2018 22:00:32	Continuing Calibration Blank	Ni (230.299 nm)	76.55	-0.0002 u (ppm)	-18.3053
9/27/2018 22:00:32	Continuing Calibration Blank	Pb (220.353 nm)	84.29	0.0008 (ppm)	4.5612
9/27/2018 22:00:32	Continuing Calibration Blank	Sb (217.582 nm)	20.88	0.0041 (ppm)	5.9967
9/27/2018 22:00:32	Continuing Calibration Blank	Se (196.026 nm)	> 100.00	0.0017 u (ppm)	6.0635
9/27/2018 22:00:32	Continuing Calibration Blank	Sn (189.925 nm)	80.49	0.0010 (ppm)	1.8550
9/27/2018 22:00:32	Continuing Calibration Blank	Sr (216.596 nm)	49.71	0.0002 (ppm)	3.3977
9/27/2018 22:00:32	Continuing Calibration Blank	Ti (336.122 nm)	70.40	0.0019 (ppm)	597.2170
9/27/2018 22:00:32	Continuing Calibration Blank	Tl (351.923 nm)	> 100.00	0.0009 u (ppm)	14.6746
9/27/2018 22:00:32	Continuing Calibration Blank	V (292.401 nm)	> 100.00	0.0001 u (ppm)	133.0527
9/27/2018 22:00:32	Continuing Calibration Blank	Y (360.074 nm)	0.30	1.00 (Ratio)	1059791.92
9/27/2018 22:00:32	Continuing Calibration Blank	Y_R (360.074 nm)	0.30	1.00 (Ratio)	1060109.71
9/27/2018 22:00:32	Continuing Calibration Blank	Zn (213.857 nm)	37.53	0.0001 (ppm)	-24.0786
9/27/2018 22:03:46	R1808996-008	Ag (328.068 nm)	43.83	0.0003 (ppm)	-168.1477
9/27/2018 22:03:46	R1808996-008	Al (394.401 nm)	1.33	0.8700 (ppm)	10639.1459
9/27/2018 22:03:46	R1808996-008	As (188.980 nm)	93.38	0.0020 (ppm)	0.9146
9/27/2018 22:03:46	R1808996-008	B (249.772 nm)	1.30	0.4748 (ppm)	10940.0986
9/27/2018 22:03:46	R1808996-008	Ba (230.424 nm)	1.06	0.0703 (ppm)	2118.3632
9/27/2018 22:03:46	R1808996-008	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-381.8917
9/27/2018 22:03:46	R1808996-008	Ca (227.547 nm)	1.89	20.3178 (ppm)	1052.7540
9/27/2018 22:03:46	R1808996-008	Cd (214.439 nm)	12.09	-0.0003 u (ppm)	7.5100
9/27/2018 22:03:46	R1808996-008	Co (230.786 nm)	> 100.00	0.0001 u (ppm)	-3.6302
9/27/2018 22:03:46	R1808996-008	Cr (267.716 nm)	17.43	0.0014 (ppm)	68.8476
9/27/2018 22:03:46	R1808996-008	Cu (327.395 nm)	4.20	0.0022 (ppm)	160.7304
9/27/2018 22:03:46	R1808996-008	Fe (234.350 nm)	1.08	0.8470 (ppm)	8105.4699
9/27/2018 22:03:46	R1808996-008	K (766.491 nm)	2.00	1.8187 (ppm)	5353.7536

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:03:46	R1808996-008	Mg (279.078 nm)	1.26	8.9966 (ppm)	15295.3814
9/27/2018 22:03:46	R1808996-008	Mn (257.610 nm)	1.28	0.0220 (ppm)	5967.1795
9/27/2018 22:03:46	R1808996-008	Mo (202.032 nm)	20.21	0.0046 (ppm)	49.1472
9/27/2018 22:03:46	R1808996-008	Na (588.995 nm)	1.58	43.4047 (ppm)	1891596.0548
9/27/2018 22:03:46	R1808996-008	Ni (230.299 nm)	11.50	-0.0064 u (ppm)	-54.6672
9/27/2018 22:03:46	R1808996-008	Pb (220.353 nm)	> 100.00	0.0003 u (ppm)	3.4787
9/27/2018 22:03:46	R1808996-008	Sb (217.582 nm)	> 100.00	0.0003 u (ppm)	1.3844
9/27/2018 22:03:46	R1808996-008	Se (196.026 nm)	> 100.00	-0.0022 u (ppm)	2.9053
9/27/2018 22:03:46	R1808996-008	Sn (189.925 nm)	23.46	-0.0015 u (ppm)	-1.0142
9/27/2018 22:03:46	R1808996-008	Sr (216.596 nm)	1.77	1.7189 (ppm)	22496.7117
9/27/2018 22:03:46	R1808996-008	Ti (336.122 nm)	5.89	0.0075 (ppm)	1647.0524
9/27/2018 22:03:46	R1808996-008	Tl (351.923 nm)	> 100.00	-0.0002 u (ppm)	12.1515
9/27/2018 22:03:46	R1808996-008	V (292.401 nm)	5.77	0.0014 (ppm)	175.3940
9/27/2018 22:03:46	R1808996-008	Y (360.074 nm)	1.39	0.97 (Ratio)	1028498.99
9/27/2018 22:03:46	R1808996-008	Y_R (360.074 nm)	1.39	0.97 (Ratio)	1028815.81
9/27/2018 22:03:46	R1808996-008	Zn (213.857 nm)	0.62	0.0105 (ppm)	239.1408
9/27/2018 22:07:01	R1808996-009	Ag (328.068 nm)	30.04	0.0003 (ppm)	-167.4797
9/27/2018 22:07:01	R1808996-009	Al (394.401 nm)	1.14	0.0425 (ppm)	611.9641
9/27/2018 22:07:01	R1808996-009	As (188.980 nm)	> 100.00	0.0014 u (ppm)	0.4596
9/27/2018 22:07:01	R1808996-009	B (249.772 nm)	2.92	0.0121 (ppm)	300.6340
9/27/2018 22:07:01	R1808996-009	Ba (230.424 nm)	1.36	0.2384 (ppm)	7101.7364
9/27/2018 22:07:01	R1808996-009	Be (313.107 nm)	9.04	0.0000 u (ppm)	-443.8729
9/27/2018 22:07:01	R1808996-009	Ca (227.547 nm)	1.40	94.4777 o (ppm)	4870.3185
9/27/2018 22:07:01	R1808996-009	Cd (214.439 nm)	72.89	-0.0002 u (ppm)	9.9511
9/27/2018 22:07:01	R1808996-009	Co (230.786 nm)	> 100.00	-0.0004 u (ppm)	-7.5217
9/27/2018 22:07:01	R1808996-009	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	7.2648
9/27/2018 22:07:01	R1808996-009	Cu (327.395 nm)	7.32	0.0010 (ppm)	92.3098
9/27/2018 22:07:01	R1808996-009	Fe (234.350 nm)	1.78	0.0231 (ppm)	285.6008
9/27/2018 22:07:01	R1808996-009	K (766.491 nm)	1.82	1.0756 (ppm)	3147.9491
9/27/2018 22:07:01	R1808996-009	Mg (279.078 nm)	1.26	29.0962 (ppm)	49465.8401
9/27/2018 22:07:01	R1808996-009	Mn (257.610 nm)	1.31	0.0019 (ppm)	515.9035
9/27/2018 22:07:01	R1808996-009	Mo (202.032 nm)	11.48	-0.0062 u (ppm)	3.5367
9/27/2018 22:07:01	R1808996-009	Na (588.995 nm)	1.64	13.1825 (ppm)	569770.9140
9/27/2018 22:07:01	R1808996-009	Ni (230.299 nm)	13.42	-0.0095 u (ppm)	-72.8118
9/27/2018 22:07:01	R1808996-009	Pb (220.353 nm)	> 100.00	-0.0005 u (ppm)	1.9534
9/27/2018 22:07:01	R1808996-009	Sb (217.582 nm)	> 100.00	-0.0003 u (ppm)	0.5953
9/27/2018 22:07:01	R1808996-009	Se (196.026 nm)	33.90	-0.0043 u (ppm)	1.1666
9/27/2018 22:07:01	R1808996-009	Sn (189.925 nm)	42.15	-0.0018 u (ppm)	-1.4616
9/27/2018 22:07:01	R1808996-009	Sr (216.596 nm)	1.23	0.3280 (ppm)	4292.7984
9/27/2018 22:07:01	R1808996-009	Ti (336.122 nm)	22.17	-0.0012 u (ppm)	31.7575
9/27/2018 22:07:01	R1808996-009	Tl (351.923 nm)	> 100.00	0.0002 u (ppm)	13.1194
9/27/2018 22:07:01	R1808996-009	V (292.401 nm)	23.57	0.0004 (ppm)	141.0637
9/27/2018 22:07:01	R1808996-009	Y (360.074 nm)	1.48	0.96 (Ratio)	1011681.59
9/27/2018 22:07:01	R1808996-009	Y_R (360.074 nm)	1.48	0.96 (Ratio)	1011988.63
9/27/2018 22:07:01	R1808996-009	Zn (213.857 nm)	1.41	0.0051 (ppm)	101.6233
9/27/2018 22:10:16	R1808996-010	Ag (328.068 nm)	57.21	0.0002 (ppm)	-174.4285
9/27/2018 22:10:16	R1808996-010	Al (394.401 nm)	1.40	3.9777 (ppm)	48295.6017
9/27/2018 22:10:16	R1808996-010	As (188.980 nm)	> 100.00	0.0010 u (ppm)	0.1429
9/27/2018 22:10:16	R1808996-010	B (249.772 nm)	1.28	0.3975 (ppm)	9162.5850
9/27/2018 22:10:16	R1808996-010	Ba (230.424 nm)	1.44	0.1734 (ppm)	5176.0775
9/27/2018 22:10:16	R1808996-010	Be (313.107 nm)	4.46	0.0001 (ppm)	-263.4005

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:10:16	R1808996-010	Ca (227.547 nm)	1.44	16.7362 (ppm)	868.3846
9/27/2018 22:10:16	R1808996-010	Cd (214.439 nm)	11.19	-0.0002 u (ppm)	9.5998
9/27/2018 22:10:16	R1808996-010	Co (230.786 nm)	11.66	0.0012 (ppm)	6.3109
9/27/2018 22:10:16	R1808996-010	Cr (267.716 nm)	2.05	0.0091 (ppm)	402.2189
9/27/2018 22:10:16	R1808996-010	Cu (327.395 nm)	6.08	0.0040 (ppm)	259.6695
9/27/2018 22:10:16	R1808996-010	Fe (234.350 nm)	1.18	2.6908 (ppm)	25605.1481
9/27/2018 22:10:16	R1808996-010	K (766.491 nm)	1.62	8.7288 (ppm)	25863.3357
9/27/2018 22:10:16	R1808996-010	Mg (279.078 nm)	1.18	7.6833 (ppm)	13062.7093
9/27/2018 22:10:16	R1808996-010	Mn (257.610 nm)	1.03	0.0390 (ppm)	10570.2832
9/27/2018 22:10:16	R1808996-010	Mo (202.032 nm)	2.09	0.0348 (ppm)	176.5352
9/27/2018 22:10:16	R1808996-010	Na (588.995 nm)	1.70	51.9794 (ppm)	2266627.2584
9/27/2018 22:10:16	R1808996-010	Ni (230.299 nm)	4.76	-0.0077 u (ppm)	-62.0132
9/27/2018 22:10:16	R1808996-010	Pb (220.353 nm)	85.96	0.0001 (ppm)	3.2145
9/27/2018 22:10:16	R1808996-010	Sb (217.582 nm)	22.56	0.0011 (ppm)	2.2816
9/27/2018 22:10:16	R1808996-010	Se (196.026 nm)	> 100.00	-0.0017 u (ppm)	3.3057
9/27/2018 22:10:16	R1808996-010	Sn (189.925 nm)	> 100.00	0.0005 u (ppm)	1.2611
9/27/2018 22:10:16	R1808996-010	Sr (216.596 nm)	1.52	1.1892 (ppm)	15563.7313
9/27/2018 22:10:16	R1808996-010	Ti (336.122 nm)	1.25	0.0701 (ppm)	13325.7949
9/27/2018 22:10:16	R1808996-010	Tl (351.923 nm)	> 100.00	0.0021 u (ppm)	17.6814
9/27/2018 22:10:16	R1808996-010	V (292.401 nm)	1.27	0.0086 (ppm)	419.3750
9/27/2018 22:10:16	R1808996-010	Y (360.074 nm)	1.42	0.97 (Ratio)	1025226.42
9/27/2018 22:10:16	R1808996-010	Y_R (360.074 nm)	1.42	0.97 (Ratio)	1025526.97
9/27/2018 22:10:16	R1808996-010	Zn (213.857 nm)	1.42	0.0098 (ppm)	219.6371
9/27/2018 22:13:31	R1808996-011	Ag (328.068 nm)	12.23	0.0002 (ppm)	-170.9917
9/27/2018 22:13:31	R1808996-011	Al (394.401 nm)	1.94	0.3367 (ppm)	4177.2421
9/27/2018 22:13:31	R1808996-011	As (188.980 nm)	> 100.00	0.0009 u (ppm)	0.1014
9/27/2018 22:13:31	R1808996-011	B (249.772 nm)	2.23	0.0178 (ppm)	432.0556
9/27/2018 22:13:31	R1808996-011	Ba (230.424 nm)	1.46	0.2099 (ppm)	6257.3869
9/27/2018 22:13:31	R1808996-011	Be (313.107 nm)	2.86	0.0000 u (ppm)	-423.9439
9/27/2018 22:13:31	R1808996-011	Ca (227.547 nm)	1.44	101.2933 o (ppm)	5221.1645
9/27/2018 22:13:31	R1808996-011	Cd (214.439 nm)	68.00	-0.0001 u (ppm)	10.9131
9/27/2018 22:13:31	R1808996-011	Co (230.786 nm)	> 100.00	0.0001 u (ppm)	-3.3571
9/27/2018 22:13:31	R1808996-011	Cr (267.716 nm)	58.44	0.0003 (ppm)	21.3486
9/27/2018 22:13:31	R1808996-011	Cu (327.395 nm)	20.92	0.0009 (ppm)	87.1074
9/27/2018 22:13:31	R1808996-011	Fe (234.350 nm)	1.24	0.3219 (ppm)	3121.5806
9/27/2018 22:13:31	R1808996-011	K (766.491 nm)	1.96	1.4059 (ppm)	4128.5426
9/27/2018 22:13:31	R1808996-011	Mg (279.078 nm)	1.32	27.6344 (ppm)	46980.7313
9/27/2018 22:13:31	R1808996-011	Mn (257.610 nm)	1.32	0.0139 (ppm)	3784.5363
9/27/2018 22:13:31	R1808996-011	Mo (202.032 nm)	5.11	-0.0062 u (ppm)	3.4869
9/27/2018 22:13:31	R1808996-011	Na (588.995 nm)	1.80	57.4702 o (ppm)	2506778.4878
9/27/2018 22:13:31	R1808996-011	Ni (230.299 nm)	11.32	-0.0084 u (ppm)	-66.1554
9/27/2018 22:13:31	R1808996-011	Pb (220.353 nm)	> 100.00	-0.0007 u (ppm)	1.5885
9/27/2018 22:13:31	R1808996-011	Sb (217.582 nm)	> 100.00	0.0017 u (ppm)	3.0260
9/27/2018 22:13:31	R1808996-011	Se (196.026 nm)	96.14	-0.0041 u (ppm)	1.3759
9/27/2018 22:13:31	R1808996-011	Sn (189.925 nm)	46.44	-0.0021 u (ppm)	-1.7733
9/27/2018 22:13:31	R1808996-011	Sr (216.596 nm)	1.15	0.4254 (ppm)	5568.4366
9/27/2018 22:13:31	R1808996-011	Ti (336.122 nm)	4.80	0.0080 (ppm)	1753.1225
9/27/2018 22:13:31	R1808996-011	Tl (351.923 nm)	44.44	0.0032 (ppm)	20.3959
9/27/2018 22:13:31	R1808996-011	V (292.401 nm)	13.27	0.0009 (ppm)	159.6965
9/27/2018 22:13:31	R1808996-011	Y (360.074 nm)	1.58	0.94 (Ratio)	996990.58
9/27/2018 22:13:31	R1808996-011	Y_R (360.074 nm)	1.58	0.94 (Ratio)	997270.35

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:13:31	R1808996-011	Zn (213.857 nm)	1.97	0.0062 (ppm)	129.7661
9/27/2018 22:16:46	R1808996-012	Ag (328.068 nm)	33.04	0.0003 (ppm)	-168.4673
9/27/2018 22:16:46	R1808996-012	Al (394.401 nm)	2.13	0.0626 (ppm)	856.3294
9/27/2018 22:16:46	R1808996-012	As (188.980 nm)	69.45	-0.0024 u (ppm)	-2.5241
9/27/2018 22:16:46	R1808996-012	B (249.772 nm)	1.29	0.3347 (ppm)	7717.6030
9/27/2018 22:16:46	R1808996-012	Ba (230.424 nm)	1.74	0.3910 (ppm)	11625.7602
9/27/2018 22:16:46	R1808996-012	Be (313.107 nm)	28.86	0.0000 u (ppm)	-435.3588
9/27/2018 22:16:46	R1808996-012	Ca (227.547 nm)	1.95	36.0670 (ppm)	1863.4823
9/27/2018 22:16:46	R1808996-012	Cd (214.439 nm)	10.35	-0.0003 u (ppm)	7.4309
9/27/2018 22:16:46	R1808996-012	Co (230.786 nm)	> 100.00	0.0002 u (ppm)	-2.1819
9/27/2018 22:16:46	R1808996-012	Cr (267.716 nm)	32.91	0.0003 (ppm)	21.7379
9/27/2018 22:16:46	R1808996-012	Cu (327.395 nm)	14.34	0.0012 (ppm)	105.9776
9/27/2018 22:16:46	R1808996-012	Fe (234.350 nm)	1.25	0.2574 (ppm)	2510.0545
9/27/2018 22:16:46	R1808996-012	K (766.491 nm)	1.85	1.4965 (ppm)	4397.1793
9/27/2018 22:16:46	R1808996-012	Mg (279.078 nm)	1.41	14.6315 (ppm)	24875.0240
9/27/2018 22:16:46	R1808996-012	Mn (257.610 nm)	1.44	0.0550 (ppm)	14908.8822
9/27/2018 22:16:46	R1808996-012	Mo (202.032 nm)	5.97	-0.0063 u (ppm)	3.2897
9/27/2018 22:16:46	R1808996-012	Na (588.995 nm)	1.62	62.8367 o (ppm)	2741494.7622
9/27/2018 22:16:46	R1808996-012	Ni (230.299 nm)	11.38	-0.0096 u (ppm)	-73.2035
9/27/2018 22:16:46	R1808996-012	Pb (220.353 nm)	> 100.00	0.0002 u (ppm)	3.4104
9/27/2018 22:16:46	R1808996-012	Sb (217.582 nm)	> 100.00	0.0016 (ppm)	2.9709
9/27/2018 22:16:46	R1808996-012	Se (196.026 nm)	> 100.00	-0.0004 u (ppm)	4.3277
9/27/2018 22:16:46	R1808996-012	Sn (189.825 nm)	> 100.00	-0.0009 u (ppm)	-0.3401
9/27/2018 22:16:46	R1808996-012	Sr (216.596 nm)	1.76	1.3515 (ppm)	17687.4970
9/27/2018 22:16:46	R1808996-012	Ti (336.122 nm)	15.04	-0.0012 u (ppm)	30.9353
9/27/2018 22:16:46	R1808996-012	Tl (351.923 nm)	> 100.00	0.0002 u (ppm)	13.1310
9/27/2018 22:16:46	R1808996-012	V (292.401 nm)	> 100.00	0.0001 u (ppm)	130.2763
9/27/2018 22:16:46	R1808996-012	Y (360.074 nm)	1.77	0.96 (Ratio)	1014846.39
9/27/2018 22:16:46	R1808996-012	Y_R (360.074 nm)	1.77	0.96 (Ratio)	1015154.28
9/27/2018 22:16:46	R1808996-012	Zn (213.857 nm)	0.42	0.0056 (ppm)	114.0771
9/27/2018 22:20:01	R1808996-013	Ag (328.068 nm)	54.71	0.0003 (ppm)	-166.2579
9/27/2018 22:20:01	R1808996-013	Al (394.401 nm)	1.48	0.4108 (ppm)	5075.4944
9/27/2018 22:20:01	R1808996-013	As (188.980 nm)	> 100.00	-0.0022 u (ppm)	-2.2922
9/27/2018 22:20:01	R1808996-013	B (249.772 nm)	1.06	0.0634 (ppm)	1480.9542
9/27/2018 22:20:01	R1808996-013	Ba (230.424 nm)	0.97	0.0392 (ppm)	1196.9229
9/27/2018 22:20:01	R1808996-013	Be (313.107 nm)	45.86	0.0000 u (ppm)	-437.1753
9/27/2018 22:20:01	R1808996-013	Ca (227.547 nm)	1.35	176.9425 o (ppm)	9115.3940
9/27/2018 22:20:01	R1808996-013	Cd (214.439 nm)	67.56	-0.0002 u (ppm)	9.7620
9/27/2018 22:20:01	R1808996-013	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.5392
9/27/2018 22:20:01	R1808996-013	Cr (267.716 nm)	63.21	-0.0002 u (ppm)	1.0587
9/27/2018 22:20:01	R1808996-013	Cu (327.395 nm)	12.05	0.0012 (ppm)	105.7702
9/27/2018 22:20:01	R1808996-013	Fe (234.350 nm)	1.11	0.8981 (ppm)	8590.7468
9/27/2018 22:20:01	R1808996-013	K (766.491 nm)	1.41	2.0858 (ppm)	6146.4241
9/27/2018 22:20:01	R1808996-013	Mg (279.078 nm)	1.07	72.5704 o (ppm)	123374.3814
9/27/2018 22:20:01	R1808996-013	Mn (257.610 nm)	1.09	0.1141 (ppm)	30897.7179
9/27/2018 22:20:01	R1808996-013	Mo (202.032 nm)	49.91	-0.0017 u (ppm)	22.7174
9/27/2018 22:20:01	R1808996-013	Na (588.995 nm)	1.49	14.1434 (ppm)	611794.5543
9/27/2018 22:20:01	R1808996-013	Ni (230.299 nm)	21.25	-0.0126 u (ppm)	-90.4937
9/27/2018 22:20:01	R1808996-013	Pb (220.353 nm)	91.18	-0.0014 u (ppm)	0.1579
9/27/2018 22:20:01	R1808996-013	Sb (217.582 nm)	69.31	0.0027 (ppm)	4.2820
9/27/2018 22:20:01	R1808996-013	Se (196.026 nm)	57.28	-0.0037 u (ppm)	1.7066

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:20:01	R1808996-013	Sn (189.925 nm)	19.61	-0.0046 u (ppm)	-4.7198
9/27/2018 22:20:01	R1808996-013	Sr (216.596 nm)	0.81	12.1210 o (ppm)	158629.4603
9/27/2018 22:20:01	R1808996-013	Ti (336.122 nm)	3.26	0.0078 (ppm)	1710.1933
9/27/2018 22:20:01	R1808996-013	Tl (351.923 nm)	> 100.00	0.0034 u (ppm)	20.9456
9/27/2018 22:20:01	R1808996-013	V (292.401 nm)	12.78	0.0007 (ppm)	150.3622
9/27/2018 22:20:01	R1808996-013	Y (360.074 nm)	1.38	0.93 (Ratio)	984051.85
9/27/2018 22:20:01	R1808996-013	Y_R (360.074 nm)	1.38	0.93 (Ratio)	984353.65
9/27/2018 22:20:01	R1808996-013	Zn (213.857 nm)	2.16	0.0060 (ppm)	125.1886
9/27/2018 22:23:16	R1808996-014	Ag (328.068 nm)	31.61	0.0003 (ppm)	-163.4773
9/27/2018 22:23:16	R1808996-014	Al (394.401 nm)	1.12	0.1676 (ppm)	2128.0013
9/27/2018 22:23:16	R1808996-014	As (188.980 nm)	> 100.00	0.0002 u (ppm)	-0.4551
9/27/2018 22:23:16	R1808996-014	B (249.772 nm)	1.16	0.6928 (ppm)	15953.0237
9/27/2018 22:23:16	R1808996-014	Ba (230.424 nm)	1.79	1.3211 (ppm)	39206.7654
9/27/2018 22:23:16	R1808996-014	Be (313.107 nm)	15.64	0.0000 u (ppm)	-435.3754
9/27/2018 22:23:16	R1808996-014	Ca (227.547 nm)	1.49	52.6490 (ppm)	2717.0843
9/27/2018 22:23:16	R1808996-014	Cd (214.439 nm)	82.09	-0.0003 u (ppm)	8.5012
9/27/2018 22:23:16	R1808996-014	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.4707
9/27/2018 22:23:16	R1808996-014	Cr (267.716 nm)	19.26	0.0005 (ppm)	32.1621
9/27/2018 22:23:16	R1808996-014	Cu (327.395 nm)	22.91	0.0008 (ppm)	81.4913
9/27/2018 22:23:16	R1808996-014	Fe (234.350 nm)	1.29	0.5677 (ppm)	5454.4371
9/27/2018 22:23:16	R1808996-014	K (766.491 nm)	1.60	2.8535 (ppm)	8425.0627
9/27/2018 22:23:16	R1808996-014	Mg (279.078 nm)	1.18	22.3626 (ppm)	38018.3789
9/27/2018 22:23:16	R1808996-014	Mn (257.610 nm)	1.09	0.0243 (ppm)	6592.2099
9/27/2018 22:23:16	R1808996-014	Mo (202.032 nm)	11.69	-0.0065 u (ppm)	2.2801
9/27/2018 22:23:16	R1808996-014	Na (588.995 nm)	1.53	88.8317 o (ppm)	3878437.3030
9/27/2018 22:23:16	R1808996-014	Ni (230.299 nm)	9.84	-0.0046 u (ppm)	-44.4088
9/27/2018 22:23:16	R1808996-014	Pb (220.353 nm)	25.45	-0.0019 u (ppm)	-0.6957
9/27/2018 22:23:16	R1808996-014	Sb (217.582 nm)	> 100.00	0.0018 (ppm)	3.1966
9/27/2018 22:23:16	R1808996-014	Se (196.026 nm)	73.70	-0.0034 u (ppm)	1.9580
9/27/2018 22:23:16	R1808996-014	Sn (189.925 nm)	45.15	-0.0024 u (ppm)	-2.1251
9/27/2018 22:23:16	R1808996-014	Sr (216.596 nm)	1.40	2.5746 (ppm)	33694.4722
9/27/2018 22:23:16	R1808996-014	Ti (336.122 nm)	40.67	-0.0006 u (ppm)	132.0604
9/27/2018 22:23:16	R1808996-014	Tl (351.923 nm)	> 100.00	0.0003 u (ppm)	13.3992
9/27/2018 22:23:16	R1808996-014	V (292.401 nm)	44.25	0.0003 (ppm)	139.9030
9/27/2018 22:23:16	R1808996-014	Y (360.074 nm)	1.36	0.95 (Ratio)	998037.36
9/27/2018 22:23:16	R1808996-014	Y_R (360.074 nm)	1.35	0.95 (Ratio)	998340.37
9/27/2018 22:23:16	R1808996-014	Zn (213.857 nm)	0.80	0.0060 (ppm)	126.3256
9/27/2018 22:26:32	R1808996-015	Ag (328.068 nm)	43.83	0.0003 (ppm)	-164.1378
9/27/2018 22:26:32	R1808996-015	Al (394.401 nm)	1.33	0.3994 (ppm)	4936.7928
9/27/2018 22:26:32	R1808996-015	As (188.980 nm)	> 100.00	0.0012 u (ppm)	0.3055
9/27/2018 22:26:32	R1808996-015	B (249.772 nm)	1.08	0.1792 (ppm)	4143.5366
9/27/2018 22:26:32	R1808996-015	Ba (230.424 nm)	0.62	0.0302 (ppm)	929.8408
9/27/2018 22:26:32	R1808996-015	Be (313.107 nm)	29.89	0.0000 u (ppm)	-439.6053
9/27/2018 22:26:32	R1808996-015	Ca (227.547 nm)	1.40	476.2724 o (ppm)	24524.1230
9/27/2018 22:26:32	R1808996-015	Cd (214.439 nm)	55.31	-0.0001 u (ppm)	11.2630
9/27/2018 22:26:32	R1808996-015	Co (230.786 nm)	30.23	0.0018 (ppm)	11.6132
9/27/2018 22:26:32	R1808996-015	Cr (267.716 nm)	48.17	-0.0003 u (ppm)	-1.9281
9/27/2018 22:26:32	R1808996-015	Cu (327.395 nm)	4.02	0.0009 (ppm)	85.9499
9/27/2018 22:26:32	R1808996-015	Fe (234.350 nm)	1.02	3.4457 (ppm)	32770.4407
9/27/2018 22:26:32	R1808996-015	K (766.491 nm)	1.50	8.2886 (ppm)	24556.8778
9/27/2018 22:26:32	R1808996-015	Mg (279.078 nm)	1.16	241.8784 o (ppm)	411207.3651

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:26:32	R1808996-015	Mn (257.610 nm)	1.13	0.3880 (ppm)	105074.2611
9/27/2018 22:26:32	R1808996-015	Mo (202.032 nm)	22.84	-0.0036 u (ppm)	14.6497
9/27/2018 22:26:32	R1808996-015	Na (588.995 nm)	1.56	73.9889 o (ppm)	3229258.0247
9/27/2018 22:26:32	R1808996-015	Ni (230.299 nm)	2.79	-0.0080 u (ppm)	-63.6717
9/27/2018 22:26:32	R1808996-015	Pb (220.353 nm)	> 100.00	-0.0011 u (ppm)	0.8654
9/27/2018 22:26:32	R1808996-015	Sb (217.582 nm)	> 100.00	-0.0001 u (ppm)	0.8677
9/27/2018 22:26:32	R1808996-015	Se (196.026 nm)	49.05	-0.0056 u (ppm)	0.1446
9/27/2018 22:26:32	R1808996-015	Sn (189.925 nm)	35.63	-0.0030 u (ppm)	-2.7671
9/27/2018 22:26:32	R1808996-015	Sr (216.596 nm)	2.00	17.4940 o (ppm)	228946.7764
9/27/2018 22:26:32	R1808996-015	Ti (336.122 nm)	1.71	0.0085 (ppm)	1828.3405
9/27/2018 22:26:32	R1808996-015	Tl (351.923 nm)	6.51	0.0158 (ppm)	50.8776
9/27/2018 22:26:32	R1808996-015	V (292.401 nm)	18.81	0.0009 (ppm)	158.1130
9/27/2018 22:26:32	R1808996-015	Y (360.074 nm)	1.38	0.88 (Ratio)	926308.64
9/27/2018 22:26:32	R1808996-015	Y_R (360.074 nm)	1.38	0.88 (Ratio)	926561.95
9/27/2018 22:26:32	R1808996-015	Zn (213.857 nm)	2.35	0.0089 (ppm)	197.2728
9/27/2018 22:29:46	R1808996-016	Ag (328.068 nm)	48.63	0.0001 (ppm)	-175.9570
9/27/2018 22:29:46	R1808996-016	Al (394.401 nm)	1.27	0.4972 (ppm)	6121.6285
9/27/2018 22:29:46	R1808996-016	As (188.980 nm)	> 100.00	0.0008 (ppm)	0.0260
9/27/2018 22:29:46	R1808996-016	B (249.772 nm)	0.90	1.5547 (ppm)	35773.8011
9/27/2018 22:29:46	R1808996-016	Ba (230.424 nm)	1.55	1.0541 (ppm)	31290.5947
9/27/2018 22:29:46	R1808996-016	Be (313.107 nm)	14.06	0.0000 u (ppm)	-429.2794
9/27/2018 22:29:46	R1808996-016	Ca (227.547 nm)	0.88	16.0832 (ppm)	834.7693
9/27/2018 22:29:46	R1808996-016	Cd (214.439 nm)	8.52	0.0013 (ppm)	38.5337
9/27/2018 22:29:46	R1808996-016	Co (230.786 nm)	> 100.00	0.0003 u (ppm)	-1.3249
9/27/2018 22:29:46	R1808996-016	Cr (267.716 nm)	1.44	0.0051 (ppm)	229.8018
9/27/2018 22:29:46	R1808996-016	Cu (327.395 nm)	1.91	0.0125 (ppm)	728.8135
9/27/2018 22:29:46	R1808996-016	Fe (234.350 nm)	0.77	1.1658 (ppm)	11131.0876
9/27/2018 22:29:46	R1808996-016	K (766.491 nm)	1.16	3.2910 (ppm)	9723.6018
9/27/2018 22:29:46	R1808996-016	Mg (279.078 nm)	1.01	8.8788 (ppm)	15095.2110
9/27/2018 22:29:46	R1808996-016	Mn (257.610 nm)	1.00	0.0148 (ppm)	4011.2852
9/27/2018 22:29:46	R1808996-016	Mo (202.032 nm)	9.84	-0.0070 u (ppm)	0.1447
9/27/2018 22:29:46	R1808996-016	Na (588.995 nm)	1.15	132.3704 o (ppm)	5782688.0855
9/27/2018 22:29:46	R1808996-016	Ni (230.299 nm)	58.15	0.0009 (ppm)	-12.2188
9/27/2018 22:29:46	R1808996-016	Pb (220.353 nm)	> 100.00	-0.0004 u (ppm)	2.2155
9/27/2018 22:29:46	R1808996-016	Sb (217.582 nm)	78.25	0.0019 (ppm)	3.2889
9/27/2018 22:29:46	R1808996-016	Se (196.026 nm)	> 100.00	-0.0009 u (ppm)	3.9249
9/27/2018 22:29:46	R1808996-016	Sn (189.925 nm)	38.56	-0.0017 u (ppm)	-1.2388
9/27/2018 22:29:46	R1808996-016	Sr (216.596 nm)	1.44	1.9967 (ppm)	26131.6956
9/27/2018 22:29:46	R1808996-016	Ti (336.122 nm)	2.49	0.0044 (ppm)	1075.5272
9/27/2018 22:29:46	R1808996-016	Tl (351.923 nm)	> 100.00	-0.0005 u (ppm)	11.4944
9/27/2018 22:29:46	R1808996-016	V (292.401 nm)	15.13	0.0008 (ppm)	156.0808
9/27/2018 22:29:46	R1808996-016	Y (360.074 nm)	1.28	0.94 (Ratio)	996233.30
9/27/2018 22:29:46	R1808996-016	Y_R (360.074 nm)	1.28	0.94 (Ratio)	996494.45
9/27/2018 22:29:46	R1808996-016	Zn (213.857 nm)	1.18	0.0266 (ppm)	643.4581
9/27/2018 22:33:01	R1808996-017	Ag (328.068 nm)	33.70	0.0001 (ppm)	-176.8769
9/27/2018 22:33:01	R1808996-017	Al (394.401 nm)	1.87	0.0680 (ppm)	921.6393
9/27/2018 22:33:01	R1808996-017	As (188.980 nm)	> 100.00	-0.0009 u (ppm)	-1.3232
9/27/2018 22:33:01	R1808996-017	B (249.772 nm)	1.02	0.3348 (ppm)	7720.7479
9/27/2018 22:33:01	R1808996-017	Ba (230.424 nm)	1.65	0.3910 (ppm)	11626.3934
9/27/2018 22:33:01	R1808996-017	Be (313.107 nm)	19.85	0.0000 u (ppm)	-447.9538
9/27/2018 22:33:01	R1808996-017	Ca (227.547 nm)	0.78	35.9858 (ppm)	1859.3064

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:33:01	R1808996-017	Cd (214.439 nm)	65.07	-0.0002 u (ppm)	10.1993
9/27/2018 22:33:01	R1808996-017	Co (230.786 nm)	> 100.00	0.0003 u (ppm)	-1.4960
9/27/2018 22:33:01	R1808996-017	Cr (267.716 nm)	35.99	0.0004 (ppm)	26.4644
9/27/2018 22:33:01	R1808996-017	Cu (327.395 nm)	10.90	0.0012 (ppm)	105.3484
9/27/2018 22:33:01	R1808996-017	Fe (234.350 nm)	0.64	0.2665 (ppm)	2596.2385
9/27/2018 22:33:01	R1808996-017	K (766.491 nm)	1.41	1.4884 (ppm)	4373.3026
9/27/2018 22:33:01	R1808996-017	Mg (279.078 nm)	0.91	14.6103 (ppm)	24839.0786
9/27/2018 22:33:01	R1808996-017	Mn (257.610 nm)	0.82	0.0549 (ppm)	14883.4611
9/27/2018 22:33:01	R1808996-017	Mo (202.032 nm)	4.07	-0.0071 u (ppm)	-0.0654
9/27/2018 22:33:01	R1808996-017	Na (588.995 nm)	1.34	62.8171 o (ppm)	2740638.0378
9/27/2018 22:33:01	R1808996-017	Ni (230.299 nm)	5.71	-0.0095 u (ppm)	-72.8347
9/27/2018 22:33:01	R1808996-017	Pb (220.353 nm)	> 100.00	-0.0005 u (ppm)	1.9826
9/27/2018 22:33:01	R1808996-017	Sb (217.582 nm)	61.21	0.0025 (ppm)	4.0241
9/27/2018 22:33:01	R1808996-017	Se (196.026 nm)	> 100.00	-0.0021 u (ppm)	2.9892
9/27/2018 22:33:01	R1808996-017	Sn (189.925 nm)	88.53	-0.0009 u (ppm)	-0.3917
9/27/2018 22:33:01	R1808996-017	Sr (216.596 nm)	0.74	1.3455 (ppm)	17609.6522
9/27/2018 22:33:01	R1808996-017	Ti (336.122 nm)	5.37	-0.0011 u (ppm)	47.5392
9/27/2018 22:33:01	R1808996-017	Tl (351.923 nm)	> 100.00	0.0011 u (ppm)	15.3024
9/27/2018 22:33:01	R1808996-017	V (292.401 nm)	97.05	0.0001 (ppm)	132.9720
9/27/2018 22:33:01	R1808996-017	Y (360.074 nm)	1.24	0.96 (Ratio)	1011798.53
9/27/2018 22:33:01	R1808996-017	Y_R (360.074 nm)	1.24	0.96 (Ratio)	1012060.09
9/27/2018 22:33:01	R1808996-017	Zn (213.857 nm)	2.36	0.0048 (ppm)	94.0437
9/27/2018 22:36:15	Continuing Calibration Verification	Ag (328.068 nm)	0.12	0.4991 (ppm)	30918.7831
9/27/2018 22:36:15	Continuing Calibration Verification	Al (394.401 nm)	0.14	9.5421 (ppm)	115718.4555
9/27/2018 22:36:15	Continuing Calibration Verification	As (188.980 nm)	0.96	0.9788 (ppm)	761.6616
9/27/2018 22:36:15	Continuing Calibration Verification	B (249.772 nm)	0.26	2.4841 (ppm)	57145.4703
9/27/2018 22:36:15	Continuing Calibration Verification	Ba (230.424 nm)	0.72	10.0811 (ppm)	298964.6029
9/27/2018 22:36:15	Continuing Calibration Verification	Be (313.107 nm)	0.62	0.2505 (ppm)	326684.6651
9/27/2018 22:36:15	Continuing Calibration Verification	Ca (227.547 nm)	0.20	24.1179 (ppm)	1248.3755
9/27/2018 22:36:15	Continuing Calibration Verification	Cd (214.439 nm)	0.53	0.4980 (ppm)	9801.2940
9/27/2018 22:36:15	Continuing Calibration Verification	Co (230.786 nm)	0.26	2.5834 (ppm)	22499.4192
9/27/2018 22:36:15	Continuing Calibration Verification	Cr (267.716 nm)	0.43	0.5145 (ppm)	22286.0963
9/27/2018 22:36:15	Continuing Calibration Verification	Cu (327.395 nm)	0.28	1.2176 (ppm)	67026.2578
9/27/2018 22:36:15	Continuing Calibration Verification	Fe (234.350 nm)	0.38	4.8349 (ppm)	45955.8578
9/27/2018 22:36:15	Continuing Calibration Verification	K (766.491 nm)	0.27	24.1759 (ppm)	71711.3957
9/27/2018 22:36:15	Continuing Calibration Verification	Mg (279.078 nm)	0.32	24.3667 (ppm)	41425.5336
9/27/2018 22:36:15	Continuing Calibration Verification	Mn (257.610 nm)	0.34	0.7637 (ppm)	206789.7880
9/27/2018 22:36:15	Continuing Calibration Verification	Mo (202.032 nm)	0.36	2.6041 (ppm)	11004.7848
9/27/2018 22:36:15	Continuing Calibration Verification	Na (588.995 nm)	0.43	24.2337 (ppm)	1053116.4958
9/27/2018 22:36:15	Continuing Calibration Verification	Ni (230.299 nm)	0.32	2.0433 (ppm)	11871.6763
9/27/2018 22:36:15	Continuing Calibration Verification	Pb (220.353 nm)	0.67	0.5047 (ppm)	987.2911
9/27/2018 22:36:15	Continuing Calibration Verification	Sb (217.582 nm)	0.19	4.8953 (ppm)	6018.0314
9/27/2018 22:36:15	Continuing Calibration Verification	Se (196.026 nm)	1.10	0.4845 (ppm)	398.7093
9/27/2018 22:36:15	Continuing Calibration Verification	Sn (189.925 nm)	0.40	4.9992 (ppm)	5836.5553
9/27/2018 22:36:15	Continuing Calibration Verification	Sr (216.596 nm)	0.53	2.5225 (ppm)	33012.2682
9/27/2018 22:36:15	Continuing Calibration Verification	Ti (336.122 nm)	0.20	2.5050 (ppm)	467739.6970
9/27/2018 22:36:15	Continuing Calibration Verification	Tl (351.923 nm)	0.16	0.9949 (ppm)	2429.3887
9/27/2018 22:36:15	Continuing Calibration Verification	V (292.401 nm)	0.30	2.5008 (ppm)	85048.4813
9/27/2018 22:36:15	Continuing Calibration Verification	Y (360.074 nm)	0.55	0.96 (Ratio)	1008520.33
9/27/2018 22:36:15	Continuing Calibration Verification	Y_R (360.074 nm)	0.55	0.96 (Ratio)	1008781.45
9/27/2018 22:36:15	Continuing Calibration Verification	Zn (213.857 nm)	0.27	0.9887 (ppm)	24839.8336

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:39:29	Continuing Calibration Blank	Ag (328.068 nm)	79.82	0.0002 (ppm)	-172.1337
9/27/2018 22:39:29	Continuing Calibration Blank	Al (394.401 nm)	41.11	-0.0006 u (ppm)	90.4014
9/27/2018 22:39:29	Continuing Calibration Blank	As (188.980 nm)	> 100.00	0.0009 u (ppm)	0.1091
9/27/2018 22:39:29	Continuing Calibration Blank	B (249.772 nm)	27.60	0.0015 (ppm)	56.8969
9/27/2018 22:39:29	Continuing Calibration Blank	Ba (230.424 nm)	> 100.00	0.0001 u (ppm)	35.4975
9/27/2018 22:39:29	Continuing Calibration Blank	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-375.3620
9/27/2018 22:39:29	Continuing Calibration Blank	Ca (227.547 nm)	> 100.00	-0.0148 u (ppm)	6.0849
9/27/2018 22:39:29	Continuing Calibration Blank	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	12.2802
9/27/2018 22:39:29	Continuing Calibration Blank	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-3.6722
9/27/2018 22:39:29	Continuing Calibration Blank	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	8.5501
9/27/2018 22:39:29	Continuing Calibration Blank	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	37.6778
9/27/2018 22:39:29	Continuing Calibration Blank	Fe (234.350 nm)	47.59	0.0027 (ppm)	91.8055
9/27/2018 22:39:29	Continuing Calibration Blank	K (766.491 nm)	19.35	0.0253 (ppm)	30.6331
9/27/2018 22:39:29	Continuing Calibration Blank	Mg (279.078 nm)	> 100.00	-0.0009 u (ppm)	-0.7734
9/27/2018 22:39:29	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	16.0426
9/27/2018 22:39:29	Continuing Calibration Blank	Mo (202.032 nm)	> 100.00	0.0006 u (ppm)	32.2335
9/27/2018 22:39:29	Continuing Calibration Blank	Na (588.995 nm)	37.17	0.0055 (ppm)	-6553.0111
9/27/2018 22:39:29	Continuing Calibration Blank	Ni (230.299 nm)	> 100.00	0.0000 u (ppm)	-17.3487
9/27/2018 22:39:29	Continuing Calibration Blank	Pb (220.353 nm)	> 100.00	-0.0003 u (ppm)	2.4387
9/27/2018 22:39:29	Continuing Calibration Blank	Sb (217.582 nm)	> 100.00	0.0033 u (ppm)	5.0072
9/27/2018 22:39:29	Continuing Calibration Blank	Se (196.026 nm)	> 100.00	0.0023 u (ppm)	6.5402
9/27/2018 22:39:29	Continuing Calibration Blank	Sn (189.925 nm)	> 100.00	0.0002 u (ppm)	0.9183
9/27/2018 22:39:29	Continuing Calibration Blank	Sr (216.596 nm)	> 100.00	0.0001 u (ppm)	1.4458
9/27/2018 22:39:29	Continuing Calibration Blank	Ti (336.122 nm)	63.46	0.0019 (ppm)	605.3112
9/27/2018 22:39:29	Continuing Calibration Blank	Tl (351.923 nm)	> 100.00	0.0005 u (ppm)	13.7557
9/27/2018 22:39:29	Continuing Calibration Blank	V (292.401 nm)	> 100.00	-0.0001 u (ppm)	126.1834
9/27/2018 22:39:29	Continuing Calibration Blank	Y (360.074 nm)	0.52	1.00 (Ratio)	1054316.46
9/27/2018 22:39:29	Continuing Calibration Blank	Y_R (360.074 nm)	0.52	1.00 (Ratio)	1054579.48
9/27/2018 22:39:29	Continuing Calibration Blank	Zn (213.857 nm)	52.08	0.0002 (ppm)	-21.4250
9/27/2018 22:42:44	R1808996-018	Ag (328.068 nm)	27.87	0.0001 (ppm)	-177.7677
9/27/2018 22:42:44	R1808996-018	Al (394.401 nm)	3.03	0.0312 (ppm)	475.5600
9/27/2018 22:42:44	R1808996-018	As (188.980 nm)	> 100.00	0.0012 u (ppm)	0.2852
9/27/2018 22:42:44	R1808996-018	B (249.772 nm)	1.16	0.3756 (ppm)	8659.1261
9/27/2018 22:42:44	R1808996-018	Ba (230.424 nm)	1.36	0.1341 (ppm)	4009.2858
9/27/2018 22:42:44	R1808996-018	Be (313.107 nm)	25.41	0.0000 u (ppm)	-443.7756
9/27/2018 22:42:44	R1808996-018	Ca (227.547 nm)	1.65	11.1445 (ppm)	580.5381
9/27/2018 22:42:44	R1808996-018	Cd (214.439 nm)	24.42	-0.0002 u (ppm)	9.4253
9/27/2018 22:42:44	R1808996-018	Co (230.786 nm)	44.81	-0.0005 u (ppm)	-8.2836
9/27/2018 22:42:44	R1808996-018	Cr (267.716 nm)	15.38	-0.0004 u (ppm)	-8.7912
9/27/2018 22:42:44	R1808996-018	Cu (327.395 nm)	19.80	0.0006 (ppm)	72.6677
9/27/2018 22:42:44	R1808996-018	Fe (234.350 nm)	1.78	0.0169 (ppm)	227.0713
9/27/2018 22:42:44	R1808996-018	K (766.491 nm)	1.41	8.2318 (ppm)	24388.1567
9/27/2018 22:42:44	R1808996-018	Mg (279.078 nm)	1.20	6.0024 (ppm)	10205.0688
9/27/2018 22:42:44	R1808996-018	Mn (257.610 nm)	1.07	0.0024 (ppm)	666.7250
9/27/2018 22:42:44	R1808996-018	Mo (202.032 nm)	0.96	0.0435 (ppm)	213.1153
9/27/2018 22:42:44	R1808996-018	Na (588.995 nm)	1.52	53.5224 (ppm)	2334115.2694
9/27/2018 22:42:44	R1808996-018	Ni (230.299 nm)	28.38	-0.0029 u (ppm)	-34.3327
9/27/2018 22:42:44	R1808996-018	Pb (220.353 nm)	> 100.00	-0.0007 u (ppm)	1.5257
9/27/2018 22:42:44	R1808996-018	Sb (217.582 nm)	45.98	0.0011 (ppm)	2.3096
9/27/2018 22:42:44	R1808996-018	Se (196.026 nm)	> 100.00	-0.0001 u (ppm)	4.5967
9/27/2018 22:42:44	R1808996-018	Sn (189.925 nm)	> 100.00	-0.0004 u (ppm)	0.2565

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:42:44	R1808996-018	Sr (216.596 nm)	2.09	1.1476 (ppm)	15018.8967
9/27/2018 22:42:44	R1808996-018	Ti (336.122 nm)	27.71	-0.0016 u (ppm)	-39.0204
9/27/2018 22:42:44	R1808996-018	Tl (351.923 nm)	51.43	0.0027 (ppm)	19.0741
9/27/2018 22:42:44	R1808996-018	V (292.401 nm)	17.29	0.0012 (ppm)	169.8828
9/27/2018 22:42:44	R1808996-018	Y (360.074 nm)	1.32	0.97 (Ratio)	1023076.35
9/27/2018 22:42:44	R1808996-018	Y_R (360.074 nm)	1.32	0.97 (Ratio)	1023318.65
9/27/2018 22:42:44	R1808996-018	Zn (213.857 nm)	1.33	0.0037 (ppm)	66.7491
9/27/2018 22:45:58	R1809064-003	Ag (328.068 nm)	51.30	0.0001 (ppm)	-176.9857
9/27/2018 22:45:58	R1809064-003	Al (394.401 nm)	3.34	0.0190 (ppm)	328.3522
9/27/2018 22:45:58	R1809064-003	As (188.980 nm)	> 100.00	0.0000 u (ppm)	-0.5903
9/27/2018 22:45:58	R1809064-003	B (249.772 nm)	0.79	0.1942 (ppm)	4487.3525
9/27/2018 22:45:58	R1809064-003	Ba (230.424 nm)	1.92	0.0090 (ppm)	300.8758
9/27/2018 22:45:58	R1809064-003	Be (313.107 nm)	9.29	0.0000 u (ppm)	-449.3381
9/27/2018 22:45:58	R1809064-003	Ca (227.547 nm)	0.94	44.8054 (ppm)	2313.3127
9/27/2018 22:45:58	R1809064-003	Cd (214.439 nm)	12.74	-0.0001 u (ppm)	10.7328
9/27/2018 22:45:58	R1809064-003	Co (230.786 nm)	44.94	-0.0004 u (ppm)	-7.3963
9/27/2018 22:45:58	R1809064-003	Cr (267.716 nm)	1.93	0.0026 (ppm)	123.5101
9/27/2018 22:45:58	R1809064-003	Cu (327.395 nm)	12.80	0.0009 (ppm)	87.9816
9/27/2018 22:45:58	R1809064-003	Fe (234.350 nm)	18.36	0.0029 (ppm)	94.1088
9/27/2018 22:45:58	R1809064-003	K (766.491 nm)	1.02	3.5145 (ppm)	10386.9533
9/27/2018 22:45:58	R1809064-003	Mg (279.078 nm)	0.84	25.4525 (ppm)	43271.3696
9/27/2018 22:45:58	R1809064-003	Mn (257.610 nm)	1.81	0.0005 (ppm)	163.1008
9/27/2018 22:45:58	R1809064-003	Mo (202.032 nm)	5.76	0.0077 (ppm)	62.0316
9/27/2018 22:45:58	R1809064-003	Na (588.995 nm)	0.98	94.3771 o (ppm)	4120975.1538
9/27/2018 22:45:58	R1809064-003	Ni (230.299 nm)	5.09	-0.0209 u (ppm)	-139.1344
9/27/2018 22:45:58	R1809064-003	Pb (220.353 nm)	> 100.00	-0.0008 u (ppm)	1.3594
9/27/2018 22:45:58	R1809064-003	Sb (217.582 nm)	> 100.00	0.0007 u (ppm)	1.8846
9/27/2018 22:45:58	R1809064-003	Se (196.026 nm)	> 100.00	0.0000 u (ppm)	4.7115
9/27/2018 22:45:58	R1809064-003	Sn (189.925 nm)	> 100.00	-0.0004 u (ppm)	0.2406
9/27/2018 22:45:58	R1809064-003	Sr (216.596 nm)	1.49	1.5237 (ppm)	19940.8697
9/27/2018 22:45:58	R1809064-003	Ti (336.122 nm)	16.95	-0.0015 u (ppm)	-32.3678
9/27/2018 22:45:58	R1809064-003	Tl (351.923 nm)	> 100.00	0.0003 u (ppm)	13.2725
9/27/2018 22:45:58	R1809064-003	V (292.401 nm)	0.95	0.0207 (ppm)	831.5896
9/27/2018 22:45:58	R1809064-003	Y (360.074 nm)	1.20	0.94 (Ratio)	997173.29
9/27/2018 22:45:58	R1809064-003	Y_R (360.074 nm)	1.20	0.95 (Ratio)	997413.93
9/27/2018 22:45:58	R1809064-003	Zn (213.857 nm)	0.68	0.0545 (ppm)	1345.2678
9/27/2018 22:49:12	R1809064-010	Ag (328.068 nm)	47.24	0.0002 (ppm)	-173.2164
9/27/2018 22:49:12	R1809064-010	Al (394.401 nm)	5.75	0.0191 (ppm)	329.2618
9/27/2018 22:49:12	R1809064-010	As (188.980 nm)	> 100.00	0.0023 u (ppm)	1.1736
9/27/2018 22:49:12	R1809064-010	B (249.772 nm)	1.28	0.2249 (ppm)	5194.0329
9/27/2018 22:49:12	R1809064-010	Ba (230.424 nm)	0.83	0.0197 (ppm)	616.7031
9/27/2018 22:49:12	R1809064-010	Be (313.107 nm)	10.80	0.0000 u (ppm)	-454.8741
9/27/2018 22:49:12	R1809064-010	Ca (227.547 nm)	1.29	60.4050 o (ppm)	3116.3445
9/27/2018 22:49:12	R1809064-010	Cd (214.439 nm)	45.98	-0.0003 u (ppm)	8.2814
9/27/2018 22:49:12	R1809064-010	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.4511
9/27/2018 22:49:12	R1809064-010	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	3.4472
9/27/2018 22:49:12	R1809064-010	Cu (327.395 nm)	> 100.00	0.0001 u (ppm)	45.7635
9/27/2018 22:49:12	R1809064-010	Fe (234.350 nm)	1.63	0.0339 (ppm)	388.7237
9/27/2018 22:49:12	R1809064-010	K (766.491 nm)	1.30	4.2148 (ppm)	12465.3070
9/27/2018 22:49:12	R1809064-010	Mg (279.078 nm)	1.07	26.0096 (ppm)	44218.5548
9/27/2018 22:49:12	R1809064-010	Mn (257.610 nm)	0.97	0.1019 (ppm)	27613.1611

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:49:12	R1809064-010	Mo (202.032 nm)	25.23	0.0049 (ppm)	50.5166
9/27/2018 22:49:12	R1809064-010	Na (588.995 nm)	1.67	133.8367 o (ppm)	5846821.9185
9/27/2018 22:49:12	R1809064-010	Ni (230.299 nm)	4.57	-0.0319 u (ppm)	-203.2701
9/27/2018 22:49:12	R1809064-010	Pb (220.353 nm)	38.57	-0.0014 u (ppm)	0.1626
9/27/2018 22:49:12	R1809064-010	Sb (217.582 nm)	44.93	0.0026 (ppm)	4.1936
9/27/2018 22:49:12	R1809064-010	Se (196.026 nm)	> 100.00	-0.0011 u (ppm)	3.7819
9/27/2018 22:49:12	R1809064-010	Sn (189.925 nm)	> 100.00	-0.0007 u (ppm)	-0.1694
9/27/2018 22:49:12	R1809064-010	Sr (216.596 nm)	1.41	1.5998 (ppm)	20936.7645
9/27/2018 22:49:12	R1809064-010	Ti (336.122 nm)	7.09	-0.0020 u (ppm)	-122.4280
9/27/2018 22:49:12	R1809064-010	Tl (351.923 nm)	> 100.00	-0.0018 u (ppm)	8.1701
9/27/2018 22:49:12	R1809064-010	V (292.401 nm)	1.63	0.0145 (ppm)	621.2491
9/27/2018 22:49:12	R1809064-010	Y (360.074 nm)	1.37	0.93 (Ratio)	986021.11
9/27/2018 22:49:12	R1809064-010	Y_R (360.074 nm)	1.37	0.93 (Ratio)	986261.17
9/27/2018 22:49:12	R1809064-010	Zn (213.857 nm)	2.50	0.0041 (ppm)	77.6248
9/27/2018 22:52:26	R1809064-010L	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-177.4657
9/27/2018 22:52:26	R1809064-010L	Al (394.401 nm)	7.15	0.0067 (ppm)	178.5832
9/27/2018 22:52:26	R1809064-010L	As (188.980 nm)	73.20	-0.0032 u (ppm)	-3.0804
9/27/2018 22:52:26	R1809064-010L	B (249.772 nm)	0.73	0.0402 (ppm)	945.4719
9/27/2018 22:52:26	R1809064-010L	Ba (230.424 nm)	3.60	0.0030 (ppm)	121.9267
9/27/2018 22:52:26	R1809064-010L	Be (313.107 nm)	18.55	0.0000 u (ppm)	-433.0249
9/27/2018 22:52:26	R1809064-010L	Ca (227.547 nm)	0.60	10.7421 (ppm)	559.8217
9/27/2018 22:52:26	R1809064-010L	Cd (214.439 nm)	50.53	-0.0002 u (ppm)	10.1123
9/27/2018 22:52:26	R1809064-010L	Co (230.786 nm)	18.60	-0.0004 u (ppm)	-7.7346
9/27/2018 22:52:26	R1809064-010L	Cr (267.716 nm)	33.69	-0.0002 u (ppm)	3.2248
9/27/2018 22:52:26	R1809064-010L	Cu (327.395 nm)	> 100.00	-0.0001 u (ppm)	31.1485
9/27/2018 22:52:26	R1809064-010L	Fe (234.350 nm)	3.25	0.0052 (ppm)	115.8127
9/27/2018 22:52:26	R1809064-010L	K (766.491 nm)	0.78	0.7084 (ppm)	2058.2853
9/27/2018 22:52:26	R1809064-010L	Mg (279.078 nm)	0.38	4.8694 (ppm)	8279.0121
9/27/2018 22:52:26	R1809064-010L	Mn (257.610 nm)	0.42	0.0198 (ppm)	5370.6443
9/27/2018 22:52:26	R1809064-010L	Mo (202.032 nm)	4.75	-0.0042 u (ppm)	11.9048
9/27/2018 22:52:26	R1809064-010L	Na (588.995 nm)	0.14	25.6351 (ppm)	1114407.3484
9/27/2018 22:52:26	R1809064-010L	Ni (230.299 nm)	4.55	-0.0061 u (ppm)	-52.7415
9/27/2018 22:52:26	R1809064-010L	Pb (220.353 nm)	> 100.00	-0.0008 u (ppm)	1.3050
9/27/2018 22:52:26	R1809064-010L	Sb (217.582 nm)	31.20	0.0029 (ppm)	4.5133
9/27/2018 22:52:26	R1809064-010L	Se (196.026 nm)	> 100.00	-0.0013 u (ppm)	3.6287
9/27/2018 22:52:26	R1809064-010L	Sn (189.925 nm)	10.86	-0.0025 u (ppm)	-2.1988
9/27/2018 22:52:26	R1809064-010L	Sr (216.596 nm)	0.59	0.3088 (ppm)	4041.3089
9/27/2018 22:52:26	R1809064-010L	Ti (336.122 nm)	5.95	-0.0025 u (ppm)	-219.7860
9/27/2018 22:52:26	R1809064-010L	Tl (351.923 nm)	> 100.00	-0.0009 u (ppm)	10.3755
9/27/2018 22:52:26	R1809064-010L	V (292.401 nm)	3.04	0.0026 (ppm)	216.1419
9/27/2018 22:52:26	R1809064-010L	Y (360.074 nm)	0.72	0.98 (Ratio)	1035371.63
9/27/2018 22:52:26	R1809064-010L	Y_R (360.074 nm)	0.72	0.98 (Ratio)	1035625.31
9/27/2018 22:52:26	R1809064-010L	Zn (213.857 nm)	3.35	0.0017 (ppm)	16.4362
9/27/2018 22:55:41	Continuing Calibration Verification	Ag (328.068 nm)	0.45	0.4966 (ppm)	30761.7879
9/27/2018 22:55:41	Continuing Calibration Verification	Al (394.401 nm)	0.35	9.4978 (ppm)	115182.3941
9/27/2018 22:55:41	Continuing Calibration Verification	As (188.980 nm)	1.82	0.9696 (ppm)	754.5399
9/27/2018 22:55:41	Continuing Calibration Verification	B (249.772 nm)	0.54	2.4733 (ppm)	56897.3044
9/27/2018 22:55:41	Continuing Calibration Verification	Ba (230.424 nm)	0.75	10.0631 (ppm)	298429.7429
9/27/2018 22:55:41	Continuing Calibration Verification	Be (313.107 nm)	0.37	0.2490 (ppm)	324705.6845
9/27/2018 22:55:41	Continuing Calibration Verification	Ca (227.547 nm)	0.22	24.0650 (ppm)	1245.6510
9/27/2018 22:55:41	Continuing Calibration Verification	Cd (214.439 nm)	0.50	0.4975 (ppm)	9791.7642

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 22:55:41	Continuing Calibration Verification	Co (230.786 nm)	0.64	2.5736 (ppm)	22414.0649
9/27/2018 22:55:41	Continuing Calibration Verification	Cr (267.716 nm)	0.57	0.5140 (ppm)	22262.2178
9/27/2018 22:55:41	Continuing Calibration Verification	Cu (327.395 nm)	0.34	1.2084 (ppm)	66518.2060
9/27/2018 22:55:41	Continuing Calibration Verification	Fe (234.350 nm)	0.61	4.8255 (ppm)	45866.4654
9/27/2018 22:55:41	Continuing Calibration Verification	K (766.491 nm)	0.15	23.9692 (ppm)	71098.0553
9/27/2018 22:55:41	Continuing Calibration Verification	Mg (279.078 nm)	0.40	24.3019 (ppm)	41315.2451
9/27/2018 22:55:41	Continuing Calibration Verification	Mn (257.610 nm)	0.57	0.7619 (ppm)	206303.1599
9/27/2018 22:55:41	Continuing Calibration Verification	Mo (202.032 nm)	0.82	2.5753 (ppm)	10883.2563
9/27/2018 22:55:41	Continuing Calibration Verification	Na (588.995 nm)	0.10	23.9791 (ppm)	1041978.3422
9/27/2018 22:55:41	Continuing Calibration Verification	Ni (230.299 nm)	0.63	2.0416 (ppm)	11861.7682
9/27/2018 22:55:41	Continuing Calibration Verification	Pb (220.353 nm)	0.52	0.5030 (ppm)	983.9513
9/27/2018 22:55:41	Continuing Calibration Verification	Sb (217.582 nm)	0.35	4.8629 (ppm)	5978.1869
9/27/2018 22:55:41	Continuing Calibration Verification	Se (196.026 nm)	0.36	0.4832 (ppm)	397.6448
9/27/2018 22:55:41	Continuing Calibration Verification	Sn (189.925 nm)	0.63	4.9963 (ppm)	5833.1190
9/27/2018 22:55:41	Continuing Calibration Verification	Sr (216.596 nm)	0.68	2.5205 (ppm)	32987.0345
9/27/2018 22:55:41	Continuing Calibration Verification	Ti (336.122 nm)	0.26	2.4957 (ppm)	466007.1433
9/27/2018 22:55:41	Continuing Calibration Verification	Tl (351.923 nm)	0.42	0.9896 (ppm)	2416.4350
9/27/2018 22:55:41	Continuing Calibration Verification	V (292.401 nm)	0.47	2.4908 (ppm)	84707.7843
9/27/2018 22:55:41	Continuing Calibration Verification	Y (360.074 nm)	0.26	0.96 (Ratio)	1010775.76
9/27/2018 22:55:41	Continuing Calibration Verification	Y_R (360.074 nm)	0.26	0.96 (Ratio)	1011019.29
9/27/2018 22:55:41	Continuing Calibration Verification	Zn (213.857 nm)	0.54	0.9867 (ppm)	24788.5517
9/27/2018 22:58:55	Continuing Calibration Blank	Ag (328.068 nm)	12.45	0.0002 (ppm)	-170.4225
9/27/2018 22:58:55	Continuing Calibration Blank	Al (394.401 nm)	3.88	-0.0006 u (ppm)	90.8023
9/27/2018 22:58:55	Continuing Calibration Blank	As (188.980 nm)	> 100.00	-0.0004 u (ppm)	-0.9609
9/27/2018 22:58:55	Continuing Calibration Blank	B (249.772 nm)	31.15	0.0012 (ppm)	49.6438
9/27/2018 22:58:55	Continuing Calibration Blank	Ba (230.424 nm)	> 100.00	0.0001 u (ppm)	35.5537
9/27/2018 22:58:55	Continuing Calibration Blank	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-381.2299
9/27/2018 22:58:55	Continuing Calibration Blank	Ca (227.547 nm)	81.70	0.0187 (ppm)	7.8121
9/27/2018 22:58:55	Continuing Calibration Blank	Cd (214.439 nm)	22.62	-0.0001 u (ppm)	11.9503
9/27/2018 22:58:55	Continuing Calibration Blank	Co (230.786 nm)	52.53	0.0003 (ppm)	-1.7742
9/27/2018 22:58:55	Continuing Calibration Blank	Cr (267.716 nm)	41.79	-0.0001 u (ppm)	3.9726
9/27/2018 22:58:55	Continuing Calibration Blank	Cu (327.395 nm)	61.43	0.0001 (ppm)	46.5193
9/27/2018 22:58:55	Continuing Calibration Blank	Fe (234.350 nm)	40.54	0.0021 (ppm)	86.6859
9/27/2018 22:58:55	Continuing Calibration Blank	K (766.491 nm)	50.28	0.0271 (ppm)	36.0470
9/27/2018 22:58:55	Continuing Calibration Blank	Mg (279.078 nm)	> 100.00	0.0008 u (ppm)	2.0463
9/27/2018 22:58:55	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	14.9778
9/27/2018 22:58:55	Continuing Calibration Blank	Mo (202.032 nm)	> 100.00	0.0004 u (ppm)	31.3860
9/27/2018 22:58:55	Continuing Calibration Blank	Na (588.995 nm)	29.21	0.0055 (ppm)	-6554.4061
9/27/2018 22:58:55	Continuing Calibration Blank	Ni (230.299 nm)	> 100.00	0.0000 u (ppm)	-17.1322
9/27/2018 22:58:55	Continuing Calibration Blank	Pb (220.353 nm)	70.51	0.0013 (ppm)	5.5677
9/27/2018 22:58:55	Continuing Calibration Blank	Sb (217.582 nm)	57.72	0.0040 (ppm)	5.9435
9/27/2018 22:58:55	Continuing Calibration Blank	Se (196.026 nm)	> 100.00	0.0019 u (ppm)	6.2496
9/27/2018 22:58:55	Continuing Calibration Blank	Sn (189.925 nm)	71.83	0.0008 (ppm)	1.6260
9/27/2018 22:58:55	Continuing Calibration Blank	Sr (216.596 nm)	82.41	0.0003 (ppm)	4.3848
9/27/2018 22:58:55	Continuing Calibration Blank	Ti (336.122 nm)	67.24	0.0020 (ppm)	625.6536
9/27/2018 22:58:55	Continuing Calibration Blank	Tl (351.923 nm)	> 100.00	0.0008 u (ppm)	14.4988
9/27/2018 22:58:55	Continuing Calibration Blank	V (292.401 nm)	> 100.00	0.0001 u (ppm)	130.2835
9/27/2018 22:58:55	Continuing Calibration Blank	Y (360.074 nm)	0.39	1.00 (Ratio)	1059049.68
9/27/2018 22:58:55	Continuing Calibration Blank	Y_R (360.074 nm)	0.39	1.00 (Ratio)	1059315.36
9/27/2018 22:58:55	Continuing Calibration Blank	Zn (213.857 nm)	65.65	0.0001 (ppm)	-22.6694
9/27/2018 23:02:10	Contract Required Detection Limit	Ag (328.068 nm)	1.62	0.0099 (ppm)	430.7192

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:02:10	Contract Required Detection Limit	Al (394.401 nm)	0.61	0.1749 (ppm)	2217.4438
9/27/2018 23:02:10	Contract Required Detection Limit	As (188.980 nm)	6.32	0.0184 (ppm)	13.6769
9/27/2018 23:02:10	Contract Required Detection Limit	B (249.772 nm)	0.59	0.1878 (ppm)	4339.7471
9/27/2018 23:02:10	Contract Required Detection Limit	Ba (230.424 nm)	0.33	0.2036 (ppm)	6071.0462
9/27/2018 23:02:10	Contract Required Detection Limit	Be (313.107 nm)	0.42	0.0047 (ppm)	5794.4179
9/27/2018 23:02:10	Contract Required Detection Limit	Ca (227.547 nm)	4.38	0.9312 (ppm)	54.7827
9/27/2018 23:02:10	Contract Required Detection Limit	Cd (214.439 nm)	0.81	0.0096 (ppm)	202.7413
9/27/2018 23:02:10	Contract Required Detection Limit	Co (230.786 nm)	0.13	0.0508 (ppm)	438.4536
9/27/2018 23:02:10	Contract Required Detection Limit	Cr (267.716 nm)	1.14	0.0111 (ppm)	488.8412
9/27/2018 23:02:10	Contract Required Detection Limit	Cu (327.395 nm)	0.07	0.0242 (ppm)	1368.0469
9/27/2018 23:02:10	Contract Required Detection Limit	Fe (234.350 nm)	0.85	0.1020 (ppm)	1034.9474
9/27/2018 23:02:10	Contract Required Detection Limit	K (766.491 nm)	0.24	0.9174 (ppm)	2678.4113
9/27/2018 23:02:10	Contract Required Detection Limit	Mg (279.078 nm)	0.32	0.9811 (ppm)	1668.7059
9/27/2018 23:02:10	Contract Required Detection Limit	Mn (257.610 nm)	0.36	0.0153 (ppm)	4168.1404
9/27/2018 23:02:10	Contract Required Detection Limit	Mo (202.032 nm)	7.76	0.0196 R (ppm) 78%.	112.4092 R
9/27/2018 23:02:10	Contract Required Detection Limit	Na (588.995 nm)	0.26	0.9892 (ppm)	36470.5429
9/27/2018 23:02:10	Contract Required Detection Limit	Ni (230.299 nm)	1.54	0.0406 (ppm)	218.6843
9/27/2018 23:02:10	Contract Required Detection Limit	Pb (220.353 nm)	11.45	0.0105 (ppm)	23.3552
9/27/2018 23:02:10	Contract Required Detection Limit	Sb (217.582 nm)	4.04	0.0591 (ppm)	73.6284
9/27/2018 23:02:10	Contract Required Detection Limit	Se (196.026 nm)	20.61	0.0104 (ppm)	13.1392
9/27/2018 23:02:10	Contract Required Detection Limit	Sn (189.925 nm)	0.61	0.4966 (ppm)	580.3874
9/27/2018 23:02:10	Contract Required Detection Limit	Sr (216.596 nm)	1.01	0.1004 (ppm)	1314.7571
9/27/2018 23:02:10	Contract Required Detection Limit	Ti (336.122 nm)	1.26	0.0478 (ppm)	9168.6296
9/27/2018 23:02:10	Contract Required Detection Limit	Tl (351.923 nm)	9.35	0.0198 (ppm)	60.6928
9/27/2018 23:02:10	Contract Required Detection Limit	V (292.401 nm)	0.85	0.0487 (ppm)	1781.1973
9/27/2018 23:02:10	Contract Required Detection Limit	Y (360.074 nm)	0.33	1.00 (Ratio)	1059524.68
9/27/2018 23:02:10	Contract Required Detection Limit	Y_R (360.074 nm)	0.33	1.00 (Ratio)	1059780.48
9/27/2018 23:02:10	Contract Required Detection Limit	Zn (213.857 nm)	1.51	0.0191 (ppm)	454.6351
9/27/2018 23:05:24	Interference Check Solution A	Ag (328.068 nm)	75.91	0.0002 (ppm)	-171.5566
9/27/2018 23:05:24	Interference Check Solution A	Al (394.401 nm)	0.50	265.4230 o (ppm)	3216217.0572
9/27/2018 23:05:24	Interference Check Solution A	As (188.980 nm)	> 100.00	0.0001 u (ppm)	-0.5197
9/27/2018 23:05:24	Interference Check Solution A	B (249.772 nm)	0.72	0.0465 (ppm)	1092.4485
9/27/2018 23:05:24	Interference Check Solution A	Ba (230.424 nm)	49.51	-0.0002 u (ppm)	26.2598
9/27/2018 23:05:24	Interference Check Solution A	Be (313.107 nm)	12.01	-0.0001 u (ppm)	-499.6019
9/27/2018 23:05:24	Interference Check Solution A	Ca (227.547 nm)	0.35	269.7044 o (ppm)	13890.5369
9/27/2018 23:05:24	Interference Check Solution A	Cd (214.439 nm)	16.19	-0.0014 Ku (ppm)	-13.4057 K
9/27/2018 23:05:24	Interference Check Solution A	Co (230.786 nm)	14.82	-0.0021 u (ppm)	-22.2638
9/27/2018 23:05:24	Interference Check Solution A	Cr (267.716 nm)	38.33	-0.0006 u (ppm)	-15.6564
9/27/2018 23:05:24	Interference Check Solution A	Cu (327.395 nm)	18.60	0.0005 (ppm)	67.5382
9/27/2018 23:05:24	Interference Check Solution A	Fe (234.350 nm)	0.68	89.6712 o (ppm)	851156.5164
9/27/2018 23:05:24	Interference Check Solution A	K (766.491 nm)	42.19	0.0181 (ppm)	9.2792
9/27/2018 23:05:24	Interference Check Solution A	Mg (279.078 nm)	0.50	261.2703 o (ppm)	444174.6005
9/27/2018 23:05:24	Interference Check Solution A	Mn (257.610 nm)	0.62	0.0015 (ppm)	416.8745
9/27/2018 23:05:24	Interference Check Solution A	Mo (202.032 nm)	32.45	-0.0059 u (ppm)	4.9843
9/27/2018 23:05:24	Interference Check Solution A	Na (588.995 nm)	10.56	-0.0152 u (ppm)	-7460.3542
9/27/2018 23:05:24	Interference Check Solution A	Ni (230.299 nm)	21.15	-0.0028 u (ppm)	-33.7322
9/27/2018 23:05:24	Interference Check Solution A	Pb (220.353 nm)	> 100.00	-0.0008 u (ppm)	1.3621
9/27/2018 23:05:24	Interference Check Solution A	Sb (217.582 nm)	25.39	-0.0040 u (ppm)	-3.8841
9/27/2018 23:05:24	Interference Check Solution A	Se (196.026 nm)	65.29	-0.0020 u (ppm)	3.0883
9/27/2018 23:05:24	Interference Check Solution A	Sn (189.925 nm)	65.17	-0.0030 u (ppm)	-2.8642
9/27/2018 23:05:24	Interference Check Solution A	Sr (216.596 nm)	0.29	0.0237 (ppm)	311.1243

