

30 January 2012

Elizabeth Palmer
Fisher Brothers Management
299 Park Avenue, Suite 42
New York, NY 10171

**Re: Limited Phase II Environmental Site Investigation
105-107 Washington Street (Lot 4) and
111-121 Washington Street (Lot 12)
New York, New York
Langan Project No. 001948405**

Dear Ms. Palmer:

As requested, Langan completed a preliminary Phase II Environmental Site Investigation (ESI) at the above-referenced property. The Investigation consisted of completion of tests in the area of an underground storage tank (UST) that was identified onsite based on review of New York City Department of Building (NYCDOB) records. According to New York State Department of Environmental Conservation (NYSDEC) records, the tank consists of a gasoline UST that was closed-in-place in 1997. The UST reportedly had an associated fuel pump island located directly adjacent to the east and a remote fill port line that extended west to the curb line of Washington Street.

On 11 January 2011, Langan completed a test pit on the south central portion of the property and uncovered a 4,000-gal gallon capacity UST encased in an approximate one foot thick concrete vault. Test pits were completed by Environmental Industrial Service Corp. of New Jersey (EISCO-NJ) using a Deere 35D track-mounted excavator with a 24-inch toothed bucket. The location of the UST and the extents of the completed test pits are provided on the attached Figure 1. A photographic log of the test pit activities are provided as Attachment 1. Test pit logs are provided as Attachment 2.

The concrete vault measured 8.5 feet wide, 6 feet deep, and approximately 25.5 feet long (the southern extent of the vault could not be verified without undermining the onsite construction trailer). The top of the vault was located approximately 3 feet below ground surface (bgs). Based on visual observations, the northern and western walls of the concrete vault appeared to be in good condition with no cracks observed. The remainder of the vault could not be exposed due to the presence of onsite construction trailers. A suspected fill port line with intact 3-inch piping was uncovered on the northern end of the vault. The piping extended south over the

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vault and continued west at the southern end of the vault. Due to physical site limitations, only the northern and western edges and the northern portion of the top of the vault were exposed. Near the southwestern corner of the UST stained soils exhibiting strong odors were encountered at the base of the tank vault at a depth of 9 feet bgs. The stained soil extended to the bottom of the test pit (12 feet b.g.s.).

Soil Sampling

Soils observed in the test pit consisted of brown sand from the surface to 9 feet bgs (suspected to be fill sand from the vault installation). Below the brown sand is a 1-foot thick layer of fill (consisting primarily of brick demolition debris) underlain by a 1-foot thick layer of gravel and a red-brown silty sand.

A photo-ionization detector (PID) was used to monitor the air and soil during excavation. Soil samples were collected from the western side of the vault to be analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). SS-1 was collected from 13.5 feet to 14 feet bgs on the northern side of the western edge of the vault. Mild odors were observed during excavation activities. No PID readings were detected. Soil sample SS-2 was collected from 11.5 feet to 12 feet bgs from below the piping on the southern end of the western edge of the vault. Strong odors and stained soil were observed from 9 to 12 feet, but no PID readings were detected. Soil sample locations are shown on Figure 1. Upon completion of the investigation, EISCO backfilled the test pits with the soil that was removed and compacted the soil with the excavator bucket as backfilling proceeded. The gravel was replaced on the surface and compacted using a vibratory compactor.

Soil Laboratory Analytical Results

The soil samples were then placed on ice and submitted to Accutest Laboratories of Dayton, New Jersey, for analysis for VOCs and SVOCs. Laboratory analytical results for these soil samples are summarized in Table 1. The NYSDEC has a series of contaminant concentration clean-up objectives that can be applied to a site depending on a site's regulatory status (spill cases versus brownfield cases) and proposed usage (residential versus commercial etc.). The soil analytical results for soil sample SS-1 did not reveal any contaminants above NYSDEC Soil Clean-Up Objectives.

The soil analytical results for SS-2 identified the presence of several VOCs including ethylbenzene, xylenes, 1,2,4-trimethylbenzene, isopropylbenzene, and propylbenzene-n. These contaminants were all found in concentrations less than the Brownfield Residential Soil Clean-up Objectives (Subpart 375-6). Exceedence of several other soil clean-up objectives including the Protection of Groundwater Soil Clean-up Objectives and Soil Clean-up Levels for Gasoline Contaminated Sites (Table 2 of Commission's Policy CP-51) were identified. In addition, contaminants concentrations were detected in exceedence of NYSDEC Unrestricted Allowable Constituent Levels (DER-10) and therefore are precluded from re-use as "clean" fill, and, if excavated, must be sent to a permitted contaminated soil disposal facility. In addition, low

concentrations of poly-aromatic hydrocarbons (PAHs) were detected, though no exceedences of NYSDEC soil clean-up objectives were reported.

Soil samples were also analyzed for gasoline-related organics (GRO). Though NYSDEC does not have criteria for this analysis, it is a required parameter for waste disposal purposes. GRO was not detected in SS-1, however a concentration of 1,660 mg/kg was reported in SS-2 which is indicative of a moderate level of gasoline contamination. This concentration can normally be accepted for processing at several area disposal facilities permitted to handle petroleum-impacted soil.

Groundwater Sampling

A groundwater sample was collected from an existing piezometer location in the sidewalk near the northwest corner of the property. The location of the piezometer is shown on Figure 1. As well drawdown characteristics were unknown at the time a sampling, two samples were collected: first a pre-purge sample (GW-1) and then a post-purge (GW-2). The pre-purge sample (GW-1) involved the collection of a VOC sample using a dedicated disposal bailer followed by the collection of a SVOC sample using a peristaltic pump. The well was then sampled using the volume-averaging technique where three to five well volumes were purged from the piezometer using a peristaltic pump. Once the groundwater level in the piezometer recovered, a post-purge sample (GW-2) was collected using a peristaltic pump and bailer as described above.

Groundwater Laboratory Analytical Results

The groundwater samples were submitted to Accutest Laboratories for analysis for VOCs and SVOCs. The groundwater analytical results did not reveal any exceedences of the NYSDEC Groundwater Quality Criteria (either Part 703 or TAGM 4046).

CONCLUSIONS

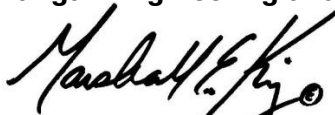
Based on observations made during the Phase II ESI activities, impacts associated with a discharge from the existing underground storage tank were observed at depths corresponding to the tank base and continuing to at least 12 feet bgs. Analytical results confirmed that impacts to soil associated with a release of gasoline are evident. Impacts to groundwater were not identified based on samples collected from a nearby piezometer; however, localized impacts to groundwater are anticipated based on field observations.

Based on the analytical results, notification to NYSDEC of a spill from the UST is required. The removal of the tank and associated impacted soil must be documented to NYSDEC Spills Management Bureau in order to allow for closure of the spill case. In addition, once the UST is removed, NYSDEC Petroleum Bulk Storage (PBS) records are required to be updated.

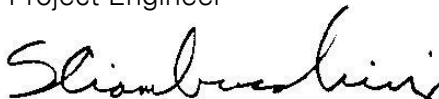
If you have any questions, please do not hesitate to contact us to discuss in more detail.

Sincerely,

Langan Engineering and Environmental Services, Inc., PC



Marshall E. King, P.E.
Project Engineer



Steven A. Ciambuschini, P.G., L.E.P.
Senior Associate / Vice President

MK:kn

Attachments: Figure 1 – Site Conditions Map
Table 1 – Soil Analytical Results Summary
Table 2 – Groundwater Analytical Results Summary
Attachment 1 – Photo Log
Attachment 2 – Test Pit Logs
Attachment 3 – Laboratory Analytical Data

NJ Certificate of Authorization No. 24GA27996400

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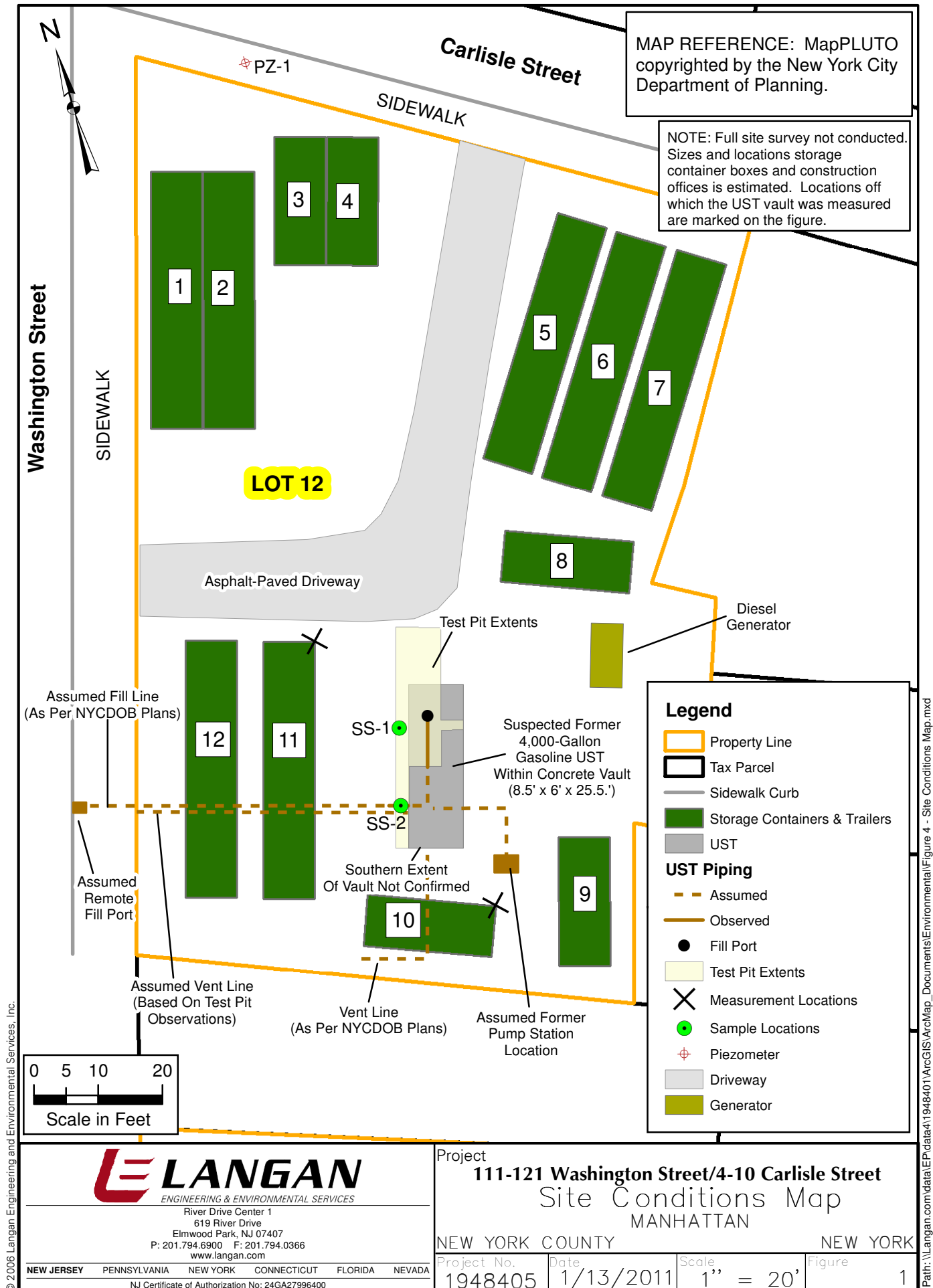


Table 1
Summary of Soil Analytical Results
111 Washington Street
New York, New York
Langan Project: 1948405

Sample ID Langan Sample Number		TAGM 4046/ STAR COMBINED	SUBPART 375-6 (Revised Brownfields) # - 9/2006 RESTRICTED USE SOIL CLEANUP OBJECTIVES			DER-10 (APPENDIX 5) - 5/3/2010	Commission's Policy CP-51 - SOIL CLEANUP GUIDANCE (Issued 10/21/2010, Effective 12/3/2010)			SS-1 001 JA96854-1/R 1/11/2012 13.5 - 14.0 (mg/kg) Q	SS-2 002 JA96854-2/R 1/11/2012 11.5 - 12.0 (mg/kg) Q
Lab Sample Number Sampling Date Sampling Depth (ft) Units:	CAS No.	RSCO's (mg/kg)	Residential (mg/kg)	Protection of Ecological Resources (mg/kg)	Protection of Groundwater (mg/kg)	UNRESTRICTED ALLOWABLE CONSTITUENT LEVELS (ACLs) (mg/kg)	Table 1: Supplemental Soil Cleanup Objectives Residential (mg/kg)	Protection of Groundwater (mg/kg)	Table 2: Soil Cleanup Levels for Gasoline Contaminated Soils (mg/kg)		
VOCs											
1,2,4-Trimethylbenzene	95-63-6	10*	---	---	---	3.6	---	---	3.6	ND	86.3 a
1,3,5-Trimethylbenzene	108-67-8	10*	---	---	---	8.4	---	---	8.4	ND	0.922
Acetone	67-64-1	0.2	100	2.2	0.05	0.05	---	---	---	0.0269	ND
Benzene	71-43-2	0.06 or MDL	2.9	70	0.06	0.06	---	---	0.06	0.0008 J	0.0145 J
n-Butylbenzene	104-51-8	10*	100	NS	12	12	---	---	12	ND	7.78
Ethylbenzene	100-41-4	5.5	30	NS	1	1	---	---	1	ND	10.4
Isopropylbenzene	98-82-8	10*	---	---	---	---	100	2.3	2.3	ND	3.08
p-Isopropyltoluene	99-87-6	---	---	---	---	---	---	10	10	ND	1.56
Naphthalene	91-20-3	---	---	---	---	---	---	---	---	ND	14.8 a
Propylbenzene-n	103-65-1	3.7	100	NS	3.9	3.9	---	---	3.9	ND	12.9
Sec-Butylbenzene	135-98-8	10	100	NS	11	11	---	---	11	ND	2.21
Toluene	108-88-3	1.5	100	36	0.7	0.7	---	---	0.7	ND	0.0269 J
Xylene (mixed)	1330-20-7	1.2	100	0.26	1.6	0.26	---	---	0.26	ND	14.6
Total VOC	---	10	---	---	---	---	---	---	---	0.0277	154.5934
PAHs											
Acenaphthene	83-32-9	50*	100	20	98	20	---	---	---	ND	0.0302 J
Anthracene	120-12-7	50*	100	NS	1,000	100	---	---	---	ND	0.0195 J
Fluoranthene	206-44-0	50*	100	NS	1,000	100	---	---	---	ND	0.0259 J
Fluorene	86-73-7	50*	100	30	386	30	---	---	---	ND	0.0425
Naphthalene	91-20-3	13	100	NS	12	12	---	---	12	0.06	1.49
Phenanthrene	85-01-8	50*	100	NS	1,000	100	---	---	---	ND	0.0717
Pyrene	129-00-0	50*	100	NS	1,000	100	---	---	---	ND	0.0311 J
Total PAHs	---	500	---	---	---	---	---	---	---	0.06	1.7109
Miscellaneous											
TPH-GRO (C6-C10)	---	---	---	---	---	---	---	---	---	ND	1,660

NOTES:
J: Estimated Value
a: Result from second run.
* : No criteria established, value is generic criteria
SB: Site Background
**See New Jersey Criteria until New York state criteria are adapted
***Standards exist for additional criteria not listed in this table
See table below for Generic Cap Approach Values from the New York State Brownfield Cleanup Program Development of Soil Cleanup Objectives Technical Support Document Section 9.3, Cap Approach and Values, dated September 2006.

Use of the Site	Maximum SCOs for Individual
Unrestricted	100 ppm
Residential	100 ppm
Restricted Residential	100 ppm
Commercial	500 ppm
Industrial	1000 ppm
Groundwater	1000 ppm
Ecological Resources	100 ppm

Table 2
Summary of Groundwater Analytical Results

111 Washington Street
New York, New York
Langan Project: 1948405

Sample ID Langan Sample Number Lab Sample Number Sampling Date Units:	CAS No.	Ground Water Quality Standards			GW-1 003 JA96854-3 1/11/2012 ug/L Q	GW-2 004 JA96854-4 1/11/2012 ug/L Q	TB-1 005 JA96854-5 1/11/2012 ug/L Q
		Part 703*** (ug/L)	TAGM 4046 (ug/L)	Limitations for Effluent to Sanitary or Combined Sewers (ppb)			
VOCs							
Methyl tert-butyl ether	1634-04-4	10	5*	50	0.38 J	0.52 J	ND
Total VOC	---	---	10	---	0.38	0.52	ND
PAHs							
Fluoranthene	206-44-0	5*	50	---	0.56 J	0.46 J	NA
Total PAHs	---	5*	550	---	0.56	0.46	NA

NOTES:

J: Estimated value

---: No criteria established

* : No criteria established, value is generic criteria

***Standards exist for additional criteria not listed in this table

NYSDEC Groundwater Criteria are a combination of values from Part 703 if the NYS Code and TAGM 4046. Most values are generic screening values, however where contaminant specific criteria have been established they are used in this table. Limitations for Effluent to Sanitary or Combined Sewers taken from Table A of the Procedure for Obtaining Letter of Approval for Groundwater Discharge to Sanitary or Combined Sewer dated November 2009.



Photo 1: Approximate location of the suspected UST. Facing south. 4 January 2012.



Photo 2: A concrete structure was encountered while performing test pitting to locate the suspected UST. Facing east. 11 January 2012.



Photo 3: Piping connected to the concrete structure was identified. Facing south. 11 January 2012.



Photo 4: View of the southern sidewall at the location of SS-1. 11 January 2012.



Photo 5: The test pit extended along the length of the western edge of the concrete vault. Facing south. 11 January 2012.



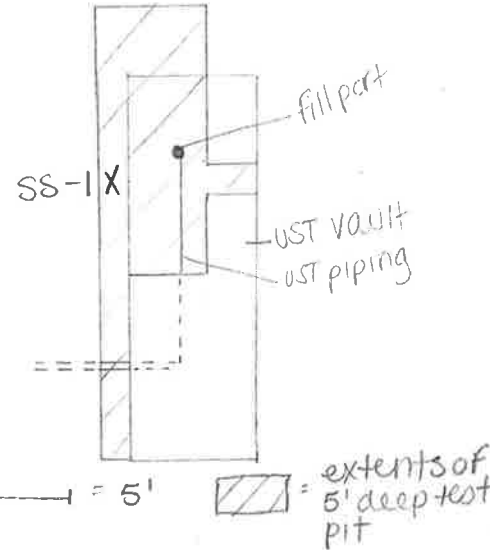
Photo 6: Piping associated with the UST was encountered at the southern end of the test pit. Facing south. 11 January 2012.



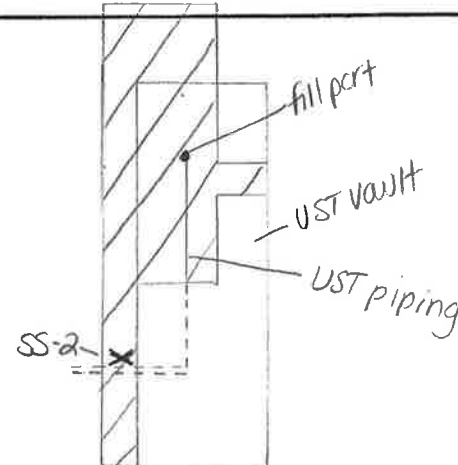
Photo 7: View of the southern sidewall at the location of SS-2. 11 January 2012.



Photo 8: The test pit location was restored to its previous condition at the completion of work. Facing south. 11 January 2012.

PROJECT <u>Former Parking Garage</u>			PROJECT NO. <u>1948405</u>		
LOCATION <u>111-121 Washington St, New York, NY</u>			ELEVATION AND DATUM <u>±10 ft - USGS</u>		
EXCAVATION CONTRACTOR <u>EISCO - NJ</u>			DATE <u>1/11/12</u>		COMPLETION DEPTH <u>13.5'</u>
EXCAVATION EQUIPMENT <u>John Deere 35D Track-Mounted Excavator</u>			OBSERVED WATER LEVEL DATA <u>N/A</u>		
PID ELEV. (ppm)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE		REMARKS
			NO	LOG TYPE	
	0'-1' - gravel underlain by asphalt	1			 * SS-1 was excavated to 13.5' bgs for sampling purposes. The remainder of test pitting activities were completed to confirm the location + dimensions of the tank. The rest of the test pit area was excavated to only 5' bgs. Piping was observed immediately on top of the tank. TP-1/SS-1 completed at 13.5' SS-1 collected 13.5'-14' mild odor <u>Tank</u> 8.5' x 25.5' x 6' Top = 3' bgs Bottom = 9' bgs
	1'-9' - brown silty sand, some cobble, moist	2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			
	9'-9.5' - brick	10			
	9.5'-10' - gravel, sand	11			
	10'-13.5' - orangish brown silt	12			
		13			
		14			
		15			
		16			

PROJECT <u>Former Parking Garage</u>			PROJECT NO. <u>1948405</u>		
LOCATION <u>111-121 Washington Street, New York, NY</u>			ELEVATION AND DATUM <u>±10 ft - USGS</u>		
EXCAVATION CONTRACTOR <u>EISCO - NJ</u>			DATE <u>1/11/12</u>		COMPLETION DEPTH <u>11.5'</u>
EXCAVATION EQUIPMENT <u>John Deere 35D Track-mounted Excavator</u>			OBSERVED WATER LEVEL DATA <u>N/A</u>		

PTD ELEV. (ppm)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE		REMARKS
			NO	LOC	
	0'-1' - gravel underlain by asphalt	1			 1" = 5'  = extents of 5' deep test pit *SS-2 was excavated to 11.5' bgs for sampling purposes. The remainder of test pitting activities were completed to confirm the location + dimensions of tank. The rest of the test pit area was excavated to only 5' bgs. Piping was observed immediately on top of the tank. TP-2/SS-2 completed at 11.5'
	1'-6' - brown silty sand, some cobble, tr brick, moist	2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			
		10			
		11			
	6'-11.5' - black stained silty sand, some cobble, tr brick	12	SS-2	grab	SS-2 collected 11.5' - 12' black stained soil strong odor
		13			
		14			
		15			
		16			

Tank
8.5' x 25.5' x 6'
Top = 3' bgs
Bottom = 9' bgs



01/25/12

Technical Report for

Langan Engineering & Environmental

111 Washington Street, New York, NY

1948405

Accutest Job Number: JA96854

Sampling Date: 01/11/12

Report to:

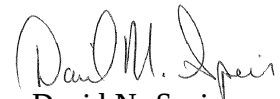
Langan Engineering & Environmental
619 River Drive, Center #1
Elmwood Park, NJ 07407
mking@langan.com

ATTN: Marshall King

Total number of pages in report: **948**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


David N. Speis
VP, Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Sample Summary

Langan Engineering & Environmental

Job No: JA96854

111 Washington Street, New York, NY

Project No: 1948405

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
JA96854-1	01/11/12	14:00	AF	01/12/12	SO	Soil	SS-1 001
JA96854-1R	01/11/12	14:00	AF	01/12/12	SO	Soil	SS-1 001
JA96854-2	01/11/12	15:25	AF	01/12/12	SO	Soil	SS-2 002
JA96854-2R	01/11/12	15:25	AF	01/12/12	SO	Soil	SS-2 002
JA96854-3	01/11/12	17:40	AF	01/12/12	AQ	Ground Water	GW-1 003
JA96854-4	01/11/12	18:25	AF	01/12/12	AQ	Ground Water	GW-2 004
JA96854-5	01/11/12	18:25	AF	01/12/12	AQ	Trip Blank Water	TB-1 005

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Langan Engineering & Environmental

Job No JA96854

Site: 111 Washington Street, New York, NY

Report Date 1/25/2012 8:36:54 AM

On 01/12/2012, 4 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 3.4 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA96854 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: V2B4134

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA97075-1MS, JA97075-4DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for 1,1-Dichloroethene are outside control limits for sample JA97075-4DUP. High RPD due to low concentration of hit

Matrix: SO

Batch ID: VD7804

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA96938-12MS, JA96938-12MSD were used as the QC samples indicated.

Matrix: SO

Batch ID: VE8236

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA97134-2MS, JA97134-2MSD were used as the QC samples indicated.

Matrix: SO

Batch ID: VY5108

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA96920-3MS, JA96920-4DUP were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ

Batch ID: OP54208

- All samples were extracted within the recommended method holding time.
- Sample(s) JA96827-1MS, JA96827-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: OP54195

- All samples were extracted within the recommended method holding time.
- Sample(s) JA96820-1MS, JA96820-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846 8015C**Matrix:** SO**Batch ID:** GUV3747

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA96374-18AMS, JA96374-18AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO**Batch ID:** GUV3751

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA96480-23MS, JA96480-23MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method ASTM 4643-00**Matrix:** SO**Batch ID:** GN60407

- The data for ASTM 4643-00 meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

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Client Sample ID:	SS-1 001	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-1	Date Received:	01/12/12
Matrix:	SO - Soil	Percent Solids:	72.8
Method:	SW846 8260B SW846 5035		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y119503.D	1	01/17/12	RS	01/12/12 12:05	n/a	VY5108
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0269	0.015	0.0099	mg/kg	
71-43-2	Benzene	0.00080	0.0015	0.00020	mg/kg	J
78-93-3	2-Butanone (MEK)	ND	0.015	0.0065	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0075	0.00035	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0075	0.00024	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0075	0.00021	mg/kg	
75-15-0	Carbon disulfide	ND	0.0075	0.00029	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0075	0.00052	mg/kg	
108-90-7	Chlorobenzene	ND	0.0075	0.00048	mg/kg	
75-00-3	Chloroethane	ND	0.0075	0.00061	mg/kg	
67-66-3	Chloroform	ND	0.0075	0.00072	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0075	0.00025	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0075	0.00041	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0075	0.00029	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0075	0.00025	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0075	0.00033	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0015	0.00027	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0075	0.00092	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0075	0.00063	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0075	0.00056	mg/kg	
100-41-4	Ethylbenzene	ND	0.0015	0.00022	mg/kg	
76-13-1	Freon 113	ND	0.0075	0.0011	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0075	0.00020	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0075	0.00044	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0015	0.00027	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0075	0.0039	mg/kg	
75-09-2	Methylene chloride	ND	0.0075	0.00034	mg/kg	
91-20-3	Naphthalene	ND	0.0075	0.0016	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0075	0.00052	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0075	0.00027	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0075	0.00029	mg/kg	
108-88-3	Toluene	ND	0.0015	0.00056	mg/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SS-1 001	
Lab Sample ID: JA96854-1	Date Sampled: 01/11/12
Matrix: SO - Soil	Date Received: 01/12/12
Method: SW846 8260B SW846 5035	Percent Solids: 72.8
Project: 111 Washington Street, New York, NY	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	0.0075	0.00051	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0075	0.00036	mg/kg	
79-01-6	Trichloroethene	ND	0.0075	0.00037	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0075	0.0016	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0075	0.0017	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0075	0.00019	mg/kg	
75-01-4	Vinyl chloride	ND	0.0075	0.00069	mg/kg	
1330-20-7	Xylene (total)	ND	0.0015	0.00027	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		67-131%
17060-07-0	1,2-Dichloroethane-D4	109%		66-130%
2037-26-5	Toluene-D8	103%		76-125%
460-00-4	4-Bromofluorobenzene	102%		53-142%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	SS-1 001	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-1	Date Received:	01/12/12
Matrix:	SO - Soil	Percent Solids:	72.8
Method:	SW846 8270D SW846 3550C		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84312.D	1	01/14/12	KLS	01/13/12	OP54195	EM3363
Run #2							

	Initial Weight	Final Volume
Run #1	35.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.039	0.011	mg/kg	
208-96-8	Acenaphthylene	ND	0.039	0.012	mg/kg	
120-12-7	Anthracene	ND	0.039	0.014	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.039	0.013	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.039	0.012	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.039	0.013	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.039	0.015	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.039	0.015	mg/kg	
218-01-9	Chrysene	ND	0.039	0.013	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.039	0.013	mg/kg	
206-44-0	Fluoranthene	ND	0.039	0.017	mg/kg	
86-73-7	Fluorene	ND	0.039	0.013	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.039	0.014	mg/kg	
91-20-3	Naphthalene	0.0600	0.039	0.011	mg/kg	
85-01-8	Phenanthrene	ND	0.039	0.018	mg/kg	
129-00-0	Pyrene	ND	0.039	0.015	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		21-122%
321-60-8	2-Fluorobiphenyl	82%		30-117%
1718-51-0	Terphenyl-d14	112%		31-129%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	SS-1 001	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-1R	Date Received:	01/12/12
Matrix:	SO - Soil	Percent Solids:	72.8
Method:	SW846 8015C		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV94803.D	1	01/17/12	RP	n/a	n/a	GUV3747
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	17	3.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	89%		66-119%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	SS-2 002	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-2	Date Received:	01/12/12
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8260B SW846 5035		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E187223.D	1	01/19/12	DPP	01/12/12 12:05	n/a	VE8236
Run #2	D191683.D	1	01/19/12	ET	01/12/12 12:05	n/a	VD7804

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.9 g	5.0 ml	100 ul
Run #2	4.9 g	5.0 ml	5.0 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.69	0.45	mg/kg	
71-43-2	Benzene	0.0145	0.069	0.0091	mg/kg	J
78-93-3	2-Butanone (MEK)	ND	0.69	0.30	mg/kg	
104-51-8	n-Butylbenzene	7.78	0.34	0.016	mg/kg	
135-98-8	sec-Butylbenzene	2.21	0.34	0.011	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.34	0.0095	mg/kg	
75-15-0	Carbon disulfide	ND	0.34	0.013	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.34	0.024	mg/kg	
108-90-7	Chlorobenzene	ND	0.34	0.022	mg/kg	
75-00-3	Chloroethane	ND	0.34	0.028	mg/kg	
67-66-3	Chloroform	ND	0.34	0.033	mg/kg	
124-48-1	Dibromochloromethane	ND	0.34	0.012	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.34	0.019	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.34	0.013	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.34	0.012	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.34	0.015	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.069	0.012	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.34	0.042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.34	0.029	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.34	0.026	mg/kg	
100-41-4	Ethylbenzene	10.4	0.069	0.010	mg/kg	
76-13-1	Freon 113	ND	0.34	0.049	mg/kg	
98-82-8	Isopropylbenzene	3.08	0.34	0.0094	mg/kg	
99-87-6	p-Isopropyltoluene	1.56	0.34	0.020	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.069	0.012	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.34	0.18	mg/kg	
75-09-2	Methylene chloride	ND	0.34	0.016	mg/kg	
91-20-3	Naphthalene	14.8 ^a	6.9	1.5	mg/kg	
103-65-1	n-Propylbenzene	12.9	0.34	0.024	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.34	0.012	mg/kg	
127-18-4	Tetrachloroethene	ND	0.34	0.013	mg/kg	
108-88-3	Toluene	0.0269	0.069	0.026	mg/kg	J

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SS-2 002	Date Sampled: 01/11/12
Lab Sample ID: JA96854-2	Date Received: 01/12/12
Matrix: SO - Soil	Percent Solids: 85.2
Method: SW846 8260B SW846 5035	
Project: 111 Washington Street, New York, NY	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	0.34	0.023	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.34	0.017	mg/kg	
79-01-6	Trichloroethene	ND	0.34	0.017	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.34	0.073	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	86.3 ^a	6.9	1.5	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.922	0.34	0.0087	mg/kg	
75-01-4	Vinyl chloride	ND	0.34	0.032	mg/kg	
1330-20-7	Xylene (total)	14.6	0.069	0.013	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	91%	67-131%
17060-07-0	1,2-Dichloroethane-D4	83%	86%	66-130%
2037-26-5	Toluene-D8	91%	99%	76-125%
460-00-4	4-Bromofluorobenzene	93%	88%	53-142%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	SS-2 002	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-2	Date Received:	01/12/12
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8270D SW846 3550C		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M84313.D	1	01/14/12	KLS	01/13/12	OP54195	EM3363
Run #2							

	Initial Weight	Final Volume
Run #1	35.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0302	0.033	0.0097	mg/kg	J
208-96-8	Acenaphthylene	ND	0.033	0.011	mg/kg	
120-12-7	Anthracene	0.0195	0.033	0.012	mg/kg	J
56-55-3	Benzo(a)anthracene	ND	0.033	0.011	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.033	0.010	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.033	0.011	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.033	0.012	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.033	0.013	mg/kg	
218-01-9	Chrysene	ND	0.033	0.011	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.033	0.011	mg/kg	
206-44-0	Fluoranthene	0.0259	0.033	0.015	mg/kg	J
86-73-7	Fluorene	0.0425	0.033	0.011	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.033	0.012	mg/kg	
91-20-3	Naphthalene	1.49	0.033	0.0091	mg/kg	
85-01-8	Phenanthrene	0.0717	0.033	0.015	mg/kg	
129-00-0	Pyrene	0.0311	0.033	0.013	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	55%		21-122%
321-60-8	2-Fluorobiphenyl	52%		30-117%
1718-51-0	Terphenyl-d14	75%		31-129%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	SS-2 002	
Lab Sample ID:	JA96854-2R	Date Sampled: 01/11/12
Matrix:	SO - Soil	Date Received: 01/12/12
Method:	SW846 8015C	Percent Solids: 85.2
Project:	111 Washington Street, New York, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV94884.D	1	01/20/12	RP	n/a	n/a	GUV3751
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	50.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1660	27	4.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	104%		66-119%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	GW-1 003	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-3	Date Received:	01/12/12
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B91902.D	1	01/17/12	DR	n/a	n/a	V2B4134
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.33	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.24	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.19	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.38	1.0	0.18	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.68	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GW-1 003	Date Sampled: 01/11/12
Lab Sample ID: JA96854-3	Date Received: 01/12/12
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: 111 Washington Street, New York, NY	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.54	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.18	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.23	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		77-120%
17060-07-0	1,2-Dichloroethane-D4	99%		70-127%
2037-26-5	Toluene-D8	103%		79-120%
460-00-4	4-Bromofluorobenzene	104%		76-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GW-1 003	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-3	Date Received:	01/12/12
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R91075.D	1	01/16/12	RG	01/13/12	OP54208	ER3517
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.25	ug/l	
120-12-7	Anthracene	ND	1.1	0.32	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.25	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.25	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.51	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.36	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.57	ug/l	
218-01-9	Chrysene	ND	1.1	0.32	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.42	ug/l	
206-44-0	Fluoranthene	0.56	1.1	0.35	ug/l	J
86-73-7	Fluorene	ND	1.1	0.31	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.42	ug/l	
91-20-3	Naphthalene	ND	1.1	0.29	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.32	ug/l	
129-00-0	Pyrene	ND	1.1	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%		38-129%
321-60-8	2-Fluorobiphenyl	77%		42-117%
1718-51-0	Terphenyl-d14	90%		14-132%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID:	GW-2 004	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-4	Date Received:	01/12/12
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B91903.D	1	01/17/12	DR	n/a	n/a	V2B4134
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.33	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.24	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.19	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.52	1.0	0.18	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.68	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GW-2 004	Date Sampled: 01/11/12
Lab Sample ID: JA96854-4	Date Received: 01/12/12
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: 111 Washington Street, New York, NY	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.54	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.18	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.23	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		77-120%
17060-07-0	1,2-Dichloroethane-D4	99%		70-127%
2037-26-5	Toluene-D8	102%		79-120%
460-00-4	4-Bromofluorobenzene	103%		76-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	GW-2 004	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-4	Date Received:	01/12/12
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R91076.D	1	01/16/12	RG	01/13/12	OP54208	ER3517
Run #2							

	Initial Volume	Final Volume
Run #1	965 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	1.6	1.0	0.27	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
120-12-7	Anthracene	ND	1.0	0.30	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.23	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.23	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.47	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.33	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.53	ug/l	
218-01-9	Chrysene	ND	1.0	0.30	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.39	ug/l	
206-44-0	Fluoranthene	0.46	1.0	0.33	ug/l	J
86-73-7	Fluorene	ND	1.0	0.29	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.39	ug/l	
91-20-3	Naphthalene	ND	1.0	0.27	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.30	ug/l	
129-00-0	Pyrene	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		38-129%
321-60-8	2-Fluorobiphenyl	78%		42-117%
1718-51-0	Terphenyl-d14	87%		14-132%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID:	TB-1 005	Date Sampled:	01/11/12
Lab Sample ID:	JA96854-5	Date Received:	01/12/12
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	111 Washington Street, New York, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B91904.D	1	01/17/12	DR	n/a	n/a	V2B4134
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.33	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.24	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.19	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.68	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB-1 005	Date Sampled: 01/11/12
Lab Sample ID: JA96854-5	Date Received: 01/12/12
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: SW846 8260B	
Project: 111 Washington Street, New York, NY	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.54	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.18	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.23	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		77-120%
17060-07-0	1,2-Dichloroethane-D4	98%		70-127%
2037-26-5	Toluene-D8	104%		79-120%
460-00-4	4-Bromofluorobenzene	105%		76-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



Sample Log-In Summary

JA96854

Lab Name:

Accutest

Page 1 of 1

Received by (Print Name):

T. Hedson

Received by (Signature):

[Signature]

Log-in Date: 1/12/2012

Case Number:

N/A

SDG Number:

N/A

SAS Number:

N/A

REMARKS:

Custody Seal(s)

Present/Absent*
Intact/Broken

Custody Seal

Numbers:

Chain-of-Custody

Records

Contract Lab

Sample Inform.

Sheet (CLISIS)

Airbill

Airbill No.:

Airbill/Sticker
Present/Absent*
Receipt/Consign Invoice

Sample Tags

Sample Tag Nos.

Sample Condition

Does Information

on custody rec.

CLISIS, & sample

tags agree

Date received

at Lab:

Time Received:

Do aqueous VOC vials

have headspace?

Are preserved voc

samples fully in-

serted in preservative?

Yes/No* (N/A)

Sample Transfer

Location:

See Internal

Chain of Custody

Contract BTSR and attach record of resolution

Reviewed By:

Signature

Logbook No.:

Logbook Page No.:

N/A

N/A

JA96854: Chain of Custody

Page 1 of 4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number JA96854

Client:

Date / Time Received: 1/12/2012

Project:

No. Coolers: 1

Airbill #'s:

Delivery Method:

Cooler Security

Y or N

Y or N

1. Custody Seals Present:	☒	☐	3. COC Present:	☒	☐
2. Custody Seals Intact:	☒	☐	4. Smpl Dates/Time OK	☒	☐

Cooler Temperature

Y or N

1. Temp criteria achieved:	☒	☐
2. Cooler temp verification:		
3. Cooler media:	Ice (Bag)	

Quality Control Preservation

Y or N

N/A

1. Trip Blank present / cooler:	☒	☐	☐
2. Trip Blank listed on COC:	☒	☐	☐
3. Samples preserved properly:	☒	☐	
4. VOCs headspace free:	☒	☐	☐

Sample Integrity - Documentation

Y or N

1. Sample labels present on bottles:	☒	☐
2. Container labeling complete:	☒	☐
3. Sample container label / COC agree:	☒	☐

Sample Integrity - Condition

Y or N

1. Sample recvd within HT:	☒	☐
2. All containers accounted for:	☒	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions

Y or N N/A

1. Analysis requested is clear:	☒	☐	
2. Bottles received for unspecified tests	☐	☒	
3. Sufficient volume recvd for analysis:	☒	☐	
4. Compositing instructions clear:	☐	☐	☒
5. Filtering instructions clear:	☐	☐	☒

Comments



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2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.acutest.com

[illegible]

IND TR,

JA96854: Chain of Custody

Page 3 of 4

Job Change Order: JA96854_1/16/2012

Requested Date: 1/16/2012
Account Name: Langan Engineering &
Project: 111 Washington Street, New York, NY
SR: TM

Received Date: 1/12/2012
Due Date: 1/19/2012
Deliverable: NYASPB
TAT (Days): 3

Sample #: JA96854-1

Change: relog for GRO due 1/19/12

SS-1 001

Sample #: JA96854-2

Change: relog for GRO due 1/19/12

SS-2 002

Approved Changes Per: Marshall King Date: 1/16/2012

Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

Internal Sample Tracking Chronicle

Langan Engineering & Environmental

Job No: JA96854

111 Washington Street, New York, NY

Project No: 1948405

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA96854-1 Collected: 11-JAN-12 14:00 By: AF Received: 12-JAN-12 By: TH SS-1 001						
JA96854-1	ASTM 4643-00	11-JAN-12	WR			%SOL
JA96854-1	SW846 8270D	14-JAN-12 12:07	KLS	13-JAN-12	JL	B8270TAGMPET
JA96854-1	SW846 8260B	17-JAN-12 19:21	RS			V8260STRTAGM
JA96854-2 Collected: 11-JAN-12 15:25 By: AF Received: 12-JAN-12 By: TH SS-2 002						
JA96854-2	ASTM 4643-00	11-JAN-12	WR			%SOL
JA96854-2	SW846 8270D	14-JAN-12 12:37	KLS	13-JAN-12	JL	B8270TAGMPET
JA96854-2	SW846 8260B	19-JAN-12 01:59	DPP			V8260STRTAGM
JA96854-2	SW846 8260B	19-JAN-12 12:48	ET			V8260STRTAGM
JA96854-3 Collected: 11-JAN-12 17:40 By: AF Received: 12-JAN-12 By: TH GW-1 003						
JA96854-3	SW846 8270D	16-JAN-12 11:26	RG	13-JAN-12	RSJ	B8270TAGMPET
JA96854-3	SW846 8260B	17-JAN-12 03:57	DR			V8260STRTAGM
JA96854-4 Collected: 11-JAN-12 18:25 By: AF Received: 12-JAN-12 By: TH GW-2 004						
JA96854-4	SW846 8270D	16-JAN-12 11:59	RG	13-JAN-12	RSJ	B8270TAGMPET
JA96854-4	SW846 8260B	17-JAN-12 04:29	DR			V8260STRTAGM
JA96854-5 Collected: 11-JAN-12 18:25 By: AF Received: 12-JAN-12 By: TH TB-1 005						
JA96854-5	SW846 8260B	17-JAN-12 05:00	DR			V8260STRTAGM
JA96854-1R Collected: 11-JAN-12 14:00 By: AF Received: 12-JAN-12 By: TH SS-1 001						
JA96854-1R	SW846 8015C	17-JAN-12 20:11	RP			V8015GRO
JA96854-2R Collected: 11-JAN-12 15:25 By: AF Received: 12-JAN-12 By: TH SS-2 002						

Internal Sample Tracking Chronicle

Langan Engineering & Environmental

Job No: JA96854

111 Washington Street, New York, NY
Project No: 1948405

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA96854-2R	SW846 8015C	20-JAN-12 10:31	RP			V8015GRO

Accutest Internal Chain of Custody

Page 1 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY
Received: 01/12/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA96854-1.1	Secured Storage	Janet Lee	01/13/12 08:28	Retrieve from Storage
JA96854-1.1	Janet Lee	Secured Storage	01/13/12 16:36	Return to Storage
JA96854-1.1	Secured Storage	Adam Scott	01/17/12 10:27	Retrieve from Storage
JA96854-1.1	Adam Scott	Richa Patel	01/17/12 10:29	Custody Transfer
JA96854-1.1	Richa Patel	Secured Storage	01/17/12 17:19	Return to Storage
JA96854-1.1.1	Janet Lee	Organics Prep	01/13/12 08:32	Extract from JA96854-1.1
JA96854-1.1.1	Organics Prep	Janet Lee	01/13/12 16:14	Extract from JA96854-1.1
JA96854-1.1.1	Janet Lee	Extract Storage	01/13/12 16:14	Return to Storage
JA96854-1.1.1	Extract Storage	Kristi Schollenberger	01/14/12 10:04	Retrieve from Storage
JA96854-1.1.1	Kristi Schollenberger	GCMSM	01/14/12 10:04	Load on Instrument
JA96854-1.1.1	GCMSM	Olga Azarihn	01/16/12 09:14	Unload from Instrument
JA96854-1.1.1	Olga Azarihn	Extract Freezer	01/16/12 09:14	Return to Storage
JA96854-1.2	Secured Storage	Todd Shoemaker	01/13/12 08:28	Retrieve from Storage
JA96854-1.2	Todd Shoemaker	Wojciech Rodzik	01/13/12 08:29	Custody Transfer
JA96854-1.2	Wojciech Rodzik	Secured Storage	01/13/12 11:07	Return to Storage
JA96854-1.4	Secured Storage	Meng Han	01/12/12 12:40	Retrieve from Storage
JA96854-1.4	Meng Han	Secured Storage	01/12/12 12:41	Return to Storage
JA96854-1.5	Secured Storage	Meng Han	01/12/12 12:40	Retrieve from Storage
JA96854-1.5	Meng Han	Secured Storage	01/12/12 12:41	Return to Storage
JA96854-1.6	Secured Storage	Meng Han	01/12/12 12:40	Retrieve from Storage
JA96854-1.6	Meng Han	Secured Storage	01/12/12 12:41	Return to Storage
JA96854-1.6	Secured Storage	Robert Szot	01/17/12 14:08	Retrieve from Storage
JA96854-1.6	Robert Szot	GCMSY	01/17/12 14:08	Load on Instrument
JA96854-1.6	GCMSY	Robert Szot	01/18/12 12:21	Unload from Instrument
JA96854-1.6	Robert Szot		01/18/12 12:21	Depleted
JA96854-2.1	Secured Storage	Janet Lee	01/13/12 08:28	Retrieve from Storage
JA96854-2.1	Janet Lee	Secured Storage	01/13/12 16:36	Return to Storage
JA96854-2.1	Secured Storage	Adam Scott	01/17/12 10:27	Retrieve from Storage
JA96854-2.1	Adam Scott	Richa Patel	01/17/12 10:29	Custody Transfer
JA96854-2.1	Richa Patel	Secured Storage	01/17/12 17:19	Return to Storage
JA96854-2.1.1	Janet Lee	Organics Prep	01/13/12 08:32	Extract from JA96854-2.1
JA96854-2.1.1	Organics Prep	Janet Lee	01/13/12 16:14	Extract from JA96854-2.1
JA96854-2.1.1	Janet Lee	Extract Storage	01/13/12 16:14	Return to Storage
JA96854-2.1.1	Extract Storage	Kristi Schollenberger	01/14/12 10:04	Retrieve from Storage
JA96854-2.1.1	Kristi Schollenberger	GCMSM	01/14/12 10:04	Load on Instrument
JA96854-2.1.1	GCMSM	Olga Azarihn	01/16/12 09:14	Unload from Instrument
JA96854-2.1.1	Olga Azarihn	Extract Freezer	01/16/12 09:14	Return to Storage

Accutest Internal Chain of Custody

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY
Received: 01/12/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA96854-2.2	Secured Storage	Todd Shoemaker	01/13/12 08:28	Retrieve from Storage
JA96854-2.2	Todd Shoemaker	Wojciech Rodzik	01/13/12 08:29	Custody Transfer
JA96854-2.2	Wojciech Rodzik	Secured Storage	01/13/12 11:07	Return to Storage
JA96854-2.4	Secured Storage	Meng Han	01/12/12 12:40	Retrieve from Storage
JA96854-2.4	Meng Han	Secured Storage	01/12/12 12:41	Return to Storage
JA96854-2.4	Secured Storage	Oksana Treglazova	01/18/12 12:40	Retrieve from Storage
JA96854-2.4	Oksana Treglazova	Secured Storage	01/18/12 15:53	Return to Storage
JA96854-2.5	Secured Storage	Meng Han	01/12/12 12:40	Retrieve from Storage
JA96854-2.5	Meng Han	Secured Storage	01/12/12 12:41	Return to Storage
JA96854-2.6	Secured Storage	Meng Han	01/12/12 12:40	Retrieve from Storage
JA96854-2.6	Meng Han	Secured Storage	01/12/12 12:41	Return to Storage
JA96854-3.2	Secured Storage	Reginald Saint-Juste	01/13/12 14:57	Retrieve from Storage
JA96854-3.2	Reginald Saint-Juste		01/13/12 16:54	Depleted
JA96854-3.2.1	Reginald Saint-Juste	Organics Prep	01/13/12 14:57	Extract from JA96854-3.2
JA96854-3.2.1	Organics Prep	Reginald Saint-Juste	01/13/12 16:47	Extract from JA96854-3.2
JA96854-3.2.1	Reginald Saint-Juste	Extract Storage	01/13/12 16:47	Return to Storage
JA96854-3.2.1	Extract Storage	Kristi Schollenberger	01/14/12 13:02	Retrieve from Storage
JA96854-3.2.1	Kristi Schollenberger	GCMSR	01/14/12 13:03	Load on Instrument
JA96854-3.2.1	GCMSR	Rachel Gregor	01/18/12 15:41	Unload from Instrument
JA96854-3.2.1	Rachel Gregor	Extract Freezer	01/18/12 15:41	Return to Storage
JA96854-3.4	Secured Storage	Dezaree Reis	01/13/12 15:50	Retrieve from Storage
JA96854-3.4	Dezaree Reis	VOA Prep Storage	01/13/12 15:50	Return to Storage
JA96854-3.4	VOA Prep Storage	Henny Salim	01/14/12 13:02	Retrieve from Storage
JA96854-3.4	Henny Salim	GCMS2B	01/14/12 13:02	Load on Instrument
JA96854-3.4	GCMS2B	Henny Salim	01/14/12 13:05	Unload from Instrument
JA96854-3.4	Henny Salim	GCMS2C	01/14/12 13:05	Load on Instrument
JA96854-3.4	GCMS2C	Dezaree Reis	01/16/12 16:38	Unload from Instrument
JA96854-3.4	Dezaree Reis	Secured Storage	01/16/12 16:38	Return to Storage
JA96854-3.4	Secured Storage	Dezaree Reis	01/16/12 16:39	Retrieve from Storage
JA96854-3.4	Dezaree Reis	GCMS2B	01/16/12 16:39	Load on Instrument
JA96854-3.4	GCMS2B	Dezaree Reis	01/17/12 11:20	Unload from Instrument
JA96854-3.4	Dezaree Reis	Secured Storage	01/17/12 11:20	Return to Storage
JA96854-4.2	Secured Storage	Reginald Saint-Juste	01/13/12 14:57	Retrieve from Storage
JA96854-4.2	Reginald Saint-Juste		01/13/12 16:54	Depleted
JA96854-4.2.1	Reginald Saint-Juste	Organics Prep	01/13/12 14:57	Extract from JA96854-4.2

Accutest Internal Chain of Custody

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY
Received: 01/12/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA96854-4.2.1	Organics Prep	Reginald Saint-Juste	01/13/12 16:47	Extract from JA96854-4.2
JA96854-4.2.1	Reginald Saint-Juste	Extract Storage	01/13/12 16:47	Return to Storage
JA96854-4.2.1	Extract Storage	Kristi Schollenberger	01/14/12 13:02	Retrieve from Storage
JA96854-4.2.1	Kristi Schollenberger	GCMSR	01/14/12 13:03	Load on Instrument
JA96854-4.2.1	GCMSR	Rachel Gregor	01/18/12 15:41	Unload from Instrument
JA96854-4.2.1	Rachel Gregor	Extract Freezer	01/18/12 15:41	Return to Storage
JA96854-4.4	Secured Storage	Dezaree Reis	01/13/12 15:50	Retrieve from Storage
JA96854-4.4	Dezaree Reis	VOA Prep Storage	01/13/12 15:50	Return to Storage
JA96854-4.4	VOA Prep Storage	Henny Salim	01/14/12 13:02	Retrieve from Storage
JA96854-4.4	Henny Salim	GCMS2B	01/14/12 13:02	Load on Instrument
JA96854-4.4	GCMS2B	Henny Salim	01/14/12 13:05	Unload from Instrument
JA96854-4.4	Henny Salim	GCMS2C	01/14/12 13:05	Load on Instrument
JA96854-4.4	GCMS2C	Dezaree Reis	01/16/12 16:38	Unload from Instrument
JA96854-4.4	Dezaree Reis	Secured Storage	01/16/12 16:38	Return to Storage
JA96854-4.4	Secured Storage	Dezaree Reis	01/16/12 16:39	Retrieve from Storage
JA96854-4.4	Dezaree Reis	GCMS2B	01/16/12 16:39	Load on Instrument
JA96854-4.4	GCMS2B	Dezaree Reis	01/17/12 11:20	Unload from Instrument
JA96854-4.4	Dezaree Reis	Secured Storage	01/17/12 11:20	Return to Storage
JA96854-5.1	Secured Storage	Dezaree Reis	01/13/12 15:50	Retrieve from Storage
JA96854-5.1	Dezaree Reis	VOA Prep Storage	01/13/12 15:50	Return to Storage
JA96854-5.1	VOA Prep Storage	Henny Salim	01/14/12 13:02	Retrieve from Storage
JA96854-5.1	Henny Salim	GCMS2B	01/14/12 13:02	Load on Instrument
JA96854-5.1	GCMS2B	Henny Salim	01/14/12 13:05	Unload from Instrument
JA96854-5.1	Henny Salim	GCMS2C	01/14/12 13:05	Load on Instrument
JA96854-5.1	GCMS2C	Dezaree Reis	01/16/12 16:38	Unload from Instrument
JA96854-5.1	Dezaree Reis	Secured Storage	01/16/12 16:38	Return to Storage
JA96854-5.1	Secured Storage	Dezaree Reis	01/16/12 16:39	Retrieve from Storage
JA96854-5.1	Dezaree Reis	GCMS2B	01/16/12 16:39	Load on Instrument
JA96854-5.1	GCMS2B	Dezaree Reis	01/17/12 11:20	Unload from Instrument
JA96854-5.1	Dezaree Reis	Secured Storage	01/17/12 11:20	Return to Storage

GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B4134-MB	2B91891.D	1	01/16/12	DR	n/a	n/a	V2B4134

The QC reported here applies to the following samples:**Method:** SW846 8260B

JA96854-3, JA96854-4, JA96854-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.33	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.24	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.19	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.68	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.17	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.54	ug/l	

Method Blank Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B4134-MB	2B91891.D	1	01/16/12	DR	n/a	n/a	V2B4134

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-3, JA96854-4, JA96854-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.18	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.23	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	95% 77-120%
17060-07-0	1,2-Dichloroethane-D4	99% 70-127%
2037-26-5	Toluene-D8	103% 79-120%
460-00-4	4-Bromofluorobenzene	103% 76-118%

Method Blank Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY5108-MB	Y119491.D	1	01/17/12	RS	n/a	n/a	VY5108

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.6	ug/kg	
71-43-2	Benzene	ND	1.0	0.13	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.3	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.24	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.16	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.14	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.20	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.35	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.32	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.41	ug/kg	
67-66-3	Chloroform	ND	5.0	0.48	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.17	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.28	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.19	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.17	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.0	0.61	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	0.42	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.37	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/kg	
76-13-1	Freon 113	ND	5.0	0.72	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.14	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.30	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.6	ug/kg	
75-09-2	Methylene chloride	ND	5.0	0.23	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.1	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.35	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	5.0	0.19	ug/kg	
108-88-3	Toluene	ND	1.0	0.38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.34	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.24	ug/kg	
79-01-6	Trichloroethene	ND	5.0	0.25	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.1	ug/kg	

Method Blank Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY5108-MB	Y119491.D	1	01/17/12	RS	n/a	n/a	VY5108

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.13	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 67-131%
17060-07-0	1,2-Dichloroethane-D4	110% 66-130%
2037-26-5	Toluene-D8	103% 76-125%
460-00-4	4-Bromofluorobenzene	100% 53-142%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE8236-MB	E187215.D	1	01/18/12	DPP	n/a	n/a	VE8236

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	330	ug/kg	
71-43-2	Benzene	ND	50	6.7	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	220	ug/kg	
104-51-8	n-Butylbenzene	ND	250	12	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	8.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	6.9	ug/kg	
75-15-0	Carbon disulfide	ND	250	9.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	250	17	ug/kg	
108-90-7	Chlorobenzene	ND	250	16	ug/kg	
75-00-3	Chloroethane	ND	250	20	ug/kg	
67-66-3	Chloroform	ND	250	24	ug/kg	
124-48-1	Dibromochloromethane	ND	250	8.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	250	14	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	250	9.6	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	250	8.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	250	11	ug/kg	
107-06-2	1,2-Dichloroethane	ND	50	9.1	ug/kg	
75-35-4	1,1-Dichloroethene	ND	250	31	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	250	21	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	19	ug/kg	
100-41-4	Ethylbenzene	ND	50	7.4	ug/kg	
76-13-1	Freon 113	ND	250	36	ug/kg	
98-82-8	Isopropylbenzene	ND	250	6.9	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	15	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	50	9.0	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	130	ug/kg	
75-09-2	Methylene chloride	ND	250	12	ug/kg	
103-65-1	n-Propylbenzene	ND	250	17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	9.0	ug/kg	
127-18-4	Tetrachloroethene	ND	250	9.6	ug/kg	
108-88-3	Toluene	ND	50	19	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	17	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	250	12	ug/kg	
79-01-6	Trichloroethene	ND	250	12	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	54	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	6.4	ug/kg	

Method Blank Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE8236-MB	E187215.D	1	01/18/12	DPP	n/a	n/a	VE8236

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-2

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	250	23	ug/kg	
1330-20-7	Xylene (total)	ND	50	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	92% 67-131%
17060-07-0	1,2-Dichloroethane-D4	85% 66-130%
2037-26-5	Toluene-D8	93% 76-125%
460-00-4	4-Bromofluorobenzene	80% 53-142%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

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Job Number: JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD7804-MB	D191680.D	1	01/19/12	ET	n/a	n/a	VD7804

The QC reported here applies to the following samples:**Method:** SW846 8260B

JA96854-2

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	250	53	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	56	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	90% 67-131%
17060-07-0	1,2-Dichloroethane-D4	85% 66-130%
2037-26-5	Toluene-D8	100% 76-125%
460-00-4	4-Bromofluorobenzene	87% 53-142%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Blank Spike Summary**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B4134-BS	2B91892.D	1	01/16/12	DR	n/a	n/a	V2B4134

The QC reported here applies to the following samples:**Method:** SW846 8260B

JA96854-3, JA96854-4, JA96854-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	40.6	81	49-142
71-43-2	Benzene	50	50.8	102	76-119
78-93-3	2-Butanone (MEK)	50	40.6	81	64-132
104-51-8	n-Butylbenzene	50	56.5	113	74-130
135-98-8	sec-Butylbenzene	50	53.3	107	75-125
98-06-6	tert-Butylbenzene	50	53.9	108	76-127
75-15-0	Carbon disulfide	50	49.9	100	45-149
56-23-5	Carbon tetrachloride	50	50.1	100	74-146
108-90-7	Chlorobenzene	50	51.3	103	79-120
75-00-3	Chloroethane	50	41.8	84	60-134
67-66-3	Chloroform	50	51.8	104	77-127
124-48-1	Dibromochloromethane	50	49.3	99	77-131
95-50-1	1,2-Dichlorobenzene	50	51.4	103	78-123
541-73-1	1,3-Dichlorobenzene	50	51.3	103	77-124
106-46-7	1,4-Dichlorobenzene	50	51.7	103	76-121
75-34-3	1,1-Dichloroethane	50	56.0	112	74-124
107-06-2	1,2-Dichloroethane	50	50.0	100	71-138
75-35-4	1,1-Dichloroethene	50	53.3	107	68-126
156-60-5	trans-1,2-Dichloroethene	50	52.9	106	64-119
142-28-9	1,3-Dichloropropane	50	51.7	103	77-120
100-41-4	Ethylbenzene	50	50.4	101	77-119
76-13-1	Freon 113	50	50.7	101	64-145
98-82-8	Isopropylbenzene	50	54.9	110	74-125
99-87-6	p-Isopropyltoluene	50	53.5	107	78-128
1634-04-4	Methyl Tert Butyl Ether	100	93.4	93	72-125
108-10-1	4-Methyl-2-pentanone(MIBK)	50	40.7	81	68-131
75-09-2	Methylene chloride	50	52.6	105	73-122
91-20-3	Naphthalene	50	42.4	85	61-136
103-65-1	n-Propylbenzene	50	54.3	109	73-121
79-34-5	1,1,2,2-Tetrachloroethane	50	44.9	90	70-121
127-18-4	Tetrachloroethene	50	50.6	101	64-148
108-88-3	Toluene	50	50.7	101	77-122
120-82-1	1,2,4-Trichlorobenzene	50	53.8	108	73-133
71-55-6	1,1,1-Trichloroethane	50	54.0	108	76-135
79-01-6	Trichloroethene	50	52.0	104	80-129
96-18-4	1,2,3-Trichloropropane	50	42.9	86	72-130

Blank Spike Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B4134-BS	2B91892.D	1	01/16/12	DR	n/a	n/a	V2B4134

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-3, JA96854-4, JA96854-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-63-6	1,2,4-Trimethylbenzene	50	52.1	104	77-123
108-67-8	1,3,5-Trimethylbenzene	50	52.6	105	76-123
75-01-4	Vinyl chloride	50	31.9	64	56-133
1330-20-7	Xylene (total)	150	151	101	78-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	77-120%
17060-07-0	1,2-Dichloroethane-D4	96%	70-127%
2037-26-5	Toluene-D8	102%	79-120%
460-00-4	4-Bromofluorobenzene	105%	76-118%

Blank Spike Summary**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY5108-BS	Y119492.D	1	01/17/12	RS	n/a	n/a	VY5108

The QC reported here applies to the following samples:**Method:** SW846 8260B

JA96854-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	29.0	58	48-154
71-43-2	Benzene	50	48.1	96	76-120
78-93-3	2-Butanone (MEK)	50	44.8	90	61-141
104-51-8	n-Butylbenzene	50	51.9	104	70-131
135-98-8	sec-Butylbenzene	50	50.0	100	71-126
98-06-6	tert-Butylbenzene	50	50.6	101	73-127
75-15-0	Carbon disulfide	50	45.0	90	58-134
56-23-5	Carbon tetrachloride	50	62.6	125	64-156
108-90-7	Chlorobenzene	50	48.9	98	80-121
75-00-3	Chloroethane	50	50.9	102	57-138
67-66-3	Chloroform	50	51.4	103	77-130
124-48-1	Dibromochloromethane	50	57.8	116	74-138
95-50-1	1,2-Dichlorobenzene	50	50.7	101	77-121
541-73-1	1,3-Dichlorobenzene	50	50.9	102	77-122
106-46-7	1,4-Dichlorobenzene	50	49.0	98	74-117
75-34-3	1,1-Dichloroethane	50	49.4	99	75-129
107-06-2	1,2-Dichloroethane	50	57.7	115	70-145
75-35-4	1,1-Dichloroethene	50	46.7	93	70-128
156-60-5	trans-1,2-Dichloroethene	50	45.4	91	68-124
142-28-9	1,3-Dichloropropane	50	50.6	101	79-124
100-41-4	Ethylbenzene	50	50.8	102	75-125
76-13-1	Freon 113	50	51.8	104	62-144
98-82-8	Isopropylbenzene	50	49.7	99	67-126
99-87-6	p-Isopropyltoluene	50	53.3	107	73-131
1634-04-4	Methyl Tert Butyl Ether	100	92.4	93	72-126
108-10-1	4-Methyl-2-pentanone(MIBK)	50	60.2	120	69-135
75-09-2	Methylene chloride	50	45.8	92	71-124
91-20-3	Naphthalene	50	48.3	97	59-134
103-65-1	n-Propylbenzene	50	50.1	100	70-123
79-34-5	1,1,2,2-Tetrachloroethane	50	48.0	96	71-122
127-18-4	Tetrachloroethene	50	42.5	85	70-137
108-88-3	Toluene	50	48.4	97	77-124
120-82-1	1,2,4-Trichlorobenzene	50	57.9	116	70-132
71-55-6	1,1,1-Trichloroethane	50	57.5	115	70-144
79-01-6	Trichloroethene	50	51.5	103	80-129
96-18-4	1,2,3-Trichloropropane	50	51.3	103	74-133

Blank Spike Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY5108-BS	Y119492.D	1	01/17/12	RS	n/a	n/a	VY5108

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-63-6	1,2,4-Trimethylbenzene	50	51.6	103	73-122
108-67-8	1,3,5-Trimethylbenzene	50	52.4	105	71-121
75-01-4	Vinyl chloride	50	49.0	98	59-134
1330-20-7	Xylene (total)	150	148	99	78-124

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	67-131%
17060-07-0	1,2-Dichloroethane-D4	109%	66-130%
2037-26-5	Toluene-D8	106%	76-125%
460-00-4	4-Bromofluorobenzene	99%	53-142%

Blank Spike Summary**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE8236-BS	E187216.D	1	01/18/12	DPP	n/a	n/a	VE8236

The QC reported here applies to the following samples:**Method:** SW846 8260B

JA96854-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	2500	2360	94	48-154
71-43-2	Benzene	2500	2530	101	76-120
78-93-3	2-Butanone (MEK)	2500	2170	87	61-141
104-51-8	n-Butylbenzene	2500	2540	102	70-131
135-98-8	sec-Butylbenzene	2500	2450	98	71-126
98-06-6	tert-Butylbenzene	2500	2510	100	73-127
75-15-0	Carbon disulfide	2500	2450	98	58-134
56-23-5	Carbon tetrachloride	2500	2990	120	64-156
108-90-7	Chlorobenzene	2500	2670	107	80-121
75-00-3	Chloroethane	2500	2500	100	57-138
67-66-3	Chloroform	2500	2460	98	77-130
124-48-1	Dibromochloromethane	2500	2570	103	74-138
95-50-1	1,2-Dichlorobenzene	2500	2620	105	77-121
541-73-1	1,3-Dichlorobenzene	2500	2630	105	77-122
106-46-7	1,4-Dichlorobenzene	2500	2650	106	74-117
75-34-3	1,1-Dichloroethane	2500	2500	100	75-129
107-06-2	1,2-Dichloroethane	2500	2460	98	70-145
75-35-4	1,1-Dichloroethene	2500	2550	102	70-128
156-60-5	trans-1,2-Dichloroethene	2500	2530	101	68-124
142-28-9	1,3-Dichloropropane	2500	2450	98	79-124
100-41-4	Ethylbenzene	2500	2490	100	75-125
76-13-1	Freon 113	2500	2790	112	62-144
98-82-8	Isopropylbenzene	2500	2410	96	67-126
99-87-6	p-Isopropyltoluene	2500	2610	104	73-131
1634-04-4	Methyl Tert Butyl Ether	5000	4420	88	72-126
108-10-1	4-Methyl-2-pentanone(MIBK)	2500	2260	90	69-135
75-09-2	Methylene chloride	2500	2490	100	71-124
103-65-1	n-Propylbenzene	2500	2410	96	70-123
79-34-5	1,1,2,2-Tetrachloroethane	2500	2100	84	71-122
127-18-4	Tetrachloroethene	2500	2960	118	70-137
108-88-3	Toluene	2500	2590	104	77-124
120-82-1	1,2,4-Trichlorobenzene	2500	3240	130	70-132
71-55-6	1,1,1-Trichloroethane	2500	2660	106	70-144
79-01-6	Trichloroethene	2500	2690	108	80-129
96-18-4	1,2,3-Trichloropropane	2500	2340	94	74-133
108-67-8	1,3,5-Trimethylbenzene	2500	2290	92	71-121

Blank Spike Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE8236-BS	E187216.D	1	01/18/12	DPP	n/a	n/a	VE8236

The QC reported here applies to the following samples: Method: SW846 8260B

JA96854-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
75-01-4	Vinyl chloride	2500	2350	94	59-134
1330-20-7	Xylene (total)	7500	7780	104	78-124

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	67-131%
17060-07-0	1,2-Dichloroethane-D4	82%	66-130%
2037-26-5	Toluene-D8	93%	76-125%
460-00-4	4-Bromofluorobenzene	82%	53-142%

Blank Spike Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD7804-BS	D191681.D	1	01/19/12	ET	n/a	n/a	VD7804

The QC reported here applies to the following samples: Method: SW846 8260B

JA96854-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
91-20-3	Naphthalene	2500	2280	91	59-134
95-63-6	1,2,4-Trimethylbenzene	2500	2280	91	73-122

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	91%	67-131%
17060-07-0	1,2-Dichloroethane-D4	83%	66-130%
2037-26-5	Toluene-D8	98%	76-125%
460-00-4	4-Bromofluorobenzene	84%	53-142%

Matrix Spike Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA97075-1MS	2B91893.D	1	01/16/12	DR	n/a	n/a	V2B4134
JA97075-1	2B91895.D	1	01/17/12	DR	n/a	n/a	V2B4134

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-3, JA96854-4, JA96854-5

CAS No.	Compound	JA97075-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		50	42.6	85	39-150
71-43-2	Benzene	ND		50	57.8	116	40-139
78-93-3	2-Butanone (MEK)	ND		50	43.3	87	55-141
104-51-8	n-Butylbenzene	ND		50	61.7	123	55-139
135-98-8	sec-Butylbenzene	ND		50	60.3	121	55-137
98-06-6	tert-Butylbenzene	ND		50	60.2	120	58-137
75-15-0	Carbon disulfide	ND		50	54.1	108	23-153
56-23-5	Carbon tetrachloride	ND		50	56.9	114	52-155
108-90-7	Chlorobenzene	ND		50	56.4	113	66-129
75-00-3	Chloroethane	ND		50	62.2	124	50-140
67-66-3	Chloroform	0.34	J	50	56.7	113	63-133
124-48-1	Dibromochloromethane	ND		50	51.9	104	64-136
95-50-1	1,2-Dichlorobenzene	ND		50	55.6	111	69-129
541-73-1	1,3-Dichlorobenzene	ND		50	56.0	112	66-130
106-46-7	1,4-Dichlorobenzene	ND		50	56.4	113	66-127
75-34-3	1,1-Dichloroethane	ND		50	59.8	120	58-132
107-06-2	1,2-Dichloroethane	ND		50	54.5	109	62-145
75-35-4	1,1-Dichloroethene	0.40	J	50	61.4	122	43-142
156-60-5	trans-1,2-Dichloroethene	ND		50	60.0	120	53-132
142-28-9	1,3-Dichloropropane	ND		50	55.3	111	68-127
100-41-4	Ethylbenzene	ND		50	56.0	112	40-140
76-13-1	Freon 113	ND		50	58.9	118	38-159
98-82-8	Isopropylbenzene	ND		50	62.2	124	56-138
99-87-6	p-Isopropyltoluene	ND		50	57.7	115	58-136
1634-04-4	Methyl Tert Butyl Ether	ND		50	51.8	104	54-136
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	45.5	91	61-138
75-09-2	Methylene chloride	ND		50	56.3	113	60-130
91-20-3	Naphthalene	ND		50	45.6	91	51-149
103-65-1	n-Propylbenzene	ND		50	60.8	122	51-138
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	49.2	98	65-128
127-18-4	Tetrachloroethene	ND		50	58.2	116	52-143
108-88-3	Toluene	ND		50	57.6	115	47-140
120-82-1	1,2,4-Trichlorobenzene	ND		50	55.9	112	64-136
71-55-6	1,1,1-Trichloroethane	ND		50	60.8	122	55-146
79-01-6	Trichloroethene	ND		50	59.6	119	54-142
96-18-4	1,2,3-Trichloropropane	ND		50	46.3	93	64-137

Matrix Spike Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA97075-1MS	2B91893.D	1	01/16/12	DR	n/a	n/a	V2B4134
JA97075-1	2B91895.D	1	01/17/12	DR	n/a	n/a	V2B4134

The QC reported here applies to the following samples: Method: SW846 8260B

JA96854-3, JA96854-4, JA96854-5

CAS No.	Compound	JA97075-1 ug/l	Spike Q	MS ug/l	MS %	Limits
95-63-6	1,2,4-Trimethylbenzene	ND	50	57.0	114	40-147
108-67-8	1,3,5-Trimethylbenzene	ND	50	58.8	118	50-142
75-01-4	Vinyl chloride	ND	50	54.2	108	42-145
1330-20-7	Xylene (total)	ND	150	166	111	42-140

CAS No.	Surrogate Recoveries	MS	JA97075-1	Limits
1868-53-7	Dibromofluoromethane	96%	93%	77-120%
17060-07-0	1,2-Dichloroethane-D4	96%	97%	70-127%
2037-26-5	Toluene-D8	103%	104%	79-120%
460-00-4	4-Bromofluorobenzene	105%	105%	76-118%

Matrix Spike Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA96920-3MS	Y119498.D	1	01/17/12	RS	n/a	n/a	VY5108
JA96920-3	Y119496.D	1	01/17/12	RS	n/a	n/a	VY5108

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-1

CAS No.	Compound	JA96920-3 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	32.7		55.4	97.9	118	12-189
71-43-2	Benzene	ND		55.4	54.1	98	37-132
78-93-3	2-Butanone (MEK)	ND		55.4	76.9	139	21-179
104-51-8	n-Butylbenzene	ND		55.4	59.7	108	10-156
135-98-8	sec-Butylbenzene	ND		55.4	58.2	105	10-152
98-06-6	tert-Butylbenzene	ND		55.4	58.0	105	10-151
75-15-0	Carbon disulfide	ND		55.4	52.3	94	25-139
56-23-5	Carbon tetrachloride	ND		55.4	73.4	133	25-156
108-90-7	Chlorobenzene	ND		55.4	54.1	98	25-140
75-00-3	Chloroethane	ND		55.4	35.2	64	15-143
67-66-3	Chloroform	ND		55.4	55.8	101	42-134
124-48-1	Dibromochloromethane	ND		55.4	62.3	112	28-150
95-50-1	1,2-Dichlorobenzene	ND		55.4	53.9	97	10-147
541-73-1	1,3-Dichlorobenzene	ND		55.4	54.5	98	10-148
106-46-7	1,4-Dichlorobenzene	ND		55.4	53.3	96	10-144
75-34-3	1,1-Dichloroethane	ND		55.4	53.7	97	44-131
107-06-2	1,2-Dichloroethane	ND		55.4	63.5	115	39-144
75-35-4	1,1-Dichloroethene	ND		55.4	54.4	98	37-135
156-60-5	trans-1,2-Dichloroethene	ND		55.4	51.6	93	35-133
142-28-9	1,3-Dichloropropane	ND		55.4	55.7	101	38-135
100-41-4	Ethylbenzene	ND		55.4	57.3	103	20-144
76-13-1	Freon 113	ND		55.4	40.6	73	22-155
98-82-8	Isopropylbenzene	ND		55.4	56.9	103	14-146
99-87-6	p-Isopropyltoluene	ND		55.4	58.4	105	10-154
1634-04-4	Methyl Tert Butyl Ether	ND		55.4	51.3	93	43-131
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		55.4	56.5	102	36-145
75-09-2	Methylene chloride	ND		55.4	50.7	92	41-128
91-20-3	Naphthalene	ND		55.4	56.3	102	10-157
103-65-1	n-Propylbenzene	ND		55.4	56.0	101	10-147
79-34-5	1,1,2,2-Tetrachloroethane	ND		55.4	53.4	96	30-134
127-18-4	Tetrachloroethene	ND		55.4	50.3	91	18-163
108-88-3	Toluene	ND		55.4	54.3	98	29-138
120-82-1	1,2,4-Trichlorobenzene	ND		55.4	61.0	110	10-163
71-55-6	1,1,1-Trichloroethane	ND		55.4	65.9	119	35-145
79-01-6	Trichloroethene	ND		55.4	58.3	105	28-151
96-18-4	1,2,3-Trichloropropane	ND		55.4	56.3	102	35-141

Matrix Spike Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA96920-3MS	Y119498.D	1	01/17/12	RS	n/a	n/a	VY5108
JA96920-3	Y119496.D	1	01/17/12	RS	n/a	n/a	VY5108

The QC reported here applies to the following samples: Method: SW846 8260B

JA96854-1

CAS No.	Compound	JA96920-3 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Limits
95-63-6	1,2,4-Trimethylbenzene	ND		55.4	55.6	100	10-151
108-67-8	1,3,5-Trimethylbenzene	ND		55.4	59.0	107	10-146
75-01-4	Vinyl chloride	ND		55.4	33.4	60	33-143
1330-20-7	Xylene (total)	0.45	J	166	166	100	18-145

CAS No.	Surrogate Recoveries	MS	JA96920-3	Limits
1868-53-7	Dibromofluoromethane	99%	97%	67-131%
17060-07-0	1,2-Dichloroethane-D4	103%	100%	66-130%
2037-26-5	Toluene-D8	106%	103%	76-125%
460-00-4	4-Bromofluorobenzene	98%	100%	53-142%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA97134-2MS	E187217.D	1	01/18/12	DPP	n/a	n/a	VE8236
JA97134-2MSD	E187218.D	1	01/18/12	DPP	n/a	n/a	VE8236
JA97134-2	E187220.D	1	01/19/12	DPP	n/a	n/a	VE8236

The QC reported here applies to the following samples:**Method:** SW846 8260B

JA96854-2

CAS No.	Compound	JA97134-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		3870	3620	94	3470	90	4	12-189/33
71-43-2	Benzene	90.5		3870	3990	101	3900	98	2	37-132/21
78-93-3	2-Butanone (MEK)	ND		3870	3420	88	3530	91	3	21-179/29
104-51-8	n-Butylbenzene	976		3870	4800	99	4760	98	1	10-156/33
135-98-8	sec-Butylbenzene	363		3870	4150	98	4100	97	1	10-152/30
98-06-6	tert-Butylbenzene	79.2		3870	3990	101	3960	100	1	10-151/28
75-15-0	Carbon disulfide	ND		3870	2640	68	2570	66	3	25-139/24
56-23-5	Carbon tetrachloride	ND		3870	4600	119	4400	114	4	25-156/24
108-90-7	Chlorobenzene	ND		3870	4250	110	4200	109	1	25-140/24
75-00-3	Chloroethane	ND		3870	3650	94	3420	88	7	15-143/26
67-66-3	Chloroform	ND		3870	3930	102	3860	100	2	42-134/21
124-48-1	Dibromochloromethane	ND		3870	4130	107	4070	105	1	28-150/22
95-50-1	1,2-Dichlorobenzene	ND		3870	3870	100	3860	100	0	10-147/28
541-73-1	1,3-Dichlorobenzene	ND		3870	3990	103	3970	103	1	10-148/28
106-46-7	1,4-Dichlorobenzene	ND		3870	4120	106	4120	106	0	10-144/28
75-34-3	1,1-Dichloroethane	ND		3870	3660	95	3620	94	1	44-131/21
107-06-2	1,2-Dichloroethane	ND		3870	3850	99	3760	97	2	39-144/20
75-35-4	1,1-Dichloroethene	ND		3870	3270	85	3190	82	2	37-135/23
156-60-5	trans-1,2-Dichloroethene	ND		3870	3670	95	3570	92	3	35-133/23
142-28-9	1,3-Dichloropropane	ND		3870	3920	101	3840	99	2	38-135/20
100-41-4	Ethylbenzene	113		3870	4190	105	4110	103	2	20-144/25
76-13-1	Freon 113	ND		3870	4230	109	4080	105	4	22-155/26
98-82-8	Isopropylbenzene	214		3870	3870	94	3830	93	1	14-146/27
99-87-6	p-Isopropyltoluene	ND		3870	3940	102	3940	102	0	10-154/30
1634-04-4	Methyl Tert Butyl Ether	51.3		3870	3420	87	3400	87	1	43-131/20
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		3870	3360	87	3500	90	4	36-145/26
75-09-2	Methylene chloride	ND		3870	3700	96	3610	93	2	41-128/20
103-65-1	n-Propylbenzene	844		3870	4430	93	4400	92	1	10-147/29
79-34-5	1,1,2,2-Tetrachloroethane	ND		3870	3410	88	3540	91	4	30-134/26
127-18-4	Tetrachloroethene	ND		3870	4800	124	4710	122	2	18-163/26
108-88-3	Toluene	123		3870	4170	105	4070	102	2	29-138/23
120-82-1	1,2,4-Trichlorobenzene	ND		3870	4380	113	4390	113	0	10-163/35
71-55-6	1,1,1-Trichloroethane	ND		3870	3980	103	3860	100	3	35-145/23
79-01-6	Trichloroethene	ND		3870	4300	111	4250	110	1	28-151/23
96-18-4	1,2,3-Trichloropropane	ND		3870	4000	103	4040	104	1	35-141/24
108-67-8	1,3,5-Trimethylbenzene	101		3870	3860	97	3840	97	1	10-146/28

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA97134-2MS	E187217.D	1	01/18/12	DPP	n/a	n/a	VE8236
JA97134-2MSD	E187218.D	1	01/18/12	DPP	n/a	n/a	VE8236
JA97134-2	E187220.D	1	01/19/12	DPP	n/a	n/a	VE8236

The QC reported here applies to the following samples: Method: SW846 8260B

JA96854-2

CAS No.	Compound	JA97134-2 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
75-01-4	Vinyl chloride	ND		3870	4130	107	3950	102	4	33-143/24
1330-20-7	Xylene (total)	577		11600	13100	108	12900	106	2	18-145/25

CAS No.	Surrogate Recoveries	MS	MSD	JA97134-2	Limits
1868-53-7	Dibromofluoromethane	95%	96%	92%	67-131%
17060-07-0	1,2-Dichloroethane-D4	82%	83%	83%	66-130%
2037-26-5	Toluene-D8	93%	93%	94%	76-125%
460-00-4	4-Bromofluorobenzene	84%	82%	85%	53-142%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA96938-12MS	D191688.D	1	01/19/12	ET	n/a	n/a	VD7804
JA96938-12MSD	D191689.D	1	01/19/12	ET	n/a	n/a	VD7804
JA96938-12 ^a	D191691.D	1	01/19/12	ET	n/a	n/a	VD7804

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-2

CAS No.	Compound	JA96938-12 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	4070		3390	8210	122	8350	126	2	10-157/34
95-63-6	1,2,4-Trimethylbenzene	194	J	3390	3320	92	3260	90	2	10-151/31

CAS No.	Surrogate Recoveries	MS	MSD	JA96938-12	Limits
1868-53-7	Dibromofluoromethane	91%	90%	90%	67-131%
17060-07-0	1,2-Dichloroethane-D4	83%	83%	84%	66-130%
2037-26-5	Toluene-D8	99%	100%	100%	76-125%
460-00-4	4-Bromofluorobenzene	86%	84%	87%	53-142%

(a) Diluted due to high concentration of target compound.

Duplicate Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA97075-4DUP	2B91896.D	1	01/17/12	DR	n/a	n/a	V2B4134
JA97075-4	2B91897.D	1	01/17/12	DR	n/a	n/a	V2B4134

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-3, JA96854-4, JA96854-5

CAS No.	Compound	JA97075-4 ug/l	DUP Q	ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	16
71-43-2	Benzene	ND		ND		nc	10
78-93-3	2-Butanone (MEK)	ND		ND		nc	10
104-51-8	n-Butylbenzene	ND		ND		nc	10
135-98-8	sec-Butylbenzene	ND		ND		nc	10
98-06-6	tert-Butylbenzene	ND		ND		nc	10
75-15-0	Carbon disulfide	ND		ND		nc	10
56-23-5	Carbon tetrachloride	ND		ND		nc	10
108-90-7	Chlorobenzene	ND		ND		nc	10
75-00-3	Chloroethane	ND		ND		nc	10
67-66-3	Chloroform	0.34	J	0.34	J	0	11
124-48-1	Dibromochloromethane	ND		ND		nc	10
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	10
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	10
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	10
75-34-3	1,1-Dichloroethane	ND		ND		nc	10
107-06-2	1,2-Dichloroethane	ND		ND		nc	10
75-35-4	1,1-Dichloroethene	0.45	J	0.36	J	22* a	10
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	10
142-28-9	1,3-Dichloropropane	ND		ND		nc	10
100-41-4	Ethylbenzene	ND		ND		nc	12
76-13-1	Freon 113	ND		ND		nc	10
98-82-8	Isopropylbenzene	ND		ND		nc	10
99-87-6	p-Isopropyltoluene	ND		ND		nc	10
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	16
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	10
75-09-2	Methylene chloride	ND		ND		nc	10
91-20-3	Naphthalene	ND		ND		nc	14
103-65-1	n-Propylbenzene	ND		ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	10
127-18-4	Tetrachloroethene	ND		ND		nc	13
108-88-3	Toluene	ND		ND		nc	10
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	10
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	10
79-01-6	Trichloroethene	ND		ND		nc	12
96-18-4	1,2,3-Trichloropropane	ND		ND		nc	10

Duplicate Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA97075-4DUP	2B91896.D	1	01/17/12	DR	n/a	n/a	V2B4134
JA97075-4	2B91897.D	1	01/17/12	DR	n/a	n/a	V2B4134

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-3, JA96854-4, JA96854-5

CAS No.	Compound	JA97075-4 ug/l	DUP Q	ug/l	Q	RPD	Limits
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	10
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	10
75-01-4	Vinyl chloride	ND		ND		nc	10
1330-20-7	Xylene (total)	ND		ND		nc	13

CAS No.	Surrogate Recoveries	DUP	JA97075-4	Limits
1868-53-7	Dibromofluoromethane	94%	95%	77-120%
17060-07-0	1,2-Dichloroethane-D4	99%	99%	70-127%
2037-26-5	Toluene-D8	102%	102%	79-120%
460-00-4	4-Bromofluorobenzene	105%	103%	76-118%

(a) High RPD due to low concentration of hit

Duplicate Summary**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA96920-4DUP	Y119500.D	1	01/17/12	RS	n/a	n/a	VY5108
JA96920-4	Y119497.D	1	01/17/12	RS	n/a	n/a	VY5108

The QC reported here applies to the following samples:**Method:** SW846 8260B

JA96854-1

CAS No.	Compound	JA96920-4 ug/kg	DUP Q ug/kg	Q	RPD	Limits
67-64-1	Acetone	14.1	12.4		13	34
71-43-2	Benzene	ND	ND		nc	14
78-93-3	2-Butanone (MEK)	ND	ND		nc	10
104-51-8	n-Butylbenzene	ND	ND		nc	10
135-98-8	sec-Butylbenzene	ND	ND		nc	10
98-06-6	tert-Butylbenzene	ND	ND		nc	10
75-15-0	Carbon disulfide	ND	ND		nc	20
56-23-5	Carbon tetrachloride	ND	ND		nc	10
108-90-7	Chlorobenzene	ND	ND		nc	10
75-00-3	Chloroethane	ND	ND		nc	10
67-66-3	Chloroform	ND	ND		nc	10
124-48-1	Dibromochloromethane	ND	ND		nc	10
95-50-1	1,2-Dichlorobenzene	ND	ND		nc	10
541-73-1	1,3-Dichlorobenzene	ND	ND		nc	10
106-46-7	1,4-Dichlorobenzene	ND	ND		nc	10
75-34-3	1,1-Dichloroethane	ND	ND		nc	10
107-06-2	1,2-Dichloroethane	ND	ND		nc	10
75-35-4	1,1-Dichloroethene	ND	ND		nc	10
156-60-5	trans-1,2-Dichloroethene	ND	ND		nc	10
142-28-9	1,3-Dichloropropane	ND	ND		nc	10
100-41-4	Ethylbenzene	ND	ND		nc	12
76-13-1	Freon 113	ND	ND		nc	10
98-82-8	Isopropylbenzene	ND	ND		nc	10
99-87-6	p-Isopropyltoluene	ND	ND		nc	10
1634-04-4	Methyl Tert Butyl Ether	ND	ND		nc	14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	ND		nc	10
75-09-2	Methylene chloride	ND	ND		nc	17
91-20-3	Naphthalene	ND	ND		nc	10
103-65-1	n-Propylbenzene	ND	ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	ND		nc	10
127-18-4	Tetrachloroethene	ND	ND		nc	20
108-88-3	Toluene	ND	ND		nc	18
120-82-1	1,2,4-Trichlorobenzene	ND	ND		nc	10
71-55-6	1,1,1-Trichloroethane	ND	ND		nc	10
79-01-6	Trichloroethene	ND	ND		nc	15
96-18-4	1,2,3-Trichloropropane	ND	ND		nc	10

Duplicate Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA96920-4DUP	Y119500.D	1	01/17/12	RS	n/a	n/a	VY5108
JA96920-4	Y119497.D	1	01/17/12	RS	n/a	n/a	VY5108

The QC reported here applies to the following samples:

Method: SW846 8260B

JA96854-1

CAS No.	Compound	JA96920-4 ug/kg	DUP Q	RPD	Limits
95-63-6	1,2,4-Trimethylbenzene	ND	ND	nc	10
108-67-8	1,3,5-Trimethylbenzene	ND	ND	nc	10
75-01-4	Vinyl chloride	ND	ND	nc	10
1330-20-7	Xylene (total)	ND	ND	nc	14

CAS No.	Surrogate Recoveries	DUP	JA96920-4	Limits
1868-53-7	Dibromofluoromethane	98%	99%	67-131%
17060-07-0	1,2-Dichloroethane-D4	104%	103%	66-130%
2037-26-5	Toluene-D8	104%	102%	76-125%
460-00-4	4-Bromofluorobenzene	102%	100%	53-142%

Instrument Performance Check (BFB)**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY**Sample:** V2B4096-BFB**Injection Date:** 12/22/11**Lab File ID:** 2B91055.D**Injection Time:** 10:53**Instrument ID:** GCMS2B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	19961	19.4	Pass
75	30.0 - 60.0% of mass 95	50525	49.2	Pass
95	Base peak, 100% relative abundance	102698	100.0	Pass
96	5.0 - 9.0% of mass 95	6929	6.75	Pass
173	Less than 2.0% of mass 174	1038	1.01 (0.97) ^a	Pass
174	50.0 - 150.0% of mass 95	107288	104.5	Pass
175	5.0 - 9.0% of mass 174	8240	8.02 (7.68) ^a	Pass
176	95.0 - 101.0% of mass 174	103216	100.5 (96.2) ^a	Pass
177	5.0 - 9.0% of mass 176	6693	6.52 (6.48) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B4096-IC4096	2B91056.D	12/22/11	11:21	00:28	Initial cal 0.5
V2B4096-IC4096	2B91057.D	12/22/11	11:52	00:59	Initial cal 1
V2B4096-IC4096	2B91058.D	12/22/11	12:24	01:31	Initial cal 2
V2B4096-IC4096	2B91060.D	12/22/11	13:27	02:34	Initial cal 10
V2B4096-IC4096	2B91061.D	12/22/11	13:58	03:05	Initial cal 20
V2B4096-ICC4096	2B91062.D	12/22/11	14:29	03:36	Initial cal 50
V2B4096-IC4096	2B91063.D	12/22/11	14:59	04:06	Initial cal 100
V2B4096-IC4096	2B91064.D	12/22/11	15:30	04:37	Initial cal 200
V2B4096-IC4096	2B91067.D	12/22/11	17:23	06:30	Initial cal 5
V2B4096-ICV4096	2B91068.D	12/22/11	17:55	07:02	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4134-BFB **Injection Date:** 01/16/12
Lab File ID: 2B91888.D **Injection Time:** 20:41
Instrument ID: GCMS2B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	38416	19.2	Pass
75	30.0 - 60.0% of mass 95	97445	48.7	Pass
95	Base peak, 100% relative abundance	200256	100.0	Pass
96	5.0 - 9.0% of mass 95	12992	6.49	Pass
173	Less than 2.0% of mass 174	1155	0.58 (0.62) ^a	Pass
174	50.0 - 150.0% of mass 95	185256	92.5	Pass
175	5.0 - 9.0% of mass 174	14285	7.13 (7.71) ^a	Pass
176	95.0 - 101.0% of mass 174	181901	90.8 (98.2) ^a	Pass
177	5.0 - 9.0% of mass 176	12272	6.13 (6.75) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B4134-CC4096	2B91889.D	01/16/12	21:08	00:27	Continuing cal 50
V2B4134-MB	2B91891.D	01/16/12	22:11	01:30	Method Blank
V2B4134-BS	2B91892.D	01/16/12	22:42	02:01	Blank Spike
JA97075-1MS	2B91893.D	01/16/12	23:14	02:33	Matrix Spike
JA97075-1	2B91895.D	01/17/12	00:16	03:35	(used for QC only; not part of job JA96854)
JA97075-4DUP	2B91896.D	01/17/12	00:48	04:07	Duplicate
JA97075-4	2B91897.D	01/17/12	01:19	04:38	(used for QC only; not part of job JA96854)
ZZZZZZ	2B91898.D	01/17/12	01:51	05:10	(unrelated sample)
ZZZZZZ	2B91899.D	01/17/12	02:23	05:42	(unrelated sample)
ZZZZZZ	2B91900.D	01/17/12	02:54	06:13	(unrelated sample)
ZZZZZZ	2B91901.D	01/17/12	03:26	06:45	(unrelated sample)
JA96854-3	2B91902.D	01/17/12	03:57	07:16	GW-1 003
JA96854-4	2B91903.D	01/17/12	04:29	07:48	GW-2 004
JA96854-5	2B91904.D	01/17/12	05:00	08:19	TB-1 005
ZZZZZZ	2B91907.D	01/17/12	06:35	09:54	(unrelated sample)

Instrument Performance Check (BFB)**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY**Sample:** VD7671-BFB**Injection Date:** 10/28/11**Lab File ID:** D188518.D**Injection Time:** 08:53**Instrument ID:** GCMSD

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	14760	17.8	Pass
75	30.0 - 60.0% of mass 95	39411	47.5	Pass
95	Base peak, 100% relative abundance	83021	100.0	Pass
96	5.0 - 9.0% of mass 95	5575	6.72	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	67379	81.2	Pass
175	5.0 - 9.0% of mass 174	5024	6.05 (7.46) ^a	Pass
176	95.0 - 101.0% of mass 174	65571	79.0 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	4276	5.15 (6.52) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VD7671-IC7671	D188519.D	10/28/11	09:24	00:31	Initial cal 0.5
VD7671-IC7671	D188520.D	10/28/11	09:53	01:00	Initial cal 1
VD7671-IC7671	D188521.D	10/28/11	10:23	01:30	Initial cal 2
VD7671-IC7671	D188522.D	10/28/11	10:52	01:59	Initial cal 5
VD7671-IC7671	D188523.D	10/28/11	11:22	02:29	Initial cal 10
VD7671-IC7671	D188524.D	10/28/11	11:51	02:58	Initial cal 20
VD7671-ICC7671	D188525.D	10/28/11	12:20	03:27	Initial cal 50
VD7671-ICV7671	D188526.D	10/28/11	12:50	03:57	Initial cal verification 50
VD7671-IC7671	D188527.D	10/28/11	13:19	04:26	Initial cal 100
VD7671-IC7671	D188528.D	10/28/11	13:48	04:55	Initial cal 200
VD7671-MB	D188531.D	10/28/11	15:33	06:40	Method Blank
VD7671-BS	D188532.D	10/28/11	16:15	07:22	Blank Spike
JA89370-5	D188534.D	10/28/11	17:31	08:38	(used for QC only; not part of job JA96854)
ZZZZZZ	D188535.D	10/28/11	18:05	09:12	(unrelated sample)
JA89370-5MS	D188536.D	10/28/11	18:41	09:48	Matrix Spike
JA89370-5MSD	D188537.D	10/28/11	19:13	10:20	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VD7804-BFB
Lab File ID: D191677.D
Instrument ID: GCMSD
Injection Date: 01/19/12
Injection Time: 09:32

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7829	16.3	Pass
75	30.0 - 60.0% of mass 95	21827	45.4	Pass
95	Base peak, 100% relative abundance	48067	100.0	Pass
96	5.0 - 9.0% of mass 95	3223	6.71	Pass
173	Less than 2.0% of mass 174	89	0.19 (0.22) ^a	Pass
174	50.0 - 120.0% of mass 95	41373	86.1	Pass
175	5.0 - 9.0% of mass 174	3042	6.33 (7.35) ^a	Pass
176	95.0 - 101.0% of mass 174	40077	83.4 (96.9) ^a	Pass
177	5.0 - 9.0% of mass 176	2752	5.73 (6.87) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VD7804-CC7671	D191678.D	01/19/12	10:06	00:34	Continuing cal 20
VD7804-MB	D191680.D	01/19/12	11:15	01:43	Method Blank
VD7804-BS	D191681.D	01/19/12	11:45	02:13	Blank Spike
JA96854-2	D191683.D	01/19/12	12:48	03:16	SS-2 002
ZZZZZZ	D191684.D	01/19/12	13:18	03:46	(unrelated sample)
ZZZZZZ	D191685.D	01/19/12	13:47	04:15	(unrelated sample)
ZZZZZZ	D191686.D	01/19/12	14:17	04:45	(unrelated sample)
ZZZZZZ	D191687.D	01/19/12	14:47	05:15	(unrelated sample)
JA96938-12MS	D191688.D	01/19/12	15:17	05:45	Matrix Spike
JA96938-12MSD	D191689.D	01/19/12	15:47	06:15	Matrix Spike Duplicate
JA96938-12	D191691.D	01/19/12	16:46	07:14	(used for QC only; not part of job JA96854)
ZZZZZZ	D191693.D	01/19/12	17:45	08:13	(unrelated sample)
ZZZZZZ	D191694.D	01/19/12	18:15	08:43	(unrelated sample)
ZZZZZZ	D191695.D	01/19/12	18:44	09:12	(unrelated sample)
ZZZZZZ	D191696.D	01/19/12	19:14	09:42	(unrelated sample)
ZZZZZZ	D191697.D	01/19/12	19:43	10:11	(unrelated sample)
ZZZZZZ	D191698.D	01/19/12	20:13	10:41	(unrelated sample)
ZZZZZZ	D191699.D	01/19/12	20:42	11:10	(unrelated sample)
ZZZZZZ	D191700.D	01/19/12	21:12	11:40	(unrelated sample)

Instrument Performance Check (BFB)

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Job Number: JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY**Sample:** VE8147-BFB**Injection Date:** 11/22/11**Lab File ID:** E185152.D**Injection Time:** 20:27**Instrument ID:** GCMSE

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	12130	17.9	Pass
75	30.0 - 60.0% of mass 95	31490	46.5	Pass
95	Base peak, 100% relative abundance	67749	100.0	Pass
96	5.0 - 9.0% of mass 95	4504	6.65	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	59568	87.9	Pass
175	5.0 - 9.0% of mass 174	4558	6.73 (7.65) ^a	Pass
176	95.0 - 101.0% of mass 174	58317	86.1 (97.9) ^a	Pass
177	5.0 - 9.0% of mass 176	4127	6.09 (7.08) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VE8147-IC8147	E185153.D	11/22/11	20:57	00:30	Initial cal 0.5
VE8147-IC8147	E185154.D	11/22/11	21:27	01:00	Initial cal 1
VE8147-IC8147	E185155.D	11/22/11	21:57	01:30	Initial cal 2
VE8147-IC8147	E185156.D	11/22/11	22:27	02:00	Initial cal 5
VE8147-IC8147	E185157.D	11/22/11	22:57	02:30	Initial cal 10
VE8147-IC8147	E185158.D	11/22/11	23:27	03:00	Initial cal 20
VE8147-ICC8147	E185159.D	11/22/11	23:57	03:30	Initial cal 50
VE8147-IC8147	E185161.D	11/23/11	00:57	04:30	Initial cal 100
VE8147-IC8147	E185162.D	11/23/11	01:28	05:01	Initial cal 200

Instrument Performance Check (BFB)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VE8236-BFB
Lab File ID: E187212.D
Instrument ID: GCMSE
Injection Date: 01/18/12
Injection Time: 20:32

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	14297	16.0	Pass
75	30.0 - 60.0% of mass 95	39645	44.5	Pass
95	Base peak, 100% relative abundance	89162	100.0	Pass
96	5.0 - 9.0% of mass 95	6166	6.92	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	88792	99.6	Pass
175	5.0 - 9.0% of mass 174	6925	7.77 (7.80) ^a	Pass
176	95.0 - 101.0% of mass 174	87298	97.9 (98.3) ^a	Pass
177	5.0 - 9.0% of mass 176	5953	6.68 (6.82) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VE8236-CC8147	E187213.D	01/18/12	21:02	00:30	Continuing cal 50
VE8236-MB	E187215.D	01/18/12	22:01	01:29	Method Blank
VE8236-BS	E187216.D	01/18/12	22:32	02:00	Blank Spike
JA97134-2MS	E187217.D	01/18/12	23:01	02:29	Matrix Spike
JA97134-2MSD	E187218.D	01/18/12	23:31	02:59	Matrix Spike Duplicate
JA97134-2	E187220.D	01/19/12	00:30	03:58	(used for QC only; not part of job JA96854)
ZZZZZZ	E187221.D	01/19/12	01:00	04:28	(unrelated sample)
ZZZZZZ	E187222.D	01/19/12	01:29	04:57	(unrelated sample)
JA96854-2	E187223.D	01/19/12	01:59	05:27	SS-2 002
ZZZZZZ	E187225.D	01/19/12	02:58	06:26	(unrelated sample)
ZZZZZZ	E187226.D	01/19/12	03:28	06:56	(unrelated sample)
ZZZZZZ	E187227.D	01/19/12	03:58	07:26	(unrelated sample)
ZZZZZZ	E187228.D	01/19/12	04:27	07:55	(unrelated sample)
ZZZZZZ	E187229.D	01/19/12	04:56	08:24	(unrelated sample)

Instrument Performance Check (BFB)

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VY5012-BFB
Lab File ID: Y117399.D
Instrument ID: GCMSY

Injection Date: 11/08/11
Injection Time: 10:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	6146	16.1	Pass
75	30.0 - 60.0% of mass 95	15862	41.5	Pass
95	Base peak, 100% relative abundance	38181	100.0	Pass
96	5.0 - 9.0% of mass 95	2326	6.09	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	39146	102.5	Pass
175	5.0 - 9.0% of mass 174	3125	8.18 (7.98) ^a	Pass
176	95.0 - 101.0% of mass 174	37658	98.6 (96.2) ^a	Pass
177	5.0 - 9.0% of mass 176	2411	6.31 (6.40) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY5012-IC5012	Y117400.D	11/08/11	10:48	00:44	Initial cal 10
VY5012-IC5012	Y117401.D	11/08/11	11:18	01:14	Initial cal 2
VY5012-IC5012	Y117402.D	11/08/11	11:48	01:44	Initial cal 1
VY5012-IC5012	Y117403.D	11/08/11	12:19	02:15	Initial cal 0.5
VY5012-ICC5012	Y117404.D	11/08/11	12:49	02:45	Initial cal 50
VY5012-IC5012	Y117405.D	11/08/11	13:19	03:15	Initial cal 5
VY5012-IC5012	Y117406.D	11/08/11	13:49	03:45	Initial cal 20
VY5012-IC5012	Y117408.D	11/08/11	15:29	05:25	Initial cal 100
VY5012-IC5012	Y117409.D	11/08/11	15:59	05:55	Initial cal 200
VY5012-IC5012	Y117410.D	11/08/11	16:29	06:25	Initial cal 75
VY5012-ICV5012	Y117411.D	11/08/11	17:48	07:44	Initial cal verification 50

Instrument Performance Check (BFB)**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY**Sample:** VY5108-BFB**Injection Date:** 01/17/12**Lab File ID:** Y119487.D**Injection Time:** 10:24**Instrument ID:** GCMSY

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7506	20.3	Pass
75	30.0 - 60.0% of mass 95	18501	50.1	Pass
95	Base peak, 100% relative abundance	36960	100.0	Pass
96	5.0 - 9.0% of mass 95	2693	7.29	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	36709	99.3	Pass
175	5.0 - 9.0% of mass 174	2293	6.20 (6.25) ^a	Pass
176	95.0 - 101.0% of mass 174	35528	96.1 (96.8) ^a	Pass
177	5.0 - 9.0% of mass 176	2333	6.31 (6.57) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY5108-CC5012	Y119489.D	01/17/12	11:41	01:17	Continuing cal 20
VY5108-MB	Y119491.D	01/17/12	12:51	02:27	Method Blank
VY5108-BS	Y119492.D	01/17/12	13:24	03:00	Blank Spike
ZZZZZZ	Y119494.D	01/17/12	14:41	04:17	(unrelated sample)
ZZZZZZ	Y119495.D	01/17/12	15:12	04:48	(unrelated sample)
JA96920-3	Y119496.D	01/17/12	15:43	05:19	(used for QC only; not part of job JA96854)
JA96920-4	Y119497.D	01/17/12	16:13	05:49	(used for QC only; not part of job JA96854)
JA96920-3MS	Y119498.D	01/17/12	16:47	06:23	Matrix Spike
JA96920-4DUP	Y119500.D	01/17/12	17:49	07:25	Duplicate
ZZZZZZ	Y119501.D	01/17/12	18:20	07:56	(unrelated sample)
ZZZZZZ	Y119502.D	01/17/12	18:51	08:27	(unrelated sample)
JA96854-1	Y119503.D	01/17/12	19:21	08:57	SS-1 001
ZZZZZZ	Y119504.D	01/17/12	19:52	09:28	(unrelated sample)
ZZZZZZ	Y119505.D	01/17/12	20:22	09:58	(unrelated sample)
ZZZZZZ	Y119506.D	01/17/12	20:53	10:29	(unrelated sample)
ZZZZZZ	Y119507.D	01/17/12	21:23	10:59	(unrelated sample)
ZZZZZZ	Y119508.D	01/17/12	21:54	11:30	(unrelated sample)

Volatile Internal Standard Area Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std:	V2B4134-CC4096	Injection Date:	01/16/12
Lab File ID:	2B91889.D	Injection Time:	21:08
Instrument ID:	GCMS2B	Method:	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	105706	8.58	303637	11.06	439177	11.96	434372	14.92	244855	17.06
Upper Limit ^a	211412	9.08	607274	11.56	878354	12.46	868744	15.42	489710	17.56
Lower Limit ^b	52853	8.08	151819	10.56	219589	11.46	217186	14.42	122428	16.56

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2B4134-MB	110083	8.59	316866	11.06	449342	11.96	443180	14.92	258737	17.06
V2B4134-BS	107741	8.59	303639	11.06	441078	11.96	431979	14.92	248378	17.06
JA97075-1MS	109287	8.59	313281	11.06	448630	11.96	442547	14.92	250227	17.06
JA97075-1	111971	8.58	323367	11.06	455329	11.96	459475	14.92	263949	17.06
JA97075-4DUP	116034	8.59	325850	11.06	463751	11.96	458951	14.92	262984	17.06
JA97075-4	114257	8.58	315676	11.06	456291	11.96	451076	14.92	260569	17.06
ZZZZZZ	113440	8.59	317117	11.06	449859	11.96	446478	14.92	256167	17.06
ZZZZZZ	111017	8.58	318329	11.06	456469	11.96	453673	14.92	264363	17.06
ZZZZZZ	112104	8.58	316123	11.06	452365	11.96	454399	14.92	263465	17.06
ZZZZZZ	110177	8.58	309339	11.06	438728	11.96	430908	14.92	251980	17.06
JA96854-3	114737	8.58	316098	11.06	454204	11.96	446562	14.92	257484	17.06
JA96854-4	104957	8.59	310198	11.06	446308	11.96	431027	14.92	251044	17.06
JA96854-5	105620	8.58	310218	11.06	441590	11.96	439191	14.92	253428	17.06
ZZZZZZ	112422	8.58	308210	11.06	438300	11.96	436193	14.92	253264	17.06

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std: VD7804-CC7671
Lab File ID: D191678.D
Instrument ID: GCMSD
Injection Date: 01/19/12
Injection Time: 10:06
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	122233	7.50	248579	9.74	389862	10.65	360288	13.99	204568	16.57
Upper Limit ^a	244466	8.00	497158	10.24	779724	11.15	720576	14.49	409136	17.07
Lower Limit ^b	61117	7.00	124290	9.24	194931	10.15	180144	13.49	102284	16.07

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VD7804-MB	113354	7.52	236562	9.74	365913	10.65	350490	13.99	195909	16.58
VD7804-BS	116240	7.50	242097	9.75	377178	10.65	347896	13.99	203650	16.57
JA96854-2	115586	7.51	239942	9.75	374042	10.65	358909	13.99	199570	16.58
ZZZZZZ	113360	7.51	228968	9.75	354970	10.65	346040	13.99	200001	16.58
ZZZZZZ	118184	7.51	237930	9.75	377691	10.65	371655	13.99	216805	16.58
ZZZZZZ	116520	7.50	236644	9.75	372089	10.66	358801	13.99	209298	16.57
ZZZZZZ	107552	7.52	234053	9.75	364003	10.66	351723	13.99	202130	16.58
JA96938-12MS	117594	7.52	241322	9.75	376905	10.66	350640	13.99	202684	16.57
JA96938-12MSD	118971	7.53	242304	9.75	378110	10.65	350163	13.99	203563	16.57
JA96938-12	113565	7.52	244051	9.75	377012	10.66	357314	13.99	198272	16.58
ZZZZZZ	120074	7.51	239920	9.75	375956	10.65	361685	13.99	208276	16.58
ZZZZZZ	116414	7.52	235187	9.74	366602	10.65	351399	13.99	201949	16.58
ZZZZZZ	119336	7.52	239155	9.75	373099	10.66	362839	13.99	217251	16.57
ZZZZZZ	121341	7.52	243389	9.75	378018	10.65	364376	13.99	210396	16.57
ZZZZZZ	127092	7.50	242155	9.75	379348	10.65	376007	13.99	219135	16.57
ZZZZZZ	123986	7.50	241526	9.75	378777	10.66	362868	13.99	208975	16.58
ZZZZZZ	121201	7.53	235753	9.74	371554	10.65	371026	13.99	215516	16.57
ZZZZZZ	120804	7.52	235931	9.75	369102	10.66	367944	13.99	216472	16.58

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std: VE8236-CC8147
Lab File ID: E187213.D
Instrument ID: GCMSE
Injection Date: 01/18/12
Injection Time: 21:02
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	124901	7.73	231217	9.95	322587	10.87	307580	14.19	169462	16.77
Upper Limit ^a	249802	8.23	462434	10.45	645174	11.37	615160	14.69	338924	17.27
Lower Limit ^b	62451	7.23	115609	9.45	161294	10.37	153790	13.69	84731	16.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VE8236-MB	110270	7.74	236907	9.95	321500	10.87	311399	14.19	170494	16.76
VE8236-BS	124581	7.73	230442	9.95	322785	10.87	310756	14.19	169864	16.77
JA97134-2MS	105272	7.73	221473	9.95	304133	10.87	284368	14.19	163391	16.77
JA97134-2MSD	104245	7.73	225004	9.95	310731	10.87	290714	14.19	164342	16.77
JA97134-2	111149	7.74	230031	9.95	306626	10.87	290736	14.19	161811	16.77
ZZZZZZ	112440	7.74	235612	9.95	316846	10.87	298908	14.19	168745	16.77
ZZZZZZ	117587	7.74	230570	9.95	306822	10.87	288160	14.19	163644	16.77
JA96854-2	117596	7.74	237875	9.95	322111	10.86	280119	14.19	157526	16.77
ZZZZZZ	141389	7.73	226275	9.95	307562	10.87	296117	14.19	171094	16.77
ZZZZZZ	119699	7.74	225418	9.95	298352	10.87	277439	14.19	163711	16.77
ZZZZZZ	115991	7.74	230160	9.95	303691	10.87	275253	14.19	154469	16.77
ZZZZZZ	116041	7.74	237633	9.95	318263	10.87	284676	14.19	151692	16.77
ZZZZZZ	116788	7.74	229631	9.95	303883	10.87	268845	14.19	141306	16.77

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std: VY5108-CC5012 **Injection Date:** 01/17/12
Lab File ID: Y119489.D **Injection Time:** 11:41
Instrument ID: GCMSY **Method:** SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	45678	7.70	167416	9.86	219975	10.78	170024	13.86	80607	16.14
Upper Limit ^a	91356	8.20	334832	10.36	439950	11.28	340048	14.36	161214	16.64
Lower Limit ^b	22839	7.20	83708	9.36	109988	10.28	85012	13.36	40304	15.64

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VY5108-MB	45151	7.70	167897	9.86	221372	10.78	166330	13.86	77306	16.14
VY5108-BS	49467	7.69	170662	9.86	230364	10.78	183203	13.86	88193	16.14
ZZZZZZ	51815	7.70	194099	9.86	253508	10.78	187337	13.86	85102	16.14
ZZZZZZ	47182	7.70	182621	9.86	242481	10.78	183234	13.86	85128	16.14
JA96920-3	50154	7.69	194811	9.86	254716	10.78	191620	13.86	88564	16.14
JA96920-4	44412	7.70	182783	9.86	239851	10.78	177505	13.86	80325	16.14
JA96920-3MS	56290	7.70	185204	9.86	247945	10.77	196151	13.86	94359	16.14
JA96920-4DUP	58251	7.70	199789	9.86	259423	10.78	192919	13.86	87633	16.14
ZZZZZZ	50135	7.70	182964	9.86	244626	10.78	187662	13.86	85064	16.14
ZZZZZZ	57682	7.70	180104	9.86	240123	10.78	182735	13.86	86405	16.14
JA96854-1	48513	7.70	187422	9.86	248567	10.78	189813	13.86	86811	16.14
ZZZZZZ	38575	7.70	178844	9.86	236144	10.78	177778	13.86	81764	16.14
ZZZZZZ	48772	7.70	185615	9.86	245241	10.78	186320	13.86	84405	16.14
ZZZZZZ	42680	7.70	178142	9.86	235635	10.78	181464	13.86	83933	16.14
ZZZZZZ	48618	7.70	171356	9.86	227117	10.78	175296	13.86	80508	16.14
ZZZZZZ	49637	7.70	177297	9.86	235440	10.78	176392	13.86	81209	16.14

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Method: SW846 8260B	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA96854-3	2B91902.D	96.0	99.0	103.0	104.0
JA96854-4	2B91903.D	96.0	99.0	102.0	103.0
JA96854-5	2B91904.D	95.0	98.0	104.0	105.0
JA97075-1MS	2B91893.D	96.0	96.0	103.0	105.0
JA97075-4DUP	2B91896.D	94.0	99.0	102.0	105.0
V2B4134-BS	2B91892.D	96.0	96.0	102.0	105.0
V2B4134-MB	2B91891.D	95.0	99.0	103.0	103.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	77-120%
S2 = 1,2-Dichloroethane-D4	70-127%
S3 = Toluene-D8	79-120%
S4 = 4-Bromofluorobenzene	76-118%

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Method: SW846 8260B

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA96854-1	Y119503.D	100.0	109.0	103.0	102.0
JA96854-2	D191683.D	91.0	86.0	99.0	88.0
JA96854-2	E187223.D	93.0	83.0	91.0	93.0
JA96920-3MS	Y119498.D	99.0	103.0	106.0	98.0
JA96920-4DUP	Y119500.D	98.0	104.0	104.0	102.0
JA96938-12MS	D191688.D	91.0	83.0	99.0	86.0
JA96938-12MSD	D191689.D	90.0	83.0	100.0	84.0
JA97134-2MS	E187217.D	95.0	82.0	93.0	84.0
JA97134-2MSD	E187218.D	96.0	83.0	93.0	82.0
VD7804-BS	D191681.D	91.0	83.0	98.0	84.0
VD7804-MB	D191680.D	90.0	85.0	100.0	87.0
VE8236-BS	E187216.D	96.0	82.0	93.0	82.0
VE8236-MB	E187215.D	92.0	85.0	93.0	80.0
VY5108-BS	Y119492.D	100.0	109.0	106.0	99.0
VY5108-MB	Y119491.D	101.0	110.0	103.0	100.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane
S2 = 1,2-Dichloroethane-D4
S3 = Toluene-D8
S4 = 4-Bromofluorobenzene

67-131%
66-130%
76-125%
53-142%

Initial Calibration Summary

Page 1 of 5

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4096-ICC4096
Lab FileID: 2B91062.D

Response Factor Report MS2B

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration

Calibration Files

1 =2B91057.D 2 =2B91058.D 100 =2B91063.D 50 =2B91062.D
20 =2B91061.D 200 =2B91064.D 5 =2B91067.D 10 =2B91060.D
0.5 =2B91056.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9 -----ISTD-----											
2) tertiary butyl alcohol	0.786	1.001	1.035	1.048	0.971	0.962	1.011			0.973	9.06
3) 1,4-dioxane		0.101	0.104	0.104	0.101	0.084	0.096			0.098	7.95
4) I pentafluorobenzene -----ISTD-----											
5) chlorodifluoromethane	0.632	0.597	0.556	0.563	0.560	0.511	0.679	0.602	0.504	0.578	9.66
6) dichlorodifluoromethane	0.871	0.835	0.825	0.824	0.806	0.758	1.016	0.832	0.767	0.837	9.02
7) chlorotrifluoroethene										0.000#	-1.00
8) chloromethane	0.806	0.800	0.742	0.759	0.748	0.660	0.860	0.764	1.004	0.794	12.08
9) vinyl chloride	0.746	0.728	0.728	0.722	0.733	0.657	0.855	0.756	0.725	0.739	6.99
10) bromomethane	0.403	0.425	0.542	0.485	0.476	0.571	0.492	0.454	0.398	0.472	12.56
11) chloroethane	0.295	0.297	0.352	0.331	0.334	0.359	0.362	0.334	0.231	0.322	12.89
12) vinyl bromide										0.000#	-1.00
13) trichlorofluoromethane	0.752	0.804	0.817	0.801	0.795	0.763	0.919	0.821	0.732	0.800	6.70
14) Pentane	0.785	0.685	0.565	0.568	0.542	0.524	0.604	0.624	0.583	0.609	13.39
15) ethyl ether		0.226	0.228	0.223	0.233	0.187	0.217			0.219	7.58
16) acrolein		0.093	0.093	0.089	0.089	0.081	0.084			0.088	5.47
17) 1,2-dichloro-1,2,2-trifluoroet										0.000#	-1.00
18) 1,1-dichloroethene	0.405	0.416	0.399	0.405	0.380	0.399	0.375	0.403	0.282	0.385	10.54
19) acetone		0.140	0.135	0.108	0.134	0.105	0.149			0.128	13.87
20) allyl chloride	0.230	0.254	0.243	0.243	0.251	0.213	0.253			0.241	6.20
21) acetonitrile		0.024	0.023	0.020	0.021		0.016			0.021	13.87
22) iodomethane	0.802	0.802	0.873	0.867	0.832	0.862	0.749	0.874	0.663	0.814	8.66
23) iso-butyl alcohol											

Initial Calibration Summary

Page 2 of 5

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4096-ICC4096
Lab FileID: 2B91062.D

		0.004	0.004	0.004	0.004	0.005	0.006		0.005#	13.28
24)	carbon disulfide									
		1.374	1.323	1.390	1.401	1.324	1.363	1.276	1.402	1.237
25)	methylene chloride									
		0.464	0.433	0.438	0.446	0.431	0.434	0.398	0.460	0.422
26)	methyl acetate									
		0.070	0.066	0.060	0.066	0.026	0.047		0.056	30.13
	----- Linear regression -----								Coefficient = 0.9984	
	Response Ratio = -0.00221 + 0.06760 *A									
27)	methyl tert butyl ether									
		1.279	1.238	1.316	1.361	1.354	1.271	1.273	1.385	1.045
28)	trans-1,2-dichloroethene									
		0.430	0.401	0.404	0.418	0.415	0.395	0.380	0.425	0.267
29)	di-isopropyl ether									
		1.113	1.192	1.188	1.210	1.205	1.085	1.168	1.267	1.040
30)	2-butanone									
		0.049	0.046	0.045	0.050			0.035	0.045	13.30
31)	1,1-dichloroethane									
		0.671	0.662	0.696	0.714	0.692	0.687	0.644	0.731	0.517
32)	chloroprene									
		0.524	0.548	0.565	0.584	0.576	0.525	0.555	0.601	
33)	acrylonitrile									
		0.157	0.159	0.153	0.156	0.123	0.145		0.149	9.02
34)	vinyl acetate									
		0.073	0.069	0.060	0.066			0.045	0.063	17.50
	----- Linear regression -----								Coefficient = 0.9954	
	Response Ratio = 0.00006 + 0.06759 *A									
35)	ethyl tert-butyl ether									
		1.195	1.154	1.258	1.273	1.268	1.154	1.204	1.302	0.985
36)	ethyl acetate									
		0.056	0.054	0.046	0.041	0.028	0.051		0.046	22.54
	----- Quadratic regression -----								Coefficient = 0.9972	
	Response Ratio = -0.00630 + 0.07226 *A + -0.00748 *A^2									
37)	2,2-dichloropropane									
		0.679	0.675	0.626	0.657	0.659	0.607	0.658	0.699	0.627
38)	cis-1,2-dichloroethene									
		0.464	0.458	0.452	0.463	0.460	0.449	0.432	0.475	0.339
39)	propionitrile									
		0.059	0.059	0.057	0.058	0.050	0.053		0.056	6.58
40)	bromochloromethane									
		0.211	0.224	0.242	0.243	0.245	0.242	0.221	0.244	
41)	tetrahydrofuran									
		0.124	0.120	0.110	0.114	0.112	0.107	0.116	0.117	
42)	chloroform									
		0.728	0.725	0.721	0.755	0.750	0.707	0.696	0.777	0.604
43)	t-butyl formate									
		0.311	0.369	0.406	0.407	0.411	0.368	0.393	0.405	
44)	dibromofluoromethane (s)									
		0.467	0.395	0.402	0.402	0.416	0.388	0.358	0.425	0.494
45)	1,2-dichloroethane-d4 (s)									
		0.472	0.452	0.441	0.456	0.469	0.437	0.421	0.500	
46)	freon 113									
		0.320	0.357	0.377	0.368	0.353	0.345	0.371	0.370	
47)	methacrylonitrile									
		0.219	0.220	0.217	0.221	0.226	0.225	0.228	0.222	1.84
48)	1,1,1-trichloroethane									
		0.664	0.666	0.680	0.705	0.675	0.666	0.642	0.711	0.538
									0.661	7.67

5.9.1

5

Initial Calibration Summary

Page 3 of 5

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4096-ICC4096
Lab FileID: 2B91062.D

49)	Cyclohexane	0.597	0.622	0.582	0.596	0.557	0.582	0.570	0.590	0.539	0.582	4.19
50)	tert amyl alcohol										0.000#	-1.00
51)	I 1,4-difluorobenzene	-----ISTD-----										
52)	tert amyl ethyl ether										0.000#	-1.00
53)	Di-isobutylene										0.000#	-1.00
54)	epichlorohydrin	0.028	0.030	0.030	0.030	0.028	0.031	0.032			0.030	4.95
55)	n-butyl alcohol	0.006	0.008	0.008	0.008	0.008	0.007	0.008			0.008#	9.28
56)	carbon tetrachloride	0.454	0.458	0.437	0.456	0.439	0.426	0.437	0.462	0.375	0.438	6.09
57)	1,1-dichloropropene	0.360	0.378	0.373	0.388	0.364	0.367	0.356	0.377	0.323	0.365	5.04
58)	hexane	0.257	0.280	0.289	0.295	0.272	0.259	0.285	0.290		0.278	5.16
59)	benzene	1.108	1.049	1.048	1.109	1.081	1.027	1.022	1.130	1.035	1.068	3.78
60)	2,2,4-trimethylpentane	0.885	1.004	0.938	0.962	0.911	0.847	0.950	0.972	0.708	0.908	9.80
61)	tert-amyl methyl ether	0.939	0.861	0.838	0.875	0.888	0.777	0.881	0.889	0.762	0.857	6.57
62)	heptane	0.158	0.177	0.172	0.176	0.166	0.158	0.178	0.179		0.170	5.21
63)	isopropyl acetate	0.599	0.505	0.485	0.502	0.481	0.453	0.458	0.489		0.497	9.15
64)	1,2-dichloroethane	0.384	0.376	0.398	0.416	0.412	0.396	0.384	0.431	0.295	0.388	10.08
65)	trichloroethene	0.302	0.275	0.301	0.314	0.296	0.306	0.283	0.310	0.257	0.294	6.37
66)	2-nitropropane	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014		0.014	3.50
67)	2-chloroethyl vinyl ether	0.158	0.162	0.177	0.180	0.173	0.159	0.158	0.182		0.169	6.15
68)	methyl methacrylate	0.234	0.264	0.278	0.288	0.274	0.273	0.249	0.294		0.269	7.33
69)	1,2-dichloropropane	0.269	0.266	0.280	0.290	0.278	0.282	0.260	0.299	0.209	0.270	9.58
70)	dibromomethane	0.191	0.190	0.199	0.207	0.201	0.201	0.190	0.213		0.199	4.22
71)	methylcyclohexane	0.475	0.462	0.459	0.478	0.448	0.424	0.472	0.490	0.348	0.451	9.51
72)	bromodichloromethane	0.399	0.390	0.405	0.423	0.406	0.415	0.386	0.416	0.307	0.394	8.84
73)	cis-1,3-dichloropropene	0.452	0.459	0.472	0.487	0.463	0.473	0.436	0.485	0.375	0.456	7.52
74)	toluene-d8 (s)	1.090	1.014	1.015	1.058	1.068	0.959	0.963	1.109	1.072	1.039	5.18
75)	4-methyl-2-pentanone	0.111	0.118	0.117	0.112	0.115	0.118				0.115	2.56
76)	toluene	0.735	0.708	0.691	0.722	0.690	0.682	0.679	0.753	0.620	0.698	5.49
77)	3-methyl-1-butanol	0.013	0.015	0.013	0.014	0.014	0.013	0.014	0.015		0.014	5.49
78)	trans-1,3-dichloropropene	0.459	0.432	0.451	0.461	0.437	0.445	0.414	0.468	0.387	0.439	5.85

Initial Calibration Summary

Page 4 of 5

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4096-ICC4096
Lab FileID: 2B91062.D

79)	ethyl methacrylate	0.330	0.323	0.349	0.360	0.356	0.343	0.329	0.370		0.345	4.88	
80)	1,1,2-trichloroethane	0.242	0.229	0.229	0.238	0.229	0.223	0.228	0.245	0.187	0.228	7.39	
81)	2-hexanone		0.083	0.099	0.100	0.096	0.097	0.084	0.102		0.095	8.12	
82)	I chlorobenzene-d5	-----ISTD-----											
83)	butyl ether											0.000#	-1.00
84)	tetrachloroethene	0.283	0.274	0.281	0.296	0.282	0.287	0.281	0.300	0.230	0.279	7.27	
85)	1,3-dichloropropane	0.424	0.420	0.427	0.446	0.441	0.432	0.414	0.441	0.347	0.421	7.08	
86)	butyl acetate		0.159	0.164	0.164	0.152	0.152	0.167			0.160	4.22	
87)	3,3-dimethyl-1-butanol	0.033	0.030	0.032	0.032	0.032	0.030	0.032	0.033	0.025	0.031	7.80	
88)	dibromochloromethane	0.351	0.338	0.370	0.379	0.362	0.378	0.328	0.365	0.281	0.350	8.90	
89)	1,2-dibromoethane	0.289	0.297	0.312	0.322	0.309	0.311	0.285	0.315	0.258	0.300	6.67	
90)	chlorobenzene	0.827	0.811	0.847	0.876	0.844	0.846	0.799	0.866	0.779	0.833	3.80	
91)	1,1,1,2-tetrachloroethane	0.362	0.334	0.361	0.368	0.359	0.362	0.339	0.363	0.353	0.356	3.25	
92)	ethylbenzene	1.427	1.380	1.331	1.400	1.410	1.315	1.302	1.456	1.363	1.376	3.83	
93)	m,p-xylene	0.531	0.536	0.547	0.564	0.560	0.560	0.526	0.585	0.516	0.547	4.02	
94)	o-xylene	0.548	0.569	0.593	0.607	0.591	0.601	0.548	0.608	0.457	0.569	8.47	
95)	styrene	0.912	0.952	0.967	0.987	0.973	0.967	0.860	1.008	0.837	0.940	6.19	
96)	bromoform	0.277	0.284	0.320	0.316	0.298	0.318	0.261	0.304	0.263	0.293	7.90	
97)	I 1,4-dichlorobenzene-d	-----ISTD-----											
98)	isopropylbenzene	2.356	2.368	2.503	2.599	2.501	2.463	2.308	2.569	2.133	2.422	6.05	
99)	4-bromofluorobenzene (s)	0.819	0.777	0.681	0.689	0.710	0.647	0.651	0.755			0.716	8.63
100)	cyclohexanone	0.040	0.036	0.020	0.029	0.020	0.020	0.010	0.026			0.025	37.73
		----- Quadratic regression -----							Coefficient = 0.9911				
		Response Ratio = 0.00239 + 0.02391 *A + -0.00010 *A^2											
101)	bromobenzene	0.716	0.683	0.714	0.730	0.724	0.708	0.666	0.732	0.557	0.692	7.96	
102)	1,1,2,2-tetrachloroethane	0.791	0.735	0.692	0.719	0.711	0.668	0.654	0.764	0.676	0.712	6.38	
103)	trans-1,4-dichloro-2-butene	0.150	0.150	0.185	0.187	0.175	0.181	0.170	0.188			0.173	9.10
104)	1,2,3-trichloropropane	0.205	0.193	0.187	0.187	0.192	0.181	0.181	0.201			0.191	4.52
105)	n-propylbenzene	2.905	2.824	2.793	2.887	2.863	2.704	2.761	2.992	2.561	2.810	4.49	
106)	2-chlorotoluene	0.620	0.620	0.654	0.663	0.647	0.657	0.621	0.662	0.524	0.630	6.93	
107)	4-chlorotoluene												

Initial Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4096-ICC4096
Lab FileID: 2B91062.D

		1.832	1.793	1.754	1.785	1.804	1.752	1.701	1.898	1.633	1.772	4.28
108)	1,3,5-trimethylbenzene	2.100	2.047	2.158	2.200	2.161	2.163	1.969	2.215	1.837	2.095	5.93
109)	tert-butylbenzene	1.810	1.808	2.056	2.086	1.973	2.060	1.740	2.009	1.664	1.912	8.24
110)	pentachloroethane	0.449	0.471	0.516	0.522	0.496	0.526	0.445	0.511	0.435	0.486	7.38
111)	1,2,4-trimethylbenzene	2.249	2.162	2.211	2.276	2.260	2.229	2.058	2.311	1.993	2.194	4.81
112)	sec-butylbenzene	2.757	2.796	2.906	3.021	2.900	2.912	2.660	3.008	2.642	2.845	4.88
113)	1,3-dichlorobenzene	1.408	1.424	1.365	1.409	1.396	1.373	1.309	1.438	1.275	1.377	3.94
114)	p-isopropyltoluene	2.357	2.335	2.541	2.624	2.509	2.529	2.291	2.541	2.225	2.439	5.68
115)	1,4-dichlorobenzene	1.491	1.367	1.415	1.461	1.403	1.432	1.344	1.445	1.280	1.404	4.64
116)	1,2-dichlorobenzene	1.416	1.401	1.415	1.491	1.442	1.410	1.343	1.487	1.359	1.418	3.53
117)	n-butylbenzene	1.151	1.200	1.307	1.361	1.274	1.299	1.151	1.311	1.032	1.232	8.56
118)	1,2-dibromo-3-chloropropane	0.178	0.155	0.167	0.174	0.166	0.165	0.154	0.167		0.166	4.98
119)	1,3,5-trichlorobenzene	1.278	1.219	1.332	1.431	1.354	1.307	1.229	1.370	1.175	1.299	6.30
120)	1,2,4-trichlorobenzene	1.084	1.040	1.216	1.295	1.220	1.212	1.130	1.241	0.952	1.154	9.59
121)	hexachlorobutadiene	0.647	0.606	0.630	0.667	0.634	0.652	0.624	0.648	0.590	0.633	3.80
122)	naphthalene	2.437	2.307	2.545	2.708	2.637	2.493	2.515	2.640	2.248	2.504	6.13
123)	1,2,3-trichlorobenzene	0.978	0.906	1.089	1.148	1.102	1.097	1.018	1.073	0.881	1.032	9.02
124)	hexachloroethane	0.458	0.455	0.534	0.546	0.497	0.541	0.422	0.495		0.494	9.22

 (#) = Out of Range ### Number of calibration levels exceeded format ###

M2B4096.M

Fri Dec 23 17:02:14 2011

MS2B

5.9.1
5

Initial Calibration Verification

Page 1 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4096-ICV4096
Lab FileID: 2B91068.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2B91068.D
 Acq On : 22 Dec 2011 5:55 pm
 Sample : icv4096-50
 Misc : MS23205,V2B4096,W,,,,,1
 MS Integration Params: rteint.p

Vial: 14
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	102	0.00	8.60
2 M	tertiary butyl alcohol	0.973	1.038	-6.7	102	0.00	8.73
3 M	1,4-dioxane	0.098	0.100	-2.0	98	0.00	12.63
4 I	pentafluorobenzene	1.000	1.000	0.0	102	0.00	11.06
5 M	chlorodifluoromethane	0.578	0.455	21.3#	82	0.00	4.65
6 M	dichlorodifluoromethane	0.837	0.827	1.2	102	0.00	4.65
7 m	chlorotrifluoroethene			-----NA-----			
8 M	chloromethane	0.794	0.753	5.2	101	0.00	5.05
9 M	vinyl chloride	0.739	0.743	-0.5	105	0.00	5.36
10 M	bromomethane	0.472	0.482	-2.1	101	0.00	6.12
11 M	chloroethane	0.322	0.334	-3.7	103	0.00	6.34
12	vinyl bromide			-----NA-----			
13 M	trichlorofluoromethane	0.800	0.816	-2.0	104	0.00	6.93
14	Pentane	0.609	0.509	16.4	91	0.00	7.05
15 M	ethyl ether	0.219	0.225	-2.7	100	0.00	7.41
16 M	acrolein	0.088	0.096	-9.1	104	0.00	7.62
17	1,2-dichloro-1,2,2-triflu			-----NA-----			
18 M	1,1-dichloroethene	0.385	0.386	-0.3	97	0.00	7.88
19 M	acetone	0.128	0.119	7.0	90	0.00	7.90
20 M	allyl chloride	0.241	0.248	-2.9	104	0.00	8.46
21 M	acetonitrile	0.021	0.022	-4.8	97	0.00	8.35
22 M	iodomethane	0.814	0.847	-4.1	99	0.00	8.17
23 M	iso-butyl alcohol	0.005	0.004#	20.0	100	0.00	11.36
24 M	carbon disulfide	1.343	1.358	-1.1	99	0.00	8.33
25 M	methylene chloride	0.436	0.434	0.5	99	0.00	8.64
----- True Calc. % Drift -----							
26 M	methyl acetate	50.000	47.123	5.8	94	0.00	8.45
----- AvgRF CCRF % Dev -----							
27 M	methyl tert butyl ether	1.280	1.319	-3.0	99	0.00	9.08
28 M	trans-1,2-dichloroethene	0.393	0.408	-3.8	99	0.00	9.10
29 M	di-isopropyl ether	1.163	1.220	-4.9	103	0.00	9.76
30 M	2-butanone	0.045	0.049	-8.9	107	0.00	10.45
31 M	1,1-dichloroethane	0.668	0.721	-7.9	103	0.00	9.70
32 M	chloroprene	0.560	0.575	-2.7	100	0.00	9.85
33 M	acrylonitrile	0.149	0.160	-7.4	102	0.00	8.97
----- True Calc. % Drift -----							
34 M	vinyl acetate	50.000	56.260	-12.5	111	0.00	9.71

Initial Calibration Verification

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: V2B4096-ICV4096
 Lab FileID: 2B91068.D

		AvgRF	CCRF	% Dev			
35 M	ethyl tert-butyl ether	1.199	1.295	-8.0	103	0.00	10.25
		True	Calc.	% Drift			
36 M	ethyl acetate	50.000	49.731	0.5	110	0.00	10.50
		AvgRF	CCRF	% Dev			
37 M	2,2-dichloropropane	0.654	0.625	4.4	97	0.00	10.52
38 M	cis-1,2-dichloroethene	0.443	0.456	-2.9	100	0.00	10.49
39 M	propionitrile	0.056	0.059	-5.4	101	0.00	10.51
40 M	bromochloromethane	0.234	0.245	-4.7	102	0.00	10.80
41 M	tetrahydrofuran	0.115	0.113	1.7	101	0.00	10.88
42 M	chloroform	0.718	0.747	-4.0	101	0.00	10.87
43	t-butyl formate	0.384	0.444	-15.6	111	0.00	10.95
44 S	dibromofluoromethane (s)	0.416	0.408	1.9	103	0.00	11.07
45 S	1,2-dichloroethane-d4 (s)	0.456	0.457	-0.2	102	0.00	11.50
46 M	freon 113	0.358	0.375	-4.7	104	0.00	7.88
47 M	methacrylonitrile	0.222	0.221	0.5	104	0.00	10.73
48 M	1,1,1-trichloroethane	0.661	0.700	-5.9	101	0.00	11.18
49 M	Cyclohexane	0.582	0.594	-2.1	101	0.00	11.29
50	tert amyl alcohol			NA			
51 I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	11.96
52	tert amyl ethyl ether			NA			
53 M	Di-isobutylene			NA			
54 M	epichlorohydrin	0.030	0.028	6.7	94	0.00	13.12
55 M	n-butyl alcohol	0.008	0.008#	0.0	103	0.00	12.04
56 M	carbon tetrachloride	0.438	0.459	-4.8	102	0.00	11.39
57 M	1,1-dichloropropene	0.365	0.383	-4.9	100	0.00	11.36
58 M	hexane	0.278	0.288	-3.6	100	0.00	9.50
59 M	benzene	1.068	1.075	-0.7	99	0.00	11.61
60	2,2,4-trimethylpentane	0.908	0.915	-0.8	97	0.00	11.69
61 M	tert-amyl methyl ether	0.857	0.926	-8.1	108	0.00	11.67
62 M	heptane	0.170	0.166	2.4	96	0.00	11.84
63 M	isopropyl acetate	0.497	0.487	2.0	99	0.00	11.54
64 M	1,2-dichloroethane	0.388	0.410	-5.7	100	0.00	11.59
65 M	trichloroethene	0.294	0.307	-4.4	100	0.00	12.30
66 M	2-nitropropane	0.014	0.014	0.0	95	0.00	13.32
67 M	2-chloroethyl vinyl ether	0.169	0.164	3.0	93	0.00	13.02
68 M	methyl methacrylate	0.269	0.280	-4.1	99	0.00	12.55
69 M	1,2-dichloropropane	0.270	0.277	-2.6	97	0.00	12.53
70 M	dibromomethane	0.199	0.208	-4.5	102	0.00	12.67
71 M	methylcyclohexane	0.451	0.479	-6.2	102	0.00	12.56
72 M	bromodichloromethane	0.394	0.413	-4.8	100	0.00	12.79
73 M	cis-1,3-dichloropropene	0.456	0.466	-2.2	97	0.00	13.23
74 S	toluene-d8 (s)	1.039	1.033	0.6	99	0.00	13.53
75 M	4-methyl-2-pentanone	0.115	0.119	-3.5	103	0.00	13.33
76 M	toluene	0.698	0.691	1.0	98	0.00	13.60
77 M	3-methyl-1-butanol	0.014	0.014	0.0	101	0.00	13.32
78 M	trans-1,3-dichloropropene	0.439	0.441	-0.5	97	0.00	13.74
79 M	ethyl methacrylate	0.345	0.358	-3.8	101	0.00	13.77
80 M	1,1,2-trichloroethane	0.228	0.225	1.3	96	0.00	13.94
81 M	2-hexanone	0.095	0.098	-3.2	100	0.00	14.12
82 I	chlorobenzene-d5	1.000	1.000	0.0	101	0.00	14.92
83 m	butyl ether			NA			
84 M	tetrachloroethene	0.279	0.295	-5.7	101	0.00	14.15
85 M	1,3-dichloropropane	0.421	0.437	-3.8	99	0.00	14.11
86 M	butyl acetate	0.160	0.165	-3.1	102	0.00	14.20
87	3,3-dimethyl-1-butanol	0.031	0.032	-3.2	101	0.00	14.26

Initial Calibration Verification

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4096-ICV4096
Lab FileID: 2B91068.D

88 M	dibromochloromethane	0.350	0.368	-5.1	99	0.00	14.35
89 M	1,2-dibromoethane	0.300	0.313	-4.3	99	0.00	14.51
90 M	chlorobenzene	0.833	0.860	-3.2	100	0.00	14.95
91 M	1,1,1,2-tetrachloroethane	0.356	0.368	-3.4	102	0.00	15.00
92 M	ethylbenzene	1.376	1.363	0.9	99	0.00	15.01
93 M	m,p-xylene	0.547	0.555	-1.5	100	0.00	15.11
94 M	o-xylene	0.569	0.606	-6.5	101	0.00	15.49
95 M	styrene	0.940	0.971	-3.3	100	0.00	15.49
96 M	bromoform	0.293	0.311	-6.1	100	0.00	15.71
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	17.07
98 M	isopropylbenzene	2.422	2.547	-5.2	100	0.00	15.81
99 S	4-bromofluorobenzene (s)	0.716	0.689	3.8	102	0.00	15.98
----- True Calc. % Drift -----							
100 M	cyclohexanone	500.000	685.410	-37.1#	111	0.00	15.93
----- AvgRF CCRF % Dev -----							
101 M	bromobenzene	0.692	0.717	-3.6	100	0.00	16.17
102 M	1,1,2,2-tetrachloroethane	0.712	0.696	2.2	99	0.00	16.04
103 M	trans-1,4-dichloro-2-bute	0.173	0.179	-3.5	98	0.00	16.08
104 M	1,2,3-trichloropropane	0.191	0.187	2.1	102	0.00	16.12
105 M	n-propylbenzene	2.810	2.867	-2.0	102	0.00	16.19
106 M	2-chlorotoluene	0.630	0.653	-3.7	101	0.00	16.31
107 M	4-chlorotoluene	1.772	1.766	0.3	101	0.00	16.40
108 M	1,3,5-trimethylbenzene	2.095	2.200	-5.0	102	0.00	16.33
109 M	tert-butylbenzene	1.912	2.067	-8.1	101	0.00	16.66
110 M	pentachloroethane	0.486	0.519	-6.8	102	0.00	16.71
111 M	1,2,4-trimethylbenzene	2.194	2.300	-4.8	103	0.00	16.69
112 M	sec-butylbenzene	2.845	3.008	-5.7	102	0.00	16.86
113 M	1,3-dichlorobenzene	1.377	1.401	-1.7	102	0.00	17.02
114 M	p-isopropyltoluene	2.439	2.694	-10.5	105	0.00	16.97
115 M	1,4-dichlorobenzene	1.404	1.435	-2.2	100	0.00	17.09
116 M	1,2-dichlorobenzene	1.418	1.471	-3.7	101	0.00	17.47
117 M	n-butylbenzene	1.232	1.335	-8.4	100	0.00	17.36
118 M	1,2-dibromo-3-chloropropa	0.166	0.173	-4.2	102	0.00	18.21
119	1,3,5-trichlorobenzene	1.299	1.418	-9.2	101	0.00	18.44
120 M	1,2,4-trichlorobenzene	1.154	1.306	-13.2	103	0.00	19.08
121 M	hexachlorobutadiene	0.633	0.636	-0.5	97	0.00	19.22
122 M	naphthalene	2.504	2.627	-4.9	99	0.00	19.36
123 M	1,2,3-trichlorobenzene	1.032	1.136	-10.1	101	0.00	19.60
124 M	hexachloroethane	0.494	0.550	-11.3	103	0.00	17.75

(#) = Out of Range
 2B91062.D M2B4096.M

SPCC's out = 0 CCC's out = 0
 Fri Dec 23 16:59:27 2011 MS2B

Continuing Calibration Summary

Page 1 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4134-CC4096
Lab FileID: 2B91889.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2B91889.D
 Acq On : 16 Jan 2012 9:08 pm
 Sample : cc4096-50
 Misc : MS24311,V2B4134,W,,,,,1
 MS Integration Params: rteint.p

Vial: 24
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	79	-0.01	8.58
2 M	tertiary butyl alcohol	0.973	1.055	-8.4	80	0.00	8.72
3 M	1,4-dioxane	0.098	0.095	3.1	71	0.00	12.63
4 I	pentafluorobenzene	1.000	1.000	0.0	111	0.00	11.06
5 M	chlorodifluoromethane	0.578	0.574	0.7	113	-0.01	4.65
6 M	dichlorodifluoromethane	0.837	0.887	-6.0	119	0.00	4.64
7 m	chlorotrifluoroethene			-----NA-----			
8 M	chloromethane	0.794	0.750	5.5	110	0.00	5.05
9 M	vinyl chloride	0.739	0.700	5.3	108	0.00	5.36
10 M	bromomethane	0.472	0.498	-5.5	114	0.00	6.12
11 M	chloroethane	0.322	0.360	-11.8	121	0.00	6.34
12	vinyl bromide			-----NA-----			
13 M	trichlorofluoromethane	0.800	0.860	-7.5	119	0.00	6.93
14	Pentane	0.609	0.705	-15.8	138	0.00	7.04
15 M	ethyl ether	0.219	0.217	0.9	105	0.00	7.40
16 M	acrolein	0.088	0.073	17.0	87	0.00	7.61
17	1,2-dichloro-1,2,2-triflu			-----NA-----			
18 M	1,1-dichloroethene	0.385	0.412	-7.0	113	0.00	7.87
19 M	acetone	0.128	0.096	25.0#	79	0.00	7.91
20 M	allyl chloride	0.241	0.261	-8.3	119	0.00	8.46
21 M	acetonitrile	0.021	0.018	14.3	89	0.00	8.34
22 M	iodomethane	0.814	0.875	-7.5	112	-0.02	8.15
23 M	iso-butyl alcohol	0.005	0.004#	20.0	98	0.00	11.36
24 M	carbon disulfide	1.343	1.460	-8.7	116	-0.01	8.32
25 M	methylene chloride	0.436	0.463	-6.2	115	0.00	8.64
26 M	methyl acetate	50.000	36.896	% Drift 26.2#	80	-0.01	8.44
27 M	methyl tert butyl ether	1.280	1.289	% Dev -0.7	105	-0.01	9.07
28 M	trans-1,2-dichloroethene	0.393	0.430	-9.4	114	0.00	9.09
29 M	di-isopropyl ether	1.163	1.346	-15.7	123	-0.01	9.75
30 M	2-butanone	0.045	0.037	17.8	88	0.00	10.45
31 M	1,1-dichloroethane	0.668	0.740	-10.8	115	-0.01	9.69
32 M	chloroprene	0.560	0.618	-10.4	117	0.00	9.84
33 M	acrylonitrile	0.149	0.120	19.5	84	0.00	8.96
34 M	vinyl acetate	50.000	45.739	% Drift 8.5	99	0.00	9.70

Continuing Calibration Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4134-CC4096
Lab FileID: 2B91889.D

		AvgRF	CCRF	% Dev			
35 M	ethyl tert-butyl ether	1.199	1.344	-12.1	117	0.00	10.25
		True	Calc.	% Drift			
36 M	ethyl acetate	50.000	40.137	19.7	97	0.00	10.50
		AvgRF	CCRF	% Dev			
37 M	2,2-dichloropropane	0.654	0.675	-3.2	114	0.00	10.52
38 M	cis-1,2-dichloroethene	0.443	0.468	-5.6	112	-0.01	10.48
39 M	propionitrile	0.056	0.043	23.2#	80	0.00	10.50
40 M	bromochloromethane	0.234	0.236	-0.9	108	0.00	10.80
41 M	tetrahydrofuran	0.115	0.087	24.3#	85	0.00	10.87
42 M	chloroform	0.718	0.747	-4.0	110	0.00	10.86
43	t-butyl formate	0.384	0.370	3.6	101	0.00	10.94
44 S	dibromofluoromethane (s)	0.416	0.405	2.6	112	0.00	11.07
45 S	1,2-dichloroethane-d4 (s)	0.456	0.439	3.7	107	0.00	11.49
46 M	freon 113	0.358	0.397	-10.9	120	0.00	7.88
47 M	methacrylonitrile	0.222	0.188	15.3	96	0.00	10.73
48 M	1,1,1-trichloroethane	0.661	0.717	-8.5	113	0.00	11.17
49 M	Cyclohexane	0.582	0.597	-2.6	111	0.00	11.28
50	tert amyl alcohol			NA			
51 I	1,4-difluorobenzene	1.000	1.000	0.0	114	0.00	11.96
52	tert amyl ethyl ether			NA			
53 M	Di-isobutylene			NA			
54 M	epichlorohydrin	0.030	0.024	20.0	89	0.00	13.12
55 M	n-butyl alcohol	0.008	0.006#	25.0#	80	0.00	12.04
56 M	carbon tetrachloride	0.438	0.444	-1.4	111	0.00	11.39
57 M	1,1-dichloropropene	0.365	0.376	-3.0	110	0.00	11.36
58 M	hexane	0.278	0.316	-13.7	122	-0.01	9.49
59 M	benzene	1.068	1.109	-3.8	114	0.00	11.61
60	2,2,4-trimethylpentane	0.908	0.948	-4.4	112	0.00	11.68
61 M	tert-amyl methyl ether	0.857	0.820	4.3	107	0.00	11.67
62 M	heptane	0.170	0.183	-7.6	119	0.00	11.84
63 M	isopropyl acetate	0.497	0.431	13.3	98	0.00	11.53
64 M	1,2-dichloroethane	0.388	0.392	-1.0	107	0.00	11.58
65 M	trichloroethene	0.294	0.307	-4.4	111	0.00	12.30
66 M	2-nitropropane	0.014	0.010	28.6#	78	0.00	13.32
67 M	2-chloroethyl vinyl ether	0.169	0.174	-3.0	110	0.00	13.02
68 M	methyl methacrylate	0.269	0.258	4.1	102	0.00	12.55
69 M	1,2-dichloropropane	0.270	0.297	-10.0	117	0.00	12.53
70 M	dibromomethane	0.199	0.187	6.0	103	0.00	12.66
71 M	methylcyclohexane	0.451	0.465	-3.1	111	0.00	12.55
72 M	bromodichloromethane	0.394	0.424	-7.6	114	0.00	12.79
73 M	cis-1,3-dichloropropene	0.456	0.494	-8.3	116	0.00	13.23
74 S	toluene-d8 (s)	1.039	1.061	-2.1	114	0.00	13.53
75 M	4-methyl-2-pentanone	0.115	0.095	17.4	92	0.00	13.33
76 M	toluene	0.698	0.724	-3.7	114	0.00	13.59
77 M	3-methyl-1-butanol	0.014	0.010#	28.6#	79	0.00	13.32
78 M	trans-1,3-dichloropropene	0.439	0.446	-1.6	110	0.00	13.74
79 M	ethyl methacrylate	0.345	0.339	1.7	107	0.00	13.76
80 M	1,1,2-trichloroethane	0.228	0.222	2.6	106	0.00	13.93
81 M	2-hexanone	0.095	0.081	14.7	92	0.00	14.12
82 I	chlorobenzene-d5	1.000	1.000	0.0	113	0.00	14.92
83 m	butyl ether			NA			
84 M	tetrachloroethene	0.279	0.286	-2.5	109	0.00	14.15
85 M	1,3-dichloropropane	0.421	0.433	-2.9	110	0.00	14.11
86 M	butyl acetate	0.160	0.154	3.8	106	0.00	14.20
87	3,3-dimethyl-1-butanol	0.031	0.022	29.0#	78	0.00	14.26

Continuing Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: V2B4134-CC4096
Lab FileID: 2B91889.D

88 M	dibromochloromethane	0.350	0.354	-1.1	105	0.00	14.35
89 M	1,2-dibromoethane	0.300	0.294	2.0	103	0.00	14.50
90 M	chlorobenzene	0.833	0.864	-3.7	111	0.00	14.95
91 M	1,1,1,2-tetrachloroethane	0.356	0.344	3.4	106	0.00	14.99
92 M	ethylbenzene	1.376	1.399	-1.7	113	0.00	15.01
93 M	m,p-xylene	0.547	0.557	-1.8	111	0.00	15.11
94 M	o-xylene	0.569	0.578	-1.6	108	0.00	15.49
95 M	styrene	0.940	0.968	-3.0	111	0.00	15.49
96 M	bromoform	0.293	0.268	8.5	96	0.00	15.71
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	17.06
98 M	isopropylbenzene	2.422	2.738	-13.0	108	0.00	15.81
99 S	4-bromofluorobenzene (s)	0.716	0.753	-5.2	112	0.00	15.98
----- True Calc. % Drift -----							
100 M	cyclohexanone	500.000	305.553	38.9#	51	0.00	15.93
----- AvgRF CCRF % Dev -----							
101 M	bromobenzene	0.692	0.778	-12.4	109	0.00	16.16
102 M	1,1,2,2-tetrachloroethane	0.712	0.663	6.9	94	0.00	16.04
103 M	trans-1,4-dichloro-2-bute	0.173	0.149	13.9	81	0.00	16.08
104 M	1,2,3-trichloropropane	0.191	0.169	11.5	92	0.00	16.12
105 M	n-propylbenzene	2.810	3.084	-9.8	109	0.00	16.19
106 M	2-chlorotoluene	0.630	0.680	-7.9	105	0.00	16.31
107 M	4-chlorotoluene	1.772	1.960	-10.6	112	0.00	16.40
108 M	1,3,5-trimethylbenzene	2.095	2.258	-7.8	105	0.00	16.33
109 M	tert-butylbenzene	1.912	2.097	-9.7	103	0.00	16.65
110 M	pentachloroethane	0.486	0.509	-4.7	100	0.00	16.71
111 M	1,2,4-trimethylbenzene	2.194	2.330	-6.2	105	0.00	16.69
112 M	sec-butylbenzene	2.845	3.058	-7.5	103	0.00	16.86
113 M	1,3-dichlorobenzene	1.377	1.444	-4.9	105	0.00	17.01
114 M	p-isopropyltoluene	2.439	2.566	-5.2	100	0.00	16.97
115 M	1,4-dichlorobenzene	1.404	1.491	-6.2	104	0.00	17.09
116 M	1,2-dichlorobenzene	1.418	1.493	-5.3	102	0.00	17.47
117 M	n-butylbenzene	1.232	1.383	-12.3	104	0.00	17.36
118 M	1,2-dibromo-3-chloropropa	0.166	0.130	21.7#	76	0.00	18.21
119	1,3,5-trichlorobenzene	1.299	1.430	-10.1	102	0.00	18.44
120 M	1,2,4-trichlorobenzene	1.154	1.255	-8.8	99	0.00	19.08
121 M	hexachlorobutadiene	0.633	0.641	-1.3	98	0.00	19.22
122 M	naphthalene	2.504	2.199	12.2	83	0.00	19.36
123 M	1,2,3-trichlorobenzene	1.032	1.053	-2.0	94	0.00	19.60
124 M	hexachloroethane	0.494	0.556	-12.6	104	0.00	17.75

(#) = Out of Range
 2B91062.D M2B4096.M

SPCC's out = 0 CCC's out = 0
 Wed Jan 18 11:57:30 2012 MS2B

Initial Calibration Summary

Page 1 of 5

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VD7671-ICC7671
Lab FileID: D188525.D

Response Factor Report MSD

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Mon Oct 31 08:44:12 2011
Response via : Initial Calibration

Calibration Files

5 =D188522.D 2 =D188521.D 0.5 =D188519.D 50 =D188525.D
100 =D188527.D 1 =D188520.D 200 =D188528.D 20 =D188524.D
10 =D188523.D =

Compound	5	2	0.5	50	100	1	200	20	10	Avg	%RSD
1) I Tert Butyl Alcohol-d9 -----ISTD-----											
2) 1,4-dioxane											
0.078				0.107	0.112		0.128	0.100	0.093	0.103	16.69
----- Linear regression -----											
Response Ratio = -0.03405 + 0.12895 *A											
3) tertiary butyl alcohol											
1.113 1.129 1.418 1.379 1.342 1.357 1.353 1.405 1.201										1.299	9.14
4) I pentafluorobenzene -----ISTD-----											
5) 1,2-dichloro-1,2,2-trifluoroet										0.000#	-1.00
6) chlorodifluoromethane											
0.622 0.595 0.655 0.673 0.672 0.648 0.663 0.725 0.607										0.651	6.06
7) dichlorodifluoromethane											
0.723 0.643				0.764	0.752	0.697	0.759	0.876	0.715	0.741	9.10
8) chloromethane											
0.723 0.698 0.809 0.815 0.814 0.779 0.836 0.896 0.735										0.790	7.89
9) vinyl chloride											
0.714 0.672 0.809 0.805 0.788 0.718 0.777 0.894 0.725										0.767	8.75
10) bromomethane											
0.457 0.446 0.510 0.501 0.450 0.503								0.574	0.464	0.488	8.84
11) chloroethane											
0.422 0.420 0.418 0.489 0.487 0.444 0.379 0.526 0.432										0.446	10.21
12) vinyl bromide										0.000#	-1.00
13) trichlorofluoromethane											
0.831 0.769				0.935	0.939	0.813	0.935	1.041	0.833	0.887	10.13
14) pentane											
1.148 1.069 1.225 1.269 1.263 1.334 1.302 1.357 1.133										1.233	7.95
15) ethyl ether											
0.341 0.349 0.388 0.412 0.409 0.320 0.404 0.427 0.338										0.376	10.44
16) acrolein											
0.141 0.144				0.149				0.145	0.121	0.140	7.94
17) chlorotrifluoroethene										0.000#	-1.00
18) 1,1-dichloroethene											
0.561 0.558 0.620 0.618 0.619 0.572 0.598 0.656 0.547										0.594	6.18
19) acetone											
0.052				0.069	0.067		0.066	0.069	0.061	0.064	10.22
20) allyl chloride											
1.295 1.031				1.328	1.297		1.239	1.428	1.220	1.263	9.69
21) acetonitrile											
0.034				0.041	0.040		0.039	0.036	0.035	0.037	7.71

Initial Calibration Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VD7671-ICC7671
Lab FileID: D188525.D

22)	acetaldehyde										0.000#	-1.00
23)	iodomethane											
		0.936	0.925	0.935	1.087	1.100	0.852	1.056	1.131	0.925	0.994	9.97
24)	iso-butyl alcohol											
		0.003			0.004	0.003		0.003	0.003	0.003	0.003#	12.82
25)	carbon disulfide											
		1.833	1.783	1.934	2.077	2.093	1.719	1.970	2.214	1.779	1.934	8.74
26)	methylene chloride											
		0.634	0.627	0.709	0.728	0.729	0.653	0.686	0.770	0.629	0.685	7.59
27)	methyl acetate											
		0.540			0.548	0.539		0.527	0.563	0.466	0.531	6.36
28)	methyl tert butyl ether											
		1.817	1.815	1.988	2.110	2.106	1.688	2.004	2.204	1.822	1.950	8.87
29)	trans-1,2-dichloroethene											
		0.595	0.575	0.646	0.661	0.669	0.579	0.643	0.708	0.576	0.628	7.71
30)	di-isopropyl ether											
		1.868	1.934	1.981	2.191	2.145	1.873	2.030	2.290	1.914	2.025	7.46
31)	ethyl tert-butyl ether											
		1.797	1.818	1.865	2.118	2.117	1.817	2.000	2.202	1.836	1.952	8.11
32)	2-butanone											
		0.064			0.087	0.086		0.085	0.086	0.068	0.079	13.20
33)	1,1-dichloroethane											
		1.055	0.997	1.129	1.205	1.159	0.984	1.115	1.260	1.025	1.103	8.65
34)	chloroprene											
		0.884	0.834	0.870	0.982	0.989	0.803	0.973	1.030	0.841	0.912	9.02
35)	acrylonitrile											
		0.226			0.269	0.263		0.252	0.277	0.226	0.252	8.70
36)	vinyl acetate											
		0.093			0.137	0.143		0.148	0.144	0.111	0.129	17.10
	----- Linear regression ----- Coefficient = 0.9997											
	Response Ratio = -0.00713 + 0.14890 *A											
37)	ethyl acetate											
		0.088			0.085	0.072		0.078	0.085	0.062	0.078	12.83
38)	2,2-dichloropropane											
		0.904	0.881	0.949	0.994	0.979	0.886	0.940	1.052	0.884	0.941	6.27
39)	cis-1,2-dichloroethene											
		0.638	0.614	0.697	0.728	0.732	0.591	0.697	0.770	0.624	0.677	9.17
40)	propionitrile											
		0.087			0.104	0.101		0.099	0.104	0.091	0.098	7.39
41)	bromochloromethane											
		0.293	0.273		0.346	0.350		0.339	0.363	0.289	0.322	11.12
42)	tetrahydrofuran											
		0.081			0.100	0.097		0.096	0.101	0.079	0.092	10.67
43)	chloroform											
		0.965	0.907	1.006	1.110	1.107	0.864	1.062	1.163	0.944	1.014	10.07
44)	dibromofluoromethane (s)											
		0.501	0.476		0.573	0.590	0.574	0.556	0.600	0.494	0.546	8.77
45)	1,2-dichloroethane-d4 (s)											
		0.598	0.548	0.697	0.698	0.713	0.663	0.671	0.725	0.588	0.656	9.58
46)	freon 113											
		0.418			0.471	0.482		0.491	0.515	0.423	0.467	8.23
47)	methacrylonitrile											
		0.297	0.332		0.408	0.404	0.385	0.397	0.409	0.324	0.370	12.08
48)	t-butyl formate											
		0.491	0.492		0.624	0.632	0.479	0.609	0.633	0.524	0.560	12.47
49)	1,1,1-trichloroethane											
		0.879	0.797	0.884	0.997	0.999	0.780	0.965	1.042	0.853	0.911	10.31
50)	tert-amyl methyl ether											

5.9.4

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Initial Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VD7671-ICC7671
Lab FileID: D188525.D

	1.713	1.788	1.936	2.007	2.007	1.822	1.906	2.078	1.735	1.888	6.90
51) I 1,4-difluorobenzene	-----ISTD-----										
52) cyclohexane	0.578	0.543	0.617	0.620	0.609	0.575	0.615	0.659	0.551	0.596	6.25
53) tert amyl alcohol	0.018	0.019	0.016	0.017	0.017	0.022	0.017	0.017	0.016	0.018	9.98
54) 2,2,4-trimethylpentane	1.421	1.352	1.727	1.528	1.517	1.436	1.523	1.690	1.364	1.506	8.77
55) epichlorohydrin	0.043	0.044	0.043	0.046	0.045	0.048	0.044	0.047	0.042	0.045	4.65
56) n-butyl alcohol	0.009	0.013		0.013	0.013	0.012	0.013	0.012	0.011	0.012	11.27
57) carbon tetrachloride	0.462	0.432	0.491	0.531	0.536	0.428	0.533	0.547	0.449	0.490	9.85
58) 1,1-dichloropropene	0.498	0.481	0.516	0.562	0.549	0.495	0.547	0.582	0.486	0.524	7.04
59) hexane	0.514	0.497	0.559	0.543	0.533	0.514	0.548	0.607	0.493	0.534	6.61
60) benzene	1.465	1.432	1.509	1.667	1.625	1.350	1.540	1.738	1.441	1.530	8.19
61) heptane	0.281	0.260		0.305	0.303	0.278	0.316	0.336	0.253	0.291	9.74
62) isopropyl acetate	0.603			0.786	0.775		0.774	0.783	0.661	0.730	10.71
63) 1,2-dichloroethane	0.483	0.461	0.512	0.565	0.564	0.427	0.554	0.581	0.479	0.514	10.59
64) Ethyl Acrylate	0.403			0.544	0.537		0.534	0.526	0.419	0.494	13.07
65) trichloroethene	0.374	0.356	0.392	0.422	0.421	0.347	0.416	0.438	0.362	0.392	8.55
66) 2-nitropropane	0.104			0.136	0.139		0.141	0.130	0.108	0.126	12.93
67) 2-chloroethyl vinyl ether	0.221	0.221		0.270	0.268		0.258	0.277	0.231	0.249	9.68
68) methyl methacrylate	0.097			0.126	0.126		0.128	0.127	0.098	0.117	12.83
69) tert-amyl ethyl ether	0.516	0.479	0.494	0.624	0.624	0.486	0.601	0.640	0.513	0.553	12.19
70) 1,2-dichloropropane	0.377	0.373	0.396	0.441	0.435	0.349	0.430	0.453	0.368	0.403	9.35
71) methylcyclohexane	0.637	0.622	0.690	0.693	0.696	0.637	0.707	0.762	0.625	0.674	6.99
72) dibromomethane	0.222	0.206	0.243	0.263	0.264	0.207	0.262	0.270	0.224	0.240	10.79
73) bromodichloromethane	0.457	0.431	0.490	0.558	0.559	0.410	0.553	0.567	0.456	0.498	12.44
74) cis-1,3-dichloropropene	0.588	0.540	0.618	0.706	0.702	0.547	0.684	0.727	0.587	0.633	11.44
75) toluene-d8 (s)	1.263	1.112	1.447	1.401	1.406	1.406	1.314	1.446	1.219	1.335	8.69
76) 4-methyl-2-pentanone	0.160	0.141		0.184	0.181		0.184	0.187	0.157	0.171	10.47
77) toluene	0.908	0.866	0.975	1.045	1.033	0.810	1.002	1.077	0.896	0.957	9.52
78) 3-methyl-1-butanol	0.010	0.010		0.013	0.013	0.010	0.014	0.013	0.011	0.012	14.12
79) trans-1,3-dichloropropene	0.541	0.511		0.666	0.661		0.647	0.678	0.549	0.608	11.61
80) ethyl methacrylate											

5.9.4

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Initial Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VD7671-ICC7671
Lab FileID: D188525.D

		0.486	0.466		0.596	0.588		0.586	0.602	0.502	0.546	10.80
81)	1,1,2-trichloroethane											
		0.275	0.254		0.324	0.323		0.317	0.336	0.279	0.301	10.45
82)	2-hexanone											
		0.166	0.139		0.168	0.167		0.172	0.184	0.151	0.164	8.95
83)	I chlorobenzene-d5	-----ISTD-----										
84)	tetrachloroethene											
		0.406	0.384	0.447	0.486	0.492	0.367	0.485	0.510	0.412	0.443	11.88
85)	1,3-dichloropropane											
		0.587	0.556	0.689	0.714	0.699	0.518	0.682	0.744	0.612	0.644	12.14
86)	butyl acetate											
		0.152			0.297	0.299		0.310	0.291	0.221	0.261	23.91
	----- Linear regression -----											
	Response Ratio = -0.01629 + 0.31250 *A											
87)	3,3-dimethyl-1-butanol											
		0.037	0.040	0.040	0.051	0.049	0.040	0.054	0.048	0.044	0.045	13.21
88)	dibromochloromethane											
		0.344			0.468	0.478		0.472	0.476	0.372	0.435	13.87
89)	1,2-dibromoethane											
		0.335	0.314	0.388	0.435	0.433	0.299	0.424	0.448	0.359	0.382	14.86
90)	chlorobenzene											
		1.019	0.980	1.246	1.215	1.202	0.961	1.162	1.273	1.048	1.123	10.78
91)	1,1,1,2-tetrachloroethane											
		0.358	0.336	0.427	0.456	0.461	0.350	0.455	0.468	0.375	0.410	13.17
92)	ethylbenzene											
		1.764	1.721	2.077	2.107	2.057	1.656	1.903	2.223	1.821	1.925	10.28
93)	m,p-xylene											
		0.710	0.693	0.803	0.835	0.824	0.662	0.764	0.878	0.721	0.766	9.61
94)	o-xylene											
		0.693	0.657	0.779	0.842	0.841	0.633	0.797	0.883	0.718	0.760	11.68
95)	styrene											
		1.166	1.070		1.453	1.443		1.344	1.505	1.213	1.314	12.64
96)	bromoform											
		0.247			0.344	0.359		0.359	0.344	0.262	0.319	15.82
	----- Linear regression -----											
	Response Ratio = -0.01344 + 0.36244 *A											
97)	I 1,4-dichlorobenzene-d	-----ISTD-----										
98)	isopropylbenzene											
		3.477	3.281		3.878	3.762	3.201	3.400	4.061	3.370	3.554	8.69
99)	4-bromofluorobenzene (s)											
		1.133	1.041		1.109	1.122	1.304	1.076	1.137	1.169	1.136	6.88
100)	bromobenzene											
		0.853	0.813		1.001	1.009	0.780	0.977	1.036	0.851	0.915	11.01
101)	cyclohexanone											
		0.072			0.095	0.085		0.080	0.076	0.086	0.082	9.96
102)	1,1,2,2-tetrachloroethane											
		0.932	0.942		1.052	1.022	0.871	0.985	1.108	0.943	0.982	7.72
103)	trans-1,4-dichloro-2-butene											
		0.230			0.305	0.305		0.300	0.309	0.241	0.282	12.87
104)	1,2,3-trichloropropane											
		0.256	0.244		0.302	0.295	0.243	0.292	0.313	0.263	0.276	10.04
105)	n-propylbenzene											
		4.094	3.874		4.545	4.343	3.698	3.839	4.788	3.992	4.147	9.14
106)	p-ethyltoluene											
		3.022	2.850		3.633	3.581	2.764	3.243	3.788	3.093	3.247	11.75
107)	2-chlorotoluene											

5.9.4

5

Initial Calibration Summary

Page 5 of 5

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VD7671-ICC7671
Lab FileID: D188525.D

	0.823 0.788	0.928 0.935 0.746 0.914 0.962 0.790	0.861	9.64
108)	4-chlorotoluene			
	2.684 2.638	2.898 2.834 2.547 2.685 3.029 2.506	2.728	6.57
109)	1,3,5-trimethylbenzene			
	3.231 3.006	3.429 3.340 2.863 3.077 3.541 2.980	3.183	7.52
110)	tert-butylbenzene			
	2.582 2.414	2.927 2.912 3.124 2.704 3.025 2.515	2.775	9.30
111)	pentachloroethane			
	0.526 0.480	0.648 0.659	0.632 0.667 0.540	0.593 12.76
112)	1,2,4-trimethylbenzene			
	3.061 2.865	3.467 3.423 2.785 3.113 3.647 3.013	3.172	9.69
113)	sec-butylbenzene			
	3.879 3.769	4.373 4.206 3.682 3.742 4.599 3.821	4.009	8.47
114)	1,3-dichlorobenzene			
	1.636 1.533	1.939 1.937 1.416 1.838 2.023 1.650	1.746	12.52
115)	p-isopropyltoluene			
	3.142 2.950	3.625 3.526 2.870 3.178 3.814 3.161	3.283	10.20
116)	1,4-dichlorobenzene			
	1.852 1.803	2.031 2.011 1.810 1.904 2.150 1.785	1.918	6.90
117)	Benzyl Chloride			
	1.609	2.155 2.100	2.006 2.182 1.763	1.969 11.82
118)	p-diethylbenzene			
	1.897 1.645	2.251 2.230 1.707 2.063 2.308 1.901	2.000	12.64
119)	1,2-dichlorobenzene			
	1.680 1.571	1.923 1.901 1.496 1.797 2.024 1.670	1.758	10.48
120)	n-butylbenzene			
	1.695 1.532	2.028 2.012	1.924 2.115 1.721	1.861 11.48
121)	1,2,4,5-tetramethylbenzene			
	2.676	3.443 3.328	2.937 3.480 2.799	3.111 11.23
122)	1,2-dibromo-3-chloropropane			
	0.139	0.175 0.174	0.170 0.180 0.150	0.165 9.91
123)	1,3,5-trichlorobenzene			
	1.173	1.513 1.497	1.427 1.551 1.242	1.401 11.15
124)	1,2,4-trichlorobenzene			
	0.839	1.237 1.242	1.197 1.231 0.925	1.112 16.26
	----- Linear regression ----- Coefficient = 0.9993			
	Response Ratio = -0.00703 + 1.20930 *A			
125)	hexachlorobutadiene			
	0.571	0.714 0.719	0.701 0.740 0.590	0.672 10.79
126)	naphthalene			
	1.566	2.346 2.294	2.186 2.335 1.759	2.081 16.09
	----- Linear regression ----- Coefficient = 0.9988			
	Response Ratio = 0.02258 + 2.20599 *A			
127)	1,2,3-trichlorobenzene			
	0.585	0.881 0.885	0.873 0.866 0.657	0.791 16.89
	----- Linear regression ----- Coefficient = 0.9998			
	Response Ratio = -0.01835 + 0.88172 *A			
128)	hexachloroethane			
	0.530 0.499	0.659 0.671 0.490 0.668 0.668 0.525	0.589	14.29

(#) = Out of Range ### Number of calibration levels exceeded format ###

MD7671.M

Mon Oct 31 08:47:19 2011

RPT1

Initial Calibration Verification

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VD7671-ICV7671
 Lab FileID: D188526.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D188526.D
 Acq On : 28 Oct 2011 12:50 pm
 Sample : ICV7671-50
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P

Vial: 9
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Mon Oct 31 08:44:12 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	102	0.00	7.50
----- True Calc. % Drift -----							
2 M	1,4-dioxane	1250.000	1129.525	9.6	98	0.00	11.36
----- AvgRF CCRF % Dev -----							
3 M	tertiary butyl alcohol	1.299	1.392	-7.2	103	0.00	7.61
4 I	pentafluorobenzene	1.000	1.000	0.0	100	0.00	9.75
5 M	1,2-dichloro-1,2,2-triflu	-----NA-----					
6 M	chlorodifluoromethane	0.651	0.530	18.6	78	0.00	4.23
7 M	dichlorodifluoromethane	0.741	0.819	-10.5	107	0.00	4.23
8 M	chloromethane	0.790	0.820	-3.8	100	0.00	4.56
9 M	vinyl chloride	0.767	0.818	-6.6	101	0.00	4.82
10 M	bromomethane	0.488	0.510	-4.5	101	0.00	5.44
11 M	chloroethane	0.446	0.503	-12.8	102	0.00	5.62
12 M	vinyl bromide	-----NA-----					
13 M	trichlorofluoromethane	0.887	0.966	-8.9	103	0.00	6.13
14	pentane	1.233	1.130	8.4	89	0.00	6.23
15 M	ethyl ether	0.376	0.403	-7.2	98	0.00	6.51
16 M	acrolein	0.140	0.162	-15.7	108	0.00	6.66
17 M	chlorotrifluoroethene	-----NA-----					
18 M	1,1-dichloroethene	0.594	0.601	-1.2	97	0.00	6.92
19 M	acetone	0.064	0.072	-12.5	103	-0.01	6.88
20 M	allyl chloride	1.263	1.311	-3.8	98	0.00	7.40
21 M	acetonitrile	0.037	0.041	-10.8	99	0.00	7.25
22 M	acetaldehyde	-----NA-----					
23 M	iodomethane	0.994	1.063	-6.9	97	0.00	7.16
24 M	iso-butyl alcohol	0.003	0.018	-500.0#	507#	-0.01	9.97
25 M	carbon disulfide	1.934	2.020	-4.4	97	0.00	7.32
26 M	methylene chloride	0.685	0.704	-2.8	96	0.00	7.56
27 M	methyl acetate	0.531	0.508	4.3	92	0.00	7.38
28 M	methyl tert butyl ether	1.950	2.087	-7.0	99	0.00	7.96
29 M	trans-1,2-dichloroethene	0.628	0.651	-3.7	98	0.00	7.97
30 M	di-isopropyl ether	2.025	2.113	-4.3	96	0.00	8.56
31 M	ethyl tert-butyl ether	1.952	2.225	-14.0	105	0.00	9.02
32 M	2-butanone	0.079	0.090	-13.9	104	0.00	9.16
33 M	1,1-dichloroethane	1.103	1.162	-5.3	96	0.00	8.49
34 M	chloroprene	0.912	0.987	-8.2	100	0.00	8.64
35 M	acrylonitrile	0.252	0.268	-6.3	99	0.00	7.81
----- True Calc. % Drift -----							

Initial Calibration Verification

Page 2 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VD7671-ICV7671
 Lab FileID: D188526.D

36 M	vinyl acetate	50.000	54.660	-9.3	113	0.00	8.50
		AvgRF	CCRF	% Dev			
37 M	ethyl acetate	0.078	0.083	-6.4	97	0.00	9.22
38 M	2,2-dichloropropane	0.941	0.971	-3.2	97	0.00	9.25
39 M	cis-1,2-dichloroethene	0.677	0.704	-4.0	96	0.00	9.21
40 M	propionitrile	0.098	0.103	-5.1	99	0.00	9.18
41 M	bromochloromethane	0.322	0.337	-4.7	97	0.00	9.50
42 M	tetrahydrofuran	0.092	0.099	-7.6	98	0.00	9.58
43 M	chloroform	1.014	1.090	-7.5	98	0.00	9.56
44 S	dibromofluoromethane (s)	0.546	0.562	-2.9	98	0.00	9.75
45 S	1,2-dichloroethane-d4 (s)	0.656	0.677	-3.2	97	0.00	10.17
46 M	freon 113	0.467	0.490	-4.9	104	0.00	6.93
47 M	methacrylonitrile	0.370	0.399	-7.8	97	0.00	9.41
48 m	t-butyl formate	0.560	0.642	-14.6	103	0.00	9.64
49 M	1,1,1-trichloroethane	0.911	0.976	-7.1	98	0.00	9.88
50 M	tert-amyl methyl ether	1.888	2.310	-22.4#	115	0.00	10.38
51 I	1,4-difluorobenzene	1.000	1.000	0.0	99	0.00	10.66
52 M	cyclohexane	0.596	0.632	-6.0	101	0.00	10.00
53	tert amyl alcohol	0.018	0.018	0.0	102	0.00	10.12
54 M	2,2,4-trimethylpentane	1.506	1.735	-15.2	113	0.00	10.40
55 M	epichlorohydrin	0.045	0.048	-6.7	103	0.00	11.87
56 M	n-butyl alcohol	0.012	0.013	-8.3	101	0.00	10.72
57 M	carbon tetrachloride	0.490	0.526	-7.3	98	0.00	10.10
58 M	1,1-dichloropropene	0.524	0.546	-4.2	96	0.00	10.06
59 M	hexane	0.534	0.559	-4.7	102	0.00	8.35
60 M	benzene	1.530	1.618	-5.8	96	0.00	10.30
61 M	heptane	0.291	0.330	-13.4	107	0.00	10.56
62 M	isopropyl acetate	0.730	0.796	-9.0	100	0.00	10.22
63 M	1,2-dichloroethane	0.514	0.553	-7.6	97	0.00	10.26
64	Ethyl Acrylate	0.494	0.520	-5.3	95	0.00	11.01
65 M	trichloroethene	0.392	0.412	-5.1	97	0.00	11.02
66 M	2-nitropropane	0.126	0.136	-7.9	99	0.00	11.70
67 M	2-chloroethyl vinyl ether	0.249	0.293	-17.7	108	0.00	11.79
68 M	methyl methacrylate	0.117	0.122	-4.3	96	0.00	11.28
69 M	tert-amyl ethyl ether	0.553	0.629	-13.7	100	0.00	11.24
70 M	1,2-dichloropropane	0.403	0.434	-7.7	98	0.00	11.25
71 M	methylcyclohexane	0.674	0.760	-12.8	109	0.00	11.31
72 M	dibromomethane	0.240	0.265	-10.4	100	0.00	11.39
73 M	bromodichloromethane	0.498	0.548	-10.0	97	0.00	11.52
74 M	cis-1,3-dichloropropene	0.633	0.678	-7.1	95	0.00	12.02
75 S	toluene-d8 (s)	1.335	1.374	-2.9	97	0.00	12.37
76 M	4-methyl-2-pentanone	0.171	0.186	-8.8	100	0.00	12.13
77 M	toluene	0.957	1.020	-6.6	97	0.00	12.45
78 M	3-methyl-1-butanol	0.012	0.014	-16.7	104	0.00	12.12
79 M	trans-1,3-dichloropropene	0.608	0.644	-5.9	96	0.00	12.60
80 M	ethyl methacrylate	0.546	0.607	-11.2	101	0.00	12.64
81 M	1,1,2-trichloroethane	0.301	0.314	-4.3	96	0.00	12.82
82 M	2-hexanone	0.164	0.170	-3.7	100	0.00	13.04
83 I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	13.99
84 M	tetrachloroethene	0.443	0.479	-8.1	98	0.00	13.10
85 M	1,3-dichloropropane	0.644	0.690	-7.1	97	0.00	13.02
		True	Calc.	% Drift			
86 M	butyl acetate	50.000	50.209	-0.4	100	0.00	13.15
		AvgRF	CCRF	% Dev			
87 m	3,3-dimethyl-1-butanol	0.045	0.051	-13.3	101	0.00	13.21

Initial Calibration Verification

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Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VD7671-ICV7671
 Lab FileID: D188526.D

88 M	dibromochloromethane	0.435	0.456	-4.8	97	0.00	13.31
89 M	1,2-dibromoethane	0.382	0.418	-9.4	96	0.00	13.48
90 M	chlorobenzene	1.123	1.182	-5.3	97	0.00	14.02
91 M	1,1,1,2-tetrachloroethane	0.410	0.445	-8.5	97	0.00	14.08
92 M	ethylbenzene	1.925	2.051	-6.5	97	0.00	14.11
93 M	m,p-xylene	0.766	0.813	-6.1	97	0.00	14.23
94 M	o-xylene	0.760	0.827	-8.8	98	0.00	14.69
95 M	styrene	1.314	1.412	-7.5	97	0.00	14.68
----- True Calc. % Drift -----							
96 M	bromoform	50.000	49.003	2.0	99	0.00	14.92
----- AvgRF CCRF % Dev -----							
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	16.58
98 M	isopropylbenzene	3.554	3.758	-5.7	97	0.00	15.08
99 S	4-bromofluorobenzene (s)	1.136	1.057	7.0	96	0.00	15.27
100 M	bromobenzene	0.915	0.985	-7.7	99	0.00	15.49
101 M	cyclohexanone	0.082	0.093	-13.4	98	0.00	15.18
102 M	1,1,2,2-tetrachloroethane	0.982	1.004	-2.2	96	0.00	15.33
103 M	trans-1,4-dichloro-2-bute	0.282	0.312	-10.6	103	0.00	15.38
104 M	1,2,3-trichloropropane	0.276	0.293	-6.2	97	0.00	15.41
105 M	n-propylbenzene	4.147	4.420	-6.6	98	0.00	15.54
106 M	p-ethyltoluene	3.247	3.486	-7.4	96	0.00	15.65
107 M	2-chlorotoluene	0.861	0.901	-4.6	97	0.00	15.68
108 M	4-chlorotoluene	2.728	2.831	-3.8	98	0.00	15.79
109 M	1,3,5-trimethylbenzene	3.183	3.349	-5.2	98	0.00	15.70
110 M	tert-butylbenzene	2.775	2.864	-3.2	98	0.00	16.09
111 M	pentachloroethane	0.593	0.654	-10.3	101	0.00	16.15
112 M	1,2,4-trimethylbenzene	3.172	3.440	-8.4	100	0.00	16.14
113 M	sec-butylbenzene	4.009	4.274	-6.6	98	0.00	16.34
114 M	1,3-dichlorobenzene	1.746	1.904	-9.0	99	0.00	16.51
115 M	p-isopropyltoluene	3.283	3.666	-11.7	101	0.00	16.48
116 M	1,4-dichlorobenzene	1.918	1.998	-4.2	99	0.00	16.60
117	Benzyl Chloride	1.969	2.565	-30.3#	119	0.00	16.71
118 M	p-diethylbenzene	2.000	2.180	-9.0	97	0.00	16.90
119 M	1,2-dichlorobenzene	1.758	1.893	-7.7	99	0.00	17.03
120 M	n-butylbenzene	1.861	1.997	-7.3	99	0.00	16.93
121 M	1,2,4,5-tetramethylbenzen	3.111	3.344	-7.5	97	0.00	17.76
122 M	1,2-dibromo-3-chloropropa	0.165	0.175	-6.1	100	0.00	17.84
123 M	1,3,5-trichlorobenzene	1.401	1.504	-7.4	100	0.00	18.11
----- True Calc. % Drift -----							
124 M	1,2,4-trichlorobenzene	50.000	52.378	-4.8	102	0.00	18.81
----- AvgRF CCRF % Dev -----							
125 M	hexachlorobutadiene	0.672	0.695	-3.4	98	0.00	18.98
----- True Calc. % Drift -----							
126 M	naphthalene	50.000	51.706	-3.4	98	0.00	19.11
127 M	1,2,3-trichlorobenzene	50.000	52.227	-4.5	103	0.00	19.39
----- AvgRF CCRF % Dev -----							
128 M	hexachloroethane	0.589	0.644	-9.3	98	0.00	17.36

(#) = Out of Range
 D188525.D MD7671.M

SPCC's out = 0 CCC's out = 0
 Mon Oct 31 08:48:18 2011 RPT1

Continuing Calibration Summary

Page 1 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VD7804-CC7671
 Lab FileID: D191678.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\D191678.D
 Acq On : 19 Jan 2012 10:06 am
 Sample : cc7671-20
 Misc : MS22961,VD7804,5,,100,5,1
 MS Integration Params: RTEINT.P

Vial: 2
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	69	-0.01	7.50
	----- True	Calc.	% Drift	-----			
2 M	1,4-dioxane	500.000	671.048	-34.2#	97	0.00	11.36
	----- AvgRF	CCRF	% Dev	-----			
3 M	tertiary butyl alcohol	1.299	1.274	1.9	63	0.00	7.62
4 I	pentafluorobenzene	1.000	1.000	0.0	78	-0.01	9.74
5 M	1,2-dichloro-1,2,2-triflu			-----NA-----			
6 M	chlorodifluoromethane	0.651	0.578	11.2	62	0.00	4.24
7 M	dichlorodifluoromethane	0.741	0.752	-1.5	67	0.01	4.25
8 M	chloromethane	0.790	0.863	-9.2	75	-0.01	4.55
9 M	vinyl chloride	0.767	0.801	-4.4	70	-0.01	4.81
10 M	bromomethane	0.488	0.508	-4.1	69	0.00	5.45
11 M	chloroethane	0.446	0.477	-7.0	71	0.00	5.62
12 M	vinyl bromide			-----NA-----			
13 M	trichlorofluoromethane	0.887	0.860	3.0	64	0.00	6.13
14	pentane	1.233	1.100	10.8	63	0.00	6.22
15 M	ethyl ether	0.376	0.373	0.8	68	0.00	6.51
16 M	acrolein	0.140	0.117	16.4	63	0.00	6.67
17 M	chlorotrifluoroethene			-----NA-----			
18 M	1,1-dichloroethene	0.594	0.597	-0.5	71	0.00	6.91
19 M	acetone	0.064	0.060	6.3	68	0.00	6.89
20 M	allyl chloride	1.263	0.929	26.4#	51	0.00	7.40
21 M	acetonitrile	0.037	0.039	-5.4	84	0.00	7.25
22 M	acetaldehyde			-----NA-----			
23 M	iodomethane	0.994	1.035	-4.1	71	0.00	7.16
24 M	iso-butyl alcohol	0.003	0.003#	0.0	63	0.00	9.98
25 M	carbon disulfide	1.934	2.089	-8.0	73	0.00	7.32
26 M	methylene chloride	0.685	0.682	0.4	69	0.00	7.55
27 M	methyl acetate	0.531	0.412	22.4#	57	0.00	7.38
28 M	methyl tert butyl ether	1.950	1.767	9.4	62	0.00	7.96
29 M	trans-1,2-dichloroethene	0.628	0.635	-1.1	70	0.00	7.97
30 M	di-isopropyl ether	2.025	1.825	9.9	62	0.00	8.56
31 M	ethyl tert-butyl ether	1.952	1.700	12.9	60	0.00	9.02
32 M	2-butanone	0.079	0.070	11.4	63	0.00	9.16
33 M	1,1-dichloroethane	1.103	1.089	1.3	67	0.00	8.49
34 M	chloroprene	0.912	0.822	9.9	62	0.00	8.64
35 M	acrylonitrile	0.252	0.233	7.5	65	0.00	7.81
	----- True	Calc.	% Drift	-----			

Continuing Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VD7804-CC7671
Lab FileID: D191678.D

36 M	vinyl acetate	20.000	16.669	16.7	57	0.02	8.52
		AvgRF	CCRF	% Dev			
37 M	ethyl acetate	0.078	0.076	2.6	70	0.00	9.23
38 M	2,2-dichloropropane	0.941	0.890	5.4	66	0.00	9.25
39 M	cis-1,2-dichloroethene	0.677	0.670	1.0	68	0.00	9.21
40 M	propionitrile	0.098	0.088	10.2	66	0.00	9.18
41 M	bromochloromethane	0.322	0.312	3.1	67	0.00	9.50
42 M	tetrahydrofuran	0.092	0.079	14.1	61	0.00	9.58
43 M	chloroform	1.014	0.990	2.4	66	0.00	9.56
44 S	dibromofluoromethane (s)	0.546	0.507	7.1	66	0.00	9.74
45 S	1,2-dichloroethane-d4 (s)	0.656	0.553	15.7	59	0.00	10.16
46 M	freon 113	0.467	0.460	1.5	69	0.00	6.94
47 M	methacrylonitrile	0.370	0.311	15.9	59	0.00	9.41
48 m	t-butyl formate	0.560	0.445	20.5#	55	0.00	9.64
49 M	1,1,1-trichloroethane	0.911	0.894	1.9	67	0.00	9.87
50 M	tert-amyl methyl ether	1.888	1.606	14.9	60	0.00	10.37
51 I	1,4-difluorobenzene	1.000	1.000	0.0	76	0.00	10.65
52 M	cyclohexane	0.596	0.638	-7.0	73	0.00	10.00
53	tert amyl alcohol	-----NA-----					
54 M	2,2,4-trimethylpentane	1.506	1.455	3.4	65	0.00	10.40
55 M	epichlorohydrin	0.045	0.037	17.8	59	0.00	11.87
56 M	n-butyl alcohol	0.012	0.011	8.3	70	0.00	10.73
57 M	carbon tetrachloride	0.490	0.490	0.0	68	0.00	10.10
58 M	1,1-dichloropropene	0.524	0.529	-1.0	69	0.00	10.05
59 M	hexane	0.534	0.474	11.2	59	0.00	8.35
60 M	benzene	1.530	1.594	-4.2	70	0.00	10.30
61 M	heptane	0.291	0.281	3.4	64	0.00	10.56
62 M	isopropyl acetate	0.730	0.554	24.1#	54	0.00	10.22
63 M	1,2-dichloroethane	0.514	0.470	8.6	61	0.00	10.25
64	Ethyl Acrylate	-----NA-----					
65 M	trichloroethene	0.392	0.388	1.0	67	0.00	11.02
66 M	2-nitropropane	0.126	0.087	31.0#	51	0.00	11.70
67 M	2-chloroethyl vinyl ether	0.249	0.230	7.6	63	0.00	11.78
68 M	methyl methacrylate	0.117	0.096	17.9	58	0.00	11.28
69 M	tert-amyl ethyl ether	-----NA-----					
70 M	1,2-dichloropropane	0.403	0.406	-0.7	68	0.00	11.25
71 M	methylcyclohexane	0.674	0.650	3.6	65	0.00	11.31
72 M	dibromomethane	0.240	0.230	4.2	65	0.00	11.39
73 M	bromodichloromethane	0.498	0.491	1.4	66	0.00	11.52
74 M	cis-1,3-dichloropropene	0.633	0.635	-0.3	66	0.00	12.02
75 S	toluene-d8 (s)	1.335	1.315	1.5	69	0.00	12.36
76 M	4-methyl-2-pentanone	0.171	0.152	11.1	62	0.00	12.12
77 M	toluene	0.957	0.997	-4.2	70	0.00	12.45
78 M	3-methyl-1-butanol	0.012	0.011	8.3	64	0.00	12.12
79 M	trans-1,3-dichloropropene	0.608	0.575	5.4	64	0.00	12.59
80 M	ethyl methacrylate	0.546	0.501	8.2	63	0.00	12.65
81 M	1,1,2-trichloroethane	0.301	0.290	3.7	65	0.00	12.81
82 M	2-hexanone	0.164	0.147	10.4	60	0.00	13.04
83 I	chlorobenzene-d5	1.000	1.000	0.0	76	0.00	13.99
84 M	tetrachloroethene	0.443	0.476	-7.4	71	0.00	13.10
85 M	1,3-dichloropropane	0.644	0.643	0.2	66	0.00	13.02
		True	Calc.	% Drift			
86 M	butyl acetate	20.000	16.826	15.9	58	0.00	13.15
		AvgRF	CCRF	% Dev			
87 m	3,3-dimethyl-1-butanol	0.045	0.039	13.3	62	0.00	13.21

Continuing Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VD7804-CC7671
Lab FileID: D191678.D

88 M	dibromochloromethane	0.435	0.418	3.9	67	0.00	13.31
89 M	1,2-dibromoethane	0.382	0.379	0.8	64	0.00	13.48
90 M	chlorobenzene	1.123	1.160	-3.3	69	0.00	14.02
91 M	1,1,1,2-tetrachloroethane	0.410	0.412	-0.5	67	0.00	14.07
92 M	ethylbenzene	1.925	1.999	-3.8	68	0.00	14.11
93 M	m,p-xylene	0.766	0.796	-3.9	69	0.00	14.23
94 M	o-xylene	0.760	0.790	-3.9	68	0.00	14.68
95 M	styrene	1.314	1.300	1.1	66	0.00	14.69
----- True Calc. % Drift -----							
96 M	bromoform	20.000	18.575	7.1	67	0.00	14.92
----- AvgRF CCRF % Dev -----							
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	75	0.00	16.57
98 M	isopropylbenzene	3.554	3.651	-2.7	67	0.00	15.07
99 S	4-bromofluorobenzene (s)	1.136	1.056	7.0	70	0.00	15.27
100 M	bromobenzene	0.915	0.953	-4.2	69	0.00	15.49
101 M	cyclohexanone	0.082	0.105	-28.0#	104	0.00	15.17
102 M	1,1,2,2-tetrachloroethane	0.982	0.925	5.8	63	0.00	15.32
103 M	trans-1,4-dichloro-2-bute	0.282	0.249	11.7	60	0.00	15.39
104 M	1,2,3-trichloropropane	0.276	0.258	6.5	62	0.00	15.41
105 M	n-propylbenzene	4.147	4.311	-4.0	67	0.00	15.53
106 M	p-ethyltoluene	-----NA-----					
107 M	2-chlorotoluene	0.861	0.863	-0.2	67	0.00	15.68
108 M	4-chlorotoluene	2.728	2.711	0.6	67	0.00	15.79
109 M	1,3,5-trimethylbenzene	3.183	3.144	1.2	66	0.00	15.70
110 M	tert-butylbenzene	2.775	2.720	2.0	67	0.00	16.09
111 M	pentachloroethane	0.593	0.613	-3.4	69	0.00	16.14
112 M	1,2,4-trimethylbenzene	3.172	3.198	-0.8	66	0.00	16.14
113 M	sec-butylbenzene	4.009	4.132	-3.1	67	0.00	16.34
114 M	1,3-dichlorobenzene	1.746	1.822	-4.4	67	0.00	16.52
115 M	p-isopropyltoluene	3.283	3.389	-3.2	67	0.00	16.47
116 M	1,4-dichlorobenzene	1.918	1.954	-1.9	68	0.00	16.60
117	Benzyl Chloride	1.969	1.726	12.3	59	0.00	16.71
118 M	p-diethylbenzene	-----NA-----					
119 M	1,2-dichlorobenzene	1.758	1.815	-3.2	67	0.00	17.03
120 M	n-butylbenzene	1.861	1.766	5.1	63	0.00	16.93
121 M	1,2,4,5-tetramethylbenzen	-----NA-----					
122 M	1,2-dibromo-3-chloropropa	0.165	0.146	11.5	61	0.00	17.85
123 M	1,3,5-trichlorobenzene	1.401	1.437	-2.6	69	0.00	18.11
----- True Calc. % Drift -----							
124 M	1,2,4-trichlorobenzene	20.000	18.886	5.6	68	0.00	18.81
----- AvgRF CCRF % Dev -----							
125 M	hexachlorobutadiene	0.672	0.723	-7.6	73	0.00	18.98
----- True Calc. % Drift -----							
126 M	naphthalene	20.000	19.282	3.6	70	0.00	19.12
127 M	1,2,3-trichlorobenzene	20.000	21.142	-5.7	77	0.00	19.39
----- AvgRF CCRF % Dev -----							
128 M	hexachloroethane	0.589	0.599	-1.7	67	0.00	17.36

(#) = Out of Range
D188524.D MD7671.M

SPCC's out = 0 CCC's out = 0
Thu Jan 19 17:52:52 2012 RPT1

Initial Calibration Summary

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Job Number: JA96854

Sample: VE8147-ICC8147

Account: LANGAN Langan Engineering & Environmental

Lab FileID: E185159.D

Project: 111 Washington Street, New York, NY

Response Factor Report MSE

Method : C:\MSDCHEM\1\METHODS\ME8147.M (RTE Integrator)
 Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 Last Update : Wed Nov 23 08:52:07 2011
 Response via : Initial Calibration

Calibration Files

5 =E185156.D 2 =E185155.D 20 =E185158.D 50 =E185159.D
 100 =E185161.D 1 =E185154.D 200 =E185162.D 0.5 =E185153.D
 10 =E185157.D =

Compound	5	2	20	50	100	1	200	0.5	10	Avg	%RSD
1) Tert Butyl Alcohol-d9 -----ISTD-----											
2) 1,4-dioxane											
0.088 0.100 0.100 0.101 0.098 0.093 0.097 5.25											
3) tertiary butyl alcohol											
1.370 1.189 1.438 1.384 1.379 1.312 1.370 1.371 1.352 5.48											
4) ethanol											
										0.000#	-1.00
5) I pentafluorobenzene -----ISTD-----											
6) freon 23											
										0.000#	-1.00
7) freon 115										0.000#	-1.00
8) freon 143a										0.000#	-1.00
9) freon 152a										0.000#	-1.00
10) chlorotrifluoroethene										0.000#	-1.00
11) chlorodifluoromethane										0.000#	-1.00
0.683 0.602 0.745 0.721 0.733 0.784 0.770 0.755 0.724 8.04											
12) dichlorodifluoromethane											
0.788 0.777 0.896 0.910 0.927 0.663 0.952 0.721 0.905 0.838 12.28											
13) freon 114											
										0.000#	-1.00
14) freon 142b										0.000#	-1.00
15) chloromethane											
1.083 1.183 1.154 1.184 1.187 1.219 1.228 1.382 1.188 1.201 6.64											
16) vinyl chloride											
0.877 0.870 0.974 0.987 1.017 0.786 1.038 0.925 1.013 0.943 8.94											
17) acetaldehyde											
										0.000#	-1.00
18) bromomethane											
0.542 0.592 0.553 0.544 0.529 0.604 0.481 0.559 0.551 6.87											
19) chloroethane											
0.486 0.468 0.504 0.497 0.507 0.474 0.504 0.427 0.530 0.488 6.04											
20) vinyl bromide											
										0.000#	-1.00
21) trichlorofluoromethane											
0.802 0.760 0.917 0.930 0.940 0.948 0.937 0.890 8.57											
22) pentane											
1.163 0.846 1.270 1.222 1.198 1.209 1.248 1.165 12.42											
23) ethyl ether											

Initial Calibration Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VE8147-ICC8147
Lab FileID: E185159.D

	0.386	0.386	0.409	0.408	0.408	0.388	0.405	0.305	0.420	0.390	8.79
24) freon 141b										0.000#	-1.00
25) freon 123a										0.000#	-1.00
26) freon 123										0.000#	-1.00
27) acrolein	0.168	0.147	0.164	0.157		0.151			0.164	0.159	5.16
28) 1,1-dichloroethene	0.496	0.495	0.581	0.557	0.551	0.536	0.537		0.611	0.546	7.21
29) isopropyl alcohol										0.000#	-1.00
30) acetone	0.064		0.077	0.072	0.069		0.067		0.080	0.071	8.61
31) allyl chloride	1.066	1.081	1.252	1.217	1.185	1.254	1.168		1.351	1.197	7.87
32) acetonitrile	0.029	0.034	0.046	0.045	0.047		0.046		0.046	0.042	17.26
----- Linear regression ----- Coefficient = 0.9999											
Response Ratio = -0.00628 + 0.04653 *A											
33) iodomethane	0.928	0.879	1.086	1.077	1.085	0.943	1.076	0.757	1.118	0.995	12.41
34) iso-butyl alcohol										0.000#	-1.00
35) carbon disulfide	1.803	1.620	2.118	2.031	1.955	1.682	1.906	1.589	2.245	1.883	12.11
36) methylene chloride	0.631	0.641	0.668	0.656	0.648	0.693	0.638		0.696	0.659	3.76
37) methyl acetate	0.623	0.607	0.630	0.588	0.586		0.577		0.619	0.604	3.46
38) methyl tert butyl ether	1.902	2.008	1.953	1.884	1.840	1.967	1.771	2.304	1.993	1.958	7.68
39) trans-1,2-dichloroethene	0.554	0.526	0.613	0.595	0.576	0.616	0.571	0.536	0.662	0.583	7.39
40) di-isopropyl ether	2.291	2.162	2.298	2.160	2.100	2.669	2.060	2.718	2.366	2.314	10.26
41) ethyl tert-butyl ether	2.043	1.882	2.111	2.017	1.984	2.210	1.941	2.021	2.162	2.041	5.12
42) 2-butanone	0.073		0.091	0.093	0.092		0.083		0.086	0.086	8.51
43) 1,1-dichloroethane	1.051	1.024	1.170	1.106	1.076	1.044	1.068	0.971	1.218	1.081	6.95
44) chloroprene	0.879	0.726	0.955	0.913	0.905	0.882	0.907	0.761	0.988	0.880	9.65
45) acrylonitrile	0.287	0.298	0.298	0.286	0.288	0.251	0.277		0.297	0.285	5.50
46) vinyl acetate	0.109	0.077	0.123	0.118	0.124		0.119		0.115	0.112	14.67
47) ethyl acetate	0.151	0.133	0.121	0.111	0.110		0.108		0.132	0.124	12.86
48) 2,2-dichloropropane	0.745	0.746	0.797	0.763	0.729	0.844	0.700	0.815	0.878	0.780	7.44
49) cis-1,2-dichloroethene	0.619	0.636	0.667	0.645	0.631	0.699	0.615	0.730	0.700	0.660	6.19
50) methyl acrylate	0.669	0.505	0.656	0.675	0.658		0.651		0.712	0.646	10.14
51) propionitrile	0.111	0.112	0.111	0.104	0.103	0.109	0.098	0.125	0.116	0.110	7.13

5.9.7

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Initial Calibration Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VE8147-ICC8147
Lab FileID: E185159.D

52)	bromochloromethane	0.318	0.314	0.337	0.336	0.330	0.303	0.324	0.241	0.351	0.317	10.11
53)	tetrahydrofuran	0.342		0.293	0.276	0.266		0.256		0.321	0.292	11.35
54)	chloroform	0.981	1.010	1.065	1.026	0.997	1.064	0.964	1.102	1.110	1.035	5.05
55)	t-butyl formate	0.578	0.573	0.625	0.598	0.591	0.576	0.589	0.519	0.620	0.585	5.30
56)	Iso-octane	2.065	1.643	2.095	1.962	1.850	2.087	1.825		2.215	1.968	9.43
57)	dibromofluoromethane (s)	0.500	0.478	0.550	0.543	0.538	0.555	0.555	0.512	0.565	0.533	5.56
58)	1,2-dichloroethane-d4 (s)	0.618	0.641	0.655	0.613	0.604	0.658	0.605	0.781	0.670	0.649	8.45
59)	freon 113	0.400		0.433	0.429	0.445		0.447		0.450	0.434	4.33
60)	methacrylonitrile	0.436	0.465	0.474	0.459	0.463	0.410	0.449		0.487	0.455	5.25
61)	1,1,1-trichloroethane	0.762	0.750	0.898	0.881	0.860	0.794	0.843	0.801	0.934	0.836	7.55
62)	tert-amyl methyl ether	1.920	1.795	1.891	1.736	1.680	2.151	1.648	1.951	1.927	1.855	8.50
63)	I 1,4-difluorobenzene	-----ISTD-----										
64)	Di-isobutylene										0.000#	-1.00
65)	tert amyl alcohol	0.025	0.018	0.020	0.020	0.019		0.018		0.021	0.020	11.91
66)	epichlorohydrin	0.058		0.052	0.050	0.051		0.050		0.055	0.053	6.00
67)	n-butyl alcohol	0.016	0.014	0.016	0.015	0.015	0.017	0.014		0.017	0.015	7.44
68)	tert-amyl ethyl ether	0.686	0.579	0.658	0.649	0.640	0.723	0.630	0.729	0.691	0.665	7.17
69)	carbon tetrachloride	0.444	0.413	0.541	0.519	0.506	0.460	0.492	0.368	0.570	0.479	13.35
70)	1,1-dichloropropene	0.487	0.461	0.578	0.554	0.551	0.493	0.528	0.435	0.624	0.523	11.46
71)	hexane	0.578	0.493	0.610	0.573	0.559	0.658	0.554		0.649	0.584	9.24
72)	benzene	1.521	1.539	1.692	1.602	1.544	1.643	1.479	1.501	1.787	1.590	6.37
73)	heptane	0.349	0.296	0.325	0.332	0.322	0.461	0.343		0.310	0.342	14.87
74)	isopropyl acetate	1.016	0.878	1.021	0.929	0.900	1.046	0.853		1.025	0.958	8.01
75)	1,2-dichloroethane	0.511	0.523	0.562	0.536	0.524	0.501	0.498	0.506	0.578	0.527	5.28
76)	ethyl acrylate	0.715	0.727	0.700	0.682	0.671	0.749	0.646		0.679	0.696	4.80
77)	trichloroethene	0.388	0.369	0.428	0.408	0.398	0.400	0.384	0.388	0.447	0.401	5.89
78)	2-nitropropane									0.003	0.003#	0.00
79)	2-chloroethyl vinyl ether	0.211	0.187	0.221	0.208	0.207	0.211	0.199		0.223	0.208	5.53
80)	methylcyclohexane	0.630	0.483	0.677	0.630	0.616	0.607	0.609	0.654	0.726	0.626	10.53
81)	methyl methacrylate	0.511	0.525	0.484	0.467	0.444	0.586	0.425		0.528	0.496	10.51

Initial Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VE8147-ICC8147
Lab FileID: E185159.D

82)	1,2-dichloropropane	0.449	0.452	0.473	0.443	0.434	0.454	0.413	0.469	0.492	0.453	5.10
83)	dibromomethane	0.257	0.272	0.274	0.269	0.263	0.259	0.252	0.252	0.283	0.265	3.99
84)	bromodichloromethane	0.551	0.570	0.591	0.570	0.562	0.613	0.536	0.671	0.609	0.586	6.94
85)	cis-1,3-dichloropropene	0.713	0.708	0.782	0.746	0.738	0.749	0.706	0.673	0.788	0.734	5.10
86)	toluene-d8 (s)	1.439	1.348	1.545	1.439	1.392	1.573	1.358	1.755	1.624	1.497	9.15
87)	4-methyl-2-pentanone	0.217	0.215	0.225	0.208	0.202	0.207	0.193		0.223	0.211	5.12
88)	toluene	0.963	0.947	1.078	1.029	1.009	1.029	0.975	0.946	1.125	1.011	6.07
89)	3-methyl-1-butanol	0.026	0.027	0.027	0.024	0.023	0.019	0.021		0.027	0.024	11.72
90)	trans-1,3-dichloropropene	0.649	0.633	0.694	0.663	0.652	0.649	0.625	0.604	0.714	0.654	5.17
91)	ethyl methacrylate	0.643	0.673	0.636	0.608	0.595	0.656	0.559	0.832	0.666	0.652	11.79
92)	1,1,2-trichloroethane	0.342	0.346	0.358	0.343	0.335	0.370	0.323	0.425	0.361	0.356	8.30
93)	2-hexanone	0.200	0.193	0.205	0.205	0.203	0.159	0.195		0.205	0.196	7.96
94)	I chlorobenzene-d5	-----ISTD-----										
95)	cyclohexanone										0.000#	-1.00
96)	tetrachloroethene	0.460	0.422	0.524	0.502	0.488	0.487	0.456	0.392	0.566	0.477	10.96
97)	1,3-dichloropropane	0.722	0.735	0.761	0.725	0.697	0.711	0.652	0.665	0.786	0.717	5.92
98)	butyl acetate	0.386	0.383	0.373	0.347	0.340	0.417	0.325	0.445	0.393	0.379	10.00
99)	3,3-dimethyl-1-butanol	0.058	0.073	0.059	0.057	0.054		0.050		0.059	0.058	12.12
100)	dibromochloromethane	0.489	0.501	0.524	0.506	0.495	0.501	0.473	0.506	0.530	0.503	3.39
101)	1,2-dibromoethane	0.442	0.460	0.464	0.461	0.446	0.445	0.424	0.444	0.484	0.452	3.82
102)	n-butyl ether										0.000#	-1.00
103)	chlorobenzene	1.133	1.145	1.245	1.212	1.168	1.128	1.117	1.121	1.286	1.173	5.20
104)	1,1,1,2-tetrachloroethane	0.434	0.446	0.458	0.441	0.423	0.455	0.410	0.399	0.484	0.439	5.98
105)	ethylbenzene	1.888	1.862	2.074	1.950	1.844	1.987	1.722	2.048	2.223	1.955	7.58
106)	m,p-xylene	0.746	0.725	0.826	0.780	0.749	0.763	0.713	0.713	0.874	0.765	7.07
107)	o-xylene	0.776	0.747	0.844	0.810	0.776	0.772	0.747	0.755	0.887	0.790	6.03
108)	butyl acrylate										0.000#	-1.00
109)	styrene	1.341	1.348	1.437	1.355	1.296	1.306	1.221	1.282	1.514	1.344	6.48
110)	bromoform	0.385	0.381	0.401	0.397	0.384	0.353	0.367	0.333	0.411	0.379	6.48
111)	I 1,4-dichlorobenzene-d	-----ISTD-----										

Initial Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
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Sample: VE8147-ICC8147
Lab FileID: E185159.D

112)	isopropylbenzene	3.757	3.698	4.198	3.992	3.848	3.792	3.651	3.970	4.421	3.925	6.40
113)	4-bromofluorobenzene (s)	1.168	1.160	1.225	1.152	1.133	1.412	1.136	1.693	1.255	1.259	14.67
114)	bromobenzene	1.077	1.080	1.112	1.070	1.040	1.109	1.015	1.040	1.160	1.078	4.12
115)	1,1,2,2-tetrachloroethane	1.251	1.315	1.250	1.192	1.174	1.405	1.116	1.367	1.310	1.265	7.44
116)	trans-1,4-dichloro-2-butene	0.276	0.262	0.302	0.300	0.306	0.262	0.298	0.219	0.290	0.279	10.18
117)	1,2,3-trichloropropane	0.324	0.333	0.327	0.314	0.312	0.308	0.298		0.332	0.318	3.91
118)	n-propylbenzene	4.345	4.225	4.673	4.414	4.246	4.443	3.984	4.622	5.015	4.441	6.75
119)	p-ethyltoluene	4.192	3.380	4.096	4.037	3.859	4.213	3.675	4.907	4.326	4.076	10.55
120)	2-chlorotoluene	0.919	0.946	0.982	0.931	0.910	0.942	0.893	1.011	1.025	0.951	4.78
121)	4-chlorotoluene	2.827	2.861	2.945	2.844	2.740	2.895	2.603	3.170	3.075	2.884	5.84
122)	1,3,5-trimethylbenzene	3.173	3.121	3.292	3.114	2.979	3.390	2.843	3.477	3.513	3.211	7.04
123)	tert-butylbenzene	2.823	2.656	3.064	2.944	2.865	2.801	2.722	3.096	3.299	2.919	6.97
124)	pentachloroethane	0.669	0.678	0.701	0.683	0.654	0.647	0.649	0.719	0.732	0.681	4.51
125)	1,2,4-trimethylbenzene	3.242	3.171	3.458	3.283	3.163	3.242	2.980	3.651	3.641	3.315	6.81
126)	sec-butylbenzene	4.082	3.890	4.492	4.301	4.150	4.075	3.898	4.658	4.696	4.249	7.20
127)	1,3-dichlorobenzene	1.932	1.889	2.055	1.955	1.903	1.930	1.814	1.956	2.089	1.947	4.27
128)	p-isopropyltoluene	3.411	3.184	3.690	3.570	3.441	3.230	3.233	3.776	3.896	3.492	7.37
129)	1,4-dichlorobenzene	1.846	1.845	2.015	1.929	1.891	1.773	1.818	2.067	2.058	1.916	5.64
130)	benzyl chloride	1.922	1.778	1.961	1.903	1.865	2.024	1.778	1.772	1.990	1.888	5.09
131)	p-diethylbenzene	2.200	1.739	2.271	2.269	2.189	2.165	2.150	2.502	2.314	2.200	9.24
132)	1,2-dichlorobenzene	1.881	1.865	1.994	1.947	1.882	1.872	1.788	1.951	2.059	1.915	4.21
133)	n-butylbenzene	1.685	1.535	1.905	1.841	1.818	1.475	1.755	1.953	1.944	1.768	9.76
134)	1,2,4,5-tetramethylbenzene	3.317	2.726	3.394	3.467	3.357	3.256	3.256	3.511	3.450	3.304	7.10
135)	1,2-dibromo-3-chloropropane	0.205	0.204	0.228	0.221	0.224	0.213	0.219	0.175	0.221	0.212	7.65
136)	1,3,5-trichlorobenzene	1.450	1.390	1.615	1.606	1.586	1.210	1.530	1.664	1.582	1.515	9.42
137)	1,2,4-trichlorobenzene	1.104	0.977	1.282	1.330	1.370	0.896	1.336	1.209	1.239	1.194	14.01
138)	hexachlorobutadiene	0.680	0.626	0.743	0.731	0.722	0.596	0.699		0.774	0.696	8.66
139)	naphthalene	2.267	2.070	2.736	2.847	2.951		2.850		2.528	2.607	12.74
140)	MMT										0.000#	-1.00
141)	1,2,3-trichlorobenzene	0.954	0.850	1.088	1.143	1.167	0.723	1.147	1.065	1.011	1.017	14.79

Initial Calibration Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

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Lab FileID: E185159.D

142)	hexachloroethane	0.638	0.560	0.704	0.686	0.680	0.583	0.667	0.629	0.708	0.651	8.09
143)	Cyclohexane	1.133	0.979	1.293	1.262	1.227	1.100	1.188	1.137	1.402	1.191	10.31
144)	ethyleinimine										0.000#	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

ME8147.M Mon Nov 28 16:59:50 2011 RPT1

5.9.7
5

Initial Calibration Verification

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Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VE8149-ICV8147
 Lab FileID: E185194A.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E185194a.D
 Acq On : 24 Nov 2011 2:32 am
 Sample : icv8147-50
 Misc : MS21882,VE8149,5,,100,5,1
 MS Integration Params: RTEINT.P

Vial: 28
 Operator: OksanaT
 Inst : MSE
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\ME8147.M (RTE Integrator)
 Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 Last Update : Wed Nov 23 08:52:07 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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)	R.T.
1	Tert Butyl Alcohol-d9	1.000	1.000	0.0	112	0.00	7.74
2 M	1,4-dioxane	0.097	0.118	-21.6#	133	0.00	11.60
3 M	tertiary butyl alcohol	1.352	1.515	-12.1	123	0.00	7.86
4	ethanol			-----NA-----			
5 I	pentafluorobenzene	1.000	1.000	0.0	124	0.00	9.96
6	freon 23			-----NA-----			
7	freon 115			-----NA-----			
8	freon 143a			-----NA-----			
9	freon 152a			-----NA-----			
10 M	chlorotrifluoroethene			-----NA-----			
11 M	chlorodifluoromethane	0.724	0.607	16.2	105	0.00	4.35
12 M	dichlorodifluoromethane	0.838	0.860	-2.6	118	0.00	4.33
13	freon 114			-----NA-----			
14	freon 142b			-----NA-----			
15 M	chloromethane	1.201	1.143	4.8	120	0.00	4.70
16 M	vinyl chloride	0.943	0.973	-3.2	123	0.00	4.97
17 M	acetaldehyde			-----NA-----			
18 M	bromomethane	0.551	0.521	5.4	119	0.00	5.63
19 M	chloroethane	0.488	0.500	-2.5	125	0.00	5.81
20 M	vinyl bromide			-----NA-----			
21 M	trichlorofluoromethane	0.890	0.903	-1.5	121	0.00	6.30
22 M	pentane	1.165	0.837	28.2#	85	0.00	6.38
23 M	ethyl ether	0.390	0.391	-0.3	119	0.00	6.69
24	freon 141b			-----NA-----			
25	freon 123a			-----NA-----			
26	freon 123			-----NA-----			
27 M	acrolein	0.159	0.136	14.5	108	0.00	6.91
28 M	1,1-dichloroethene	0.546	0.521	4.6	116	0.00	7.13
29 M	isopropyl alcohol			-----NA-----			
30 M	acetone	0.071	0.068	4.2	117	0.00	7.11
31 M	allyl chloride	1.197	1.113	7.0	114	0.00	7.63
	----- True Calc. % Drift -----						
32 M	acetonitrile	500.000	512.169	-2.4	130	0.00	7.52
	----- AvgRF CCRF % Dev -----						
33 M	iodomethane	0.995	1.020	-2.5	118	0.00	7.40
34 M	iso-butyl alcohol			-----NA-----			
35 M	carbon disulfide	1.883	1.822	3.2	112	0.00	7.56
36 M	methylene chloride	0.659	0.631	4.2	120	0.00	7.81
37 M	methyl acetate	0.604	0.522	13.6	110	0.00	7.59

Initial Calibration Verification

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Job Number: JA96854
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 Project: 111 Washington Street, New York, NY

Sample: VE8149-ICV8147
 Lab FileID: E185194A.D

38	M	methyl tert butyl ether	1.958	1.727	11.8	114	0.00	8.16
39	M	trans-1,2-dichloroethene	0.583	0.547	6.2	115	0.00	8.20
40	M	di-isopropyl ether	2.314	2.035	12.1	117	0.00	8.74
41	M	ethyl tert-butyl ether	2.041	2.017	1.2	124	0.00	9.20
42	M	2-butanone	0.086	0.081	5.8	109	0.00	9.40
43	M	1,1-dichloroethane	1.081	1.072	0.8	121	0.00	8.74
44	M	chloroprene	0.880	0.848	3.6	115	0.00	8.86
45	M	acrylonitrile	0.285	0.281	1.4	122	0.00	8.07
46	M	vinyl acetate	0.112	0.126	-12.5	132	0.00	8.71
47	M	ethyl acetate	0.124	0.105	15.3	118	0.00	9.43
48	M	2,2-dichloropropane	0.780	0.676	13.3	110	0.00	9.48
49	M	cis-1,2-dichloroethene	0.660	0.616	6.7	119	0.00	9.46
50	m	methyl acrylate	0.646	0.637	1.4	117	0.00	9.51
51	M	propionitrile	0.110	0.102	7.3	121	0.00	9.46
52	M	bromochloromethane	0.317	0.320	-0.9	118	0.00	9.76
53	M	tetrahydrofuran	0.292	0.262	10.3	118	0.00	9.82
54	M	chloroform	1.035	0.980	5.3	119	0.00	9.81
55	m	t-butyl formate	0.585	0.598	-2.2	124	0.00	9.86
56	M	Iso-octane	1.968	1.813	7.9	115	0.00	10.57
57	S	dibromofluoromethane (s)	0.533	0.523	1.9	120	0.00	10.01
58	S	1,2-dichloroethane-d4 (s)	0.649	0.579	10.8	117	0.00	10.42
59	M	freon 113	0.434	0.424	2.3	123	0.00	7.11
60	M	methacrylonitrile	0.455	0.454	0.2	123	0.00	9.66
61	M	1,1,1-trichloroethane	0.836	0.840	-0.5	119	0.00	10.10
62	M	tert-amyl methyl ether	1.855	1.772	4.5	127	0.00	10.57
63	I	1,4-difluorobenzene	1.000	1.000	0.0	122	0.00	10.87
64	M	Di-isobutylene			-----NA-----			
65	M	tert amyl alcohol	0.020	0.019	8.5	114	0.00	10.35
66	M	epichlorohydrin	0.053	0.049	7.5	120	0.00	12.12
67	M	n-butyl alcohol	0.015	0.015	0.0	120	0.00	10.96
68	M	tert-amyl ethyl ether	0.665	0.603	10.3	114	0.00	11.41
69	M	carbon tetrachloride	0.479	0.508	-6.1	120	0.00	10.32
70	M	1,1-dichloropropene	0.523	0.545	-4.2	121	0.00	10.27
71	M	hexane	0.584	0.488	16.4	104	0.00	8.52
72	M	benzene	1.590	1.542	3.0	118	0.00	10.53
73	M	heptane	0.342	0.299	12.6	111	0.00	10.72
74	M	isopropyl acetate	0.958	0.904	5.6	119	0.00	10.41
75	M	1,2-dichloroethane	0.527	0.517	1.9	118	0.00	10.51
76	M	ethyl acrylate	0.696	0.668	4.0	120	0.00	11.20
77	M	trichloroethene	0.401	0.407	-1.5	122	0.00	11.24
78	M	2-nitropropane	0.003	0.005#	-66.7#	0#	-0.01	11.96
79	M	2-chloroethyl vinyl ether	0.208	0.191	8.2	112	0.00	12.00
80	M	methylcyclohexane	0.626	0.602	3.8	117	0.00	11.50
81	M	methyl methacrylate	0.496	0.429	13.5	112	0.00	11.48
82	M	1,2-dichloropropane	0.453	0.431	4.9	119	0.00	11.48
83	M	dibromomethane	0.265	0.268	-1.1	122	0.00	11.64
84	M	bromodichloromethane	0.586	0.556	5.1	119	0.00	11.77
85	M	cis-1,3-dichloropropene	0.734	0.712	3.0	117	0.00	12.24
86	S	toluene-d8 (s)	1.497	1.440	3.8	123	0.00	12.57
87	M	4-methyl-2-pentanone	0.211	0.200	5.2	118	0.00	12.33
88	M	toluene	1.011	1.001	1.0	119	0.00	12.65
89	M	3-methyl-1-butanol	0.024	0.022	8.3	111	0.00	12.33
90	M	trans-1,3-dichloropropene	0.654	0.629	3.8	116	0.00	12.82
91	M	ethyl methacrylate	0.652	0.605	7.2	122	0.00	12.82
92	M	1,1,2-trichloroethane	0.356	0.332	6.7	118	0.00	13.05
93	M	2-hexanone	0.196	0.193	1.5	115	0.00	13.23
94	I	chlorobenzene-d5	1.000	1.000	0.0	124	0.00	14.20
95	M	cyclohexanone			-----NA-----			

Initial Calibration Verification

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Job Number: JA96854

Sample: VE8149-ICV8147

Account: LANGAN Langan Engineering & Environmental

Lab FileID: E185194A.D

Project: 111 Washington Street, New York, NY

96 M	tetrachloroethene	0.477	0.479	-0.4	119	0.00	13.30
97 M	1,3-dichloropropane	0.717	0.698	2.6	120	0.00	13.25
98 M	butyl acetate	0.379	0.340	10.3	121	0.00	13.32
99 m	3,3-dimethyl-1-butanol	0.058	0.049	15.5	108	0.00	13.42
100 M	dibromochloromethane	0.503	0.480	4.6	118	0.00	13.55
101 M	1,2-dibromoethane	0.452	0.438	3.1	118	0.00	13.72
102 M	n-butyl ether			-----NA-----			
103 M	chlorobenzene	1.173	1.161	1.0	119	0.00	14.24
104 M	1,1,1,2-tetrachloroethane	0.439	0.419	4.6	118	0.00	14.29
105 M	ethylbenzene	1.955	1.862	4.8	119	0.00	14.29
106 M	m,p-xylene	0.765	0.749	2.1	119	0.00	14.41
107 M	o-xylene	0.790	0.776	1.8	119	0.00	14.87
108 M	butyl acrylate			-----NA-----			
109 M	styrene	1.344	1.278	4.9	117	0.00	14.88
110 M	bromoform	0.379	0.369	2.6	116	0.00	15.16
111 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	122	0.00	16.77
112 M	isopropylbenzene	3.925	3.912	0.3	119	0.00	15.25
113 S	4-bromofluorobenzene (s)	1.259	1.131	10.2	119	0.00	15.47
114 M	bromobenzene	1.078	1.040	3.5	118	0.00	15.70
115 M	1,1,2,2-tetrachloroethane	1.265	1.126	11.0	115	0.00	15.55
116 M	trans-1,4-dichloro-2-bute	0.279	0.292	-4.7	118	0.00	15.60
117 M	1,2,3-trichloropropane	0.318	0.306	3.8	118	0.00	15.64
118 M	n-propylbenzene	4.441	4.383	1.3	121	0.00	15.71
119 M	p-ethyltoluene	4.076	3.826	6.1	115	0.00	15.82
120 M	2-chlorotoluene	0.951	0.909	4.4	119	0.00	15.87
121 M	4-chlorotoluene	2.884	2.739	5.0	117	0.00	15.98
122 M	1,3,5-trimethylbenzene	3.211	3.099	3.5	121	0.00	15.87
123 M	tert-butylbenzene	2.919	2.941	-0.8	122	0.00	16.26
124 M	pentachloroethane	0.681	0.671	1.5	120	0.00	16.35
125 M	1,2,4-trimethylbenzene	3.315	3.244	2.1	120	0.00	16.31
126 M	sec-butylbenzene	4.249	4.164	2.0	118	0.00	16.50
127 M	1,3-dichlorobenzene	1.947	1.920	1.4	119	0.00	16.71
128 M	p-isopropyltoluene	3.492	3.585	-2.7	122	0.00	16.63
129 M	1,4-dichlorobenzene	1.916	1.863	2.8	117	0.00	16.80
130	benzyl chloride	1.888	1.790	5.2	114	0.00	16.91
131 M	p-diethylbenzene	2.200	2.215	-0.7	119	0.00	17.05
132 M	1,2-dichlorobenzene	1.915	1.897	0.9	119	0.00	17.23
133 M	n-butylbenzene	1.768	1.818	-2.8	120	0.00	17.09
134 M	1,2,4,5-tetramethylbenzen	3.304	3.382	-2.4	119	0.00	17.91
135 M	1,2-dibromo-3-chloropropa	0.212	0.212	0.0	117	0.00	18.06
136 m	1,3,5-trichlorobenzene	1.515	1.543	-1.8	117	0.00	18.29
137 M	1,2,4-trichlorobenzene	1.194	1.349	-13.0	123	0.00	19.01
138 M	hexachlorobutadiene	0.696	0.689	1.0	115	0.00	19.15
139 M	naphthalene	2.607	2.744	-5.3	117	0.00	19.32
140	MMT			-----NA-----			
141 M	1,2,3-trichlorobenzene	1.017	1.111	-9.2	118	0.00	19.60
142 M	hexachloroethane	0.651	0.695	-6.8	123	0.00	17.54
143 M	Cyclohexane	1.191	1.185	0.5	114	0.00	10.21
144	ethyleinimine			-----NA-----			

(#) = Out of Range
E185159.D ME8147.M

SPCC's out = 0 CCC's out = 0
Tue Nov 29 08:32:15 2011 RPT1

Continuing Calibration Summary

Page 1 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VE8236-CC8147
 Lab FileID: E187213.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E187213.D Vial: 27
 Acq On : 18 Jan 2012 9:02 pm Operator: dipap
 Sample : cc8147-50 Inst : MSE
 Misc : MS24397,VE8236,5,,100,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\ME8147.M (RTE Integrator)
 Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 Last Update : Tue Nov 29 09:15:39 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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)	R.T.
1	Tert Butyl Alcohol-d9	1.000	1.000	0.0	115	0.00	7.73
2 M	1,4-dioxane	0.097	0.117	-20.6#	135	0.00	11.59
3 M	tertiary butyl alcohol	1.352	1.573	-16.3	131	0.00	7.85
4	ethanol			-----NA-----			
5 I	pentafluorobenzene	1.000	1.000	0.0	139	0.00	9.95
6	freon 23			-----NA-----			
7	freon 115			-----NA-----			
8	freon 143a			-----NA-----			
9	freon 152a			-----NA-----			
10 M	chlorotrifluoroethene			-----NA-----			
11 M	chlorodifluoromethane	0.724	0.701	3.2	135	0.00	4.35
12 M	dichlorodifluoromethane	0.838	0.832	0.7	127	0.00	4.33
13	freon 114			-----NA-----			
14	freon 142b			-----NA-----			
15 M	chloromethane	1.201	1.015	15.5	119	0.00	4.69
16 M	vinyl chloride	0.943	0.889	5.7	125	0.00	4.97
17 M	acetaldehyde			-----NA-----			
18 M	bromomethane	0.551	0.567	-2.9	145	0.00	5.63
19 M	chloroethane	0.488	0.476	2.5	133	0.00	5.81
20 M	vinyl bromide			-----NA-----			
21 M	trichlorofluoromethane	0.890	0.942	-5.8	141	-0.03	6.27
22 M	pentane	1.165	1.030	11.6	117	0.00	6.38
23 M	ethyl ether	0.390	0.370	5.1	126	0.00	6.69
24	freon 141b			-----NA-----			
25	freon 123a			-----NA-----			
26	freon 123			-----NA-----			
27 M	acrolein	0.159	0.136	14.5	120	0.00	6.90
28 M	1,1-dichloroethene	0.546	0.542	0.7	135	0.00	7.13
29 M	isopropyl alcohol			-----NA-----			
30 M	acetone	0.071	0.062	12.7	120	0.00	7.11
31 M	allyl chloride	1.197	0.952	20.5#	109	0.00	7.62
	----- True Calc. % Drift -----						
32 M	acetonitrile	500.000	460.912	7.8	130	0.00	7.52
	----- AvgRF CCRF % Dev -----						
33 M	iodomethane	0.995	1.150	-15.6	148	0.00	7.39
34 M	iso-butyl alcohol			-----NA-----			
35 M	carbon disulfide	1.883	1.874	0.5	128	0.00	7.55
36 M	methylene chloride	0.659	0.641	2.7	136	0.00	7.80
37 M	methyl acetate	0.604	0.514	14.9	122	0.00	7.58

Continuing Calibration Summary

Page 2 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VE8236-CC8147
Lab FileID: E187213.D

38 M	methyl tert butyl ether	1.958	1.762	10.0	130	0.00	8.15
39 M	trans-1,2-dichloroethene	0.583	0.583	0.0	136	0.00	8.19
40 M	di-isopropyl ether	2.314	1.911	17.4	123	0.00	8.73
41 M	ethyl tert-butyl ether	2.041	1.840	9.8	127	0.00	9.19
42 M	2-butanone	0.086	0.080	7.0	120	-0.01	9.38
43 M	1,1-dichloroethane	1.081	1.032	4.5	130	0.00	8.73
44 M	chloroprene	0.880	0.824	6.4	125	0.00	8.85
45 M	acrylonitrile	0.285	0.252	11.6	122	0.00	8.07
46 M	vinyl acetate	0.112	0.101	9.8	119	0.00	8.70
47 M	ethyl acetate	0.124	0.092	25.8#	116	0.00	9.42
48 M	2,2-dichloropropane	0.780	0.764	2.1	139	0.00	9.47
49 M	cis-1,2-dichloroethene	0.660	0.646	2.1	139	0.00	9.45
50 m	methyl acrylate	0.646	0.563	12.8	116	0.00	9.50
51 M	propionitrile	0.110	0.093	15.5	125	0.00	9.45
52 M	bromochloromethane	0.317	0.346	-9.1	143	0.00	9.76
53 M	tetrahydrofuran	0.292	0.226	22.6#	114	0.00	9.81
54 M	chloroform	1.035	0.987	4.6	134	0.00	9.81
55 m	t-butyl formate	0.585	0.482	17.6	112	0.00	9.85
56 M	Iso-octane	1.968	1.755	10.8	124	0.00	10.56
57 S	dibromofluoromethane (s)	0.533	0.560	-5.1	143	0.00	10.00
58 S	1,2-dichloroethane-d4 (s)	0.649	0.582	10.3	132	0.00	10.41
59 M	freon 113	0.434	0.461	-6.2	150	0.00	7.11
60 M	methacrylonitrile	0.455	0.390	14.3	118	0.00	9.65
61 M	1,1,1-trichloroethane	0.836	0.868	-3.8	137	0.00	10.10
62 M	tert-amyl methyl ether	1.855	1.634	11.9	131	0.00	10.56
63 I	1,4-difluorobenzene	1.000	1.000	0.0	133	0.00	10.87
64 M	Di-isobutylene			-----NA-----			
65 M	tert amyl alcohol			-----NA-----			
66 M	epichlorohydrin	0.053	0.047	11.3	126	0.00	12.11
67 M	n-butyl alcohol	0.015	0.015	0.0	128	0.00	10.95
68 M	tert-amyl ethyl ether			-----NA-----			
69 M	carbon tetrachloride	0.479	0.553	-15.4	142	0.00	10.32
70 M	1,1-dichloropropene	0.523	0.550	-5.2	132	0.00	10.27
71 M	hexane	0.584	0.510	12.7	119	0.00	8.52
72 M	benzene	1.590	1.592	-0.1	133	0.00	10.52
73 M	heptane	0.342	0.288	15.8	116	0.00	10.71
74 M	isopropyl acetate	0.958	0.784	18.2	112	0.00	10.40
75 M	1,2-dichloroethane	0.527	0.514	2.5	128	0.00	10.50
76	ethyl acrylate			-----NA-----			
77 M	trichloroethene	0.401	0.429	-7.0	140	0.00	11.24
78 M	2-nitropropane	0.003	0.003#	0.0	0#	0.02	11.99
79 M	2-chloroethyl vinyl ether	0.208	0.217	-4.3	139	0.00	11.99
80 M	methylcyclohexane	0.626	0.637	-1.8	135	0.00	11.49
81 M	methyl methacrylate	0.496	0.435	12.3	124	0.00	11.47
82 M	1,2-dichloropropane	0.453	0.436	3.8	131	0.00	11.48
83 M	dibromomethane	0.265	0.272	-2.6	135	0.00	11.64
84 M	bromodichloromethane	0.586	0.556	5.1	130	0.00	11.76
85 M	cis-1,3-dichloropropene	0.734	0.719	2.0	128	0.00	12.24
86 S	toluene-d8 (s)	1.497	1.508	-0.7	140	0.00	12.56
87 M	4-methyl-2-pentanone	0.211	0.189	10.4	121	0.00	12.32
88 M	toluene	1.011	1.027	-1.6	133	0.00	12.64
89 M	3-methyl-1-butanol	0.024	0.023	4.2	126	0.00	12.33
90 M	trans-1,3-dichloropropene	0.654	0.639	2.3	129	0.00	12.81
91 M	ethyl methacrylate	0.652	0.566	13.2	124	0.00	12.81
92 M	1,1,2-trichloroethane	0.356	0.334	6.2	130	0.00	13.04
93 M	2-hexanone	0.196	0.179	8.7	116	0.00	13.22
94 I	chlorobenzene-d5	1.000	1.000	0.0	134	0.00	14.19
95 M	cyclohexanone			-----NA-----			

Continuing Calibration Summary

Page 3 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VE8236-CC8147
Lab FileID: E187213.D