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:05:24	Interference Check Solution A	Ti (336.122 nm)	62.69	-0.0006 u (ppm)	143.3331
9/27/2018 23:05:24	Interference Check Solution A	Tl (351.923 nm)	78.57	0.0057 (ppm)	26.3659
9/27/2018 23:05:24	Interference Check Solution A	V (292.401 nm)	9.81	0.0028 (ppm)	221.9470
9/27/2018 23:05:24	Interference Check Solution A	Y (360.074 nm)	0.14	0.88 (Ratio)	925630.88
9/27/2018 23:05:24	Interference Check Solution A	Y_R (360.074 nm)	0.14	0.88 (Ratio)	925814.40
9/27/2018 23:05:24	Interference Check Solution A	Zn (213.857 nm)	1.32	0.0112 K (ppm)	255.0505 K
9/27/2018 23:08:39	Interference Check Solution AB	Ag (328.068 nm)	0.58	0.2118 (ppm)	13015.5387
9/27/2018 23:08:39	Interference Check Solution AB	Al (394.401 nm)	0.49	263.7714 o (ppm)	3196204.9554
9/27/2018 23:08:39	Interference Check Solution AB	As (188.980 nm)	7.21	0.0952 (ppm)	73.5272
9/27/2018 23:08:39	Interference Check Solution AB	B (249.772 nm)	1.57	0.0443 (ppm)	1039.8221
9/27/2018 23:08:39	Interference Check Solution AB	Ba (230.424 nm)	0.51	0.5093 (ppm)	15135.3288
9/27/2018 23:08:39	Interference Check Solution AB	Be (313.107 nm)	0.69	0.4924 (ppm)	642450.9807
9/27/2018 23:08:39	Interference Check Solution AB	Ca (227.547 nm)	0.35	268.0006 o (ppm)	13802.8296
9/27/2018 23:08:39	Interference Check Solution AB	Cd (214.439 nm)	0.59	0.9621 (ppm)	18922.9350
9/27/2018 23:08:39	Interference Check Solution AB	Co (230.786 nm)	0.53	0.4818 (ppm)	4193.1545
9/27/2018 23:08:39	Interference Check Solution AB	Cr (267.716 nm)	0.71	0.4970 (ppm)	21525.5137
9/27/2018 23:08:39	Interference Check Solution AB	Cu (327.395 nm)	0.47	0.5227 (ppm)	28794.4971
9/27/2018 23:08:39	Interference Check Solution AB	Fe (234.350 nm)	0.80	89.2684 o (ppm)	847332.5876
9/27/2018 23:08:39	Interference Check Solution AB	K (766.491 nm)	> 100.00	0.0085 (ppm)	-19.0701
9/27/2018 23:08:39	Interference Check Solution AB	Mg (279.078 nm)	0.59	260.4271 o (ppm)	442741.2106
9/27/2018 23:08:39	Interference Check Solution AB	Mn (257.610 nm)	0.53	0.4933 (ppm)	133564.3791
9/27/2018 23:08:39	Interference Check Solution AB	Mo (202.032 nm)	3.89	-0.0073 u (ppm)	-0.7761
9/27/2018 23:08:39	Interference Check Solution AB	Na (588.995 nm)	14.74	-0.0022 u (ppm)	-6888.8297
9/27/2018 23:08:39	Interference Check Solution AB	Ni (230.299 nm)	0.70	0.9417 (ppm)	5462.0030
9/27/2018 23:08:39	Interference Check Solution AB	Pb (220.353 nm)	2.93	0.0496 (ppm)	99.6817
9/27/2018 23:08:39	Interference Check Solution AB	Sb (217.582 nm)	0.83	0.6113 (ppm)	752.3859
9/27/2018 23:08:39	Interference Check Solution AB	Se (196.026 nm)	11.60	0.0556 (ppm)	49.9134
9/27/2018 23:08:39	Interference Check Solution AB	Sn (189.925 nm)	> 100.00	-0.0013 u (ppm)	-0.8789
9/27/2018 23:08:39	Interference Check Solution AB	Sr (216.596 nm)	3.36	0.0235 (ppm)	307.9761
9/27/2018 23:08:39	Interference Check Solution AB	Ti (336.122 nm)	12.96	-0.0011 u (ppm)	50.4361
9/27/2018 23:08:39	Interference Check Solution AB	Tl (351.923 nm)	2.29	0.1114 (ppm)	283.1031
9/27/2018 23:08:39	Interference Check Solution AB	V (292.401 nm)	0.52	0.5024 (ppm)	17186.4652
9/27/2018 23:08:39	Interference Check Solution AB	Y (360.074 nm)	0.11	0.88 (Ratio)	924951.99
9/27/2018 23:08:39	Interference Check Solution AB	Y_R (360.074 nm)	0.11	0.88 (Ratio)	925135.91
9/27/2018 23:08:39	Interference Check Solution AB	Zn (213.857 nm)	0.52	1.0031 (ppm)	25201.1108
9/27/2018 23:11:55	Continuing Calibration Verification	Ag (328.068 nm)	0.26	0.4952 (ppm)	30674.5062
9/27/2018 23:11:55	Continuing Calibration Verification	Al (394.401 nm)	0.13	9.4910 (ppm)	115099.7040
9/27/2018 23:11:55	Continuing Calibration Verification	As (188.980 nm)	0.36	0.9676 (ppm)	752.9234
9/27/2018 23:11:55	Continuing Calibration Verification	B (249.772 nm)	0.35	2.4687 (ppm)	56790.9562
9/27/2018 23:11:55	Continuing Calibration Verification	Ba (230.424 nm)	0.25	10.0607 (ppm)	298359.1608
9/27/2018 23:11:55	Continuing Calibration Verification	Be (313.107 nm)	0.50	0.2497 (ppm)	325572.0021
9/27/2018 23:11:55	Continuing Calibration Verification	Ca (227.547 nm)	0.45	23.9359 (ppm)	1239.0069
9/27/2018 23:11:55	Continuing Calibration Verification	Cd (214.439 nm)	0.39	0.4966 (ppm)	9773.5092
9/27/2018 23:11:55	Continuing Calibration Verification	Co (230.786 nm)	0.38	2.5675 (ppm)	22360.5727
9/27/2018 23:11:55	Continuing Calibration Verification	Cr (267.716 nm)	0.52	0.5137 (ppm)	22251.2190
9/27/2018 23:11:55	Continuing Calibration Verification	Cu (327.395 nm)	0.37	1.2002 (ppm)	66064.9294
9/27/2018 23:11:55	Continuing Calibration Verification	Fe (234.350 nm)	0.46	4.8637 (ppm)	46228.8130
9/27/2018 23:11:55	Continuing Calibration Verification	K (766.491 nm)	0.15	23.8556 (ppm)	70760.7636
9/27/2018 23:11:55	Continuing Calibration Verification	Mg (279.078 nm)	0.37	24.2758 (ppm)	41270.8539
9/27/2018 23:11:55	Continuing Calibration Verification	Mn (257.610 nm)	0.42	0.7603 (ppm)	205852.4355
9/27/2018 23:11:55	Continuing Calibration Verification	Mo (202.032 nm)	0.80	2.5371 (ppm)	10722.2700

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:11:55	Continuing Calibration Verification	Na (588.995 nm)	0.12	23.8848 (ppm)	1037854.0520
9/27/2018 23:11:55	Continuing Calibration Verification	Ni (230.299 nm)	0.38	2.0373 (ppm)	11836.8890
9/27/2018 23:11:55	Continuing Calibration Verification	Pb (220.353 nm)	0.68	0.5012 (ppm)	980.3847
9/27/2018 23:11:55	Continuing Calibration Verification	Sb (217.582 nm)	0.38	4.8485 (ppm)	5960.5614
9/27/2018 23:11:55	Continuing Calibration Verification	Se (196.026 nm)	0.42	0.4806 (ppm)	395.4951
9/27/2018 23:11:55	Continuing Calibration Verification	Sn (189.925 nm)	0.58	5.0000 (ppm)	5837.4748
9/27/2018 23:11:55	Continuing Calibration Verification	Sr (216.596 nm)	0.59	2.5255 (ppm)	33051.5882
9/27/2018 23:11:55	Continuing Calibration Verification	Ti (336.122 nm)	0.23	2.4853 (ppm)	464056.4668
9/27/2018 23:11:55	Continuing Calibration Verification	Tl (351.923 nm)	0.29	0.9885 (ppm)	2413.7478
9/27/2018 23:11:55	Continuing Calibration Verification	V (292.401 nm)	0.39	2.4876 (ppm)	84597.8472
9/27/2018 23:11:55	Continuing Calibration Verification	Y (360.074 nm)	0.32	0.96 (Ratio)	1015165.55
9/27/2018 23:11:55	Continuing Calibration Verification	Y_R (360.074 nm)	0.32	0.96 (Ratio)	1015377.71
9/27/2018 23:11:55	Continuing Calibration Verification	Zn (213.857 nm)	0.38	0.9855 (ppm)	24757.4898
9/27/2018 23:15:09	Continuing Calibration Blank	Ag (328.068 nm)	66.79	0.0001 (ppm)	-180.1274
9/27/2018 23:15:09	Continuing Calibration Blank	Al (394.401 nm)	54.53	0.0015 (ppm)	115.9505
9/27/2018 23:15:09	Continuing Calibration Blank	As (188.980 nm)	80.06	0.0008 (ppm)	0.0085
9/27/2018 23:15:09	Continuing Calibration Blank	B (249.772 nm)	29.61	0.0011 (ppm)	47.0462
9/27/2018 23:15:09	Continuing Calibration Blank	Ba (230.424 nm)	> 100.00	0.0002 u (ppm)	39.1807
9/27/2018 23:15:09	Continuing Calibration Blank	Be (313.107 nm)	40.35	0.0000 (ppm)	-371.2882
9/27/2018 23:15:09	Continuing Calibration Blank	Ca (227.547 nm)	> 100.00	-0.0097 u (ppm)	6.3495
9/27/2018 23:15:09	Continuing Calibration Blank	Cd (214.439 nm)	67.83	0.0000 u (ppm)	12.6254
9/27/2018 23:15:09	Continuing Calibration Blank	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.4855
9/27/2018 23:15:09	Continuing Calibration Blank	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	9.4674
9/27/2018 23:15:09	Continuing Calibration Blank	Cu (327.395 nm)	79.51	0.0001 (ppm)	46.0824
9/27/2018 23:15:09	Continuing Calibration Blank	Fe (234.350 nm)	27.01	0.0061 (ppm)	124.2741
9/27/2018 23:15:09	Continuing Calibration Blank	K (766.491 nm)	20.42	0.0138 (ppm)	-3.4156
9/27/2018 23:15:09	Continuing Calibration Blank	Mg (279.078 nm)	88.84	0.0024 (ppm)	4.8811
9/27/2018 23:15:09	Continuing Calibration Blank	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	19.2997
9/27/2018 23:15:09	Continuing Calibration Blank	Mo (202.032 nm)	> 100.00	0.0003 u (ppm)	30.8917
9/27/2018 23:15:09	Continuing Calibration Blank	Na (588.995 nm)	87.77	0.0028 (ppm)	-6671.0672
9/27/2018 23:15:09	Continuing Calibration Blank	Ni (230.299 nm)	> 100.00	0.0004 u (ppm)	-14.8095
9/27/2018 23:15:09	Continuing Calibration Blank	Pb (220.353 nm)	> 100.00	0.0009 u (ppm)	4.6807
9/27/2018 23:15:09	Continuing Calibration Blank	Sb (217.582 nm)	39.82	0.0022 (ppm)	3.6294
9/27/2018 23:15:09	Continuing Calibration Blank	Se (196.026 nm)	> 100.00	0.0025 (ppm)	6.7419
9/27/2018 23:15:09	Continuing Calibration Blank	Sn (189.925 nm)	59.91	0.0025 (ppm)	3.6094
9/27/2018 23:15:09	Continuing Calibration Blank	Sr (216.596 nm)	9.91	0.0003 (ppm)	4.3948
9/27/2018 23:15:09	Continuing Calibration Blank	Ti (336.122 nm)	72.93	0.0017 (ppm)	564.4414
9/27/2018 23:15:09	Continuing Calibration Blank	Tl (351.923 nm)	23.40	0.0041 (ppm)	22.6173
9/27/2018 23:15:09	Continuing Calibration Blank	V (292.401 nm)	53.01	0.0002 (ppm)	133.6320
9/27/2018 23:15:09	Continuing Calibration Blank	Y (360.074 nm)	0.48	1.01 (Ratio)	1060825.85
9/27/2018 23:15:09	Continuing Calibration Blank	Y_R (360.074 nm)	0.48	1.01 (Ratio)	1061044.38
9/27/2018 23:15:09	Continuing Calibration Blank	Zn (213.857 nm)	> 100.00	0.0001 u (ppm)	-23.2683
9/27/2018 23:18:24	PBW-322633	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-181.3091
9/27/2018 23:18:24	PBW-322633	Al (394.401 nm)	3.38	0.0077 (ppm)	190.5801
9/27/2018 23:18:24	PBW-322633	As (188.980 nm)	> 100.00	-0.0009 u (ppm)	-1.2783
9/27/2018 23:18:24	PBW-322633	B (249.772 nm)	11.15	0.0009 (ppm)	43.0800
9/27/2018 23:18:24	PBW-322633	Ba (230.424 nm)	6.05	-0.0009 u (ppm)	5.8983
9/27/2018 23:18:24	PBW-322633	Be (313.107 nm)	20.82	0.0000 u (ppm)	-427.5563
9/27/2018 23:18:24	PBW-322633	Ca (227.547 nm)	> 100.00	0.0098 u (ppm)	7.3535
9/27/2018 23:18:24	PBW-322633	Cd (214.439 nm)	65.49	-0.0002 u (ppm)	8.8777
9/27/2018 23:18:24	PBW-322633	Co (230.786 nm)	> 100.00	-0.0001 u (ppm)	-4.6296

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:18:24	PBW-322633	Cr (267.716 nm)	36.73	-0.0004 u (ppm)	-5.5513
9/27/2018 23:18:24	PBW-322633	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	38.7369
9/27/2018 23:18:24	PBW-322633	Fe (234.350 nm)	> 100.00	0.0001 u (ppm)	67.5903
9/27/2018 23:18:24	PBW-322633	K (766.491 nm)	22.55	0.0300 (ppm)	44.5806
9/27/2018 23:18:24	PBW-322633	Mg (279.078 nm)	88.55	-0.0007 u (ppm)	-0.5005
9/27/2018 23:18:24	PBW-322633	Mn (257.610 nm)	3.02	0.0005 (ppm)	140.2070
9/27/2018 23:18:24	PBW-322633	Mo (202.032 nm)	9.66	-0.0058 u (ppm)	5.2734
9/27/2018 23:18:24	PBW-322633	Na (588.995 nm)	3.63	0.0288 (ppm)	-5532.4059
9/27/2018 23:18:24	PBW-322633	Ni (230.299 nm)	> 100.00	-0.0001 u (ppm)	-18.0474
9/27/2018 23:18:24	PBW-322633	Pb (220.353 nm)	> 100.00	0.0006 (ppm)	4.1969
9/27/2018 23:18:24	PBW-322633	Sb (217.582 nm)	72.15	0.0021 (ppm)	3.5313
9/27/2018 23:18:24	PBW-322633	Se (196.026 nm)	> 100.00	-0.0005 u (ppm)	4.2859
9/27/2018 23:18:24	PBW-322633	Sn (189.925 nm)	> 100.00	0.0000 u (ppm)	0.6822
9/27/2018 23:18:24	PBW-322633	Sr (216.596 nm)	26.51	-0.0003 u (ppm)	-3.3106
9/27/2018 23:18:24	PBW-322633	Tl (336.122 nm)	23.63	-0.0016 u (ppm)	-52.5495
9/27/2018 23:18:24	PBW-322633	Tl (351.923 nm)	> 100.00	-0.0001 u (ppm)	12.4000
9/27/2018 23:18:24	PBW-322633	V (292.401 nm)	> 100.00	-0.0003 u (ppm)	119.0104
9/27/2018 23:18:24	PBW-322633	Y (360.074 nm)	1.47	1.02 (Ratio)	1073759.15
9/27/2018 23:18:24	PBW-322633	Y_R (360.074 nm)	1.48	1.02 (Ratio)	1073971.59
9/27/2018 23:18:24	PBW-322633	Zn (213.857 nm)	1.26	0.0040 (ppm)	74.4440
9/27/2018 23:21:38	LCSW-322633	Ag (328.068 nm)	1.26	0.0497 (ppm)	2910.9667
9/27/2018 23:21:38	LCSW-322633	Al (394.401 nm)	1.51	1.8669 (ppm)	22718.6287
9/27/2018 23:21:38	LCSW-322633	As (188.980 nm)	17.90	0.0382 (ppm)	29.1261
9/27/2018 23:21:38	LCSW-322633	B (249.772 nm)	1.28	0.9943 (ppm)	22885.5745
9/27/2018 23:21:38	LCSW-322633	Ba (230.424 nm)	1.41	2.0322 (ppm)	60293.3363
9/27/2018 23:21:38	LCSW-322633	Be (313.107 nm)	1.19	0.0493 (ppm)	64003.6239
9/27/2018 23:21:38	LCSW-322633	Ca (227.547 nm)	1.11	2.1613 (ppm)	118.1075
9/27/2018 23:21:38	LCSW-322633	Cd (214.439 nm)	1.31	0.0506 (ppm)	1007.2349
9/27/2018 23:21:38	LCSW-322633	Co (230.786 nm)	1.17	0.5130 (ppm)	4464.1013
9/27/2018 23:21:38	LCSW-322633	Cr (267.716 nm)	1.34	0.2010 (ppm)	8714.0711
9/27/2018 23:21:38	LCSW-322633	Cu (327.395 nm)	1.66	0.2438 (ppm)	13448.9888
9/27/2018 23:21:38	LCSW-322633	Fe (234.350 nm)	1.12	0.9794 (ppm)	9362.6460
9/27/2018 23:21:38	LCSW-322633	K (766.491 nm)	1.52	18.8135 (ppm)	55795.4868
9/27/2018 23:21:38	LCSW-322633	Mg (279.078 nm)	1.44	1.9837 (ppm)	3373.1826
9/27/2018 23:21:38	LCSW-322633	Mn (257.610 nm)	1.25	0.4961 (ppm)	134324.7255
9/27/2018 23:21:38	LCSW-322633	Mo (202.032 nm)	0.73	0.4809 (ppm)	2056.5063
9/27/2018 23:21:38	LCSW-322633	Na (588.995 nm)	1.60	19.1326 (ppm)	830007.0511
9/27/2018 23:21:38	LCSW-322633	Ni (230.299 nm)	1.12	0.4992 (ppm)	2886.9679
9/27/2018 23:21:38	LCSW-322633	Pb (220.353 nm)	1.62	0.5110 (ppm)	999.5388
9/27/2018 23:21:38	LCSW-322633	Sb (217.582 nm)	1.15	0.4650 (ppm)	572.4979
9/27/2018 23:21:38	LCSW-322633	Se (196.026 nm)	1.14	1.0278 (ppm)	840.5079
9/27/2018 23:21:38	LCSW-322633	Sn (189.925 nm)	1.58	4.9916 (ppm)	5827.6949
9/27/2018 23:21:38	LCSW-322633	Sr (216.596 nm)	1.72	2.0059 (ppm)	26251.7067
9/27/2018 23:21:38	LCSW-322633	Tl (336.122 nm)	1.45	0.4862 (ppm)	90996.0328
9/27/2018 23:21:38	LCSW-322633	Tl (351.923 nm)	1.72	1.8901 (ppm)	4603.8846
9/27/2018 23:21:38	LCSW-322633	V (292.401 nm)	1.29	0.4881 (ppm)	16702.6065
9/27/2018 23:21:38	LCSW-322633	Y (360.074 nm)	1.56	0.99 (Ratio)	1040357.39
9/27/2018 23:21:38	LCSW-322633	Y_R (360.074 nm)	1.56	0.99 (Ratio)	1040567.16
9/27/2018 23:21:38	LCSW-322633	Zn (213.857 nm)	1.40	0.5139 (ppm)	12897.1871
9/27/2018 23:24:54	R1808899-001	Ag (328.068 nm)	13.50	0.0003 (ppm)	-168.0649
9/27/2018 23:24:54	R1808899-001	Al (394.401 nm)	1.61	0.0447 (ppm)	639.6978

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:24:54	R1808899-001	As (188.980 nm)	17.46	0.0047 (ppm)	3.0204
9/27/2018 23:24:54	R1808899-001	B (249.772 nm)	1.45	0.0291 (ppm)	690.3179
9/27/2018 23:24:54	R1808899-001	Ba (230.424 nm)	0.95	1.6602 (ppm)	49261.2342
9/27/2018 23:24:54	R1808899-001	Be (313.107 nm)	15.32	0.0000 u (ppm)	-436.1770
9/27/2018 23:24:54	R1808899-001	Ca (227.547 nm)	1.17	140.0710 o (ppm)	7217.3421
9/27/2018 23:24:54	R1808899-001	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.1338
9/27/2018 23:24:54	R1808899-001	Co (230.786 nm)	27.44	0.0025 (ppm)	17.4089
9/27/2018 23:24:54	R1808899-001	Cr (267.716 nm)	8.91	-0.0010 u (ppm)	-32.2266
9/27/2018 23:24:54	R1808899-001	Cu (327.395 nm)	53.13	0.0002 (ppm)	49.8803
9/27/2018 23:24:54	R1808899-001	Fe (234.350 nm)	0.80	7.9466 (ppm)	75489.6094
9/27/2018 23:24:54	R1808899-001	K (766.491 nm)	1.67	2.4547 (ppm)	7241.2320
9/27/2018 23:24:54	R1808899-001	Mg (279.078 nm)	0.89	74.1304 o (ppm)	126026.5273
9/27/2018 23:24:54	R1808899-001	Mn (257.610 nm)	0.93	1.5687 (ppm)	424738.8995
9/27/2018 23:24:54	R1808899-001	Mo (202.032 nm)	32.04	-0.0042 u (ppm)	12.0300
9/27/2018 23:24:54	R1808899-001	Na (588.995 nm)	1.36	33.1073 (ppm)	1441222.2218
9/27/2018 23:24:54	R1808899-001	Ni (230.299 nm)	6.09	-0.0112 u (ppm)	-82.3672
9/27/2018 23:24:54	R1808899-001	Pb (220.353 nm)	> 100.00	-0.0006 u (ppm)	1.8674
9/27/2018 23:24:54	R1808899-001	Sb (217.582 nm)	> 100.00	0.0026 u (ppm)	4.1298
9/27/2018 23:24:54	R1808899-001	Se (196.026 nm)	> 100.00	0.0004 u (ppm)	5.0012
9/27/2018 23:24:54	R1808899-001	Sn (189.925 nm)	> 100.00	0.0001 u (ppm)	0.8247
9/27/2018 23:24:54	R1808899-001	Sr (216.596 nm)	1.10	0.9974 (ppm)	13053.2000
9/27/2018 23:24:54	R1808899-001	Ti (336.122 nm)	> 100.00	0.0001 u (ppm)	268.6721
9/27/2018 23:24:54	R1808899-001	Tl (351.923 nm)	9.41	0.0044 (ppm)	23.3524
9/27/2018 23:24:54	R1808899-001	V (292.401 nm)	16.34	0.0006 (ppm)	149.6437
9/27/2018 23:24:54	R1808899-001	Y (360.074 nm)	1.18	0.94 (Ratio)	988653.25
9/27/2018 23:24:54	R1808899-001	Y_R (360.074 nm)	1.18	0.94 (Ratio)	988865.23
9/27/2018 23:24:54	R1808899-001	Zn (213.857 nm)	0.62	0.0073 (ppm)	157.3381
9/27/2018 23:28:09	R1808899-002	Ag (328.068 nm)	10.68	0.0001 (ppm)	-178.0548
9/27/2018 23:28:09	R1808899-002	Al (394.401 nm)	0.87	0.0284 (ppm)	442.3173
9/27/2018 23:28:09	R1808899-002	As (188.980 nm)	> 100.00	-0.0005 u (ppm)	-1.0144
9/27/2018 23:28:09	R1808899-002	B (249.772 nm)	1.41	0.0197 (ppm)	475.9807
9/27/2018 23:28:09	R1808899-002	Ba (230.424 nm)	1.74	1.7598 (ppm)	52216.9901
9/27/2018 23:28:09	R1808899-002	Be (313.107 nm)	17.02	0.0000 u (ppm)	-444.4941
9/27/2018 23:28:09	R1808899-002	Ca (227.547 nm)	0.96	177.8420 o (ppm)	9161.6968
9/27/2018 23:28:09	R1808899-002	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	12.8847
9/27/2018 23:28:09	R1808899-002	Co (230.786 nm)	4.56	0.0023 (ppm)	15.6743
9/27/2018 23:28:09	R1808899-002	Cr (267.716 nm)	7.41	-0.0018 u (ppm)	-67.0518
9/27/2018 23:28:09	R1808899-002	Cu (327.395 nm)	12.97	0.0007 (ppm)	75.4228
9/27/2018 23:28:09	R1808899-002	Fe (234.350 nm)	0.52	0.6155 (ppm)	5908.8194
9/27/2018 23:28:09	R1808899-002	K (766.491 nm)	1.28	1.9244 (ppm)	5667.2417
9/27/2018 23:28:09	R1808899-002	Mg (279.078 nm)	0.92	57.9515 o (ppm)	98521.3990
9/27/2018 23:28:09	R1808899-002	Mn (257.610 nm)	0.97	3.1381 o (ppm)	849649.6827
9/27/2018 23:28:09	R1808899-002	Mo (202.032 nm)	9.76	-0.0058 u (ppm)	1.3236
9/27/2018 23:28:09	R1808899-002	Na (588.995 nm)	1.30	58.4674 o (ppm)	2550395.5892
9/27/2018 23:28:09	R1808899-002	Ni (230.299 nm)	3.26	-0.0082 u (ppm)	-65.1102
9/27/2018 23:28:09	R1808899-002	Pb (220.353 nm)	> 100.00	-0.0002 u (ppm)	2.4975
9/27/2018 23:28:09	R1808899-002	Sb (217.582 nm)	> 100.00	0.0002 u (ppm)	1.1872
9/27/2018 23:28:09	R1808899-002	Se (196.026 nm)	> 100.00	0.0012 u (ppm)	5.6899
9/27/2018 23:28:09	R1808899-002	Sn (189.925 nm)	73.71	-0.0008 u (ppm)	-0.2435
9/27/2018 23:28:09	R1808899-002	Sr (216.596 nm)	0.99	0.4798 (ppm)	6279.6126
9/27/2018 23:28:09	R1808899-002	Ti (336.122 nm)	29.20	-0.0011 u (ppm)	42.5589

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:28:09	R1808899-002	Tl (351.923 nm)	20.38	0.0064 (ppm)	28.0690
9/27/2018 23:28:09	R1808899-002	V (292.401 nm)	> 100.00	0.0000 u (ppm)	128.0995
9/27/2018 23:28:09	R1808899-002	Y (360.074 nm)	1.22	0.93 (Ratio)	980370.90
9/27/2018 23:28:09	R1808899-002	Y_R (360.074 nm)	1.22	0.93 (Ratio)	980566.28
9/27/2018 23:28:09	R1808899-002	Zn (213.857 nm)	0.62	0.0086 (ppm)	190.3510
9/27/2018 23:31:24	R1808899-003	Ag (328.068 nm)	8.07	0.0002 (ppm)	-173.0684
9/27/2018 23:31:24	R1808899-003	Al (394.401 nm)	5.50	0.0306 (ppm)	468.2814
9/27/2018 23:31:24	R1808899-003	As (188.980 nm)	49.38	0.0083 (ppm)	5.8478
9/27/2018 23:31:24	R1808899-003	B (249.772 nm)	0.21	0.0287 (ppm)	681.5326
9/27/2018 23:31:24	R1808899-003	Ba (230.424 nm)	0.95	1.8016 (ppm)	53453.9217
9/27/2018 23:31:24	R1808899-003	Be (313.107 nm)	27.66	0.0000 u (ppm)	-431.6092
9/27/2018 23:31:24	R1808899-003	Ca (227.547 nm)	1.29	153.4474 o (ppm)	7905.9257
9/27/2018 23:31:24	R1808899-003	Cd (214.439 nm)	> 100.00	0.0001 u (ppm)	14.6413
9/27/2018 23:31:24	R1808899-003	Co (230.786 nm)	10.09	0.0038 (ppm)	29.2755
9/27/2018 23:31:24	R1808899-003	Cr (267.716 nm)	5.77	-0.0020 u (ppm)	-78.6792
9/27/2018 23:31:24	R1808899-003	Cu (327.395 nm)	59.17	0.0001 (ppm)	43.3876
9/27/2018 23:31:24	R1808899-003	Fe (234.350 nm)	0.89	16.5368 o (ppm)	157021.1922
9/27/2018 23:31:24	R1808899-003	K (766.491 nm)	1.00	1.8264 (ppm)	5376.5535
9/27/2018 23:31:24	R1808899-003	Mg (279.078 nm)	1.30	42.1348 (ppm)	71632.2649
9/27/2018 23:31:24	R1808899-003	Mn (257.610 nm)	1.04	4.0574 o (ppm)	1098536.3040
9/27/2018 23:31:24	R1808899-003	Mo (202.032 nm)	16.65	-0.0066 u (ppm)	2.1281
9/27/2018 23:31:24	R1808899-003	Na (588.995 nm)	1.49	45.1877 (ppm)	1969581.6655
9/27/2018 23:31:24	R1808899-003	Ni (230.299 nm)	12.28	-0.0134 u (ppm)	-95.5546
9/27/2018 23:31:24	R1808899-003	Pb (220.353 nm)	> 100.00	-0.0001 u (ppm)	2.8501
9/27/2018 23:31:24	R1808899-003	Sb (217.582 nm)	> 100.00	0.0016 u (ppm)	2.8853
9/27/2018 23:31:24	R1808899-003	Se (196.026 nm)	> 100.00	-0.0035 u (ppm)	1.8434
9/27/2018 23:31:24	R1808899-003	Sn (189.925 nm)	12.00	-0.0025 u (ppm)	-2.1861
9/27/2018 23:31:24	R1808899-003	Sr (216.596 nm)	0.87	0.4465 (ppm)	5843.4886
9/27/2018 23:31:24	R1808899-003	Ti (336.122 nm)	10.58	-0.0013 u (ppm)	10.9337
9/27/2018 23:31:24	R1808899-003	Tl (351.923 nm)	> 100.00	0.0028 u (ppm)	19.2925
9/27/2018 23:31:24	R1808899-003	V (292.401 nm)	4.34	0.0006 (ppm)	149.7984
9/27/2018 23:31:24	R1808899-003	Y (360.074 nm)	1.23	0.94 (Ratio)	989272.21
9/27/2018 23:31:24	R1808899-003	Y_R (360.074 nm)	1.23	0.94 (Ratio)	989494.76
9/27/2018 23:31:24	R1808899-003	Zn (213.857 nm)	2.15	0.0067 (ppm)	142.7792
9/27/2018 23:34:38	R1808899-003S	Ag (328.068 nm)	1.39	0.0519 (ppm)	3047.2387
9/27/2018 23:34:38	R1808899-003S	Al (394.401 nm)	1.33	2.0488 (ppm)	24923.2026
9/27/2018 23:34:38	R1808899-003S	As (188.980 nm)	13.67	0.0532 (ppm)	40.8068
9/27/2018 23:34:38	R1808899-003S	B (249.772 nm)	1.16	1.0799 (ppm)	24855.0215
9/27/2018 23:34:38	R1808899-003S	Ba (230.424 nm)	1.02	3.8082 (ppm)	112956.7934
9/27/2018 23:34:38	R1808899-003S	Be (313.107 nm)	1.25	0.0506 (ppm)	65681.9879
9/27/2018 23:34:38	R1808899-003S	Ca (227.547 nm)	1.54	156.8460 o (ppm)	8080.8732
9/27/2018 23:34:38	R1808899-003S	Cd (214.439 nm)	0.85	0.0499 (ppm)	994.7768
9/27/2018 23:34:38	R1808899-003S	Co (230.786 nm)	1.43	0.5046 (ppm)	4391.5847
9/27/2018 23:34:38	R1808899-003S	Cr (267.716 nm)	1.34	0.1999 (ppm)	8665.1115
9/27/2018 23:34:38	R1808899-003S	Cu (327.395 nm)	1.59	0.2507 (ppm)	13830.9799
9/27/2018 23:34:38	R1808899-003S	Fe (234.350 nm)	1.23	17.7165 o (ppm)	168217.5205
9/27/2018 23:34:38	R1808899-003S	K (766.491 nm)	1.61	23.1627 (ppm)	68704.3220
9/27/2018 23:34:38	R1808899-003S	Mg (279.078 nm)	1.32	43.7605 (ppm)	74396.0766
9/27/2018 23:34:38	R1808899-003S	Mn (257.610 nm)	1.12	4.5853 o (ppm)	1241470.0814
9/27/2018 23:34:38	R1808899-003S	Mo (202.032 nm)	0.85	0.5013 (ppm)	2142.3635
9/27/2018 23:34:38	R1808899-003S	Na (588.995 nm)	1.89	65.1205 o (ppm)	2841379.3536

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:34:38	R1808899-003S	Ni (230.299 nm)	1.42	0.4745 (ppm)	2743.3445
9/27/2018 23:34:38	R1808899-003S	Pb (220.353 nm)	1.67	0.4990 (ppm)	976.0817
9/27/2018 23:34:38	R1808899-003S	Sb (217.582 nm)	2.24	0.4852 (ppm)	597.3199
9/27/2018 23:34:38	R1808899-003S	Se (196.026 nm)	1.33	1.0809 (ppm)	883.7154
9/27/2018 23:34:38	R1808899-003S	Sn (189.925 nm)	1.50	5.0630 (ppm)	5911.0168
9/27/2018 23:34:38	R1808899-003S	Sr (216.596 nm)	1.27	2.4160 (ppm)	31619.3792
9/27/2018 23:34:38	R1808899-003S	Ti (336.122 nm)	1.57	0.4996 (ppm)	93485.3589
9/27/2018 23:34:38	R1808899-003S	Tl (351.923 nm)	1.49	2.0335 (ppm)	4952.1961
9/27/2018 23:34:38	R1808899-003S	V (292.401 nm)	1.18	0.5022 (ppm)	17181.6711
9/27/2018 23:34:38	R1808899-003S	Y (360.074 nm)	1.52	0.93 (Ratio)	979084.52
9/27/2018 23:34:38	R1808899-003S	Y_R (360.074 nm)	1.52	0.93 (Ratio)	979314.70
9/27/2018 23:34:38	R1808899-003S	Zn (213.857 nm)	1.36	0.5065 (ppm)	12713.0494
9/27/2018 23:37:52	R1808899-003SD	Ag (328.068 nm)	1.55	0.0519 (ppm)	3047.3719
9/27/2018 23:37:52	R1808899-003SD	Al (394.401 nm)	1.17	2.0538 (ppm)	24983.5305
9/27/2018 23:37:52	R1808899-003SD	As (188.980 nm)	3.69	0.0524 (ppm)	40.1911
9/27/2018 23:37:52	R1808899-003SD	B (249.772 nm)	1.11	1.0815 (ppm)	24890.9434
9/27/2018 23:37:52	R1808899-003SD	Ba (230.424 nm)	1.71	3.7999 (ppm)	112708.8145
9/27/2018 23:37:52	R1808899-003SD	Be (313.107 nm)	1.25	0.0507 (ppm)	65737.9463
9/27/2018 23:37:52	R1808899-003SD	Ca (227.547 nm)	1.42	156.8962 o (ppm)	8083.4596
9/27/2018 23:37:52	R1808899-003SD	Cd (214.439 nm)	1.01	0.0502 (ppm)	999.5782
9/27/2018 23:37:52	R1808899-003SD	Co (230.786 nm)	1.22	0.5054 (ppm)	4398.0326
9/27/2018 23:37:52	R1808899-003SD	Cr (267.716 nm)	1.10	0.2001 (ppm)	8674.1949
9/27/2018 23:37:52	R1808899-003SD	Cu (327.395 nm)	1.42	0.2521 (ppm)	13910.1846
9/27/2018 23:37:52	R1808899-003SD	Fe (234.350 nm)	1.25	17.6989 o (ppm)	168051.0160
9/27/2018 23:37:52	R1808899-003SD	K (766.491 nm)	1.28	23.2169 (ppm)	68865.1143
9/27/2018 23:37:52	R1808899-003SD	Mg (279.078 nm)	1.25	43.7759 (ppm)	74422.1362
9/27/2018 23:37:52	R1808899-003SD	Mn (257.610 nm)	0.95	4.5942 o (ppm)	1243870.0498
9/27/2018 23:37:52	R1808899-003SD	Mo (202.032 nm)	0.89	0.5099 (ppm)	2178.5582
9/27/2018 23:37:52	R1808899-003SD	Na (588.995 nm)	1.31	65.1060 o (ppm)	2840746.7373
9/27/2018 23:37:52	R1808899-003SD	Ni (230.299 nm)	1.27	0.4756 (ppm)	2750.0832
9/27/2018 23:37:52	R1808899-003SD	Pb (220.353 nm)	1.22	0.4994 (ppm)	977.0163
9/27/2018 23:37:52	R1808899-003SD	Sb (217.582 nm)	1.50	0.4884 (ppm)	601.3097
9/27/2018 23:37:52	R1808899-003SD	Se (196.026 nm)	0.80	1.0804 (ppm)	883.2729
9/27/2018 23:37:52	R1808899-003SD	Sn (189.925 nm)	1.33	5.0701 (ppm)	5919.2843
9/27/2018 23:37:52	R1808899-003SD	Sr (216.596 nm)	1.16	2.4193 (ppm)	31662.1952
9/27/2018 23:37:52	R1808899-003SD	Ti (336.122 nm)	1.21	0.5014 (ppm)	93818.7327
9/27/2018 23:37:52	R1808899-003SD	Tl (351.923 nm)	0.83	2.0316 (ppm)	4947.5688
9/27/2018 23:37:52	R1808899-003SD	V (292.401 nm)	1.00	0.5023 (ppm)	17185.4924
9/27/2018 23:37:52	R1808899-003SD	Y (360.074 nm)	1.34	0.93 (Ratio)	979874.78
9/27/2018 23:37:52	R1808899-003SD	Y_R (360.074 nm)	1.34	0.93 (Ratio)	980126.99
9/27/2018 23:37:52	R1808899-003SD	Zn (213.857 nm)	1.24	0.5058 (ppm)	12694.5746
9/27/2018 23:41:06	R1808899-003A	Ag (328.068 nm)	1.24	0.0536 (ppm)	3154.3467
9/27/2018 23:41:06	R1808899-003A	Al (394.401 nm)	1.57	1.9924 (ppm)	24239.3293
9/27/2018 23:41:06	R1808899-003A	As (188.980 nm)	8.77	0.0483 (ppm)	37.0308
9/27/2018 23:41:06	R1808899-003A	B (249.772 nm)	1.43	1.0496 (ppm)	24158.3045
9/27/2018 23:41:06	R1808899-003A	Ba (230.424 nm)	1.75	3.6689 (ppm)	108825.4412
9/27/2018 23:41:06	R1808899-003A	Be (313.107 nm)	1.25	0.0489 (ppm)	63502.0876
9/27/2018 23:41:06	R1808899-003A	Ca (227.547 nm)	1.56	153.2382 o (ppm)	7895.1550
9/27/2018 23:41:06	R1808899-003A	Cd (214.439 nm)	1.11	0.0483 (ppm)	963.7057
9/27/2018 23:41:06	R1808899-003A	Co (230.786 nm)	1.22	0.4884 (ppm)	4250.4651
9/27/2018 23:41:06	R1808899-003A	Cr (267.716 nm)	1.37	0.1930 (ppm)	8364.4541

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:41:06	R1808899-003A	Cu (327.395 nm)	1.59	0.2439 (ppm)	13456.4954
9/27/2018 23:41:06	R1808899-003A	Fe (234.350 nm)	1.32	17.0170 o (ppm)	161578.8314
9/27/2018 23:41:06	R1808899-003A	K (766.491 nm)	1.70	22.5047 (ppm)	66751.1827
9/27/2018 23:41:06	R1808899-003A	Mg (279.078 nm)	1.23	42.8765 (ppm)	72893.1073
9/27/2018 23:41:06	R1808899-003A	Mn (257.610 nm)	1.42	4.4153 o (ppm)	1195449.5131
9/27/2018 23:41:06	R1808899-003A	Mo (202.032 nm)	1.50	0.5036 (ppm)	2152.3549
9/27/2018 23:41:06	R1808899-003A	Na (588.995 nm)	1.84	63.3117 o (ppm)	2762269.8796
9/27/2018 23:41:06	R1808899-003A	Ni (230.299 nm)	1.02	0.4596 (ppm)	2656.7598
9/27/2018 23:41:06	R1808899-003A	Pb (220.353 nm)	1.30	0.4869 (ppm)	952.6253
9/27/2018 23:41:06	R1808899-003A	Sb (217.582 nm)	1.39	0.4746 (ppm)	584.2746
9/27/2018 23:41:06	R1808899-003A	Se (196.026 nm)	1.24	1.1701 o (ppm)	956.2130
9/27/2018 23:41:06	R1808899-003A	Sn (189.925 nm)	1.38	4.9425 (ppm)	5770.3447
9/27/2018 23:41:06	R1808899-003A	Sr (216.596 nm)	1.48	2.4375 (ppm)	31900.1796
9/27/2018 23:41:06	R1808899-003A	Ti (336.122 nm)	1.37	0.4884 (ppm)	91388.9940
9/27/2018 23:41:06	R1808899-003A	Tl (351.923 nm)	1.63	1.9660 (ppm)	4788.1816
9/27/2018 23:41:06	R1808899-003A	V (292.401 nm)	1.30	0.4855 (ppm)	16615.0960
9/27/2018 23:41:06	R1808899-003A	Y (360.074 nm)	1.55	0.93 (Ratio)	979922.79
9/27/2018 23:41:06	R1808899-003A	Y_R (360.074 nm)	1.55	0.93 (Ratio)	980212.58
9/27/2018 23:41:06	R1808899-003A	Zn (213.857 nm)	1.26	0.4909 (ppm)	12319.1029
9/27/2018 23:44:20	R1808899-003L	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-176.4367
9/27/2018 23:44:20	R1808899-003L	Al (394.401 nm)	3.28	0.0131 (ppm)	255.7709
9/27/2018 23:44:20	R1808899-003L	As (188.980 nm)	65.31	0.0026 (ppm)	1.4406
9/27/2018 23:44:20	R1808899-003L	B (249.772 nm)	0.57	0.0062 (ppm)	164.4246
9/27/2018 23:44:20	R1808899-003L	Ba (230.424 nm)	1.16	0.3532 (ppm)	10507.6824
9/27/2018 23:44:20	R1808899-003L	Be (313.107 nm)	11.72	0.0000 u (ppm)	-417.4374
9/27/2018 23:44:20	R1808899-003L	Ca (227.547 nm)	0.51	28.0947 (ppm)	1453.0930
9/27/2018 23:44:20	R1808899-003L	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.6450
9/27/2018 23:44:20	R1808899-003L	Co (230.786 nm)	20.58	0.0007 (ppm)	1.8908
9/27/2018 23:44:20	R1808899-003L	Cr (267.716 nm)	16.05	-0.0005 u (ppm)	-12.9656
9/27/2018 23:44:20	R1808899-003L	Cu (327.395 nm)	> 100.00	-0.0001 u (ppm)	34.2973
9/27/2018 23:44:20	R1808899-003L	Fe (234.350 nm)	0.66	3.3042 (ppm)	31427.4314
9/27/2018 23:44:20	R1808899-003L	K (766.491 nm)	0.99	0.3428 (ppm)	973.1003
9/27/2018 23:44:20	R1808899-003L	Mg (279.078 nm)	0.52	8.0252 (ppm)	13644.0125
9/27/2018 23:44:20	R1808899-003L	Mn (257.610 nm)	0.68	0.8178 (ppm)	221424.1729
9/27/2018 23:44:20	R1808899-003L	Mo (202.032 nm)	12.17	-0.0033 u (ppm)	15.8316
9/27/2018 23:44:20	R1808899-003L	Na (588.995 nm)	0.33	8.4831 (ppm)	364233.4697
9/27/2018 23:44:20	R1808899-003L	Ni (230.299 nm)	11.20	-0.0024 u (ppm)	-31.5797
9/27/2018 23:44:20	R1808899-003L	Pb (220.353 nm)	> 100.00	0.0003 u (ppm)	3.6307
9/27/2018 23:44:20	R1808899-003L	Sb (217.582 nm)	24.96	0.0026 (ppm)	4.1775
9/27/2018 23:44:20	R1808899-003L	Se (196.026 nm)	> 100.00	0.0011 u (ppm)	5.5578
9/27/2018 23:44:20	R1808899-003L	Sn (189.925 nm)	95.31	0.0010 (ppm)	1.8793
9/27/2018 23:44:20	R1808899-003L	Sr (216.596 nm)	0.80	0.0889 (ppm)	1163.9594
9/27/2018 23:44:20	R1808899-003L	Ti (336.122 nm)	42.30	-0.0012 u (ppm)	22.9668
9/27/2018 23:44:20	R1808899-003L	Tl (351.923 nm)	57.12	0.0032 (ppm)	20.4619
9/27/2018 23:44:20	R1808899-003L	V (292.401 nm)	93.10	0.0003 (ppm)	136.8966
9/27/2018 23:44:20	R1808899-003L	Y (360.074 nm)	0.61	0.98 (Ratio)	1036452.15
9/27/2018 23:44:20	R1808899-003L	Y_R (360.074 nm)	0.62	0.98 (Ratio)	1036775.78
9/27/2018 23:44:20	R1808899-003L	Zn (213.857 nm)	2.12	0.0021 (ppm)	27.5424
9/27/2018 23:47:35	R1808989-001	Ag (328.068 nm)	20.64	0.0002 (ppm)	-170.2240
9/27/2018 23:47:35	R1808989-001	Al (394.401 nm)	2.89	0.0375 (ppm)	552.5538
9/27/2018 23:47:35	R1808989-001	As (188.980 nm)	26.97	0.0027 (ppm)	1.5251

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:47:35	R1808989-001	B (249.772 nm)	0.94	0.2032 (ppm)	4694.9253
9/27/2018 23:47:35	R1808989-001	Ba (230.424 nm)	0.99	0.0993 (ppm)	2976.5221
9/27/2018 23:47:35	R1808989-001	Be (313.107 nm)	2.43	0.0000 u (ppm)	-447.2799
9/27/2018 23:47:35	R1808989-001	Ca (227.547 nm)	0.96	55.9858 o (ppm)	2888.8514
9/27/2018 23:47:35	R1808989-001	Cd (214.439 nm)	49.42	-0.0002 u (ppm)	9.8803
9/27/2018 23:47:35	R1808989-001	Co (230.786 nm)	33.80	-0.0004 u (ppm)	-7.3898
9/27/2018 23:47:35	R1808989-001	Cr (267.716 nm)	42.69	0.0004 (ppm)	27.7269
9/27/2018 23:47:35	R1808989-001	Cu (327.395 nm)	4.58	0.0014 (ppm)	117.9729
9/27/2018 23:47:35	R1808989-001	Fe (234.350 nm)	1.07	1.6018 (ppm)	15269.3920
9/27/2018 23:47:35	R1808989-001	K (766.491 nm)	1.30	6.9702 (ppm)	20643.6645
9/27/2018 23:47:35	R1808989-001	Mg (279.078 nm)	0.93	42.2055 (ppm)	71752.3555
9/27/2018 23:47:35	R1808989-001	Mn (257.610 nm)	1.11	0.0989 (ppm)	26802.7920
9/27/2018 23:47:35	R1808989-001	Mo (202.032 nm)	18.96	0.0076 (ppm)	61.6665
9/27/2018 23:47:35	R1808989-001	Na (588.995 nm)	1.39	72.0457 o (ppm)	3144270.1319
9/27/2018 23:47:35	R1808989-001	Ni (230.299 nm)	2.99	-0.0111 u (ppm)	-82.1259
9/27/2018 23:47:35	R1808989-001	Pb (220.353 nm)	> 100.00	-0.0006 u (ppm)	1.7877
9/27/2018 23:47:35	R1808989-001	Sb (217.582 nm)	> 100.00	0.0005 u (ppm)	1.5501
9/27/2018 23:47:35	R1808989-001	Se (196.026 nm)	33.73	-0.0039 u (ppm)	1.5007
9/27/2018 23:47:35	R1808989-001	Sn (189.925 nm)	32.44	-0.0030 u (ppm)	-2.8078
9/27/2018 23:47:35	R1808989-001	Sr (216.596 nm)	0.78	14.8806 o (ppm)	194745.6406
9/27/2018 23:47:35	R1808989-001	Ti (336.122 nm)	16.00	-0.0014 u (ppm)	-2.5200
9/27/2018 23:47:35	R1808989-001	Tl (351.923 nm)	77.57	0.0020 (ppm)	17.4432
9/27/2018 23:47:35	R1808989-001	V (292.401 nm)	19.30	0.0008 (ppm)	156.4853
9/27/2018 23:47:35	R1808989-001	Y (360.074 nm)	1.37	0.95 (Ratio)	999244.17
9/27/2018 23:47:35	R1808989-001	Y_R (360.074 nm)	1.37	0.95 (Ratio)	999573.43
9/27/2018 23:47:35	R1808989-001	Zn (213.857 nm)	1.63	0.0082 (ppm)	181.2794
9/27/2018 23:50:49	Continuing Calibration Verification1	Ag (328.068 nm)	0.57	0.5011 (ppm)	31043.1386
9/27/2018 23:50:49	Continuing Calibration Verification1	Al (394.401 nm)	0.51	9.5486 (ppm)	115797.8417
9/27/2018 23:50:49	Continuing Calibration Verification1	As (188.980 nm)	0.60	0.9799 (ppm)	762.5756
9/27/2018 23:50:49	Continuing Calibration Verification1	B (249.772 nm)	0.51	2.4903 (ppm)	57286.9532
9/27/2018 23:50:49	Continuing Calibration Verification1	Ba (230.424 nm)	0.71	10.1017 (ppm)	299573.1846
9/27/2018 23:50:49	Continuing Calibration Verification1	Be (313.107 nm)	0.61	0.2514 (ppm)	327799.6206
9/27/2018 23:50:49	Continuing Calibration Verification1	Ca (227.547 nm)	0.61	24.1317 (ppm)	1249.0854
9/27/2018 23:50:49	Continuing Calibration Verification1	Cd (214.439 nm)	0.51	0.4994 (ppm)	9828.3661
9/27/2018 23:50:49	Continuing Calibration Verification1	Co (230.786 nm)	0.55	2.5855 (ppm)	22517.6426
9/27/2018 23:50:49	Continuing Calibration Verification1	Cr (267.716 nm)	0.67	0.5154 (ppm)	22325.7574
9/27/2018 23:50:49	Continuing Calibration Verification1	Cu (327.395 nm)	0.59	1.2201 (ppm)	67160.6614
9/27/2018 23:50:49	Continuing Calibration Verification1	Fe (234.350 nm)	0.63	4.8444 (ppm)	46046.1948
9/27/2018 23:50:49	Continuing Calibration Verification1	K (766.491 nm)	0.52	24.1599 (ppm)	71664.0499
9/27/2018 23:50:49	Continuing Calibration Verification1	Mg (279.078 nm)	0.46	24.4110 (ppm)	41500.8158
9/27/2018 23:50:49	Continuing Calibration Verification1	Mn (257.610 nm)	0.70	0.7660 (ppm)	207419.4118
9/27/2018 23:50:49	Continuing Calibration Verification1	Mo (202.032 nm)	0.92	2.6943 (ppm)	11384.9320
9/27/2018 23:50:49	Continuing Calibration Verification1	Na (588.995 nm)	0.49	24.3092 (ppm)	1056416.7631
9/27/2018 23:50:49	Continuing Calibration Verification1	Ni (230.299 nm)	0.59	2.0463 (ppm)	11889.4357
9/27/2018 23:50:49	Continuing Calibration Verification1	Pb (220.353 nm)	0.88	0.5054 (ppm)	988.7095
9/27/2018 23:50:49	Continuing Calibration Verification1	Sb (217.582 nm)	0.61	4.8825 (ppm)	6002.2825
9/27/2018 23:50:49	Continuing Calibration Verification1	Se (196.026 nm)	0.73	0.4790 (ppm)	394.2458
9/27/2018 23:50:49	Continuing Calibration Verification1	Sn (189.925 nm)	0.47	5.0243 (ppm)	5865.8326
9/27/2018 23:50:49	Continuing Calibration Verification1	Sr (216.596 nm)	0.57	2.5309 (ppm)	33122.7148
9/27/2018 23:50:49	Continuing Calibration Verification1	Ti (336.122 nm)	0.56	2.5076 (ppm)	468219.2279
9/27/2018 23:50:49	Continuing Calibration Verification1	Tl (351.923 nm)	0.57	0.9989 (ppm)	2438.9311

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:50:49	Continuing Calibration Verification1	V (292.401 nm)	0.66	2.5037 (ppm)	85145.8277
9/27/2018 23:50:49	Continuing Calibration Verification1	Y (360.074 nm)	0.24	0.96 (Ratio)	1014510.22
9/27/2018 23:50:49	Continuing Calibration Verification1	Y_R (360.074 nm)	0.24	0.96 (Ratio)	1014861.43
9/27/2018 23:50:49	Continuing Calibration Verification1	Zn (213.857 nm)	0.60	0.9900 (ppm)	24870.3983
9/27/2018 23:54:04	Continuing Calibration Blank1	Ag (328.068 nm)	31.16	0.0003 (ppm)	-166.5459
9/27/2018 23:54:04	Continuing Calibration Blank1	Al (394.401 nm)	56.67	-0.0003 u (ppm)	93.9488
9/27/2018 23:54:04	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	-0.0006 u (ppm)	-1.0517
9/27/2018 23:54:04	Continuing Calibration Blank1	B (249.772 nm)	32.76	0.0012 (ppm)	50.8414
9/27/2018 23:54:04	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	-0.0001 u (ppm)	30.6939
9/27/2018 23:54:04	Continuing Calibration Blank1	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-398.1802
9/27/2018 23:54:04	Continuing Calibration Blank1	Ca (227.547 nm)	> 100.00	0.0144 u (ppm)	7.5902
9/27/2018 23:54:04	Continuing Calibration Blank1	Cd (214.439 nm)	> 100.00	0.0001 (ppm)	14.8084
9/27/2018 23:54:04	Continuing Calibration Blank1	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-3.7034
9/27/2018 23:54:04	Continuing Calibration Blank1	Cr (267.716 nm)	69.03	-0.0002 u (ppm)	2.1850
9/27/2018 23:54:04	Continuing Calibration Blank1	Cu (327.395 nm)	79.86	-0.0001 u (ppm)	33.9601
9/27/2018 23:54:04	Continuing Calibration Blank1	Fe (234.350 nm)	55.64	0.0028 (ppm)	92.8255
9/27/2018 23:54:04	Continuing Calibration Blank1	K (766.491 nm)	21.61	0.0242 (ppm)	27.4062
9/27/2018 23:54:04	Continuing Calibration Blank1	Mg (279.078 nm)	> 100.00	-0.0004 u (ppm)	0.0199
9/27/2018 23:54:04	Continuing Calibration Blank1	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	15.8876
9/27/2018 23:54:04	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	0.0006 u (ppm)	32.1891
9/27/2018 23:54:04	Continuing Calibration Blank1	Na (588.995 nm)	38.78	0.0046 (ppm)	-6591.8938
9/27/2018 23:54:04	Continuing Calibration Blank1	Ni (230.299 nm)	> 100.00	0.0003 u (ppm)	-15.6057
9/27/2018 23:54:04	Continuing Calibration Blank1	Pb (220.353 nm)	> 100.00	0.0004 u (ppm)	3.6591
9/27/2018 23:54:04	Continuing Calibration Blank1	Sb (217.582 nm)	33.70	0.0035 (ppm)	5.3233
9/27/2018 23:54:04	Continuing Calibration Blank1	Se (196.026 nm)	> 100.00	0.0020 u (ppm)	6.3410
9/27/2018 23:54:04	Continuing Calibration Blank1	Sn (189.925 nm)	> 100.00	0.0009 u (ppm)	1.7860
9/27/2018 23:54:04	Continuing Calibration Blank1	Sr (216.596 nm)	86.96	0.0003 (ppm)	4.0409
9/27/2018 23:54:04	Continuing Calibration Blank1	Ti (336.122 nm)	78.59	0.0016 (ppm)	540.7385
9/27/2018 23:54:04	Continuing Calibration Blank1	Tl (351.923 nm)	46.37	0.0015 (ppm)	16.1453
9/27/2018 23:54:04	Continuing Calibration Blank1	V (292.401 nm)	> 100.00	0.0001 u (ppm)	130.7578
9/27/2018 23:54:04	Continuing Calibration Blank1	Y (360.074 nm)	0.39	1.00 (Ratio)	1058885.49
9/27/2018 23:54:04	Continuing Calibration Blank1	Y_R (360.074 nm)	0.39	1.00 (Ratio)	1059252.45
9/27/2018 23:54:04	Continuing Calibration Blank1	Zn (213.857 nm)	> 100.00	0.0000 u (ppm)	-24.6861
9/27/2018 23:57:19	R1808989-002	Ag (328.068 nm)	20.95	0.0004 (ppm)	-159.8971
9/27/2018 23:57:19	R1808989-002	Al (394.401 nm)	1.75	0.0674 (ppm)	914.0757
9/27/2018 23:57:19	R1808989-002	As (188.980 nm)	> 100.00	0.0009 u (ppm)	0.1125
9/27/2018 23:57:19	R1808989-002	B (249.772 nm)	0.81	4.2584 (ppm)	97945.1040
9/27/2018 23:57:19	R1808989-002	Ba (230.424 nm)	1.11	1.1009 (ppm)	32676.1557
9/27/2018 23:57:19	R1808989-002	Be (313.107 nm)	4.09	-0.0001 u (ppm)	-470.2776
9/27/2018 23:57:19	R1808989-002	Ca (227.547 nm)	0.87	181.5014 o (ppm)	9350.0710
9/27/2018 23:57:19	R1808989-002	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.5124
9/27/2018 23:57:19	R1808989-002	Co (230.786 nm)	8.38	0.0061 (ppm)	49.1100
9/27/2018 23:57:19	R1808989-002	Cr (267.716 nm)	0.40	0.0066 (ppm)	294.9043
9/27/2018 23:57:19	R1808989-002	Cu (327.395 nm)	15.86	0.0010 (ppm)	95.6619
9/27/2018 23:57:19	R1808989-002	Fe (234.350 nm)	0.82	9.7109 (ppm)	92235.1599
9/27/2018 23:57:19	R1808989-002	K (766.491 nm)	1.03	65.4354 o (ppm)	194172.8060
9/27/2018 23:57:19	R1808989-002	Mg (279.078 nm)	0.82	107.1591 o (ppm)	182177.0441
9/27/2018 23:57:19	R1808989-002	Mn (257.610 nm)	0.89	0.5378 (ppm)	145627.9014
9/27/2018 23:57:19	R1808989-002	Mo (202.032 nm)	12.27	-0.0065 u (ppm)	2.5810
9/27/2018 23:57:19	R1808989-002	Na (588.995 nm)	N/A	##### (ppm)	#####
9/27/2018 23:57:19	R1808989-002	Ni (230.299 nm)	13.07	-0.0041 u (ppm)	-41.0670

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/27/2018 23:57:19	R1808989-002	Pb (220.353 nm)	70.48	-0.0013 u (ppm)	0.3684
9/27/2018 23:57:19	R1808989-002	Sb (217.582 nm)	90.67	0.0033 u (ppm)	5.0260
9/27/2018 23:57:19	R1808989-002	Se (196.026 nm)	44.27	-0.0055 u (ppm)	0.2019
9/27/2018 23:57:19	R1808989-002	Sn (189.925 nm)	79.09	-0.0015 u (ppm)	-1.0149
9/27/2018 23:57:19	R1808989-002	Sr (216.596 nm)	1.12	3.2669 (ppm)	42755.0059
9/27/2018 23:57:19	R1808989-002	Ti (336.122 nm)	23.39	0.0017 (ppm)	567.3557
9/27/2018 23:57:19	R1808989-002	Tl (351.923 nm)	25.58	0.0071 (ppm)	29.9082
9/27/2018 23:57:19	R1808989-002	V (292.401 nm)	8.26	0.0028 (ppm)	223.7218
9/27/2018 23:57:19	R1808989-002	Y (360.074 nm)	1.31	0.85 (Ratio)	899975.74
9/27/2018 23:57:19	R1808989-002	Y_R (360.074 nm)	1.31	0.85 (Ratio)	900227.50
9/27/2018 23:57:19	R1808989-002	Zn (213.857 nm)	1.06	0.0159 (ppm)	374.4325
9/28/2018 00:00:33	R1808989-003	Ag (328.068 nm)	28.26	0.0003 (ppm)	-168.2679
9/28/2018 00:00:33	R1808989-003	Al (394.401 nm)	5.12	0.0355 (ppm)	527.3003
9/28/2018 00:00:33	R1808989-003	As (188.980 nm)	> 100.00	0.0004 u (ppm)	-0.3217
9/28/2018 00:00:33	R1808989-003	B (249.772 nm)	1.14	0.5817 (ppm)	13399.2944
9/28/2018 00:00:33	R1808989-003	Ba (230.424 nm)	1.21	0.2146 (ppm)	6395.8087
9/28/2018 00:00:33	R1808989-003	Be (313.107 nm)	30.61	0.0000 u (ppm)	-450.7328
9/28/2018 00:00:33	R1808989-003	Ca (227.547 nm)	1.29	164.6018 o (ppm)	8480.1231
9/28/2018 00:00:33	R1808989-003	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.6832
9/28/2018 00:00:33	R1808989-003	Co (230.786 nm)	99.62	0.0008 (ppm)	3.2241
9/28/2018 00:00:33	R1808989-003	Cr (267.716 nm)	27.82	-0.0008 u (ppm)	-23.5105
9/28/2018 00:00:33	R1808989-003	Cu (327.395 nm)	> 100.00	0.0002 u (ppm)	47.6101
9/28/2018 00:00:33	R1808989-003	Fe (234.350 nm)	1.05	6.7701 (ppm)	64322.6794
9/28/2018 00:00:33	R1808989-003	K (766.491 nm)	1.58	18.2940 (ppm)	54253.6156
9/28/2018 00:00:33	R1808989-003	Mg (279.078 nm)	1.12	38.7514 (ppm)	65880.3055
9/28/2018 00:00:33	R1808989-003	Mn (257.610 nm)	1.09	1.6390 o (ppm)	443783.2068
9/28/2018 00:00:33	R1808989-003	Mo (202.032 nm)	3.23	-0.0067 u (ppm)	1.3703
9/28/2018 00:00:33	R1808989-003	Na (588.995 nm)	1.63	244.7153 o (ppm)	10696318.8760
9/28/2018 00:00:33	R1808989-003	Ni (230.299 nm)	2.13	-0.0070 u (ppm)	-58.0560
9/28/2018 00:00:33	R1808989-003	Pb (220.353 nm)	> 100.00	-0.0004 u (ppm)	2.1255
9/28/2018 00:00:33	R1808989-003	Sb (217.582 nm)	> 100.00	0.0002 u (ppm)	1.1670
9/28/2018 00:00:33	R1808989-003	Se (196.026 nm)	77.52	-0.0044 u (ppm)	1.0729
9/28/2018 00:00:33	R1808989-003	Sn (189.925 nm)	> 100.00	-0.0026 u (ppm)	-2.3017
9/28/2018 00:00:33	R1808989-003	Sr (216.596 nm)	0.80	1.2890 (ppm)	16870.4605
9/28/2018 00:00:33	R1808989-003	Ti (336.122 nm)	32.50	-0.0007 u (ppm)	120.0301
9/28/2018 00:00:33	R1808989-003	Tl (351.923 nm)	86.32	0.0036 (ppm)	21.3811
9/28/2018 00:00:33	R1808989-003	V (292.401 nm)	0.97	0.0009 (ppm)	158.2696
9/28/2018 00:00:33	R1808989-003	Y (360.074 nm)	1.45	0.90 (Ratio)	953168.35
9/28/2018 00:00:33	R1808989-003	Y_R (360.074 nm)	1.45	0.90 (Ratio)	953426.24
9/28/2018 00:00:33	R1808989-003	Zn (213.857 nm)	1.62	0.0054 (ppm)	108.8208
9/28/2018 00:03:48	R1808989-006	Ag (328.068 nm)	26.40	0.0003 (ppm)	-164.5701
9/28/2018 00:03:48	R1808989-006	Al (394.401 nm)	2.27	0.0316 (ppm)	480.6611
9/28/2018 00:03:48	R1808989-006	As (188.980 nm)	43.43	0.0053 (ppm)	3.5368
9/28/2018 00:03:48	R1808989-006	B (249.772 nm)	1.08	0.5286 (ppm)	12178.5672
9/28/2018 00:03:48	R1808989-006	Ba (230.424 nm)	1.28	0.1412 (ppm)	4221.3181
9/28/2018 00:03:48	R1808989-006	Be (313.107 nm)	31.99	0.0000 u (ppm)	-442.4156
9/28/2018 00:03:48	R1808989-006	Ca (227.547 nm)	1.46	175.0849 o (ppm)	9019.7689
9/28/2018 00:03:48	R1808989-006	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	14.3987
9/28/2018 00:03:48	R1808989-006	Co (230.786 nm)	> 100.00	-0.0005 u (ppm)	-8.4754
9/28/2018 00:03:48	R1808989-006	Cr (267.716 nm)	4.72	-0.0020 u (ppm)	-78.0294
9/28/2018 00:03:48	R1808989-006	Cu (327.395 nm)	89.89	0.0002 (ppm)	51.1174

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:03:48	R1808989-006	Fe (234.350 nm)	0.96	13.6030 o (ppm)	129175.7618
9/28/2018 00:03:48	R1808989-006	K (766.491 nm)	1.52	9.0935 (ppm)	26945.8579
9/28/2018 00:03:48	R1808989-006	Mg (279.078 nm)	1.07	44.2201 (ppm)	75177.3989
9/28/2018 00:03:48	R1808989-006	Mn (257.610 nm)	1.14	4.6314 o (ppm)	1253961.0759
9/28/2018 00:03:48	R1808989-006	Mo (202.032 nm)	14.30	-0.0017 u (ppm)	22.7078
9/28/2018 00:03:48	R1808989-006	Na (588.995 nm)	1.75	232.2215 o (ppm)	10149878.6193
9/28/2018 00:03:48	R1808989-006	Ni (230.299 nm)	14.89	-0.0032 u (ppm)	-36.0464
9/28/2018 00:03:48	R1808989-006	Pb (220.353 nm)	> 100.00	0.0009 u (ppm)	4.6815
9/28/2018 00:03:48	R1808989-006	Sb (217.582 nm)	82.25	0.0018 (ppm)	3.2164
9/28/2018 00:03:48	R1808989-006	Se (196.026 nm)	> 100.00	-0.0027 u (ppm)	2.4728
9/28/2018 00:03:48	R1808989-006	Sn (189.925 nm)	30.82	-0.0022 u (ppm)	-1.8918
9/28/2018 00:03:48	R1808989-006	Sr (216.596 nm)	1.26	1.5473 (ppm)	20250.9624
9/28/2018 00:03:48	R1808989-006	Ti (336.122 nm)	15.16	-0.0012 u (ppm)	27.6583
9/28/2018 00:03:48	R1808989-006	Tl (351.923 nm)	56.14	0.0048 (ppm)	24.3094
9/28/2018 00:03:48	R1808989-006	V (292.401 nm)	19.70	0.0008 (ppm)	154.4783
9/28/2018 00:03:48	R1808989-006	Y (360.074 nm)	1.35	0.90 (Ratio)	953525.95
9/28/2018 00:03:48	R1808989-006	Y_R (360.074 nm)	1.34	0.90 (Ratio)	953769.75
9/28/2018 00:03:48	R1808989-006	Zn (213.857 nm)	3.42	0.0048 (ppm)	95.8399
9/28/2018 00:07:02	R1808989-006S	Ag (328.068 nm)	0.78	0.0525 (ppm)	3085.9428
9/28/2018 00:07:02	R1808989-006S	Al (394.401 nm)	0.78	2.1302 (ppm)	25909.7376
9/28/2018 00:07:02	R1808989-006S	As (188.980 nm)	9.72	0.0489 (ppm)	37.4516
9/28/2018 00:07:02	R1808989-006S	B (249.772 nm)	0.79	1.5769 (ppm)	36283.8777
9/28/2018 00:07:02	R1808989-006S	Ba (230.424 nm)	0.86	2.1381 (ppm)	63434.4003
9/28/2018 00:07:02	R1808989-006S	Be (313.107 nm)	0.81	0.0502 (ppm)	65112.4739
9/28/2018 00:07:02	R1808989-006S	Ca (227.547 nm)	0.86	177.7786 o (ppm)	9158.4300
9/28/2018 00:07:02	R1808989-006S	Cd (214.439 nm)	0.66	0.0492 (ppm)	980.1058
9/28/2018 00:07:02	R1808989-006S	Co (230.786 nm)	1.01	0.4984 (ppm)	4336.9459
9/28/2018 00:07:02	R1808989-006S	Cr (267.716 nm)	0.79	0.1965 (ppm)	8515.5437
9/28/2018 00:07:02	R1808989-006S	Cu (327.395 nm)	1.34	0.2568 (ppm)	14168.5488
9/28/2018 00:07:02	R1808989-006S	Fe (234.350 nm)	0.74	14.4754 o (ppm)	137455.7767
9/28/2018 00:07:02	R1808989-006S	K (766.491 nm)	0.75	31.9769 (ppm)	94865.2788
9/28/2018 00:07:02	R1808989-006S	Mg (279.078 nm)	0.89	45.9279 (ppm)	78080.7409
9/28/2018 00:07:02	R1808989-006S	Mn (257.610 nm)	0.93	5.0893 o (ppm)	1377934.2843
9/28/2018 00:07:02	R1808989-006S	Mo (202.032 nm)	0.50	0.5133 (ppm)	2193.2462
9/28/2018 00:07:02	R1808989-006S	Na (588.995 nm)	0.87	250.8879 o (ppm)	10966288.0915
9/28/2018 00:07:02	R1808989-006S	Ni (230.299 nm)	0.57	0.4791 (ppm)	2770.5715
9/28/2018 00:07:02	R1808989-006S	Pb (220.353 nm)	0.88	0.4904 (ppm)	959.4665
9/28/2018 00:07:02	R1808989-006S	Sb (217.582 nm)	2.11	0.4944 (ppm)	608.7064
9/28/2018 00:07:02	R1808989-006S	Se (196.026 nm)	1.04	1.0940 o (ppm)	894.3358
9/28/2018 00:07:02	R1808989-006S	Sn (189.925 nm)	0.91	4.9507 (ppm)	5779.9338
9/28/2018 00:07:02	R1808989-006S	Sr (216.596 nm)	0.82	3.4669 (ppm)	45372.2658
9/28/2018 00:07:02	R1808989-006S	Ti (336.122 nm)	0.91	0.4986 (ppm)	93309.1424
9/28/2018 00:07:02	R1808989-006S	Tl (351.923 nm)	0.96	2.0773 (ppm)	5058.5095
9/28/2018 00:07:02	R1808989-006S	V (292.401 nm)	0.78	0.5000 (ppm)	17105.8894
9/28/2018 00:07:02	R1808989-006S	Y (360.074 nm)	1.35	0.90 (Ratio)	947789.97
9/28/2018 00:07:02	R1808989-006S	Y_R (360.074 nm)	1.35	0.90 (Ratio)	948050.81
9/28/2018 00:07:02	R1808989-006S	Zn (213.857 nm)	1.10	0.5083 (ppm)	12757.4550
9/28/2018 00:10:18	R1808989-006SD	Ag (328.068 nm)	1.06	0.0530 (ppm)	3118.7148
9/28/2018 00:10:18	R1808989-006SD	Al (394.401 nm)	1.02	2.1499 (ppm)	26148.4171
9/28/2018 00:10:18	R1808989-006SD	As (188.980 nm)	10.48	0.0503 (ppm)	38.5203
9/28/2018 00:10:18	R1808989-006SD	B (249.772 nm)	0.88	1.5966 (ppm)	36735.6697

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:10:18	R1808989-006SD	Ba (230.424 nm)	0.89	2.1529 (ppm)	63870.6063
9/28/2018 00:10:18	R1808989-006SD	Be (313.107 nm)	0.97	0.0506 (ppm)	65617.9547
9/28/2018 00:10:18	R1808989-006SD	Ca (227.547 nm)	1.04	180.8112 o (ppm)	9314.5415
9/28/2018 00:10:18	R1808989-006SD	Cd (214.439 nm)	1.03	0.0494 (ppm)	983.9093
9/28/2018 00:10:18	R1808989-006SD	Co (230.786 nm)	0.81	0.5021 (ppm)	4369.1531
9/28/2018 00:10:18	R1808989-006SD	Cr (267.716 nm)	0.75	0.1986 (ppm)	8607.3167
9/28/2018 00:10:18	R1808989-006SD	Cu (327.395 nm)	1.35	0.2604 (ppm)	14363.9353
9/28/2018 00:10:18	R1808989-006SD	Fe (234.350 nm)	0.71	14.7037 o (ppm)	139622.7776
9/28/2018 00:10:18	R1808989-006SD	K (766.491 nm)	1.06	32.3337 (ppm)	95924.4364
9/28/2018 00:10:18	R1808989-006SD	Mg (279.078 nm)	0.83	46.6556 (ppm)	79317.7918
9/28/2018 00:10:18	R1808989-006SD	Mn (257.610 nm)	0.99	5.1714 o (ppm)	1400169.0649
9/28/2018 00:10:18	R1808989-006SD	Mo (202.032 nm)	0.83	0.5194 (ppm)	2218.7768
9/28/2018 00:10:18	R1808989-006SD	Na (588.995 nm)	1.19	255.0140 o (ppm)	11146752.3538
9/28/2018 00:10:18	R1808989-006SD	Ni (230.299 nm)	0.74	0.4834 (ppm)	2795.5132
9/28/2018 00:10:18	R1808989-006SD	Pb (220.353 nm)	1.03	0.4937 (ppm)	965.7698
9/28/2018 00:10:18	R1808989-006SD	Sb (217.582 nm)	1.70	0.4987 (ppm)	613.9141
9/28/2018 00:10:18	R1808989-006SD	Se (196.026 nm)	1.06	1.1082 o (ppm)	905.9094
9/28/2018 00:10:18	R1808989-006SD	Sn (189.925 nm)	1.06	5.0026 (ppm)	5840.4765
9/28/2018 00:10:18	R1808989-006SD	Sr (216.596 nm)	1.06	3.4953 (ppm)	45743.5960
9/28/2018 00:10:18	R1808989-006SD	Ti (336.122 nm)	1.06	0.5049 (ppm)	94482.5348
9/28/2018 00:10:18	R1808989-006SD	Tl (351.923 nm)	0.83	2.0953 (ppm)	5102.2731
9/28/2018 00:10:18	R1808989-006SD	V (292.401 nm)	0.98	0.5037 (ppm)	17230.6795
9/28/2018 00:10:18	R1808989-006SD	Y (360.074 nm)	1.27	0.90 (Ratio)	946144.81
9/28/2018 00:10:18	R1808989-006SD	Y_R (360.074 nm)	1.27	0.90 (Ratio)	946388.77
9/28/2018 00:10:18	R1808989-006SD	Zn (213.857 nm)	0.96	0.5187 (ppm)	13019.6125
9/28/2018 00:13:32	R1808989-006A	Ag (328.068 nm)	1.41	0.0536 (ppm)	3154.2911
9/28/2018 00:13:32	R1808989-006A	Al (394.401 nm)	1.03	2.0400 (ppm)	24816.7339
9/28/2018 00:13:32	R1808989-006A	As (188.980 nm)	9.19	0.0398 (ppm)	30.3758
9/28/2018 00:13:32	R1808989-006A	B (249.772 nm)	1.10	1.5221 (ppm)	35022.6974
9/28/2018 00:13:32	R1808989-006A	Ba (230.424 nm)	1.14	2.0432 (ppm)	60620.3404
9/28/2018 00:13:32	R1808989-006A	Be (313.107 nm)	1.13	0.0479 (ppm)	62206.3070
9/28/2018 00:13:32	R1808989-006A	Ca (227.547 nm)	1.39	173.1664 o (ppm)	8921.0062
9/28/2018 00:13:32	R1808989-006A	Cd (214.439 nm)	0.97	0.0470 (ppm)	938.0974
9/28/2018 00:13:32	R1808989-006A	Co (230.786 nm)	1.13	0.4770 (ppm)	4150.9827
9/28/2018 00:13:32	R1808989-006A	Cr (267.716 nm)	1.11	0.1885 (ppm)	8170.6263
9/28/2018 00:13:32	R1808989-006A	Cu (327.395 nm)	0.87	0.2457 (ppm)	13553.8172
9/28/2018 00:13:32	R1808989-006A	Fe (234.350 nm)	1.12	14.1308 o (ppm)	134184.8813
9/28/2018 00:13:32	R1808989-006A	K (766.491 nm)	1.45	30.5907 (ppm)	90750.9913
9/28/2018 00:13:32	R1808989-006A	Mg (279.078 nm)	1.18	44.8375 (ppm)	76226.9972
9/28/2018 00:13:32	R1808989-006A	Mn (257.610 nm)	1.15	4.9589 o (ppm)	1342636.5507
9/28/2018 00:13:32	R1808989-006A	Mo (202.032 nm)	0.88	0.4895 (ppm)	2092.9550
9/28/2018 00:13:32	R1808989-006A	Na (588.995 nm)	1.40	243.6612 o (ppm)	10650214.4987
9/28/2018 00:13:32	R1808989-006A	Ni (230.299 nm)	1.01	0.4591 (ppm)	2653.9467
9/28/2018 00:13:32	R1808989-006A	Pb (220.353 nm)	1.12	0.4698 (ppm)	919.2241
9/28/2018 00:13:32	R1808989-006A	Sb (217.582 nm)	0.88	0.4736 (ppm)	583.1429
9/28/2018 00:13:32	R1808989-006A	Se (196.026 nm)	0.79	1.1575 o (ppm)	945.9764
9/28/2018 00:13:32	R1808989-006A	Sn (189.925 nm)	1.26	4.8191 (ppm)	5626.2577
9/28/2018 00:13:32	R1808989-006A	Sr (216.596 nm)	1.20	3.4242 (ppm)	44813.6028
9/28/2018 00:13:32	R1808989-006A	Ti (336.122 nm)	1.16	0.4810 (ppm)	90017.2630
9/28/2018 00:13:32	R1808989-006A	Tl (351.923 nm)	1.24	1.9895 (ppm)	4845.1933
9/28/2018 00:13:32	R1808989-006A	V (292.401 nm)	1.32	0.4777 (ppm)	16348.8933