96 M	tetrachloroethene	0.477	0.550	-15.3	147	0.00	13.29
97 M	1,3-dichloropropane	0.717	0.695	3.1	129	0.00	13.25
98 M	butyl acetate	0.379	0.310	18.2	120	0.00	13.31
99 m	3,3-dimethyl-1-butanol	0.058	0.052	10.3	124	0.00	13.41
100 M	dibromochloromethane	0.503	0.522	-3.8	139	0.00	13.54
101 M	1,2-dibromoethane	0.452	0.460	-1.8	134	0.00	13.71
102 M	n-butyl ether			-----NA-----			
103 M	chlorobenzene	1.173	1.226	-4.5	136	0.00	14.23
104 M	1,1,1,2-tetrachloroethane	0.439	0.458	-4.3	140	0.00	14.29
105 M	ethylbenzene	1.955	1.929	1.3	133	0.00	14.29
106 M	m,p-xylene	0.765	0.788	-3.0	136	0.00	14.41
107 M	o-xylene	0.790	0.823	-4.2	137	0.00	14.86
108 M	butyl acrylate			-----NA-----			
109 M	styrene	1.344	1.349	-0.4	134	0.00	14.87
110 M	bromoform	0.379	0.416	-9.8	141	0.00	15.16
111 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	144	0.00	16.77
112 M	isopropylbenzene	3.925	3.743	4.6	135	0.00	15.25
113 S	4-bromofluorobenzene (s)	1.259	1.110	11.8	139	0.00	15.47
114 M	bromobenzene	1.078	1.075	0.3	145	0.00	15.69
115 M	1,1,2,2-tetrachloroethane	1.265	1.071	15.3	129	0.00	15.54
116 M	trans-1,4-dichloro-2-bute	0.279	0.263	5.7	126	0.00	15.59
117 M	1,2,3-trichloropropane	0.318	0.305	4.1	139	0.00	15.63
118 M	n-propylbenzene	4.441	4.156	6.4	136	0.00	15.70
119 M	p-ethyltoluene			-----NA-----			
120 M	2-chlorotoluene	0.951	0.943	0.8	146	0.00	15.87
121 M	4-chlorotoluene	2.884	2.708	6.1	137	0.00	15.97
122 M	1,3,5-trimethylbenzene	3.211	3.052	5.0	141	0.00	15.86
123 M	tert-butylbenzene	2.919	2.862	2.0	140	0.00	16.25
124 M	pentachloroethane	0.681	0.657	3.5	139	0.00	16.34
125 M	1,2,4-trimethylbenzene	3.315	3.119	5.9	137	0.00	16.30
126 M	sec-butylbenzene	4.249	4.059	4.5	136	0.00	16.50
127 M	1,3-dichlorobenzene	1.947	1.996	-2.5	147	0.00	16.70
128 M	p-isopropyltoluene	3.492	3.454	1.1	139	0.00	16.62
129 M	1,4-dichlorobenzene	1.916	1.977	-3.2	148	0.00	16.79
130	benzyl chloride	1.888	1.826	3.3	138	0.00	16.90
131 M	p-diethylbenzene			-----NA-----			
132 M	1,2-dichlorobenzene	1.915	1.983	-3.6	147	0.00	17.23
133 M	n-butylbenzene	1.768	1.755	0.7	137	0.00	17.08
134 M	1,2,4,5-tetramethylbenzen			-----NA-----			
135 M	1,2-dibromo-3-chloropropa	0.212	0.206	2.8	134	0.00	18.05
136 m	1,3,5-trichlorobenzene	1.515	1.711	-12.9	153	0.00	18.29
137 M	1,2,4-trichlorobenzene	1.194	1.492	-25.0#	161	0.00	19.00
138 M	hexachlorobutadiene	0.696	0.776	-11.5	153	0.00	19.15
139 M	naphthalene	2.607	2.989	-14.7	151	0.00	19.31
140	MMT			-----NA-----			
141 M	1,2,3-trichlorobenzene	1.017	1.297	-27.5#	163	0.00	19.59
142 M	hexachloroethane	0.651	0.674	-3.5	141	0.00	17.54
143 M	Cyclohexane	1.191	1.123	5.7	128	0.00	10.20
144	ethyleimine			-----NA-----			

(#) = Out of Range
E185159.D ME8147.M

SPCC's out = 0 CCC's out = 0
Thu Jan 19 13:23:46 2012 RPT1

Initial Calibration Summary

Page 1 of 5

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VY5012-ICC5012
Lab FileID: Y117404.D

Response Factor Report MSY

Method : C:\MSDCHEM\1\METHODS\MYS5012.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Nov 09 07:18:17 2011
Response via : Initial Calibration

Calibration Files

5 =y117405.D 10 =y117400.D 0.5 =y117403.D 50 =y117404.D
100 =y117408.D 1 =y117402.D 200 =y117409.D 20 =y117406.D
2 =y117401.D 75 =y117410.D = =

Compound	5	10	0.5	50	100	1	200	20	2	75	Avg	%RSD
1) I Tert Butyl Alcohol-d9 -----ISTD-----												
2) 1,4-dioxane												
	0.083	0.105		0.105	0.108		0.125	0.103		0.109	0.106	11.60
3) tertiary butyl alcohol												
	1.214	1.328		1.292	1.326	1.330	1.459	1.294	1.396	1.337	1.330	5.13
4) I pentafluorobenzene -----ISTD-----												
5) chlorodifluoromethane												
	0.279	0.398		0.324	0.348		0.347	0.311		0.385	0.342	12.14
6) dichlorodifluoromethane												
	0.322	0.451		0.397	0.410		0.399	0.389		0.476	0.406	12.11
7) chloromethane												
	0.512	0.591		0.500	0.533	0.566	0.524	0.512	0.532	0.573	0.538	5.90
8) vinyl chloride												
	0.374	0.453		0.409	0.416		0.417	0.396		0.509	0.425	10.40
9) bromomethane												
	0.274	0.320		0.260	0.226	0.308		0.278	0.304	0.281	0.281	10.61
10) chloroethane												
	0.201	0.238		0.207	0.206	0.212	0.185	0.211	0.184	0.251	0.211	10.40
11) Vinyl Bromide												
										0.000#		-1.00
12) trichlorofluoromethane												
	0.418	0.512		0.467	0.457		0.437	0.450		0.579	0.474	11.52
13) ethyl ether												
	0.226	0.221		0.210	0.233	0.179	0.239	0.214	0.210	0.244	0.220	8.93
14) acrolein												
	0.062	0.068		0.063		0.051		0.063	0.055	0.075	0.062	12.86
15) 1,1-dichloroethene												
	0.327	0.387		0.335	0.329	0.344	0.324	0.331	0.288	0.395	0.340	9.64
16) acetone												
	0.054	0.070		0.058	0.054		0.045	0.059		0.062	0.058	13.54
17) allyl chloride												
	0.201	0.237		0.214	0.220	0.231	0.223	0.215	0.200	0.246	0.221	7.06
18) acetonitrile												
	0.021	0.027		0.020	0.022		0.023	0.020		0.023	0.022	10.95
19) iodomethane												
	0.686	0.815		0.740	0.762	0.722	0.781	0.745	0.682	0.841	0.753	7.15
20) iso-butyl alcohol												
	0.012	0.014		0.012	0.012		0.012	0.012		0.013	0.013	5.85
21) carbon disulfide												
	1.108	1.356		1.168	1.173	1.138	1.177	1.161	1.030	1.395	1.190	9.70
22) methylene chloride												
	0.409	0.443		0.410	0.428		0.435	0.423	0.429	0.460	0.430	3.94
23) methyl acetate												

Initial Calibration Summary

Page 2 of 5

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VY5012-ICC5012
Lab FileID: Y117404.D

	0.042	0.054	0.052	0.056	0.058	0.054	0.041	0.058	0.052	13.16
24)	methyl tert butyl ether									
	0.990	1.077	1.011	1.080	1.127	1.081	1.028	0.990	1.136	5.24
25)	trans-1,2-dichloroethene									
	0.356	0.429	0.374	0.371	0.413	0.374	0.380	0.396	0.436	7.11
26)	di-isopropyl ether									
	1.242	1.350	1.274	1.367	1.206	1.400	1.318	1.224	1.445	6.32
27)	ethyl tert-butyl ether									
	1.055	1.135	1.073	1.157	1.009	1.178	1.105	1.036	1.193	5.91
28)	2-butanone									
	0.043	0.059	0.051	0.050	0.045	0.050	0.055	0.051		10.85
29)	1,1-dichloroethane									
	0.639	0.715	0.660	0.665	0.694	0.682	0.680	0.654	0.770	5.72
30)	chloroprene									
	0.420	0.508	0.450	0.448	0.365	0.464	0.451	0.398	0.541	11.88
31)	acrylonitrile									
	0.104	0.111	0.106	0.113	0.086	0.113	0.109	0.086	0.123	11.86
32)	vinyl acetate									
	0.045		0.047	0.055	0.057	0.045	0.057	0.051		11.75
33)	ethyl acetate									
	0.043	0.045	0.044	0.048	0.048	0.045	0.050	0.046		5.58
34)	2,2-dichloropropane									
	0.448	0.559	0.481	0.472	0.471	0.472	0.471	0.457	0.584	9.63
35)	cis-1,2-dichloroethene									
	0.419	0.454	0.426	0.440	0.466	0.442	0.440	0.414	0.490	5.39
36)	propionitrile									
	0.041	0.043	0.041	0.045	0.045	0.043	0.034	0.049	0.043	10.17
37)	bromochloromethane									
	0.212	0.237	0.222	0.233	0.223	0.236	0.227	0.202	0.246	6.04
38)	tetrahydrofuran									
	0.126	0.125	0.107	0.113	0.112	0.109	0.146	0.125	0.121	10.74
39)	chloroform									
	0.632	0.699	0.647	0.660	0.749	0.666	0.665	0.646	0.738	6.13
40)	tert-Butyl Formate									
	0.024	0.055	0.059	0.076	0.099	0.052	0.084	0.064		38.22
41)	dibromofluoromethane (s)									
	0.546		0.447	0.407	0.390	0.436	0.436	0.444		12.24
42)	1,2-dichloroethane-d4 (s)									
	0.506		0.412	0.377	0.360	0.410	0.395	0.410		12.40
43)	freon 113									
	0.246	0.320	0.275	0.264	0.256	0.261	0.323	0.278		11.25
44)	methacrylonitrile									
	0.177	0.186	0.193	0.206	0.215	0.191	0.182	0.221	0.196	8.12
45)	1,1,1-trichloroethane									
	0.490	0.593	0.448	0.511	0.504	0.499	0.503	0.499	0.463	9.90
46)	Cyclohexane									
	0.424	0.532	0.376	0.462	0.444	0.404	0.427	0.452	0.425	12.28
47)	2,2,4-trimethylpentane									
	1.092	1.380	1.180	1.157	1.133	1.170	0.968	1.421	1.188	12.46
48)	tert-amyl methyl ether									
	0.985	1.051	0.950	0.993	0.920	0.974	0.981	0.969	1.032	3.99
49)	I 1,4-difluorobenzene -----ISTD-----									
50)	epichlorohydrin									
	0.017	0.019	0.018	0.019	0.020	0.017	0.021	0.019		8.18
51)	n-butyl alcohol									
	0.006	0.007	0.007	0.007	0.007	0.007	0.008	0.007#		7.38
52)	carbon tetrachloride									
	0.304	0.385	0.329	0.317	0.304	0.312	0.328	0.265	0.387	12.02
53)	1,1-dichloropropene									

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Initial Calibration Summary

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Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VY5012-ICC5012
 Lab FileID: Y117404.D

	0.312 0.369	0.324 0.311 0.311 0.315 0.325 0.299 0.381 0.327	8.56
54)	hexane		
	0.280 0.360	0.302 0.287	0.291 0.299 0.275 0.363 0.307
55)	Tert Amyl Alcohol		11.31
	0.008 0.009	0.008 0.009	0.008 0.008 0.007 0.009 0.008#
56)	benzene		6.16
	1.021 1.157	1.002 0.979 1.167 0.974 1.043 1.020 1.119 1.054	7.10
57)	heptane		
	0.162 0.204	0.169 0.160	0.160 0.167 0.139 0.201 0.170
58)	isopropyl acetate		12.86
	0.093 0.099	0.092 0.096 0.070 0.098 0.096 0.085 0.099 0.092	10.28
59)	1,2-dichloroethane		
	0.314 0.330 0.308	0.306 0.311 0.332 0.318 0.321 0.299 0.331 0.317	3.58
60)	trichloroethene		
	0.275 0.310	0.274 0.269 0.285 0.267 0.278 0.261 0.313 0.281	6.50
61)	ethyl acrylate		
	0.269 0.281	0.271 0.283 0.193 0.284 0.270 0.210 0.307 0.263	14.10
62)	2-nitropropane		
	0.050	0.049 0.052	0.056 0.047 0.059 0.052
63)	2-chloroethyl vinyl ether		8.86
	0.031 0.031	0.037 0.043	0.048 0.035 0.043 0.038
----- Linear regression ----- Coefficient = 0.9965			
Response Ratio = -0.03051 + 0.04846 *A			
64)	methyl methacrylate		
	0.148 0.153	0.149 0.157	0.158 0.150 0.138 0.168 0.153
65)	1,2-dichloropropane		5.78
	0.264 0.294	0.270 0.274 0.282 0.275 0.284 0.267 0.302 0.279	4.51
66)	methylcyclohexane		
	0.325 0.428	0.361 0.348	0.341 0.356 0.428 0.369
67)	Tert-amyl ethyl ether		11.24
	0.019 0.020	0.021 0.021	0.020 0.021 0.024 0.021
68)	dibromomethane		6.34
	0.149 0.166 0.144 0.160 0.165 0.151 0.168 0.165 0.157 0.174 0.160		6.03
69)	bromodichloromethane		
	0.329 0.371	0.349 0.359 0.354 0.371 0.366 0.322 0.389 0.357	5.93
70)	cis-1,3-dichloropropene		
	0.407 0.445 0.433 0.436 0.449 0.437 0.457 0.440 0.379 0.491 0.437		6.73
71)	toluene-d8 (s)		
	1.260	1.053 0.893	0.833 1.022 1.032 1.016
72)	4-methyl-2-pentanone		14.59
	0.085 0.093	0.085 0.090	0.088 0.088 0.097 0.090
73)	toluene		4.95
	0.579 0.673	0.588 0.582 0.693 0.587 0.609 0.605 0.678 0.622	7.43
74)	3-methyl-1-butanol		
	0.005 0.006	0.006 0.006	0.006 0.006 0.004 0.007 0.006#
75)	trans-1,3-dichloropropene		14.17
	0.332 0.363	0.366 0.373 0.323 0.381 0.371 0.331 0.408 0.361	7.70
76)	ethyl methacrylate		
	0.250 0.270	0.266 0.287 0.204 0.296 0.275 0.218 0.311 0.264	13.35
77)	1,1,2-trichloroethane		
	0.179 0.191 0.197 0.183 0.193 0.176 0.195 0.196 0.184 0.206 0.190		4.88
78)	2-hexanone		
	0.086 0.110	0.097 0.094	0.088 0.101 0.074 0.105 0.094
79)	I chlorobenzene-d5	-----ISTD-----	
80)	tetrachloroethene		
	0.508 0.532	0.470 0.428 0.539 0.403 0.498 0.480 0.489 0.483	9.27
81)	1,3-dichloropropane		
	0.422 0.463 0.456 0.421 0.419 0.437 0.425 0.451 0.432 0.453 0.438		3.73

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Initial Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VY5012-ICC5012
Lab FileID: Y117404.D

82)	butyl acetate	0.163	0.177	0.163	0.167	0.166	0.168	0.177	0.169	3.47			
83)	dibromochloromethane	0.333	0.379	0.340	0.356	0.368	0.310	0.378	0.371	0.336	0.384	0.355	6.96
84)	1,2-dibromoethane	0.272	0.297	0.276	0.284	0.292	0.264	0.301	0.287	0.268	0.310	0.285	5.35
85)	3,3-Dimethyl-1-Butanol	0.021	0.023	0.023	0.025	0.026	0.022	0.021	0.027	0.023	9.29		
86)	chlorobenzene	0.849	0.943	0.853	0.845	0.913	0.870	0.890	0.885	0.943	0.888	4.31	
87)	1,1,1,2-tetrachloroethane	0.314	0.363	0.362	0.323	0.318	0.331	0.322	0.339	0.336	0.347	0.336	5.14
88)	ethylbenzene	1.284	1.485	1.287	1.219	1.424	1.228	1.337	1.318	1.437	1.335	7.05	
89)	m,p-xylene	0.513	0.590	0.500	0.467	0.528	0.471	0.524	0.503	0.557	0.517	7.56	
90)	o-xylene	0.492	0.590	0.515	0.501	0.549	0.512	0.534	0.543	0.578	0.535	6.27	
91)	styrene	0.813	0.892	0.847	0.832	0.772	0.844	0.898	0.771	0.943	0.846	6.82	
92)	bromoform	0.237	0.256	0.281	0.247	0.250	0.217	0.256	0.258	0.229	0.266	0.250	7.39
93)	I 1,4-dichlorobenzene-d	-----ISTD-----											
94)	isopropylbenzene	2.648	3.074	2.721	2.577	2.880	2.691	2.804	2.587	3.135	2.791	7.27	
95)	4-bromofluorobenzene (s)	1.226	1.001	0.850	0.847	0.980	0.967	0.979	14.14				
96)	bromobenzene	0.861	0.905	0.968	0.839	0.796	0.948	0.830	0.907	0.871	0.897	0.882	6.04
97)	cyclohexanone	0.118	0.137	0.119	0.114	0.111	0.106	0.126	0.116	0.137	0.120	9.19	
98)	1,1,2,2-tetrachloroethane	0.658	0.720	0.657	0.674	0.681	0.739	0.716	0.666	0.763	0.697	5.53	
99)	trans-1,4-dichloro-2-butene	0.129	0.129	0.146	0.149	0.166	0.152	0.172	0.149	10.95			
100)	1,2,3-trichloropropane	0.174	0.178	0.166	0.170	0.161	0.184	0.165	0.180	0.182	0.178	0.174	4.61
101)	n-propylbenzene	3.079	3.547	3.156	2.931	3.133	3.051	3.248	3.014	3.615	3.197	7.37	
102)	4-Ethyltoluene	2.545	2.548	2.570	2.443	2.311	2.477	2.338	2.419	2.410	2.760	2.482	5.27
103)	2-chlorotoluene	0.722	0.798	0.705	0.662	0.752	0.696	0.758	0.707	0.777	0.731	5.93	
104)	4-chlorotoluene	1.960	2.125	1.953	1.892	2.053	2.027	2.062	1.981	2.208	2.029	4.76	
105)	1,3,5-trimethylbenzene	2.089	2.443	2.181	2.019	2.166	2.149	2.293	2.080	2.441	2.207	6.96	
106)	tert-butylbenzene	1.862	2.126	1.930	1.860	1.946	1.980	1.982	1.785	2.258	1.970	7.35	
107)	pentachloroethane	0.376	0.468	0.415	0.415	0.392	0.488	0.402	0.377	0.499	0.426	11.11	
108)	1,2,4-trimethylbenzene	2.232	2.461	2.240	2.132	2.307	2.247	2.352	2.202	2.513	2.298	5.39	
109)	sec-butylbenzene	2.773	3.156	2.820	2.680	2.710	2.819	2.907	2.597	3.308	2.863	8.05	
110)	1,3-dichlorobenzene	1.485	1.600	1.490	1.439	1.511	1.524	1.567	1.441	1.664	1.524	4.88	
111)	p-isopropyltoluene	2.250	2.549	2.344	2.228	2.107	2.356	2.385	2.124	2.725	2.341	8.49	

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Initial Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VY5012-ICC5012
Lab FileID: Y117404.D

112)	1,4-dichlorobenzene	1.512	1.588	1.463	1.421	1.607	1.507	1.544	1.490	1.649	1.531	4.74
113)	1,2-dichlorobenzene	1.395	1.498	1.423	1.418	1.531	1.484	1.502	1.420	1.590	1.473	4.36
114)	n-butylbenzene	1.164	1.257	1.158	1.104	1.131	1.161	1.188	1.044	1.404	1.179	8.69
115)	p-Diethylbenzene	1.252	1.347	1.277	1.338	1.260	1.091	1.286	1.270	1.125	1.564	10.05
116)	1,2-dibromo-3-chloropropane	0.108	0.114	0.107	0.110		0.122	0.112	0.119	0.124	0.114	5.70
117)	1,3,5-Trichlorobenzene	1.220	1.344	1.281	1.196	1.211	1.249	1.294	1.121	1.463	1.264	7.76
118)	1,2,4-trichlorobenzene	1.074	1.147	1.134	1.094	1.009	1.165	1.136	0.961	1.317	1.115	9.07
119)	1,2,4,5-tetramethylbenzene	2.046	2.073	2.196	2.164	1.801	2.240	2.079	1.732	2.546	2.098	11.44
120)	hexachlorobutadiene	0.597	0.695	0.616	0.574	0.522	0.582	0.640	0.571	0.709	0.612	9.92
121)	naphthalene	2.385	1.745	1.857	1.946	2.099	2.147	1.922	1.981	2.381	2.051	10.85
122)	1,2,3-trichlorobenzene	1.020	0.975	1.013	0.999	0.929	1.062	1.018	0.967	1.175	1.018	6.88
123)	hexachloroethane	0.318	0.443	0.431	0.462		0.520	0.403		0.531	0.444	16.31
		----- Linear regression ----- Coefficient = 0.9955										
		Response Ratio = -0.04289 + 0.52330 *A										
124)	Benzyl chloride	0.747	0.872	0.953	0.952		1.109	0.849		1.167	0.950	15.47
		----- Linear regression ----- Coefficient = 0.9931										
		Response Ratio = -0.08623 + 1.11230 *A										

(#) = Out of Range ### Number of calibration levels exceeded format ###

MYS5012.M

Wed Nov 09 14:50:08 2011

RPT1

Initial Calibration Verification

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VY5012-ICV5012
 Lab FileID: Y117411.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\y117411.D
 Acq On : 8 Nov 2011 5:48 pm
 Sample : ICV5012-50
 Misc : MS20977,VY5012,5.0,,,,,1
 MS Integration Params: lscint.p

Vial: 13
 Operator: Roberts
 Inst : MSY
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MYS5012.M (RTE Integrator)
 Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 Last Update : Wed Nov 09 07:18:17 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	100	0.00	7.71
2	1,4-dioxane	0.106	0.111	-4.7	106	0.00	11.51
3	tertiary butyl alcohol	1.330	1.507	-13.3	117	0.00	7.82
4 I	pentafluorobenzene	1.000	1.000	0.0	95	0.00	9.87
5	chlorodifluoromethane	0.342	0.271	20.8#	79	0.00	4.20
6	dichlorodifluoromethane	0.406	0.431	-6.2	103	0.00	4.17
7	chloromethane	0.538	0.574	-6.7	109	0.00	4.53
8	vinyl chloride	0.425	0.466	-9.6	108	0.00	4.79
9	bromomethane	0.281	0.295	-5.0	108	0.00	5.49
10	chloroethane	0.211	0.247	-17.1	113	0.00	5.67
11	Vinyl Bromide	-----NA-----					
12	trichlorofluoromethane	0.474	0.527	-11.2	107	0.01	6.12
13	ethyl ether	0.220	0.254	-15.5	115	0.00	6.52
14	acrolein	0.062	0.079	-27.4#	119	0.00	6.86
15	1,1-dichloroethene	0.340	0.363	-6.8	103	0.00	6.97
16	acetone	0.058	0.060	-3.4	98	0.00	7.08
17	allyl chloride	0.221	0.248	-12.2	110	0.00	7.52
18	acetonitrile	0.022	0.026	-18.2	123	0.00	7.58
19	iodomethane	0.753	0.799	-6.1	102	0.00	7.28
20	iso-butyl alcohol	0.013	0.071	-446.2#	567#	0.00	10.20
21	carbon disulfide	1.190	1.248	-4.9	101	0.00	7.39
22	methylene chloride	0.430	0.470	-9.3	109	0.00	7.73
23	methyl acetate	0.052	0.058	-11.5	106	0.00	7.51
24	methyl tert butyl ether	1.058	2.285	-8.0	107	0.00	8.00
25	trans-1,2-dichloroethene	0.392	0.413	-5.4	105	0.00	8.07
26	di-isopropyl ether	1.314	1.478	-12.5	110	0.00	8.56
27	ethyl tert-butyl ether	1.105	1.329	-20.3#	118	0.00	9.03
28	2-butanone	0.051	0.059	-15.7	109	0.00	9.37
29	1,1-dichloroethane	0.684	0.770	-12.6	111	0.00	8.65
30	chloroprene	0.450	0.508	-12.9	107	0.00	8.74
31	acrylonitrile	0.106	0.128	-20.8#	115	0.00	8.10
32	vinyl acetate	0.051	0.065	-27.5#	130	0.00	8.63
33	ethyl acetate	0.046	0.054	-17.4	116	0.00	9.35
34	2,2-dichloropropane	0.491	0.537	-9.4	106	0.00	9.37
35	cis-1,2-dichloroethene	0.443	0.480	-8.4	107	0.00	9.39
36	propionitrile	0.043	0.051	-18.6	120	0.00	9.52
37	bromochloromethane	0.226	0.247	-9.3	106	0.00	9.71
38	tetrahydrofuran	0.121	0.131	-8.3	116	0.00	9.73
39	chloroform	0.678	0.733	-8.1	108	0.00	9.75
40	tert-Butyl Formate	0.064	0.089	-39.1#	143	0.00	9.77
41 S	dibromofluoromethane (s)	0.444	0.419	5.6	89	0.00	9.96

Initial Calibration Verification

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: VY5012-ICV5012
 Lab FileID: Y117411.D

42	S	1,2-dichloroethane-d4 (s)	0.410	0.401	2.2	92	0.00	10.38
43		freon 113	0.278	0.290	-4.3	100	0.00	6.91
44		methacrylonitrile	0.196	0.240	-22.4#	118	0.00	9.67
45		1,1,1-trichloroethane	0.512	0.571	-11.5	106	0.00	9.98
46		Cyclohexane	0.450	0.521	-15.8	107	0.00	10.01
47		2,2,4-trimethylpentane	1.188	1.418	-19.4	114	0.00	10.35
48		tert-amyl methyl ether	0.984	1.275	-29.6#	127	0.00	10.41
49	I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00	10.78
50		epichlorohydrin	0.019	0.023	-21.1#	125	0.00	12.06
51		n-butyl alcohol	0.007	0.008#	-14.3	116	0.00	10.94
52		carbon tetrachloride	0.326	0.357	-9.5	105	0.00	10.16
53		1,1-dichloropropene	0.327	0.358	-9.5	107	0.00	10.14
54		hexane	0.307	0.310	-1.0	100	0.00	8.30
55		Tert Amyl Alcohol	0.008	0.035	-337.5#	436#	-0.01	10.32
56		benzene	1.054	1.103	-4.6	107	0.00	10.42
57		heptane	0.170	0.191	-12.4	110	0.00	10.51
58		isopropyl acetate	0.092	0.109	-18.5	115	0.00	10.32
59		1,2-dichloroethane	0.317	0.341	-7.6	108	0.00	10.47
60		trichloroethene	0.281	0.302	-7.5	107	0.00	11.11
61		ethyl acrylate	0.263	0.317	-20.5#	114	0.00	11.12
62		2-nitropropane	0.052	0.062	-19.2	122	0.00	11.93
----- True Calc. % Drift -----								
63		2-chloroethyl vinyl ether	250.000	282.729	-13.1	128	0.00	11.90
----- AvgRF CCRF % Dev -----								
64		methyl methacrylate	0.153	0.171	-11.8	111	0.00	11.37
65		1,2-dichloropropane	0.279	0.312	-11.8	112	0.00	11.40
66		methylcyclohexane	0.369	0.403	-9.2	108	0.00	11.29
67		Tert-amyl ethyl ether	0.021	0.023	-9.5	105	0.00	11.11
68		dibromomethane	0.160	0.184	-15.0	112	0.00	11.57
69		bromodichloromethane	0.357	0.399	-11.8	111	0.00	11.69
70		cis-1,3-dichloropropene	0.437	0.488	-11.7	109	0.00	12.12
71	S	toluene-d8 (s)	1.016	0.964	5.1	89	0.00	12.38
72		4-methyl-2-pentanone	0.090	0.106	-17.8	121	0.00	12.20
73		toluene	0.622	0.671	-7.9	111	0.00	12.45
74		3-methyl-1-butanol	0.006	0.007#	-16.7	122	0.00	12.24
75		trans-1,3-dichloropropene	0.361	0.417	-15.5	111	0.00	12.67
76		ethyl methacrylate	0.264	0.332	-25.8#	121	0.00	12.62
77		1,1,2-trichloroethane	0.190	0.210	-10.5	111	0.00	12.89
78		2-hexanone	0.094	0.113	-20.2#	113	0.00	13.04
79	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	13.87
80		tetrachloroethene	0.483	0.482	0.2	102	0.00	13.01
81		1,3-dichloropropane	0.438	0.476	-8.7	113	0.00	13.07
82		butyl acetate	0.169	0.201	-18.9	123	0.00	13.08
83		dibromochloromethane	0.355	0.392	-10.4	110	0.00	13.32
84		1,2-dibromoethane	0.285	0.318	-11.6	112	0.00	13.48
85		3,3-Dimethyl-1-Butanol	0.023	0.029	-26.1#	124	0.00	13.21
86		chlorobenzene	0.888	0.951	-7.1	111	0.00	13.90
87		1,1,1,2-tetrachloroethane	0.336	0.351	-4.5	108	0.00	13.96
88		ethylbenzene	1.335	1.416	-6.1	110	0.00	13.93
89		m,p-xylene	0.517	0.553	-7.0	110	0.00	14.03
90		o-xylene	0.535	0.572	-6.9	111	0.00	14.45
91		styrene	0.846	0.946	-11.8	111	0.00	14.47
92		bromoform	0.250	0.274	-9.6	111	0.00	14.76
93	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	16.15
94		isopropylbenzene	2.791	2.941	-5.4	110	0.00	14.77

Initial Calibration Verification

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Job Number: JA96854

Sample: VY5012-ICV5012

Account: LANGAN Langan Engineering & Environmental

Lab FileID: Y117411.D

Project: 111 Washington Street, New York, NY

95	S	4-bromofluorobenzene (s)	0.979	0.910	7.0	93	0.00	15.00
96		bromobenzene	0.882	0.906	-2.7	110	0.00	15.20
97		cyclohexanone	0.120	0.143	-19.2	123	0.00	15.00
98		1,1,2,2-tetrachloroethane	0.697	0.740	-6.2	115	0.00	15.12
99		trans-1,4-dichloro-2-bute	0.149	0.173	-16.1	120	0.00	15.16
100		1,2,3-trichloropropane	0.174	0.182	-4.6	109	0.00	15.20
101		n-propylbenzene	3.197	3.441	-7.6	111	0.00	15.18
102		4-Ethyltoluene	2.482	2.585	-4.1	108	0.00	15.27
103		2-chlorotoluene	0.731	0.751	-2.7	109	0.00	15.34
104		4-chlorotoluene	2.029	2.116	-4.3	110	0.00	15.44
105		1,3,5-trimethylbenzene	2.207	2.331	-5.6	109	0.00	15.32
106		tert-butylbenzene	1.970	2.059	-4.5	109	0.00	15.66
107		pentachloroethane	0.426	0.475	-11.5	117	0.00	15.78
108		1,2,4-trimethylbenzene	2.298	2.456	-6.9	112	0.00	15.71
109		sec-butylbenzene	2.863	3.039	-6.1	110	0.00	15.88
110		1,3-dichlorobenzene	1.524	1.642	-7.7	112	0.00	16.09
111		p-isopropyltoluene	2.341	2.605	-11.3	113	0.00	15.99
112		1,4-dichlorobenzene	1.531	1.610	-5.2	112	0.00	16.17
113		1,2-dichlorobenzene	1.473	1.594	-8.2	114	0.00	16.57
114		n-butylbenzene	1.179	1.299	-10.2	114	0.00	16.40
115		p-Diethylbenzene	1.281	1.432	-11.8	109	0.00	16.37
116		1,2-dibromo-3-chloropropa	0.114	0.120	-5.3	115	0.00	17.36
117		1,3,5-Trichlorobenzene	1.264	1.397	-10.5	111	0.00	17.50
118		1,2,4-trichlorobenzene	1.115	1.305	-17.0	117	0.00	18.15
119		1,2,4,5-tetramethylbenzen	2.098	2.405	-14.6	112	0.00	17.15
120		hexachlorobutadiene	0.612	0.643	-5.1	106	0.00	18.23
121		naphthalene	2.051	2.336	-13.9	128	0.00	18.44
122		1,2,3-trichlorobenzene	1.018	1.143	-12.3	115	0.00	18.70

		True	Calc.	% Drift			
123	hexachloroethane	50.000	48.798	2.4	111	0.00	16.80
124	Benzyl chloride	50.000	65.388	-30.8#	146	0.00	16.30

(#) = Out of Range
y117404.D MYS5012.M

SPCC's out = 0 CCC's out = 0
Wed Nov 09 14:48:28 2011 RPT1

Continuing Calibration Summary

Page 1 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VY5108-CC5012
Lab FileID: Y119489.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\y119489.D
 Acq On : 17 Jan 2012 11:41 am
 Sample : CC5012-20
 Misc : MS24355,VY5108,5.0,,,,,1
 MS Integration Params: lscint.p

Vial: 2
 Operator: Roberts
 Inst : MSY
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MYS5012.M (RTE Integrator)
 Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 Last Update : Mon Dec 12 12:09:02 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	78	-0.01	7.70
2	1,4-dioxane	0.106	0.097	8.5	73	-0.02	11.50
3	tertiary butyl alcohol	1.330	1.361	-2.3	82	-0.02	7.81
4 I	pentafluorobenzene	1.000	1.000	0.0	93	0.00	9.86
5	chlorodifluoromethane	0.342	0.374	-9.4	112	0.00	4.20
6	dichlorodifluoromethane	0.406	0.553	-36.2#	133	0.00	4.17
7	chloromethane	0.538	0.570	-5.9	104	0.00	4.53
8	vinyl chloride	0.425	0.459	-8.0	108	0.00	4.79
9	bromomethane	0.281	0.351	-24.9#	118	0.00	5.48
10	chloroethane	0.211	0.235	-11.4	104	0.00	5.66
11	Vinyl Bromide	-----NA-----					
12	trichlorofluoromethane	0.474	0.679	-43.2#	140	0.00	6.11
13	ethyl ether	0.220	0.187	15.0	81	0.00	6.52
14	acrolein	0.062	0.063	-1.6	93	-0.01	6.85
15	1,1-dichloroethene	0.340	0.320	5.9	90	0.00	6.96
16	acetone	0.058	0.059	-1.7	94	0.00	7.08
17	allyl chloride	0.221	0.199	10.0	86	0.00	7.51
18	acetonitrile	0.022	0.017	22.7#	80	-0.01	7.57
19	iodomethane	0.753	0.723	4.0	90	-0.01	7.27
20	iso-butyl alcohol	0.013	0.012	7.7	91	0.00	10.20
21	carbon disulfide	1.190	1.103	7.3	88	0.00	7.38
22	methylene chloride	0.430	0.381	11.4	84	0.00	7.72
23	methyl acetate	0.052	0.048	7.7	83	0.00	7.51
24	methyl tert butyl ether	1.058	0.948	10.4	86	0.00	7.99
25	trans-1,2-dichloroethene	0.392	0.370	5.6	91	0.00	8.06
26	di-isopropyl ether	1.314	1.257	4.3	89	-0.01	8.55
27	ethyl tert-butyl ether	1.105	1.054	4.6	89	0.00	9.02
28	2-butanone	0.051	0.065	-27.5#	122	0.00	9.36
29	1,1-dichloroethane	0.684	0.682	0.3	93	-0.01	8.64
30	chloroprene	0.450	0.536	-19.1	111	0.00	8.73
31	acrylonitrile	0.106	0.094	11.3	80	0.00	8.10
32	vinyl acetate	0.051	0.042	17.6	88	0.00	8.62
33	ethyl acetate	0.046	0.042	8.7	87	0.00	9.35
34	2,2-dichloropropane	0.491	0.570	-16.1	113	0.00	9.36
35	cis-1,2-dichloroethene	0.443	0.415	6.3	88	-0.01	9.38
36	propionitrile	0.043	0.037	14.0	79	0.00	9.51
37	bromochloromethane	0.226	0.209	7.5	86	-0.01	9.70
38	tetrahydrofuran	0.121	0.100	17.4	85	0.00	9.72
39	chloroform	0.678	0.712	-5.0	100	0.00	9.75
40	tert-Butyl Formate	0.064	0.065	-1.6	118	-0.01	9.76
41 S	dibromofluoromethane (s)	0.444	0.448	-0.9	96	0.00	9.95

Continuing Calibration Summary

Page 2 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VY5108-CC5012
Lab FileID: Y119489.D

42	S	1,2-dichloroethane-d4 (s)	0.410	0.436	-6.3	99	0.00	10.37
43		freon 113	0.278	0.297	-6.8	106	0.00	6.91
44		methacrylonitrile	0.196	0.169	13.8	83	0.00	9.67
45		1,1,1-trichloroethane	0.512	0.616	-20.3#	115	0.00	9.97
46		Cyclohexane	0.450	0.423	6.0	87	-0.01	10.00
47		2,2,4-trimethylpentane	1.188	1.136	4.4	90	0.00	10.34
48		tert-amyl methyl ether	0.984	0.938	4.7	89	0.00	10.41
49	I	1,4-difluorobenzene	1.000	1.000	0.0	88	0.00	10.78
50		epichlorohydrin	0.019	0.020	-5.3	100	0.00	12.05
51		n-butyl alcohol	0.007	0.006#	14.3	78	0.00	10.93
52		carbon tetrachloride	0.326	0.438	-34.4#	118	0.00	10.15
53		1,1-dichloropropene	0.327	0.377	-15.3	102	-0.01	10.13
54		hexane	0.307	0.279	9.1	82	0.00	8.30
55		Tert Amyl Alcohol			-----NA-----			
56		benzene	1.054	1.073	-1.8	91	0.00	10.41
57		heptane	0.170	0.174	-2.4	92	0.00	10.50
58		isopropyl acetate	0.092	0.099	-7.6	91	0.00	10.32
59		1,2-dichloroethane	0.317	0.378	-19.2	103	0.00	10.46
60		trichloroethene	0.281	0.300	-6.8	95	0.00	11.11
61		ethyl acrylate			-----NA-----			
62		2-nitropropane	0.052	0.064	-23.1#	118	0.00	11.93
63		2-chloroethyl vinyl ether	True 100.000	Calc. 56.613	% Drift 43.4#	31	0.00	11.90
64		methyl methacrylate	AvgRF 0.153	CCRF 0.144	% Dev 5.9	84	0.00	11.37
65		1,2-dichloropropane	0.279	0.276	1.1	85	0.00	11.39
66		methylcyclohexane	0.369	0.364	1.4	90	-0.01	11.28
67		Tert-amyl ethyl ether			-----NA-----			
68		dibromomethane	0.160	0.166	-3.8	89	0.00	11.57
69		bromodichloromethane	0.357	0.408	-14.3	98	-0.01	11.68
70		cis-1,3-dichloropropene	0.437	0.437	0.0	87	0.00	12.12
71	S	toluene-d8 (s)	1.016	1.079	-6.2	93	0.00	12.37
72		4-methyl-2-pentanone	0.090	0.139	-54.4#	139	-0.01	12.19
73		toluene	0.622	0.618	0.6	89	-0.01	12.44
74		3-methyl-1-butanol	0.006	0.005#	16.7	82	0.00	12.23
75		trans-1,3-dichloropropene	0.361	0.385	-6.6	91	-0.01	12.66
76		ethyl methacrylate	0.264	0.258	2.3	82	0.00	12.62
77		1,1,2-trichloroethane	0.190	0.186	2.1	83	0.00	12.88
78		2-hexanone	0.094	0.131	-39.4#	114	0.00	13.03
79	I	chlorobenzene-d5	1.000	1.000	0.0	85	0.00	13.86
80		tetrachloroethene	0.483	0.452	6.4	77	0.00	13.00
81		1,3-dichloropropane	0.438	0.451	-3.0	85	0.00	13.06
82		butyl acetate	0.169	0.169	0.0	86	0.00	13.08
83		dibromochloromethane	0.355	0.419	-18.0	96	0.00	13.32
84		1,2-dibromoethane	0.285	0.293	-2.8	87	-0.01	13.46
85		3,3-Dimethyl-1-Butanol	0.023	0.022	4.3	86	-0.01	13.20
86		chlorobenzene	0.888	0.914	-2.9	87	0.00	13.89
87		1,1,1,2-tetrachloroethane	0.336	0.386	-14.9	97	-0.01	13.95
88		ethylbenzene	1.335	1.461	-9.4	93	0.00	13.93
89		m,p-xylene	0.517	0.554	-7.2	90	-0.01	14.02
90		o-xylene	0.535	0.548	-2.4	87	0.00	14.44
91		styrene	0.846	0.895	-5.8	85	0.00	14.46
92		bromoform	0.250	0.290	-16.0	96	0.00	14.76
93	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	87	-0.01	16.14
94		isopropylbenzene	2.791	3.041	-9.0	95	0.00	14.77

Continuing Calibration Summary

Page 3 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: VY5108-CC5012
Lab FileID: Y119489.D

95	S	4-bromofluorobenzene (s)	0.979	0.986	-0.7	88	0.00	14.99
96		bromobenzene	0.882	0.903	-2.4	87	0.00	15.19
97		cyclohexanone	0.120	0.114	5.0	80	0.00	15.00
98		1,1,2,2-tetrachloroethane	0.697	0.685	1.7	84	0.00	15.12
99		trans-1,4-dichloro-2-bute	0.149	0.190	-27.5#	109	0.00	15.15
100		1,2,3-trichloropropane	0.174	0.185	-6.3	90	-0.01	15.19
101		n-propylbenzene	3.197	3.476	-8.7	94	0.00	15.17
102		4-Ethyltoluene	-----NA-----					
103		2-chlorotoluene	0.731	0.758	-3.7	87	0.00	15.33
104		4-chlorotoluene	2.029	2.200	-8.4	93	0.00	15.43
105		1,3,5-trimethylbenzene	2.207	2.523	-14.3	96	-0.01	15.31
106		tert-butylbenzene	1.970	2.147	-9.0	95	0.00	15.66
107		pentachloroethane	0.426	0.618	-45.1#	134	-0.01	15.77
108		1,2,4-trimethylbenzene	2.298	2.447	-6.5	91	0.00	15.71
109		sec-butylbenzene	2.863	3.109	-8.6	94	-0.01	15.87
110		1,3-dichlorobenzene	1.524	1.611	-5.7	90	-0.01	16.08
111		p-isopropyltoluene	2.341	2.571	-9.8	94	-0.01	15.98
112		1,4-dichlorobenzene	1.531	1.610	-5.2	91	-0.01	16.16
113		1,2-dichlorobenzene	1.473	1.518	-3.1	88	0.00	16.56
114		n-butylbenzene	1.179	1.267	-7.5	93	0.00	16.39
115		p-Diethylbenzene	-----NA-----					
116		1,2-dibromo-3-chloropropa	0.114	0.134	-17.5	105	-0.01	17.35
117		1,3,5-Trichlorobenzene	1.264	1.414	-11.9	96	0.00	17.49
118		1,2,4-trichlorobenzene	1.115	1.177	-5.6	91	0.00	18.14
119		1,2,4,5-tetramethylbenzen	-----NA-----					
120		hexachlorobutadiene	0.612	0.793	-29.6#	108	0.00	18.22
121		naphthalene	2.051	1.822	11.2	83	0.00	18.44
122		1,2,3-trichlorobenzene	1.018	1.049	-3.0	90	-0.01	18.69
----- True Calc. % Drift -----								
123		hexachloroethane	20.000	26.856	-34.3#	129	0.00	16.79
124		Benzyl chloride	20.000	26.344	-31.7#	129	0.00	16.29

(#) = Out of Range
y117406.D MYS5012.M

SPCC's out = 0 CCC's out = 0
Wed Jan 18 15:57:46 2012 RPT1

5.9.12

5

GC/MS Volatiles

Raw Data

9

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : Y119503.D
 Acq On : 17 Jan 2012 7:21 pm
 Operator : RobertS
 Sample : JA96854-1
 Misc : MS24258,VY5108,4.6,,,,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 18 16:04:30 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.70	65	48513	500.00	ug/L	0.00
4) pentafluorobenzene	9.86	168	187422	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	248567	50.00	ug/L	0.00
79) chlorobenzene-d5	13.86	117	189813	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.14	152	86811	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.95	113	82922	49.86	ug/L	0.00
Spiked Amount 50.000	Range 67 - 131		Recovery =	99.72%		
42) 1,2-dichloroethane-d4 (s)	10.37	65	83895	54.59	ug/L	-0.01
Spiked Amount 50.000	Range 66 - 130		Recovery =	109.18%		
71) toluene-d8 (s)	12.37	98	261201	51.74	ug/L	0.00
Spiked Amount 50.000	Range 76 - 125		Recovery =	103.48%		
95) 4-bromofluorobenzene (s)	15.00	95	86951	51.18	ug/L	0.00
Spiked Amount 50.000	Range 53 - 142		Recovery =	102.36%		

Target Compounds

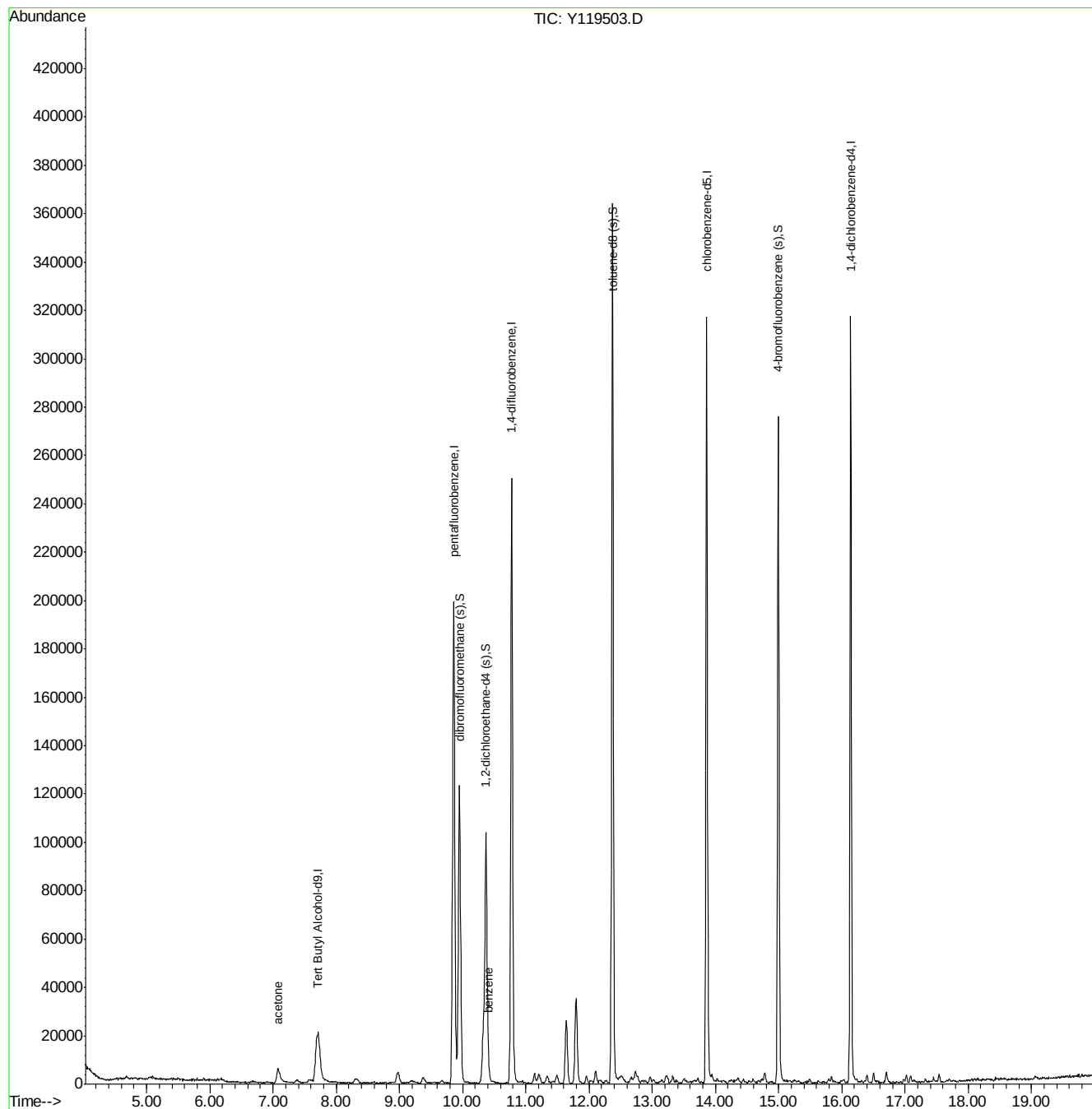
					Qvalue
16) acetone	7.08	58	3878	17.99 ug/L	90
56) benzene	10.42	78	2811	0.54 ug/L	92

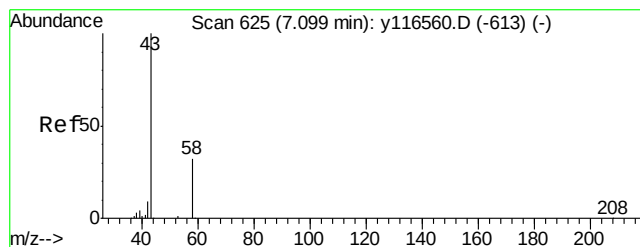
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y119503.D
Acq On : 17 Jan 2012 7:21 pm
Operator : Roberts
Sample : JA96854-1
Misc : MS24258,VY5108,4.6,,,,1
ALS Vial : 16 Sample Multiplier: 1

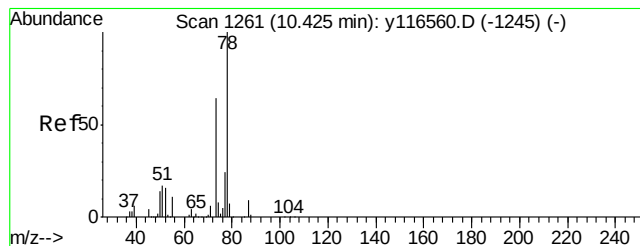
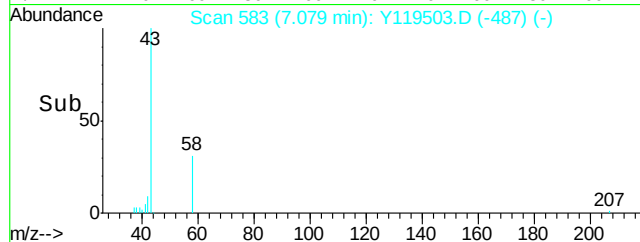
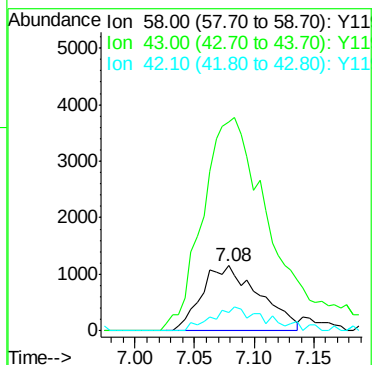
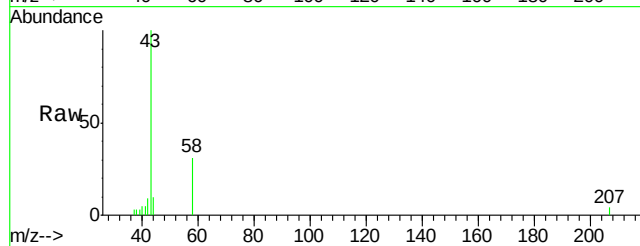
Quant Time: Jan 18 16:04:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Dec 12 12:09:02 2011
Response via : Initial Calibration





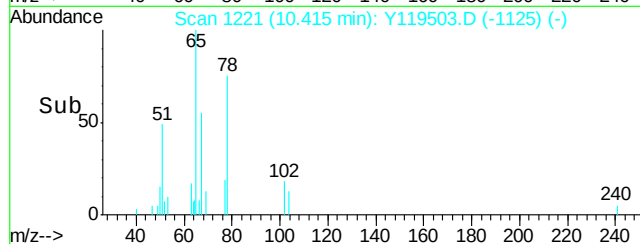
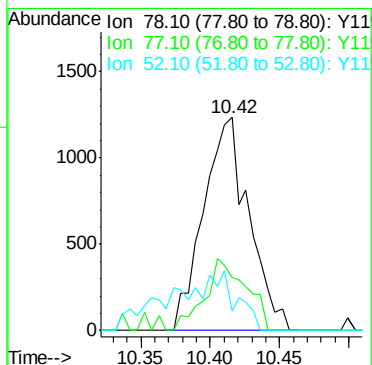
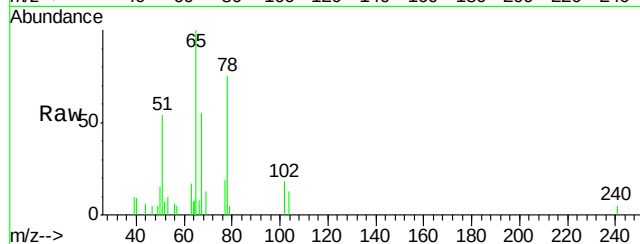
#16
acetone
Concen: 17.99 ug/L
RT: 7.08 min Scan# 583
Delta R.T. 0.00 min
Lab File: Y119503.D
Acq: 17 Jan 2012 7:21 pm

Tgt Ion:	58	Resp:	3878
Ion	Ratio	Lower	Upper
58	100		
43	320.4	270.6	330.6
42	28.1	0.0	53.6



#56
benzene
Concen: 0.54 ug/L
RT: 10.42 min Scan# 1221
Delta R.T. -0.00 min
Lab File: Y119503.D
Acq: 17 Jan 2012 7:21 pm

Tgt Ion:	78	Resp:	2811
Ion	Ratio	Lower	Upper
78	100		
77	24.8	0.0	53.9
52	9.2	0.0	46.0



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191683.D
 Acq On : 19 Jan 2012 12:48 pm
 Sample : ja96854-2
 Misc : MS24258,VD7804,4.9,,5,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 15:09 2012

Vial: 7
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.51	65	115586	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	239942	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.65	114	374042	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	358909	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	199570	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.75	113	119615	45.69	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	91.38%
45) 1,2-dichloroethane-d4 (s)	10.17	65	135380	43.02	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	86.04%
75) toluene-d8 (s)	12.37	98	493188	49.39	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	98.78%
99) 4-bromofluorobenzene (s)	15.27	95	199965	44.08	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	88.16%

Target Compounds

						Qvalue
92) ethylbenzene	14.12	91	81771	5.92	ug/L	99
93) m,p-xylene	14.24	106	42333	7.70	ug/L	99
94) o-xylene	14.71	106	1472	0.27	ug/L	98
98) isopropylbenzene	15.08	105	26253	1.85	ug/L	99
105) n-propylbenzene	15.54	91	143955	8.70	ug/L	100
109) 1,3,5-trimethylbenzene	15.71	105	11188m	0.88	ug/L	
112) 1,2,4-trimethylbenzene	16.14	105	796645	62.93	ug/L	89
113) sec-butylbenzene	16.34	105	24593	1.54	ug/L	97
115) p-isopropyltoluene	16.48	119	11914	0.91	ug/L	92
120) n-butylbenzene	16.93	92	31671	4.26	ug/L	97
126) naphthalene	19.12	128	99489	10.79	ug/L	99

(#) = qualifier out of range (m) = manual integration

D191683.D MD7671.M Thu Jan 19 15:09:32 2012 RPT1

Page 1

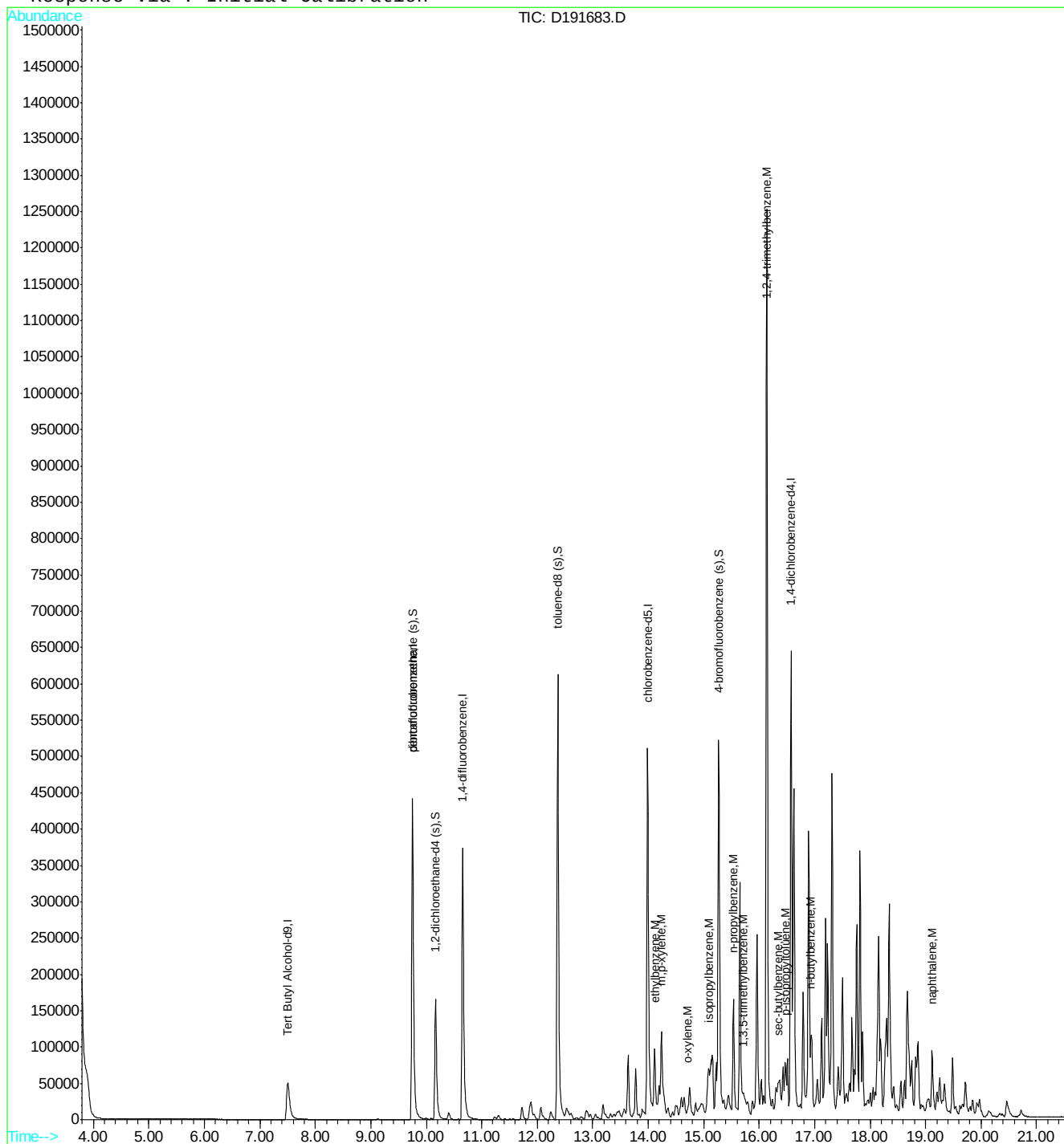
Quantitation Report

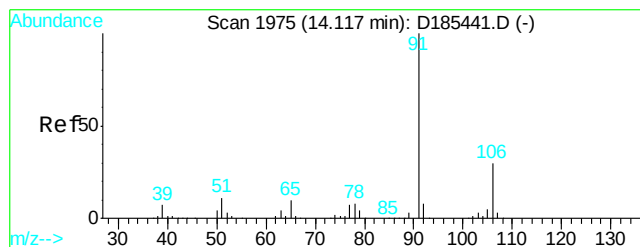
Data File : C:\HPCHEM\1\DATA\D191683.D
Acq On : 19 Jan 2012 12:48 pm
Sample : ja96854-2
Misc : MS24258,VD7804,4.9,,5,5,1
MS Integration Params: RTEINT.P
Quant Time: Jan 19 15:09 2012

Vial: 7
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Wed Jan 11 16:25:16 2012
Response via : Initial Calibration





#92

ethylbenzene

Concen: 5.92 ug/L

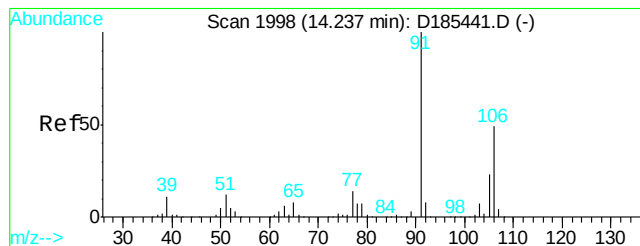
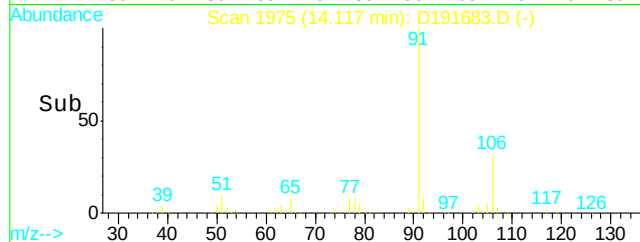
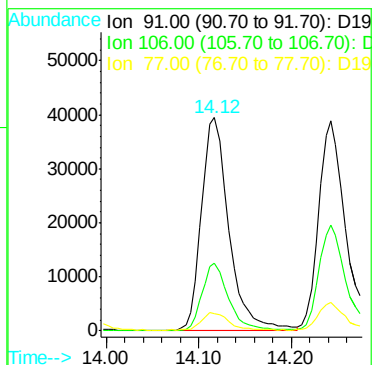
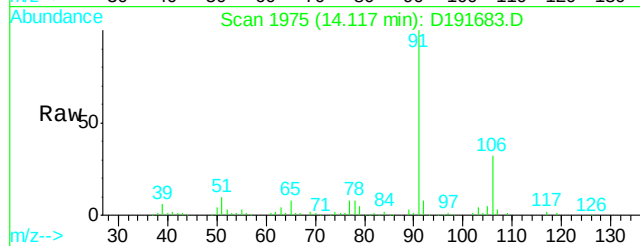
RT: 14.12 min Scan# 1975

Delta R.T. 0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.8	2.1	62.1
77	7.9	0.0	38.8



#93

m,p-xylene

Concen: 7.70 ug/L

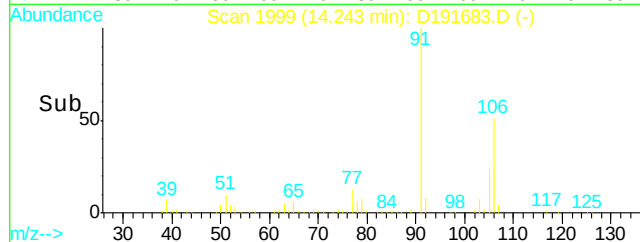
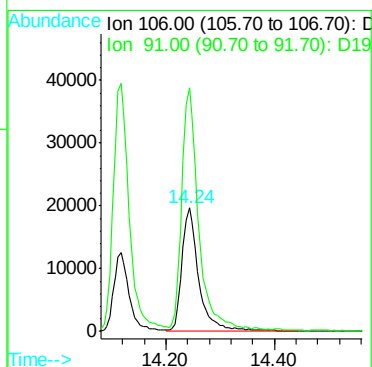
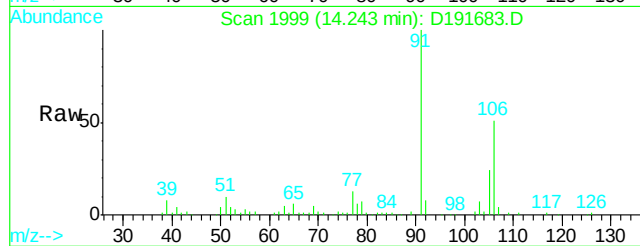
RT: 14.24 min Scan# 1999

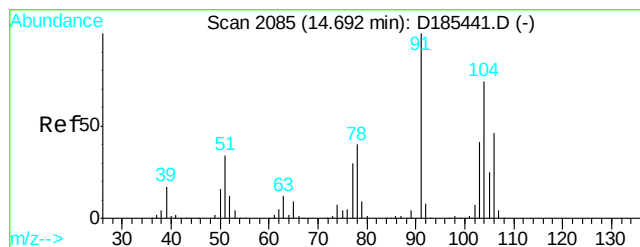
Delta R.T. 0.02 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion	Ratio	Lower	Upper
106	100		
91	196.8	139.3	258.7





#94

o-xylene

Concen: 0.27 ug/L

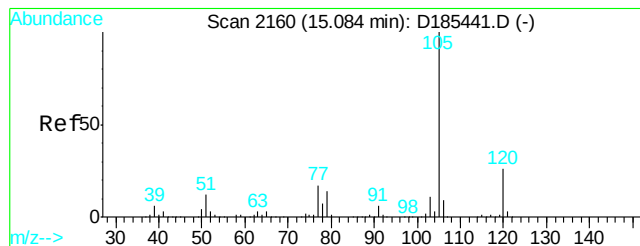
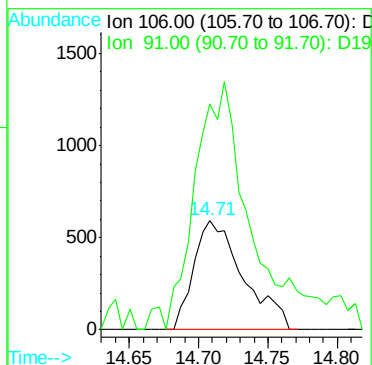
RT: 14.71 min Scan# 2088

Delta R.T. 0.02 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion	Ratio	Lower	Upper
106	100		
91	206.6	147.0	273.0



#98

isopropylbenzene

Concen: 1.85 ug/L

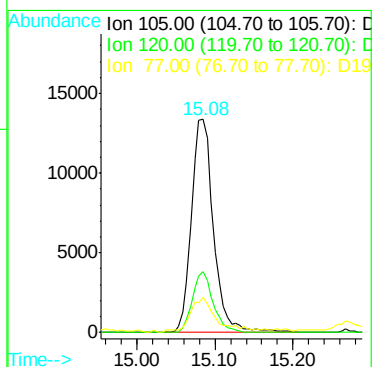
RT: 15.08 min Scan# 2160

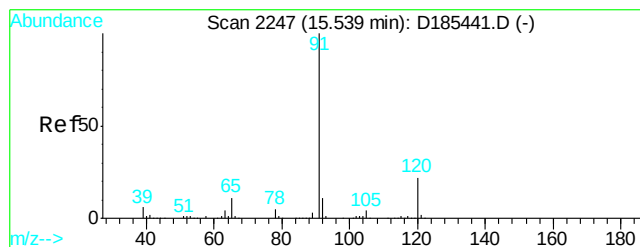
Delta R.T. 0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
120	28.5	0.0	57.4
77	15.3	0.0	45.3





#105

n-propylbenzene

Concen: 8.70 ug/L

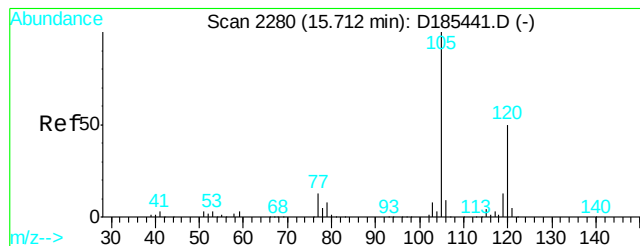
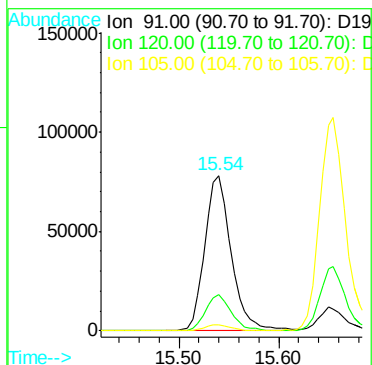
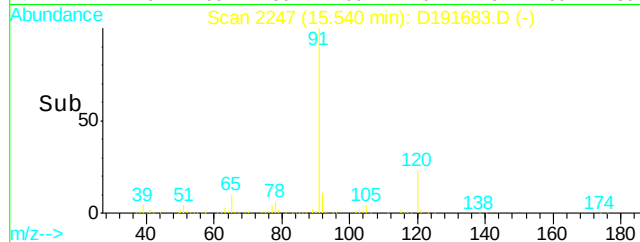
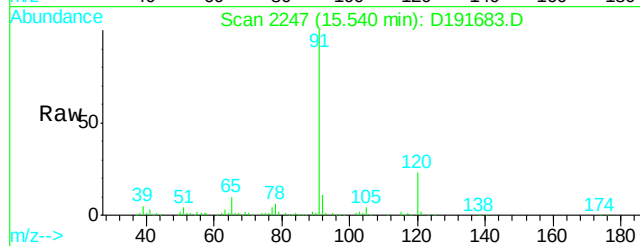
RT: 15.54 min Scan# 2247

Delta R.T. 0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion:	91	Resp:	143955
Ion Ratio	Lower	Upper	
91	100		
120	23.3	0.0	53.5
105	3.6	0.0	33.8



#109

1,3,5-trimethylbenzene

Concen: 0.88 ug/L m

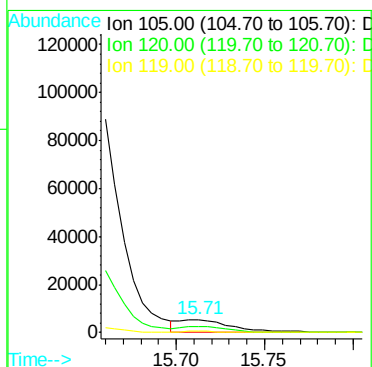
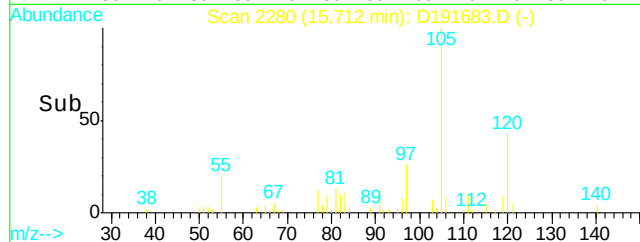
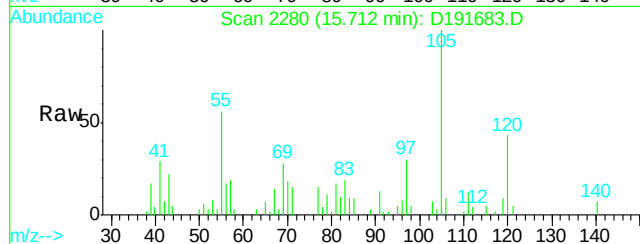
RT: 15.71 min Scan# 2280

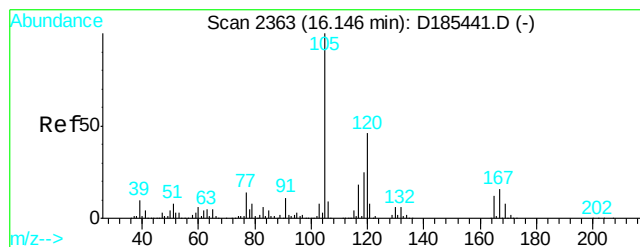
Delta R.T. 0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion:	105	Resp:	11188
Ion Ratio	Lower	Upper	
105	100		
120	42.6	19.8	79.8
119	8.7	0.0	42.5





#112

1,2,4-trimethylbenzene

Concen: 62.93 ug/L

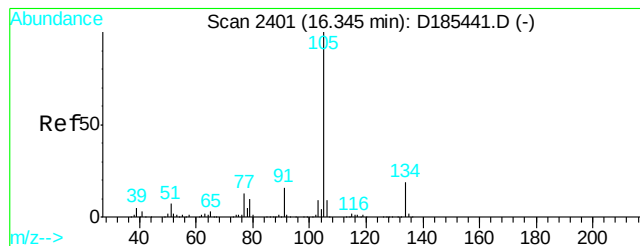
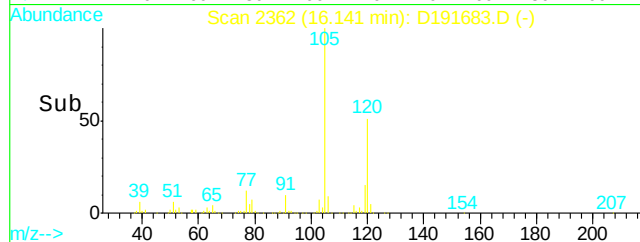
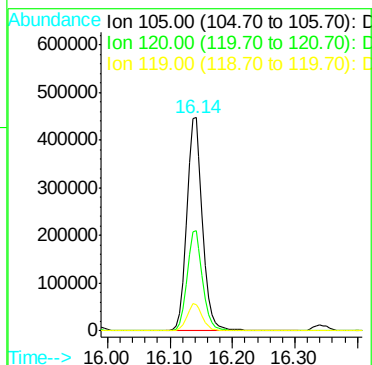
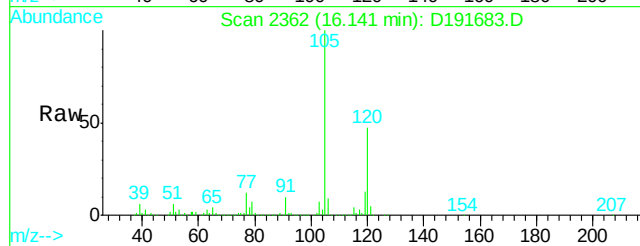
RT: 16.14 min Scan# 2362

Delta R.T. -0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
120	47.1	16.4	76.4
119	12.5	0.0	56.7



#113

sec-butylbenzene

Concen: 1.54 ug/L

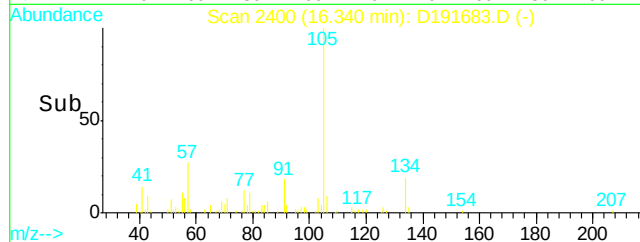
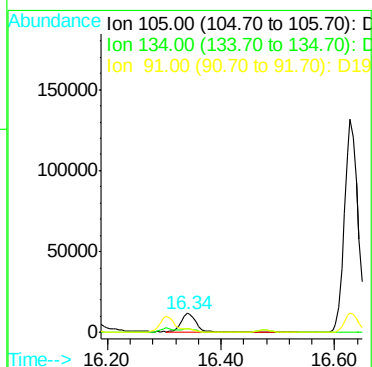
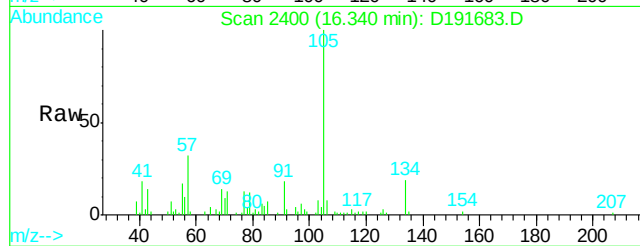
RT: 16.34 min Scan# 2400

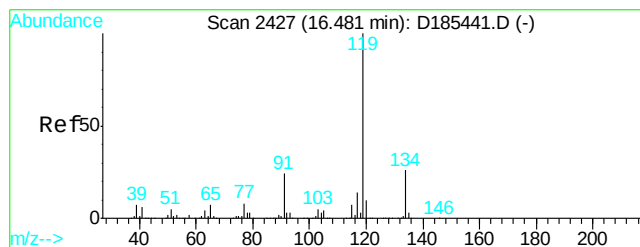
Delta R.T. -0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
134	19.1	0.0	50.3
91	17.2	0.0	45.8





#115

p-isopropyltoluene

Concen: 0.91 ug/L

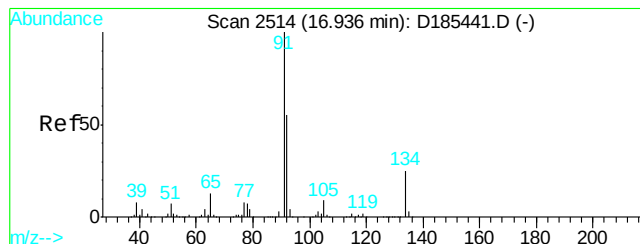
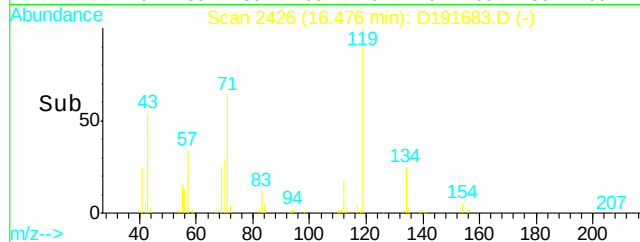
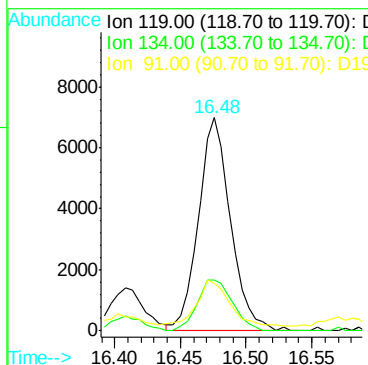
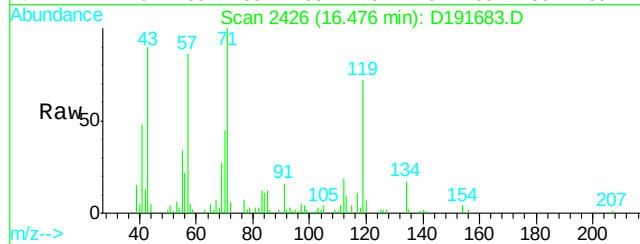
RT: 16.48 min Scan# 2426

Delta R.T. -0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion:	119	Resp:	11914
Ion Ratio	Lower	Upper	
119	100		
134	23.6	0.0	57.3
91	19.7	0.0	53.9



#120

n-butylbenzene

Concen: 4.26 ug/L

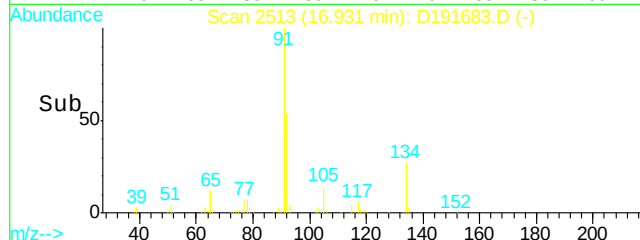
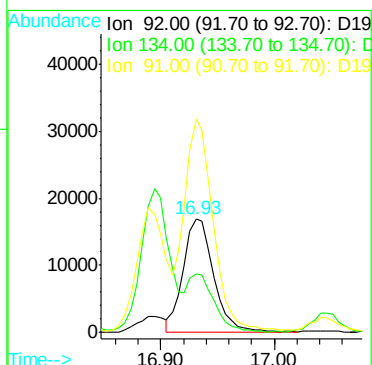
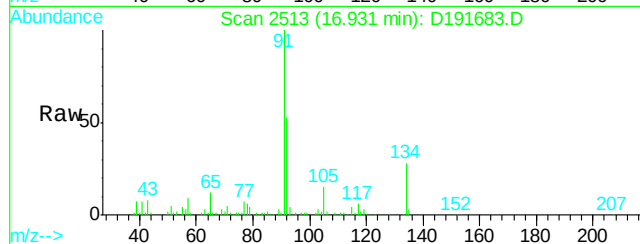
RT: 16.93 min Scan# 2513

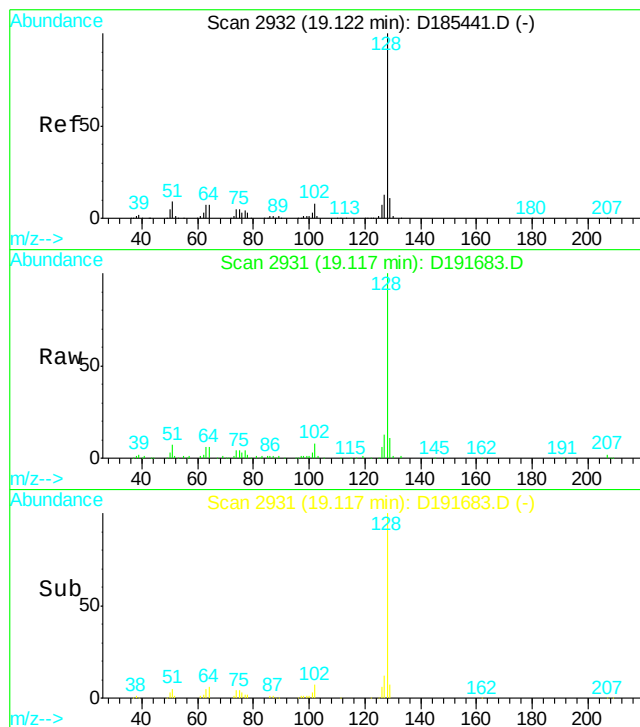
Delta R.T. -0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion:	92	Resp:	31671
Ion Ratio	Lower	Upper	
92	100		
134	49.3	19.2	79.2
91	185.2	149.8	209.8





#126

naphthalene

Concen: 10.79 ug/L

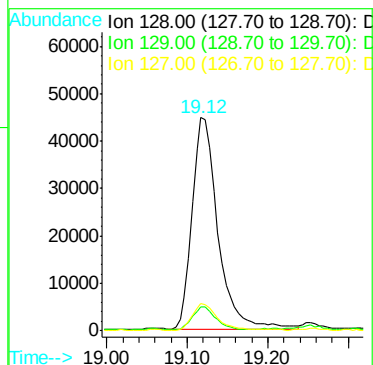
RT: 19.12 min Scan# 2931

Delta R.T. -0.00 min

Lab File: D191683.D

Acq: 19 Jan 2012 12:48 pm

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.7	0.0	41.3
127	12.5	0.0	42.8



Manual Integration Approval Summary

Sample Number: JA96854-2

Method: SW846 8260B

Lab FileID: D191683.D

Analyst approved: 01/19/12 15:09 Ying Li

Injection Time: 01/19/12 12:48

Supervisor approved: 01/19/12 17:03 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason

1,3,5-Trimethylbenzene	108-67-8		15.71	Overlapping peak

6.1.2.1
6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187223.D
 Acq On : 19 Jan 2012 1:59 am
 Operator : dipap
 Sample : ja96854-2
 Misc : MS24258,VE8236,4.9,,100,5,1
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jan 19 13:38:29 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.738	65	117596	500.00	ug/L	0.00
5) pentafluorobenzene	9.949	168	237875	50.00	ug/L	0.00
63) 1,4-difluorobenzene	10.864	114	322111	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.195	117	280119	50.00	ug/L	0.00
111) 1,4-dichlorobenzene-d4	16.767	152	157526	50.00	ug/L	0.00

System Monitoring Compounds

57) dibromofluoromethane (s)	9.996	113	117753	46.46	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	92.92%	
58) 1,2-dichloroethane-d4 (s)	10.415	65	128256	41.51	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	83.02%	
86) toluene-d8 (s)	12.563	98	437708	45.38	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	90.76%	
113) 4-bromofluorobenzene (s)	15.465	95	184138	46.42	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	92.84%	

Target Compounds

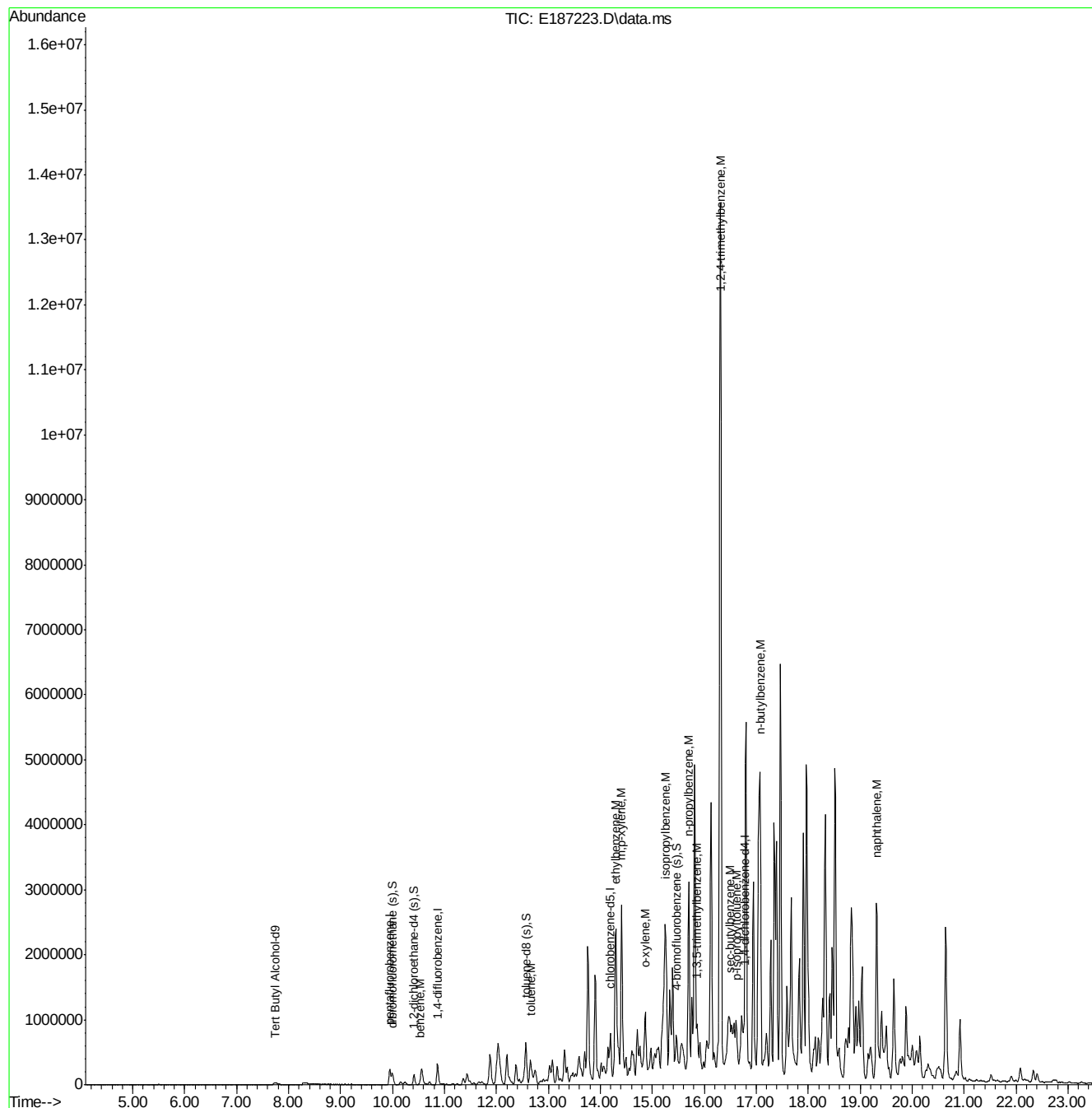
						Qvalue
72) benzene	10.519	78	2170	0.21	ug/L	91
88) toluene	12.647	92	2560	0.39	ug/L	97
105) ethylbenzene	14.289	91	1664429	151.94	ug/L	97
106) m,p-xylene	14.409	106	878425	204.85	ug/L	92
107) o-xylene	14.869	106	34449	7.78	ug/L	96
112) isopropylbenzene	15.245	105	554947	44.88	ug/L	99
118) n-propylbenzene	15.700	91	2626108	187.70	ug/L	92
122) 1,3,5-trimethylbenzene	15.862	105	135992m	13.44	ug/L	
125) 1,2,4-trimethylbenzene	16.312	105	7391098	707.76	ug/L	64
126) sec-butylbenzene	16.495	105	430817	32.18	ug/L	100
128) p-isopropyltoluene	16.626	119	249998	22.72	ug/L	99
133) n-butylbenzene	17.080	92	632024	113.47	ug/L	85
139) naphthalene	19.318	128	2406687	293.02	ug/L	96

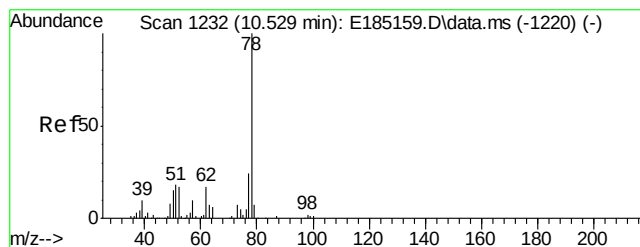
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E187223.D
Acq On : 19 Jan 2012 1:59 am
Operator : dipap
Sample : ja96854-2
Misc : MS24258,VE8236,4.9,,100,5,1
ALS Vial : 37 Sample Multiplier: 1

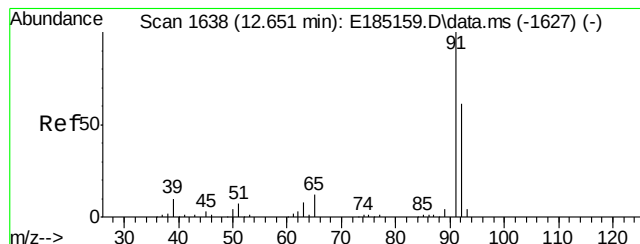
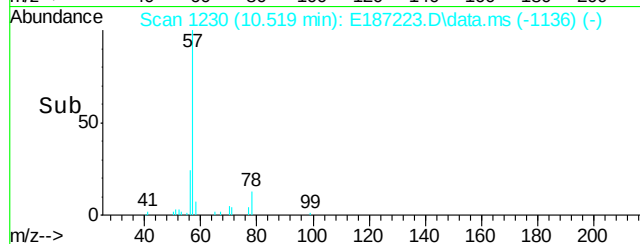
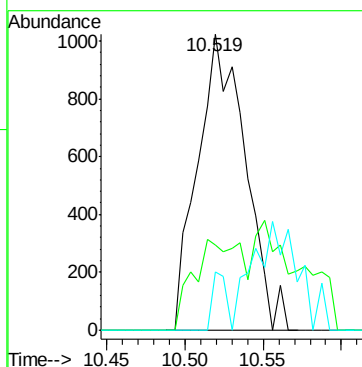
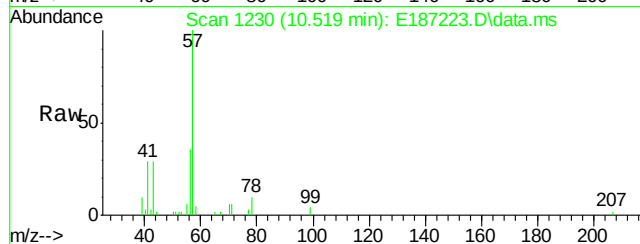
Quant Time: Jan 19 13:38:29 2012
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 29 09:15:39 2011
Response via : Initial Calibration





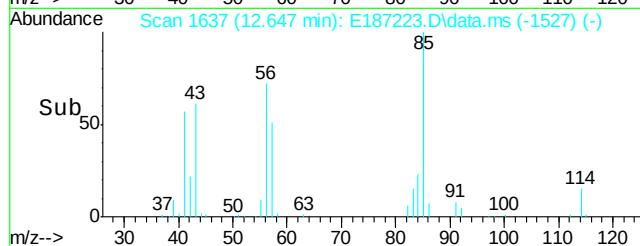
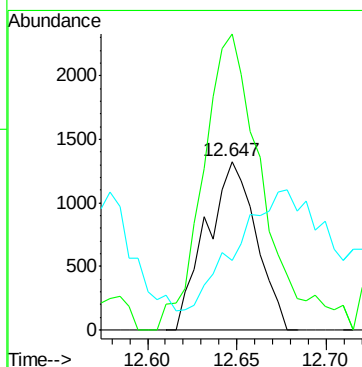
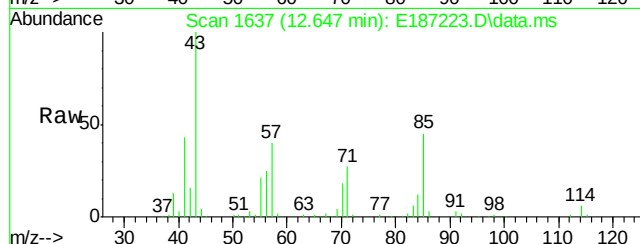
#72
benzene
Concen: 0.21 ug/L
RT: 10.519 min Scan# 1230
Delta R.T. -0.010 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

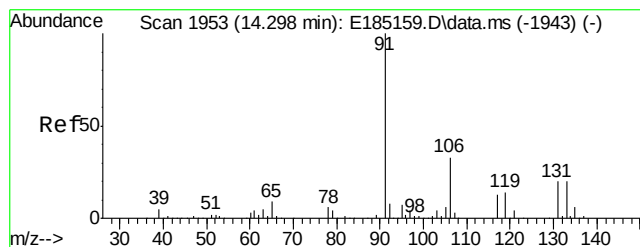
Tgt Ion	Ratio	Lower	Upper
78	100		
77	28.8	0.0	53.7
52	19.8	0.0	47.2



#88
toluene
Concen: 0.39 ug/L
RT: 12.647 min Scan# 1637
Delta R.T. -0.004 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

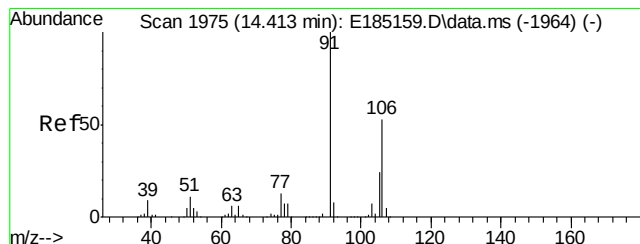
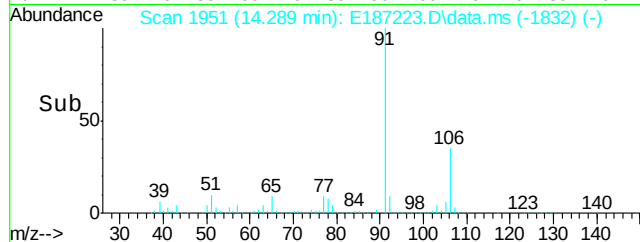
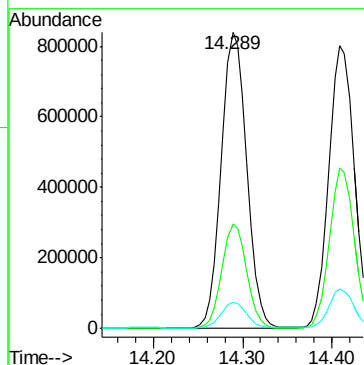
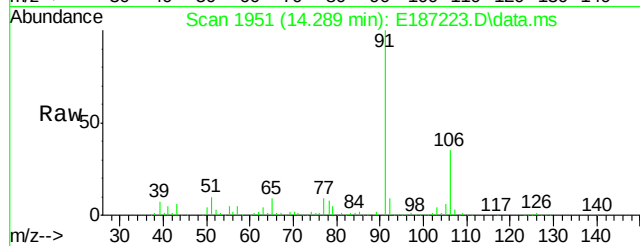
Tgt Ion	Ratio	Lower	Upper
92	100		
91	160.3	134.5	194.5
65	20.3	0.0	49.4





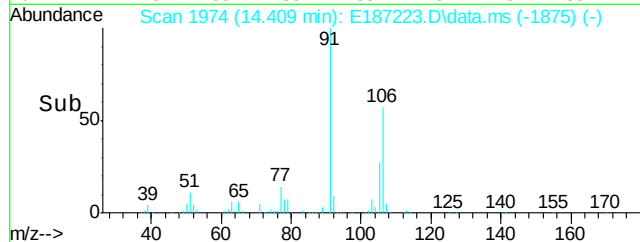
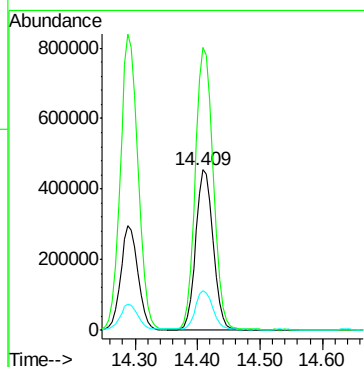
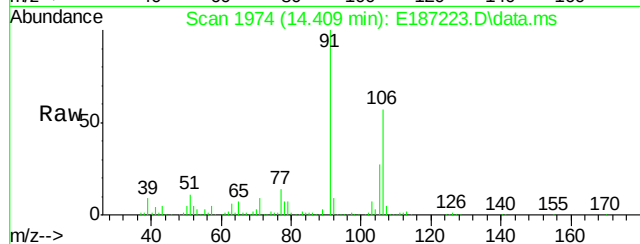
#105
ethylbenzene
Concen: 151.94 ug/L
RT: 14.289 min Scan# 1951
Delta R.T. -0.010 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

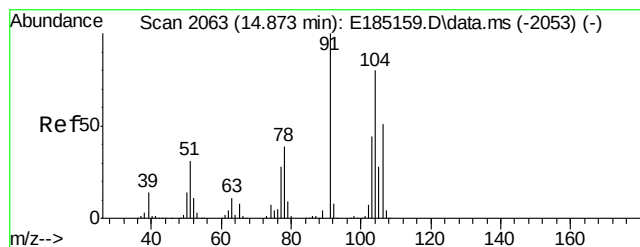
Tgt Ion	Ratio	Lower	Upper
91	100		
106	35.1	3.0	63.0
77	8.7	0.0	38.6



#106
m,p-xylene
Concen: 204.85 ug/L
RT: 14.409 min Scan# 1974
Delta R.T. -0.004 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

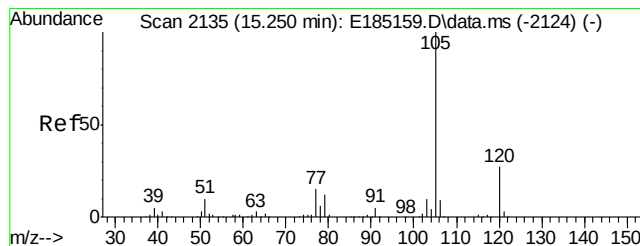
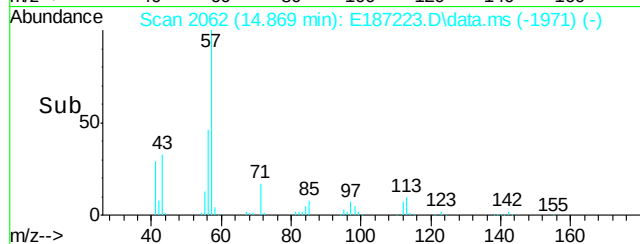
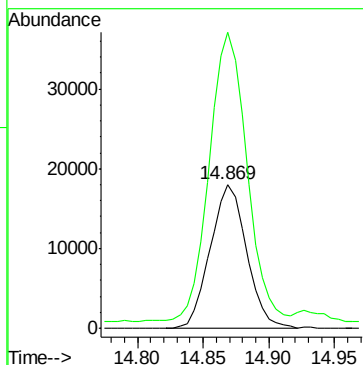
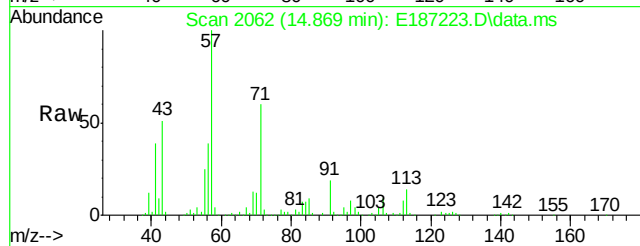
Tgt Ion	Ratio	Lower	Upper
106	100		
91	176.5	159.5	219.5
77	24.2	0.0	55.4





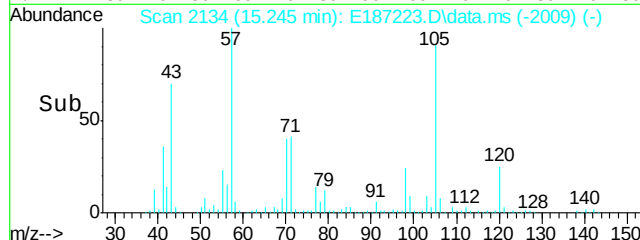
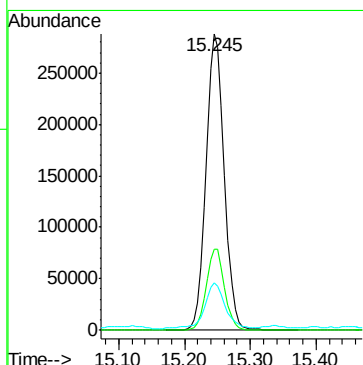
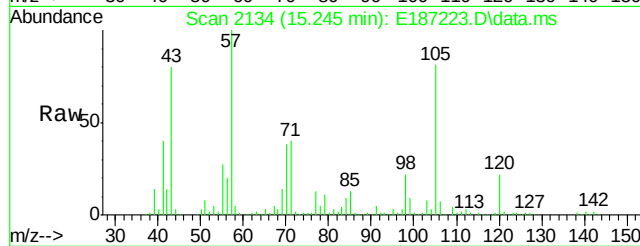
#107
o-xylene
Concen: 7.78 ug/L
RT: 14.869 min Scan# 2062
Delta R.T. -0.004 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

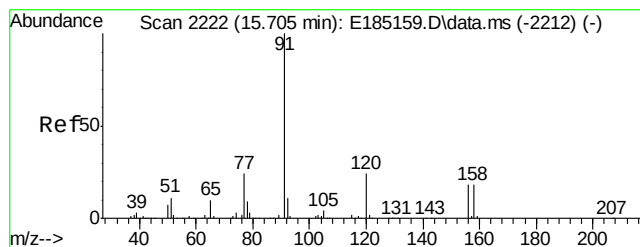
Tgt Ion	Ratio	Lower	Upper
106	100		
91	199.9	164.3	224.3



#112
isopropylbenzene
Concen: 44.88 ug/L
RT: 15.245 min Scan# 2134
Delta R.T. -0.004 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

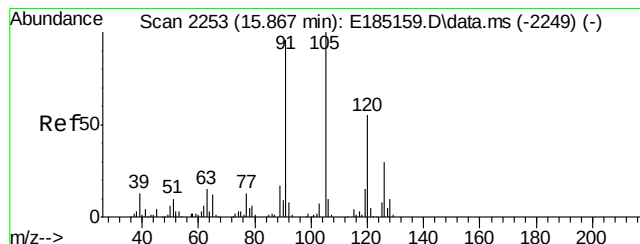
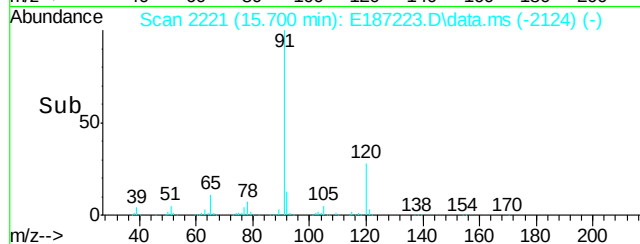
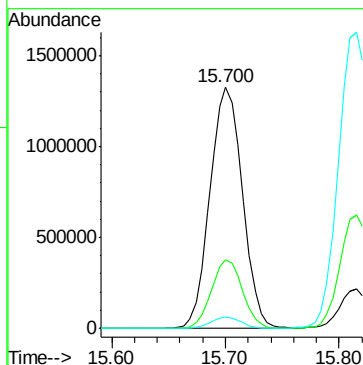
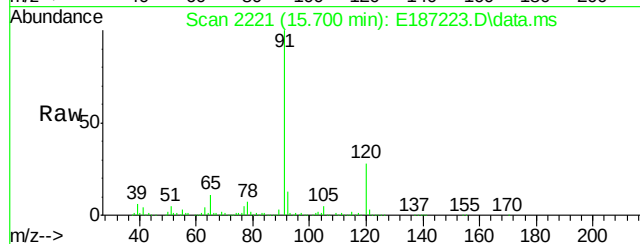
Tgt Ion	Ratio	Lower	Upper
105	100		
120	27.4	0.0	56.8
77	15.5	0.0	45.0





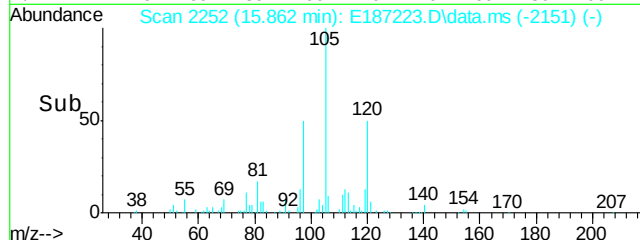
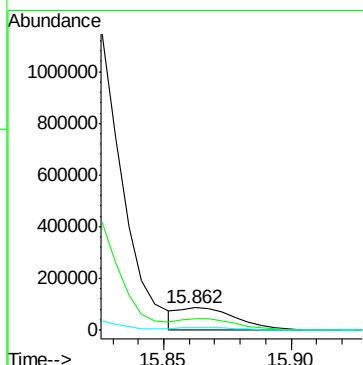
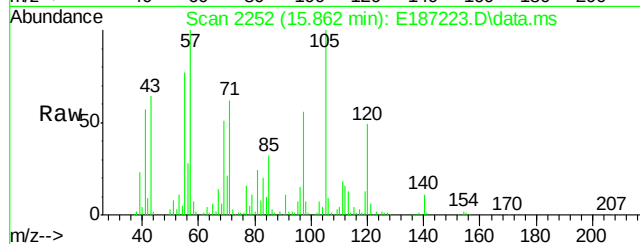
#118
n-propylbenzene
Concen: 187.70 ug/L
RT: 15.700 min Scan# 2221
Delta R.T. -0.004 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

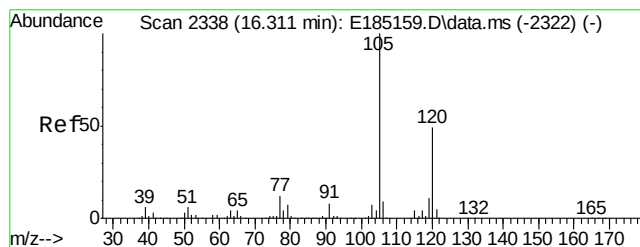
Tgt Ion: 91 Resp: 2626108
Ion Ratio Lower Upper
91 100
120 28.3 0.0 54.0
105 4.8 0.0 33.8



#122
1,3,5-trimethylbenzene
Concen: 13.44 ug/L m
RT: 15.862 min Scan# 2252
Delta R.T. -0.004 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

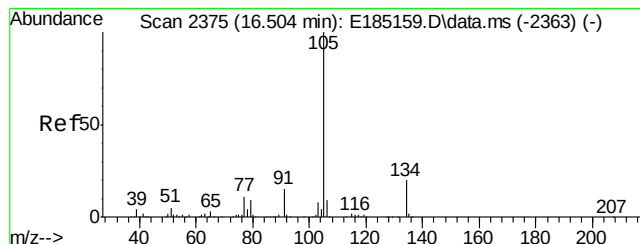
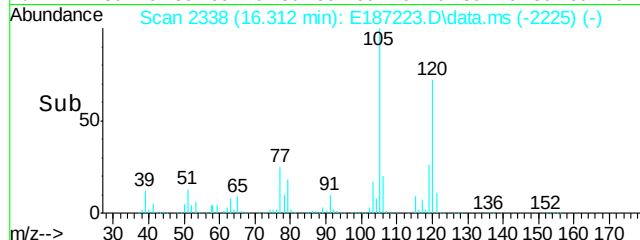
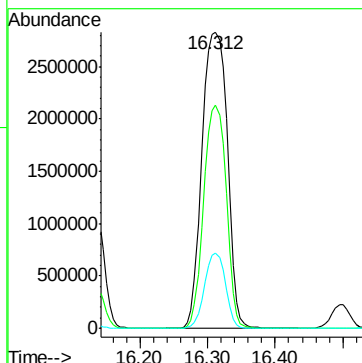
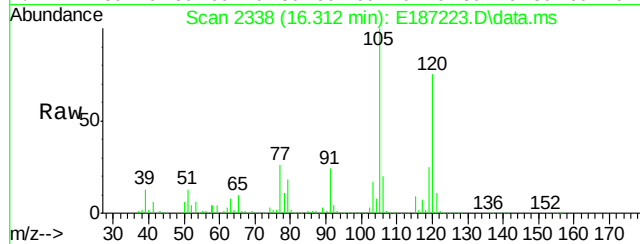
Tgt Ion: 105 Resp: 135992
Ion Ratio Lower Upper
105 100
120 49.4 21.6 81.6
119 12.9 0.0 43.3





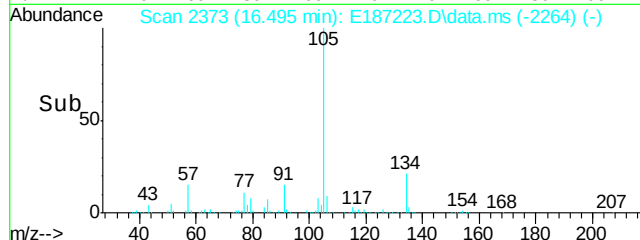
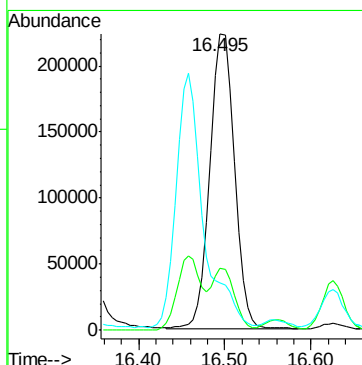
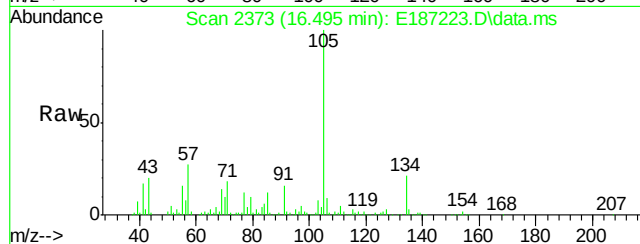
#125
1,2,4-trimethylbenzene
Concen: 707.76 ug/L
RT: 16.312 min Scan# 2338
Delta R.T. 0.001 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

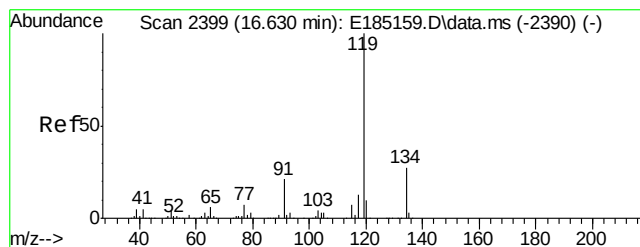
Tgt Ion	Ratio	Lower	Upper
105	100		
120	75.3	19.4	79.4
119	25.5	0.0	43.3



#126
sec-butylbenzene
Concen: 32.18 ug/L
RT: 16.495 min Scan# 2373
Delta R.T. -0.010 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

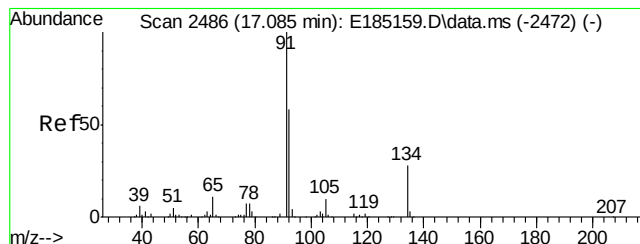
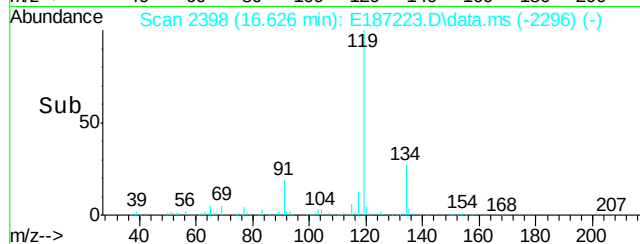
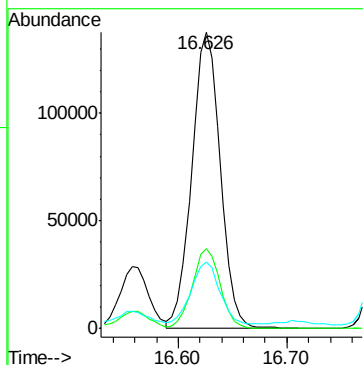
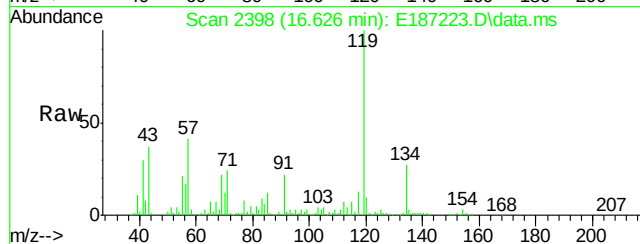
Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.4	0.0	50.1
91	14.8	0.0	44.8





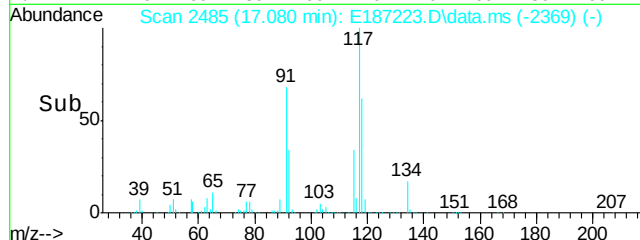
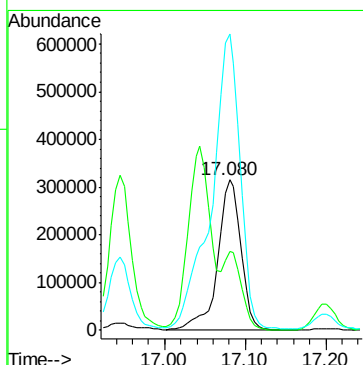
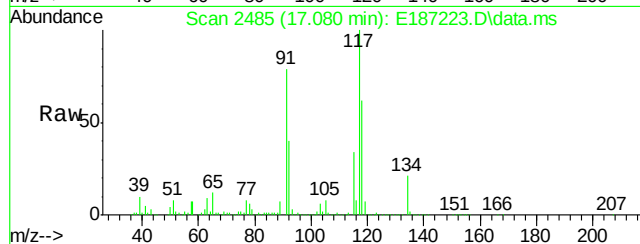
#128
p-isopropyltoluene
Concen: 22.72 ug/L
RT: 16.626 min Scan# 2398
Delta R.T. -0.004 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

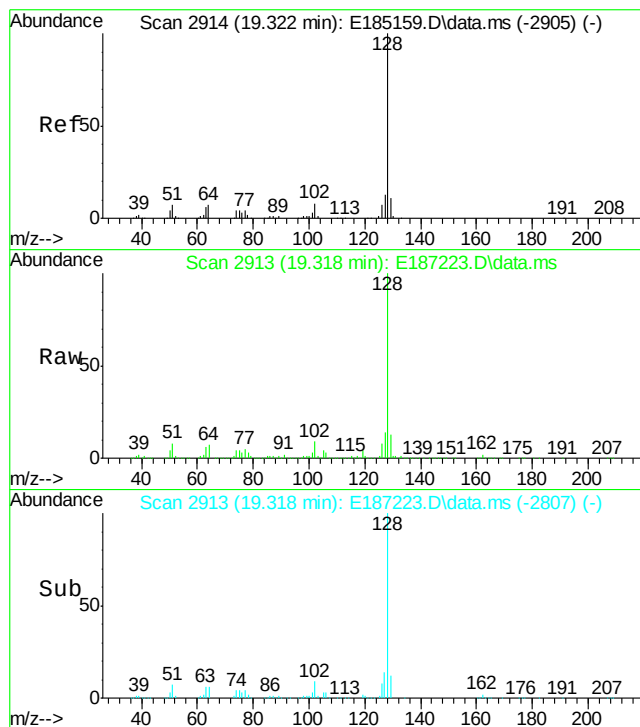
Tgt Ion	Ratio	Lower	Upper
119	100		
134	27.1	0.0	57.4
91	20.3	0.0	51.3



#133
n-butylbenzene
Concen: 113.47 ug/L
RT: 17.080 min Scan# 2485
Delta R.T. -0.004 min
Lab File: E187223.D
Acq: 19 Jan 2012 1:59 am

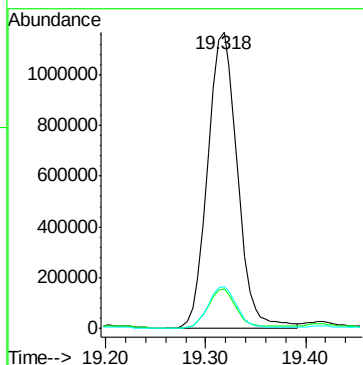
Tgt Ion	Ratio	Lower	Upper
92	100		
134	52.2	17.7	77.7
91	196.3	141.9	201.9





#139
 naphthalene
 Concen: 293.02 ug/L
 RT: 19.318 min Scan# 2913
 Delta R.T. -0.004 min
 Lab File: E187223.D
 Acq: 19 Jan 2012 1:59 am

Tgt Ion:	128	Resp:	2406687
Ion Ratio	Lower	Upper	
128	100		
129	13.1	0.0	41.4
127	14.2	0.0	42.9



Manual Integration Approval Summary

Sample Number: JA96854-2

Method: SW846 8260B

Lab FileID: E187223.D

Analyst approved: 01/19/12 15:10 Ying Li

Injection Time: 01/19/12 01:59

Supervisor approved: 01/19/12 17:03 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason

1,3,5-Trimethylbenzene	108-67-8		15.86	Overlapping peak

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91902.D Vial: 37
 Acq On : 17 Jan 2012 3:57 am Operator: dezareer
 Sample : ja96854-3 Inst : MS2B
 Misc : MS24259,V2B4134,W,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 17 04:23:27 2012 Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.58	65	114737	500.00	ug/L	-0.01
4) pentafluorobenzene	11.06	168	316098	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	454204	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	446562	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.06	152	257484	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	125905	47.84	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	95.68%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	143242	49.69	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	99.38%	
74) toluene-d8 (s)	13.53	98	485570	51.46	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	102.92%	
99) 4-bromofluorobenzene (s)	15.98	95	191066	51.82	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	103.64%	

Target Compounds

27) methyl tert butyl ether	9.10	73	3059	0.38	ug/L	Qvalue 56

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91902.D M2B4096.M Wed Jan 18 12:37:49 2012 MS2B

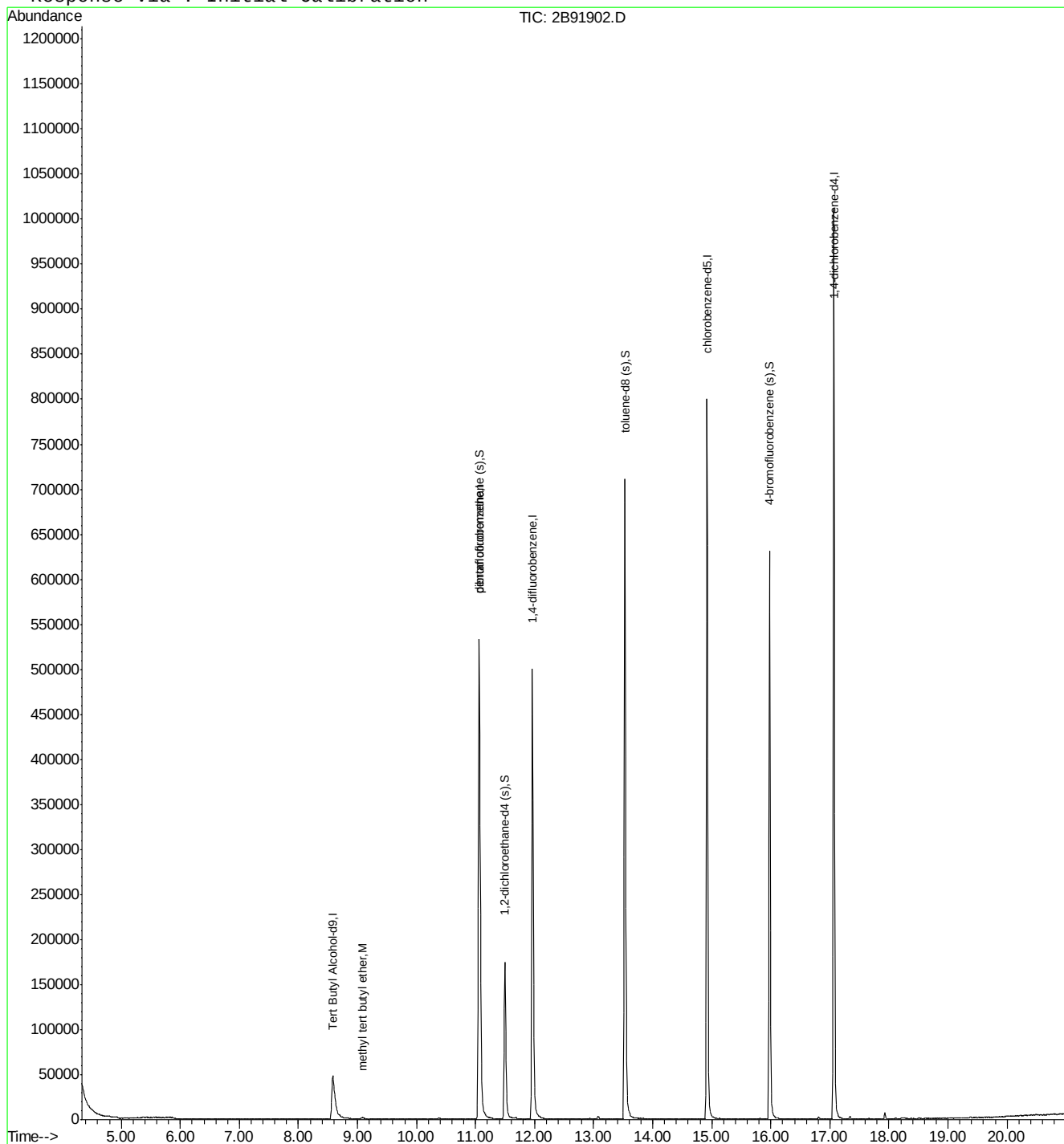
Quantitation Report (QT Reviewed)

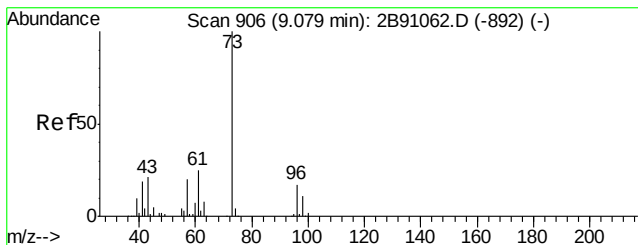
Data File : C:\MSDCHEM\1\DATA\2B91902.D
Acq On : 17 Jan 2012 3:57 am
Sample : ja96854-3
Misc : MS24259,V2B4134,W,,,1
MS Integration Params: rteint.p
Quant Time: Jan 18 12:32 2012

Vial: 37
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

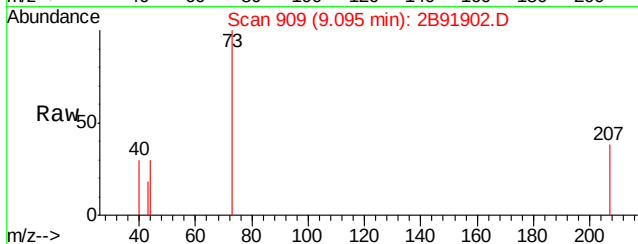
Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



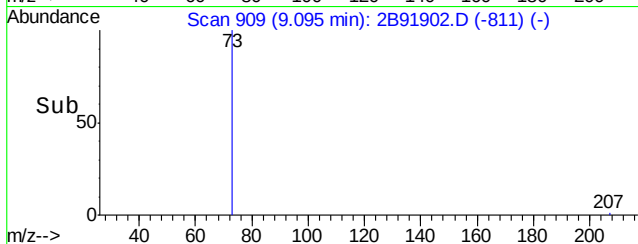
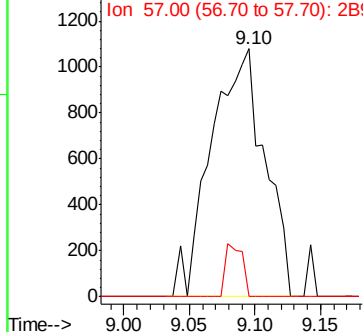


#27
methyl tert butyl ether
Concen: 0.38 ug/L
RT: 9.10 min Scan# 909
Delta R.T. 0.02 min
Lab File: 2B91902.D
Acq: 17 Jan 2012 3:57 am

Tgt Ion: 73 Resp: 3059
Ion Ratio Lower Upper
73 100
57 0.0 0.0 50.3



Abundance Ion 73.00 (72.70 to 73.70): 2B9
Ion 57.00 (56.70 to 57.70): 2B9



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91903.D Vial: 38
 Acq On : 17 Jan 2012 4:29 am Operator: dezareer
 Sample : ja96854-4 Inst : MS2B
 Misc : MS24259,V2B4134,W,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 17 04:54:55 2012 Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	104957	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	310198	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	446308	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	431027	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.06	152	251044	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	123394	47.78	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	95.56%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	139988	49.49	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	98.98%	
74) toluene-d8 (s)	13.53	98	471500	50.86	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	101.72%	
99) 4-bromofluorobenzene (s)	15.98	95	185011	51.46	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	102.92%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
27) methyl tert butyl ether	9.08	73	4100	0.52	ug/L	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91903.D M2B4096.M Wed Jan 18 12:37:54 2012 MS2B

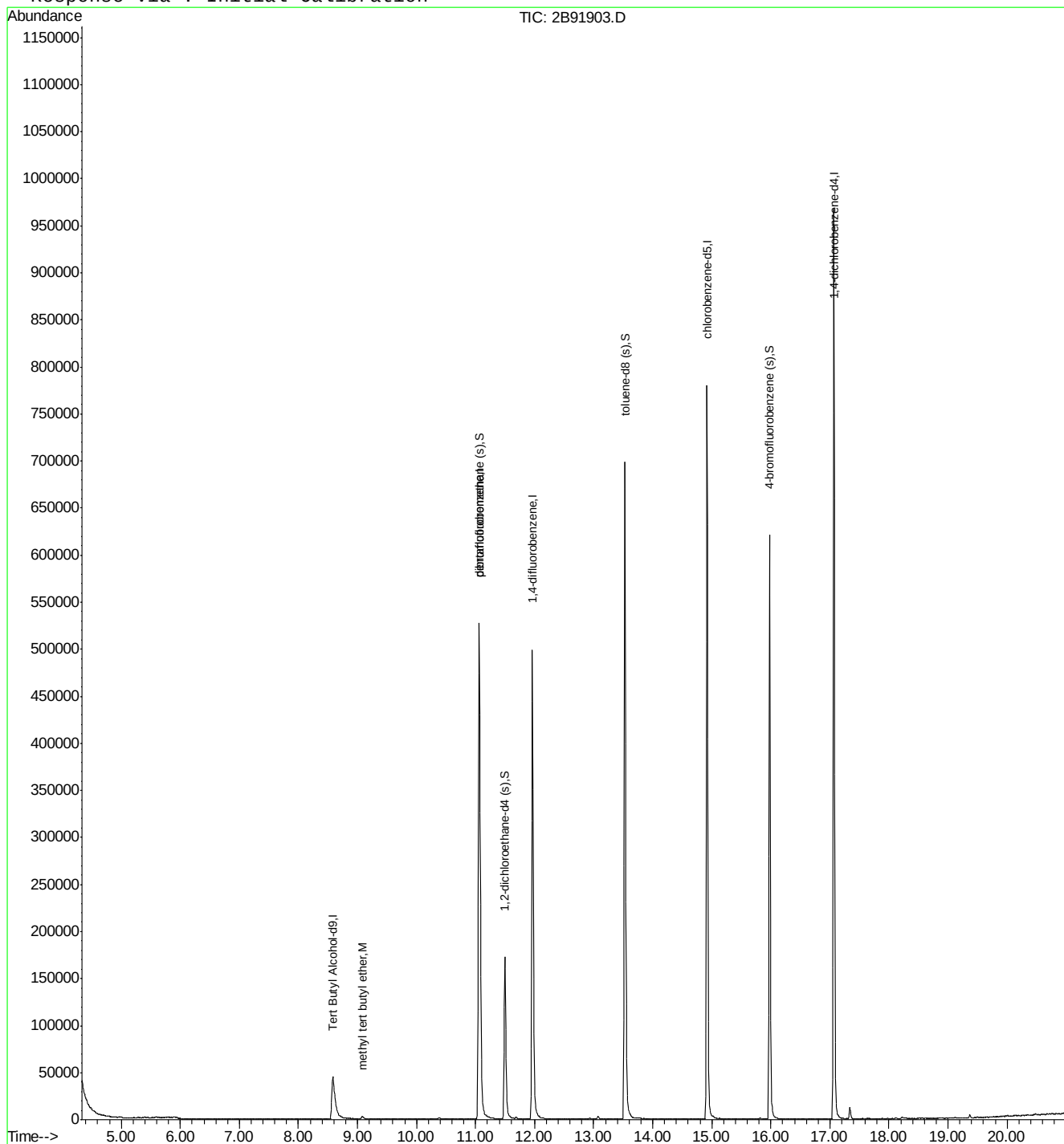
Quantitation Report (QT Reviewed)

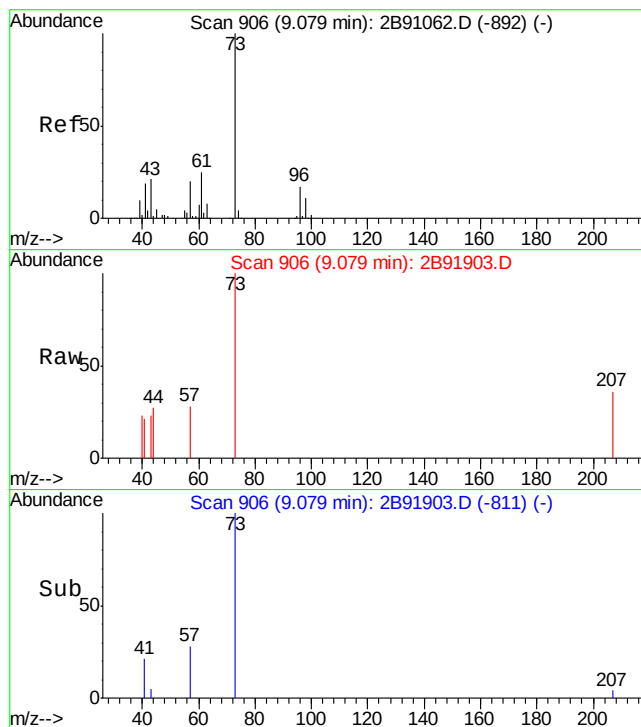
Data File : C:\MSDCHEM\1\DATA\2B91903.D
Acq On : 17 Jan 2012 4:29 am
Sample : ja96854-4
Misc : MS24259,V2B4134,W,,,1
MS Integration Params: rteint.p
Quant Time: Jan 18 12:33 2012

Vial: 38
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

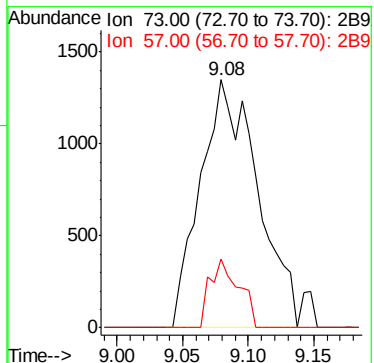
Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration





#27
methyl tert butyl ether
Concen: 0.52 ug/L
RT: 9.08 min Scan# 906
Delta R.T. -0.00 min
Lab File: 2B91903.D
Acq: 17 Jan 2012 4:29 am

Tgt Ion:	73	Resp:	4100
Ion	Ratio	Lower	Upper
73	100		
57	27.7	0.0	50.3



6.1.5

6

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91904.D Vial: 39
 Acq On : 17 Jan 2012 5:00 am Operator: dezareer
 Sample : ja96854-5 Inst : MS2B
 Misc : MS24259,V2B4134,W,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 17 05:26:26 2012 Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.58	65	105620	500.00	ug/L	-0.01
4) pentafluorobenzene	11.06	168	310218	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	441590	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	439191	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.06	152	253428	50.00	ug/L	0.00

System Monitoring Compounds						
44) dibromofluoromethane (s)	11.07	113	123317	47.75	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	95.50%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	139301	49.24	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	98.48%	
74) toluene-d8 (s)	13.53	98	476203	51.91	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	103.82%	
99) 4-bromofluorobenzene (s)	15.98	95	190286	52.43	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	104.86%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91904.D M2B4096.M Wed Jan 18 12:37:59 2012 MS2B

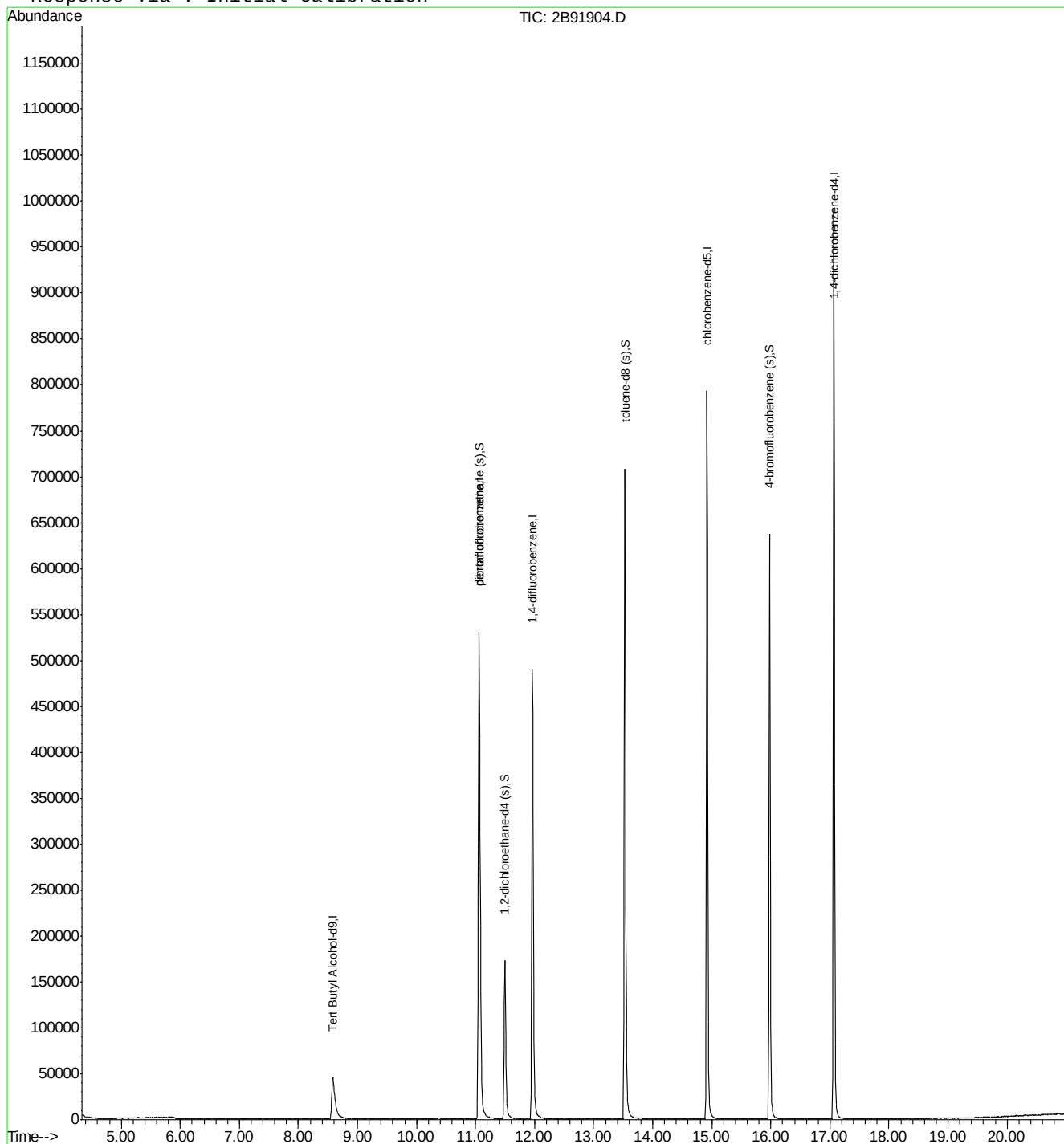
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91904.D
Acq On : 17 Jan 2012 5:00 am
Sample : ja96854-5
Misc : MS24259,V2B4134,W,,,1
MS Integration Params: rteint.p
Quant Time: Jan 18 12:34 2012

Vial: 39
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91891.D Vial: 26
Acq On : 16 Jan 2012 10:11 pm Operator: dezareer
Sample : mb Inst : MS2B
Misc : MS24311,V2B4134,W,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 16 22:36:58 2012 Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration
DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	110083	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	316866	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	449342	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	443180	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.06	152	258737	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	125484	47.57	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	95.14%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	142446	49.30	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	98.60%	
74) toluene-d8 (s)	13.53	98	480716	51.50	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	103.00%	
99) 4-bromofluorobenzene (s)	15.98	95	190219	51.34	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	102.68%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
2B91891.D M2B4096.M Wed Jan 18 12:36:42 2012 MS2B

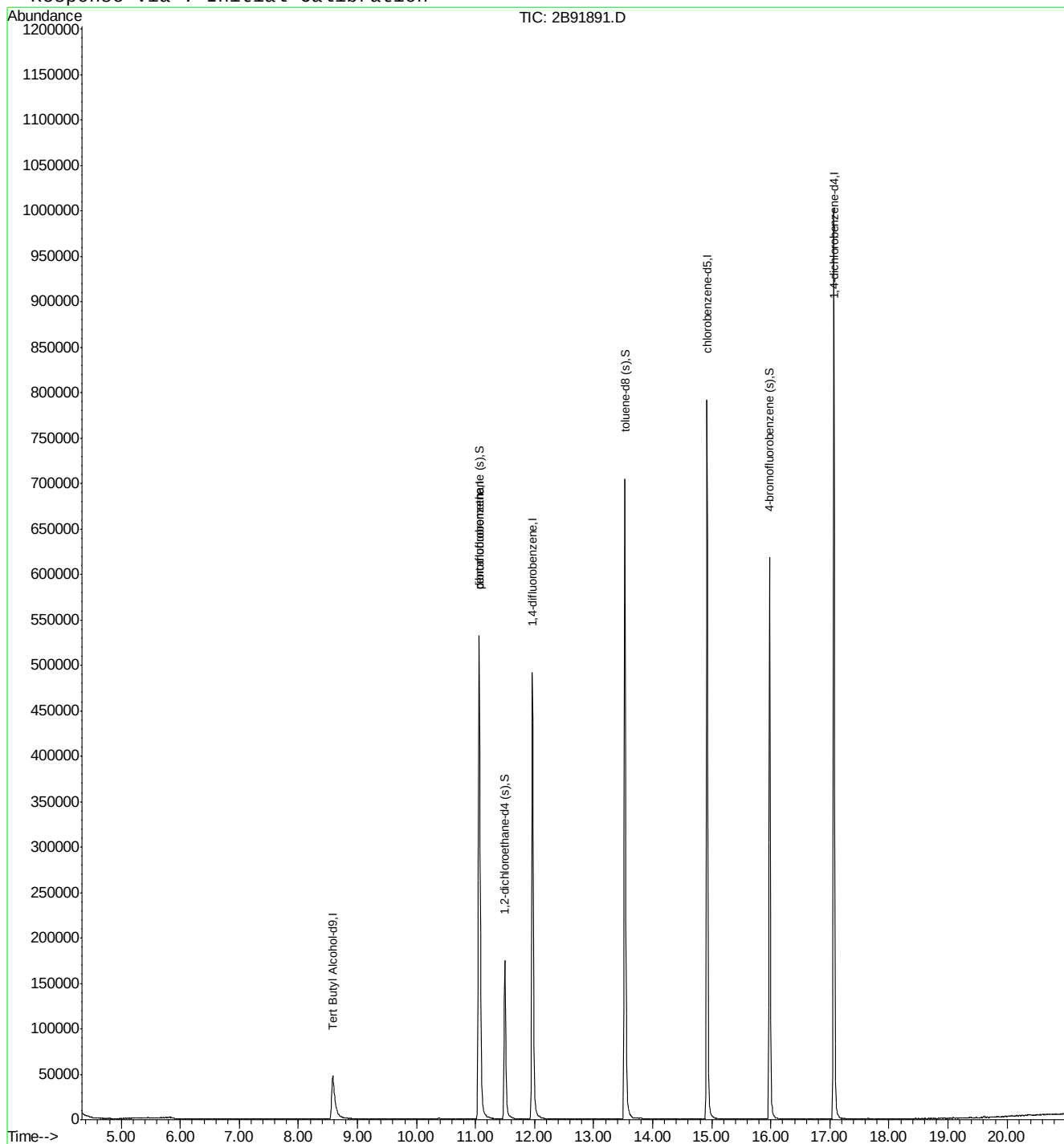
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91891.D
Acq On : 16 Jan 2012 10:11 pm
Sample : mb
Misc : MS24311,V2B4134,W,,,1
MS Integration Params: rteint.p
Quant Time: Jan 18 11:52 2012

Vial: 26
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : y119491.D
Acq On : 17 Jan 2012 12:51 pm
Operator : RobertS
Sample : MB
Misc : MS24355,VY5108,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 15:57:44 2012
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Dec 12 12:09:02 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.70	65	45151	500.00	ug/L	0.00
4) pentafluorobenzene	9.86	168	167897	50.00	ug/L	-0.01
49) 1,4-difluorobenzene	10.78	114	221372	50.00	ug/L	0.00
79) chlorobenzene-d5	13.86	117	166330	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.14	152	77306	50.00	ug/L	-0.01

System Monitoring Compounds

41) dibromofluoromethane (s)	9.95	113	75200	50.47	ug/L	0.00
Spiked Amount	50.000	Range 67 - 131	Recovery	=	100.94%	
42) 1,2-dichloroethane-d4 (s)	10.37	65	75613	54.92	ug/L	-0.01
Spiked Amount	50.000	Range 66 - 130	Recovery	=	109.84%	
71) toluene-d8 (s)	12.37	98	232095	51.62	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	103.24%	
95) 4-bromofluorobenzene (s)	15.00	95	75666	50.01	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	100.02%	

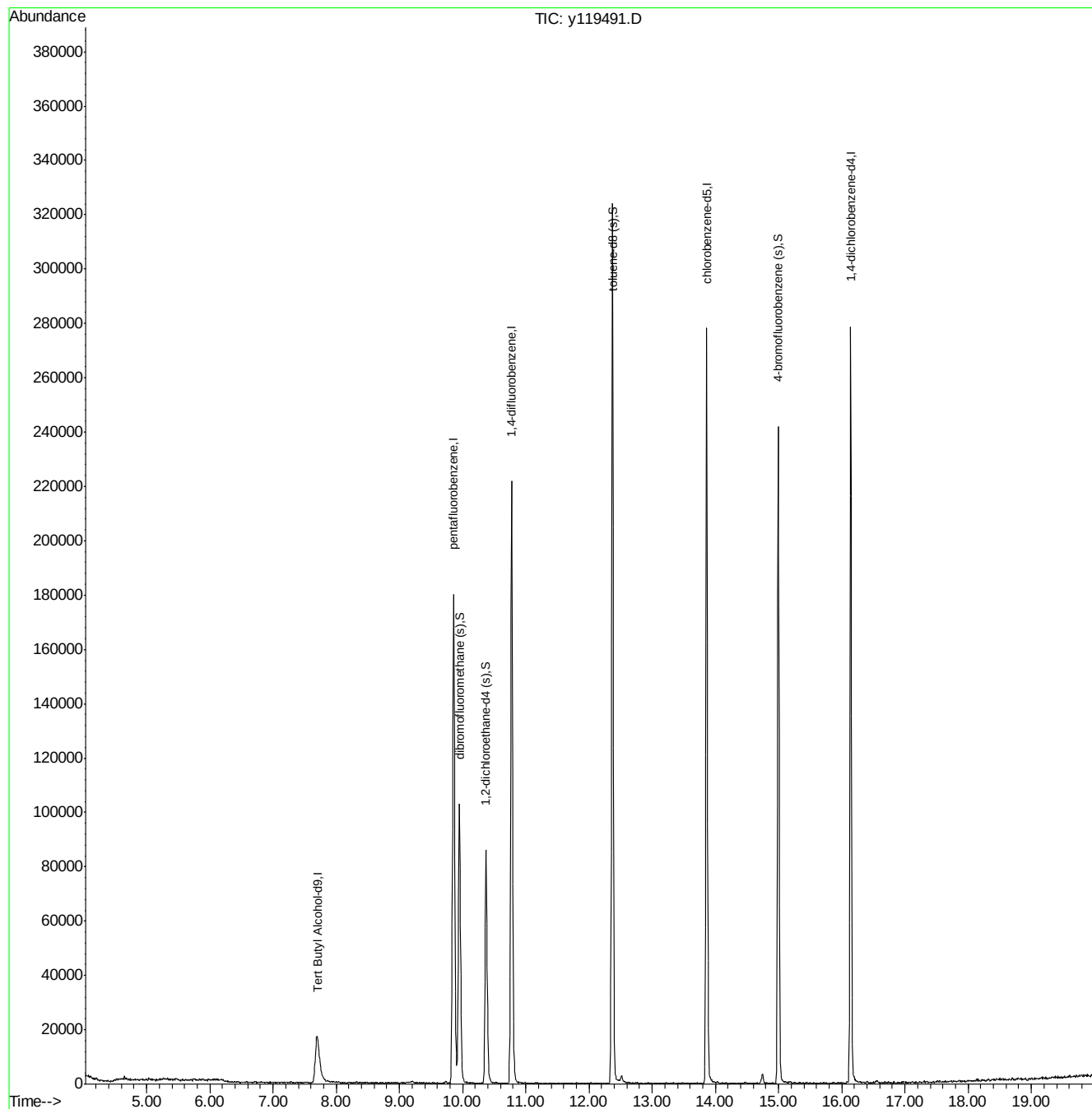
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : y119491.D
Acq On : 17 Jan 2012 12:51 pm
Operator : RobertsS
Sample : MB
Misc : MS24355,VY5108,5.0,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 15:57:44 2012
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Dec 12 12:09:02 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E187215.D
Acq On : 18 Jan 2012 10:01 pm
Operator : dipap
Sample : mb
Misc : MS24355,VE8236,5,,100,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 19 13:24:47 2012
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 29 09:15:39 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.737	65	110270	500.00	ug/L	0.00
5) pentafluorobenzene	9.949	168	236907	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.869	114	321500	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.194	117	311399	50.00	ug/L	0.00
111) 1,4-dichlorobenzene-d4	16.761	152	170494	50.00	ug/L	-0.01

System Monitoring Compounds

57) dibromofluoromethane (s)	9.996	113	115722	45.84	ug/L	-0.01
Spiked Amount	50.000	Range 77 - 120	Recovery	=	91.68%	
58) 1,2-dichloroethane-d4 (s)	10.414	65	130412	42.38	ug/L	-0.01
Spiked Amount	50.000	Range 70 - 127	Recovery	=	84.76%	
86) toluene-d8 (s)	12.568	98	448546	46.60	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	93.20%	
113) 4-bromofluorobenzene (s)	15.464	95	171801	40.01	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	80.02%	

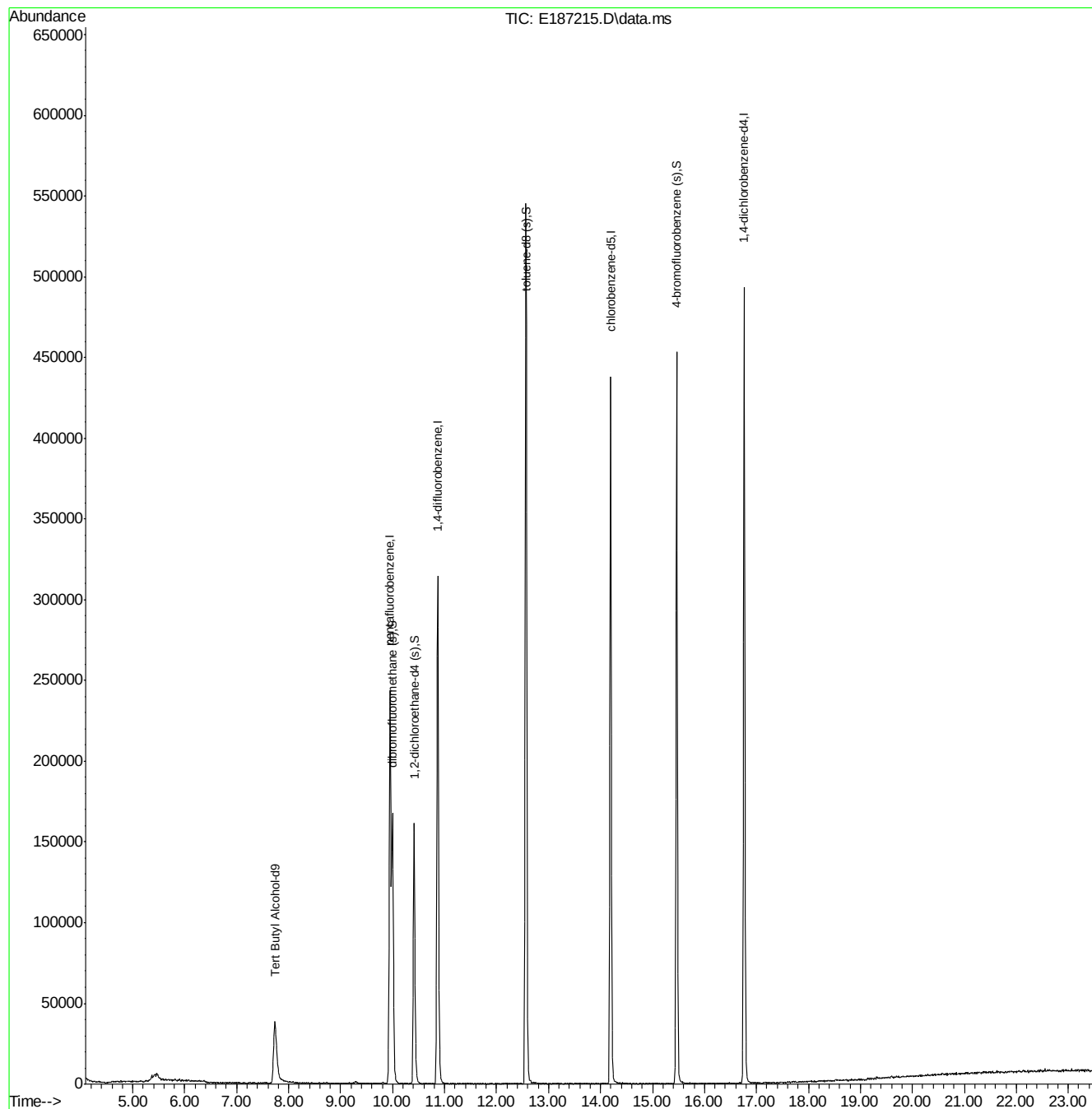
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E187215.D
Acq On : 18 Jan 2012 10:01 pm
Operator : dipap
Sample : mb
Misc : MS24355,VE8236,5,,100,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 19 13:24:47 2012
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 29 09:15:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191680.D
 Acq On : 19 Jan 2012 11:15 am
 Sample : mb
 Misc : MS22961,VD7804,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 17:56 2012

Vial: 4
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.52	65	113354	500.00	ug/L	0.02
4) pentafluorobenzene	9.74	168	236562	50.00	ug/L	-0.01
51) 1,4-difluorobenzene	10.65	114	365913	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	350490	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	195909	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.74	113	116509	45.14	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	90.28%
45) 1,2-dichloroethane-d4 (s)	10.16	65	131122	42.27	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	84.54%
75) toluene-d8 (s)	12.36	98	486121	49.76	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	99.52%
99) 4-bromofluorobenzene (s)	15.27	95	193197	43.39	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	86.78%

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

D191680.D MD7671.M Thu Jan 19 17:56:18 2012 RPT1

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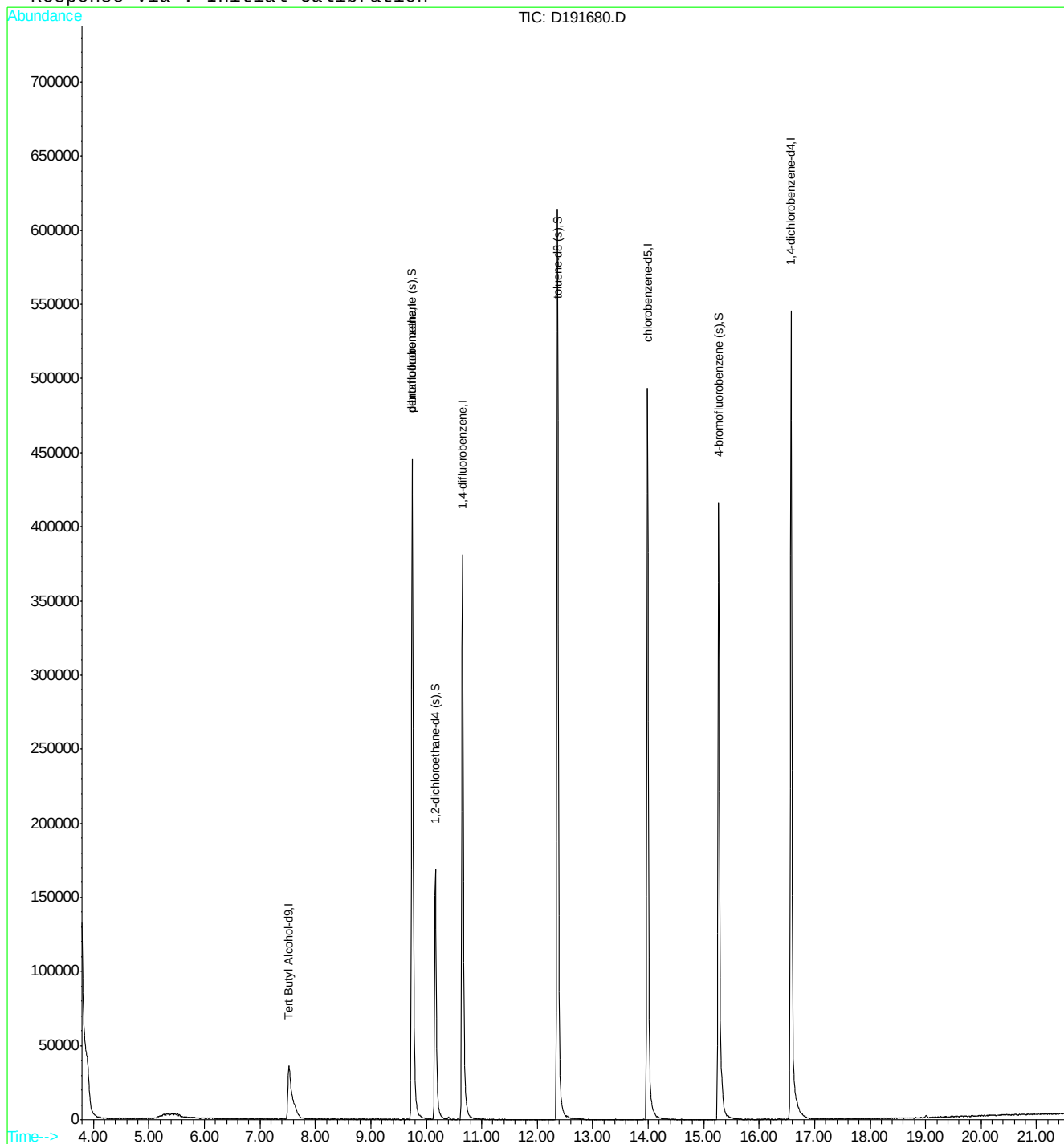
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D191680.D
Acq On : 19 Jan 2012 11:15 am
Sample : mb
Misc : MS22961,VD7804,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Jan 19 17:56 2012

Vial: 4
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Wed Jan 11 16:25:16 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91892.D
 Acq On : 16 Jan 2012 10:42 pm
 Sample : bs
 Misc : MS24311,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 23:08:15 2012

Vial: 27
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	107741	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	303639	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	441078	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	431979	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.06	152	248378	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	121518	48.07	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	96.14%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	132517	47.86	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	95.72%	
74) toluene-d8 (s)	13.53	98	469241	51.21	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	102.42%	
99) 4-bromofluorobenzene (s)	15.98	95	186050	52.31	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	104.62%	

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.72	59	50281	239.74	ug/L	96
3) 1,4-dioxane	12.63	88	23041	1086.04	ug/L	94
5) chlorodifluoromethane	4.65	51	113959	32.46	ug/L	96
6) dichlorodifluoromethane	4.64	85	118644	23.34	ug/L	98
8) chloromethane	5.04	50	127819	26.52	ug/L	100
9) vinyl chloride	5.36	62	142955	31.86	ug/L	100
10) bromomethane	6.12	94	100604	35.11	ug/L	98
11) chloroethane	6.34	64	81596	41.78	ug/L	99
13) trichlorofluoromethane	6.92	101	208987	43.00	ug/L	100
14) Pentane	7.05	43	138049	37.33	ug/L	100
15) ethyl ether	7.40	74	66087	49.73	ug/L	95
16) acrolein	7.62	56	224872	418.83	ug/L	100
18) 1,1-dichloroethene	7.87	96	124707	53.34	ug/L	97
19) acetone	7.91	43	31653	40.60	ug/L	96
20) allyl chloride	8.46	76	77020	52.64	ug/L	98
21) acetonitrile	8.34	40	49049	385.59	ug/L	95
22) iodomethane	8.16	142	255321	51.68	ug/L	99
23) iso-butyl alcohol	11.36	74	11668	425.54	ug/L	87
24) carbon disulfide	8.32	76	406747	49.86	ug/L	97
25) methylene chloride	8.64	84	139308	52.57	ug/L	96
26) methyl acetate	8.45	74	12602	32.33	ug/L	91
27) methyl tert butyl ether	9.07	73	726149	93.40	ug/L	97
28) trans-1,2-dichloroethene	9.10	96	126074	52.85	ug/L	99
29) di-isopropyl ether	9.75	45	356716	50.51	ug/L	97
30) 2-butanone	10.45	72	11119	40.63	ug/L	89
31) 1,1-dichloroethane	9.70	63	227213	55.99	ug/L	99
32) chloroprene	9.84	53	160810	47.31	ug/L	98
33) acrylonitrile	8.97	53	190142	210.08	ug/L	98
34) vinyl acetate	9.71	86	16564	40.31	ug/L	63
35) ethyl tert-butyl ether	10.25	59	364582	50.06	ug/L	96
36) ethyl acetate	10.50	45	13196	37.31	ug/L	52
37) 2,2-dichloropropane	10.52	77	189629	47.74	ug/L	99
38) cis-1,2-dichloroethene	10.48	96	140335	52.11	ug/L	98

(#) = qualifier out of range (m) = manual integration

2B91892.D M2B4096.M

Wed Jan 18 12:38:20 2012

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91892.D
 Acq On : 16 Jan 2012 10:42 pm
 Sample : bs
 Misc : MS24311,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 23:08:15 2012

Vial: 27
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.50	54	134267	393.62	ug/L	99
40) bromochloromethane	10.80	128	70531	49.64	ug/L	97
41) tetrahydrofuran	10.88	42	27976	40.02	ug/L	95
42) chloroform	10.87	83	226028	51.83	ug/L	98
43) t-butyl formate	10.94	59	96551	41.42	ug/L	98
46) freon 113	7.88	151	110106	50.70	ug/L	98
47) methacrylonitrile	10.73	41	58216	43.12	ug/L	97
48) 1,1,1-trichloroethane	11.17	97	216679	54.02	ug/L	98
49) Cyclohexane	11.28	84	179845	50.92	ug/L	92
54) epichlorohydrin	13.12	57	46180	176.51	ug/L	97
55) n-butyl alcohol	12.04	56	112321	1696.82	ug/L	99
56) carbon tetrachloride	11.39	117	193635	50.07	ug/L	99
57) 1,1-dichloropropene	11.36	75	164094	50.95	ug/L	98
58) hexane	9.50	57	117039	47.71	ug/L	98
59) benzene	11.61	78	478333	50.78	ug/L	98
60) 2,2,4-trimethylpentane	11.68	57	388331	48.45	ug/L	98
61) tert-amyl methyl ether	11.67	73	344252	45.56	ug/L	99
62) heptane	11.84	57	71884	47.81	ug/L	99
63) isopropyl acetate	11.54	43	169737	38.75	ug/L	99
64) 1,2-dichloroethane	11.59	62	170863	49.96	ug/L	98
65) trichloroethene	12.30	95	134765	52.02	ug/L	99
66) 2-nitropropane	13.32	46	4397	35.00	ug/L #	92
67) 2-chloroethyl vinyl ether	13.02	63	330754	222.36	ug/L	100
68) methyl methacrylate	12.55	69	111187	46.82	ug/L	91
69) 1,2-dichloropropane	12.53	63	126824	53.18	ug/L	98
70) dibromomethane	12.66	93	82316	46.90	ug/L	95
71) methylcyclohexane	12.56	83	195008	49.05	ug/L	97
72) bromodichloromethane	12.79	83	182626	52.54	ug/L	100
73) cis-1,3-dichloropropene	13.23	75	208420	51.84	ug/L	95
75) 4-methyl-2-pentanone	13.33	58	41355	40.68	ug/L	94
76) toluene	13.60	92	312386	50.75	ug/L	98
77) 3-methyl-1-butanol	13.32	55	78412	645.93	ug/L	98
78) trans-1,3-dichloropropene	13.74	75	192980	49.80	ug/L	97
79) ethyl methacrylate	13.76	69	146771	48.22	ug/L	98
80) 1,1,2-trichloroethane	13.93	83	97173	48.36	ug/L	99
81) 2-hexanone	14.12	58	35595	42.66	ug/L	97
84) tetrachloroethene	14.15	164	122111	50.58	ug/L	98
85) 1,3-dichloropropane	14.11	76	188337	51.75	ug/L	99
86) butyl acetate	14.20	56	60750	44.04	ug/L	95
87) 3,3-dimethyl-1-butanol	14.26	57	86732	324.99	ug/L	99
88) dibromochloromethane	14.35	129	149042	49.26	ug/L	99
89) 1,2-dibromoethane	14.50	107	125145	48.31	ug/L	96
90) chlorobenzene	14.95	112	369212	51.32	ug/L	97
91) 1,1,1,2-tetrachloroethane	14.99	131	146479	47.67	ug/L	99
92) ethylbenzene	15.01	91	599165	50.39	ug/L	98
93) m,p-xylene	15.11	106	473600	100.18	ug/L	100
94) o-xylene	15.49	106	247924	50.43	ug/L	97
95) styrene	15.49	104	413196	50.86	ug/L	99
96) bromoform	15.71	173	112942	44.56	ug/L	96

(#) = qualifier out of range (m) = manual integration

2B91892.D M2B4096.M

Wed Jan 18 12:38:20 2012

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91892.D
 Acq On : 16 Jan 2012 10:42 pm
 Sample : bs
 Misc : MS24311,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 23:08:15 2012

Vial: 27
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.81	105	661080	54.94	ug/L	100
100) cyclohexanone	15.93	98	16224	132.99	ug/L	96
101) bromobenzene	16.16	156	188134	54.70	ug/L	95
102) 1,1,2,2-tetrachloroethane	16.04	83	159011	44.95	ug/L	95
103) trans-1,4-dichloro-2-buten	16.08	53	34470	40.02	ug/L	96
104) 1,2,3-trichloropropane	16.12	110	40659	42.87	ug/L	97
105) n-propylbenzene	16.19	91	758332	54.33	ug/L	99
106) 2-chlorotoluene	16.31	126	163281	52.20	ug/L	96
107) 4-chlorotoluene	16.40	91	471255	53.52	ug/L	97
108) 1,3,5-trimethylbenzene	16.33	105	547482	52.62	ug/L	98
109) tert-butylbenzene	16.66	119	511896	53.90	ug/L	100
110) pentachloroethane	16.71	167	125613	52.06	ug/L	98
111) 1,2,4-trimethylbenzene	16.69	105	568290	52.14	ug/L	97
112) sec-butylbenzene	16.85	105	753561	53.33	ug/L	99
113) 1,3-dichlorobenzene	17.01	146	351246	51.34	ug/L	99
114) p-isopropyltoluene	16.97	119	648031	53.48	ug/L	99
115) 1,4-dichlorobenzene	17.09	146	360479	51.67	ug/L	98
116) 1,2-dichlorobenzene	17.47	146	362155	51.40	ug/L	99
117) n-butylbenzene	17.36	92	345639	56.49	ug/L	99
118) 1,2-dibromo-3-chloropropan	18.21	75	31947	38.78	ug/L	98
119) 1,3,5-trichlorobenzene	18.44	180	337222	52.24	ug/L	97
120) 1,2,4-trichlorobenzene	19.08	180	308497	53.79	ug/L	100
121) hexachlorobutadiene	19.22	225	156198	49.67	ug/L	99
122) naphthalene	19.36	128	527191	42.39	ug/L	99
123) 1,2,3-trichlorobenzene	19.60	180	254664	49.65	ug/L	99
124) hexachloroethane	17.75	201	133448	54.42	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91892.D M2B4096.M Wed Jan 18 12:38:20 2012 MS2B

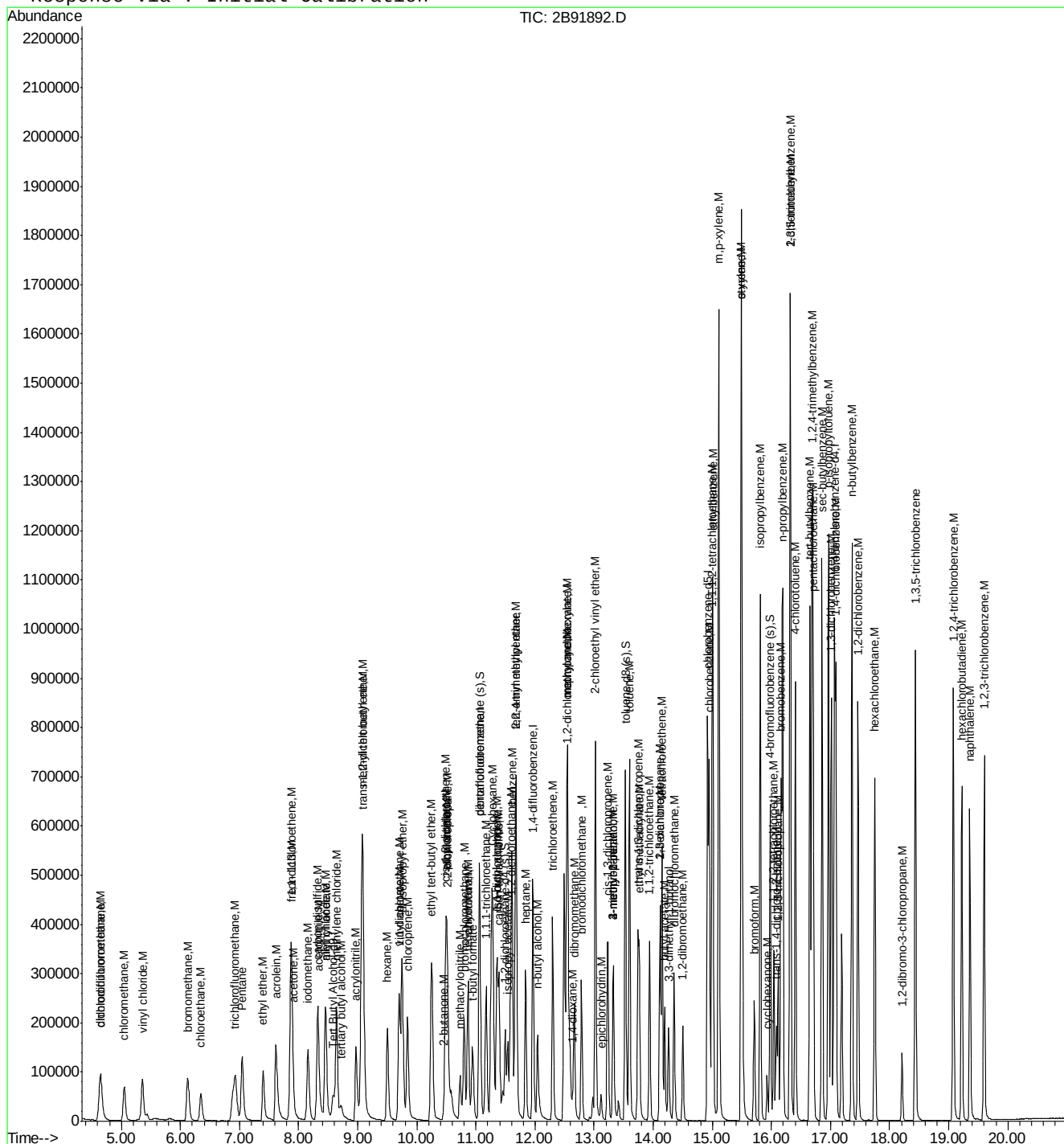
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91892.D
Acq On : 16 Jan 2012 10:42 pm
Sample : bs
Misc : MS24311,V2B4134,W,,,1
MS Integration Params: rteint.p
Quant Time: Jan 16 23:08 2012

Vial: 27
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



2B91892.D M2B4096.M

Wed Jan 18 12:38:21 2012

MS2B

Page 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119492.D
 Acq On : 17 Jan 2012 1:24 pm
 Operator : RobertS
 Sample : BS
 Misc : MS24355,VY5108,5.0,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 18 15:58:11 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.69	65	49467	500.00	ug/L	-0.02
4) pentafluorobenzene	9.86	168	170662	50.00	ug/L	-0.01
49) 1,4-difluorobenzene	10.78	114	230364	50.00	ug/L	0.00
79) chlorobenzene-d5	13.86	117	183203	50.00	ug/L	-0.01
93) 1,4-dichlorobenzene-d4	16.14	152	88193	50.00	ug/L	-0.01

System Monitoring Compounds

41) dibromofluoromethane (s)	9.95	113	75722	50.00	ug/L	0.00
Spiked Amount 50.000	Range 67 - 131		Recovery =	100.00%		
42) 1,2-dichloroethane-d4 (s)	10.37	65	76006	54.31	ug/L	-0.01
Spiked Amount 50.000	Range 66 - 130		Recovery =	108.62%		
71) toluene-d8 (s)	12.37	98	247374	52.87	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 125		Recovery =	105.74%		
95) 4-bromofluorobenzene (s)	14.99	95	85092	49.30	ug/L	0.00
Spiked Amount 50.000	Range 53 - 142		Recovery =	98.60%		

Target Compounds

						Qvalue
2) 1,4-dioxane	11.50	88	14208	1360.50	ug/L	93
3) tertiary butyl alcohol	7.80	59	32617	247.80	ug/L	95
5) chlorodifluoromethane	4.19	51	52020	44.62	ug/L	95
6) dichlorodifluoromethane	4.16	85	85399	61.60	ug/L	95
7) chloromethane	4.52	50	89809	48.90	ug/L	95
8) vinyl chloride	4.79	62	71107	49.04	ug/L	95
9) bromomethane	5.49	94	53440	55.64	ug/L	96
10) chloroethane	5.66	64	36617	50.95	ug/L	98
12) trichlorofluoromethane	6.11	101	106867	66.01	ug/L	100
13) ethyl ether	6.51	74	33454	44.59	ug/L	98
14) acrolein	6.84	56	103119	484.16	ug/L	96
15) 1,1-dichloroethene	6.96	96	54199	46.69	ug/L	92
16) acetone	7.07	58	5691	28.99	ug/L	91
17) allyl chloride	7.50	76	35193	46.71	ug/L	93
18) acetonitrile	7.57	40	32380	426.94	ug/L	96
19) iodomethane	7.27	142	126078	49.07	ug/L	96
20) iso-butyl alcohol	10.19	41	20114	469.83	ug/L	94
21) carbon disulfide	7.37	76	182814	45.02	ug/L	97
22) methylene chloride	7.72	84	67192	45.82	ug/L	99
23) methyl acetate	7.50	74	7461	42.16	ug/L	92
24) methyl tert butyl ether	7.99	73	333507	92.37	ug/L	96
25) trans-1,2-dichloroethene	8.06	96	60830	45.44	ug/L	96
26) di-isopropyl ether	8.55	45	211246	47.10	ug/L	98
27) ethyl tert-butyl ether	9.01	59	186955	49.58	ug/L	97
28) 2-butanone	9.35	72	7719	44.77	ug/L	80
29) 1,1-dichloroethane	8.64	63	115483	49.44	ug/L	99
30) chloroprene	8.72	53	83740	54.55	ug/L	91
31) acrylonitrile	8.09	53	84115	233.11	ug/L	99
32) vinyl acetate	8.62	86	10073	57.94	ug/L	100
33) ethyl acetate	9.34	45	7506	47.71	ug/L	88
34) 2,2-dichloropropane	9.35	77	92202	55.07	ug/L	98
35) cis-1,2-dichloroethene	9.37	96	70855	46.83	ug/L	98
36) propionitrile	9.51	54	68994	474.94	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119492.D
 Acq On : 17 Jan 2012 1:24 pm
 Operator : RobertS
 Sample : BS
 Misc : MS24355,VY5108,5.0,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 18 15:58:11 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.70	128	38218	49.47	ug/L	92
38) tetrahydrofuran	9.71	42	17837	43.36	ug/L	99
39) chloroform	9.74	83	118965	51.41	ug/L	98
40) tert-Butyl Formate	9.75	59	13623	62.31	ug/L	85
43) freon 113	6.90	151	49155	51.81	ug/L	97
44) methacrylonitrile	9.66	41	32475	48.48	ug/L	98
45) 1,1,1-trichloroethane	9.96	97	100404	57.48	ug/L	94
46) Cyclohexane	10.00	84	70998	46.22	ug/L #	3
47) 2,2,4-trimethylpentane	10.34	57	184465	45.51	ug/L	94
48) tert-amyl methyl ether	10.40	73	170574	50.79	ug/L	97
50) epichlorohydrin	12.04	57	23139	270.53	ug/L	97
51) n-butyl alcohol	10.93	56	78314	2367.17	ug/L	94
52) carbon tetrachloride	10.15	117	93906	62.58	ug/L	93
53) 1,1-dichloropropene	10.13	75	80345	53.27	ug/L	96
54) hexane	8.29	57	57294	40.50	ug/L	96
56) benzene	10.41	78	233651	48.13	ug/L	99
57) heptane	10.50	57	36802	46.94	ug/L	98
58) isopropyl acetate	10.32	61	21088	49.76	ug/L #	13
59) 1,2-dichloroethane	10.46	62	84263	57.69	ug/L	99
60) trichloroethene	11.10	95	66708	51.47	ug/L	99
62) 2-nitropropane	11.92	41	15186	63.22	ug/L #	73
63) 2-chloroethyl vinyl ether	11.90	63	16850	106.94	ug/L	99
64) methyl methacrylate	11.36	69	35842	50.96	ug/L	88
65) 1,2-dichloropropane	11.39	63	62606	48.71	ug/L	88
66) methylcyclohexane	11.28	83	81269	47.77	ug/L	99
68) dibromomethane	11.56	93	40202	54.58	ug/L	97
69) bromodichloromethane	11.68	83	94872	57.73	ug/L	99
70) cis-1,3-dichloropropene	12.11	75	102693	50.95	ug/L	94
72) 4-methyl-2-pentanone	12.20	58	24877	60.24	ug/L	95
73) toluene	12.44	92	138570	48.39	ug/L	97
74) 3-methyl-1-butanol	12.23	70	27140	1034.32	ug/L	95
75) trans-1,3-dichloropropene	12.66	75	93234	56.07	ug/L	98
76) ethyl methacrylate	12.62	69	66020	54.26	ug/L	97
77) 1,1,2-trichloroethane	12.88	83	43586	49.77	ug/L	97
78) 2-hexanone	13.03	58	22951	52.84	ug/L	97
80) tetrachloroethene	13.00	166	75193	42.49	ug/L	97
81) 1,3-dichloropropane	13.06	76	81242	50.64	ug/L	100
82) butyl acetate	13.07	56	30311	49.05	ug/L	92
83) dibromochloromethane	13.32	129	75261	57.79	ug/L	96
84) 1,2-dibromoethane	13.46	107	53775	51.48	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.20	57	43088	501.55	ug/L	98
86) chlorobenzene	13.89	112	159186	48.93	ug/L	98
87) 1,1,1,2-tetrachloroethane	13.95	131	67851	55.17	ug/L	99
88) ethylbenzene	13.93	91	248447	50.77	ug/L	98
89) m,p-xylene	14.02	106	186906	98.67	ug/L	92
90) o-xylene	14.44	106	97167	49.58	ug/L	93
91) styrene	14.46	104	159970	51.61	ug/L	95
92) bromoform	14.76	173	54172	59.21	ug/L	99
94) isopropylbenzene	14.77	105	244774	49.73	ug/L	98
96) bromobenzene	15.19	156	76236	49.00	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119492.D
 Acq On : 17 Jan 2012 1:24 pm
 Operator : RobertS
 Sample : BS
 Misc : MS24355,VY5108,5.0,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 18 15:58:11 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) cyclohexanone	14.99	55	76770	361.92	ug/L	96
98) 1,1,2,2-tetrachloroethane	15.12	83	58988	47.98	ug/L	97
99) trans-1,4-dichloro-2-buten	15.15	53	16685	63.41	ug/L	86
100) 1,2,3-trichloropropane	15.19	110	15737	51.33	ug/L	98
101) n-propylbenzene	15.17	91	282375	50.08	ug/L	98
103) 2-chlorotoluene	15.33	126	62795	48.71	ug/L	98
104) 4-chlorotoluene	15.43	91	182342	50.95	ug/L	99
105) 1,3,5-trimethylbenzene	15.31	105	204095	52.43	ug/L	95
106) tert-butylbenzene	15.66	119	175662	50.56	ug/L	95
107) pentachloroethane	15.77	167	52844	70.37	ug/L	98
108) 1,2,4-trimethylbenzene	15.70	105	209109	51.58	ug/L	89
109) sec-butylbenzene	15.87	105	252584	50.01	ug/L	99
110) 1,3-dichlorobenzene	16.08	146	136759	50.86	ug/L	98
111) p-isopropyltoluene	15.98	119	220179	53.32	ug/L	96
112) 1,4-dichlorobenzene	16.16	146	132357	49.00	ug/L	99
113) 1,2-dichlorobenzene	16.56	146	131684	50.67	ug/L	97
114) n-butylbenzene	16.39	92	107966	51.92	ug/L	99
116) 1,2-dibromo-3-chloropropan	17.35	75	11375	56.34	ug/L	96
117) 1,3,5-Trichlorobenzene	17.49	180	123938	55.57	ug/L	98
118) 1,2,4-trichlorobenzene	18.14	180	113877	57.89	ug/L	98
120) hexachlorobutadiene	18.22	225	65221	60.44	ug/L	98
121) naphthalene	18.44	128	174752	48.30	ug/L	98
122) 1,2,3-trichlorobenzene	18.69	180	98759	55.02	ug/L	99
123) hexachloroethane	16.79	119	50097	58.37	ug/L	98
124) Benzyl chloride	16.29	91	114260	62.11	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187216.D
 Acq On : 18 Jan 2012 10:32 pm
 Operator : dipap
 Sample : bs
 Misc : MS24397,VE8236,5,,100,5,1
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 25 08:16:47 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.731	65	124581	500.00	ug/L	0.00
5) pentafluorobenzene	9.953	168	230442	50.00	ug/L	0.00
63) 1,4-difluorobenzene	10.868	114	322785	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.193	117	310756	50.00	ug/L	0.00
111) 1,4-dichlorobenzene-d4	16.765	152	169864	50.00	ug/L	0.00

System Monitoring Compounds

57) dibromofluoromethane (s)	9.995	113	118435	48.23	ug/L	-0.01
Spiked Amount	50.000	Range	77 - 120	Recovery	=	96.46%
58) 1,2-dichloroethane-d4 (s)	10.413	65	122044	40.78	ug/L	-0.01
Spiked Amount	50.000	Range	70 - 127	Recovery	=	81.56%
86) toluene-d8 (s)	12.567	98	447152	46.27	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	92.54%
113) 4-bromofluorobenzene (s)	15.464	95	174432	40.78	ug/L	-0.01
Spiked Amount	50.000	Range	76 - 118	Recovery	=	81.56%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.584	88	36956	1531.38	ug/L	93
3) tertiary butyl alcohol	7.846	59	99986	296.87	ug/L	92
11) chlorodifluoromethane	4.344	51	147487	44.20	ug/L	95
12) dichlorodifluoromethane	4.328	85	138992	36.00	ug/L	99
15) chloromethane	4.694	50	214066	38.68	ug/L	97
16) vinyl chloride	4.966	62	204381	47.02	ug/L	99
18) bromomethane	5.630	94	125229	49.35	ug/L	99
19) chloroethane	5.807	64	112719	50.07	ug/L	96
21) trichlorofluoromethane	6.304	101	218748	53.31	ug/L	98
22) pentane	6.382	43	185818	34.61	ug/L	99
23) ethyl ether	6.691	74	89227	49.58	ug/L	92
27) acrolein	6.900	56	313434	428.97	ug/L	98
28) 1,1-dichloroethene	7.120	96	128011	50.91	ug/L	95
30) acetone	7.109	58	15513	47.11	ug/L	98
31) allyl chloride	7.622	41	231960	42.05	ug/L	94
32) acetonitrile	7.512	40	97817	462.88	ug/L	94
33) iodomethane	7.391	142	264787	57.77	ug/L	97
35) carbon disulfide	7.548	76	425571	49.03	ug/L	99
36) methylene chloride	7.794	84	151255	49.82	ug/L	90
37) methyl acetate	7.580	43	111115	39.90	ug/L	97
38) methyl tert butyl ether	8.144	73	798543	88.49	ug/L	97
39) trans-1,2-dichloroethene	8.191	96	136183	50.67	ug/L	93
40) di-isopropyl ether	8.730	45	450635	42.26	ug/L	98
41) ethyl tert-butyl ether	9.190	59	438374	46.60	ug/L	97
42) 2-butanone	9.383	72	17275	43.50	ug/L	# 93
43) 1,1-dichloroethane	8.730	63	248904	49.97	ug/L	98
44) chloroprene	8.850	53	194021	47.86	ug/L	97
45) acrylonitrile	8.066	53	299985	228.09	ug/L	99
46) vinyl acetate	8.693	86	26997	52.17	ug/L	67
47) ethyl acetate	9.415	45	21665	37.97	ug/L	94
48) 2,2-dichloropropane	9.477	77	149414	41.59	ug/L	99
49) cis-1,2-dichloroethene	9.451	96	150797	49.56	ug/L	93
50) methyl acrylate	9.498	55	134598	45.18	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187216.D
 Acq On : 18 Jan 2012 10:32 pm
 Operator : dipap
 Sample : bs
 Misc : MS24397,VE8236,5,,100,5,1
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 25 08:16:47 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.446	54	222343	438.95	ug/L	92
52) bromochloromethane	9.755	128	79561	54.44	ug/L	87
53) tetrahydrofuran	9.807	42	52616	39.05	ug/L	94
54) chloroform	9.807	83	234864	49.22	ug/L	97
55) t-butyl formate	9.849	59	110908	41.10	ug/L	95
56) Iso-octane	10.560	57	386799	42.65	ug/L	98
59) freon 113	7.104	151	111493	55.74	ug/L	95
60) methacrylonitrile	9.655	41	92580	44.10	ug/L	97
61) 1,1,1-trichloroethane	10.094	97	204839	53.17	ug/L	97
62) tert-amyl methyl ether	10.560	73	412117	48.20	ug/L	98
65) tert amyl alcohol	10.345	55	61662	478.38	ug/L	99
66) epichlorohydrin	12.112	57	76174	223.93	ug/L	95
67) n-butyl alcohol	10.947	56	254348	2547.17	ug/L	95
68) tert-amyl ethyl ether	11.401	87	397822	92.66	ug/L	97
69) carbon tetrachloride	10.314	117	184816	59.75	ug/L	97
70) 1,1-dichloropropene	10.267	75	180840	53.53	ug/L	98
71) hexane	8.510	57	146877	38.94	ug/L	99
72) benzene	10.523	78	519424	50.61	ug/L	98
73) heptane	10.711	57	84312	38.14	ug/L	97
74) isopropyl acetate	10.403	43	266057	43.00	ug/L	98
75) 1,2-dichloroethane	10.502	62	167312	49.21	ug/L	99
76) ethyl acrylate	11.192	55	184200	40.99	ug/L	99
77) trichloroethene	11.234	95	139124	53.73	ug/L	92
78) 2-nitropropane	11.950	46	1445	72.28	ug/L #	58
79) 2-chloroethyl vinyl ether	11.997	63	349707	259.83	ug/L	97
80) methylcyclohexane	11.490	83	215022	53.22	ug/L	95
81) methyl methacrylate	11.469	69	142908	44.60	ug/L	99
82) 1,2-dichloropropane	11.480	63	140913	48.16	ug/L	99
83) dibromomethane	11.637	93	89811	52.56	ug/L	94
84) bromodichloromethane	11.762	83	184504	48.76	ug/L	98
85) cis-1,3-dichloropropene	12.238	75	225876	47.68	ug/L	97
87) 4-methyl-2-pentanone	12.316	58	61545	45.13	ug/L	98
88) toluene	12.646	92	338395	51.83	ug/L	97
89) 3-methyl-1-butanol	12.327	55	156705	997.52	ug/L	96
90) trans-1,3-dichloropropene	12.818	75	203108	48.13	ug/L	93
91) ethyl methacrylate	12.813	69	184678	43.87	ug/L	96
92) 1,1,2-trichloroethane	13.048	83	108883	47.37	ug/L	95
93) 2-hexanone	13.226	58	58232	46.10	ug/L	88
96) tetrachloroethene	13.294	166	175749	59.23	ug/L	97
97) 1,3-dichloropropane	13.247	76	218535	49.03	ug/L	99
98) butyl acetate	13.310	56	99799	42.39	ug/L	93
99) 3,3-dimethyl-1-butanol	13.404	57	164718	453.13	ug/L	98
100) dibromochloromethane	13.540	129	160934	51.50	ug/L	99
101) 1,2-dibromoethane	13.712	107	141920	50.51	ug/L	96
103) chlorobenzene	14.230	112	388933	53.37	ug/L	98
104) 1,1,1,2-tetrachloroethane	14.287	131	144288	52.89	ug/L	98
105) ethylbenzene	14.287	91	606142	49.88	ug/L	99
106) m,p-xylene	14.407	106	493799	103.80	ug/L	95
107) o-xylene	14.868	106	254752	51.85	ug/L	98
109) styrene	14.873	104	415023	49.68	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187216.D
 Acq On : 18 Jan 2012 10:32 pm
 Operator : dipap
 Sample : bs
 Misc : MS24397,VE8236,5,,100,5,1
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 25 08:16:47 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) bromoform	15.155	173	129105	54.81	ug/L	98
112) isopropylbenzene	15.244	105	644039	48.30	ug/L	98
114) bromobenzene	15.688	156	185318	50.59	ug/L	91
115) 1,1,2,2-tetrachloroethane	15.547	83	180796	42.08	ug/L	98
116) trans-1,4-dichloro-2-b...	15.589	53	42139	44.40	ug/L	97
117) 1,2,3-trichloropropane	15.631	110	50658	46.82	ug/L	91
118) n-propylbenzene	15.699	91	727245	48.20	ug/L	99
119) p-ethyltoluene	15.809	105	596480	43.08	ug/L	99
120) 2-chlorotoluene	15.866	126	161211	49.90	ug/L	91
121) 4-chlorotoluene	15.971	91	463431	47.29	ug/L	98
122) 1,3,5-trimethylbenzene	15.861	105	500706	45.90	ug/L	98
123) tert-butylbenzene	16.253	119	497067	50.13	ug/L	98
124) pentachloroethane	16.342	167	109984	47.51	ug/L	99
125) 1,2,4-trimethylbenzene	16.300	105	545577	48.45	ug/L	100
126) sec-butylbenzene	16.493	105	708330	49.07	ug/L	99
127) 1,3-dichlorobenzene	16.703	146	347461	52.53	ug/L	98
128) p-isopropyltoluene	16.624	119	618354	52.12	ug/L	99
129) 1,4-dichlorobenzene	16.791	146	344293	52.90	ug/L	99
130) benzyl chloride	16.901	91	242004	37.73	ug/L	99
131) p-diethylbenzene	17.042	119	359934	48.16	ug/L	99
132) 1,2-dichlorobenzene	17.225	146	341156	52.43	ug/L	99
133) n-butylbenzene	17.079	92	305120	50.80	ug/L	98
134) 1,2,4,5-tetramethylben...	17.905	119	561985	50.07	ug/L	97
135) 1,2-dibromo-3-chloropr...	18.051	75	34678	48.13	ug/L	88
136) 1,3,5-trichlorobenzene	18.287	180	293084	56.96	ug/L	97
137) 1,2,4-trichlorobenzene	19.003	180	262569	64.75	ug/L	99
138) hexachlorobutadiene	19.144	225	131974	55.80	ug/L	98
139) naphthalene	19.317	128	509124	57.48	ug/L	100
141) 1,2,3-trichlorobenzene	19.594	180	223197	64.63	ug/L	99
142) hexachloroethane	17.539	119	120333	54.44	ug/L	97
143) Cyclohexane	10.199	84	187445	46.32	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191681.D
 Acq On : 19 Jan 2012 11:45 am
 Sample : bs
 Misc : MS22961,VD7804,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 17:57 2012

Vial: 5
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	116240	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	242097	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.65	114	377178	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	347896	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.57	152	203650	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.74	113	120314	45.54	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	91.08%
45) 1,2-dichloroethane-d4 (s)	10.16	65	131958	41.56	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	83.12%
75) toluene-d8 (s)	12.37	98	495706	49.23	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	98.46%
99) 4-bromofluorobenzene (s)	15.27	95	195549	42.25	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	84.50%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.36	88	40794	1492.82	ug/L	# 91
3) tertiary butyl alcohol	7.62	59	71212	235.72	ug/L	97
6) chlorodifluoromethane	4.24	51	99222	31.47	ug/L	97
7) dichlorodifluoromethane	4.25	85	115211	32.11	ug/L	99
8) chloromethane	4.56	50	178617	46.72	ug/L	98
9) vinyl chloride	4.82	62	175035	47.13	ug/L	99
10) bromomethane	5.44	94	110573	46.78	ug/L	97
11) chloroethane	5.62	64	109544	50.69	ug/L	99
13) trichlorofluoromethane	6.14	101	195195	45.45	ug/L	99
14) pentane	6.23	43	204346	34.22	ug/L	97
15) ethyl ether	6.51	74	82317	45.16	ug/L	98
16) acrolein	6.67	56	283701	418.64	ug/L	98
18) 1,1-dichloroethene	6.92	96	120491	41.87	ug/L	95
19) acetone	6.89	58	11704	37.83	ug/L	91
20) allyl chloride	7.40	41	197548	32.31	ug/L	98
21) acetonitrile	7.25	40	89888	495.37	ug/L	99
23) iodomethane	7.16	142	213040	44.26	ug/L	97
24) iso-butyl alcohol	9.97	74	6750	435.12	ug/L	99
25) carbon disulfide	7.32	76	397983	42.51	ug/L	98
26) methylene chloride	7.55	84	143271	43.19	ug/L	98
27) methyl acetate	7.38	43	89617	34.88	ug/L	98
28) methyl tert butyl ether	7.96	73	770559	81.60	ug/L	99
29) trans-1,2-dichloroethene	7.97	96	132940	43.71	ug/L	97
30) di-isopropyl ether	8.56	45	415882	42.41	ug/L	98
31) ethyl tert-butyl ether	9.02	59	403559	42.69	ug/L	98
32) 2-butanone	9.15	72	15399	40.07	ug/L	94
33) 1,1-dichloroethane	8.49	63	235865	44.15	ug/L	100
34) chloroprene	8.64	53	182010	41.23	ug/L	96
35) acrylonitrile	7.81	53	261586	214.24	ug/L	97
36) vinyl acetate	8.49	86	28274	41.61	ug/L	79
37) ethyl acetate	9.22	45	15049	39.63	ug/L	87
38) 2,2-dichloropropane	9.25	77	181482	39.83	ug/L	99
39) cis-1,2-dichloroethene	9.21	96	143231	43.71	ug/L	97

(#)=qualifier out of range (m)=manual integration

D191681.D MD7671.M Thu Jan 19 17:57:21 2012 RPT1

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191681.D
 Acq On : 19 Jan 2012 11:45 am
 Sample : bs
 Misc : MS22961,VD7804,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 17:57 2012

Vial: 5
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.17	54	199537	422.27	ug/L	99
41) bromochloromethane	9.50	128	68163	43.72	ug/L	93
42) tetrahydrofuran	9.58	72	17918	40.04	ug/L	96
43) chloroform	9.56	83	215013	43.78	ug/L	99
46) freon 113	6.94	151	98900	43.75	ug/L	91
47) methacrylonitrile	9.41	41	73504	41.08	ug/L	90
48) t-butyl formate	9.64	59	106515	39.25	ug/L	97
49) 1,1,1-trichloroethane	9.87	97	185827	42.14	ug/L	98
50) tert-amyl methyl ether	10.37	73	404874	44.29	ug/L	99
52) cyclohexane	10.00	84	195425	43.44	ug/L #	100
53) tert amyl alcohol	10.12	55	30444	227.19	ug/L	79
54) 2,2,4-trimethylpentane	10.40	57	500105	44.01	ug/L	97
55) epichlorohydrin	11.87	57	71867	212.38	ug/L	99
56) n-butyl alcohol	10.72	56	218280	2398.37	ug/L	96
57) carbon tetrachloride	10.10	117	161120	43.60	ug/L	99
58) 1,1-dichloropropene	10.05	75	173219	43.81	ug/L	99
59) hexane	8.35	57	151828	37.67	ug/L	98
60) benzene	10.30	78	538570	46.67	ug/L	99
61) heptane	10.56	57	93852	42.71	ug/L	98
62) isopropyl acetate	10.22	43	221041	40.11	ug/L	97
63) 1,2-dichloroethane	10.25	62	160755	41.45	ug/L	99
65) trichloroethene	11.02	95	130515	44.12	ug/L	97
66) 2-nitropropane	11.70	43	32904	34.56	ug/L	95
67) 2-chloroethyl vinyl ether	11.78	63	424937	225.78	ug/L	99
68) methyl methacrylate	11.28	100	37873	42.89	ug/L	91
69) tert-amyl ethyl ether	11.24	87	195968	46.97	ug/L	100
70) 1,2-dichloropropane	11.25	63	142189	46.82	ug/L	96
71) methylcyclohexane	11.31	83	233528	45.91	ug/L	100
72) dibromomethane	11.38	93	81443	44.97	ug/L	98
73) bromodichloromethane	11.52	83	170089	45.27	ug/L	98
74) cis-1,3-dichloropropene	12.01	75	217087	45.43	ug/L	94
76) 4-methyl-2-pentanone	12.12	58	54615	42.37	ug/L	96
77) toluene	12.44	92	333361	46.18	ug/L	100
78) 3-methyl-1-butanol	12.11	70	81506	927.94	ug/L	99
79) trans-1,3-dichloropropene	12.60	75	201012	43.86	ug/L	94
80) ethyl methacrylate	12.64	69	180769	43.85	ug/L	96
81) 1,1,2-trichloroethane	12.82	83	100969	44.46	ug/L	99
82) 2-hexanone	13.03	58	47137	38.10	ug/L	94
84) tetrachloroethene	13.10	166	144189	46.76	ug/L	97
85) 1,3-dichloropropane	13.02	76	206903	46.14	ug/L	99
86) butyl acetate	13.14	56	86945	42.59	ug/L	93
87) 3,3-dimethyl-1-butanol	13.20	57	143068	459.69	ug/L	97
88) dibromochloromethane	13.30	129	134622	44.48	ug/L	96
89) 1,2-dibromoethane	13.47	107	121365	45.72	ug/L	98
90) chlorobenzene	14.02	112	369306	47.27	ug/L	98
91) 1,1,1,2-tetrachloroethane	14.08	131	132018	46.33	ug/L	99
92) ethylbenzene	14.11	91	631456	47.13	ug/L	99
93) m,p-xylene	14.23	106	497521	93.41	ug/L	99
94) o-xylene	14.68	106	248506	46.97	ug/L	99

(#)=qualifier out of range (m)=manual integration

D191681.D MD7671.M

Thu Jan 19 17:57:22 2012

RPT1

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191681.D
 Acq On : 19 Jan 2012 11:45 am
 Sample : bs
 Misc : MS22961,VD7804,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 17:57 2012

Vial: 5
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) styrene	14.68	104	426490	46.66	ug/L	98
96) bromoform	14.92	173	102364	42.44	ug/L	98
98) isopropylbenzene	15.07	105	644704	44.54	ug/L	98
100) bromobenzene	15.48	156	173169	46.46	ug/L	95
101) cyclohexanone	15.17	55	101017	301.72	ug/L	97
102) 1,1,2,2-tetrachloroethane	15.33	83	167616	41.91	ug/L	98
103) trans-1,4-dichloro-2-buten	15.38	53	46739	40.71	ug/L	87
104) 1,2,3-trichloropropane	15.41	110	47400	42.15	ug/L	90
105) n-propylbenzene	15.53	91	780472	46.21	ug/L	99
107) 2-chlorotoluene	15.68	126	156895	44.75	ug/L	99
108) 4-chlorotoluene	15.78	91	488461	43.97	ug/L	99
109) 1,3,5-trimethylbenzene	15.70	105	563703	43.48	ug/L	99
110) tert-butylbenzene	16.09	119	479896	42.46	ug/L	97
111) pentachloroethane	16.14	167	113569	47.01	ug/L	98
112) 1,2,4-trimethylbenzene	16.14	105	588873	45.59	ug/L	99
113) sec-butylbenzene	16.33	105	732912	44.89	ug/L	99
114) 1,3-dichlorobenzene	16.51	146	339408	47.72	ug/L	99
115) p-isopropyltoluene	16.47	119	627120	46.90	ug/L	98
116) 1,4-dichlorobenzene	16.60	146	354275	45.34	ug/L	97
117) Benzyl Chloride	16.71	91	350258	43.67	ug/L	100
119) 1,2-dichlorobenzene	17.03	146	330537	46.17	ug/L	99
120) n-butylbenzene	16.93	92	328328	43.32	ug/L	99
122) 1,2-dibromo-3-chloropropan	17.84	75	27411	40.89	ug/L	99
123) 1,3,5-trichlorobenzene	18.11	180	260969	45.74	ug/L	98
124) 1,2,4-trichlorobenzene	18.80	180	220421	45.04	ug/L	99
125) hexachlorobutadiene	18.98	225	124658	45.51	ug/L #	69
126) naphthalene	19.11	128	414745	45.65	ug/L	99
127) 1,2,3-trichlorobenzene	19.39	180	164571	46.87	ug/L	98
128) hexachloroethane	17.36	119	109256	45.55	ug/L	97

(#) = qualifier out of range (m) = manual integration

D191681.D MD7671.M Thu Jan 19 17:57:22 2012 RPT1

Page 3

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91893.D
 Acq On : 16 Jan 2012 11:14 pm
 Sample : ja97075-1ms
 Misc : MS24379,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 23:39:34 2012

Vial: 28
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	109287	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	313281	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	448630	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	442547	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.06	152	250227	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	125619	48.16	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	96.32%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	136906	47.92	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	95.84%	
74) toluene-d8 (s)	13.53	98	479713	51.47	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	102.94%	
99) 4-bromofluorobenzene (s)	15.98	95	188991	52.74	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	105.48%	

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.72	59	66454	312.37	ug/L	99
3) 1,4-dioxane	12.63	88	29397	1366.03	ug/L	94
5) chlorodifluoromethane	4.65	51	189043	52.19	ug/L	99
6) dichlorodifluoromethane	4.64	85	303615	57.89	ug/L	98
8) chloromethane	5.05	50	256921	51.67	ug/L	99
9) vinyl chloride	5.36	62	250752	54.17	ug/L	99
10) bromomethane	6.12	94	169087	57.20	ug/L	97
11) chloroethane	6.34	64	125413	62.24	ug/L	97
13) trichlorofluoromethane	6.93	101	302184	60.26	ug/L	99
14) Pentane	7.05	43	230444	60.40	ug/L	99
15) ethyl ether	7.40	74	70991	51.77	ug/L	97
16) acrolein	7.62	56	196595	354.90	ug/L	100
18) 1,1-dichloroethene	7.87	96	148131	61.41	ug/L	95
19) acetone	7.91	43	34245	42.57	ug/L	95
20) allyl chloride	8.46	76	85371	56.55	ug/L	97
21) acetonitrile	8.33	40	58218	443.59	ug/L	91
22) iodomethane	8.16	142	298581	58.57	ug/L	99
23) iso-butyl alcohol	11.36	74	13616	481.31	ug/L	91
24) carbon disulfide	8.32	76	455595	54.12	ug/L	97
25) methylene chloride	8.64	84	154034	56.34	ug/L	95
26) methyl acetate	8.45	74	16252	40.01	ug/L	93
27) methyl tert butyl ether	9.07	73	415651	51.82	ug/L	100
28) trans-1,2-dichloroethene	9.09	96	147619	59.98	ug/L	99
29) di-isopropyl ether	9.75	45	427164	58.62	ug/L	96
30) 2-butanone	10.46	72	12216	43.26	ug/L	86
31) 1,1-dichloroethane	9.70	63	250288	59.78	ug/L	99
32) chloroprene	9.84	53	207315	59.12	ug/L	98
33) acrylonitrile	8.97	53	196183	210.09	ug/L	99
34) vinyl acetate	9.71	86	17208	40.59	ug/L	78
35) ethyl tert-butyl ether	10.25	59	424548	56.50	ug/L	98
36) ethyl acetate	10.50	45	14196	38.84	ug/L	58
37) 2,2-dichloropropane	10.52	77	223609	54.56	ug/L	99
38) cis-1,2-dichloroethene	10.48	96	158937	57.20	ug/L	97

(#) = qualifier out of range (m) = manual integration

2B91893.D M2B4096.M

Wed Jan 18 12:38:28 2012

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91893.D
 Acq On : 16 Jan 2012 11:14 pm
 Sample : ja97075-1ms
 Misc : MS24379,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 23:39:34 2012

Vial: 28
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.50	54	141907	403.22	ug/L	98
40) bromochloromethane	10.80	128	79320	54.11	ug/L	97
41) tetrahydrofuran	10.87	42	27677	38.37	ug/L	93
42) chloroform	10.86	83	255019	56.68	ug/L	96
43) t-butyl formate	10.95	59	3549	1.48	ug/L	95
46) freon 113	7.88	151	132038	58.93	ug/L	94
47) methacrylonitrile	10.73	41	61388	44.07	ug/L	96
48) 1,1,1-trichloroethane	11.17	97	251532	60.77	ug/L	99
49) Cyclohexane	11.28	84	216243	59.34	ug/L	81
54) epichlorohydrin	13.12	57	35132	132.02	ug/L	98
55) n-butyl alcohol	12.04	56	133031	1975.86	ug/L	99
56) carbon tetrachloride	11.39	117	223817	56.90	ug/L	98
57) 1,1-dichloropropene	11.36	75	193137	58.96	ug/L	98
58) hexane	9.50	57	155066	62.14	ug/L	100
59) benzene	11.61	78	553730	57.80	ug/L	98
60) 2,2,4-trimethylpentane	11.68	57	464551	56.99	ug/L	98
61) tert-amyl methyl ether	11.67	73	376907	49.04	ug/L	98
62) heptane	11.84	57	91531	59.85	ug/L	99
63) isopropyl acetate	11.54	43	196238	44.05	ug/L	98
64) 1,2-dichloroethane	11.59	62	189661	54.52	ug/L	99
65) trichloroethene	12.30	95	157040	59.60	ug/L	99
66) 2-nitropropane	13.32	46	4823	37.75	ug/L #	89
67) 2-chloroethyl vinyl ether	13.12	63	1186	0.78	ug/L #	45
68) methyl methacrylate	12.55	69	122240	50.61	ug/L	92
69) 1,2-dichloropropane	12.53	63	145805	60.11	ug/L	99
70) dibromomethane	12.66	93	89517	50.15	ug/L	96
71) methylcyclohexane	12.55	83	227377	56.23	ug/L	99
72) bromodichloromethane	12.79	83	202407	57.25	ug/L	100
73) cis-1,3-dichloropropene	13.23	75	238999	58.45	ug/L	97
75) 4-methyl-2-pentanone	13.33	58	47055	45.51	ug/L	98
76) toluene	13.59	92	360425	57.57	ug/L	96
77) 3-methyl-1-butanol	13.32	55	95364	772.35	ug/L	96
78) trans-1,3-dichloropropene	13.74	75	212293	53.86	ug/L	97
79) ethyl methacrylate	13.76	69	160941	51.98	ug/L	99
80) 1,1,2-trichloroethane	13.93	83	107494	52.60	ug/L	99
81) 2-hexanone	14.12	58	40064	47.21	ug/L	99
84) tetrachloroethene	14.15	164	143857	58.16	ug/L	97
85) 1,3-dichloropropane	14.11	76	206044	55.26	ug/L	98
86) butyl acetate	14.20	56	67254	47.59	ug/L	97
87) 3,3-dimethyl-1-butanol	14.26	57	109054	398.88	ug/L	98
88) dibromochloromethane	14.35	129	160916	51.91	ug/L	99
89) 1,2-dibromoethane	14.50	107	138167	52.06	ug/L	96
90) chlorobenzene	14.95	112	415617	56.39	ug/L	96
91) 1,1,1,2-tetrachloroethane	14.99	131	163023	51.78	ug/L	99
92) ethylbenzene	15.01	91	681633	55.96	ug/L	99
93) m,p-xylene	15.11	106	537789	111.04	ug/L	100
94) o-xylene	15.49	106	278495	55.30	ug/L	100
95) styrene	15.49	104	451530	54.26	ug/L	99
96) bromoform	15.71	173	119109	45.87	ug/L	96

(#) = qualifier out of range (m) = manual integration

2B91893.D M2B4096.M

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MS2B

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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91893.D
 Acq On : 16 Jan 2012 11:14 pm
 Sample : ja97075-1ms
 Misc : MS24379,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 23:39:34 2012

Vial: 28
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.81	105	753890	62.19	ug/L	100
100) cyclohexanone	15.93	98	17050	139.01	ug/L	96
101) bromobenzene	16.16	156	208025	60.04	ug/L	94
102) 1,1,2,2-tetrachloroethane	16.04	83	175278	49.18	ug/L	99
103) trans-1,4-dichloro-2-buten	16.08	53	38314	44.15	ug/L	94
104) 1,2,3-trichloropropane	16.12	110	44238	46.30	ug/L	98
105) n-propylbenzene	16.19	91	855049	60.80	ug/L	99
106) 2-chlorotoluene	16.31	126	183926	58.36	ug/L	96
107) 4-chlorotoluene	16.40	91	531076	59.87	ug/L	97
108) 1,3,5-trimethylbenzene	16.33	105	616462	58.81	ug/L	98
109) tert-butylbenzene	16.66	119	576229	60.23	ug/L	99
110) pentachloroethane	16.71	167	133492	54.92	ug/L	98
111) 1,2,4-trimethylbenzene	16.69	105	625700	56.98	ug/L	98
112) sec-butylbenzene	16.86	105	857815	60.26	ug/L	99
113) 1,3-dichlorobenzene	17.01	146	385701	55.96	ug/L	98
114) p-isopropyltoluene	16.97	119	704498	57.72	ug/L	100
115) 1,4-dichlorobenzene	17.09	146	396148	56.37	ug/L	98
116) 1,2-dichlorobenzene	17.47	146	395012	55.65	ug/L	99
117) n-butylbenzene	17.36	92	380178	61.68	ug/L	99
118) 1,2-dibromo-3-chloropropan	18.21	75	33924	40.88	ug/L	96
119) 1,3,5-trichlorobenzene	18.44	180	368864	56.72	ug/L	98
120) 1,2,4-trichlorobenzene	19.08	180	323235	55.94	ug/L	99
121) hexachlorobutadiene	19.22	225	172554	54.46	ug/L	100
122) naphthalene	19.36	128	571647	45.63	ug/L	99
123) 1,2,3-trichlorobenzene	19.60	180	273525	52.94	ug/L	100
124) hexachloroethane	17.75	201	147544	59.73	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91893.D M2B4096.M Wed Jan 18 12:38:28 2012 MS2B

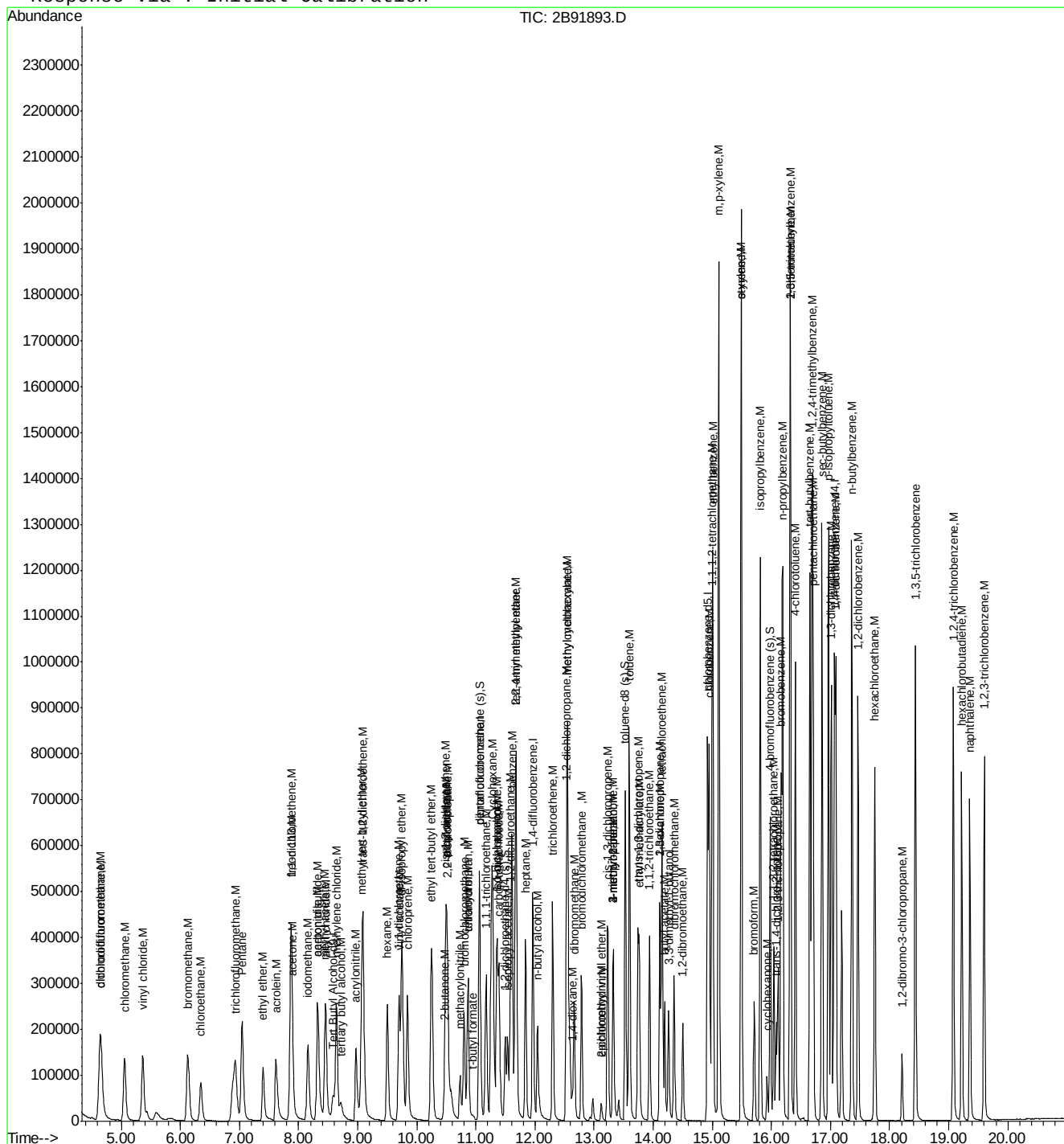
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91893.D
Acq On : 16 Jan 2012 11:14 pm
Sample : ja97075-1ms
Misc : MS24379,V2B4134,W,,,1
MS Integration Params: rteint.p
Quant Time: Jan 16 23:39 2012

Vial: 28
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



2B91893.D M2B4096.M

Wed Jan 18 12:38:29 2012

MS2B

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6.4.1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119498.D
 Acq On : 17 Jan 2012 4:47 pm
 Operator : RobertS
 Sample : JA96920-3MS
 Misc : MS24317,VY5108,5.4,,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 18 16:01:58 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.70	65	56290	500.00	ug/L	0.00
4) pentafluorobenzene	9.86	168	185204	50.00	ug/L	-0.01
49) 1,4-difluorobenzene	10.77	114	247945	50.00	ug/L	-0.01
79) chlorobenzene-d5	13.86	117	196151	50.00	ug/L	-0.01
93) 1,4-dichlorobenzene-d4	16.14	152	94359	50.00	ug/L	-0.01

System Monitoring Compounds

41) dibromofluoromethane (s)	9.95	113	81168	49.39	ug/L	0.00
Spiked Amount 50.000	Range 67 - 131		Recovery =	98.78%		
42) 1,2-dichloroethane-d4 (s)	10.37	65	78568	51.74	ug/L	-0.01
Spiked Amount 50.000	Range 66 - 130		Recovery =	103.48%		
71) toluene-d8 (s)	12.37	98	266628	52.95	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 125		Recovery =	105.90%		
95) 4-bromofluorobenzene (s)	14.99	95	90083	48.78	ug/L	0.00
Spiked Amount 50.000	Range 53 - 142		Recovery =	97.56%		

Target Compounds

						Qvalue
2) 1,4-dioxane	11.50	88	15751	1325.44	ug/L	96
3) tertiary butyl alcohol	7.81	59	37273	248.85	ug/L	97
5) chlorodifluoromethane	4.20	51	45400	35.88	ug/L	97
6) dichlorodifluoromethane	4.16	85	60988	40.54	ug/L	95
7) chloromethane	4.52	50	59220	29.72	ug/L	98
8) vinyl chloride	4.79	62	47437	30.14	ug/L	97
9) bromomethane	5.48	94	36376	34.90	ug/L	99
10) chloroethane	5.66	64	24790	31.79	ug/L	96
12) trichlorofluoromethane	6.11	101	73494	41.83	ug/L	100
13) ethyl ether	6.51	74	35554	43.67	ug/L	95
14) acrolein	6.84	56	87843	380.06	ug/L	99
15) 1,1-dichloroethene	6.96	96	61873	49.12	ug/L	91
16) acetone	7.06	58	18840	88.42	ug/L #	83
17) allyl chloride	7.50	76	37028	45.28	ug/L	94
18) acetonitrile	7.57	40	33318	404.81	ug/L	98
19) iodomethane	7.27	142	135911	48.74	ug/L	97
20) iso-butyl alcohol	10.19	41	23082	496.83	ug/L	93
21) carbon disulfide	7.37	76	208137	47.24	ug/L	98
22) methylene chloride	7.72	84	72780	45.73	ug/L	96
23) methyl acetate	7.50	74	8898	46.33	ug/L	98
24) methyl tert butyl ether	7.98	73	181435	46.30	ug/L	97
25) trans-1,2-dichloroethene	8.06	96	67661	46.58	ug/L	95
26) di-isopropyl ether	8.55	45	153678	31.58	ug/L	98
27) ethyl tert-butyl ether	9.02	59	139023	33.97	ug/L	96
28) 2-butanone	9.35	72	12998	69.46	ug/L	62
29) 1,1-dichloroethane	8.64	63	122999	48.53	ug/L	98
30) chloroprene	8.72	53	64008	38.43	ug/L	94
31) acrylonitrile	8.09	53	92542	236.32	ug/L	97
32) vinyl acetate	8.61	86	7604	40.31	ug/L	97
33) ethyl acetate	9.34	45	7818	45.79	ug/L	72
34) 2,2-dichloropropane	9.35	77	103847	57.15	ug/L	98
35) cis-1,2-dichloroethene	9.37	96	77122	46.97	ug/L	97
36) propionitrile	9.51	54	75027	475.92	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119498.D
 Acq On : 17 Jan 2012 4:47 pm
 Operator : RobertS
 Sample : JA96920-3MS
 Misc : MS24317,VY5108,5.4,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 18 16:01:58 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.70	128	40373	48.16	ug/L	96
38) tetrahydrofuran	9.71	42	19422	43.50	ug/L	97
39) chloroform	9.74	83	126486	50.37	ug/L	98
40) tert-Butyl Formate	9.75	59	13463	56.74	ug/L	90
43) freon 113	6.89	151	37758	36.67	ug/L	94
44) methacrylonitrile	9.66	41	35682	49.08	ug/L	99
45) 1,1,1-trichloroethane	9.96	97	112768	59.49	ug/L	95
46) Cyclohexane	10.00	84	89048	53.42	ug/L #	99
47) 2,2,4-trimethylpentane	10.33	57	156479	35.57	ug/L	95
48) tert-amyl methyl ether	10.40	73	128868	35.36	ug/L	98
50) epichlorohydrin	12.04	57	25135	273.03	ug/L	99
51) n-butyl alcohol	10.93	56	95048	2669.27	ug/L	99
52) carbon tetrachloride	10.15	117	107059	66.29	ug/L	98
53) 1,1-dichloropropene	10.13	75	90410	55.69	ug/L	98
54) hexane	8.29	57	49010	32.19	ug/L	97
56) benzene	10.41	78	255169	48.84	ug/L	100
57) heptane	10.50	57	30817	36.52	ug/L	98
58) isopropyl acetate	10.31	61	20266	44.43	ug/L	98
59) 1,2-dichloroethane	10.46	62	90143	57.34	ug/L	99
60) trichloroethene	11.10	95	73426	52.64	ug/L	99
62) 2-nitropropane	11.92	41	16278	62.96	ug/L #	73
63) 2-chloroethyl vinyl ether	11.90	63	16964	102.07	ug/L	97
64) methyl methacrylate	11.36	69	39011	51.54	ug/L	95
65) 1,2-dichloropropane	11.39	63	66848	48.32	ug/L	88
66) methylcyclohexane	11.28	83	60786	33.19	ug/L	97
68) dibromomethane	11.56	93	42013	53.00	ug/L	98
69) bromodichloromethane	11.68	83	97700	55.23	ug/L	100
70) cis-1,3-dichloropropene	12.11	75	110886	51.11	ug/L	96
72) 4-methyl-2-pentanone	12.20	58	22685	51.04	ug/L	92
73) toluene	12.44	92	150992	48.99	ug/L	99
74) 3-methyl-1-butanol	12.23	70	32153	1138.48	ug/L	98
75) trans-1,3-dichloropropene	12.66	75	98415	54.99	ug/L	95
76) ethyl methacrylate	12.61	69	72472	55.34	ug/L	96
77) 1,1,2-trichloroethane	12.88	83	45912	48.71	ug/L	98
78) 2-hexanone	13.03	58	29415	62.93	ug/L	97
80) tetrachloroethene	13.00	166	86110	45.45	ug/L	97
81) 1,3-dichloropropane	13.06	76	86316	50.25	ug/L	98
82) butyl acetate	13.07	56	28701	43.38	ug/L	95
83) dibromochloromethane	13.31	129	78429	56.25	ug/L	95
84) 1,2-dibromoethane	13.46	107	59006	52.76	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.20	57	51526	560.17	ug/L	97
86) chlorobenzene	13.89	112	170189	48.86	ug/L	96
87) 1,1,1,2-tetrachloroethane	13.95	131	69657	52.90	ug/L	97
88) ethylbenzene	13.92	91	271053	51.74	ug/L	98
89) m,p-xylene	14.02	106	203000	100.09	ug/L	94
90) o-xylene	14.44	106	104061	49.59	ug/L	92
91) styrene	14.46	104	171197	51.59	ug/L	96
92) bromoform	14.75	173	56663	57.84	ug/L	99
94) isopropylbenzene	14.77	105	270639	51.39	ug/L	98
96) bromobenzene	15.19	156	79996	48.06	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119498.D
 Acq On : 17 Jan 2012 4:47 pm
 Operator : RobertS
 Sample : JA96920-3MS
 Misc : MS24317,VY5108,5.4,,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 18 16:01:58 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