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:13:32	R1808989-006A	Y (360.074 nm)	1.48	0.90 (Ratio)	950250.13
9/28/2018 00:13:32	R1808989-006A	Y_R (360.074 nm)	1.48	0.90 (Ratio)	950477.18
9/28/2018 00:13:32	R1808989-006A	Zn (213.857 nm)	1.12	0.4896 (ppm)	12287.7678
9/28/2018 00:16:47	R1808989-006L	Ag (328.068 nm)	28.28	0.0001 (ppm)	-176.4257
9/28/2018 00:16:47	R1808989-006L	Al (394.401 nm)	> 100.00	0.0183 u (ppm)	319.2623
9/28/2018 00:16:47	R1808989-006L	As (188.980 nm)	> 100.00	-0.0006 u (ppm)	-1.0893
9/28/2018 00:16:47	R1808989-006L	B (249.772 nm)	0.56	0.0988 (ppm)	2293.7661
9/28/2018 00:16:47	R1808989-006L	Ba (230.424 nm)	0.28	0.0277 (ppm)	855.2852
9/28/2018 00:16:47	R1808989-006L	Be (313.107 nm)	16.96	0.0000 u (ppm)	-427.9768
9/28/2018 00:16:47	R1808989-006L	Ca (227.547 nm)	0.64	32.0994 (ppm)	1659.2443
9/28/2018 00:16:47	R1808989-006L	Cd (214.439 nm)	74.91	-0.0001 u (ppm)	11.4843
9/28/2018 00:16:47	R1808989-006L	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.7997
9/28/2018 00:16:47	R1808989-006L	Cr (267.716 nm)	18.27	-0.0005 u (ppm)	-10.6251
9/28/2018 00:16:47	R1808989-006L	Cu (327.395 nm)	52.17	-0.0001 u (ppm)	34.4977
9/28/2018 00:16:47	R1808989-006L	Fe (234.350 nm)	0.75	2.7672 (ppm)	26330.6234
9/28/2018 00:16:47	R1808989-006L	K (766.491 nm)	0.49	1.5490 (ppm)	4553.0715
9/28/2018 00:16:47	R1808989-006L	Mg (279.078 nm)	0.66	8.5885 (ppm)	14601.6027
9/28/2018 00:16:47	R1808989-006L	Mn (257.610 nm)	0.66	0.9459 (ppm)	256103.5420
9/28/2018 00:16:47	R1808989-006L	Mo (202.032 nm)	27.30	-0.0030 u (ppm)	17.1568
9/28/2018 00:16:47	R1808989-006L	Na (588.995 nm)	0.37	46.2107 (ppm)	2014323.1779
9/28/2018 00:16:47	R1808989-006L	Ni (230.299 nm)	47.31	-0.0011 u (ppm)	-23.7986
9/28/2018 00:16:47	R1808989-006L	Pb (220.353 nm)	93.89	0.0007 (ppm)	4.3910
9/28/2018 00:16:47	R1808989-006L	Sb (217.582 nm)	59.51	0.0045 (ppm)	6.5424
9/28/2018 00:16:47	R1808989-006L	Se (196.026 nm)	76.84	-0.0015 u (ppm)	3.4694
9/28/2018 00:16:47	R1808989-006L	Sn (189.925 nm)	> 100.00	0.0001 u (ppm)	0.7796
9/28/2018 00:16:47	R1808989-006L	Sr (216.596 nm)	0.94	0.3115 (ppm)	4077.0392
9/28/2018 00:16:47	R1808989-006L	Ti (336.122 nm)	43.69	-0.0012 u (ppm)	26.5302
9/28/2018 00:16:47	R1808989-006L	Tl (351.923 nm)	> 100.00	0.0023 u (ppm)	18.0669
9/28/2018 00:16:47	R1808989-006L	V (292.401 nm)	> 100.00	0.0001 u (ppm)	131.9243
9/28/2018 00:16:47	R1808989-006L	Y (360.074 nm)	0.55	0.97 (Ratio)	1023707.76
9/28/2018 00:16:47	R1808989-006L	Y_R (360.074 nm)	0.55	0.97 (Ratio)	1023937.27
9/28/2018 00:16:47	R1808989-006L	Zn (213.857 nm)	1.95	0.0019 (ppm)	21.0343
9/28/2018 00:20:01	R1808989-007	Ag (328.068 nm)	20.15	0.0002 (ppm)	-169.7254
9/28/2018 00:20:01	R1808989-007	Al (394.401 nm)	2.80	0.0424 (ppm)	610.7697
9/28/2018 00:20:01	R1808989-007	As (188.980 nm)	> 100.00	0.0009 u (ppm)	0.1233
9/28/2018 00:20:01	R1808989-007	B (249.772 nm)	0.68	1.9847 (ppm)	45661.3058
9/28/2018 00:20:01	R1808989-007	Ba (230.424 nm)	1.02	1.3874 (ppm)	41172.3433
9/28/2018 00:20:01	R1808989-007	Be (313.107 nm)	38.43	0.0000 u (ppm)	-428.6286
9/28/2018 00:20:01	R1808989-007	Ca (227.547 nm)	0.88	279.6341 o (ppm)	14401.6923
9/28/2018 00:20:01	R1808989-007	Cd (214.439 nm)	22.41	0.0003 (ppm)	19.0530
9/28/2018 00:20:01	R1808989-007	Co (230.786 nm)	68.48	0.0006 (ppm)	1.5129
9/28/2018 00:20:01	R1808989-007	Cr (267.716 nm)	5.20	0.0026 (ppm)	121.2496
9/28/2018 00:20:01	R1808989-007	Cu (327.395 nm)	88.96	0.0002 (ppm)	51.9337
9/28/2018 00:20:01	R1808989-007	Fe (234.350 nm)	0.70	34.0688 o (ppm)	323421.0884
9/28/2018 00:20:01	R1808989-007	K (766.491 nm)	1.02	49.0922 (ppm)	145664.9858
9/28/2018 00:20:01	R1808989-007	Mg (279.078 nm)	0.64	127.6575 o (ppm)	217025.4458
9/28/2018 00:20:01	R1808989-007	Mn (257.610 nm)	0.68	0.8659 (ppm)	234442.8849
9/28/2018 00:20:01	R1808989-007	Mo (202.032 nm)	8.91	-0.0068 u (ppm)	1.1548
9/28/2018 00:20:01	R1808989-007	Na (588.995 nm)	1.21	86.8626 o (ppm)	3792316.4526
9/28/2018 00:20:01	R1808989-007	Ni (230.299 nm)	4.16	-0.0314 u (ppm)	-200.3636
9/28/2018 00:20:01	R1808989-007	Pb (220.353 nm)	> 100.00	0.0000 u (ppm)	2.9417

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:20:01	R1808989-007	Sb (217.582 nm)	34.45	-0.0030 u (ppm)	-2.6635
9/28/2018 00:20:01	R1808989-007	Se (196.026 nm)	> 100.00	-0.0022 u (ppm)	2.9247
9/28/2018 00:20:01	R1808989-007	Sn (189.925 nm)	7.61	-0.0008 u (ppm)	-0.2322
9/28/2018 00:20:01	R1808989-007	Sr (216.596 nm)	0.84	3.3904 (ppm)	44370.7025
9/28/2018 00:20:01	R1808989-007	Ti (336.122 nm)	22.54	0.0010 (ppm)	446.7575
9/28/2018 00:20:01	R1808989-007	Tl (351.923 nm)	39.81	0.0099 (ppm)	36.7499
9/28/2018 00:20:01	R1808989-007	V (292.401 nm)	7.38	0.0021 (ppm)	200.3710
9/28/2018 00:20:01	R1808989-007	Y (360.074 nm)	1.10	0.90 (Ratio)	950577.58
9/28/2018 00:20:01	R1808989-007	Y_R (360.074 nm)	1.10	0.90 (Ratio)	950798.79
9/28/2018 00:20:01	R1808989-007	Zn (213.857 nm)	2.26	0.0083 (ppm)	182.0666
9/28/2018 00:23:14	R1808989-008	Ag (328.068 nm)	90.12	0.0002 (ppm)	-172.9170
9/28/2018 00:23:14	R1808989-008	Al (394.401 nm)	1.02	0.0604 (ppm)	829.1342
9/28/2018 00:23:14	R1808989-008	As (188.980 nm)	10.82	0.0272 (ppm)	20.5686
9/28/2018 00:23:14	R1808989-008	B (249.772 nm)	1.19	1.1394 (ppm)	26222.5074
9/28/2018 00:23:14	R1808989-008	Ba (230.424 nm)	1.62	0.4143 (ppm)	12318.5509
9/28/2018 00:23:14	R1808989-008	Be (313.107 nm)	28.99	0.0000 u (ppm)	-446.8570
9/28/2018 00:23:14	R1808989-008	Ca (227.547 nm)	1.41	133.1356 o (ppm)	6860.3264
9/28/2018 00:23:14	R1808989-008	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.1286
9/28/2018 00:23:14	R1808989-008	Co (230.786 nm)	1.79	0.0034 (ppm)	25.8984
9/28/2018 00:23:14	R1808989-008	Cr (267.716 nm)	8.12	0.0016 (ppm)	80.8003
9/28/2018 00:23:14	R1808989-008	Cu (327.395 nm)	32.98	0.0002 (ppm)	50.3695
9/28/2018 00:23:14	R1808989-008	Fe (234.350 nm)	1.15	15.8685 o (ppm)	150678.2813
9/28/2018 00:23:14	R1808989-008	K (766.491 nm)	1.50	70.8945 o (ppm)	210375.6363
9/28/2018 00:23:14	R1808989-008	Mg (279.078 nm)	1.24	68.1698 o (ppm)	115893.1619
9/28/2018 00:23:14	R1808989-008	Mn (257.610 nm)	1.22	0.1508 (ppm)	40838.4011
9/28/2018 00:23:14	R1808989-008	Mo (202.032 nm)	10.91	-0.0058 u (ppm)	5.2471
9/28/2018 00:23:14	R1808989-008	Na (588.995 nm)	1.37	214.2735 o (ppm)	9364883.4402
9/28/2018 00:23:14	R1808989-008	Ni (230.299 nm)	13.50	-0.0087 u (ppm)	-68.2510
9/28/2018 00:23:14	R1808989-008	Pb (220.353 nm)	67.70	-0.0021 u (ppm)	-1.0914
9/28/2018 00:23:14	R1808989-008	Sb (217.582 nm)	> 100.00	0.0009 u (ppm)	2.0673
9/28/2018 00:23:14	R1808989-008	Se (196.026 nm)	> 100.00	-0.0028 u (ppm)	2.3733
9/28/2018 00:23:14	R1808989-008	Sn (189.925 nm)	> 100.00	-0.0005 u (ppm)	0.1342
9/28/2018 00:23:14	R1808989-008	Sr (216.596 nm)	1.21	1.1288 (ppm)	14773.8355
9/28/2018 00:23:14	R1808989-008	Ti (336.122 nm)	39.74	-0.0004 u (ppm)	176.6881
9/28/2018 00:23:14	R1808989-008	Tl (351.923 nm)	> 100.00	-0.0005 u (ppm)	11.2919
9/28/2018 00:23:14	R1808989-008	V (292.401 nm)	6.74	0.0020 (ppm)	194.7494
9/28/2018 00:23:14	R1808989-008	Y (360.074 nm)	1.52	0.90 (Ratio)	951147.72
9/28/2018 00:23:14	R1808989-008	Y_R (360.074 nm)	1.52	0.90 (Ratio)	951374.07
9/28/2018 00:23:14	R1808989-008	Zn (213.857 nm)	2.28	0.0067 (ppm)	141.8873
9/28/2018 00:26:29	R1808989-009	Ag (328.068 nm)	18.40	0.0003 (ppm)	-167.7856
9/28/2018 00:26:29	R1808989-009	Al (394.401 nm)	2.17	0.0550 (ppm)	764.1757
9/28/2018 00:26:29	R1808989-009	As (188.980 nm)	> 100.00	0.0010 u (ppm)	0.1981
9/28/2018 00:26:29	R1808989-009	B (249.772 nm)	1.30	0.7738 (ppm)	17815.5672
9/28/2018 00:26:29	R1808989-009	Ba (230.424 nm)	1.24	0.2324 (ppm)	6924.3721
9/28/2018 00:26:29	R1808989-009	Be (313.107 nm)	19.08	-0.0001 u (ppm)	-461.3840
9/28/2018 00:26:29	R1808989-009	Ca (227.547 nm)	1.76	160.0861 o (ppm)	8247.6700
9/28/2018 00:26:29	R1808989-009	Cd (214.439 nm)	68.59	-0.0002 u (ppm)	9.9436
9/28/2018 00:26:29	R1808989-009	Co (230.786 nm)	37.22	0.0010 (ppm)	4.2959
9/28/2018 00:26:29	R1808989-009	Cr (267.716 nm)	27.46	-0.0003 u (ppm)	-4.2213
9/28/2018 00:26:29	R1808989-009	Cu (327.395 nm)	3.53	0.0032 (ppm)	213.8107
9/28/2018 00:26:29	R1808989-009	Fe (234.350 nm)	1.07	0.9491 (ppm)	9074.5694

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:26:29	R1808989-009	K (766.491 nm)	1.66	15.6928 (ppm)	46533.0279
9/28/2018 00:26:29	R1808989-009	Mg (279.078 nm)	1.25	46.0733 (ppm)	78327.9611
9/28/2018 00:26:29	R1808989-009	Mn (257.610 nm)	1.18	1.1802 (ppm)	319541.3822
9/28/2018 00:26:29	R1808989-009	Mo (202.032 nm)	12.67	-0.0034 u (ppm)	15.3565
9/28/2018 00:26:29	R1808989-009	Na (588.995 nm)	1.61	381.1633 o (ppm)	16664143.7639
9/28/2018 00:26:29	R1808989-009	Ni (230.299 nm)	22.05	-0.0078 u (ppm)	-62.7246
9/28/2018 00:26:29	R1808989-009	Pb (220.353 nm)	> 100.00	-0.0014 u (ppm)	0.2323
9/28/2018 00:26:29	R1808989-009	Sb (217.582 nm)	35.17	0.0046 (ppm)	6.6370
9/28/2018 00:26:29	R1808989-009	Se (196.026 nm)	38.34	-0.0032 u (ppm)	2.1077
9/28/2018 00:26:29	R1808989-009	Sn (189.925 nm)	72.89	-0.0029 u (ppm)	-2.7139
9/28/2018 00:26:29	R1808989-009	Sr (216.596 nm)	1.92	2.4152 (ppm)	31608.4724
9/28/2018 00:26:29	R1808989-009	Ti (336.122 nm)	26.41	-0.0007 u (ppm)	128.6459
9/28/2018 00:26:29	R1808989-009	Tl (351.923 nm)	53.30	0.0037 (ppm)	21.5969
9/28/2018 00:26:29	R1808989-009	V (292.401 nm)	60.59	0.0004 (ppm)	143.1711
9/28/2018 00:26:29	R1808989-009	Y (360.074 nm)	1.60	0.88 (Ratio)	931278.91
9/28/2018 00:26:29	R1808989-009	Y_R (360.074 nm)	1.60	0.88 (Ratio)	931497.66
9/28/2018 00:26:29	R1808989-009	Zn (213.857 nm)	1.38	0.0293 (ppm)	710.8991
9/28/2018 00:29:44	Continuing Calibration Verification1	Ag (328.068 nm)	0.46	0.4998 (ppm)	30962.6219
9/28/2018 00:29:44	Continuing Calibration Verification1	Al (394.401 nm)	0.33	9.5731 (ppm)	116095.0680
9/28/2018 00:29:44	Continuing Calibration Verification1	As (188.980 nm)	0.60	0.9738 (ppm)	757.8035
9/28/2018 00:29:44	Continuing Calibration Verification1	B (249.772 nm)	0.51	2.4882 (ppm)	57238.8323
9/28/2018 00:29:44	Continuing Calibration Verification1	Ba (230.424 nm)	0.67	10.1028 (ppm)	299606.9358
9/28/2018 00:29:44	Continuing Calibration Verification1	Be (313.107 nm)	1.16	0.2506 (ppm)	326836.7958
9/28/2018 00:29:44	Continuing Calibration Verification1	Ca (227.547 nm)	0.60	24.1954 (ppm)	1252.3635
9/28/2018 00:29:44	Continuing Calibration Verification1	Cd (214.439 nm)	0.83	0.4971 (ppm)	9784.1642
9/28/2018 00:29:44	Continuing Calibration Verification1	Co (230.786 nm)	0.65	2.5851 (ppm)	22513.7786
9/28/2018 00:29:44	Continuing Calibration Verification1	Cr (267.716 nm)	0.63	0.5162 (ppm)	22357.2215
9/28/2018 00:29:44	Continuing Calibration Verification1	Cu (327.395 nm)	0.29	1.2183 (ppm)	67117.7523
9/28/2018 00:29:44	Continuing Calibration Verification1	Fe (234.350 nm)	0.69	4.8534 (ppm)	46130.9800
9/28/2018 00:29:44	Continuing Calibration Verification1	K (766.491 nm)	0.09	24.2538 (ppm)	71942.6989
9/28/2018 00:29:44	Continuing Calibration Verification1	Mg (279.078 nm)	0.57	24.3895 (ppm)	41464.1687
9/28/2018 00:29:44	Continuing Calibration Verification1	Mn (257.610 nm)	0.59	0.7661 (ppm)	207422.3533
9/28/2018 00:29:44	Continuing Calibration Verification1	Mo (202.032 nm)	0.80	2.5787 (ppm)	10897.7846
9/28/2018 00:29:44	Continuing Calibration Verification1	Na (588.995 nm)	0.06	24.3418 (ppm)	1057844.0868
9/28/2018 00:29:44	Continuing Calibration Verification1	Ni (230.299 nm)	0.62	2.0453 (ppm)	11883.3230
9/28/2018 00:29:44	Continuing Calibration Verification1	Pb (220.353 nm)	0.68	0.5030 (ppm)	983.9615
9/28/2018 00:29:44	Continuing Calibration Verification1	Sb (217.582 nm)	0.27	4.8923 (ppm)	6014.3686
9/28/2018 00:29:44	Continuing Calibration Verification1	Se (196.026 nm)	0.50	0.4821 (ppm)	396.7691
9/28/2018 00:29:44	Continuing Calibration Verification1	Sn (189.925 nm)	0.74	5.0176 (ppm)	5857.9991
9/28/2018 00:29:44	Continuing Calibration Verification1	Sr (216.596 nm)	0.76	2.5261 (ppm)	33060.6040
9/28/2018 00:29:44	Continuing Calibration Verification1	Ti (336.122 nm)	0.47	2.5131 (ppm)	469249.6865
9/28/2018 00:29:44	Continuing Calibration Verification1	Tl (351.923 nm)	0.24	0.9971 (ppm)	2434.6599
9/28/2018 00:29:44	Continuing Calibration Verification1	V (292.401 nm)	0.55	2.5082 (ppm)	85298.5059
9/28/2018 00:29:44	Continuing Calibration Verification1	Y (360.074 nm)	0.29	0.96 (Ratio)	1011141.66
9/28/2018 00:29:44	Continuing Calibration Verification1	Y_R (360.074 nm)	0.29	0.96 (Ratio)	1011377.28
9/28/2018 00:29:44	Continuing Calibration Verification1	Zn (213.857 nm)	0.60	0.9911 (ppm)	24898.3318
9/28/2018 00:32:58	Continuing Calibration Blank1	Ag (328.068 nm)	31.45	0.0001 (ppm)	-176.3608
9/28/2018 00:32:58	Continuing Calibration Blank1	Al (394.401 nm)	> 100.00	-0.0005 u (ppm)	91.4508
9/28/2018 00:32:58	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	-0.0004 u (ppm)	-0.9144
9/28/2018 00:32:58	Continuing Calibration Blank1	B (249.772 nm)	17.86	0.0018 (ppm)	62.6755
9/28/2018 00:32:58	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	32.0872

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:32:58	Continuing Calibration Blank1	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-392.1124
9/28/2018 00:32:58	Continuing Calibration Blank1	Ca (227.547 nm)	> 100.00	0.0036 u (ppm)	7.0321
9/28/2018 00:32:58	Continuing Calibration Blank1	Cd (214.439 nm)	55.46	-0.0001 u (ppm)	12.1673
9/28/2018 00:32:58	Continuing Calibration Blank1	Co (230.786 nm)	88.56	-0.0002 u (ppm)	-5.7349
9/28/2018 00:32:58	Continuing Calibration Blank1	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	6.9324
9/28/2018 00:32:58	Continuing Calibration Blank1	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	38.1978
9/28/2018 00:32:58	Continuing Calibration Blank1	Fe (234.350 nm)	41.58	0.0035 (ppm)	99.5186
9/28/2018 00:32:58	Continuing Calibration Blank1	K (766.491 nm)	10.40	0.0332 (ppm)	54.2580
9/28/2018 00:32:58	Continuing Calibration Blank1	Mg (279.078 nm)	> 100.00	0.0002 u (ppm)	1.0190
9/28/2018 00:32:58	Continuing Calibration Blank1	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	19.7921
9/28/2018 00:32:58	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	0.0003 u (ppm)	31.1368
9/28/2018 00:32:58	Continuing Calibration Blank1	Na (588.995 nm)	18.40	0.0158 (ppm)	-6102.9508
9/28/2018 00:32:58	Continuing Calibration Blank1	Ni (230.299 nm)	> 100.00	0.0000 u (ppm)	-17.1390
9/28/2018 00:32:58	Continuing Calibration Blank1	Pb (220.353 nm)	55.12	0.0013 (ppm)	5.4721
9/28/2018 00:32:58	Continuing Calibration Blank1	Sb (217.582 nm)	> 100.00	0.0013 u (ppm)	2.5506
9/28/2018 00:32:58	Continuing Calibration Blank1	Se (196.026 nm)	> 100.00	-0.0011 u (ppm)	3.7971
9/28/2018 00:32:58	Continuing Calibration Blank1	Sn (189.925 nm)	> 100.00	0.0014 u (ppm)	2.3374
9/28/2018 00:32:58	Continuing Calibration Blank1	Sr (216.596 nm)	> 100.00	-0.0001 u (ppm)	-0.1642
9/28/2018 00:32:58	Continuing Calibration Blank1	Ti (336.122 nm)	72.11	0.0016 (ppm)	555.4242
9/28/2018 00:32:58	Continuing Calibration Blank1	Tl (351.923 nm)	96.35	0.0025 u (ppm)	18.6112
9/28/2018 00:32:58	Continuing Calibration Blank1	V (292.401 nm)	> 100.00	-0.0001 u (ppm)	126.1272
9/28/2018 00:32:58	Continuing Calibration Blank1	Y (360.074 nm)	0.42	1.01 (Ratio)	1064141.52
9/28/2018 00:32:58	Continuing Calibration Blank1	Y_R (360.074 nm)	0.42	1.01 (Ratio)	1064402.13
9/28/2018 00:32:58	Continuing Calibration Blank1	Zn (213.857 nm)	65.74	0.0001 (ppm)	-23.5098
9/28/2018 00:36:12	R1808989-010	Ag (328.068 nm)	49.76	0.0002 (ppm)	-175.6863
9/28/2018 00:36:12	R1808989-010	Al (394.401 nm)	0.45	0.0413 (ppm)	597.9433
9/28/2018 00:36:12	R1808989-010	As (188.980 nm)	> 100.00	-0.0001 u (ppm)	-0.7102
9/28/2018 00:36:12	R1808989-010	B (249.772 nm)	0.70	0.7610 (ppm)	17521.5391
9/28/2018 00:36:12	R1808989-010	Ba (230.424 nm)	1.04	0.2293 (ppm)	6833.5999
9/28/2018 00:36:12	R1808989-010	Be (313.107 nm)	19.04	0.0000 u (ppm)	-455.1128
9/28/2018 00:36:12	R1808989-010	Ca (227.547 nm)	0.99	157.3346 o (ppm)	8106.0292
9/28/2018 00:36:12	R1808989-010	Cd (214.439 nm)	5.94	-0.0002 u (ppm)	9.8734
9/28/2018 00:36:12	R1808989-010	Co (230.786 nm)	61.64	0.0010 (ppm)	4.2861
9/28/2018 00:36:12	R1808989-010	Cr (267.716 nm)	13.67	-0.0007 u (ppm)	-20.5892
9/28/2018 00:36:12	R1808989-010	Cu (327.395 nm)	1.40	0.0023 (ppm)	165.0268
9/28/2018 00:36:12	R1808989-010	Fe (234.350 nm)	1.08	0.9485 (ppm)	9068.5640
9/28/2018 00:36:12	R1808989-010	K (766.491 nm)	1.16	15.3344 (ppm)	45469.3682
9/28/2018 00:36:12	R1808989-010	Mg (279.078 nm)	0.98	45.4989 (ppm)	77351.3924
9/28/2018 00:36:12	R1808989-010	Mn (257.610 nm)	0.91	1.1646 (ppm)	315319.5581
9/28/2018 00:36:12	R1808989-010	Mo (202.032 nm)	24.13	-0.0014 u (ppm)	24.0818
9/28/2018 00:36:12	R1808989-010	Na (588.995 nm)	1.29	376.2370 o (ppm)	16448679.7919
9/28/2018 00:36:12	R1808989-010	Ni (230.299 nm)	40.86	-0.0060 u (ppm)	-52.3511
9/28/2018 00:36:12	R1808989-010	Pb (220.353 nm)	> 100.00	-0.0008 u (ppm)	1.4530
9/28/2018 00:36:12	R1808989-010	Sb (217.582 nm)	70.30	0.0047 (ppm)	6.7748
9/28/2018 00:36:12	R1808989-010	Se (196.026 nm)	90.38	-0.0025 u (ppm)	2.6223
9/28/2018 00:36:12	R1808989-010	Sn (189.925 nm)	> 100.00	-0.0015 u (ppm)	-1.0304
9/28/2018 00:36:12	R1808989-010	Sr (216.596 nm)	1.19	2.3920 (ppm)	31304.9753
9/28/2018 00:36:12	R1808989-010	Ti (336.122 nm)	79.33	-0.0005 u (ppm)	155.6155
9/28/2018 00:36:12	R1808989-010	Tl (351.923 nm)	36.21	0.0045 (ppm)	23.6032
9/28/2018 00:36:12	R1808989-010	V (292.401 nm)	20.89	0.0008 (ppm)	155.8323
9/28/2018 00:36:12	R1808989-010	Y (360.074 nm)	1.32	0.88 (Ratio)	932789.16

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:36:12	R1808989-010	Y_R (360.074 nm)	1.32	0.88 (Ratio)	932985.90
9/28/2018 00:36:12	R1808989-010	Zn (213.857 nm)	0.82	0.0183 (ppm)	434.0919
9/28/2018 00:39:27	R1808989-011	Ag (328.068 nm)	> 100.00	0.0000 u (ppm)	-186.3382
9/28/2018 00:39:27	R1808989-011	Al (394.401 nm)	2.40	0.0364 (ppm)	538.3145
9/28/2018 00:39:27	R1808989-011	As (188.980 nm)	> 100.00	0.0004 u (ppm)	-0.3290
9/28/2018 00:39:27	R1808989-011	B (249.772 nm)	1.16	1.0205 (ppm)	23488.4791
9/28/2018 00:39:27	R1808989-011	Ba (230.424 nm)	1.27	0.3019 (ppm)	8985.9984
9/28/2018 00:39:27	R1808989-011	Be (313.107 nm)	8.96	-0.0001 u (ppm)	-464.8882
9/28/2018 00:39:27	R1808989-011	Ca (227.547 nm)	1.58	170.1981 o (ppm)	8768.2080
9/28/2018 00:39:27	R1808989-011	Cd (214.439 nm)	76.52	-0.0002 u (ppm)	9.4727
9/28/2018 00:39:27	R1808989-011	Co (230.786 nm)	93.02	0.0005 (ppm)	0.3640
9/28/2018 00:39:27	R1808989-011	Cr (267.716 nm)	97.48	0.0001 u (ppm)	13.8417
9/28/2018 00:39:27	R1808989-011	Cu (327.395 nm)	4.80	0.0032 (ppm)	214.0110
9/28/2018 00:39:27	R1808989-011	Fe (234.350 nm)	1.13	1.6109 (ppm)	15355.8377
9/28/2018 00:39:27	R1808989-011	K (766.491 nm)	1.59	21.3315 (ppm)	63269.0194
9/28/2018 00:39:27	R1808989-011	Mg (279.078 nm)	1.20	53.5323 (ppm)	91008.6597
9/28/2018 00:39:27	R1808989-011	Mn (257.610 nm)	1.15	0.6648 (ppm)	180005.8549
9/28/2018 00:39:27	R1808989-011	Mo (202.032 nm)	17.12	-0.0030 u (ppm)	16.9643
9/28/2018 00:39:27	R1808989-011	Na (588.995 nm)	1.65	420.6393 o (ppm)	18390705.9917
9/28/2018 00:39:27	R1808989-011	Ni (230.299 nm)	13.14	-0.0093 u (ppm)	-71.7888
9/28/2018 00:39:27	R1808989-011	Pb (220.353 nm)	25.14	-0.0030 u (ppm)	-2.8422
9/28/2018 00:39:27	R1808989-011	Sb (217.582 nm)	64.35	0.0021 (ppm)	3.5557
9/28/2018 00:39:27	R1808989-011	Se (196.026 nm)	79.14	-0.0049 u (ppm)	0.7307
9/28/2018 00:39:27	R1808989-011	Sn (189.925 nm)	62.30	-0.0032 u (ppm)	-3.0346
9/28/2018 00:39:27	R1808989-011	Sr (216.596 nm)	1.87	2.4206 (ppm)	31679.8637
9/28/2018 00:39:27	R1808989-011	Ti (336.122 nm)	27.50	-0.0007 u (ppm)	111.6631
9/28/2018 00:39:27	R1808989-011	Tl (351.923 nm)	52.85	0.0046 (ppm)	23.8174
9/28/2018 00:39:27	R1808989-011	V (292.401 nm)	40.92	0.0008 (ppm)	154.7312
9/28/2018 00:39:27	R1808989-011	Y (360.074 nm)	1.52	0.87 (Ratio)	921346.46
9/28/2018 00:39:27	R1808989-011	Y_R (360.074 nm)	1.52	0.87 (Ratio)	921529.09
9/28/2018 00:39:27	R1808989-011	Zn (213.857 nm)	1.80	0.0298 (ppm)	724.1292
9/28/2018 00:42:41	R1808989-012	Ag (328.068 nm)	85.97	0.0001 (ppm)	-177.9635
9/28/2018 00:42:41	R1808989-012	Al (394.401 nm)	4.00	0.0024 (ppm)	127.2412
9/28/2018 00:42:41	R1808989-012	As (188.980 nm)	76.10	-0.0012 u (ppm)	-1.5394
9/28/2018 00:42:41	R1808989-012	B (249.772 nm)	3.92	0.0032 (ppm)	95.5621
9/28/2018 00:42:41	R1808989-012	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	32.7938
9/28/2018 00:42:41	R1808989-012	Be (313.107 nm)	8.19	0.0000 u (ppm)	-418.2790
9/28/2018 00:42:41	R1808989-012	Ca (227.547 nm)	13.43	0.0870 (ppm)	11.3286
9/28/2018 00:42:41	R1808989-012	Cd (214.439 nm)	40.77	-0.0003 u (ppm)	8.1767
9/28/2018 00:42:41	R1808989-012	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-4.3935
9/28/2018 00:42:41	R1808989-012	Cr (267.716 nm)	41.40	-0.0001 u (ppm)	5.6892
9/28/2018 00:42:41	R1808989-012	Cu (327.395 nm)	2.84	0.0052 (ppm)	323.7173
9/28/2018 00:42:41	R1808989-012	Fe (234.350 nm)	6.35	0.0147 (ppm)	205.6442
9/28/2018 00:42:41	R1808989-012	K (766.491 nm)	37.71	0.0331 (ppm)	53.9105
9/28/2018 00:42:41	R1808989-012	Mg (279.078 nm)	15.22	0.0113 (ppm)	19.8809
9/28/2018 00:42:41	R1808989-012	Mn (257.610 nm)	4.38	0.0009 (ppm)	251.1233
9/28/2018 00:42:41	R1808989-012	Mo (202.032 nm)	5.54	-0.0070 u (ppm)	0.0734
9/28/2018 00:42:41	R1808989-012	Na (588.995 nm)	5.88	0.3502 (ppm)	8525.0283
9/28/2018 00:42:41	R1808989-012	Ni (230.299 nm)	51.34	0.0010 (ppm)	-11.3427
9/28/2018 00:42:41	R1808989-012	Pb (220.353 nm)	> 100.00	0.0002 u (ppm)	3.2737
9/28/2018 00:42:41	R1808989-012	Sb (217.582 nm)	11.45	0.0018 (ppm)	3.1303

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:42:41	R1808989-012	Se (196.026 nm)	59.55	-0.0020 u (ppm)	3.0356
9/28/2018 00:42:41	R1808989-012	Sn (189.925 nm)	78.34	-0.0010 u (ppm)	-0.4529
9/28/2018 00:42:41	R1808989-012	Sr (216.596 nm)	22.99	0.0005 (ppm)	7.1223
9/28/2018 00:42:41	R1808989-012	Ti (336.122 nm)	7.48	-0.0024 u (ppm)	-194.1160
9/28/2018 00:42:41	R1808989-012	Tl (351.923 nm)	> 100.00	-0.0003 u (ppm)	11.7780
9/28/2018 00:42:41	R1808989-012	V (292.401 nm)	27.10	-0.0004 u (ppm)	115.9343
9/28/2018 00:42:41	R1808989-012	Y (360.074 nm)	1.41	1.02 (Ratio)	1075785.14
9/28/2018 00:42:41	R1808989-012	Y_R (360.074 nm)	1.41	1.02 (Ratio)	1076025.52
9/28/2018 00:42:41	R1808989-012	Zn (213.857 nm)	1.32	0.0044 (ppm)	83.9732
9/28/2018 00:45:55	R1808989-013	Ag (328.068 nm)	52.92	0.0002 (ppm)	-175.6147
9/28/2018 00:45:55	R1808989-013	Al (394.401 nm)	1.09	1.6715 (ppm)	20351.6051
9/28/2018 00:45:55	R1808989-013	As (188.980 nm)	18.32	0.0046 (ppm)	2.9383
9/28/2018 00:45:55	R1808989-013	B (249.772 nm)	1.06	0.3714 (ppm)	8563.3782
9/28/2018 00:45:55	R1808989-013	Ba (230.424 nm)	1.12	0.2490 (ppm)	7416.6986
9/28/2018 00:45:55	R1808989-013	Be (313.107 nm)	43.72	0.0000 u (ppm)	-410.7257
9/28/2018 00:45:55	R1808989-013	Ca (227.547 nm)	1.11	142.8755 o (ppm)	7361.7117
9/28/2018 00:45:55	R1808989-013	Cd (214.439 nm)	8.05	0.0012 (ppm)	37.2286
9/28/2018 00:45:55	R1808989-013	Co (230.786 nm)	> 100.00	0.0005 u (ppm)	0.5595
9/28/2018 00:45:55	R1808989-013	Cr (267.716 nm)	8.43	0.0013 (ppm)	67.7786
9/28/2018 00:45:55	R1808989-013	Cu (327.395 nm)	3.05	0.0052 (ppm)	327.2379
9/28/2018 00:45:55	R1808989-013	Fe (234.350 nm)	0.86	0.8143 (ppm)	7795.4753
9/28/2018 00:45:55	R1808989-013	K (766.491 nm)	1.22	119.6574 o (ppm)	355107.4870
9/28/2018 00:45:55	R1808989-013	Mg (279.078 nm)	0.73	0.6476 (ppm)	1101.6714
9/28/2018 00:45:55	R1808989-013	Mn (257.610 nm)	0.77	0.0127 (ppm)	3462.4160
9/28/2018 00:45:55	R1808989-013	Mo (202.032 nm)	3.38	0.0073 (ppm)	60.6876
9/28/2018 00:45:55	R1808989-013	Na (588.995 nm)	1.25	194.9524 o (ppm)	8519837.4330
9/28/2018 00:45:55	R1808989-013	Ni (230.299 nm)	5.24	0.0118 (ppm)	51.1749
9/28/2018 00:45:55	R1808989-013	Pb (220.353 nm)	30.97	0.0028 (ppm)	8.3403
9/28/2018 00:45:55	R1808989-013	Sb (217.582 nm)	37.36	0.0054 (ppm)	7.5664
9/28/2018 00:45:55	R1808989-013	Se (196.026 nm)	68.13	-0.0028 u (ppm)	2.3813
9/28/2018 00:45:55	R1808989-013	Sn (189.925 nm)	> 100.00	0.0015 (ppm)	2.3961
9/28/2018 00:45:55	R1808989-013	Sr (216.596 nm)	1.29	2.8781 (ppm)	37666.5035
9/28/2018 00:45:55	R1808989-013	Ti (336.122 nm)	2.44	0.0147 (ppm)	2989.9939
9/28/2018 00:45:55	R1808989-013	Tl (351.923 nm)	78.31	0.0020 (ppm)	17.3680
9/28/2018 00:45:55	R1808989-013	V (292.401 nm)	2.13	0.0108 (ppm)	495.2893
9/28/2018 00:45:55	R1808989-013	Y (360.074 nm)	1.30	0.91 (Ratio)	959824.82
9/28/2018 00:45:55	R1808989-013	Y_R (360.074 nm)	1.30	0.91 (Ratio)	960014.13
9/28/2018 00:45:55	R1808989-013	Zn (213.857 nm)	0.65	0.0234 (ppm)	562.8001
9/28/2018 00:49:09	R1808989-014	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-178.5240
9/28/2018 00:49:09	R1808989-014	Al (394.401 nm)	0.75	0.1383 (ppm)	1772.8391
9/28/2018 00:49:09	R1808989-014	As (188.980 nm)	> 100.00	0.0008 u (ppm)	0.0051
9/28/2018 00:49:09	R1808989-014	B (249.772 nm)	0.95	0.1059 (ppm)	2457.8746
9/28/2018 00:49:09	R1808989-014	Ba (230.424 nm)	1.15	0.0700 (ppm)	2108.9439
9/28/2018 00:49:09	R1808989-014	Be (313.107 nm)	18.48	0.0000 u (ppm)	-429.3128
9/28/2018 00:49:09	R1808989-014	Ca (227.547 nm)	1.19	51.1756 (ppm)	2641.2376
9/28/2018 00:49:09	R1808989-014	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	12.4197
9/28/2018 00:49:09	R1808989-014	Co (230.786 nm)	> 100.00	0.0001 u (ppm)	-3.2197
9/28/2018 00:49:09	R1808989-014	Cr (267.716 nm)	6.53	-0.0004 u (ppm)	-7.1215
9/28/2018 00:49:09	R1808989-014	Cu (327.395 nm)	5.51	0.0025 (ppm)	173.7390
9/28/2018 00:49:09	R1808989-014	Fe (234.350 nm)	1.18	0.6123 (ppm)	5878.1919
9/28/2018 00:49:09	R1808989-014	K (766.491 nm)	2.00	4.9011 (ppm)	14502.4792

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:49:09	R1808989-014	Mg (279.078 nm)	1.12	12.0862 (ppm)	20547.9352
9/28/2018 00:49:09	R1808989-014	Mn (257.610 nm)	1.02	0.0657 (ppm)	17803.9418
9/28/2018 00:49:09	R1808989-014	Mo (202.032 nm)	8.46	-0.0042 u (ppm)	11.9177
9/28/2018 00:49:09	R1808989-014	Na (588.995 nm)	1.51	44.7881 (ppm)	1952101.5421
9/28/2018 00:49:09	R1808989-014	Ni (230.299 nm)	> 100.00	0.0005 (ppm)	-14.6333
9/28/2018 00:49:09	R1808989-014	Pb (220.353 nm)	86.21	-0.0002 u (ppm)	2.5489
9/28/2018 00:49:09	R1808989-014	Sb (217.582 nm)	49.90	0.0015 (ppm)	2.7642
9/28/2018 00:49:09	R1808989-014	Se (196.026 nm)	> 100.00	-0.0007 u (ppm)	4.1159
9/28/2018 00:49:09	R1808989-014	Sn (189.925 nm)	> 100.00	-0.0010 u (ppm)	-0.4919
9/28/2018 00:49:09	R1808989-014	Sr (216.596 nm)	0.58	0.2154 (ppm)	2819.3242
9/28/2018 00:49:09	R1808989-014	Ti (336.122 nm)	20.93	-0.0005 u (ppm)	165.8027
9/28/2018 00:49:09	R1808989-014	Tl (351.923 nm)	> 100.00	-0.0034 u (ppm)	4.3038
9/28/2018 00:49:09	R1808989-014	V (292.401 nm)	35.63	0.0005 (ppm)	144.6406
9/28/2018 00:49:09	R1808989-014	Y (360.074 nm)	1.33	0.97 (Ratio)	1018472.67
9/28/2018 00:49:09	R1808989-014	Y_R (360.074 nm)	1.33	0.97 (Ratio)	1018695.13
9/28/2018 00:49:09	R1808989-014	Zn (213.857 nm)	3.54	0.0050 (ppm)	99.4497
9/28/2018 00:52:23	R1808989-015	Ag (328.068 nm)	73.86	0.0002 (ppm)	-171.3510
9/28/2018 00:52:23	R1808989-015	Al (394.401 nm)	1.10	0.0995 (ppm)	1302.9184
9/28/2018 00:52:23	R1808989-015	As (188.980 nm)	10.18	0.0114 (ppm)	8.2757
9/28/2018 00:52:23	R1808989-015	B (249.772 nm)	0.84	4.3301 (ppm)	99593.8007
9/28/2018 00:52:23	R1808989-015	Ba (230.424 nm)	1.55	0.6581 (ppm)	19548.1585
9/28/2018 00:52:23	R1808989-015	Be (313.107 nm)	27.44	0.0000 u (ppm)	-457.5073
9/28/2018 00:52:23	R1808989-015	Ca (227.547 nm)	1.13	134.6601 o (ppm)	6938.8019
9/28/2018 00:52:23	R1808989-015	Cd (214.439 nm)	> 100.00	0.0002 (ppm)	17.5413
9/28/2018 00:52:23	R1808989-015	Co (230.786 nm)	7.24	0.0043 (ppm)	33.5586
9/28/2018 00:52:23	R1808989-015	Cr (267.716 nm)	3.09	0.0048 (ppm)	216.6159
9/28/2018 00:52:23	R1808989-015	Cu (327.395 nm)	44.38	0.0004 (ppm)	61.6284
9/28/2018 00:52:23	R1808989-015	Fe (234.350 nm)	0.82	19.9953 o (ppm)	189846.5479
9/28/2018 00:52:23	R1808989-015	K (766.491 nm)	0.98	111.6112 o (ppm)	331225.7702
9/28/2018 00:52:23	R1808989-015	Mg (279.078 nm)	0.90	118.5758 o (ppm)	201586.2093
9/28/2018 00:52:23	R1808989-015	Mn (257.610 nm)	0.80	0.2197 (ppm)	59496.1759
9/28/2018 00:52:23	R1808989-015	Mo (202.032 nm)	13.72	-0.0060 u (ppm)	4.5530
9/28/2018 00:52:23	R1808989-015	Na (588.995 nm)	1.20	338.0825 o (ppm)	14779916.7062
9/28/2018 00:52:23	R1808989-015	Ni (230.299 nm)	0.50	-0.0130 u (ppm)	-93.3052
9/28/2018 00:52:23	R1808989-015	Pb (220.353 nm)	98.28	0.0011 (ppm)	5.1727
9/28/2018 00:52:23	R1808989-015	Sb (217.582 nm)	> 100.00	-0.0027 u (ppm)	-2.2826
9/28/2018 00:52:23	R1808989-015	Se (196.026 nm)	> 100.00	-0.0038 u (ppm)	1.5769
9/28/2018 00:52:23	R1808989-015	Sn (189.925 nm)	> 100.00	-0.0011 u (ppm)	-0.5918
9/28/2018 00:52:23	R1808989-015	Sr (216.596 nm)	0.70	1.8494 (ppm)	24203.6286
9/28/2018 00:52:23	R1808989-015	Ti (336.122 nm)	10.73	0.0010 (ppm)	438.9402
9/28/2018 00:52:23	R1808989-015	Tl (351.923 nm)	> 100.00	0.0013 u (ppm)	15.7859
9/28/2018 00:52:23	R1808989-015	V (292.401 nm)	7.89	0.0024 (ppm)	211.0339
9/28/2018 00:52:23	R1808989-015	Y (360.074 nm)	1.24	0.88 (Ratio)	928130.17
9/28/2018 00:52:23	R1808989-015	Y_R (360.074 nm)	1.24	0.88 (Ratio)	928337.02
9/28/2018 00:52:23	R1808989-015	Zn (213.857 nm)	3.20	0.0109 (ppm)	248.4353
9/28/2018 00:55:38	R1808989-016	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-180.2341
9/28/2018 00:55:38	R1808989-016	Al (394.401 nm)	2.84	0.0385 (ppm)	563.6774
9/28/2018 00:55:38	R1808989-016	As (188.980 nm)	> 100.00	-0.0017 u (ppm)	-1.9381
9/28/2018 00:55:38	R1808989-016	B (249.772 nm)	1.13	0.2825 (ppm)	6519.4401
9/28/2018 00:55:38	R1808989-016	Ba (230.424 nm)	2.00	0.4080 (ppm)	12130.9561
9/28/2018 00:55:38	R1808989-016	Be (313.107 nm)	28.09	0.0000 u (ppm)	-425.4113

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:55:38	R1808989-016	Ca (227.547 nm)	1.44	131.2597 o (ppm)	6763.7596
9/28/2018 00:55:38	R1808989-016	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.4410
9/28/2018 00:55:38	R1808989-016	Co (230.786 nm)	80.00	0.0003 (ppm)	-1.8220
9/28/2018 00:55:38	R1808989-016	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	7.2070
9/28/2018 00:55:38	R1808989-016	Cu (327.395 nm)	7.07	0.0025 (ppm)	173.7321
9/28/2018 00:55:38	R1808989-016	Fe (234.350 nm)	1.04	6.0533 (ppm)	57519.4339
9/28/2018 00:55:38	R1808989-016	K (766.491 nm)	1.64	7.9661 (ppm)	23599.6905
9/28/2018 00:55:38	R1808989-016	Mg (279.078 nm)	1.20	44.9506 (ppm)	76419.2154
9/28/2018 00:55:38	R1808989-016	Mn (257.610 nm)	1.03	0.5375 (ppm)	145547.1591
9/28/2018 00:55:38	R1808989-016	Mo (202.032 nm)	15.87	-0.0077 u (ppm)	-2.6679
9/28/2018 00:55:38	R1808989-016	Na (588.995 nm)	1.43	23.9655 (ppm)	1041383.5586
9/28/2018 00:55:38	R1808989-016	Ni (230.299 nm)	6.11	-0.0113 u (ppm)	-83.0771
9/28/2018 00:55:38	R1808989-016	Pb (220.353 nm)	86.31	-0.0017 u (ppm)	-0.4208
9/28/2018 00:55:38	R1808989-016	Sb (217.582 nm)	> 100.00	0.0007 u (ppm)	1.7889
9/28/2018 00:55:38	R1808989-016	Se (196.026 nm)	67.12	-0.0046 u (ppm)	0.9664
9/28/2018 00:55:38	R1808989-016	Sn (189.925 nm)	64.13	-0.0014 u (ppm)	-0.9648
9/28/2018 00:55:38	R1808989-016	Sr (216.596 nm)	1.20	1.2189 (ppm)	15952.4131
9/28/2018 00:55:38	R1808989-016	Ti (336.122 nm)	9.41	-0.0012 u (ppm)	18.3122
9/28/2018 00:55:38	R1808989-016	Tl (351.923 nm)	> 100.00	0.0005 u (ppm)	13.8499
9/28/2018 00:55:38	R1808989-016	V (292.401 nm)	7.95	0.0004 (ppm)	140.9517
9/28/2018 00:55:38	R1808989-016	Y (360.074 nm)	1.38	0.95 (Ratio)	999336.61
9/28/2018 00:55:38	R1808989-016	Y_R (360.074 nm)	1.38	0.95 (Ratio)	999564.91
9/28/2018 00:55:38	R1808989-016	Zn (213.857 nm)	1.26	0.0078 (ppm)	170.3257
9/28/2018 00:58:53	R1809110-001 20X	Ag (328.068 nm)	66.16	0.0001 (ppm)	-181.4921
9/28/2018 00:58:53	R1809110-001 20X	Al (394.401 nm)	13.71	-0.0020 u (ppm)	73.2818
9/28/2018 00:58:53	R1809110-001 20X	As (188.980 nm)	> 100.00	-0.0006 u (ppm)	-1.0605
9/28/2018 00:58:53	R1809110-001 20X	B (249.772 nm)	23.02	0.0009 (ppm)	42.9089
9/28/2018 00:58:53	R1809110-001 20X	Ba (230.424 nm)	3.08	-0.0011 u (ppm)	0.4433
9/28/2018 00:58:53	R1809110-001 20X	Be (313.107 nm)	24.59	0.0000 u (ppm)	-418.9806
9/28/2018 00:58:53	R1809110-001 20X	Ca (227.547 nm)	19.56	-0.0108 u (ppm)	6.2951
9/28/2018 00:58:53	R1809110-001 20X	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.7604
9/28/2018 00:58:53	R1809110-001 20X	Co (230.786 nm)	21.56	-0.0005 u (ppm)	-8.6747
9/28/2018 00:58:53	R1809110-001 20X	Cr (267.716 nm)	58.39	-0.0001 u (ppm)	4.2993
9/28/2018 00:58:53	R1809110-001 20X	Cu (327.395 nm)	1.35	0.0107 (ppm)	625.3135
9/28/2018 00:58:53	R1809110-001 20X	Fe (234.350 nm)	26.60	0.0089 (ppm)	151.0907
9/28/2018 00:58:53	R1809110-001 20X	K (766.491 nm)	8.53	0.0271 (ppm)	35.9276
9/28/2018 00:58:53	R1809110-001 20X	Mg (279.078 nm)	> 100.00	0.0009 u (ppm)	2.2183
9/28/2018 00:58:53	R1809110-001 20X	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	13.9027
9/28/2018 00:58:53	R1809110-001 20X	Mo (202.032 nm)	5.45	-0.0073 u (ppm)	-0.9176
9/28/2018 00:58:53	R1809110-001 20X	Na (588.995 nm)	0.63	0.4744 (ppm)	13957.3471
9/28/2018 00:58:53	R1809110-001 20X	Ni (230.299 nm)	> 100.00	0.0000 u (ppm)	-17.1648
9/28/2018 00:58:53	R1809110-001 20X	Pb (220.353 nm)	> 100.00	0.0008 u (ppm)	4.4378
9/28/2018 00:58:53	R1809110-001 20X	Sb (217.582 nm)	> 100.00	-0.0007 u (ppm)	0.1629
9/28/2018 00:58:53	R1809110-001 20X	Se (196.026 nm)	3.06	0.1218 (ppm)	103.7542
9/28/2018 00:58:53	R1809110-001 20X	Sn (189.925 nm)	93.33	-0.0013 u (ppm)	-0.8034
9/28/2018 00:58:53	R1809110-001 20X	Sr (216.596 nm)	> 100.00	0.0001 (ppm)	2.3997
9/28/2018 00:58:53	R1809110-001 20X	Ti (336.122 nm)	4.53	-0.0029 u (ppm)	-293.9497
9/28/2018 00:58:53	R1809110-001 20X	Tl (351.923 nm)	52.77	-0.0009 u (ppm)	10.3869
9/28/2018 00:58:53	R1809110-001 20X	V (292.401 nm)	9.40	-0.0004 u (ppm)	114.7482
9/28/2018 00:58:53	R1809110-001 20X	Y (360.074 nm)	0.40	1.02 (Ratio)	1072361.32
9/28/2018 00:58:53	R1809110-001 20X	Y_R (360.074 nm)	0.40	1.02 (Ratio)	1072610.29

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 00:58:53	R1809110-001 20X	Zn (213.857 nm)	0.44	1.0214 (ppm)	25661.4049
9/28/2018 01:02:08	R1809110-001 5X	Ag (328.068 nm)	> 100.00	0.0001 u (ppm)	-179.1493
9/28/2018 01:02:08	R1809110-001 5X	Al (394.401 nm)	11.99	-0.0017 u (ppm)	77.5803
9/28/2018 01:02:08	R1809110-001 5X	As (188.980 nm)	85.74	0.0018 (ppm)	0.8241
9/28/2018 01:02:08	R1809110-001 5X	B (249.772 nm)	78.28	0.0004 (ppm)	30.8469
9/28/2018 01:02:08	R1809110-001 5X	Ba (230.424 nm)	3.60	-0.0012 u (ppm)	-1.3243
9/28/2018 01:02:08	R1809110-001 5X	Be (313.107 nm)	6.58	0.0000 u (ppm)	-418.4567
9/28/2018 01:02:08	R1809110-001 5X	Ca (227.547 nm)	> 100.00	-0.0115 u (ppm)	6.2553
9/28/2018 01:02:08	R1809110-001 5X	Cd (214.439 nm)	62.42	-0.0001 u (ppm)	11.1697
9/28/2018 01:02:08	R1809110-001 5X	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-6.1776
9/28/2018 01:02:08	R1809110-001 5X	Cr (267.716 nm)	23.52	-0.0002 u (ppm)	-0.4255
9/28/2018 01:02:08	R1809110-001 5X	Cu (327.395 nm)	0.51	0.0427 (ppm)	2385.8584
9/28/2018 01:02:08	R1809110-001 5X	Fe (234.350 nm)	46.12	-0.0022 u (ppm)	46.1255
9/28/2018 01:02:08	R1809110-001 5X	K (766.491 nm)	16.75	0.0217 (ppm)	19.8923
9/28/2018 01:02:08	R1809110-001 5X	Mg (279.078 nm)	32.52	-0.0022 u (ppm)	-3.0675
9/28/2018 01:02:08	R1809110-001 5X	Mn (257.610 nm)	36.73	0.0000 (ppm)	22.5022
9/28/2018 01:02:08	R1809110-001 5X	Mo (202.032 nm)	6.97	-0.0071 u (ppm)	-0.1793
9/28/2018 01:02:08	R1809110-001 5X	Na (588.995 nm)	0.25	1.8498 (ppm)	74111.7797
9/28/2018 01:02:08	R1809110-001 5X	Ni (230.299 nm)	69.40	0.0005 (ppm)	-14.3298
9/28/2018 01:02:08	R1809110-001 5X	Pb (220.353 nm)	> 100.00	0.0001 u (ppm)	3.1273
9/28/2018 01:02:08	R1809110-001 5X	Sb (217.582 nm)	39.75	-0.0012 u (ppm)	-0.5460
9/28/2018 01:02:08	R1809110-001 5X	Se (196.026 nm)	1.43	0.4864 (ppm)	400.2678
9/28/2018 01:02:08	R1809110-001 5X	Sn (189.925 nm)	44.89	-0.0007 u (ppm)	-0.1828
9/28/2018 01:02:08	R1809110-001 5X	Sr (216.596 nm)	> 100.00	-0.0001 u (ppm)	-0.5590
9/28/2018 01:02:08	R1809110-001 5X	Ti (336.122 nm)	2.97	-0.0029 u (ppm)	-289.6027
9/28/2018 01:02:08	R1809110-001 5X	Tl (351.923 nm)	> 100.00	0.0021 u (ppm)	17.6444
9/28/2018 01:02:08	R1809110-001 5X	V (292.401 nm)	18.27	-0.0003 u (ppm)	117.7401
9/28/2018 01:02:08	R1809110-001 5X	Y (360.074 nm)	0.42	1.02 (Ratio)	1072956.14
9/28/2018 01:02:08	R1809110-001 5X	Y_R (360.074 nm)	0.42	1.02 (Ratio)	1073194.12
9/28/2018 01:02:08	R1809110-001 5X	Zn (213.857 nm)	1.05	4.0775 o (ppm)	102517.6328
9/28/2018 01:05:22	R1809110-001D 5X	Ag (328.068 nm)	90.30	0.0001 (ppm)	-178.0872
9/28/2018 01:05:22	R1809110-001D 5X	Al (394.401 nm)	25.32	-0.0015 u (ppm)	79.3460
9/28/2018 01:05:22	R1809110-001D 5X	As (188.980 nm)	> 100.00	-0.0013 u (ppm)	-1.6609
9/28/2018 01:05:22	R1809110-001D 5X	B (249.772 nm)	47.26	0.0002 (ppm)	25.9260
9/28/2018 01:05:22	R1809110-001D 5X	Ba (230.424 nm)	6.81	-0.0012 u (ppm)	-1.8835
9/28/2018 01:05:22	R1809110-001D 5X	Be (313.107 nm)	20.75	0.0000 u (ppm)	-426.2598
9/28/2018 01:05:22	R1809110-001D 5X	Ca (227.547 nm)	> 100.00	-0.0092 u (ppm)	6.3741
9/28/2018 01:05:22	R1809110-001D 5X	Cd (214.439 nm)	39.83	-0.0001 u (ppm)	11.4121
9/28/2018 01:05:22	R1809110-001D 5X	Co (230.786 nm)	52.97	-0.0003 u (ppm)	-6.8789
9/28/2018 01:05:22	R1809110-001D 5X	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	7.4670
9/28/2018 01:05:22	R1809110-001D 5X	Cu (327.395 nm)	0.79	0.0443 (ppm)	2477.9143
9/28/2018 01:05:22	R1809110-001D 5X	Fe (234.350 nm)	24.47	-0.0034 u (ppm)	34.7066
9/28/2018 01:05:22	R1809110-001D 5X	K (766.491 nm)	32.63	0.0202 (ppm)	15.5122
9/28/2018 01:05:22	R1809110-001D 5X	Mg (279.078 nm)	45.57	-0.0018 u (ppm)	-2.2714
9/28/2018 01:05:22	R1809110-001D 5X	Mn (257.610 nm)	64.97	0.0000 (ppm)	18.5139
9/28/2018 01:05:22	R1809110-001D 5X	Mo (202.032 nm)	5.08	-0.0075 u (ppm)	-1.7950
9/28/2018 01:05:22	R1809110-001D 5X	Na (588.995 nm)	0.46	1.9112 (ppm)	76796.7973
9/28/2018 01:05:22	R1809110-001D 5X	Ni (230.299 nm)	> 100.00	0.0001 u (ppm)	-16.9441
9/28/2018 01:05:22	R1809110-001D 5X	Pb (220.353 nm)	23.21	0.0015 (ppm)	5.8353
9/28/2018 01:05:22	R1809110-001D 5X	Sb (217.582 nm)	> 100.00	0.0005 u (ppm)	1.6460
9/28/2018 01:05:22	R1809110-001D 5X	Se (196.026 nm)	0.80	0.5045 (ppm)	414.9564

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:05:22	R1809110-001D 5X	Sn (189.925 nm)	> 100.00	-0.0003 u (ppm)	0.2860
9/28/2018 01:05:22	R1809110-001D 5X	Sr (216.596 nm)	35.36	-0.0002 u (ppm)	-2.6744
9/28/2018 01:05:22	R1809110-001D 5X	Ti (336.122 nm)	1.41	-0.0029 u (ppm)	-289.6083
9/28/2018 01:05:22	R1809110-001D 5X	Tl (351.923 nm)	> 100.00	0.0010 u (ppm)	15.0181
9/28/2018 01:05:22	R1809110-001D 5X	V (292.401 nm)	50.08	-0.0003 u (ppm)	117.4573
9/28/2018 01:05:22	R1809110-001D 5X	Y (360.074 nm)	0.62	1.02 (Ratio)	1072083.13
9/28/2018 01:05:22	R1809110-001D 5X	Y_R (360.074 nm)	0.63	1.02 (Ratio)	1072327.56
9/28/2018 01:05:22	R1809110-001D 5X	Zn (213.857 nm)	0.57	4.2598 o (ppm)	107101.9695
9/28/2018 01:08:36	Continuing Calibration Verification1	Ag (328.068 nm)	0.29	0.4970 (ppm)	30786.0257
9/28/2018 01:08:36	Continuing Calibration Verification1	Al (394.401 nm)	0.30	9.4993 (ppm)	115200.3063
9/28/2018 01:08:36	Continuing Calibration Verification1	As (188.980 nm)	1.17	0.9682 (ppm)	753.3904
9/28/2018 01:08:36	Continuing Calibration Verification1	B (249.772 nm)	0.31	2.4705 (ppm)	56832.5480
9/28/2018 01:08:36	Continuing Calibration Verification1	Ba (230.424 nm)	0.43	10.0284 (ppm)	297400.6926
9/28/2018 01:08:36	Continuing Calibration Verification1	Be (313.107 nm)	0.30	0.2488 (ppm)	324417.2949
9/28/2018 01:08:36	Continuing Calibration Verification1	Ca (227.547 nm)	0.39	24.0524 (ppm)	1245.0020
9/28/2018 01:08:36	Continuing Calibration Verification1	Cd (214.439 nm)	0.39	0.4944 (ppm)	9731.0085
9/28/2018 01:08:36	Continuing Calibration Verification1	Co (230.786 nm)	0.39	2.5662 (ppm)	22349.2177
9/28/2018 01:08:36	Continuing Calibration Verification1	Cr (267.716 nm)	0.42	0.5125 (ppm)	22198.0756
9/28/2018 01:08:36	Continuing Calibration Verification1	Cu (327.395 nm)	0.18	1.2089 (ppm)	66543.8915
9/28/2018 01:08:36	Continuing Calibration Verification1	Fe (234.350 nm)	0.38	4.8076 (ppm)	45696.4025
9/28/2018 01:08:36	Continuing Calibration Verification1	K (766.491 nm)	0.27	24.0243 (ppm)	71261.4867
9/28/2018 01:08:36	Continuing Calibration Verification1	Mg (279.078 nm)	0.33	24.2349 (ppm)	41201.3621
9/28/2018 01:08:36	Continuing Calibration Verification1	Mn (257.610 nm)	0.42	0.7595 (ppm)	205651.8293
9/28/2018 01:08:36	Continuing Calibration Verification1	Mo (202.032 nm)	0.68	2.5655 (ppm)	10842.2084
9/28/2018 01:08:36	Continuing Calibration Verification1	Na (588.995 nm)	0.04	24.0960 (ppm)	1047093.2960
9/28/2018 01:08:36	Continuing Calibration Verification1	Ni (230.299 nm)	0.47	2.0313 (ppm)	11802.1317
9/28/2018 01:08:36	Continuing Calibration Verification1	Pb (220.353 nm)	0.43	0.5031 (ppm)	984.1881
9/28/2018 01:08:36	Continuing Calibration Verification1	Sb (217.582 nm)	0.14	4.8754 (ppm)	5993.6240
9/28/2018 01:08:36	Continuing Calibration Verification1	Se (196.026 nm)	0.85	0.4811 (ppm)	395.9554
9/28/2018 01:08:36	Continuing Calibration Verification1	Sn (189.925 nm)	0.53	4.9770 (ppm)	5810.5910
9/28/2018 01:08:36	Continuing Calibration Verification1	Sr (216.596 nm)	0.43	2.5185 (ppm)	32960.2395
9/28/2018 01:08:36	Continuing Calibration Verification1	Ti (336.122 nm)	0.27	2.4940 (ppm)	465694.8906
9/28/2018 01:08:36	Continuing Calibration Verification1	Tl (351.923 nm)	0.28	0.9918 (ppm)	2421.7383
9/28/2018 01:08:36	Continuing Calibration Verification1	V (292.401 nm)	0.42	2.4899 (ppm)	84676.0661
9/28/2018 01:08:36	Continuing Calibration Verification1	Y (360.074 nm)	0.38	0.96 (Ratio)	1017899.55
9/28/2018 01:08:36	Continuing Calibration Verification1	Y_R (360.074 nm)	0.38	0.96 (Ratio)	1018137.07
9/28/2018 01:08:36	Continuing Calibration Verification1	Zn (213.857 nm)	0.28	0.9849 (ppm)	24741.9744
9/28/2018 01:11:50	Continuing Calibration Blank1	Ag (328.068 nm)	11.45	0.0002 (ppm)	-173.6429
9/28/2018 01:11:50	Continuing Calibration Blank1	Al (394.401 nm)	> 100.00	-0.0008 u (ppm)	88.4292
9/28/2018 01:11:50	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	0.0004 u (ppm)	-0.2854
9/28/2018 01:11:50	Continuing Calibration Blank1	B (249.772 nm)	34.11	0.0013 (ppm)	52.3847
9/28/2018 01:11:50	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	-0.0001 u (ppm)	30.5399
9/28/2018 01:11:50	Continuing Calibration Blank1	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-389.5124
9/28/2018 01:11:50	Continuing Calibration Blank1	Ca (227.547 nm)	> 100.00	-0.0340 u (ppm)	5.0983
9/28/2018 01:11:50	Continuing Calibration Blank1	Cd (214.439 nm)	32.15	-0.0001 u (ppm)	10.7707
9/28/2018 01:11:50	Continuing Calibration Blank1	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-4.3163
9/28/2018 01:11:50	Continuing Calibration Blank1	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	8.1746
9/28/2018 01:11:50	Continuing Calibration Blank1	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	41.0361
9/28/2018 01:11:50	Continuing Calibration Blank1	Fe (234.350 nm)	66.45	0.0020 (ppm)	85.5943
9/28/2018 01:11:50	Continuing Calibration Blank1	K (766.491 nm)	9.31	0.0353 (ppm)	60.3719
9/28/2018 01:11:50	Continuing Calibration Blank1	Mg (279.078 nm)	> 100.00	-0.0009 u (ppm)	-0.8667

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:11:50	Continuing Calibration Blank1	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	18.5480
9/28/2018 01:11:50	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	0.0008 u (ppm)	33.0093
9/28/2018 01:11:50	Continuing Calibration Blank1	Na (588.995 nm)	19.49	0.0098 (ppm)	-6366.2150
9/28/2018 01:11:50	Continuing Calibration Blank1	Ni (230.299 nm)	> 100.00	-0.0001 u (ppm)	-18.1433
9/28/2018 01:11:50	Continuing Calibration Blank1	Pb (220.353 nm)	> 100.00	-0.0001 u (ppm)	2.7131
9/28/2018 01:11:50	Continuing Calibration Blank1	Sb (217.582 nm)	32.47	0.0044 (ppm)	6.3657
9/28/2018 01:11:50	Continuing Calibration Blank1	Se (196.026 nm)	84.55	0.0032 (ppm)	7.3100
9/28/2018 01:11:50	Continuing Calibration Blank1	Sn (189.925 nm)	> 100.00	0.0003 u (ppm)	1.0697
9/28/2018 01:11:50	Continuing Calibration Blank1	Sr (216.596 nm)	> 100.00	0.0001 u (ppm)	1.6151
9/28/2018 01:11:50	Continuing Calibration Blank1	Ti (336.122 nm)	68.20	0.0018 (ppm)	585.7279
9/28/2018 01:11:50	Continuing Calibration Blank1	Tl (351.923 nm)	47.08	0.0031 (ppm)	20.2198
9/28/2018 01:11:50	Continuing Calibration Blank1	V (292.401 nm)	> 100.00	-0.0002 u (ppm)	122.6916
9/28/2018 01:11:50	Continuing Calibration Blank1	Y (360.074 nm)	0.28	1.01 (Ratio)	1066360.92
9/28/2018 01:11:50	Continuing Calibration Blank1	Y_R (360.074 nm)	0.28	1.01 (Ratio)	1066616.43
9/28/2018 01:11:50	Continuing Calibration Blank1	Zn (213.857 nm)	> 100.00	0.0002 (ppm)	-22.0317
9/28/2018 01:15:04	R1809110-001	Ag (328.068 nm)	13.14	0.0002 (ppm)	-174.1450
9/28/2018 01:15:04	R1809110-001	Al (394.401 nm)	> 100.00	-0.0002 u (ppm)	94.6053
9/28/2018 01:15:04	R1809110-001	As (188.980 nm)	75.49	-0.0029 u (ppm)	-2.8525
9/28/2018 01:15:04	R1809110-001	B (249.772 nm)	23.31	0.0005 (ppm)	34.5907
9/28/2018 01:15:04	R1809110-001	Ba (230.424 nm)	7.61	-0.0009 u (ppm)	6.7697
9/28/2018 01:15:04	R1809110-001	Be (313.107 nm)	48.35	0.0000 u (ppm)	-421.8626
9/28/2018 01:15:04	R1809110-001	Ca (227.547 nm)	74.95	-0.0251 u (ppm)	5.5557
9/28/2018 01:15:04	R1809110-001	Cd (214.439 nm)	61.31	-0.0002 u (ppm)	8.6046
9/28/2018 01:15:04	R1809110-001	Co (230.786 nm)	> 100.00	-0.0001 u (ppm)	-5.2316
9/28/2018 01:15:04	R1809110-001	Cr (267.716 nm)	22.27	-0.0004 u (ppm)	-9.5754
9/28/2018 01:15:04	R1809110-001	Cu (327.395 nm)	1.35	0.2161 (ppm)	11929.6546
9/28/2018 01:15:04	R1809110-001	Fe (234.350 nm)	3.31	-0.0053 u (ppm)	16.1768
9/28/2018 01:15:04	R1809110-001	K (766.491 nm)	22.51	0.0301 (ppm)	44.8884
9/28/2018 01:15:04	R1809110-001	Mg (279.078 nm)	80.41	-0.0025 u (ppm)	-3.4372
9/28/2018 01:15:04	R1809110-001	Mn (257.610 nm)	1.89	0.0004 (ppm)	134.3265
9/28/2018 01:15:04	R1809110-001	Mo (202.032 nm)	2.39	-0.0059 u (ppm)	5.0677
9/28/2018 01:15:04	R1809110-001	Na (588.995 nm)	1.52	9.2027 (ppm)	395704.5801
9/28/2018 01:15:04	R1809110-001	Ni (230.299 nm)	21.54	-0.0014 u (ppm)	-25.7107
9/28/2018 01:15:04	R1809110-001	Pb (220.353 nm)	> 100.00	0.0003 u (ppm)	3.6244
9/28/2018 01:15:04	R1809110-001	Sb (217.582 nm)	46.63	0.0020 (ppm)	3.4482
9/28/2018 01:15:04	R1809110-001	Se (196.026 nm)	1.32	2.5841 o (ppm)	2106.1674
9/28/2018 01:15:04	R1809110-001	Sn (189.925 nm)	> 100.00	-0.0010 u (ppm)	-0.4192
9/28/2018 01:15:04	R1809110-001	Sr (216.596 nm)	55.63	-0.0002 u (ppm)	-2.2571
9/28/2018 01:15:04	R1809110-001	Ti (336.122 nm)	25.46	-0.0017 u (ppm)	-73.6849
9/28/2018 01:15:04	R1809110-001	Tl (351.923 nm)	> 100.00	-0.0003 u (ppm)	11.7821
9/28/2018 01:15:04	R1809110-001	V (292.401 nm)	26.60	-0.0002 u (ppm)	121.6361
9/28/2018 01:15:04	R1809110-001	Y (360.074 nm)	1.33	1.01 (Ratio)	1065506.45
9/28/2018 01:15:04	R1809110-001	Y_R (360.074 nm)	1.33	1.01 (Ratio)	1065729.17
9/28/2018 01:15:04	R1809110-001	Zn (213.857 nm)	2.24	19.7498 o (ppm)	496654.0963
9/28/2018 01:18:18	R1809111-001	Ag (328.068 nm)	37.89	0.0002 (ppm)	-175.5615
9/28/2018 01:18:18	R1809111-001	Al (394.401 nm)	4.92	0.0264 (ppm)	417.5749
9/28/2018 01:18:18	R1809111-001	As (188.980 nm)	40.48	0.0115 (ppm)	8.3742
9/28/2018 01:18:18	R1809111-001	B (249.772 nm)	0.70	0.5793 (ppm)	13342.7083
9/28/2018 01:18:18	R1809111-001	Ba (230.424 nm)	0.31	0.2011 (ppm)	5997.3571
9/28/2018 01:18:18	R1809111-001	Be (313.107 nm)	72.16	0.0000 u (ppm)	-418.9059
9/28/2018 01:18:18	R1809111-001	Ca (227.547 nm)	0.76	125.9300 o (ppm)	6489.3996

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:18:18	R1809111-001	Cd (214.439 nm)	45.14	-0.0002 u (ppm)	8.8757
9/28/2018 01:18:18	R1809111-001	Co (230.786 nm)	25.58	0.0013 (ppm)	7.3279
9/28/2018 01:18:18	R1809111-001	Cr (267.716 nm)	19.15	-0.0003 u (ppm)	-1.9716
9/28/2018 01:18:18	R1809111-001	Cu (327.395 nm)	54.50	0.0004 (ppm)	59.0331
9/28/2018 01:18:18	R1809111-001	Fe (234.350 nm)	0.62	1.5136 (ppm)	14432.5586
9/28/2018 01:18:18	R1809111-001	K (766.491 nm)	0.80	9.5564 (ppm)	28319.6724
9/28/2018 01:18:18	R1809111-001	Mg (279.078 nm)	0.68	26.0367 (ppm)	44264.4909
9/28/2018 01:18:18	R1809111-001	Mn (257.610 nm)	0.57	2.1410 o (ppm)	579684.2925
9/28/2018 01:18:18	R1809111-001	Mo (202.032 nm)	8.18	-0.0061 u (ppm)	4.1482
9/28/2018 01:18:18	R1809111-001	Na (588.995 nm)	0.73	91.3800 o (ppm)	3989891.5770
9/28/2018 01:18:18	R1809111-001	Ni (230.299 nm)	44.01	0.0035 (ppm)	2.9754
9/28/2018 01:18:18	R1809111-001	Pb (220.353 nm)	> 100.00	-0.0014 u (ppm)	0.2396
9/28/2018 01:18:18	R1809111-001	Sb (217.582 nm)	> 100.00	0.0018 u (ppm)	3.1940
9/28/2018 01:18:18	R1809111-001	Se (196.026 nm)	> 100.00	-0.0023 u (ppm)	2.8212
9/28/2018 01:18:18	R1809111-001	Sn (189.925 nm)	38.27	-0.0021 u (ppm)	-1.7956
9/28/2018 01:18:18	R1809111-001	Sr (216.596 nm)	0.85	0.6268 (ppm)	8202.9546
9/28/2018 01:18:18	R1809111-001	Ti (336.122 nm)	28.51	-0.0009 u (ppm)	80.6781
9/28/2018 01:18:18	R1809111-001	Tl (351.923 nm)	> 100.00	0.0007 u (ppm)	14.3246
9/28/2018 01:18:18	R1809111-001	V (292.401 nm)	38.58	0.0006 (ppm)	149.8267
9/28/2018 01:18:18	R1809111-001	Y (360.074 nm)	0.82	0.94 (Ratio)	989877.53
9/28/2018 01:18:18	R1809111-001	Y_R (360.074 nm)	0.82	0.94 (Ratio)	990072.03
9/28/2018 01:18:18	R1809111-001	Zn (213.857 nm)	8.61	0.0057 (ppm)	118.6563
9/28/2018 01:21:31	R1809111-002	Ag (328.068 nm)	71.80	0.0002 (ppm)	-173.5742
9/28/2018 01:21:31	R1809111-002	Al (394.401 nm)	2.15	0.0208 (ppm)	350.0580
9/28/2018 01:21:31	R1809111-002	As (188.980 nm)	20.52	0.0097 (ppm)	6.9330
9/28/2018 01:21:31	R1809111-002	B (249.772 nm)	0.66	0.2701 (ppm)	6232.7642
9/28/2018 01:21:31	R1809111-002	Ba (230.424 nm)	0.41	0.1509 (ppm)	4507.3270
9/28/2018 01:21:31	R1809111-002	Be (313.107 nm)	54.24	0.0000 u (ppm)	-425.4195
9/28/2018 01:21:31	R1809111-002	Ca (227.547 nm)	0.87	106.6071 o (ppm)	5494.7089
9/28/2018 01:21:31	R1809111-002	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	12.0794
9/28/2018 01:21:31	R1809111-002	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-6.0174
9/28/2018 01:21:31	R1809111-002	Cr (267.716 nm)	5.70	-0.0013 u (ppm)	-48.1769
9/28/2018 01:21:31	R1809111-002	Cu (327.395 nm)	> 100.00	0.0001 u (ppm)	44.3873
9/28/2018 01:21:31	R1809111-002	Fe (234.350 nm)	0.46	1.6478 (ppm)	15705.8924
9/28/2018 01:21:31	R1809111-002	K (766.491 nm)	0.93	2.3934 (ppm)	7059.5122
9/28/2018 01:21:31	R1809111-002	Mg (279.078 nm)	0.62	19.3589 (ppm)	32911.8589
9/28/2018 01:21:31	R1809111-002	Mn (257.610 nm)	0.53	2.0025 o (ppm)	542184.1774
9/28/2018 01:21:31	R1809111-002	Mo (202.032 nm)	10.62	-0.0071 u (ppm)	-0.0322
9/28/2018 01:21:31	R1809111-002	Na (588.995 nm)	0.99	43.0126 (ppm)	1874446.2667
9/28/2018 01:21:31	R1809111-002	Ni (230.299 nm)	1.95	-0.0096 u (ppm)	-73.3649
9/28/2018 01:21:31	R1809111-002	Pb (220.353 nm)	> 100.00	0.0003 u (ppm)	3.6068
9/28/2018 01:21:31	R1809111-002	Sb (217.582 nm)	84.04	0.0017 (ppm)	3.0870
9/28/2018 01:21:31	R1809111-002	Se (196.026 nm)	> 100.00	-0.0006 u (ppm)	4.2386
9/28/2018 01:21:31	R1809111-002	Sn (189.925 nm)	36.82	-0.0015 u (ppm)	-1.0516
9/28/2018 01:21:31	R1809111-002	Sr (216.596 nm)	1.42	0.6508 (ppm)	8517.9931
9/28/2018 01:21:31	R1809111-002	Ti (336.122 nm)	10.07	-0.0017 u (ppm)	-71.9041
9/28/2018 01:21:31	R1809111-002	Tl (351.923 nm)	24.54	0.0012 (ppm)	15.4613
9/28/2018 01:21:31	R1809111-002	V (292.401 nm)	> 100.00	0.0001 u (ppm)	132.8631
9/28/2018 01:21:31	R1809111-002	Y (360.074 nm)	0.96	0.95 (Ratio)	1007567.69
9/28/2018 01:21:31	R1809111-002	Y_R (360.074 nm)	0.96	0.95 (Ratio)	1007762.34
9/28/2018 01:21:31	R1809111-002	Zn (213.857 nm)	0.72	0.0035 (ppm)	63.3223

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:24:45	R1809111-002L	Ag (328.068 nm)	40.42	0.0002 (ppm)	-173.1737
9/28/2018 01:24:45	R1809111-002L	Al (394.401 nm)	7.28	0.0089 (ppm)	205.0080
9/28/2018 01:24:45	R1809111-002L	As (188.980 nm)	> 100.00	0.0017 u (ppm)	0.6937
9/28/2018 01:24:45	R1809111-002L	B (249.772 nm)	0.96	0.0496 (ppm)	1162.6998
9/28/2018 01:24:45	R1809111-002L	Ba (230.424 nm)	1.40	0.0286 (ppm)	880.9061
9/28/2018 01:24:45	R1809111-002L	Be (313.107 nm)	19.29	0.0000 u (ppm)	-417.3345
9/28/2018 01:24:45	R1809111-002L	Ca (227.547 nm)	0.58	19.4971 (ppm)	1010.5074
9/28/2018 01:24:45	R1809111-002L	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.3409
9/28/2018 01:24:45	R1809111-002L	Co (230.786 nm)	> 100.00	-0.0001 u (ppm)	-4.7791
9/28/2018 01:24:45	R1809111-002L	Cr (267.716 nm)	38.65	-0.0005 u (ppm)	-12.5590
9/28/2018 01:24:45	R1809111-002L	Cu (327.395 nm)	73.83	-0.0001 u (ppm)	31.5637
9/28/2018 01:24:45	R1809111-002L	Fe (234.350 nm)	1.34	0.3283 (ppm)	3182.1527
9/28/2018 01:24:45	R1809111-002L	K (766.491 nm)	0.43	0.4294 (ppm)	1230.0748
9/28/2018 01:24:45	R1809111-002L	Mg (279.078 nm)	1.02	3.7082 (ppm)	6304.7941
9/28/2018 01:24:45	R1809111-002L	Mn (257.610 nm)	1.09	0.3976 (ppm)	107676.6934
9/28/2018 01:24:45	R1809111-002L	Mo (202.032 nm)	10.73	-0.0068 u (ppm)	1.1798
9/28/2018 01:24:45	R1809111-002L	Na (588.995 nm)	0.12	8.1862 (ppm)	351244.8197
9/28/2018 01:24:45	R1809111-002L	Ni (230.299 nm)	13.64	-0.0024 u (ppm)	-31.6544
9/28/2018 01:24:45	R1809111-002L	Pb (220.353 nm)	68.04	-0.0008 u (ppm)	1.4286
9/28/2018 01:24:45	R1809111-002L	Sb (217.582 nm)	80.06	0.0021 (ppm)	3.5439
9/28/2018 01:24:45	R1809111-002L	Se (196.026 nm)	> 100.00	-0.0020 u (ppm)	3.0445
9/28/2018 01:24:45	R1809111-002L	Sn (189.925 nm)	20.96	-0.0024 u (ppm)	-2.0890
9/28/2018 01:24:45	R1809111-002L	Sr (216.596 nm)	1.69	0.1292 (ppm)	1691.8100
9/28/2018 01:24:45	R1809111-002L	Ti (336.122 nm)	6.48	-0.0027 u (ppm)	-246.2777
9/28/2018 01:24:45	R1809111-002L	Tl (351.923 nm)	> 100.00	-0.0001 u (ppm)	12.3631
9/28/2018 01:24:45	R1809111-002L	V (292.401 nm)	> 100.00	-0.0001 u (ppm)	125.1235
9/28/2018 01:24:45	R1809111-002L	Y (360.074 nm)	0.43	1.00 (Ratio)	1051742.65
9/28/2018 01:24:45	R1809111-002L	Y_R (360.074 nm)	0.43	1.00 (Ratio)	1051956.06
9/28/2018 01:24:45	R1809111-002L	Zn (213.857 nm)	1.98	0.0015 (ppm)	12.4408
9/28/2018 01:28:00	Continuing Calibration Verification1	Ag (328.068 nm)	0.62	0.4956 (ppm)	30698.4610
9/28/2018 01:28:00	Continuing Calibration Verification1	Al (394.401 nm)	0.56	9.5009 (ppm)	115219.1904
9/28/2018 01:28:00	Continuing Calibration Verification1	As (188.980 nm)	0.68	0.9644 (ppm)	750.4547
9/28/2018 01:28:00	Continuing Calibration Verification1	B (249.772 nm)	0.69	2.4694 (ppm)	56807.2288
9/28/2018 01:28:00	Continuing Calibration Verification1	Ba (230.424 nm)	0.80	10.0227 (ppm)	297231.4969
9/28/2018 01:28:00	Continuing Calibration Verification1	Be (313.107 nm)	0.65	0.2490 (ppm)	324707.9817
9/28/2018 01:28:00	Continuing Calibration Verification1	Ca (227.547 nm)	0.42	24.0803 (ppm)	1246.4399
9/28/2018 01:28:00	Continuing Calibration Verification1	Cd (214.439 nm)	0.80	0.4941 (ppm)	9724.0893
9/28/2018 01:28:00	Continuing Calibration Verification1	Co (230.786 nm)	0.71	2.5623 (ppm)	22315.5192
9/28/2018 01:28:00	Continuing Calibration Verification1	Cr (267.716 nm)	0.77	0.5127 (ppm)	22207.3857
9/28/2018 01:28:00	Continuing Calibration Verification1	Cu (327.395 nm)	0.58	1.2095 (ppm)	66580.9965
9/28/2018 01:28:00	Continuing Calibration Verification1	Fe (234.350 nm)	0.74	4.8072 (ppm)	45693.0797
9/28/2018 01:28:00	Continuing Calibration Verification1	K (766.491 nm)	0.34	24.0197 (ppm)	71247.8143
9/28/2018 01:28:00	Continuing Calibration Verification1	Mg (279.078 nm)	0.70	24.1830 (ppm)	41113.1226
9/28/2018 01:28:00	Continuing Calibration Verification1	Mn (257.610 nm)	0.76	0.7595 (ppm)	205639.3144
9/28/2018 01:28:00	Continuing Calibration Verification1	Mo (202.032 nm)	1.32	2.5371 (ppm)	10722.1589
9/28/2018 01:28:00	Continuing Calibration Verification1	Na (588.995 nm)	0.53	24.1378 (ppm)	1048923.3306
9/28/2018 01:28:00	Continuing Calibration Verification1	Ni (230.299 nm)	0.70	2.0310 (ppm)	11800.3438
9/28/2018 01:28:00	Continuing Calibration Verification1	Pb (220.353 nm)	0.46	0.4990 (ppm)	976.1673
9/28/2018 01:28:00	Continuing Calibration Verification1	Sb (217.582 nm)	0.42	4.8670 (ppm)	5983.3238
9/28/2018 01:28:00	Continuing Calibration Verification1	Se (196.026 nm)	0.84	0.4794 (ppm)	394.5102
9/28/2018 01:28:00	Continuing Calibration Verification1	Sn (189.925 nm)	0.86	4.9744 (ppm)	5807.5661

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:28:00	Continuing Calibration Verification1	Sr (216.596 nm)	0.71	2.5061 (ppm)	32798.5862
9/28/2018 01:28:00	Continuing Calibration Verification1	Ti (336.122 nm)	0.65	2.4941 (ppm)	465711.1957
9/28/2018 01:28:00	Continuing Calibration Verification1	Tl (351.923 nm)	0.76	0.9940 (ppm)	2426.9942
9/28/2018 01:28:00	Continuing Calibration Verification1	V (292.401 nm)	0.67	2.4876 (ppm)	84598.9929
9/28/2018 01:28:00	Continuing Calibration Verification1	Y (360.074 nm)	0.19	0.97 (Ratio)	1018656.77
9/28/2018 01:28:00	Continuing Calibration Verification1	Y_R (360.074 nm)	0.19	0.97 (Ratio)	1018875.53
9/28/2018 01:28:00	Continuing Calibration Verification1	Zn (213.857 nm)	0.72	0.9833 (ppm)	24702.6965
9/28/2018 01:31:14	Continuing Calibration Blank1	Ag (328.068 nm)	49.74	0.0001 (ppm)	-177.1414
9/28/2018 01:31:14	Continuing Calibration Blank1	Al (394.401 nm)	5.34	-0.0010 u (ppm)	85.0293
9/28/2018 01:31:14	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	0.0012 u (ppm)	0.3248
9/28/2018 01:31:14	Continuing Calibration Blank1	B (249.772 nm)	5.58	0.0013 (ppm)	51.2937
9/28/2018 01:31:14	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	33.5236
9/28/2018 01:31:14	Continuing Calibration Blank1	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-388.7615
9/28/2018 01:31:14	Continuing Calibration Blank1	Ca (227.547 nm)	> 100.00	-0.0139 u (ppm)	6.1354
9/28/2018 01:31:14	Continuing Calibration Blank1	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.7677
9/28/2018 01:31:14	Continuing Calibration Blank1	Co (230.786 nm)	55.47	0.0004 (ppm)	-0.8991
9/28/2018 01:31:14	Continuing Calibration Blank1	Cr (267.716 nm)	37.74	-0.0001 u (ppm)	6.2552
9/28/2018 01:31:14	Continuing Calibration Blank1	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	38.6766
9/28/2018 01:31:14	Continuing Calibration Blank1	Fe (234.350 nm)	49.68	0.0022 (ppm)	87.7894
9/28/2018 01:31:14	Continuing Calibration Blank1	K (766.491 nm)	36.14	0.0230 (ppm)	23.8966
9/28/2018 01:31:14	Continuing Calibration Blank1	Mg (279.078 nm)	> 100.00	-0.0018 u (ppm)	-2.2536
9/28/2018 01:31:14	Continuing Calibration Blank1	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	17.4529
9/28/2018 01:31:14	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	-0.0008 u (ppm)	26.3079
9/28/2018 01:31:14	Continuing Calibration Blank1	Na (588.995 nm)	27.26	0.0099 (ppm)	-6360.6138
9/28/2018 01:31:14	Continuing Calibration Blank1	Ni (230.299 nm)	80.03	0.0005 (ppm)	-14.6372
9/28/2018 01:31:14	Continuing Calibration Blank1	Pb (220.353 nm)	71.46	0.0014 (ppm)	5.7742
9/28/2018 01:31:14	Continuing Calibration Blank1	Sb (217.582 nm)	25.79	0.0030 (ppm)	4.6362
9/28/2018 01:31:14	Continuing Calibration Blank1	Se (196.026 nm)	36.80	0.0028 (ppm)	6.9965
9/28/2018 01:31:14	Continuing Calibration Blank1	Sn (189.925 nm)	> 100.00	0.0002 u (ppm)	0.8782
9/28/2018 01:31:14	Continuing Calibration Blank1	Sr (216.596 nm)	> 100.00	0.0000 u (ppm)	0.5343
9/28/2018 01:31:14	Continuing Calibration Blank1	Ti (336.122 nm)	67.67	0.0019 (ppm)	605.9483
9/28/2018 01:31:14	Continuing Calibration Blank1	Tl (351.923 nm)	66.98	0.0019 (ppm)	17.2728
9/28/2018 01:31:14	Continuing Calibration Blank1	V (292.401 nm)	> 100.00	0.0000 u (ppm)	127.9064
9/28/2018 01:31:14	Continuing Calibration Blank1	Y (360.074 nm)	0.32	1.01 (Ratio)	1063402.82
9/28/2018 01:31:14	Continuing Calibration Blank1	Y_R (360.074 nm)	0.32	1.01 (Ratio)	1063646.16
9/28/2018 01:31:14	Continuing Calibration Blank1	Zn (213.857 nm)	49.46	0.0001 (ppm)	-22.3619
9/28/2018 01:34:29	Contract Required Detection Limit	Ag (328.068 nm)	0.47	0.0098 (ppm)	425.2524
9/28/2018 01:34:29	Contract Required Detection Limit	Al (394.401 nm)	0.11	0.1749 (ppm)	2217.4502
9/28/2018 01:34:29	Contract Required Detection Limit	As (188.980 nm)	7.51	0.0188 (ppm)	13.9909
9/28/2018 01:34:29	Contract Required Detection Limit	B (249.772 nm)	0.34	0.1868 (ppm)	4317.9039
9/28/2018 01:34:29	Contract Required Detection Limit	Ba (230.424 nm)	0.47	0.2022 (ppm)	6027.5873
9/28/2018 01:34:29	Contract Required Detection Limit	Be (313.107 nm)	0.03	0.0047 (ppm)	5742.3230
9/28/2018 01:34:29	Contract Required Detection Limit	Ca (227.547 nm)	2.47	0.9325 (ppm)	54.8535
9/28/2018 01:34:29	Contract Required Detection Limit	Cd (214.439 nm)	0.81	0.0097 (ppm)	203.9444
9/28/2018 01:34:29	Contract Required Detection Limit	Co (230.786 nm)	2.14	0.0493 (ppm)	425.7553
9/28/2018 01:34:29	Contract Required Detection Limit	Cr (267.716 nm)	0.99	0.0110 (ppm)	484.5815
9/28/2018 01:34:29	Contract Required Detection Limit	Cu (327.395 nm)	1.22	0.0240 (ppm)	1360.3160
9/28/2018 01:34:29	Contract Required Detection Limit	Fe (234.350 nm)	0.43	0.1013 (ppm)	1028.1217
9/28/2018 01:34:29	Contract Required Detection Limit	K (766.491 nm)	0.93	0.9160 (ppm)	2674.4728
9/28/2018 01:34:29	Contract Required Detection Limit	Mg (279.078 nm)	0.25	0.9738 (ppm)	1656.2072
9/28/2018 01:34:29	Contract Required Detection Limit	Mn (257.610 nm)	0.04	0.0152 (ppm)	4140.5837

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:34:29	Contract Required Detection Limit	Mo (202.032 nm)	4.95	0.0194 R (ppm) 78%	111.4870 R
9/28/2018 01:34:29	Contract Required Detection Limit	Na (588.995 nm)	0.49	0.9913 (ppm)	36561.2910
9/28/2018 01:34:29	Contract Required Detection Limit	Ni (230.299 nm)	4.49	0.0401 (ppm)	216.0447
9/28/2018 01:34:29	Contract Required Detection Limit	Pb (220.353 nm)	12.68	0.0095 (ppm)	21.4127
9/28/2018 01:34:29	Contract Required Detection Limit	Sb (217.582 nm)	2.68	0.0582 (ppm)	72.4948
9/28/2018 01:34:29	Contract Required Detection Limit	Se (196.026 nm)	17.01	0.0117 (ppm)	14.1656
9/28/2018 01:34:29	Contract Required Detection Limit	Sn (189.925 nm)	0.35	0.4968 (ppm)	580.6433
9/28/2018 01:34:29	Contract Required Detection Limit	Sr (216.596 nm)	0.78	0.0985 (ppm)	1289.7083
9/28/2018 01:34:29	Contract Required Detection Limit	Ti (336.122 nm)	0.97	0.0476 (ppm)	9127.7933
9/28/2018 01:34:29	Contract Required Detection Limit	Tl (351.923 nm)	6.46	0.0201 (ppm)	61.5303
9/28/2018 01:34:29	Contract Required Detection Limit	V (292.401 nm)	0.25	0.0480 (ppm)	1757.4091
9/28/2018 01:34:29	Contract Required Detection Limit	Y (360.074 nm)	0.49	1.01 (Ratio)	1065989.14
9/28/2018 01:34:29	Contract Required Detection Limit	Y_R (360.074 nm)	0.49	1.01 (Ratio)	1066229.42
9/28/2018 01:34:29	Contract Required Detection Limit	Zn (213.857 nm)	0.54	0.0191 (ppm)	453.3081
9/28/2018 01:37:44	Interference Check Solution A	Ag (328.068 nm)	26.04	0.0002 (ppm)	-171.3251
9/28/2018 01:37:44	Interference Check Solution A	Al (394.401 nm)	0.40	264.5587 o (ppm)	3205744.5597
9/28/2018 01:37:44	Interference Check Solution A	As (188.980 nm)	> 100.00	-0.0008 u (ppm)	-1.2220
9/28/2018 01:37:44	Interference Check Solution A	B (249.772 nm)	0.75	0.0469 (ppm)	1100.4728
9/28/2018 01:37:44	Interference Check Solution A	Ba (230.424 nm)	30.77	-0.0004 u (ppm)	20.3511
9/28/2018 01:37:44	Interference Check Solution A	Be (313.107 nm)	9.47	-0.0001 u (ppm)	-500.0044
9/28/2018 01:37:44	Interference Check Solution A	Ca (227.547 nm)	0.26	269.1124 o (ppm)	13860.0607
9/28/2018 01:37:44	Interference Check Solution A	Cd (214.439 nm)	7.05	-0.0010 Ku (ppm)	-6.9010 K
9/28/2018 01:37:44	Interference Check Solution A	Co (230.786 nm)	16.91	-0.0023 u (ppm)	-24.3225
9/28/2018 01:37:44	Interference Check Solution A	Cr (267.716 nm)	21.16	-0.0005 u (ppm)	-11.5858
9/28/2018 01:37:44	Interference Check Solution A	Cu (327.395 nm)	23.62	0.0006 (ppm)	70.0705
9/28/2018 01:37:44	Interference Check Solution A	Fe (234.350 nm)	0.39	88.8228 o (ppm)	843103.9421
9/28/2018 01:37:44	Interference Check Solution A	K (766.491 nm)	40.98	0.0212 (ppm)	18.4076
9/28/2018 01:37:44	Interference Check Solution A	Mg (279.078 nm)	0.48	259.2063 o (ppm)	440665.7082
9/28/2018 01:37:44	Interference Check Solution A	Mn (257.610 nm)	1.04	0.0015 (ppm)	411.3154
9/28/2018 01:37:44	Interference Check Solution A	Mo (202.032 nm)	10.21	-0.0062 u (ppm)	3.5881
9/28/2018 01:37:44	Interference Check Solution A	Na (588.995 nm)	20.46	-0.0082 u (ppm)	-7151.1552
9/28/2018 01:37:44	Interference Check Solution A	Ni (230.299 nm)	11.67	-0.0022 u (ppm)	-29.9258
9/28/2018 01:37:44	Interference Check Solution A	Pb (220.353 nm)	> 100.00	0.0006 u (ppm)	4.0419
9/28/2018 01:37:44	Interference Check Solution A	Sb (217.582 nm)	> 100.00	0.0032 u (ppm)	4.9170
9/28/2018 01:37:44	Interference Check Solution A	Se (196.026 nm)	> 100.00	-0.0008 u (ppm)	4.0260
9/28/2018 01:37:44	Interference Check Solution A	Sn (189.925 nm)	> 100.00	-0.0012 u (ppm)	-0.7008
9/28/2018 01:37:44	Interference Check Solution A	Sr (216.596 nm)	2.29	0.0236 (ppm)	309.7828
9/28/2018 01:37:44	Interference Check Solution A	Ti (336.122 nm)	57.10	-0.0006 u (ppm)	137.0099
9/28/2018 01:37:44	Interference Check Solution A	Tl (351.923 nm)	40.78	0.0025 (ppm)	18.7032
9/28/2018 01:37:44	Interference Check Solution A	V (292.401 nm)	5.77	0.0029 (ppm)	227.1823
9/28/2018 01:37:44	Interference Check Solution A	Y (360.074 nm)	0.21	0.88 (Ratio)	931339.56
9/28/2018 01:37:44	Interference Check Solution A	Y_R (360.074 nm)	0.21	0.88 (Ratio)	931506.65
9/28/2018 01:37:44	Interference Check Solution A	Zn (213.857 nm)	1.40	0.0111 K (ppm)	254.3235 K
9/28/2018 01:40:58	Interference Check Solution AB	Ag (328.068 nm)	0.75	0.2101 (ppm)	12906.9524
9/28/2018 01:40:58	Interference Check Solution AB	Al (394.401 nm)	0.74	262.9522 o (ppm)	3186279.3887
9/28/2018 01:40:58	Interference Check Solution AB	As (188.980 nm)	1.60	0.0978 (ppm)	75.5261
9/28/2018 01:40:58	Interference Check Solution AB	B (249.772 nm)	0.22	0.0439 (ppm)	1030.5354
9/28/2018 01:40:58	Interference Check Solution AB	Ba (230.424 nm)	0.66	0.5045 (ppm)	14991.5524
9/28/2018 01:40:58	Interference Check Solution AB	Be (313.107 nm)	0.91	0.4876 (ppm)	636256.2973
9/28/2018 01:40:58	Interference Check Solution AB	Ca (227.547 nm)	0.61	267.2811 o (ppm)	13765.7917
9/28/2018 01:40:58	Interference Check Solution AB	Cd (214.439 nm)	0.82	0.9489 (ppm)	18663.8360

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:40:58	Interference Check Solution AB	Co (230.786 nm)	0.84	0.4777 (ppm)	4157.3259
9/28/2018 01:40:58	Interference Check Solution AB	Cr (267.716 nm)	0.80	0.4917 (ppm)	21298.1319
9/28/2018 01:40:58	Interference Check Solution AB	Cu (327.395 nm)	0.66	0.5195 (ppm)	28616.9063
9/28/2018 01:40:58	Interference Check Solution AB	Fe (234.350 nm)	0.72	88.6151 o (ppm)	841132.0689
9/28/2018 01:40:58	Interference Check Solution AB	K (766.491 nm)	78.19	0.0076 (ppm)	-21.7203
9/28/2018 01:40:58	Interference Check Solution AB	Mg (279.078 nm)	0.78	257.7402 o (ppm)	438173.2620
9/28/2018 01:40:58	Interference Check Solution AB	Mn (257.610 nm)	0.75	0.4884 (ppm)	132243.6144
9/28/2018 01:40:58	Interference Check Solution AB	Mo (202.032 nm)	3.88	-0.0080 u (ppm)	-4.1285
9/28/2018 01:40:58	Interference Check Solution AB	Na (588.995 nm)	16.32	0.0052 (ppm)	-6566.9622
9/28/2018 01:40:58	Interference Check Solution AB	Ni (230.299 nm)	0.64	0.9316 (ppm)	5402.9624
9/28/2018 01:40:58	Interference Check Solution AB	Pb (220.353 nm)	7.16	0.0468 (ppm)	94.1498
9/28/2018 01:40:58	Interference Check Solution AB	Sb (217.582 nm)	0.16	0.6049 (ppm)	744.4603
9/28/2018 01:40:58	Interference Check Solution AB	Se (196.026 nm)	2.35	0.0483 (ppm)	43.9576
9/28/2018 01:40:58	Interference Check Solution AB	Sn (189.925 nm)	42.06	-0.0028 u (ppm)	-2.5582
9/28/2018 01:40:58	Interference Check Solution AB	Sr (216.596 nm)	4.22	0.0237 (ppm)	311.3157
9/28/2018 01:40:58	Interference Check Solution AB	Ti (336.122 nm)	21.60	-0.0011 u (ppm)	48.8990
9/28/2018 01:40:58	Interference Check Solution AB	Tl (351.923 nm)	3.31	0.1148 (ppm)	291.4151
9/28/2018 01:40:58	Interference Check Solution AB	V (292.401 nm)	0.90	0.4984 (ppm)	17052.6380
9/28/2018 01:40:58	Interference Check Solution AB	Y (360.074 nm)	0.10	0.88 (Ratio)	932172.06
9/28/2018 01:40:58	Interference Check Solution AB	Y_R (360.074 nm)	0.10	0.88 (Ratio)	932328.40
9/28/2018 01:40:58	Interference Check Solution AB	Zn (213.857 nm)	0.76	0.9934 (ppm)	24956.9632
9/28/2018 01:44:12	Continuing Calibration Verification1	Ag (328.068 nm)	0.54	0.4956 (ppm)	30699.5186
9/28/2018 01:44:12	Continuing Calibration Verification1	Al (394.401 nm)	0.34	9.5292 (ppm)	115563.0501
9/28/2018 01:44:12	Continuing Calibration Verification1	As (188.980 nm)	1.34	0.9624 (ppm)	748.8862
9/28/2018 01:44:12	Continuing Calibration Verification1	B (249.772 nm)	0.56	2.4660 (ppm)	56729.5314
9/28/2018 01:44:12	Continuing Calibration Verification1	Ba (230.424 nm)	0.85	10.0409 (ppm)	297771.2645
9/28/2018 01:44:12	Continuing Calibration Verification1	Be (313.107 nm)	0.82	0.2488 (ppm)	324397.8426
9/28/2018 01:44:12	Continuing Calibration Verification1	Ca (227.547 nm)	0.61	24.0934 (ppm)	1247.1130
9/28/2018 01:44:12	Continuing Calibration Verification1	Cd (214.439 nm)	0.95	0.4931 (ppm)	9704.4718
9/28/2018 01:44:12	Continuing Calibration Verification1	Co (230.786 nm)	0.66	2.5601 (ppm)	22296.4946
9/28/2018 01:44:12	Continuing Calibration Verification1	Cr (267.716 nm)	0.85	0.5125 (ppm)	22197.7756
9/28/2018 01:44:12	Continuing Calibration Verification1	Cu (327.395 nm)	0.31	1.2073 (ppm)	66460.9160
9/28/2018 01:44:12	Continuing Calibration Verification1	Fe (234.350 nm)	0.65	4.8498 (ppm)	46097.0603
9/28/2018 01:44:12	Continuing Calibration Verification1	K (766.491 nm)	0.31	24.0408 (ppm)	71310.3499
9/28/2018 01:44:12	Continuing Calibration Verification1	Mg (279.078 nm)	0.67	24.2084 (ppm)	41156.2737
9/28/2018 01:44:12	Continuing Calibration Verification1	Mn (257.610 nm)	0.64	0.7583 (ppm)	205333.8545
9/28/2018 01:44:12	Continuing Calibration Verification1	Mo (202.032 nm)	0.88	2.5158 (ppm)	10632.7384
9/28/2018 01:44:12	Continuing Calibration Verification1	Na (588.995 nm)	0.27	24.0823 (ppm)	1046494.3141
9/28/2018 01:44:12	Continuing Calibration Verification1	Ni (230.299 nm)	0.67	2.0275 (ppm)	11779.7630
9/28/2018 01:44:12	Continuing Calibration Verification1	Pb (220.353 nm)	0.76	0.5006 (ppm)	979.2631
9/28/2018 01:44:12	Continuing Calibration Verification1	Sb (217.582 nm)	0.42	4.8642 (ppm)	5979.8368
9/28/2018 01:44:12	Continuing Calibration Verification1	Se (196.026 nm)	0.27	0.4837 (ppm)	398.0121
9/28/2018 01:44:12	Continuing Calibration Verification1	Sn (189.925 nm)	0.68	4.9740 (ppm)	5807.0631
9/28/2018 01:44:12	Continuing Calibration Verification1	Sr (216.596 nm)	0.96	2.5052 (ppm)	32786.1567
9/28/2018 01:44:12	Continuing Calibration Verification1	Ti (336.122 nm)	0.55	2.4932 (ppm)	465531.5935
9/28/2018 01:44:12	Continuing Calibration Verification1	Tl (351.923 nm)	0.76	0.9907 (ppm)	2419.2028
9/28/2018 01:44:12	Continuing Calibration Verification1	V (292.401 nm)	0.70	2.4894 (ppm)	84661.5662
9/28/2018 01:44:12	Continuing Calibration Verification1	Y (360.074 nm)	0.07	0.96 (Ratio)	1017545.72
9/28/2018 01:44:12	Continuing Calibration Verification1	Y_R (360.074 nm)	0.07	0.96 (Ratio)	1017734.93
9/28/2018 01:44:12	Continuing Calibration Verification1	Zn (213.857 nm)	0.74	0.9834 (ppm)	24706.4102
9/28/2018 01:47:27	Continuing Calibration Blank1	Ag (328.068 nm)	88.23	0.0001 u (ppm)	-176.4046

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:47:27	Continuing Calibration Blank1	Al (394.401 nm)	30.35	0.0013 (ppm)	113.1083
9/28/2018 01:47:27	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	-0.0002 u (ppm)	-0.7560
9/28/2018 01:47:27	Continuing Calibration Blank1	B (249.772 nm)	21.50	0.0012 (ppm)	50.7665
9/28/2018 01:47:27	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	32.1651
9/28/2018 01:47:27	Continuing Calibration Blank1	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-380.0806
9/28/2018 01:47:27	Continuing Calibration Blank1	Ca (227.547 nm)	> 100.00	-0.0117 u (ppm)	6.2471
9/28/2018 01:47:27	Continuing Calibration Blank1	Cd (214.439 nm)	59.72	-0.0001 u (ppm)	12.3976
9/28/2018 01:47:27	Continuing Calibration Blank1	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-6.0643
9/28/2018 01:47:27	Continuing Calibration Blank1	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	9.6754
9/28/2018 01:47:27	Continuing Calibration Blank1	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	39.6857
9/28/2018 01:47:27	Continuing Calibration Blank1	Fe (234.350 nm)	29.61	0.0054 (ppm)	118.2012
9/28/2018 01:47:27	Continuing Calibration Blank1	K (766.491 nm)	32.48	0.0264 (ppm)	33.9139
9/28/2018 01:47:27	Continuing Calibration Blank1	Mg (279.078 nm)	77.60	0.0010 (ppm)	2.4474
9/28/2018 01:47:27	Continuing Calibration Blank1	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	15.6931
9/28/2018 01:47:27	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	0.0000 u (ppm)	29.9527
9/28/2018 01:47:27	Continuing Calibration Blank1	Na (588.995 nm)	26.04	0.0068 (ppm)	-6494.1576
9/28/2018 01:47:27	Continuing Calibration Blank1	Ni (230.299 nm)	> 100.00	-0.0002 u (ppm)	-18.6053
9/28/2018 01:47:27	Continuing Calibration Blank1	Pb (220.353 nm)	60.15	-0.0008 u (ppm)	1.4273
9/28/2018 01:47:27	Continuing Calibration Blank1	Sb (217.582 nm)	4.01	0.0047 (ppm)	6.7280
9/28/2018 01:47:27	Continuing Calibration Blank1	Se (196.026 nm)	90.27	0.0016 (ppm)	5.9830
9/28/2018 01:47:27	Continuing Calibration Blank1	Sn (189.925 nm)	83.71	0.0011 (ppm)	1.9825
9/28/2018 01:47:27	Continuing Calibration Blank1	Sr (216.596 nm)	85.24	0.0003 (ppm)	4.8697
9/28/2018 01:47:27	Continuing Calibration Blank1	Ti (336.122 nm)	70.15	0.0016 (ppm)	553.5755
9/28/2018 01:47:27	Continuing Calibration Blank1	Tl (351.923 nm)	54.43	0.0035 (ppm)	21.1809
9/28/2018 01:47:27	Continuing Calibration Blank1	V (292.401 nm)	71.15	0.0002 (ppm)	135.1217
9/28/2018 01:47:27	Continuing Calibration Blank1	Y (360.074 nm)	0.43	1.01 (Ratio)	1062972.30
9/28/2018 01:47:27	Continuing Calibration Blank1	Y_R (360.074 nm)	0.43	1.01 (Ratio)	1063199.89
9/28/2018 01:47:27	Continuing Calibration Blank1	Zn (213.857 nm)	66.99	0.0001 (ppm)	-22.4143
9/28/2018 01:50:41	PBW-322635	Ag (328.068 nm)	85.65	0.0001 (ppm)	-175.8934
9/28/2018 01:50:41	PBW-322635	Al (394.401 nm)	4.90	0.0150 (ppm)	279.7935
9/28/2018 01:50:41	PBW-322635	As (188.980 nm)	> 100.00	0.0000 u (ppm)	-0.5877
9/28/2018 01:50:41	PBW-322635	B (249.772 nm)	10.99	0.0012 (ppm)	48.7576
9/28/2018 01:50:41	PBW-322635	Ba (230.424 nm)	5.41	-0.0008 u (ppm)	7.9422
9/28/2018 01:50:41	PBW-322635	Be (313.107 nm)	15.13	0.0000 u (ppm)	-421.0910
9/28/2018 01:50:41	PBW-322635	Ca (227.547 nm)	60.45	0.0536 (ppm)	9.6064
9/28/2018 01:50:41	PBW-322635	Cd (214.439 nm)	49.72	-0.0002 u (ppm)	9.0664
9/28/2018 01:50:41	PBW-322635	Co (230.786 nm)	> 100.00	-0.0001 u (ppm)	-4.9628
9/28/2018 01:50:41	PBW-322635	Cr (267.716 nm)	27.85	-0.0003 u (ppm)	-3.6289
9/28/2018 01:50:41	PBW-322635	Cu (327.395 nm)	> 100.00	-0.0001 u (ppm)	35.5209
9/28/2018 01:50:41	PBW-322635	Fe (234.350 nm)	5.39	0.0067 (ppm)	130.4444
9/28/2018 01:50:41	PBW-322635	K (766.491 nm)	21.18	0.0359 (ppm)	62.0618
9/28/2018 01:50:41	PBW-322635	Mg (279.078 nm)	31.29	0.0026 (ppm)	5.0976
9/28/2018 01:50:41	PBW-322635	Mn (257.610 nm)	3.94	0.0005 (ppm)	160.7615
9/28/2018 01:50:41	PBW-322635	Mo (202.032 nm)	9.82	-0.0056 u (ppm)	6.2421
9/28/2018 01:50:41	PBW-322635	Na (588.995 nm)	1.11	0.0533 (ppm)	-4461.5264
9/28/2018 01:50:41	PBW-322635	Ni (230.299 nm)	> 100.00	0.0008 u (ppm)	-12.8665
9/28/2018 01:50:41	PBW-322635	Pb (220.353 nm)	> 100.00	0.0003 u (ppm)	3.6356
9/28/2018 01:50:41	PBW-322635	Sb (217.582 nm)	49.93	0.0023 (ppm)	3.7935
9/28/2018 01:50:41	PBW-322635	Se (196.026 nm)	> 100.00	-0.0004 u (ppm)	4.3505
9/28/2018 01:50:41	PBW-322635	Sn (189.925 nm)	> 100.00	0.0001 u (ppm)	0.8476
9/28/2018 01:50:41	PBW-322635	Sr (216.596 nm)	34.92	-0.0002 u (ppm)	-2.6700

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:50:41	PBW-322635	Ti (336.122 nm)	22.66	-0.0016 u (ppm)	-44.0661
9/28/2018 01:50:41	PBW-322635	Tl (351.923 nm)	56.91	-0.0007 u (ppm)	10.8480
9/28/2018 01:50:41	PBW-322635	V (292.401 nm)	18.59	-0.0004 u (ppm)	114.4836
9/28/2018 01:50:41	PBW-322635	Y (360.074 nm)	1.58	1.02 (Ratio)	1079795.65
9/28/2018 01:50:41	PBW-322635	Y_R (360.074 nm)	1.58	1.02 (Ratio)	1080029.84
9/28/2018 01:50:41	PBW-322635	Zn (213.857 nm)	1.57	0.0073 (ppm)	158.1274
9/28/2018 01:53:55	LCSW-322635	Ag (328.068 nm)	0.95	0.0497 (ppm)	2911.2988
9/28/2018 01:53:55	LCSW-322635	Al (394.401 nm)	1.22	1.8773 (ppm)	22845.2797
9/28/2018 01:53:55	LCSW-322635	As (188.980 nm)	5.73	0.0392 (ppm)	29.9175
9/28/2018 01:53:55	LCSW-322635	B (249.772 nm)	1.05	0.9962 (ppm)	22930.6999
9/28/2018 01:53:55	LCSW-322635	Be (230.424 nm)	1.00	2.0278 (ppm)	60162.2757
9/28/2018 01:53:55	LCSW-322635	Be (313.107 nm)	1.02	0.0494 (ppm)	64076.0567
9/28/2018 01:53:55	LCSW-322635	Ca (227.547 nm)	2.75	2.0963 (ppm)	114.7585
9/28/2018 01:53:55	LCSW-322635	Cd (214.439 nm)	1.04	0.0504 (ppm)	1004.9030
9/28/2018 01:53:55	LCSW-322635	Co (230.786 nm)	0.99	0.5128 (ppm)	4463.0263
9/28/2018 01:53:55	LCSW-322635	Cr (267.716 nm)	1.07	0.2007 (ppm)	8697.4422
9/28/2018 01:53:55	LCSW-322635	Cu (327.395 nm)	1.17	0.2455 (ppm)	13544.9743
9/28/2018 01:53:55	LCSW-322635	Fe (234.350 nm)	1.00	0.9695 (ppm)	9268.4688
9/28/2018 01:53:55	LCSW-322635	K (766.491 nm)	1.31	18.9683 (ppm)	56254.8095
9/28/2018 01:53:55	LCSW-322635	Mg (279.078 nm)	1.01	1.9853 (ppm)	3375.9038
9/28/2018 01:53:55	LCSW-322635	Mn (257.610 nm)	1.02	0.4965 (ppm)	134451.7403
9/28/2018 01:53:55	LCSW-322635	Mo (202.032 nm)	1.39	0.4819 (ppm)	2060.9196
9/28/2018 01:53:55	LCSW-322635	Na (588.995 nm)	1.54	19.2934 (ppm)	837042.0769
9/28/2018 01:53:55	LCSW-322635	Ni (230.299 nm)	1.00	0.4988 (ppm)	2885.0164
9/28/2018 01:53:55	LCSW-322635	Pb (220.353 nm)	1.01	0.5089 (ppm)	995.5237
9/28/2018 01:53:55	LCSW-322635	Sb (217.582 nm)	1.07	0.4683 (ppm)	576.5393
9/28/2018 01:53:55	LCSW-322635	Se (196.026 nm)	1.64	1.0330 (ppm)	844.7172
9/28/2018 01:53:55	LCSW-322635	Sn (189.925 nm)	0.96	5.0144 (ppm)	5854.2298
9/28/2018 01:53:55	LCSW-322635	Sr (216.596 nm)	0.85	2.0044 (ppm)	26233.1004
9/28/2018 01:53:55	LCSW-322635	Ti (336.122 nm)	1.21	0.4901 (ppm)	91717.1160
9/28/2018 01:53:55	LCSW-322635	Tl (351.923 nm)	1.32	1.9017 (ppm)	4631.9935
9/28/2018 01:53:55	LCSW-322635	V (292.401 nm)	1.10	0.4894 (ppm)	16747.2190
9/28/2018 01:53:55	LCSW-322635	Y (360.074 nm)	1.30	0.99 (Ratio)	1045746.75
9/28/2018 01:53:55	LCSW-322635	Y_R (360.074 nm)	1.30	0.99 (Ratio)	1045949.34
9/28/2018 01:53:55	LCSW-322635	Zn (213.857 nm)	1.15	0.5038 (ppm)	12644.5259
9/28/2018 01:57:10	R1808906-001	Ag (328.068 nm)	26.90	0.0002 (ppm)	-171.2822
9/28/2018 01:57:10	R1808906-001	Al (394.401 nm)	0.74	1.2693 (ppm)	15477.1175
9/28/2018 01:57:10	R1808906-001	As (188.980 nm)	6.43	0.0279 (ppm)	21.1143
9/28/2018 01:57:10	R1808906-001	B (249.772 nm)	0.66	0.3260 (ppm)	7518.5629
9/28/2018 01:57:10	R1808906-001	Be (230.424 nm)	0.92	0.4331 (ppm)	12875.8288
9/28/2018 01:57:10	R1808906-001	Be (313.107 nm)	4.49	0.0002 (ppm)	-105.1922
9/28/2018 01:57:10	R1808906-001	Ca (227.547 nm)	0.76	171.2087 o (ppm)	8820.2309
9/28/2018 01:57:10	R1808906-001	Cd (214.439 nm)	22.04	0.0008 (ppm)	28.7582
9/28/2018 01:57:10	R1808906-001	Co (230.786 nm)	3.19	0.0373 (ppm)	320.8282
9/28/2018 01:57:10	R1808906-001	Cr (267.716 nm)	1.22	0.0201 (ppm)	878.4868
9/28/2018 01:57:10	R1808906-001	Cu (327.395 nm)	1.39	0.0362 (ppm)	2028.7643
9/28/2018 01:57:10	R1808906-001	Fe (234.350 nm)	0.40	61.8354 o (ppm)	586959.8672
9/28/2018 01:57:10	R1808906-001	K (766.491 nm)	1.01	11.1915 (ppm)	33172.6639
9/28/2018 01:57:10	R1808906-001	Mg (279.078 nm)	0.69	47.6360 (ppm)	80984.5323
9/28/2018 01:57:10	R1808906-001	Mn (257.610 nm)	0.57	4.7222 o (ppm)	1278550.8152
9/28/2018 01:57:10	R1808906-001	Mo (202.032 nm)	24.08	0.0062 (ppm)	55.8403

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 01:57:10	R1808906-001	Na (588.995 nm)	1.19	87.2136 o (ppm)	3807666.5594
9/28/2018 01:57:10	R1808906-001	Ni (230.299 nm)	1.61	0.1266 (ppm)	719.2200
9/28/2018 01:57:10	R1808906-001	Pb (220.353 nm)	25.93	0.0027 (ppm)	8.1287
9/28/2018 01:57:10	R1808906-001	Sb (217.582 nm)	90.40	-0.0011 u (ppm)	-0.3875
9/28/2018 01:57:10	R1808906-001	Se (196.026 nm)	21.79	0.0030 (ppm)	7.1579
9/28/2018 01:57:10	R1808906-001	Sn (189.925 nm)	> 100.00	0.0002 u (ppm)	0.9682
9/28/2018 01:57:10	R1808906-001	Sr (216.596 nm)	0.98	0.7521 (ppm)	9844.0597
9/28/2018 01:57:10	R1808906-001	Ti (336.122 nm)	1.75	0.0348 (ppm)	6746.4082
9/28/2018 01:57:10	R1808906-001	Tl (351.923 nm)	> 100.00	0.0017 u (ppm)	16.7289
9/28/2018 01:57:10	R1808906-001	V (292.401 nm)	2.10	0.0052 (ppm)	304.7052
9/28/2018 01:57:10	R1808906-001	Y (360.074 nm)	1.02	0.93 (Ratio)	978912.63
9/28/2018 01:57:10	R1808906-001	Y_R (360.074 nm)	1.02	0.93 (Ratio)	979102.96
9/28/2018 01:57:10	R1808906-001	Zn (213.857 nm)	0.45	0.0368 (ppm)	900.3205
9/28/2018 02:00:24	R1808906-002	Ag (328.068 nm)	28.29	0.0003 (ppm)	-167.4618
9/28/2018 02:00:24	R1808906-002	Al (394.401 nm)	1.02	5.5260 (ppm)	67055.4441
9/28/2018 02:00:24	R1808906-002	As (188.980 nm)	38.41	0.0113 (ppm)	8.1690
9/28/2018 02:00:24	R1808906-002	B (249.772 nm)	0.88	0.2498 (ppm)	5765.9202
9/28/2018 02:00:24	R1808906-002	Ba (230.424 nm)	1.12	0.6057 (ppm)	17993.8511
9/28/2018 02:00:24	R1808906-002	Be (313.107 nm)	1.16	0.0005 (ppm)	288.2386
9/28/2018 02:00:24	R1808906-002	Ca (227.547 nm)	1.10	220.2339 o (ppm)	11343.9218
9/28/2018 02:00:24	R1808906-002	Cd (214.439 nm)	4.65	0.0043 (ppm)	98.1274
9/28/2018 02:00:24	R1808906-002	Co (230.786 nm)	0.24	0.1466 (ppm)	1272.4945
9/28/2018 02:00:24	R1808906-002	Cr (267.716 nm)	1.32	0.0226 (ppm)	987.6133
9/28/2018 02:00:24	R1808906-002	Cu (327.395 nm)	0.65	0.0172 (ppm)	983.4120
9/28/2018 02:00:24	R1808906-002	Fe (234.350 nm)	0.90	290.8827 o (ppm)	2760899.7828
9/28/2018 02:00:24	R1808906-002	K (766.491 nm)	1.44	8.7855 (ppm)	26031.4960
9/28/2018 02:00:24	R1808906-002	Mg (279.078 nm)	0.98	58.0354 o (ppm)	98664.1492
9/28/2018 02:00:24	R1808906-002	Mn (257.610 nm)	0.93	14.9743 o (ppm)	4054272.0701
9/28/2018 02:00:24	R1808906-002	Mo (202.032 nm)	36.62	-0.0043 u (ppm)	11.6798
9/28/2018 02:00:24	R1808906-002	Na (588.995 nm)	1.54	99.5129 o (ppm)	4345603.3038
9/28/2018 02:00:24	R1808906-002	Ni (230.299 nm)	1.76	0.1670 (ppm)	954.3843
9/28/2018 02:00:24	R1808906-002	Pb (220.353 nm)	7.40	0.0212 (ppm)	44.3787
9/28/2018 02:00:24	R1808906-002	Sb (217.582 nm)	11.09	-0.0236 u (ppm)	-28.0490
9/28/2018 02:00:24	R1808906-002	Se (196.026 nm)	16.87	0.0213 (ppm)	22.0392
9/28/2018 02:00:24	R1808906-002	Sn (189.925 nm)	53.06	0.0025 (ppm)	3.6448
9/28/2018 02:00:24	R1808906-002	Sr (216.596 nm)	0.84	0.9079 (ppm)	11881.9958
9/28/2018 02:00:24	R1808906-002	Ti (336.122 nm)	0.78	0.1508 (ppm)	28397.2298
9/28/2018 02:00:24	R1808906-002	Tl (351.923 nm)	> 100.00	-0.0015 u (ppm)	8.9558
9/28/2018 02:00:24	R1808906-002	V (292.401 nm)	2.31	0.0228 (ppm)	903.7231
9/28/2018 02:00:24	R1808906-002	Y (360.074 nm)	1.40	0.91 (Ratio)	960726.70
9/28/2018 02:00:24	R1808906-002	Y_R (360.074 nm)	1.40	0.91 (Ratio)	960933.09
9/28/2018 02:00:24	R1808906-002	Zn (213.857 nm)	0.91	0.0884 (ppm)	2196.2960
9/28/2018 02:03:39	R1808906-003	Ag (328.068 nm)	94.83	0.0002 (ppm)	-172.4062
9/28/2018 02:03:39	R1808906-003	Al (394.401 nm)	1.02	0.2885 (ppm)	3593.4687
9/28/2018 02:03:39	R1808906-003	As (188.980 nm)	> 100.00	0.0012 u (ppm)	0.3008
9/28/2018 02:03:39	R1808906-003	B (249.772 nm)	0.91	0.0658 (ppm)	1535.1443
9/28/2018 02:03:39	R1808906-003	Ba (230.424 nm)	0.98	0.2342 (ppm)	6978.0717
9/28/2018 02:03:39	R1808906-003	Be (313.107 nm)	1.21	0.0010 (ppm)	848.5332
9/28/2018 02:03:39	R1808906-003	Ca (227.547 nm)	1.11	85.5006 o (ppm)	4408.1977
9/28/2018 02:03:39	R1808906-003	Cd (214.439 nm)	45.57	0.0004 (ppm)	20.5873
9/28/2018 02:03:39	R1808906-003	Co (230.786 nm)	1.77	0.0701 (ppm)	606.7813

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:03:39	R1808906-003	Cr (267.716 nm)	4.41	0.0052 (ppm)	233.2589
9/28/2018 02:03:39	R1808906-003	Cu (327.395 nm)	1.01	0.0547 (ppm)	3046.3514
9/28/2018 02:03:39	R1808906-003	Fe (234.350 nm)	0.86	25.1272 o (ppm)	238554.8012
9/28/2018 02:03:39	R1808906-003	K (766.491 nm)	1.22	7.0169 (ppm)	20782.4037
9/28/2018 02:03:39	R1808906-003	Mg (279.078 nm)	0.90	19.0729 (ppm)	32425.7554
9/28/2018 02:03:39	R1808906-003	Mn (257.610 nm)	0.97	1.1152 (ppm)	301949.5039
9/28/2018 02:03:39	R1808906-003	Mo (202.032 nm)	19.11	-0.0047 u (ppm)	10.1646
9/28/2018 02:03:39	R1808906-003	Na (588.995 nm)	1.26	16.4473 (ppm)	712562.3274
9/28/2018 02:03:39	R1808906-003	Ni (230.299 nm)	0.97	0.1898 (ppm)	1087.1956
9/28/2018 02:03:39	R1808906-003	Pb (220.353 nm)	> 100.00	-0.0006 u (ppm)	1.7844
9/28/2018 02:03:39	R1808906-003	Sb (217.582 nm)	> 100.00	-0.0009 u (ppm)	-0.1721
9/28/2018 02:03:39	R1808906-003	Se (196.026 nm)	> 100.00	-0.0007 u (ppm)	4.1561
9/28/2018 02:03:39	R1808906-003	Sn (189.925 nm)	> 100.00	-0.0011 u (ppm)	-0.6135
9/28/2018 02:03:39	R1808906-003	Sr (216.596 nm)	0.89	0.3383 (ppm)	4427.6175
9/28/2018 02:03:39	R1808906-003	Ti (336.122 nm)	8.58	0.0013 (ppm)	493.0654
9/28/2018 02:03:39	R1808906-003	Tl (351.923 nm)	> 100.00	-0.0009 u (ppm)	10.4940
9/28/2018 02:03:39	R1808906-003	V (292.401 nm)	25.63	0.0011 (ppm)	166.3873
9/28/2018 02:03:39	R1808906-003	Y (360.074 nm)	1.31	0.97 (Ratio)	1024169.47
9/28/2018 02:03:39	R1808906-003	Y_R (360.074 nm)	1.31	0.97 (Ratio)	1024411.55
9/28/2018 02:03:39	R1808906-003	Zn (213.857 nm)	0.98	0.0931 (ppm)	2316.6810
9/28/2018 02:06:54	R1808906-006	Ag (328.068 nm)	11.38	0.0002 (ppm)	-174.1489
9/28/2018 02:06:54	R1808906-006	Al (394.401 nm)	1.08	2.0481 (ppm)	24914.3387
9/28/2018 02:06:54	R1808906-006	As (188.980 nm)	88.99	0.0017 (ppm)	0.7058
9/28/2018 02:06:54	R1808906-006	B (249.772 nm)	0.47	0.0246 (ppm)	588.4345
9/28/2018 02:06:54	R1808906-006	Ba (230.424 nm)	0.80	0.0547 (ppm)	1656.1822
9/28/2018 02:06:54	R1808906-006	Be (313.107 nm)	5.01	0.0001 (ppm)	-201.7074
9/28/2018 02:06:54	R1808906-006	Ca (227.547 nm)	0.84	60.0550 o (ppm)	3098.3238
9/28/2018 02:06:54	R1808906-006	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	14.2934
9/28/2018 02:06:54	R1808906-006	Co (230.786 nm)	14.71	0.0035 (ppm)	26.4392
9/28/2018 02:06:54	R1808906-006	Cr (267.716 nm)	1.91	0.0179 (ppm)	785.0416
9/28/2018 02:06:54	R1808906-006	Cu (327.395 nm)	2.66	0.0080 (ppm)	481.2362
9/28/2018 02:06:54	R1808906-006	Fe (234.350 nm)	0.80	15.6099 o (ppm)	148223.9130
9/28/2018 02:06:54	R1808906-006	K (766.491 nm)	1.34	1.9761 (ppm)	5820.8403
9/28/2018 02:06:54	R1808906-006	Mg (279.078 nm)	0.89	15.3731 (ppm)	26135.8064
9/28/2018 02:06:54	R1808906-006	Mn (257.610 nm)	0.83	0.6766 (ppm)	183194.2135
9/28/2018 02:06:54	R1808906-006	Mo (202.032 nm)	3.73	-0.0068 u (ppm)	1.0613
9/28/2018 02:06:54	R1808906-006	Na (588.995 nm)	1.17	17.3316 (ppm)	751240.8102
9/28/2018 02:06:54	R1808906-006	Ni (230.299 nm)	5.02	0.0052 (ppm)	13.0308
9/28/2018 02:06:54	R1808906-006	Pb (220.353 nm)	83.28	0.0017 (ppm)	6.3033
9/28/2018 02:06:54	R1808906-006	Sb (217.582 nm)	> 100.00	0.0005 u (ppm)	1.6306
9/28/2018 02:06:54	R1808906-006	Se (196.026 nm)	66.47	-0.0033 u (ppm)	1.9908
9/28/2018 02:06:54	R1808906-006	Sn (189.925 nm)	> 100.00	-0.0015 u (ppm)	-1.0972
9/28/2018 02:06:54	R1808906-006	Sr (216.596 nm)	0.62	0.2180 (ppm)	2853.4152
9/28/2018 02:06:54	R1808906-006	Ti (336.122 nm)	3.16	0.0294 (ppm)	5737.3468
9/28/2018 02:06:54	R1808906-006	Tl (351.923 nm)	> 100.00	-0.0028 u (ppm)	5.7728
9/28/2018 02:06:54	R1808906-006	V (292.401 nm)	8.28	0.0049 (ppm)	294.6906
9/28/2018 02:06:54	R1808906-006	Y (360.074 nm)	1.14	0.98 (Ratio)	1033282.84
9/28/2018 02:06:54	R1808906-006	Y_R (360.074 nm)	1.14	0.98 (Ratio)	1033513.87
9/28/2018 02:06:54	R1808906-006	Zn (213.857 nm)	1.39	0.0104 (ppm)	236.8508
9/28/2018 02:10:09	R1808906-007	Ag (328.068 nm)	9.98	0.0003 (ppm)	-169.2593
9/28/2018 02:10:09	R1808906-007	Al (394.401 nm)	1.03	5.1157 (ppm)	62084.7973

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:10:09	R1808906-007	As (188.980 nm)	40.81	0.0056 (ppm)	3.7598
9/28/2018 02:10:09	R1808906-007	B (249.772 nm)	0.79	0.0590 (ppm)	1379.4915
9/28/2018 02:10:09	R1808906-007	Ba (230.424 nm)	1.08	0.1782 (ppm)	5317.3302
9/28/2018 02:10:09	R1808906-007	Be (313.107 nm)	4.21	0.0002 (ppm)	-131.7302
9/28/2018 02:10:09	R1808906-007	Ca (227.547 nm)	0.98	69.7613 o (ppm)	3597.9812
9/28/2018 02:10:09	R1808906-007	Cd (214.439 nm)	9.70	0.0008 (ppm)	29.7531
9/28/2018 02:10:09	R1808906-007	Co (230.786 nm)	1.39	0.0951 (ppm)	824.5429
9/28/2018 02:10:09	R1808906-007	Cr (267.716 nm)	0.89	0.0995 (ppm)	4316.9912
9/28/2018 02:10:09	R1808906-007	Cu (327.395 nm)	1.91	0.0092 (ppm)	545.4794
9/28/2018 02:10:09	R1808906-007	Fe (234.350 nm)	0.73	77.5217 o (ppm)	735841.9646
9/28/2018 02:10:09	R1808906-007	K (766.491 nm)	1.19	34.7523 (ppm)	103102.9315
9/28/2018 02:10:09	R1808906-007	Mg (279.078 nm)	0.75	16.8526 (ppm)	28651.0038
9/28/2018 02:10:09	R1808906-007	Mn (257.610 nm)	0.52	7.1162 o (ppm)	1926696.1590
9/28/2018 02:10:09	R1808906-007	Mo (202.032 nm)	13.81	0.0060 (ppm)	54.9929
9/28/2018 02:10:09	R1808906-007	Na (588.995 nm)	1.29	36.1557 (ppm)	1574549.1703
9/28/2018 02:10:09	R1808906-007	Ni (230.299 nm)	4.38	0.0383 (ppm)	205.5123
9/28/2018 02:10:09	R1808906-007	Pb (220.353 nm)	19.59	0.0032 (ppm)	9.1149
9/28/2018 02:10:09	R1808906-007	Sb (217.582 nm)	29.82	-0.0076 u (ppm)	-8.3100
9/28/2018 02:10:09	R1808906-007	Se (196.026 nm)	14.90	0.0039 (ppm)	7.8268
9/28/2018 02:10:09	R1808906-007	Sn (189.925 nm)	> 100.00	-0.0007 u (ppm)	-0.1470
9/28/2018 02:10:09	R1808906-007	Sr (216.596 nm)	0.49	0.5085 (ppm)	6654.7664
9/28/2018 02:10:09	R1808906-007	Ti (336.122 nm)	1.44	0.1059 (ppm)	20013.2554
9/28/2018 02:10:09	R1808906-007	Tl (351.923 nm)	51.19	-0.0030 u (ppm)	5.4079
9/28/2018 02:10:09	R1808906-007	V (292.401 nm)	0.37	0.0118 (ppm)	529.1318
9/28/2018 02:10:09	R1808906-007	Y (360.074 nm)	1.23	0.96 (Ratio)	1013459.64
9/28/2018 02:10:09	R1808906-007	Y_R (360.074 nm)	1.23	0.96 (Ratio)	1013696.78
9/28/2018 02:10:09	R1808906-007	Zn (213.857 nm)	1.72	0.0234 (ppm)	563.0581
9/28/2018 02:13:22	R1808906-008	Ag (328.068 nm)	28.55	0.0003 (ppm)	-166.3944
9/28/2018 02:13:22	R1808906-008	Al (394.401 nm)	0.89	2.7442 (ppm)	33348.5362
9/28/2018 02:13:22	R1808906-008	As (188.980 nm)	24.83	0.0118 (ppm)	8.6090
9/28/2018 02:13:22	R1808906-008	B (249.772 nm)	0.87	0.4718 (ppm)	10871.6897
9/28/2018 02:13:22	R1808906-008	Ba (230.424 nm)	0.64	0.4324 (ppm)	12854.4885
9/28/2018 02:13:22	R1808906-008	Be (313.107 nm)	6.97	0.0001 (ppm)	-258.5598
9/28/2018 02:13:22	R1808906-008	Ca (227.547 nm)	1.08	131.0568 o (ppm)	6753.3125
9/28/2018 02:13:22	R1808906-008	Cd (214.439 nm)	57.36	0.0002 (ppm)	18.3578
9/28/2018 02:13:22	R1808906-008	Co (230.786 nm)	2.24	0.0158 (ppm)	133.5897
9/28/2018 02:13:22	R1808906-008	Cr (267.716 nm)	2.04	0.0045 (ppm)	204.5224
9/28/2018 02:13:22	R1808906-008	Cu (327.395 nm)	2.63	0.0047 (ppm)	295.9071
9/28/2018 02:13:22	R1808906-008	Fe (234.350 nm)	0.77	36.4630 o (ppm)	346145.1033
9/28/2018 02:13:22	R1808906-008	K (766.491 nm)	1.09	7.4395 (ppm)	22036.5280
9/28/2018 02:13:22	R1808906-008	Mg (279.078 nm)	0.77	39.4035 (ppm)	66988.8213
9/28/2018 02:13:22	R1808906-008	Mn (257.610 nm)	0.77	2.0538 o (ppm)	556071.6685
9/28/2018 02:13:22	R1808906-008	Mo (202.032 nm)	30.93	-0.0035 u (ppm)	15.2279
9/28/2018 02:13:22	R1808906-008	Na (588.995 nm)	1.44	37.3995 (ppm)	1628947.7230
9/28/2018 02:13:22	R1808906-008	Ni (230.299 nm)	11.42	-0.0133 u (ppm)	-94.8483
9/28/2018 02:13:22	R1808906-008	Pb (220.353 nm)	34.92	0.0045 (ppm)	11.7858
9/28/2018 02:13:22	R1808906-008	Sb (217.582 nm)	> 100.00	-0.0002 u (ppm)	0.6898
9/28/2018 02:13:22	R1808906-008	Se (196.026 nm)	> 100.00	-0.0004 u (ppm)	4.3421
9/28/2018 02:13:22	R1808906-008	Sn (189.925 nm)	80.13	-0.0021 u (ppm)	-1.7221
9/28/2018 02:13:22	R1808906-008	Sr (216.596 nm)	0.72	0.6988 (ppm)	9145.2782
9/28/2018 02:13:22	R1808906-008	Ti (336.122 nm)	2.17	0.0461 (ppm)	8848.7937

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:13:22	R1808906-008	Tl (351.923 nm)	> 100.00	0.0022 u (ppm)	18.0060
9/28/2018 02:13:22	R1808906-008	V (292.401 nm)	3.47	0.0069 (ppm)	363.3892
9/28/2018 02:13:22	R1808906-008	Y (360.074 nm)	1.22	0.95 (Ratio)	1002424.69
9/28/2018 02:13:22	R1808906-008	Y_R (360.074 nm)	1.22	0.95 (Ratio)	1002682.81
9/28/2018 02:13:22	R1808906-008	Zn (213.857 nm)	1.42	0.0123 (ppm)	282.6588
9/28/2018 02:16:37	R1808906-009	Ag (328.068 nm)	20.72	0.0003 (ppm)	-168.9370
9/28/2018 02:16:37	R1808906-009	Al (394.401 nm)	1.28	1.2503 (ppm)	15247.9040
9/28/2018 02:16:37	R1808906-009	As (188.980 nm)	> 100.00	0.0006 u (ppm)	-0.1154
9/28/2018 02:16:37	R1808906-009	B (249.772 nm)	2.92	0.0093 (ppm)	235.6051
9/28/2018 02:16:37	R1808906-009	Ba (230.424 nm)	0.89	0.0293 (ppm)	901.9130
9/28/2018 02:16:37	R1808906-009	Be (313.107 nm)	49.63	0.0000 (ppm)	-378.5888
9/28/2018 02:16:37	R1808906-009	Ca (227.547 nm)	0.59	5.9553 (ppm)	313.4099
9/28/2018 02:16:37	R1808906-009	Cd (214.439 nm)	11.86	-0.0003 u (ppm)	7.8578
9/28/2018 02:16:37	R1808906-009	Co (230.786 nm)	5.80	0.0032 (ppm)	24.0834
9/28/2018 02:16:37	R1808906-009	Cr (267.716 nm)	0.80	0.1285 (ppm)	5573.0316
9/28/2018 02:16:37	R1808906-009	Cu (327.395 nm)	3.79	0.0036 (ppm)	238.6796
9/28/2018 02:16:37	R1808906-009	Fe (234.350 nm)	0.63	1.2000 (ppm)	11456.2293
9/28/2018 02:16:37	R1808906-009	K (766.491 nm)	1.65	1.3539 (ppm)	3974.1058
9/28/2018 02:16:37	R1808906-009	Mg (279.078 nm)	0.74	2.8562 (ppm)	4856.3817
9/28/2018 02:16:37	R1808906-009	Mn (257.610 nm)	0.94	0.0393 (ppm)	10662.8619
9/28/2018 02:16:37	R1808906-009	Mo (202.032 nm)	4.38	-0.0063 u (ppm)	3.0949
9/28/2018 02:16:37	R1808906-009	Na (588.995 nm)	1.06	7.3563 (ppm)	314947.6035
9/28/2018 02:16:37	R1808906-009	Ni (230.299 nm)	3.73	0.0281 (ppm)	146.2506
9/28/2018 02:16:37	R1808906-009	Pb (220.353 nm)	49.01	0.0009 (ppm)	4.7700
9/28/2018 02:16:37	R1808906-009	Sb (217.582 nm)	> 100.00	0.0001 u (ppm)	1.0721
9/28/2018 02:16:37	R1808906-009	Se (196.026 nm)	> 100.00	-0.0013 u (ppm)	3.5965
9/28/2018 02:16:37	R1808906-009	Sn (189.925 nm)	67.38	-0.0012 u (ppm)	-0.7414
9/28/2018 02:16:37	R1808906-009	Sr (216.596 nm)	0.86	0.0323 (ppm)	423.0764
9/28/2018 02:16:37	R1808906-009	Ti (336.122 nm)	2.24	0.0381 (ppm)	7359.2629
9/28/2018 02:16:37	R1808906-009	Tl (351.923 nm)	> 100.00	0.0007 u (ppm)	14.3884
9/28/2018 02:16:37	R1808906-009	V (292.401 nm)	6.35	0.0023 (ppm)	207.7741
9/28/2018 02:16:37	R1808906-009	Y (360.074 nm)	1.15	1.01 (Ratio)	1062606.12
9/28/2018 02:16:37	R1808906-009	Y_R (360.074 nm)	1.15	1.01 (Ratio)	1062889.98
9/28/2018 02:16:37	R1808906-009	Zn (213.857 nm)	2.15	0.0053 (ppm)	108.4665
9/28/2018 02:19:51	R1808906-010	Ag (328.068 nm)	3.80	-0.0038 u (ppm)	-423.3548
9/28/2018 02:19:51	R1808906-010	Al (394.401 nm)	0.77	847.6726 o (ppm)	10271312.6761
9/28/2018 02:19:51	R1808906-010	As (188.980 nm)	1.81	0.1897 (ppm)	147.1441
9/28/2018 02:19:51	R1808906-010	B (249.772 nm)	0.28	0.4598 (ppm)	10594.3215
9/28/2018 02:19:51	R1808906-010	Ba (230.424 nm)	0.26	4.4651 (ppm)	132435.2910
9/28/2018 02:19:51	R1808906-010	Be (313.107 nm)	0.37	0.0429 (ppm)	55555.4009
9/28/2018 02:19:51	R1808906-010	Ca (227.547 nm)	0.37	93.3276 o (ppm)	4811.1116
9/28/2018 02:19:51	R1808906-010	Cd (214.439 nm)	13.16	0.0061 (ppm)	133.7808
9/28/2018 02:19:51	R1808906-010	Co (230.786 nm)	0.18	1.1064 (ppm)	9633.2044
9/28/2018 02:19:51	R1808906-010	Cr (267.716 nm)	0.36	1.8621 o (ppm)	80630.5399
9/28/2018 02:19:51	R1808906-010	Cu (327.395 nm)	0.36	1.0010 (ppm)	55108.6159
9/28/2018 02:19:51	R1808906-010	Fe (234.350 nm)	0.50	509.4088 o (ppm)	4834979.5957
9/28/2018 02:19:51	R1808906-010	K (766.491 nm)	0.72	45.4287 (ppm)	134791.3139
9/28/2018 02:19:51	R1808906-010	Mg (279.078 nm)	0.30	50.4570 (ppm)	85780.4368
9/28/2018 02:19:51	R1808906-010	Mn (257.610 nm)	0.52	17.0415 o (ppm)	4613955.0562
9/28/2018 02:19:51	R1808906-010	Mo (202.032 nm)	10.43	0.0271 (ppm)	144.1727
9/28/2018 02:19:51	R1808906-010	Na (588.995 nm)	1.00	8.2740 (ppm)	355087.3003

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:19:51	R1808906-010	Ni (230.299 nm)	0.23	1.0981 (ppm)	6372.1772
9/28/2018 02:19:51	R1808906-010	Pb (220.353 nm)	0.88	0.5186 (ppm)	1014.4529
9/28/2018 02:19:51	R1808906-010	Sb (217.582 nm)	3.51	-0.0575 u (ppm)	-69.6865
9/28/2018 02:19:51	R1808906-010	Se (196.026 nm)	6.81	0.0289 (ppm)	28.2113
9/28/2018 02:19:51	R1808906-010	Sn (189.925 nm)	14.91	0.0029 (ppm)	4.0992
9/28/2018 02:19:51	R1808906-010	Sr (216.596 nm)	0.36	0.6615 (ppm)	8657.2895
9/28/2018 02:19:51	R1808906-010	Ti (336.122 nm)	0.33	13.5099 o (ppm)	2521508.5175
9/28/2018 02:19:51	R1808906-010	Tl (351.923 nm)	0.57	-0.1787 u (ppm)	-421.4974
9/28/2018 02:19:51	R1808906-010	V (292.401 nm)	0.38	1.3667 (ppm)	46535.7685
9/28/2018 02:19:51	R1808906-010	Y (360.074 nm)	0.89	1.14 (Ratio)	1203088.46
9/28/2018 02:19:51	R1808906-010	Y_R (360.074 nm)	0.89	1.14 (Ratio)	1203341.69
9/28/2018 02:19:51	R1808906-010	Zn (213.857 nm)	0.29	2.0370 (ppm)	51200.8772
9/28/2018 02:23:05	Continuing Calibration Verification1	Ag (328.068 nm)	0.61	0.4937 (ppm)	30579.9960
9/28/2018 02:23:05	Continuing Calibration Verification1	Al (394.401 nm)	0.14	9.5789 (ppm)	116165.1132
9/28/2018 02:23:05	Continuing Calibration Verification1	As (188.980 nm)	0.81	0.9638 (ppm)	749.9632
9/28/2018 02:23:05	Continuing Calibration Verification1	B (249.772 nm)	0.68	2.4545 (ppm)	56464.9134
9/28/2018 02:23:05	Continuing Calibration Verification1	Ba (230.424 nm)	0.77	9.9652 (ppm)	295525.5004
9/28/2018 02:23:05	Continuing Calibration Verification1	Be (313.107 nm)	0.53	0.2478 (ppm)	323157.2841
9/28/2018 02:23:05	Continuing Calibration Verification1	Ca (227.547 nm)	0.11	23.9817 (ppm)	1241.3639
9/28/2018 02:23:05	Continuing Calibration Verification1	Cd (214.439 nm)	0.77	0.4893 (ppm)	9630.8408
9/28/2018 02:23:05	Continuing Calibration Verification1	Co (230.786 nm)	0.73	2.5472 (ppm)	22184.1085
9/28/2018 02:23:05	Continuing Calibration Verification1	Cr (267.716 nm)	0.78	0.5088 (ppm)	22038.3486
9/28/2018 02:23:05	Continuing Calibration Verification1	Cu (327.395 nm)	0.41	1.2058 (ppm)	66373.2321
9/28/2018 02:23:05	Continuing Calibration Verification1	Fe (234.350 nm)	0.13	4.9622 (ppm)	47163.7622
9/28/2018 02:23:05	Continuing Calibration Verification1	K (766.491 nm)	0.08	23.9578 (ppm)	71064.2245
9/28/2018 02:23:05	Continuing Calibration Verification1	Mg (279.078 nm)	0.68	24.0253 (ppm)	40844.9943
9/28/2018 02:23:05	Continuing Calibration Verification1	Mn (257.610 nm)	0.54	0.7592 (ppm)	205575.9483
9/28/2018 02:23:05	Continuing Calibration Verification1	Mo (202.032 nm)	0.36	2.5652 (ppm)	10840.5734
9/28/2018 02:23:05	Continuing Calibration Verification1	Na (588.995 nm)	0.20	24.0232 (ppm)	1043909.0039
9/28/2018 02:23:05	Continuing Calibration Verification1	Ni (230.299 nm)	0.63	2.0208 (ppm)	11741.1272
9/28/2018 02:23:05	Continuing Calibration Verification1	Pb (220.353 nm)	0.19	0.4948 (ppm)	968.0112
9/28/2018 02:23:05	Continuing Calibration Verification1	Sb (217.582 nm)	0.37	4.8296 (ppm)	5937.3030
9/28/2018 02:23:05	Continuing Calibration Verification1	Se (196.026 nm)	2.07	0.4722 (ppm)	388.6736
9/28/2018 02:23:05	Continuing Calibration Verification1	Sn (189.925 nm)	0.90	4.9363 (ppm)	5763.0516
9/28/2018 02:23:05	Continuing Calibration Verification1	Sr (216.596 nm)	0.81	2.4862 (ppm)	32537.9115
9/28/2018 02:23:05	Continuing Calibration Verification1	Ti (336.122 nm)	0.70	2.5002 (ppm)	466844.9570
9/28/2018 02:23:05	Continuing Calibration Verification1	Tl (351.923 nm)	0.30	0.9879 (ppm)	2412.3391
9/28/2018 02:23:05	Continuing Calibration Verification1	V (292.401 nm)	0.70	2.4774 (ppm)	84251.3298
9/28/2018 02:23:05	Continuing Calibration Verification1	Y (360.074 nm)	0.22	0.97 (Ratio)	1023046.07
9/28/2018 02:23:05	Continuing Calibration Verification1	Y_R (360.074 nm)	0.22	0.97 (Ratio)	1023292.57
9/28/2018 02:23:05	Continuing Calibration Verification1	Zn (213.857 nm)	0.66	0.9760 (ppm)	24519.7336
9/28/2018 02:26:19	Continuing Calibration Blank1	Ag (328.068 nm)	6.91	0.0001 (ppm)	-176.2637
9/28/2018 02:26:19	Continuing Calibration Blank1	Al (394.401 nm)	35.01	0.0098 (ppm)	216.9133
9/28/2018 02:26:19	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	0.0005 u (ppm)	-0.2055
9/28/2018 02:26:19	Continuing Calibration Blank1	B (249.772 nm)	27.03	0.0013 (ppm)	51.6426
9/28/2018 02:26:19	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	32.2051
9/28/2018 02:26:19	Continuing Calibration Blank1	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-386.6710
9/28/2018 02:26:19	Continuing Calibration Blank1	Ca (227.547 nm)	81.56	-0.0376 u (ppm)	4.9150
9/28/2018 02:26:19	Continuing Calibration Blank1	Cd (214.439 nm)	34.90	-0.0002 u (ppm)	9.9987
9/28/2018 02:26:19	Continuing Calibration Blank1	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-4.0103
9/28/2018 02:26:19	Continuing Calibration Blank1	Cr (267.716 nm)	> 100.00	0.0000 u (ppm)	9.7588