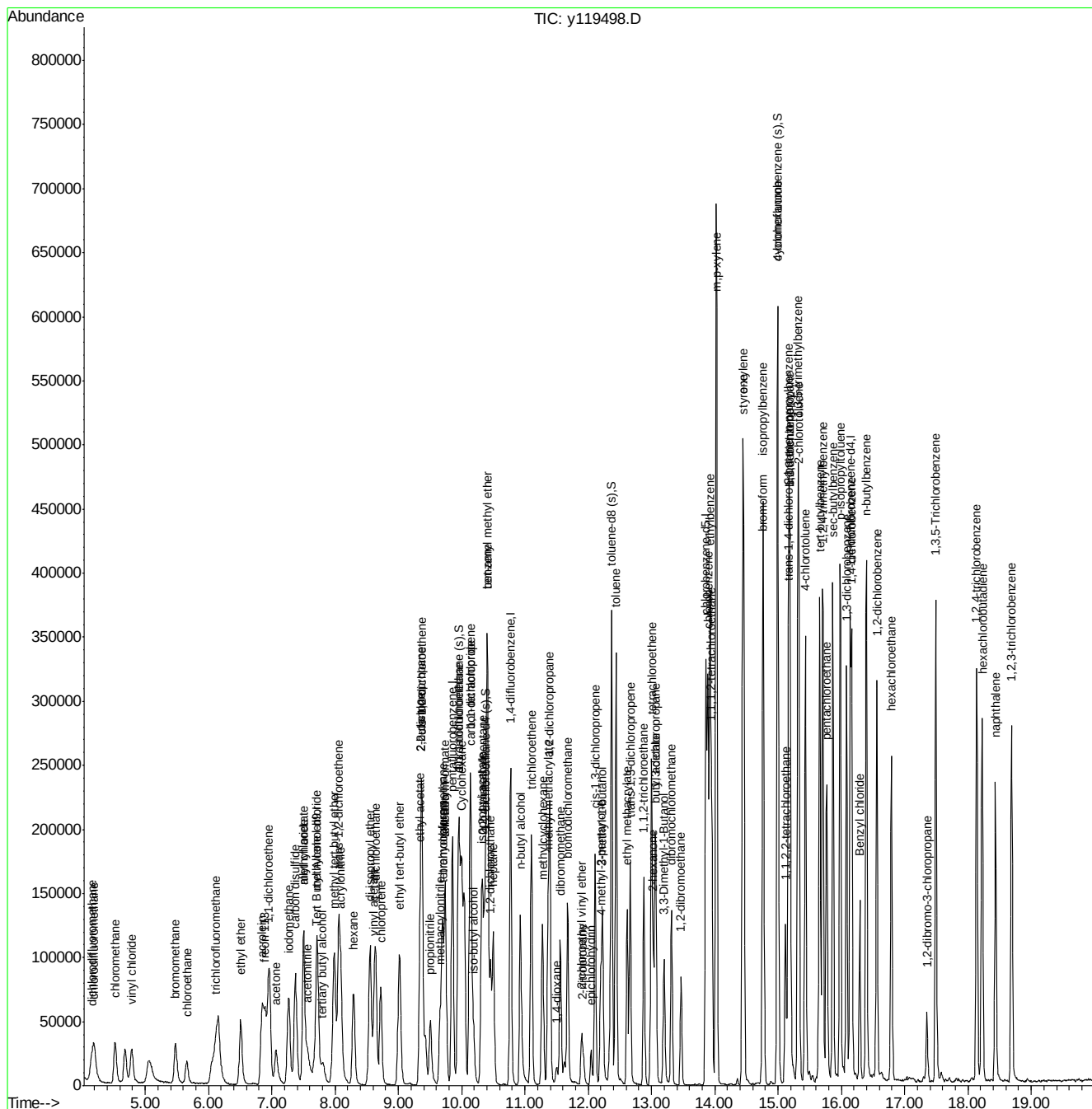
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) cyclohexanone	14.99	55	137159	604.37	ug/L	97
98) 1,1,2,2-tetrachloroethane	15.12	83	63439	48.22	ug/L	98
99) trans-1,4-dichloro-2-buten	15.15	53	17657	62.72	ug/L	93
100) 1,2,3-trichloropropane	15.19	110	16680	50.85	ug/L	99
101) n-propylbenzene	15.17	91	305160	50.58	ug/L	99
103) 2-chlorotoluene	15.33	126	65951	47.82	ug/L	93
104) 4-chlorotoluene	15.43	91	191195	49.93	ug/L	98
105) 1,3,5-trimethylbenzene	15.31	105	221893	53.28	ug/L	96
106) tert-butylbenzene	15.66	119	194794	52.40	ug/L	97
107) pentachloroethane	15.77	167	53086	66.07	ug/L	99
108) 1,2,4-trimethylbenzene	15.70	105	217648	50.18	ug/L	96
109) sec-butylbenzene	15.87	105	284092	52.57	ug/L	99
110) 1,3-dichlorobenzene	16.08	146	141532	49.19	ug/L	96
111) p-isopropyltoluene	15.98	119	232868	52.71	ug/L	96
112) 1,4-dichlorobenzene	16.16	146	139174	48.16	ug/L	99
113) 1,2-dichlorobenzene	16.56	146	135282	48.65	ug/L	99
114) n-butylbenzene	16.39	92	119902	53.89	ug/L	96
116) 1,2-dibromo-3-chloropropan	17.35	75	13194	61.08	ug/L	86
117) 1,3,5-Trichlorobenzene	17.49	180	131453	55.09	ug/L	99
118) 1,2,4-trichlorobenzene	18.14	180	115839	55.04	ug/L	98
120) hexachlorobutadiene	18.22	225	73011	63.24	ug/L	97
121) naphthalene	18.43	128	196917	50.86	ug/L	99
122) 1,2,3-trichlorobenzene	18.69	180	105434	54.90	ug/L	98
123) hexachloroethane	16.79	119	54026	58.80	ug/L	97
124) Benzyl chloride	16.29	91	99239	51.15	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

```
Data Path   : C:\MSDCHEM\1\DATA\  
Data File  : y119498.D  
Acq On     : 17 Jan 2012    4:47 pm  
Operator   : Roberts  
Sample     : JA96920-3MS  
Misc       : MS24317,VY5108,5.4,,,,,1  
ALS Vial   : 11    Sample Multiplier: 1
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Quant Time: Jan 18 16:01:58 2012
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Dec 12 12:09:02 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187217.D
 Acq On : 18 Jan 2012 11:01 pm
 Operator : dipap
 Sample : ja97134-2ms
 Misc : MS24397,VE8236,10.0,,100,10,1
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 19 13:26:30 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.732	65	105272	500.00	ug/L	0.00
5) pentafluorobenzene	9.948	168	221473	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.868	114	304133	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.193	117	284368	50.00	ug/L	0.00
111) 1,4-dichlorobenzene-d4	16.766	152	163391	50.00	ug/L	0.00

System Monitoring Compounds

57) dibromofluoromethane (s)	9.995	113	112116	47.51	ug/L	-0.01
Spiked Amount	50.000	Range 77 - 120	Recovery	=	95.02%	
58) 1,2-dichloroethane-d4 (s)	10.414	65	118536	41.21	ug/L	-0.01
Spiked Amount	50.000	Range 70 - 127	Recovery	=	82.42%	
86) toluene-d8 (s)	12.568	98	425391	46.71	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	93.42%	
113) 4-bromofluorobenzene (s)	15.464	95	173026	42.05	ug/L	-0.01
Spiked Amount	50.000	Range 76 - 118	Recovery	=	84.10%	

Target Compounds

						Qvalue
2) 1,4-dioxane	11.579	88	31203	1530.15	ug/L	# 1
3) tertiary butyl alcohol	7.852	59	80085	281.40	ug/L	# 35
11) chlorodifluoromethane	4.339	51	145875	45.49	ug/L	99
12) dichlorodifluoromethane	4.323	85	209086	56.35	ug/L	96
15) chloromethane	4.689	50	250998	47.19	ug/L	99
16) vinyl chloride	4.961	62	222683	53.31	ug/L	98
18) bromomethane	5.599	94	113179	46.40	ug/L	98
19) chloroethane	5.782	64	102007	47.14	ug/L	99
21) trichlorofluoromethane	6.289	101	226496	57.43	ug/L	96
22) pentane	6.367	43	227034	43.99	ug/L	100
23) ethyl ether	6.686	74	73327	42.39	ug/L	97
27) acrolein	6.900	56	294212	418.96	ug/L	100
28) 1,1-dichloroethene	7.115	96	102088	42.25	ug/L	95
30) acetone	7.109	58	14800	46.76	ug/L	# 83
31) allyl chloride	7.617	41	205962	38.85	ug/L	99
32) acetonitrile	7.512	40	85614	422.14	ug/L	99
33) iodomethane	7.387	142	207843	47.18	ug/L	98
35) carbon disulfide	7.543	76	285059	34.17	ug/L	97
36) methylene chloride	7.794	84	139418	47.78	ug/L	92
37) methyl acetate	7.580	43	123295	46.07	ug/L	96
38) methyl tert butyl ether	8.145	73	383017	44.16	ug/L	# 52
39) trans-1,2-dichloroethene	8.186	96	122484	47.42	ug/L	93
40) di-isopropyl ether	8.735	45	439311	42.87	ug/L	93
41) ethyl tert-butyl ether	9.190	59	411305	45.49	ug/L	82
42) 2-butanone	9.389	72	16872	44.21	ug/L	# 54
43) 1,1-dichloroethane	8.725	63	226297	47.27	ug/L	99
44) chloroprene	8.850	53	193505	49.66	ug/L	95
45) acrylonitrile	8.066	53	277245	219.34	ug/L	97
46) vinyl acetate	8.699	86	23079	46.40	ug/L	70
47) ethyl acetate	9.420	45	19208	35.03	ug/L	# 83
48) 2,2-dichloropropane	9.473	77	148719	43.07	ug/L	99
49) cis-1,2-dichloroethene	9.452	96	140469	48.04	ug/L	94
50) methyl acrylate	9.499	55	122551	42.80	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187217.D
 Acq On : 18 Jan 2012 11:01 pm
 Operator : dipap
 Sample : ja97134-2ms
 Misc : MS24397,VE8236,10.0,,100,10,1
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 19 13:26:30 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.446	54	199644	410.10	ug/L	100
52) bromochloromethane	9.755	128	75603	53.82	ug/L	88
53) tetrahydrofuran	9.807	42	50184	38.75	ug/L	96
54) chloroform	9.807	83	232911	50.79	ug/L	98
55) t-butyl formate	9.849	59	112013	43.19	ug/L	93
56) Iso-octane	10.560	57	2058830	236.22	ug/L	93
59) freon 113	7.109	151	105068	54.66	ug/L	93
60) methacrylonitrile	9.650	41	89350	44.29	ug/L	96
61) 1,1,1-trichloroethane	10.089	97	190531	51.46	ug/L	98
62) tert-amyl methyl ether	10.560	73	360320	43.84	ug/L	69
66) epichlorohydrin	12.107	57	59733	186.37	ug/L	91
67) n-butyl alcohol	10.947	56	205754	2186.89	ug/L	98
69) carbon tetrachloride	10.309	117	173253	59.45	ug/L	97
70) 1,1-dichloropropene	10.267	75	164792	51.77	ug/L	96
71) hexane	8.511	57	220017	61.92	ug/L	99
72) benzene	10.518	78	498323	51.53	ug/L	98
73) heptane	10.712	57	180705	86.76	ug/L	89
74) isopropyl acetate	10.408	43	239772	41.13	ug/L	97
75) 1,2-dichloroethane	10.502	62	159151	49.68	ug/L	98
77) trichloroethene	11.234	95	135477	55.53	ug/L	93
78) 2-nitropropane	11.951	46	1258	66.79	ug/L #	1
79) 2-chloroethyl vinyl ether	11.992	63	363063	286.30	ug/L	98
80) methylcyclohexane	11.491	83	324814	85.32	ug/L	89
81) methyl methacrylate	11.470	69	181814	60.23	ug/L	99
82) 1,2-dichloropropane	11.475	63	132616	48.10	ug/L	99
83) dibromomethane	11.637	93	83207	51.68	ug/L	92
84) bromodichloromethane	11.762	83	174827	49.04	ug/L	99
85) cis-1,3-dichloropropene	12.238	75	205296	45.99	ug/L	91
87) 4-methyl-2-pentanone	12.317	58	55798	43.43	ug/L #	83
88) toluene	12.641	92	331475	53.89	ug/L	100
89) 3-methyl-1-butanol	12.327	55	118669	801.72	ug/L	95
90) trans-1,3-dichloropropene	12.818	75	193034	48.55	ug/L	92
91) ethyl methacrylate	12.813	69	178040	44.89	ug/L	95
92) 1,1,2-trichloroethane	13.049	83	114806	53.01	ug/L	89
93) 2-hexanone	13.221	58	55184	46.37	ug/L	90
96) tetrachloroethene	13.289	166	168520	62.07	ug/L	100
97) 1,3-dichloropropane	13.247	76	206351	50.60	ug/L	98
98) butyl acetate	13.310	56	167768	77.86	ug/L #	79
99) 3,3-dimethyl-1-butanol	13.409	57	125445	377.11	ug/L	87
100) dibromochloromethane	13.540	129	152439	53.31	ug/L	96
101) 1,2-dibromoethane	13.712	107	129585	50.40	ug/L	95
103) chlorobenzene	14.230	112	366542	54.96	ug/L	97
104) 1,1,1,2-tetrachloroethane	14.288	131	139813	56.01	ug/L	100
105) ethylbenzene	14.288	91	602664	54.19	ug/L	100
106) m,p-xylene	14.403	106	499510	114.74	ug/L	95
107) o-xylene	14.868	106	246438	54.82	ug/L	98
109) styrene	14.873	104	401166	52.47	ug/L	99
110) bromoform	15.155	173	117342	54.43	ug/L	100
112) isopropylbenzene	15.244	105	641310	50.00	ug/L	98
114) bromobenzene	15.689	156	176554	50.11	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187217.D
 Acq On : 18 Jan 2012 11:01 pm
 Operator : dipap
 Sample : ja97134-2ms
 Misc : MS24397,VE8236,10.0,,100,10,1
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 19 13:26:30 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) 1,1,2,2-tetrachloroethane	15.547	83	182198	44.09	ug/L	99
116) trans-1,4-dichloro-2-b...	15.589	53	47697	52.25	ug/L	98
117) 1,2,3-trichloropropane	15.631	110	53758	51.66	ug/L	89
118) n-propylbenzene	15.699	91	830497	57.23	ug/L	98
120) 2-chlorotoluene	15.866	126	155742	50.12	ug/L	94
121) 4-chlorotoluene	15.971	91	447097	47.43	ug/L	98
122) 1,3,5-trimethylbenzene	15.861	105	522819	49.82	ug/L	98
123) tert-butylbenzene	16.259	119	491552	51.53	ug/L	97
124) pentachloroethane	16.342	167	106874	47.99	ug/L	99
125) 1,2,4-trimethylbenzene	16.300	105	565797	52.24	ug/L	100
126) sec-butylbenzene	16.494	105	744306	53.61	ug/L	99
127) 1,3-dichlorobenzene	16.703	146	327993	51.55	ug/L	98
128) p-isopropyltoluene	16.624	119	580562	50.87	ug/L	100
129) 1,4-dichlorobenzene	16.792	146	333231	53.23	ug/L	98
130) benzyl chloride	16.902	91	265446	43.02	ug/L	100
132) 1,2-dichlorobenzene	17.226	146	313195	50.04	ug/L	97
133) n-butylbenzene	17.079	92	358063	61.98	ug/L	96
135) 1,2-dibromo-3-chloropr...	18.046	75	27074	39.07	ug/L	89
136) 1,3,5-trichlorobenzene	18.287	180	264718	53.48	ug/L	99
137) 1,2,4-trichlorobenzene	19.003	180	220792	56.61	ug/L	100
138) hexachlorobutadiene	19.144	225	143548	63.10	ug/L	100
139) naphthalene	19.317	128	493863	57.97	ug/L	98
141) 1,2,3-trichlorobenzene	19.594	180	202593	60.99	ug/L	99
142) hexachloroethane	17.539	119	87859	41.32	ug/L #	74
143) Cyclohexane	10.199	84	191001	49.07	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187218.D
 Acq On : 18 Jan 2012 11:31 pm
 Operator : dipap
 Sample : ja97134-2msd
 Misc : MS24397,VE8236,10.0,,100,10,1
 ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 19 13:27:21 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.732	65	104245	500.00	ug/L	0.00
5) pentafluorobenzene	9.949	168	225004	50.00	ug/L	0.00
63) 1,4-difluorobenzene	10.869	114	310731	50.00	ug/L	0.00
94) chlorobenzene-d5	14.194	117	290714	50.00	ug/L	0.00
111) 1,4-dichlorobenzene-d4	16.766	152	164342	50.00	ug/L	0.00

System Monitoring Compounds

57) dibromofluoromethane (s)	9.996	113	114810	47.89	ug/L	0.00
Spiked Amount	50.000	Range	77 - 120	Recovery	=	95.78%
58) 1,2-dichloroethane-d4 (s)	10.414	65	121339	41.52	ug/L	0.00
Spiked Amount	50.000	Range	70 - 127	Recovery	=	83.04%
86) toluene-d8 (s)	12.568	98	432144	46.45	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	92.90%
113) 4-bromofluorobenzene (s)	15.465	95	169787	41.02	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	82.04%

Target Compounds

Qvalue

2) 1,4-dioxane	11.585	88	32985	1633.47	ug/L	#	18
3) tertiary butyl alcohol	7.847	59	80615	286.05	ug/L	#	1
11) chlorodifluoromethane	4.339	51	142543	43.75	ug/L		99
12) dichlorodifluoromethane	4.324	85	202311	53.67	ug/L		96
15) chloromethane	4.690	50	233189	43.15	ug/L		99
16) vinyl chloride	4.967	62	216609	51.04	ug/L		99
18) bromomethane	5.599	94	108860	43.93	ug/L		94
19) chloroethane	5.777	64	97267	44.25	ug/L		94
21) trichlorofluoromethane	6.300	101	217435	54.27	ug/L		95
22) pentane	6.368	43	223826	42.69	ug/L		99
23) ethyl ether	6.692	74	73349	41.74	ug/L		94
27) acrolein	6.901	56	297727	417.32	ug/L		98
28) 1,1-dichloroethene	7.121	96	101139	41.20	ug/L		86
30) acetone	7.110	58	14438	44.90	ug/L	#	79
31) allyl chloride	7.617	41	194744	36.16	ug/L		94
32) acetonitrile	7.508	40	83361	404.86	ug/L		98
33) iodomethane	7.393	142	204790	45.76	ug/L		99
35) carbon disulfide	7.544	76	281514	33.21	ug/L		98
36) methylene chloride	7.795	84	138328	46.66	ug/L		90
37) methyl acetate	7.586	43	126815	46.64	ug/L		96
38) methyl tert butyl ether	8.151	73	386695	43.89	ug/L	#	55
39) trans-1,2-dichloroethene	8.187	96	121009	46.12	ug/L		93
40) di-isopropyl ether	8.736	45	435070	41.79	ug/L		94
41) ethyl tert-butyl ether	9.191	59	413357	45.00	ug/L		84
42) 2-butanone	9.384	72	17676	45.59	ug/L	#	51
43) 1,1-dichloroethane	8.726	63	227697	46.82	ug/L		98
44) chloroprene	8.851	53	192059	48.52	ug/L		93
45) acrylonitrile	8.067	53	281521	219.23	ug/L		98
46) vinyl acetate	8.694	86	23383	46.28	ug/L		70
47) ethyl acetate	9.416	45	19423	34.87	ug/L		88
48) 2,2-dichloropropane	9.473	77	147016	41.91	ug/L		98
49) cis-1,2-dichloroethene	9.452	96	141632	47.68	ug/L		95
50) methyl acrylate	9.499	55	121403	41.74	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187218.D
 Acq On : 18 Jan 2012 11:31 pm
 Operator : dipap
 Sample : ja97134-2msd
 Misc : MS24397,VE8236,10.0,,100,10,1
 ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 19 13:27:21 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.447	54	203988	412.44	ug/L	96
52) bromochloromethane	9.756	128	76634	53.70	ug/L #	86
53) tetrahydrofuran	9.813	42	52341	39.79	ug/L	97
54) chloroform	9.803	83	232536	49.91	ug/L	97
55) t-butyl formate	9.850	59	115475	43.83	ug/L	93
56) Iso-octane	10.561	57	2061794	232.85	ug/L	93
59) freon 113	7.105	151	103086	52.78	ug/L	98
60) methacrylonitrile	9.656	41	91485	44.64	ug/L	96
61) 1,1,1-trichloroethane	10.095	97	187800	49.93	ug/L	97
62) tert-amyl methyl ether	10.561	73	362435	43.41	ug/L	69
66) epichlorohydrin	12.108	57	62406	190.58	ug/L	92
67) n-butyl alcohol	10.948	56	210763	2192.57	ug/L	97
69) carbon tetrachloride	10.310	117	169103	56.79	ug/L	98
70) 1,1-dichloropropene	10.268	75	167110	51.38	ug/L	97
71) hexane	8.511	57	223678	61.61	ug/L	98
72) benzene	10.519	78	498192	50.42	ug/L	98
73) heptane	10.712	57	154898	72.79	ug/L	90
74) isopropyl acetate	10.404	43	246446	41.38	ug/L	96
75) 1,2-dichloroethane	10.503	62	159208	48.65	ug/L	97
77) trichloroethene	11.235	95	136920	54.93	ug/L	94
78) 2-nitropropane	11.946	46	1239	64.38	ug/L #	1
79) 2-chloroethyl vinyl ether	11.993	63	373478	288.26	ug/L	98
80) methylcyclohexane	11.491	83	321248	82.59	ug/L	88
81) methyl methacrylate	11.470	69	182643	59.22	ug/L	96
82) 1,2-dichloropropane	11.476	63	133864	47.53	ug/L	99
83) dibromomethane	11.638	93	83661	50.86	ug/L	93
84) bromodichloromethane	11.763	83	176289	48.40	ug/L	97
85) cis-1,3-dichloropropene	12.239	75	207480	45.49	ug/L	92
87) 4-methyl-2-pentanone	12.323	58	59425	45.27	ug/L #	76
88) toluene	12.641	92	330336	52.56	ug/L	99
89) 3-methyl-1-butanol	12.328	55	140885	931.60	ug/L	82
90) trans-1,3-dichloropropene	12.819	75	196852	48.46	ug/L	91
91) ethyl methacrylate	12.814	69	182746	45.10	ug/L	94
92) 1,1,2-trichloroethane	13.049	83	118745	53.66	ug/L	89
93) 2-hexanone	13.222	58	55446	45.60	ug/L	86
96) tetrachloroethene	13.290	166	168773	60.80	ug/L	99
97) 1,3-dichloropropane	13.248	76	206687	49.57	ug/L	99
98) butyl acetate	13.311	56	171989	78.08	ug/L #	79
99) 3,3-dimethyl-1-butanol	13.405	57	123280	362.51	ug/L #	78
100) dibromochloromethane	13.541	129	153677	52.57	ug/L	99
101) 1,2-dibromoethane	13.708	107	131041	49.85	ug/L	92
103) chlorobenzene	14.231	112	369695	54.23	ug/L	96
104) 1,1,1,2-tetrachloroethane	14.288	131	138741	54.36	ug/L	97
105) ethylbenzene	14.288	91	604430	53.17	ug/L	99
106) m,p-xylene	14.409	106	499744	112.29	ug/L	95
107) o-xylene	14.869	106	247141	53.77	ug/L	99
109) styrene	14.874	104	403632	51.64	ug/L	98
110) bromoform	15.156	173	117743	53.43	ug/L	99
112) isopropylbenzene	15.245	105	638629	49.50	ug/L	98
114) bromobenzene	15.689	156	177860	50.19	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187218.D
 Acq On : 18 Jan 2012 11:31 pm
 Operator : dipap
 Sample : ja97134-2msd
 Misc : MS24397,VE8236,10.0,,100,10,1
 ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 19 13:27:21 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

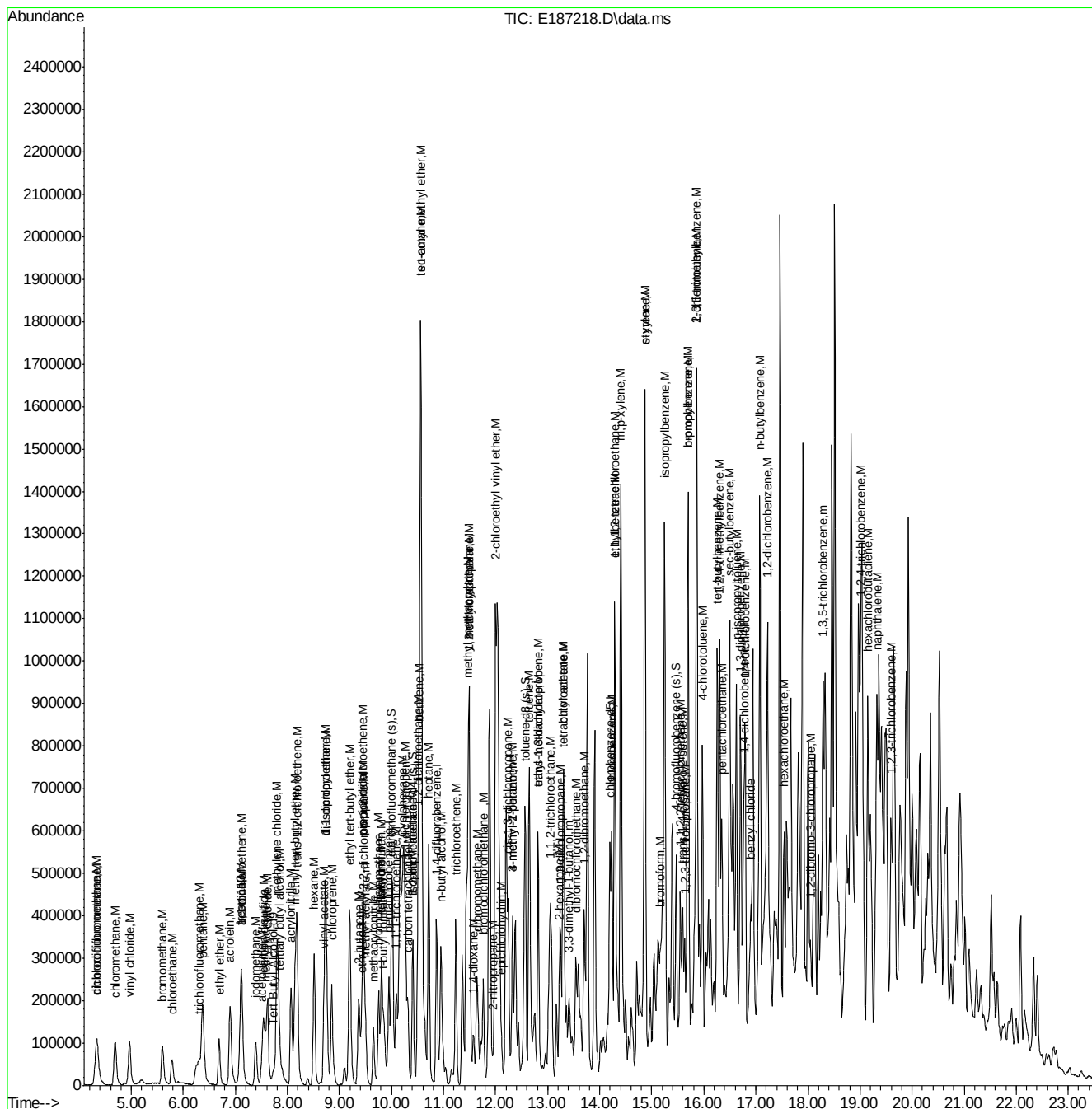
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) 1,1,2,2-tetrachloroethane	15.548	83	190317	45.78	ug/L	97
116) trans-1,4-dichloro-2-b...	15.590	53	46755	50.92	ug/L	98
117) 1,2,3-trichloropropane	15.637	110	54702	52.26	ug/L #	91
118) n-propylbenzene	15.700	91	830152	56.87	ug/L	99
120) 2-chlorotoluene	15.867	126	156812	50.17	ug/L	94
121) 4-chlorotoluene	15.972	91	450265	47.49	ug/L	98
122) 1,3,5-trimethylbenzene	15.862	105	523462	49.59	ug/L	99
123) tert-butylbenzene	16.254	119	491262	51.21	ug/L	98
124) pentachloroethane	16.343	167	106874	47.72	ug/L	99
125) 1,2,4-trimethylbenzene	16.301	105	569316	52.26	ug/L	99
126) sec-butylbenzene	16.494	105	739494	52.95	ug/L	99
127) 1,3-dichlorobenzene	16.704	146	328628	51.35	ug/L	98
128) p-isopropyltoluene	16.625	119	584236	50.90	ug/L	99
129) 1,4-dichlorobenzene	16.792	146	334890	53.19	ug/L	98
130) benzyl chloride	16.902	91	315417	50.83	ug/L	93
132) 1,2-dichlorobenzene	17.226	146	314286	49.92	ug/L	98
133) n-butylbenzene	17.080	92	357792	61.57	ug/L	97
135) 1,2-dibromo-3-chloropr...	18.052	75	26212	37.60	ug/L	85
136) 1,3,5-trichlorobenzene	18.288	180	261953	52.62	ug/L	96
137) 1,2,4-trichlorobenzene	19.004	180	222348	56.67	ug/L	99
138) hexachlorobutadiene	19.145	225	143890	62.88	ug/L	99
139) naphthalene	19.318	128	491426	57.35	ug/L	98
141) 1,2,3-trichlorobenzene	19.589	180	203318	60.85	ug/L	99
142) hexachloroethane	17.540	119	86491	40.44	ug/L #	75
143) Cyclohexane	10.200	84	188903	48.25	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E187218.D
Acq On : 18 Jan 2012 11:31 pm
Operator : dipap
Sample : ja97134-2msd
Misc : MS24397,VE8236,10.0,,100,10,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 19 13:27:21 2012
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 29 09:15:39 2011
Response via : Initial Calibration



ME8147.M Thu Jan 19 13:27:27 2012 RPT1

Page: 4

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191688.D
 Acq On : 19 Jan 2012 3:17 pm
 Sample : ja96938-12ms
 Misc : MS24318,VD7804,5.3,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 18:10 2012

Vial: 12
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.52	65	117594	500.00	ug/L	0.02
4) pentafluorobenzene	9.75	168	241322	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	376905	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	350640	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.57	152	202684	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.75	113	119710	45.46	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	90.92%
45) 1,2-dichloroethane-d4 (s)	10.16	65	131727	41.62	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	83.24%
75) toluene-d8 (s)	12.37	98	498329	49.52	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	99.04%
99) 4-bromofluorobenzene (s)	15.27	95	196940	42.75	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	85.50%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.36	88	45523	1633.09	ug/L	# 90
3) tertiary butyl alcohol	7.64	59	81038	265.16	ug/L	97
6) chlorodifluoromethane	4.24	51	114248	36.36	ug/L	98
7) dichlorodifluoromethane	4.24	85	163882	45.83	ug/L	98
8) chloromethane	4.56	50	194582	51.06	ug/L	98
9) vinyl chloride	4.82	62	177729	48.01	ug/L	100
10) bromomethane	5.40	94	31613	13.42	ug/L	96
11) chloroethane	5.58	64	53400	24.79	ug/L	96
13) trichlorofluoromethane	6.11	101	188885	44.12	ug/L	99
14) pentane	6.20	43	218897	36.77	ug/L	100
15) ethyl ether	6.51	74	86683	47.71	ug/L	95
16) acrolein	6.67	56	303844	449.80	ug/L	100
18) 1,1-dichloroethene	6.91	96	116583	40.64	ug/L	95
19) acetone	6.90	58	16170	52.43	ug/L	90
20) allyl chloride	7.40	41	209130	34.32	ug/L	97
21) acetonitrile	7.26	40	98118	542.47	ug/L	97
23) iodomethane	7.15	142	213862	44.57	ug/L	98
24) iso-butyl alcohol	9.98	74	6961	450.16	ug/L	95
25) carbon disulfide	7.31	76	403323	43.22	ug/L	97
26) methylene chloride	7.55	84	147616	44.65	ug/L	98
27) methyl acetate	7.38	43	111650	43.60	ug/L	100
28) methyl tert butyl ether	7.96	73	412768	43.85	ug/L	99
29) trans-1,2-dichloroethene	7.97	96	130299	42.97	ug/L	95
30) di-isopropyl ether	8.56	45	450336	46.07	ug/L	98
31) ethyl tert-butyl ether	9.02	59	436911	46.37	ug/L	99
32) 2-butanone	9.15	72	18910	49.37	ug/L	96
33) 1,1-dichloroethane	8.49	63	229357	43.07	ug/L	99
34) chloroprene	8.63	53	186748	42.44	ug/L	95
35) acrylonitrile	7.81	53	281991	231.69	ug/L	99
36) vinyl acetate	8.50	86	27954	41.29	ug/L	91
37) ethyl acetate	9.22	45	16593	43.83	ug/L	# 42
38) 2,2-dichloropropane	9.24	77	184104	40.54	ug/L	99
39) cis-1,2-dichloroethene	9.21	96	144609	44.27	ug/L	96

(#) = qualifier out of range (m) = manual integration

D191688.D MD7671.M Thu Jan 19 18:10:50 2012 RPT1

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191688.D
 Acq On : 19 Jan 2012 3:17 pm
 Sample : ja96938-12ms
 Misc : MS24318,VD7804,5.3,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 18:10 2012

Vial: 12
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.18	54	218793	464.51	ug/L	99
41) bromochloromethane	9.49	128	71429	45.96	ug/L	97
42) tetrahydrofuran	9.59	72	19068	42.74	ug/L	89
43) chloroform	9.56	83	213551	43.63	ug/L	99
46) freon 113	6.93	151	93020	41.28	ug/L	93
47) methacrylonitrile	9.41	41	75814	42.50	ug/L	95
48) t-butyl formate	9.64	59	119597	44.21	ug/L	97
49) 1,1,1-trichloroethane	9.87	97	177665	40.42	ug/L	98
50) tert-amyl methyl ether	10.37	73	409185	44.90	ug/L	99
52) cyclohexane	10.00	84	194921	43.36	ug/L #	100
54) 2,2,4-trimethylpentane	10.40	57	498510	43.90	ug/L	98
55) epichlorohydrin	11.87	57	78518	232.21	ug/L	99
56) n-butyl alcohol	10.72	56	227901	2505.90	ug/L	96
57) carbon tetrachloride	10.10	117	151198	40.94	ug/L	98
58) 1,1-dichloropropene	10.05	75	168478	42.64	ug/L	99
59) hexane	8.34	57	164861	40.93	ug/L	99
60) benzene	10.29	78	579056	50.22	ug/L	99
61) heptane	10.56	57	97280	44.31	ug/L	99
62) isopropyl acetate	10.22	43	240487	43.67	ug/L	98
63) 1,2-dichloroethane	10.25	62	168383	43.45	ug/L	99
65) trichloroethene	11.02	95	127299	43.07	ug/L	97
66) 2-nitropropane	11.70	43	35270	37.08	ug/L	99
67) 2-chloroethyl vinyl ether	11.78	63	478347	254.34	ug/L	100
68) methyl methacrylate	11.28	100	39067	44.28	ug/L	99
70) 1,2-dichloropropane	11.25	63	142605	47.00	ug/L	94
71) methylcyclohexane	11.30	83	216326	42.56	ug/L	98
72) dibromomethane	11.38	93	82913	45.81	ug/L	96
73) bromodichloromethane	11.52	83	173809	46.30	ug/L	99
74) cis-1,3-dichloropropene	12.02	75	231500	48.48	ug/L	96
76) 4-methyl-2-pentanone	12.12	58	58308	45.27	ug/L	98
77) toluene	12.44	92	590608	81.88	ug/L	100
78) 3-methyl-1-butanol	12.11	70	89426	1018.85	ug/L	98
79) trans-1,3-dichloropropene	12.59	75	212732	46.45	ug/L	97
80) ethyl methacrylate	12.64	69	194397	47.19	ug/L	98
81) 1,1,2-trichloroethane	12.82	83	105859	46.65	ug/L	99
82) 2-hexanone	13.03	58	58084	46.98	ug/L	97
84) tetrachloroethene	13.10	166	141434	45.51	ug/L	95
85) 1,3-dichloropropane	13.02	76	215926	47.78	ug/L	99
86) butyl acetate	13.14	56	95032	45.97	ug/L	93
87) 3,3-dimethyl-1-butanol	13.21	57	159111	507.23	ug/L	97
88) dibromochloromethane	13.30	129	140393	46.02	ug/L	97
89) 1,2-dibromoethane	13.47	107	128892	48.17	ug/L	99
90) chlorobenzene	14.02	112	371001	47.11	ug/L	99
91) 1,1,1,2-tetrachloroethane	14.08	131	133947	46.64	ug/L	99
92) ethylbenzene	14.11	91	797438	59.06	ug/L	99
93) m,p-xylene	14.23	106	552569	102.93	ug/L	98
94) o-xylene	14.68	106	278023	52.14	ug/L	100
95) styrene	14.68	104	438506	47.60	ug/L	98
96) bromoform	14.92	173	105904	43.52	ug/L	99

(#)=qualifier out of range (m)=manual integration

D191688.D MD7671.M Thu Jan 19 18:10:50 2012 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191688.D
Acq On : 19 Jan 2012 3:17 pm
Sample : ja96938-12ms
Misc : MS24318,VD7804,5.3,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Jan 19 18:10 2012

Vial: 12
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Wed Jan 11 16:25:16 2012
Response via : Initial Calibration
DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.07	105	649738	45.10	ug/L	99
100) bromobenzene	15.48	156	179093	48.28	ug/L	96
101) cyclohexanone	15.17	55	211435	634.53	ug/L	96
102) 1,1,2,2-tetrachloroethane	15.33	83	180739	45.40	ug/L	98
103) trans-1,4-dichloro-2-buten	15.38	53	52734	46.15	ug/L	90
104) 1,2,3-trichloropropane	15.41	110	49893	44.58	ug/L	99
105) n-propylbenzene	15.53	91	764685	45.49	ug/L	99
107) 2-chlorotoluene	15.68	126	157132	45.03	ug/L	97
108) 4-chlorotoluene	15.78	91	494863	44.75	ug/L	100
109) 1,3,5-trimethylbenzene	15.70	105	576064	44.64	ug/L	100
110) tert-butylbenzene	16.09	119	479423	42.62	ug/L	96
111) pentachloroethane	16.14	167	114982	47.82	ug/L	98
112) 1,2,4-trimethylbenzene	16.14	105	629955	49.00	ug/L	99
113) sec-butylbenzene	16.34	105	728998	44.86	ug/L	99
114) 1,3-dichlorobenzene	16.51	146	342696	48.41	ug/L	99
115) p-isopropyltoluene	16.47	119	611267	45.93	ug/L	99
116) 1,4-dichlorobenzene	16.60	146	365965	47.06	ug/L	98
117) Benzyl Chloride	16.71	91	410929	51.48	ug/L	100
119) 1,2-dichlorobenzene	17.03	146	346489	48.63	ug/L	99
120) n-butylbenzene	16.93	92	339069	44.95	ug/L	99
122) 1,2-dibromo-3-chloropropan	17.84	75	30482	45.68	ug/L	97
123) 1,3,5-trichlorobenzene	18.11	180	285976	50.37	ug/L	99
124) 1,2,4-trichlorobenzene	18.80	180	248941	51.07	ug/L	100
125) hexachlorobutadiene	18.98	225	132920	48.76	ug/L #	68
126) naphthalene	19.11	128	1087533	121.10	ug/L	100
127) 1,2,3-trichlorobenzene	19.39	180	199550	56.87	ug/L	99
128) hexachloroethane	17.36	119	125426	52.55	ug/L	90

(#) = qualifier out of range (m) = manual integration

D191688.D MD7671.M Thu Jan 19 18:10:50 2012 RPT1

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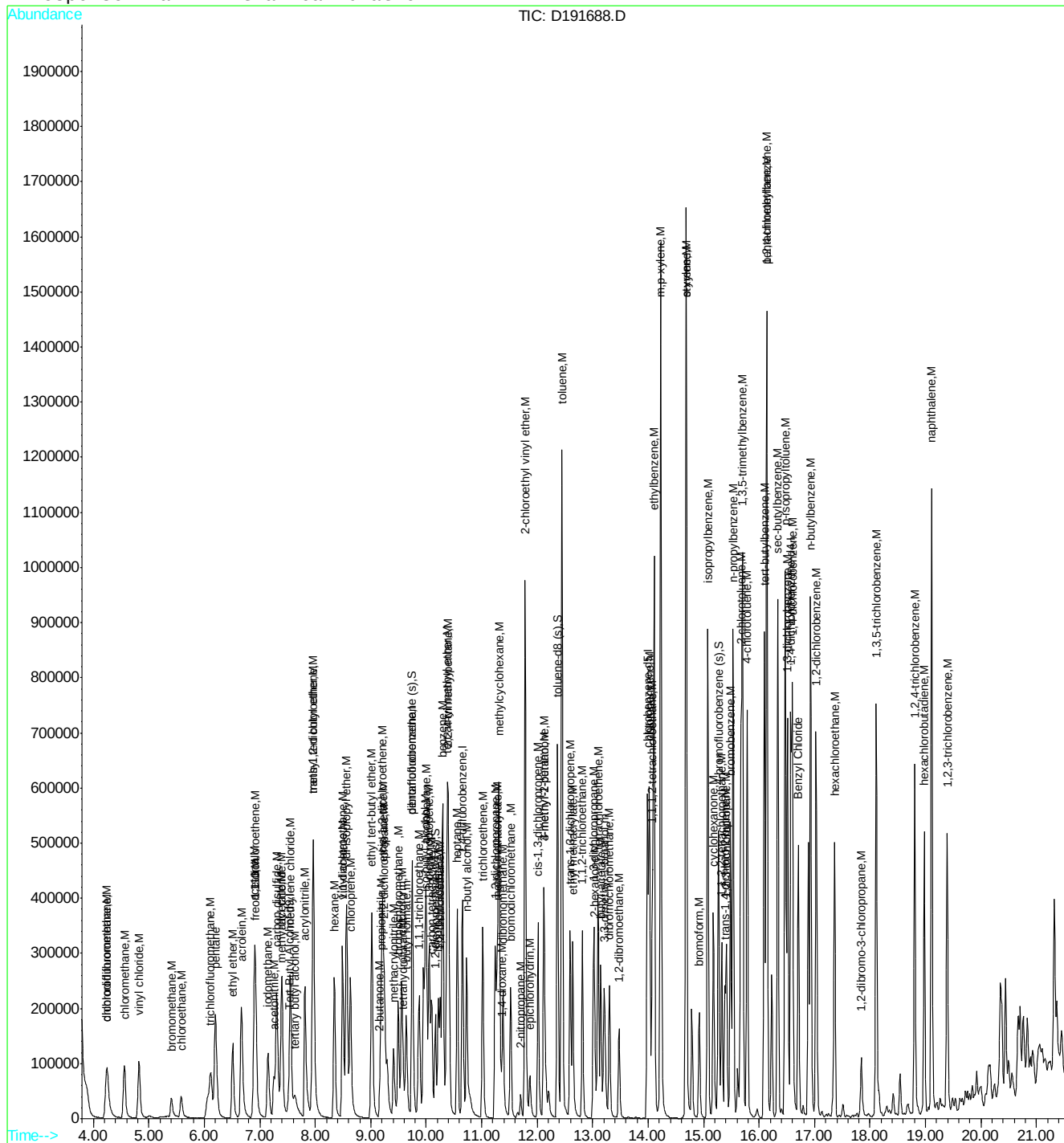
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D191688.D
Acq On : 19 Jan 2012 3:17 pm
Sample : ja96938-12ms
Misc : MS24318,VD7804,5.3,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Jan 19 18:10 2012

Vial: 12
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Wed Jan 11 16:25:16 2012
Response via : Initial Calibration



D191688.D MD7671.M

Thu Jan 19 18:10:53 2012

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191689.D
 Acq On : 19 Jan 2012 3:47 pm
 Sample : ja96938-12msd
 Misc : MS24318,VD7804,5.3,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 18:11 2012

Vial: 13
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.53	65	118971	500.00	ug/L	0.02
4) pentafluorobenzene	9.75	168	242304	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.65	114	378110	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	350163	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.57	152	203563	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.75	113	118557	44.84	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	89.68%
45) 1,2-dichloroethane-d4 (s)	10.16	65	132224	41.61	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	83.22%
75) toluene-d8 (s)	12.37	98	502513	49.78	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	99.56%
99) 4-bromofluorobenzene (s)	15.27	95	195318	42.21	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	84.42%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.36	88	42919	1530.85	ug/L	# 94
3) tertiary butyl alcohol	7.64	59	81244	262.76	ug/L	95
6) chlorodifluoromethane	4.24	51	113300	35.91	ug/L	94
7) dichlorodifluoromethane	4.24	85	161522	44.98	ug/L	98
8) chloromethane	4.56	50	198091	51.77	ug/L	98
9) vinyl chloride	4.82	62	174086	46.84	ug/L	98
10) bromomethane	5.40	94	31888	13.48	ug/L	100
11) chloroethane	5.58	64	53384	24.68	ug/L	94
13) trichlorofluoromethane	6.12	101	182777	42.52	ug/L	99
14) pentane	6.20	43	211551	35.39	ug/L	99
15) ethyl ether	6.51	74	85577	46.91	ug/L	96
16) acrolein	6.67	56	305893	451.00	ug/L	99
18) 1,1-dichloroethene	6.91	96	113706	39.48	ug/L	99
19) acetone	6.89	58	14642	47.28	ug/L	# 77
20) allyl chloride	7.40	41	228965	37.42	ug/L	97
21) acetonitrile	7.25	40	95596	526.38	ug/L	99
23) iodomethane	7.15	142	214286	44.48	ug/L	96
24) iso-butyl alcohol	9.98	74	6603	425.28	ug/L	84
25) carbon disulfide	7.31	76	395670	42.23	ug/L	98
26) methylene chloride	7.55	84	148094	44.61	ug/L	98
27) methyl acetate	7.38	43	111262	43.27	ug/L	99
28) methyl tert butyl ether	7.96	73	418514	44.28	ug/L	98
29) trans-1,2-dichloroethene	7.96	96	125738	41.30	ug/L	95
30) di-isopropyl ether	8.56	45	456110	46.47	ug/L	98
31) ethyl tert-butyl ether	9.02	59	437932	46.29	ug/L	98
32) 2-butanone	9.16	72	17496	45.49	ug/L	96
33) 1,1-dichloroethane	8.49	63	224875	42.05	ug/L	99
34) chloroprene	8.63	53	178589	40.42	ug/L	97
35) acrylonitrile	7.81	53	283287	231.81	ug/L	98
36) vinyl acetate	8.49	86	29297	43.00	ug/L	91
37) ethyl acetate	9.22	45	16748	44.06	ug/L	82
38) 2,2-dichloropropane	9.24	77	179246	39.31	ug/L	98
39) cis-1,2-dichloroethene	9.21	96	142889	43.57	ug/L	98

(#) = qualifier out of range (m) = manual integration

D191689.D MD7671.M Thu Jan 19 18:11:25 2012 RPT1

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191689.D
 Acq On : 19 Jan 2012 3:47 pm
 Sample : ja96938-12msd
 Misc : MS24318,VD7804,5.3,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 18:11 2012

Vial: 13
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.18	54	216839	458.49	ug/L	99
41) bromochloromethane	9.49	128	70880	45.42	ug/L	96
42) tetrahydrofuran	9.58	72	19368	43.24	ug/L	97
43) chloroform	9.56	83	209583	42.64	ug/L	98
46) freon 113	6.92	151	91428	40.41	ug/L	95
47) methacrylonitrile	9.41	41	77418	43.23	ug/L	92
48) t-butyl formate	9.64	59	122341	45.04	ug/L	98
49) 1,1,1-trichloroethane	9.87	97	173459	39.31	ug/L	99
50) tert-amyl methyl ether	10.38	73	413386	45.18	ug/L	98
52) cyclohexane	10.00	84	188833	41.88	ug/L #	100
54) 2,2,4-trimethylpentane	10.40	57	483081	42.41	ug/L	98
55) epichlorohydrin	11.87	57	80769	238.10	ug/L	99
56) n-butyl alcohol	10.72	56	233939	2564.09	ug/L	97
57) carbon tetrachloride	10.10	117	147888	39.92	ug/L	97
58) 1,1-dichloropropene	10.05	75	161691	40.79	ug/L	100
59) hexane	8.34	57	157503	38.98	ug/L	98
60) benzene	10.29	78	566935	49.01	ug/L	99
61) heptane	10.56	57	94870	43.07	ug/L	99
62) isopropyl acetate	10.22	43	241099	43.65	ug/L	97
63) 1,2-dichloroethane	10.25	62	168424	43.32	ug/L	99
65) trichloroethene	11.02	95	123300	41.58	ug/L	95
66) 2-nitropropane	11.70	43	35677	37.39	ug/L	95
67) 2-chloroethyl vinyl ether	11.78	63	480239	254.54	ug/L	99
68) methyl methacrylate	11.28	100	38347	43.32	ug/L	99
70) 1,2-dichloropropane	11.25	63	142889	46.94	ug/L	95
71) methylcyclohexane	11.30	83	209803	41.14	ug/L	99
72) dibromomethane	11.38	93	83405	45.94	ug/L	96
73) bromodichloromethane	11.52	83	172161	45.71	ug/L	99
74) cis-1,3-dichloropropene	12.01	75	231992	48.43	ug/L	94
76) 4-methyl-2-pentanone	12.12	58	58182	45.03	ug/L	99
77) toluene	12.44	92	582228	80.46	ug/L	99
78) 3-methyl-1-butanol	12.11	70	89350	1014.74	ug/L	99
79) trans-1,3-dichloropropene	12.59	75	213981	46.57	ug/L	98
80) ethyl methacrylate	12.64	69	193697	46.87	ug/L	96
81) 1,1,2-trichloroethane	12.82	83	105955	46.54	ug/L	99
82) 2-hexanone	13.03	58	52757	42.53	ug/L	98
84) tetrachloroethene	13.10	166	138113	44.50	ug/L	95
85) 1,3-dichloropropane	13.01	76	216796	48.04	ug/L	99
86) butyl acetate	13.14	56	92738	44.98	ug/L	93
87) 3,3-dimethyl-1-butanol	13.21	57	159564	509.37	ug/L	97
88) dibromochloromethane	13.30	129	139511	45.79	ug/L	99
89) 1,2-dibromoethane	13.47	107	128268	48.00	ug/L	100
90) chlorobenzene	14.02	112	364585	46.36	ug/L	99
91) 1,1,1,2-tetrachloroethane	14.08	131	134999	47.07	ug/L	99
92) ethylbenzene	14.11	91	781627	57.96	ug/L	99
93) m,p-xylene	14.23	106	543573	101.39	ug/L	99
94) o-xylene	14.68	106	275433	51.73	ug/L	99
95) styrene	14.68	104	431434	46.90	ug/L	99
96) bromoform	14.92	173	105136	43.27	ug/L	98

(#)=qualifier out of range (m)=manual integration

D191689.D MD7671.M

Thu Jan 19 18:11:25 2012

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191689.D
 Acq On : 19 Jan 2012 3:47 pm
 Sample : ja96938-12msd
 Misc : MS24318,VD7804,5.3,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 18:11 2012

Vial: 13
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.07	105	634299	43.84	ug/L	99
100) bromobenzene	15.48	156	176603	47.40	ug/L	97
101) cyclohexanone	15.17	55	186402	556.99	ug/L	95
102) 1,1,2,2-tetrachloroethane	15.33	83	180652	45.19	ug/L	99
103) trans-1,4-dichloro-2-buten	15.38	53	52682	45.91	ug/L	85
104) 1,2,3-trichloropropane	15.41	110	50101	44.57	ug/L	90
105) n-propylbenzene	15.53	91	753457	44.63	ug/L	99
107) 2-chlorotoluene	15.68	126	156414	44.63	ug/L	99
108) 4-chlorotoluene	15.78	91	492730	44.37	ug/L	99
109) 1,3,5-trimethylbenzene	15.70	105	571905	44.13	ug/L	100
110) tert-butylbenzene	16.09	119	467619	41.39	ug/L	98
111) pentachloroethane	16.14	167	115588	47.86	ug/L	99
112) 1,2,4-trimethylbenzene	16.14	105	620231	48.04	ug/L	99
113) sec-butylbenzene	16.33	105	713289	43.70	ug/L	99
114) 1,3-dichlorobenzene	16.51	146	340610	47.91	ug/L	98
115) p-isopropyltoluene	16.47	119	601028	44.96	ug/L	99
116) 1,4-dichlorobenzene	16.60	146	366671	46.95	ug/L	97
117) Benzyl Chloride	16.71	91	409755	51.11	ug/L	100
119) 1,2-dichlorobenzene	17.03	146	347457	48.55	ug/L	99
120) n-butylbenzene	16.93	92	331782	43.79	ug/L	98
122) 1,2-dibromo-3-chloropropan	17.84	75	30997	46.25	ug/L	94
123) 1,3,5-trichlorobenzene	18.11	180	288969	50.67	ug/L	98
124) 1,2,4-trichlorobenzene	18.80	180	251160	51.30	ug/L	99
125) hexachlorobutadiene	18.98	225	131895	48.17	ug/L #	69
126) naphthalene	19.11	128	1110673	123.16	ug/L	100
127) 1,2,3-trichlorobenzene	19.39	180	203168	57.64	ug/L	99
128) hexachloroethane	17.36	119	123943	51.70	ug/L	90

(#) = qualifier out of range (m) = manual integration

D191689.D MD7671.M Thu Jan 19 18:11:25 2012 RPT1

Page 3

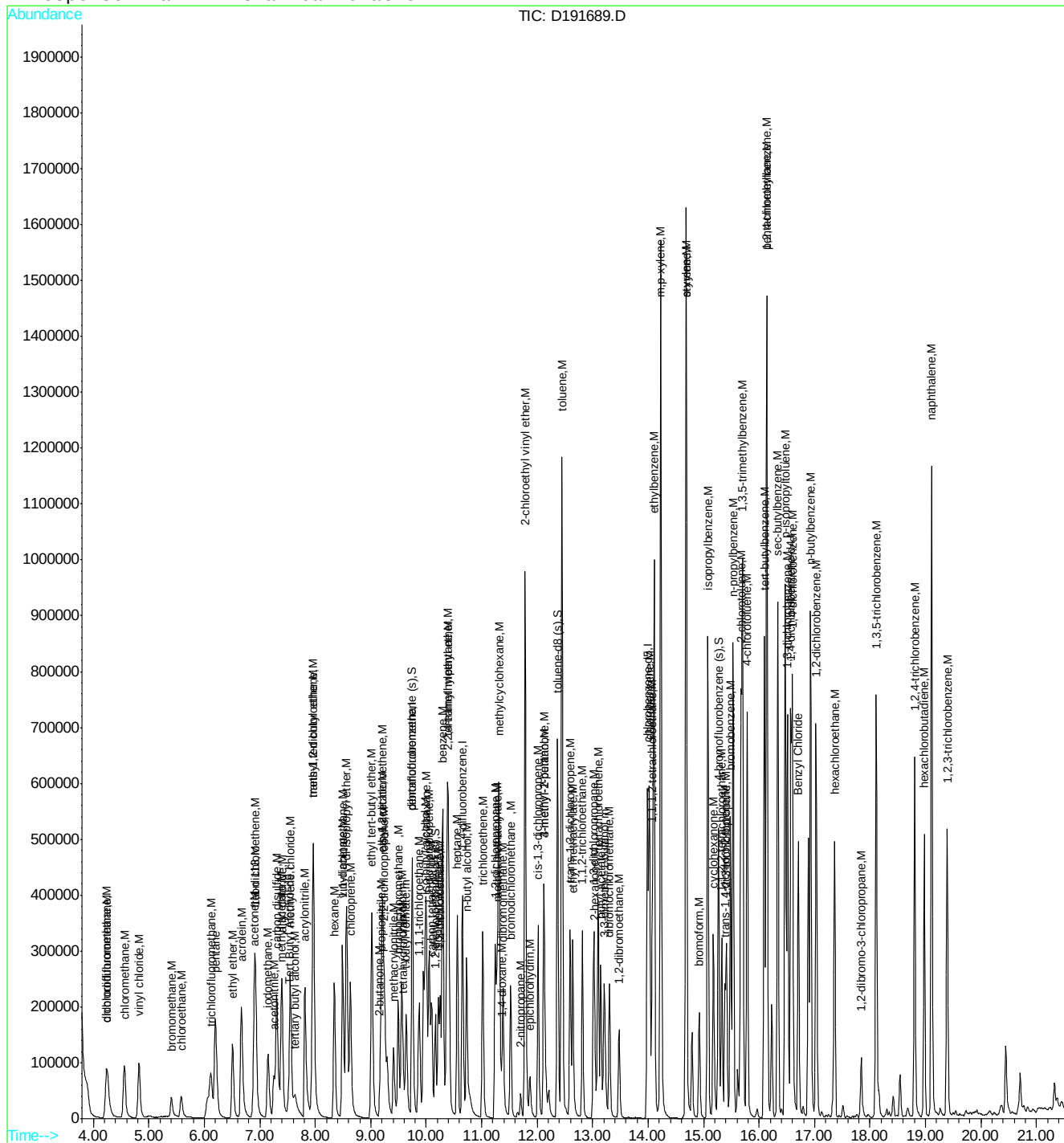
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D191689.D
Acq On : 19 Jan 2012 3:47 pm
Sample : ja96938-12msd
Misc : MS24318,VD7804,5.3,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Jan 19 18:11 2012

Vial: 13
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Wed Jan 11 16:25:16 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91896.D Vial: 31
 Acq On : 17 Jan 2012 12:48 am Operator: dezareer
 Sample : ja97075-4dup Inst : MS2B
 Misc : MS24379,V2B4134,W,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jan 17 01:13:40 2012 Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	116034	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	325850	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	463751	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	458951	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.06	152	262984	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	127737	47.09	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	94.18%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	147245	49.55	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	99.10%	
74) toluene-d8 (s)	13.53	98	491934	51.06	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	102.12%	
99) 4-bromofluorobenzene (s)	15.98	95	197199	52.36	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	104.72%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
18) 1,1-dichloroethene	7.90	96	906	0.36	ug/L	# 73
42) chloroform	10.88	83	1588	0.34	ug/L	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91896.D M2B4096.M Wed Jan 18 12:36:52 2012 MS2B

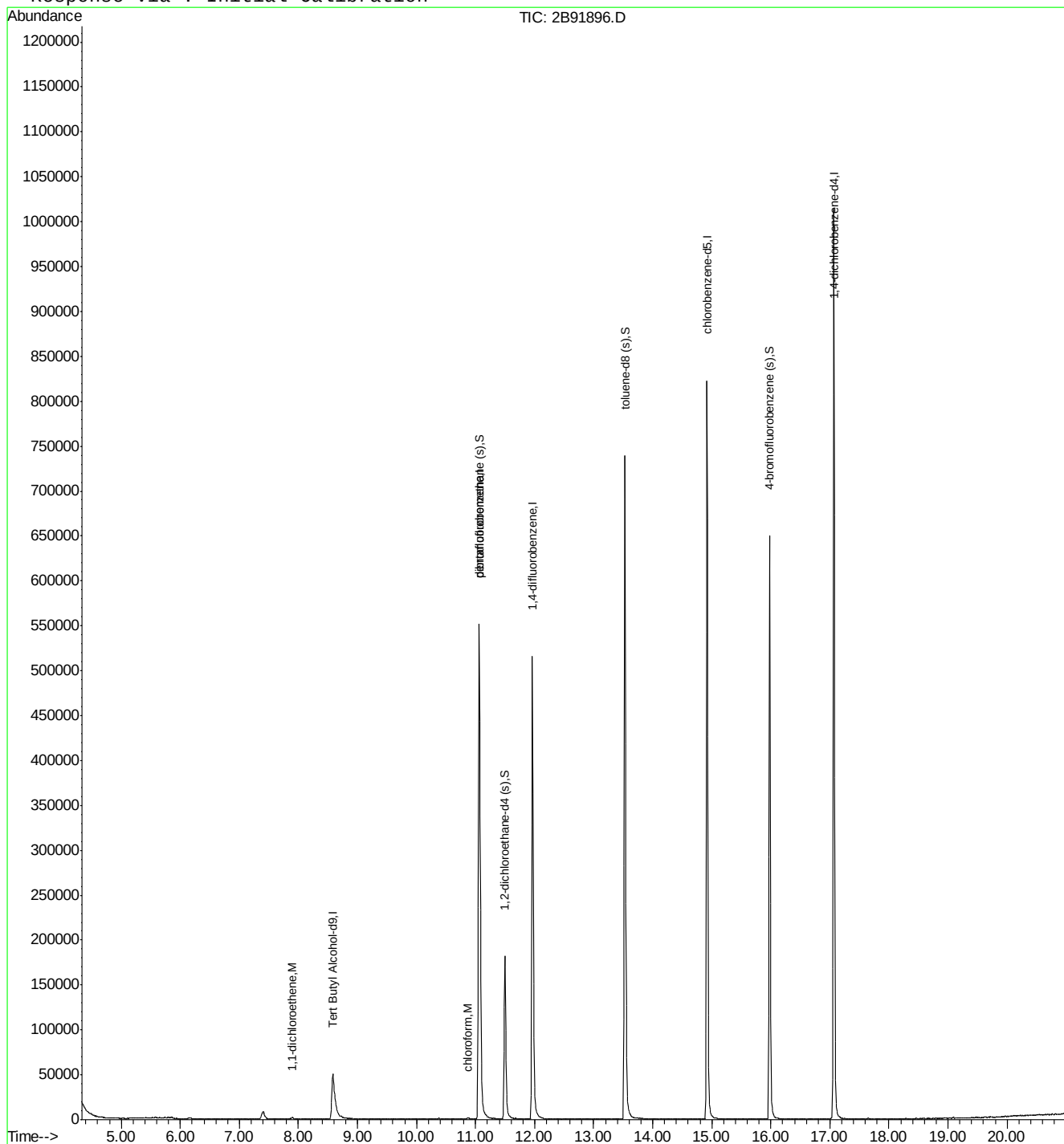
Quantitation Report (QT Reviewed)

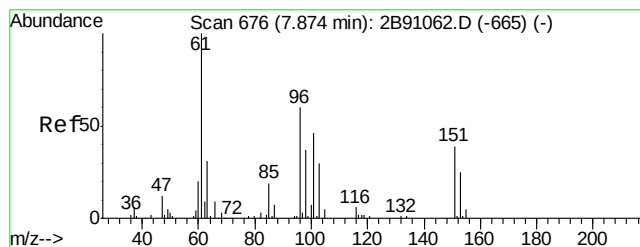
Data File : C:\MSDCHEM\1\DATA\2B91896.D
Acq On : 17 Jan 2012 12:48 am
Sample : ja97075-4dup
Misc : MS24379,V2B4134,W,,,1
MS Integration Params: rteint.p
Quant Time: Jan 18 12:12 2012

Vial: 31
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

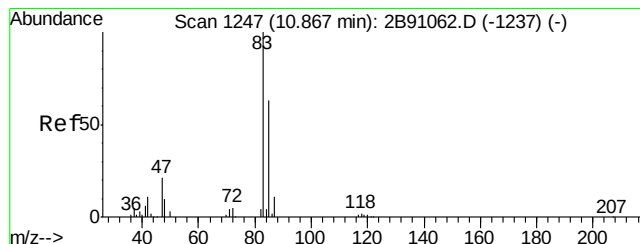
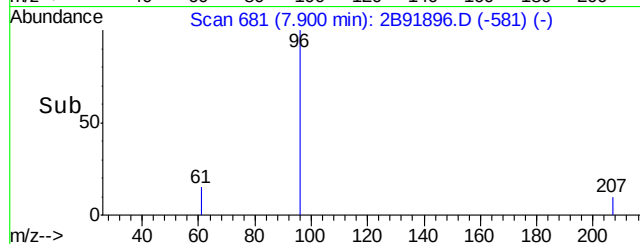
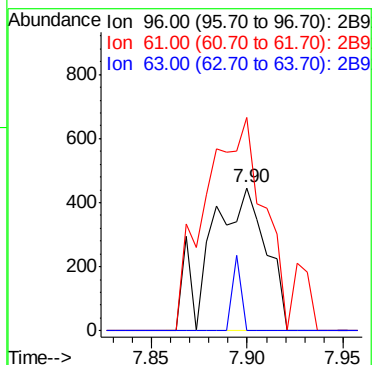
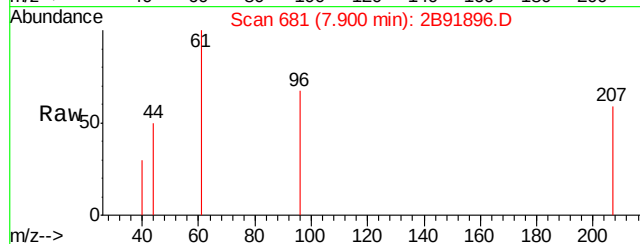
Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration





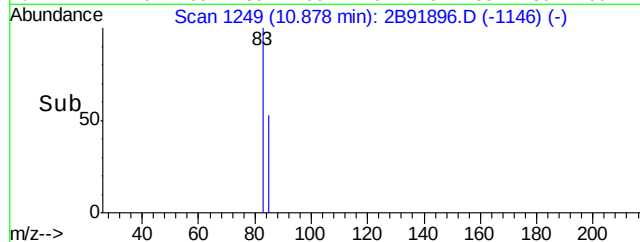
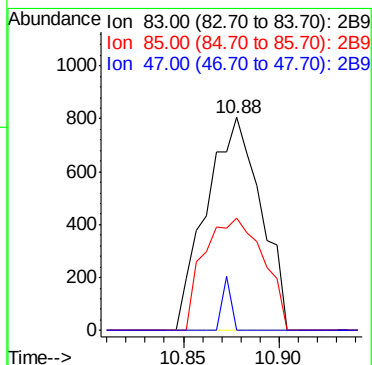
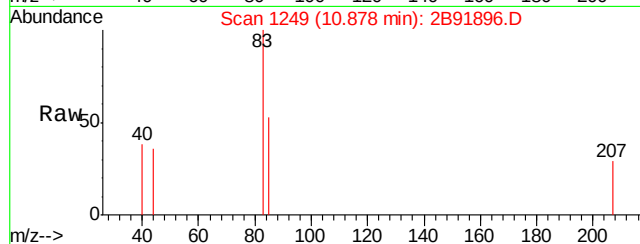
#18
1,1-dichloroethene
Concen: 0.36 ug/L
RT: 7.90 min Scan# 681
Delta R.T. 0.03 min
Lab File: 2B91896.D
Acq: 17 Jan 2012 12:48 am

Tgt Ion	Ratio	Lower	Upper
96	100		
61	149.3	135.3	195.3
63	0.0	22.0	82.0



#42
chloroform
Concen: 0.34 ug/L
RT: 10.88 min Scan# 1249
Delta R.T. 0.01 min
Lab File: 2B91896.D
Acq: 17 Jan 2012 12:48 am

Tgt Ion	Ratio	Lower	Upper
83	100		
85	53.0	33.2	93.2
47	0.0	0.0	55.7



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : Y119500.D
 Acq On : 17 Jan 2012 5:49 pm
 Operator : RobertS
 Sample : JA96920-4DUP
 Misc : MS24317,VY5108,5.6,,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 18 16:02:36 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.70	65	58251	500.00	ug/L	-0.01
4) pentafluorobenzene	9.86	168	199789	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	259423	50.00	ug/L	0.00
79) chlorobenzene-d5	13.86	117	192919	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.14	152	87633	50.00	ug/L	-0.01

System Monitoring Compounds

41) dibromofluoromethane (s)	9.95	113	86538	48.81	ug/L	0.00
Spiked Amount	50.000	Range 67 - 131	Recovery	=	97.62%	
42) 1,2-dichloroethane-d4 (s)	10.37	65	85049	51.92	ug/L	0.00
Spiked Amount	50.000	Range 66 - 130	Recovery	=	103.84%	
71) toluene-d8 (s)	12.37	98	274473	52.09	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	104.18%	
95) 4-bromofluorobenzene (s)	15.00	95	87061	50.76	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	101.52%	

Target Compounds

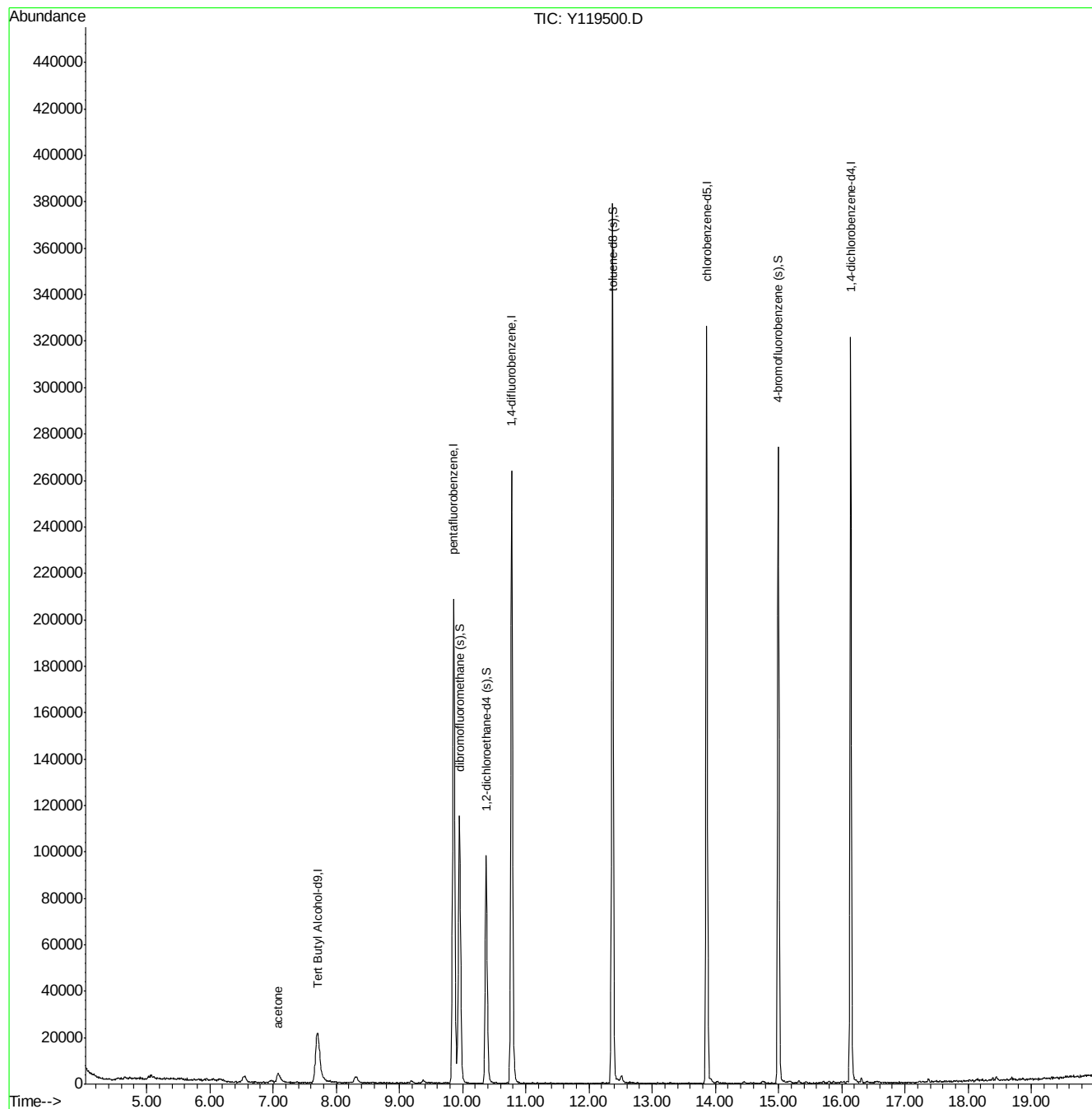
					Qvalue
16) acetone	7.09	58	2712	11.80 ug/L	# 82

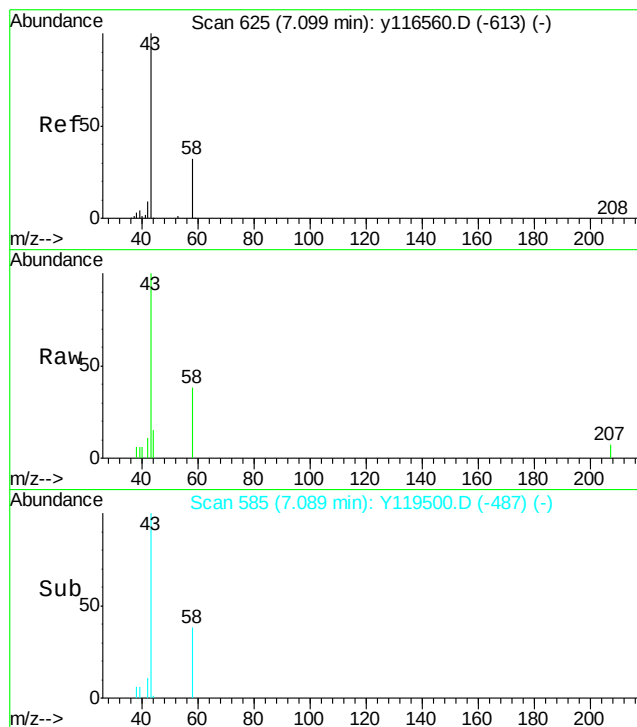
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : Y119500.D
Acq On : 17 Jan 2012 5:49 pm
Operator : Roberts
Sample : JA96920-4DUP
Misc : MS24317,VY5108,5.6,,,,,1
ALS Vial : 13 Sample Multiplier: 1

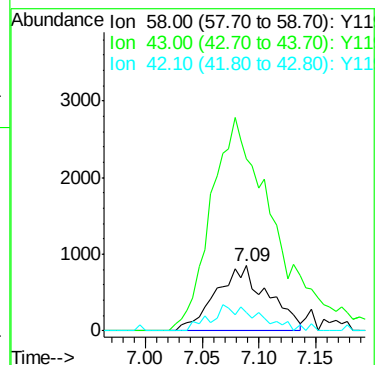
Quant Time: Jan 18 16:02:36 2012
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Dec 12 12:09:02 2011
Response via : Initial Calibration





#16
acetone
Concen: 11.80 ug/L
RT: 7.09 min Scan# 585
Delta R.T. 0.01 min
Lab File: Y119500.D
Acq: 17 Jan 2012 5:49 pm

Tgt Ion	Ratio	Lower	Upper
58	100		
43	263.1	270.6	330.6#
42	27.8	0.0	53.6



SW-846 Method 8260

Data File : C:\MSDCHEM\1\DATA\2B91055.D

Acq On : 22 Dec 2011 10:53 am

Sample : bfb

Misc : MS23205,V2B4096,W,,,1

MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M2BBFB.M (RTE Integrator)

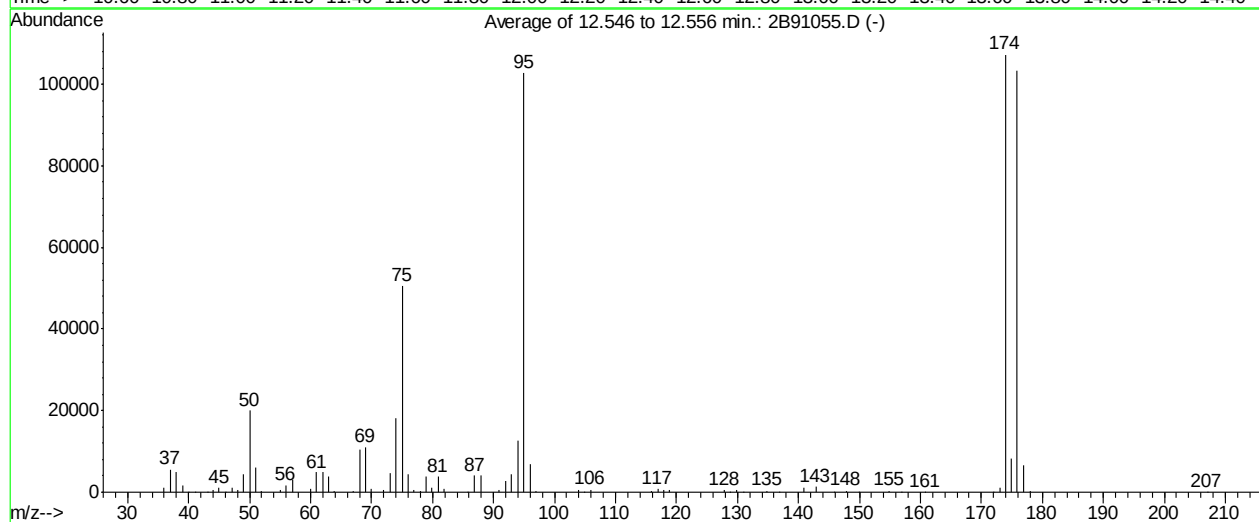
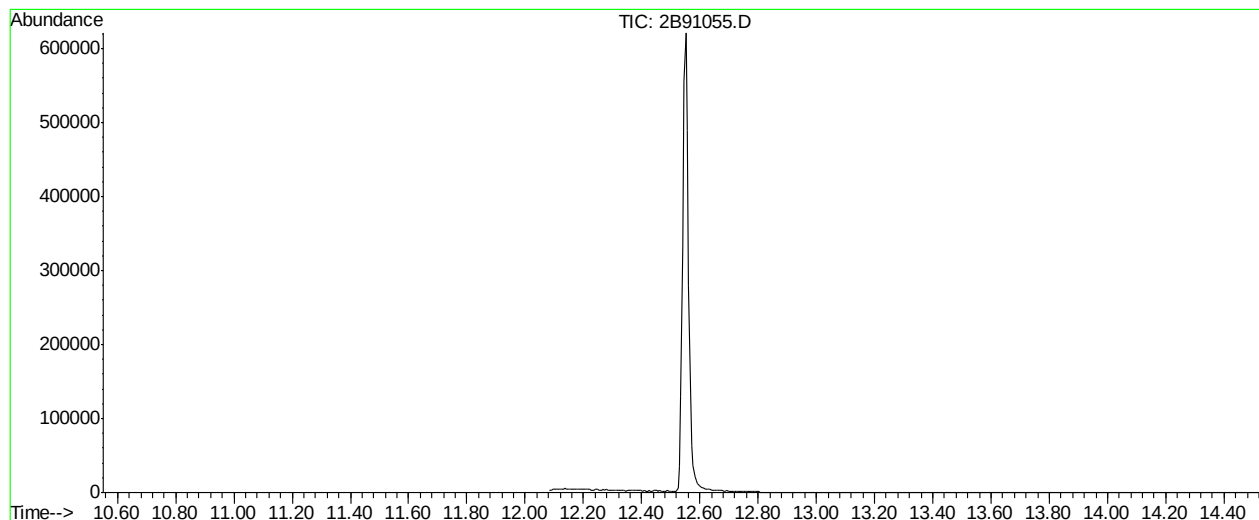
Title : SW-846 Method 8260

Vial: 1

Operator: dezareer

Inst : MS2B

Multiplr: 1.00



AutoFind: Scans 89, 90, 91; Background Corrected with Scan 82

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	19961	PASS
75	95	30	60	49.2	50525	PASS
95	95	100	100	100.0	102698	PASS
96	95	5	9	6.7	6929	PASS
173	174	0.00	2	1.0	1038	PASS
174	95	50	150	104.5	107288	PASS
175	174	5	9	7.7	8240	PASS
176	174	95	101	96.2	103216	PASS
177	176	5	9	6.5	6693	PASS

Average of 12.546 to 12.556 min.: 2B91055.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	979	48.00	588	63.00	3963	76.95	574
37.00	5631	49.00	4472	63.90	408	77.95	406
38.00	4957	50.00	19961	66.95	222	78.90	3946
39.00	1639	51.00	6023	68.00	10504	79.90	1143
39.95	99	52.00	296	69.00	10998	80.90	3846
41.05	127	55.00	481	70.00	785	81.90	844
43.00	89	55.95	1758	72.00	656	85.80	61
44.00	676	57.00	3046	73.00	4563	86.90	4115
45.00	975	60.00	926	74.00	18217	87.90	4062
46.00	62	61.00	4913	75.00	50525	90.90	438
47.05	990	62.00	4881	76.00	4313	92.00	2886

Average of 12.546 to 12.556 min.: 2B91055.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.95	4279	118.90	644	149.90	62	207.00	106
94.00	12726	127.85	460	154.90	299		
95.00	102698	128.80	144	156.80	93		
96.00	6929	129.85	440	160.80	134		
96.90	265	130.90	98	172.00	73		
103.85	524	134.90	286	173.05	1038		
104.80	76	136.90	139	173.90	107288		
105.90	614	140.90	1178	174.90	8240		
115.90	385	142.85	1259	175.90	103216		
116.90	747	145.80	80	176.90	6693		
117.85	440	147.85	306	177.95	216		

SW-846 Method 8260

Data File : C:\MSDCHEM\1\DATA\2B91888.D

Acq On : 16 Jan 2012 8:41 pm

Sample : bfb

Misc : MS24311,V2B4134,W,,,,,1

MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M2BBFB.M (RTE Integrator)

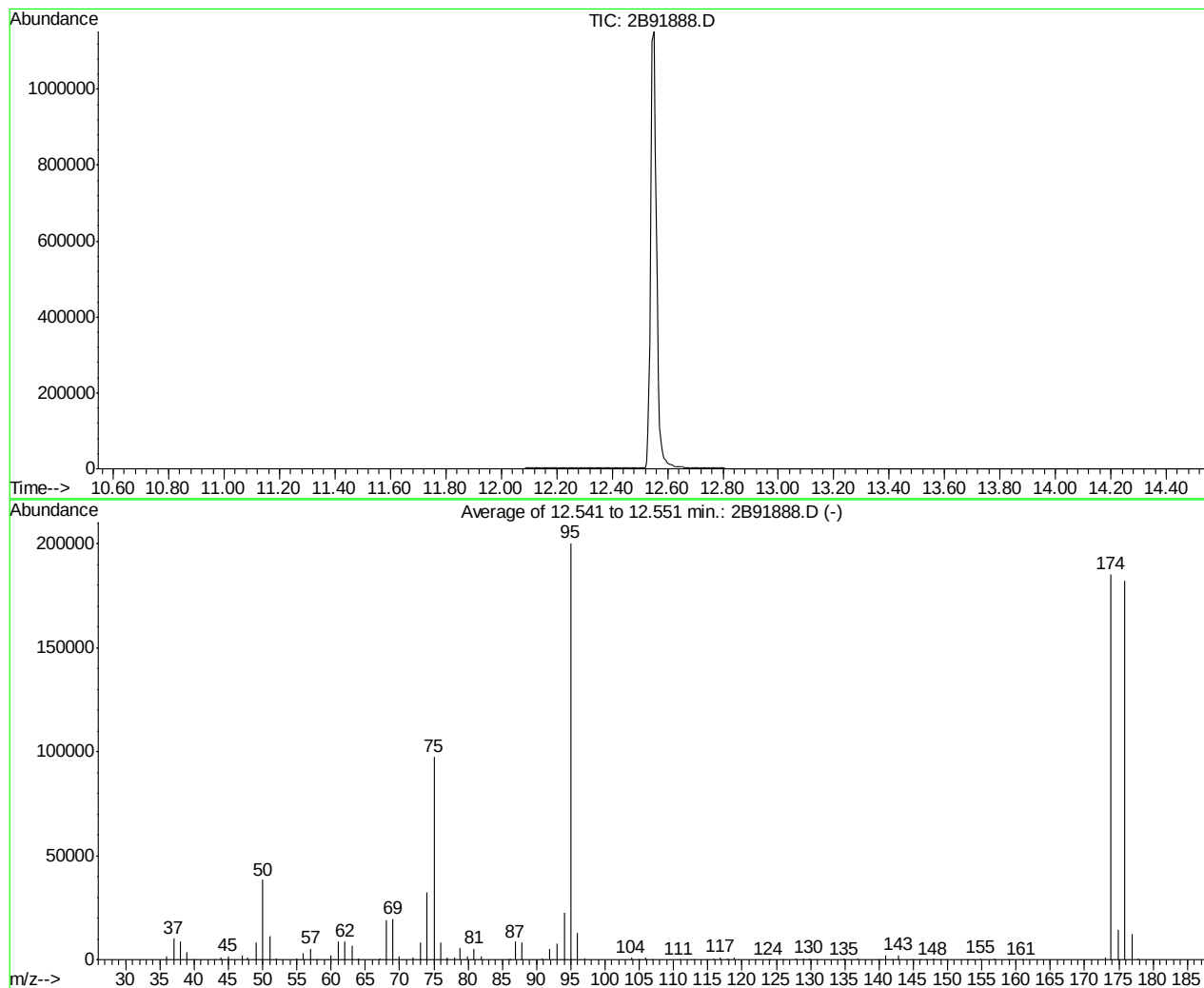
Title : SW-846 Method 8260

Vial: 23

Operator: dezareer

Inst : MS2B

Multiplr: 1.00



AutoFind: Scans 88, 89, 90; Background Corrected with Scan 81

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.2	38416	PASS
75	95	30	60	48.7	97445	PASS
95	95	100	100	100.0	200256	PASS
96	95	5	9	6.5	12992	PASS
173	174	0.00	2	0.6	1155	PASS
174	95	50	150	92.5	185256	PASS
175	174	5	9	7.7	14285	PASS
176	174	95	101	98.2	181901	PASS
177	176	5	9	6.7	12272	PASS

Average of 12.541 to 12.551 min.: 2B91888.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1776	50.00	38416	64.00	543	77.95	869
37.00	10059	51.00	11378	67.05	504	78.85	5416
38.00	8522	51.95	433	68.00	19142	79.90	1606
39.00	3364	54.95	571	69.00	19595	80.90	5398
39.90	135	55.95	2859	69.95	1431	81.85	1328
43.00	64	57.00	5263	71.95	983	85.90	161
43.95	975	57.95	222	73.00	8311	86.10	85
45.00	1748	60.00	1851	74.00	32264	86.90	8522
46.95	2281	61.00	8533	75.00	97445	87.90	8306
47.85	1165	62.00	8777	76.00	8346	90.85	685
49.00	8137	63.00	6547	76.90	1187	91.95	5176

Average of 12.541 to 12.551 min.: 2B91888.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	7767	112.85	141	130.90	245	148.90	64
94.00	22501	114.90	170	134.90	388	149.85	167
95.00	200256	115.80	621	136.95	332	152.90	74
96.00	12992	116.85	1085	139.90	79	153.80	63
97.00	400	117.90	664	140.90	1958	154.85	615
103.85	889	118.90	968	141.90	272	156.90	361
104.80	207	123.90	75	142.90	2086	158.80	140
105.00	89	126.00	74	144.80	68	160.85	174
105.90	798	127.80	645	145.90	275	173.00	1155
106.90	202	128.90	443	146.90	80	173.90	185256
110.85	155	129.90	665	147.90	482	174.90	14285

Average of 12.541 to 12.551 min.: 2B91888.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.90	181901						
176.90	12272						
177.85	354						

SW-846 Method 8260

Data File : C:\HPCHEM\1\DATA\D188518.D

Acq On : 28 Oct 2011 8:53 am

Sample : BFB

Misc : MS20017, VD7671, 5,, 100, 5, 1

MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

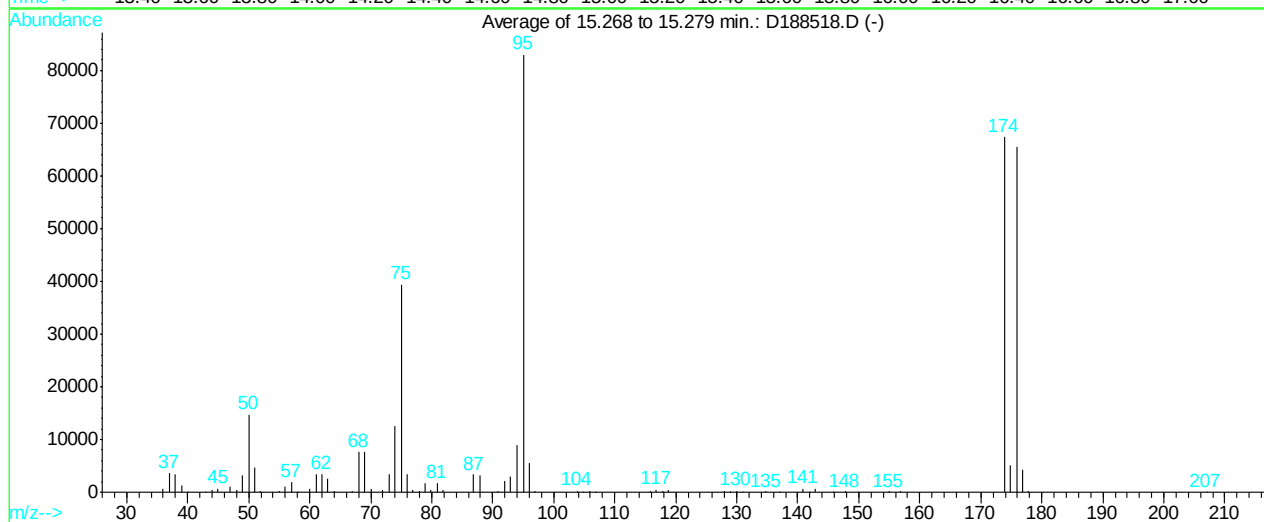
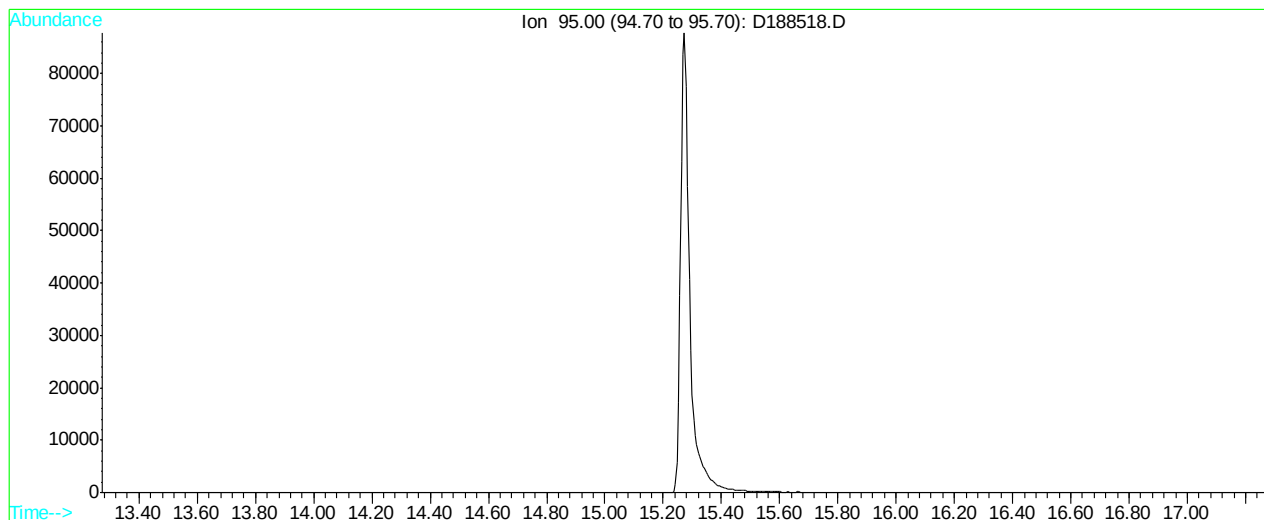
Title : SW-846 Method 8260B

Vial: 1

Operator: EmilyT

Inst : MSD

Multiplr: 1.00



AutoFind: Scans 2195, 2196, 2197; Background Corrected with Scan 2186

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	14760	PASS
75	95	30	60	47.5	39411	PASS
95	95	100	100	100.0	83021	PASS
96	95	5	9	6.7	5575	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	81.2	67379	PASS
175	174	5	9	7.5	5024	PASS
176	174	95	101	97.3	65571	PASS
177	176	5	9	6.5	4276	PASS

Average of 15.268 to 15.279 min.: D188518.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	694	50.00	14760	64.00	256	77.90	318
37.00	3709	51.00	4651	67.05	190	78.90	1741
38.00	3504	51.95	206	68.00	7642	79.90	488
39.00	1339	54.95	223	69.00	7592	80.90	1730
40.00	89	56.00	1093	70.00	579	81.85	359
42.90	38	57.00	1931	71.95	431	86.90	3339
44.00	362	57.90	47	73.00	3358	87.90	3155
45.00	647	60.00	696	74.00	12656	90.90	230
47.00	1011	61.00	3342	75.00	39411	91.95	2033
48.00	453	62.00	3424	76.00	3413	92.95	2950
49.00	3143	63.00	2559	76.90	470	94.00	8850

Average of 15.268 to 15.279 min.: D188518.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	83021	127.90	221	147.80	202		
96.00	5575	128.80	46	149.90	37		
96.95	160	128.95	94	154.90	196		
103.90	274	129.90	248	156.90	157		
104.90	77	130.85	80	173.90	67379		
105.85	274	134.80	144	174.90	5024		
106.90	34	136.90	74	175.90	65571		
115.85	247	140.85	695	176.90	4276		
116.85	463	141.85	71	177.85	125		
117.85	262	142.80	676	206.90	34		
118.85	375	145.80	87				

SW-846 Method 8260

Data File : C:\HPCHEM\1\DATA\D191677.D

Acq On : 19 Jan 2012 9:32 am

Sample : bfb

Misc : MS22961, VD7804, 5,, 100, 5, 1

MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

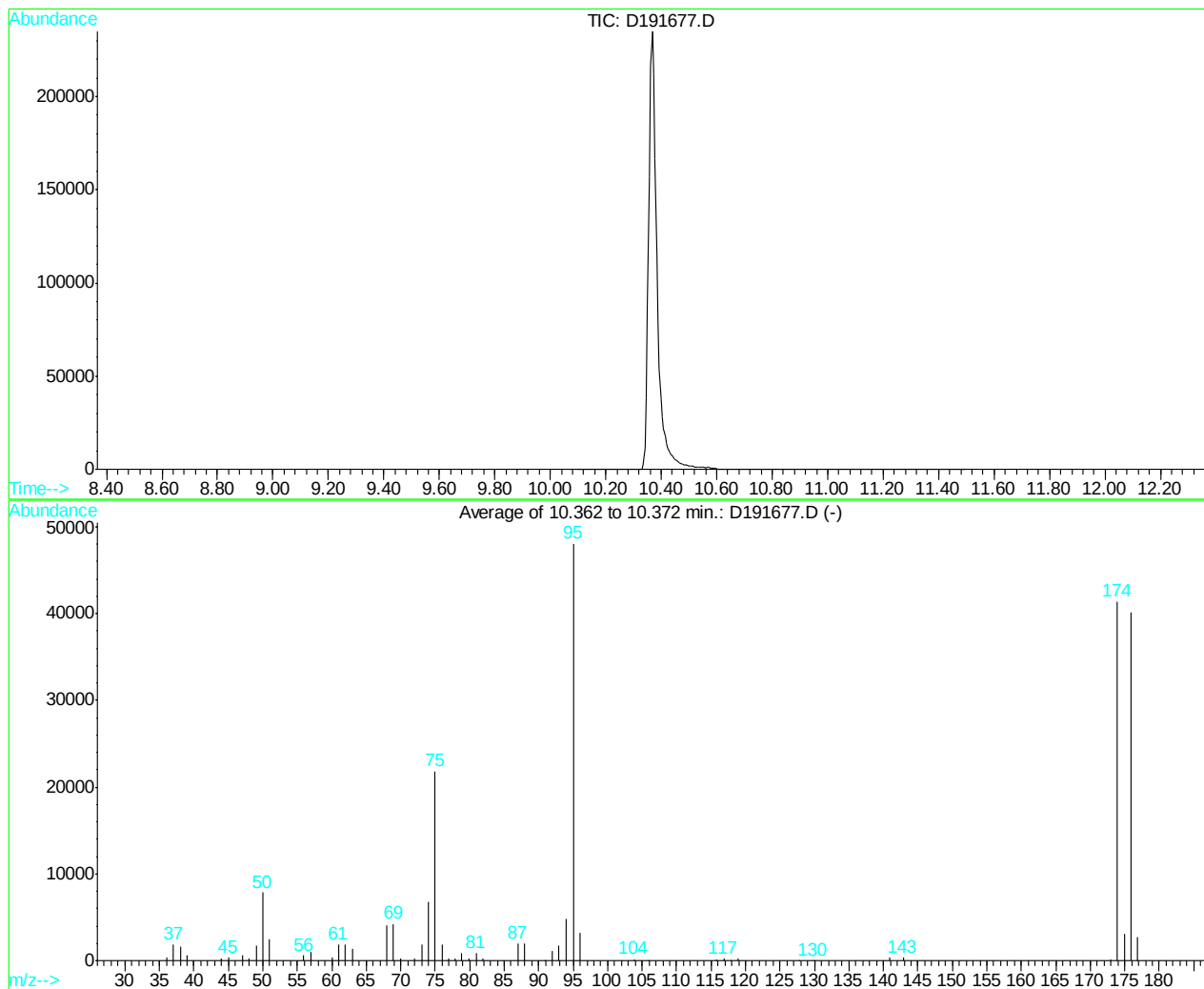
Title : SW-846 Method 8260B

Vial: 1

Operator: EmilyT

Inst : MSD

Multiplr: 1.00



AutoFind: Scans 52, 53, 54; Background Corrected with Scan 43

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	7829	PASS
75	95	30	60	45.4	21827	PASS
95	95	100	100	100.0	48067	PASS
96	95	5	9	6.7	3223	PASS
173	174	0.00	2	0.2	89	PASS
174	95	50	120	86.1	41373	PASS
175	174	5	9	7.4	3042	PASS
176	174	95	101	96.9	40077	PASS
177	176	5	9	6.9	2752	PASS

Average of 10.362 to 10.372 min.: D191677.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	369	55.95	588	74.00	6834	90.90	52
37.00	1874	56.95	1026	75.00	21827	91.95	1084
38.00	1664	60.00	387	76.00	1813	92.95	1752
39.00	650	60.95	1882	76.95	276	94.00	4865
43.95	287	62.00	1841	77.95	220	95.00	48067
45.00	312	63.00	1377	78.85	886	96.00	3223
47.00	635	67.95	4031	79.90	301	103.85	163
47.95	260	68.95	4223	80.90	913	105.90	51
49.00	1707	70.00	306	81.85	211	115.85	103
50.00	7829	71.95	216	86.95	2032	116.85	243
51.00	2430	73.00	1861	87.90	1959	117.80	51

Average of 10.362 to 10.372 min.: D191677.D

bfb

Modified:subtracted

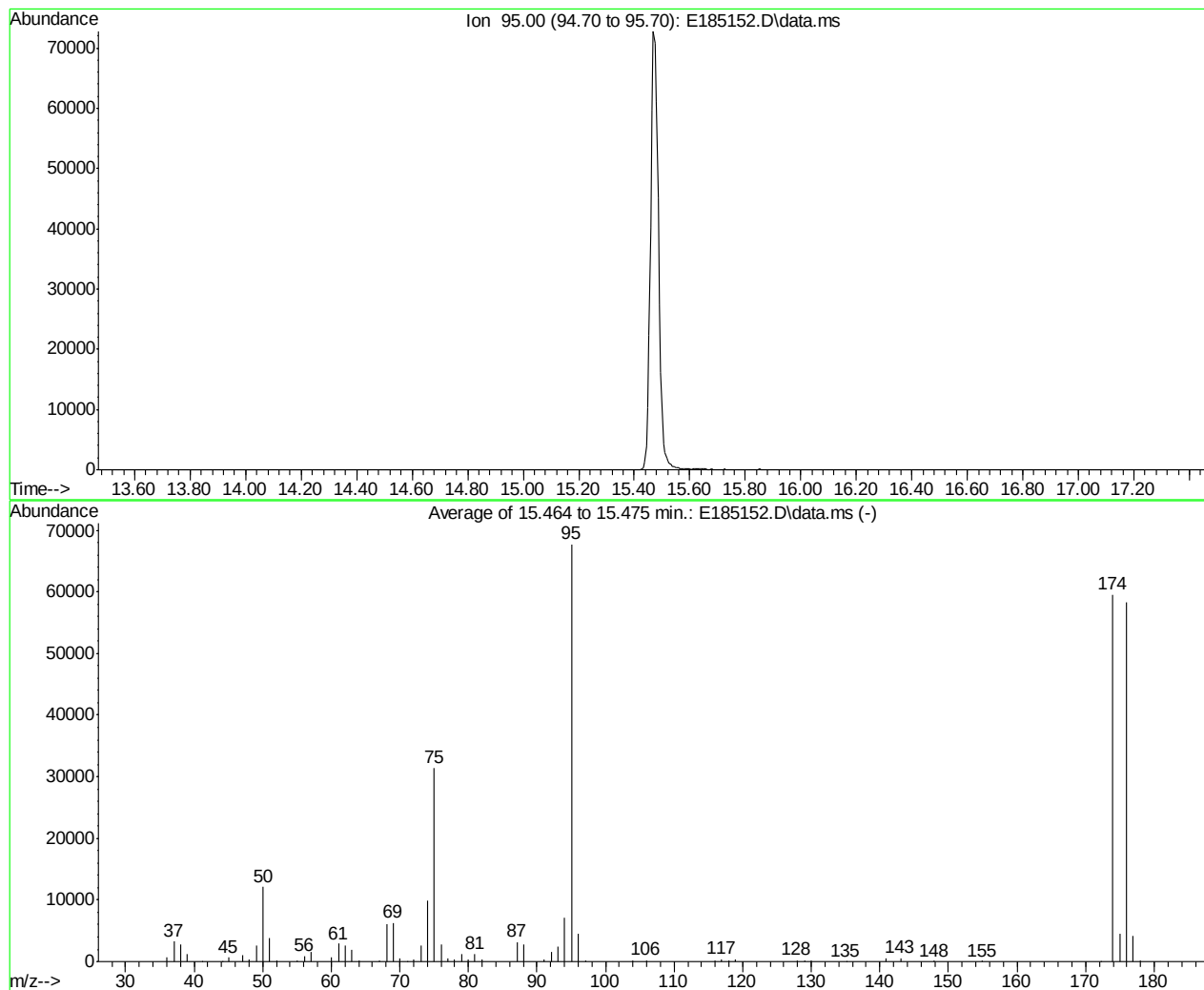
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.85	218						
127.80	52						
129.90	54						
140.90	338						
142.85	358						
172.90	89						
173.90	41373						
174.90	3042						
175.90	40077						
176.90	2752						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\E185152.D
Acq On : 22 Nov 2011 8:27 pm
Sample : bfb
Misc : MS21604,VE8147,5,,100,5,1
MS Integration Params: RTEINT.P

Vial: 13
Operator: OksanaT
Inst : MSE
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\ME8147.M (RTE Integrator)
Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2176, 2177, 2178; Background Corrected with Scan 2166

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.9	12130	PASS
75	95	30	60	46.5	31490	PASS
95	95	100	100	100.0	67749	PASS
96	95	5	9	6.6	4504	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	87.9	59568	PASS
175	174	5	9	7.7	4558	PASS
176	174	95	101	97.9	58317	PASS
177	176	5	9	7.1	4127	PASS

Average of 15.464 to 15.475 min.: E185152.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	707	51.05	3809	68.05	5995	78.95	1274
37.05	3228	52.10	216	69.05	6330	79.95	380
38.05	2847	55.05	136	70.05	514	80.95	1263
39.05	1154	56.05	904	71.05	52	82.00	295
41.10	37	57.05	1496	72.05	385	87.05	3142
44.05	15	60.00	636	73.05	2695	88.05	2773
45.05	691	61.05	2872	74.05	9884	91.00	272
47.05	1096	62.05	2652	75.05	31490	92.05	1650
48.00	405	63.05	1999	76.05	2705	93.05	2436
49.05	2617	64.05	182	77.05	455	94.05	7126
50.05	12130	67.00	151	78.00	348	95.05	67749

Average of 15.464 to 15.475 min.: E185152.D\data.ms

bfb

Modified:subtracted

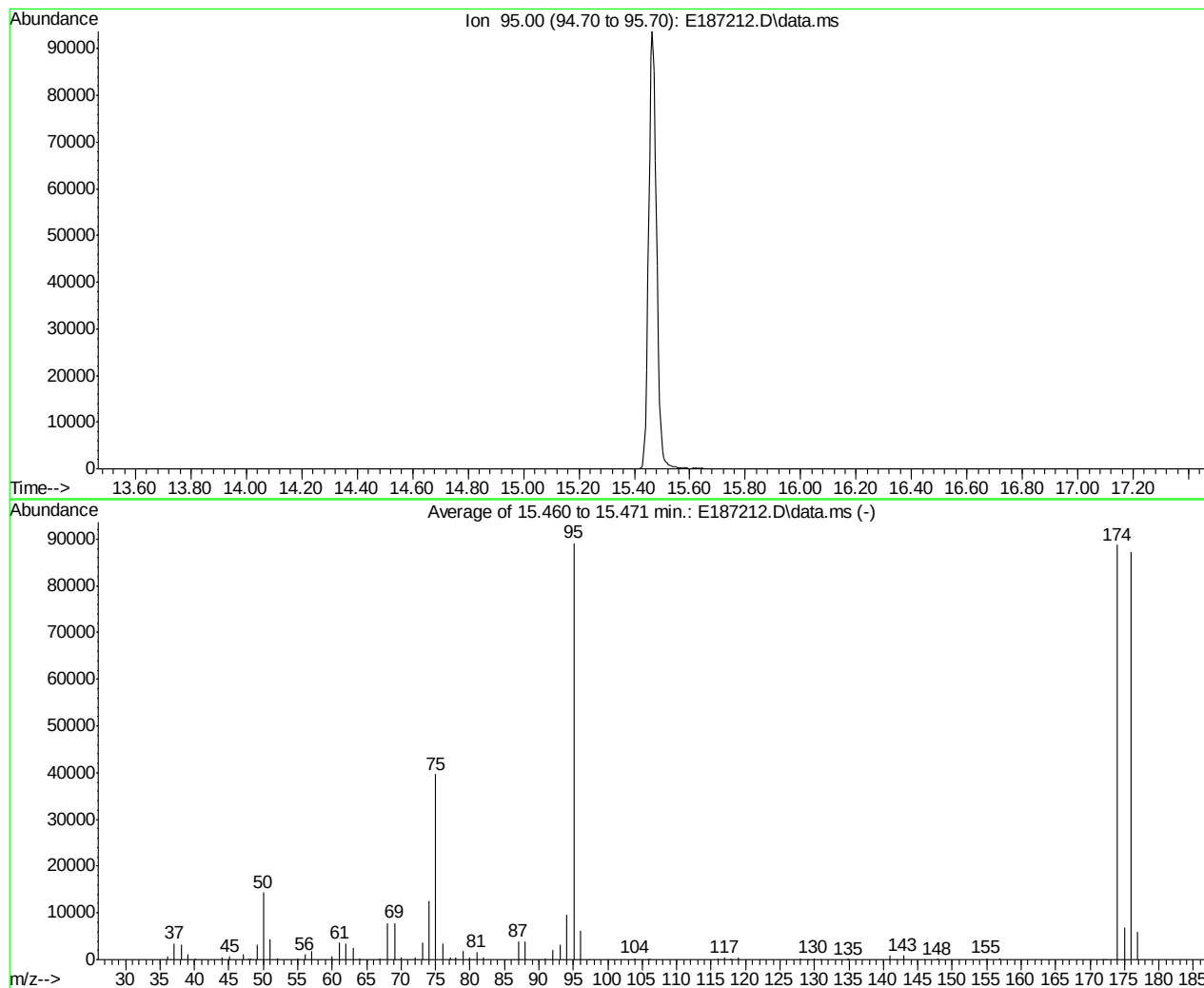
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	4504	135.05	51				
97.05	201	140.95	484				
103.95	217	143.00	535				
105.95	227	147.95	116				
115.90	181	154.95	125				
116.90	364	172.15	50				
118.00	211	173.95	59568				
118.95	288	175.00	4558				
127.95	243	175.95	58317				
129.00	104	176.95	4127				
129.95	231	177.95	103				

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\E187212.D
Acq On : 18 Jan 2012 8:32 pm
Sample : bfb
Misc : MS24397,VE8236,5,,100,5,1
MS Integration Params: RTEINT.P

Vial: 26
Operator: dipap
Inst : MSE
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\ME8147.M (RTE Integrator)
Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2175, 2176, 2177; Background Corrected with Scan 2165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.0	14297	PASS
75	95	30	60	44.5	39645	PASS
95	95	100	100	100.0	89162	PASS
96	95	5	9	6.9	6166	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	99.6	88792	PASS
175	174	5	9	7.8	6925	PASS
176	174	95	101	98.3	87298	PASS
177	176	5	9	6.8	5953	PASS

E187212.D ME8147.M Thu Jan 19 13:21:55 2012 RPT1

Average of 15.460 to 15.471 min.: E187212.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	714	50.05	14297	67.00	198	78.95	1744
37.10	3544	51.05	4457	68.05	7842	80.00	486
38.10	3225	52.05	189	69.05	7879	80.95	1706
39.10	1251	55.00	248	70.05	520	82.00	414
40.10	132	56.05	1103	72.05	434	87.05	3889
44.05	376	57.05	1939	73.05	3642	88.05	3858
45.10	668	60.00	696	74.05	12596	91.00	272
47.05	1195	61.05	3567	75.05	39645	92.05	2054
47.85	165	62.05	3377	76.05	3457	93.05	3144
48.15	331	63.05	2550	77.10	502	94.05	9667
49.05	3235	64.05	294	78.00	381	95.05	89162

Average of 15.460 to 15.471 min.: E187212.D\data.ms

bfb

Modified:subtracted

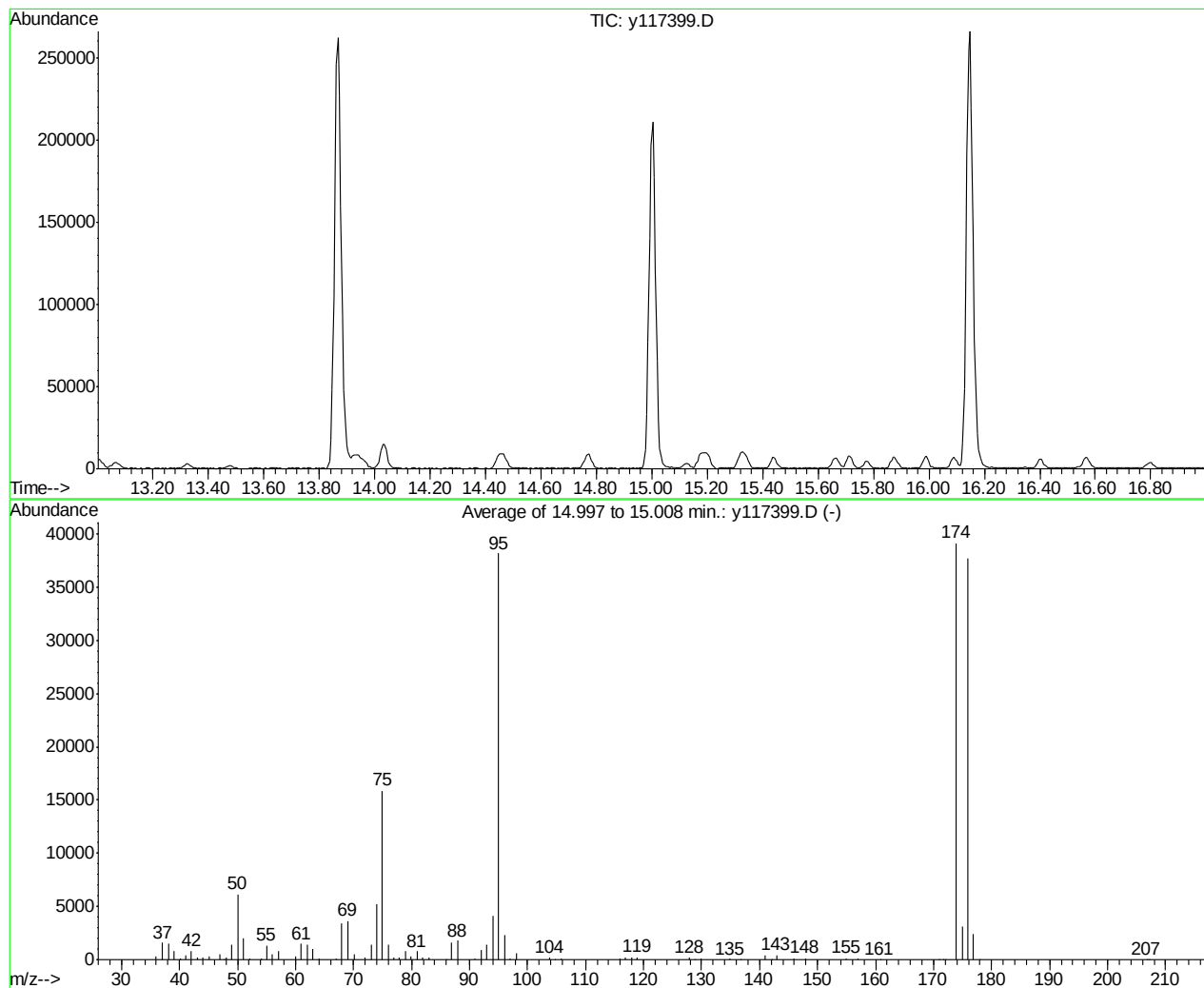
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	6166	129.90	339	171.85	53		
97.25	51	130.85	55	172.25	62		
104.00	344	134.75	55	173.95	88792		
105.85	105	134.95	142	175.05	6925		
106.05	237	140.95	842	175.95	87298		
115.95	257	141.95	61	176.95	5953		
117.00	441	142.95	911				
117.95	238	145.90	111				
118.95	419	147.90	221				
127.95	314	155.00	256				
128.95	56	156.95	146				

SW-846 Method 8260

Data File : C:\MSDCHEM\1\DATA\y117399.D
Acq On : 8 Nov 2011 10:04 am
Sample : BFB
Misc : MS20977,VY5012,5.0,,,,,1
MS Integration Params: lscint.p

Vial: 1
Operator: Roberts
Inst : MSY
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MYS5012.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2097, 2098, 2099; Background Corrected with Scan 2088

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.1	6146	PASS
75	95	30	60	41.5	15862	PASS
95	95	100	100	100.0	38181	PASS
96	95	5	9	6.1	2326	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	102.5	39146	PASS
175	174	5	9	8.0	3125	PASS
176	174	95	101	96.2	37658	PASS
177	176	5	9	6.4	2411	PASS

y117399.D MYS5012.M Wed Nov 09 14:44:38 2011 RPT1

Average of 14.997 to 15.008 min.: y117399.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	316	47.70	41	61.00	1478	75.00	15862
37.10	1576	48.00	182	62.00	1427	76.00	1410
38.05	1476	49.00	1402	63.00	1012	76.95	238
39.05	827	50.00	6146	64.05	126	77.95	163
40.10	123	51.05	1972	67.00	86	78.90	841
41.05	391	52.05	69	68.00	3424	79.95	302
42.05	852	54.05	98	69.00	3662	80.90	793
43.05	179	55.05	1357	70.05	499	81.90	217
44.00	174	56.00	550	71.95	190	83.00	161
45.05	301	57.00	769	73.00	1428	85.90	32
47.00	520	60.00	295	74.00	5264	86.95	1627

Average of 14.997 to 15.008 min.: y117399.D

BFB

Modified:subtracted

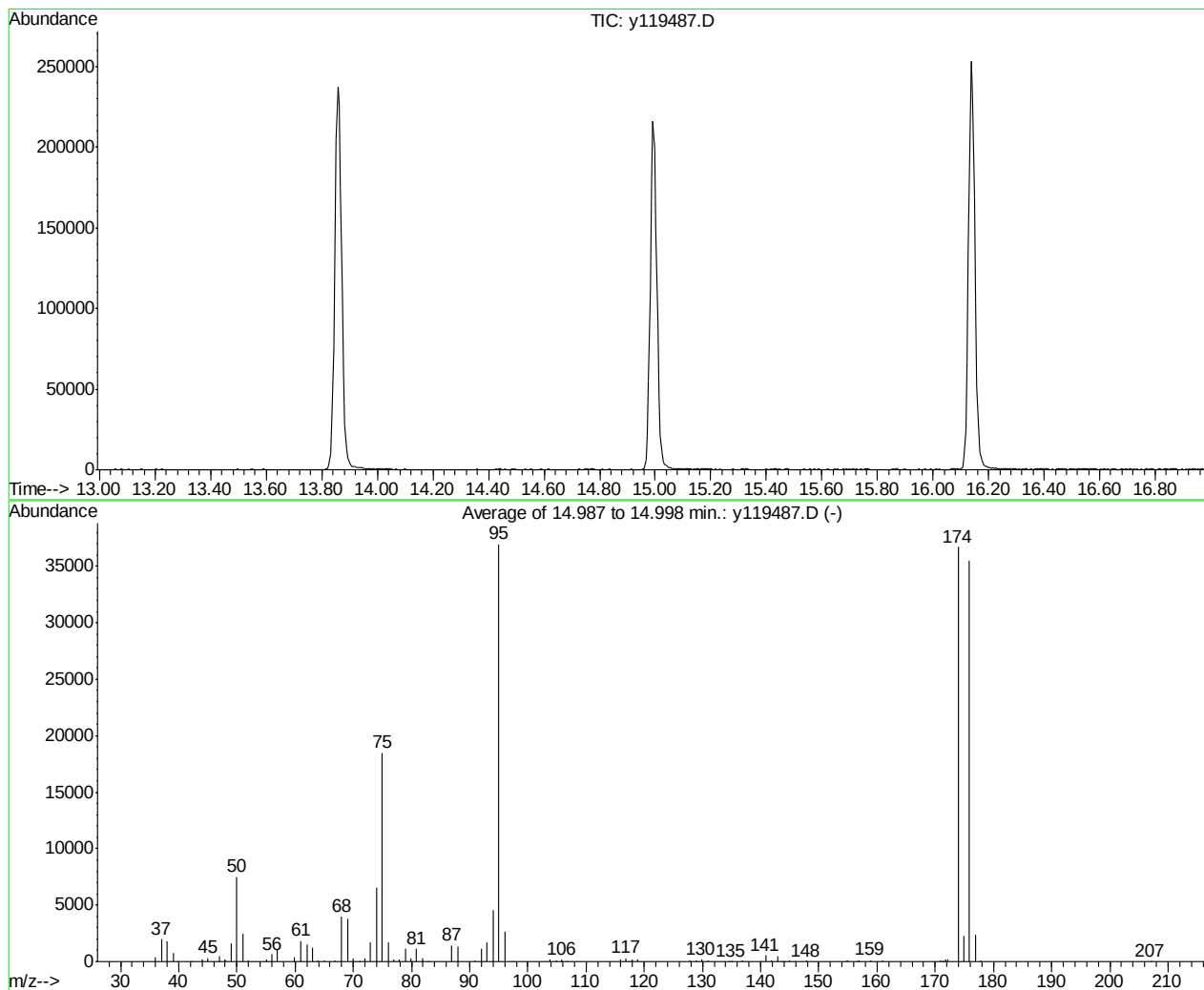
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	1758	105.85	150	142.00	32	174.95	3125
90.95	147	115.85	117	142.90	419	175.90	37658
92.00	936	116.85	188	145.85	61	176.90	2411
93.00	1385	117.90	163	147.85	122	177.90	39
94.00	4093	118.95	226	154.95	125	206.80	32
95.00	38181	127.90	163	156.90	56	207.10	26
96.00	2326	128.90	26	160.80	27		
97.00	128	129.85	141	171.00	31		
98.05	587	134.95	87	171.70	28		
103.85	179	136.80	30	172.00	35		
104.80	28	140.95	367	173.90	39146		

SW-846 Method 8260

Data File : C:\MSDCHEM\1\DATA\y119487.D
Acq On : 17 Jan 2012 10:24 am
Sample : BFB
Misc : MS24355,VY5108,5.0,,,1
MS Integration Params: lscint.p

Vial: 1
Operator: Roberts
Inst : MSY
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MYS5012.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2095, 2096, 2097; Background Corrected with Scan 2086

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	7506	PASS
75	95	30	60	50.1	18501	PASS
95	95	100	100	100.0	36960	PASS
96	95	5	9	7.3	2693	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	99.3	36709	PASS
175	174	5	9	6.2	2293	PASS
176	174	95	101	96.8	35528	PASS
177	176	5	9	6.6	2333	PASS

y119487.D MYS5012.M Wed Jan 18 15:56:59 2012 RPT1

Average of 14.987 to 14.998 min.: y119487.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	405	49.00	1617	63.95	134	76.00	1732
37.05	1984	50.00	7506	65.05	110	76.95	175
38.05	1808	51.00	2438	66.85	93	77.85	168
39.05	727	52.00	117	68.00	3978	78.90	1103
39.90	38	55.00	185	69.00	3777	79.95	305
42.20	25	56.05	637	70.05	299	80.90	1105
44.00	234	57.00	1009	71.10	25	81.90	284
45.00	312	59.95	409	71.95	260	82.90	27
47.00	470	61.00	1812	73.00	1738	86.95	1444
47.90	162	62.00	1501	74.00	6519	87.95	1336
48.10	70	63.00	1258	75.00	18501	90.90	139

Average of 14.987 to 14.998 min.: y119487.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	1123	116.90	292	140.00	26	156.60	29
93.00	1732	117.60	47	140.85	549	156.95	68
94.00	4574	117.95	167	141.85	58	158.85	99
95.00	36960	118.90	229	142.90	449	160.90	64
96.00	2693	127.85	132	143.70	27	170.95	95
97.30	26	128.90	64	144.00	26	171.20	36
103.85	156	129.85	186	144.95	84	171.40	38
104.85	70	131.05	58	145.90	34	171.75	198
105.85	182	134.70	26	147.85	83	172.15	206
106.80	36	135.00	34	154.80	87	173.90	36709
115.95	161	136.80	111	154.95	82	174.90	2293

Average of 14.987 to 14.998 min.: y119487.D

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.90	35528						
176.90	2333						
177.90	86						
207.00	27						

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91056.D
 Acq On : 22 Dec 2011 11:21 am
 Sample : ic4096-0.5
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 11:47:16 2011

Vial: 2
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	115632	500.00	ug/L	-0.02
4) pentafluorobenzene	11.06	168	230632	50.00	ug/L	-0.01
51) 1,4-difluorobenzene	11.96	114	318707	50.00	ug/L	-0.02
82) chlorobenzene-d5	14.92	117	326368	50.00	ug/L	-0.01
97) 1,4-dichlorobenzene-d4	17.07	152	218508	50.00	ug/L	-0.01

System Monitoring Compounds

44) dibromofluoromethane (s)	11.08	113	1140	0.68	ug/L	0.00
Spiked Amount	50.000	Range	77 - 120	Recovery	=	1.36%#
45) 1,2-dichloroethane-d4 (s)	0.00	65	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 127	Recovery	=	0.00%#
74) toluene-d8 (s)	13.55	98	3418	0.57	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	1.14%#
99) 4-bromofluorobenzene (s)	15.99	95	2483	0.82	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	1.64%#

Target Compounds

						Qvalue
5) chlorodifluoromethane	4.66	51	1162	0.51	ug/L	63
6) dichlorodifluoromethane	4.64	85	1768	0.58	ug/L	# 50
8) chloromethane	5.04	50	2316	0.66	ug/L	88
9) vinyl chloride	5.33	62	1671	0.53	ug/L	93
10) bromomethane	6.11	94	918	0.49	ug/L	97
11) chloroethane	6.35	64	533	0.35	ug/L	# 45
13) trichlorofluoromethane	6.92	101	1689	0.58	ug/L	92
14) Pentane	7.06	43	1344	0.41	ug/L	# 68
18) 1,1-dichloroethene	7.88	96	651	0.38	ug/L	# 76
22) iodomethane	8.17	142	1529	0.46	ug/L	79
24) carbon disulfide	8.33	76	2853	0.45	ug/L	79
25) methylene chloride	8.65	84	973	0.49	ug/L	# 64
27) methyl tert butyl ether	9.07	73	2411	0.43	ug/L	53
28) trans-1,2-dichloroethene	9.11	96	615	0.34	ug/L	# 72
29) di-isopropyl ether	9.76	45	2398	0.38	ug/L	83
31) 1,1-dichloroethane	9.70	63	1192	0.37	ug/L	88
32) chloroprene	9.87	53	834	0.31	ug/L	78
35) ethyl tert-butyl ether	10.25	59	2271	0.40	ug/L	95
37) 2,2-dichloropropane	10.52	77	1445	0.54	ug/L	69
38) cis-1,2-dichloroethene	10.50	96	781	0.39	ug/L	# 72
42) chloroform	10.87	83	1393	0.45	ug/L	79
48) 1,1,1-trichloroethane	11.17	97	1240	0.48	ug/L	70
49) Cyclohexane	11.28	84	1242	0.45	ug/L	91
56) carbon tetrachloride	11.39	117	1195	0.51	ug/L	90
57) 1,1-dichloropropene	11.36	75	1031	0.43	ug/L	# 73
59) benzene	11.62	78	3299	0.45	ug/L	93
60) 2,2,4-trimethylpentane	11.69	57	2255	0.35	ug/L	87
61) tert-amyl methyl ether	11.69	73	2428	0.44	ug/L	79
64) 1,2-dichloroethane	11.60	62	939	0.44	ug/L	# 49
65) trichloroethene	12.30	95	818	0.47	ug/L	87
67) 2-chloroethyl vinyl ether	13.05	63	1882	1.82	ug/L	85
69) 1,2-dichloropropane	12.55	63	667	0.36	ug/L	# 50
71) methylcyclohexane	12.56	83	1110	0.38	ug/L	69

(#) = qualifier out of range (m) = manual integration

2B91056.D M2B4096.M

Fri Dec 23 17:01:32 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91056.D
 Acq On : 22 Dec 2011 11:21 am
 Sample : ic4096-0.5
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 11:47:16 2011

Vial: 2
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
72) bromodichloromethane	12.79	83	978	0.43	ug/L	89
73) cis-1,3-dichloropropene	13.25	75	1195	0.43	ug/L	72
76) toluene	13.61	92	1977	0.46	ug/L	94
78) trans-1,3-dichloropropene	13.76	75	1233	0.50	ug/L	75
79) ethyl methacrylate	13.80	69	573	0.26	ug/L	72
80) 1,1,2-trichloroethane	13.95	83	597	0.46	ug/L	98
84) tetrachloroethene	14.15	164	750	0.37	ug/L #	83
85) 1,3-dichloropropane	14.12	76	1132	0.39	ug/L	95
87) 3,3-dimethyl-1-butanol	14.28	57	823	3.84	ug/L #	75
88) dibromochloromethane	14.36	129	917	0.42	ug/L	88
89) 1,2-dibromoethane	14.52	107	843	0.45	ug/L	93
90) chlorobenzene	14.95	112	2541	0.47	ug/L	92
91) 1,1,1,2-tetrachloroethane	15.00	131	1153	0.56	ug/L #	81
92) ethylbenzene	15.02	91	4450	0.50	ug/L	95
93) m,p-xylene	15.12	106	3369	0.95	ug/L	87
94) o-xylene	15.50	106	1490	0.41	ug/L	97
95) styrene	15.51	104	2733	0.45	ug/L	87
96) bromoform	15.71	173	858	0.50	ug/L	73
98) isopropylbenzene	15.82	105	4660	0.41	ug/L	98
100) cyclohexanone	15.94	98	1025	4.10	ug/L	85
101) bromobenzene	16.17	156	1218	0.40	ug/L	85
102) 1,1,2,2-tetrachloroethane	16.04	83	1477	0.46	ug/L	84
105) n-propylbenzene	16.19	91	5595	0.44	ug/L	96
106) 2-chlorotoluene	16.32	126	1145	0.42	ug/L	92
107) 4-chlorotoluene	16.42	91	3568	0.46	ug/L	90
108) 1,3,5-trimethylbenzene	16.33	105	4014	0.44	ug/L	92
109) tert-butylbenzene	16.66	119	3637	0.44	ug/L	91
110) pentachloroethane	16.71	167	951	0.51	ug/L	92
111) 1,2,4-trimethylbenzene	16.70	105	4355	0.47	ug/L	87
112) sec-butylbenzene	16.86	105	5772	0.46	ug/L	93
113) 1,3-dichlorobenzene	17.02	146	2785	0.46	ug/L	90
114) p-isopropyltoluene	16.97	119	4862	0.46	ug/L	91
115) 1,4-dichlorobenzene	17.09	146	2796	0.46	ug/L	68
116) 1,2-dichlorobenzene	17.48	146	2970	0.49	ug/L	96
117) n-butylbenzene	17.37	92	2254	0.41	ug/L	87
119) 1,3,5-trichlorobenzene	18.44	180	2567	0.47	ug/L #	92
120) 1,2,4-trichlorobenzene	19.09	180	2081	0.42	ug/L	92
121) hexachlorobutadiene	19.22	225	1289	0.46	ug/L	92
122) naphthalene	19.37	128	4913	0.44	ug/L	99
123) 1,2,3-trichlorobenzene	19.61	180	1924	0.42	ug/L	93
124) hexachloroethane	17.75	201	857	0.39	ug/L	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91056.D M2B4096.M Fri Dec 23 17:01:32 2011 MS2B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91057.D
 Acq On : 22 Dec 2011 11:52 am
 Sample : ic4096-1
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 12:18:33 2011

Vial: 3
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	124414	500.00	ug/L	-0.02
4) pentafluorobenzene	11.06	168	237256	50.00	ug/L	-0.01
51) 1,4-difluorobenzene	11.96	114	327500	50.00	ug/L	-0.02
82) chlorobenzene-d5	14.92	117	350801	50.00	ug/L	-0.01
97) 1,4-dichlorobenzene-d4	17.07	152	228179	50.00	ug/L	-0.01

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	2214	1.28	ug/L	-0.01
Spiked Amount	50.000	Range	77 - 120	Recovery	=	2.56%#
45) 1,2-dichloroethane-d4 (s)	11.51	65	2241	1.25	ug/L	0.00
Spiked Amount	50.000	Range	70 - 127	Recovery	=	2.50%#
74) toluene-d8 (s)	13.54	98	7138	1.16	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	2.32%#
99) 4-bromofluorobenzene (s)	15.99	95	3736	1.18	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	2.36%#

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.73	59	772	3.07	ug/L	77
5) chlorodifluoromethane	4.64	51	3000	1.29	ug/L	64
6) dichlorodifluoromethane	4.64	85	4134	1.31	ug/L	89
8) chloromethane	5.03	50	3826	1.06	ug/L	89
9) vinyl chloride	5.33	62	3542	1.09	ug/L	91
10) bromomethane	6.13	94	1910	1.00	ug/L	86
11) chloroethane	6.34	64	1401	0.89	ug/L	# 62
13) trichlorofluoromethane	6.94	101	3570	1.19	ug/L	81
14) Pentane	7.06	43	3727	1.09	ug/L	# 68
16) acrolein	7.69	56	1917	4.77	ug/L	85
18) 1,1-dichloroethene	7.87	96	1924	1.08	ug/L	85
20) allyl chloride	8.46	76	712	0.59	ug/L	# 33
21) acetonitrile	8.35	40	556	4.49	ug/L	# 1
22) iodomethane	8.17	142	3804	1.12	ug/L	83
24) carbon disulfide	8.32	76	6521	1.00	ug/L	83
25) methylene chloride	8.65	84	2204	1.08	ug/L	93
27) methyl tert butyl ether	9.08	73	6070	1.05	ug/L	87
28) trans-1,2-dichloroethene	9.10	96	2042	1.10	ug/L	# 70
29) di-isopropyl ether	9.76	45	5283	0.82	ug/L	95
31) 1,1-dichloroethane	9.71	63	3182	0.96	ug/L	92
32) chloroprene	9.86	53	2488	0.88	ug/L	77
33) acrylonitrile	9.05	53	1733	2.11	ug/L	# 65
35) ethyl tert-butyl ether	10.26	59	5670	0.97	ug/L	87
37) 2,2-dichloropropane	10.52	77	3220	1.17	ug/L	87
38) cis-1,2-dichloroethene	10.50	96	2200	1.06	ug/L	81
39) propionitrile	10.56	54	1565	5.23	ug/L	# 51
40) bromochloromethane	10.81	128	1003	0.95	ug/L	90
41) tetrahydrofuran	10.93	42	587	0.99	ug/L	# 33
42) chloroform	10.87	83	3456	1.09	ug/L	91
43) t-butyl formate	10.96	59	1475	0.78	ug/L	92
46) freon 113	7.88	151	1519	0.97	ug/L	77
47) methacrylonitrile	10.80	41	537	0.43	ug/L	# 36
48) 1,1,1-trichloroethane	11.18	97	3149	1.18	ug/L	89

(#) = qualifier out of range (m) = manual integration

2B91057.D M2B4096.M

Fri Dec 23 17:01:36 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91057.D
 Acq On : 22 Dec 2011 11:52 am
 Sample : ic4096-1
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 12:18:33 2011

Vial: 3
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) Cyclohexane	11.29	84	2833	1.00	ug/L #	83
54) epichlorohydrin	13.14	57	514	2.65	ug/L	54
55) n-butyl alcohol	12.12	56	1111	21.41	ug/L #	71
56) carbon tetrachloride	11.40	117	2975	1.25	ug/L	95
57) 1,1-dichloropropene	11.37	75	2360	0.96	ug/L	97
58) hexane	9.53	57	1681	0.72	ug/L	77
59) benzene	11.62	78	7259	0.96	ug/L	90
60) 2,2,4-trimethylpentane	11.68	57	5798	0.87	ug/L	80
61) tert-amyl methyl ether	11.68	73	6148	1.10	ug/L	95
62) heptane	11.86	57	1035	0.76	ug/L	89
63) isopropyl acetate	11.56	43	3924	1.11	ug/L	62
64) 1,2-dichloroethane	11.60	62	2515	1.14	ug/L	84
65) trichloroethene	12.31	95	1978	1.10	ug/L	91
67) 2-chloroethyl vinyl ether	13.04	63	5179	4.89	ug/L	91
68) methyl methacrylate	12.58	69	1532	0.82	ug/L #	15
69) 1,2-dichloropropane	12.55	63	1762	0.94	ug/L	87
70) dibromomethane	12.67	93	1252	1.13	ug/L	85
71) methylcyclohexane	12.56	83	3108	1.04	ug/L	86
72) bromodichloromethane	12.80	83	2613	1.12	ug/L	91
73) cis-1,3-dichloropropene	13.25	75	2959	1.03	ug/L	93
75) 4-methyl-2-pentanone	13.36	58	514	0.67	ug/L #	28
76) toluene	13.61	92	4812	1.10	ug/L	98
77) 3-methyl-1-butanol	13.35	55	1698	20.56	ug/L	91
78) trans-1,3-dichloropropene	13.75	75	3005	1.19	ug/L	86
79) ethyl methacrylate	13.79	69	2160	0.96	ug/L	84
80) 1,1,2-trichloroethane	13.95	83	1583	1.18	ug/L	90
84) tetrachloroethene	14.15	164	1989	0.91	ug/L	93
85) 1,3-dichloropropane	14.12	76	2976	0.96	ug/L	96
86) butyl acetate	14.22	56	872	0.66	ug/L #	8
87) 3,3-dimethyl-1-butanol	14.27	57	2297	9.96	ug/L	99
88) dibromochloromethane	14.36	129	2463	1.06	ug/L	88
89) 1,2-dibromoethane	14.51	107	2025	1.00	ug/L	99
90) chlorobenzene	14.95	112	5800	1.00	ug/L	97
91) 1,1,1,2-tetrachloroethane	15.00	131	2538	1.15	ug/L	98
92) ethylbenzene	15.02	91	10011	1.04	ug/L	96
93) m,p-xylene	15.11	106	7452	1.95	ug/L	94
94) o-xylene	15.50	106	3842	0.98	ug/L	99
95) styrene	15.50	104	6398	0.99	ug/L	92
96) bromoform	15.72	173	1944	1.05	ug/L	84
98) isopropylbenzene	15.82	105	10754	0.91	ug/L	97
100) cyclohexanone	15.94	98	1805	6.91	ug/L #	83
101) bromobenzene	16.18	156	3267	1.02	ug/L	90
102) 1,1,2,2-tetrachloroethane	16.04	83	3609	1.07	ug/L	98
103) trans-1,4-dichloro-2-buten	16.09	53	685	0.92	ug/L	84
104) 1,2,3-trichloropropane	16.12	110	937	1.16	ug/L	85
105) n-propylbenzene	16.19	91	13257	0.99	ug/L	96
106) 2-chlorotoluene	16.32	126	2830	1.00	ug/L	93
107) 4-chlorotoluene	16.41	91	8360	1.04	ug/L	98
108) 1,3,5-trimethylbenzene	16.33	105	9585	1.00	ug/L	94

(#) = qualifier out of range (m) = manual integration

2B91057.D M2B4096.M

Fri Dec 23 17:01:36 2011

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91057.D
 Acq On : 22 Dec 2011 11:52 am
 Sample : ic4096-1
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 12:18:33 2011

Vial: 3
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
109) tert-butylbenzene	16.66	119	8258	0.95	ug/L	97
110) pentachloroethane	16.71	167	2051	1.06	ug/L	85
111) 1,2,4-trimethylbenzene	16.70	105	10262	1.05	ug/L	89
112) sec-butylbenzene	16.86	105	12584	0.96	ug/L	94
113) 1,3-dichlorobenzene	17.02	146	6425	1.02	ug/L	94
114) p-isopropyltoluene	16.97	119	10757	0.98	ug/L	94
115) 1,4-dichlorobenzene	17.09	146	6806	1.06	ug/L	90
116) 1,2-dichlorobenzene	17.47	146	6461	1.02	ug/L	88
117) n-butylbenzene	17.37	92	5253	0.92	ug/L	93
118) 1,2-dibromo-3-chloropropan	18.21	75	812	1.29	ug/L #	68
119) 1,3,5-trichlorobenzene	18.44	180	5830	1.01	ug/L #	85
120) 1,2,4-trichlorobenzene	19.09	180	4948	0.95	ug/L	98
121) hexachlorobutadiene	19.22	225	2954	1.01	ug/L	96
122) naphthalene	19.37	128	11123	0.96	ug/L	95
123) 1,2,3-trichlorobenzene	19.61	180	4464	0.92	ug/L	89
124) hexachloroethane	17.75	201	2092	0.90	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91057.D M2B4096.M Fri Dec 23 17:01:36 2011 MS2B

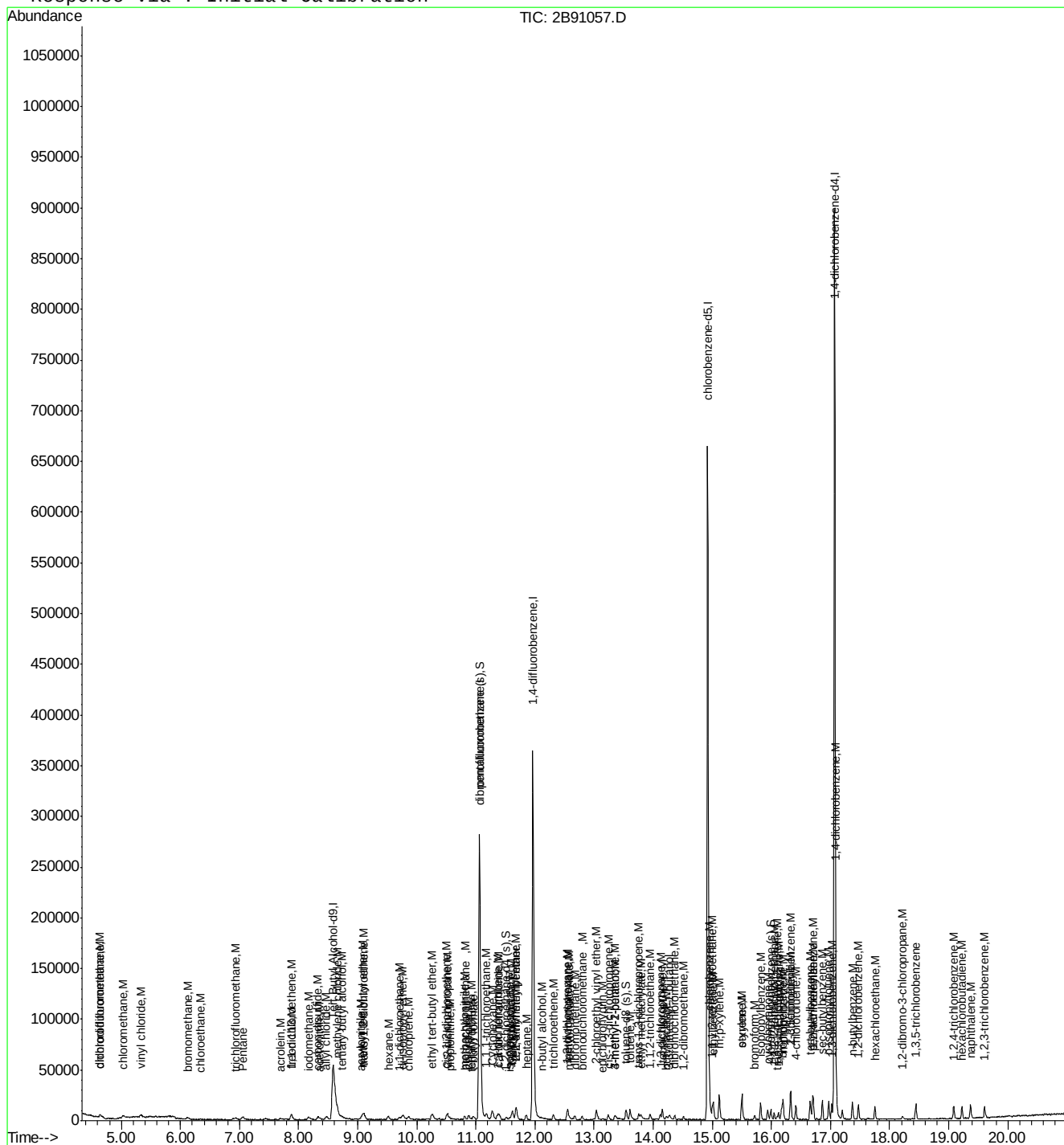
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91057.D
Acq On : 22 Dec 2011 11:52 am
Sample : ic4096-1
Misc : MS23205,V2B4096,W,,,1
MS Integration Params: rteint.p
Quant Time: Dec 22 12:18 2011

Vial: 3
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



2B91057.D M2B4096.M

Fri Dec 23 17:01:37 2011

MS2B

Page 4

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91058.D
 Acq On : 22 Dec 2011 12:24 pm
 Sample : ic4096-2
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 12:50:00 2011

Vial: 4
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	126892	500.00	ug/L	-0.01
4) pentafluorobenzene	11.07	168	250795	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	348384	50.00	ug/L	-0.02
82) chlorobenzene-d5	14.92	117	371769	50.00	ug/L	-0.01
97) 1,4-dichlorobenzene-d4	17.07	152	239612	50.00	ug/L	-0.01

System Monitoring Compounds

44) dibromofluoromethane (s)	11.08	113	3959	2.17	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	4.34%#	
45) 1,2-dichloroethane-d4 (s)	11.51	65	4538	2.39	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	4.78%#	
74) toluene-d8 (s)	13.54	98	14127	2.17	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	4.34%#	
99) 4-bromofluorobenzene (s)	15.99	95	7445	2.24	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	4.48%#	

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.73	59	1995	7.78	ug/L	83
3) 1,4-dioxane	12.66	88	890	43.31	ug/L	84
5) chlorodifluoromethane	4.66	51	5984	2.43	ug/L	92
6) dichlorodifluoromethane	4.65	85	8376	2.51	ug/L	97
8) chloromethane	5.04	50	8026	2.11	ug/L	94
9) vinyl chloride	5.34	62	7299	2.12	ug/L	98
10) bromomethane	6.13	94	4268	2.11	ug/L	90
11) chloroethane	6.35	64	2984	1.80	ug/L	93
13) trichlorofluoromethane	6.94	101	8066	2.54	ug/L	95
14) Pentane	7.06	43	6868	1.90	ug/L #	83
15) ethyl ether	7.43	74	1226	1.06	ug/L	78
16) acrolein	7.66	56	6169	14.52	ug/L	96
18) 1,1-dichloroethene	7.88	96	4171	2.21	ug/L	96
19) acetone	8.01	43	893	0.86	ug/L #	50
20) allyl chloride	8.48	76	2309	1.80	ug/L #	71
21) acetonitrile	8.29	40	672	5.14	ug/L #	1
22) iodomethane	8.18	142	8044	2.24	ug/L	98
23) iso-butyl alcohol	11.62	74	625	32.05	ug/L #	42
24) carbon disulfide	8.34	76	13274	1.92	ug/L	83
25) methylene chloride	8.65	84	4342	2.01	ug/L	94
27) methyl tert butyl ether	9.08	73	12419	2.04	ug/L	99
28) trans-1,2-dichloroethene	9.11	96	4027	2.05	ug/L	89
29) di-isopropyl ether	9.76	45	11953	1.75	ug/L	93
31) 1,1-dichloroethane	9.70	63	6645	1.91	ug/L	94
32) chloroprene	9.86	53	5496	1.85	ug/L	91
33) acrylonitrile	9.03	53	5545	6.40	ug/L	91
35) ethyl tert-butyl ether	10.27	59	11578	1.87	ug/L	100
37) 2,2-dichloropropane	10.53	77	6772	2.33	ug/L	96
38) cis-1,2-dichloroethene	10.51	96	4596	2.10	ug/L #	77
39) propionitrile	10.56	54	4276	13.52	ug/L	67
40) bromochloromethane	10.82	128	2244	2.01	ug/L	91
41) tetrahydrofuran	10.89	42	1207	1.93	ug/L #	66
42) chloroform	10.88	83	7276	2.18	ug/L	88

(#) = qualifier out of range (m) = manual integration

2B91058.D M2B4096.M

Fri Dec 23 17:01:40 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91058.D
 Acq On : 22 Dec 2011 12:24 pm
 Sample : ic4096-2
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 12:50:00 2011

Vial: 4
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) t-butyl formate	10.96	59	3706	1.85	ug/L	95
46) freon 113	7.89	151	3579	2.16	ug/L	81
47) methacrylonitrile	10.77	41	2197	1.68	ug/L	70
48) 1,1,1-trichloroethane	11.18	97	6680	2.38	ug/L	91
49) Cyclohexane	11.29	84	6238	2.08	ug/L #	85
54) epichlorohydrin	13.14	57	1930	9.37	ug/L	78
55) n-butyl alcohol	12.09	56	4225	76.54	ug/L	99
56) carbon tetrachloride	11.40	117	6378	2.51	ug/L	93
57) 1,1-dichloropropene	11.36	75	5261	2.02	ug/L	97
58) hexane	9.51	57	3895	1.56	ug/L	84
59) benzene	11.62	78	14620	1.82	ug/L	98
60) 2,2,4-trimethylpentane	11.69	57	13997	1.98	ug/L	89
61) tert-amyl methyl ether	11.68	73	11992	2.01	ug/L	87
62) heptane	11.85	57	2469	1.70	ug/L	95
63) isopropyl acetate	11.56	43	7037	1.87	ug/L	97
64) 1,2-dichloroethane	11.60	62	5233	2.24	ug/L	88
65) trichloroethene	12.31	95	3834	2.00	ug/L	94
67) 2-chloroethyl vinyl ether	13.04	63	11259	9.98	ug/L	97
68) methyl methacrylate	12.58	69	3681	1.85	ug/L #	59
69) 1,2-dichloropropane	12.54	63	3700	1.85	ug/L	89
70) dibromomethane	12.67	93	2643	2.25	ug/L	95