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:26:19	Continuing Calibration Blank1	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	38.2313
9/28/2018 02:26:19	Continuing Calibration Blank1	Fe (234.350 nm)	9.65	0.0202 (ppm)	258.0211
9/28/2018 02:26:19	Continuing Calibration Blank1	K (766.491 nm)	14.57	0.0451 (ppm)	89.5064
9/28/2018 02:26:19	Continuing Calibration Blank1	Mg (279.078 nm)	> 100.00	0.0010 u (ppm)	2.3857
9/28/2018 02:26:19	Continuing Calibration Blank1	Mn (257.610 nm)	35.82	0.0003 (ppm)	91.2292
9/28/2018 02:26:19	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	-0.0002 u (ppm)	28.8554
9/28/2018 02:26:19	Continuing Calibration Blank1	Na (588.995 nm)	15.74	0.0107 (ppm)	-6324.5897
9/28/2018 02:26:19	Continuing Calibration Blank1	Ni (230.299 nm)	> 100.00	0.0000 u (ppm)	-17.4458
9/28/2018 02:26:19	Continuing Calibration Blank1	Pb (220.353 nm)	> 100.00	-0.0004 u (ppm)	2.2140
9/28/2018 02:26:19	Continuing Calibration Blank1	Sb (217.582 nm)	78.63	0.0026 (ppm)	4.2107
9/28/2018 02:26:19	Continuing Calibration Blank1	Se (196.026 nm)	18.28	-0.0027 u (ppm)	2.4902
9/28/2018 02:26:19	Continuing Calibration Blank1	Sn (189.925 nm)	59.98	0.0008 (ppm)	1.6711
9/28/2018 02:26:19	Continuing Calibration Blank1	Sr (216.596 nm)	> 100.00	0.0001 u (ppm)	1.8169
9/28/2018 02:26:19	Continuing Calibration Blank1	Ti (336.122 nm)	48.61	0.0033 (ppm)	871.4170
9/28/2018 02:26:19	Continuing Calibration Blank1	Tl (351.923 nm)	> 100.00	-0.0007 u (ppm)	10.8122
9/28/2018 02:26:19	Continuing Calibration Blank1	V (292.401 nm)	> 100.00	0.0000 u (ppm)	128.6758
9/28/2018 02:26:19	Continuing Calibration Blank1	Y (360.074 nm)	0.55	1.01 (Ratio)	1067440.44
9/28/2018 02:26:19	Continuing Calibration Blank1	Y_R (360.074 nm)	0.55	1.01 (Ratio)	1067708.35
9/28/2018 02:26:19	Continuing Calibration Blank1	Zn (213.857 nm)	66.11	0.0001 (ppm)	-22.3703
9/28/2018 02:29:34	R1808906-010L	Ag (328.068 nm)	7.19	-0.0009 u (ppm)	-242.4992
9/28/2018 02:29:34	R1808906-010L	Al (394.401 nm)	0.30	210.4781 o (ppm)	2550452.1985
9/28/2018 02:29:34	R1808906-010L	As (188.980 nm)	5.79	0.0438 (ppm)	33.4750
9/28/2018 02:29:34	R1808906-010L	B (249.772 nm)	0.74	0.1200 (ppm)	2781.2668
9/28/2018 02:29:34	R1808906-010L	Ba (230.424 nm)	0.41	1.1357 (ppm)	33708.8621
9/28/2018 02:29:34	R1808906-010L	Be (313.107 nm)	0.20	0.0108 (ppm)	13748.1698
9/28/2018 02:29:34	R1808906-010L	Ca (227.547 nm)	0.20	20.7694 (ppm)	1076.0019
9/28/2018 02:29:34	R1808906-010L	Cd (214.439 nm)	21.96	0.0014 (ppm)	41.4935
9/28/2018 02:29:34	R1808906-010L	Co (230.786 nm)	0.24	0.2916 (ppm)	2536.2161
9/28/2018 02:29:34	R1808906-010L	Cr (267.716 nm)	0.19	0.4787 (ppm)	20736.8248
9/28/2018 02:29:34	R1808906-010L	Cu (327.395 nm)	0.33	0.2290 (ppm)	12636.0339
9/28/2018 02:29:34	R1808906-010L	Fe (234.350 nm)	0.49	191.8732 o (ppm)	1821178.5861
9/28/2018 02:29:34	R1808906-010L	K (766.491 nm)	0.42	9.9397 (ppm)	29457.2359
9/28/2018 02:29:34	R1808906-010L	Mg (279.078 nm)	0.24	13.1568 (ppm)	22367.9381
9/28/2018 02:29:34	R1808906-010L	Mn (257.610 nm)	0.38	4.7050 o (ppm)	1273885.2390
9/28/2018 02:29:34	R1808906-010L	Mo (202.032 nm)	78.36	0.0022 (ppm)	39.1062
9/28/2018 02:29:34	R1808906-010L	Na (588.995 nm)	0.43	1.8356 (ppm)	73489.8131
9/28/2018 02:29:34	R1808906-010L	Ni (230.299 nm)	0.92	0.2938 (ppm)	1692.3742
9/28/2018 02:29:34	R1808906-010L	Pb (220.353 nm)	1.91	0.1383 (ppm)	272.6089
9/28/2018 02:29:34	R1808906-010L	Sb (217.582 nm)	35.86	-0.0140 u (ppm)	-16.2456
9/28/2018 02:29:34	R1808906-010L	Se (196.026 nm)	50.75	0.0080 (ppm)	11.1761
9/28/2018 02:29:34	R1808906-010L	Sn (189.925 nm)	> 100.00	-0.0001 u (ppm)	0.5991
9/28/2018 02:29:34	R1808906-010L	Sr (216.596 nm)	0.35	0.1687 (ppm)	2208.4430
9/28/2018 02:29:34	R1808906-010L	Ti (336.122 nm)	0.12	3.4074 (ppm)	636146.8969
9/28/2018 02:29:34	R1808906-010L	Tl (351.923 nm)	3.31	-0.0425 u (ppm)	-90.7450
9/28/2018 02:29:34	R1808906-010L	V (292.401 nm)	0.11	0.3413 (ppm)	11719.1889
9/28/2018 02:29:34	R1808906-010L	Y (360.074 nm)	0.57	1.01 (Ratio)	1067788.97
9/28/2018 02:29:34	R1808906-010L	Y_R (360.074 nm)	0.57	1.01 (Ratio)	1068037.47
9/28/2018 02:29:34	R1808906-010L	Zn (213.857 nm)	0.17	0.4944 (ppm)	12406.8554
9/28/2018 02:32:48	R1809106-001	Ag (328.068 nm)	20.24	0.0002 (ppm)	-170.3239
9/28/2018 02:32:48	R1809106-001	Al (394.401 nm)	4.81	0.1984 (ppm)	2501.2502
9/28/2018 02:32:48	R1809106-001	As (188.980 nm)	> 100.00	-0.0022 u (ppm)	-2.3483

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:32:48	R1809106-001	B (249.772 nm)	0.87	0.0731 (ppm)	1703.7201
9/28/2018 02:32:48	R1809106-001	Ba (230.424 nm)	0.88	0.0176 (ppm)	554.4167
9/28/2018 02:32:48	R1809106-001	Be (313.107 nm)	36.83	0.0000 u (ppm)	-423.8019
9/28/2018 02:32:48	R1809106-001	Ca (227.547 nm)	1.06	300.2430 o (ppm)	15462.5839
9/28/2018 02:32:48	R1809106-001	Cd (214.439 nm)	28.12	-0.0001 u (ppm)	10.6660
9/28/2018 02:32:48	R1809106-001	Co (230.786 nm)	> 100.00	0.0003 (ppm)	-1.0722
9/28/2018 02:32:48	R1809106-001	Cr (267.716 nm)	19.23	-0.0005 u (ppm)	-13.0686
9/28/2018 02:32:48	R1809106-001	Cu (327.395 nm)	22.97	0.0004 (ppm)	59.8605
9/28/2018 02:32:48	R1809106-001	Fe (234.350 nm)	1.28	0.7462 (ppm)	7148.6517
9/28/2018 02:32:48	R1809106-001	K (766.491 nm)	1.26	2.0227 (ppm)	5959.0371
9/28/2018 02:32:48	R1809106-001	Mg (279.078 nm)	1.00	101.4720 o (ppm)	172508.7141
9/28/2018 02:32:48	R1809106-001	Mn (257.610 nm)	1.03	0.1401 (ppm)	37953.1042
9/28/2018 02:32:48	R1809106-001	Mo (202.032 nm)	6.52	-0.0062 u (ppm)	3.5268
9/28/2018 02:32:48	R1809106-001	Na (588.995 nm)	1.07	12.4563 (ppm)	538008.3155
9/28/2018 02:32:48	R1809106-001	Ni (230.299 nm)	12.92	-0.0089 u (ppm)	-68.9782
9/28/2018 02:32:48	R1809106-001	Pb (220.353 nm)	30.69	-0.0026 u (ppm)	-2.0852
9/28/2018 02:32:48	R1809106-001	Sb (217.582 nm)	17.60	0.0026 (ppm)	4.1606
9/28/2018 02:32:48	R1809106-001	Se (196.026 nm)	52.70	-0.0045 u (ppm)	1.0170
9/28/2018 02:32:48	R1809106-001	Sn (189.925 nm)	31.80	-0.0036 u (ppm)	-3.5133
9/28/2018 02:32:48	R1809106-001	Sr (216.596 nm)	1.78	1.6413 (ppm)	21481.0924
9/28/2018 02:32:48	R1809106-001	Ti (336.122 nm)	17.68	0.0066 (ppm)	1480.4839
9/28/2018 02:32:48	R1809106-001	Tl (351.923 nm)	29.52	0.0061 (ppm)	27.3008
9/28/2018 02:32:48	R1809106-001	V (292.401 nm)	15.13	0.0006 (ppm)	147.0881
9/28/2018 02:32:48	R1809106-001	Y (360.074 nm)	1.29	0.93 (Ratio)	982093.14
9/28/2018 02:32:48	R1809106-001	Y_R (360.074 nm)	1.29	0.93 (Ratio)	982318.60
9/28/2018 02:32:48	R1809106-001	Zn (213.857 nm)	3.63	0.0044 (ppm)	85.4518
9/28/2018 02:36:02	R1809106-002	Ag (328.068 nm)	93.74	0.0001 (ppm)	-178.6969
9/28/2018 02:36:02	R1809106-002	Al (394.401 nm)	2.33	0.0633 (ppm)	865.1972
9/28/2018 02:36:02	R1809106-002	As (188.980 nm)	> 100.00	-0.0015 u (ppm)	-1.7949
9/28/2018 02:36:02	R1809106-002	B (249.772 nm)	0.61	0.8300 (ppm)	19107.5761
9/28/2018 02:36:02	R1809106-002	Ba (230.424 nm)	1.18	0.3261 (ppm)	9702.6988
9/28/2018 02:36:02	R1809106-002	Be (313.107 nm)	29.15	0.0000 u (ppm)	-435.5217
9/28/2018 02:36:02	R1809106-002	Ca (227.547 nm)	1.09	56.6169 o (ppm)	2921.3397
9/28/2018 02:36:02	R1809106-002	Cd (214.439 nm)	38.81	-0.0003 u (ppm)	8.4119
9/28/2018 02:36:02	R1809106-002	Co (230.786 nm)	> 100.00	-0.0001 u (ppm)	-5.0336
9/28/2018 02:36:02	R1809106-002	Cr (267.716 nm)	9.95	-0.0006 u (ppm)	-14.2135
9/28/2018 02:36:02	R1809106-002	Cu (327.395 nm)	95.78	0.0001 (ppm)	44.2100
9/28/2018 02:36:02	R1809106-002	Fe (234.350 nm)	4.05	0.0427 (ppm)	472.2913
9/28/2018 02:36:02	R1809106-002	K (766.491 nm)	1.10	2.3898 (ppm)	7048.6138
9/28/2018 02:36:02	R1809106-002	Mg (279.078 nm)	0.73	31.1757 (ppm)	53001.1051
9/28/2018 02:36:02	R1809106-002	Mn (257.610 nm)	0.85	0.0202 (ppm)	5485.1406
9/28/2018 02:36:02	R1809106-002	Mo (202.032 nm)	5.15	-0.0074 u (ppm)	-1.4250
9/28/2018 02:36:02	R1809106-002	Na (588.995 nm)	1.18	42.3034 (ppm)	1843429.6532
9/28/2018 02:36:02	R1809106-002	Ni (230.299 nm)	3.61	-0.0089 u (ppm)	-69.0927
9/28/2018 02:36:02	R1809106-002	Pb (220.353 nm)	> 100.00	-0.0006 u (ppm)	1.7373
9/28/2018 02:36:02	R1809106-002	Sb (217.582 nm)	> 100.00	0.0000 u (ppm)	0.9446
9/28/2018 02:36:02	R1809106-002	Se (196.026 nm)	78.36	-0.0038 u (ppm)	1.5936
9/28/2018 02:36:02	R1809106-002	Sn (189.925 nm)	23.47	-0.0034 u (ppm)	-3.2399
9/28/2018 02:36:02	R1809106-002	Sr (216.596 nm)	1.03	5.0293 (ppm)	65820.0812
9/28/2018 02:36:02	R1809106-002	Ti (336.122 nm)	99.26	-0.0005 u (ppm)	149.2796
9/28/2018 02:36:02	R1809106-002	Tl (351.923 nm)	> 100.00	0.0011 u (ppm)	15.2356

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:36:02	R1809106-002	V (292.401 nm)	17.69	0.0004 (ppm)	142.9509
9/28/2018 02:36:02	R1809106-002	Y (360.074 nm)	1.03	0.97 (Ratio)	1021515.17
9/28/2018 02:36:02	R1809106-002	Y_R (360.074 nm)	1.03	0.97 (Ratio)	1021735.33
9/28/2018 02:36:02	R1809106-002	Zn (213.857 nm)	5.00	0.0036 (ppm)	64.7963
9/28/2018 02:39:17	R1809106-003	Ag (328.068 nm)	48.58	0.0003 (ppm)	-168.9984
9/28/2018 02:39:17	R1809106-003	Al (394.401 nm)	1.36	0.2037 (ppm)	2565.7611
9/28/2018 02:39:17	R1809106-003	As (188.980 nm)	25.66	-0.0028 u (ppm)	-2.7981
9/28/2018 02:39:17	R1809106-003	B (249.772 nm)	1.27	0.1867 (ppm)	4316.0550
9/28/2018 02:39:17	R1809106-003	Ba (230.424 nm)	1.71	0.0407 (ppm)	1240.1871
9/28/2018 02:39:17	R1809106-003	Be (313.107 nm)	14.59	0.0000 u (ppm)	-417.7532
9/28/2018 02:39:17	R1809106-003	Ca (227.547 nm)	1.37	424.8898 o (ppm)	21879.0767
9/28/2018 02:39:17	R1809106-003	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	12.6379
9/28/2018 02:39:17	R1809106-003	Co (230.786 nm)	11.55	0.0035 (ppm)	26.2282
9/28/2018 02:39:17	R1809106-003	Cr (267.716 nm)	7.81	-0.0006 u (ppm)	-17.1293
9/28/2018 02:39:17	R1809106-003	Cu (327.395 nm)	10.81	0.0008 (ppm)	81.1265
9/28/2018 02:39:17	R1809106-003	Fe (234.350 nm)	0.79	0.2175 (ppm)	2131.1006
9/28/2018 02:39:17	R1809106-003	K (766.491 nm)	1.59	3.3721 (ppm)	9954.3487
9/28/2018 02:39:17	R1809106-003	Mg (279.078 nm)	0.98	130.7607 o (ppm)	222301.0762
9/28/2018 02:39:17	R1809106-003	Mn (257.610 nm)	1.00	0.4457 (ppm)	120679.4794
9/28/2018 02:39:17	R1809106-003	Mo (202.032 nm)	3.40	-0.0061 u (ppm)	4.2149
9/28/2018 02:39:17	R1809106-003	Na (588.995 nm)	1.48	18.0211 (ppm)	781396.8483
9/28/2018 02:39:17	R1809106-003	Ni (230.299 nm)	28.32	-0.0044 u (ppm)	-43.2276
9/28/2018 02:39:17	R1809106-003	Pb (220.353 nm)	64.29	-0.0017 u (ppm)	-0.2886
9/28/2018 02:39:17	R1809106-003	Sb (217.582 nm)	97.68	0.0022 u (ppm)	3.6991
9/28/2018 02:39:17	R1809106-003	Se (196.026 nm)	99.47	-0.0052 u (ppm)	0.4748
9/28/2018 02:39:17	R1809106-003	Sn (189.925 nm)	22.16	-0.0030 u (ppm)	-2.7821
9/28/2018 02:39:17	R1809106-003	Sr (216.596 nm)	1.54	5.4245 o (ppm)	70992.4262
9/28/2018 02:39:17	R1809106-003	Ti (336.122 nm)	6.12	0.0032 (ppm)	850.3298
9/28/2018 02:39:17	R1809106-003	Tl (351.923 nm)	35.20	0.0107 (ppm)	38.5478
9/28/2018 02:39:17	R1809106-003	V (292.401 nm)	47.18	0.0005 (ppm)	144.9277
9/28/2018 02:39:17	R1809106-003	Y (360.074 nm)	1.39	0.91 (Ratio)	965294.19
9/28/2018 02:39:17	R1809106-003	Y_R (360.074 nm)	1.39	0.91 (Ratio)	965516.80
9/28/2018 02:39:17	R1809106-003	Zn (213.857 nm)	0.62	0.0099 (ppm)	222.0484
9/28/2018 02:42:30	R1809106-004	Ag (328.068 nm)	19.80	0.0002 (ppm)	-172.9296
9/28/2018 02:42:30	R1809106-004	Al (394.401 nm)	1.28	0.2278 (ppm)	2857.7965
9/28/2018 02:42:30	R1809106-004	As (188.980 nm)	> 100.00	0.0008 u (ppm)	0.0152
9/28/2018 02:42:30	R1809106-004	B (249.772 nm)	1.26	0.9527 (ppm)	21929.0449
9/28/2018 02:42:30	R1809106-004	Ba (230.424 nm)	1.18	0.1946 (ppm)	5802.9840
9/28/2018 02:42:30	R1809106-004	Be (313.107 nm)	18.85	0.0000 u (ppm)	-422.9801
9/28/2018 02:42:30	R1809106-004	Ca (227.547 nm)	1.42	111.3328 o (ppm)	5737.9747
9/28/2018 02:42:30	R1809106-004	Cd (214.439 nm)	30.35	-0.0002 u (ppm)	9.8265
9/28/2018 02:42:30	R1809106-004	Co (230.786 nm)	> 100.00	0.0004 u (ppm)	-0.3634
9/28/2018 02:42:30	R1809106-004	Cr (267.716 nm)	39.20	-0.0001 u (ppm)	7.0429
9/28/2018 02:42:30	R1809106-004	Cu (327.395 nm)	20.58	0.0004 (ppm)	58.5241
9/28/2018 02:42:30	R1809106-004	Fe (234.350 nm)	0.73	0.1617 (ppm)	1601.4041
9/28/2018 02:42:30	R1809106-004	K (766.491 nm)	1.36	6.9351 (ppm)	20539.3612
9/28/2018 02:42:30	R1809106-004	Mg (279.078 nm)	1.32	59.1484 o (ppm)	100556.2312
9/28/2018 02:42:30	R1809106-004	Mn (257.610 nm)	1.22	0.0170 (ppm)	4625.9672
9/28/2018 02:42:30	R1809106-004	Mo (202.032 nm)	10.27	-0.0067 u (ppm)	1.5990
9/28/2018 02:42:30	R1809106-004	Na (588.995 nm)	1.72	69.0332 o (ppm)	3012512.7635
9/28/2018 02:42:30	R1809106-004	Ni (230.299 nm)	4.01	-0.0090 u (ppm)	-69.6493

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:42:30	R1809106-004	Pb (220.353 nm)	66.15	-0.0008 u (ppm)	1.3589
9/28/2018 02:42:30	R1809106-004	Sb (217.582 nm)	73.19	0.0021 (ppm)	3.5544
9/28/2018 02:42:30	R1809106-004	Se (196.026 nm)	47.12	-0.0037 u (ppm)	1.7123
9/28/2018 02:42:30	R1809106-004	Sn (189.925 nm)	61.04	-0.0027 u (ppm)	-2.4632
9/28/2018 02:42:30	R1809106-004	Sr (216.596 nm)	1.90	10.4851 o (ppm)	137220.4863
9/28/2018 02:42:30	R1809106-004	Ti (336.122 nm)	12.59	0.0020 (ppm)	625.3440
9/28/2018 02:42:30	R1809106-004	Tl (351.923 nm)	> 100.00	0.0017 (ppm)	16.7793
9/28/2018 02:42:30	R1809106-004	V (292.401 nm)	14.29	0.0008 (ppm)	154.9324
9/28/2018 02:42:30	R1809106-004	Y (360.074 nm)	1.54	0.94 (Ratio)	996735.44
9/28/2018 02:42:30	R1809106-004	Y_R (360.074 nm)	1.54	0.94 (Ratio)	996946.60
9/28/2018 02:42:30	R1809106-004	Zn (213.857 nm)	1.99	0.0046 (ppm)	68.6899
9/28/2018 02:45:45	R1809106-005	Ag (328.068 nm)	90.62	0.0002 (ppm)	-172.2888
9/28/2018 02:45:45	R1809106-005	Al (394.401 nm)	1.76	0.0794 (ppm)	1059.5405
9/28/2018 02:45:45	R1809106-005	As (188.980 nm)	> 100.00	0.0010 u (ppm)	0.1501
9/28/2018 02:45:45	R1809106-005	B (249.772 nm)	0.96	0.0702 (ppm)	1637.3240
9/28/2018 02:45:45	R1809106-005	Ba (230.424 nm)	1.13	0.0731 (ppm)	2201.3938
9/28/2018 02:45:45	R1809106-005	Be (313.107 nm)	35.42	0.0000 u (ppm)	-430.5017
9/28/2018 02:45:45	R1809106-005	Ca (227.547 nm)	0.97	239.9727 o (ppm)	12360.0236
9/28/2018 02:45:45	R1809106-005	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	14.3796
9/28/2018 02:45:45	R1809106-005	Co (230.786 nm)	35.01	0.0008 (ppm)	2.6656
9/28/2018 02:45:45	R1809106-005	Cr (267.716 nm)	20.59	-0.0006 u (ppm)	-16.9714
9/28/2018 02:45:45	R1809106-005	Cu (327.395 nm)	7.93	0.0023 (ppm)	165.1908
9/28/2018 02:45:45	R1809106-005	Fe (234.350 nm)	0.79	0.1194 (ppm)	1189.3903
9/28/2018 02:45:45	R1809106-005	K (766.491 nm)	1.27	3.0694 (ppm)	9065.7418
9/28/2018 02:45:45	R1809106-005	Mg (279.078 nm)	0.86	66.5188 o (ppm)	113086.3395
9/28/2018 02:45:45	R1809106-005	Mn (257.610 nm)	0.86	0.0902 (ppm)	24424.5719
9/28/2018 02:45:45	R1809106-005	Mo (202.032 nm)	13.99	-0.0058 u (ppm)	5.2452
9/28/2018 02:45:45	R1809106-005	Na (588.995 nm)	1.26	18.8747 (ppm)	818728.2496
9/28/2018 02:45:45	R1809106-005	Ni (230.299 nm)	20.35	-0.0063 u (ppm)	-53.8747
9/28/2018 02:45:45	R1809106-005	Pb (220.353 nm)	> 100.00	-0.0003 u (ppm)	2.2963
9/28/2018 02:45:45	R1809106-005	Sb (217.582 nm)	29.40	0.0034 (ppm)	5.1289
9/28/2018 02:45:45	R1809106-005	Se (196.026 nm)	70.90	-0.0040 u (ppm)	1.4380
9/28/2018 02:45:45	R1809106-005	Sn (189.925 nm)	81.67	-0.0017 u (ppm)	-1.2743
9/28/2018 02:45:45	R1809106-005	Sr (216.596 nm)	1.01	1.4354 (ppm)	18786.3134
9/28/2018 02:45:45	R1809106-005	Ti (336.122 nm)	> 100.00	-0.0002 u (ppm)	215.1405
9/28/2018 02:45:45	R1809106-005	Tl (351.923 nm)	> 100.00	0.0021 u (ppm)	17.6999
9/28/2018 02:45:45	R1809106-005	V (292.401 nm)	18.67	0.0005 (ppm)	143.3804
9/28/2018 02:45:45	R1809106-005	Y (360.074 nm)	1.22	0.94 (Ratio)	994146.77
9/28/2018 02:45:45	R1809106-005	Y_R (360.074 nm)	1.22	0.94 (Ratio)	994375.47
9/28/2018 02:45:45	R1809106-005	Zn (213.857 nm)	2.64	0.0065 (ppm)	138.8659
9/28/2018 02:49:00	R1809106-006	Ag (328.068 nm)	61.63	0.0003 (ppm)	-165.0907
9/28/2018 02:49:00	R1809106-006	Al (394.401 nm)	0.97	0.3431 (ppm)	4255.0445
9/28/2018 02:49:00	R1809106-006	As (188.980 nm)	40.35	0.0041 (ppm)	2.5392
9/28/2018 02:49:00	R1809106-006	B (249.772 nm)	0.95	0.2462 (ppm)	5684.7640
9/28/2018 02:49:00	R1809106-006	Ba (230.424 nm)	0.97	0.1369 (ppm)	4091.4193
9/28/2018 02:49:00	R1809106-006	Be (313.107 nm)	80.80	0.0000 u (ppm)	-412.6377
9/28/2018 02:49:00	R1809106-006	Ca (227.547 nm)	1.09	112.5773 o (ppm)	5802.0348
9/28/2018 02:49:00	R1809106-006	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	13.0667
9/28/2018 02:49:00	R1809106-006	Co (230.786 nm)	44.81	0.0009 (ppm)	4.1018
9/28/2018 02:49:00	R1809106-006	Cr (267.716 nm)	37.14	-0.0003 u (ppm)	-2.8752
9/28/2018 02:49:00	R1809106-006	Cu (327.395 nm)	16.11	0.0008 (ppm)	83.3311

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:49:00	R1809106-006	Fe (234.350 nm)	0.86	0.6668 (ppm)	6395.2593
9/28/2018 02:49:00	R1809106-006	K (766.491 nm)	1.13	4.4806 (ppm)	13254.4354
9/28/2018 02:49:00	R1809106-006	Mg (279.078 nm)	0.99	35.5036 (ppm)	60358.8390
9/28/2018 02:49:00	R1809106-006	Mn (257.610 nm)	1.01	0.0609 (ppm)	16491.4761
9/28/2018 02:49:00	R1809106-006	Mo (202.032 nm)	5.90	-0.0077 u (ppm)	-2.6878
9/28/2018 02:49:00	R1809106-006	Na (588.995 nm)	1.23	15.8070 (ppm)	684557.6981
9/28/2018 02:49:00	R1809106-006	Ni (230.299 nm)	9.20	-0.0087 u (ppm)	-67.8719
9/28/2018 02:49:00	R1809106-006	Pb (220.353 nm)	> 100.00	-0.0002 u (ppm)	2.6100
9/28/2018 02:49:00	R1809106-006	Sb (217.582 nm)	42.30	0.0011 (ppm)	2.3728
9/28/2018 02:49:00	R1809106-006	Se (196.026 nm)	> 100.00	-0.0016 u (ppm)	3.3945
9/28/2018 02:49:00	R1809106-006	Sn (189.925 nm)	33.35	-0.0037 u (ppm)	-3.6364
9/28/2018 02:49:00	R1809106-006	Sr (216.596 nm)	0.95	4.7489 (ppm)	62149.9067
9/28/2018 02:49:00	R1809106-006	Ti (336.122 nm)	5.89	0.0026 (ppm)	741.3849
9/28/2018 02:49:00	R1809106-006	Tl (351.923 nm)	55.29	0.0034 (ppm)	20.8928
9/28/2018 02:49:00	R1809106-006	V (292.401 nm)	8.36	0.0013 (ppm)	172.2259
9/28/2018 02:49:00	R1809106-006	Y (360.074 nm)	1.32	0.96 (Ratio)	1017791.20
9/28/2018 02:49:00	R1809106-006	Y_R (360.074 nm)	1.32	0.96 (Ratio)	1018082.15
9/28/2018 02:49:00	R1809106-006	Zn (213.857 nm)	0.81	0.0056 (ppm)	114.5589
9/28/2018 02:52:15	R1809106-007	Ag (328.068 nm)	3.99	0.0004 (ppm)	-160.8469
9/28/2018 02:52:15	R1809106-007	Al (394.401 nm)	1.19	0.2316 (ppm)	2904.4268
9/28/2018 02:52:15	R1809106-007	As (188.980 nm)	> 100.00	-0.0003 u (ppm)	-0.8770
9/28/2018 02:52:15	R1809106-007	B (249.772 nm)	1.07	0.4070 (ppm)	9380.7851
9/28/2018 02:52:15	R1809106-007	Ba (230.424 nm)	1.49	0.0610 (ppm)	1840.9600
9/28/2018 02:52:15	R1809106-007	Be (313.107 nm)	28.92	0.0000 u (ppm)	-421.5081
9/28/2018 02:52:15	R1809106-007	Ca (227.547 nm)	1.27	145.3476 o (ppm)	7488.9656
9/28/2018 02:52:15	R1809106-007	Cd (214.439 nm)	49.78	-0.0002 u (ppm)	9.2647
9/28/2018 02:52:15	R1809106-007	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.6499
9/28/2018 02:52:15	R1809106-007	Cr (267.716 nm)	9.77	-0.0004 u (ppm)	-6.2736
9/28/2018 02:52:15	R1809106-007	Cu (327.395 nm)	18.50	0.0007 (ppm)	76.6270
9/28/2018 02:52:15	R1809106-007	Fe (234.350 nm)	0.75	0.2394 (ppm)	2339.2025
9/28/2018 02:52:15	R1809106-007	K (766.491 nm)	1.42	3.6836 (ppm)	10888.8754
9/28/2018 02:52:15	R1809106-007	Mg (279.078 nm)	1.07	49.0647 (ppm)	83413.4657
9/28/2018 02:52:15	R1809106-007	Mn (257.610 nm)	1.10	0.0296 (ppm)	8033.7735
9/28/2018 02:52:15	R1809106-007	Mo (202.032 nm)	20.15	-0.0074 u (ppm)	-1.2569
9/28/2018 02:52:15	R1809106-007	Na (588.995 nm)	1.65	31.2542 (ppm)	1360170.4515
9/28/2018 02:52:15	R1809106-007	Ni (230.299 nm)	14.39	-0.0094 u (ppm)	-72.3460
9/28/2018 02:52:15	R1809106-007	Pb (220.353 nm)	25.71	-0.0019 u (ppm)	-0.8078
9/28/2018 02:52:15	R1809106-007	Sb (217.582 nm)	> 100.00	0.0010 u (ppm)	2.1462
9/28/2018 02:52:15	R1809106-007	Se (196.026 nm)	62.52	-0.0018 u (ppm)	3.2299
9/28/2018 02:52:15	R1809106-007	Sn (189.925 nm)	> 100.00	-0.0012 u (ppm)	-0.7292
9/28/2018 02:52:15	R1809106-007	Sr (216.596 nm)	1.28	2.8291 (ppm)	37025.6747
9/28/2018 02:52:15	R1809106-007	Ti (336.122 nm)	16.73	0.0012 (ppm)	467.6149
9/28/2018 02:52:15	R1809106-007	Tl (351.923 nm)	> 100.00	0.0004 u (ppm)	13.5581
9/28/2018 02:52:15	R1809106-007	V (292.401 nm)	90.06	0.0003 (ppm)	138.8638
9/28/2018 02:52:15	R1809106-007	Y (360.074 nm)	1.44	0.95 (Ratio)	1003027.04
9/28/2018 02:52:15	R1809106-007	Y_R (360.074 nm)	1.44	0.95 (Ratio)	1003307.83
9/28/2018 02:52:15	R1809106-007	Zn (213.857 nm)	2.88	0.0045 (ppm)	88.0836
9/28/2018 02:55:29	R1809106-008	Ag (328.068 nm)	55.98	0.0002 (ppm)	-170.4520
9/28/2018 02:55:29	R1809106-008	Al (394.401 nm)	1.39	0.1246 (ppm)	1607.2153
9/28/2018 02:55:29	R1809106-008	As (188.980 nm)	> 100.00	0.0020 u (ppm)	0.9534
9/28/2018 02:55:29	R1809106-008	B (249.772 nm)	0.87	0.9229 (ppm)	21245.6245

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:55:29	R1809106-008	Ba (230.424 nm)	1.16	0.1401 (ppm)	4188.4138
9/28/2018 02:55:29	R1809106-008	Be (313.107 nm)	12.28	0.0000 u (ppm)	-427.6564
9/28/2018 02:55:29	R1809106-008	Ca (227.547 nm)	0.81	189.8991 o (ppm)	9782.3644
9/28/2018 02:55:29	R1809106-008	Cd (214.439 nm)	99.13	-0.0003 u (ppm)	7.7138
9/28/2018 02:55:29	R1809106-008	Co (230.786 nm)	19.51	0.0013 (ppm)	6.9213
9/28/2018 02:55:29	R1809106-008	Cr (267.716 nm)	15.76	-0.0008 u (ppm)	-25.5192
9/28/2018 02:55:29	R1809106-008	Cu (327.395 nm)	42.35	0.0004 (ppm)	61.0520
9/28/2018 02:55:29	R1809106-008	Fe (234.350 nm)	0.79	0.3164 (ppm)	3069.5500
9/28/2018 02:55:29	R1809106-008	K (766.491 nm)	0.74	2.3011 (ppm)	6785.4961
9/28/2018 02:55:29	R1809106-008	Mg (279.078 nm)	0.82	49.5469 (ppm)	84233.1802
9/28/2018 02:55:29	R1809106-008	Mn (257.610 nm)	0.90	0.8075 (ppm)	245707.6392
9/28/2018 02:55:29	R1809106-008	Mo (202.032 nm)	5.40	-0.0059 u (ppm)	4.9900
9/28/2018 02:55:29	R1809106-008	Na (588.995 nm)	1.18	85.7303 o (ppm)	3742791.6547
9/28/2018 02:55:29	R1809106-008	Ni (230.299 nm)	> 100.00	0.0006 u (ppm)	-14.1792
9/28/2018 02:55:29	R1809106-008	Pb (220.353 nm)	> 100.00	-0.0012 u (ppm)	0.6424
9/28/2018 02:55:29	R1809106-008	Sb (217.582 nm)	89.82	0.0028 (ppm)	4.3870
9/28/2018 02:55:29	R1809106-008	Se (196.026 nm)	30.62	-0.0041 u (ppm)	1.3941
9/28/2018 02:55:29	R1809106-008	Sn (189.925 nm)	62.79	-0.0027 u (ppm)	-2.4818
9/28/2018 02:55:29	R1809106-008	Sr (216.596 nm)	0.98	2.3616 (ppm)	30907.3003
9/28/2018 02:55:29	R1809106-008	Ti (336.122 nm)	52.02	-0.0003 u (ppm)	191.4491
9/28/2018 02:55:29	R1809106-008	Tl (351.923 nm)	> 100.00	0.0024 u (ppm)	18.4167
9/28/2018 02:55:29	R1809106-008	V (292.401 nm)	66.05	0.0002 (ppm)	136.5269
9/28/2018 02:55:29	R1809106-008	Y (360.074 nm)	1.34	0.93 (Ratio)	981431.63
9/28/2018 02:55:29	R1809106-008	Y_R (360.074 nm)	1.34	0.93 (Ratio)	981728.75
9/28/2018 02:55:29	R1809106-008	Zn (213.857 nm)	1.46	0.0049 (ppm)	97.3240
9/28/2018 02:58:43	R1809106-009	Ag (328.068 nm)	70.70	0.0002 (ppm)	-175.5868
9/28/2018 02:58:43	R1809106-009	Al (394.401 nm)	2.53	0.0550 (ppm)	764.6185
9/28/2018 02:58:43	R1809106-009	As (188.980 nm)	> 100.00	-0.0013 u (ppm)	-1.6123
9/28/2018 02:58:43	R1809106-009	B (249.772 nm)	0.86	0.1227 (ppm)	2843.4966
9/28/2018 02:58:43	R1809106-009	Ba (230.424 nm)	1.16	0.1411 (ppm)	4216.1506
9/28/2018 02:58:43	R1809106-009	Be (313.107 nm)	15.41	0.0000 u (ppm)	-430.6128
9/28/2018 02:58:43	R1809106-009	Ca (227.547 nm)	1.32	94.1855 o (ppm)	4855.2733
9/28/2018 02:58:43	R1809106-009	Cd (214.439 nm)	69.53	-0.0001 u (ppm)	11.2223
9/28/2018 02:58:43	R1809106-009	Co (230.786 nm)	> 100.00	0.0001 u (ppm)	-3.3041
9/28/2018 02:58:43	R1809106-009	Cr (267.716 nm)	4.89	0.0013 (ppm)	66.1295
9/28/2018 02:58:43	R1809106-009	Cu (327.395 nm)	31.27	0.0004 (ppm)	60.5081
9/28/2018 02:58:43	R1809106-009	Fe (234.350 nm)	1.08	0.0284 (ppm)	335.6458
9/28/2018 02:58:43	R1809106-009	K (766.491 nm)	1.37	2.4963 (ppm)	7364.7644
9/28/2018 02:58:43	R1809106-009	Mg (279.078 nm)	0.94	39.4633 (ppm)	67090.5612
9/28/2018 02:58:43	R1809106-009	Mn (257.610 nm)	2.31	0.0024 (ppm)	663.2453
9/28/2018 02:58:43	R1809106-009	Mo (202.032 nm)	23.56	-0.0028 u (ppm)	18.0061
9/28/2018 02:58:43	R1809106-009	Na (588.995 nm)	1.31	34.2780 (ppm)	1492422.0724
9/28/2018 02:58:43	R1809106-009	Ni (230.299 nm)	4.65	-0.0106 u (ppm)	-79.1279
9/28/2018 02:58:43	R1809106-009	Pb (220.353 nm)	> 100.00	-0.0017 u (ppm)	-0.3049
9/28/2018 02:58:43	R1809106-009	Sb (217.582 nm)	51.68	0.0048 (ppm)	6.8458
9/28/2018 02:58:43	R1809106-009	Se (196.026 nm)	74.75	-0.0024 u (ppm)	2.7260
9/28/2018 02:58:43	R1809106-009	Sn (189.925 nm)	78.30	-0.0018 u (ppm)	-1.4120
9/28/2018 02:58:43	R1809106-009	Sr (216.596 nm)	1.14	1.2017 (ppm)	15726.7941
9/28/2018 02:58:43	R1809106-009	Ti (336.122 nm)	5.39	-0.0015 u (ppm)	-35.1509
9/28/2018 02:58:43	R1809106-009	Tl (351.923 nm)	66.76	0.0023 (ppm)	18.2163
9/28/2018 02:58:43	R1809106-009	V (292.401 nm)	15.56	0.0006 (ppm)	147.9496

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 02:58:43	R1809106-009	Y (360.074 nm)	1.30	0.96 (Ratio)	1010504.75
9/28/2018 02:58:43	R1809106-009	Y_R (360.074 nm)	1.30	0.96 (Ratio)	1010783.16
9/28/2018 02:58:43	R1809106-009	Zn (213.857 nm)	2.01	0.0062 (ppm)	130.9590
9/28/2018 03:01:57	Continuing Calibration Verification1	Ag (328.068 nm)	0.35	0.4960 (ppm)	30724.2694
9/28/2018 03:01:57	Continuing Calibration Verification1	Al (394.401 nm)	0.22	9.4991 (ppm)	115197.9435
9/28/2018 03:01:57	Continuing Calibration Verification1	As (188.980 nm)	1.43	0.9653 (ppm)	751.1908
9/28/2018 03:01:57	Continuing Calibration Verification1	B (249.772 nm)	0.30	2.4632 (ppm)	56665.1164
9/28/2018 03:01:57	Continuing Calibration Verification1	Ba (230.424 nm)	0.35	9.9675 (ppm)	295594.0061
9/28/2018 03:01:57	Continuing Calibration Verification1	Be (313.107 nm)	0.35	0.2484 (ppm)	323965.5750
9/28/2018 03:01:57	Continuing Calibration Verification1	Ca (227.547 nm)	0.12	23.9677 (ppm)	1240.6463
9/28/2018 03:01:57	Continuing Calibration Verification1	Cd (214.439 nm)	0.48	0.4914 (ppm)	9670.8827
9/28/2018 03:01:57	Continuing Calibration Verification1	Co (230.786 nm)	0.33	2.5503 (ppm)	22211.2409
9/28/2018 03:01:57	Continuing Calibration Verification1	Cr (267.716 nm)	0.38	0.5091 (ppm)	22049.3005
9/28/2018 03:01:57	Continuing Calibration Verification1	Cu (327.395 nm)	0.20	1.2126 (ppm)	66749.6885
9/28/2018 03:01:57	Continuing Calibration Verification1	Fe (234.350 nm)	0.54	4.7803 (ppm)	45437.2344
9/28/2018 03:01:57	Continuing Calibration Verification1	K (766.491 nm)	0.13	23.9600 (ppm)	71070.5791
9/28/2018 03:01:57	Continuing Calibration Verification1	Mg (279.078 nm)	0.46	24.0995 (ppm)	40971.4273
9/28/2018 03:01:57	Continuing Calibration Verification1	Mn (257.610 nm)	0.31	0.7574 (ppm)	205069.9492
9/28/2018 03:01:57	Continuing Calibration Verification1	Mo (202.032 nm)	0.66	2.6106 (ppm)	11031.9694
9/28/2018 03:01:57	Continuing Calibration Verification1	Na (588.995 nm)	0.25	24.0891 (ppm)	1046792.0892
9/28/2018 03:01:57	Continuing Calibration Verification1	Ni (230.299 nm)	0.26	2.0191 (ppm)	11731.0139
9/28/2018 03:01:57	Continuing Calibration Verification1	Pb (220.353 nm)	0.75	0.4981 (ppm)	974.3385
9/28/2018 03:01:57	Continuing Calibration Verification1	Sb (217.582 nm)	0.17	4.8498 (ppm)	5962.1251
9/28/2018 03:01:57	Continuing Calibration Verification1	Se (196.026 nm)	0.64	0.4803 (ppm)	395.2477
9/28/2018 03:01:57	Continuing Calibration Verification1	Sn (189.925 nm)	0.28	4.9447 (ppm)	5772.9372
9/28/2018 03:01:57	Continuing Calibration Verification1	Sr (216.596 nm)	0.51	2.4928 (ppm)	32623.7354
9/28/2018 03:01:57	Continuing Calibration Verification1	Ti (336.122 nm)	0.33	2.4888 (ppm)	464726.2120
9/28/2018 03:01:57	Continuing Calibration Verification1	Tl (351.923 nm)	0.03	0.9902 (ppm)	2417.8704
9/28/2018 03:01:57	Continuing Calibration Verification1	V (292.401 nm)	0.42	2.4816 (ppm)	84394.1271
9/28/2018 03:01:57	Continuing Calibration Verification1	Y (360.074 nm)	0.36	0.97 (Ratio)	1021455.67
9/28/2018 03:01:57	Continuing Calibration Verification1	Y_R (360.074 nm)	0.36	0.97 (Ratio)	1021750.84
9/28/2018 03:01:57	Continuing Calibration Verification1	Zn (213.857 nm)	0.45	0.9771 (ppm)	24546.1541
9/28/2018 03:05:11	Continuing Calibration Blank1	Ag (328.068 nm)	5.06	0.0003 (ppm)	-168.8407
9/28/2018 03:05:11	Continuing Calibration Blank1	Al (394.401 nm)	> 100.00	0.0000 u (ppm)	97.6979
9/28/2018 03:05:11	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	0.0003 u (ppm)	-0.3788
9/28/2018 03:05:11	Continuing Calibration Blank1	B (249.772 nm)	18.81	0.0014 (ppm)	53.8742
9/28/2018 03:05:11	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	33.5824
9/28/2018 03:05:11	Continuing Calibration Blank1	Be (313.107 nm)	79.42	0.0000 (ppm)	-388.4739
9/28/2018 03:05:11	Continuing Calibration Blank1	Ca (227.547 nm)	> 100.00	-0.0063 u (ppm)	6.5266
9/28/2018 03:05:11	Continuing Calibration Blank1	Cd (214.439 nm)	> 100.00	0.0000 u (ppm)	12.8727
9/28/2018 03:05:11	Continuing Calibration Blank1	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.5363
9/28/2018 03:05:11	Continuing Calibration Blank1	Cr (267.716 nm)	66.42	-0.0001 u (ppm)	6.2767
9/28/2018 03:05:11	Continuing Calibration Blank1	Cu (327.395 nm)	42.53	-0.0002 u (ppm)	29.1512
9/28/2018 03:05:11	Continuing Calibration Blank1	Fe (234.350 nm)	38.52	0.0026 (ppm)	91.2771
9/28/2018 03:05:11	Continuing Calibration Blank1	K (766.491 nm)	19.04	0.0281 (ppm)	38.8869
9/28/2018 03:05:11	Continuing Calibration Blank1	Mg (279.078 nm)	> 100.00	0.0006 u (ppm)	1.6870
9/28/2018 03:05:11	Continuing Calibration Blank1	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	16.8559
9/28/2018 03:05:11	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	0.0003 u (ppm)	31.0693
9/28/2018 03:05:11	Continuing Calibration Blank1	Na (588.995 nm)	24.73	0.0102 (ppm)	-6346.8167
9/28/2018 03:05:11	Continuing Calibration Blank1	Ni (230.299 nm)	58.76	0.0009 (ppm)	-12.0775
9/28/2018 03:05:11	Continuing Calibration Blank1	Pb (220.353 nm)	> 100.00	0.0010 (ppm)	4.9098

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:05:11	Continuing Calibration Blank1	Sb (217.582 nm)	50.36	0.0037 (ppm)	5.5437
9/28/2018 03:05:11	Continuing Calibration Blank1	Se (196.026 nm)	> 100.00	0.0000 u (ppm)	4.7221
9/28/2018 03:05:11	Continuing Calibration Blank1	Sn (189.925 nm)	> 100.00	0.0004 u (ppm)	1.2019
9/28/2018 03:05:11	Continuing Calibration Blank1	Sr (216.596 nm)	91.96	0.0003 (ppm)	4.2276
9/28/2018 03:05:11	Continuing Calibration Blank1	Ti (336.122 nm)	63.93	0.0020 (ppm)	622.2398
9/28/2018 03:05:11	Continuing Calibration Blank1	Tl (351.923 nm)	56.90	0.0024 (ppm)	18.4657
9/28/2018 03:05:11	Continuing Calibration Blank1	V (292.401 nm)	> 100.00	-0.0001 u (ppm)	124.1558
9/28/2018 03:05:11	Continuing Calibration Blank1	Y (360.074 nm)	0.22	1.02 (Ratio)	1071189.89
9/28/2018 03:05:11	Continuing Calibration Blank1	Y_R (360.074 nm)	0.22	1.02 (Ratio)	1071499.16
9/28/2018 03:05:11	Continuing Calibration Blank1	Zn (213.857 nm)	48.44	0.0001 (ppm)	-22.7341
9/28/2018 03:08:25	R1809106-010	Ag (328.068 nm)	53.96	0.0002 (ppm)	-171.7787
9/28/2018 03:08:25	R1809106-010	Al (394.401 nm)	1.87	0.1338 (ppm)	1719.1037
9/28/2018 03:08:25	R1809106-010	As (188.980 nm)	> 100.00	-0.0012 u (ppm)	-1.5802
9/28/2018 03:08:25	R1809106-010	B (249.772 nm)	0.78	0.1100 (ppm)	2551.5457
9/28/2018 03:08:25	R1809106-010	Ba (230.424 nm)	1.68	0.0682 (ppm)	2054.4455
9/28/2018 03:08:25	R1809106-010	Be (313.107 nm)	49.53	0.0000 u (ppm)	-408.2550
9/28/2018 03:08:25	R1809106-010	Ca (227.547 nm)	1.11	152.6984 o (ppm)	7867.3674
9/28/2018 03:08:25	R1809106-010	Cd (214.439 nm)	25.25	-0.0003 u (ppm)	7.8354
9/28/2018 03:08:25	R1809106-010	Co (230.786 nm)	64.95	-0.0003 u (ppm)	-6.8785
9/28/2018 03:08:25	R1809106-010	Cr (267.716 nm)	38.11	-0.0005 u (ppm)	-10.0049
9/28/2018 03:08:25	R1809106-010	Cu (327.395 nm)	> 100.00	0.0000 u (ppm)	39.3966
9/28/2018 03:08:25	R1809106-010	Fe (234.350 nm)	0.80	0.0890 (ppm)	911.0731
9/28/2018 03:08:25	R1809106-010	K (766.491 nm)	0.95	2.0165 (ppm)	5940.8087
9/28/2018 03:08:25	R1809106-010	Mg (279.078 nm)	1.01	57.5552 o (ppm)	97847.7914
9/28/2018 03:08:25	R1809106-010	Mn (257.610 nm)	0.77	0.0156 (ppm)	4225.8146
9/28/2018 03:08:25	R1809106-010	Mo (202.032 nm)	6.16	-0.0065 u (ppm)	2.4037
9/28/2018 03:08:25	R1809106-010	Na (588.995 nm)	1.19	23.9479 (ppm)	1040614.1328
9/28/2018 03:08:25	R1809106-010	Ni (230.299 nm)	13.94	-0.0057 u (ppm)	-50.8396
9/28/2018 03:08:25	R1809106-010	Pb (220.353 nm)	59.62	-0.0028 u (ppm)	-2.5645
9/28/2018 03:08:25	R1809106-010	Sb (217.582 nm)	87.18	0.0022 (ppm)	3.7220
9/28/2018 03:08:25	R1809106-010	Se (196.026 nm)	32.38	-0.0043 u (ppm)	1.1716
9/28/2018 03:08:25	R1809106-010	Sn (189.925 nm)	51.62	-0.0016 u (ppm)	-1.2160
9/28/2018 03:08:25	R1809106-010	Sr (216.596 nm)	1.08	3.0691 (ppm)	40166.7646
9/28/2018 03:08:25	R1809106-010	Ti (336.122 nm)	34.54	0.0007 (ppm)	383.4463
9/28/2018 03:08:25	R1809106-010	Tl (351.923 nm)	> 100.00	0.0021 u (ppm)	17.7418
9/28/2018 03:08:25	R1809106-010	V (292.401 nm)	11.11	0.0003 (ppm)	139.3231
9/28/2018 03:08:25	R1809106-010	Y (360.074 nm)	1.32	0.95 (Ratio)	1002585.51
9/28/2018 03:08:25	R1809106-010	Y_R (360.074 nm)	1.32	0.95 (Ratio)	1002819.46
9/28/2018 03:08:25	R1809106-010	Zn (213.857 nm)	0.61	0.0045 (ppm)	88.2818
9/28/2018 03:11:40	R1809106-010S	Ag (328.068 nm)	1.05	0.0511 (ppm)	3001.7230
9/28/2018 03:11:40	R1809106-010S	Al (394.401 nm)	1.36	2.0978 (ppm)	25516.6130
9/28/2018 03:11:40	R1809106-010S	As (188.980 nm)	15.63	0.0394 (ppm)	30.0653
9/28/2018 03:11:40	R1809106-010S	B (249.772 nm)	1.06	1.1552 (ppm)	26586.3471
9/28/2018 03:11:40	R1809106-010S	Ba (230.424 nm)	0.97	2.0738 (ppm)	61526.3544
9/28/2018 03:11:40	R1809106-010S	Be (313.107 nm)	1.03	0.0494 (ppm)	64159.6939
9/28/2018 03:11:40	R1809106-010S	Ca (227.547 nm)	1.18	156.2350 o (ppm)	8049.4216
9/28/2018 03:11:40	R1809106-010S	Cd (214.439 nm)	0.61	0.0490 (ppm)	976.0633
9/28/2018 03:11:40	R1809106-010S	Co (230.786 nm)	0.79	0.4872 (ppm)	4239.4984
9/28/2018 03:11:40	R1809106-010S	Cr (267.716 nm)	0.99	0.1977 (ppm)	8569.1092
9/28/2018 03:11:40	R1809106-010S	Cu (327.395 nm)	1.43	0.2471 (ppm)	13633.3889
9/28/2018 03:11:40	R1809106-010S	Fe (234.350 nm)	1.01	1.0152 (ppm)	9702.3740

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:11:40	R1809106-010S	K (766.491 nm)	1.35	23.0188 (ppm)	68277.2194
9/28/2018 03:11:40	R1809106-010S	Mg (279.078 nm)	0.99	59.6879 o (ppm)	101473.4173
9/28/2018 03:11:40	R1809106-010S	Mn (257.610 nm)	1.15	0.5072 (ppm)	137346.6005
9/28/2018 03:11:40	R1809106-010S	Mo (202.032 nm)	1.35	0.4881 (ppm)	2087.0192
9/28/2018 03:11:40	R1809106-010S	Na (588.995 nm)	1.36	44.0009 (ppm)	1917672.6732
9/28/2018 03:11:40	R1809106-010S	Ni (230.299 nm)	0.87	0.4706 (ppm)	2721.1072
9/28/2018 03:11:40	R1809106-010S	Pb (220.353 nm)	1.47	0.4935 (ppm)	965.4405
9/28/2018 03:11:40	R1809106-010S	Sb (217.582 nm)	1.50	0.4875 (ppm)	600.1691
9/28/2018 03:11:40	R1809106-010S	Se (196.026 nm)	0.77	1.0568 (ppm)	864.1124
9/28/2018 03:11:40	R1809106-010S	Sn (189.925 nm)	0.97	4.9976 (ppm)	5834.6895
9/28/2018 03:11:40	R1809106-010S	Sr (216.596 nm)	1.15	5.0359 (ppm)	65905.7906
9/28/2018 03:11:40	R1809106-010S	Ti (336.122 nm)	1.11	0.4953 (ppm)	92682.5272
9/28/2018 03:11:40	R1809106-010S	Tl (351.923 nm)	0.98	2.0160 (ppm)	4909.6904
9/28/2018 03:11:40	R1809106-010S	V (292.401 nm)	1.13	0.4953 (ppm)	16945.2100
9/28/2018 03:11:40	R1809106-010S	Y (360.074 nm)	1.44	0.94 (Ratio)	992697.93
9/28/2018 03:11:40	R1809106-010S	Y_R (360.074 nm)	1.44	0.94 (Ratio)	992894.19
9/28/2018 03:11:40	R1809106-010S	Zn (213.857 nm)	0.95	0.4963 (ppm)	12456.3500
9/28/2018 03:14:53	R1809106-010SD	Ag (328.068 nm)	0.59	0.0512 (ppm)	3006.8075
9/28/2018 03:14:53	R1809106-010SD	Al (394.401 nm)	1.03	2.1421 (ppm)	26052.8408
9/28/2018 03:14:53	R1809106-010SD	As (188.980 nm)	12.94	0.0403 (ppm)	30.7972
9/28/2018 03:14:53	R1809106-010SD	B (249.772 nm)	0.94	1.1587 (ppm)	26667.3456
9/28/2018 03:14:53	R1809106-010SD	Ba (230.424 nm)	0.91	2.0782 (ppm)	61656.2805
9/28/2018 03:14:53	R1809106-010SD	Be (313.107 nm)	1.01	0.0495 (ppm)	64209.8342
9/28/2018 03:14:53	R1809106-010SD	Ca (227.547 nm)	1.02	155.8637 o (ppm)	8030.3079
9/28/2018 03:14:53	R1809106-010SD	Cd (214.439 nm)	0.66	0.0489 (ppm)	975.1579
9/28/2018 03:14:53	R1809106-010SD	Co (230.786 nm)	0.86	0.4891 (ppm)	4256.0866
9/28/2018 03:14:53	R1809106-010SD	Cr (267.716 nm)	0.95	0.1982 (ppm)	8591.8319
9/28/2018 03:14:53	R1809106-010SD	Cu (327.395 nm)	1.07	0.2479 (ppm)	13677.8029
9/28/2018 03:14:53	R1809106-010SD	Fe (234.350 nm)	0.90	1.0472 (ppm)	10006.0796
9/28/2018 03:14:53	R1809106-010SD	K (766.491 nm)	1.05	23.1434 (ppm)	68646.9939
9/28/2018 03:14:53	R1809106-010SD	Mg (279.078 nm)	0.92	59.5185 o (ppm)	101185.4137
9/28/2018 03:14:53	R1809106-010SD	Mn (257.610 nm)	0.93	0.5081 (ppm)	137588.8483
9/28/2018 03:14:53	R1809106-010SD	Mo (202.032 nm)	0.58	0.4890 (ppm)	2090.5422
9/28/2018 03:14:53	R1809106-010SD	Na (588.995 nm)	1.22	44.0543 (ppm)	1920007.2149
9/28/2018 03:14:53	R1809106-010SD	Ni (230.299 nm)	1.26	0.4707 (ppm)	2721.5379
9/28/2018 03:14:53	R1809106-010SD	Pb (220.353 nm)	1.04	0.4923 (ppm)	963.0908
9/28/2018 03:14:53	R1809106-010SD	Sb (217.582 nm)	0.94	0.4888 (ppm)	601.7561
9/28/2018 03:14:53	R1809106-010SD	Se (196.026 nm)	1.12	1.0645 (ppm)	870.3554
9/28/2018 03:14:53	R1809106-010SD	Sn (189.925 nm)	1.00	5.0179 (ppm)	5858.3255
9/28/2018 03:14:53	R1809106-010SD	Sr (216.596 nm)	0.50	5.0183 (ppm)	65675.8581
9/28/2018 03:14:53	R1809106-010SD	Ti (336.122 nm)	0.92	0.4983 (ppm)	93236.5252
9/28/2018 03:14:53	R1809106-010SD	Tl (351.923 nm)	0.75	2.0230 (ppm)	4926.7426
9/28/2018 03:14:53	R1809106-010SD	V (292.401 nm)	0.99	0.4960 (ppm)	16972.1662
9/28/2018 03:14:53	R1809106-010SD	Y (360.074 nm)	1.25	0.94 (Ratio)	994840.20
9/28/2018 03:14:53	R1809106-010SD	Y_R (360.074 nm)	1.25	0.94 (Ratio)	995025.63
9/28/2018 03:14:53	R1809106-010SD	Zn (213.857 nm)	0.67	0.5037 (ppm)	12641.2810
9/28/2018 03:18:07	R1809106-010A	Ag (328.068 nm)	1.06	0.0530 (ppm)	3115.2728
9/28/2018 03:18:07	R1809106-010A	Al (394.401 nm)	1.29	2.0763 (ppm)	25256.0735
9/28/2018 03:18:07	R1809106-010A	As (188.980 nm)	8.22	0.0402 (ppm)	30.7282
9/28/2018 03:18:07	R1809106-010A	B (249.772 nm)	1.10	1.1251 (ppm)	25893.6145
9/28/2018 03:18:07	R1809106-010A	Ba (230.424 nm)	1.22	2.0082 (ppm)	59582.1857

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:18:07	R1809106-010A	Be (313.107 nm)	1.19	0.0479 (ppm)	62167.5060
9/28/2018 03:18:07	R1809106-010A	Ca (227.547 nm)	1.36	151.5540 o (ppm)	7808.4554
9/28/2018 03:18:07	R1809106-010A	Cd (214.439 nm)	1.10	0.0474 (ppm)	945.8577
9/28/2018 03:18:07	R1809106-010A	Co (230.786 nm)	1.45	0.4736 (ppm)	4121.3411
9/28/2018 03:18:07	R1809106-010A	Cr (267.716 nm)	1.08	0.1915 (ppm)	8302.1993
9/28/2018 03:18:07	R1809106-010A	Cu (327.395 nm)	2.13	0.2407 (ppm)	13278.6755
9/28/2018 03:18:07	R1809106-010A	Fe (234.350 nm)	1.07	1.0151 (ppm)	9701.5148
9/28/2018 03:18:07	R1809106-010A	K (766.491 nm)	1.42	22.3944 (ppm)	66423.7253
9/28/2018 03:18:07	R1809106-010A	Mg (279.078 nm)	1.10	57.8968 o (ppm)	98428.5248
9/28/2018 03:18:07	R1809106-010A	Mn (257.610 nm)	1.13	0.4918 (ppm)	133177.8184
9/28/2018 03:18:07	R1809106-010A	Mo (202.032 nm)	1.32	0.4799 (ppm)	2052.1369
9/28/2018 03:18:07	R1809106-010A	Na (588.995 nm)	1.86	42.7845 (ppm)	1864472.8907
9/28/2018 03:18:07	R1809106-010A	Ni (230.299 nm)	0.73	0.4566 (ppm)	2639.3495
9/28/2018 03:18:07	R1809106-010A	Pb (220.353 nm)	1.22	0.4770 (ppm)	933.2487
9/28/2018 03:18:07	R1809106-010A	Sb (217.582 nm)	2.02	0.4751 (ppm)	584.9570
9/28/2018 03:18:07	R1809106-010A	Se (196.026 nm)	1.07	1.1361 o (ppm)	928.5605
9/28/2018 03:18:07	R1809106-010A	Sn (189.925 nm)	0.89	4.9040 (ppm)	5725.4234
9/28/2018 03:18:07	R1809106-010A	Sr (216.596 nm)	0.93	4.9668 (ppm)	65002.0826
9/28/2018 03:18:07	R1809106-010A	Ti (336.122 nm)	1.30	0.4855 (ppm)	90850.6777
9/28/2018 03:18:07	R1809106-010A	Tl (351.923 nm)	1.12	1.9580 (ppm)	4768.7457
9/28/2018 03:18:07	R1809106-010A	V (292.401 nm)	1.17	0.4792 (ppm)	16401.0371
9/28/2018 03:18:07	R1809106-010A	Y (360.074 nm)	1.49	0.94 (Ratio)	993468.45
9/28/2018 03:18:07	R1809106-010A	Y_R (360.074 nm)	1.49	0.94 (Ratio)	993666.61
9/28/2018 03:18:07	R1809106-010A	Zn (213.857 nm)	1.22	0.4841 (ppm)	12148.9062
9/28/2018 03:21:22	R1809106-010L	Ag (328.068 nm)	6.80	0.0002 (ppm)	-173.2901
9/28/2018 03:21:22	R1809106-010L	Al (394.401 nm)	1.47	0.0311 (ppm)	474.0381
9/28/2018 03:21:22	R1809106-010L	As (188.980 nm)	> 100.00	-0.0012 u (ppm)	-1.5623
9/28/2018 03:21:22	R1809106-010L	B (249.772 nm)	0.99	0.0213 (ppm)	511.2209
9/28/2018 03:21:22	R1809106-010L	Ba (230.424 nm)	1.14	0.0130 (ppm)	418.2273
9/28/2018 03:21:22	R1809106-010L	Be (313.107 nm)	18.99	0.0000 u (ppm)	-414.8473
9/28/2018 03:21:22	R1809106-010L	Ca (227.547 nm)	0.67	27.9980 (ppm)	1448.1126
9/28/2018 03:21:22	R1809106-010L	Cd (214.439 nm)	8.83	-0.0002 u (ppm)	9.5622
9/28/2018 03:21:22	R1809106-010L	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-3.7910
9/28/2018 03:21:22	R1809106-010L	Cr (267.716 nm)	25.25	-0.0004 u (ppm)	-5.9876
9/28/2018 03:21:22	R1809106-010L	Cu (327.395 nm)	> 100.00	-0.0001 u (ppm)	34.2690
9/28/2018 03:21:22	R1809106-010L	Fe (234.350 nm)	6.09	0.0180 (ppm)	237.3064
9/28/2018 03:21:22	R1809106-010L	K (766.491 nm)	2.26	0.3781 (ppm)	1077.7228
9/28/2018 03:21:22	R1809106-010L	Mg (279.078 nm)	0.75	11.0107 (ppm)	18719.4698
9/28/2018 03:21:22	R1809106-010L	Mn (257.610 nm)	0.45	0.0031 (ppm)	856.5080
9/28/2018 03:21:22	R1809106-010L	Mo (202.032 nm)	35.05	-0.0044 u (ppm)	11.1413
9/28/2018 03:21:22	R1809106-010L	Na (588.995 nm)	0.07	4.5080 (ppm)	190370.9653
9/28/2018 03:21:22	R1809106-010L	Ni (230.299 nm)	57.04	-0.0011 u (ppm)	-23.5572
9/28/2018 03:21:22	R1809106-010L	Pb (220.353 nm)	> 100.00	0.0001 u (ppm)	3.1796
9/28/2018 03:21:22	R1809106-010L	Sb (217.582 nm)	66.99	0.0030 (ppm)	4.6071
9/28/2018 03:21:22	R1809106-010L	Se (196.026 nm)	> 100.00	-0.0006 u (ppm)	4.2294
9/28/2018 03:21:22	R1809106-010L	Sn (189.925 nm)	77.44	0.0010 (ppm)	1.8817
9/28/2018 03:21:22	R1809106-010L	Sr (216.596 nm)	0.82	0.6136 (ppm)	8031.4458
9/28/2018 03:21:22	R1809106-010L	Ti (336.122 nm)	> 100.00	-0.0004 u (ppm)	169.9260
9/28/2018 03:21:22	R1809106-010L	Tl (351.923 nm)	68.96	0.0035 (ppm)	21.2039
9/28/2018 03:21:22	R1809106-010L	V (292.401 nm)	> 100.00	0.0000 u (ppm)	128.9914
9/28/2018 03:21:22	R1809106-010L	Y (360.074 nm)	0.60	0.99 (Ratio)	1049397.63

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:21:22	R1809106-010L	Y_R (360.074 nm)	0.60	0.99 (Ratio)	1049624.82
9/28/2018 03:21:22	R1809106-010L	Zn (213.857 nm)	6.29	0.0017 (ppm)	16.4279
9/28/2018 03:24:37	R1809106-011	Ag (328.068 nm)	49.77	0.0002 (ppm)	-170.3362
9/28/2018 03:24:37	R1809106-011	Al (394.401 nm)	2.06	0.0431 (ppm)	619.5584
9/28/2018 03:24:37	R1809106-011	As (188.980 nm)	> 100.00	0.0005 u (ppm)	-0.2218
9/28/2018 03:24:37	R1809106-011	B (249.772 nm)	0.41	0.0564 (ppm)	1318.7839
9/28/2018 03:24:37	R1809106-011	Ba (230.424 nm)	0.92	0.0748 (ppm)	2250.5859
9/28/2018 03:24:37	R1809106-011	Be (313.107 nm)	40.02	0.0000 u (ppm)	-435.5387
9/28/2018 03:24:37	R1809106-011	Ca (227.547 nm)	1.05	90.8026 o (ppm)	4681.1345
9/28/2018 03:24:37	R1809106-011	Cd (214.439 nm)	73.32	-0.0002 u (ppm)	10.1251
9/28/2018 03:24:37	R1809106-011	Co (230.786 nm)	> 100.00	-0.0002 u (ppm)	-5.4889
9/28/2018 03:24:37	R1809106-011	Cr (267.716 nm)	25.33	-0.0006 u (ppm)	-16.7615
9/28/2018 03:24:37	R1809106-011	Cu (327.395 nm)	> 100.00	0.0002 u (ppm)	48.7424
9/28/2018 03:24:37	R1809106-011	Fe (234.350 nm)	0.95	0.6309 (ppm)	6054.7679
9/28/2018 03:24:37	R1809106-011	K (766.491 nm)	1.43	1.7167 (ppm)	5050.9962
9/28/2018 03:24:37	R1809106-011	Mg (279.078 nm)	0.92	48.6603 (ppm)	82725.9052
9/28/2018 03:24:37	R1809106-011	Mn (257.610 nm)	0.75	0.0441 (ppm)	11953.2074
9/28/2018 03:24:37	R1809106-011	Mo (202.032 nm)	19.04	-0.0043 u (ppm)	11.5191
9/28/2018 03:24:37	R1809106-011	Na (588.995 nm)	0.96	10.6667 (ppm)	459735.4313
9/28/2018 03:24:37	R1809106-011	Ni (230.299 nm)	6.43	-0.0115 u (ppm)	-84.5778
9/28/2018 03:24:37	R1809106-011	Pb (220.353 nm)	77.02	-0.0022 u (ppm)	-1.3338
9/28/2018 03:24:37	R1809106-011	Sb (217.582 nm)	> 100.00	0.0016 u (ppm)	2.9266
9/28/2018 03:24:37	R1809106-011	Se (196.026 nm)	16.90	-0.0069 u (ppm)	-0.9367
9/28/2018 03:24:37	R1809106-011	Sn (189.925 nm)	> 100.00	-0.0011 u (ppm)	-0.6134
9/28/2018 03:24:37	R1809106-011	Sr (216.596 nm)	1.25	8.3115 o (ppm)	108774.0612
9/28/2018 03:24:37	R1809106-011	Ti (336.122 nm)	22.86	-0.0014 u (ppm)	-2.0645
9/28/2018 03:24:37	R1809106-011	Tl (351.923 nm)	> 100.00	0.0001 u (ppm)	12.8857
9/28/2018 03:24:37	R1809106-011	V (292.401 nm)	> 100.00	0.0000 u (ppm)	129.0244
9/28/2018 03:24:37	R1809106-011	Y (360.074 nm)	1.11	0.97 (Ratio)	1020627.69
9/28/2018 03:24:37	R1809106-011	Y_R (360.074 nm)	1.11	0.97 (Ratio)	1020837.24
9/28/2018 03:24:37	R1809106-011	Zn (213.857 nm)	0.71	0.0053 (ppm)	106.4942
9/28/2018 03:27:51	R1809106-012	Ag (328.068 nm)	25.10	0.0003 (ppm)	-169.4099
9/28/2018 03:27:51	R1809106-012	Al (394.401 nm)	2.15	0.0733 (ppm)	985.3197
9/28/2018 03:27:51	R1809106-012	As (188.980 nm)	> 100.00	-0.0014 u (ppm)	-1.7147
9/28/2018 03:27:51	R1809106-012	B (249.772 nm)	0.49	0.0755 (ppm)	1759.0773
9/28/2018 03:27:51	R1809106-012	Ba (230.424 nm)	0.76	0.0845 (ppm)	2539.8075
9/28/2018 03:27:51	R1809106-012	Be (313.107 nm)	16.21	0.0000 u (ppm)	-439.9753
9/28/2018 03:27:51	R1809106-012	Ca (227.547 nm)	0.90	142.0035 o (ppm)	7316.8238
9/28/2018 03:27:51	R1809106-012	Cd (214.439 nm)	50.22	-0.0002 u (ppm)	9.9706
9/28/2018 03:27:51	R1809106-012	Co (230.786 nm)	> 100.00	-0.0003 u (ppm)	-6.5237
9/28/2018 03:27:51	R1809106-012	Cr (267.716 nm)	20.07	-0.0007 u (ppm)	-18.6403
9/28/2018 03:27:51	R1809106-012	Cu (327.395 nm)	2.13	0.0019 (ppm)	145.9573
9/28/2018 03:27:51	R1809106-012	Fe (234.350 nm)	0.38	0.0709 (ppm)	739.5861
9/28/2018 03:27:51	R1809106-012	K (766.491 nm)	1.17	2.9956 (ppm)	8846.7068
9/28/2018 03:27:51	R1809106-012	Mg (279.078 nm)	0.85	74.5050 o (ppm)	126663.2959
9/28/2018 03:27:51	R1809106-012	Mn (257.610 nm)	0.83	0.0475 (ppm)	12864.2608
9/28/2018 03:27:51	R1809106-012	Mo (202.032 nm)	> 100.00	0.0003 u (ppm)	31.1495
9/28/2018 03:27:51	R1809106-012	Na (588.995 nm)	1.00	14.5730 (ppm)	630587.3787
9/28/2018 03:27:51	R1809106-012	Ni (230.299 nm)	9.45	-0.0096 u (ppm)	-73.1170
9/28/2018 03:27:51	R1809106-012	Pb (220.353 nm)	29.00	-0.0016 u (ppm)	-0.2446
9/28/2018 03:27:51	R1809106-012	Sb (217.582 nm)	38.72	0.0035 (ppm)	5.2429

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:27:51	R1809106-012	Se (196.026 nm)	91.85	-0.0021 u (ppm)	3.0161
9/28/2018 03:27:51	R1809106-012	Sn (189.925 nm)	> 100.00	-0.0007 u (ppm)	-0.1305
9/28/2018 03:27:51	R1809106-012	Sr (216.596 nm)	0.13	11.3998 b (ppm)	149191.3148
9/28/2018 03:27:51	R1809106-012	Ti (336.122 nm)	62.34	-0.0003 u (ppm)	186.4695
9/28/2018 03:27:51	R1809106-012	Tl (351.923 nm)	> 100.00	0.0024 u (ppm)	18.4771
9/28/2018 03:27:51	R1809106-012	V (292.401 nm)	98.18	0.0002 (ppm)	136.1885
9/28/2018 03:27:51	R1809106-012	Y (360.074 nm)	1.22	0.95 (Ratio)	1000767.89
9/28/2018 03:27:51	R1809106-012	Y_R (360.074 nm)	1.22	0.95 (Ratio)	1000973.83
9/28/2018 03:27:51	R1809106-012	Zn (213.857 nm)	0.73	0.0141 (ppm)	328.2509
9/28/2018 03:31:06	Continuing Calibration Verification1	Ag (328.068 nm)	0.16	0.4957 (ppm)	30701.7881
9/28/2018 03:31:06	Continuing Calibration Verification1	Al (394.401 nm)	0.19	9.5128 (ppm)	115363.6225
9/28/2018 03:31:06	Continuing Calibration Verification1	As (188.980 nm)	0.78	0.9728 (ppm)	757.0458
9/28/2018 03:31:06	Continuing Calibration Verification1	B (249.772 nm)	0.17	2.4643 (ppm)	56689.8749
9/28/2018 03:31:06	Continuing Calibration Verification1	Ba (230.424 nm)	0.49	9.9943 (ppm)	296387.9270
9/28/2018 03:31:06	Continuing Calibration Verification1	Be (313.107 nm)	0.30	0.2481 (ppm)	323486.3741
9/28/2018 03:31:06	Continuing Calibration Verification1	Ca (227.547 nm)	0.48	24.0536 (ppm)	1245.0681
9/28/2018 03:31:06	Continuing Calibration Verification1	Cd (214.439 nm)	0.39	0.4914 (ppm)	9671.2069
9/28/2018 03:31:06	Continuing Calibration Verification1	Co (230.786 nm)	0.36	2.5550 (ppm)	22251.5700
9/28/2018 03:31:06	Continuing Calibration Verification1	Cr (267.716 nm)	0.38	0.5102 (ppm)	22100.0137
9/28/2018 03:31:06	Continuing Calibration Verification1	Cu (327.395 nm)	0.11	1.2119 (ppm)	66713.5922
9/28/2018 03:31:06	Continuing Calibration Verification1	Fe (234.350 nm)	0.34	4.7860 (ppm)	45491.7358
9/28/2018 03:31:06	Continuing Calibration Verification1	K (766.491 nm)	0.34	24.0617 (ppm)	71372.5310
9/28/2018 03:31:06	Continuing Calibration Verification1	Mg (279.078 nm)	0.29	24.1228 (ppm)	41010.9017
9/28/2018 03:31:06	Continuing Calibration Verification1	Mn (257.610 nm)	0.17	0.7569 (ppm)	204947.9640
9/28/2018 03:31:06	Continuing Calibration Verification1	Mo (202.032 nm)	0.67	2.5637 (ppm)	10834.3915
9/28/2018 03:31:06	Continuing Calibration Verification1	Na (588.995 nm)	0.42	24.1709 (ppm)	1050369.9200
9/28/2018 03:31:06	Continuing Calibration Verification1	Ni (230.299 nm)	0.45	2.0230 (ppm)	11753.4977
9/28/2018 03:31:06	Continuing Calibration Verification1	Pb (220.353 nm)	0.43	0.4976 (ppm)	973.4946
9/28/2018 03:31:06	Continuing Calibration Verification1	Sb (217.582 nm)	0.17	4.8651 (ppm)	5980.9378
9/28/2018 03:31:06	Continuing Calibration Verification1	Se (196.026 nm)	0.92	0.4794 (ppm)	394.5659
9/28/2018 03:31:06	Continuing Calibration Verification1	Sn (189.925 nm)	0.28	4.9457 (ppm)	5774.0528
9/28/2018 03:31:06	Continuing Calibration Verification1	Sr (216.596 nm)	0.67	2.4942 (ppm)	32642.5737
9/28/2018 03:31:06	Continuing Calibration Verification1	Ti (336.122 nm)	0.21	2.4946 (ppm)	465803.2084
9/28/2018 03:31:06	Continuing Calibration Verification1	Tl (351.923 nm)	0.51	0.9924 (ppm)	2423.2764
9/28/2018 03:31:06	Continuing Calibration Verification1	V (292.401 nm)	0.14	2.4836 (ppm)	84463.1551
9/28/2018 03:31:06	Continuing Calibration Verification1	Y (360.074 nm)	0.60	0.97 (Ratio)	1019544.16
9/28/2018 03:31:06	Continuing Calibration Verification1	Y_R (360.074 nm)	0.60	0.97 (Ratio)	1019786.35
9/28/2018 03:31:06	Continuing Calibration Verification1	Zn (213.857 nm)	0.24	0.9785 (ppm)	24582.4131
9/28/2018 03:34:20	Continuing Calibration Blank1	Ag (328.068 nm)	26.66	0.0002 (ppm)	-169.9844
9/28/2018 03:34:20	Continuing Calibration Blank1	Al (394.401 nm)	60.00	-0.0007 u (ppm)	89.4067
9/28/2018 03:34:20	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	-0.0002 u (ppm)	-0.7583
9/28/2018 03:34:20	Continuing Calibration Blank1	B (249.772 nm)	12.30	0.0012 (ppm)	49.3870
9/28/2018 03:34:20	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	0.0001 u (ppm)	35.6387
9/28/2018 03:34:20	Continuing Calibration Blank1	Be (313.107 nm)	> 100.00	0.0000 u (ppm)	-385.6823
9/28/2018 03:34:20	Continuing Calibration Blank1	Ca (227.547 nm)	63.84	-0.0454 u (ppm)	4.5138
9/28/2018 03:34:20	Continuing Calibration Blank1	Cd (214.439 nm)	> 100.00	-0.0001 u (ppm)	11.8998
9/28/2018 03:34:20	Continuing Calibration Blank1	Co (230.786 nm)	14.21	0.0001 (ppm)	-2.7856
9/28/2018 03:34:20	Continuing Calibration Blank1	Cr (267.716 nm)	68.77	-0.0001 u (ppm)	6.8895
9/28/2018 03:34:20	Continuing Calibration Blank1	Cu (327.395 nm)	> 100.00	-0.0002 u (ppm)	29.6144
9/28/2018 03:34:20	Continuing Calibration Blank1	Fe (234.350 nm)	50.45	0.0022 (ppm)	87.6501
9/28/2018 03:34:20	Continuing Calibration Blank1	K (766.491 nm)	36.92	0.0253 (ppm)	30.7536

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:34:20	Continuing Calibration Blank1	Mg (279.078 nm)	63.86	0.0022 (ppm)	4.4933
9/28/2018 03:34:20	Continuing Calibration Blank1	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	18.7261
9/28/2018 03:34:20	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	0.0003 u (ppm)	31.1774
9/28/2018 03:34:20	Continuing Calibration Blank1	Na (588.995 nm)	14.42	0.0087 (ppm)	-6411.9091
9/28/2018 03:34:20	Continuing Calibration Blank1	Ni (230.299 nm)	> 100.00	0.0002 u (ppm)	-16.3694
9/28/2018 03:34:20	Continuing Calibration Blank1	Pb (220.353 nm)	> 100.00	0.0000 u (ppm)	3.0505
9/28/2018 03:34:20	Continuing Calibration Blank1	Sb (217.582 nm)	49.92	0.0028 (ppm)	4.4289
9/28/2018 03:34:20	Continuing Calibration Blank1	Se (196.026 nm)	41.29	0.0025 (ppm)	6.7080
9/28/2018 03:34:20	Continuing Calibration Blank1	Sn (189.925 nm)	> 100.00	0.0009 (ppm)	1.7781
9/28/2018 03:34:20	Continuing Calibration Blank1	Sr (216.596 nm)	28.22	0.0002 (ppm)	3.7528
9/28/2018 03:34:20	Continuing Calibration Blank1	Ti (336.122 nm)	68.86	0.0019 (ppm)	598.6140
9/28/2018 03:34:20	Continuing Calibration Blank1	Tl (351.923 nm)	83.83	0.0036 (ppm)	21.3730
9/28/2018 03:34:20	Continuing Calibration Blank1	V (292.401 nm)	> 100.00	0.0000 u (ppm)	126.5659
9/28/2018 03:34:20	Continuing Calibration Blank1	Y (360.074 nm)	0.69	1.02 (Ratio)	1072489.05
9/28/2018 03:34:20	Continuing Calibration Blank1	Y_R (360.074 nm)	0.69	1.02 (Ratio)	1072752.93
9/28/2018 03:34:20	Continuing Calibration Blank1	Zn (213.857 nm)	50.05	0.0001 (ppm)	-24.3646
9/28/2018 03:37:35	Contract Required Detection Limit	Ag (328.068 nm)	0.43	0.0096 (ppm)	415.9081
9/28/2018 03:37:35	Contract Required Detection Limit	Al (394.401 nm)	0.48	0.1728 (ppm)	2191.9561
9/28/2018 03:37:35	Contract Required Detection Limit	As (188.980 nm)	9.67	0.0190 (ppm)	14.1425
9/28/2018 03:37:35	Contract Required Detection Limit	B (249.772 nm)	0.68	0.1853 (ppm)	4283.3626
9/28/2018 03:37:35	Contract Required Detection Limit	Ba (230.424 nm)	0.79	0.2009 (ppm)	5990.0204
9/28/2018 03:37:35	Contract Required Detection Limit	Be (313.107 nm)	0.58	0.0047 (ppm)	5704.7134
9/28/2018 03:37:35	Contract Required Detection Limit	Ca (227.547 nm)	3.79	0.9564 (ppm)	56.0819
9/28/2018 03:37:35	Contract Required Detection Limit	Cd (214.439 nm)	1.09	0.0095 (ppm)	200.0895
9/28/2018 03:37:35	Contract Required Detection Limit	Co (230.786 nm)	0.36	0.0495 (ppm)	427.0750
9/28/2018 03:37:35	Contract Required Detection Limit	Cr (267.716 nm)	1.78	0.0108 (ppm)	476.6679
9/28/2018 03:37:35	Contract Required Detection Limit	Cu (327.395 nm)	0.64	0.0240 (ppm)	1356.7751
9/28/2018 03:37:35	Contract Required Detection Limit	Fe (234.350 nm)	1.64	0.1002 (ppm)	1017.5497
9/28/2018 03:37:35	Contract Required Detection Limit	K (766.491 nm)	0.66	0.9038 (ppm)	2638.2427
9/28/2018 03:37:35	Contract Required Detection Limit	Mg (279.078 nm)	0.65	0.9666 (ppm)	1644.0649
9/28/2018 03:37:35	Contract Required Detection Limit	Mn (257.610 nm)	0.59	0.0151 (ppm)	4103.6144
9/28/2018 03:37:35	Contract Required Detection Limit	Mo (202.032 nm)	4.69	0.0199 R (ppm) 80%	113.5096 R
9/28/2018 03:37:35	Contract Required Detection Limit	Na (588.995 nm)	0.13	0.9834 (ppm)	36216.7383
9/28/2018 03:37:35	Contract Required Detection Limit	Ni (230.299 nm)	0.60	0.0410 (ppm)	221.0150
9/28/2018 03:37:35	Contract Required Detection Limit	Pb (220.353 nm)	4.57	0.0096 (ppm)	21.6514
9/28/2018 03:37:35	Contract Required Detection Limit	Sb (217.582 nm)	1.99	0.0581 (ppm)	72.4307
9/28/2018 03:37:35	Contract Required Detection Limit	Se (196.026 nm)	23.23	0.0080 R (ppm) 80%	11.1908 R
9/28/2018 03:37:35	Contract Required Detection Limit	Sn (189.925 nm)	0.58	0.4879 (ppm)	570.2625
9/28/2018 03:37:35	Contract Required Detection Limit	Sr (216.596 nm)	0.70	0.0984 (ppm)	1288.4476
9/28/2018 03:37:35	Contract Required Detection Limit	Ti (336.122 nm)	1.37	0.0473 (ppm)	9081.4027
9/28/2018 03:37:35	Contract Required Detection Limit	Tl (351.923 nm)	11.11	0.0171 (ppm)	54.1793
9/28/2018 03:37:35	Contract Required Detection Limit	V (292.401 nm)	0.53	0.0477 (ppm)	1748.5076
9/28/2018 03:37:35	Contract Required Detection Limit	Y (360.074 nm)	0.17	1.02 (Ratio)	1073925.73
9/28/2018 03:37:35	Contract Required Detection Limit	Y_R (360.074 nm)	0.17	1.02 (Ratio)	1074181.38
9/28/2018 03:37:35	Contract Required Detection Limit	Zn (213.857 nm)	1.13	0.0188 (ppm)	447.8709
9/28/2018 03:40:49	Interference Check Solution A	Ag (328.068 nm)	16.68	0.0003 (ppm)	-167.7485
9/28/2018 03:40:49	Interference Check Solution A	Al (394.401 nm)	0.40	263.3372 o (ppm)	3190943.7270
9/28/2018 03:40:49	Interference Check Solution A	As (188.980 nm)	> 100.00	-0.0002 u (ppm)	-0.7932
9/28/2018 03:40:49	Interference Check Solution A	B (249.772 nm)	0.59	0.0458 (ppm)	1074.2376
9/28/2018 03:40:49	Interference Check Solution A	Ba (230.424 nm)	32.28	-0.0005 u (ppm)	18.6050
9/28/2018 03:40:49	Interference Check Solution A	Be (313.107 nm)	8.03	-0.0001 u (ppm)	-501.0677

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:40:49	Interference Check Solution A	Ca (227.547 nm)	0.49	268.5173 o (ppm)	13829.4255
9/28/2018 03:40:49	Interference Check Solution A	Cd (214.439 nm)	17.76	-0.0012 Ku (ppm)	-10.6464 K
9/28/2018 03:40:49	Interference Check Solution A	Co (230.786 nm)	26.94	-0.0021 u (ppm)	-22.5103
9/28/2018 03:40:49	Interference Check Solution A	Cr (267.716 nm)	36.45	-0.0005 u (ppm)	-13.6341
9/28/2018 03:40:49	Interference Check Solution A	Cu (327.395 nm)	14.02	0.0008 (ppm)	83.2382
9/28/2018 03:40:49	Interference Check Solution A	Fe (234.350 nm)	0.70	87.9733 o (ppm)	835040.5927
9/28/2018 03:40:49	Interference Check Solution A	K (766.491 nm)	22.07	0.0151 (ppm)	0.3720
9/28/2018 03:40:49	Interference Check Solution A	Mg (279.078 nm)	0.68	257.1425 o (ppm)	437157.1499
9/28/2018 03:40:49	Interference Check Solution A	Mn (257.610 nm)	0.67	0.0015 (ppm)	416.8670
9/28/2018 03:40:49	Interference Check Solution A	Mo (202.032 nm)	12.75	-0.0071 u (ppm)	-0.2509
9/28/2018 03:40:49	Interference Check Solution A	Na (588.995 nm)	2.90	-0.0074 u (ppm)	-7117.4397
9/28/2018 03:40:49	Interference Check Solution A	Ni (230.299 nm)	22.99	-0.0030 u (ppm)	-34.8897
9/28/2018 03:40:49	Interference Check Solution A	Pb (220.353 nm)	54.05	-0.0019 u (ppm)	-0.7630
9/28/2018 03:40:49	Interference Check Solution A	Sb (217.582 nm)	> 100.00	-0.0015 u (ppm)	-0.8471
9/28/2018 03:40:49	Interference Check Solution A	Se (196.026 nm)	> 100.00	0.0000 u (ppm)	4.7253
9/28/2018 03:40:49	Interference Check Solution A	Sn (189.925 nm)	> 100.00	-0.0015 u (ppm)	-1.1045
9/28/2018 03:40:49	Interference Check Solution A	Sr (216.596 nm)	2.17	0.0232 (ppm)	304.3879
9/28/2018 03:40:49	Interference Check Solution A	Ti (336.122 nm)	47.98	-0.0006 u (ppm)	147.6768
9/28/2018 03:40:49	Interference Check Solution A	Tl (351.923 nm)	69.02	0.0076 (ppm)	30.9693
9/28/2018 03:40:49	Interference Check Solution A	V (292.401 nm)	9.83	0.0029 (ppm)	228.0895
9/28/2018 03:40:49	Interference Check Solution A	Y (360.074 nm)	0.27	0.89 (Ratio)	939086.30
9/28/2018 03:40:49	Interference Check Solution A	Y_R (360.074 nm)	0.27	0.89 (Ratio)	939278.91
9/28/2018 03:40:49	Interference Check Solution A	Zn (213.857 nm)	1.25	0.0111 K (ppm)	252.7625 K
9/28/2018 03:44:04	Interference Check Solution AB	Ag (328.068 nm)	0.36	0.2094 (ppm)	12862.0652
9/28/2018 03:44:04	Interference Check Solution AB	Al (394.401 nm)	0.20	261.7892 o (ppm)	3172187.0246
9/28/2018 03:44:04	Interference Check Solution AB	As (188.980 nm)	1.63	0.0933 (ppm)	72.0241
9/28/2018 03:44:04	Interference Check Solution AB	B (249.772 nm)	1.15	0.0433 (ppm)	1017.0297
9/28/2018 03:44:04	Interference Check Solution AB	Ba (230.424 nm)	0.63	0.5000 (ppm)	14858.2776
9/28/2018 03:44:04	Interference Check Solution AB	Be (313.107 nm)	0.46	0.4833 (ppm)	630635.8460
9/28/2018 03:44:04	Interference Check Solution AB	Ca (227.547 nm)	0.13	266.8221 o (ppm)	13742.1601
9/28/2018 03:44:04	Interference Check Solution AB	Cd (214.439 nm)	0.52	0.9408 (ppm)	18505.0101
9/28/2018 03:44:04	Interference Check Solution AB	Co (230.786 nm)	0.10	0.4739 (ppm)	4123.5209
9/28/2018 03:44:04	Interference Check Solution AB	Cr (267.716 nm)	0.51	0.4880 (ppm)	21139.6194
9/28/2018 03:44:04	Interference Check Solution AB	Cu (327.395 nm)	0.22	0.5193 (ppm)	28607.6639
9/28/2018 03:44:04	Interference Check Solution AB	Fe (234.350 nm)	0.38	87.8438 o (ppm)	833811.9762
9/28/2018 03:44:04	Interference Check Solution AB	K (766.491 nm)	> 100.00	0.0050 u (ppm)	-29.4250
9/28/2018 03:44:04	Interference Check Solution AB	Mg (279.078 nm)	0.39	255.6418 o (ppm)	434605.8353
9/28/2018 03:44:04	Interference Check Solution AB	Mn (257.610 nm)	0.47	0.4846 (ppm)	131216.2097
9/28/2018 03:44:04	Interference Check Solution AB	Mo (202.032 nm)	15.59	-0.0069 u (ppm)	0.7679
9/28/2018 03:44:04	Interference Check Solution AB	Na (588.995 nm)	19.42	0.0063 (ppm)	-6518.0513
9/28/2018 03:44:04	Interference Check Solution AB	Ni (230.299 nm)	0.55	0.9237 (ppm)	5357.2498
9/28/2018 03:44:04	Interference Check Solution AB	Pb (220.353 nm)	8.01	0.0470 (ppm)	94.5381
9/28/2018 03:44:04	Interference Check Solution AB	Sb (217.582 nm)	1.48	0.6018 (ppm)	740.6649
9/28/2018 03:44:04	Interference Check Solution AB	Se (196.026 nm)	5.61	0.0477 (ppm)	43.5179
9/28/2018 03:44:04	Interference Check Solution AB	Sn (189.925 nm)	> 100.00	-0.0015 u (ppm)	-1.1036
9/28/2018 03:44:04	Interference Check Solution AB	Sr (216.596 nm)	2.82	0.0233 (ppm)	304.8942
9/28/2018 03:44:04	Interference Check Solution AB	Ti (336.122 nm)	18.09	-0.0010 u (ppm)	61.1691
9/28/2018 03:44:04	Interference Check Solution AB	Tl (351.923 nm)	1.51	0.1163 (ppm)	295.1988
9/28/2018 03:44:04	Interference Check Solution AB	V (292.401 nm)	0.28	0.4950 (ppm)	16936.2278
9/28/2018 03:44:04	Interference Check Solution AB	Y (360.074 nm)	0.52	0.89 (Ratio)	938147.67
9/28/2018 03:44:04	Interference Check Solution AB	Y_R (360.074 nm)	0.52	0.89 (Ratio)	938351.30

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:44:04	Interference Check Solution AB	Zn (213.857 nm)	0.37	0.9860 (ppm)	24769.4503
9/28/2018 03:47:19	Continuing Calibration Verification1	Ag (328.068 nm)	0.50	0.4925 (ppm)	30505.6700
9/28/2018 03:47:19	Continuing Calibration Verification1	Al (394.401 nm)	0.37	9.4479 (ppm)	114577.7712
9/28/2018 03:47:19	Continuing Calibration Verification1	As (188.980 nm)	1.80	0.9617 (ppm)	748.3424
9/28/2018 03:47:19	Continuing Calibration Verification1	B (249.772 nm)	0.60	2.4469 (ppm)	56289.2961
9/28/2018 03:47:19	Continuing Calibration Verification1	Ba (230.424 nm)	0.87	9.9473 (ppm)	294997.0736
9/28/2018 03:47:19	Continuing Calibration Verification1	Be (313.107 nm)	0.86	0.2468 (ppm)	321839.6551
9/28/2018 03:47:19	Continuing Calibration Verification1	Ca (227.547 nm)	0.39	23.8315 (ppm)	1233.6311
9/28/2018 03:47:19	Continuing Calibration Verification1	Cd (214.439 nm)	0.78	0.4907 (ppm)	9657.4190
9/28/2018 03:47:19	Continuing Calibration Verification1	Co (230.786 nm)	0.66	2.5411 (ppm)	22130.3800
9/28/2018 03:47:19	Continuing Calibration Verification1	Cr (267.716 nm)	0.72	0.5079 (ppm)	22000.0542
9/28/2018 03:47:19	Continuing Calibration Verification1	Cu (327.395 nm)	0.39	1.1960 (ppm)	65838.4166
9/28/2018 03:47:19	Continuing Calibration Verification1	Fe (234.350 nm)	0.63	4.8119 (ppm)	45737.2249
9/28/2018 03:47:19	Continuing Calibration Verification1	K (766.491 nm)	0.43	23.7146 (ppm)	70342.2753
9/28/2018 03:47:19	Continuing Calibration Verification1	Mg (279.078 nm)	0.54	24.0256 (ppm)	40845.6280
9/28/2018 03:47:19	Continuing Calibration Verification1	Mn (257.610 nm)	0.71	0.7528 (ppm)	203837.6014
9/28/2018 03:47:19	Continuing Calibration Verification1	Mo (202.032 nm)	0.87	2.5297 (ppm)	10691.0538
9/28/2018 03:47:19	Continuing Calibration Verification1	Na (588.995 nm)	0.13	23.8720 (ppm)	1037296.8173
9/28/2018 03:47:19	Continuing Calibration Verification1	Ni (230.299 nm)	0.72	2.0132 (ppm)	11696.4458
9/28/2018 03:47:19	Continuing Calibration Verification1	Pb (220.353 nm)	0.52	0.4953 (ppm)	968.9636
9/28/2018 03:47:19	Continuing Calibration Verification1	Sb (217.582 nm)	0.43	4.8279 (ppm)	5935.1782
9/28/2018 03:47:19	Continuing Calibration Verification1	Se (196.026 nm)	1.48	0.4734 (ppm)	389.6420
9/28/2018 03:47:19	Continuing Calibration Verification1	Sn (189.925 nm)	0.82	4.9385 (ppm)	5765.6195
9/28/2018 03:47:19	Continuing Calibration Verification1	Sr (216.596 nm)	0.87	2.4876 (ppm)	32556.0641
9/28/2018 03:47:19	Continuing Calibration Verification1	Ti (336.122 nm)	0.52	2.4735 (ppm)	461852.6925
9/28/2018 03:47:19	Continuing Calibration Verification1	Tl (351.923 nm)	0.89	0.9828 (ppm)	2399.9661
9/28/2018 03:47:19	Continuing Calibration Verification1	V (292.401 nm)	0.57	2.4683 (ppm)	83942.0542
9/28/2018 03:47:19	Continuing Calibration Verification1	Y (360.074 nm)	0.14	0.97 (Ratio)	1024589.17
9/28/2018 03:47:19	Continuing Calibration Verification1	Y_R (360.074 nm)	0.14	0.97 (Ratio)	1024811.23
9/28/2018 03:47:19	Continuing Calibration Verification1	Zn (213.857 nm)	0.66	0.9739 (ppm)	24466.2389
9/28/2018 03:50:33	Continuing Calibration Blank1	Ag (328.068 nm)	41.24	0.0001 (ppm)	-179.0808
9/28/2018 03:50:33	Continuing Calibration Blank1	Al (394.401 nm)	36.16	0.0018 (ppm)	119.3328
9/28/2018 03:50:33	Continuing Calibration Blank1	As (188.980 nm)	> 100.00	-0.0006 u (ppm)	-1.1052
9/28/2018 03:50:33	Continuing Calibration Blank1	B (249.772 nm)	36.91	0.0012 (ppm)	49.6562
9/28/2018 03:50:33	Continuing Calibration Blank1	Ba (230.424 nm)	> 100.00	0.0000 u (ppm)	34.2435
9/28/2018 03:50:33	Continuing Calibration Blank1	Be (313.107 nm)	26.12	0.0000 (ppm)	-377.7792
9/28/2018 03:50:33	Continuing Calibration Blank1	Ca (227.547 nm)	> 100.00	0.0067 u (ppm)	7.1925
9/28/2018 03:50:33	Continuing Calibration Blank1	Cd (214.439 nm)	42.36	-0.0001 u (ppm)	11.9772
9/28/2018 03:50:33	Continuing Calibration Blank1	Co (230.786 nm)	> 100.00	0.0000 u (ppm)	-3.7394
9/28/2018 03:50:33	Continuing Calibration Blank1	Cr (267.716 nm)	> 100.00	-0.0001 u (ppm)	6.1191
9/28/2018 03:50:33	Continuing Calibration Blank1	Cu (327.395 nm)	> 100.00	-0.0001 u (ppm)	31.2848
9/28/2018 03:50:33	Continuing Calibration Blank1	Fe (234.350 nm)	31.26	0.0051 (ppm)	115.1363
9/28/2018 03:50:33	Continuing Calibration Blank1	K (766.491 nm)	8.18	0.0205 (ppm)	16.3318
9/28/2018 03:50:33	Continuing Calibration Blank1	Mg (279.078 nm)	40.52	0.0033 (ppm)	6.2689
9/28/2018 03:50:33	Continuing Calibration Blank1	Mn (257.610 nm)	> 100.00	0.0000 u (ppm)	15.9305
9/28/2018 03:50:33	Continuing Calibration Blank1	Mo (202.032 nm)	> 100.00	-0.0001 u (ppm)	29.1665
9/28/2018 03:50:33	Continuing Calibration Blank1	Na (588.995 nm)	21.81	0.0079 (ppm)	-6448.2427
9/28/2018 03:50:33	Continuing Calibration Blank1	Ni (230.299 nm)	> 100.00	0.0001 u (ppm)	-16.5743
9/28/2018 03:50:33	Continuing Calibration Blank1	Pb (220.353 nm)	11.05	0.0010 (ppm)	4.9567
9/28/2018 03:50:33	Continuing Calibration Blank1	Sb (217.582 nm)	> 100.00	0.0026 u (ppm)	4.1792
9/28/2018 03:50:33	Continuing Calibration Blank1	Se (196.026 nm)	> 100.00	0.0020 u (ppm)	6.2961

Date Time	Label	Element Label (nm)	%RSD	Unadjusted Conc	Intensity
9/28/2018 03:50:33	Continuing Calibration Blank1	Sn (189.925 nm)	88.27	0.0006 (ppm)	1.3377
9/28/2018 03:50:33	Continuing Calibration Blank1	Sr (216.596 nm)	99.32	0.0001 (ppm)	2.5255
9/28/2018 03:50:33	Continuing Calibration Blank1	Ti (336.122 nm)	76.08	0.0015 (ppm)	538.7926
9/28/2018 03:50:33	Continuing Calibration Blank1	Tl (351.923 nm)	> 100.00	0.0015 u (ppm)	16.2579
9/28/2018 03:50:33	Continuing Calibration Blank1	V (292.401 nm)	> 100.00	-0.0001 u (ppm)	124.7238
9/28/2018 03:50:33	Continuing Calibration Blank1	Y (360.074 nm)	0.36	1.02 (Ratio)	1073566.46
9/28/2018 03:50:33	Continuing Calibration Blank1	Y_R (360.074 nm)	0.36	1.02 (Ratio)	1073802.03
9/28/2018 03:50:33	Continuing Calibration Blank1	Zn (213.857 nm)	48.09	0.0001 (ppm)	-22.5004

Ag (328.068 nm)
Intensity = 62314.51905324 * Concentration - 185.20814355
Correlation coefficient: 0.99999

As (188.980 nm)
Intensity = 778.80787481 * Concentration - 0.61612763
Correlation coefficient: 0.99998

B (249.772 nm)
Intensity = 22995.36364607 * Concentration + 22.16682459
Correlation coefficient: 0.99998

Ba (230.424 nm)
Intensity = 29652.52594722 * Concentration + 33.10390605
Correlation coefficient: 0.99998

Be (313.107 nm)
Intensity = 1305616.90414866 * Concentration - 392.43643488
Correlation coefficient: 1.00000

Cd (214.439 nm)
Intensity = 19654.65752007 * Concentration + 13.50233896
Correlation coefficient: 1.00000

Co (230.786 nm)
Intensity = 8710.74639342 * Concentration - 4.08292067
Correlation coefficient: 0.99999

Cr (267.716 nm)
Intensity = 43295.35570171 * Concentration + 9.79700483
Correlation coefficient: 1.00000

Cu (327.395 nm)
Intensity = 55014.78322937 * Concentration + 38.86227895
Correlation coefficient: 0.99999

K (766.491 nm)
Intensity = 2968.07400248 * Concentration - 44.41226717
Correlation coefficient: 0.99993

Mn (257.610 nm)
Intensity = 270747.26960405 * Concentration + 14.96493232
Correlation coefficient: 1.00000

Mo (202.032 nm)
Intensity = 4214.48348383 * Concentration + 29.78213840
Correlation coefficient: 0.99998

Na (588.995 nm)
Intensity = 43736.99255687 * Concentration - 6793.39460888
Correlation coefficient: 0.99999

Ni (230.299 nm)
Intensity = 5818.64346989 * Concentration - 17.41064638
Correlation coefficient: 0.99999

Pb (220.353 nm)
Intensity = 1950.29925855 * Concentration + 2.95934136
Correlation coefficient: 0.99999

Sb (217.582 nm)
Intensity = 1229.15561981 * Concentration + 0.97118379
Correlation coefficient: 1.00000

Se (196.026 nm)
Intensity = 813.22239328 * Concentration + 4.68971693
Correlation coefficient: 0.99998

Sn (189.925 nm)
Intensity = 1167.35094880 * Concentration + 0.69255278
Correlation coefficient: 1.00000

Ti (336.122 nm)
Intensity = 186622.53609248 * Concentration + 251.07781553
Correlation coefficient: 1.00000

Tl (351.923 nm)
Intensity = 2429.09592147 * Concentration + 12.59084352
Correlation coefficient: 0.99995

V (292.401 nm)
Intensity = 33956.78596725 * Concentration + 128.04514364
Correlation coefficient: 1.00000

Zn (213.857 nm)
Intensity = 25148.58585687 * Concentration - 25.81329960
Correlation coefficient: 0.99999

Al (394.401 nm)
Intensity = 12116.96065589 * Concentration + 97.59057053
Correlation coefficient: 0.99989

Ca (227.547 nm)
Intensity = 51.47741684 * Concentration + 6.84862251
Correlation coefficient: 0.99994

Fe (234.350 nm)
Intensity = 9491.22467324 * Concentration + 66.55091229
Correlation coefficient: 1.00000

Mg (279.078 nm)
Intensity = 1700.05516390 * Concentration + 0.73159213
Correlation coefficient: 1.00000

Sr (216.596 nm)
Intensity = 13087.14836919 * Concentration + 0.57804254
Correlation coefficient: 1.00000

Preparation Information Benchsheet

Prep Run#: 322634
Team: Metals/KMCLAEN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 9/25/18 03:09 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1810179-01	MB		50mL	6010C/Ag T DOD, Al T DOD, As D, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb D, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear		HB: 7 Well: E1 Temp: 94.0C Corr. Factor: 0.0C Corr. Temp: 94.0C Plunge Filtered
2	RQ1810179-02	MB		50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		Filtered: 9/24/18
3	RQ1810179-03	LCS		50mL	6010C/Ag T DOD, Al T DOD, As D, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb D, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear	0.0500 mL/180701; 0.1000 mL/185154; 0.5000 mL/188860; 0.5000 mL/188859; 0.2500 mL/189248	On HB: 16:51 HB turn off: 2:51 Plunge Filtered
4	R1808910-001	MW-12D	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		Tier IV
5	R1808910-002	MW-11M	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
6	R1808910-003	MW-13S	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
7	R1808910-004	MW-13M	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
8	R1808910-006	MW-14S	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
9	R1808910-007	MW-11S	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
10	R1808910-008	MW-10S	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
11	R1808910-009	MW-10M	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
12	R1808910-010	MW-12S	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
13	R1808910-011	MW-12M	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
14	R1808910-017	MW-10D	.05	50mL	6010C/As D, Pb D	<2			50.00mL	Colorless-Clear		
15	R1808926-001	WSTPT-11-MP-2-091718	.13	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear		Tier IV

Preparation Information Benchsheet

Prep Run#: 322634
Team: Metals/KMCLAEN
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A
Status: Prepped
Prep Date/Time: 9/25/18 03:09 PM

16	R1808926-002	WSTPT-11-MP-3-091718	.19	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear		
17	RQ1810179-04	R1808926-002 MS	.19	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear	0.0500 mL/180701; 0.1000 mL/185154; 0.5000 mL/188859; 0.2500 mL/189248; 0.5000 mL/188860	
18	RQ1810179-05	R1808926-002 DMS	.19	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear	0.5000 mL/188860; 0.2500 mL/189248; 0.5000 mL/188859; 0.0500 mL/180701; 0.1000 mL/185154	
19	R1808926-003	WSTPT-11-MP-4-091718	.13	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear		
20	R1808926-004	FD-091718	.05	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear		
21	R1808926-006	WSTPT-11-MP-1-091818	.13	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		Plunge Filtered

Preparation Information Benchsheet

Prep Run#: 322634 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/KMCLAEN **Prep Method:** EPA 3005A/3010A **Prep Date/Time:** 9/25/18 03:09 PM

22	R1808926-007	EQB-091818	.06	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear		
23	R1808926-009	EQB-091718	.05	50mL	6010C/Ag T DOD, Al T DOD, As T DOD, B T DOD, Ba T DOD, Be T DOD, Ca T DOD, Cd T DOD, Co T DOD, Cr T DOD, Cu T DOD, Fe T DOD, K T DOD, Mg T DOD, Mn T DOD, Na T DOD, Ni T DOD, Pb T DOD, Se T DOD, Tl T DOD, V T DOD, Zn T DOD	<2			50.00mL	Colorless-Clear		
24	R1809066-002	WD-SP0001-SEP-XL 0918	.01	50mL	6010C/Fe T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Selenium 1000 ug/mL Se	Inventory ID	180701	Logbook Ref:	M7080014F	Expires On:	10/12/2018	Lot #:	1635013
Name:	Strontium 1000 ug/mL Sr	Inventory ID	185154	Logbook Ref:	M7600003Q	Expires On:	04/30/2019	Lot #:	1702403
Name:	Custom LCS STD A Metals	Inventory ID	188859	Logbook Ref:	M7600005I	Expires On:	09/16/2019	Lot #:	1007025(
Name:	Custom LCS STD B Metals	Inventory ID	188860	Logbook Ref:	M7600005J	Expires On:	09/16/2019	Lot #:	1007025(
Name:	Tin 1000 ug/mL Sn	Inventory ID	189248	Logbook Ref:	M7600005M	Expires On:	09/30/2019	Lot #:	1803846

Preparation Materials

1:1 HCl Metals Grade	M7600005P (189998)	Hot Block Cups	50 mL Lot 1804377 (192925)	Nitric Acid Metals Grade HNO3	M7600006E (189973)
Plunger Filter	191676 (191676)	Thermometer	293 (12952)		

Preparation Steps

Step: Digestion
Started: 9/25/18 15:09
Finished: 9/26/18 11:40
By: KMCLAEN
Comments

Comments: DOD check M7710029 9/25/18

Reviewed By: _____ Date: _____ Spike Witness: NMANSEN Date: _____

Preparation Information Benchsheet

Prep Run#: 322634
Team: Metals/KMCLAEN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 9/25/18 03:09 PM

Chain of Custody

Relinquished By: Kelly McKeen Date: 9/26/18

Received By: RAO Date: 9/26/18

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 322632
Team: Metals/KMCLAEN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 9/25/18 03:08 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1810175-01	MB		50mL	6010C/Ag T, Al T, B T, Ba T, Be T, Ca D, Ca T, Cd D, Cd T, Co T, Cr T, Cu T, Fe D, Fe T, K D, K T, Mg D, Mg T, Mn D, Mn T, Mo T, Na D, Na T, Ni T, Pb D, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB: 1 Well: E1 Temp: 90.0C Corr. Factor: 0.0C Corr. Temp: 90.0C Plunge Filtered
2	RQ1810175-02	LCS		50mL	6010C/Ag T, Al T, B T, Ba T, Be T, Ca D, Ca T, Cd D, Cd T, Co T, Cr T, Cu T, Fe D, Fe T, K D, K T, Mg D, Mg T, Mn D, Mn T, Mo T, Na D, Na T, Ni T, Pb D, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/188860; 0.2500 mL/189248; 0.5000 mL/188859; 0.0500 mL/180701; 0.1000 mL/185154	On HB: 16:31 HB turn off: 2:31 Plunge Filtered
3	RQ1810175-03	DLCS		50mL	6010C/Ag T, Al T, B T, Ba T, Be T, Ca D, Ca T, Cd D, Cd T, Co T, Cr T, Cu T, Fe D, Fe T, K D, K T, Mg D, Mg T, Mn D, Mn T, Mo T, Na D, Na T, Ni T, Pb D, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.1000 mL/185154; 0.0500 mL/180701; 0.5000 mL/188860; 0.5000 mL/188859; 0.2500 mL/189248	Plunge Filtered
4	R1808996-001	MW-31S	.07	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
5	R1808996-002	MW-31D	.05	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
6	R1808996-003	MW-32S	.03	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
7	R1808996-004	MW-32D	.02	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
8	R1808996-005	MW-21S	.04	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
9	R1808996-006	MW-21D	.02	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		Plunge Filtered
10	R1808996-007	MW-20S	.06	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
11	R1808996-008	MW-20D	.04	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
12	R1808996-009	MW-30S	.05	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
13	R1808996-010	MW-30D	.06	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
14	R1808996-011	MW-17RS	.07	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
15	R1808996-012	MW-17RD	.03	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
16	R1808996-013	MW-19RS	.03	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
17	R1808996-014	MW-19RD	.06	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
18	R1808996-015	MW-18S	.01	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R1808996-016	MW-18RD	.06	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		Plunge Filtered

Preparation Information Benchsheet

Prep Run#: 322632 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/KMCLAEN **Prep Method:** EPA 3005A/3010A **Prep Date/Time:** 9/25/18 03:08 PM

20	R1808996-017	Dupe-X	.06	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
21	R1808996-018	MW-30D Dissolved	.01	50mL	6010C/Ca D, Cd D, Fe D, K D, Mg D, Mn D, Na D, Pb D	<2			50.00mL	Colorless-Clear		
22	R1809064-003	1809180910A WW-4-848	.02	50mL	6010C/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
23	R1809064-010	1809180935A WW-4-948	.02	50mL	6010C/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Selenium 1000 ug/mL Se	Inventory ID	180701	Logbook Ref:	M7080014F	Expires On:	10/12/2018	Lot #:	163501
Name:	Strontium 1000 ug/mL Sr	Inventory ID	185154	Logbook Ref:	M7600003Q	Expires On:	04/30/2019	Lot #:	170240
Name:	Custom LCS STD A Metals	Inventory ID	188859	Logbook Ref:	M7600005I	Expires On:	09/16/2019	Lot #:	100702
Name:	Custom LCS STD B Metals	Inventory ID	188860	Logbook Ref:	M7600005J	Expires On:	09/16/2019	Lot #:	100702
Name:	Tin 1000 ug/mL Sn	Inventory ID	189248	Logbook Ref:	M7600005M	Expires On:	09/30/2019	Lot #:	180384

Preparation Materials

1:1 HCl Metals Grade	M7600005P (189998)	Hot Block Cups	50 mL Lot 1804377 (192925)	Nitric Acid Metals Grade HNO3	M7600006E (189973)
Plunger Filter	191676 (191676)	Thermometer	294 (12954)		

Preparation Steps

Step: Digestion
Started: 9/25/18 15:08
Finished: 9/26/18 11:30
By: KMCLAEN
Comments

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: NMANSEN Date: _____

Chain of Custody

Relinquished By: Kelly McJunkin Date: 9/26/18
Received By: RAO1 Date: 9/26/18

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 322633
Team: Metals/KMCLAEN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 9/25/18 03:09 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1810176-01	MB		50mL	6010C/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB: 1 Well: E1 Temp: 90.0C Corr. Factor: 0.0C Corr. Temp: 90.0C Plunge Filtered
2	RQ1810176-02	LCS		50mL	6010C/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.2500 mL/189248; 0.5000 mL/188859; 0.0500 mL/180701; 0.1000 mL/185154; 0.5000 mL/188860	On HB: 16:31 HB turn off: 2:31 Plunge Filtered
3	R1808899-001	MW-7A2	.12	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		Tier IV
4	R1808899-002	MW-7B	.08	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
5	R1808899-003	MW-12A	.19	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
6	RQ1810176-03	R1808899-003 MS	.19	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear	0.5000 mL/188860; 0.1000 mL/185154; 0.2500 mL/189248; 0.0500 mL/180701; 0.5000 mL/188859	
7	RQ1810176-04	R1808899-003 DMS	.19	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear	0.0500 mL/180701; 0.5000 mL/188860; 0.2500 mL/189248; 0.1000 mL/185154; 0.5000 mL/188859	
8	R1808989-001	B4SR-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		Tier IV
9	R1808989-002	B6DRR-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		Plunge Filtered
10	R1808989-003	B1BDRR-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
11	R1808989-006	LRW4-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
12	RQ1810176-05	R1808989-006 MS	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear	0.1000 mL/185154; 0.0500 mL/180701; 0.5000 mL/188859; 0.5000 mL/188860; 0.2500 mL/189248	
13	RQ1810176-06	R1808989-006 DMS	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear	0.5000 mL/188860; 0.1000 mL/185154; 0.2500 mL/189248; 0.0500 mL/180701; 0.5000 mL/188859	

Preparation Information Benchsheet

Prep Run#: 322633 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/KMCLAEN **Prep Method:** EPA 3005A/3010A **Prep Date/Time:** 9/25/18 03:09 PM

14	R1808989-007	LRW3R-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
15	R1808989-008	B1BS-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
16	R1808989-009	SW3A-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		Plunge Filtered
17	R1808989-010	DUP1-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
18	R1808989-011	SW1A-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
19	R1808989-012	EB1-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
20	R1808989-013	B4DR-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		Plunge Filtered
21	R1808989-014	SW2-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
22	R1808989-015	B6SR3-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
23	R1808989-016	LRW5-0918	.02	50mL	6010C/Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Se T, Tl T	<2			50.00mL	Colorless-Clear		
24	R1809110-001	Lot: 2024492	.01	5mL	6010C/Cu T, Se T, Zn T	<2			50.00mL	Colorless-Clear		Cu: 1x Se: 5x Zn: 20x
25	RQ1810176-07	R1809110-001 DUP	.01	5mL	6010C/Se T	<2			50.00mL	Colorless-Clear		
26	R1809111-001	LDS-0918	.01	50mL	6010C/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		Tier IV
27	R1809111-002	GDS-0918	.01	50mL	6010C/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Selenium 1000 ug/mL Se	Inventory ID	180701	Logbook Ref:	M7080014F	Expires On:	10/12/2018	Lot #:	1635013
Name:	Strontium 1000 ug/mL Sr	Inventory ID	185154	Logbook Ref:	M7600003Q	Expires On:	04/30/2019	Lot #:	1702403
Name:	Custom LCS STD A Metals	Inventory ID	188859	Logbook Ref:	M7600005I	Expires On:	09/16/2019	Lot #:	1007025
Name:	Custom LCS STD B Metals	Inventory ID	188860	Logbook Ref:	M7600005J	Expires On:	09/16/2019	Lot #:	1007025
Name:	Tin 1000 ug/mL Sn	Inventory ID	189248	Logbook Ref:	M7600005M	Expires On:	09/30/2019	Lot #:	1803846

Preparation Information Benchsheet

Prep Run#: 322633
Team: Metals/KMCLAEN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 9/25/18 03:09 PM

Preparation Materials

1:1 HCl Metals Grade	M7600005P (189998)	Hot Block Cups	50 mL Lot 1804377 (192925)	Nitric Acid Metals Grade HNO3	M7600006E (189973)
Plunger Filter	191676 (191676)	Thermometer	294 (12954)		

Preparation Steps

Step: Digestion
Started: 9/25/18 15:09
Finished: 9/26/18 11:36
By: KMCLAEN
Comments

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: NMANSEN Date: _____

Chain of Custody

Relinquished By: Kelly McJaen Date: 9/26/18
Received By: RAO1 Date: 9/26/18

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 322635
Team: Metals/KMCLAEN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 9/25/18 03:09 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1810183-01	MB		50mL	6010C/As T, Ca T, Cd T, Co T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T	<2			50.00mL	Colorless-Clear		HB: 7 Well: E1 Temp: 94.0C Corr. Factor: 0.0C Corr. Temp: 94.0C Plunge Filtered
2	RQ1810183-02	LCS		50mL	6010C/As T, Ca T, Cd T, Co T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T	<2			50.00mL	Colorless-Clear	0.0500 mL/180701; 0.5000 mL/188860; 0.5000 mL/188859; 0.2500 mL/189248; 0.1000 mL/185154	On HB: 16:51 HB turn off: 2:51 Plunge Filtered
3	R1808906-001	091318-GW-STMP-12	.01	50mL	6010C/As T, Cd T, Co T, Fe T, Mn T, Ni T	<2			50.00mL	Tan-Cloudy/Yellow-Clear		Tier IV Plunge Filtered
4	R1808906-002	091318-GW-TRC-PM-MIP-45	.01	50mL	6010C/As T, Cd T, Co T, Fe T, Mn T, Ni T	<2			50.00mL	Tan-Cloudy/Yellow-Cloudy		Plunge Filtered
5	R1808906-003	091318-GW-MW12	.01	50mL	6010C/As T, Cd T, Co T, Fe T, Mn T, Ni T	<2			50.00mL	Colorless-Clear		
6	R1808906-006	091318-GW-TRC-PM-MIP-27B	.01	50mL	6010C/As T, Cd T, Co T, Fe T, Mn T, Ni T	<2			50.00mL	Colorless-Clear		
7	R1808906-007	091418-GW-TRC-PM-MIP-21B	.01	50mL	6010C/As T, Cd T, Co T, Fe T, Mn T, Ni T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
8	R1808906-008	091418-GW-PW-OBS-9-15	.01	50mL	6010C/As T, Cd T, Co T, Fe T, Mn T, Ni T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
9	R1808906-009	091418-GW-MW-07D	.01	50mL	6010C/As T, Cd T, Co T, Fe T, Mn T, Ni T	<2			50.00mL	Colorless-Clear		
10	R1808906-010	091418-GW-TRC-PM-MIP-21A	.04	50mL	6010C/As T, Cd T, Co T, Fe T, Mn T, Ni T	<2			50.00mL	Brown-Cloudy/Yellow-Clear		Plunge Filtered
11	R1809106-001	MW-8RS	.02	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
12	R1809106-002	MW-8RDR	.05	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
13	R1809106-003	MW-7RS	.07	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
14	R1809106-004	MW-7RD	.07	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
15	R1809106-005	MW-3S	.05	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
16	R1809106-006	MW-3D	.02	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
17	R1809106-007	MW-29D	.02	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
18	R1809106-008	MW-28D	.04	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R1809106-009	MW-25S	.05	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 322635 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/KMCLAEN **Prep Method:** EPA 3005A/3010A **Prep Date/Time:** 9/25/18 03:09 PM

20	R1809106-010	MW-25D	.03	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
21	RQ1810183-03	R1809106-010 MS	.03	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear	0.0500 mL/180701; 0.1000 mL/185154; 0.5000 mL/188859; 0.5000 mL/188860; 0.2500 mL/189248	
22	RQ1810183-04	R1809106-010 DMS	.03	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear	0.5000 mL/188859; 0.2500 mL/189248; 0.0500 mL/180701; 0.5000 mL/188860; 0.1000 mL/185154	
23	R1809106-011	Dupe-Y	.03	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
24	R1809106-012	MW-24S	.06	50mL	6010C/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Selenium 1000 ug/mL Se	Inventory ID	180701	Logbook Ref:	M7080014F	Expires On:	10/12/2018	Lot #:	1635013
Name:	Strontium 1000 ug/mL Sr	Inventory ID	185154	Logbook Ref:	M7600003Q	Expires On:	04/30/2019	Lot #:	1702403
Name:	Custom LCS STD A Metals	Inventory ID	188859	Logbook Ref:	M7600005I	Expires On:	09/16/2019	Lot #:	1007025
Name:	Custom LCS STD B Metals	Inventory ID	188860	Logbook Ref:	M7600005J	Expires On:	09/16/2019	Lot #:	1007025
Name:	Tin 1000 ug/mL Sn	Inventory ID	189248	Logbook Ref:	M7600005M	Expires On:	09/30/2019	Lot #:	1803846

Preparation Materials

1:1 HCl Metals Grade	M7600005P (189998)	Hot Block Cups	50 mL Lot 1804377 (192925)	Nitric Acid Metals Grade HNO3	M7600006E (189973)
Plunger Filter	191676 (191676)	Thermometer	293 (12952)		

Preparation Steps

Step: Digestion
Started: 9/25/18 15:09
Finished: 9/26/18 11:45
By: KMCLAEN
Comments

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: NMANSEN Date: _____

Preparation Information Benchsheet

Prep Run#: 322635
Team: Metals/KMCLAEN

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 9/25/18 03:09 PM

Chain of Custody

Relinquished By: Kelly McFeeters Date: 9/26/18

Received By: RACI Date: 9/26/18

Extracts Examined
Yes No

Frequency:

Pipettes: 3 trials for both bias and precision
DOD Projects - Daily before use at each volume of use, or if more than 3 volumes of use, a high, medium, and low.
Non-DOD: Monthly at high, medium, and low.

Repeaters, Dispensers, and Repipettors: 3 trials for both bias and precision
If used for dilutions - Daily before use and each time the volume is changed.
If not used for dilutions - monthly

Calculations:
%Recovery = Mean/Nominal Volume*100
%RSD = Stdev/Volume*100

Limits: % Rec: 98-102 for Pipettes and others for dilutions
% Recovery: 90-110 (Repeaters, Dispensers, Repipettors not for dilutions)
%RSD: ≤1 (Pipets); ≤3 (Repeaters, Dispensers, and Repipettors)

Use a balance and DI for all except Dispensers and Repipettors which contain reagents. For these, dispense into a To Contain Class A grad cylinder and document the Max Volume of the cylinder instead of the Balance ID. Record to 1/10 the graduation of the cylinder.

Date	Init.	Equipment ID	Volume (mL)	Trial #1 (g/mL)	Trial #2 (g/mL)	Trial #3 (g/mL)	Bias %Recovery	Pass/ Fail	Precision %RSD	Pass/ Fail	Recal? Y/N	Balance ID or Class A (TC)	Comments/ Corrective Action
9/26/18	NM	M34	1.0000	0.9951	0.9982	0.9947	99.6%	P	0.192	P	N	R-10	DOD Check
		↓	0.5000	0.4951	0.4977	0.4956	99.27%	P	0.276	P	N		
		M25	0.1000	0.0994	0.0997	0.0997	99.6%	P	0.173	P	N		
			0.0500	0.0497	0.0498	0.0498	99.53%	P	0.115	P	N		
			0.0200	0.0201	0.0200	0.0200	100.17%	P	0.289	P	N		
↓	↓	↓	0.0100	0.0101	0.0101	0.0101	101%	P	0	P	N	↓	↓

OPTIMA 3/4/5/6 ICV/CCV (Standard is prepared daily)
(ICV FOR ILM5.3 IS A ½ DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 1	CA	M760000[illegible]M	5000	1.00	200	25.0
	MG		5000			25.0
	K		5000			25.0
	NA		5000			25.0
Cal Std 2	AG	M760000[illegible]N	100	1.00		0.500
	CR		100			0.500
	MN		150			0.750
	NI		400			2.00
	ZN		200			1.00
Cal Std 3	AL	M760000[illegible]O	2000	1.00		10.0
	BA		2000			10.0
	BE		50			0.250
	CO		500			2.50
	CU		250			1.25
	FE		1000			5.00
	V		500			2.50
Cal Std 4	AS	M760000[illegible]P	100	2.00		1.00
	CD		50			0.500
	PB		50			0.500
	SE		50			0.500
	TL		100			1.00
Single Metals	SB	M760000[illegible]5A	1000	1.00		5.00
	SN	M760000[illegible]6F	1000	1.00		5.00
	B	M760000[illegible]3I	1000	0.500		2.50
	MO	M760000[illegible]6L	1000	0.500		2.50
	TI	M760000[illegible]3K	1000	0.500		2.50
	SR	M760000[illegible]6J	1000	0.500		2.50
	P	—	1000	1.00		5.00

Analyst/ Date	Letter ID	Nitric Acid Lot # / Concentration	Hydrochloric Acid Lot # / Concentration	Pipet ID
NM 9/4/18	A	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/5/18	B	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/5/18	C	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/6/18	D	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/7/18	E	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/10/18	F	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/12/18	G	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/13/18	H	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/14/18	I	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/14/18	J	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/17/18	K	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/18/18	L	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/19/18	M	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/19/18	N	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/20/18	O	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/21/18	P	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/21/18	Q	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/24/18	R	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/25/18	S	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
NM 9/26/18	T	M760000[illegible]6X 2%	M760000[illegible]SP 5%	M35
NM 9/26/18	U	M760000[illegible]6X 10%	M760000[illegible]SP 5%	M35
	V			
	W			
	X			
	Y			
	Z			
	AA			
	BB			

every 6 months

OPTIMA 3,4,5,6 CALIBRATION STANDARD #1 (Standard is prepared ~~weekly~~ or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std. 1 Int.	AL	M762000041A	20.0	1.00	1000	0.020
	AS		5.00			0.0050
	CD		1.00			0.0010
	CO		3.00			0.0030
	CR		5.00			0.0050
	PB		5.00			0.0050
	V		3.00			0.0030
Cal Std. 1	CA	M708000 13X	5000	0.100		0.500
	K		5000			BELOW
	MG		5000			0.500
	NA		5000			0.500
Single Element	BA	M708000 14BB	1000	0.020		0.020
	CU	M760000 01A	1000	0.010		0.010
	K	M708000 14AA	10000	0.150		2.00
	MN	M760000 05G	1000	0.010		0.010
	MO	M760000 02V	1000	0.025		0.025
	SB	M760000 01G	1000	0.010		0.010
	TL	M760000 01N	1000	0.010		0.010
	ZN	M760000 03V	1000	0.010		0.010
	P	—	1000	0.100		0.100

Analyst/ Date	Letter ID	Nitric Acid Lot#/ Concentration	Hydrochloric Acid Lot #/ Concentration	Expiration Date	Pipet ID
NM 7/10/18	A	M760000 06E 2%	M760000 05P 5%	12/1/18	M35 M25
NM 7/10/18	B	M760000 06E 10%	M760000 05P 5%	12/1/18	M35 M25
	C				
	D				
	E				
	F				
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				
	W				
	X				
	Y				
	Z				

OPTIMA 3,4,5,6 CALIBRATION STANDARD #2
(Standard is prepared ~~weekly~~ every 6 months or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Single Element	AL	M760000 01J	1000	0.100	1000	0.100
	AS	M708001 1X	1000	0.010		0.010
	B	M760000 2U	1000	0.200		0.200
	BE	M760000 6G (1/10)	100	0.030		0.003
	CA	M708001 4Y	10000	0.100		1.00
	CD	M760000 6A (1/10)	100	0.050		0.005
	CU	M760000 1A	1000	0.020		0.020
	K	M708001 4AA	10000	0.200		2.00
	MG	M760000 2H	10000	0.100		1.00
	NA	M708001 4Z	10000	0.100		1.00
	PB	M760000 5H	1000	0.050		0.050
	SB	M760000 1G	1000	0.060		0.060
	SE	M708001 4F	1000	0.010		0.010
	SN	M760000 5M	1000	0.500		0.500

Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
NM 7/10/18	A	M760000 06E 2%	M760000 5P 5%	10/12/18	M25 M35
NM 7/10/18	B	M760000 06E 10%	M760000 5P 5%	10/12/18	M25 M35
	C				
	D				
	E				
	F				
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				
	W				
	X				
	Y				
	Z				

OPTIMA 3/4/5/6 CALIBRATION STANDARD #5 / HLCCV1 (Standard is prepared ~~weekly~~ every 6 months or as necessary)

NM 6/11/18

(CALIBRATION STANDARD #3 IS A 1/100 DILUTION OF THIS STANDARD)
(CALIBRATION STANDARD #4 IS A 1/5 DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	AG	M76000005C	100	~~2.00~~	~~200~~	1.00
	CR		100	5.00	500	1.00
	MN		150			1.50
	NI		400			4.00
	ZN		200			2.00
Cal Std 3	AL	M76000002M	2000	~~2.00~~		20.0
	BA		2000	5.00		20.0
	BE		50			0.500
	CO		500			5.00
	CU		250			2.50
	FE		1000			10.0
	V		500			5.00
Cal Std 4	AS	M76000005D	100	~~4.00~~		2.00
	CD		50	10.00		1.00
	PB		50			1.00
	SE		50			1.00
	TL		100			2.00
Single Metals	CA	M7080014Y	10000	~~1.00~~	2.50	50.0
	MG	M76000002H	10000	~~1.00~~	2.50	50.0
	K	M7080014AA	10000	~~1.00~~	2.50	50.0
	NA	M7080014Z	10000	~~1.00~~	2.50	50.0
	SB	M76000001G	1000	~~2.00~~	5.00	10.0
	SN	M76000009M	1000	~~2.00~~	5.00	10.0
	B	M76000002U	1000	~~1.00~~	2.50	5.00
	MO	M76000002V	1000	~~1.00~~	2.50	5.00
	TI	M7080013R	1000	~~1.00~~	2.50	5.00
	SR	M76000003Q	1000	~~1.00~~	2.50	5.00

Analyst/ Date	Letter ID	Nitric Acid Lot#/ Concentration	Hydrochloric Acid Lot #/ Concentration	Expiration Date	Pipet ID
NM 6/11/18	A	M76000004S 10%	M76000005P 5%	9/20/18	M32 M35
NM 8/9/18	B	M76000006E 2%	M76000005P 5%	9/20/18	M32 M35
NM 8/9/18	C	M76000006E 10%	M76000005P 5%	9/20/18	M32 M35
	D				
	E				
	F				
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				
	W				
	X				
	Y				
	Z				
	AA				
	BB				

OPTIMA 3/4/5/6 MRL (Standard is prepared every 6 months or as needed)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 1	CA	M708O013X	5000	0.200	1000	1.00
	MG		5000			1.00
	K		5000			1.00
	NA		5000			1.00
Cal Std 2	AG	M760000SC	100	0.100		0.0100
	CR		100			0.0100
	MN		150			0.0150
	NI		400			0.0400
	ZN		200			0.0200
Cal Std 3	AL	M760000 2M	2000	0.100		0.200
	BA		2000			0.200
	BE		50			0.0050
	CO		500			0.0500
	CU		250			0.0250
	FE		1000			0.100
	V		500			0.0500
Cal Std 4	AS	M760000SD	100	0.200		0.0200
	CD		50			0.0100
	PB		50			0.0100
	SE		50			0.0100
	TL		100			0.0200
Single Metals	B	M760000 2U	1000	0.200		0.200
	MO	M760000 2V	1000	0.025		0.0250
	SN	M760000 05M	1000	0.500		0.500
	TI	M708001 3R	1000	0.050		0.0500
	SB	M760000 1G	1000	0.060		0.0600
	SR	M760000 03Q	1000	0.100		0.100
	P	—	1000	0.100		0.100

Analyst/ Date	Letter ID	Nitric Acid Lot# / Concentration	Hydrochloric Acid Lot # / Concentration	Expiration Date	Pipet ID
NM 5/31/18	A	M760000 4S 10%	M760000 5P 5%	7/20/18	M25 M35
NM 8/3/18	B	M760000 6E 10%	M760000 5P 5%	9/30/18	M25 M35
NM 8/3/18	C	M760000 6E 2%	M760000 5P 5%	9/30/18	M25 M35
	D				
	E				
	F				
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				
	W				
	X				
	Y				
	Z				
	AA				
	BB				

OPTIMA 3/4/6 HLCCV2 (Standard is prepared every ~~2 weeks~~ 6 months or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	AG	M760000SC	100	2.00	100	2.00
	CR		100			Below
	MN		150			Below
	NI		400			8.00
	ZN		200			4.00
Cal Std 3	AL	M760002M	2000	2.00		Below
	BA		2000			40.0
	BE		50			1.00
	CO, V		500			10.0
	CU		250			5.00
	FE		1000			Below
Cal Std 4	AS, TL	M760005D	100	4.00		4.00
	CD, SE		50			2.00
	PB		50			Below
Single Metals	B	M760002U	1000	1.00		10.0
	MO	M760002V	1000	1.00		10.0
	TI	M7080013R	1000	1.00		10.0
	SR	M760003Q	1000	1.00		10.0
	CA	M7080014Y	10000	2.50		250
	MG	M760002H	10000	5.00		500
	NA	M7080014Z	10000	~~1.50~~ 2.00		~~150~~ 200
	CR	M760002H	1000	0.800		10.0
	FE	M760001C	10000	0.300		50
	AL	M760002G	10000	4.60		500
	MN	M760005G	1000	0.700		10.00
	PB	M760005H	1000	0.800		10.0
	K	M7080014AA	10000	1.50		150

Analyst/ Date	Letter ID	Nitric Acid Lot # / Concentration	Hydrochloric Acid Lot # / Concentration	Expiration Date	Pipet ID
NM 7/10/18	A	M760006E 2%	M760005P 5%	9/20/18	M35
NM 7/10/18	B	M760006E 10%	M760005P 5%	9/20/18	M35
NM 8/9/18	C	M760006E 10%	M760005P 5%	9/20/18	M35
~~NM 9/4/18~~	D	M760006E 2%	M760005P 5%	9/20/18	M35
NM 9/4/18	E	M760006E 10%	M760005P 5%		
	F				
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				
	W				
	X				
	Y				
	Z				
	AA				

NM 9/4/18

OPTIMA 3/4/5/6 HLCCV3
(Standard is prepared biweekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Single Elements	CA	M7080014Y	10000	2.00	100	200
	CU	M7600001A	1000	0.40		4.00
	FE	M7600001C	10000	0.40		40.0
	K	M7080014AA	10000	1.00		100
	TL	M7600001N	1000	0.30		3.00
Na		M7080014Z	10000	1.50		150

Analyst / Date	Letter ID	Nitric Acid Lot #/ Concentration	Hydrochloric Acid Lot #/ Concentration	Expiration Date	Pip Il
NM 5/24/18	A	M760000045 2%	M760000SP 5%	11/24/18	M3
NM 5/24/18	B	M760000045 10%	M760000SP 5%	11/24/18	M3
NM 6/14/18	C	M760000045 10%	M760000SP 5%	12/14/18	M3
NM 7/19/18	D	M760000065 10%	M760000SP 5%	12/14/18	M3
NM 8/9/18	E	M760000065 2%	M760000SP 5%	12/14/18	M3
NM 8/9/18	F	M760000065 10%	M760000SP 5%	12/14/18	M3
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				

OPTIMA 3/5/6 ICSA STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Int. A Sol'n	M760000005K	Multi	50	1000	Multi
AL		5000			250
CA		5000			250
FE		2000			100
MG		5000			250

Analyst/ Date	ID Letter	Nitric Acid Lot # / Concentration	Hydrochloric Acid Lot # / Concentration	Expiration Date	Pipet ID
NM 6/18/18	A	M760000006E 10%	M760000005P 5%	12/18/18	Volumetric
	B				
	C				
	D				
	E				
	F				
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				

OPTIMA 3/5/6 ICSAB STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Int. A Sol'n	M760005K	Multi	25	500	Multi
AL		5000			250
CA		5000			250
FE		2000			100
MG		5000			250
Int. B Sol'n	M760003W	Multi	5		Multi
AG		20			0.200
BA		50			0.500
BE		50			0.500
CD		100			1.00
CO		50			0.500
CR		50			0.500
CU		50			0.500
MN		50			0.500
NI		100			1.00
PB		5			0.0500
V		50			0.500
ZN		100			1.00
AS		10			0.100
SB		60			0.600
SE		5			0.0500
TL		10			0.100

Analyst/ Date	ID Letter	Nitric Acid Lot # / Concentration	Hydrochloric Acid Lot # / Concentration	Expiration Date	Pipet ID
NM 9/18/18	A	M760000GE 10%	M760000SP 5%	12/18/18	Volumetric
NM 8/9/18	B	M760000GE 2%	M760000SP 5%	2/9/18	Volumetric
NM 8/9/18	C	M760000GE 10%	M760000SP 5%	2/9/18	Volumetric
	D				
	E				
	F				
	G				
	H				
	I				
	J				
	K				
	L				
	M				
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				

OPTIMA 3/4/6 INTERNAL STANDARD (ADDED ON-LINE)

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix
Y	M7600003F	10000	2.0	2000	10.0	5 % HCl 2%HNO3
CS	M7600003E	10000	2.0		10.0	

Analyst/ Date	Letter ID	Nitric Acid Lot #	Hydro-chloric Acid Lot #	Expiration Date	Pipet ID
NM 5/22/18	A	M760000045	M760000SP	11/22/18	M35
NM 5/29/18	B	M760000045	M760000SP	11/29/18	M35
NM 6/1/18	C	M760000045	M760000SP	12/1/18	M35
NM 6/11/18	D	M760000045	M760000SP	12/11/18	M35
NM 6/18/18	E	M7600006E	M760000SP	12/18/18	M35
NM 6/22/18	F	M7600006E	M760000SP	12/22/18	M35
NM 7/2/18	G	M7600006E	M760000SP	1/2/18	M35
NM 7/16/18	H	M7600006E	M760000SP	1/16/18	M35
NM 7/23/18	I	M7600006E	M760000SP	1/23/18	M35
NM 8/6/18	J	M7600006E	M760000SP	2/6/19	M35
NM 8/13/18	K	M7600006E	M760000SP	2/13/19	M35
NM 8/20/18	L	M7600006E	M760000SP	2/20/19	M35
NM 8/25/18	M	M7600006E	M760000SP	2/25/19	M35
NM 9/5/18	N	M7600006E	M760000SP	3/5/19	M35
NM 9/14/18	O	M7600006X	M760000SP	3/14/19	M35
NM 9/24/18	P	M7600006X	M760000SP	3/24/19	M35
	Q				
	R				
	S				
	T				
	V				

Sample Dilutions

Analyst: NM Date 9/26/18

Instrument: ICP6 Analysis 6010C

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2	HNO3/HCL	3	3	1/2												
1/3	HNO3/HCL	3	6	1/3												
1/4	HNO3/HCL	2	6	1/4												
1/5	HNO3/HCL	2	8	1/5												
1/10	HNO3/HCL	1	9	1/10												
1/20	HNO3/HCL	3	3	1/2	1	9	1/20									
1/30	HNO3/HCL	3	6	1/3	1	9	1/30									
1/40	HNO3/HCL	1	3	1/4	1	9	1/40									
1/50	HNO3/HCL	1	4	1/5	1	9	1/50									
1/100	HNO3/HCL	1	9	1/10	1	9	1/100									
1/200	HNO3/HCL	3	3	1/2	1	9	1/20	1	9	1/200						
1/300	HNO3/HCL	3	6	1/3	1	9	1/30	1	9	1/300						
1/400	HNO3/HCL	1	3	1/4	1	9	1/40	1	9	1/400						
1/500	HNO3/HCL	1	4	1/5	1	9	1/50	1	9	1/500						
1/1000	HNO3/HCL	1	9	1/10	1	9	1/100	1	9	1/1000						
1/2000	HNO3/HCL	3	3	1/2	1	9	1/20	1	9	1/200	1	9	1/2000			
1/3000	HNO3/HCL	3	6	1/3	1	9	1/30	1	9	1/300	1	9	1/3000			
1/4000	HNO3/HCL	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000			
1/10000	HNO3/HCL	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000			
1/20000	HNO3/HCL	1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000	1	9	1/20000
1/40000	HNO3/HCL	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000	1	9	1/40000
1/100000	HNO3/HCL	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000	1	9	1/100000

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608673 **Method/Testcode:** 6010C/Al T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810179-01	Aluminum, Total	MB		Water	0.01 ppm	50 mL	400 µg/L U	1	70	400			9/27/18 19:11:47	N	IV
RQ1810179-01	Arsenic, Dissolved	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:11:47	N	IV
RQ1810179-01	Arsenic, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:11:47	N	IV
RQ1810179-01	Barium, Total	MB		Water	0.00 ppm	50 mL	40 µg/L U	1	7	40			9/27/18 19:11:47	N	IV
RQ1810179-01	Beryllium, Total	MB		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.3	5.0			9/27/18 19:11:47	N	IV
RQ1810179-01	Boron, Total	MB		Water	0.00 ppm	50 mL	400 µg/L U	1	20	400			9/27/18 19:11:47	N	IV
RQ1810179-01	Cadmium, Total	MB		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 19:11:47	N	IV
RQ1810179-01	Calcium, Total	MB		Water	0.03 ppm	50 mL	1000 µg/L U	1	300	1000			9/27/18 19:11:47	N	IV
RQ1810179-01	Chromium, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 19:11:47	N	IV
RQ1810179-01	Cobalt, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 19:11:47	N	IV
RQ1810179-01	Copper, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 19:11:47	N	IV
RQ1810179-01	Iron, Total	MB		Water	0.00 ppm	50 mL	200 µg/L U	1	50	200			9/27/18 19:11:47	N	IV
RQ1810179-01	Iron, Total	MB		Water	0.00 ppm	50 mL	100 µg/L U	1	50	100			9/27/18 19:11:47	N	IV
RQ1810179-01	Lead, Dissolved	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:11:47	N	IV
RQ1810179-01	Lead, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	3	10			9/27/18 19:11:47	N	IV
RQ1810179-01	Magnesium, Total	MB		Water	0.00 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 19:11:47	N	IV
RQ1810179-01	Manganese, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	6	20			9/27/18 19:11:47	N	IV
RQ1810179-01	Nickel, Total	MB		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 19:11:47	N	IV
RQ1810179-01	Potassium, Total	MB		Water	0.05 ppm	50 mL	2000 µg/L U	1	200	2000			9/27/18 19:11:47	N	IV
RQ1810179-01	Selenium, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 19:11:47	N	IV
RQ1810179-01	Silver, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 19:11:47	N	IV
RQ1810179-01	Sodium, Total	MB		Water	0.03 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 19:11:47	N	IV
RQ1810179-01	Thallium, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 19:11:47	N	IV
RQ1810179-01	Vanadium, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 19:11:47	N	IV
RQ1810179-01	Zinc, Total	MB		Water	0.00 ppm	50 mL	40 µg/L U	1	10	40			9/27/18 19:11:47	N	IV
RQ1810179-02	Arsenic, Dissolved	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:15:01	N	IV
RQ1810179-02	Lead, Dissolved	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:15:01	N	IV
RQ1810179-03	Aluminum, Total	LCS		Water	1.89 ppm	50 mL	1890 µg/L	1	70	400	94		9/27/18 19:18:16	N	IV
RQ1810179-03	Arsenic, Dissolved	LCS		Water	0.04 ppm	50 mL	39.1 µg/L	1	4	10	98		9/27/18 19:18:16	N	IV
RQ1810179-03	Arsenic, Total	LCS		Water	0.04 ppm	50 mL	39.1 µg/L	1	4	10	98		9/27/18 19:18:16	N	IV
RQ1810179-03	Barium, Total	LCS		Water	2.05 ppm	50 mL	2050 µg/L	1	7	40	103		9/27/18 19:18:16	N	IV
RQ1810179-03	Beryllium, Total	LCS		Water	0.05 ppm	50 mL	50.2 µg/L	1	0.3	5.0	100		9/27/18 19:18:16	N	IV
RQ1810179-03	Boron, Total	LCS		Water	1.01 ppm	50 mL	1010 µg/L	1	20	400	101		9/27/18 19:18:16	N	IV
RQ1810179-03	Cadmium, Total	LCS		Water	0.05 ppm	50 mL	51.5 µg/L	1	0.6	5.0	103		9/27/18 19:18:16	N	IV
RQ1810179-03	Calcium, Total	LCS		Water	2.16 ppm	50 mL	2160 µg/L	1	300	1000	108		9/27/18 19:18:16	N	IV
RQ1810179-03	Chromium, Total	LCS		Water	0.20 ppm	50 mL	203 µg/L	1	2	10	101		9/27/18 19:18:16	N	IV

' indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608673 **Method/Testcode:** 6010C/Co T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
?Q1810179-03	Cobalt, Total	LCS		Water	0.52 ppm	50 mL	519 µg/L	1	2	50	104		9/27/18 19:18:16	N	IV
?Q1810179-03	Copper, Total	LCS		Water	0.25 ppm	50 mL	250 µg/L	1	7	20	100		9/27/18 19:18:16	N	IV
?Q1810179-03	Iron, Total	LCS		Water	0.98 ppm	50 mL	977 µg/L	1	50	200	98		9/27/18 19:18:16	N	IV
?Q1810179-03	Iron, Total	LCS		Water	0.98 ppm	50 mL	977 µg/L	1	50	100	98		9/27/18 19:18:16	N	IV
?Q1810179-03	Lead, Dissolved	LCS		Water	0.52 ppm	50 mL	517 µg/L	1	3	50	103		9/27/18 19:18:16	N	IV
?Q1810179-03	Lead, Total	LCS		Water	0.52 ppm	50 mL	517 µg/L	1	3	10	103		9/27/18 19:18:16	N	IV
?Q1810179-03	Magnesium, Total	LCS		Water	2.01 ppm	50 mL	2010 µg/L	1	200	1000	101		9/27/18 19:18:16	N	IV
?Q1810179-03	Manganese, Total	LCS		Water	0.50 ppm	50 mL	504 µg/L	1	6	20	101		9/27/18 19:18:16	N	IV
?Q1810179-03	Nickel, Total	LCS		Water	0.51 ppm	50 mL	505 µg/L	1	3	40	101		9/27/18 19:18:16	N	IV
?Q1810179-03	Potassium, Total	LCS		Water	19.13 ppm	50 mL	19100 µg/L	1	200	2000	96		9/27/18 19:18:16	N	IV
?Q1810179-03	Selenium, Total	LCS		Water	1.05 ppm	50 mL	1050 µg/L	1	5	10	104		9/27/18 19:18:16	N	IV
?Q1810179-03	Silver, Total	LCS		Water	0.05 ppm	50 mL	50.6 µg/L	1	0.6	10	101		9/27/18 19:18:16	N	IV
?Q1810179-03	Sodium, Total	LCS		Water	19.54 ppm	50 mL	19500 µg/L	1	200	1000	98		9/27/18 19:18:16	N	IV
?Q1810179-03	Thallium, Total	LCS		Water	1.92 ppm	50 mL	1920 µg/L	1	7	20	96		9/27/18 19:18:16	N	IV
?Q1810179-03	Vanadium, Total	LCS		Water	0.49 ppm	50 mL	494 µg/L	1	2	50	99		9/27/18 19:18:16	N	IV
?Q1810179-03	Zinc, Total	LCS		Water	0.53 ppm	50 mL	531 µg/L	1	10	40	106		9/27/18 19:18:16	N	IV
?1808910-001	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:21:30	N	IV
?1808910-001	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:21:30	N	IV
?1808910-002	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:24:45	N	IV
?1808910-002	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:24:45	N	IV
?1808910-003	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:28:01	N	IV
?1808910-003	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:28:01	N	IV
?1808910-004	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:31:17	N	IV
?1808910-004	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:31:17	N	IV
?1808910-006	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:34:32	N	II
?1808910-006	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:34:32	N	II
?1808910-007	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:37:47	N	II
?1808910-007	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:37:47	N	II
?1808910-008	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:41:02	N	II
?1808910-008	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:41:02	N	II
?1808910-009	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:50:45	N	II
?1808910-009	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:50:45	N	II
?1808910-010	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:54:00	N	II
?1808910-010	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:54:00	N	II
?1808910-011	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 19:57:14	N	II
?1808910-011	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 19:57:14	N	II

? indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608673 **Method/Testcode:** 6010C/As D

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1808910-017	Arsenic, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 20:00:29	N	II
R1808910-017	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 20:00:29	N	II
R1808926-001	Aluminum, Total	N/A		Water	0.05 ppm	50 mL	400 µg/L U	1	70	400			9/27/18 20:06:58	N	IV
R1808926-001	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 20:06:58	N	IV
R1808926-001	Barium, Total	N/A		Water	0.10 ppm	50 mL	100 µg/L	1	7	40			9/27/18 20:06:58	N	IV
R1808926-001	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.3	5.0			9/27/18 20:06:58	N	IV
R1808926-001	Boron, Total	N/A		Water	0.11 ppm	50 mL	110 µg/L J	1	20	400			9/27/18 20:06:58	N	IV
R1808926-001	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 20:06:58	N	IV
R1808926-001	Calcium, Total	N/A		Water	124.45 ppm	50 mL	124000 µg/L	1	300	1000			9/27/18 20:06:58	N	IV
R1808926-001	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 20:06:58	N	IV
R1808926-001	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	2 µg/L J	1	2	50			9/27/18 20:06:58	N	IV
R1808926-001	Copper, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:06:58	N	IV
R1808926-001	Iron, Total	N/A		Water	0.10 ppm	50 mL	100 µg/L J	1	50	200			9/27/18 20:06:58	N	IV
R1808926-001	Lead, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	3	10			9/27/18 20:06:58	N	IV
R1808926-001	Magnesium, Total	N/A		Water	30.91 ppm	50 mL	30900 µg/L	1	200	1000			9/27/18 20:06:58	N	IV
R1808926-001	Manganese, Total	N/A		Water	0.09 ppm	50 mL	92 µg/L	1	6	20			9/27/18 20:06:58	N	IV
R1808926-001	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 20:06:58	N	IV
R1808926-001	Potassium, Total	N/A		Water	3.51 ppm	50 mL	3500 µg/L	1	200	2000			9/27/18 20:06:58	N	IV
R1808926-001	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 20:06:58	N	IV
R1808926-001	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 20:06:58	N	IV
R1808926-001	Sodium, Total	N/A		Water	115.37 ppm	50 mL	115000 µg/L	1	200	1000			9/27/18 20:06:58	N	IV
R1808926-001	Thallium, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:06:58	N	IV
R1808926-001	Vanadium, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:06:58	N	IV
R1808926-001	Zinc, Total	N/A		Water	0.01 ppm	50 mL	13 µg/L J	1	10	40			9/27/18 20:06:58	N	IV
R1808926-002	Aluminum, Total	N/A		Water	0.03 ppm	50 mL	400 µg/L U	1	70	400			9/27/18 20:10:13	Y	IV
R1808926-002	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 20:10:13	Y	IV
R1808926-002	Barium, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	7	40			9/27/18 20:10:13	Y	IV
R1808926-002	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.3	5.0			9/27/18 20:10:13	Y	IV
R1808926-002	Boron, Total	N/A		Water	0.02 ppm	50 mL	20 µg/L J	1	20	400			9/27/18 20:10:13	Y	IV
R1808926-002	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 20:10:13	Y	IV
R1808926-002	Calcium, Total	N/A		Water	16.97 ppm	50 mL	17000 µg/L	1	300	1000			9/27/18 20:10:13	Y	IV
R1808926-002	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 20:10:13	Y	IV
R1808926-002	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:10:13	Y	IV
R1808926-002	Copper, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:10:13	Y	IV
R1808926-002	Iron, Total	N/A		Water	38.04 ppm	50 mL	38000 µg/L	1	50	200			9/27/18 20:10:13	Y	IV
R1808926-002	Lead, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	3	10			9/27/18 20:10:13	Y	IV