71) methylcyclohexane	12.56	83	6436	2.03	ug/L	92
72) bromodichloromethane	12.80	83	5440	2.18	ug/L	95
73) cis-1,3-dichloropropene	13.24	75	6391	2.08	ug/L	86
75) 4-methyl-2-pentanone	13.34	58	1127	1.37	ug/L	90
76) toluene	13.60	92	9872	2.12	ug/L	95
77) 3-methyl-1-butanol	13.35	55	4093	46.59	ug/L	97
78) trans-1,3-dichloropropene	13.75	75	6021	2.24	ug/L	75
79) ethyl methacrylate	13.78	69	4505	1.88	ug/L	96
80) 1,1,2-trichloroethane	13.95	83	3192	2.23	ug/L	85
81) 2-hexanone	14.15	58	1158	1.43	ug/L #	45
84) tetrachloroethene	14.15	164	4073	1.75	ug/L	93
85) 1,3-dichloropropane	14.11	76	6239	1.90	ug/L	90
86) butyl acetate	14.22	56	1728	1.24	ug/L #	66
87) 3,3-dimethyl-1-butanol	14.27	57	4407	18.03	ug/L	89
88) dibromochloromethane	14.36	129	5033	2.04	ug/L	82
89) 1,2-dibromoethane	14.51	107	4417	2.06	ug/L	84
90) chlorobenzene	14.95	112	12064	1.96	ug/L	97
91) 1,1,1,2-tetrachloroethane	15.00	131	4972	2.12	ug/L	92
92) ethylbenzene	15.02	91	20527	2.01	ug/L	98
93) m,p-xylene	15.11	106	15942	3.94	ug/L	97
94) o-xylene	15.50	106	8456	2.04	ug/L	98
95) styrene	15.50	104	14163	2.06	ug/L	97
96) bromoform	15.71	173	4229	2.16	ug/L	94
98) isopropylbenzene	15.82	105	22694	1.83	ug/L	93
100) cyclohexanone	15.93	98	3462	12.63	ug/L	84
101) bromobenzene	16.17	156	6548	1.94	ug/L	92
102) 1,1,2,2-tetrachloroethane	16.04	83	7047	1.98	ug/L	95
103) trans-1,4-dichloro-2-buten	16.09	53	1433	1.83	ug/L	84

(#) = qualifier out of range (m) = manual integration

2B91058.D M2B4096.M

Fri Dec 23 17:01:40 2011

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91058.D
 Acq On : 22 Dec 2011 12:24 pm
 Sample : ic4096-2
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 12:50:00 2011

Vial: 4
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
104) 1,2,3-trichloropropane	16.12	110	1848	2.17	ug/L	94
105) n-propylbenzene	16.19	91	27063	1.93	ug/L	97
106) 2-chlorotoluene	16.32	126	5938m	2.00	ug/L	
107) 4-chlorotoluene	16.41	91	17184	2.03	ug/L	97
108) 1,3,5-trimethylbenzene	16.33	105	19623	1.96	ug/L	99
109) tert-butylbenzene	16.66	119	17326	1.89	ug/L	92
110) pentachloroethane	16.71	167	4512	2.22	ug/L	93
111) 1,2,4-trimethylbenzene	16.69	105	20726	2.02	ug/L	96
112) sec-butylbenzene	16.86	105	26794	1.94	ug/L	95
113) 1,3-dichlorobenzene	17.02	146	13650	2.07	ug/L	96
114) p-isopropyltoluene	16.97	119	22380	1.94	ug/L	94
115) 1,4-dichlorobenzene	17.10	146	13100	1.95	ug/L	96
116) 1,2-dichlorobenzene	17.47	146	13432	2.02	ug/L	95
117) n-butylbenzene	17.37	92	11498	1.93	ug/L	93
118) 1,2-dibromo-3-chloropropan	18.21	75	1486	2.25	ug/L	94
119) 1,3,5-trichlorobenzene	18.44	180	11688	1.93	ug/L	97
120) 1,2,4-trichlorobenzene	19.08	180	9966	1.81	ug/L	99
121) hexachlorobutadiene	19.22	225	5808	1.90	ug/L	97
122) naphthalene	19.37	128	22111	1.81	ug/L	98
123) 1,2,3-trichlorobenzene	19.61	180	8687	1.71	ug/L	87
124) hexachloroethane	17.75	201	4361	1.79	ug/L	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91058.D M2B4096.M Fri Dec 23 17:01:40 2011 MS2B

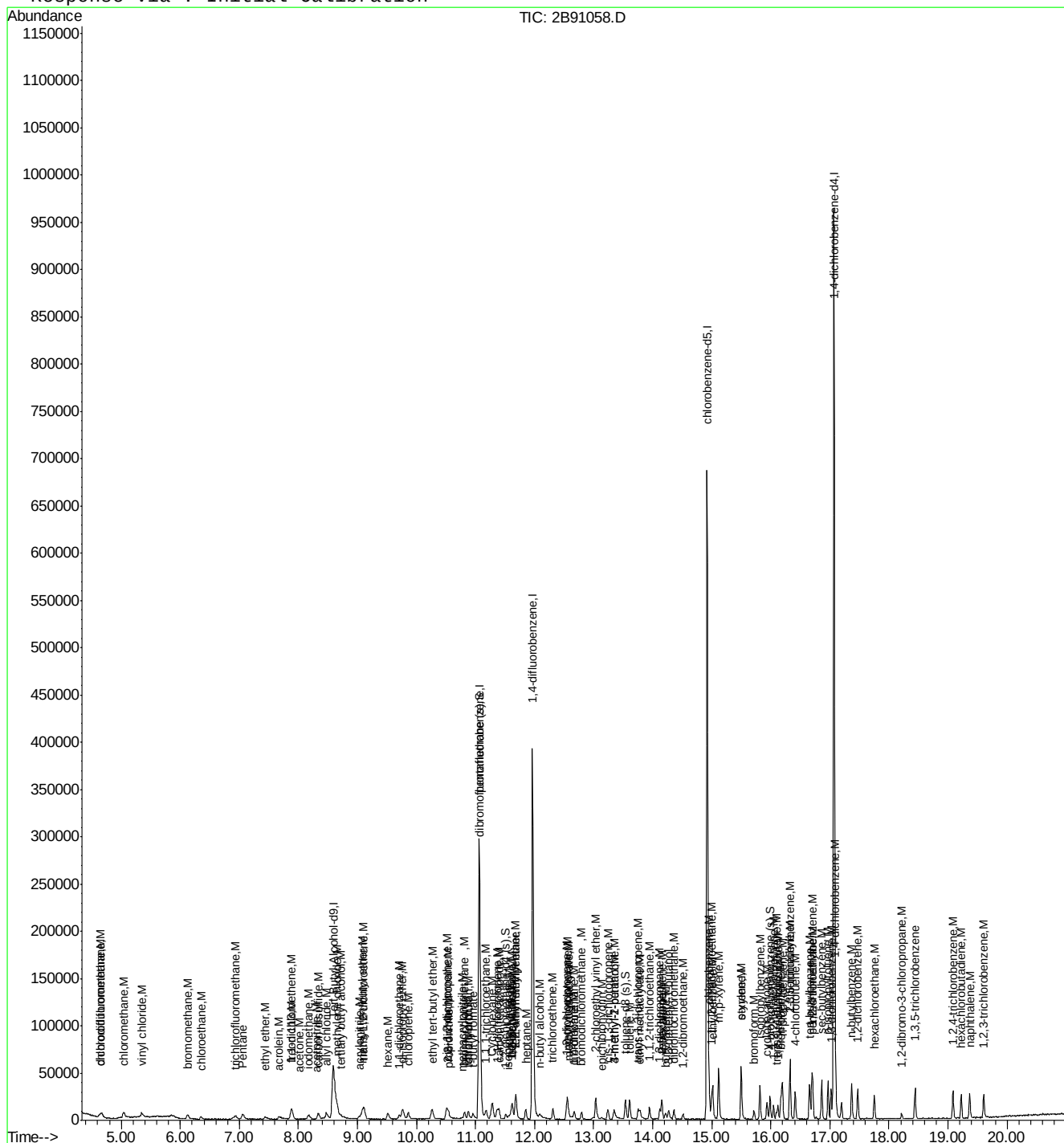
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91058.D
Acq On : 22 Dec 2011 12:24 pm
Sample : ic4096-2
Misc : MS23205,V2B4096,W,,,1
MS Integration Params: rteint.p
Quant Time: Dec 22 15:06 2011

Vial: 4
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



2B91058.D M2B4096.M

Fri Dec 23 17:01:41 2011

MS2B

Page 4

Manual Integration Approval Summary

Sample Number: V2B4096-IC4096

Method: SW846 8260B

Lab FileID: 2B91058.D

Analyst approved: 12/23/11 17:00 MoHui Huang

Injection Time: 12/22/11 12:24

Supervisor approved: 12/28/11 12:52 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Chlorotoluene	95-49-8		16.32	Missed peak

6.7.3.1
6

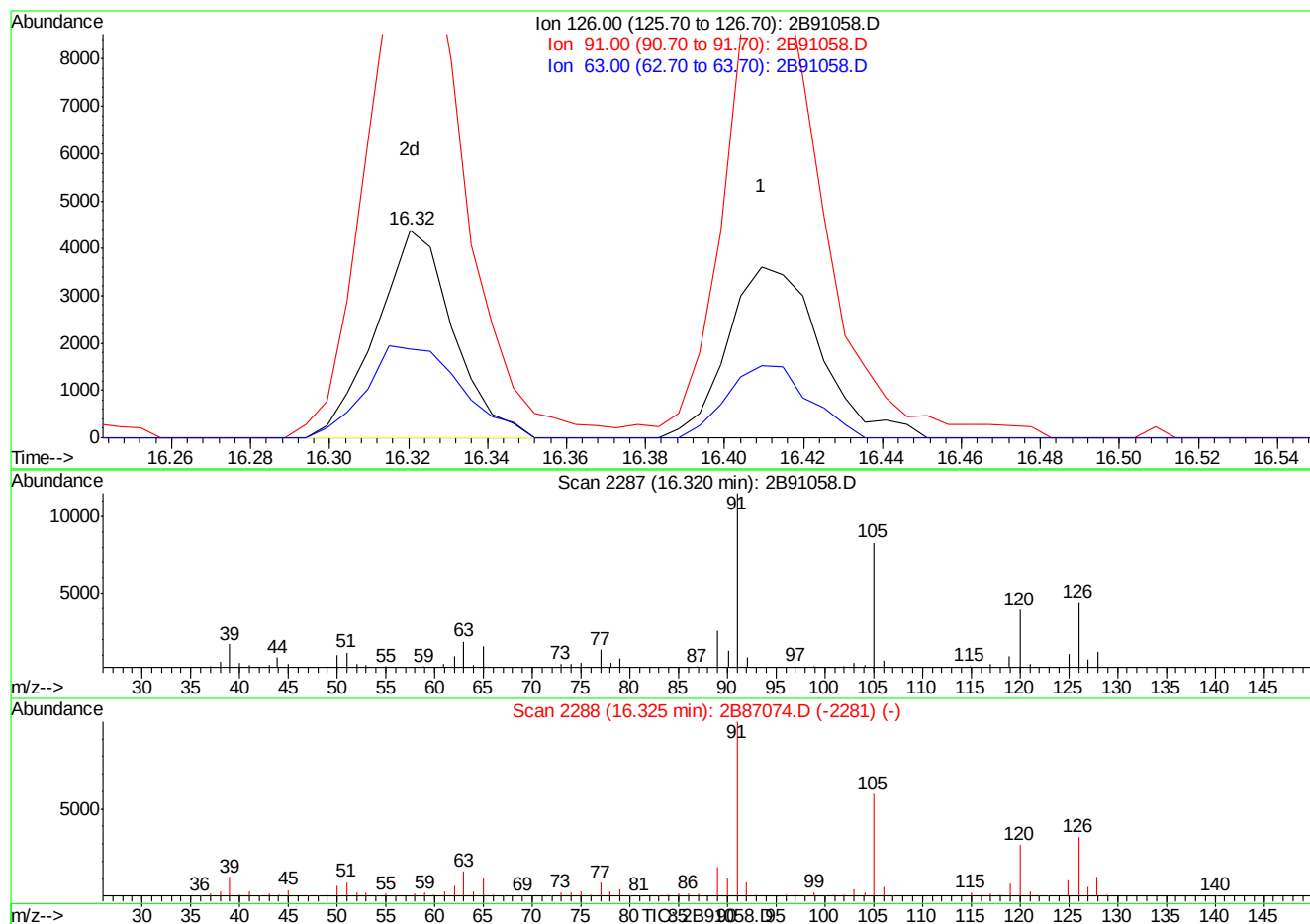
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\2B91058.D
Acq On : 22 Dec 2011 12:24 pm
Sample : ic4096-2
Misc : MS23205,V2B4096,W,,,1
MS Integration Params: rteint.p
Quant Time: Dec 22 12:50 2011

Vial: 4
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Thu Dec 22 15:05:12 2011
Response via : Multiple Level Calibration



(106) 2-chlorotoluene (M)

16.41min 1.99ug/L

response 5894

Ion	Exp%	Act%
126.00	100	100
91.00	294.60	277.16
63.00	41.20	42.28
0.00	0.00	0.00

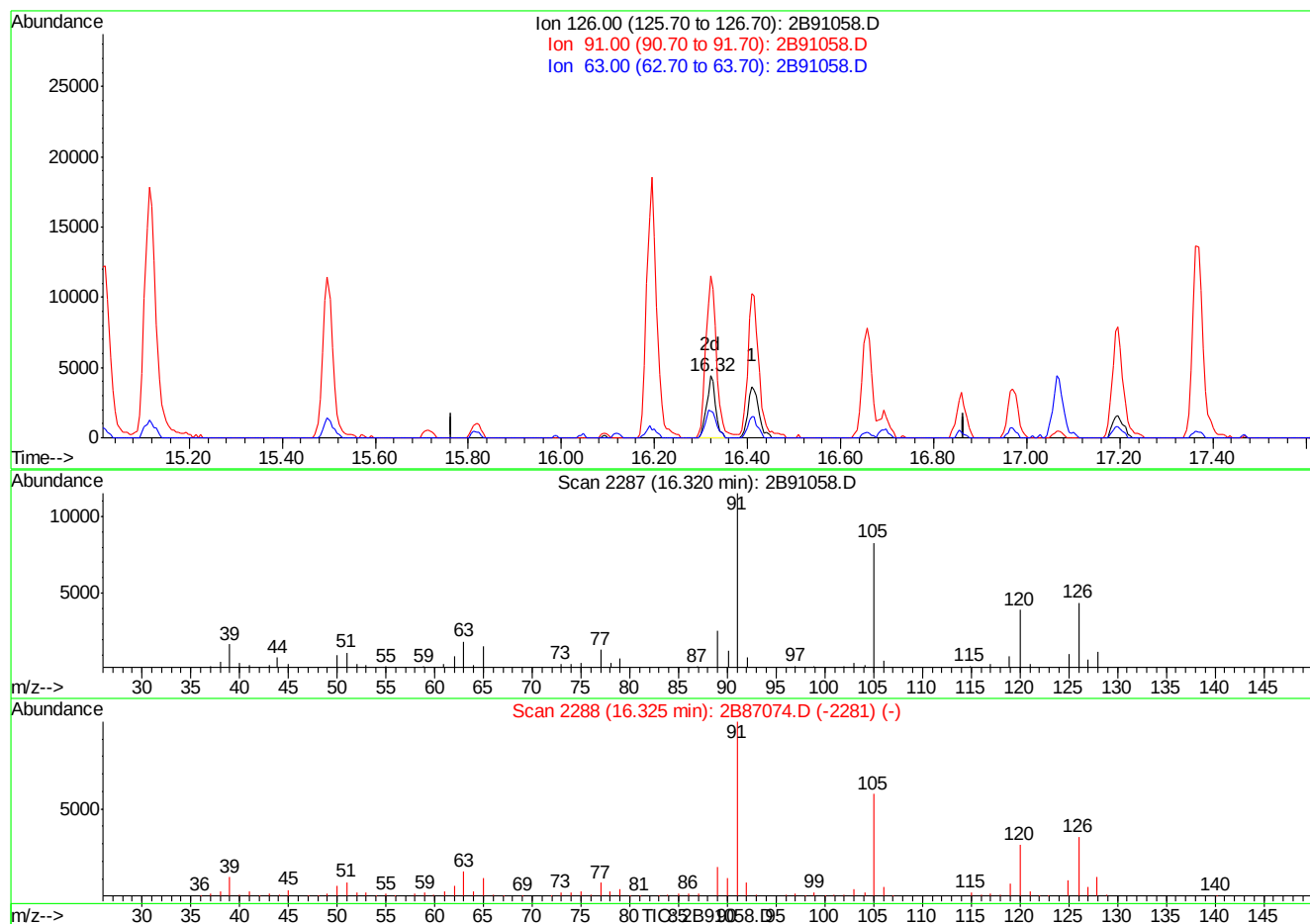
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\2B91058.D
Acq On : 22 Dec 2011 12:24 pm
Sample : ic4096-2
Misc : MS23205,V2B4096,W,,,1
MS Integration Params: rteint.p
Quant Time: Dec 22 15:06 2011

Vial: 4
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Thu Dec 22 15:05:12 2011
Response via : Multiple Level Calibration



(106) 2-chlorotoluene (M)

16.32min 2.00ug/L m

response 5938

Ion	Exp%	Act%
126.00	100	100
91.00	294.60	261.63#
63.00	41.20	42.83
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91060.D
 Acq On : 22 Dec 2011 1:27 pm
 Sample : ic4096-10
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 13:52:51 2011

Vial: 6
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.58	65	129308	500.00	ug/L	-0.02
4) pentafluorobenzene	11.06	168	248581	50.00	ug/L	-0.01
51) 1,4-difluorobenzene	11.96	114	354179	50.00	ug/L	-0.02
82) chlorobenzene-d5	14.92	117	366625	50.00	ug/L	-0.01
97) 1,4-dichlorobenzene-d4	17.07	152	234955	50.00	ug/L	-0.01

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	21142	11.69	ug/L	-0.01
Spiked Amount	50.000	Range	77 - 120	Recovery	=	23.38%#
45) 1,2-dichloroethane-d4 (s)	11.50	65	24852	13.21	ug/L	-0.01
Spiked Amount	50.000	Range	70 - 127	Recovery	=	26.42%#
74) toluene-d8 (s)	13.53	98	78535	11.85	ug/L	-0.01
Spiked Amount	50.000	Range	79 - 120	Recovery	=	23.70%#
99) 4-bromofluorobenzene (s)	15.98	95	35493	10.88	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	21.76%#

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.73	59	13071	50.02	ug/L	94
3) 1,4-dioxane	12.64	88	6206	296.33	ug/L	87
5) chlorodifluoromethane	4.64	51	29911	12.24	ug/L	92
6) dichlorodifluoromethane	4.64	85	41369	12.53	ug/L	99
8) chloromethane	5.03	50	37967	10.07	ug/L	98
9) vinyl chloride	5.35	62	37609	11.01	ug/L	98
10) bromomethane	6.12	94	22565	11.25	ug/L	98
11) chloroethane	6.34	64	16609	10.10	ug/L	97
13) trichlorofluoromethane	6.92	101	40800	12.98	ug/L	99
14) Pentane	7.05	43	31030	8.68	ug/L	99
15) ethyl ether	7.41	74	10783	9.42	ug/L	85
16) acrolein	7.63	56	41976	99.69	ug/L	97
18) 1,1-dichloroethene	7.88	96	20050	10.72	ug/L	98
19) acetone	7.96	43	7407	7.23	ug/L	86
20) allyl chloride	8.47	76	12569	9.87	ug/L	# 80
21) acetonitrile	8.36	40	8140	62.77	ug/L	87
22) iodomethane	8.16	142	43445	12.20	ug/L	90
23) iso-butyl alcohol	11.36	74	2806	145.17	ug/L	93
24) carbon disulfide	8.32	76	69691	10.15	ug/L	88
25) methylene chloride	8.65	84	22889	10.71	ug/L	89
26) methyl acetate	8.47	74	2333	9.04	ug/L	# 87
27) methyl tert butyl ether	9.07	73	68841	11.41	ug/L	100
28) trans-1,2-dichloroethene	9.10	96	21120	10.86	ug/L	92
29) di-isopropyl ether	9.76	45	62974	9.29	ug/L	80
30) 2-butanone	10.48	72	1740	6.33	ug/L	# 47
31) 1,1-dichloroethane	9.70	63	36357	10.52	ug/L	98
32) chloroprene	9.85	53	29860	10.13	ug/L	97
33) acrylonitrile	8.99	53	36080	41.98	ug/L	94
34) vinyl acetate	9.73	86	2257	5.70	ug/L	# 35
35) ethyl tert-butyl ether	10.26	59	64753	10.56	ug/L	98
36) ethyl acetate	10.52	45	2557	6.46	ug/L	# 32
37) 2,2-dichloropropane	10.52	77	34731	12.06	ug/L	94
38) cis-1,2-dichloroethene	10.49	96	23602	10.88	ug/L	92

(#) = qualifier out of range (m) = manual integration

2B91060.D M2B4096.M

Fri Dec 23 17:01:42 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91060.D
 Acq On : 22 Dec 2011 1:27 pm
 Sample : ic4096-10
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 13:52:51 2011

Vial: 6
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.52	54	26460	84.38	ug/L	94
40) bromochloromethane	10.80	128	12113	10.93	ug/L	90
41) tetrahydrofuran	10.89	42	5834	9.40	ug/L	91
42) chloroform	10.87	83	38609	11.65	ug/L	98
43) t-butyl formate	10.95	59	20158	10.16	ug/L	96
46) freon 113	7.88	151	18414	11.20	ug/L	98
47) methacrylonitrile	10.75	41	11347	8.77	ug/L	93
48) 1,1,1-trichloroethane	11.17	97	35327	12.68	ug/L	98
49) Cyclohexane	11.28	84	29353	9.89	ug/L	89
54) epichlorohydrin	13.12	57	11202	53.48	ug/L	92
55) n-butyl alcohol	12.05	56	27640	492.52	ug/L	96
56) carbon tetrachloride	11.40	117	32751	12.69	ug/L	98
57) 1,1-dichloropropene	11.36	75	26671	10.08	ug/L	96
58) hexane	9.50	57	20524	8.10	ug/L	99
59) benzene	11.61	78	80076	9.83	ug/L	99
60) 2,2,4-trimethylpentane	11.68	57	68833	9.56	ug/L	89
61) tert-amyl methyl ether	11.67	73	62995	10.39	ug/L	96
62) heptane	11.84	57	12692	8.59	ug/L	95
63) isopropyl acetate	11.54	43	34633	9.04	ug/L	92
64) 1,2-dichloroethane	11.59	62	30508	12.84	ug/L	95
65) trichloroethene	12.30	95	21956	11.27	ug/L	96
66) 2-nitropropane	13.32	46	1024	9.83	ug/L #	61
67) 2-chloroethyl vinyl ether	13.03	63	64364	56.15	ug/L	96
68) methyl methacrylate	12.56	69	20801	10.28	ug/L	89
69) 1,2-dichloropropane	12.54	63	21166	10.39	ug/L	97
70) dibromomethane	12.67	93	15106	12.66	ug/L	93
71) methylcyclohexane	12.56	83	34731	10.78	ug/L	96
72) bromodichloromethane	12.79	83	29480	11.63	ug/L	97
73) cis-1,3-dichloropropene	13.23	75	34376	11.01	ug/L	85
75) 4-methyl-2-pentanone	13.34	58	8351	10.02	ug/L	99
76) toluene	13.60	92	53310	11.24	ug/L	97
77) 3-methyl-1-butanol	13.33	55	20631	230.99	ug/L	88
78) trans-1,3-dichloropropene	13.75	75	33165	12.15	ug/L	92
79) ethyl methacrylate	13.77	69	26219	10.74	ug/L	98
80) 1,1,2-trichloroethane	13.94	83	17366	11.93	ug/L	99
81) 2-hexanone	14.13	58	7236	8.81	ug/L	95
84) tetrachloroethene	14.15	164	22027	9.62	ug/L	97
85) 1,3-dichloropropane	14.11	76	32315	9.99	ug/L	98
86) butyl acetate	14.20	56	12272	8.94	ug/L	99
87) 3,3-dimethyl-1-butanol	14.26	57	24237	100.55	ug/L	94
88) dibromochloromethane	14.36	129	26751	11.02	ug/L	99
89) 1,2-dibromoethane	14.51	107	23123	10.93	ug/L	95
90) chlorobenzene	14.95	112	63507	10.48	ug/L	98
91) 1,1,1,2-tetrachloroethane	15.00	131	26624	11.51	ug/L	94
92) ethylbenzene	15.01	91	106788	10.62	ug/L	98
93) m,p-xylene	15.11	106	85853	21.49	ug/L	96
94) o-xylene	15.50	106	44597	10.89	ug/L	97
95) styrene	15.50	104	73882	10.89	ug/L	97
96) bromoform	15.71	173	22259	11.51	ug/L	98

(#) = qualifier out of range (m) = manual integration

2B91060.D M2B4096.M

Fri Dec 23 17:01:42 2011

MS2B

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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91060.D
 Acq On : 22 Dec 2011 1:27 pm
 Sample : ic4096-10
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 13:52:51 2011

Vial: 6
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00
 Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.82	105	120738	9.94	ug/L	97
100) cyclohexanone	15.93	98	12369	46.01	ug/L	94
101) bromobenzene	16.17	156	34397	10.40	ug/L	97
102) 1,1,2,2-tetrachloroethane	16.04	83	35898	10.29	ug/L	97
103) trans-1,4-dichloro-2-buten	16.09	53	8849	11.56	ug/L	84
104) 1,2,3-trichloropropane	16.12	110	9437	11.32	ug/L	93
105) n-propylbenzene	16.19	91	140597	10.25	ug/L	98
106) 2-chlorotoluene	16.32	126	31115	10.69	ug/L	96
107) 4-chlorotoluene	16.41	91	89167	10.75	ug/L	96
108) 1,3,5-trimethylbenzene	16.33	105	104075	10.58	ug/L	98
109) tert-butylbenzene	16.66	119	94386	10.52	ug/L	95
110) pentachloroethane	16.71	167	24024	12.08	ug/L	93
111) 1,2,4-trimethylbenzene	16.69	105	108610	10.81	ug/L	98
112) sec-butylbenzene	16.86	105	141341	10.46	ug/L	98
113) 1,3-dichlorobenzene	17.02	146	67566	10.43	ug/L	98
114) p-isopropyltoluene	16.97	119	119400	10.56	ug/L	97
115) 1,4-dichlorobenzene	17.10	146	67924	10.32	ug/L	99
116) 1,2-dichlorobenzene	17.47	146	69889	10.71	ug/L	95
117) n-butylbenzene	17.36	92	61587	10.53	ug/L	97
118) 1,2-dibromo-3-chloropropan	18.21	75	7847	12.11	ug/L	94
119) 1,3,5-trichlorobenzene	18.44	180	64395	10.87	ug/L #	93
120) 1,2,4-trichlorobenzene	19.08	180	58296	10.82	ug/L	97
121) hexachlorobutadiene	19.22	225	30453	10.15	ug/L	96
122) naphthalene	19.36	128	124070	10.37	ug/L	99
123) 1,2,3-trichlorobenzene	19.61	180	50402	10.11	ug/L	97
124) hexachloroethane	17.75	201	23277	9.76	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91060.D M2B4096.M Fri Dec 23 17:01:42 2011 MS2B

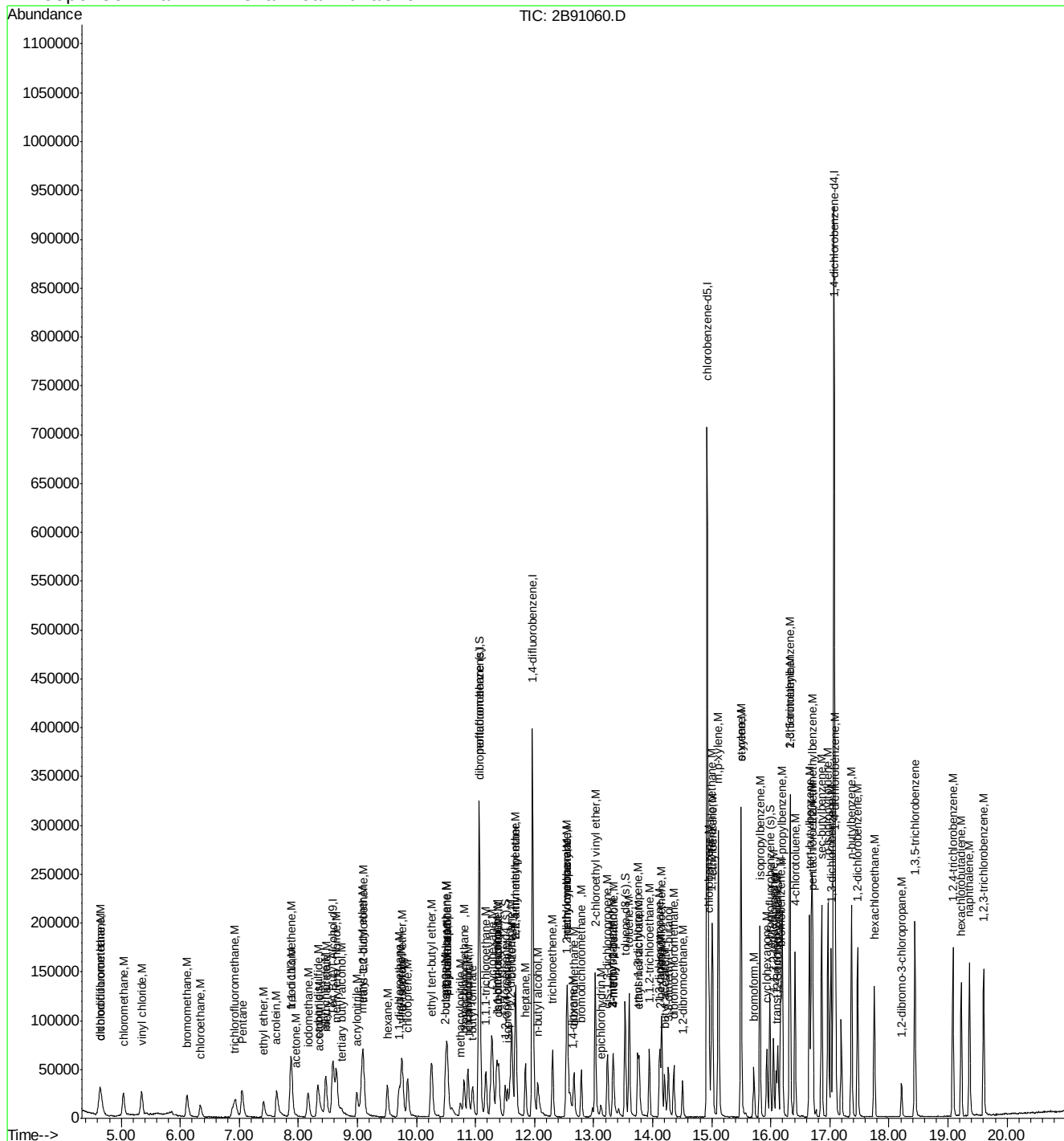
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91060.D
Acq On : 22 Dec 2011 1:27 pm
Sample : ic4096-10
Misc : MS23205,V2B4096,W,,,1
MS Integration Params: rteint.p
Quant Time: Dec 22 15:08 2011

Vial: 6
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



2B91060.D M2B4096.M

Fri Dec 23 17:01:43 2011

MS2B

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6.7.4

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91061.D
 Acq On : 22 Dec 2011 1:58 pm
 Sample : ic4096-20
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 23 09:01:28 2011

Vial: 7
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 09:01:25 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	128367	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	265093	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	371704	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	368904	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.07	152	233642	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	110294	49.31	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	98.62%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	124215	50.52	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	101.04%	
74) toluene-d8 (s)	13.53	98	397032	50.85	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	101.70%	
99) 4-bromofluorobenzene (s)	15.98	95	165784	48.81	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	97.62%	

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.73	59	26898	106.35	ug/L	93
3) 1,4-dioxane	12.64	88	13410	522.99	ug/L	92
5) chlorodifluoromethane	4.66	51	59393	19.65	ug/L	99
6) dichlorodifluoromethane	4.65	85	85517	19.78	ug/L	99
8) chloromethane	5.05	50	79306	19.20	ug/L	98
9) vinyl chloride	5.36	62	77715	20.34	ug/L	100
10) bromomethane	6.13	94	50494	20.61	ug/L	99
11) chloroethane	6.34	64	35375	21.26	ug/L	97
13) trichlorofluoromethane	6.94	101	84256	20.32	ug/L	98
14) Pentane	7.05	43	57441	17.60	ug/L	98
15) ethyl ether	7.41	74	23604	20.32	ug/L	92
16) acrolein	7.63	56	94680	202.94	ug/L	99
18) 1,1-dichloroethene	7.88	96	40271	19.51	ug/L	95
19) acetone	7.93	43	11452	15.44	ug/L	93
20) allyl chloride	8.47	76	25730	19.91	ug/L	93
21) acetonitrile	8.35	40	21489	193.50	ug/L	97
22) iodomethane	8.17	142	88171	20.27	ug/L	94
23) iso-butyl alcohol	11.36	74	4622	193.88	ug/L	80
24) carbon disulfide	8.33	76	140397	19.55	ug/L	98
25) methylene chloride	8.65	84	45701	19.59	ug/L	96
26) methyl acetate	8.47	74	6353	21.37	ug/L	89
27) methyl tert butyl ether	9.08	73	143551	21.09	ug/L	100
28) trans-1,2-dichloroethene	9.10	96	44032	21.00	ug/L	96
29) di-isopropyl ether	9.76	45	127808	20.65	ug/L	92
30) 2-butanone	10.47	72	4769	19.96	ug/L	# 69
31) 1,1-dichloroethane	9.70	63	73414	20.58	ug/L	97
32) chloroprene	9.86	53	61048	21.29	ug/L	96
33) acrylonitrile	8.98	53	81298	105.80	ug/L	97
34) vinyl acetate	9.72	86	6314	17.57	ug/L	88
35) ethyl tert-butyl ether	10.25	59	134506	21.11	ug/L	100
36) ethyl acetate	10.52	45	4911	17.73	ug/L	# 19
37) 2,2-dichloropropane	10.52	77	69906	20.11	ug/L	99
38) cis-1,2-dichloroethene	10.50	96	48820	20.79	ug/L	97

(#) = qualifier out of range (m) = manual integration

2B91061.D M2B4096.M

Fri Dec 23 17:01:45 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91061.D
 Acq On : 22 Dec 2011 1:58 pm
 Sample : ic4096-20
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 23 09:01:28 2011

Vial: 7
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 09:01:25 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.51	54	60864	210.10	ug/L	98
40) bromochloromethane	10.81	128	26026	20.89	ug/L	91
41) tetrahydrofuran	10.89	42	11904	19.70	ug/L	98
42) chloroform	10.87	83	79545	20.76	ug/L	97
43) t-butyl formate	10.95	59	43531	21.41	ug/L	95
46) freon 113	7.89	151	37430	19.77	ug/L	97
47) methacrylonitrile	10.74	41	23413	19.98	ug/L	95
48) 1,1,1-trichloroethane	11.18	97	71546	20.28	ug/L	99
49) Cyclohexane	11.29	84	59038	19.00	ug/L	93
54) epichlorohydrin	13.12	57	22157	101.90	ug/L	96
55) n-butyl alcohol	12.05	56	58941	1058.66	ug/L	99
56) carbon tetrachloride	11.40	117	65326	19.91	ug/L	100
57) 1,1-dichloropropene	11.36	75	54128	19.82	ug/L	96
58) hexane	9.51	57	40425	19.46	ug/L	97
59) benzene	11.61	78	160666	20.14	ug/L	98
60) 2,2,4-trimethylpentane	11.69	57	135443	19.99	ug/L	97
61) tert-amyl methyl ether	11.67	73	131978	20.66	ug/L	97
62) heptane	11.84	57	24636	19.40	ug/L	95
63) isopropyl acetate	11.54	43	71511	19.13	ug/L	95
64) 1,2-dichloroethane	11.59	62	61204	21.14	ug/L	98
65) trichloroethene	12.30	95	43970	20.04	ug/L	97
66) 2-nitropropane	13.32	46	2093	19.64	ug/L #	43
67) 2-chloroethyl vinyl ether	13.02	63	128708	105.20	ug/L	99
68) methyl methacrylate	12.56	69	40726	20.17	ug/L	95
69) 1,2-dichloropropane	12.54	63	41329	20.46	ug/L	100
70) dibromomethane	12.67	93	29824	20.01	ug/L	96
71) methylcyclohexane	12.56	83	66682	19.83	ug/L	98
72) bromodichloromethane	12.79	83	60408	20.57	ug/L	100
73) cis-1,3-dichloropropene	13.23	75	68838	20.26	ug/L	98
75) 4-methyl-2-pentanone	13.33	58	17454	21.52	ug/L	97
76) toluene	13.60	92	102619	19.72	ug/L	100
77) 3-methyl-1-butanol	13.32	55	40864	400.62	ug/L	97
78) trans-1,3-dichloropropene	13.75	75	64986	19.80	ug/L	99
79) ethyl methacrylate	13.77	69	52998	20.54	ug/L	98
80) 1,1,2-trichloroethane	13.94	83	33982	20.15	ug/L	99
81) 2-hexanone	14.12	58	14324	19.81	ug/L	97
84) tetrachloroethene	14.15	164	41626	20.12	ug/L	93
85) 1,3-dichloropropane	14.11	76	65017	20.88	ug/L	97
86) butyl acetate	14.20	56	24213	21.33	ug/L	96
87) 3,3-dimethyl-1-butanol	14.26	57	47323	206.52	ug/L	98
88) dibromochloromethane	14.36	129	53426	20.63	ug/L	99
89) 1,2-dibromoethane	14.51	107	45534	20.43	ug/L	99
90) chlorobenzene	14.95	112	124558	20.17	ug/L	100
91) 1,1,1,2-tetrachloroethane	15.00	131	53010	20.14	ug/L	99
92) ethylbenzene	15.01	91	208124	20.34	ug/L	99
93) m,p-xylene	15.11	106	165352	40.78	ug/L	98
94) o-xylene	15.50	106	87175	20.66	ug/L	98
95) styrene	15.50	104	143543	20.52	ug/L	99
96) bromoform	15.71	173	43949	20.16	ug/L	97

(#) = qualifier out of range (m) = manual integration

2B91061.D M2B4096.M

Fri Dec 23 17:01:46 2011

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91061.D
 Acq On : 22 Dec 2011 1:58 pm
 Sample : ic4096-20
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 23 09:01:28 2011

Vial: 7
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 09:01:25 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.82	105	233751	20.52	ug/L	99
100) cyclohexanone	15.93	98	18610	156.98	ug/L	94
101) bromobenzene	16.17	156	67675	20.77	ug/L	98
102) 1,1,2,2-tetrachloroethane	16.04	83	66481	19.76	ug/L	99
103) trans-1,4-dichloro-2-buten	16.08	53	16399	20.21	ug/L	100
104) 1,2,3-trichloropropane	16.12	110	17912	20.05	ug/L	98
105) n-propylbenzene	16.19	91	267583	20.27	ug/L	99
106) 2-chlorotoluene	16.32	126	60432	20.48	ug/L	97
107) 4-chlorotoluene	16.40	91	168610	20.24	ug/L	98
108) 1,3,5-trimethylbenzene	16.33	105	201996	20.52	ug/L	98
109) tert-butylbenzene	16.66	119	184432	20.45	ug/L	99
110) pentachloroethane	16.71	167	46335	20.26	ug/L	97
111) 1,2,4-trimethylbenzene	16.69	105	211229	20.43	ug/L	98
112) sec-butylbenzene	16.86	105	271007	20.28	ug/L	99
113) 1,3-dichlorobenzene	17.02	146	130422	20.18	ug/L	97
114) p-isopropyltoluene	16.97	119	234463	20.45	ug/L	99
115) 1,4-dichlorobenzene	17.09	146	131128	19.93	ug/L	97
116) 1,2-dichlorobenzene	17.47	146	134787	20.28	ug/L	99
117) n-butylbenzene	17.36	92	119018	20.61	ug/L	98
118) 1,2-dibromo-3-chloropropan	18.21	75	15527	20.09	ug/L	94
119) 1,3,5-trichlorobenzene	18.44	180	126497	20.78	ug/L	98
120) 1,2,4-trichlorobenzene	19.08	180	114028	21.18	ug/L	98
121) hexachlorobutadiene	19.22	225	59255	19.99	ug/L	99
122) naphthalene	19.36	128	246490	21.20	ug/L	100
123) 1,2,3-trichlorobenzene	19.60	180	103033	21.45	ug/L	98
124) hexachloroethane	17.75	201	46453	19.83	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91061.D M2B4096.M Fri Dec 23 17:01:46 2011 MS2B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91061.D
Acq On : 22 Dec 2011 1:58 pm
Sample : ic4096-20
Misc : MS23205,V2B4096,W,,,,,1
MS Integration Params: rteint.p
Quant Time: Dec 23 9:03 2011

Vial: 7

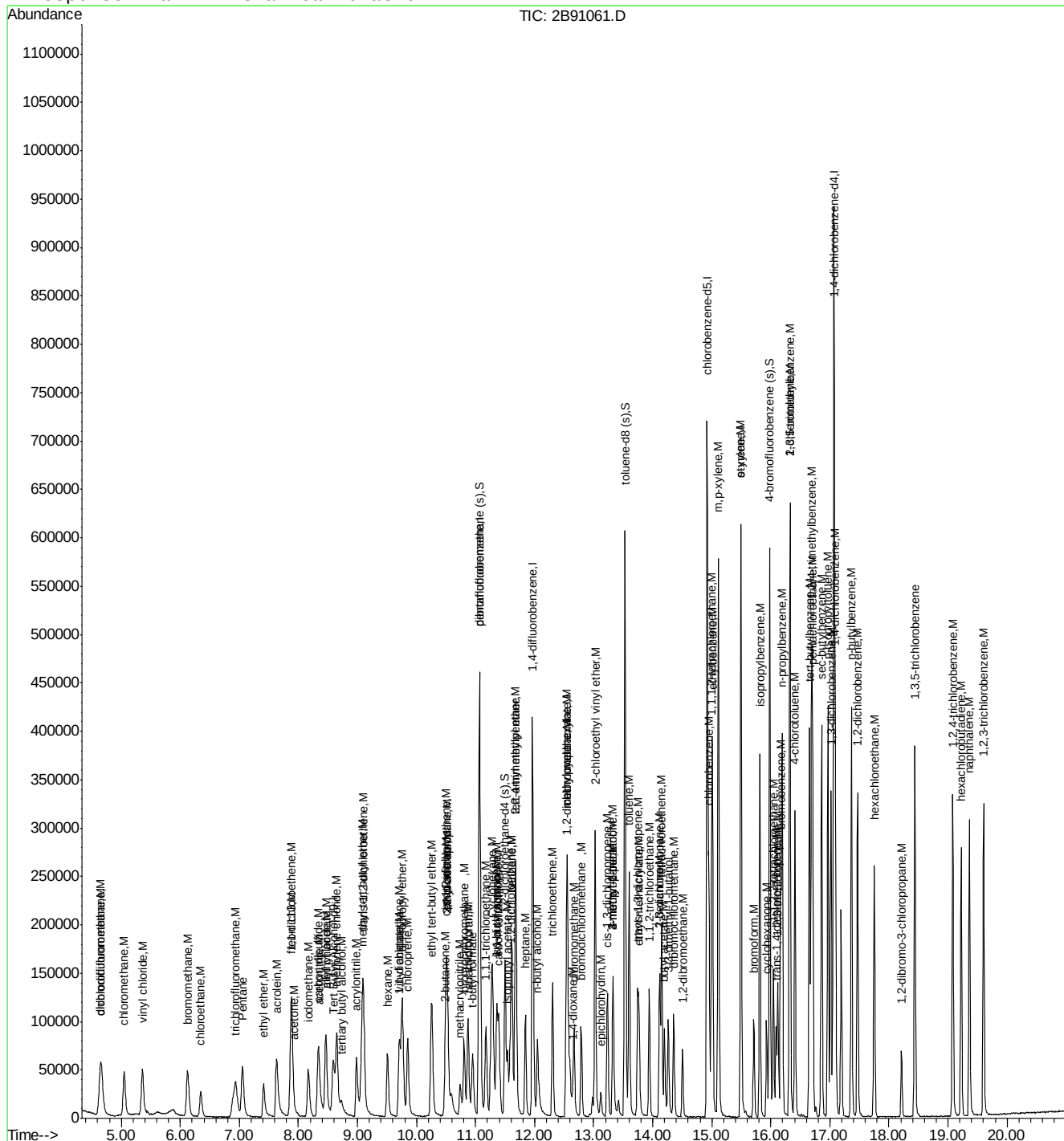
Operator: dezareer

Inst : MS2B

Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91062.D
 Acq On : 22 Dec 2011 2:29 pm
 Sample : icc4096-50
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 14:53:55 2011

Vial: 8
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	134592	500.00	ug/L	-0.01
4) pentafluorobenzene	11.06	168	273690	50.00	ug/L	-0.01
51) 1,4-difluorobenzene	11.96	114	385610	50.00	ug/L	-0.02
82) chlorobenzene-d5	14.92	117	384880	50.00	ug/L	-0.01
97) 1,4-dichlorobenzene-d4	17.07	152	239687	50.00	ug/L	-0.01

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	109895	55.18	ug/L	-0.02
Spiked Amount	50.000	Range	77 - 120	Recovery	=	110.36%
45) 1,2-dichloroethane-d4 (s)	11.50	65	124795	60.25	ug/L	-0.02
Spiked Amount	50.000	Range	70 - 127	Recovery	=	120.50%
74) toluene-d8 (s)	13.53	98	408072	56.56	ug/L	-0.01
Spiked Amount	50.000	Range	79 - 120	Recovery	=	113.12%
99) 4-bromofluorobenzene (s)	15.98	95	165029	49.57	ug/L	-0.01
Spiked Amount	50.000	Range	76 - 118	Recovery	=	99.14%

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.72	59	69625	256.00	ug/L	98
3) 1,4-dioxane	12.63	88	35123	1611.23	ug/L	92
5) chlorodifluoromethane	4.66	51	154017	57.24	ug/L	95
6) dichlorodifluoromethane	4.64	85	225538	62.03	ug/L	98
8) chloromethane	5.05	50	207651	50.00	ug/L	98
9) vinyl chloride	5.36	62	197531	52.51	ug/L	99
10) bromomethane	6.12	94	132653	60.09	ug/L	97
11) chloroethane	6.34	64	90499	49.98	ug/L	97
13) trichlorofluoromethane	6.94	101	219100	63.31	ug/L	97
14) Pentane	7.05	43	155466	39.49	ug/L	99
15) ethyl ether	7.41	74	62509	49.57	ug/L	94
16) acrolein	7.62	56	255189	550.46	ug/L	99
18) 1,1-dichloroethene	7.87	96	110781	53.79	ug/L	95
19) acetone	7.90	43	36897	32.69	ug/L	91
20) allyl chloride	8.46	76	66493	47.44	ug/L	# 84
21) acetonitrile	8.34	40	62957	440.93	ug/L	91
22) iodomethane	8.17	142	237277	60.51	ug/L	94
23) iso-butyl alcohol	11.36	74	11624	546.19	ug/L	93
24) carbon disulfide	8.33	76	383329	50.73	ug/L	93
25) methylene chloride	8.64	84	122181	51.92	ug/L	99
26) methyl acetate	8.45	74	18158	47.27	ug/L	98
27) methyl tert butyl ether	9.08	73	372501	56.07	ug/L	95
28) trans-1,2-dichloroethene	9.10	96	114270	53.35	ug/L	96
29) di-isopropyl ether	9.76	45	331090	44.38	ug/L	94
30) 2-butanone	10.46	72	12696	41.94	ug/L	# 79
31) 1,1-dichloroethane	9.70	63	195333	51.32	ug/L	99
32) chloroprene	9.84	53	159927	49.30	ug/L	98
33) acrylonitrile	8.97	53	217639	230.01	ug/L	99
34) vinyl acetate	9.71	86	19021	49.54	ug/L	61
35) ethyl tert-butyl ether	10.25	59	348344	51.58	ug/L	97
36) ethyl acetate	10.50	45	14670	40.31	ug/L	# 46
37) 2,2-dichloropropane	10.52	77	179835	56.72	ug/L	95
38) cis-1,2-dichloroethene	10.49	96	126836	53.12	ug/L	97

(#) = qualifier out of range (m) = manual integration

2B91062.D M2B4096.M

Fri Dec 23 17:01:52 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91062.D
 Acq On : 22 Dec 2011 2:29 pm
 Sample : icc4096-50
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 14:53:55 2011

Vial: 8
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.51	54	162512	470.70	ug/L	94
40) bromochloromethane	10.80	128	66585	54.57	ug/L	94
41) tetrahydrofuran	10.88	42	31119	45.52	ug/L	97
42) chloroform	10.87	83	206583	56.61	ug/L	97
43) t-butyl formate	10.95	59	111524	51.07	ug/L	96
46) freon 113	7.88	151	100641	55.59	ug/L	92
47) methacrylonitrile	10.74	41	59431	41.70	ug/L	91
48) 1,1,1-trichloroethane	11.18	97	192826	62.87	ug/L	100
49) Cyclohexane	11.29	84	163096	49.92	ug/L #	74
54) epichlorohydrin	13.12	57	58616	257.05	ug/L	97
55) n-butyl alcohol	12.04	56	153667	2515.00	ug/L	97
56) carbon tetrachloride	11.39	117	176002	62.65	ug/L	99
57) 1,1-dichloropropene	11.35	75	149743	52.00	ug/L	98
58) hexane	9.50	57	113641	41.21	ug/L	98
59) benzene	11.61	78	427791	48.24	ug/L	99
60) 2,2,4-trimethylpentane	11.69	57	370853	47.31	ug/L	95
61) tert-amyl methyl ether	11.67	73	337461	51.11	ug/L	98
62) heptane	11.84	57	67804	42.16	ug/L	96
63) isopropyl acetate	11.54	43	193649	46.41	ug/L	98
64) 1,2-dichloroethane	11.59	62	160280	61.97	ug/L	94
65) trichloroethene	12.30	95	121172	57.11	ug/L	98
66) 2-nitropropane	13.32	46	5790	51.04	ug/L #	56
67) 2-chloroethyl vinyl ether	13.02	63	347888	278.73	ug/L	99
68) methyl methacrylate	12.55	69	111055	50.41	ug/L #	86
69) 1,2-dichloropropane	12.53	63	111951	50.49	ug/L	100
70) dibromomethane	12.67	93	79777	61.40	ug/L	98
71) methylcyclohexane	12.56	83	184387	52.57	ug/L	98
72) bromodichloromethane	12.79	83	163062	59.10	ug/L	100
73) cis-1,3-dichloropropene	13.23	75	187765	55.26	ug/L	92
75) 4-methyl-2-pentanone	13.33	58	45440	50.08	ug/L	94
76) toluene	13.60	92	278227	53.90	ug/L	97
77) 3-methyl-1-butanol	13.32	55	106465	1094.87	ug/L	97
78) trans-1,3-dichloropropene	13.74	75	177618	59.76	ug/L	94
79) ethyl methacrylate	13.77	69	138958	52.29	ug/L	99
80) 1,1,2-trichloroethane	13.94	83	91868	57.96	ug/L	98
81) 2-hexanone	14.12	58	38622	43.19	ug/L	94
84) tetrachloroethene	14.15	164	113983	47.43	ug/L	94
85) 1,3-dichloropropane	14.11	76	171612	50.53	ug/L	99
86) butyl acetate	14.20	56	63262	43.92	ug/L	91
87) 3,3-dimethyl-1-butanol	14.26	57	123546	488.21	ug/L	96
88) dibromochloromethane	14.35	129	145942	57.28	ug/L	100
89) 1,2-dibromoethane	14.50	107	124051	55.83	ug/L	99
90) chlorobenzene	14.95	112	336989	52.98	ug/L	99
91) 1,1,1,2-tetrachloroethane	15.00	131	141574	58.31	ug/L	98
92) ethylbenzene	15.01	91	538973	51.08	ug/L	98
93) m,p-xylene	15.11	106	433890	103.48	ug/L	96
94) o-xylene	15.49	106	233584	54.33	ug/L	99
95) styrene	15.49	104	379773	53.33	ug/L	96
96) bromoform	15.71	173	121616	59.88	ug/L	97

(#) = qualifier out of range (m) = manual integration

2B91062.D M2B4096.M

Fri Dec 23 17:01:52 2011

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91062.D
 Acq On : 22 Dec 2011 2:29 pm
 Sample : icc4096-50
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 14:53:55 2011

Vial: 8
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Mon Nov 21 12:33:45 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

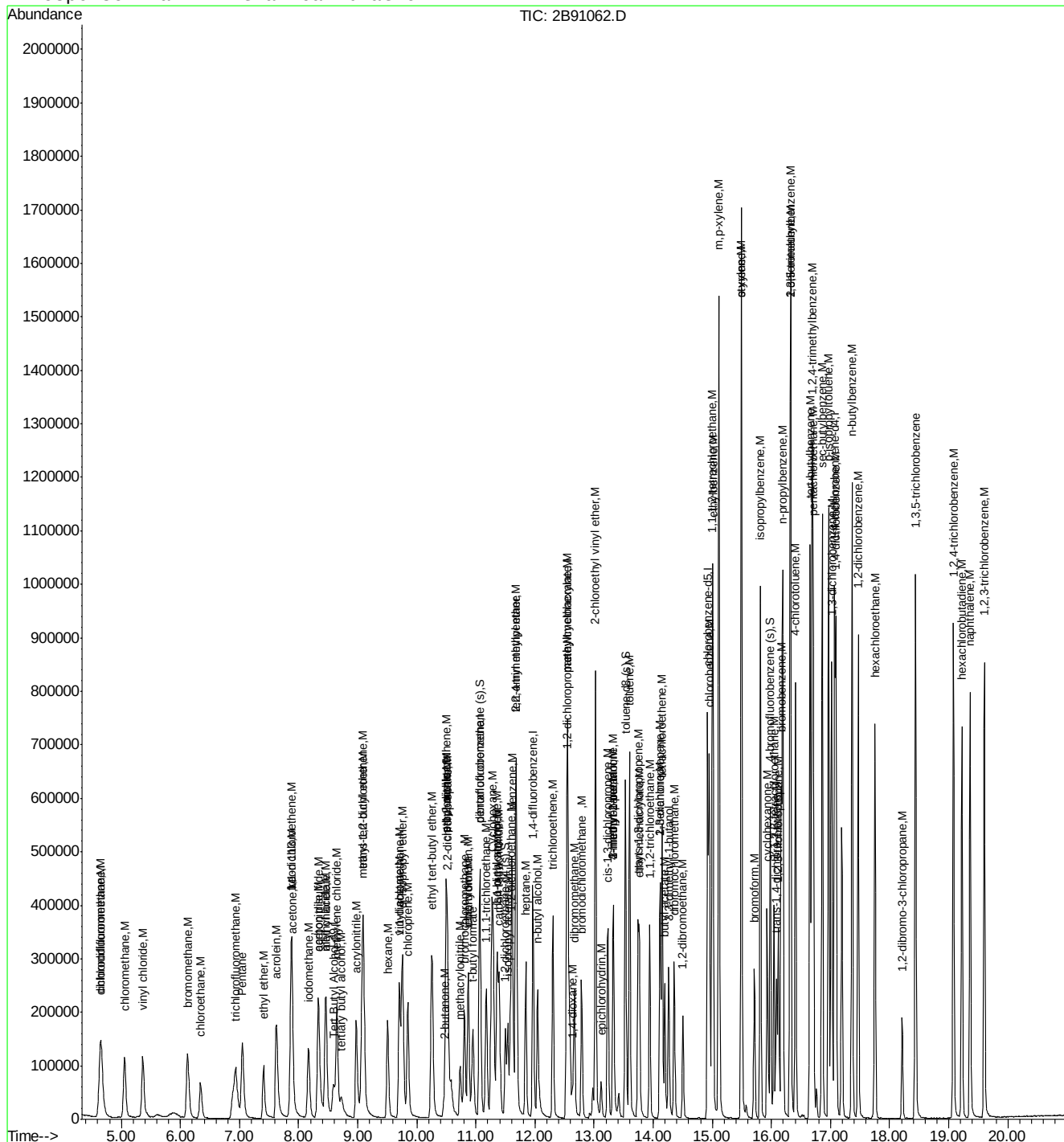
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.81	105	622945	50.27	ug/L	98
100) cyclohexanone	15.93	98	69141	252.10	ug/L	92
101) bromobenzene	16.17	156	175030	51.86	ug/L	99
102) 1,1,2,2-tetrachloroethane	16.04	83	172276	48.40	ug/L	99
103) trans-1,4-dichloro-2-buten	16.08	53	44846	57.40	ug/L	89
104) 1,2,3-trichloropropane	16.12	110	44878	52.79	ug/L	99
105) n-propylbenzene	16.19	91	692010	49.44	ug/L	99
106) 2-chlorotoluene	16.31	126	158919	53.54	ug/L	94
107) 4-chlorotoluene	16.40	91	427726	50.54	ug/L	96
108) 1,3,5-trimethylbenzene	16.33	105	527273	52.54	ug/L	98
109) tert-butylbenzene	16.66	119	500027	54.62	ug/L	95
110) pentachloroethane	16.71	167	125071	61.65	ug/L	94
111) 1,2,4-trimethylbenzene	16.69	105	545470	53.20	ug/L	99
112) sec-butylbenzene	16.86	105	723990	52.51	ug/L	98
113) 1,3-dichlorobenzene	17.02	146	337605	51.10	ug/L	97
114) p-isopropyltoluene	16.97	119	629052	54.52	ug/L	97
115) 1,4-dichlorobenzene	17.09	146	350225	52.16	ug/L	98
116) 1,2-dichlorobenzene	17.47	146	357289	53.67	ug/L	98
117) n-butylbenzene	17.36	92	326239	54.69	ug/L	98
118) 1,2-dibromo-3-chloropropan	18.21	75	41746	63.17	ug/L	84
119) 1,3,5-trichlorobenzene	18.44	180	342908	56.72	ug/L	96
120) 1,2,4-trichlorobenzene	19.08	180	310392	56.46	ug/L	98
121) hexachlorobutadiene	19.22	225	159911	52.25	ug/L	99
122) naphthalene	19.36	128	649095	53.19	ug/L	100
123) 1,2,3-trichlorobenzene	19.60	180	275214	54.13	ug/L	98
124) hexachloroethane	17.75	201	130800	53.77	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91062.D M2B4096.M Fri Dec 23 17:01:53 2011 MS2B

(QT Reviewed)

Vial: 8
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91063.D
 Acq On : 22 Dec 2011 2:59 pm
 Sample : ic4096-100
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 15:25:07 2011

Vial: 9
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Thu Dec 22 15:20:15 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	138478	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	279050	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	396308	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	404902	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.07	152	252237	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	224092	93.47	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	186.94%#	
45) 1,2-dichloroethane-d4 (s)	11.50	65	246227	93.47	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	186.94%#	
74) toluene-d8 (s)	13.53	98	804525	95.00	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	190.00%#	
99) 4-bromofluorobenzene (s)	15.98	95	343596	84.78	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	169.56%#	

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.73	59	138579	508.06	ug/L	98
3) 1,4-dioxane	12.63	88	69790	2538.04	ug/L	95
5) chlorodifluoromethane	4.65	51	310172	95.73	ug/L	100
6) dichlorodifluoromethane	4.64	85	460243	100.31	ug/L	99
8) chloromethane	5.06	50	414053	92.58	ug/L	99
9) vinyl chloride	5.37	62	406029	99.83	ug/L	100
10) bromomethane	6.12	94	302453	124.54	ug/L	99
11) chloroethane	6.33	64	196198	116.40	ug/L	98
13) trichlorofluoromethane	6.93	101	455906	104.74	ug/L	97
14) Pentane	7.04	43	315334	88.83	ug/L	99
15) ethyl ether	7.40	74	125854	105.35	ug/L	98
16) acrolein	7.62	56	521114	1080.49	ug/L	99
18) 1,1-dichloroethene	7.87	96	222716	103.25	ug/L	97
19) acetone	7.88	43	78050	100.01	ug/L	95
20) allyl chloride	8.46	76	141966	105.88	ug/L	96
21) acetonitrile	8.33	40	132681	1195.83	ug/L	97
22) iodomethane	8.16	142	486979	108.10	ug/L	99
23) iso-butyl alcohol	11.36	74	22895	871.20	ug/L	95
24) carbon disulfide	8.32	76	775943	103.14	ug/L	99
25) methylene chloride	8.64	84	244185	99.20	ug/L	98
26) methyl acetate	8.43	74	39232	123.64	ug/L	99
27) methyl tert butyl ether	9.07	73	734191	102.69	ug/L	99
28) trans-1,2-dichloroethene	9.09	96	225388	102.42	ug/L	97
29) di-isopropyl ether	9.75	45	663301	101.07	ug/L	98
30) 2-butanone	10.45	72	27155	128.85	ug/L	# 85
31) 1,1-dichloroethane	9.70	63	388522	104.30	ug/L	98
32) chloroprene	9.84	53	315304	104.71	ug/L	97
33) acrylonitrile	8.96	53	438739	609.13	ug/L	98
34) vinyl acetate	9.70	86	40997	101.80	ug/L	88
35) ethyl tert-butyl ether	10.25	59	702286	104.79	ug/L	100
36) ethyl acetate	10.50	45	31348	103.40	ug/L	60
37) 2,2-dichloropropane	10.52	77	349566	93.97	ug/L	99
38) cis-1,2-dichloroethene	10.48	96	252023	102.46	ug/L	99

(#) = qualifier out of range (m) = manual integration

2B91063.D M2B4096.M

Fri Dec 23 17:01:56 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91063.D
 Acq On : 22 Dec 2011 2:59 pm
 Sample : ic4096-100
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 15:25:07 2011

Vial: 9
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Thu Dec 22 15:20:15 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.51	54	327672	1229.61	ug/L	97
40) bromochloromethane	10.80	128	135158	104.07	ug/L	98
41) tetrahydrofuran	10.87	42	61537	95.30	ug/L	92
42) chloroform	10.87	83	402442	99.43	ug/L	97
43) t-butyl formate	10.95	59	226746	106.28	ug/L	99
46) freon 113	7.88	151	210303	105.89	ug/L	97
47) methacrylonitrile	10.73	41	122858	108.79	ug/L	97
48) 1,1,1-trichloroethane	11.17	97	379464	102.55	ug/L	97
49) Cyclohexane	11.28	84	324846	99.12	ug/L	93
54) epichlorohydrin	13.12	57	116937	542.66	ug/L	99
55) n-butyl alcohol	12.04	56	314550	5923.13	ug/L	98
56) carbon tetrachloride	11.39	117	346642	98.49	ug/L	98
57) 1,1-dichloropropene	11.36	75	295349	101.63	ug/L	99
58) hexane	9.50	57	228916	102.65	ug/L	98
59) benzene	11.61	78	830328	96.67	ug/L	99
60) 2,2,4-trimethylpentane	11.69	57	743643	102.33	ug/L	100
61) tert-amyl methyl ether	11.67	73	664274	95.90	ug/L	99
62) heptane	11.84	57	136296	99.50	ug/L	99
63) isopropyl acetate	11.54	43	384591	94.36	ug/L	99
64) 1,2-dichloroethane	11.59	62	315274	102.71	ug/L	99
65) trichloroethene	12.30	95	238900	102.96	ug/L	98
66) 2-nitropropane	13.32	46	11440	99.43	ug/L #	93
67) 2-chloroethyl vinyl ether	13.02	63	699579	539.44	ug/L	99
68) methyl methacrylate	12.55	69	220313	102.78	ug/L	93
69) 1,2-dichloropropane	12.53	63	221575	103.92	ug/L	95
70) dibromomethane	12.66	93	157768	99.13	ug/L	97
71) methylcyclohexane	12.56	83	363557	100.73	ug/L	95
72) bromodichloromethane	12.79	83	320839	103.60	ug/L	98
73) cis-1,3-dichloropropene	13.23	75	374129	104.28	ug/L	99
75) 4-methyl-2-pentanone	13.33	58	88196	107.92	ug/L	89
76) toluene	13.60	92	547961	98.22	ug/L	97
77) 3-methyl-1-butanol	13.32	55	212262	1917.75	ug/L	97
78) trans-1,3-dichloropropene	13.74	75	357394	102.60	ug/L	99
79) ethyl methacrylate	13.76	69	276638	107.84	ug/L	99
80) 1,1,2-trichloroethane	13.94	83	181177	100.67	ug/L	98
81) 2-hexanone	14.11	58	78585	102.25	ug/L	97
84) tetrachloroethene	14.15	164	227441	100.54	ug/L	97
85) 1,3-dichloropropane	14.11	76	345775	101.68	ug/L	99
86) butyl acetate	14.20	56	128563	106.95	ug/L	97
87) 3,3-dimethyl-1-butanol	14.26	57	255168	1011.93	ug/L	99
88) dibromochloromethane	14.35	129	299249	107.24	ug/L	98
89) 1,2-dibromoethane	14.50	107	252773	104.30	ug/L	98
90) chlorobenzene	14.95	112	685876	101.49	ug/L	99
91) 1,1,1,2-tetrachloroethane	15.00	131	292239	101.53	ug/L	98
92) ethylbenzene	15.01	91	1077942	94.75	ug/L	99
93) m,p-xylene	15.11	106	886365	199.57	ug/L	96
94) o-xylene	15.49	106	480190	105.03	ug/L	99
95) styrene	15.49	104	783061	102.59	ug/L	98
96) bromoform	15.71	173	259161	110.80	ug/L	100

(#) = qualifier out of range (m) = manual integration

2B91063.D M2B4096.M

Fri Dec 23 17:01:57 2011

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91063.D
 Acq On : 22 Dec 2011 2:59 pm
 Sample : ic4096-100
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 15:25:07 2011

Vial: 9
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Thu Dec 22 15:20:15 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.81	105	1262793	103.24	ug/L	99
100) cyclohexanone	15.93	98	102603	627.15	ug/L	98
101) bromobenzene	16.16	156	360360	103.03	ug/L	96
102) 1,1,2,2-tetrachloroethane	16.04	83	348910	94.56	ug/L	97
103) trans-1,4-dichloro-2-buten	16.08	53	93515	108.75	ug/L	99
104) 1,2,3-trichloropropane	16.12	110	94299	96.58	ug/L	94
105) n-propylbenzene	16.19	91	1408770	98.08	ug/L	99
106) 2-chlorotoluene	16.32	126	330052	104.72	ug/L	99
107) 4-chlorotoluene	16.40	91	885094	97.95	ug/L	99
108) 1,3,5-trimethylbenzene	16.33	105	1088886	103.19	ug/L	100
109) tert-butylbenzene	16.66	119	1037135	108.60	ug/L	100
110) pentachloroethane	16.71	167	260258	107.37	ug/L	98
111) 1,2,4-trimethylbenzene	16.69	105	1115409	100.04	ug/L	100
112) sec-butylbenzene	16.86	105	1466166	102.14	ug/L	99
113) 1,3-dichlorobenzene	17.02	146	688425	98.36	ug/L	99
114) p-isopropyltoluene	16.97	119	1281813	104.58	ug/L	99
115) 1,4-dichlorobenzene	17.09	146	713832	100.81	ug/L	98
116) 1,2-dichlorobenzene	17.47	146	713953	99.29	ug/L	97
117) n-butylbenzene	17.36	92	659314	107.45	ug/L	99
118) 1,2-dibromo-3-chloropropan	18.21	75	84445	101.38	ug/L	95
119) 1,3,5-trichlorobenzene	18.44	180	672150	102.66	ug/L	99
120) 1,2,4-trichlorobenzene	19.08	180	613517	107.20	ug/L	98
121) hexachlorobutadiene	19.22	225	317715	99.54	ug/L	98
122) naphthalene	19.36	128	1283724	102.63	ug/L	100
123) 1,2,3-trichlorobenzene	19.60	180	549464	107.93	ug/L	100
124) hexachloroethane	17.75	201	269319	112.32	ug/L	97

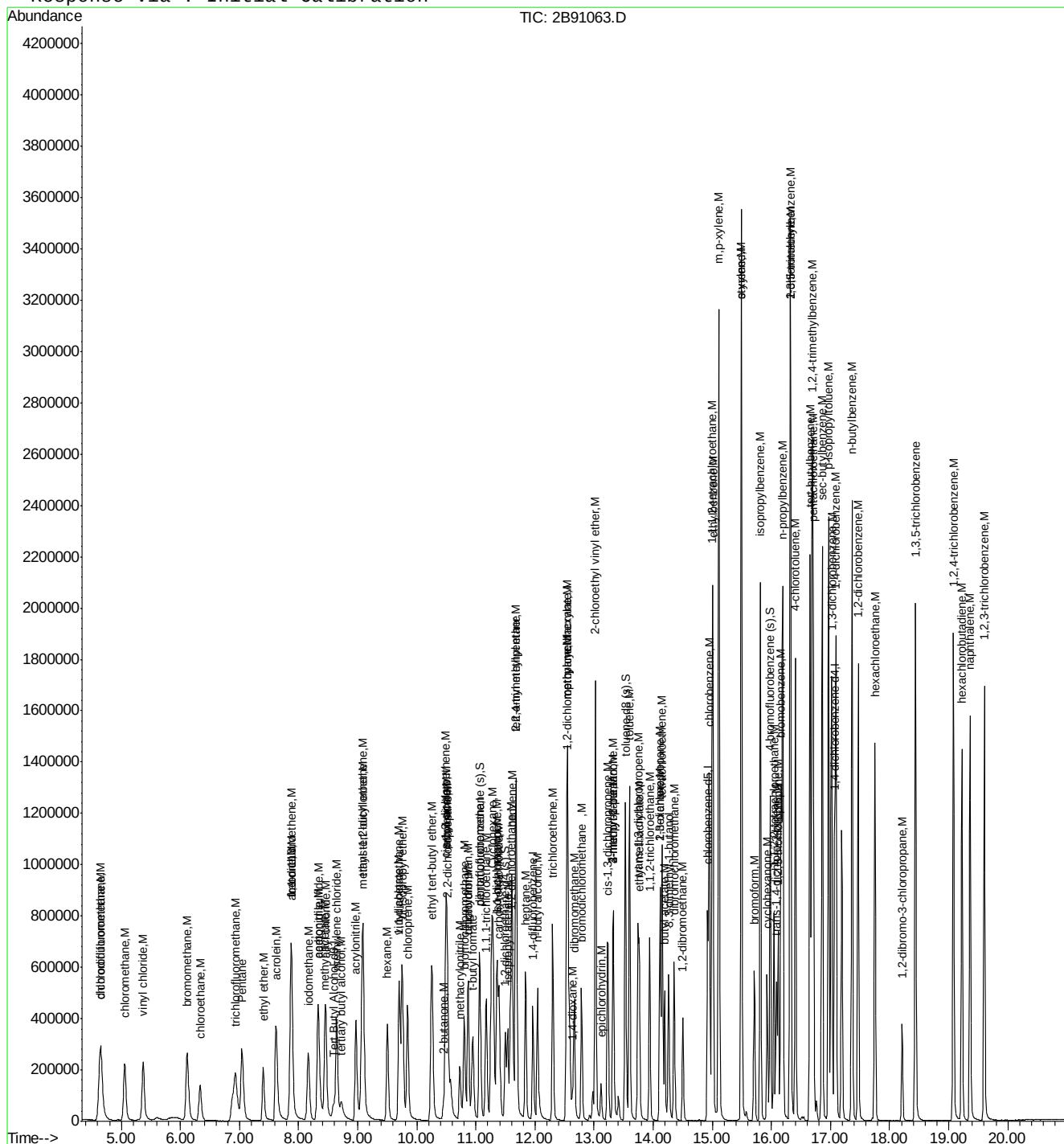
(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91063.D M2B4096.M Fri Dec 23 17:01:57 2011 MS2B

(QT Reviewed)

Vial: 9
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



Page 4

6.7.7

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91064.D
 Acq On : 22 Dec 2011 3:30 pm
 Sample : ic4096-200
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 15:56:23 2011

Vial: 10
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Thu Dec 22 15:20:15 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.60	65	138033	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	288209	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	418678	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	413514	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.07	152	258157	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	447605	180.77	ug/L	0.00
Spiked Amount	50.000	Range	77 - 120	Recovery	=	361.54%#
45) 1,2-dichloroethane-d4 (s)	11.50	65	503334	185.00	ug/L	0.00
Spiked Amount	50.000	Range	70 - 127	Recovery	=	370.00%#
74) toluene-d8 (s)	13.53	98	1606187	179.53	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	359.06%#
99) 4-bromofluorobenzene (s)	15.98	95	668453	161.16	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	322.32%#

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.73	59	268022	985.79	ug/L	99
3) 1,4-dioxane	12.63	88	139843	5102.04	ug/L	93
5) chlorodifluoromethane	4.65	51	589501	176.16	ug/L	99
6) dichlorodifluoromethane	4.63	85	873808	184.39	ug/L	99
8) chloromethane	5.06	50	761429	164.84	ug/L	98
9) vinyl chloride	5.37	62	757356	180.30	ug/L	100
10) bromomethane	6.10	94	658461	262.52	ug/L	98
11) chloroethane	6.32	64	413523	237.54	ug/L	99
13) trichlorofluoromethane	6.92	101	879900	195.72	ug/L	98
14) Pentane	7.03	43	603861	164.70	ug/L	99
15) ethyl ether	7.40	74	268496	217.61	ug/L	97
16) acrolein	7.62	56	1025229	2058.19	ug/L	100
18) 1,1-dichloroethene	7.87	96	460546	206.73	ug/L	95
19) acetone	7.88	43	154000	191.07	ug/L	97
20) allyl chloride	8.45	76	289299	208.90	ug/L	97
21) acetonitrile	8.33	40	245758	2144.58	ug/L	95
22) iodomethane	8.16	142	993297	213.50	ug/L	99
23) iso-butyl alcohol	11.35	74	46590	1716.50	ug/L	# 69
24) carbon disulfide	8.32	76	1571859	202.30	ug/L	99
25) methylene chloride	8.64	84	500724	196.95	ug/L	97
26) methyl acetate	8.43	74	76193	232.50	ug/L	99
27) methyl tert butyl ether	9.07	73	1465751	198.50	ug/L	98
28) trans-1,2-dichloroethene	9.09	96	455870	200.56	ug/L	97
29) di-isopropyl ether	9.75	45	1250363	184.47	ug/L	96
30) 2-butanone	10.44	72	58013	266.52	ug/L	96
31) 1,1-dichloroethane	9.70	63	791901	205.82	ug/L	99
32) chloroprene	9.84	53	604724	194.44	ug/L	98
33) acrylonitrile	8.96	53	899282	1208.85	ug/L	99
34) vinyl acetate	9.70	86	76276	180.38	ug/L	82
35) ethyl tert-butyl ether	10.25	59	1330857	192.27	ug/L	99
36) ethyl acetate	10.50	45	46794	148.60	ug/L	55
37) 2,2-dichloropropane	10.52	77	700263	182.25	ug/L	100
38) cis-1,2-dichloroethene	10.48	96	517298	203.63	ug/L	99

(#) = qualifier out of range (m) = manual integration

2B91064.D M2B4096.M

Fri Dec 23 17:02:01 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91064.D
 Acq On : 22 Dec 2011 3:30 pm
 Sample : ic4096-200
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 15:56:23 2011

Vial: 10
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Thu Dec 22 15:20:15 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.50	54	671323	2439.13	ug/L	97
40) bromochloromethane	10.80	128	278507	207.63	ug/L	97
41) tetrahydrofuran	10.87	42	123878	185.74	ug/L	92
42) chloroform	10.87	83	814490	194.83	ug/L	98
43) t-butyl formate	10.95	59	423989	192.41	ug/L	98
46) freon 113	7.87	151	398261	194.15	ug/L	96
47) methacrylonitrile	10.73	41	260717	223.52	ug/L	97
48) 1,1,1-trichloroethane	11.17	97	767856	200.91	ug/L	98
49) Cyclohexane	11.28	84	671044	198.24	ug/L	97
54) epichlorohydrin	13.12	57	232866	1022.90	ug/L	99
55) n-butyl alcohol	12.04	56	643038	11461.75	ug/L	99
56) carbon tetrachloride	11.39	117	713841	191.98	ug/L	100
57) 1,1-dichloropropene	11.35	75	613836	199.93	ug/L	97
58) hexane	9.50	57	433551	184.03	ug/L	99
59) benzene	11.61	78	1720063	189.56	ug/L	100
60) 2,2,4-trimethylpentane	11.69	57	1417783	184.68	ug/L	100
61) tert-amyl methyl ether	11.67	73	1301316	177.83	ug/L	97
62) heptane	11.84	57	264007	182.43	ug/L	98
63) isopropyl acetate	11.54	43	758802	176.23	ug/L	98
64) 1,2-dichloroethane	11.59	62	662512	204.30	ug/L	99
65) trichloroethene	12.30	95	511664	208.74	ug/L	97
66) 2-nitropropane	13.32	46	22905	188.44	ug/L #	56
67) 2-chloroethyl vinyl ether	13.02	63	1333953	973.64	ug/L	97
68) methyl methacrylate	12.55	69	456482	201.59	ug/L	90
69) 1,2-dichloropropane	12.53	63	473014	209.99	ug/L	97
70) dibromomethane	12.66	93	335787	199.71	ug/L	98
71) methylcyclohexane	12.56	83	710617	186.36	ug/L	96
72) bromodichloromethane	12.79	83	694349	212.23	ug/L	98
73) cis-1,3-dichloropropene	13.23	75	791843	208.92	ug/L	97
75) 4-methyl-2-pentanone	13.33	58	187911	217.65	ug/L	95
76) toluene	13.60	92	1141993	193.75	ug/L	95
77) 3-methyl-1-butanol	13.32	55	421700	3606.42	ug/L	98
78) trans-1,3-dichloropropene	13.74	75	745895	202.68	ug/L	99
79) ethyl methacrylate	13.76	69	573597	211.66	ug/L	100
80) 1,1,2-trichloroethane	13.94	83	373717	196.55	ug/L	98
81) 2-hexanone	14.11	58	162093	199.63	ug/L	96
84) tetrachloroethene	14.15	164	475115	205.66	ug/L	98
85) 1,3-dichloropropane	14.11	76	715286	205.96	ug/L	99
86) butyl acetate	14.19	56	250995	204.45	ug/L	97
87) 3,3-dimethyl-1-butanol	14.26	57	496903	1929.54	ug/L	98
88) dibromochloromethane	14.35	129	625476	219.48	ug/L	99
89) 1,2-dibromoethane	14.50	107	515109	208.13	ug/L	97
90) chlorobenzene	14.95	112	1398554	202.65	ug/L	99
91) 1,1,1,2-tetrachloroethane	15.00	131	598855	203.72	ug/L	100
92) ethylbenzene	15.01	91	2174552	187.16	ug/L	99
93) m,p-xylene	15.11	106	1850894	408.05	ug/L	93
94) o-xylene	15.49	106	994374	212.96	ug/L	96
95) styrene	15.49	104	1598842	205.11	ug/L	97
96) bromoform	15.71	173	525859	220.13	ug/L	99

(#) = qualifier out of range (m) = manual integration

2B91064.D M2B4096.M

Fri Dec 23 17:02:01 2011

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91064.D
 Acq On : 22 Dec 2011 3:30 pm
 Sample : ic4096-200
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 22 15:56:23 2011

Vial: 10
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Thu Dec 22 15:20:15 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

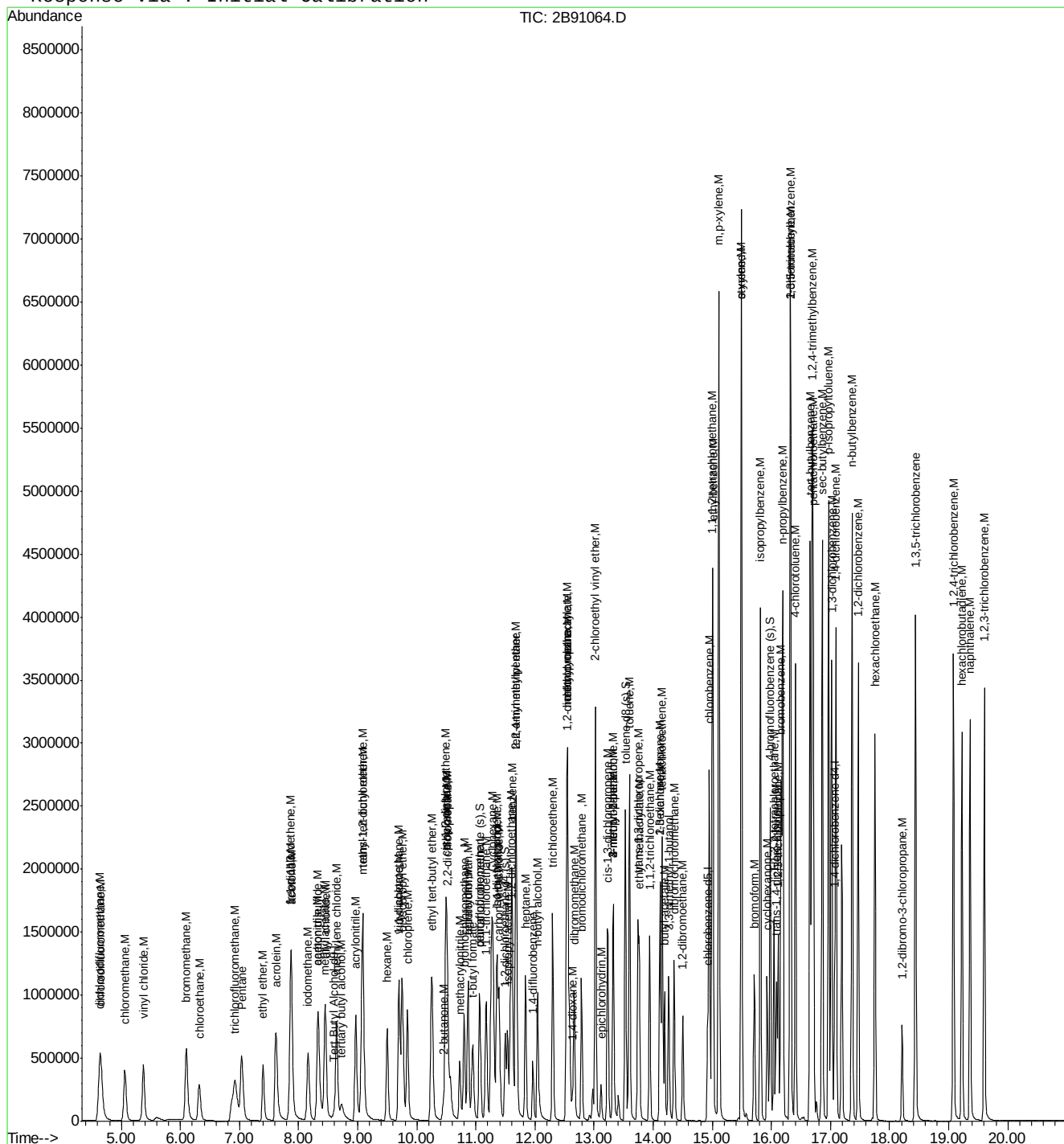
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.82	105	2543527	203.18	ug/L	98
100) cyclohexanone	15.93	98	209274	1249.83	ug/L	91
101) bromobenzene	16.16	156	731399	204.31	ug/L	96
102) 1,1,2,2-tetrachloroethane	16.04	83	689509	182.58	ug/L	97
103) trans-1,4-dichloro-2-buten	16.08	53	187031	212.51	ug/L	97
104) 1,2,3-trichloropropane	16.12	110	187364	187.50	ug/L	95
105) n-propylbenzene	16.19	91	2791778	189.91	ug/L	97
106) 2-chlorotoluene	16.31	126	678372	210.31	ug/L	97
107) 4-chlorotoluene	16.40	91	1808956	195.59	ug/L	100
108) 1,3,5-trimethylbenzene	16.33	105	2233554	206.82	ug/L	100
109) tert-butylbenzene	16.66	119	2126845	217.59	ug/L	99
110) pentachloroethane	16.71	167	542963	218.86	ug/L	98
111) 1,2,4-trimethylbenzene	16.69	105	2301408	201.67	ug/L	100
112) sec-butylbenzene	16.86	105	3006551	204.65	ug/L	98
113) 1,3-dichlorobenzene	17.02	146	1418249	197.99	ug/L	99
114) p-isopropyltoluene	16.97	119	2611052	208.14	ug/L	98
115) 1,4-dichlorobenzene	17.09	146	1478691	204.03	ug/L	97
116) 1,2-dichlorobenzene	17.47	146	1456191	197.87	ug/L	97
117) n-butylbenzene	17.36	92	1341590	213.64	ug/L	97
118) 1,2-dibromo-3-chloropropan	18.21	75	170229	199.69	ug/L	84
119) 1,3,5-trichlorobenzene	18.44	180	1349860	201.44	ug/L	99
120) 1,2,4-trichlorobenzene	19.08	180	1251530	213.67	ug/L	98
121) hexachlorobutadiene	19.22	225	672841	205.96	ug/L	99
122) naphthalene	19.36	128	2574683	201.11	ug/L	99
123) 1,2,3-trichlorobenzene	19.60	180	1132640	217.37	ug/L	98
124) hexachloroethane	17.75	201	559085	227.82	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91064.D M2B4096.M Fri Dec 23 17:02:01 2011 MS2B

(QT Reviewed)

Vial: 10
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



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6.6.8

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91067.D
 Acq On : 22 Dec 2011 5:23 pm
 Sample : ic4096-5
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 23 08:52:00 2011

Vial: 13
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 08:51:57 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.59	65	149129	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	284880	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	397723	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	403112	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.07	152	259957	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	10209	4.25	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	8.50%#	
45) 1,2-dichloroethane-d4 (s)	11.50	65	11984	4.54	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	9.08%#	
74) toluene-d8 (s)	13.54	98	38295	4.58	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	9.16%#	
99) 4-bromofluorobenzene (s)	15.98	95	16923	4.48	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	8.96%#	

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.73	59	7175	24.42	ug/L	82
3) 1,4-dioxane	12.64	88	3124	104.87	ug/L	82
5) chlorodifluoromethane	4.64	51	19334	5.95	ug/L	96
6) dichlorodifluoromethane	4.65	85	28937	6.23	ug/L	96
8) chloromethane	5.03	50	24491	5.52	ug/L	97
9) vinyl chloride	5.34	62	24356	5.93	ug/L	100
10) bromomethane	6.11	94	14020	5.32	ug/L	94
11) chloroethane	6.33	64	10314	5.77	ug/L	92
13) trichlorofluoromethane	6.93	101	26171	5.87	ug/L	98
14) Pentane	7.05	43	17218	4.91	ug/L	98
15) ethyl ether	7.42	74	5322	4.26	ug/L	90
16) acrolein	7.63	56	23133	46.14	ug/L	98
18) 1,1-dichloroethene	7.87	96	10683	4.82	ug/L	88
19) acetone	7.97	43	2992	3.78	ug/L	56
20) allyl chloride	8.46	76	6061	4.36	ug/L	# 84
21) acetonitrile	8.37	40	4478	37.52	ug/L	86
22) iodomethane	8.16	142	21344	4.57	ug/L	98
23) iso-butyl alcohol	11.35	74	1338	52.23	ug/L	# 35
24) carbon disulfide	8.32	76	36363	4.71	ug/L	97
25) methylene chloride	8.64	84	11350	4.53	ug/L	95
26) methyl acetate	8.48	74	737	2.11	ug/L	91
27) methyl tert butyl ether	9.08	73	36273	4.96	ug/L	99
28) trans-1,2-dichloroethene	9.11	96	10821	4.80	ug/L	81
29) di-isopropyl ether	9.76	45	33264	5.00	ug/L	84
30) 2-butanone	10.48	72	819	3.19	ug/L	# 21
31) 1,1-dichloroethane	9.70	63	18354	4.79	ug/L	95
32) chloroprene	9.85	53	15814	5.13	ug/L	96
33) acrylonitrile	9.00	53	17587	21.30	ug/L	88
34) vinyl acetate	9.75	86	953	2.43	ug/L	# 1
35) ethyl tert-butyl ether	10.25	59	34291	5.01	ug/L	95
36) ethyl acetate	10.53	45	802	6.26	ug/L	# 1
37) 2,2-dichloropropane	10.52	77	18748	5.02	ug/L	98
38) cis-1,2-dichloroethene	10.50	96	12311	4.88	ug/L	91

(#) = qualifier out of range (m) = manual integration

2B91067.D M2B4096.M

Fri Dec 23 17:02:05 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91067.D
 Acq On : 22 Dec 2011 5:23 pm
 Sample : ic4096-5
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 23 08:52:00 2011

Vial: 13
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 08:51:57 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.53	54	14265	45.82	ug/L	94
40) bromochloromethane	10.80	128	6284	4.69	ug/L	97
41) tetrahydrofuran	10.89	42	3301	5.08	ug/L	84
42) chloroform	10.87	83	19840	4.82	ug/L	99
43) t-butyl formate	10.94	59	11187	5.12	ug/L	98
46) freon 113	7.87	151	10555	5.19	ug/L	96
47) methacrylonitrile	10.76	41	6405	5.09	ug/L	84
48) 1,1,1-trichloroethane	11.17	97	18289	4.83	ug/L	98
49) Cyclohexane	11.28	84	16241	4.86	ug/L	83
54) epichlorohydrin	13.12	57	6116	26.29	ug/L	96
55) n-butyl alcohol	12.06	56	14206	238.47	ug/L	96
56) carbon tetrachloride	11.39	117	17371	4.95	ug/L	96
57) 1,1-dichloropropene	11.36	75	14176	4.85	ug/L	97
58) hexane	9.51	57	11321	5.09	ug/L	99
59) benzene	11.61	78	40647	4.76	ug/L	99
60) 2,2,4-trimethylpentane	11.67	57	37786	5.21	ug/L	92
61) tert-amyl methyl ether	11.67	73	35027	5.13	ug/L	98
62) heptane	11.85	57	7081	5.21	ug/L	89
63) isopropyl acetate	11.54	43	18203	4.55	ug/L	99
64) 1,2-dichloroethane	11.59	62	15265	4.93	ug/L	98
65) trichloroethene	12.30	95	11237	4.79	ug/L	94
66) 2-nitropropane	13.60	46	548	4.81	ug/L #	1
67) 2-chloroethyl vinyl ether	13.03	63	31433	24.01	ug/L	97
68) methyl methacrylate	12.57	69	9916	4.59	ug/L #	76
69) 1,2-dichloropropane	12.54	63	10339	4.78	ug/L	95
70) dibromomethane	12.67	93	7574	4.75	ug/L	93
71) methylcyclohexane	12.56	83	18754	5.21	ug/L	95
72) bromodichloromethane	12.79	83	15339	4.88	ug/L	99
73) cis-1,3-dichloropropene	13.23	75	17350	4.77	ug/L	97
75) 4-methyl-2-pentanone	13.34	58	4564	5.26	ug/L	88
76) toluene	13.60	92	27017	4.85	ug/L	98
77) 3-methyl-1-butanol	13.33	55	11416	104.60	ug/L	93
78) trans-1,3-dichloropropene	13.75	75	16463	4.69	ug/L	91
79) ethyl methacrylate	13.77	69	13084	4.74	ug/L	93
80) 1,1,2-trichloroethane	13.94	83	9080	5.03	ug/L	95
81) 2-hexanone	14.13	58	3355	4.34	ug/L	86
84) tetrachloroethene	14.15	164	11328	5.01	ug/L	91
85) 1,3-dichloropropane	14.11	76	16702	4.91	ug/L	95
86) butyl acetate	14.20	56	6117	4.93	ug/L	88
87) 3,3-dimethyl-1-butanol	14.26	57	12755	50.94	ug/L	87
88) dibromochloromethane	14.36	129	13217	4.67	ug/L	97
89) 1,2-dibromoethane	14.51	107	11477	4.71	ug/L	92
90) chlorobenzene	14.95	112	32222	4.77	ug/L	91
91) 1,1,1,2-tetrachloroethane	15.00	131	13655	4.75	ug/L	97
92) ethylbenzene	15.01	91	52491	4.70	ug/L	99
93) m,p-xylene	15.11	106	42371	9.56	ug/L	98
94) o-xylene	15.50	106	22101	4.79	ug/L	100
95) styrene	15.50	104	34672	4.54	ug/L	98
96) bromoform	15.71	173	10506	4.41	ug/L	99

(#) = qualifier out of range (m) = manual integration

2B91067.D M2B4096.M

Fri Dec 23 17:02:05 2011

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91067.D
 Acq On : 22 Dec 2011 5:23 pm
 Sample : ic4096-5
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 23 08:52:00 2011

Vial: 13
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 08:51:57 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.82	105	59988	4.73	ug/L	98
100) cyclohexanone	15.94	98	2711	7.65	ug/L	96
101) bromobenzene	16.17	156	17304	4.77	ug/L	96
102) 1,1,2,2-tetrachloroethane	16.04	83	17004	4.54	ug/L	93
103) trans-1,4-dichloro-2-buten	16.09	53	4422	4.90	ug/L	87
104) 1,2,3-trichloropropane	16.12	110	4712	4.74	ug/L	98
105) n-propylbenzene	16.19	91	71787	4.89	ug/L	99
106) 2-chlorotoluene	16.32	126	16140	4.92	ug/L	92
107) 4-chlorotoluene	16.41	91	44227	4.77	ug/L	99
108) 1,3,5-trimethylbenzene	16.33	105	51174	4.67	ug/L	99
109) tert-butylbenzene	16.66	119	45222	4.51	ug/L	97
110) pentachloroethane	16.71	167	11580	4.55	ug/L	97
111) 1,2,4-trimethylbenzene	16.69	105	53488	4.65	ug/L	95
112) sec-butylbenzene	16.86	105	69154	4.65	ug/L	97
113) 1,3-dichlorobenzene	17.02	146	34022	4.73	ug/L	96
114) p-isopropyltoluene	16.97	119	59550	4.67	ug/L	97
115) 1,4-dichlorobenzene	17.09	146	34947	4.77	ug/L	96
116) 1,2-dichlorobenzene	17.47	146	34923	4.72	ug/L	99
117) n-butylbenzene	17.36	92	29930	4.66	ug/L	98
118) 1,2-dibromo-3-chloropropan	18.21	75	4004	4.66	ug/L	89
119) 1,3,5-trichlorobenzene	18.44	180	31953	4.72	ug/L	97
120) 1,2,4-trichlorobenzene	19.08	180	29382	4.91	ug/L	95
121) hexachlorobutadiene	19.22	225	16225	4.92	ug/L	99
122) naphthalene	19.37	128	65390	5.05	ug/L	98
123) 1,2,3-trichlorobenzene	19.61	180	26465	4.95	ug/L	92
124) hexachloroethane	17.75	201	10971	4.21	ug/L	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91067.D M2B4096.M Fri Dec 23 17:02:05 2011 MS2B

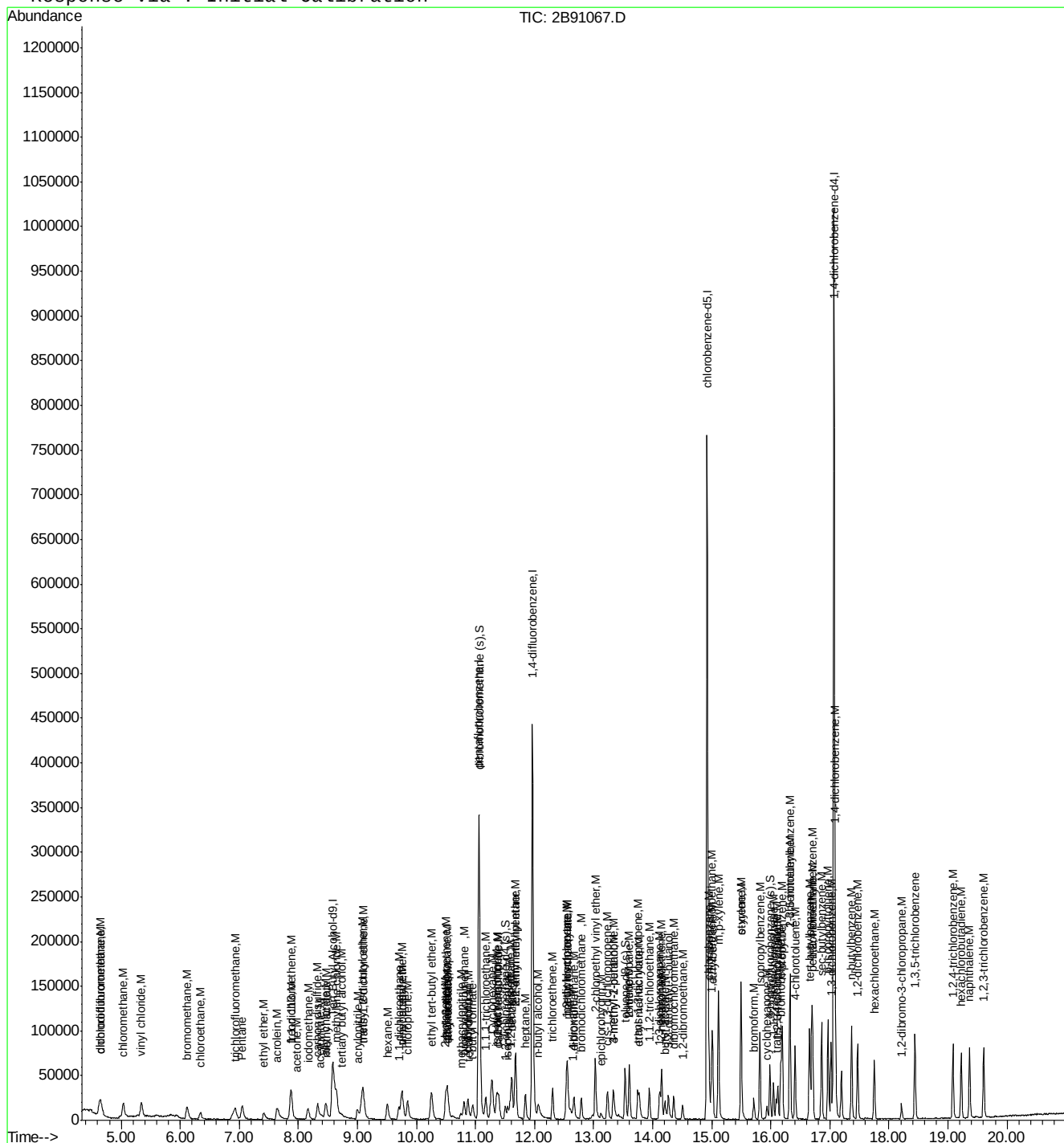
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91067.D
Acq On : 22 Dec 2011 5:23 pm
Sample : ic4096-5
Misc : MS23205,V2B4096,W,,,,1
MS Integration Params: rteint.p
Quant Time: Dec 23 9:04 2011

Vial: 13
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



2B91067.D M2B4096.M

Fri Dec 23 17:02:06 2011

MS2B

Page 4

6.7.9

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91068.D
 Acq On : 22 Dec 2011 5:55 pm
 Sample : icv4096-50
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 23 16:52:56 2011

Vial: 14
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.60	65	137360	500.00	ug/L	0.00
4) pentafluorobenzene	11.06	168	278318	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	392614	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	390498	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.07	152	245027	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	113506	48.98	ug/L	0.00
Spiked Amount	50.000	Range 77 - 120	Recovery	=	97.96%	
45) 1,2-dichloroethane-d4 (s)	11.50	65	127328	50.17	ug/L	0.00
Spiked Amount	50.000	Range 70 - 127	Recovery	=	100.34%	
74) toluene-d8 (s)	13.53	98	405454	49.71	ug/L	0.00
Spiked Amount	50.000	Range 79 - 120	Recovery	=	99.42%	
99) 4-bromofluorobenzene (s)	15.98	95	168784	48.10	ug/L	0.00
Spiked Amount	50.000	Range 76 - 118	Recovery	=	96.20%	

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.73	59	71294	266.63	ug/L	97
3) 1,4-dioxane	12.63	88	34427	1272.82	ug/L	93
5) chlorodifluoromethane	4.65	51	126500	39.31	ug/L	94
6) dichlorodifluoromethane	4.65	85	230059	49.37	ug/L	96
8) chloromethane	5.05	50	209552	47.43	ug/L	100
9) vinyl chloride	5.36	62	206908	50.31	ug/L	99
10) bromomethane	6.12	94	134265	51.13	ug/L	98
11) chloroethane	6.34	64	93094	52.00	ug/L	98
13) trichlorofluoromethane	6.93	101	227135	50.98	ug/L	98
14) Pentane	7.05	43	141625	41.79	ug/L	99
15) ethyl ether	7.41	74	62596	51.38	ug/L	96
16) acrolein	7.62	56	266419	541.36	ug/L	99
18) 1,1-dichloroethene	7.88	96	107323	50.08	ug/L	100
19) acetone	7.90	43	33230	46.50	ug/L	92
20) allyl chloride	8.46	76	68985	51.43	ug/L	98
21) acetonitrile	8.35	40	60901	522.32	ug/L	98
22) iodomethane	8.17	142	235783	52.06	ug/L	100
23) iso-butyl alcohol	11.36	74	11571	460.40	ug/L	80
24) carbon disulfide	8.33	76	377883	50.53	ug/L	98
25) methylene chloride	8.64	84	120886	49.77	ug/L	98
26) methyl acetate	8.45	74	17116	47.12	ug/L	90
27) methyl tert butyl ether	9.08	73	733822	102.97	ug/L	99
28) trans-1,2-dichloroethene	9.10	96	113500	51.91	ug/L	99
29) di-isopropyl ether	9.76	45	339471	52.44	ug/L	99
30) 2-butanone	10.45	72	13607	54.24	ug/L	# 82
31) 1,1-dichloroethane	9.70	63	200558	53.92	ug/L	99
32) chloroprene	9.85	53	159987	51.35	ug/L	99
33) acrylonitrile	8.97	53	222906	268.69	ug/L	99
34) vinyl acetate	9.71	86	21183	56.26	ug/L	83
35) ethyl tert-butyl ether	10.25	59	360517	54.00	ug/L	99
36) ethyl acetate	10.50	45	16190	49.73	ug/L	70
37) 2,2-dichloropropane	10.52	77	173871	47.75	ug/L	100
38) cis-1,2-dichloroethene	10.49	96	126896	51.40	ug/L	98

(#) = qualifier out of range (m) = manual integration

2B91068.D M2B4096.M

Fri Dec 23 17:02:09 2011

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91068.D
 Acq On : 22 Dec 2011 5:55 pm
 Sample : icv4096-50
 Misc : MS23205,V2B4096,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Dec 23 16:52:56 2011

Vial: 14
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.51	54	163650	523.41	ug/L	99
40) bromochloromethane	10.80	128	68144	52.32	ug/L	96
41) tetrahydrofuran	10.88	42	31455	49.09	ug/L	95
42) chloroform	10.87	83	207807	51.99	ug/L	98
43) t-butyl formate	10.95	59	123494	57.80	ug/L	97
46) freon 113	7.88	151	104404	52.45	ug/L	93
47) methacrylonitrile	10.73	41	61532	49.72	ug/L	99
48) 1,1,1-trichloroethane	11.18	97	194951	53.02	ug/L	99
49) Cyclohexane	11.29	84	165430	51.10	ug/L	98
54) epichlorohydrin	13.12	57	55316	237.53	ug/L	95
55) n-butyl alcohol	12.04	56	157861	2679.17	ug/L	99
56) carbon tetrachloride	11.39	117	180347	52.39	ug/L	98
57) 1,1-dichloropropene	11.36	75	150284	52.42	ug/L	97
58) hexane	9.50	57	113116	51.80	ug/L	98
59) benzene	11.61	78	422204	50.36	ug/L	99
60) 2,2,4-trimethylpentane	11.69	57	359124	50.34	ug/L	96
61) tert-amyl methyl ether	11.67	73	363579	54.06	ug/L	99
62) heptane	11.84	57	64978	48.55	ug/L	97
63) isopropyl acetate	11.54	43	191323	49.07	ug/L	99
64) 1,2-dichloroethane	11.59	62	161004	52.89	ug/L	100
65) trichloroethene	12.30	95	120632	52.31	ug/L	99
66) 2-nitropropane	13.32	46	5503	49.22	ug/L #	69
67) 2-chloroethyl vinyl ether	13.02	63	321888	243.12	ug/L	99
68) methyl methacrylate	12.55	69	109969	52.03	ug/L	98
69) 1,2-dichloropropane	12.53	63	108731	51.23	ug/L	98
70) dibromomethane	12.67	93	81706	52.30	ug/L	99
71) methylcyclohexane	12.56	83	188232	53.19	ug/L	96
72) bromodichloromethane	12.79	83	162297	52.45	ug/L	98
73) cis-1,3-dichloropropene	13.23	75	182880	51.10	ug/L	99
75) 4-methyl-2-pentanone	13.33	58	46876	51.81	ug/L #	86
76) toluene	13.60	92	271393	49.53	ug/L	97
77) 3-methyl-1-butanol	13.32	55	107305	993.05	ug/L	98
78) trans-1,3-dichloropropene	13.74	75	173099	50.18	ug/L	99
79) ethyl methacrylate	13.77	69	140675	51.92	ug/L	97
80) 1,1,2-trichloroethane	13.94	83	88243	49.34	ug/L	97
81) 2-hexanone	14.12	58	38554	51.91	ug/L	96
84) tetrachloroethene	14.15	164	115143	52.76	ug/L	96
85) 1,3-dichloropropane	14.11	76	170734	51.89	ug/L	96
86) butyl acetate	14.20	56	64300	51.56	ug/L	97
87) 3,3-dimethyl-1-butanol	14.26	57	125321	519.47	ug/L	100
88) dibromochloromethane	14.35	129	143810	52.58	ug/L	99
89) 1,2-dibromoethane	14.51	107	122288	52.22	ug/L	98
90) chlorobenzene	14.95	112	335860	51.65	ug/L	100
91) 1,1,1,2-tetrachloroethane	15.00	131	143827	51.77	ug/L	99
92) ethylbenzene	15.01	91	532119	49.51	ug/L	99
93) m,p-xylene	15.11	106	433224	101.37	ug/L	98
94) o-xylene	15.49	106	236477	53.21	ug/L	100
95) styrene	15.49	104	379009	51.61	ug/L	98
96) bromoform	15.71	173	121271	52.93	ug/L	98

(#) = qualifier out of range (m) = manual integration

2B91068.D M2B4096.M

Fri Dec 23 17:02:09 2011

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91068.D Vial: 14
 Acq On : 22 Dec 2011 5:55 pm Operator: dezareer
 Sample : icv4096-50 Inst : MS2B
 Misc : MS23205,V2B4096,W,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 23 16:52:56 2011 Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.81	105	624047	52.57	ug/L	99
100) cyclohexanone	15.93	98	76484	685.41	ug/L	100
101) bromobenzene	16.17	156	175804	51.82	ug/L	98
102) 1,1,2,2-tetrachloroethane	16.04	83	170594	48.88	ug/L	97
103) trans-1,4-dichloro-2-buten	16.08	53	43739	51.48	ug/L	99
104) 1,2,3-trichloropropane	16.12	110	45922	49.08	ug/L	95
105) n-propylbenzene	16.19	91	702410	51.01	ug/L	98
106) 2-chlorotoluene	16.31	126	159924	51.82	ug/L	98
107) 4-chlorotoluene	16.40	91	432807	49.83	ug/L	98
108) 1,3,5-trimethylbenzene	16.33	105	538948	52.51	ug/L	99
109) tert-butylbenzene	16.66	119	506546	54.07	ug/L	99
110) pentachloroethane	16.71	167	127119	53.41	ug/L	98
111) 1,2,4-trimethylbenzene	16.69	105	563678	52.42	ug/L	99
112) sec-butylbenzene	16.86	105	736974	52.87	ug/L	100
113) 1,3-dichlorobenzene	17.02	146	343376	50.88	ug/L	99
114) p-isopropyltoluene	16.97	119	660181	55.23	ug/L	99
115) 1,4-dichlorobenzene	17.09	146	351587	51.09	ug/L	99
116) 1,2-dichlorobenzene	17.47	146	360556	51.87	ug/L	100
117) n-butylbenzene	17.36	92	327200	54.21	ug/L	98
118) 1,2-dibromo-3-chloropropan	18.21	75	42511	52.32	ug/L	85
119) 1,3,5-trichlorobenzene	18.44	180	347331	54.54	ug/L	99
120) 1,2,4-trichlorobenzene	19.08	180	319923	56.55	ug/L	99
121) hexachlorobutadiene	19.22	225	155738	50.20	ug/L	99
122) naphthalene	19.36	128	643764	52.47	ug/L	99
123) 1,2,3-trichlorobenzene	19.60	180	278383	55.02	ug/L	99
124) hexachloroethane	17.75	201	134728	55.70	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91068.D M2B4096.M Fri Dec 23 17:02:09 2011 MS2B

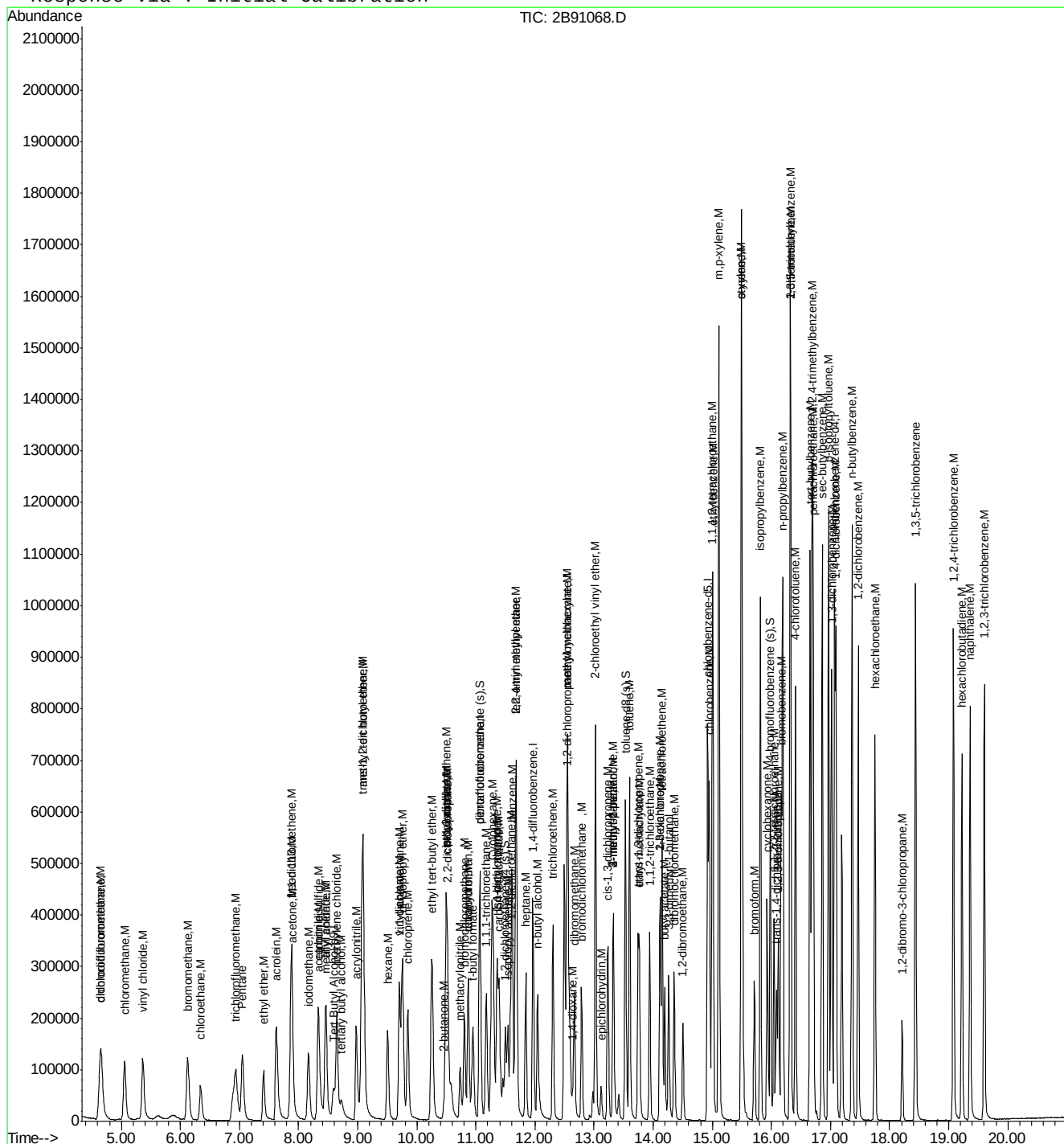
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91068.D
Acq On : 22 Dec 2011 5:55 pm
Sample : icv4096-50
Misc : MS23205,V2B4096,W,,,1
MS Integration Params: rteint.p
Quant Time: Dec 23 16:57 2011

Vial: 14
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



2B91068.D M2B4096.M

Fri Dec 23 17:02:10 2011

MS2B

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6.7.10

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91889.D
 Acq On : 16 Jan 2012 9:08 pm
 Sample : cc4096-50
 Misc : MS24311,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 21:34:20 2012

Vial: 24
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.58	65	105706	500.00	ug/L	-0.01
4) pentafluorobenzene	11.06	168	303637	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.96	114	439177	50.00	ug/L	0.00
82) chlorobenzene-d5	14.92	117	434372	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	17.06	152	244855	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	11.07	113	122911	48.62	ug/L	0.00
Spiked Amount	50.000	Range	77 - 120	Recovery	=	97.24%
45) 1,2-dichloroethane-d4 (s)	11.49	65	133162	48.09	ug/L	0.00
Spiked Amount	50.000	Range	70 - 127	Recovery	=	96.18%
74) toluene-d8 (s)	13.53	98	465960	51.07	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	102.14%
99) 4-bromofluorobenzene (s)	15.98	95	184272	52.55	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	105.10%

Target Compounds

						Qvalue
2) tertiary butyl alcohol	8.72	59	55736	270.87	ug/L	98
3) 1,4-dioxane	12.63	88	25034	1202.70	ug/L	94
5) chlorodifluoromethane	4.65	51	174223	49.63	ug/L	98
6) dichlorodifluoromethane	4.64	85	269354	52.99	ug/L	99
8) chloromethane	5.05	50	227752	47.25	ug/L	99
9) vinyl chloride	5.36	62	212587	47.38	ug/L	99
10) bromomethane	6.12	94	151307	52.81	ug/L	99
11) chloroethane	6.34	64	109393	56.01	ug/L	98
13) trichlorofluoromethane	6.93	101	261025	53.70	ug/L	98
14) Pentane	7.04	43	214042	57.89	ug/L	99
15) ethyl ether	7.40	74	65908	49.59	ug/L	97
16) acrolein	7.61	56	221845	413.20	ug/L	99
18) 1,1-dichloroethene	7.87	96	125045	53.49	ug/L	92
19) acetone	7.91	43	29231	37.50	ug/L	97
20) allyl chloride	8.46	76	79117	54.07	ug/L	99
21) acetonitrile	8.34	40	55737	438.17	ug/L	96
22) iodomethane	8.15	142	265637	53.77	ug/L	99
23) iso-butyl alcohol	11.36	74	11374	414.82	ug/L	86
24) carbon disulfide	8.32	76	443160	54.32	ug/L	97
25) methylene chloride	8.64	84	140703	53.10	ug/L	96
26) methyl acetate	8.44	74	14475	36.90	ug/L	96
27) methyl tert butyl ether	9.07	73	391410	50.34	ug/L	100
28) trans-1,2-dichloroethene	9.09	96	130577	54.74	ug/L	99
29) di-isopropyl ether	9.75	45	408812	57.88	ug/L	97
30) 2-butanone	10.45	72	11188	40.88	ug/L	97
31) 1,1-dichloroethane	9.69	63	224564	55.33	ug/L	99
32) chloroprene	9.84	53	187570	55.19	ug/L	99
33) acrylonitrile	8.96	53	182606	201.76	ug/L	97
34) vinyl acetate	9.70	86	18792	45.74	ug/L	97
35) ethyl tert-butyl ether	10.25	59	408122	56.04	ug/L	99
36) ethyl acetate	10.50	45	14236	40.14	ug/L #	45
37) 2,2-dichloropropane	10.52	77	205061	51.62	ug/L	98
38) cis-1,2-dichloroethene	10.48	96	142125	52.77	ug/L	95

(#) = qualifier out of range (m) = manual integration

2B91889.D M2B4096.M

Wed Jan 18 12:38:12 2012

MS2B

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91889.D
 Acq On : 16 Jan 2012 9:08 pm
 Sample : cc4096-50
 Misc : MS24311,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 21:34:20 2012

Vial: 24
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) propionitrile	10.50	54	130128	381.49	ug/L	97
40) bromochloromethane	10.80	128	71793	50.53	ug/L	100
41) tetrahydrofuran	10.87	42	26531	37.95	ug/L	91
42) chloroform	10.86	83	226679	51.98	ug/L	98
43) t-butyl formate	10.94	59	112376	48.21	ug/L	99
46) freon 113	7.88	151	120506	55.49	ug/L	94
47) methacrylonitrile	10.73	41	57148	42.33	ug/L	95
48) 1,1,1-trichloroethane	11.17	97	217681	54.27	ug/L	99
49) Cyclohexane	11.28	84	181263	51.32	ug/L	97
54) epichlorohydrin	13.12	57	51955	199.44	ug/L	99
55) n-butyl alcohol	12.04	56	123030	1866.65	ug/L	99
56) carbon tetrachloride	11.39	117	194934	50.63	ug/L	98
57) 1,1-dichloropropene	11.36	75	164941	51.43	ug/L	99
58) hexane	9.49	57	138838	56.84	ug/L	98
59) benzene	11.61	78	486949	51.92	ug/L	98
60) 2,2,4-trimethylpentane	11.68	57	416167	52.15	ug/L	98
61) tert-amyl methyl ether	11.67	73	359943	47.84	ug/L	98
62) heptane	11.84	57	80357	53.68	ug/L	99
63) isopropyl acetate	11.53	43	189493	43.45	ug/L	98
64) 1,2-dichloroethane	11.58	62	172267	50.59	ug/L	100
65) trichloroethene	12.30	95	134832	52.27	ug/L	98
66) 2-nitropropane	13.32	46	4510	36.06	ug/L #	89
67) 2-chloroethyl vinyl ether	13.02	63	381074	257.30	ug/L	99
68) methyl methacrylate	12.55	69	113387	47.96	ug/L	89
69) 1,2-dichloropropane	12.53	63	130465	54.95	ug/L	98
70) dibromomethane	12.66	93	82050	46.96	ug/L	99
71) methylcyclohexane	12.55	83	204126	51.57	ug/L	98
72) bromodichloromethane	12.79	83	186184	53.79	ug/L	100
73) cis-1,3-dichloropropene	13.23	75	216877	54.18	ug/L	99
75) 4-methyl-2-pentanone	13.33	58	41610	41.11	ug/L	96
76) toluene	13.59	92	317763	51.84	ug/L	97
77) 3-methyl-1-butanol	13.32	55	84551	699.51	ug/L	97
78) trans-1,3-dichloropropene	13.74	75	195897	50.77	ug/L	98
79) ethyl methacrylate	13.76	69	148997	49.16	ug/L	99
80) 1,1,2-trichloroethane	13.93	83	97336	48.65	ug/L	98
81) 2-hexanone	14.12	58	35588	42.84	ug/L	96
84) tetrachloroethene	14.15	164	124315	51.21	ug/L	99
85) 1,3-dichloropropane	14.11	76	188230	51.43	ug/L	99
86) butyl acetate	14.20	56	67068	48.35	ug/L	95
87) 3,3-dimethyl-1-butanol	14.26	57	96838	360.86	ug/L	99
88) dibromochloromethane	14.35	129	153665	50.50	ug/L	99
89) 1,2-dibromoethane	14.50	107	127683	49.02	ug/L	97
90) chlorobenzene	14.95	112	375347	51.89	ug/L	97
91) 1,1,1,2-tetrachloroethane	14.99	131	149628	48.42	ug/L	99
92) ethylbenzene	15.01	91	607809	50.84	ug/L	98
93) m,p-xylene	15.11	106	483677	101.74	ug/L	99
94) o-xylene	15.49	106	251218	50.82	ug/L	97
95) styrene	15.49	104	420289	51.45	ug/L	99
96) bromoform	15.71	173	116202	45.59	ug/L	98

(#) = qualifier out of range (m) = manual integration

2B91889.D M2B4096.M

Wed Jan 18 12:38:12 2012

MS2B

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91889.D
 Acq On : 16 Jan 2012 9:08 pm
 Sample : cc4096-50
 Misc : MS24311,V2B4134,W,,,1
 MS Integration Params: rteint.p
 Quant Time: Jan 16 21:34:20 2012

Vial: 24
 Operator: dezareer
 Inst : MS2B
 Multiplr: 1.00

Quant Results File: M2B4096.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
 Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
 Last Update : Fri Dec 23 16:52:49 2011
 Response via : Initial Calibration
 DataAcq Meth : M2B4096

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.81	105	670443	56.52	ug/L	100
100) cyclohexanone	15.93	98	35490	305.55	ug/L	94
101) bromobenzene	16.16	156	190589	56.21	ug/L	94
102) 1,1,2,2-tetrachloroethane	16.04	83	162340	46.55	ug/L	99
103) trans-1,4-dichloro-2-buten	16.08	53	36512	43.00	ug/L	92
104) 1,2,3-trichloropropane	16.12	110	41387	44.26	ug/L	95
105) n-propylbenzene	16.19	91	755082	54.87	ug/L	99
106) 2-chlorotoluene	16.31	126	166434	53.97	ug/L	97
107) 4-chlorotoluene	16.40	91	479965	55.30	ug/L	98
108) 1,3,5-trimethylbenzene	16.33	105	552794	53.89	ug/L	100
109) tert-butylbenzene	16.65	119	513343	54.83	ug/L	98
110) pentachloroethane	16.71	167	124531	52.35	ug/L	97
111) 1,2,4-trimethylbenzene	16.69	105	570414	53.08	ug/L	97
112) sec-butylbenzene	16.86	105	748676	53.75	ug/L	98
113) 1,3-dichlorobenzene	17.01	146	353477	52.41	ug/L	99
114) p-isopropyltoluene	16.97	119	628366	52.61	ug/L	99
115) 1,4-dichlorobenzene	17.09	146	365017	53.08	ug/L	97
116) 1,2-dichlorobenzene	17.47	146	365595	52.63	ug/L	99
117) n-butylbenzene	17.36	92	338600	56.14	ug/L	97
118) 1,2-dibromo-3-chloropropan	18.21	75	31904	39.29	ug/L	92
119) 1,3,5-trichlorobenzene	18.44	180	350225	55.04	ug/L	98
120) 1,2,4-trichlorobenzene	19.08	180	307413	54.37	ug/L	98
121) hexachlorobutadiene	19.22	225	157010	50.64	ug/L	99
122) naphthalene	19.36	128	538481	43.92	ug/L	99
123) 1,2,3-trichlorobenzene	19.60	180	257879	51.00	ug/L	99
124) hexachloroethane	17.75	201	136192	56.34	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
 2B91889.D M2B4096.M Wed Jan 18 12:38:12 2012 MS2B

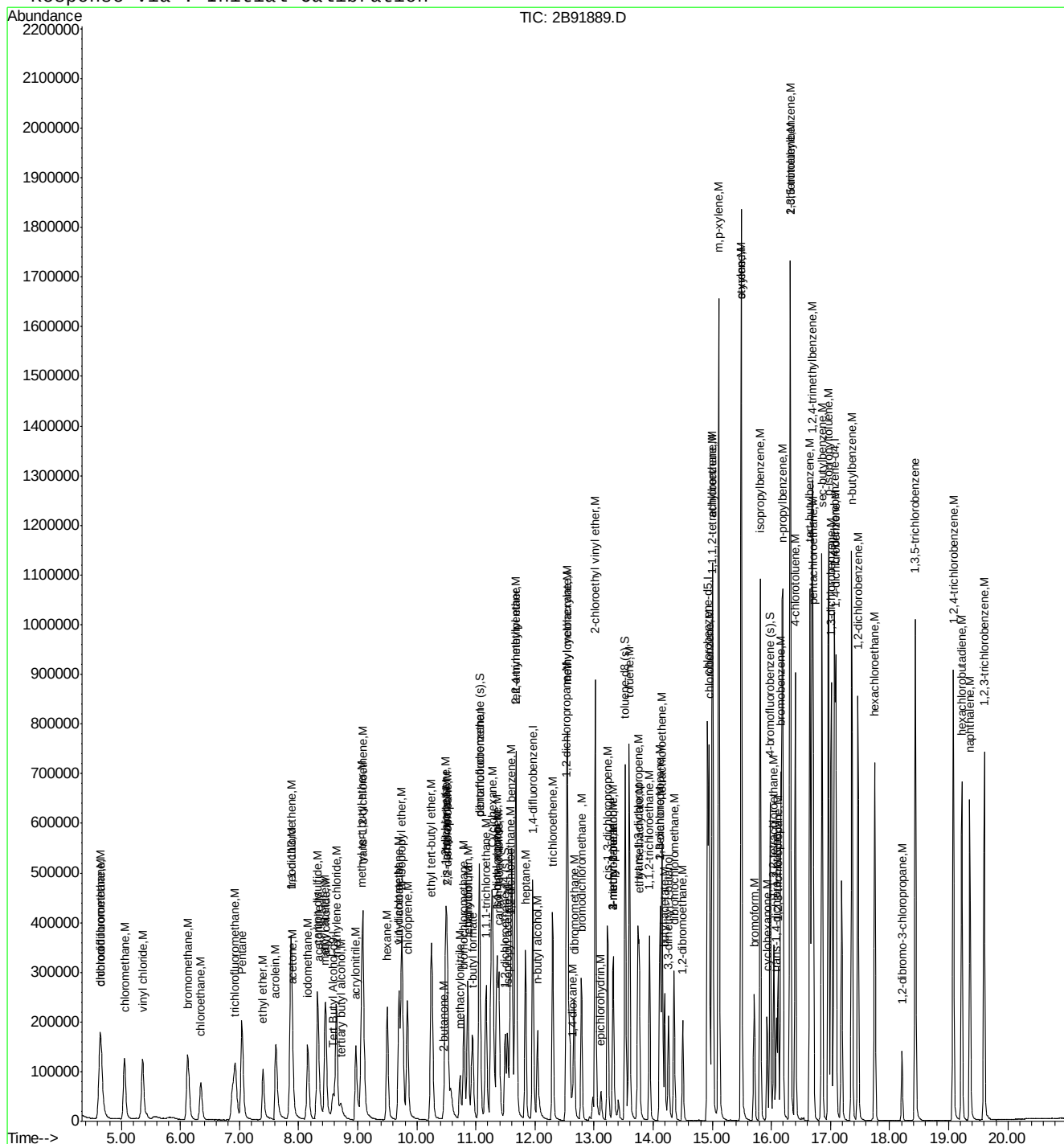
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B91889.D
Acq On : 16 Jan 2012 9:08 pm
Sample : cc4096-50
Misc : MS24311,V2B4134,W,,,,1
MS Integration Params: rteint.p
Quant Time: Jan 18 11:48 2012

Vial: 24
Operator: dezareer
Inst : MS2B
Multiplr: 1.00

Quant Results File: M2B4096.RES

Method : C:\MSDCHEM\1\METHODS\M2B4096.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Fri Dec 23 16:52:49 2011
Response via : Initial Calibration



2B91889.D M2B4096.M

Wed Jan 18 12:38:14 2012

MS2B

Page 4

6.7.11

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188519.D
 Acq On : 28 Oct 2011 9:24 am
 Sample : IC7671-0.5
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:29 2011

Vial: 2
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:29:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	201878	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	316246	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	504103	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	487722	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	263941	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.76	113	2199	0.64	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	1.28%#
45) 1,2-dichloroethane-d4 (s)	10.19	65	2205	0.53	ug/L	0.02
Spiked Amount	50.000	Range	66 - 130	Recovery	=	1.06%#
75) toluene-d8 (s)	12.40	98	7292	0.54	ug/L	0.03
Spiked Amount	50.000	Range	76 - 125	Recovery	=	1.08%#
99) 4-bromofluorobenzene (s)	15.32	95	4607	0.77	ug/L	0.05
Spiked Amount	50.000	Range	53 - 142	Recovery	=	1.54%#

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.63	59	1431	2.73	ug/L	54
6) chlorodifluoromethane	4.23	51	2072	0.50	ug/L	91
7) dichlorodifluoromethane	4.25	85	2110	0.45	ug/L	90
8) chloromethane	4.54	50	2557	0.51	ug/L	90
9) vinyl chloride	4.79	62	2560	0.53	ug/L	84
10) bromomethane	5.44	94	1614	0.52	ug/L	90
11) chloroethane	5.63	64	1321	0.47	ug/L	95
13) trichlorofluoromethane	6.10	101	2483	0.44	ug/L	73
14) pentane	6.24	43	3875	0.50	ug/L #	85
15) ethyl ether	6.52	74	1226	0.51	ug/L	77
16) acrolein	6.71	56	4866	5.41	ug/L	97
18) 1,1-dichloroethene	6.93	96	1961	0.52	ug/L	90
20) allyl chloride	7.41	41	6387	0.80	ug/L	91
23) iodomethane	7.16	142	2957	0.47	ug/L	86
24) iso-butyl alcohol	10.07	74	84	4.15	ug/L	50
25) carbon disulfide	7.32	76	6116	0.50	ug/L	79
26) methylene chloride	7.57	84	2243	0.52	ug/L	96
28) methyl tert butyl ether	7.97	73	6288	0.51	ug/L	95
29) trans-1,2-dichloroethene	7.99	96	2044	0.51	ug/L	74
30) di-isopropyl ether	8.57	45	6264	0.49	ug/L	94
31) ethyl tert-butyl ether	9.03	59	5898	0.48	ug/L	98
33) 1,1-dichloroethane	8.50	63	3571	0.51	ug/L	97
34) chloroprene	8.67	53	2751	0.48	ug/L	96
35) acrylonitrile	7.94	53	3233	2.03	ug/L	78
36) vinyl acetate	8.38	86	288	2.70	ug/L #	1
38) 2,2-dichloropropane	9.26	77	3001	0.50	ug/L	91
39) cis-1,2-dichloroethene	9.23	96	2205	0.52	ug/L #	76
40) propionitrile	9.28	54	3372	5.46	ug/L	69
41) bromochloromethane	9.52	128	835	0.41	ug/L #	86
42) tetrahydrofuran	9.76	72	148	0.25	ug/L #	3
43) chloroform	9.57	83	3182	0.50	ug/L	98
46) freon 113	6.93	151	1218	0.41	ug/L	78
47) methacrylonitrile	9.50	41	1812	0.77	ug/L	75

(#) = qualifier out of range (m) = manual integration

D188519.D MD7671.M Fri Oct 28 17:22:26 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188519.D
 Acq On : 28 Oct 2011 9:24 am
 Sample : IC7671-0.5
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:29 2011

Vial: 2
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:29:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) t-butyl formate	9.67	59	1503	0.42	ug/L #	54
49) 1,1,1-trichloroethane	9.87	97	2796	0.49	ug/L #	75
50) tert-amyl methyl ether	10.39	73	6122	0.51	ug/L	97
52) cyclohexane	10.00	84	3109	0.52	ug/L #	100
53) tert amyl alcohol	10.17	55	408	2.28	ug/L #	2
54) 2,2,4-trimethylpentane	10.40	57	8706	0.57	ug/L	91
55) epichlorohydrin	11.85	57	1092	2.42	ug/L	64
56) n-butyl alcohol	10.66	56	9704	80.17	ug/L #	36
57) carbon tetrachloride	10.11	117	2476	0.50	ug/L	93
58) 1,1-dichloropropene	10.07	75	2603	0.49	ug/L	93
59) hexane	8.36	57	2819	0.52	ug/L	92
60) benzene	10.32	78	7605	0.49	ug/L	92
61) heptane	10.58	57	1695	0.58	ug/L	85
62) isopropyl acetate	10.27	43	4071	0.55	ug/L	77
63) 1,2-dichloroethane	10.28	62	2579	0.50	ug/L	90
65) trichloroethene	11.04	95	1977	0.50	ug/L	98
66) 2-nitropropane	11.44	43	4348	3.42	ug/L	69
67) 2-chloroethyl vinyl ether	11.84	63	5413	2.15	ug/L	93
69) tert-amyl ethyl ether	11.25	87	2492	0.45	ug/L	88
70) 1,2-dichloropropane	11.26	63	1998	0.49	ug/L	96
71) methylcyclohexane	11.32	83	3477	0.51	ug/L	83
72) dibromomethane	11.40	93	1225	0.51	ug/L	77
73) bromodichloromethane	11.54	83	2472	0.49	ug/L	93
74) cis-1,3-dichloropropene	12.05	75	3117	0.49	ug/L	93
76) 4-methyl-2-pentanone	12.22	58	1043	0.61	ug/L #	1
77) toluene	12.48	92	4913	0.51	ug/L	93
78) 3-methyl-1-butanol	12.23	70	353	3.01	ug/L #	1
79) trans-1,3-dichloropropene	12.64	75	3060	0.50	ug/L	83
80) ethyl methacrylate	12.74	69	2430	0.44	ug/L	83
81) 1,1,2-trichloroethane	12.84	83	1863	0.61	ug/L	79
84) tetrachloroethene	13.11	166	2180	0.50	ug/L	85
85) 1,3-dichloropropane	13.05	76	3361	0.53	ug/L	98
86) butyl acetate	13.27	56	1508	3.10	ug/L #	13
87) 3,3-dimethyl-1-butanol	13.26	57	1953	4.48	ug/L #	80
88) dibromochloromethane	13.33	129	2045	0.48	ug/L	97
89) 1,2-dibromoethane	13.52	107	1890	0.51	ug/L	94
90) chlorobenzene	14.03	112	6076	0.55	ug/L	97
91) 1,1,1,2-tetrachloroethane	14.09	131	2082	0.52	ug/L #	84
92) ethylbenzene	14.13	91	10130	0.54	ug/L	87
93) m,p-xylene	14.27	106	7831	1.05	ug/L	78
94) o-xylene	14.72	106	3797	0.51	ug/L	90
95) styrene	14.75	104	6748	0.53	ug/L	90
96) bromoform	14.95	173	1677	2.33	ug/L	84
98) isopropylbenzene	15.11	105	11213	0.60	ug/L	98
100) bromobenzene	15.53	156	2925	0.61	ug/L	89
101) cyclohexanone	15.24	55	2087	4.81	ug/L	90
102) 1,1,2,2-tetrachloroethane	15.35	83	4305	0.83	ug/L	93
103) trans-1,4-dichloro-2-buten	15.45	53	641	0.43	ug/L #	1
104) 1,2,3-trichloropropane	15.44	110	1011	0.69	ug/L #	74

(#) = qualifier out of range (m) = manual integration

D188519.D MD7671.M

Fri Oct 28 17:22:28 2011

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188519.D
 Acq On : 28 Oct 2011 9:24 am
 Sample : IC7671-0.5
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:29 2011

Vial: 2
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:29:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
105) n-propylbenzene	15.57	91	13511	0.62	ug/L	98
106) p-ethyltoluene	15.68	105	7035	0.41	ug/L #	93
107) 2-chlorotoluene	15.71	126	2752	0.61	ug/L #	69
108) 4-chlorotoluene	15.83	91	9650	0.67	ug/L	93
109) 1,3,5-trimethylbenzene	15.72	105	10847	0.65	ug/L	94
110) tert-butylbenzene	16.11	119	8852	0.60	ug/L	95
111) pentachloroethane	16.16	167	1974	0.63	ug/L	88
112) 1,2,4-trimethylbenzene	16.16	105	10802	0.65	ug/L	87
113) sec-butylbenzene	16.35	105	13096	0.62	ug/L	98
114) 1,3-dichlorobenzene	16.54	146	5760	0.62	ug/L	93
115) p-isopropyltoluene	16.50	119	11187	0.65	ug/L	93
116) 1,4-dichlorobenzene	16.61	146	7424	0.73	ug/L	84
117) Benzyl Chloride	16.77	91	4425	0.43	ug/L #	85
119) 1,2-dichlorobenzene	17.07	146	6271	0.68	ug/L	91
120) n-butylbenzene	17.01	92	5479	0.56	ug/L	93
121) 1,2,4,5-tetramethylbenzene	17.81	119	6610	0.40	ug/L	94
122) 1,2-dibromo-3-chloropropan	17.92	75	568	0.65	ug/L #	34
123) 1,3,5-trichlorobenzene	18.18	180	4421	0.60	ug/L	85
124) 1,2,4-trichlorobenzene	18.91	180	2988	0.76	ug/L	78
125) hexachlorobutadiene	19.00	225	2217	0.62	ug/L #	61
126) naphthalene	19.22	128	5773	0.53	ug/L	69
127) 1,2,3-trichlorobenzene	19.46	180	2221	1.52	ug/L #	66
128) hexachloroethane	17.37	119	2143	0.69	ug/L	84

(#) = qualifier out of range (m) = manual integration

D188519.D MD7671.M Fri Oct 28 17:22:29 2011 RPT1

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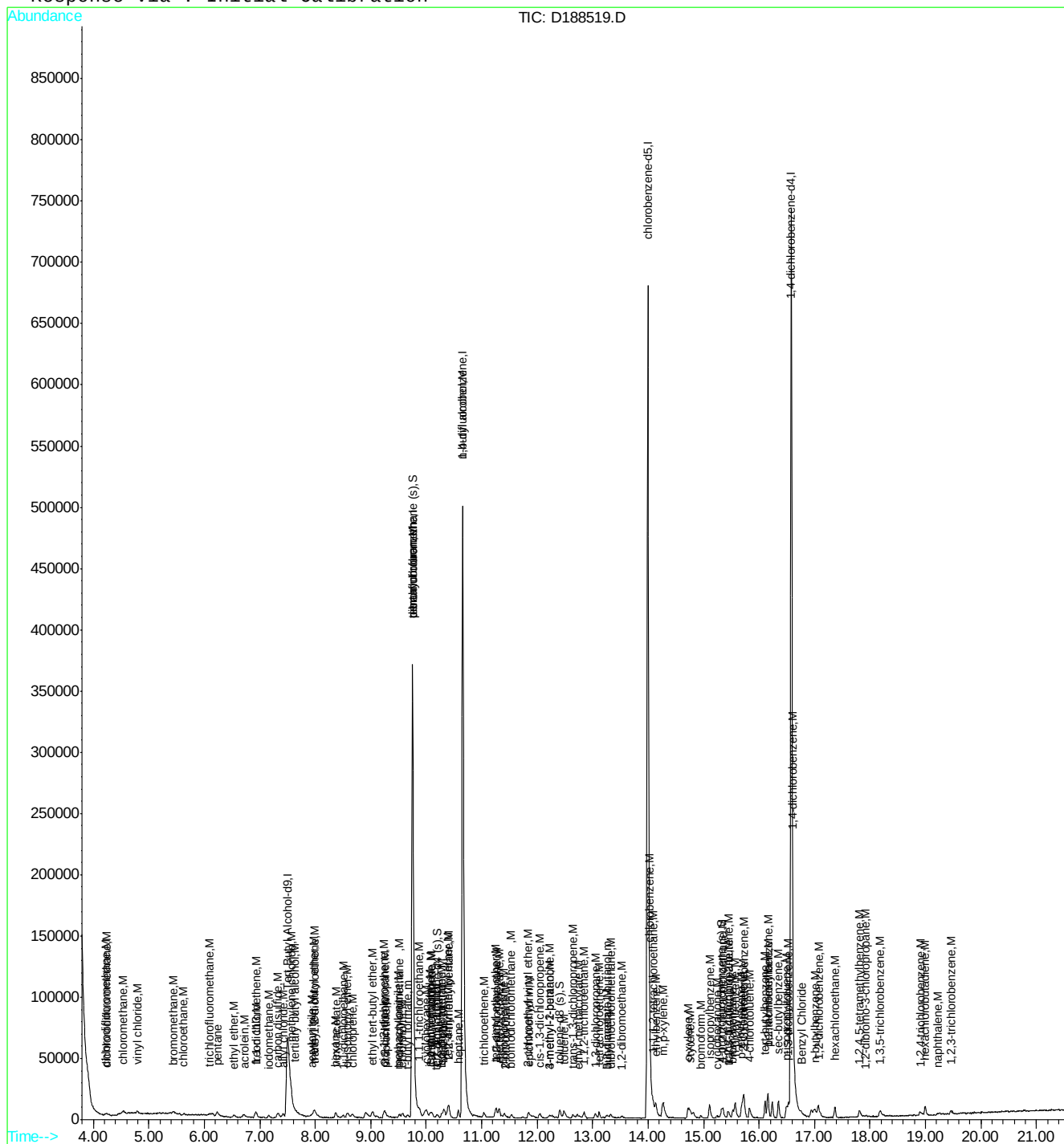
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D188519.D
Acq On : 28 Oct 2011 9:24 am
Sample : IC7671-0.5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:29 2011

Vial: 2
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 17:18:22 2011
Response via : Initial Calibration



D188519.D MD7671.M

Fri Oct 28 17:22:37 2011

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188520.D
 Acq On : 28 Oct 2011 9:53 am
 Sample : IC7671-1
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:33 2011

Vial: 3
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:29:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	193208	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	319834	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	506155	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	495178	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	265939	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.77	113	3674	1.05	ug/L	0.02
Spiked Amount	50.000	Range	67 - 131	Recovery	=	2.10%#
45) 1,2-dichloroethane-d4 (s)	10.19	65	4239	1.01	ug/L	0.02
Spiked Amount	50.000	Range	66 - 130	Recovery	=	2.02%#
75) toluene-d8 (s)	12.40	98	14235	1.05	ug/L	0.03
Spiked Amount	50.000	Range	76 - 125	Recovery	=	2.10%#
99) 4-bromofluorobenzene (s)	15.32	95	6937	1.15	ug/L	0.05
Spiked Amount	50.000	Range	53 - 142	Recovery	=	2.30%#

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.63	59	2621	5.22	ug/L	# 37
6) chlorodifluoromethane	4.23	51	4144	1.00	ug/L	98
7) dichlorodifluoromethane	4.23	85	4457	0.94	ug/L	92
8) chloromethane	4.54	50	4981	0.99	ug/L	96
9) vinyl chloride	4.79	62	4591	0.94	ug/L	93
10) bromomethane	5.45	94	3219	1.03	ug/L	84
11) chloroethane	5.62	64	2843	1.00	ug/L	96
13) trichlorofluoromethane	6.13	101	5201	0.92	ug/L	89
14) pentane	6.24	43	8535	1.08	ug/L	91
15) ethyl ether	6.52	74	2050	0.85	ug/L	77
16) acrolein	6.71	56	9814	10.79	ug/L	98
18) 1,1-dichloroethene	6.93	96	3658	0.96	ug/L	87
20) allyl chloride	7.42	41	10389	1.29	ug/L	93
21) acetoneitrile	7.30	40	2058	8.59	ug/L	92
23) iodomethane	7.17	142	5453	0.86	ug/L	91
24) iso-butyl alcohol	10.05	74	71	3.46	ug/L	50
25) carbon disulfide	7.32	76	10999	0.90	ug/L	92
26) methylene chloride	7.56	84	4178	0.95	ug/L	94
28) methyl tert butyl ether	7.97	73	10795	0.87	ug/L	89
29) trans-1,2-dichloroethene	7.99	96	3705	0.92	ug/L	88
30) di-isopropyl ether	8.58	45	11983	0.92	ug/L	100
31) ethyl tert-butyl ether	9.03	59	11624	0.93	ug/L	97
33) 1,1-dichloroethane	8.51	63	6294	0.89	ug/L	95
34) chloroprene	8.67	53	5134	0.88	ug/L	87
35) acrylonitrile	7.89	53	6601	4.09	ug/L	84
36) vinyl acetate	8.37	86	804	3.24	ug/L	# 1
38) 2,2-dichloropropane	9.25	77	5668	0.94	ug/L	99
39) cis-1,2-dichloroethene	9.23	96	3778	0.87	ug/L	86
40) propionitrile	9.26	54	4607	7.38	ug/L	80
41) bromochloromethane	9.52	128	1669	0.81	ug/L	97
42) tetrahydrofuran	9.62	72	202	0.34	ug/L	# 1
43) chloroform	9.57	83	5529	0.85	ug/L	96
46) freon 113	6.92	151	2518	0.84	ug/L	96

(#) = qualifier out of range (m) = manual integration

D188520.D MD7671.M Fri Oct 28 17:22:57 2011 RPT1

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188520.D
 Acq On : 28 Oct 2011 9:53 am
 Sample : IC7671-1
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:33 2011

Vial: 3
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:29:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) methacrylonitrile	9.50	41	2464	1.04	ug/L	73
48) t-butyl formate	9.67	59	3062	0.85	ug/L #	53
49) 1,1,1-trichloroethane	9.88	97	4989	0.86	ug/L	76
50) tert-amyl methyl ether	10.38	73	11657	0.97	ug/L	95
52) cyclohexane	10.02	84	5817	0.96	ug/L #	100
53) tert amyl alcohol	10.19	55	1102	6.13	ug/L #	17
54) 2,2,4-trimethylpentane	10.40	57	14534	0.95	ug/L	94
55) epichlorohydrin	11.92	57	2437	5.37	ug/L	87
56) n-butyl alcohol	10.85	56	6039	49.69	ug/L	89
57) carbon tetrachloride	10.11	117	4337	0.87	ug/L	88
58) 1,1-dichloropropene	10.06	75	5012	0.94	ug/L	90
59) hexane	8.37	57	5205	0.96	ug/L	95
60) benzene	10.32	78	13666	0.88	ug/L	97
61) heptane	10.58	57	2813	0.95	ug/L	94
62) isopropyl acetate	10.26	43	5592	0.76	ug/L	98
63) 1,2-dichloroethane	10.27	62	4322	0.83	ug/L	99
65) trichloroethene	11.04	95	3515	0.89	ug/L	96
66) 2-nitropropane	11.74	43	1106	0.87	ug/L	80
67) 2-chloroethyl vinyl ether	11.83	63	10635	4.21	ug/L	97
68) methyl methacrylate	11.38	100	532	0.45	ug/L #	1
69) tert-amyl ethyl ether	11.25	87	4917	0.88	ug/L	97
70) 1,2-dichloropropane	11.26	63	3538	0.87	ug/L	94
71) methylcyclohexane	11.31	83	6453	0.95	ug/L	97
72) dibromomethane	11.41	93	2093	0.86	ug/L	75
73) bromodichloromethane	11.53	83	4152	0.82	ug/L	97
74) cis-1,3-dichloropropene	12.04	75	5538	0.86	ug/L	93
77) toluene	12.48	92	8200	0.85	ug/L	96
78) 3-methyl-1-butanol	12.19	70	1968	16.70	ug/L #	52
79) trans-1,3-dichloropropene	12.63	75	4943	0.80	ug/L	97
80) ethyl methacrylate	12.73	69	3993	0.72	ug/L	93
81) 1,1,2-trichloroethane	12.84	83	2469	0.81	ug/L	92
82) 2-hexanone	13.19	58	760	0.46	ug/L #	54
84) tetrachloroethene	13.11	166	3633	0.83	ug/L	96
85) 1,3-dichloropropane	13.05	76	5132	0.80	ug/L	97
86) butyl acetate	13.24	56	2827	3.52	ug/L #	39
87) 3,3-dimethyl-1-butanol	13.24	57	3952	8.92	ug/L	84
88) dibromochloromethane	13.33	129	3072	0.71	ug/L	92
89) 1,2-dibromoethane	13.51	107	2962	0.78	ug/L	94
90) chlorobenzene	14.03	112	9514	0.86	ug/L	97
91) 1,1,1,2-tetrachloroethane	14.09	131	3470	0.86	ug/L	84
92) ethylbenzene	14.13	91	16400	0.86	ug/L	95
93) m,p-xylene	14.26	106	13109	1.73	ug/L	87
94) o-xylene	14.71	106	6269	0.83	ug/L	100
95) styrene	14.75	104	10198	0.78	ug/L	93
96) bromoform	14.95	173	2082	2.43	ug/L	83
98) isopropylbenzene	15.10	105	17027	0.90	ug/L	97
100) bromobenzene	15.52	156	4151	0.85	ug/L	92
101) cyclohexanone	15.24	55	3442	7.87	ug/L	91
102) 1,1,2,2-tetrachloroethane	15.34	83	4635	0.89	ug/L	98

(#)=qualifier out of range (m)=manual integration

D188520.D MD7671.M Fri Oct 28 17:22:58 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188520.D
 Acq On : 28 Oct 2011 9:53 am
 Sample : IC7671-1
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:33 2011

Vial: 3
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:29:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
103) trans-1,4-dichloro-2-buten	15.45	53	951	0.63	ug/L #	1
104) 1,2,3-trichloropropane	15.44	110	1294	0.88	ug/L	98
105) n-propylbenzene	15.56	91	19667	0.89	ug/L	98
106) p-ethyltoluene	15.68	105	14701	0.85	ug/L	97
107) 2-chlorotoluene	15.70	126	3967	0.87	ug/L	90
108) 4-chlorotoluene	15.82	91	13547	0.93	ug/L	95
109) 1,3,5-trimethylbenzene	15.72	105	15229	0.90	ug/L	94
110) tert-butylbenzene	16.11	119	16615	1.13	ug/L	98
111) pentachloroethane	16.15	167	2470	0.78	ug/L	81
112) 1,2,4-trimethylbenzene	16.16	105	14813	0.88	ug/L	96
113) sec-butylbenzene	16.35	105	19584	0.92	ug/L	99
114) 1,3-dichlorobenzene	16.53	146	7532	0.81	ug/L	95
115) p-isopropyltoluene	16.49	119	15266	0.87	ug/L	95
116) 1,4-dichlorobenzene	16.61	146	9629	0.94	ug/L	98
117) Benzyl Chloride	16.75	91	8420	0.80	ug/L	93
118) p-diethylbenzene	16.93	119	9080	0.85	ug/L #	83
119) 1,2-dichlorobenzene	17.06	146	7955	0.85	ug/L	93
120) n-butylbenzene	16.98	92	7484	0.76	ug/L	95
121) 1,2,4,5-tetramethylbenzene	17.80	119	12579	0.76	ug/L	97
122) 1,2-dibromo-3-chloropropan	17.92	75	543	0.62	ug/L #	57
123) 1,3,5-trichlorobenzene	18.17	180	5022	0.67	ug/L	96
124) 1,2,4-trichlorobenzene	18.90	180	3293	0.80	ug/L	94
125) hexachlorobutadiene	19.00	225	2825	0.79	ug/L	90
126) naphthalene	19.23	128	6087	0.55	ug/L	97
127) 1,2,3-trichlorobenzene	19.46	180	2340	1.54	ug/L	87
128) hexachloroethane	17.37	119	2608	0.83	ug/L	90

(#) = qualifier out of range (m) = manual integration

D188520.D MD7671.M Fri Oct 28 17:22:59 2011 RPT1

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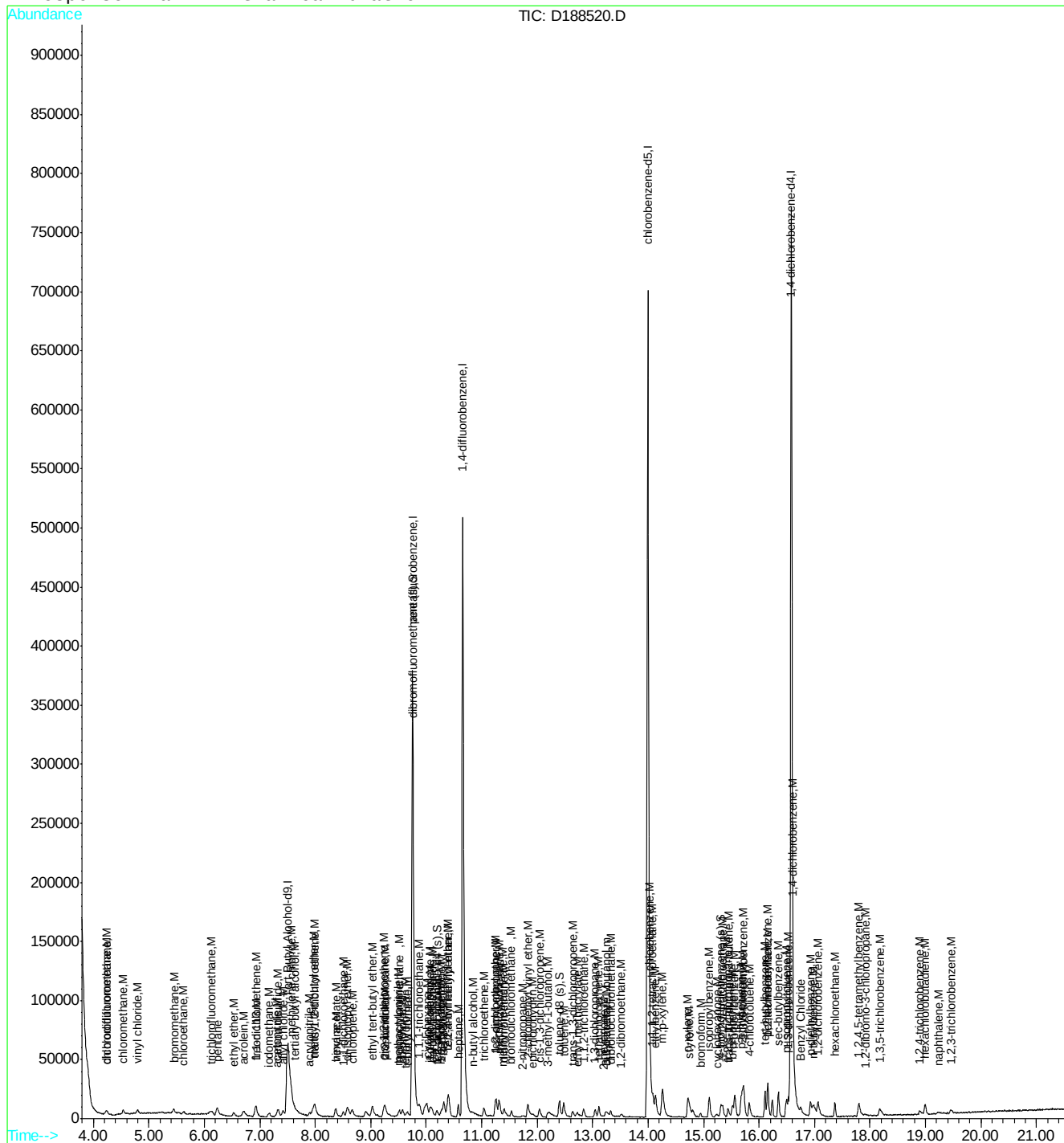
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D188520.D
Acq On : 28 Oct 2011 9:53 am
Sample : IC7671-1
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:33 2011

Vial: 3
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 17:18:22 2011
Response via : Initial Calibration



D188520.D MD7671.M

Fri Oct 28 17:23:10 2011

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188521.D
 Acq On : 28 Oct 2011 10:23 am
 Sample : IC7671-2
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:24 2011

Vial: 4
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	192540	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	317679	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	504419	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	492457	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	269380	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.77	113	6052	1.75	ug/L	0.02
Spiked Amount	50.000	Range	67 - 131	Recovery	=	3.50%#
45) 1,2-dichloroethane-d4 (s)	10.19	65	6959	1.67	ug/L	0.02
Spiked Amount	50.000	Range	66 - 130	Recovery	=	3.34%#
75) toluene-d8 (s)	12.39	98	22446	1.67	ug/L	0.02
Spiked Amount	50.000	Range	76 - 125	Recovery	=	3.34%#
99) 4-bromofluorobenzene (s)	15.30	95	11222	1.83	ug/L	0.03
Spiked Amount	50.000	Range	53 - 142	Recovery	=	3.66%#

Target Compounds

						Qvalue
2) 1,4-dioxane	11.39	88	1406	160.34	ug/L	# 99
3) tertiary butyl alcohol	7.64	59	4349	8.69	ug/L	65
6) chlorodifluoromethane	4.24	51	7564	1.83	ug/L	99
7) dichlorodifluoromethane	4.23	85	8165	1.73	ug/L	92
8) chloromethane	4.55	50	8870	1.77	ug/L	96
9) vinyl chloride	4.80	62	8541	1.75	ug/L	91
10) bromomethane	5.45	94	5665	1.83	ug/L	96
11) chloroethane	5.62	64	5334	1.88	ug/L	95
13) trichlorofluoromethane	6.14	101	9776	1.73	ug/L	91
14) pentane	6.23	43	13582	1.73	ug/L	94
15) ethyl ether	6.52	74	4435	1.85	ug/L	93
16) acrolein	6.66	56	916330	1014.20	ug/L	99
18) 1,1-dichloroethene	6.93	96	7092	1.88	ug/L	97
19) acetone	6.91	58	1687	4.16	ug/L	94
20) allyl chloride	7.41	41	13102	1.64	ug/L	95
21) acetonitrile	7.27	40	3697	15.53	ug/L	93
23) iodomethane	7.16	142	11758	1.86	ug/L	97
24) iso-butyl alcohol	10.01	74	103	5.06	ug/L	50
25) carbon disulfide	7.32	76	22656	1.86	ug/L	99
26) methylene chloride	7.56	84	7968	1.83	ug/L	98
27) methyl acetate	7.42	43	11094	3.26	ug/L	73
28) methyl tert butyl ether	7.97	73	23059	1.86	ug/L	96
29) trans-1,2-dichloroethene	7.99	96	7305	1.83	ug/L	92
30) di-isopropyl ether	8.57	45	24580	1.91	ug/L	74
31) ethyl tert-butyl ether	9.02	59	23105	1.86	ug/L	98
33) 1,1-dichloroethane	8.50	63	12674	1.81	ug/L	92
34) chloroprene	8.65	53	10601	1.83	ug/L	97
35) acrylonitrile	7.86	53	13299	8.30	ug/L	91
36) vinyl acetate	8.59	86	791	3.23	ug/L	# 89
38) 2,2-dichloropropane	9.25	77	11190	1.87	ug/L	92
39) cis-1,2-dichloroethene	9.23	96	7806	1.82	ug/L	97
40) propionitrile	9.23	54	10042	16.20	ug/L	93
41) bromochloromethane	9.52	128	3474	1.70	ug/L	94

(#)=qualifier out of range (m)=manual integration

D188521.D MD7671.M Fri Oct 28 17:23:59 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188521.D
 Acq On : 28 Oct 2011 10:23 am
 Sample : IC7671-2
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:24 2011

Vial: 4
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) tetrahydrofuran	9.62	72	804	1.37	ug/L #	31
43) chloroform	9.57	83	11527	1.79	ug/L	93
46) freon 113	6.93	151	5011	1.69	ug/L	96
47) methacrylonitrile	9.46	41	4224	1.79	ug/L	97
48) t-butyl formate	9.66	59	6252	1.76	ug/L #	67
49) 1,1,1-trichloroethane	9.88	97	10124	1.75	ug/L	87
50) tert-amyl methyl ether	10.39	73	22719	1.89	ug/L	99
52) cyclohexane	10.01	84	10962	1.82	ug/L #	100
53) tert amyl alcohol	10.16	55	1912	10.67	ug/L #	63
54) 2,2,4-trimethylpentane	10.40	57	27279	1.80	ug/L	98
55) epichlorohydrin	11.90	57	4477	9.90	ug/L	84
56) n-butyl alcohol	10.80	56	13087	108.05	ug/L	90
57) carbon tetrachloride	10.11	117	8707	1.76	ug/L	99
58) 1,1-dichloropropene	10.07	75	9705	1.84	ug/L	96
59) hexane	8.36	57	10033	1.86	ug/L	94
60) benzene	10.32	78	28886	1.87	ug/L	98
61) heptane	10.57	57	5246	1.79	ug/L	91
62) isopropyl acetate	10.25	43	11951	1.62	ug/L	97
63) 1,2-dichloroethane	10.27	62	9303	1.79	ug/L	92
64) Ethyl Acrylate	11.08	55	7444	1.50	ug/L #	80
65) trichloroethene	11.03	95	7187	1.82	ug/L	96
66) 2-nitropropane	11.73	43	1911	1.50	ug/L	86
67) 2-chloroethyl vinyl ether	11.81	63	22345	8.88	ug/L	97
68) methyl methacrylate	11.33	100	1585	1.34	ug/L #	81
69) tert-amyl ethyl ether	11.24	87	9659	1.73	ug/L	97
70) 1,2-dichloropropane	11.26	63	7526	1.85	ug/L	97
71) methylcyclohexane	11.31	83	12557	1.85	ug/L	98
72) dibromomethane	11.40	93	4156	1.72	ug/L	94
73) bromodichloromethane	11.53	83	8699	1.73	ug/L	97
74) cis-1,3-dichloropropene	12.04	75	10899	1.71	ug/L	95
76) 4-methyl-2-pentanone	12.18	58	2852	1.65	ug/L #	50
77) toluene	12.47	92	17468	1.81	ug/L	97
78) 3-methyl-1-butanol	12.17	70	4033	34.33	ug/L #	70
79) trans-1,3-dichloropropene	12.62	75	10320	1.68	ug/L	90
80) ethyl methacrylate	12.69	69	9399	1.70	ug/L	97
81) 1,1,2-trichloroethane	12.83	83	5119	1.69	ug/L	91
82) 2-hexanone	13.13	58	2809	1.70	ug/L #	73
84) tetrachloroethene	13.11	166	7565	1.73	ug/L	98
85) 1,3-dichloropropane	13.04	76	10958	1.73	ug/L	92
86) butyl acetate	13.24	56	8085	5.23	ug/L #	26
87) 3,3-dimethyl-1-butanol	13.23	57	7834	17.78	ug/L #	78
88) dibromochloromethane	13.32	129	6256	1.46	ug/L	93
89) 1,2-dibromoethane	13.50	107	6183	1.65	ug/L	98
90) chlorobenzene	14.03	112	19295	1.74	ug/L	83
91) 1,1,1,2-tetrachloroethane	14.09	131	6620	1.64	ug/L	91
92) ethylbenzene	14.13	91	33898	1.79	ug/L	97
93) m,p-xylene	14.25	106	27294	3.62	ug/L	88
94) o-xylene	14.70	106	12944	1.73	ug/L	94
95) styrene	14.72	104	21070	1.63	ug/L	95

(#)=qualifier out of range (m)=manual integration

D188521.D MD7671.M

Fri Oct 28 17:24:01 2011

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188521.D
 Acq On : 28 Oct 2011 10:23 am
 Sample : IC7671-2
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 16:24 2011

Vial: 4
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) bromoform	14.94	173	4513	3.12	ug/L	84
98) isopropylbenzene	15.10	105	35349	1.85	ug/L	97
100) bromobenzene	15.51	156	8759	1.78	ug/L	97
101) cyclohexanone	15.22	55	6451	14.55	ug/L	96
102) 1,1,2,2-tetrachloroethane	15.34	83	10153	1.92	ug/L	97
103) trans-1,4-dichloro-2-buten	15.43	53	2225	1.47	ug/L #	1
104) 1,2,3-trichloropropane	15.43	110	2627	1.77	ug/L	94
105) n-propylbenzene	15.55	91	41742	1.87	ug/L	98
106) p-ethyltoluene	15.67	105	30714	1.76	ug/L	98
107) 2-chlorotoluene	15.69	126	8486	1.83	ug/L	94
108) 4-chlorotoluene	15.81	91	28428	1.93	ug/L	98
109) 1,3,5-trimethylbenzene	15.72	105	32393	1.89	ug/L	99
110) tert-butylbenzene	16.11	119	26011	1.74	ug/L	97
111) pentachloroethane	16.15	167	5175	1.62	ug/L	90
112) 1,2,4-trimethylbenzene	16.16	105	30866	1.81	ug/L	99
113) sec-butylbenzene	16.35	105	40609	1.88	ug/L	97
114) 1,3-dichlorobenzene	16.53	146	16516	1.76	ug/L	97
115) p-isopropyltoluene	16.48	119	31787	1.80	ug/L	96
116) 1,4-dichlorobenzene	16.61	146	19424	1.88	ug/L	92
117) Benzyl Chloride	16.74	91	16903	1.59	ug/L	96
118) p-diethylbenzene	16.91	119	17723	1.64	ug/L #	76
119) 1,2-dichlorobenzene	17.05	146	16929	1.79	ug/L	95
120) n-butylbenzene	16.96	92	16511	1.65	ug/L	95
121) 1,2,4,5-tetramethylbenzene	17.78	119	25217	1.50	ug/L	99
122) 1,2-dibromo-3-chloropropan	17.89	75	1200	1.35	ug/L	82
123) 1,3,5-trichlorobenzene	18.15	180	11559	1.53	ug/L	92
124) 1,2,4-trichlorobenzene	18.87	180	8043	1.53	ug/L	93
125) hexachlorobutadiene	18.99	225	5718	1.58	ug/L	87
126) naphthalene	19.19	128	14552	0.71	ug/L	95
127) 1,2,3-trichlorobenzene	19.43	180	5261	2.15	ug/L	94
128) hexachloroethane	17.37	119	5376	1.69	ug/L	94

(#) = qualifier out of range (m) = manual integration

D188521.D MD7671.M Fri Oct 28 17:24:02 2011 RPT1

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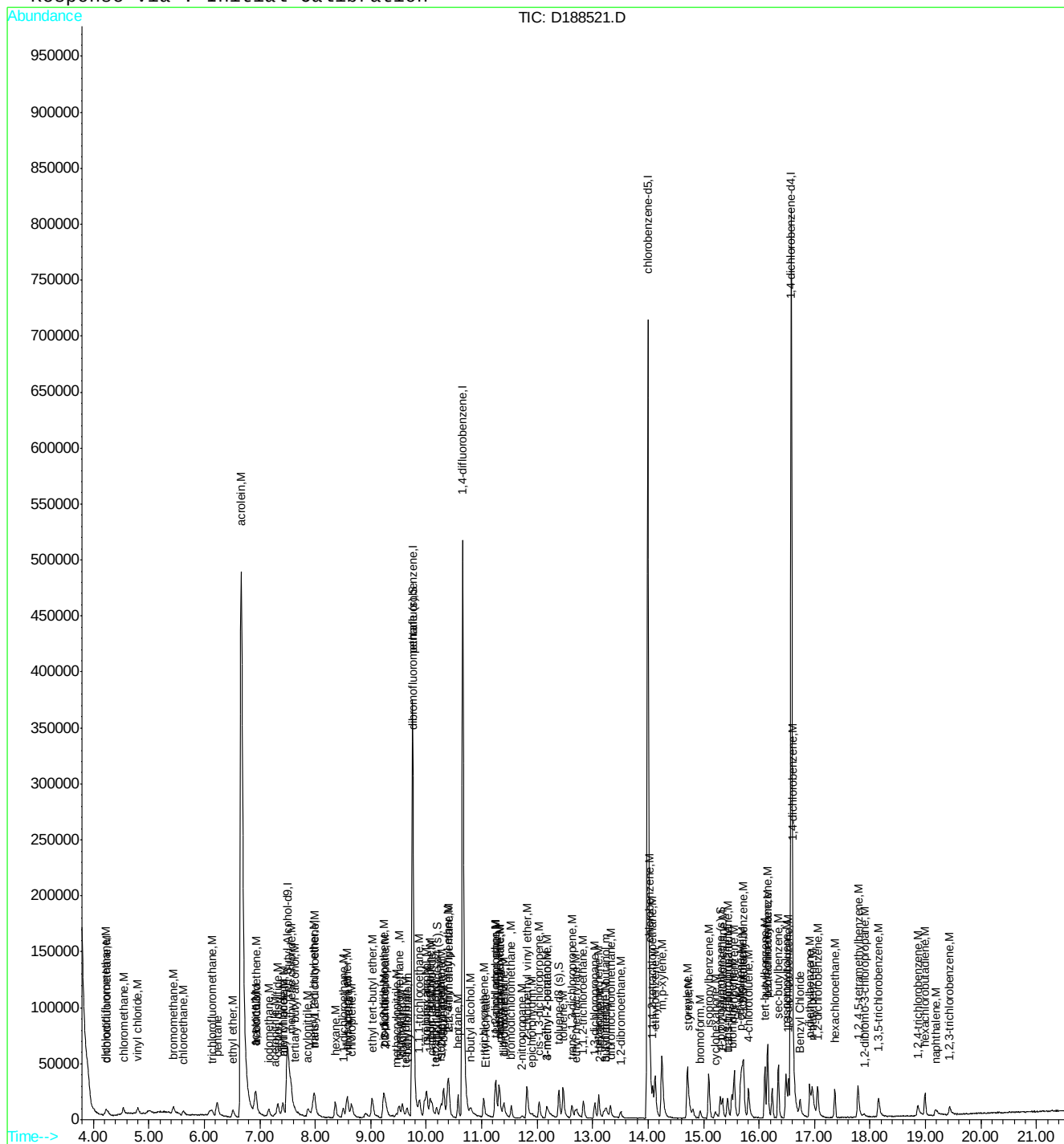
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D188521.D
Acq On : 28 Oct 2011 10:23 am
Sample : IC7671-2
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:24 2011

Vial: 4
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 17:18:22 2011
Response via : Initial Calibration



D188521.D MD7671.M

Fri Oct 28 17:24:11 2011

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188522.D
 Acq On : 28 Oct 2011 10:52 am
 Sample : IC7671-5
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 17:17 2011

Vial: 5
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	185611	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	317995	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	504691	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	497893	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	270852	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.76	113	15934	4.59	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	9.18%#
45) 1,2-dichloroethane-d4 (s)	10.18	65	19003	4.56	ug/L	0.01
Spiked Amount	50.000	Range	66 - 130	Recovery	=	9.12%#
75) toluene-d8 (s)	12.39	98	63737	4.73	ug/L	0.02
Spiked Amount	50.000	Range	76 - 125	Recovery	=	9.46%#
99) 4-bromofluorobenzene (s)	15.29	95	30682	4.98	ug/L	0.02
Spiked Amount	50.000	Range	53 - 142	Recovery	=	9.96%#

Target Compounds

						Qvalue
2) 1,4-dioxane	11.38	88	3621	207.67	ug/L	# 99
3) tertiary butyl alcohol	7.62	59	10329	21.41	ug/L	74
6) chlorodifluoromethane	4.23	51	19764	4.77	ug/L	98
7) dichlorodifluoromethane	4.23	85	22981	4.88	ug/L	96
8) chloromethane	4.54	50	22995	4.58	ug/L	98
9) vinyl chloride	4.80	62	22695	4.65	ug/L	96
10) bromomethane	5.45	94	14527	4.68	ug/L	98
11) chloroethane	5.63	64	13430	4.73	ug/L	100
13) trichlorofluoromethane	6.14	101	26417	4.68	ug/L	96
14) pentane	6.23	43	36502	4.65	ug/L	99
15) ethyl ether	6.52	74	10832	4.52	ug/L	90
16) acrolein	6.69	56	44745	49.47	ug/L	99
18) 1,1-dichloroethene	6.92	96	17844	4.72	ug/L	94
19) acetone	6.94	58	1653	4.07	ug/L	# 81
20) allyl chloride	7.41	41	41182	5.15	ug/L	94
21) acetonitrile	7.28	40	10951	45.95	ug/L	91
23) iodomethane	7.17	142	29763	4.71	ug/L	98
24) iso-butyl alcohol	10.00	74	802m	39.36	ug/L	
25) carbon disulfide	7.33	76	58301	4.78	ug/L	97
26) methylene chloride	7.56	84	20173	4.63	ug/L	95
27) methyl acetate	7.41	43	17170	5.04	ug/L	88
28) methyl tert butyl ether	7.96	73	57792	4.66	ug/L	96
29) trans-1,2-dichloroethene	7.99	96	18915	4.73	ug/L	94
30) di-isopropyl ether	8.57	45	59400	4.61	ug/L	80
31) ethyl tert-butyl ether	9.02	59	57135	4.60	ug/L	96
32) 2-butanone	9.20	72	2022m	3.99	ug/L	
33) 1,1-dichloroethane	8.50	63	33564	4.78	ug/L	98
34) chloroprene	8.65	53	28108	4.85	ug/L	93
35) acrylonitrile	7.85	53	35931	22.40	ug/L	92
36) vinyl acetate	8.55	86	2973	5.53	ug/L	# 40
37) ethyl acetate	9.26	45	2811m	5.70	ug/L	
38) 2,2-dichloropropane	9.26	77	28734	4.80	ug/L	99
39) cis-1,2-dichloroethene	9.22	96	20273	4.71	ug/L	95

(#)=qualifier out of range (m)=manual integration

D188522.D MD7671.M Fri Oct 28 17:24:35 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188522.D
 Acq On : 28 Oct 2011 10:52 am
 Sample : IC7671-5
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 17:17 2011

Vial: 5
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.22	54	27532	44.36	ug/L	98
41) bromochloromethane	9.51	128	9324	4.55	ug/L	91
42) tetrahydrofuran	9.61	72	2562	4.36	ug/L #	71
43) chloroform	9.57	83	30679	4.76	ug/L	97
46) freon 113	6.93	151	13307	4.48	ug/L	91
47) methacrylonitrile	9.44	41	9435	4.00	ug/L	90
48) t-butyl formate	9.65	59	15626	4.38	ug/L #	74
49) 1,1,1-trichloroethane	9.88	97	27944	4.82	ug/L	98
50) tert-amyl methyl ether	10.38	73	54469	4.54	ug/L	99
52) cyclohexane	10.01	84	29190	4.85	ug/L #	100
53) tert amyl alcohol	10.16	55	4546	25.35	ug/L #	72
54) 2,2,4-trimethylpentane	10.40	57	71716	4.72	ug/L	99
55) epichlorohydrin	11.89	57	10800	23.86	ug/L	95
56) n-butyl alcohol	10.77	56	23494	193.87	ug/L	91
57) carbon tetrachloride	10.11	117	23292	4.71	ug/L	93
58) 1,1-dichloropropene	10.07	75	25119	4.75	ug/L	98
59) hexane	8.36	57	25921	4.81	ug/L	98
60) benzene	10.31	78	73942	4.79	ug/L	99
61) heptane	10.57	57	14160	4.82	ug/L	99
62) isopropyl acetate	10.24	43	30454	4.13	ug/L	99
63) 1,2-dichloroethane	10.27	62	24401	4.70	ug/L	98
64) Ethyl Acrylate	11.05	55	20361m	4.09	ug/L	
65) trichloroethene	11.03	95	18852	4.76	ug/L	97
66) 2-nitropropane	11.72	43	5237	4.11	ug/L	99
67) 2-chloroethyl vinyl ether	11.80	63	55788	22.15	ug/L	97
68) methyl methacrylate	11.31	100	4895	4.14	ug/L #	27
69) tert-amyl ethyl ether	11.25	87	26058	4.67	ug/L	96
70) 1,2-dichloropropane	11.26	63	19034	4.68	ug/L	97
71) methylcyclohexane	11.31	83	32133	4.72	ug/L	98
72) dibromomethane	11.40	93	11208	4.62	ug/L	96
73) bromodichloromethane	11.53	83	23080	4.59	ug/L	99
74) cis-1,3-dichloropropene	12.03	75	29670	4.64	ug/L	96
76) 4-methyl-2-pentanone	12.15	58	8097	4.69	ug/L #	77
77) toluene	12.46	92	45836	4.75	ug/L	98
78) 3-methyl-1-butanol	12.15	70	9931	84.50	ug/L	85
79) trans-1,3-dichloropropene	12.62	75	27307	4.45	ug/L	99
80) ethyl methacrylate	12.67	69	24553	4.45	ug/L	97
81) 1,1,2-trichloroethane	12.83	83	13863	4.56	ug/L	98
82) 2-hexanone	13.09	58	8381	5.06	ug/L	86
84) tetrachloroethene	13.11	166	20198	4.58	ug/L	92
85) 1,3-dichloropropane	13.03	76	29225	4.55	ug/L	95
86) butyl acetate	13.18	56	7550m	5.03	ug/L	
87) 3,3-dimethyl-1-butanol	13.23	57	18442	41.40	ug/L #	82
88) dibromochloromethane	13.32	129	17145	3.96	ug/L	99
89) 1,2-dibromoethane	13.49	107	16694	4.39	ug/L	99
90) chlorobenzene	14.03	112	50736	4.54	ug/L	98
91) 1,1,1,2-tetrachloroethane	14.09	131	17815	4.37	ug/L	94
92) ethylbenzene	14.12	91	87839	4.58	ug/L	98
93) m,p-xylene	14.24	106	70724	9.28	ug/L	98

(#) = qualifier out of range (m) = manual integration

D188522.D MD7671.M Fri Oct 28 17:24:36 2011 RPT1

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188522.D
 Acq On : 28 Oct 2011 10:52 am
 Sample : IC7671-5
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 17:17 2011

Vial: 5
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) o-xylene	14.70	106	34521	4.56	ug/L	97
95) styrene	14.70	104	58053	4.44	ug/L	96
96) bromoform	14.93	173	12315	5.27	ug/L	99
98) isopropylbenzene	15.08	105	94170	4.89	ug/L	97
100) bromobenzene	15.50	156	23109	4.66	ug/L	93
101) cyclohexanone	15.19	55	19458	43.66	ug/L	96
102) 1,1,2,2-tetrachloroethane	15.34	83	25242	4.75	ug/L	97
103) trans-1,4-dichloro-2-buten	15.40	53	6223	4.08	ug/L #	62
104) 1,2,3-trichloropropane	15.42	110	6934	4.64	ug/L #	80
105) n-propylbenzene	15.54	91	110875	4.94	ug/L	99
106) p-ethyltoluene	15.66	105	81861	4.65	ug/L	99
107) 2-chlorotoluene	15.69	126	22297	4.78	ug/L	97
108) 4-chlorotoluene	15.80	91	72708	4.92	ug/L	100
109) 1,3,5-trimethylbenzene	15.71	105	87506	5.07	ug/L	96
110) tert-butylbenzene	16.10	119	69928	4.65	ug/L	99
111) pentachloroethane	16.15	167	14244	4.43	ug/L	94
112) 1,2,4-trimethylbenzene	16.15	105	82895	4.83	ug/L	99
113) sec-butylbenzene	16.34	105	105074	4.84	ug/L	98
114) 1,3-dichlorobenzene	16.52	146	44303	4.68	ug/L	98
115) p-isopropyltoluene	16.48	119	85092	4.78	ug/L	98
116) 1,4-dichlorobenzene	16.61	146	50153	4.83	ug/L	99
117) Benzyl Chloride	16.73	91	43573	4.09	ug/L	98
118) p-diethylbenzene	16.90	119	51372	4.74	ug/L #	80
119) 1,2-dichlorobenzene	17.05	146	45507	4.78	ug/L	98
120) n-butylbenzene	16.94	92	45908	4.55	ug/L	98
121) 1,2,4,5-tetramethylbenzene	17.77	119	72482	4.30	ug/L	99
122) 1,2-dibromo-3-chloropropan	17.88	75	3762	4.22	ug/L	82
123) 1,3,5-trichlorobenzene	18.13	180	31781	4.19	ug/L	97
124) 1,2,4-trichlorobenzene	18.83	180	22719	3.76	ug/L	96
125) hexachlorobutadiene	18.99	225	15459	4.24	ug/L #	69
126) naphthalene	19.15	128	42416	3.04	ug/L	96
127) 1,2,3-trichlorobenzene	19.41	180	15858	4.36	ug/L	96
128) hexachloroethane	17.36	119	14366	4.50	ug/L	96

(#) = qualifier out of range (m) = manual integration

D188522.D MD7671.M Fri Oct 28 17:24:37 2011 RPT1

Page 3

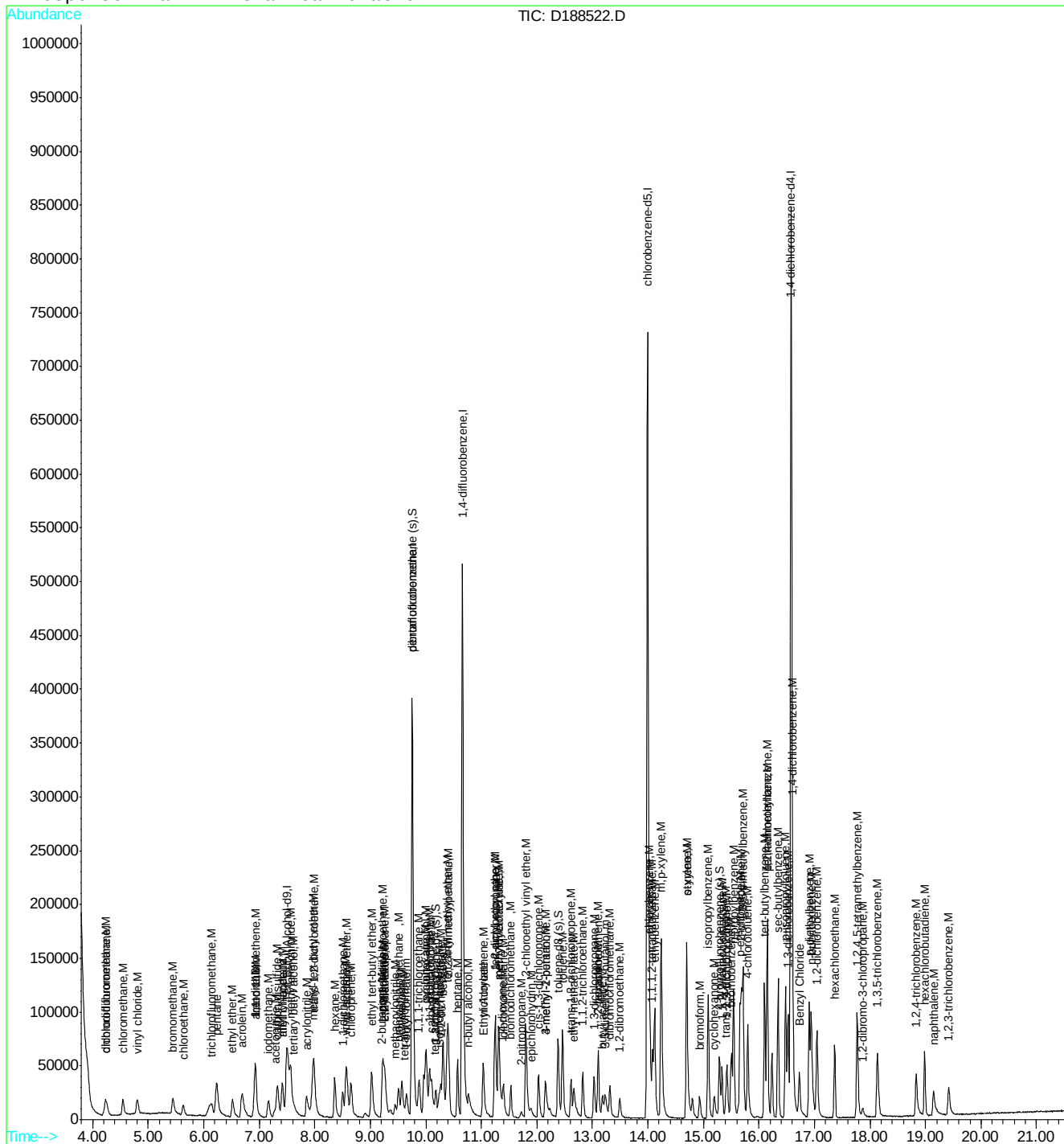
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 17:17 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 17:18:22 2011
Response via : Initial Calibration



D188522.D MD7671.M

Fri Oct 28 17:24:47 2011

RPT1

Page 4

Manual Integration Approval Summary

Page 1 of 1

Sample Number: VD7671-IC7671 **Method:** SW846 8260B
Lab FileID: D188522.D **Analyst approved:** 10/31/11 08:51 Yunxia Chen
Injection Time: 10/28/11 10:52 **Supervisor approved:** 10/31/11 15:09 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Butanone (MEK)	78-93-3		9.20	Split peak
Ethyl Acetate	141-78-6		9.26	Split peak
Isobutyl alcohol	78-83-1		10.00	Missed peak
Ethyl Acrylate	140-88-5		11.05	Missed peak
Butyl Acetate	123-86-4		13.18	Overlapping peak

6.7.15.1

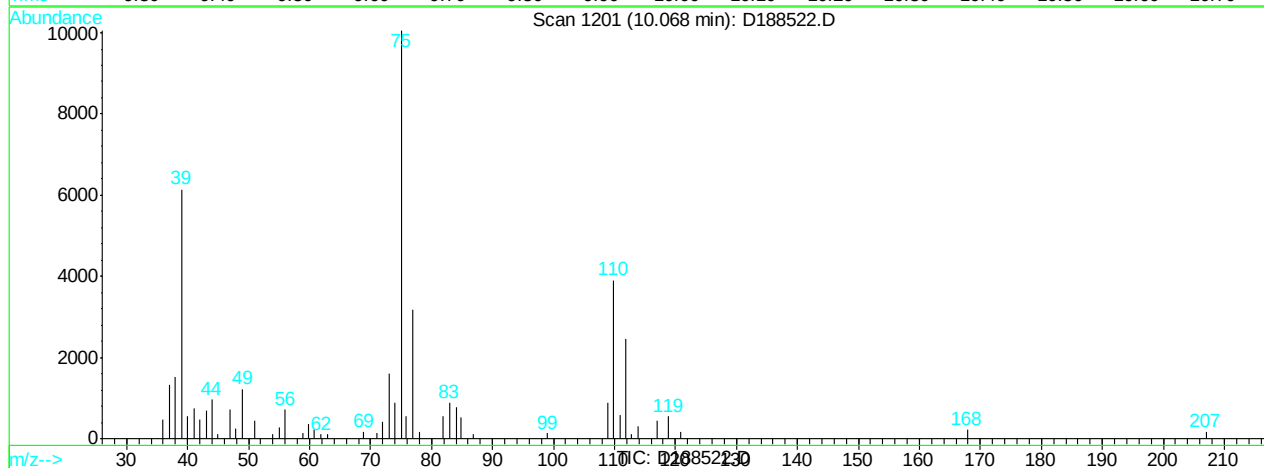
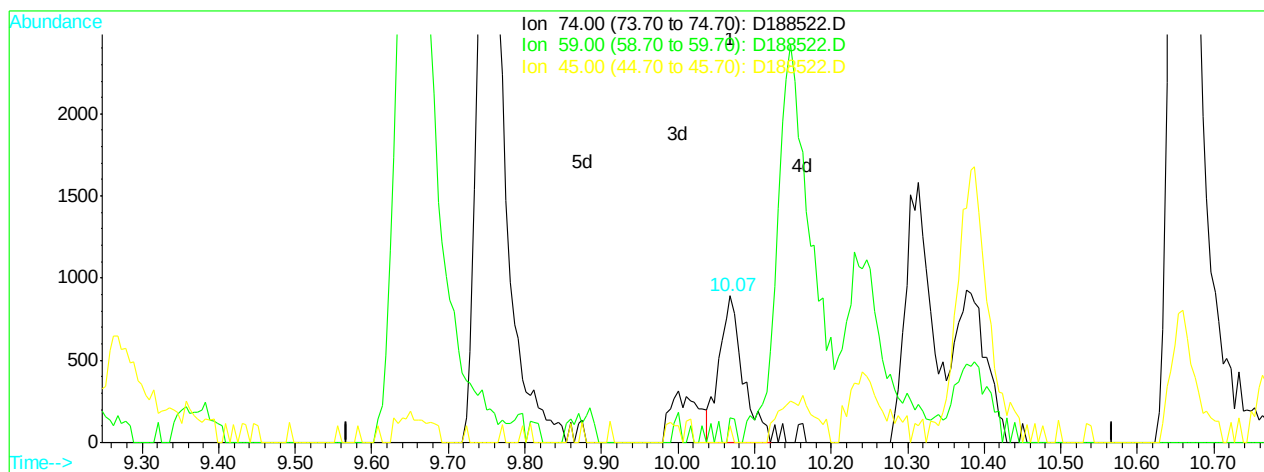
6

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 11:23 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 12:53:25 2011
Response via : Multiple Level Calibration



(24) iso-butyl alcohol (M)

10.07min 103.56ug/L

response 1916

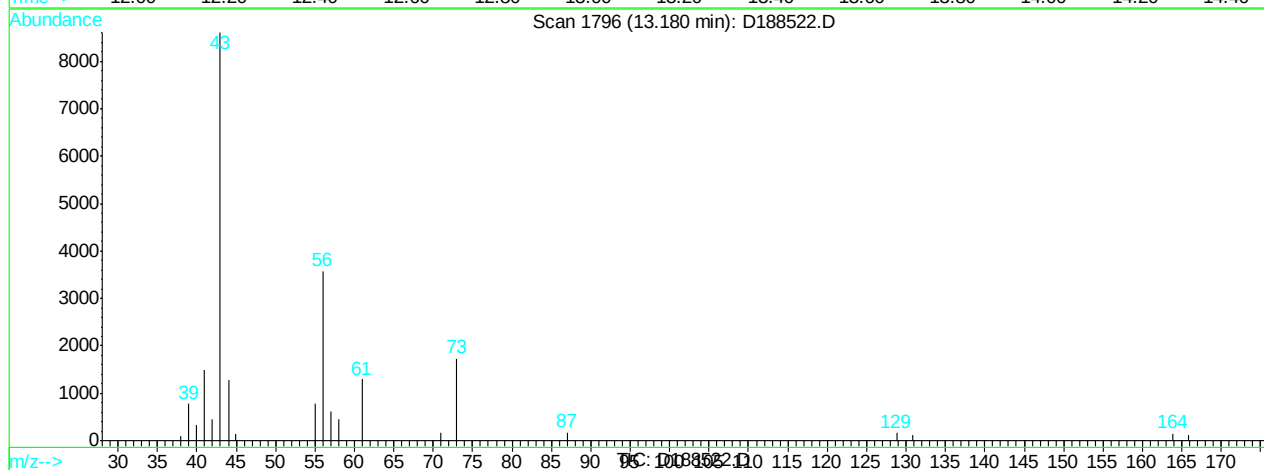
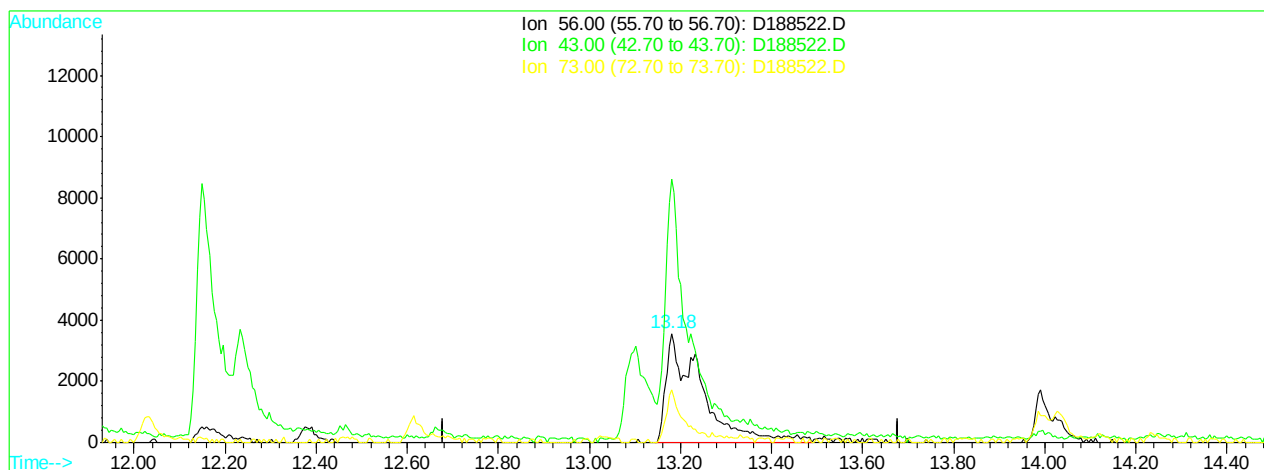
Ion	Exp%	Act%
74.00	100	100
59.00	26.20	16.69
45.00	29.30	11.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 12:55 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 12:58:46 2011
Response via : Multiple Level Calibration



(86) butyl acetate (M)

13.18min 6.12ug/L

response 19423

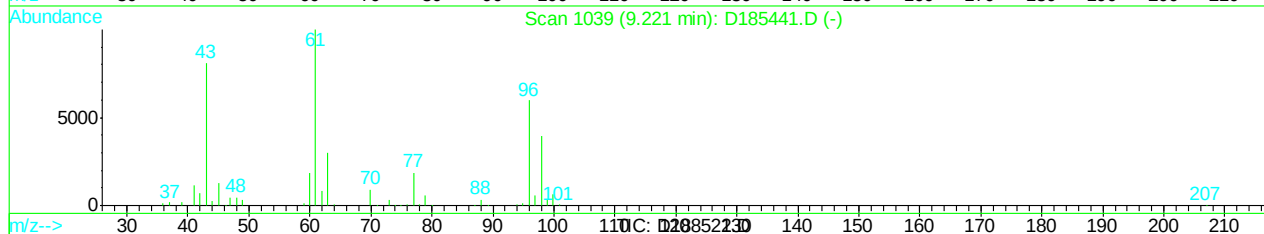
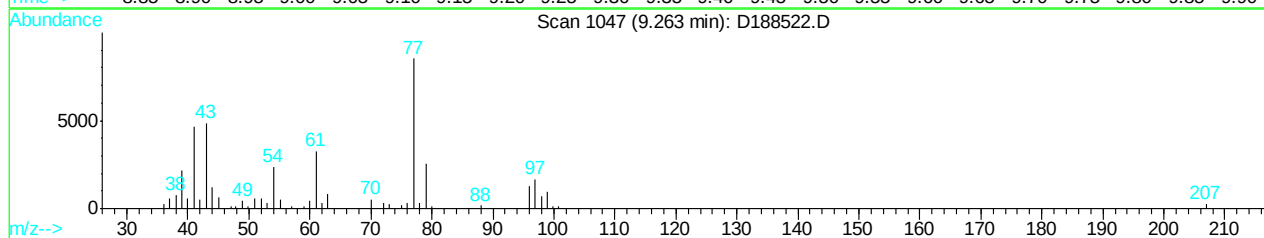
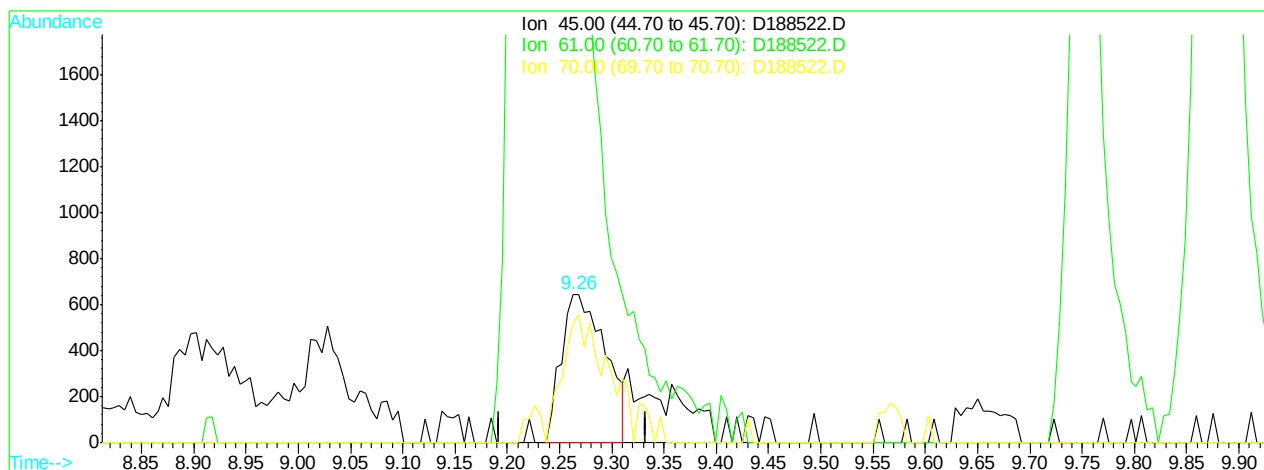
Ion	Exp%	Act%
56.00	100	100
43.00	259.20	233.05
73.00	37.40	48.64
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017, VD7671, 5,, 100, 5, 1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 15:09 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 14:45:19 2011
Response via : Multiple Level Calibration



(37) ethyl acetate (M)

9.26min 4.48ug/L

response 1895

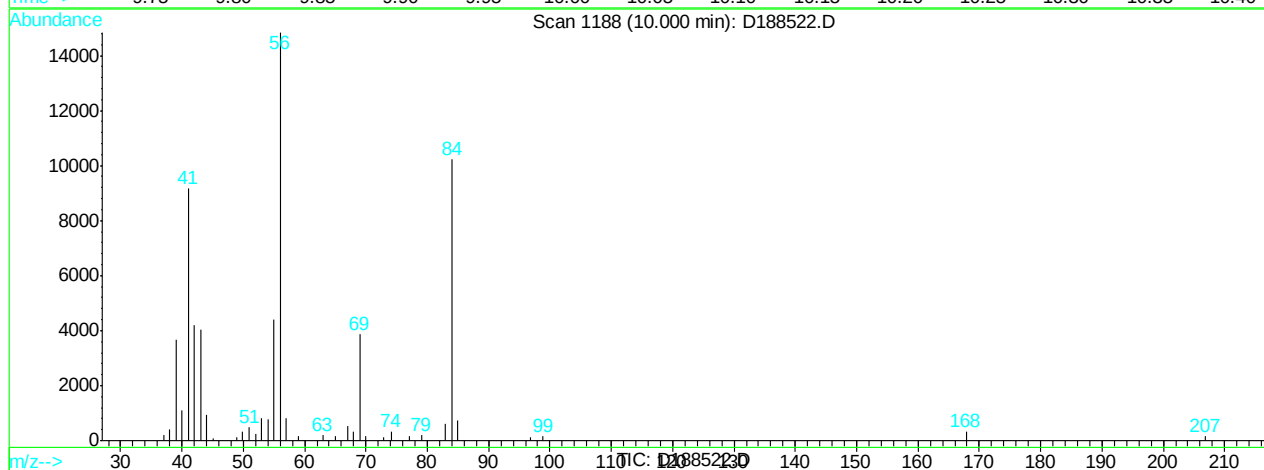
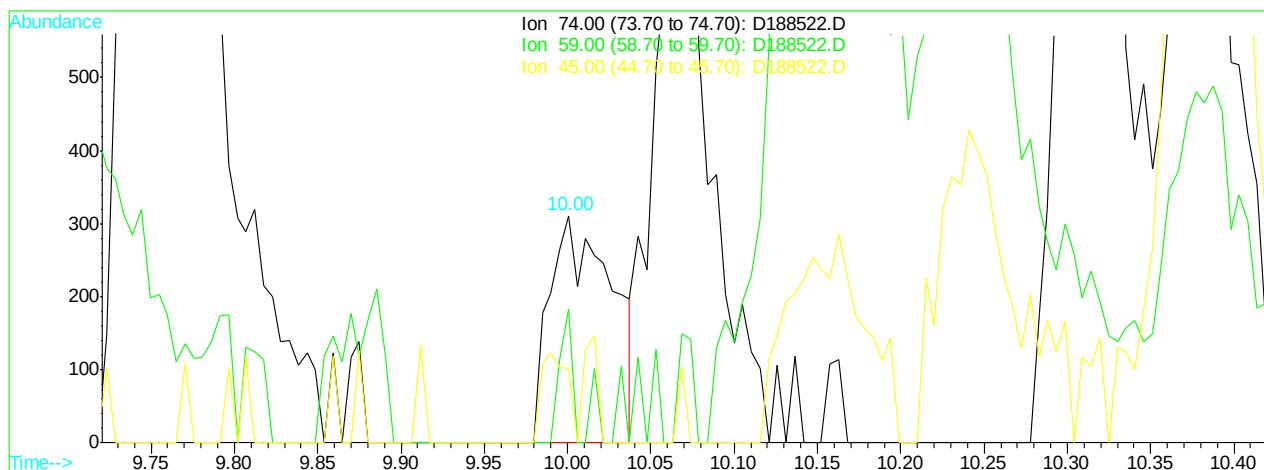
Ion	Exp%	Act%
45.00	100	100
61.00	790.90	403.56#
70.00	71.00	79.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:35 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 16:29:07 2011
Response via : Single Level Calibration



(24) iso-butyl alcohol (M)

10.00min 39.36ug/L m

response 802

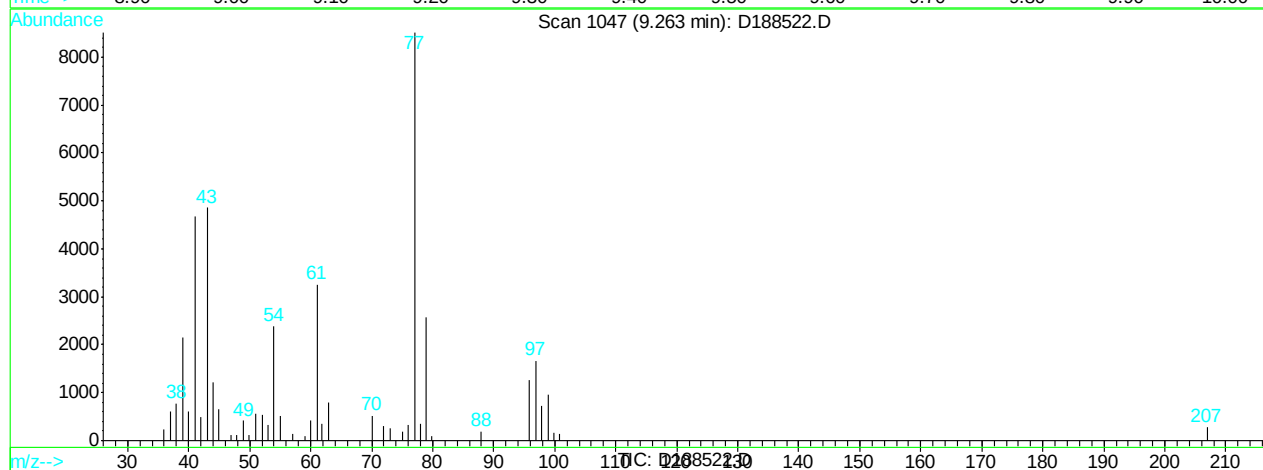
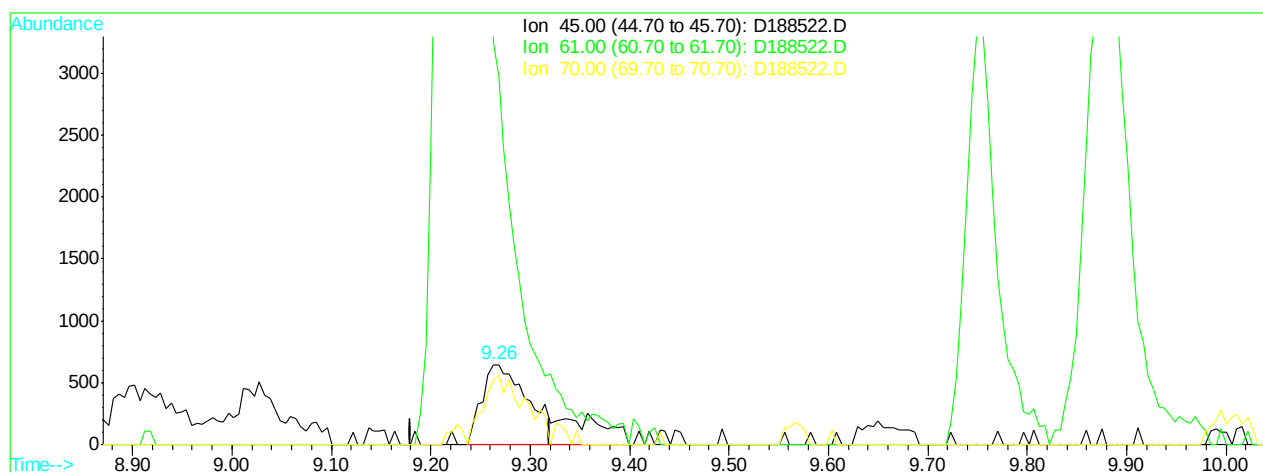
Ion	Exp%	Act%
74.00	100	100
59.00	28.20	58.84#
45.00	21.90	32.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017, VD7671, 5, , 100, 5, 1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:35 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 16:29:07 2011
Response via : Multiple Level Calibration



(37) ethyl acetate (M)

9.26min 5.70ug/L m

response 2811

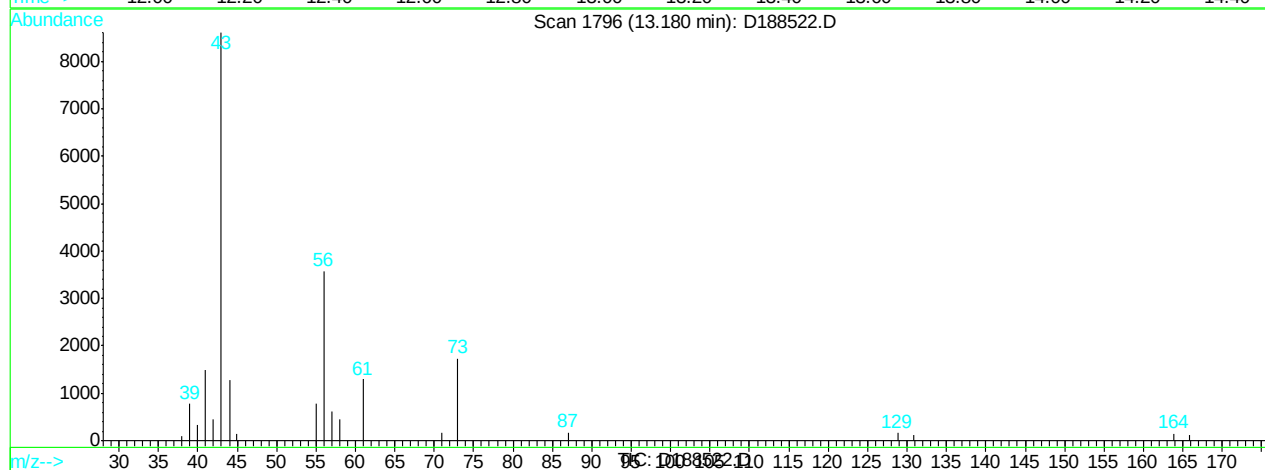
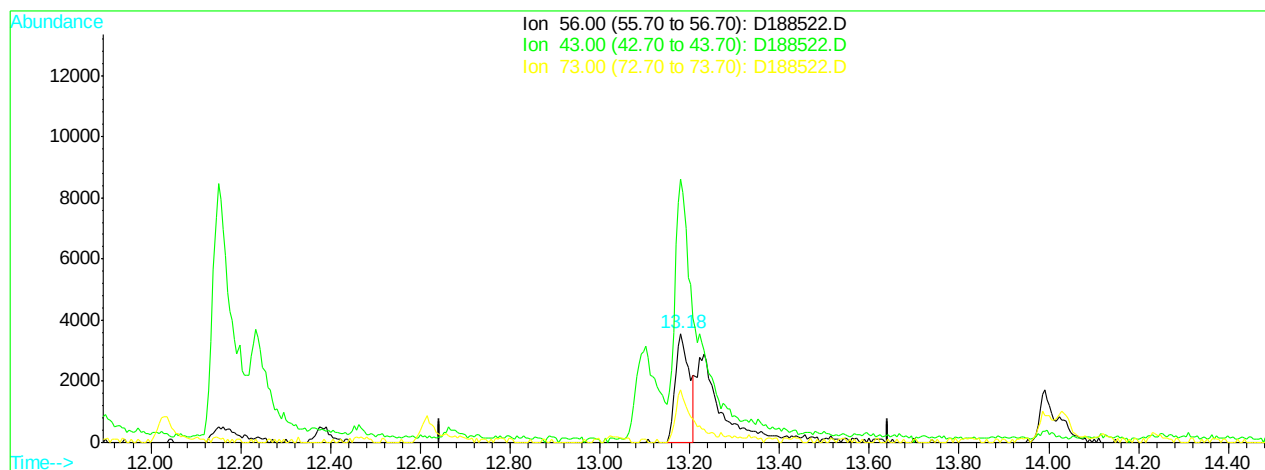
Ion	Exp%	Act%
45.00	100	100
61.00	821.80	503.25#
70.00	85.40	79.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:36 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 16:29:07 2011
Response via : Multiple Level Calibration



(86) butyl acetate (M)

13.18min 5.03ug/L m

response 7550

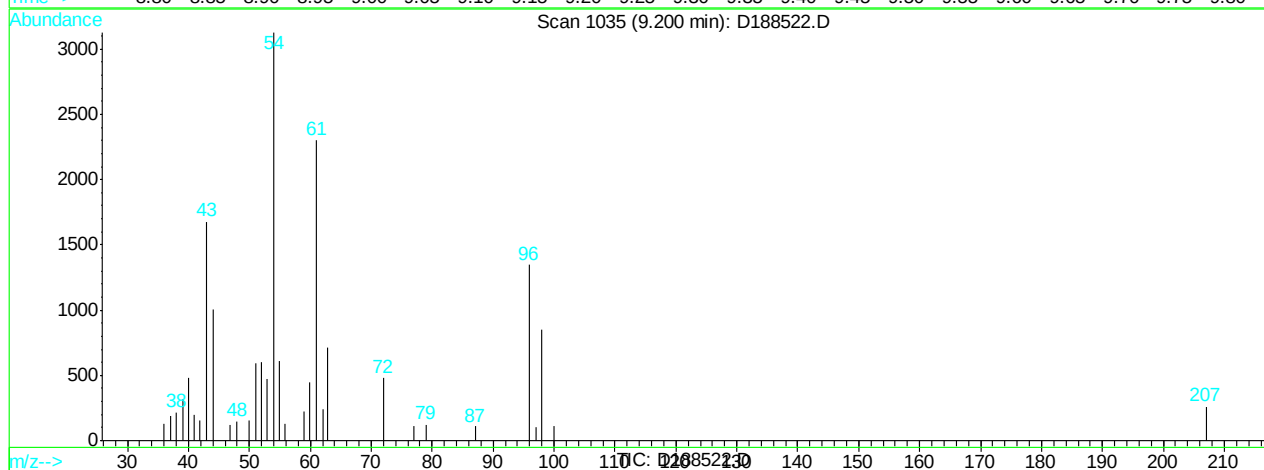
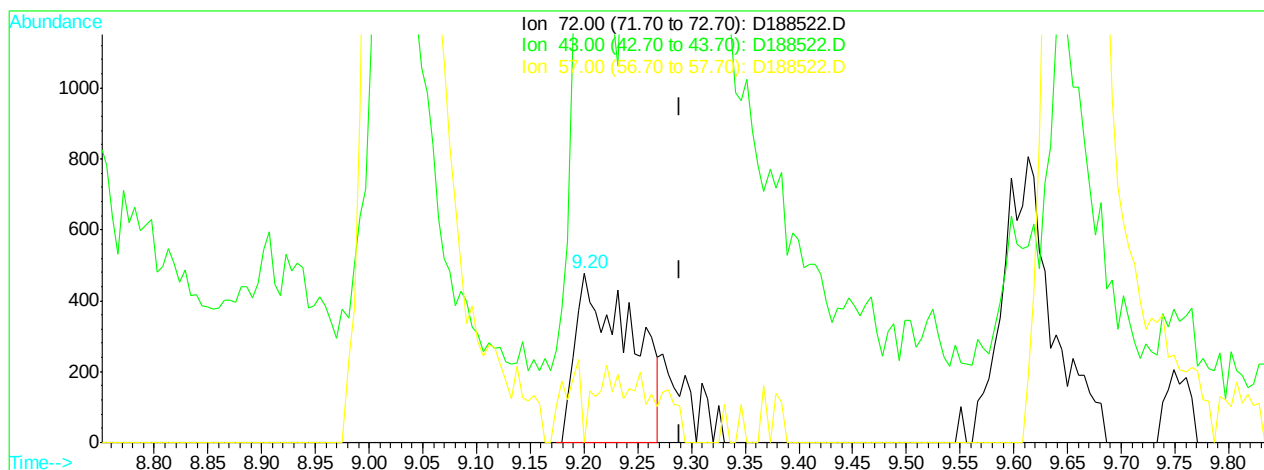
Ion	Exp%	Act%
56.00	100	100
43.00	231.90	240.83
73.00	42.30	48.64
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:36 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 16:38:39 2011
Response via : Multiple Level Calibration



(32) 2-butanone (M)

9.20min 3.33ug/L

response 1690

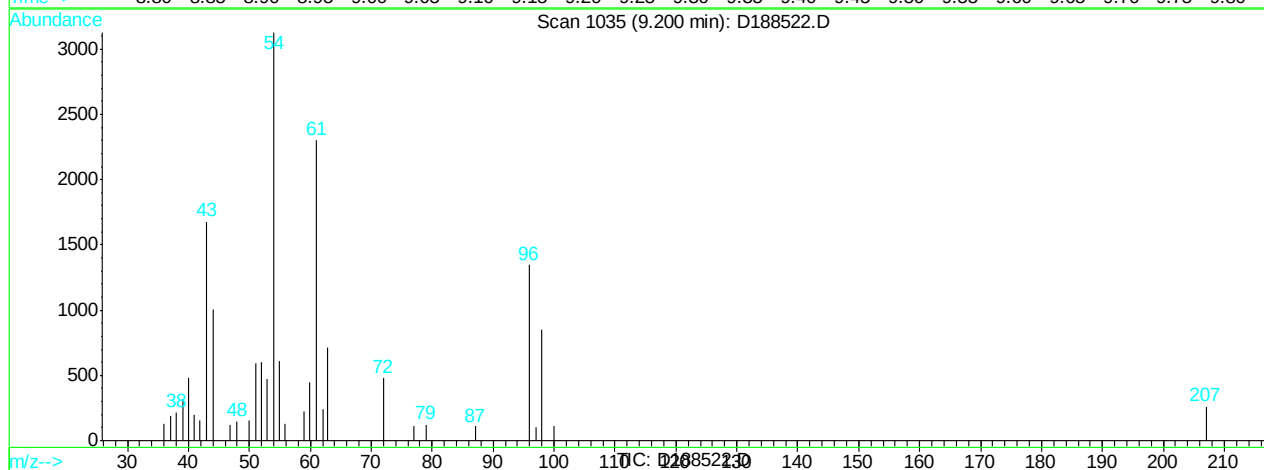
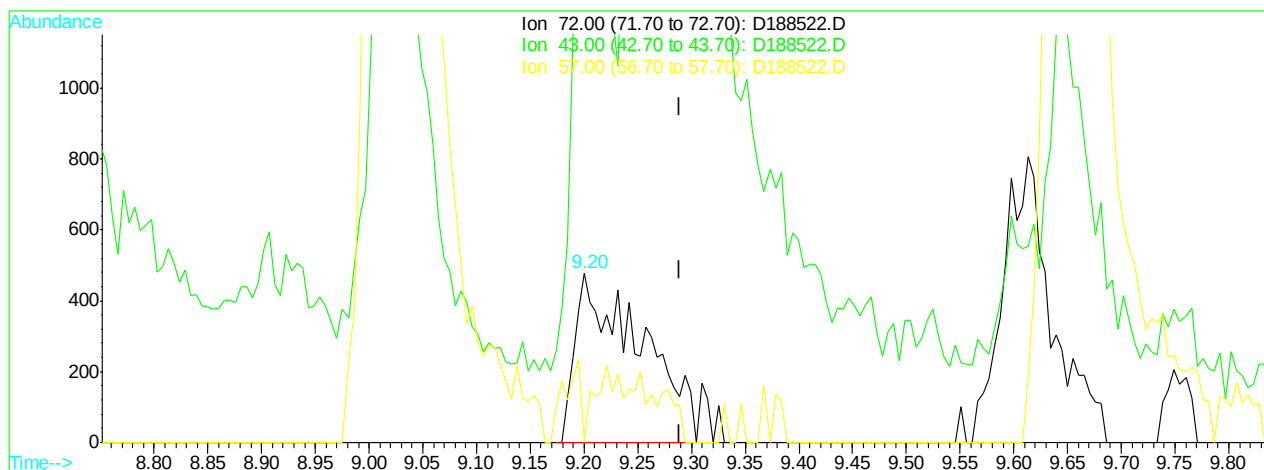
Ion	Exp%	Act%
72.00	100	100
43.00	297.10	204.20#
57.00	33.90	15.03#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:50 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 16:38:39 2011
Response via : Multiple Level Calibration



(32) 2-butanone (M)

9.20min 3.99ug/L m

response 2022

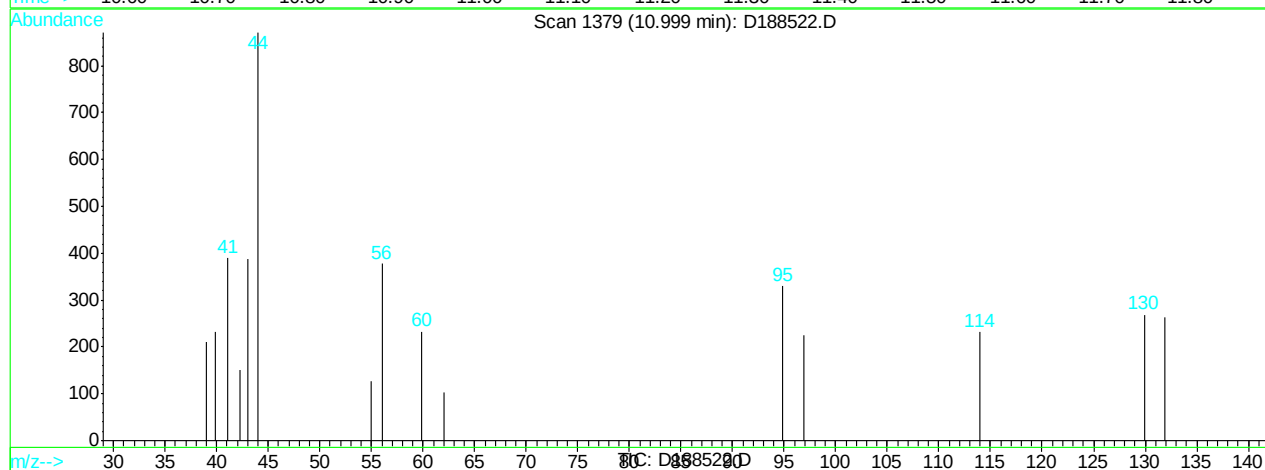
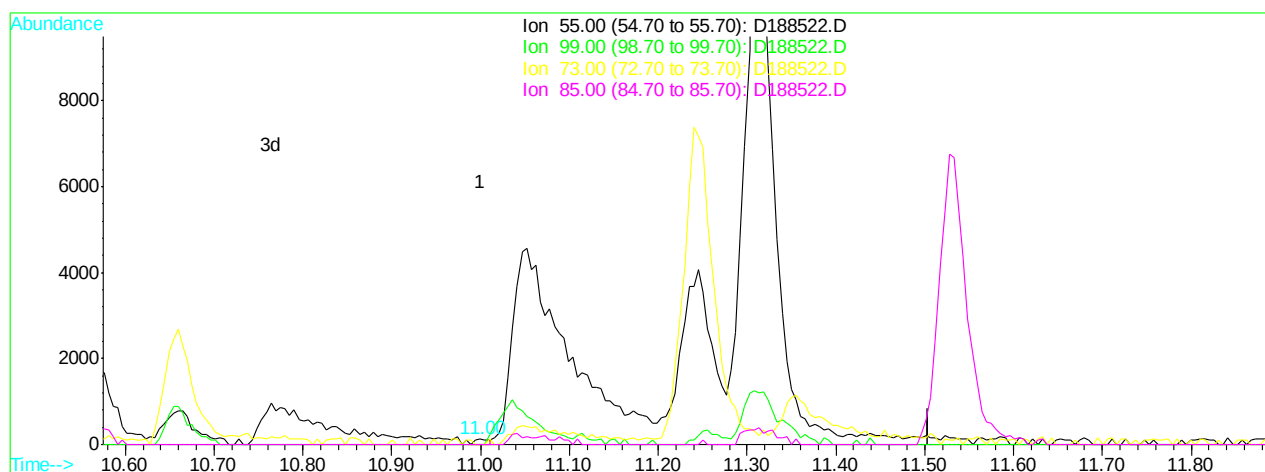
Ion	Exp%	Act%
72.00	100	100
43.00	297.10	170.67#
57.00	33.90	12.56#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017, VD7671, 5,, 100, 5, 1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 16:50 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 17:02:22 2011
Response via : Multiple Level Calibration



(64) Ethyl Acrylate

11.00min 0.03ug/L

response 149

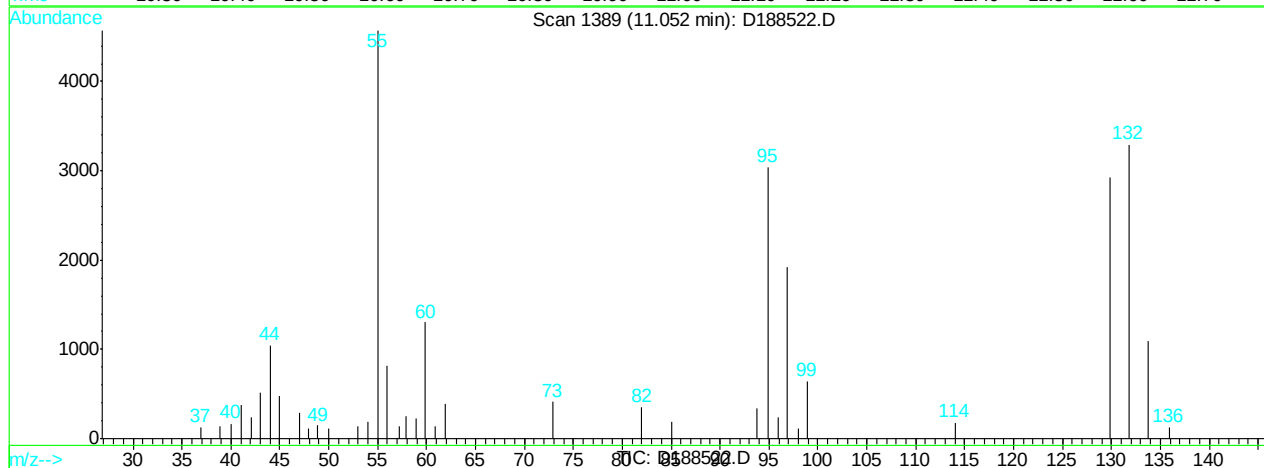
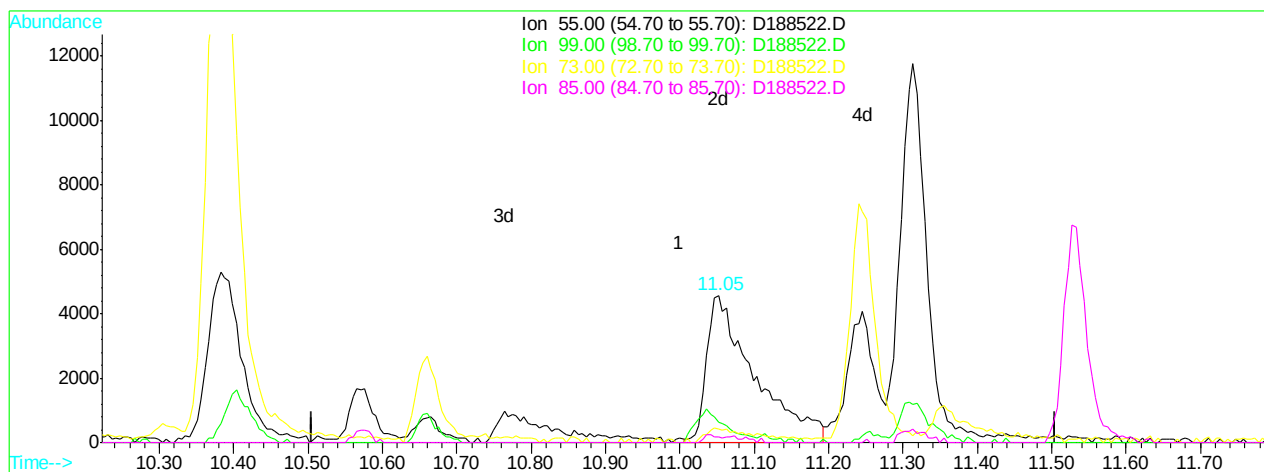
Ion	Exp%	Act%
55.00	100	100
99.00	15.30	0.00#
73.00	7.50	0.00#
85.00	5.00	0.00#

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D188522.D
Acq On : 28 Oct 2011 10:52 am
Sample : IC7671-5
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 28 17:17 2011

Vial: 5
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Fri Oct 28 17:02:22 2011
Response via : Multiple Level Calibration



(64) Ethyl Acrylate

11.05min 4.09ug/L m

response 20361

Ion	Exp%	Act%
55.00	100	100
99.00	15.30	0.00#
73.00	7.50	0.00#
85.00	5.00	0.00#

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188523.D
 Acq On : 28 Oct 2011 11:22 am
 Sample : IC7671-10
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:28 2011

Vial: 6
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	192974	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	313710	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	501139	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	468033	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	267563	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.76	113	31007	9.06	ug/L	0.01
Spiked Amount	50.000	Range	67 - 131	Recovery	=	18.12%#
45) 1,2-dichloroethane-d4 (s)	10.18	65	36901	8.97	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	17.94%#
75) toluene-d8 (s)	12.38	98	122181	9.13	ug/L	0.01
Spiked Amount	50.000	Range	76 - 125	Recovery	=	18.26%#
99) 4-bromofluorobenzene (s)	15.28	95	62536	10.28	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	20.56%#

Target Compounds

						Qvalue
2) 1,4-dioxane	11.38	88	8982	312.50	ug/L	# 89
3) tertiary butyl alcohol	7.63	59	23169	46.20	ug/L	87
6) chlorodifluoromethane	4.24	51	38095	9.33	ug/L	96
7) dichlorodifluoromethane	4.23	85	44839	9.64	ug/L	96
8) chloromethane	4.55	50	46134	9.31	ug/L	99
9) vinyl chloride	4.81	62	45501	9.46	ug/L	99
10) bromomethane	5.45	94	29099	9.50	ug/L	97
11) chloroethane	5.62	64	27122	9.69	ug/L	99
13) trichlorofluoromethane	6.14	101	52234	9.39	ug/L	99
14) pentane	6.23	43	71092	9.17	ug/L	96
15) ethyl ether	6.52	74	21237	8.99	ug/L	98
16) acrolein	6.68	56	75842	85.00	ug/L	98
18) 1,1-dichloroethene	6.92	96	34339	9.21	ug/L	96
19) acetone	6.92	58	3831	9.56	ug/L	93
20) allyl chloride	7.41	41	76566	9.71	ug/L	96
21) acetonitrile	7.26	40	21698	92.28	ug/L	98
23) iodomethane	7.17	142	58063	9.31	ug/L	99
24) iso-butyl alcohol	10.00	74	1802	89.64	ug/L	62
25) carbon disulfide	7.33	76	111601	9.27	ug/L	99
26) methylene chloride	7.56	84	39469	9.18	ug/L	95
27) methyl acetate	7.40	43	29244	8.70	ug/L	97
28) methyl tert butyl ether	7.96	73	114332	9.34	ug/L	98
29) trans-1,2-dichloroethene	7.98	96	36168	9.18	ug/L	96
30) di-isopropyl ether	8.57	45	120065	9.45	ug/L	90
31) ethyl tert-butyl ether	9.02	59	115200	9.40	ug/L	99
32) 2-butanone	9.18	72	4292	8.58	ug/L	65
33) 1,1-dichloroethane	8.50	63	64312	9.29	ug/L	99
34) chloroprene	8.65	53	52748	9.22	ug/L	99
35) acrylonitrile	7.84	53	70818	44.76	ug/L	99
36) vinyl acetate	8.53	86	6945	9.83	ug/L	83
37) ethyl acetate	9.25	45	3883	7.99	ug/L	# 17
38) 2,2-dichloropropane	9.26	77	55489	9.40	ug/L	96
39) cis-1,2-dichloroethene	9.22	96	39164	9.22	ug/L	94

(#)=qualifier out of range (m)=manual integration

D188523.D MD7671.M Mon Oct 31 08:30:26 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188523.D
 Acq On : 28 Oct 2011 11:22 am
 Sample : IC7671-10
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:28 2011

Vial: 6
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.20	54	57162	93.35	ug/L	96
41) bromochloromethane	9.51	128	18106	8.96	ug/L	93
42) tetrahydrofuran	9.59	72	4980	8.59	ug/L #	76
43) chloroform	9.57	83	59233	9.32	ug/L	99
46) freon 113	6.93	151	26563	9.07	ug/L	99
47) methacrylonitrile	9.44	41	20345	8.75	ug/L	93
48) t-butyl formate	9.65	59	32876	9.35	ug/L	94
49) 1,1,1-trichloroethane	9.88	97	53525	9.37	ug/L	98
50) tert-amyl methyl ether	10.38	73	108858	9.19	ug/L	99
52) cyclohexane	10.01	84	55202	9.24	ug/L #	100
53) tert amyl alcohol	10.14	55	7889	44.31	ug/L	91
54) 2,2,4-trimethylpentane	10.40	57	136696	9.05	ug/L	99
55) epichlorohydrin	11.88	57	21038	46.81	ug/L	99
56) n-butyl alcohol	10.75	56	54093	449.54	ug/L	99
57) carbon tetrachloride	10.11	117	45015	9.17	ug/L	100
58) 1,1-dichloropropene	10.06	75	48726	9.27	ug/L	97
59) hexane	8.35	57	49452	9.23	ug/L	97
60) benzene	10.31	78	144470	9.42	ug/L	100
61) heptane	10.57	57	25332	8.68	ug/L	99
62) isopropyl acetate	10.23	43	66300	9.05	ug/L	99
63) 1,2-dichloroethane	10.26	62	48049	9.33	ug/L	98
64) Ethyl Acrylate	11.03	55	41948	8.49	ug/L	98
65) trichloroethene	11.03	95	36293	9.23	ug/L	95
66) 2-nitropropane	11.72	43	10800	8.54	ug/L	96
67) 2-chloroethyl vinyl ether	11.79	63	115939	46.36	ug/L	98
68) methyl methacrylate	11.29	100	9859	8.40	ug/L #	75
69) tert-amyl ethyl ether	11.24	87	51462	9.28	ug/L	99
70) 1,2-dichloropropane	11.25	63	36929	9.15	ug/L	100
71) methylcyclohexane	11.31	83	62621	9.26	ug/L	96
72) dibromomethane	11.40	93	22410	9.31	ug/L	98
73) bromodichloromethane	11.53	83	45751	9.17	ug/L	96
74) cis-1,3-dichloropropene	12.02	75	58872	9.27	ug/L	99
76) 4-methyl-2-pentanone	12.14	58	15725	9.18	ug/L	93
77) toluene	12.45	92	89792	9.36	ug/L	99
78) 3-methyl-1-butanol	12.13	70	22358	191.58	ug/L	96
79) trans-1,3-dichloropropene	12.61	75	54995	9.03	ug/L	98
80) ethyl methacrylate	12.66	69	50269	9.18	ug/L	99
81) 1,1,2-trichloroethane	12.83	83	27927	9.26	ug/L	99
82) 2-hexanone	13.07	58	15151	9.22	ug/L	100
84) tetrachloroethene	13.10	166	38566	9.30	ug/L	98
85) 1,3-dichloropropane	13.02	76	57307	9.50	ug/L	99
86) butyl acetate	13.17	56	20674	9.67	ug/L	95
87) 3,3-dimethyl-1-butanol	13.22	57	41110	98.18	ug/L	92
88) dibromochloromethane	13.31	129	34802	8.55	ug/L	99
89) 1,2-dibromoethane	13.49	107	33596	9.41	ug/L	95
90) chlorobenzene	14.03	112	98131	9.34	ug/L	98
91) 1,1,1,2-tetrachloroethane	14.08	131	35130	9.16	ug/L	99
92) ethylbenzene	14.12	91	170444	9.46	ug/L	99
93) m,p-xylene	14.24	106	134937	18.83	ug/L	99

(#) = qualifier out of range (m) = manual integration

D188523.D MD7671.M Mon Oct 31 08:30:27 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188523.D
 Acq On : 28 Oct 2011 11:22 am
 Sample : IC7671-10
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:28 2011

Vial: 6
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) o-xylene	14.69	106	67165	9.44	ug/L	100
95) styrene	14.70	104	113581	9.24	ug/L	100
96) bromoform	14.93	173	24541	9.09	ug/L	99
98) isopropylbenzene	15.08	105	180325	9.48	ug/L	100
100) bromobenzene	15.50	156	45562	9.30	ug/L	99
101) cyclohexanone	15.19	55	45763	103.94	ug/L	98
102) 1,1,2,2-tetrachloroethane	15.33	83	50464	9.60	ug/L	99
103) trans-1,4-dichloro-2-buten	15.39	53	12899	8.55	ug/L	96
104) 1,2,3-trichloropropane	15.42	110	14079	9.53	ug/L	95
105) n-propylbenzene	15.54	91	213627	9.63	ug/L	99
106) p-ethyltoluene	15.65	105	165528	9.53	ug/L	99
107) 2-chlorotoluene	15.69	126	42278	9.18	ug/L	94
108) 4-chlorotoluene	15.79	91	134118	9.19	ug/L	98
109) 1,3,5-trimethylbenzene	15.71	105	159461	9.36	ug/L	98
110) tert-butylbenzene	16.10	119	134562	9.06	ug/L	98
111) pentachloroethane	16.15	167	28896	9.10	ug/L	95
112) 1,2,4-trimethylbenzene	16.15	105	161232	9.50	ug/L	98
113) sec-butylbenzene	16.34	105	204462	9.53	ug/L	98
114) 1,3-dichlorobenzene	16.52	146	88273	9.45	ug/L	96
115) p-isopropyltoluene	16.48	119	169130	9.63	ug/L	98
116) 1,4-dichlorobenzene	16.61	146	95535	9.31	ug/L	99
117) Benzyl Chloride	16.72	91	94321	8.95	ug/L	100
118) p-diethylbenzene	16.90	119	101709	9.50	ug/L	100
119) 1,2-dichlorobenzene	17.04	146	89344	9.50	ug/L	99
120) n-butylbenzene	16.94	92	92100	9.25	ug/L	98
121) 1,2,4,5-tetramethylbenzene	17.77	119	149787	9.00	ug/L	98
122) 1,2-dibromo-3-chloropropan	17.85	75	8022	9.11	ug/L	84
123) 1,3,5-trichlorobenzene	18.12	180	66489	8.87	ug/L	99
124) 1,2,4-trichlorobenzene	18.82	180	49504	7.94	ug/L	99
125) hexachlorobutadiene	18.99	225	31594	8.78	ug/L #	68
126) naphthalene	19.13	128	94104	7.46	ug/L	100
127) 1,2,3-trichlorobenzene	19.41	180	35180	8.50	ug/L	99
128) hexachloroethane	17.36	119	28084	8.91	ug/L	100

(#) = qualifier out of range (m) = manual integration

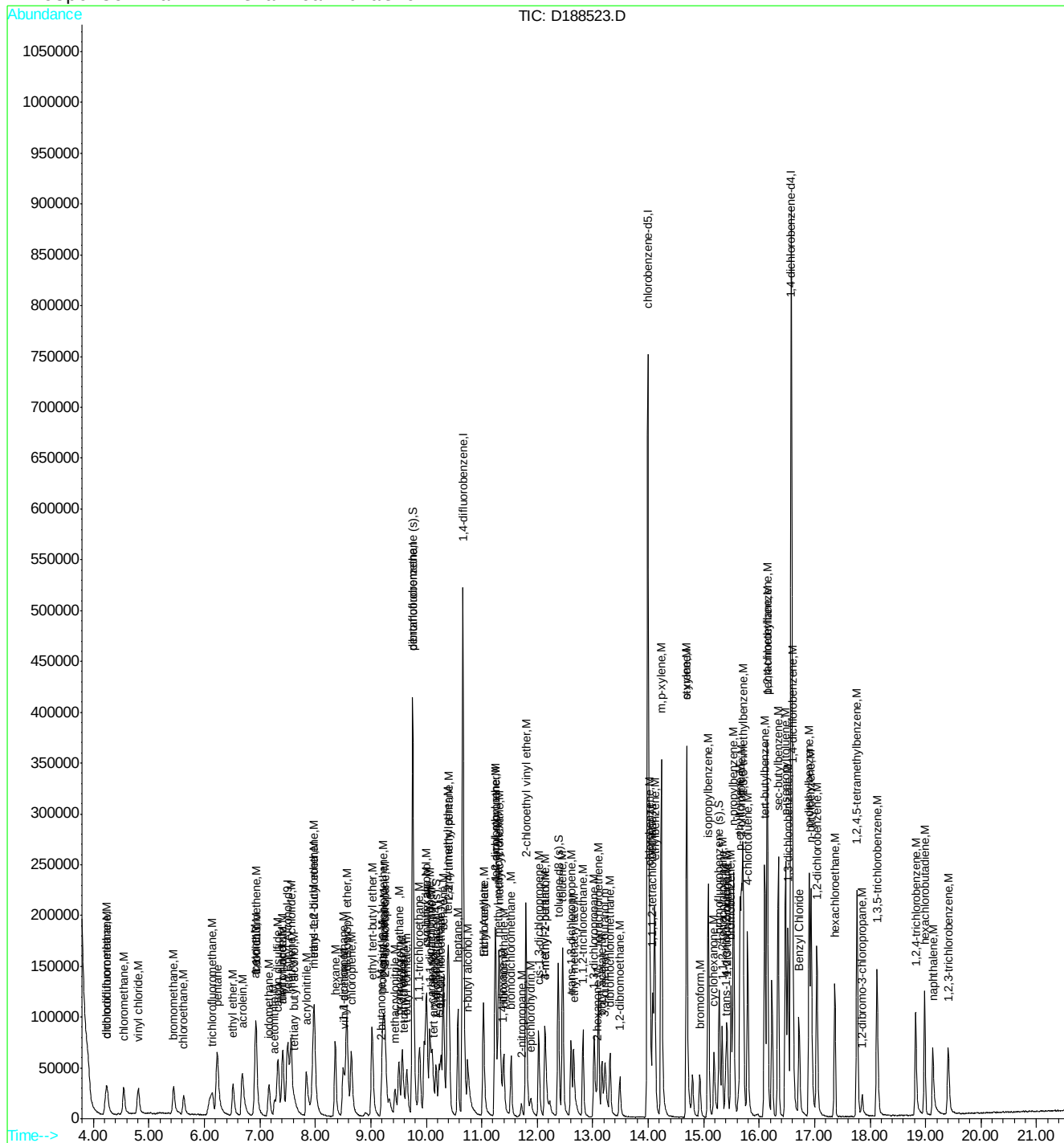
D188523.D MD7671.M Mon Oct 31 08:30:27 2011 RPT1

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6.7.16

Vial: 6
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Mon Oct 31 08:30:11 2011
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188524.D
 Acq On : 28 Oct 2011 11:51 am
 Sample : IC7671-20
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:29 2011

Vial: 7
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	176837	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	320054	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	513621	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	474892	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	273219	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.75	113	76794	21.99	ug/L	0.00
Spiked Amount	50.000	Range 67 - 131	Recovery	=	43.98%#	
45) 1,2-dichloroethane-d4 (s)	10.17	65	92850	22.12	ug/L	0.00
Spiked Amount	50.000	Range 66 - 130	Recovery	=	44.24%#	
75) toluene-d8 (s)	12.37	98	297049	21.66	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	43.32%#	
99) 4-bromofluorobenzene (s)	15.27	95	124304	20.02	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	40.04%#	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.37	88	17597	517.87	ug/L	# 98
3) tertiary butyl alcohol	7.62	59	49691	108.12	ug/L	94
6) chlorodifluoromethane	4.23	51	92802	22.27	ug/L	97
7) dichlorodifluoromethane	4.23	85	112136	23.64	ug/L	99
8) chloromethane	4.55	50	114749	22.71	ug/L	98
9) vinyl chloride	4.81	62	114471	23.32	ug/L	99
10) bromomethane	5.44	94	73475	23.51	ug/L	99
11) chloroethane	5.62	64	67309	23.56	ug/L	99
13) trichlorofluoromethane	6.14	101	133262	23.47	ug/L	100
14) pentane	6.23	43	173786	21.98	ug/L	99
15) ethyl ether	6.51	74	54674	22.69	ug/L	95
16) acrolein	6.68	56	185082	203.33	ug/L	99
18) 1,1-dichloroethene	6.92	96	84019	22.08	ug/L	97
19) acetone	6.90	58	8787	21.48	ug/L	97
20) allyl chloride	7.41	41	182802	22.73	ug/L	99
21) acetonitrile	7.26	40	45855	191.15	ug/L	98
23) iodomethane	7.16	142	144746	22.75	ug/L	99
24) iso-butyl alcohol	9.98	74	4312	210.26	ug/L	89
25) carbon disulfide	7.32	76	283406	23.06	ug/L	99
26) methylene chloride	7.56	84	98570	22.48	ug/L	99
27) methyl acetate	7.38	43	72063	21.01	ug/L	98
28) methyl tert butyl ether	7.96	73	282102	22.60	ug/L	99
29) trans-1,2-dichloroethene	7.98	96	90675	22.55	ug/L	98
30) di-isopropyl ether	8.56	45	293219	22.62	ug/L	96
31) ethyl tert-butyl ether	9.02	59	281886	22.56	ug/L	99
32) 2-butanone	9.17	72	11015	21.57	ug/L	84
33) 1,1-dichloroethane	8.50	63	161325	22.84	ug/L	99
34) chloroprene	8.64	53	131899	22.60	ug/L	99
35) acrylonitrile	7.82	53	177436	109.92	ug/L	98
36) vinyl acetate	8.51	86	18474	21.78	ug/L	98
37) ethyl acetate	9.23	45	10898	21.97	ug/L	97
38) 2,2-dichloropropane	9.25	77	134633	22.35	ug/L	98
39) cis-1,2-dichloroethene	9.21	96	98585	22.76	ug/L	97

(#) = qualifier out of range (m) = manual integration

D188524.D MD7671.M Mon Oct 31 08:30:18 2011 RPT1

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188524.D
 Acq On : 28 Oct 2011 11:51 am
 Sample : IC7671-20
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:29 2011

Vial: 7
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.19	54	133469	213.65	ug/L	98
41) bromochloromethane	9.51	128	46524	22.57	ug/L	97
42) tetrahydrofuran	9.58	72	12948	21.88	ug/L	96
43) chloroform	9.56	83	148830	22.96	ug/L	99
46) freon 113	6.93	151	65902	22.05	ug/L	99
47) methacrylonitrile	9.42	41	52385	22.09	ug/L	99
48) t-butyl formate	9.64	59	81017	22.58	ug/L	99
49) 1,1,1-trichloroethane	9.88	97	133375	22.88	ug/L	98
50) tert-amyl methyl ether	10.38	73	266080	22.02	ug/L	99
52) cyclohexane	10.00	84	135411	22.11	ug/L	# 100
53) tert amyl alcohol	10.13	55	17445	95.60	ug/L	98
54) 2,2,4-trimethylpentane	10.40	57	347181	22.44	ug/L	99
55) epichlorohydrin	11.88	57	48738	105.80	ug/L	100
56) n-butyl alcohol	10.73	56	128140	1039.03	ug/L	98
57) carbon tetrachloride	10.10	117	112476	22.35	ug/L	98
58) 1,1-dichloropropene	10.06	75	119564	22.21	ug/L	98
59) hexane	8.35	57	124611	22.70	ug/L	99
60) benzene	10.31	78	356986	22.72	ug/L	99
61) heptane	10.56	57	68947	23.04	ug/L	99
62) isopropyl acetate	10.22	43	160918	21.44	ug/L	99
63) 1,2-dichloroethane	10.26	62	119316	22.59	ug/L	99
64) Ethyl Acrylate	11.01	55	108083	21.35	ug/L	98
65) trichloroethene	11.02	95	89945	22.33	ug/L	99
66) 2-nitropropane	11.71	43	26663	20.57	ug/L	99
67) 2-chloroethyl vinyl ether	11.79	63	284379	110.96	ug/L	99
68) methyl methacrylate	11.28	100	26051	21.67	ug/L	98
69) tert-amyl ethyl ether	11.24	87	131496	23.15	ug/L	99
70) 1,2-dichloropropane	11.25	63	93051	22.50	ug/L	100
71) methylcyclohexane	11.31	83	156557	22.60	ug/L	97
72) dibromomethane	11.39	93	55482	22.50	ug/L	99
73) bromodichloromethane	11.52	83	116441	22.76	ug/L	99
74) cis-1,3-dichloropropene	12.02	75	149410	22.96	ug/L	98
76) 4-methyl-2-pentanone	12.13	58	38521	21.95	ug/L	96
77) toluene	12.45	92	221255	22.51	ug/L	99
78) 3-methyl-1-butanol	12.13	70	52323	437.45	ug/L	96
79) trans-1,3-dichloropropene	12.60	75	139215	22.31	ug/L	99
80) ethyl methacrylate	12.65	69	123645	22.03	ug/L	99
81) 1,1,2-trichloroethane	12.82	83	69075	22.34	ug/L	99
82) 2-hexanone	13.05	58	37894	22.49	ug/L	97
84) tetrachloroethene	13.10	166	96824	23.00	ug/L	99
85) 1,3-dichloropropane	13.02	76	141233	23.07	ug/L	99
86) butyl acetate	13.16	56	55270	21.23	ug/L	98
87) 3,3-dimethyl-1-butanol	13.21	57	92090	216.76	ug/L	98
88) dibromochloromethane	13.31	129	90332	21.86	ug/L	99
89) 1,2-dibromoethane	13.48	107	85026	23.46	ug/L	99
90) chlorobenzene	14.02	112	241902	22.68	ug/L	99
91) 1,1,1,2-tetrachloroethane	14.08	131	88889	22.85	ug/L	99
92) ethylbenzene	14.11	91	422182	23.09	ug/L	99
93) m,p-xylene	14.23	106	333415	45.86	ug/L	99

(#) = qualifier out of range (m) = manual integration

D188524.D MD7671.M Mon Oct 31 08:30:18 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188524.D
 Acq On : 28 Oct 2011 11:51 am
 Sample : IC7671-20
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:29 2011

Vial: 7
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 16:20:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) o-xylene	14.69	106	167709	23.22	ug/L	99
95) styrene	14.69	104	285964	22.92	ug/L	99
96) bromoform	14.92	173	65293	20.82	ug/L	99
98) isopropylbenzene	15.08	105	443777	22.85	ug/L	99
100) bromobenzene	15.49	156	113235	22.64	ug/L	96
101) cyclohexanone	15.18	55	82925	184.45	ug/L	98
102) 1,1,2,2-tetrachloroethane	15.33	83	121116	22.57	ug/L	98
103) trans-1,4-dichloro-2-buten	15.39	53	33814	21.95	ug/L	95
104) 1,2,3-trichloropropane	15.42	110	34248	22.70	ug/L	85
105) n-propylbenzene	15.54	91	523219	23.09	ug/L	99
106) p-ethyltoluene	15.65	105	414023	23.34	ug/L	100
107) 2-chlorotoluene	15.68	126	105155	22.36	ug/L	99
108) 4-chlorotoluene	15.79	91	331040	22.21	ug/L	99
109) 1,3,5-trimethylbenzene	15.71	105	386935	22.24	ug/L	99
110) tert-butylbenzene	16.10	119	330543	21.80	ug/L	99
111) pentachloroethane	16.15	167	72851	22.48	ug/L	98
112) 1,2,4-trimethylbenzene	16.14	105	398533	23.00	ug/L	99
113) sec-butylbenzene	16.34	105	502634	22.94	ug/L	99
114) 1,3-dichlorobenzene	16.52	146	221052	23.16	ug/L	98
115) p-isopropyltoluene	16.48	119	416852	23.24	ug/L	98
116) 1,4-dichlorobenzene	16.60	146	234973	22.42	ug/L	99
117) Benzyl Chloride	16.71	91	238433	22.16	ug/L	100
118) p-diethylbenzene	16.90	119	252234	23.08	ug/L	98
119) 1,2-dichlorobenzene	17.03	146	221152	23.02	ug/L	99
120) n-butylbenzene	16.93	92	231126	22.73	ug/L	99
121) 1,2,4,5-tetramethylbenzene	17.76	119	380318	22.37	ug/L	100
122) 1,2-dibromo-3-chloropropan	17.85	75	19652	21.85	ug/L	96
123) 1,3,5-trichlorobenzene	18.11	180	169559	22.15	ug/L	100
124) 1,2,4-trichlorobenzene	18.81	180	134528	20.65	ug/L	100
125) hexachlorobutadiene	18.98	225	80868	22.01	ug/L	99
126) naphthalene	19.12	128	255225	20.66	ug/L	99
127) 1,2,3-trichlorobenzene	19.40	180	94598	20.67	ug/L	97
128) hexachloroethane	17.36	119	73012	22.69	ug/L	99

(#) = qualifier out of range (m) = manual integration

D188524.D MD7671.M Mon Oct 31 08:30:18 2011 RPT1

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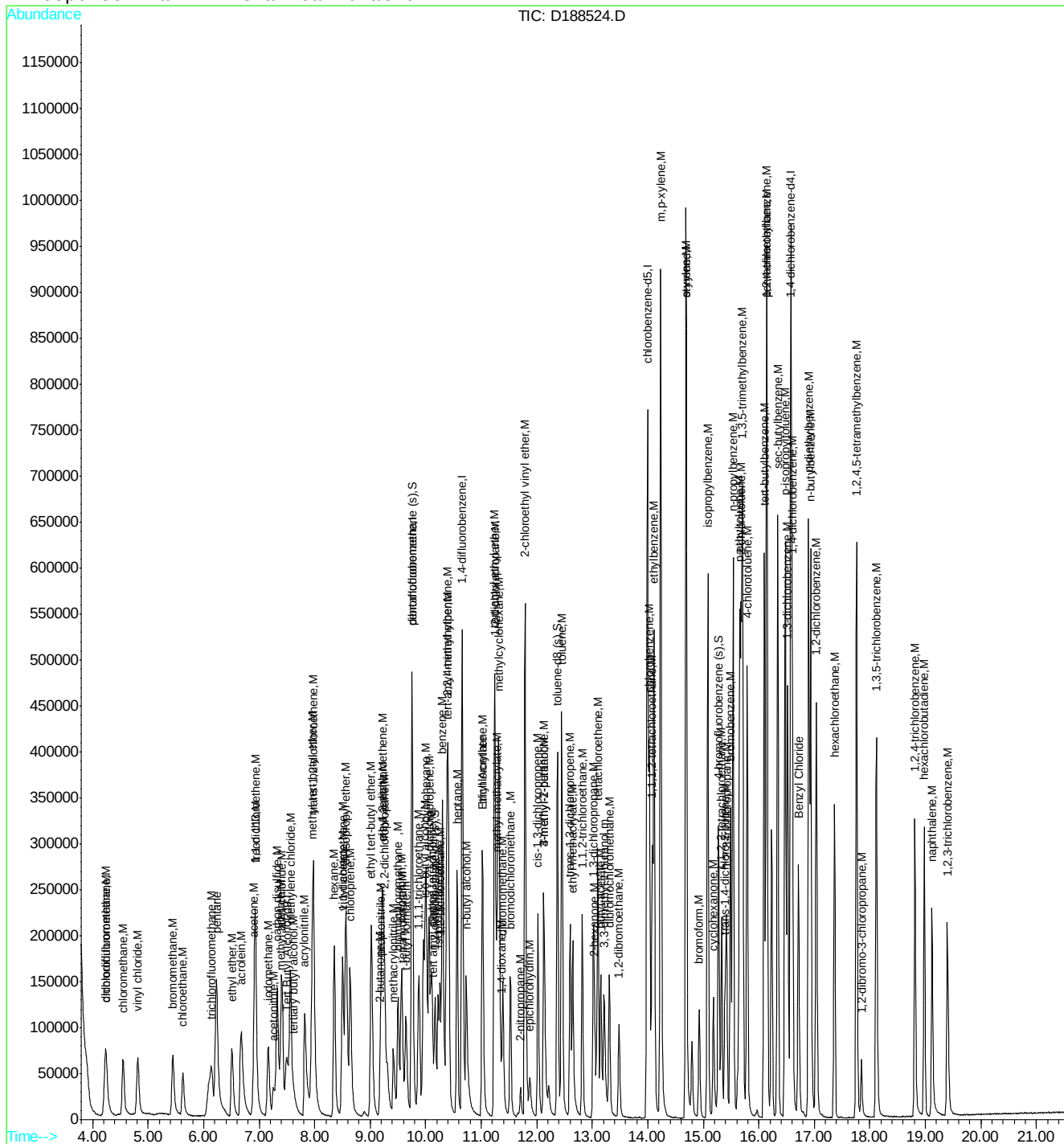
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D188524.D
Acq On : 28 Oct 2011 11:51 am
Sample : IC7671-20
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 31 8:29 2011

Vial: 7
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Mon Oct 31 08:30:11 2011
Response via : Initial Calibration



D188524.D MD7671.M

Mon Oct 31 08:30:20 2011

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188525.D
 Acq On : 28 Oct 2011 12:20 pm
 Sample : ICC7671-50
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:31 2011

Vial: 8
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 12:53:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.51	65	191813	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	325654	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	520408	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	485746	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	276864	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.75	113	186740	60.17	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	120.34%
45) 1,2-dichloroethane-d4 (s)	10.17	65	227355	61.89	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	123.78%
75) toluene-d8 (s)	12.37	98	729206	60.22	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	120.44%
99) 4-bromofluorobenzene (s)	15.27	95	307051	53.57	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	107.14%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.36	88	51249	1482.60	ug/L	# 100
3) tertiary butyl alcohol	7.61	59	132227	272.71	ug/L	100
6) chlorodifluoromethane	4.24	51	219138	52.17	ug/L	100
7) dichlorodifluoromethane	4.23	85	248725	51.88	ug/L	100
8) chloromethane	4.56	50	265481	52.63	ug/L	100
9) vinyl chloride	4.82	62	262259	53.38	ug/L	100
10) bromomethane	5.44	94	163213	51.06	ug/L	100
11) chloroethane	5.62	64	159253	53.67	ug/L	100
13) trichlorofluoromethane	6.14	101	304460	53.72	ug/L	100
14) pentane	6.23	43	413344	51.97	ug/L	100
15) ethyl ether	6.51	74	134058	56.46	ug/L	100
16) acrolein	6.67	56	486575	525.36	ug/L	100
18) 1,1-dichloroethene	6.92	96	201226	52.77	ug/L	100
19) acetone	6.89	58	22575	55.21	ug/L	100
20) allyl chloride	7.40	41	432578	50.56	ug/L	100
21) acetonitrile	7.25	40	133603	594.20	ug/L	100
23) iodomethane	7.16	142	353825	55.66	ug/L	100
24) iso-butyl alcohol	9.98	74	11455	445.74	ug/L	100
25) carbon disulfide	7.32	76	676502	55.23	ug/L	100
26) methylene chloride	7.56	84	236996	54.02	ug/L	100
27) methyl acetate	7.38	43	178570	51.04	ug/L	100
28) methyl tert butyl ether	7.96	73	687005	55.25	ug/L	100
29) trans-1,2-dichloroethene	7.97	96	215402	53.70	ug/L	100
30) di-isopropyl ether	8.56	45	713507	54.45	ug/L	100
31) ethyl tert-butyl ether	9.02	59	689651	54.83	ug/L	100
32) 2-butanone	9.16	72	28237	56.43	ug/L	98
33) 1,1-dichloroethane	8.50	63	392503	55.40	ug/L	100
34) chloroprene	8.64	53	319744	54.82	ug/L	100
35) acrylonitrile	7.81	53	438320	285.55	ug/L	100
36) vinyl acetate	8.50	86	44508	56.34	ug/L	100
37) ethyl acetate	9.22	45	27707	91.33	ug/L	100
38) 2,2-dichloropropane	9.25	77	323691	53.25	ug/L	100
39) cis-1,2-dichloroethene	9.21	96	237232	55.12	ug/L	100

(#) = qualifier out of range (m) = manual integration

D188525.D MD7671.M Mon Oct 31 08:32:15 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188525.D
 Acq On : 28 Oct 2011 12:20 pm
 Sample : ICC7671-50
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:31 2011

Vial: 8
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 12:53:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.18	54	338169	580.31	ug/L	100
41) bromochloromethane	9.50	128	112614	56.84	ug/L	100
42) tetrahydrofuran	9.58	72	32693	59.09	ug/L	100
43) chloroform	9.56	83	361400	56.14	ug/L	100
46) freon 113	6.93	151	153401	54.03	ug/L	100
47) methacrylonitrile	9.41	41	132784	56.49	ug/L	100
48) t-butyl formate	9.64	59	203149	57.71	ug/L	100
49) 1,1,1-trichloroethane	9.88	97	324795	55.95	ug/L	100
50) tert-amyl methyl ether	10.38	73	653589	54.03	ug/L	100
52) cyclohexane	10.01	84	322607	52.74	ug/L #	100
53) tert amyl alcohol	10.13	55	45445	240.50	ug/L	100
54) 2,2,4-trimethylpentane	10.40	57	795160	52.15	ug/L	100
55) epichlorohydrin	11.87	57	120320	256.08	ug/L	100
56) n-butyl alcohol	10.72	56	341951	2810.05	ug/L	100
57) carbon tetrachloride	10.10	117	276327	55.91	ug/L	100
58) 1,1-dichloropropene	10.06	75	292660	54.35	ug/L	100
59) hexane	8.35	57	282752	51.45	ug/L	100
60) benzene	10.30	78	867560	55.00	ug/L	100
61) heptane	10.56	57	158668	53.43	ug/L	100
62) isopropyl acetate	10.22	43	408849	59.21	ug/L	100
63) 1,2-dichloroethane	10.26	62	294067	56.57	ug/L	100
64) Ethyl Acrylate	11.01	55	283116	60.26	ug/L	100
65) trichloroethene	11.02	95	219830	55.12	ug/L	100
66) 2-nitropropane	11.70	43	70735	59.86	ug/L	100
67) 2-chloroethyl vinyl ether	11.79	63	703792	283.45	ug/L	100
68) methyl methacrylate	11.28	100	65712	56.32	ug/L	100
69) tert-amyl ethyl ether	11.24	87	324803	57.46	ug/L	100
70) 1,2-dichloropropane	11.25	63	229331	55.98	ug/L	100
71) methylcyclohexane	11.31	83	360775	52.30	ug/L	100
72) dibromomethane	11.39	93	136919	56.72	ug/L	100
73) bromodichloromethane	11.52	83	290264	58.11	ug/L	100
74) cis-1,3-dichloropropene	12.02	75	367608	57.33	ug/L	100
76) 4-methyl-2-pentanone	12.13	58	95962	55.50	ug/L	100
77) toluene	12.45	92	544016	55.98	ug/L	100
78) 3-methyl-1-butanol	12.12	70	137500	1189.24	ug/L	100
79) trans-1,3-dichloropropene	12.60	75	346468	58.18	ug/L	100
80) ethyl methacrylate	12.64	69	310408	56.22	ug/L	100
81) 1,1,2-trichloroethane	12.82	83	168551	56.79	ug/L	100
82) 2-hexanone	13.04	58	87564	51.99	ug/L	100
84) tetrachloroethene	13.10	166	236262	56.90	ug/L	100
85) 1,3-dichloropropane	13.02	76	346581	57.38	ug/L	100
86) butyl acetate	13.14	56	144326	47.04	ug/L	100
87) 3,3-dimethyl-1-butanol	13.21	57	245978	584.85	ug/L	100
88) dibromochloromethane	13.31	129	227385	61.39	ug/L	100
89) 1,2-dibromoethane	13.48	107	211359	59.61	ug/L	100
90) chlorobenzene	14.02	112	590367	56.13	ug/L	100
91) 1,1,1,2-tetrachloroethane	14.08	131	221304	58.33	ug/L	100
92) ethylbenzene	14.11	91	1023674	55.99	ug/L	100
93) m,p-xylene	14.23	106	811395	111.40	ug/L	100

(#)=qualifier out of range (m)=manual integration

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188525.D
 Acq On : 28 Oct 2011 12:20 pm
 Sample : ICC7671-50
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:31 2011

Vial: 8
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 12:53:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) o-xylene	14.69	106	408879	57.06	ug/L	100
95) styrene	14.68	104	705754	56.69	ug/L	100
96) bromoform	14.92	173	167089	60.29	ug/L	100
98) isopropylbenzene	15.08	105	1073811	54.71	ug/L	100
100) bromobenzene	15.49	156	277012	56.27	ug/L	100
101) cyclohexanone	15.18	55	263197	629.11	ug/L	100
102) 1,1,2,2-tetrachloroethane	15.33	83	291174	53.95	ug/L	100
103) trans-1,4-dichloro-2-buten	15.38	53	84528	56.25	ug/L	100
104) 1,2,3-trichloropropane	15.41	110	83642	55.89	ug/L	100
105) n-propylbenzene	15.54	91	1258396	54.56	ug/L	100
106) p-ethyltoluene	15.65	105	1005715	56.90	ug/L	100
107) 2-chlorotoluene	15.68	126	257006	55.29	ug/L	100
108) 4-chlorotoluene	15.79	91	802455	53.33	ug/L	100
109) 1,3,5-trimethylbenzene	15.71	105	949305	54.00	ug/L	100
110) tert-butylbenzene	16.09	119	810340	52.94	ug/L	100
111) pentachloroethane	16.15	167	179524	58.49	ug/L	100
112) 1,2,4-trimethylbenzene	16.14	105	959917	55.22	ug/L	100
113) sec-butylbenzene	16.34	105	1210658	54.38	ug/L	100
114) 1,3-dichlorobenzene	16.51	146	536897	57.06	ug/L	100
115) p-isopropyltoluene	16.48	119	1003570	55.59	ug/L	100
116) 1,4-dichlorobenzene	16.60	146	562354	53.31	ug/L	100
117) Benzyl Chloride	16.71	91	596714	59.54	ug/L	100
118) p-diethylbenzene	16.89	119	623132	57.67	ug/L	100
119) 1,2-dichlorobenzene	17.03	146	532544	55.68	ug/L	100
120) n-butylbenzene	16.93	92	561352	57.94	ug/L	100
121) 1,2,4,5-tetramethylbenzene	17.76	119	953379	60.40	ug/L	100
122) 1,2-dibromo-3-chloropropan	17.84	75	48393	61.20	ug/L	100
123) 1,3,5-trichlorobenzene	18.11	180	418905	60.54	ug/L	100
124) 1,2,4-trichlorobenzene	18.81	180	342515	66.30	ug/L	100
125) hexachlorobutadiene	18.98	225	197615	58.24	ug/L	100
126) naphthalene	19.12	128	649608	67.03	ug/L	100
127) 1,2,3-trichlorobenzene	19.39	180	243996	67.48	ug/L	100
128) hexachloroethane	17.36	119	182501	58.65	ug/L	100

(#) = qualifier out of range (m) = manual integration

D188525.D MD7671.M Mon Oct 31 08:32:16 2011 RPT1

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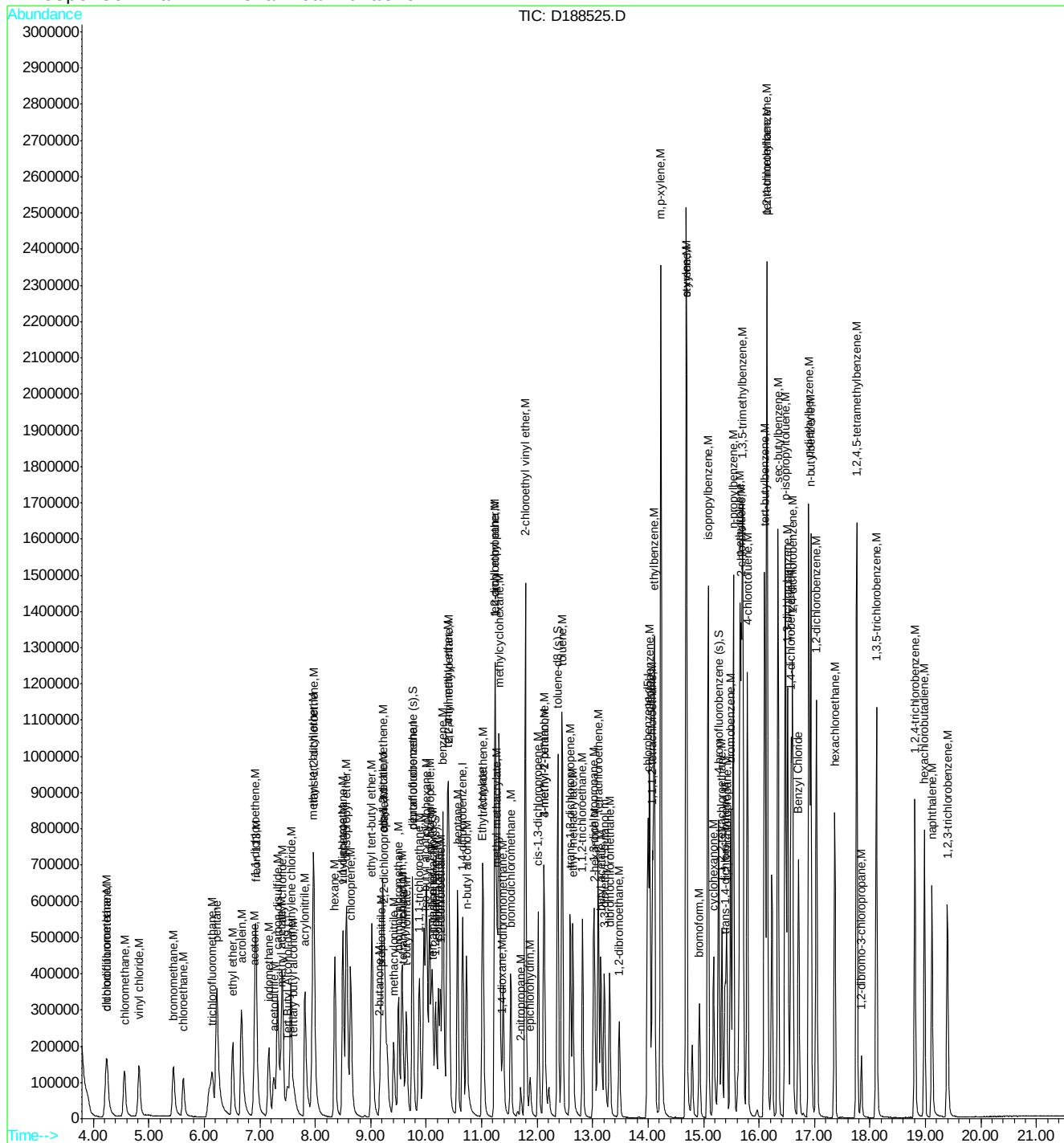
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D188525.D
Acq On : 28 Oct 2011 12:20 pm
Sample : ICC7671-50
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 31 8:31 2011

Vial: 8
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Mon Oct 31 08:31:01 2011
Response via : Initial Calibration



D188525.D MD7671.M

Mon Oct 31 08:32:17 2011

RPT1

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6.7.18

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188527.D
 Acq On : 28 Oct 2011 1:19 pm
 Sample : IC7671-100
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 15:04 2011

Vial: 10
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 13:16:12 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.51	65	192225	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	329461	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	526413	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	493899	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	282303	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.75	113	388503	123.72	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	247.44%#
45) 1,2-dichloroethane-d4 (s)	10.16	65	469971	126.45	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	252.90%#
75) toluene-d8 (s)	12.37	98	1479859	120.82	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	241.64%#
99) 4-bromofluorobenzene (s)	15.27	95	633359	108.36	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	216.72%#

Target Compounds

						Qvalue
2) 1,4-dioxane	11.36	88	108013	3118.04	ug/L	# 100
3) tertiary butyl alcohol	7.62	59	257877	483.17	ug/L	99
6) chlorodifluoromethane	4.23	51	442568	104.14	ug/L	98
7) dichlorodifluoromethane	4.23	85	495626	102.19	ug/L	99
8) chloromethane	4.56	50	536463	105.13	ug/L	100
9) vinyl chloride	4.83	62	518948	104.38	ug/L	100
10) bromomethane	5.44	94	296839	91.79	ug/L	99
11) chloroethane	5.61	64	320745	106.84	ug/L	98
13) trichlorofluoromethane	6.13	101	618992	107.95	ug/L	97
14) pentane	6.22	43	831936	103.40	ug/L	99
15) ethyl ether	6.51	74	269782	112.31	ug/L	98
16) acrolein	6.68	56	36235	38.67	ug/L	95
18) 1,1-dichloroethene	6.92	96	407731	105.68	ug/L	99
19) acetone	6.88	58	44047	106.53	ug/L	88
20) allyl chloride	7.40	41	854672	103.64	ug/L	99
21) acetonitrile	7.24	40	263993	1160.55	ug/L	98
23) iodomethane	7.16	142	725039	112.73	ug/L	100
24) iso-butyl alcohol	9.97	74	22827	1128.45	ug/L	93
25) carbon disulfide	7.31	76	1378798	111.03	ug/L	99
26) methylene chloride	7.55	84	480397	108.24	ug/L	100
27) methyl acetate	7.37	43	355387	100.41	ug/L	99
28) methyl tert butyl ether	7.96	73	1387717	110.31	ug/L	99
29) trans-1,2-dichloroethene	7.97	96	440847	108.64	ug/L	99
30) di-isopropyl ether	8.56	45	1413618	106.64	ug/L	98
31) ethyl tert-butyl ether	9.02	59	1394989	109.62	ug/L	99
32) 2-butanone	9.15	72	56712	106.00	ug/L	95
33) 1,1-dichloroethane	8.49	63	763822	106.56	ug/L	99
34) chloroprene	8.64	53	651705	110.43	ug/L	99
35) acrylonitrile	7.81	53	865097	557.12	ug/L	100
36) vinyl acetate	8.49	86	94438	102.42	ug/L	91
37) ethyl acetate	9.22	45	47290	82.87	ug/L	58
38) 2,2-dichloropropane	9.25	77	645269	104.92	ug/L	99
39) cis-1,2-dichloroethene	9.21	96	482044	110.70	ug/L	98

(#) = qualifier out of range (m) = manual integration

D188527.D MD7671.M Mon Oct 31 08:31:30 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188527.D
 Acq On : 28 Oct 2011 1:19 pm
 Sample : IC7671-100
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 15:04 2011

Vial: 10
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 13:16:12 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.18	54	666102	1129.85	ug/L	100
41) bromochloromethane	9.50	128	230937	115.21	ug/L	97
42) tetrahydrofuran	9.58	72	64199	107.82	ug/L	98
43) chloroform	9.56	83	729384	111.86	ug/L	99
46) freon 113	6.93	151	317506	110.53	ug/L	97
47) methacrylonitrile	9.41	41	266342	112.12	ug/L	98
48) t-butyl formate	9.64	59	416128	116.85	ug/L	97
49) 1,1,1-trichloroethane	9.88	97	657997	112.04	ug/L	99
50) tert-amyl methyl ether	10.38	73	1322735	108.09	ug/L	100
52) cyclohexane	10.00	84	640745	103.56	ug/L #	100
53) tert amyl alcohol	10.12	55	91939	481.01	ug/L	96
54) 2,2,4-trimethylpentane	10.40	57	1596956	103.53	ug/L	99
55) epichlorohydrin	11.87	57	237111	498.84	ug/L	99
56) n-butyl alcohol	10.72	56	676350	5494.63	ug/L	99
57) carbon tetrachloride	10.10	117	564363	112.89	ug/L	100
58) 1,1-dichloropropene	10.05	75	578510	106.20	ug/L	99
59) hexane	8.34	57	561656	101.03	ug/L	99
60) benzene	10.30	78	1711094	107.24	ug/L	99
61) heptane	10.56	57	318815	106.14	ug/L	100
62) isopropyl acetate	10.22	43	816231	113.07	ug/L	99
63) 1,2-dichloroethane	10.25	62	594048	112.97	ug/L	99
64) Ethyl Acrylate	11.00	55	565048	96.72	ug/L	99
65) trichloroethene	11.02	95	443606	109.95	ug/L	99
66) 2-nitropropane	11.70	43	146355	122.44	ug/L	98
67) 2-chloroethyl vinyl ether	11.79	63	1408552	560.82	ug/L	99
68) methyl methacrylate	11.27	100	132695	112.43	ug/L	95
69) tert-amyl ethyl ether	11.24	87	657086	114.93	ug/L	98
70) 1,2-dichloropropane	11.25	63	458113	110.55	ug/L	98
71) methylcyclohexane	11.31	83	732849	105.03	ug/L	98
72) dibromomethane	11.38	93	278395	114.01	ug/L	98
73) bromodichloromethane	11.52	83	588683	116.50	ug/L	98
74) cis-1,3-dichloropropene	12.02	75	738855	113.92	ug/L	98
76) 4-methyl-2-pentanone	12.12	58	191028	109.23	ug/L	98
77) toluene	12.44	92	1087506	110.63	ug/L	98
78) 3-methyl-1-butanol	12.11	70	272193	2327.35	ug/L	98
79) trans-1,3-dichloropropene	12.59	75	695767	115.50	ug/L	97
80) ethyl methacrylate	12.64	69	618707	110.79	ug/L	99
81) 1,1,2-trichloroethane	12.82	83	340236	113.32	ug/L	99
82) 2-hexanone	13.03	58	175671	103.11	ug/L	98
84) tetrachloroethene	13.10	166	486257	115.16	ug/L	99
85) 1,3-dichloropropane	13.02	76	690161	112.37	ug/L	99
86) butyl acetate	13.15	56	294862	97.49	ug/L	98
87) 3,3-dimethyl-1-butanol	13.21	57	483580	1130.82	ug/L	99
88) dibromochloromethane	13.31	129	472386	100.06	ug/L	99
89) 1,2-dibromoethane	13.47	107	427415	98.36	ug/L	97
90) chlorobenzene	14.02	112	1187329	111.02	ug/L	99
91) 1,1,1,2-tetrachloroethane	14.08	131	455040	117.96	ug/L	100
92) ethylbenzene	14.11	91	2031877	109.30	ug/L	98
93) m,p-xylene	14.23	106	1627768	219.79	ug/L	93

(#)=qualifier out of range (m)=manual integration

D188527.D MD7671.M Mon Oct 31 08:31:30 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188527.D
 Acq On : 28 Oct 2011 1:19 pm
 Sample : IC7671-100
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 28 15:04 2011

Vial: 10
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 13:16:12 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) o-xylene	14.68	106	831194	114.08	ug/L	99
95) styrene	14.68	104	1425635	112.62	ug/L	99
96) bromoform	14.92	173	354160	101.90	ug/L	100
98) isopropylbenzene	15.08	105	2124083	106.14	ug/L	98
100) bromobenzene	15.48	156	569963	113.54	ug/L	97
101) cyclohexanone	15.17	55	478870	1032.00	ug/L	99
102) 1,1,2,2-tetrachloroethane	15.33	83	577167	104.87	ug/L	98
103) trans-1,4-dichloro-2-buten	15.38	53	172397	98.04	ug/L	98
104) 1,2,3-trichloropropane	15.42	110	166717	109.25	ug/L	98
105) n-propylbenzene	15.54	91	2452251	104.28	ug/L	97
106) p-ethyltoluene	15.65	105	2021901	112.20	ug/L	99
107) 2-chlorotoluene	15.68	126	527991	111.39	ug/L	98
108) 4-chlorotoluene	15.79	91	1600133	104.30	ug/L	98
109) 1,3,5-trimethylbenzene	15.70	105	1885599	105.19	ug/L	99
110) tert-butylbenzene	16.10	119	1644162	105.35	ug/L	98
111) pentachloroethane	16.15	167	372040	115.15	ug/L	98
112) 1,2,4-trimethylbenzene	16.14	105	1932368	109.02	ug/L	98
113) sec-butylbenzene	16.34	105	2374500	104.60	ug/L	97
114) 1,3-dichlorobenzene	16.51	146	1093902	114.01	ug/L	99
115) p-isopropyltoluene	16.47	119	1990752	108.15	ug/L	97
116) 1,4-dichlorobenzene	16.60	146	1135682	105.58	ug/L	98
117) Benzyl Chloride	16.71	91	1185805	108.99	ug/L	99
118) p-diethylbenzene	16.90	119	1259226	114.30	ug/L	99
119) 1,2-dichlorobenzene	17.03	146	1073408	110.07	ug/L	98
120) n-butylbenzene	16.93	92	1135817	110.65	ug/L	96
121) 1,2,4,5-tetramethylbenzene	17.76	119	1878766	107.35	ug/L	99
122) 1,2-dibromo-3-chloropropan	17.84	75	98152	108.07	ug/L	100
123) 1,3,5-trichlorobenzene	18.11	180	845053	109.24	ug/L	99
124) 1,2,4-trichlorobenzene	18.80	180	701315	98.02	ug/L	100
125) hexachlorobutadiene	18.98	225	405834	109.95	ug/L	98
126) naphthalene	19.11	128	1294985	95.45	ug/L	99
127) 1,2,3-trichlorobenzene	19.39	180	499427	97.97	ug/L	98
128) hexachloroethane	17.36	119	378647	119.34	ug/L	99

(#) = qualifier out of range (m) = manual integration

D188527.D MD7671.M Mon Oct 31 08:31:30 2011 RPT1

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Vial: 10
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