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608673 **Method/Testcode:** 6010C/Mg T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1808926-002	Magnesium, Total	N/A		Water	5.44 ppm	50 mL	5400 µg/L	1	200	1000			9/27/18 20:10:13	Y	IV
R1808926-002	Manganese, Total	N/A		Water	0.25 ppm	50 mL	255 µg/L	1	6	20			9/27/18 20:10:13	Y	IV
R1808926-002	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 20:10:13	Y	IV
R1808926-002	Potassium, Total	N/A		Water	0.71 ppm	50 mL	700 µg/L J	1	200	2000			9/27/18 20:10:13	Y	IV
R1808926-002	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 20:10:13	Y	IV
R1808926-002	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 20:10:13	N	IV
R1808926-002	Sodium, Total	N/A		Water	8.71 ppm	50 mL	8700 µg/L	1	200	1000			9/27/18 20:10:13	Y	IV
R1808926-002	Thallium, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:10:13	Y	IV
R1808926-002	Vanadium, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:10:13	Y	IV
R1808926-002	Zinc, Total	N/A		Water	0.01 ppm	50 mL	10 µg/L J	1	10	40			9/27/18 20:10:13	Y	IV
RQ1810179-04	Aluminum, Total	MS	R1808926-002	Water	1.92 ppm	50 mL	1920 µg/L	1	70	400	96		9/27/18 20:13:27	N	IV
RQ1810179-04	Arsenic, Total	MS	R1808926-002	Water	0.03 ppm	50 mL	34 µg/L	1	4	10	85*		9/27/18 20:13:27	N	IV
RQ1810179-04	Barium, Total	MS	R1808926-002	Water	2.05 ppm	50 mL	2050 µg/L	1	7	40	102		9/27/18 20:13:27	N	IV
RQ1810179-04	Beryllium, Total	MS	R1808926-002	Water	0.05 ppm	50 mL	50.0 µg/L	1	0.3	5.0	100		9/27/18 20:13:27	N	IV
RQ1810179-04	Boron, Total	MS	R1808926-002	Water	1.03 ppm	50 mL	1030 µg/L	1	20	400	101		9/27/18 20:13:27	N	IV
RQ1810179-04	Cadmium, Total	MS	R1808926-002	Water	0.05 ppm	50 mL	51.0 µg/L	1	0.6	5.0	102		9/27/18 20:13:27	N	IV
RQ1810179-04	Calcium, Total	MS	R1808926-002	Water	18.85 ppm	50 mL	18900 µg/L	1	300	1000	94		9/27/18 20:13:27	N	IV
RQ1810179-04	Chromium, Total	MS	R1808926-002	Water	0.20 ppm	50 mL	202 µg/L	1	2	10	101		9/27/18 20:13:27	N	IV
RQ1810179-04	Cobalt, Total	MS	R1808926-002	Water	0.51 ppm	50 mL	512 µg/L	1	2	50	102		9/27/18 20:13:27	N	IV
RQ1810179-04	Copper, Total	MS	R1808926-002	Water	0.25 ppm	50 mL	246 µg/L	1	7	20	98		9/27/18 20:13:27	N	IV
RQ1810179-04	Iron, Total	MS	R1808926-002	Water	28.90 ppm	50 mL	28900 µg/L	1	50	200	-914*	Spk too low	9/27/18 20:13:27	N	IV
RQ1810179-04	Lead, Total	MS	R1808926-002	Water	0.51 ppm	50 mL	505 µg/L	1	3	10	101		9/27/18 20:13:27	N	IV
RQ1810179-04	Magnesium, Total	MS	R1808926-002	Water	7.34 ppm	50 mL	7300 µg/L	1	200	1000	95		9/27/18 20:13:27	N	IV
RQ1810179-04	Manganese, Total	MS	R1808926-002	Water	0.71 ppm	50 mL	714 µg/L	1	6	20	92		9/27/18 20:13:27	N	IV
RQ1810179-04	Nickel, Total	MS	R1808926-002	Water	0.49 ppm	50 mL	490 µg/L	1	3	40	98		9/27/18 20:13:27	N	IV
RQ1810179-04	Potassium, Total	MS	R1808926-002	Water	19.98 ppm	50 mL	20000 µg/L	1	200	2000	96		9/27/18 20:13:27	N	IV
RQ1810179-04	Selenium, Total	MS	R1808926-002	Water	1.03 ppm	50 mL	1030 µg/L	1	5	10	102		9/27/18 20:13:27	N	IV
RQ1810179-04	Silver, Total	MS	R1808926-002	Water	0.05 ppm	50 mL	50 µg/L	1	0.6	10	100		9/27/18 20:13:27	N	IV
RQ1810179-04	Sodium, Total	MS	R1808926-002	Water	27.90 ppm	50 mL	27900 µg/L	1	200	1000	96		9/27/18 20:13:27	N	IV
RQ1810179-04	Thallium, Total	MS	R1808926-002	Water	1.92 ppm	50 mL	1920 µg/L	1	7	20	96		9/27/18 20:13:27	N	IV
RQ1810179-04	Vanadium, Total	MS	R1808926-002	Water	0.49 ppm	50 mL	494 µg/L	1	2	50	99		9/27/18 20:13:27	N	IV
RQ1810179-04	Zinc, Total	MS	R1808926-002	Water	0.50 ppm	50 mL	505 µg/L	1	10	40	99		9/27/18 20:13:27	N	IV
RQ1810179-05	Aluminum, Total	DMS	R1808926-002	Water	1.92 ppm	50 mL	1920 µg/L	1	70	400	96	<1	9/27/18 20:16:43	N	IV
RQ1810179-05	Arsenic, Total	DMS	R1808926-002	Water	0.04 ppm	50 mL	43 µg/L	1	4	10	108	23*	9/27/18 20:16:43	N	IV
RQ1810179-05	Barium, Total	DMS	R1808926-002	Water	2.06 ppm	50 mL	2060 µg/L	1	7	40	103	<1	9/27/18 20:16:43	N	IV
RQ1810179-05	Beryllium, Total	DMS	R1808926-002	Water	0.05 ppm	50 mL	50.1 µg/L	1	0.3	5.0	100	<1	9/27/18 20:16:43	N	IV

' indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608673 **Method/Testcode:** 6010C/B T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
?Q1810179-05	Boron, Total	DMS	R1808926-002	Water	1.03 ppm	50 mL	1030 µg/L	1	20	400	101	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Cadmium, Total	DMS	R1808926-002	Water	0.05 ppm	50 mL	51.3 µg/L	1	0.6	5.0	103	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Calcium, Total	DMS	R1808926-002	Water	18.84 ppm	50 mL	18800 µg/L	1	300	1000	93	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Chromium, Total	DMS	R1808926-002	Water	0.20 ppm	50 mL	203 µg/L	1	2	10	101	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Cobalt, Total	DMS	R1808926-002	Water	0.51 ppm	50 mL	515 µg/L	1	2	50	103	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Copper, Total	DMS	R1808926-002	Water	0.25 ppm	50 mL	246 µg/L	1	7	20	99	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Iron, Total	DMS	R1808926-002	Water	28.81 ppm	50 mL	28800 µg/L	1	50	200	-922*	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Lead, Total	DMS	R1808926-002	Water	0.51 ppm	50 mL	511 µg/L	1	3	10	102	1	9/27/18 20:16:43	N	IV
?Q1810179-05	Magnesium, Total	DMS	R1808926-002	Water	7.36 ppm	50 mL	7400 µg/L	1	200	1000	96	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Manganese, Total	DMS	R1808926-002	Water	0.72 ppm	50 mL	716 µg/L	1	6	20	92	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Nickel, Total	DMS	R1808926-002	Water	0.49 ppm	50 mL	492 µg/L	1	3	40	98	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Potassium, Total	DMS	R1808926-002	Water	20.06 ppm	50 mL	20100 µg/L	1	200	2000	97	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Selenium, Total	DMS	R1808926-002	Water	1.05 ppm	50 mL	1050 µg/L	1	5	10	103	1	9/27/18 20:16:43	N	IV
?Q1810179-05	Silver, Total	DMS	R1808926-002	Water	0.05 ppm	50 mL	50 µg/L	1	0.6	10	101	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Sodium, Total	DMS	R1808926-002	Water	28.00 ppm	50 mL	28000 µg/L	1	200	1000	96	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Thallium, Total	DMS	R1808926-002	Water	1.92 ppm	50 mL	1920 µg/L	1	7	20	96	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Vanadium, Total	DMS	R1808926-002	Water	0.50 ppm	50 mL	496 µg/L	1	2	50	99	<1	9/27/18 20:16:43	N	IV
?Q1810179-05	Zinc, Total	DMS	R1808926-002	Water	0.51 ppm	50 mL	507 µg/L	1	10	40	99	<1	9/27/18 20:16:43	N	IV
?1808926-003	Aluminum, Total	N/A		Water	0.08 ppm	50 mL	80 µg/L J	1	70	400			9/27/18 20:32:55	N	IV
?1808926-003	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 20:32:55	N	IV
?1808926-003	Barium, Total	N/A		Water	0.03 ppm	50 mL	26 µg/L J	1	7	40			9/27/18 20:32:55	N	IV
?1808926-003	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.3	5.0			9/27/18 20:32:55	N	IV
?1808926-003	Boron, Total	N/A		Water	0.17 ppm	50 mL	170 µg/L J	1	20	400			9/27/18 20:32:55	N	IV
?1808926-003	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 20:32:55	N	IV
?1808926-003	Calcium, Total	N/A		Water	82.32 ppm	50 mL	82300 µg/L	1	300	1000			9/27/18 20:32:55	N	IV
?1808926-003	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 20:32:55	N	IV
?1808926-003	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:32:55	N	IV
?1808926-003	Copper, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:32:55	N	IV
?1808926-003	Iron, Total	N/A		Water	0.14 ppm	50 mL	140 µg/L J	1	50	200			9/27/18 20:32:55	N	IV
?1808926-003	Lead, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	3	10			9/27/18 20:32:55	N	IV
?1808926-003	Magnesium, Total	N/A		Water	24.61 ppm	50 mL	24600 µg/L	1	200	1000			9/27/18 20:32:55	N	IV
?1808926-003	Manganese, Total	N/A		Water	1.39 ppm	50 mL	1390 µg/L	1	6	20			9/27/18 20:32:55	N	IV
?1808926-003	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 20:32:55	N	IV
?1808926-003	Potassium, Total	N/A		Water	2.26 ppm	50 mL	2300 µg/L	1	200	2000			9/27/18 20:32:55	N	IV
?1808926-003	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 20:32:55	N	IV
?1808926-003	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 20:32:55	N	IV

* indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608673 **Method/Testcode:** 6010C/Na T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1808926-003	Sodium, Total	N/A		Water	52.98 ppm	50 mL	53000 µg/L	1	200	1000			9/27/18 20:32:55	N	IV
R1808926-003	Thallium, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:32:55	N	IV
R1808926-003	Vanadium, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:32:55	N	IV
R1808926-003	Zinc, Total	N/A		Water	0.02 ppm	50 mL	17 µg/L J	1	10	40			9/27/18 20:32:55	N	IV
R1808926-004	Aluminum, Total	N/A		Water	0.09 ppm	50 mL	90 µg/L J	1	70	400			9/27/18 20:36:10	N	IV
R1808926-004	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 20:36:10	N	IV
R1808926-004	Barium, Total	N/A		Water	0.10 ppm	50 mL	102 µg/L	1	7	40			9/27/18 20:36:10	N	IV
R1808926-004	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.3	5.0			9/27/18 20:36:10	N	IV
R1808926-004	Boron, Total	N/A		Water	0.11 ppm	50 mL	110 µg/L J	1	20	400			9/27/18 20:36:10	N	IV
R1808926-004	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 20:36:10	N	IV
R1808926-004	Calcium, Total	N/A		Water	125.33 ppm	50 mL	125000 µg/L	1	300	1000			9/27/18 20:36:10	N	IV
R1808926-004	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 20:36:10	N	IV
R1808926-004	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	3 µg/L J	1	2	50			9/27/18 20:36:10	N	IV
R1808926-004	Copper, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:36:10	N	IV
R1808926-004	Iron, Total	N/A		Water	0.23 ppm	50 mL	230 µg/L	1	50	200			9/27/18 20:36:10	N	IV
R1808926-004	Lead, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	3	10			9/27/18 20:36:10	N	IV
R1808926-004	Magnesium, Total	N/A		Water	30.93 ppm	50 mL	30900 µg/L	1	200	1000			9/27/18 20:36:10	N	IV
R1808926-004	Manganese, Total	N/A		Water	0.17 ppm	50 mL	171 µg/L	1	6	20			9/27/18 20:36:10	N	IV
R1808926-004	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 20:36:10	N	IV
R1808926-004	Potassium, Total	N/A		Water	3.70 ppm	50 mL	3700 µg/L	1	200	2000			9/27/18 20:36:10	N	IV
R1808926-004	Selenium, Total	N/A		Water	-0.01 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 20:36:10	N	IV
R1808926-004	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 20:36:10	N	IV
R1808926-004	Sodium, Total	N/A		Water	116.28 ppm	50 mL	116000 µg/L	1	200	1000			9/27/18 20:36:10	N	IV
R1808926-004	Thallium, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:36:10	N	IV
R1808926-004	Vanadium, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:36:10	N	IV
R1808926-004	Zinc, Total	N/A		Water	0.02 ppm	50 mL	16 µg/L J	1	10	40			9/27/18 20:36:10	N	IV
R1808926-006	Aluminum, Total	N/A		Water	9.76 ppm	50 mL	9760 µg/L	1	70	400			9/27/18 20:39:23	N	IV
R1808926-006	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 20:39:23	N	IV
R1808926-006	Barium, Total	N/A		Water	0.09 ppm	50 mL	91 µg/L	1	7	40			9/27/18 20:39:23	N	IV
R1808926-006	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	0.4 µg/L J	1	0.3	5.0			9/27/18 20:39:23	N	IV
R1808926-006	Boron, Total	N/A		Water	0.04 ppm	50 mL	40 µg/L J	1	20	400			9/27/18 20:39:23	N	IV
R1808926-006	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 20:39:23	N	IV
R1808926-006	Calcium, Total	N/A		Water	92.38 ppm	50 mL	92400 µg/L	1	300	1000			9/27/18 20:39:23	N	IV
R1808926-006	Chromium, Total	N/A		Water	0.08 ppm	50 mL	81 µg/L	1	2	10			9/27/18 20:39:23	N	IV
R1808926-006	Cobalt, Total	N/A		Water	0.01 ppm	50 mL	7 µg/L J	1	2	50			9/27/18 20:39:23	N	IV
R1808926-006	Copper, Total	N/A		Water	0.03 ppm	50 mL	31 µg/L	1	7	20			9/27/18 20:39:23	N	IV

' indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608673 **Method/Testcode:** 6010C/Fe T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1808926-006	Iron, Total	N/A		Water	14.86 ppm	50 mL	14900 µg/L	1	50	200			9/27/18 20:39:23	N	IV
R1808926-006	Lead, Total	N/A		Water	0.00 ppm	50 mL	4 µg/L J	1	3	10			9/27/18 20:39:23	N	IV
R1808926-006	Magnesium, Total	N/A		Water	14.73 ppm	50 mL	14700 µg/L	1	200	1000			9/27/18 20:39:23	N	IV
R1808926-006	Manganese, Total	N/A		Water	0.42 ppm	50 mL	415 µg/L	1	6	20			9/27/18 20:39:23	N	IV
R1808926-006	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 20:39:23	N	IV
R1808926-006	Potassium, Total	N/A		Water	7.07 ppm	50 mL	7100 µg/L	1	200	2000			9/27/18 20:39:23	N	IV
R1808926-006	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 20:39:23	N	IV
R1808926-006	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 20:39:23	N	IV
R1808926-006	Sodium, Total	N/A		Water	26.07 ppm	50 mL	26100 µg/L	1	200	1000			9/27/18 20:39:23	N	IV
R1808926-006	Thallium, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:39:23	N	IV
R1808926-006	Vanadium, Total	N/A		Water	0.02 ppm	50 mL	21 µg/L J	1	2	50			9/27/18 20:39:23	N	IV
R1808926-006	Zinc, Total	N/A		Water	0.06 ppm	50 mL	61 µg/L	1	10	40			9/27/18 20:39:23	N	IV
R1808926-007	Aluminum, Total	N/A		Water	0.19 ppm	50 mL	190 µg/L J	1	70	400			9/27/18 20:42:38	N	IV
R1808926-007	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 20:42:38	N	IV
R1808926-007	Barium, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	7	40			9/27/18 20:42:38	N	IV
R1808926-007	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.3	5.0			9/27/18 20:42:38	N	IV
R1808926-007	Boron, Total	N/A		Water	0.00 ppm	50 mL	400 µg/L U	1	20	400			9/27/18 20:42:38	N	IV
R1808926-007	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 20:42:38	N	IV
R1808926-007	Calcium, Total	N/A		Water	0.15 ppm	50 mL	1000 µg/L U	1	300	1000			9/27/18 20:42:38	N	IV
R1808926-007	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 20:42:38	N	IV
R1808926-007	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:42:38	N	IV
R1808926-007	Copper, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:42:38	N	IV
R1808926-007	Iron, Total	N/A		Water	0.28 ppm	50 mL	280 µg/L	1	50	200			9/27/18 20:42:38	N	IV
R1808926-007	Lead, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	3	10			9/27/18 20:42:38	N	IV
R1808926-007	Magnesium, Total	N/A		Water	0.06 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 20:42:38	N	IV
R1808926-007	Manganese, Total	N/A		Water	0.01 ppm	50 mL	14 µg/L J	1	6	20			9/27/18 20:42:38	N	IV
R1808926-007	Nickel, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 20:42:38	N	IV
R1808926-007	Potassium, Total	N/A		Water	0.07 ppm	50 mL	2000 µg/L U	1	200	2000			9/27/18 20:42:38	N	IV
R1808926-007	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 20:42:38	N	IV
R1808926-007	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 20:42:38	N	IV
R1808926-007	Sodium, Total	N/A		Water	0.29 ppm	50 mL	300 µg/L J	1	200	1000			9/27/18 20:42:38	N	IV
R1808926-007	Thallium, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:42:38	N	IV
R1808926-007	Vanadium, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:42:38	N	IV
R1808926-007	Zinc, Total	N/A		Water	0.01 ppm	50 mL	40 µg/L U	1	10	40			9/27/18 20:42:38	N	IV
R1808926-009	Aluminum, Total	N/A		Water	0.00 ppm	50 mL	400 µg/L U	1	70	400			9/27/18 20:45:52	N	IV
R1808926-009	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 20:45:52	N	IV

I indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608673 **Method/Testcode:** 6010C/Ba T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
1808926-009	Barium, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	7	40			9/27/18 20:45:52	N	IV
1808926-009	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.3	5.0			9/27/18 20:45:52	N	IV
1808926-009	Boron, Total	N/A		Water	0.00 ppm	50 mL	400 µg/L U	1	20	400			9/27/18 20:45:52	N	IV
1808926-009	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 20:45:52	N	IV
1808926-009	Calcium, Total	N/A		Water	0.00 ppm	50 mL	1000 µg/L U	1	300	1000			9/27/18 20:45:52	N	IV
1808926-009	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 20:45:52	N	IV
1808926-009	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:45:52	N	IV
1808926-009	Copper, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:45:52	N	IV
1808926-009	Iron, Total	N/A		Water	0.00 ppm	50 mL	200 µg/L U	1	50	200			9/27/18 20:45:52	N	IV
1808926-009	Lead, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	3	10			9/27/18 20:45:52	N	IV
1808926-009	Magnesium, Total	N/A		Water	0.00 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 20:45:52	N	IV
1808926-009	Manganese, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	6	20			9/27/18 20:45:52	N	IV
1808926-009	Nickel, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 20:45:52	N	IV
1808926-009	Potassium, Total	N/A		Water	0.02 ppm	50 mL	2000 µg/L U	1	200	2000			9/27/18 20:45:52	N	IV
1808926-009	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 20:45:52	N	IV
1808926-009	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 20:45:52	N	IV
1808926-009	Sodium, Total	N/A		Water	0.12 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 20:45:52	N	IV
1808926-009	Thallium, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 20:45:52	N	IV
1808926-009	Vanadium, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 20:45:52	N	IV
1808926-009	Zinc, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	10	40			9/27/18 20:45:52	N	IV
1809066-002	Iron, Total	N/A		Water	0.32 ppm	50 mL	320 µg/L	1	50	100			9/27/18 20:49:06	N	II

' indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608674 **Method/Testcode:** 6010C/Al T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ1810175-01	Aluminum, Total	MB		Water	0.01 ppm	50 mL	100 µg/L U	1	70	100			9/27/18 21:24:49	N	II
KQ1810175-01	Barium, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 21:24:49	N	II
KQ1810175-01	Beryllium, Total	MB		Water	0.00 ppm	50 mL	3.0 µg/L U	1	0.3	3.0			9/27/18 21:24:49	N	II
KQ1810175-01	Boron, Total	MB		Water	0.00 ppm	50 mL	200 µg/L U	1	20	200			9/27/18 21:24:49	N	II
KQ1810175-01	Cadmium, Dissolved	MB		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:24:49	N	II
KQ1810175-01	Cadmium, Total	MB		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:24:49	N	II
KQ1810175-01	Calcium, Dissolved	MB		Water	0.04 ppm	50 mL	1000 µg/L U	1	300	1000			9/27/18 21:24:49	N	II
KQ1810175-01	Calcium, Total	MB		Water	0.04 ppm	50 mL	1000 µg/L U	1	300	1000			9/27/18 21:24:49	N	II
KQ1810175-01	Chromium, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 21:24:49	N	II
KQ1810175-01	Cobalt, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 21:24:49	N	II
KQ1810175-01	Copper, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 21:24:49	N	II
KQ1810175-01	Iron, Dissolved	MB		Water	0.01 ppm	50 mL	100 µg/L U	1	50	100			9/27/18 21:24:49	N	II
KQ1810175-01	Iron, Total	MB		Water	0.01 ppm	50 mL	100 µg/L U	1	50	100			9/27/18 21:24:49	N	II
KQ1810175-01	Lead, Dissolved	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 21:24:49	N	II
KQ1810175-01	Lead, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 21:24:49	N	II
KQ1810175-01	Magnesium, Dissolved	MB		Water	0.00 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 21:24:49	N	II
KQ1810175-01	Magnesium, Total	MB		Water	0.00 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 21:24:49	N	II
KQ1810175-01	Manganese, Dissolved	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/27/18 21:24:49	N	II
KQ1810175-01	Manganese, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/27/18 21:24:49	N	II
KQ1810175-01	Molybdenum, Total	MB		Water	-0.01 ppm	50 mL	25 µg/L U	1	3	25			9/27/18 21:24:49	N	II
KQ1810175-01	Nickel, Total	MB		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 21:24:49	N	II
KQ1810175-01	Potassium, Dissolved	MB		Water	0.08 ppm	50 mL	2000 µg/L U	1	200	2000			9/27/18 21:24:49	N	II
KQ1810175-01	Potassium, Total	MB		Water	0.08 ppm	50 mL	2000 µg/L U	1	200	2000			9/27/18 21:24:49	N	II
KQ1810175-01	Selenium, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 21:24:49	N	II
KQ1810175-01	Silver, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 21:24:49	N	II
KQ1810175-01	Sodium, Dissolved	MB		Water	0.03 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 21:24:49	N	II
KQ1810175-01	Sodium, Total	MB		Water	0.03 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 21:24:49	N	II
KQ1810175-01	Strontium, Total	MB		Water	0.00 ppm	50 mL	100 µg/L U	1	3	100			9/27/18 21:24:49	N	II
KQ1810175-01	Tin, Total	MB		Water	0.00 ppm	50 mL	500 µg/L U	1	20	500			9/27/18 21:24:49	N	II
KQ1810175-01	Vanadium, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 21:24:49	N	II
KQ1810175-01	Zinc, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	10	20			9/27/18 21:24:49	N	II
KQ1810175-02	Aluminum, Total	LCS		Water	1.89 ppm	50 mL	1890 µg/L	1	70	100	94		9/27/18 21:28:03	N	II
KQ1810175-02	Barium, Total	LCS		Water	2.05 ppm	50 mL	2050 µg/L	1	7	20	103		9/27/18 21:28:03	N	II
KQ1810175-02	Beryllium, Total	LCS		Water	0.05 ppm	50 mL	50.1 µg/L	1	0.3	3.0	100		9/27/18 21:28:03	N	II
KQ1810175-02	Boron, Total	LCS		Water	1.01 ppm	50 mL	1010 µg/L	1	20	200	101		9/27/18 21:28:03	N	II
KQ1810175-02	Cadmium, Dissolved	LCS		Water	0.05 ppm	50 mL	51.3 µg/L	1	0.6	5.0	103		9/27/18 21:28:03	N	II

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608674 **Method/Testcode:** 6010C/Cd T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810175-02	Cadmium, Total	LCS		Water	0.05 ppm	50 mL	51.3 µg/L	1	0.6	5.0	103		9/27/18 21:28:03	N	II
RQ1810175-02	Calcium, Dissolved	LCS		Water	1.94 ppm	50 mL	1940 µg/L	1	300	1000	97		9/27/18 21:28:03	N	II
RQ1810175-02	Calcium, Total	LCS		Water	1.94 ppm	50 mL	1940 µg/L	1	300	1000	97		9/27/18 21:28:03	N	II
RQ1810175-02	Chromium, Total	LCS		Water	0.20 ppm	50 mL	203 µg/L	1	2	10	102		9/27/18 21:28:03	N	II
RQ1810175-02	Cobalt, Total	LCS		Water	0.52 ppm	50 mL	520 µg/L	1	2	50	104		9/27/18 21:28:03	N	II
RQ1810175-02	Copper, Total	LCS		Water	0.25 ppm	50 mL	250 µg/L	1	7	20	100		9/27/18 21:28:03	N	II
RQ1810175-02	Iron, Dissolved	LCS		Water	0.98 ppm	50 mL	982 µg/L	1	50	100	98		9/27/18 21:28:03	N	II
RQ1810175-02	Iron, Total	LCS		Water	0.98 ppm	50 mL	982 µg/L	1	50	100	98		9/27/18 21:28:03	N	II
RQ1810175-02	Lead, Dissolved	LCS		Water	0.52 ppm	50 mL	518 µg/L	1	3	50	104		9/27/18 21:28:03	N	II
RQ1810175-02	Lead, Total	LCS		Water	0.52 ppm	50 mL	518 µg/L	1	3	50	104		9/27/18 21:28:03	N	II
RQ1810175-02	Magnesium, Dissolved	LCS		Water	2.01 ppm	50 mL	2010 µg/L	1	200	1000	100		9/27/18 21:28:03	N	II
RQ1810175-02	Magnesium, Total	LCS		Water	2.01 ppm	50 mL	2010 µg/L	1	200	1000	100		9/27/18 21:28:03	N	II
RQ1810175-02	Manganese, Dissolved	LCS		Water	0.50 ppm	50 mL	503 µg/L	1	6	10	101		9/27/18 21:28:03	N	II
RQ1810175-02	Manganese, Total	LCS		Water	0.50 ppm	50 mL	503 µg/L	1	6	10	101		9/27/18 21:28:03	N	II
RQ1810175-02	Molybdenum, Total	LCS		Water	0.50 ppm	50 mL	502 µg/L	1	3	25	100		9/27/18 21:28:03	N	II
RQ1810175-02	Nickel, Total	LCS		Water	0.51 ppm	50 mL	506 µg/L	1	3	40	101		9/27/18 21:28:03	N	II
RQ1810175-02	Potassium, Dissolved	LCS		Water	19.14 ppm	50 mL	19100 µg/L	1	200	2000	96		9/27/18 21:28:03	N	II
RQ1810175-02	Potassium, Total	LCS		Water	19.14 ppm	50 mL	19100 µg/L	1	200	2000	96		9/27/18 21:28:03	N	II
RQ1810175-02	Selenium, Total	LCS		Water	1.04 ppm	50 mL	1040 µg/L	1	5	10	103		9/27/18 21:28:03	N	II
RQ1810175-02	Silver, Total	LCS		Water	0.05 ppm	50 mL	50.4 µg/L	1	0.6	10	101		9/27/18 21:28:03	N	II
RQ1810175-02	Sodium, Dissolved	LCS		Water	19.48 ppm	50 mL	19500 µg/L	1	200	1000	97		9/27/18 21:28:03	N	II
RQ1810175-02	Sodium, Total	LCS		Water	19.48 ppm	50 mL	19500 µg/L	1	200	1000	97		9/27/18 21:28:03	N	II
RQ1810175-02	Strontium, Total	LCS		Water	2.02 ppm	50 mL	2020 µg/L	1	3	100	101		9/27/18 21:28:03	N	II
RQ1810175-02	Tin, Total	LCS		Water	5.08 ppm	50 mL	5080 µg/L	1	20	500	102		9/27/18 21:28:03	N	II
RQ1810175-02	Vanadium, Total	LCS		Water	0.49 ppm	50 mL	494 µg/L	1	2	50	99		9/27/18 21:28:03	N	II
RQ1810175-02	Zinc, Total	LCS		Water	0.51 ppm	50 mL	505 µg/L	1	10	20	101		9/27/18 21:28:03	N	II
RQ1810175-03	Aluminum, Total	DLCS		Water	1.88 ppm	50 mL	1880 µg/L	1	70	100	94	<1	9/27/18 21:31:19	N	II
RQ1810175-03	Barium, Total	DLCS		Water	2.05 ppm	50 mL	2050 µg/L	1	7	20	102	<1	9/27/18 21:31:19	N	II
RQ1810175-03	Beryllium, Total	DLCS		Water	0.05 ppm	50 mL	49.8 µg/L	1	0.3	3.0	100	<1	9/27/18 21:31:19	N	II
RQ1810175-03	Boron, Total	DLCS		Water	1.00 ppm	50 mL	1000 µg/L	1	20	200	100	<1	9/27/18 21:31:19	N	II
RQ1810175-03	Cadmium, Dissolved	DLCS		Water	0.05 ppm	50 mL	51.3 µg/L	1	0.6	5.0	103	<1	9/27/18 21:31:19	N	II
RQ1810175-03	Cadmium, Total	DLCS		Water	0.05 ppm	50 mL	51.3 µg/L	1	0.6	5.0	103	<1	9/27/18 21:31:19	N	II
RQ1810175-03	Calcium, Dissolved	DLCS		Water	1.96 ppm	50 mL	1960 µg/L	1	300	1000	98	1	9/27/18 21:31:19	N	II
RQ1810175-03	Calcium, Total	DLCS		Water	1.96 ppm	50 mL	1960 µg/L	1	300	1000	98	1	9/27/18 21:31:19	N	II
RQ1810175-03	Chromium, Total	DLCS		Water	0.20 ppm	50 mL	202 µg/L	1	2	10	101	<1	9/27/18 21:31:19	N	II
RQ1810175-03	Cobalt, Total	DLCS		Water	0.52 ppm	50 mL	517 µg/L	1	2	50	103	<1	9/27/18 21:31:19	N	II

f indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608674 **Method/Testcode:** 6010C/Cu T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2Q1810175-03	Copper, Total	DLCS		Water	0.25 ppm	50 mL	247 µg/L	1	7	20	99	1	9/27/18 21:31:19	N	II
2Q1810175-03	Iron, Dissolved	DLCS		Water	0.98 ppm	50 mL	977 µg/L	1	50	100	98	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Iron, Total	DLCS		Water	0.98 ppm	50 mL	977 µg/L	1	50	100	98	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Lead, Dissolved	DLCS		Water	0.51 ppm	50 mL	513 µg/L	1	3	50	103	1	9/27/18 21:31:19	N	II
2Q1810175-03	Lead, Total	DLCS		Water	0.51 ppm	50 mL	513 µg/L	1	3	50	103	1	9/27/18 21:31:19	N	II
2Q1810175-03	Magnesium, Dissolved	DLCS		Water	2.00 ppm	50 mL	2000 µg/L	1	200	1000	100	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Magnesium, Total	DLCS		Water	2.00 ppm	50 mL	2000 µg/L	1	200	1000	100	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Manganese, Dissolved	DLCS		Water	0.50 ppm	50 mL	502 µg/L	1	6	10	100	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Manganese, Total	DLCS		Water	0.50 ppm	50 mL	502 µg/L	1	6	10	100	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Molybdenum, Total	DLCS		Water	0.50 ppm	50 mL	503 µg/L	1	3	25	101	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Nickel, Total	DLCS		Water	0.50 ppm	50 mL	503 µg/L	1	3	40	101	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Potassium, Dissolved	DLCS		Water	19.04 ppm	50 mL	19000 µg/L	1	200	2000	95	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Potassium, Total	DLCS		Water	19.04 ppm	50 mL	19000 µg/L	1	200	2000	95	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Selenium, Total	DLCS		Water	1.03 ppm	50 mL	1030 µg/L	1	5	10	102	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Silver, Total	DLCS		Water	0.05 ppm	50 mL	50.3 µg/L	1	0.6	10	101	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Sodium, Dissolved	DLCS		Water	19.39 ppm	50 mL	19400 µg/L	1	200	1000	97	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Sodium, Total	DLCS		Water	19.39 ppm	50 mL	19400 µg/L	1	200	1000	97	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Strontium, Total	DLCS		Water	2.02 ppm	50 mL	2020 µg/L	1	3	100	101	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Tin, Total	DLCS		Water	5.04 ppm	50 mL	5040 µg/L	1	20	500	101	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Vanadium, Total	DLCS		Water	0.49 ppm	50 mL	492 µg/L	1	2	50	98	<1	9/27/18 21:31:19	N	II
2Q1810175-03	Zinc, Total	DLCS		Water	0.51 ppm	50 mL	510 µg/L	1	10	20	102	<1	9/27/18 21:31:19	N	II
21808996-001	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:34:34	N	II
21808996-001	Iron, Total	N/A		Water	0.05 ppm	50 mL	100 µg/L U	1	50	100			9/27/18 21:34:34	N	II
21808996-001	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 21:34:34	N	II
21808996-001	Magnesium, Total	N/A		Water	91.69 ppm	50 mL	91700 µg/L	1	200	1000			9/27/18 21:34:34	N	II
21808996-001	Manganese, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/27/18 21:34:34	N	II
21808996-001	Potassium, Total	N/A		Water	2.65 ppm	50 mL	2700 µg/L	1	200	2000			9/27/18 21:34:34	N	II
21808996-001	Sodium, Total	N/A		Water	18.76 ppm	50 mL	18800 µg/L	1	200	1000			9/27/18 21:34:34	N	II
21808996-002	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:37:49	N	II
21808996-002	Calcium, Total	N/A		Water	54.27 ppm	50 mL	54300 µg/L	1	300	1000			9/27/18 21:37:49	N	II
21808996-002	Iron, Total	N/A		Water	0.65 ppm	50 mL	650 µg/L	1	50	100			9/27/18 21:37:49	N	II
21808996-002	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 21:37:49	N	II
21808996-002	Magnesium, Total	N/A		Water	19.41 ppm	50 mL	19400 µg/L	1	200	1000			9/27/18 21:37:49	N	II
21808996-002	Manganese, Total	N/A		Water	0.04 ppm	50 mL	44 µg/L	1	6	10			9/27/18 21:37:49	N	II
21808996-002	Potassium, Total	N/A		Water	17.86 ppm	50 mL	17900 µg/L	1	200	2000			9/27/18 21:37:49	N	II
21808996-002	Sodium, Total	N/A		Water	113.88 ppm	50 mL	114000 µg/L	1	200	1000			9/27/18 21:37:49	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608674 **Method/Testcode:** 6010C/Cd T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
21808996-003	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:41:04	N	II
21808996-003	Iron, Total	N/A		Water	0.26 ppm	50 mL	260 µg/L	1	50	100			9/27/18 21:41:04	N	II
21808996-003	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 21:41:04	N	II
21808996-003	Magnesium, Total	N/A		Water	210.62 ppm	50 mL	211000 µg/L	1	200	1000			9/27/18 21:41:04	N	II
21808996-003	Manganese, Total	N/A		Water	0.50 ppm	50 mL	501 µg/L	1	6	10			9/27/18 21:41:04	N	II
21808996-003	Potassium, Total	N/A		Water	5.05 ppm	50 mL	5000 µg/L	1	200	2000			9/27/18 21:41:04	N	II
21808996-003	Sodium, Total	N/A		Water	35.99 ppm	50 mL	36000 µg/L	1	200	1000			9/27/18 21:41:04	N	II
21808996-004	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:44:19	N	II
21808996-004	Calcium, Total	N/A		Water	45.90 ppm	50 mL	45900 µg/L	1	300	1000			9/27/18 21:44:19	N	II
21808996-004	Iron, Total	N/A		Water	0.21 ppm	50 mL	210 µg/L	1	50	100			9/27/18 21:44:19	N	II
21808996-004	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 21:44:19	N	II
21808996-004	Magnesium, Total	N/A		Water	16.66 ppm	50 mL	16700 µg/L	1	200	1000			9/27/18 21:44:19	N	II
21808996-004	Manganese, Total	N/A		Water	0.09 ppm	50 mL	90 µg/L	1	6	10			9/27/18 21:44:19	N	II
21808996-004	Potassium, Total	N/A		Water	3.92 ppm	50 mL	3900 µg/L	1	200	2000			9/27/18 21:44:19	N	II
21808996-004	Sodium, Total	N/A		Water	67.06 ppm	50 mL	67100 µg/L	1	200	1000			9/27/18 21:44:19	N	II
21808996-005	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:47:33	N	II
21808996-005	Calcium, Total	N/A		Water	109.84 ppm	50 mL	110000 µg/L	1	300	1000			9/27/18 21:47:33	N	II
21808996-005	Iron, Total	N/A		Water	0.81 ppm	50 mL	810 µg/L	1	50	100			9/27/18 21:47:33	N	II
21808996-005	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 21:47:33	N	II
21808996-005	Magnesium, Total	N/A		Water	63.85 ppm	50 mL	63800 µg/L	1	200	1000			9/27/18 21:47:33	N	II
21808996-005	Manganese, Total	N/A		Water	0.09 ppm	50 mL	94 µg/L	1	6	10			9/27/18 21:47:33	N	II
21808996-005	Potassium, Total	N/A		Water	2.61 ppm	50 mL	2600 µg/L	1	200	2000			9/27/18 21:47:33	N	II
21808996-005	Sodium, Total	N/A		Water	21.02 ppm	50 mL	21000 µg/L	1	200	1000			9/27/18 21:47:33	N	II
21808996-006	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:50:47	N	II
21808996-006	Calcium, Total	N/A		Water	52.09 ppm	50 mL	52100 µg/L	1	300	1000			9/27/18 21:50:47	N	II
21808996-006	Iron, Total	N/A		Water	2.27 ppm	50 mL	2270 µg/L	1	50	100			9/27/18 21:50:47	N	II
21808996-006	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 21:50:47	N	II
21808996-006	Magnesium, Total	N/A		Water	23.04 ppm	50 mL	23000 µg/L	1	200	1000			9/27/18 21:50:47	N	II
21808996-006	Manganese, Total	N/A		Water	0.04 ppm	50 mL	43 µg/L	1	6	10			9/27/18 21:50:47	N	II
21808996-006	Potassium, Total	N/A		Water	4.82 ppm	50 mL	4800 µg/L	1	200	2000			9/27/18 21:50:47	N	II
21808996-006	Sodium, Total	N/A		Water	96.90 ppm	50 mL	96900 µg/L	1	200	1000			9/27/18 21:50:47	N	II
21808996-007	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 21:54:02	N	II
21808996-007	Calcium, Total	N/A		Water	158.05 ppm	50 mL	158000 µg/L	1	300	1000			9/27/18 21:54:02	N	II
21808996-007	Iron, Total	N/A		Water	0.30 ppm	50 mL	300 µg/L	1	50	100			9/27/18 21:54:02	N	II
21808996-007	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 21:54:02	N	II
21808996-007	Magnesium, Total	N/A		Water	62.40 ppm	50 mL	62400 µg/L	1	200	1000			9/27/18 21:54:02	N	II

' indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608674 **Method/Testcode:** 6010C/Mn T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1808996-007	Manganese, Total	N/A		Water	0.04 ppm	50 mL	41 µg/L	1	6	10			9/27/18 21:54:02	N	II
R1808996-007	Potassium, Total	N/A		Water	2.08 ppm	50 mL	2100 µg/L	1	200	2000			9/27/18 21:54:02	N	II
R1808996-007	Sodium, Total	N/A		Water	33.46 ppm	50 mL	33500 µg/L	1	200	1000			9/27/18 21:54:02	N	II
R1808996-008	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:03:46	N	II
R1808996-008	Calcium, Total	N/A		Water	20.32 ppm	50 mL	20300 µg/L	1	300	1000			9/27/18 22:03:46	N	II
R1808996-008	Iron, Total	N/A		Water	0.85 ppm	50 mL	850 µg/L	1	50	100			9/27/18 22:03:46	N	II
R1808996-008	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:03:46	N	II
R1808996-008	Magnesium, Total	N/A		Water	9.00 ppm	50 mL	9000 µg/L	1	200	1000			9/27/18 22:03:46	N	II
R1808996-008	Manganese, Total	N/A		Water	0.02 ppm	50 mL	22 µg/L	1	6	10			9/27/18 22:03:46	N	II
R1808996-008	Potassium, Total	N/A		Water	1.82 ppm	50 mL	1800 µg/L J	1	200	2000			9/27/18 22:03:46	N	II
R1808996-008	Sodium, Total	N/A		Water	43.40 ppm	50 mL	43400 µg/L	1	200	1000			9/27/18 22:03:46	N	II
R1808996-009	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:07:01	N	II
R1808996-009	Calcium, Total	N/A		Water	94.48 ppm	50 mL	94500 µg/L	1	300	1000			9/27/18 22:07:01	N	II
R1808996-009	Iron, Total	N/A		Water	0.02 ppm	50 mL	100 µg/L U	1	50	100			9/27/18 22:07:01	N	II
R1808996-009	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:07:01	N	II
R1808996-009	Magnesium, Total	N/A		Water	29.10 ppm	50 mL	29100 µg/L	1	200	1000			9/27/18 22:07:01	N	II
R1808996-009	Manganese, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/27/18 22:07:01	N	II
R1808996-009	Potassium, Total	N/A		Water	1.08 ppm	50 mL	1100 µg/L J	1	200	2000			9/27/18 22:07:01	N	II
R1808996-009	Sodium, Total	N/A		Water	13.18 ppm	50 mL	13200 µg/L	1	200	1000			9/27/18 22:07:01	N	II
R1808996-010	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:10:16	N	II
R1808996-010	Calcium, Total	N/A		Water	16.74 ppm	50 mL	16700 µg/L	1	300	1000			9/27/18 22:10:16	N	II
R1808996-010	Iron, Total	N/A		Water	2.69 ppm	50 mL	2690 µg/L	1	50	100			9/27/18 22:10:16	N	II
R1808996-010	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:10:16	N	II
R1808996-010	Magnesium, Total	N/A		Water	7.68 ppm	50 mL	7700 µg/L	1	200	1000			9/27/18 22:10:16	N	II
R1808996-010	Manganese, Total	N/A		Water	0.04 ppm	50 mL	39 µg/L	1	6	10			9/27/18 22:10:16	N	II
R1808996-010	Potassium, Total	N/A		Water	8.73 ppm	50 mL	8700 µg/L	1	200	2000			9/27/18 22:10:16	N	II
R1808996-010	Sodium, Total	N/A		Water	51.98 ppm	50 mL	52000 µg/L	1	200	1000			9/27/18 22:10:16	N	II
R1808996-011	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:13:31	N	II
R1808996-011	Calcium, Total	N/A		Water	101.29 ppm	50 mL	101000 µg/L	1	300	1000			9/27/18 22:13:31	N	II
R1808996-011	Iron, Total	N/A		Water	0.32 ppm	50 mL	320 µg/L	1	50	100			9/27/18 22:13:31	N	II
R1808996-011	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:13:31	N	II
R1808996-011	Magnesium, Total	N/A		Water	27.63 ppm	50 mL	27600 µg/L	1	200	1000			9/27/18 22:13:31	N	II
R1808996-011	Manganese, Total	N/A		Water	0.01 ppm	50 mL	14 µg/L	1	6	10			9/27/18 22:13:31	N	II
R1808996-011	Potassium, Total	N/A		Water	1.41 ppm	50 mL	1400 µg/L J	1	200	2000			9/27/18 22:13:31	N	II
R1808996-011	Sodium, Total	N/A		Water	57.47 ppm	50 mL	57500 µg/L	1	200	1000			9/27/18 22:13:31	N	II
R1808996-012	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:16:46	N	II

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Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608674 **Method/Testcode:** 6010C/Ca T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1808996-012	Calcium, Total	N/A		Water	36.07 ppm	50 mL	36100 µg/L	1	300	1000			9/27/18 22:16:46	N	II
R1808996-012	Iron, Total	N/A		Water	0.26 ppm	50 mL	260 µg/L	1	50	100			9/27/18 22:16:46	N	II
R1808996-012	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:16:46	N	II
R1808996-012	Magnesium, Total	N/A		Water	14.63 ppm	50 mL	14600 µg/L	1	200	1000			9/27/18 22:16:46	N	II
R1808996-012	Manganese, Total	N/A		Water	0.06 ppm	50 mL	55 µg/L	1	6	10			9/27/18 22:16:46	N	II
R1808996-012	Potassium, Total	N/A		Water	1.50 ppm	50 mL	1500 µg/L J	1	200	2000			9/27/18 22:16:46	N	II
R1808996-012	Sodium, Total	N/A		Water	62.84 ppm	50 mL	62800 µg/L	1	200	1000			9/27/18 22:16:46	N	II
R1808996-013	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:20:01	N	II
R1808996-013	Calcium, Total	N/A		Water	176.94 ppm	50 mL	177000 µg/L	1	300	1000			9/27/18 22:20:01	N	II
R1808996-013	Iron, Total	N/A		Water	0.90 ppm	50 mL	900 µg/L	1	50	100			9/27/18 22:20:01	N	II
R1808996-013	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:20:01	N	II
R1808996-013	Magnesium, Total	N/A		Water	72.57 ppm	50 mL	72600 µg/L	1	200	1000			9/27/18 22:20:01	N	II
R1808996-013	Manganese, Total	N/A		Water	0.11 ppm	50 mL	114 µg/L	1	6	10			9/27/18 22:20:01	N	II
R1808996-013	Potassium, Total	N/A		Water	2.09 ppm	50 mL	2100 µg/L	1	200	2000			9/27/18 22:20:01	N	II
R1808996-013	Sodium, Total	N/A		Water	14.14 ppm	50 mL	14100 µg/L	1	200	1000			9/27/18 22:20:01	N	II
R1808996-014	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:23:16	N	II
R1808996-014	Calcium, Total	N/A		Water	52.65 ppm	50 mL	52600 µg/L	1	300	1000			9/27/18 22:23:16	N	II
R1808996-014	Iron, Total	N/A		Water	0.57 ppm	50 mL	570 µg/L	1	50	100			9/27/18 22:23:16	N	II
R1808996-014	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:23:16	N	II
R1808996-014	Magnesium, Total	N/A		Water	22.36 ppm	50 mL	22400 µg/L	1	200	1000			9/27/18 22:23:16	N	II
R1808996-014	Manganese, Total	N/A		Water	0.02 ppm	50 mL	24 µg/L	1	6	10			9/27/18 22:23:16	N	II
R1808996-014	Potassium, Total	N/A		Water	2.85 ppm	50 mL	2900 µg/L	1	200	2000			9/27/18 22:23:16	N	II
R1808996-014	Sodium, Total	N/A		Water	88.83 ppm	50 mL	88800 µg/L	1	200	1000			9/27/18 22:23:16	N	II
R1808996-015	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:26:32	N	II
R1808996-015	Iron, Total	N/A		Water	3.45 ppm	50 mL	3450 µg/L	1	50	100			9/27/18 22:26:32	N	II
R1808996-015	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:26:32	N	II
R1808996-015	Magnesium, Total	N/A		Water	241.88 ppm	50 mL	242000 µg/L	1	200	1000			9/27/18 22:26:32	N	II
R1808996-015	Manganese, Total	N/A		Water	0.39 ppm	50 mL	388 µg/L	1	6	10			9/27/18 22:26:32	N	II
R1808996-015	Potassium, Total	N/A		Water	8.29 ppm	50 mL	8300 µg/L	1	200	2000			9/27/18 22:26:32	N	II
R1808996-015	Sodium, Total	N/A		Water	73.99 ppm	50 mL	74000 µg/L	1	200	1000			9/27/18 22:26:32	N	II
R1808996-016	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	1.3 µg/L J	1	0.6	5.0			9/27/18 22:29:46	N	II
R1808996-016	Calcium, Total	N/A		Water	16.08 ppm	50 mL	16100 µg/L	1	300	1000			9/27/18 22:29:46	N	II
R1808996-016	Iron, Total	N/A		Water	1.17 ppm	50 mL	1170 µg/L	1	50	100			9/27/18 22:29:46	N	II
R1808996-016	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:29:46	N	II
R1808996-016	Magnesium, Total	N/A		Water	8.88 ppm	50 mL	8900 µg/L	1	200	1000			9/27/18 22:29:46	N	II
R1808996-016	Manganese, Total	N/A		Water	0.01 ppm	50 mL	15 µg/L	1	6	10			9/27/18 22:29:46	N	II

I indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608674 **Method/Testcode:** 6010C/K T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1808996-016	Potassium, Total	N/A		Water	3.29 ppm	50 mL	3300 µg/L	1	200	2000			9/27/18 22:29:46	N	II
R1808996-016	Sodium, Total	N/A		Water	132.37 ppm	50 mL	132000 µg/L	1	200	1000			9/27/18 22:29:46	N	II
R1808996-017	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:33:01	N	II
R1808996-017	Calcium, Total	N/A		Water	35.99 ppm	50 mL	36000 µg/L	1	300	1000			9/27/18 22:33:01	N	II
R1808996-017	Iron, Total	N/A		Water	0.27 ppm	50 mL	270 µg/L	1	50	100			9/27/18 22:33:01	N	II
R1808996-017	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:33:01	N	II
R1808996-017	Magnesium, Total	N/A		Water	14.61 ppm	50 mL	14600 µg/L	1	200	1000			9/27/18 22:33:01	N	II
R1808996-017	Manganese, Total	N/A		Water	0.05 ppm	50 mL	55 µg/L	1	6	10			9/27/18 22:33:01	N	II
R1808996-017	Potassium, Total	N/A		Water	1.49 ppm	50 mL	1500 µg/L J	1	200	2000			9/27/18 22:33:01	N	II
R1808996-017	Sodium, Total	N/A		Water	62.82 ppm	50 mL	62800 µg/L	1	200	1000			9/27/18 22:33:01	N	II
R1808996-018	Cadmium, Dissolved	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 22:42:44	N	II
R1808996-018	Calcium, Dissolved	N/A		Water	11.14 ppm	50 mL	11100 µg/L	1	300	1000			9/27/18 22:42:44	N	II
R1808996-018	Iron, Dissolved	N/A		Water	0.02 ppm	50 mL	100 µg/L U	1	50	100			9/27/18 22:42:44	N	II
R1808996-018	Lead, Dissolved	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 22:42:44	N	II
R1808996-018	Magnesium, Dissolved	N/A		Water	6.00 ppm	50 mL	6000 µg/L	1	200	1000			9/27/18 22:42:44	N	II
R1808996-018	Manganese, Dissolved	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/27/18 22:42:44	N	II
R1808996-018	Potassium, Dissolved	N/A		Water	8.23 ppm	50 mL	8200 µg/L	1	200	2000			9/27/18 22:42:44	N	II
R1808996-018	Sodium, Dissolved	N/A		Water	53.52 ppm	50 mL	53500 µg/L	1	200	1000			9/27/18 22:42:44	N	II
R1809064-003	Aluminum, Total	N/A		Water	0.02 ppm	50 mL	0.10 mg/L U	1	0.07	0.10			9/27/18 22:45:58	N	IV
R1809064-003	Barium, Total	N/A		Water	0.01 ppm	50 mL	0.009 mg/L J	1	0.007	0.020			9/27/18 22:45:58	N	IV
R1809064-003	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	0.0030 mg/L U	1	0.0003	0.0030			9/27/18 22:45:58	N	IV
R1809064-003	Boron, Total	N/A		Water	0.19 ppm	50 mL	0.19 mg/L J	1	0.02	0.20			9/27/18 22:45:58	N	IV
R1809064-003	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	0.0050 mg/L U	1	0.0006	0.0050			9/27/18 22:45:58	N	IV
R1809064-003	Calcium, Total	N/A		Water	44.81 ppm	50 mL	44.8 mg/L	1	0.3	1.0			9/27/18 22:45:58	N	IV
R1809064-003	Chromium, Total	N/A		Water	0.00 ppm	50 mL	0.003 mg/L J	1	0.002	0.010			9/27/18 22:45:58	N	IV
R1809064-003	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	0.050 mg/L U	1	0.002	0.050			9/27/18 22:45:58	N	IV
R1809064-003	Copper, Total	N/A		Water	0.00 ppm	50 mL	0.020 mg/L U	1	0.007	0.020			9/27/18 22:45:58	N	IV
R1809064-003	Iron, Total	N/A		Water	0.00 ppm	50 mL	0.10 mg/L U	1	0.05	0.10			9/27/18 22:45:58	N	IV
R1809064-003	Lead, Total	N/A		Water	0.00 ppm	50 mL	0.050 mg/L U	1	0.003	0.050			9/27/18 22:45:58	N	IV
R1809064-003	Magnesium, Total	N/A		Water	25.45 ppm	50 mL	25.5 mg/L	1	0.2	1.0			9/27/18 22:45:58	N	IV
R1809064-003	Manganese, Total	N/A		Water	0.00 ppm	50 mL	0.010 mg/L U	1	0.006	0.010			9/27/18 22:45:58	N	IV
R1809064-003	Molybdenum, Total	N/A		Water	0.01 ppm	50 mL	0.008 mg/L J	1	0.003	0.025			9/27/18 22:45:58	N	IV
R1809064-003	Nickel, Total	N/A		Water	-0.02 ppm	50 mL	0.040 mg/L U	1	0.003	0.040			9/27/18 22:45:58	N	IV
R1809064-003	Potassium, Total	N/A		Water	3.51 ppm	50 mL	3.5 mg/L	1	0.2	2.0			9/27/18 22:45:58	N	IV
R1809064-003	Selenium, Total	N/A		Water	0.00 ppm	50 mL	0.010 mg/L U	1	0.005	0.010			9/27/18 22:45:58	N	IV
R1809064-003	Silver, Total	N/A		Water	0.00 ppm	50 mL	0.010 mg/L U	1	0.0006	0.010			9/27/18 22:45:58	N	IV

I indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608674 **Method/Testcode:** 6010C/Na T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
1809064-003	Sodium, Total	N/A		Water	94.38 ppm	50 mL	94.4 mg/L	1	0.2	1.0			9/27/18 22:45:58	N	IV
1809064-003	Strontium, Total	N/A		Water	1.52 ppm	50 mL	1.52 mg/L	1	0.003	0.10			9/27/18 22:45:58	N	IV
1809064-003	Tin, Total	N/A		Water	0.00 ppm	50 mL	0.50 mg/L U	1	0.02	0.50			9/27/18 22:45:58	N	IV
1809064-003	Vanadium, Total	N/A		Water	0.02 ppm	50 mL	0.021 mg/L J	1	0.002	0.050			9/27/18 22:45:58	N	IV
1809064-003	Zinc, Total	N/A		Water	0.05 ppm	50 mL	0.055 mg/L	1	0.010	0.020			9/27/18 22:45:58	N	IV
1809064-010	Aluminum, Total	N/A		Water	0.02 ppm	50 mL	0.10 mg/L U	1	0.07	0.10			9/27/18 22:49:12	N	IV
1809064-010	Barium, Total	N/A		Water	0.02 ppm	50 mL	0.020 mg/L J	1	0.007	0.020			9/27/18 22:49:12	N	IV
1809064-010	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	0.0030 mg/L U	1	0.0003	0.0030			9/27/18 22:49:12	N	IV
1809064-010	Boron, Total	N/A		Water	0.22 ppm	50 mL	0.22 mg/L	1	0.02	0.20			9/27/18 22:49:12	N	IV
1809064-010	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	0.0050 mg/L U	1	0.0006	0.0050			9/27/18 22:49:12	N	IV
1809064-010	Calcium, Total	N/A		Water	60.41 ppm	50 mL	60.4 mg/L	1	0.3	1.0			9/27/18 22:49:12	N	IV
1809064-010	Chromium, Total	N/A		Water	0.00 ppm	50 mL	0.010 mg/L U	1	0.002	0.010			9/27/18 22:49:12	N	IV
1809064-010	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	0.050 mg/L U	1	0.002	0.050			9/27/18 22:49:12	N	IV
1809064-010	Copper, Total	N/A		Water	0.00 ppm	50 mL	0.020 mg/L U	1	0.007	0.020			9/27/18 22:49:12	N	IV
1809064-010	Iron, Total	N/A		Water	0.03 ppm	50 mL	0.10 mg/L U	1	0.05	0.10			9/27/18 22:49:12	N	IV
1809064-010	Lead, Total	N/A		Water	0.00 ppm	50 mL	0.050 mg/L U	1	0.003	0.050			9/27/18 22:49:12	N	IV
1809064-010	Magnesium, Total	N/A		Water	26.01 ppm	50 mL	26.0 mg/L	1	0.2	1.0			9/27/18 22:49:12	N	IV
1809064-010	Manganese, Total	N/A		Water	0.10 ppm	50 mL	0.102 mg/L	1	0.006	0.010			9/27/18 22:49:12	N	IV
1809064-010	Molybdenum, Total	N/A		Water	0.00 ppm	50 mL	0.005 mg/L J	1	0.003	0.025			9/27/18 22:49:12	N	IV
1809064-010	Nickel, Total	N/A		Water	-0.03 ppm	50 mL	0.040 mg/L U	1	0.003	0.040			9/27/18 22:49:12	N	IV
1809064-010	Potassium, Total	N/A		Water	4.21 ppm	50 mL	4.2 mg/L	1	0.2	2.0			9/27/18 22:49:12	N	IV
1809064-010	Selenium, Total	N/A		Water	0.00 ppm	50 mL	0.010 mg/L U	1	0.005	0.010			9/27/18 22:49:12	N	IV
1809064-010	Silver, Total	N/A		Water	0.00 ppm	50 mL	0.010 mg/L U	1	0.0006	0.010			9/27/18 22:49:12	N	IV
1809064-010	Sodium, Total	N/A		Water	133.84 ppm	50 mL	134 mg/L	1	0.2	1.0			9/27/18 22:49:12	N	IV
1809064-010	Strontium, Total	N/A		Water	1.60 ppm	50 mL	1.60 mg/L	1	0.003	0.10			9/27/18 22:49:12	N	IV
1809064-010	Tin, Total	N/A		Water	0.00 ppm	50 mL	0.50 mg/L U	1	0.02	0.50			9/27/18 22:49:12	N	IV
1809064-010	Vanadium, Total	N/A		Water	0.01 ppm	50 mL	0.015 mg/L J	1	0.002	0.050			9/27/18 22:49:12	N	IV
1809064-010	Zinc, Total	N/A		Water	0.00 ppm	50 mL	0.020 mg/L U	1	0.010	0.020			9/27/18 22:49:12	N	IV

' indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/Al T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810176-01	Aluminum, Total	MB		Water	0.01 ppm	50 mL	100 µg/L U	1	70	100			9/27/18 23:18:24	N	IV
RQ1810176-01	Antimony, Total	MB		Water	0.00 ppm	50 mL	60 µg/L U	1	6	60			9/27/18 23:18:24	N	IV
RQ1810176-01	Arsenic, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 23:18:24	N	IV
RQ1810176-01	Barium, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 23:18:24	N	IV
RQ1810176-01	Beryllium, Total	MB		Water	0.00 ppm	50 mL	3.0 µg/L U	1	0.3	3.0			9/27/18 23:18:24	N	IV
RQ1810176-01	Boron, Total	MB		Water	0.00 ppm	50 mL	200 µg/L U	1	20	200			9/27/18 23:18:24	N	IV
RQ1810176-01	Cadmium, Total	MB		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 23:18:24	N	IV
RQ1810176-01	Calcium, Total	MB		Water	0.01 ppm	50 mL	1000 µg/L U	1	300	1000			9/27/18 23:18:24	N	IV
RQ1810176-01	Chromium, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 23:18:24	N	IV
RQ1810176-01	Cobalt, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 23:18:24	N	IV
RQ1810176-01	Copper, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/27/18 23:18:24	N	IV
RQ1810176-01	Iron, Total	MB		Water	0.00 ppm	50 mL	100 µg/L U	1	50	100			9/27/18 23:18:24	N	IV
RQ1810176-01	Lead, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 23:18:24	N	IV
RQ1810176-01	Magnesium, Total	MB		Water	0.00 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 23:18:24	N	IV
RQ1810176-01	Manganese, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/27/18 23:18:24	N	IV
RQ1810176-01	Nickel, Total	MB		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 23:18:24	N	IV
RQ1810176-01	Potassium, Total	MB		Water	0.03 ppm	50 mL	2000 µg/L U	1	200	2000			9/27/18 23:18:24	N	IV
RQ1810176-01	Selenium, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 23:18:24	N	IV
RQ1810176-01	Silver, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/27/18 23:18:24	N	IV
RQ1810176-01	Sodium, Total	MB		Water	0.03 ppm	50 mL	1000 µg/L U	1	200	1000			9/27/18 23:18:24	N	IV
RQ1810176-01	Thallium, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/27/18 23:18:24	N	IV
RQ1810176-01	Vanadium, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/27/18 23:18:24	N	IV
RQ1810176-01	Zinc, Total	MB		Water	0.00 ppm	50 mL	20 µg/L U	1	10	20			9/27/18 23:18:24	N	IV
RQ1810176-02	Aluminum, Total	LCS		Water	1.87 ppm	50 mL	1870 µg/L	1	70	100	93		9/27/18 23:21:38	N	IV
RQ1810176-02	Antimony, Total	LCS		Water	0.47 ppm	50 mL	465 µg/L	1	6	60	93		9/27/18 23:21:38	N	IV
RQ1810176-02	Arsenic, Total	LCS		Water	0.04 ppm	50 mL	38.2 µg/L	1	4	10	96		9/27/18 23:21:38	N	IV
RQ1810176-02	Barium, Total	LCS		Water	2.03 ppm	50 mL	2030 µg/L	1	7	20	102		9/27/18 23:21:38	N	IV
RQ1810176-02	Beryllium, Total	LCS		Water	0.05 ppm	50 mL	49.3 µg/L	1	0.3	3.0	99		9/27/18 23:21:38	N	IV
RQ1810176-02	Boron, Total	LCS		Water	0.99 ppm	50 mL	994 µg/L	1	20	200	99		9/27/18 23:21:38	N	IV
RQ1810176-02	Cadmium, Total	LCS		Water	0.05 ppm	50 mL	50.6 µg/L	1	0.6	5.0	101		9/27/18 23:21:38	N	IV
RQ1810176-02	Calcium, Total	LCS		Water	2.16 ppm	50 mL	2160 µg/L	1	300	1000	108		9/27/18 23:21:38	N	IV
RQ1810176-02	Chromium, Total	LCS		Water	0.20 ppm	50 mL	201 µg/L	1	2	10	101		9/27/18 23:21:38	N	IV
RQ1810176-02	Cobalt, Total	LCS		Water	0.51 ppm	50 mL	513 µg/L	1	2	50	103		9/27/18 23:21:38	N	IV
RQ1810176-02	Copper, Total	LCS		Water	0.24 ppm	50 mL	244 µg/L	1	7	20	98		9/27/18 23:21:38	N	IV
RQ1810176-02	Iron, Total	LCS		Water	0.98 ppm	50 mL	979 µg/L	1	50	100	98		9/27/18 23:21:38	N	IV
RQ1810176-02	Lead, Total	LCS		Water	0.51 ppm	50 mL	511 µg/L	1	3	50	102		9/27/18 23:21:38	N	IV

f indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/Mg T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2Q1810176-02	Magnesium, Total	LCS		Water	1.98 ppm	50 mL	1980 µg/L	1	200	1000	99		9/27/18 23:21:38	N	IV
2Q1810176-02	Manganese, Total	LCS		Water	0.50 ppm	50 mL	496 µg/L	1	6	10	99		9/27/18 23:21:38	N	IV
2Q1810176-02	Nickel, Total	LCS		Water	0.50 ppm	50 mL	499 µg/L	1	3	40	100		9/27/18 23:21:38	N	IV
2Q1810176-02	Potassium, Total	LCS		Water	18.81 ppm	50 mL	18800 µg/L	1	200	2000	94		9/27/18 23:21:38	N	IV
2Q1810176-02	Selenium, Total	LCS		Water	1.03 ppm	50 mL	1030 µg/L	1	5	10	102		9/27/18 23:21:38	N	IV
2Q1810176-02	Silver, Total	LCS		Water	0.05 ppm	50 mL	49.7 µg/L	1	0.6	10	99		9/27/18 23:21:38	N	IV
2Q1810176-02	Sodium, Total	LCS		Water	19.13 ppm	50 mL	19100 µg/L	1	200	1000	96		9/27/18 23:21:38	N	IV
2Q1810176-02	Thallium, Total	LCS		Water	1.89 ppm	50 mL	1890 µg/L	1	7	10	95		9/27/18 23:21:38	N	IV
2Q1810176-02	Vanadium, Total	LCS		Water	0.49 ppm	50 mL	488 µg/L	1	2	50	98		9/27/18 23:21:38	N	IV
2Q1810176-02	Zinc, Total	LCS		Water	0.51 ppm	50 mL	514 µg/L	1	10	20	103		9/27/18 23:21:38	N	IV
21808899-001	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 23:24:54	N	IV
21808899-001	Calcium, Total	N/A		Water	140.07 ppm	50 mL	140000 µg/L	1	300	1000			9/27/18 23:24:54	N	IV
21808899-001	Iron, Total	N/A		Water	7.95 ppm	50 mL	7950 µg/L	1	50	100			9/27/18 23:24:54	N	IV
21808899-001	Lead, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 23:24:54	N	IV
21808899-001	Magnesium, Total	N/A		Water	74.13 ppm	50 mL	74100 µg/L	1	200	1000			9/27/18 23:24:54	N	IV
21808899-001	Manganese, Total	N/A		Water	1.57 ppm	50 mL	1570 µg/L	1	6	10			9/27/18 23:24:54	N	IV
21808899-001	Potassium, Total	N/A		Water	2.45 ppm	50 mL	2500 µg/L	1	200	2000			9/27/18 23:24:54	N	IV
21808899-001	Sodium, Total	N/A		Water	33.11 ppm	50 mL	33100 µg/L	1	200	1000			9/27/18 23:24:54	N	IV
21808899-002	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 23:28:09	N	IV
21808899-002	Calcium, Total	N/A		Water	177.84 ppm	50 mL	178000 µg/L	1	300	1000			9/27/18 23:28:09	N	IV
21808899-002	Iron, Total	N/A		Water	0.62 ppm	50 mL	620 µg/L	1	50	100			9/27/18 23:28:09	N	IV
21808899-002	Lead, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 23:28:09	N	IV
21808899-002	Magnesium, Total	N/A		Water	57.95 ppm	50 mL	58000 µg/L	1	200	1000			9/27/18 23:28:09	N	IV
21808899-002	Manganese, Total	N/A		Water	3.14 ppm	50 mL	3140 µg/L	1	6	10			9/27/18 23:28:09	N	IV
21808899-002	Potassium, Total	N/A		Water	1.92 ppm	50 mL	2000 µg/L U	1	200	2000			9/27/18 23:28:09	N	IV
21808899-002	Sodium, Total	N/A		Water	58.47 ppm	50 mL	58500 µg/L	1	200	1000			9/27/18 23:28:09	N	IV
21808899-003	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 23:31:24	Y	IV
21808899-003	Calcium, Total	N/A		Water	153.45 ppm	50 mL	153000 µg/L	1	300	1000			9/27/18 23:31:24	Y	IV
21808899-003	Iron, Total	N/A		Water	16.54 ppm	50 mL	16500 µg/L	1	50	100			9/27/18 23:31:24	Y	IV
21808899-003	Lead, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/27/18 23:31:24	Y	IV
21808899-003	Magnesium, Total	N/A		Water	42.13 ppm	50 mL	42100 µg/L	1	200	1000			9/27/18 23:31:24	Y	IV
21808899-003	Manganese, Total	N/A		Water	4.06 ppm	50 mL	4060 µg/L	1	6	10			9/27/18 23:31:24	Y	IV
21808899-003	Potassium, Total	N/A		Water	1.83 ppm	50 mL	2000 µg/L U	1	200	2000			9/27/18 23:31:24	Y	IV
21808899-003	Sodium, Total	N/A		Water	45.19 ppm	50 mL	45200 µg/L	1	200	1000			9/27/18 23:31:24	Y	IV
2Q1810176-03	Cadmium, Total	MS	R1808899-003	Water	0.05 ppm	50 mL	49.9 µg/L	1	0.6	5.0	100		9/27/18 23:34:38	N	IV
2Q1810176-03	Calcium, Total	MS	R1808899-003	Water	156.85 ppm	50 mL	157000 µg/L	1	300	1000	170*		9/27/18 23:34:38	N	IV

spk too low

f indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/Fe T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810176-03	Iron, Total	MS	R1808899-003	Water	17.72 ppm	50 mL	17700 µg/L	1	50	100	118		9/27/18 23:34:38	N	IV
RQ1810176-03	Lead, Total	MS	R1808899-003	Water	0.50 ppm	50 mL	499 µg/L	1	3	50	100		9/27/18 23:34:38	N	IV
RQ1810176-03	Magnesium, Total	MS	R1808899-003	Water	43.76 ppm	50 mL	43800 µg/L	1	200	1000	81		9/27/18 23:34:38	N	IV
RQ1810176-03	Manganese, Total	MS	R1808899-003	Water	4.59 ppm	50 mL	4590 µg/L	1	6	10	106		9/27/18 23:34:38	N	IV
RQ1810176-03	Potassium, Total	MS	R1808899-003	Water	23.16 ppm	50 mL	23200 µg/L	1	200	2000	116		9/27/18 23:34:38	N	IV
RQ1810176-03	Sodium, Total	MS	R1808899-003	Water	65.12 ppm	50 mL	65100 µg/L	1	200	1000	100		9/27/18 23:34:38	N	IV
RQ1810176-04	Cadmium, Total	DMS	R1808899-003	Water	0.05 ppm	50 mL	50.2 µg/L	1	0.6	5.0	100	<1	9/27/18 23:37:52	N	IV
RQ1810176-04	Calcium, Total	DMS	R1808899-003	Water	156.90 ppm	50 mL	157000 µg/L	1	300	1000	172*	<1	9/27/18 23:37:52	N	IV
RQ1810176-04	Iron, Total	DMS	R1808899-003	Water	17.70 ppm	50 mL	17700 µg/L	1	50	100	116	<1	9/27/18 23:37:52	N	IV
RQ1810176-04	Lead, Total	DMS	R1808899-003	Water	0.50 ppm	50 mL	499 µg/L	1	3	50	100	<1	9/27/18 23:37:52	N	IV
RQ1810176-04	Magnesium, Total	DMS	R1808899-003	Water	43.78 ppm	50 mL	43800 µg/L	1	200	1000	82	<1	9/27/18 23:37:52	N	IV
RQ1810176-04	Manganese, Total	DMS	R1808899-003	Water	4.59 ppm	50 mL	4590 µg/L	1	6	10	107	<1	9/27/18 23:37:52	N	IV
RQ1810176-04	Potassium, Total	DMS	R1808899-003	Water	23.22 ppm	50 mL	23200 µg/L	1	200	2000	116	<1	9/27/18 23:37:52	N	IV
RQ1810176-04	Sodium, Total	DMS	R1808899-003	Water	65.11 ppm	50 mL	65100 µg/L	1	200	1000	100	<1	9/27/18 23:37:52	N	IV
R1808989-001	Aluminum, Total	N/A		Water	0.04 ppm	50 mL	100 µg/L U	1	70	100			9/27/18 23:47:35	N	IV
R1808989-001	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 23:47:35	N	IV
R1808989-001	Barium, Total	N/A		Water	0.10 ppm	50 mL	99 µg/L	1	7	20			9/27/18 23:47:35	N	IV
R1808989-001	Boron, Total	N/A		Water	0.20 ppm	50 mL	200 µg/L	1	20	200			9/27/18 23:47:35	N	IV
R1808989-001	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 23:47:35	N	IV
R1808989-001	Calcium, Total	N/A		Water	55.99 ppm	50 mL	56000 µg/L	1	300	1000			9/27/18 23:47:35	N	IV
R1808989-001	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/27/18 23:47:35	N	IV
R1808989-001	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 23:47:35	N	IV
R1808989-001	Magnesium, Total	N/A		Water	42.21 ppm	50 mL	42200 µg/L	1	200	1000			9/27/18 23:47:35	N	IV
R1808989-001	Manganese, Total	N/A		Water	0.10 ppm	50 mL	99 µg/L	1	6	10			9/27/18 23:47:35	N	IV
R1808989-001	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 23:47:35	N	IV
R1808989-001	Potassium, Total	N/A		Water	6.97 ppm	50 mL	7000 µg/L	1	200	2000			9/27/18 23:47:35	N	IV
R1808989-001	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 23:47:35	N	IV
R1808989-001	Sodium, Total	N/A		Water	72.05 ppm	50 mL	72000 µg/L	1	200	1000			9/27/18 23:47:35	N	IV
R1808989-001	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/27/18 23:47:35	N	IV
R1808989-002	Aluminum, Total	N/A		Water	0.07 ppm	50 mL	100 µg/L U	1	70	100			9/27/18 23:57:19	N	IV
R1808989-002	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/27/18 23:57:19	N	IV
R1808989-002	Barium, Total	N/A		Water	1.10 ppm	50 mL	1100 µg/L	1	7	20			9/27/18 23:57:19	N	IV
R1808989-002	Boron, Total	N/A		Water	4.26 ppm	50 mL	4260 µg/L	1	20	200			9/27/18 23:57:19	N	IV
R1808989-002	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/27/18 23:57:19	N	IV
R1808989-002	Calcium, Total	N/A		Water	181.50 ppm	50 mL	182000 µg/L	1	300	1000			9/27/18 23:57:19	N	IV
R1808989-002	Chromium, Total	N/A		Water	0.01 ppm	50 mL	7 µg/L J	1	2	10			9/27/18 23:57:19	N	IV

* indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/Pb T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1808989-002	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/27/18 23:57:19	N	IV
R1808989-002	Magnesium, Total	N/A		Water	107.16 ppm	50 mL	107000 µg/L	1	200	1000			9/27/18 23:57:19	N	IV
R1808989-002	Manganese, Total	N/A		Water	0.54 ppm	50 mL	538 µg/L	1	6	10			9/27/18 23:57:19	N	IV
R1808989-002	Nickel, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/27/18 23:57:19	N	IV
R1808989-002	Potassium, Total	N/A		Water	65.44 ppm	50 mL	65400 µg/L	1	200	2000			9/27/18 23:57:19	N	IV
R1808989-002	Selenium, Total	N/A		Water	-0.01 ppm	50 mL	10 µg/L U	1	5	10			9/27/18 23:57:19	N	IV
R1808989-002	Thallium, Total	N/A		Water	0.01 ppm	50 mL	7 µg/L J	1	7	10			9/27/18 23:57:19	N	IV
R1808989-003	Aluminum, Total	N/A		Water	0.04 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:00:33	N	IV
R1808989-003	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 00:00:33	N	IV
R1808989-003	Barium, Total	N/A		Water	0.21 ppm	50 mL	215 µg/L	1	7	20			9/28/18 00:00:33	N	IV
R1808989-003	Boron, Total	N/A		Water	0.58 ppm	50 mL	580 µg/L	1	20	200			9/28/18 00:00:33	N	IV
R1808989-003	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:00:33	N	IV
R1808989-003	Calcium, Total	N/A		Water	164.60 ppm	50 mL	165000 µg/L	1	300	1000			9/28/18 00:00:33	N	IV
R1808989-003	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:00:33	N	IV
R1808989-003	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:00:33	N	IV
R1808989-003	Magnesium, Total	N/A		Water	38.75 ppm	50 mL	38800 µg/L	1	200	1000			9/28/18 00:00:33	N	IV
R1808989-003	Manganese, Total	N/A		Water	1.64 ppm	50 mL	1640 µg/L	1	6	10			9/28/18 00:00:33	N	IV
R1808989-003	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:00:33	N	IV
R1808989-003	Potassium, Total	N/A		Water	18.29 ppm	50 mL	18300 µg/L	1	200	2000			9/28/18 00:00:33	N	IV
R1808989-003	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:00:33	N	IV
R1808989-003	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:00:33	N	IV
R1808989-006	Aluminum, Total	N/A		Water	0.03 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:03:48	Y	IV
R1808989-006	Arsenic, Total	N/A		Water	0.01 ppm	50 mL	5 µg/L J	1	4	10			9/28/18 00:03:48	Y	IV
R1808989-006	Barium, Total	N/A		Water	0.14 ppm	50 mL	141 µg/L	1	7	20			9/28/18 00:03:48	Y	IV
R1808989-006	Boron, Total	N/A		Water	0.53 ppm	50 mL	530 µg/L	1	20	200			9/28/18 00:03:48	Y	IV
R1808989-006	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:03:48	Y	IV
R1808989-006	Calcium, Total	N/A		Water	175.08 ppm	50 mL	175000 µg/L	1	300	1000			9/28/18 00:03:48	Y	IV
R1808989-006	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:03:48	Y	IV
R1808989-006	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:03:48	Y	IV
R1808989-006	Magnesium, Total	N/A		Water	44.22 ppm	50 mL	44200 µg/L	1	200	1000			9/28/18 00:03:48	Y	IV
R1808989-006	Manganese, Total	N/A		Water	4.63 ppm	50 mL	4630 µg/L	1	6	10			9/28/18 00:03:48	Y	IV
R1808989-006	Nickel, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:03:48	Y	IV
R1808989-006	Potassium, Total	N/A		Water	9.09 ppm	50 mL	9100 µg/L	1	200	2000			9/28/18 00:03:48	Y	IV
R1808989-006	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:03:48	Y	IV
R1808989-006	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:03:48	Y	IV
RQ1810176-05	Aluminum, Total	MS	R1808989-006	Water	2.13 ppm	50 mL	2130 µg/L	1	70	100	107		9/28/18 00:07:02	N	IV

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/As T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810176-05	Arsenic, Total	MS	R1808989-006	Water	0.05 ppm	50 mL	49 µg/L	1	4	10	109		9/28/18 00:07:02	N	IV
RQ1810176-05	Barium, Total	MS	R1808989-006	Water	2.14 ppm	50 mL	2140 µg/L	1	7	20	100		9/28/18 00:07:02	N	IV
RQ1810176-05	Boron, Total	MS	R1808989-006	Water	1.58 ppm	50 mL	1580 µg/L	1	20	200	105		9/28/18 00:07:02	N	IV
RQ1810176-05	Cadmium, Total	MS	R1808989-006	Water	0.05 ppm	50 mL	49.2 µg/L	1	0.6	5.0	98		9/28/18 00:07:02	N	IV
RQ1810176-05	Calcium, Total	MS	R1808989-006	Water	177.78 ppm	50 mL	178000 µg/L	1	300	1000	135*		9/28/18 00:07:02	N	IV
RQ1810176-05	Chromium, Total	MS	R1808989-006	Water	0.20 ppm	50 mL	197 µg/L	1	2	10	98		9/28/18 00:07:02	N	IV
RQ1810176-05	Lead, Total	MS	R1808989-006	Water	0.49 ppm	50 mL	490 µg/L	1	3	50	98		9/28/18 00:07:02	N	IV
RQ1810176-05	Magnesium, Total	MS	R1808989-006	Water	45.93 ppm	50 mL	45900 µg/L	1	200	1000	85		9/28/18 00:07:02	N	IV
RQ1810176-05	Manganese, Total	MS	R1808989-006	Water	5.09 ppm	50 mL	5090 µg/L	1	6	10	92		9/28/18 00:07:02	N	IV
RQ1810176-05	Nickel, Total	MS	R1808989-006	Water	0.48 ppm	50 mL	479 µg/L	1	3	40	96		9/28/18 00:07:02	N	IV
RQ1810176-05	Potassium, Total	MS	R1808989-006	Water	31.98 ppm	50 mL	32000 µg/L	1	200	2000	114		9/28/18 00:07:02	N	IV
RQ1810176-05	Selenium, Total	MS	R1808989-006	Water	1.09 ppm	50 mL	1090 µg/L	1	5	10	108		9/28/18 00:07:02	N	IV
RQ1810176-05	Thallium, Total	MS	R1808989-006	Water	2.08 ppm	50 mL	2080 µg/L	1	7	10	104		9/28/18 00:07:02	N	IV
RQ1810176-06	Aluminum, Total	DMS	R1808989-006	Water	2.15 ppm	50 mL	2150 µg/L	1	70	100	107	<1	9/28/18 00:10:18	N	IV
RQ1810176-06	Arsenic, Total	DMS	R1808989-006	Water	0.05 ppm	50 mL	50 µg/L	1	4	10	113	3	9/28/18 00:10:18	N	IV
RQ1810176-06	Barium, Total	DMS	R1808989-006	Water	2.15 ppm	50 mL	2150 µg/L	1	7	20	101	<1	9/28/18 00:10:18	N	IV
RQ1810176-06	Boron, Total	DMS	R1808989-006	Water	1.60 ppm	50 mL	1600 µg/L	1	20	200	107	1	9/28/18 00:10:18	N	IV
RQ1810176-06	Cadmium, Total	DMS	R1808989-006	Water	0.05 ppm	50 mL	49.4 µg/L	1	0.6	5.0	99	<1	9/28/18 00:10:18	N	IV
RQ1810176-06	Calcium, Total	DMS	R1808989-006	Water	180.81 ppm	50 mL	181000 µg/L	1	300	1000	286*	2	9/28/18 00:10:18	N	IV
RQ1810176-06	Chromium, Total	DMS	R1808989-006	Water	0.20 ppm	50 mL	199 µg/L	1	2	10	99	1	9/28/18 00:10:18	N	IV
RQ1810176-06	Lead, Total	DMS	R1808989-006	Water	0.49 ppm	50 mL	494 µg/L	1	3	50	99	<1	9/28/18 00:10:18	N	IV
RQ1810176-06	Magnesium, Total	DMS	R1808989-006	Water	46.66 ppm	50 mL	46700 µg/L	1	200	1000	122	2	9/28/18 00:10:18	N	IV
RQ1810176-06	Manganese, Total	DMS	R1808989-006	Water	5.17 ppm	50 mL	5170 µg/L	1	6	10	108	2	9/28/18 00:10:18	N	IV
RQ1810176-06	Nickel, Total	DMS	R1808989-006	Water	0.48 ppm	50 mL	483 µg/L	1	3	40	97	<1	9/28/18 00:10:18	N	IV
RQ1810176-06	Potassium, Total	DMS	R1808989-006	Water	32.33 ppm	50 mL	32300 µg/L	1	200	2000	116	1	9/28/18 00:10:18	N	IV
RQ1810176-06	Selenium, Total	DMS	R1808989-006	Water	1.11 ppm	50 mL	1110 µg/L	1	5	10	110	1	9/28/18 00:10:18	N	IV
RQ1810176-06	Thallium, Total	DMS	R1808989-006	Water	2.10 ppm	50 mL	2100 µg/L	1	7	10	105	<1	9/28/18 00:10:18	N	IV
R1808989-007	Aluminum, Total	N/A		Water	0.04 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:20:01	N	IV
R1808989-007	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 00:20:01	N	IV
R1808989-007	Barium, Total	N/A		Water	1.39 ppm	50 mL	1390 µg/L	1	7	20			9/28/18 00:20:01	N	IV
R1808989-007	Boron, Total	N/A		Water	1.98 ppm	50 mL	1980 µg/L	1	20	200			9/28/18 00:20:01	N	IV
R1808989-007	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:20:01	N	IV
R1808989-007	Chromium, Total	N/A		Water	0.00 ppm	50 mL	3 µg/L J	1	2	10			9/28/18 00:20:01	N	IV
R1808989-007	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:20:01	N	IV
R1808989-007	Magnesium, Total	N/A		Water	127.66 ppm	50 mL	128000 µg/L	1	200	1000			9/28/18 00:20:01	N	IV
R1808989-007	Manganese, Total	N/A		Water	0.87 ppm	50 mL	866 µg/L	1	6	10			9/28/18 00:20:01	N	IV

f indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/Ni T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
21808989-007	Nickel, Total	N/A		Water	-0.03 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:20:01	N	IV
21808989-007	Potassium, Total	N/A		Water	49.09 ppm	50 mL	49100 µg/L	1	200	2000			9/28/18 00:20:01	N	IV
21808989-007	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:20:01	N	IV
21808989-007	Sodium, Total	N/A		Water	86.86 ppm	50 mL	86900 µg/L	1	200	1000			9/28/18 00:20:01	N	IV
21808989-007	Thallium, Total	N/A		Water	0.01 ppm	50 mL	10 µg/L J	1	7	10			9/28/18 00:20:01	N	IV
21808989-008	Aluminum, Total	N/A		Water	0.06 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:23:14	N	IV
21808989-008	Arsenic, Total	N/A		Water	0.03 ppm	50 mL	27 µg/L	1	4	10			9/28/18 00:23:14	N	IV
21808989-008	Barium, Total	N/A		Water	0.41 ppm	50 mL	414 µg/L	1	7	20			9/28/18 00:23:14	N	IV
21808989-008	Boron, Total	N/A		Water	1.14 ppm	50 mL	1140 µg/L	1	20	200			9/28/18 00:23:14	N	IV
21808989-008	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:23:14	N	IV
21808989-008	Calcium, Total	N/A		Water	133.14 ppm	50 mL	133000 µg/L	1	300	1000			9/28/18 00:23:14	N	IV
21808989-008	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:23:14	N	IV
21808989-008	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:23:14	N	IV
21808989-008	Magnesium, Total	N/A		Water	68.17 ppm	50 mL	68200 µg/L	1	200	1000			9/28/18 00:23:14	N	IV
21808989-008	Manganese, Total	N/A		Water	0.15 ppm	50 mL	151 µg/L	1	6	10			9/28/18 00:23:14	N	IV
21808989-008	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:23:14	N	IV
21808989-008	Potassium, Total	N/A		Water	70.89 ppm	50 mL	70900 µg/L	1	200	2000			9/28/18 00:23:14	N	IV
21808989-008	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:23:14	N	IV
21808989-008	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:23:14	N	IV
21808989-009	Aluminum, Total	N/A		Water	0.06 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:26:29	N	IV
21808989-009	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 00:26:29	N	IV
21808989-009	Barium, Total	N/A		Water	0.23 ppm	50 mL	232 µg/L	1	7	20			9/28/18 00:26:29	N	IV
21808989-009	Boron, Total	N/A		Water	0.77 ppm	50 mL	770 µg/L	1	20	200			9/28/18 00:26:29	N	IV
21808989-009	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:26:29	N	IV
21808989-009	Calcium, Total	N/A		Water	160.09 ppm	50 mL	160000 µg/L	1	300	1000			9/28/18 00:26:29	N	IV
21808989-009	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:26:29	N	IV
21808989-009	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:26:29	N	IV
21808989-009	Magnesium, Total	N/A		Water	46.07 ppm	50 mL	46100 µg/L	1	200	1000			9/28/18 00:26:29	N	IV
21808989-009	Manganese, Total	N/A		Water	1.18 ppm	50 mL	1180 µg/L	1	6	10			9/28/18 00:26:29	N	IV
21808989-009	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:26:29	N	IV
21808989-009	Potassium, Total	N/A		Water	15.69 ppm	50 mL	15700 µg/L	1	200	2000			9/28/18 00:26:29	N	IV
21808989-009	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:26:29	N	IV
21808989-009	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:26:29	N	IV
21808989-010	Aluminum, Total	N/A		Water	0.04 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:36:12	N	IV
21808989-010	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 00:36:12	N	IV
21808989-010	Barium, Total	N/A		Water	0.23 ppm	50 mL	229 µg/L	1	7	20			9/28/18 00:36:12	N	IV

f indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/B T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
21808989-010	Boron, Total	N/A		Water	0.76 ppm	50 mL	760 µg/L	1	20	200			9/28/18 00:36:12	N	IV
21808989-010	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:36:12	N	IV
21808989-010	Calcium, Total	N/A		Water	157.33 ppm	50 mL	157000 µg/L	1	300	1000			9/28/18 00:36:12	N	IV
21808989-010	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:36:12	N	IV
21808989-010	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:36:12	N	IV
21808989-010	Magnesium, Total	N/A		Water	45.50 ppm	50 mL	45500 µg/L	1	200	1000			9/28/18 00:36:12	N	IV
21808989-010	Manganese, Total	N/A		Water	1.16 ppm	50 mL	1160 µg/L	1	6	10			9/28/18 00:36:12	N	IV
21808989-010	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:36:12	N	IV
21808989-010	Potassium, Total	N/A		Water	15.33 ppm	50 mL	15300 µg/L	1	200	2000			9/28/18 00:36:12	N	IV
21808989-010	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:36:12	N	IV
21808989-010	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:36:12	N	IV
21808989-011	Aluminum, Total	N/A		Water	0.04 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:39:27	N	IV
21808989-011	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 00:39:27	N	IV
21808989-011	Barium, Total	N/A		Water	0.30 ppm	50 mL	302 µg/L	1	7	20			9/28/18 00:39:27	N	IV
21808989-011	Boron, Total	N/A		Water	1.02 ppm	50 mL	1020 µg/L	1	20	200			9/28/18 00:39:27	N	IV
21808989-011	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:39:27	N	IV
21808989-011	Calcium, Total	N/A		Water	170.20 ppm	50 mL	170000 µg/L	1	300	1000			9/28/18 00:39:27	N	IV
21808989-011	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:39:27	N	IV
21808989-011	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:39:27	N	IV
21808989-011	Magnesium, Total	N/A		Water	53.53 ppm	50 mL	53500 µg/L	1	200	1000			9/28/18 00:39:27	N	IV
21808989-011	Manganese, Total	N/A		Water	0.66 ppm	50 mL	665 µg/L	1	6	10			9/28/18 00:39:27	N	IV
21808989-011	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:39:27	N	IV
21808989-011	Potassium, Total	N/A		Water	21.33 ppm	50 mL	21300 µg/L	1	200	2000			9/28/18 00:39:27	N	IV
21808989-011	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:39:27	N	IV
21808989-011	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:39:27	N	IV
21808989-012	Aluminum, Total	N/A		Water	0.00 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:42:41	N	IV
21808989-012	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 00:42:41	N	IV
21808989-012	Barium, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/28/18 00:42:41	N	IV
21808989-012	Boron, Total	N/A		Water	0.00 ppm	50 mL	200 µg/L U	1	20	200			9/28/18 00:42:41	N	IV
21808989-012	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:42:41	N	IV
21808989-012	Calcium, Total	N/A		Water	0.09 ppm	50 mL	1000 µg/L U	1	300	1000			9/28/18 00:42:41	N	IV
21808989-012	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:42:41	N	IV
21808989-012	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:42:41	N	IV
21808989-012	Magnesium, Total	N/A		Water	0.01 ppm	50 mL	1000 µg/L U	1	200	1000			9/28/18 00:42:41	N	IV
21808989-012	Manganese, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/28/18 00:42:41	N	IV
21808989-012	Nickel, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:42:41	N	IV

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Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/K T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
21808989-012	Potassium, Total	N/A		Water	0.03 ppm	50 mL	2000 µg/L U	1	200	2000			9/28/18 00:42:41	N	IV
21808989-012	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:42:41	N	IV
21808989-012	Sodium, Total	N/A		Water	0.35 ppm	50 mL	400 µg/L J	1	200	1000			9/28/18 00:42:41	N	IV
21808989-012	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:42:41	N	IV
21808989-013	Aluminum, Total	N/A		Water	1.67 ppm	50 mL	1670 µg/L	1	70	100			9/28/18 00:45:55	N	IV
21808989-013	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	5 µg/L J	1	4	10			9/28/18 00:45:55	N	IV
21808989-013	Barium, Total	N/A		Water	0.25 ppm	50 mL	249 µg/L	1	7	20			9/28/18 00:45:55	N	IV
21808989-013	Boron, Total	N/A		Water	0.37 ppm	50 mL	370 µg/L	1	20	200			9/28/18 00:45:55	N	IV
21808989-013	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	1.2 µg/L J	1	0.6	5.0			9/28/18 00:45:55	N	IV
21808989-013	Calcium, Total	N/A		Water	142.88 ppm	50 mL	143000 µg/L	1	300	1000			9/28/18 00:45:55	N	IV
21808989-013	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:45:55	N	IV
21808989-013	Lead, Total	N/A		Water	0.00 ppm	50 mL	2.8 µg/L J	1	2.5	5.0			9/28/18 00:45:55	N	IV
21808989-013	Magnesium, Total	N/A		Water	0.65 ppm	50 mL	600 µg/L J	1	200	1000			9/28/18 00:45:55	N	IV
21808989-013	Manganese, Total	N/A		Water	0.01 ppm	50 mL	13 µg/L	1	6	10			9/28/18 00:45:55	N	IV
21808989-013	Nickel, Total	N/A		Water	0.01 ppm	50 mL	12 µg/L J	1	3	40			9/28/18 00:45:55	N	IV
21808989-013	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:45:55	N	IV
21808989-013	Sodium, Total	N/A		Water	194.95 ppm	50 mL	195000 µg/L	1	200	1000			9/28/18 00:45:55	N	IV
21808989-013	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:45:55	N	IV
21808989-014	Aluminum, Total	N/A		Water	0.14 ppm	50 mL	140 µg/L	1	70	100			9/28/18 00:49:09	N	IV
21808989-014	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 00:49:09	N	IV
21808989-014	Barium, Total	N/A		Water	0.07 ppm	50 mL	70 µg/L	1	7	20			9/28/18 00:49:09	N	IV
21808989-014	Boron, Total	N/A		Water	0.11 ppm	50 mL	110 µg/L J	1	20	200			9/28/18 00:49:09	N	IV
21808989-014	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:49:09	N	IV
21808989-014	Calcium, Total	N/A		Water	51.18 ppm	50 mL	51200 µg/L	1	300	1000			9/28/18 00:49:09	N	IV
21808989-014	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:49:09	N	IV
21808989-014	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:49:09	N	IV
21808989-014	Magnesium, Total	N/A		Water	12.09 ppm	50 mL	12100 µg/L	1	200	1000			9/28/18 00:49:09	N	IV
21808989-014	Manganese, Total	N/A		Water	0.07 ppm	50 mL	66 µg/L	1	6	10			9/28/18 00:49:09	N	IV
21808989-014	Nickel, Total	N/A		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:49:09	N	IV
21808989-014	Potassium, Total	N/A		Water	4.90 ppm	50 mL	4900 µg/L	1	200	2000			9/28/18 00:49:09	N	IV
21808989-014	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:49:09	N	IV
21808989-014	Sodium, Total	N/A		Water	44.79 ppm	50 mL	44800 µg/L	1	200	1000			9/28/18 00:49:09	N	IV
21808989-014	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:49:09	N	IV
21808989-015	Aluminum, Total	N/A		Water	0.10 ppm	50 mL	100 µg/L J	1	70	100			9/28/18 00:52:23	N	IV
21808989-015	Arsenic, Total	N/A		Water	0.01 ppm	50 mL	11 µg/L	1	4	10			9/28/18 00:52:23	N	IV
21808989-015	Barium, Total	N/A		Water	0.66 ppm	50 mL	658 µg/L	1	7	20			9/28/18 00:52:23	N	IV

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Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/B T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
21808989-015	Boron, Total	N/A		Water	4.33 ppm	50 mL	4330 µg/L	1	20	200			9/28/18 00:52:23	N	IV
21808989-015	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:52:23	N	IV
21808989-015	Calcium, Total	N/A		Water	134.66 ppm	50 mL	135000 µg/L	1	300	1000			9/28/18 00:52:23	N	IV
21808989-015	Chromium, Total	N/A		Water	0.00 ppm	50 mL	5 µg/L J	1	2	10			9/28/18 00:52:23	N	IV
21808989-015	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:52:23	N	IV
21808989-015	Magnesium, Total	N/A		Water	118.58 ppm	50 mL	119000 µg/L	1	200	1000			9/28/18 00:52:23	N	IV
21808989-015	Manganese, Total	N/A		Water	0.22 ppm	50 mL	220 µg/L	1	6	10			9/28/18 00:52:23	N	IV
21808989-015	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:52:23	N	IV
21808989-015	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:52:23	N	IV
21808989-015	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:52:23	N	IV
21808989-016	Aluminum, Total	N/A		Water	0.04 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 00:55:38	N	IV
21808989-016	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 00:55:38	N	IV
21808989-016	Barium, Total	N/A		Water	0.41 ppm	50 mL	408 µg/L	1	7	20			9/28/18 00:55:38	N	IV
21808989-016	Boron, Total	N/A		Water	0.28 ppm	50 mL	280 µg/L	1	20	200			9/28/18 00:55:38	N	IV
21808989-016	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 00:55:38	N	IV
21808989-016	Calcium, Total	N/A		Water	131.26 ppm	50 mL	131000 µg/L	1	300	1000			9/28/18 00:55:38	N	IV
21808989-016	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 00:55:38	N	IV
21808989-016	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 00:55:38	N	IV
21808989-016	Magnesium, Total	N/A		Water	44.95 ppm	50 mL	45000 µg/L	1	200	1000			9/28/18 00:55:38	N	IV
21808989-016	Manganese, Total	N/A		Water	0.54 ppm	50 mL	538 µg/L	1	6	10			9/28/18 00:55:38	N	IV
21808989-016	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 00:55:38	N	IV
21808989-016	Potassium, Total	N/A		Water	7.97 ppm	50 mL	8000 µg/L	1	200	2000			9/28/18 00:55:38	N	IV
21808989-016	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 00:55:38	N	IV
21808989-016	Sodium, Total	N/A		Water	23.97 ppm	50 mL	24000 µg/L	1	200	1000			9/28/18 00:55:38	N	IV
21808989-016	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 00:55:38	N	IV
21809110-001	Zinc, Total	N/A		Water	1.02 ppm	5.0000 mL	204 mg/L	20	1.9	4.0			9/28/18 00:58:53	N	II
21809110-001	Selenium, Total	N/A		Water	0.49 ppm	5.0000 mL	24.3 mg/L	5	0.23	0.50			9/28/18 01:02:08	N	II
2Q1810176-07	Selenium, Total	DUP	R1809110-001	Water	0.50 ppm	5.0000 mL	25200 µg/L	5	230	500		4	9/28/18 01:05:22	N	II
21809110-001	Copper, Total	N/A		Water	0.22 ppm	5.0000 mL	2.16 mg/L	1	0.07	0.20			9/28/18 01:15:04	N	II
21809111-001	Aluminum, Total	N/A		Water	0.03 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 01:18:18	N	IV
21809111-001	Antimony, Total	N/A		Water	0.00 ppm	50 mL	60 µg/L U	1	6	60			9/28/18 01:18:18	N	IV
21809111-001	Barium, Total	N/A		Water	0.20 ppm	50 mL	201 µg/L	1	7	20			9/28/18 01:18:18	N	IV
21809111-001	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	3.0 µg/L U	1	0.3	3.0			9/28/18 01:18:18	N	IV
21809111-001	Boron, Total	N/A		Water	0.58 ppm	50 mL	580 µg/L	1	20	200			9/28/18 01:18:18	N	IV
21809111-001	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 01:18:18	N	IV
21809111-001	Calcium, Total	N/A		Water	125.93 ppm	50 mL	126000 µg/L	1	300	1000			9/28/18 01:18:18	N	IV

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/Cr T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
21809111-001	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 01:18:18	N	IV
21809111-001	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/28/18 01:18:18	N	IV
21809111-001	Copper, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/28/18 01:18:18	N	IV
21809111-001	Iron, Total	N/A		Water	1.51 ppm	50 mL	1510 µg/L	1	50	100			9/28/18 01:18:18	N	IV
21809111-001	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 01:18:18	N	IV
21809111-001	Magnesium, Total	N/A		Water	26.04 ppm	50 mL	26000 µg/L	1	200	1000			9/28/18 01:18:18	N	IV
21809111-001	Manganese, Total	N/A		Water	2.14 ppm	50 mL	2140 µg/L	1	6	10			9/28/18 01:18:18	N	IV
21809111-001	Nickel, Total	N/A		Water	0.00 ppm	50 mL	4 µg/L J	1	3	40			9/28/18 01:18:18	N	IV
21809111-001	Potassium, Total	N/A		Water	9.56 ppm	50 mL	9600 µg/L	1	200	2000			9/28/18 01:18:18	N	IV
21809111-001	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 01:18:18	N	IV
21809111-001	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/28/18 01:18:18	N	IV
21809111-001	Sodium, Total	N/A		Water	91.38 ppm	50 mL	91400 µg/L	1	200	1000			9/28/18 01:18:18	N	IV
21809111-001	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 01:18:18	N	IV
21809111-001	Vanadium, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/28/18 01:18:18	N	IV
21809111-001	Zinc, Total	N/A		Water	0.01 ppm	50 mL	20 µg/L U	1	10	20			9/28/18 01:18:18	N	IV
21809111-002	Aluminum, Total	N/A		Water	0.02 ppm	50 mL	100 µg/L U	1	70	100			9/28/18 01:21:31	N	IV
21809111-002	Antimony, Total	N/A		Water	0.00 ppm	50 mL	60 µg/L U	1	6	60			9/28/18 01:21:31	N	IV
21809111-002	Arsenic, Total	N/A		Water	0.01 ppm	50 mL	10 µg/L J	1	4	10			9/28/18 01:21:31	N	IV
21809111-002	Barium, Total	N/A		Water	0.15 ppm	50 mL	151 µg/L	1	7	20			9/28/18 01:21:31	N	IV
21809111-002	Beryllium, Total	N/A		Water	0.00 ppm	50 mL	3.0 µg/L U	1	0.3	3.0			9/28/18 01:21:31	N	IV
21809111-002	Boron, Total	N/A		Water	0.27 ppm	50 mL	270 µg/L	1	20	200			9/28/18 01:21:31	N	IV
21809111-002	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 01:21:31	N	IV
21809111-002	Calcium, Total	N/A		Water	106.61 ppm	50 mL	107000 µg/L	1	300	1000			9/28/18 01:21:31	N	IV
21809111-002	Chromium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	2	10			9/28/18 01:21:31	N	IV
21809111-002	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/28/18 01:21:31	N	IV
21809111-002	Copper, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	7	20			9/28/18 01:21:31	N	IV
21809111-002	Iron, Total	N/A		Water	1.65 ppm	50 mL	1650 µg/L	1	50	100			9/28/18 01:21:31	N	IV
21809111-002	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 01:21:31	N	IV
21809111-002	Magnesium, Total	N/A		Water	19.36 ppm	50 mL	19400 µg/L	1	200	1000			9/28/18 01:21:31	N	IV
21809111-002	Manganese, Total	N/A		Water	2.00 ppm	50 mL	2000 µg/L	1	6	10			9/28/18 01:21:31	N	IV
21809111-002	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 01:21:31	N	IV
21809111-002	Potassium, Total	N/A		Water	2.39 ppm	50 mL	2400 µg/L	1	200	2000			9/28/18 01:21:31	N	IV
21809111-002	Selenium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	5	10			9/28/18 01:21:31	N	IV
21809111-002	Silver, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	0.6	10			9/28/18 01:21:31	N	IV
21809111-002	Sodium, Total	N/A		Water	43.01 ppm	50 mL	43000 µg/L	1	200	1000			9/28/18 01:21:31	N	IV
21809111-002	Thallium, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	7	10			9/28/18 01:21:31	N	IV

I indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608675 **Method/Testcode:** 6010C/V T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1809111-002	Vanadium, Total	N/A		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/28/18 01:21:31	N	IV
R1809111-002	Zinc, Total	N/A		Water	0.00 ppm	50 mL	20 µg/L U	1	10	20			9/28/18 01:21:31	N	IV

' indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608677 **Method/Testcode:** 6010C/As T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810183-01	Arsenic, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 01:50:41	N	IV
RQ1810183-01	Cadmium, Total	MB		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 01:50:41	N	IV
RQ1810183-01	Calcium, Total	MB		Water	0.05 ppm	50 mL	1000 µg/L U	1	300	1000			9/28/18 01:50:41	N	IV
RQ1810183-01	Cobalt, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	2	50			9/28/18 01:50:41	N	IV
RQ1810183-01	Iron, Total	MB		Water	0.01 ppm	50 mL	100 µg/L U	1	50	100			9/28/18 01:50:41	N	IV
RQ1810183-01	Lead, Total	MB		Water	0.00 ppm	50 mL	50 µg/L U	1	3	50			9/28/18 01:50:41	N	IV
RQ1810183-01	Magnesium, Total	MB		Water	0.00 ppm	50 mL	1000 µg/L U	1	200	1000			9/28/18 01:50:41	N	IV
RQ1810183-01	Manganese, Total	MB		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/28/18 01:50:41	N	IV
RQ1810183-01	Nickel, Total	MB		Water	0.00 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 01:50:41	N	IV
RQ1810183-01	Potassium, Total	MB		Water	0.04 ppm	50 mL	2000 µg/L U	1	200	2000			9/28/18 01:50:41	N	IV
RQ1810183-01	Sodium, Total	MB		Water	0.05 ppm	50 mL	1000 µg/L U	1	200	1000			9/28/18 01:50:41	N	IV
RQ1810183-02	Arsenic, Total	LCS		Water	0.04 ppm	50 mL	39.2 µg/L	1	4	10	98		9/28/18 01:53:55	N	IV
RQ1810183-02	Cadmium, Total	LCS		Water	0.05 ppm	50 mL	50.4 µg/L	1	0.6	5.0	101		9/28/18 01:53:55	N	IV
RQ1810183-02	Calcium, Total	LCS		Water	2.10 ppm	50 mL	2100 µg/L	1	300	1000	105		9/28/18 01:53:55	N	IV
RQ1810183-02	Cobalt, Total	LCS		Water	0.51 ppm	50 mL	513 µg/L	1	2	50	103		9/28/18 01:53:55	N	IV
RQ1810183-02	Iron, Total	LCS		Water	0.97 ppm	50 mL	970 µg/L	1	50	100	97		9/28/18 01:53:55	N	IV
RQ1810183-02	Lead, Total	LCS		Water	0.51 ppm	50 mL	509 µg/L	1	3	50	102		9/28/18 01:53:55	N	IV
RQ1810183-02	Magnesium, Total	LCS		Water	1.99 ppm	50 mL	1990 µg/L	1	200	1000	99		9/28/18 01:53:55	N	IV
RQ1810183-02	Manganese, Total	LCS		Water	0.50 ppm	50 mL	497 µg/L	1	6	10	99		9/28/18 01:53:55	N	IV
RQ1810183-02	Nickel, Total	LCS		Water	0.50 ppm	50 mL	499 µg/L	1	3	40	100		9/28/18 01:53:55	N	IV
RQ1810183-02	Potassium, Total	LCS		Water	18.97 ppm	50 mL	19000 µg/L	1	200	2000	95		9/28/18 01:53:55	N	IV
RQ1810183-02	Sodium, Total	LCS		Water	19.29 ppm	50 mL	19300 µg/L	1	200	1000	96		9/28/18 01:53:55	N	IV
R1808906-001	Arsenic, Total	N/A		Water	0.03 ppm	50 mL	28 µg/L	1	4	10			9/28/18 01:57:10	N	IV
R1808906-001	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	0.8 µg/L J	1	0.6	5.0			9/28/18 01:57:10	N	IV
R1808906-001	Cobalt, Total	N/A		Water	0.04 ppm	50 mL	37 µg/L J	1	2	50			9/28/18 01:57:10	N	IV
R1808906-001	Manganese, Total	N/A		Water	4.72 ppm	50 mL	4720 µg/L	1	6	10			9/28/18 01:57:10	N	IV
R1808906-001	Nickel, Total	N/A		Water	0.13 ppm	50 mL	127 µg/L	1	3	40			9/28/18 01:57:10	N	IV
R1808906-002	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	4.3 µg/L J	1	0.6	5.0			9/28/18 02:00:24	N	IV
R1808906-002	Cobalt, Total	N/A		Water	0.15 ppm	50 mL	147 µg/L	1	2	50			9/28/18 02:00:24	N	IV
R1808906-002	Nickel, Total	N/A		Water	0.17 ppm	50 mL	167 µg/L	1	3	40			9/28/18 02:00:24	N	IV
R1808906-003	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 02:03:39	N	IV
R1808906-003	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:03:39	N	IV
R1808906-003	Cobalt, Total	N/A		Water	0.07 ppm	50 mL	70 µg/L	1	2	50			9/28/18 02:03:39	N	IV
R1808906-003	Iron, Total	N/A		Water	25.13 ppm	50 mL	25100 µg/L	1	50	100			9/28/18 02:03:39	N	IV
R1808906-003	Manganese, Total	N/A		Water	1.12 ppm	50 mL	1120 µg/L	1	6	10			9/28/18 02:03:39	N	IV
R1808906-003	Nickel, Total	N/A		Water	0.19 ppm	50 mL	190 µg/L	1	3	40			9/28/18 02:03:39	N	IV

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608677 **Method/Testcode:** 6010C/As T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
21808906-006	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 02:06:54	N	IV
21808906-006	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:06:54	N	IV
21808906-006	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	4 µg/L J	1	2	50			9/28/18 02:06:54	N	IV
21808906-006	Iron, Total	N/A		Water	15.61 ppm	50 mL	15600 µg/L	1	50	100			9/28/18 02:06:54	N	IV
21808906-006	Manganese, Total	N/A		Water	0.68 ppm	50 mL	677 µg/L	1	6	10			9/28/18 02:06:54	N	IV
21808906-006	Nickel, Total	N/A		Water	0.01 ppm	50 mL	5 µg/L J	1	3	40			9/28/18 02:06:54	N	IV
21808906-007	Arsenic, Total	N/A		Water	0.01 ppm	50 mL	6 µg/L J	1	4	10			9/28/18 02:10:09	N	IV
21808906-007	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	0.8 µg/L J	1	0.6	5.0			9/28/18 02:10:09	N	IV
21808906-007	Cobalt, Total	N/A		Water	0.10 ppm	50 mL	95 µg/L	1	2	50			9/28/18 02:10:09	N	IV
21808906-007	Manganese, Total	N/A		Water	7.12 ppm	50 mL	7120 µg/L	1	6	10			9/28/18 02:10:09	N	IV
21808906-007	Nickel, Total	N/A		Water	0.04 ppm	50 mL	38 µg/L J	1	3	40			9/28/18 02:10:09	N	IV
21808906-008	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:13:22	N	IV
21808906-008	Cobalt, Total	N/A		Water	0.02 ppm	50 mL	16 µg/L J	1	2	50			9/28/18 02:13:22	N	IV
21808906-008	Iron, Total	N/A		Water	36.46 ppm	50 mL	36500 µg/L	1	50	100			9/28/18 02:13:22	N	IV
21808906-008	Manganese, Total	N/A		Water	2.05 ppm	50 mL	2050 µg/L	1	6	10			9/28/18 02:13:22	N	IV
21808906-008	Nickel, Total	N/A		Water	-0.01 ppm	50 mL	40 µg/L U	1	3	40			9/28/18 02:13:22	N	IV
21808906-009	Arsenic, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	4	10			9/28/18 02:16:37	N	IV
21808906-009	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:16:37	N	IV
21808906-009	Cobalt, Total	N/A		Water	0.00 ppm	50 mL	3 µg/L J	1	2	50			9/28/18 02:16:37	N	IV
21808906-009	Iron, Total	N/A		Water	1.20 ppm	50 mL	1200 µg/L	1	50	100			9/28/18 02:16:37	N	IV
21808906-009	Manganese, Total	N/A		Water	0.04 ppm	50 mL	39 µg/L	1	6	10			9/28/18 02:16:37	N	IV
21808906-009	Nickel, Total	N/A		Water	0.03 ppm	50 mL	28 µg/L J	1	3	40			9/28/18 02:16:37	N	IV
21808906-010	Arsenic, Total	N/A		Water	0.19 ppm	50 mL	190 µg/L	1	4	10			9/28/18 02:19:51	N	IV
21808906-010	Cadmium, Total	N/A		Water	0.01 ppm	50 mL	6.1 µg/L	1	0.6	5.0			9/28/18 02:19:51	N	IV
21808906-010	Cobalt, Total	N/A		Water	1.11 ppm	50 mL	1110 µg/L	1	2	50			9/28/18 02:19:51	N	IV
21808906-010	Nickel, Total	N/A		Water	1.10 ppm	50 mL	1100 µg/L	1	3	40			9/28/18 02:19:51	N	IV
21809106-001	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:32:48	N	II
21809106-001	Iron, Total	N/A		Water	0.75 ppm	50 mL	750 µg/L	1	50	100			9/28/18 02:32:48	N	II
21809106-001	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:32:48	N	II
21809106-001	Magnesium, Total	N/A		Water	101.47 ppm	50 mL	101000 µg/L	1	200	1000			9/28/18 02:32:48	N	II
21809106-001	Manganese, Total	N/A		Water	0.14 ppm	50 mL	140 µg/L	1	6	10			9/28/18 02:32:48	N	II
21809106-001	Potassium, Total	N/A		Water	2.02 ppm	50 mL	2000 µg/L	1	200	2000			9/28/18 02:32:48	N	II
21809106-001	Sodium, Total	N/A		Water	12.46 ppm	50 mL	12500 µg/L	1	200	1000			9/28/18 02:32:48	N	II
21809106-002	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:36:02	N	II
21809106-002	Calcium, Total	N/A		Water	56.62 ppm	50 mL	56600 µg/L	1	300	1000			9/28/18 02:36:02	N	II
21809106-002	Iron, Total	N/A		Water	0.04 ppm	50 mL	100 µg/L U	1	50	100			9/28/18 02:36:02	N	II

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Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608677 **Method/Testcode:** 6010C/Pb T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1809106-002	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:36:02	N	II
R1809106-002	Magnesium, Total	N/A		Water	31.18 ppm	50 mL	31200 µg/L	1	200	1000			9/28/18 02:36:02	N	II
R1809106-002	Manganese, Total	N/A		Water	0.02 ppm	50 mL	20 µg/L	1	6	10			9/28/18 02:36:02	N	II
R1809106-002	Potassium, Total	N/A		Water	2.39 ppm	50 mL	2400 µg/L	1	200	2000			9/28/18 02:36:02	N	II
R1809106-002	Sodium, Total	N/A		Water	42.30 ppm	50 mL	42300 µg/L	1	200	1000			9/28/18 02:36:02	N	II
R1809106-003	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:39:17	N	II
R1809106-003	Iron, Total	N/A		Water	0.22 ppm	50 mL	220 µg/L	1	50	100			9/28/18 02:39:17	N	II
R1809106-003	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:39:17	N	II
R1809106-003	Magnesium, Total	N/A		Water	130.76 ppm	50 mL	131000 µg/L	1	200	1000			9/28/18 02:39:17	N	II
R1809106-003	Manganese, Total	N/A		Water	0.45 ppm	50 mL	446 µg/L	1	6	10			9/28/18 02:39:17	N	II
R1809106-003	Potassium, Total	N/A		Water	3.37 ppm	50 mL	3400 µg/L	1	200	2000			9/28/18 02:39:17	N	II
R1809106-003	Sodium, Total	N/A		Water	18.02 ppm	50 mL	18000 µg/L	1	200	1000			9/28/18 02:39:17	N	II
R1809106-004	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:42:30	N	II
R1809106-004	Calcium, Total	N/A		Water	111.33 ppm	50 mL	111000 µg/L	1	300	1000			9/28/18 02:42:30	N	II
R1809106-004	Iron, Total	N/A		Water	0.16 ppm	50 mL	160 µg/L	1	50	100			9/28/18 02:42:30	N	II
R1809106-004	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:42:30	N	II
R1809106-004	Magnesium, Total	N/A		Water	59.15 ppm	50 mL	59100 µg/L	1	200	1000			9/28/18 02:42:30	N	II
R1809106-004	Manganese, Total	N/A		Water	0.02 ppm	50 mL	17 µg/L	1	6	10			9/28/18 02:42:30	N	II
R1809106-004	Potassium, Total	N/A		Water	6.94 ppm	50 mL	6900 µg/L	1	200	2000			9/28/18 02:42:30	N	II
R1809106-004	Sodium, Total	N/A		Water	69.03 ppm	50 mL	69000 µg/L	1	200	1000			9/28/18 02:42:30	N	II
R1809106-005	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:45:45	N	II
R1809106-005	Iron, Total	N/A		Water	0.12 ppm	50 mL	120 µg/L	1	50	100			9/28/18 02:45:45	N	II
R1809106-005	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:45:45	N	II
R1809106-005	Magnesium, Total	N/A		Water	66.52 ppm	50 mL	66500 µg/L	1	200	1000			9/28/18 02:45:45	N	II
R1809106-005	Manganese, Total	N/A		Water	0.09 ppm	50 mL	90 µg/L	1	6	10			9/28/18 02:45:45	N	II
R1809106-005	Potassium, Total	N/A		Water	3.07 ppm	50 mL	3100 µg/L	1	200	2000			9/28/18 02:45:45	N	II
R1809106-005	Sodium, Total	N/A		Water	18.87 ppm	50 mL	18900 µg/L	1	200	1000			9/28/18 02:45:45	N	II
R1809106-006	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:49:00	N	II
R1809106-006	Calcium, Total	N/A		Water	112.58 ppm	50 mL	113000 µg/L	1	300	1000			9/28/18 02:49:00	N	II
R1809106-006	Iron, Total	N/A		Water	0.67 ppm	50 mL	670 µg/L	1	50	100			9/28/18 02:49:00	N	II
R1809106-006	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:49:00	N	II
R1809106-006	Magnesium, Total	N/A		Water	35.50 ppm	50 mL	35500 µg/L	1	200	1000			9/28/18 02:49:00	N	II
R1809106-006	Manganese, Total	N/A		Water	0.06 ppm	50 mL	61 µg/L	1	6	10			9/28/18 02:49:00	N	II
R1809106-006	Potassium, Total	N/A		Water	4.48 ppm	50 mL	4500 µg/L	1	200	2000			9/28/18 02:49:00	N	II
R1809106-006	Sodium, Total	N/A		Water	15.81 ppm	50 mL	15800 µg/L	1	200	1000			9/28/18 02:49:00	N	II
R1809106-007	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:52:15	N	II

I indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608677 **Method/Testcode:** 6010C/Ca T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R1809106-007	Calcium, Total	N/A		Water	145.35 ppm	50 mL	145000 µg/L	1	300	1000			9/28/18 02:52:15	N	II
R1809106-007	Iron, Total	N/A		Water	0.24 ppm	50 mL	240 µg/L	1	50	100			9/28/18 02:52:15	N	II
R1809106-007	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:52:15	N	II
R1809106-007	Magnesium, Total	N/A		Water	49.06 ppm	50 mL	49100 µg/L	1	200	1000			9/28/18 02:52:15	N	II
R1809106-007	Manganese, Total	N/A		Water	0.03 ppm	50 mL	30 µg/L	1	6	10			9/28/18 02:52:15	N	II
R1809106-007	Potassium, Total	N/A		Water	3.68 ppm	50 mL	3700 µg/L	1	200	2000			9/28/18 02:52:15	N	II
R1809106-007	Sodium, Total	N/A		Water	31.25 ppm	50 mL	31300 µg/L	1	200	1000			9/28/18 02:52:15	N	II
R1809106-008	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:55:29	N	II
R1809106-008	Calcium, Total	N/A		Water	189.90 ppm	50 mL	190000 µg/L	1	300	1000			9/28/18 02:55:29	N	II
R1809106-008	Iron, Total	N/A		Water	0.32 ppm	50 mL	320 µg/L	1	50	100			9/28/18 02:55:29	N	II
R1809106-008	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:55:29	N	II
R1809106-008	Magnesium, Total	N/A		Water	49.55 ppm	50 mL	49500 µg/L	1	200	1000			9/28/18 02:55:29	N	II
R1809106-008	Manganese, Total	N/A		Water	0.91 ppm	50 mL	908 µg/L	1	6	10			9/28/18 02:55:29	N	II
R1809106-008	Potassium, Total	N/A		Water	2.30 ppm	50 mL	2300 µg/L	1	200	2000			9/28/18 02:55:29	N	II
R1809106-008	Sodium, Total	N/A		Water	85.73 ppm	50 mL	85700 µg/L	1	200	1000			9/28/18 02:55:29	N	II
R1809106-009	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 02:58:43	N	II
R1809106-009	Calcium, Total	N/A		Water	94.19 ppm	50 mL	94200 µg/L	1	300	1000			9/28/18 02:58:43	N	II
R1809106-009	Iron, Total	N/A		Water	0.03 ppm	50 mL	100 µg/L U	1	50	100			9/28/18 02:58:43	N	II
R1809106-009	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 02:58:43	N	II
R1809106-009	Magnesium, Total	N/A		Water	39.46 ppm	50 mL	39500 µg/L	1	200	1000			9/28/18 02:58:43	N	II
R1809106-009	Manganese, Total	N/A		Water	0.00 ppm	50 mL	10 µg/L U	1	6	10			9/28/18 02:58:43	N	II
R1809106-009	Potassium, Total	N/A		Water	2.50 ppm	50 mL	2500 µg/L	1	200	2000			9/28/18 02:58:43	N	II
R1809106-009	Sodium, Total	N/A		Water	34.28 ppm	50 mL	34300 µg/L	1	200	1000			9/28/18 02:58:43	N	II
R1809106-010	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 03:08:25	Y	II
R1809106-010	Calcium, Total	N/A		Water	152.70 ppm	50 mL	153000 µg/L	1	300	1000			9/28/18 03:08:25	Y	II
R1809106-010	Iron, Total	N/A		Water	0.09 ppm	50 mL	90 µg/L J	1	50	100			9/28/18 03:08:25	Y	II
R1809106-010	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 03:08:25	Y	II
R1809106-010	Magnesium, Total	N/A		Water	57.56 ppm	50 mL	57600 µg/L	1	200	1000			9/28/18 03:08:25	Y	II
R1809106-010	Manganese, Total	N/A		Water	0.02 ppm	50 mL	16 µg/L	1	6	10			9/28/18 03:08:25	Y	II
R1809106-010	Potassium, Total	N/A		Water	2.02 ppm	50 mL	2000 µg/L	1	200	2000			9/28/18 03:08:25	Y	II
R1809106-010	Sodium, Total	N/A		Water	23.95 ppm	50 mL	23900 µg/L	1	200	1000			9/28/18 03:08:25	Y	II
RQ1810183-03	Cadmium, Total	MS	R1809106-010	Water	0.05 ppm	50 mL	49.0 µg/L	1	0.6	5.0	98		9/28/18 03:11:40	N	II
RQ1810183-03	Calcium, Total	MS	R1809106-010	Water	156.24 ppm	50 mL	156000 µg/L	1	300	1000	177*		9/28/18 03:11:40	N	II
RQ1810183-03	Iron, Total	MS	R1809106-010	Water	1.02 ppm	50 mL	1020 µg/L	1	50	100	93		9/28/18 03:11:40	N	II
RQ1810183-03	Lead, Total	MS	R1809106-010	Water	0.49 ppm	50 mL	494 µg/L	1	3	50	99		9/28/18 03:11:40	N	II
RQ1810183-03	Magnesium, Total	MS	R1809106-010	Water	59.69 ppm	50 mL	59700 µg/L	1	200	1000	107		9/28/18 03:11:40	N	II

Sft low

* indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-ICP-AES-06 **Analyst:** NMANSEN **Analysis Lot:** 608677 **Method/Testcode:** 6010C/Mn T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810183-03	Manganese, Total	MS	R1809106-010	Water	0.51 ppm	50 mL	507 µg/L	1	6	10	98		9/28/18 03:11:40	N	II
RQ1810183-03	Potassium, Total	MS	R1809106-010	Water	23.02 ppm	50 mL	23000 µg/L	1	200	2000	105		9/28/18 03:11:40	N	II
RQ1810183-03	Sodium, Total	MS	R1809106-010	Water	44.00 ppm	50 mL	44000 µg/L	1	200	1000	100		9/28/18 03:11:40	N	II
RQ1810183-04	Cadmium, Total	DMS	R1809106-010	Water	0.05 ppm	50 mL	48.9 µg/L	1	0.6	5.0	98	<1	9/28/18 03:14:53	N	II
RQ1810183-04	Calcium, Total	DMS	R1809106-010	Water	155.86 ppm	50 mL	156000 µg/L	1	300	1000	158*	<1	9/28/18 03:14:53	N	II
RQ1810183-04	Iron, Total	DMS	R1809106-010	Water	1.05 ppm	50 mL	1050 µg/L	1	50	100	96	3	9/28/18 03:14:53	N	II
RQ1810183-04	Lead, Total	DMS	R1809106-010	Water	0.49 ppm	50 mL	492 µg/L	1	3	50	98	<1	9/28/18 03:14:53	N	II
RQ1810183-04	Magnesium, Total	DMS	R1809106-010	Water	59.52 ppm	50 mL	59500 µg/L	1	200	1000	98	<1	9/28/18 03:14:53	N	II
RQ1810183-04	Manganese, Total	DMS	R1809106-010	Water	0.51 ppm	50 mL	508 µg/L	1	6	10	99	<1	9/28/18 03:14:53	N	II
RQ1810183-04	Potassium, Total	DMS	R1809106-010	Water	23.14 ppm	50 mL	23100 µg/L	1	200	2000	106	<1	9/28/18 03:14:53	N	II
RQ1810183-04	Sodium, Total	DMS	R1809106-010	Water	44.05 ppm	50 mL	44100 µg/L	1	200	1000	101	<1	9/28/18 03:14:53	N	II
R1809106-011	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 03:24:37	N	II
R1809106-011	Calcium, Total	N/A		Water	90.80 ppm	50 mL	90800 µg/L	1	300	1000			9/28/18 03:24:37	N	II
R1809106-011	Iron, Total	N/A		Water	0.63 ppm	50 mL	630 µg/L	1	50	100			9/28/18 03:24:37	N	II
R1809106-011	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 03:24:37	N	II
R1809106-011	Magnesium, Total	N/A		Water	48.66 ppm	50 mL	48700 µg/L	1	200	1000			9/28/18 03:24:37	N	II
R1809106-011	Manganese, Total	N/A		Water	0.04 ppm	50 mL	44 µg/L	1	6	10			9/28/18 03:24:37	N	II
R1809106-011	Potassium, Total	N/A		Water	1.72 ppm	50 mL	1700 µg/L J	1	200	2000			9/28/18 03:24:37	N	II
R1809106-011	Sodium, Total	N/A		Water	10.67 ppm	50 mL	10700 µg/L	1	200	1000			9/28/18 03:24:37	N	II
R1809106-012	Cadmium, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	0.6	5.0			9/28/18 03:27:51	N	II
R1809106-012	Calcium, Total	N/A		Water	142.00 ppm	50 mL	142000 µg/L	1	300	1000			9/28/18 03:27:51	N	II
R1809106-012	Iron, Total	N/A		Water	0.07 ppm	50 mL	70 µg/L J	1	50	100			9/28/18 03:27:51	N	II
R1809106-012	Lead, Total	N/A		Water	0.00 ppm	50 mL	5.0 µg/L U	1	2.5	5.0			9/28/18 03:27:51	N	II
R1809106-012	Magnesium, Total	N/A		Water	74.51 ppm	50 mL	74500 µg/L	1	200	1000			9/28/18 03:27:51	N	II
R1809106-012	Manganese, Total	N/A		Water	0.05 ppm	50 mL	48 µg/L	1	6	10			9/28/18 03:27:51	N	II
R1809106-012	Potassium, Total	N/A		Water	3.00 ppm	50 mL	3000 µg/L	1	200	2000			9/28/18 03:27:51	N	II
R1809106-012	Sodium, Total	N/A		Water	14.57 ppm	50 mL	14600 µg/L	1	200	1000			9/28/18 03:27:51	N	II

* indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	1000	985	98	1000	976	98	971	97	P
Lead	500	511	102	500	510	102	510	102	P

Comments:

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				1000	979	98	973	97	P
Lead				500	510	102	506	101	P

Comments:

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				1000	988	99			P
Lead				500	506	101			P

Comments:

METALS

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BLANKS

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	10.00	U	10.00	U	10.00	U	10.00	U	10.000	U	P
Lead	50.00	U	50.00	U	50.00	U	50.00	U	50.000	U	P

Comments:

METALS

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BLANKS

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			10.00	U	10.00	U					P
Lead			50.00	U	50.00	U					P

Comments:

METALS

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ANALYSIS RUN LOG

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: MW-12D

Instrument ID Number: Agilent ICP Method: P

Start Date: 9/27/2018 End Date: 9/27/2018

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
BLANK	1.00	18:29				X									X															
STANDARD 1	1.00	18:32				X									X															
STANDARD 2	1.00	18:35				X									X															
STANDARD 3	1.00	18:38				X									X															
STANDARD 4	1.00	18:42				X									X															
STANDARD 5	1.00	18:45				X									X															
ICV1	1.00	18:49				X									X															
ICB1	1.00	18:52				X									X															
CRDL1	1.00	18:55				X									X															
ICS-A1	1.00	18:58				X									X															
ICS-AB1	1.00	19:02				X									X															
CCV1	1.00	19:05				X									X															
CCB1	1.00	19:08				X									X															
PBW	1.00	19:11				X									X															
ZZZZZZ	1.00	19:15																												
LCSW	1.00	19:18				X									X															
MW-12D	1.00	19:21				X									X															
MW-11M	1.00	19:24				X									X															
MW-13S	1.00	19:28				X									X															
MW-13M	1.00	19:31				X									X															
MW-14S	1.00	19:34				X									X															
MW-11S	1.00	19:37				X									X															
MW-10S	1.00	19:41				X									X															
CCV2	1.00	19:44				X									X															
CCB2	1.00	19:47				X									X															
MW-10M	1.00	19:50				X									X															
MW-12S	1.00	19:54				X									X															
MW-12M	1.00	19:57				X									X															
MW-10D	1.00	20:00				X									X															
MW-10DL	5.00	20:03				X									X															
ZZZZZZ	1.00	20:06																												
ZZZZZZ	1.00	20:10																												
ZZZZZZ	1.00	20:13																												

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS

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ANALYSIS RUN LOG

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: MW-12D

Instrument ID Number: Agilent ICP Method: P

Start Date: 9/27/2018 End Date: 9/27/2018

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
ZZZZZZ	1.00	20:16																												
ZZZZZZ	1.00	20:19																												
CCV3	1.00	20:23				X									X															
CCB3	1.00	20:26				X									X															
ZZZZZZ	5.00	20:29																												
ZZZZZZ	1.00	20:32																												
ZZZZZZ	1.00	20:36																												
ZZZZZZ	1.00	20:39																												
ZZZZZZ	1.00	20:42																												
ZZZZZZ	1.00	20:45																												
ZZZZZZ	1.00	20:49																												
CCV4	1.00	20:52				X									X															
CCB4	1.00	20:55				X									X															
CRDL2	1.00	20:58				X									X															
ICS-A2	1.00	21:02				X									X															
ICS-AB2	1.00	21:05				X									X															
ZZZZZZ	1.00	21:08																												
ZZZZZZ	1.00	21:11																												
ZZZZZZ	1.00	21:15																												
CCV5	1.00	21:18				X									X															
CCB5	1.00	21:21				X									X															

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS

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PREPARATION LOG

Contract: R1808910

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: MW-12D

Method: P

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
LCSW	9/25/2018	50.0	50.0
PBW	9/25/2018	50.0	50.0
MW-12D	9/25/2018	50.0	50.0
MW-11M	9/25/2018	50.0	50.0
MW-13S	9/25/2018	50.0	50.0
MW-13M	9/25/2018	50.0	50.0
MW-14S	9/25/2018	50.0	50.0
MW-11S	9/25/2018	50.0	50.0
MW-10S	9/25/2018	50.0	50.0
MW-10M	9/25/2018	50.0	50.0
MW-12S	9/25/2018	50.0	50.0
MW-12M	9/25/2018	50.0	50.0
MW-10D	9/25/2018	50.0	50.0

Comments:

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:18
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-12D	**Basis:**	NA
Lab Code:	R1808910-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-11M	**Basis:**	NA
Lab Code:	R1808910-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 12:25
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13S	**Basis:**	NA
Lab Code:	R1808910-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/17/18 11:55
Sample Matrix:	Water	**Date Received:**	09/17/18 14:32
Sample Name:	MW-13M	**Basis:**	NA
Lab Code:	R1808910-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 09:10
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-14S	**Basis:**	NA
Lab Code:	R1808910-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:00
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-11S	**Basis:**	NA
Lab Code:	R1808910-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.9	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10S	**Basis:**	NA
Lab Code:	R1808910-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 11:45
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10M	**Basis:**	NA
Lab Code:	R1808910-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12S	**Basis:**	NA
Lab Code:	R1808910-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 12:35
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-12M	**Basis:**	NA
Lab Code:	R1808910-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	1	09/25/18 11:55	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Unicorn Management Consultants	**Service Request:**	R1808910
Project:	Union Road/2011-200	**Date Collected:**	09/18/18 07:30
Sample Matrix:	Water	**Date Received:**	09/18/18 17:35
Sample Name:	MW-10D	**Basis:**	NA
Lab Code:	R1808910-017		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	1	09/25/18 11:55	

Analytical Results Summary

Instrument Name: R-Balance-19 **Analyst:** AFELSER **Analysis Lot:** 608139 **Method/Testcode:** 1664A/OG HEM

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810178-01	Oil and Grease, Total (HEM)	MB		Water	0.60 mg/L	1000 mL	5.0 mg/L U	1	1.4	5.0			9/25/18 11:55	N	II
RQ1810178-02	Oil and Grease, Total (HEM)	LCS		Water	36.50 mg/L	1000 mL	36.5 mg/L	1	1.4	5.0	89		9/25/18 11:55	N	II
RQ1810178-03	Oil and Grease, Total (HEM)	DLCS		Water	34.50 mg/L	1000 mL	34.5 mg/L	1	1.4	5.0	84	6	9/25/18 11:55	N	II
R1808893-003	Oil and Grease, Total (HEM)	N/A		Water	0.75 mg/L	1064 mL	4.7 mg/L U	1	1.4	4.7			9/25/18 11:55	N	II
R1808903-001	Oil and Grease, Total (HEM)	N/A		Water	0.40 mg/L	1005 mL	5.0 mg/L U	1	1.4	5.0			9/25/18 11:55	N	II
R1808910-001	Oil and Grease, Total (HEM)	N/A		Water	0.57 mg/L	1053 mL	4.7 mg/L U	1	1.4	4.7			9/25/18 11:55	N	IV
R1808910-002	Oil and Grease, Total (HEM)	N/A		Water	0.78 mg/L	1032 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	IV
R1808910-003	Oil and Grease, Total (HEM)	N/A		Water	0.57 mg/L	1054 mL	4.7 mg/L U	1	1.4	4.7			9/25/18 11:55	N	IV
R1808910-004	Oil and Grease, Total (HEM)	N/A		Water	0.38 mg/L	1053 mL	4.7 mg/L U	1	1.4	4.7			9/25/18 11:55	N	IV
R1808910-006	Oil and Grease, Total (HEM)	N/A		Water	0.67 mg/L	1038 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	II
R1808910-007	Oil and Grease, Total (HEM)	N/A		Water	0.79 mg/L	1017 mL	4.9 mg/L U	1	1.4	4.9			9/25/18 11:55	N	II
R1808910-008	Oil and Grease, Total (HEM)	N/A		Water	0.10 mg/L	1052 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	II
R1808910-009	Oil and Grease, Total (HEM)	N/A		Water	1.33 mg/L	1051 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	II
R1808910-010	Oil and Grease, Total (HEM)	N/A		Water	0.47 mg/L	1060 mL	4.7 mg/L U	1	1.4	4.7			9/25/18 11:55	N	II
R1808910-011	Oil and Grease, Total (HEM)	N/A		Water	1.07 mg/L	1032 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	II
R1808910-017	Oil and Grease, Total (HEM)	N/A		Water	1.32 mg/L	1057 mL	4.7 mg/L U	1	1.4	4.7			9/25/18 11:55	N	II
R1808984-001	Oil and Grease, Total (HEM)	N/A		Water	0.48 mg/L	1051 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	II
R1808985-001	Oil and Grease, Total (HEM)	N/A		Water	0.86 mg/L	1051 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	II
R1808994-001	Oil and Grease, Total (HEM)	N/A		Water	118.00 mg/L	50 mL	120 mg/L	1	30	100			9/25/18 11:55	N	II
R1808994-002	Oil and Grease, Total (HEM)	N/A		Water	118.00 mg/L	50 mL	120 mg/L	1	30	100			9/25/18 11:55	N	II
R1809000-003	Oil and Grease, Total (HEM)	N/A		Water	42.67 mg/L	150 mL	43 mg/L	1	10	33			9/25/18 11:55	N	II
R1809000-004	Oil and Grease, Total (HEM)	N/A		Water	1.04 mg/L	1057 mL	4.7 mg/L U	1	1.4	4.7			9/25/18 11:55	N	II
R1809165-001	Oil and Grease, Total (HEM)	N/A		Water	2.80 mg/L	250 mL	20 mg/L U	1	6	20			9/25/18 11:55	N	II

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-19 **Analyst:** AFELSER **Analysis Lot:** 608141 **Method/Testcode:** 1664A/OG HEM

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1810180-01	Oil and Grease, Total (HEM)	MB		Water	0.20 mg/L	1000 mL	5.0 mg/L U	1	1.4	5.0			9/25/18 11:55	N	I
RQ1810180-02	Oil and Grease, Total (HEM)	LCS		Water	34.40 mg/L	1000 mL	34.4 mg/L	1	1.4	5.0	84		9/25/18 11:55	N	I
R1809033-001	Oil and Grease, Total (HEM)	N/A		Water	26.67 mg/L	30 mL	170 mg/L U	1	50	170			9/25/18 11:55	N	I
R1809033-002	Oil and Grease, Total (HEM)	N/A		Water	1.77 mg/L	1018 mL	4.9 mg/L U	1	1.4	4.9			9/25/18 11:55	N	I
R1809047-001	Oil and Grease, Total (HEM)	N/A		Water	2.82 mg/L	1027 mL	4.9 mg/L U	1	1.4	4.9			9/25/18 11:55	N	I
R1809072-001	Oil and Grease, Total (HEM)	N/A		Water	0.67 mg/L	1043 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	II
R1809084-001	Oil and Grease, Total (HEM)	N/A		Water	0.38 mg/L	1041 mL	4.8 mg/L U	1	1.4	4.8			9/25/18 11:55	N	II
R1809199-004	Oil and Grease, Total (HEM)	N/A		Water	0.40 mg/L	1264 mL	4.0 mg/L U	1	1.4	4.0			9/25/18 11:55	Y	II
RQ1810180-03	Oil and Grease, Total (HEM)	MS	R1809199-004	Water	27.87 mg/L	1270 mL	27.9 mg/L	1	1.4	3.9	87		9/25/18 11:55	N	II
RQ1810180-04	Oil and Grease, Total (HEM)	DMS	R1809199-004	Water	27.42 mg/L	1258 mL	27.4 mg/L	1	1.4	4.0	84	2	9/25/18 11:55	N	II
R1809197-004	Oil and Grease, Total (HEM)	N/A		Water	0.16 mg/L	1266 mL	3.9 mg/L U	1	1.4	3.9			9/25/18 11:55	N	II
R1809198-004	Oil and Grease, Total (HEM)	N/A		Water	0.00 mg/L	1283 mL	3.9 mg/L U	1	1.4	3.9			9/25/18 11:55	N	II
R1809201-001	Oil and Grease, Total (HEM)	N/A		Water	0.25 mg/L	1216 mL	4.1 mg/L U	1	1.4	4.1			9/25/18 11:55	N	II

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analyte: Grease and Oil / Total Petroleum Hydrocarbons
Method: EPA 1664A

Analyst: AFELSER
Date: 9/25/18
Time: 11:55

Pipet ID: Volumetric
Added 5.0 mls of 8178 ppm lot # 193371 to LCS/MS
LCS True Value = 40.89

R-Balance- r-19

Balance Verification:

	2 mg before	2 mg after	1 g before	1 g after
Gross 1:	0.0020	0.0021	1.0000	1.0000
Gross 2:	0.0020	0.0020	1.0000	0.9999
Gross 3:				

2mg Limits: 0.2mg 1g Limits: 0.5 mg

Hexane: 192156
Methanol: 191200 pH Paper: 220617
SPE disks: 193476 HCl: 191026
Evap (°C): 49 Silica Gel: na
Therm ID: 399 SGT filters: na

X1=Silica Gel Added

	Misc.	Order #	(X) if TPH	Flask IDs		Sample Vol (mLs)	pH		Gross (g)		Tare	Difference (gross-tare)	Final Result (mg/L)
1		MB		1	1	1000	<2		1	48.9628	48.9622	0.0006	0.6000
				2	ZEUS				2	48.9628			
				3	A				3				
2		LCS		1	2	1000	<2		1	46.0740	46.0373	0.0365	36.5000
				2	ENKI				2	46.0738			
				3	B				3				
3		LCS DUP		1	3	1000	<2		1	50.2469	50.2122	0.0345	34.5000
				2	FRAN				2	50.2467			
				3	C				3				
4		R1808893-003		1	4	1064	<2		1	47.8468	47.8460	0.0008	0.7519
				2	VAAN				2	47.8468			
				3	D				3				
5		R1808903-001		1	5	1005	<2		1	51.3155	51.3151	0.0004	0.3980
				2	PIKA				2	51.3155			
				3	E				3				
6		R1808910-001		1	6	1053	<2		1	46.6411	46.6405	0.0006	0.5698
				2	NATSU				2	46.6412			
				3	F				3				
7		R1808910-002		1	7	1032	<2		1	44.9096	44.9088	0.0008	0.7752
				2	ALY				2	44.9096			
				3	G				3				
8		R1808910-003		1	8	1054	<2		1	49.6332	49.6326	0.0006	0.5693
				2	CECIL				2	49.6334			
				3	H				3				
9		R1808910-004		1	9	1053	<2	Dry Again	1	41.9545	41.9536	0.0004	0.3799
				2	PONYO				2	41.9540			
				3	I				3				
10		R1808910-006		1	11	1038	<2		1	49.6827	49.6820	0.0007	0.6744
				2	GRIM				2	49.6830			
				3	J				3				
11		R1808910-007		1	12	1017	<2		1	40.6173	40.6165	0.0008	0.7866
				2	ROSSO				2	40.6176			
				3	K				3				
12		R1808910-008		1	1	1052	<2		1	44.8600	44.8599	0.0001	0.0951
				2	PAUL				2	44.8603			
				3	L				3				
13		R1808910-009		1	2	1051	<2		1	46.0166	46.0152	0.0014	1.3321
				2	JOHN				2	46.0166			
				3	M				3				

mg/L G = [(gross-tare,g)-(blank, g (if nec.)) / vol. sample, mL] * 1,000,000

Template-1664-r2 2/24/17

Analyte: Grease and Oil / Total Petroleum Hydrocarbons
Method: EPA 1664A

Analyst: AFELSER
Date: 9/25/18
Time: 11:55

Pipet ID: Volumetric
Added 5.0 mls of 8178 ppm lot # 193371 to LCS/MS
LCS True Value = 40.89

R-Balance- r-19

Balance Verification:

	2 mg before	2 mg after	1 g before	1 g after
Gross 1:	0.0020	0.0021	1.0000	1.0000
Gross 2:	0.0020	0.0020	1.0000	0.9999
Gross 3:				

2mg Limits: 0.2mg 1g Limits: 0.5 mg

Hexane: 192156
Methanol: 191200 pH Paper: 220617
SPE disks: 193476 HCl: 191026
Evap (°C): 49 Silica Gel: na
Therm ID: 399 SGT filters: na

X1=Silica Gel Added

	Misc.	Order #	(X) if TPH	Flask IDs		Sample Vol (mLs)	pH	Dry Again	Gross (g)		Tare	Difference (gross-tare)	Final Result (mg/L)
14		R1808910-010		1	3	1060	<2		1	46.7594	46.7583	0.0005	0.4717
				2	PANIC				2	46.7588			
				3	N				3				
15		R1808910-011		1	4	1032	<2		1	46.0398	46.0387	0.0011	1.0659
				2	RICK				2	46.0400			
				3	O				3				
16		R1808910-017		1	5	1057	<2		1	41.7664	41.7650	0.0014	1.3245
				2	SEN				2	41.7667			
				3	P				3				
17		R1808984-001		1	6	1051	<2		1	45.6660	45.6655	0.0005	0.4757
				2	GEORGE				2	45.6663			
				3	Q				3				
18		R1808985-001		1	7	1051	<2		1	48.9478	48.9468	0.0009	0.8563
				2	CHAR				2	48.9477			
				3	R				3				
19	<FULL VOL	R1808994-001		1	8	50	<2		1	42.1282	42.1223	0.0059	118.0000
				2	INU				2	42.1283			
				3	S				3				
20	<FULL VOL	R1808994-002		1	9	50	<2		1	48.2025	48.1965	0.0059	118.0000
				2	MORTY				2	48.2024			
				3	T				3				
21	<FULL VOL	R1809000-003		1	11	150	<2		1	51.5235	51.5171	0.0064	42.6667
				2	RINGO				2	51.5235			
				3	U				3				
22		R1809000-004		1	12	1057	<2		1	45.6843	45.6832	0.0011	1.0407
				2	VUL				2	45.6843			
				3	V				3				
23	<FULL VOL	R1809165-001		1	1	250	<2		1	43.5422	43.5415	0.0007	2.8000
				2	DARIA				2	43.5422			
				3	X				3				
24		MB		1	2	1000	<2		1	41.6849	41.6847	0.0002	0.2000
				2	HAKU				2	41.6852			
				3	Z				3				
25		LCS		1	3	1000	<2		1	51.7014	51.6670	0.0344	34.4000
				2	BIRD				2	51.7016			
				3	AA				3				
26	<FULL VOL	R1809033-001		1	4	30	<2		1	45.7815	45.7807	0.0008	26.6667
				2	DUG				2	45.7817			
				3	BB				3				

mg/L G = [(gross-tare,g)-(blank, g (if nec.)) / vol. sample, mL] * 1,000,000

Template-1664-r2 2/24/17

Analyte: Grease and Oil / Total Petroleum Hydrocarbons
Method: EPA 1664A

Analyst: AFELSER
Date: 9/25/18
Time: 11:55

Pipet ID: Volumetric
Added 5.0 mls of 8178 ppm lot # 193371 to LCS/MS
LCS True Value = 40.89

R-Balance- r-19

Balance Verification:

	2 mg before	2 mg after	1 g before	1 g after
Gross 1:	0.0020	0.0021	1.0000	1.0000
Gross 2:	0.0020	0.0020	1.0000	0.9999
Gross 3:				

2mg Limits: 0.2mg 1g Limits: 0.5 mg

Hexane:	192156		
Methanol:	191200	pH Paper:	220617
SPE disks:	193476	HCl:	191026
Evap (°C):	49	Silica Gel:	na
Therm ID:	399	SGT filters:	na

X1=Silica Gel Added

	Misc.	Order #	(X) if TPH	Flask IDs		Sample Vol (mLs)	pH		Gross (g)		Tare	Difference (gross-tare)	Final Result (mg/L)
27		R1809033-002		1	5	1018	<2		1	42.9889	42.9871	0.0018	1.7682
				2	SS				2	42.9891			
				3	CC				3				
28		R1809047-001		1	6	1027	<2		1	44.5450	44.5421	0.0029	2.8238
				2	PR				2	44.5450			
				3	DD				3				
29		R1809072-001		1	7	1043	<2		1	43.2108	43.2101	0.0007	0.6711
				2	DL				2	43.2111			
				3	EE				3				
30		R1809084-001		1	8	1041	<2		1	39.7833	39.7829	0.0004	0.3842
				2	LK				2	39.7837			
				3	FF				3				
31		R1809199-004		1	9	1264	<2		1	49.1324	49.1319	0.0005	0.3956
				2	AZ				2	49.1327			
				3	GG				3				
32		R1809199-004 MS		1	11	1270	<2		1	48.3934	48.3579	0.0354	27.8740
				2	SAL				2	48.3933			
				3	HH				3				
33		R1809199-004 DMS		1	12	1258	<2		1	46.8781	46.8434	0.0345	27.4245
				2	SOLO				2	46.8779			
				3	II				3				
34		R1809197-004		1	1	1266	8-<2		1	46.6332	46.6330	0.0002	0.1580
				2	HU				2	46.6333			
				3	JJ				3				
35		R1809198-004		1	2	1283	8-<2	#DIV/0!	1	47.4089	47.4089	0.0000	0.0000
				2	CAT				2	47.4091			
				3	KK				3				
36		R1809201-001		1	3	1216	<2		1	49.2631	49.2628	0.0003	0.2467
				2	XE				2	49.2633			
				3	LL				3				
37				1					1				
				2					2				
				3					3				
38				1					1				
				2					2				
				3					3				
39				1					1				
				2					2				
				3					3				

GN 9/26/18

mg/L G = [(gross-tare,g)-(blank, g (if nec.)) / vol. sample, mL] * 1,000,000

Template-1664-r2 2/24/17

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Tare Weights:

Instrument: R-Balance- r-19

Analyst: GNITA
Date: 09/26/18

Drying Tins: ____ Dish 104°C: ____
Crucible 550°C: ____ Dish 550°C: ____
Dish 180°C: ____ G/O Dishes: X

	Weight	Actual
s Weights (s):	0.0021 g	0.0020 g
	0.9999 g	1.0000 g

ID Number	Weight	
A	48.9622	48.9622
B	46.0373	46.0374
C	50.2123	50.2122
D	47.8460	47.8462
E	51.3151	51.3151
F	46.6408	46.6405
G	44.9088	44.9088
H	49.6326	49.6326
I	41.9536	41.9536
J	49.6820	49.6820
K	40.6166	40.6165
L	44.8599	44.8599
M	46.0152	46.0156
N	46.7583	46.7585
O	46.0387	46.0388
P	41.7650	41.7655
Q	45.6655	45.6655
R	48.9470	48.9468
S	42.1225	42.1223
T	48.1966	48.1965
U	51.5171	51.5171
V	45.6832	45.6835
X	43.5415	43.5416
Z	41.6847	41.6848
AA	51.6670	51.6671
BB	45.7807	45.7811
CC	42.9871	42.9875
DD	44.5421	44.5422
EE	43.2101	43.2103
FF	39.7829	39.7829
GG	49.1320	49.1319
HH	48.3579	48.3581
II	46.8434	46.8434
JJ	46.6330	46.6330
KK	47.4090	47.4089
LL	49.2629	49.2628

ID Number	Weight	

GN 9/26/18

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: AF/GN Date: 9/25/18

Analysis: ✓ **Oil & Grease, Method 1664** **Instrument: Mettler Analytical Balance**
_____ **Total Petroleum Hydrocarbons, Method 1664**

STOCK SOLUTION	Log # Prep/Exp Dates	Reagent	Weight (mg)	Final Vol, (mL)	Conc. (mg/L)
WC189017A **Prep: 09/20/2018** **Exp: 03/20/2019**		Stearic Acid 171200 Exp: 3/30/2021	817.2	200 *	8178
		n-Hexadecane 179382 Exp: 2/16/2022	818.4		4086

* Diluent is acetone

Quality Control		Stock Sol'n (mLs)	Stock Sol'n (mg/L)	Final Volume (mLs)	True Value (mg/L)
LCS, O&G		5	See Data Sheet	1000	40.89
Matrix Spike, O&G		5	See Data Sheet	See Data Sheet	
LCS, TPH		5	See Data Sheet	1000	20.43
Matrix Spike, TPH		5	See Data Sheet	See Data Sheet	

Instrument log filled in? (Y) (N)

Comments, O&G:

*The final weight value of the preparation blank, if < 5.00 mg/L, is not subtracted from the final weight of the samples. However, if the prep blank value is > 5.00 mg/L, the difference between the prep blank value and 5.00 mg/L is subtracted from all of the samples. For samples with a higher reporting limit, the limit for the prep blank value is equal to the PQL.

Comments, TPH:

The Hexane solvent is evaporated at room temperature.

Same Standard as Oil & Grease by 1664. Stearic Acid is removed with Silica Gel, leaving only the concentration of Hexadecane, above. Silica Gel is not added to samples that are <PQL for Oil & Grease.

The final weight value of the preparation blank, if < 5.00 mg/l, is not subtracted from the final weight of the samples. However, if the Prep Blank value is > 5.00 mg/L, the difference between the prep blank value and 5.00 mg/L is subtracted from all of the samples.

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 915128

Site Name Union Road Site

Site Address: Losson Road Zip Code: 14110
City/Town: Cheektowaga
County: Erie
Site Acreage: 23.000

Reporting Period: December 26, 2017 to December 26, 2018

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative _____ Date _____

SITE NO. 915128 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
114.17-1-2	Witben Realty C/O Universal Marion Corp.	Landuse Restriction Monitoring Plan O&M Plan
		Ground Water Use Restriction
Site O&M Plan & Reporting per Order on Consent.		
114.17-1-3.1	Universal Marion Corp.	
		Ground Water Use Restriction Landuse Restriction Monitoring Plan O&M Plan
Site O&M Plan & Reporting per Order on Consent.		

Box 4

Description of Engineering Controls

Parcel	Engineering Control
114.17-1-2	Cover System Groundwater Treatment System Fencing/Access Control
114.17-1-3.1	Groundwater Treatment System Cover System Fencing/Access Control

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 915128

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Michael Persico (print name) at 52 Federal Rd., Suite 2C, Danbury, CT. (print business address)

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

1/11/19
Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Michael O'Connor (print name) at 52 Federal Rd. Suite 2C Danbury CT 06810 (print business address)

am certifying as a Qualified Environmental Professional for the Remedial Party (Owner or Remedial Party)

M Michael O'Con — Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

1/11/19 — Date