```
Method       : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title        : SW-846 Method 8260B
Last Update   : Mon Oct 31 08:31:01 2011
Response via  : Initial Calibration
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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188528.D
 Acq On : 28 Oct 2011 1:48 pm
 Sample : IC7671-200
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:32 2011

Vial: 11
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 14:22:53 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.51	65	193490	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	331260	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	522424	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	492513	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	284850	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.75	113	736641	225.67	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	451.34%#
45) 1,2-dichloroethane-d4 (s)	10.16	65	889661	229.40	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	458.80%#
75) toluene-d8 (s)	12.37	98	2746825	219.45	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	438.90%#
99) 4-bromofluorobenzene (s)	15.27	95	1226228	205.47	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	410.94%#

Target Compounds

						Qvalue
2) 1,4-dioxane	11.36	88	248308	6839.31	ug/L	# 88
3) tertiary butyl alcohol	7.62	59	523479	1000.71	ug/L	97
6) chlorodifluoromethane	4.23	51	878887	204.48	ug/L	99
7) dichlorodifluoromethane	4.22	85	1005930	205.64	ug/L	99
8) chloromethane	4.57	50	1108066	214.39	ug/L	99
9) vinyl chloride	4.84	62	1029983	204.77	ug/L	98
10) bromomethane	5.43	94	324782	99.88	ug/L	98
11) chloroethane	5.60	64	502035	164.71	ug/L	98
13) trichlorofluoromethane	6.13	101	1239349	212.54	ug/L	99
14) pentane	6.21	43	1725099	212.21	ug/L	99
15) ethyl ether	6.51	74	534748	217.58	ug/L	97
16) acrolein	6.68	56	21050	19.71	ug/L	88
18) 1,1-dichloroethene	6.91	96	792046	202.54	ug/L	99
19) acetone	6.88	58	86866	206.25	ug/L	91
20) allyl chloride	7.40	41	1641240	196.75	ug/L	99
21) acetonitrile	7.25	40	515772	2204.53	ug/L	99
23) iodomethane	7.15	142	1399122	212.50	ug/L	99
24) iso-butyl alcohol	9.98	74	46101	2209.85	ug/L	97
25) carbon disulfide	7.31	76	2610549	205.84	ug/L	98
26) methylene chloride	7.55	84	908811	201.29	ug/L	100
27) methyl acetate	7.37	43	698155	196.03	ug/L	99
28) methyl tert butyl ether	7.96	73	2655235	206.87	ug/L	98
29) trans-1,2-dichloroethene	7.97	96	852558	206.41	ug/L	99
30) di-isopropyl ether	8.56	45	2690228	199.95	ug/L	99
31) ethyl tert-butyl ether	9.02	59	2650599	204.35	ug/L	98
32) 2-butanone	9.15	72	113100	207.14	ug/L	97
33) 1,1-dichloroethane	8.49	63	1477791	203.14	ug/L	99
34) chloroprene	8.63	53	1288719	214.00	ug/L	99
35) acrylonitrile	7.80	53	1671763	1053.57	ug/L	99
36) vinyl acetate	8.48	86	195839	205.18	ug/L	85
37) ethyl acetate	9.21	45	103798	212.26	ug/L	45
38) 2,2-dichloropropane	9.25	77	1245370	199.99	ug/L	99
39) cis-1,2-dichloroethene	9.21	96	923727	207.80	ug/L	98

(#)=qualifier out of range (m)=manual integration

D188528.D MD7671.M Mon Oct 31 09:03:45 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188528.D
 Acq On : 28 Oct 2011 1:48 pm
 Sample : IC7671-200
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:32 2011

Vial: 11
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 14:22:53 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.18	54	1307550	2165.66	ug/L	99
41) bromochloromethane	9.50	128	449424	218.24	ug/L	96
42) tetrahydrofuran	9.58	72	126798	208.53	ug/L	99
43) chloroform	9.56	83	1407479	211.11	ug/L	98
46) freon 113	6.93	151	651249	222.14	ug/L	96
47) methacrylonitrile	9.41	41	525904	216.44	ug/L	98
48) t-butyl formate	9.64	59	807598	220.24	ug/L	96
49) 1,1,1-trichloroethane	9.88	97	1279245	212.98	ug/L	99
50) tert-amyl methyl ether	10.38	73	2525820	202.93	ug/L	98
52) cyclohexane	10.00	84	1285808	208.34	ug/L #	100
53) tert amyl alcohol	10.12	55	180649	957.53	ug/L	99
54) 2,2,4-trimethylpentane	10.40	57	3183345	206.91	ug/L	98
55) epichlorohydrin	11.87	57	463487	982.87	ug/L	98
56) n-butyl alcohol	10.72	56	1363195	11003.57	ug/L	100
57) carbon tetrachloride	10.10	117	1113844	220.44	ug/L	98
58) 1,1-dichloropropene	10.05	75	1143781	209.72	ug/L	99
59) hexane	8.34	57	1145308	207.28	ug/L	99
60) benzene	10.30	78	3218903	201.20	ug/L	96
61) heptane	10.56	57	659674	219.36	ug/L	99
62) isopropyl acetate	10.22	43	1616837	220.88	ug/L	99
63) 1,2-dichloroethane	10.25	62	1157744	217.82	ug/L	99
64) Ethyl Acrylate	11.00	55	1115497	196.55	ug/L	99
65) trichloroethene	11.02	95	869647	214.15	ug/L	98
66) 2-nitropropane	11.70	43	294496	240.55	ug/L	99
67) 2-chloroethyl vinyl ether	11.78	63	2691948	1061.54	ug/L	97
68) methyl methacrylate	11.27	100	267068	222.47	ug/L	96
69) tert-amyl ethyl ether	11.24	87	1255488	216.64	ug/L	99
70) 1,2-dichloropropane	11.25	63	897997	215.11	ug/L	99
71) methylcyclohexane	11.31	83	1477158	211.79	ug/L	99
72) dibromomethane	11.38	93	547095	221.34	ug/L	98
73) bromodichloromethane	11.52	83	1156001	225.22	ug/L	99
74) cis-1,3-dichloropropene	12.02	75	1430352	217.89	ug/L	96
76) 4-methyl-2-pentanone	12.12	58	384494	218.17	ug/L	99
77) toluene	12.44	92	2094327	211.47	ug/L	92
78) 3-methyl-1-butanol	12.11	70	567212	4775.25	ug/L	98
79) trans-1,3-dichloropropene	12.59	75	1352877	221.40	ug/L	95
80) ethyl methacrylate	12.64	69	1223704	216.90	ug/L	99
81) 1,1,2-trichloroethane	12.82	83	662352	218.14	ug/L	99
82) 2-hexanone	13.03	58	359654	211.61	ug/L	98
84) tetrachloroethene	13.10	166	955319	222.08	ug/L	99
85) 1,3-dichloropropane	13.02	76	1342600	215.40	ug/L	99
86) butyl acetate	13.14	56	610052	204.45	ug/L	96
87) 3,3-dimethyl-1-butanol	13.21	57	1060336	2440.89	ug/L	99
88) dibromochloromethane	13.31	129	930004	195.99	ug/L	99
89) 1,2-dibromoethane	13.47	107	834902	194.66	ug/L	100
90) chlorobenzene	14.02	112	2288443	211.25	ug/L	97
91) 1,1,1,2-tetrachloroethane	14.08	131	896344	227.19	ug/L	98
92) ethylbenzene	14.11	91	3749632	199.62	ug/L	93
93) m,p-xylene	14.23	106	3011534	402.10	ug/L	78

(#)=qualifier out of range (m)=manual integration

D188528.D MD7671.M Mon Oct 31 09:03:45 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188528.D
 Acq On : 28 Oct 2011 1:48 pm
 Sample : IC7671-200
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:32 2011

Vial: 11
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Fri Oct 28 14:22:53 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) o-xylene	14.69	106	1570777	211.93	ug/L	95
95) styrene	14.68	104	2648098	205.46	ug/L	94
96) bromoform	14.92	173	706485	198.59	ug/L	99
98) isopropylbenzene	15.08	105	3873459	190.15	ug/L	91
100) bromobenzene	15.48	156	1112916	215.55	ug/L	95
101) cyclohexanone	15.18	55	912509	1936.55	ug/L	99
102) 1,1,2,2-tetrachloroethane	15.33	83	1122570	200.75	ug/L	97
103) trans-1,4-dichloro-2-buten	15.38	53	342168	194.97	ug/L	97
104) 1,2,3-trichloropropane	15.41	110	332517	213.13	ug/L	98
105) n-propylbenzene	15.53	91	4374083	183.22	ug/L	88
106) p-ethyltoluene	15.65	105	3694783	199.71	ug/L	95
107) 2-chlorotoluene	15.68	126	1041525	214.28	ug/L	91
108) 4-chlorotoluene	15.79	91	3058919	196.40	ug/L	94
109) 1,3,5-trimethylbenzene	15.71	105	3506433	192.43	ug/L	94
110) tert-butylbenzene	16.10	119	3080814	194.15	ug/L	94
111) pentachloroethane	16.15	167	720263	215.50	ug/L	99
112) 1,2,4-trimethylbenzene	16.14	105	3546612	195.77	ug/L	94
113) sec-butylbenzene	16.34	105	4263189	184.90	ug/L	89
114) 1,3-dichlorobenzene	16.51	146	2093735	212.03	ug/L	96
115) p-isopropyltoluene	16.48	119	3621314	192.73	ug/L	90
116) 1,4-dichlorobenzene	16.60	146	2169328	198.29	ug/L	97
117) Benzyl Chloride	16.71	91	2285333	204.49	ug/L	98
118) p-diethylbenzene	16.89	119	2350206	207.18	ug/L	97
119) 1,2-dichlorobenzene	17.03	146	2047679	205.14	ug/L	96
120) n-butylbenzene	16.93	92	2192214	207.96	ug/L	88
121) 1,2,4,5-tetramethylbenzene	17.76	119	3346910	186.79	ug/L	94
122) 1,2-dibromo-3-chloropropan	17.84	75	194124	208.47	ug/L	96
123) 1,3,5-trichlorobenzene	18.11	180	1625868	204.52	ug/L	98
124) 1,2,4-trichlorobenzene	18.80	180	1363519	190.58	ug/L	100
125) hexachlorobutadiene	18.98	225	799079	210.37	ug/L #	68
126) naphthalene	19.11	128	2491190	188.14	ug/L	98
127) 1,2,3-trichlorobenzene	19.39	180	994820	195.10	ug/L	99
128) hexachloroethane	17.36	119	761517	231.47	ug/L	100

(#) = qualifier out of range (m) = manual integration

D188528.D MD7671.M Mon Oct 31 09:03:46 2011 RPT1

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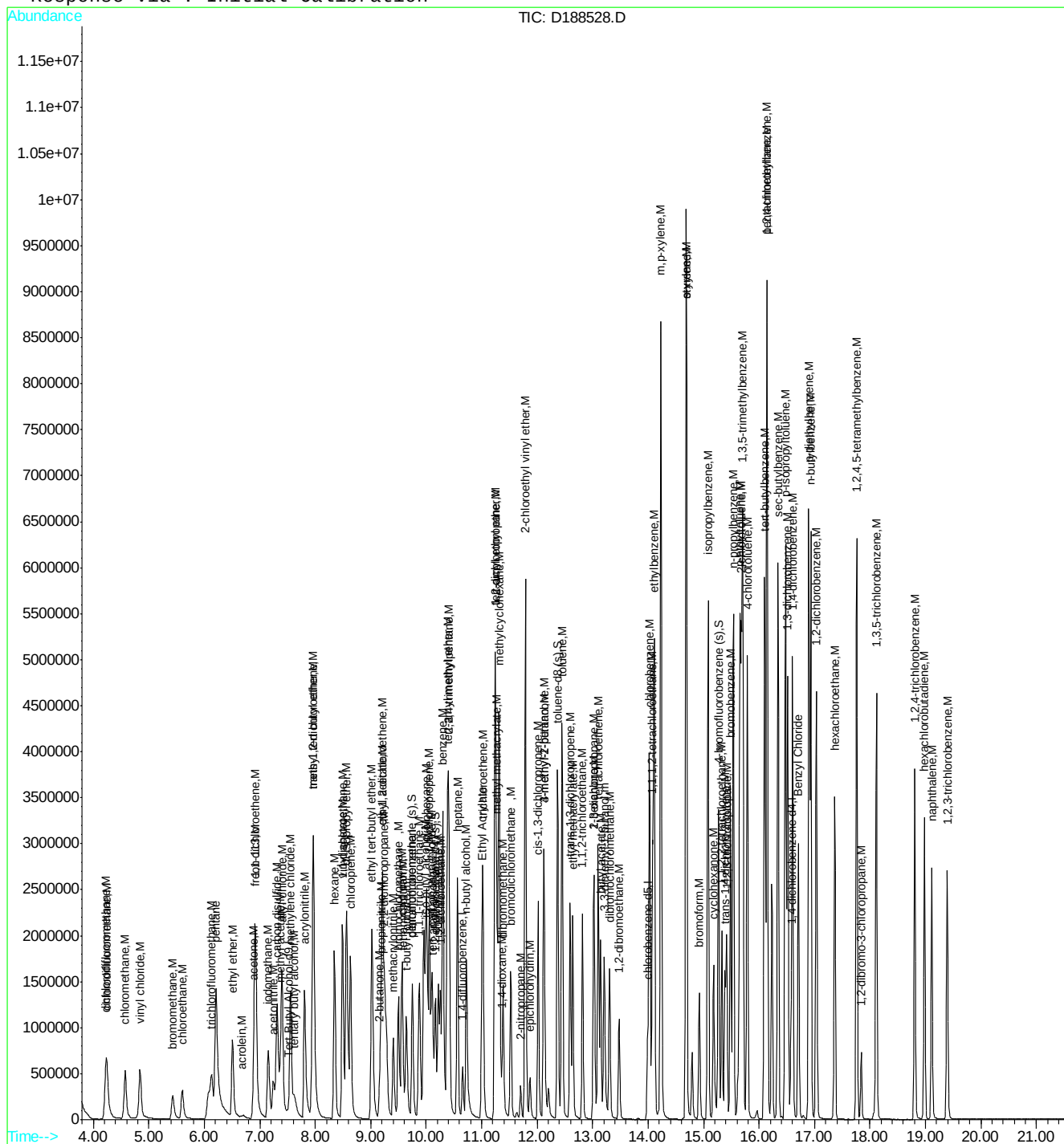
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D188528.D
Acq On : 28 Oct 2011 1:48 pm
Sample : IC7671-200
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 31 8:32 2011

Vial: 11
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Mon Oct 31 08:44:12 2011
Response via : Initial Calibration



D188528.D MD7671.M

Mon Oct 31 09:03:48 2011

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188526.D
 Acq On : 28 Oct 2011 12:50 pm
 Sample : ICV7671-50
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:48 2011

Vial: 9
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Mon Oct 31 08:44:12 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	195407	500.00	ug/L	0.00
4) pentafluorobenzene	9.75	168	324497	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.66	114	516031	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	484745	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.58	152	277691	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.75	113	182245	51.47	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	102.94%
45) 1,2-dichloroethane-d4 (s)	10.17	65	219776	51.65	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	103.30%
75) toluene-d8 (s)	12.37	98	709056	51.47	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	102.94%
99) 4-bromofluorobenzene (s)	15.27	95	293607	46.52	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	93.04%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.36	88	50269	1129.53	ug/L	# 99
3) tertiary butyl alcohol	7.61	59	135996	267.79	ug/L	98
6) chlorodifluoromethane	4.23	51	171969	40.70	ug/L	98
7) dichlorodifluoromethane	4.23	85	265752	55.26	ug/L	98
8) chloromethane	4.56	50	266195	51.95	ug/L	99
9) vinyl chloride	4.82	62	265281	53.30	ug/L	98
10) bromomethane	5.44	94	165584	52.26	ug/L	99
11) chloroethane	5.62	64	163072	56.30	ug/L	98
13) trichlorofluoromethane	6.13	101	313614	54.48	ug/L	97
14) pentane	6.23	43	366797	45.82	ug/L	99
15) ethyl ether	6.51	74	130836	53.55	ug/L	98
16) acrolein	6.66	56	526530	579.67	ug/L	99
18) 1,1-dichloroethene	6.92	96	194914	50.53	ug/L	99
19) acetone	6.88	58	23355	56.32	ug/L	99
20) allyl chloride	7.40	41	425479	51.92	ug/L	98
21) acetonitrile	7.25	40	132526	544.89	ug/L	97
23) iodomethane	7.16	142	344963	53.46	ug/L	99
24) iso-butyl alcohol	9.97	74	58119	2795.11	ug/L	95
25) carbon disulfide	7.32	76	655444	52.23	ug/L	99
26) methylene chloride	7.56	84	228514	51.40	ug/L	100
27) methyl acetate	7.38	43	164854	47.87	ug/L	100
28) methyl tert butyl ether	7.96	73	1354275	106.99	ug/L	99
29) trans-1,2-dichloroethene	7.97	96	211156	51.79	ug/L	98
30) di-isopropyl ether	8.56	45	685501	52.15	ug/L	98
31) ethyl tert-butyl ether	9.02	59	722143	57.00	ug/L	99
32) 2-butanone	9.16	72	29342	56.97	ug/L	97
33) 1,1-dichloroethane	8.49	63	377160	52.67	ug/L	99
34) chloroprene	8.64	53	320121	54.10	ug/L	100
35) acrylonitrile	7.81	53	434845	265.70	ug/L	99
36) vinyl acetate	8.50	86	50506	54.66	ug/L	90
37) ethyl acetate	9.22	45	26935	52.91	ug/L	54
38) 2,2-dichloropropane	9.25	77	315126	51.60	ug/L	99
39) cis-1,2-dichloroethene	9.21	96	228573	52.04	ug/L	100

(#)=qualifier out of range (m)=manual integration

D188526.D MD7671.M Mon Oct 31 08:55:51 2011 RPT1

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188526.D
 Acq On : 28 Oct 2011 12:50 pm
 Sample : ICV7671-50
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:48 2011

Vial: 9
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Mon Oct 31 08:44:12 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.18	54	335460	529.64	ug/L	99
41) bromochloromethane	9.50	128	109438	52.37	ug/L	97
42) tetrahydrofuran	9.58	72	32143	53.58	ug/L	98
43) chloroform	9.56	83	353565	53.72	ug/L	100
46) freon 113	6.93	151	159021	52.49	ug/L	96
47) methacrylonitrile	9.41	41	129421	53.96	ug/L	96
48) t-butyl formate	9.64	59	208356	57.28	ug/L	98
49) 1,1,1-trichloroethane	9.88	97	316803	53.60	ug/L	98
50) tert-amyl methyl ether	10.38	73	749613	61.17	ug/L	100
52) cyclohexane	10.00	84	326222	53.01	ug/L #	100
53) tert amyl alcohol	10.12	55	92382	503.91	ug/L	98
54) 2,2,4-trimethylpentane	10.40	57	895524	57.60	ug/L	99
55) epichlorohydrin	11.87	57	123570	266.92	ug/L	99
56) n-butyl alcohol	10.72	56	344863	2769.62	ug/L	100
57) carbon tetrachloride	10.10	117	271620	53.72	ug/L	99
58) 1,1-dichloropropene	10.06	75	281817	52.09	ug/L	100
59) hexane	8.35	57	288368	52.29	ug/L	99
60) benzene	10.30	78	834977	52.89	ug/L	100
61) heptane	10.56	57	170420	56.69	ug/L	99
62) isopropyl acetate	10.22	43	410568	54.46	ug/L	99
63) 1,2-dichloroethane	10.26	62	285228	53.76	ug/L	99
64) Ethyl Acrylate	11.01	55	268383	52.67	ug/L	99
65) trichloroethene	11.02	95	212754	52.57	ug/L	100
66) 2-nitropropane	11.70	43	70146	53.86	ug/L	97
67) 2-chloroethyl vinyl ether	11.79	63	756603	293.84	ug/L	100
68) methyl methacrylate	11.28	100	63091	52.23	ug/L	98
69) tert-amyl ethyl ether	11.24	87	648685	113.64	ug/L	99
70) 1,2-dichloropropane	11.25	63	223772	53.86	ug/L	100
71) methylcyclohexane	11.31	83	392033	56.33	ug/L	100
72) dibromomethane	11.39	93	136695	55.17	ug/L	100
73) bromodichloromethane	11.52	83	282767	55.01	ug/L	99
74) cis-1,3-dichloropropene	12.02	75	350088	53.55	ug/L	99
76) 4-methyl-2-pentanone	12.13	58	95949	54.41	ug/L	98
77) toluene	12.45	92	526439	53.31	ug/L	99
78) 3-methyl-1-butanol	12.12	70	142574	1186.43	ug/L	98
79) trans-1,3-dichloropropene	12.60	75	332124	52.97	ug/L	97
80) ethyl methacrylate	12.64	69	313192	55.53	ug/L	99
81) 1,1,2-trichloroethane	12.82	83	161990	52.14	ug/L	99
82) 2-hexanone	13.04	58	87478	51.68	ug/L	97
84) tetrachloroethene	13.10	166	232089	54.01	ug/L	98
85) 1,3-dichloropropane	13.02	76	334555	53.55	ug/L	99
86) butyl acetate	13.15	56	144220	50.21	ug/L	97
87) 3,3-dimethyl-1-butanol	13.21	57	248757	573.63	ug/L	99
88) dibromochloromethane	13.31	129	221259	52.46	ug/L	97
89) 1,2-dibromoethane	13.48	107	202656	54.79	ug/L	98
90) chlorobenzene	14.02	112	573071	52.64	ug/L	99
91) 1,1,1,2-tetrachloroethane	14.08	131	215586	54.30	ug/L	99
92) ethylbenzene	14.11	91	994193	53.26	ug/L	100
93) m,p-xylene	14.23	106	788022	106.18	ug/L	99

(#)=qualifier out of range (m)=manual integration

D188526.D MD7671.M Mon Oct 31 08:55:52 2011 RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D188526.D
 Acq On : 28 Oct 2011 12:50 pm
 Sample : ICV7671-50
 Misc : MS20017,VD7671,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Oct 31 8:48 2011

Vial: 9
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Mon Oct 31 08:44:12 2011
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) o-xylene	14.69	106	400741	54.37	ug/L	98
95) styrene	14.68	104	684252	53.73	ug/L	99
96) bromoform	14.92	173	165674	49.00	ug/L	99
98) isopropylbenzene	15.08	105	1043506	52.87	ug/L	100
100) bromobenzene	15.49	156	273560	53.83	ug/L	99
101) cyclohexanone	15.18	55	258589	566.43	ug/L	98
102) 1,1,2,2-tetrachloroethane	15.33	83	278667	51.10	ug/L	99
103) trans-1,4-dichloro-2-buten	15.38	53	86676	55.37	ug/L	99
104) 1,2,3-trichloropropane	15.41	110	81422	53.10	ug/L	99
105) n-propylbenzene	15.54	91	1227333	53.30	ug/L	100
106) p-ethyltoluene	15.65	105	967949	53.68	ug/L	99
107) 2-chlorotoluene	15.68	126	250142	52.32	ug/L	97
108) 4-chlorotoluene	15.79	91	786131	51.89	ug/L	99
109) 1,3,5-trimethylbenzene	15.70	105	929890	52.60	ug/L	99
110) tert-butylbenzene	16.09	119	795211	51.59	ug/L	99
111) pentachloroethane	16.15	167	181598	55.12	ug/L	98
112) 1,2,4-trimethylbenzene	16.14	105	955160	54.23	ug/L	100
113) sec-butylbenzene	16.34	105	1186980	53.31	ug/L	100
114) 1,3-dichlorobenzene	16.51	146	528858	54.53	ug/L	99
115) p-isopropyltoluene	16.48	119	1018049	55.83	ug/L	99
116) 1,4-dichlorobenzene	16.60	146	554746	52.07	ug/L	99
117) Benzyl Chloride	16.71	91	712231	65.13	ug/L	100
118) p-diethylbenzene	16.90	119	605373	54.50	ug/L	100
119) 1,2-dichlorobenzene	17.03	146	525663	53.85	ug/L	100
120) n-butylbenzene	16.93	92	554482	53.65	ug/L	98
121) 1,2,4,5-tetramethylbenzene	17.76	119	928474	53.74	ug/L	100
122) 1,2-dibromo-3-chloropropan	17.84	75	48493	53.05	ug/L	95
123) 1,3,5-trichlorobenzene	18.11	180	417671	53.69	ug/L	98
124) 1,2,4-trichlorobenzene	18.81	180	349830	52.38	ug/L	99
125) hexachlorobutadiene	18.98	225	192967	51.67	ug/L	98
126) naphthalene	19.11	128	639757	51.71	ug/L	100
127) 1,2,3-trichlorobenzene	19.39	180	250654	52.23	ug/L	98
128) hexachloroethane	17.36	119	178756	54.66	ug/L	98

(#) = qualifier out of range (m) = manual integration

D188526.D MD7671.M Mon Oct 31 08:55:52 2011 RPT1

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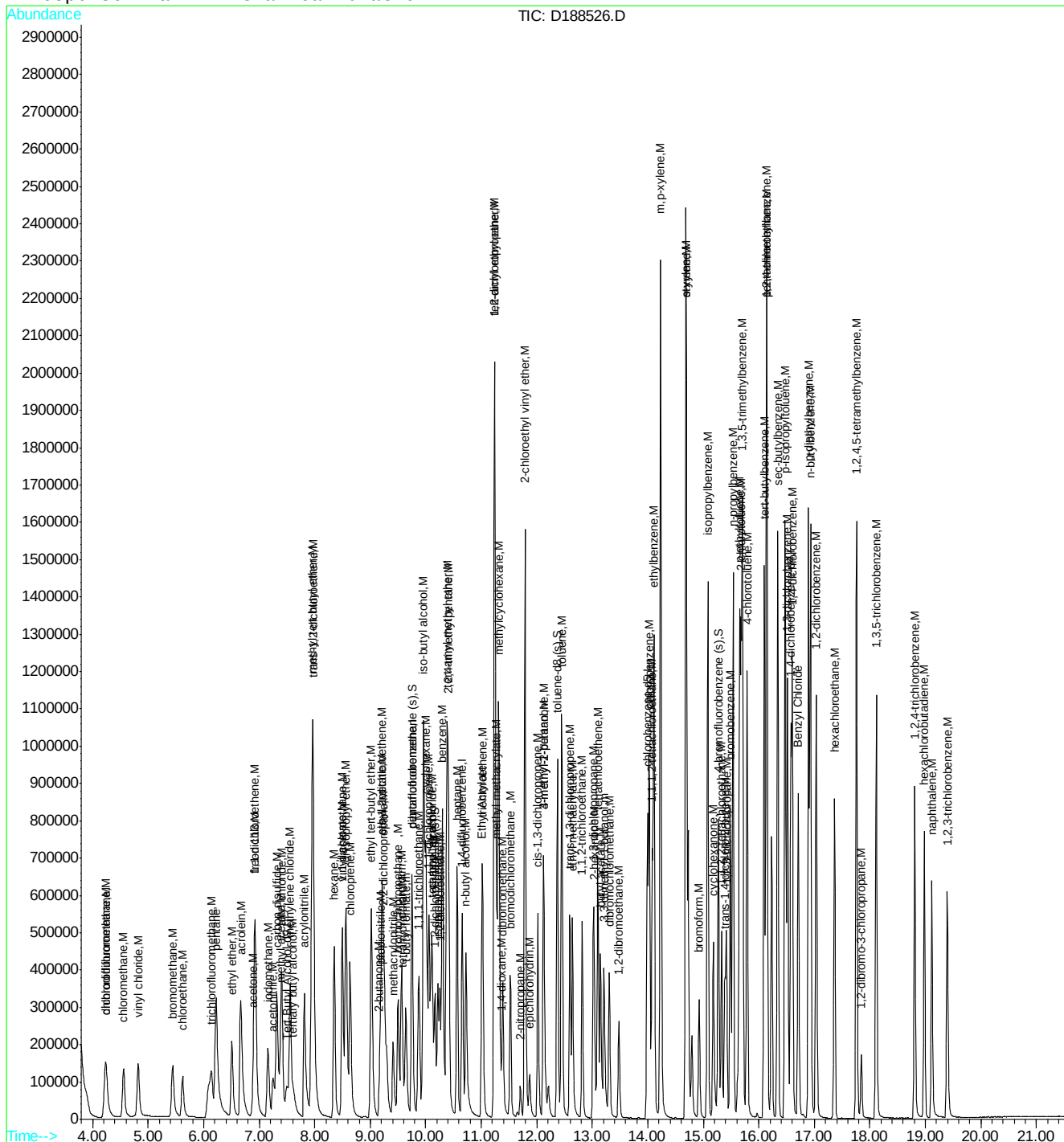
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D188526.D
Acq On : 28 Oct 2011 12:50 pm
Sample : ICV7671-50
Misc : MS20017,VD7671,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Oct 31 8:48 2011

Vial: 9
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Mon Oct 31 08:44:12 2011
Response via : Initial Calibration



D188526.D MD7671.M

Mon Oct 31 08:55:55 2011

RPT1

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6.7.21

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191678.D
 Acq On : 19 Jan 2012 10:06 am
 Sample : cc7671-20
 Misc : MS22961,VD7804,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 17:52 2012

Vial: 2
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.50	65	122233	500.00	ug/L	-0.01
4) pentafluorobenzene	9.74	168	248579	50.00	ug/L	-0.01
51) 1,4-difluorobenzene	10.65	114	389862	50.00	ug/L	0.00
83) chlorobenzene-d5	13.99	117	360288	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	16.57	152	204568	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	9.74	113	126086	46.48	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	92.96%
45) 1,2-dichloroethane-d4 (s)	10.16	65	137491	42.18	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	84.36%
75) toluene-d8 (s)	12.36	98	512847	49.27	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	98.54%
99) 4-bromofluorobenzene (s)	15.27	95	215984	46.45	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	92.90%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.36	88	16992	671.05	ug/L	# 89
3) tertiary butyl alcohol	7.62	59	31135	98.01	ug/L	96
6) chlorodifluoromethane	4.24	51	57433	17.74	ug/L	96
7) dichlorodifluoromethane	4.25	85	74755	20.29	ug/L	99
8) chloromethane	4.55	50	85795	21.86	ug/L	99
9) vinyl chloride	4.81	62	79657	20.89	ug/L	98
10) bromomethane	5.45	94	50555	20.83	ug/L	99
11) chloroethane	5.62	64	47468	21.39	ug/L	99
13) trichlorofluoromethane	6.13	101	85492	19.39	ug/L	99
14) pentane	6.22	43	109401	17.84	ug/L	98
15) ethyl ether	6.51	74	37099	19.82	ug/L	93
16) acrolein	6.67	56	116102	166.86	ug/L	99
18) 1,1-dichloroethene	6.91	96	59331	20.08	ug/L	94
19) acetone	6.89	58	5997	18.88	ug/L	# 82
20) allyl chloride	7.40	41	92355	14.71	ug/L	99
21) acetonitrile	7.25	40	38494	206.61	ug/L	98
23) iodomethane	7.16	142	102886	20.82	ug/L	98
24) iso-butyl alcohol	9.98	74	2700	169.51	ug/L	99
25) carbon disulfide	7.32	76	207671	21.60	ug/L	98
26) methylene chloride	7.55	84	67804	19.91	ug/L	99
27) methyl acetate	7.38	43	40937	15.52	ug/L	99
28) methyl tert butyl ether	7.96	73	175743	18.12	ug/L	98
29) trans-1,2-dichloroethene	7.97	96	63125	20.21	ug/L	97
30) di-isopropyl ether	8.56	45	181436	18.02	ug/L	97
31) ethyl tert-butyl ether	9.02	59	169027	17.42	ug/L	99
32) 2-butanone	9.16	72	6915	17.53	ug/L	83
33) 1,1-dichloroethane	8.49	63	108316	19.74	ug/L	99
34) chloroprene	8.64	53	81751	18.04	ug/L	96
35) acrylonitrile	7.81	53	115802	92.37	ug/L	99
36) vinyl acetate	8.52	86	10567	16.67	ug/L	64
37) ethyl acetate	9.23	45	7585m	19.45	ug/L	
38) 2,2-dichloropropane	9.25	77	88540	18.93	ug/L	98
39) cis-1,2-dichloroethene	9.21	96	66621	19.80	ug/L	93

(#)=qualifier out of range (m)=manual integration

D191678.D MD7671.M Thu Jan 19 17:54:43 2012 RPT1

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191678.D
 Acq On : 19 Jan 2012 10:06 am
 Sample : cc7671-20
 Misc : MS22961,VD7804,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 17:52 2012

Vial: 2
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)

Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) propionitrile	9.18	54	87462	180.26	ug/L	99
41) bromochloromethane	9.50	128	30994	19.36	ug/L	93
42) tetrahydrofuran	9.58	72	7847	17.08	ug/L	97
43) chloroform	9.56	83	98422	19.52	ug/L	98
46) freon 113	6.94	151	45699	19.69	ug/L	96
47) methacrylonitrile	9.41	41	30882	16.81	ug/L	92
48) t-butyl formate	9.64	59	44290	15.89	ug/L	93
49) 1,1,1-trichloroethane	9.87	97	88940	19.64	ug/L	99
50) tert-amyl methyl ether	10.37	73	159677	17.01	ug/L	97
52) cyclohexane	10.00	84	99502	21.40	ug/L #	100
54) 2,2,4-trimethylpentane	10.40	57	226898	19.32	ug/L	96
55) epichlorohydrin	11.87	57	28573	81.69	ug/L	96
56) n-butyl alcohol	10.73	56	89477	951.15	ug/L	97
57) carbon tetrachloride	10.10	117	76361	19.99	ug/L	99
58) 1,1-dichloropropene	10.05	75	82464	20.18	ug/L	100
59) hexane	8.35	57	73963	17.75	ug/L	99
60) benzene	10.30	78	248651	20.85	ug/L	98
61) heptane	10.56	57	43798	19.28	ug/L	99
62) isopropyl acetate	10.22	43	86453	15.18	ug/L	95
63) 1,2-dichloroethane	10.25	62	73248	18.27	ug/L	100
65) trichloroethene	11.02	95	60543	19.80	ug/L	95
66) 2-nitropropane	11.70	43	13599	13.82	ug/L	97
67) 2-chloroethyl vinyl ether	11.78	63	179023	92.03	ug/L	99
68) methyl methacrylate	11.28	100	15034	16.47	ug/L	99
70) 1,2-dichloropropane	11.25	63	63340	20.18	ug/L	97
71) methylcyclohexane	11.31	83	101364	19.28	ug/L	98
72) dibromomethane	11.39	93	35880	19.17	ug/L	95
73) bromodichloromethane	11.52	83	76569	19.72	ug/L	100
74) cis-1,3-dichloropropene	12.02	75	98973	20.04	ug/L	95
76) 4-methyl-2-pentanone	12.12	58	23749	17.83	ug/L	90
77) toluene	12.45	92	155419	20.83	ug/L	100
78) 3-methyl-1-butanol	12.12	70	33610	370.20	ug/L	97
79) trans-1,3-dichloropropene	12.59	75	89671	18.93	ug/L	94
80) ethyl methacrylate	12.65	69	78127	18.33	ug/L	94
81) 1,1,2-trichloroethane	12.81	83	45198	19.26	ug/L	98
82) 2-hexanone	13.04	58	22882	17.89	ug/L	92
84) tetrachloroethene	13.10	166	68644	21.49	ug/L	96
85) 1,3-dichloropropane	13.02	76	92736	19.97	ug/L	98
86) butyl acetate	13.15	56	32021	16.83	ug/L	88
87) 3,3-dimethyl-1-butanol	13.21	57	56768	176.13	ug/L	96
88) dibromochloromethane	13.31	129	60273	19.23	ug/L	98
89) 1,2-dibromoethane	13.48	107	54648	19.88	ug/L	99
90) chlorobenzene	14.02	112	167167	20.66	ug/L	97
91) 1,1,1,2-tetrachloroethane	14.07	131	59307	20.10	ug/L	97
92) ethylbenzene	14.11	91	288031	20.76	ug/L	99
93) m,p-xylene	14.23	106	229338	41.58	ug/L	97
94) o-xylene	14.68	106	113890	20.79	ug/L	100
95) styrene	14.69	104	187344	19.79	ug/L	98
96) bromoform	14.92	173	43670	18.57	ug/L	96

(#)=qualifier out of range (m)=manual integration

D191678.D MD7671.M

Thu Jan 19 17:54:44 2012

RPT1

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\D191678.D
 Acq On : 19 Jan 2012 10:06 am
 Sample : cc7671-20
 Misc : MS22961,VD7804,5,,100,5,1
 MS Integration Params: RTEINT.P
 Quant Time: Jan 19 17:52 2012

Vial: 2
 Operator: EmilyT
 Inst : MSD
 Multiplr: 1.00

Quant Results File: MD7671.RES

Quant Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
 Title : SW-846 Method 8260B
 Last Update : Wed Jan 11 16:25:16 2012
 Response via : Initial Calibration
 DataAcq Meth : MD7671

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) isopropylbenzene	15.07	105	298742	20.55	ug/L	98
100) bromobenzene	15.49	156	78006	20.83	ug/L	98
101) cyclohexanone	15.17	55	86181	256.25	ug/L	97
102) 1,1,2,2-tetrachloroethane	15.32	83	75727	18.85	ug/L	97
103) trans-1,4-dichloro-2-buten	15.39	53	20403	17.69	ug/L	85
104) 1,2,3-trichloropropane	15.41	110	21131	18.71	ug/L	94
105) n-propylbenzene	15.53	91	352725	20.79	ug/L	100
107) 2-chlorotoluene	15.68	126	70620	20.05	ug/L	96
108) 4-chlorotoluene	15.79	91	221836	19.88	ug/L	99
109) 1,3,5-trimethylbenzene	15.70	105	257224	19.75	ug/L	99
110) tert-butylbenzene	16.09	119	222595	19.60	ug/L	96
111) pentachloroethane	16.14	167	50130	20.66	ug/L	97
112) 1,2,4-trimethylbenzene	16.14	105	261701	20.17	ug/L	99
113) sec-butylbenzene	16.34	105	338094	20.61	ug/L	98
114) 1,3-dichlorobenzene	16.52	146	149061	20.86	ug/L	97
115) p-isopropyltoluene	16.47	119	277335	20.65	ug/L	98
116) 1,4-dichlorobenzene	16.60	146	159923	20.38	ug/L	97
117) Benzyl Chloride	16.71	91	141258	17.53	ug/L	100
119) 1,2-dichlorobenzene	17.03	146	148503	20.65	ug/L	99
120) n-butylbenzene	16.93	92	144503	18.98	ug/L	97
122) 1,2-dibromo-3-chloropropan	17.85	75	11933	17.72	ug/L	89
123) 1,3,5-trichlorobenzene	18.11	180	117609	20.52	ug/L	99
124) 1,2,4-trichlorobenzene	18.81	180	92007	18.89	ug/L	98
125) hexachlorobutadiene	18.98	225	59200	21.52	ug/L #	70
126) naphthalene	19.12	128	178653	19.28	ug/L	99
127) 1,2,3-trichlorobenzene	19.39	180	72514	21.14	ug/L	99
128) hexachloroethane	17.36	119	49000	20.34	ug/L	97

(#) = qualifier out of range (m) = manual integration

D191678.D MD7671.M Thu Jan 19 17:54:44 2012 RPT1

Page 3

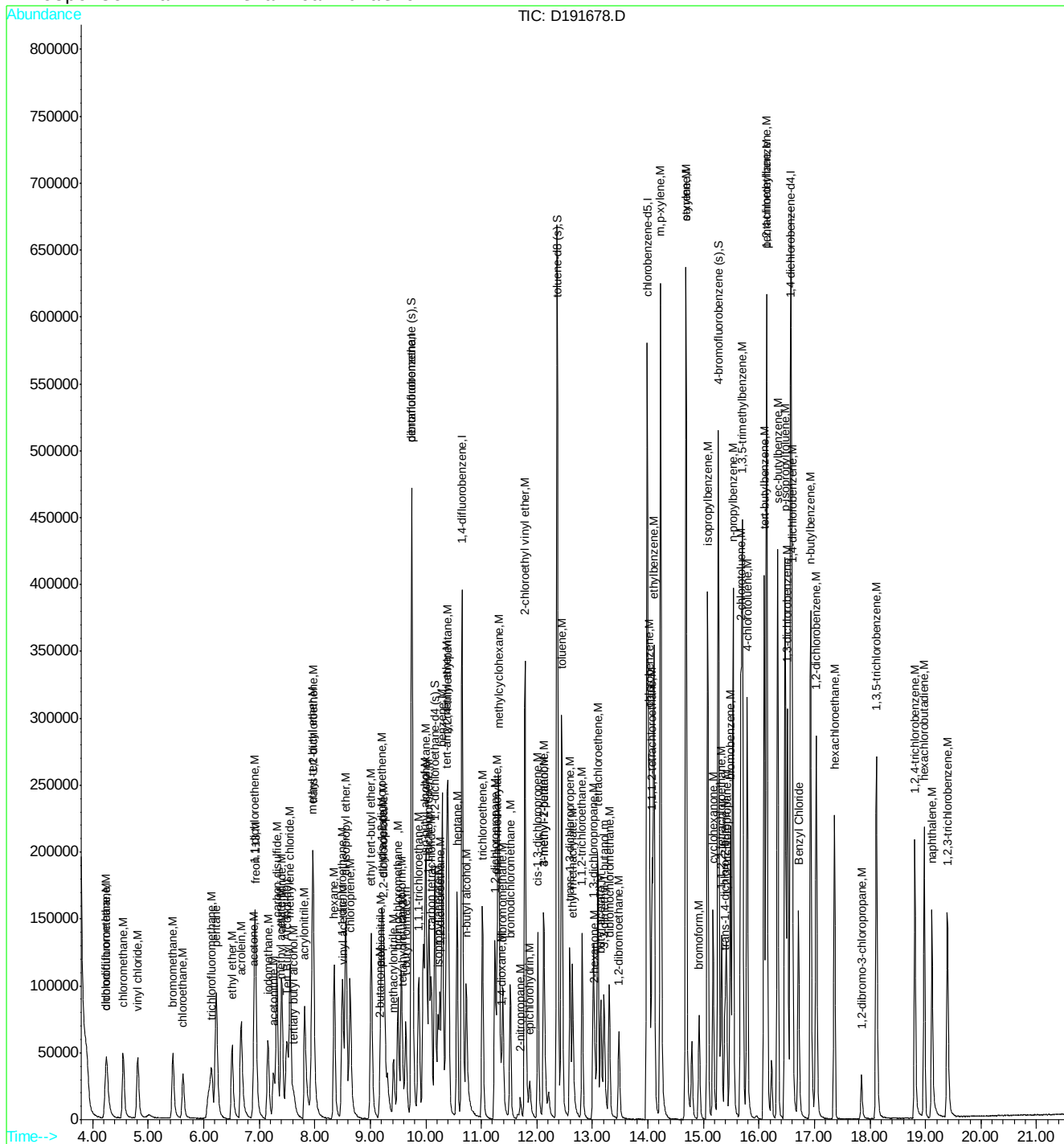
Quantitation Report

Data File : C:\HPCHEM\1\DATA\D191678.D
Acq On : 19 Jan 2012 10:06 am
Sample : cc7671-20
Misc : MS22961,VD7804,5,,100,5,1
MS Integration Params: RTEINT.P
Quant Time: Jan 19 17:52 2012

Vial: 2
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: MD7671.RES

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Method       : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title        : SW-846 Method 8260B
Last Update   : Wed Jan 11 16:25:16 2012
Response via  : Initial Calibration
```



D191678.D MD7671.M

Thu Jan 19 17:54:47 2012

RPT1

Page 4

6.7.22

Manual Integration Approval Summary

Sample Number: VD7804-CC7671

Method: SW846 8260B

Lab FileID: D191678.D

Analyst approved: 01/20/12 11:52 Ying Li

Injection Time: 01/19/12 10:06

Supervisor approved: 01/21/12 01:44 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason

Ethyl Acetate	141-78-6		9.23	Split peak

6.7.22.1
6

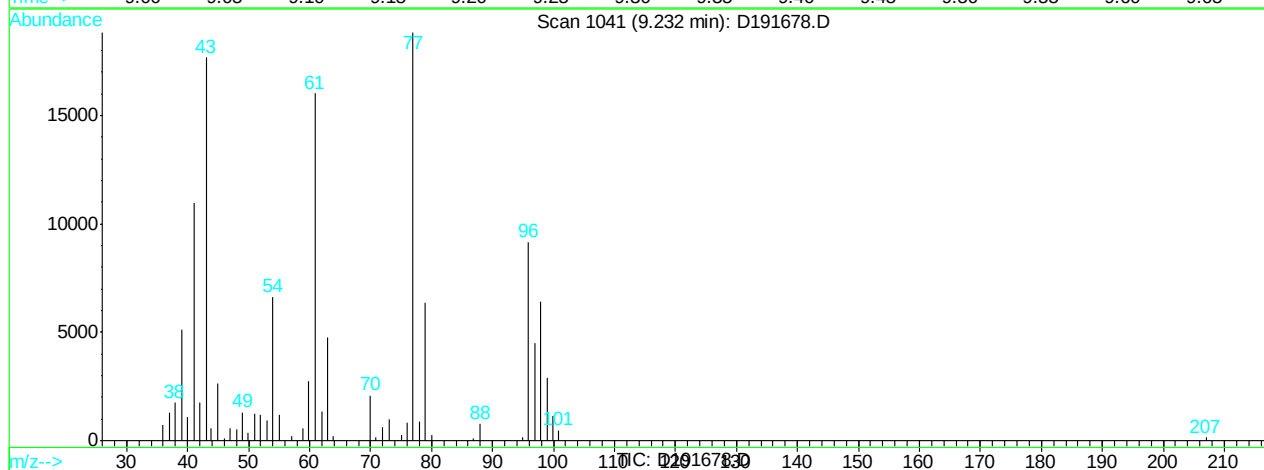
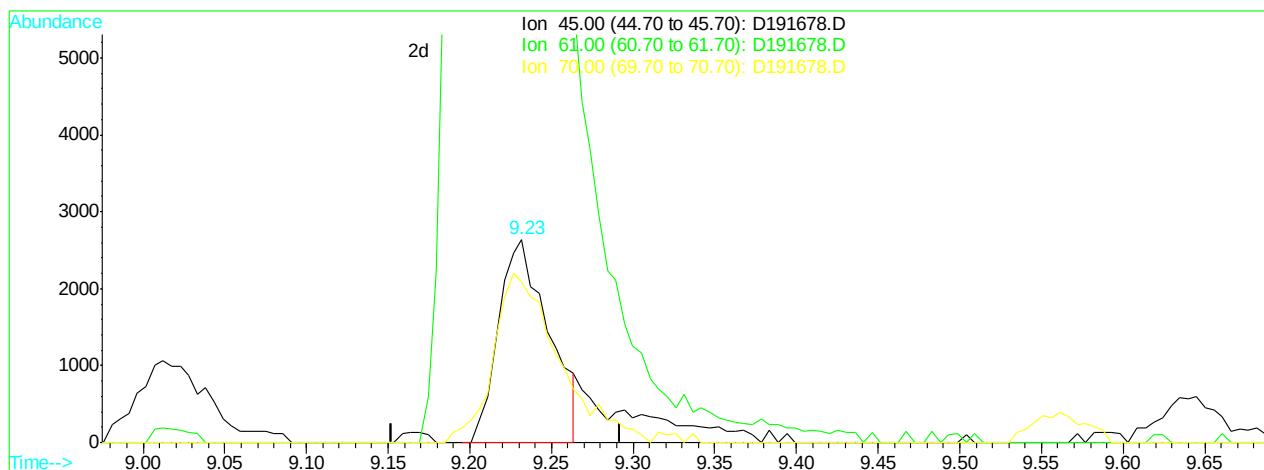
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D191678.D
Acq On : 19 Jan 2012 10:06 am
Sample : cc7671-20
Misc : MS22961, VD7804, 5,, 100, 5, 1
MS Integration Params: RTEINT.P
Quant Time: Jan 19 17:51 2012

Vial: 2
Operator: EmilyT
Inst : MSD
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Wed Jan 11 16:25:16 2012
Response via : Multiple Level Calibration



(37) ethyl acetate (M)

9.23min 14.40ug/L

response 5617

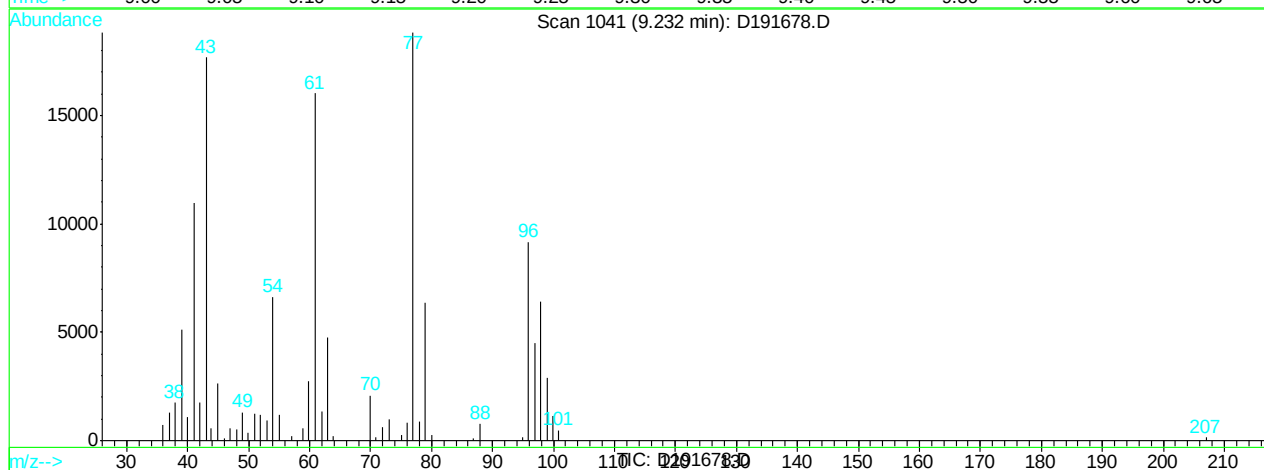
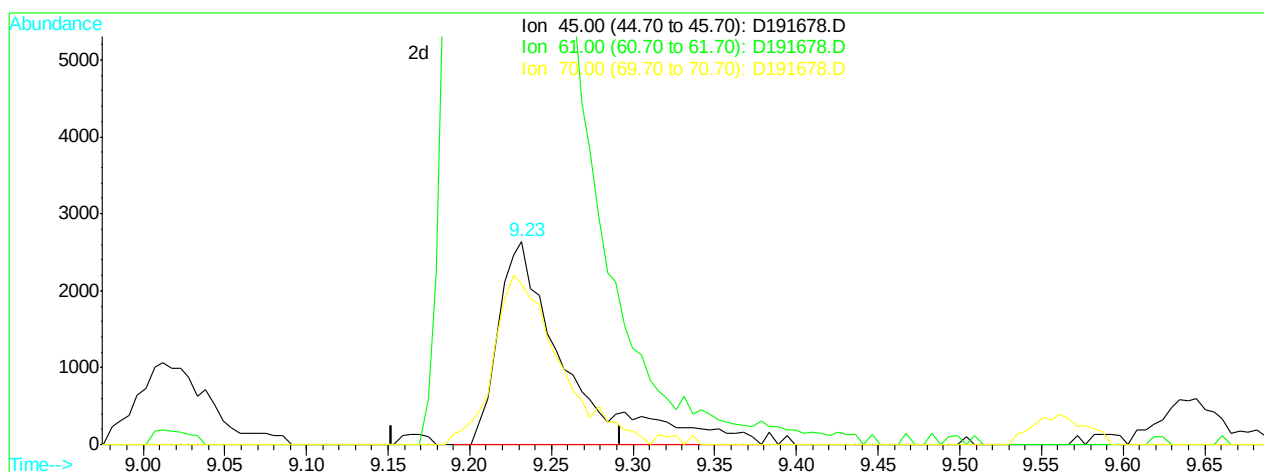
Ion	Exp%	Act%
45.00	100	100
61.00	821.80	385.81#
70.00	85.40	71.61
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\D191678.D
Acq On : 19 Jan 2012 10:06 am
Sample : cc7671-20
Misc : MS22961, VD7804, 5,, 100, 5, 1
MS Integration Params: RTEINT.P
Quant Time: Jan 19 17:51 2012

Vial: 2
Operator: EmilyT
Inst : MSD
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MD7671.M (RTE Integrator)
Title : SW-846 Method 8260B
Last Update : Wed Jan 11 16:25:16 2012
Response via : Multiple Level Calibration



(37) ethyl acetate (M)

9.23min 19.45ug/L m

response 7585

Ion	Exp%	Act%
45.00	100	100
61.00	821.80	605.68
70.00	85.40	78.61
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185153.D
 Acq On : 22 Nov 2011 8:57 pm
 Operator : OksanaT
 Sample : ic8147-0.5
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 23 08:14:17 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.753	65	117306	500.00	ug/L	0.00
5) pentafluorobenzene	9.959	168	171230	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.874	114	249242	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.199	117	232805	50.00	ug/L	-0.02
111) 1,4-dichlorobenzene-d4	16.772	152	118045	50.00	ug/L	-0.02

System Monitoring Compounds

57) dibromofluoromethane (s)	10.006	113	876	0.59	ug/L	-0.01
Spiked Amount	50.000	Range	77 - 120	Recovery	=	1.18%#
58) 1,2-dichloroethane-d4 (s)	10.435	65	1337	0.77	ug/L	0.00
Spiked Amount	50.000	Range	70 - 127	Recovery	=	1.54%#
86) toluene-d8 (s)	12.579	98	4375	0.70	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	1.40%#
113) 4-bromofluorobenzene (s)	15.480	95	1998	0.82	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	1.64%#

Target Compounds

						Qvalue
11) chlorodifluoromethane	4.345	51	743	0.40	ug/L	65
12) dichlorodifluoromethane	4.334	85	1235	0.53	ug/L #	49
15) chloromethane	4.674	50	2366	0.75	ug/L	91
16) vinyl chloride	4.946	62	1584	0.58	ug/L	81
18) bromomethane	5.631	94	1387m	0.83	ug/L	
19) chloroethane	5.814	64	732	0.52	ug/L #	46
22) pentane	6.394	43	907	0.32	ug/L #	68
23) ethyl ether	6.697	74	522	0.50	ug/L #	50
27) acrolein	6.922	56	6634	16.28	ug/L	95
28) 1,1-dichloroethene	7.126	96	427	0.28	ug/L #	15
33) iodomethane	7.413	142	1297	0.46	ug/L	84
35) carbon disulfide	7.570	76	2721	0.48	ug/L	81
36) methylene chloride	7.816	84	1715	0.86	ug/L	97
38) methyl tert butyl ether	8.171	73	3945	0.73	ug/L	93
39) trans-1,2-dichloroethene	8.203	96	918	0.56	ug/L	88
40) di-isopropyl ether	8.757	45	4654	0.76	ug/L	80
41) ethyl tert-butyl ether	9.212	59	3461	0.59	ug/L	91
43) 1,1-dichloroethane	8.741	63	1663	0.54	ug/L	80
44) chloroprene	8.862	53	1303	0.54	ug/L	79
45) acrylonitrile	8.098	53	2572	3.24	ug/L	96
48) 2,2-dichloropropane	9.484	77	1395	0.61	ug/L	77
49) cis-1,2-dichloroethene	9.463	96	1250	0.66	ug/L #	77
51) propionitrile	9.478	54	2137	6.99	ug/L	99
52) bromochloromethane	9.766	128	412	0.45	ug/L	95
53) tetrahydrofuran	9.823	42	1089	1.49	ug/L #	59
54) chloroform	9.823	83	1887	0.64	ug/L	81
55) t-butyl formate	9.871	59	889	0.56	ug/L #	36
56) Iso-octane	10.561	57	5349	0.93	ug/L	92
61) 1,1,1-trichloroethane	10.101	97	1372	0.61	ug/L	97
62) tert-amyl methyl ether	10.582	73	3340	0.62	ug/L	97
68) tert-amyl ethyl ether	11.413	87	1817	0.66	ug/L #	90
69) carbon tetrachloride	10.325	117	918	0.46	ug/L #	80
70) 1,1-dichloropropene	10.278	75	1083	0.48	ug/L	71

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185153.D
 Acq On : 22 Nov 2011 8:57 pm
 Operator : OksanaT
 Sample : ic8147-0.5
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 23 08:14:17 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
71) hexane	8.527	57	2392	1.11	ug/L	92
72) benzene	10.535	78	3741	0.52	ug/L	92
75) 1,2-dichloroethane	10.519	62	1261	0.56	ug/L	78
77) trichloroethene	11.246	95	967	0.57	ug/L #	77
79) 2-chloroethyl vinyl ether	12.014	63	1915	2.01	ug/L	91
80) methylcyclohexane	11.502	83	1631	0.59	ug/L	98
81) methyl methacrylate	11.496	69	2415	1.32	ug/L #	62
82) 1,2-dichloropropane	11.491	63	1170	0.62	ug/L #	43
83) dibromomethane	11.648	93	629	0.58	ug/L	87
84) bromodichloromethane	11.774	83	1672	0.72	ug/L	94
85) cis-1,3-dichloropropene	12.260	75	1678	0.55	ug/L	92
88) toluene	12.652	92	2358	0.53	ug/L	99
89) 3-methyl-1-butanol	12.359	55	522	4.88	ug/L #	57
90) trans-1,3-dichloropropene	12.830	75	1505	0.56	ug/L	70
91) ethyl methacrylate	12.840	69	2074	0.89	ug/L	92
92) 1,1,2-trichloroethane	13.060	83	1060	0.73	ug/L	89
93) 2-hexanone	13.248	58	236	0.30	ug/L #	33
96) tetrachloroethene	13.300	166	912	0.46	ug/L	92
97) 1,3-dichloropropane	13.264	76	1549	0.54	ug/L	84
98) butyl acetate	13.347	56	1035	0.82	ug/L #	53
99) 3,3-dimethyl-1-butanol	13.159	57	231	1.02	ug/L	94
100) dibromochloromethane	13.556	129	1178	0.65	ug/L	70
101) 1,2-dibromoethane	13.718	107	1033	0.62	ug/L	98
103) chlorobenzene	14.241	112	2609	0.54	ug/L	85
104) 1,1,1,2-tetrachloroethane	14.293	131	928	0.55	ug/L	88
105) ethylbenzene	14.299	91	4767	0.58	ug/L	89
106) m,p-xylene	14.419	106	3318	1.04	ug/L	91
107) o-xylene	14.874	106	1758	0.54	ug/L	85
109) styrene	14.884	104	2985	0.58	ug/L	98
110) bromoform	15.172	173	775	0.58	ug/L	88
112) isopropylbenzene	15.255	105	4686	0.58	ug/L	97
114) bromobenzene	15.700	156	1228	0.57	ug/L	96
115) 1,1,2,2-tetrachloroethane	15.553	83	1614	0.66	ug/L	85
116) trans-1,4-dichloro-2-b...	15.611	53	258	0.44	ug/L #	74
117) 1,2,3-trichloropropane	15.647	110	226	0.36	ug/L #	4
118) n-propylbenzene	15.710	91	5456	0.58	ug/L	95
119) p-ethyltoluene	15.825	105	5792	0.69	ug/L	95
120) 2-chlorotoluene	15.883	126	1193	0.62	ug/L #	54
121) 4-chlorotoluene	15.982	91	3742	0.63	ug/L	97
122) 1,3,5-trimethylbenzene	15.872	105	4104	0.62	ug/L	90
123) tert-butylbenzene	16.264	119	3655	0.62	ug/L	94
124) pentachloroethane	16.353	167	849	0.67	ug/L #	69
125) 1,2,4-trimethylbenzene	16.311	105	4310	0.63	ug/L	91
126) sec-butylbenzene	16.505	105	5498	0.64	ug/L	96
127) 1,3-dichlorobenzene	16.709	146	2309	0.57	ug/L	85
128) p-isopropyltoluene	16.636	119	4457	0.64	ug/L	97
129) 1,4-dichlorobenzene	16.803	146	2440	0.59	ug/L	91
130) benzyl chloride	16.913	91	2092	0.49	ug/L	95
131) p-diethylbenzene	17.054	119	2954	0.65	ug/L	94
132) 1,2-dichlorobenzene	17.237	146	2303	0.59	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E185153.D
Acq On : 22 Nov 2011 8:57 pm
Operator : OksanaT
Sample : ic8147-0.5
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 23 08:14:17 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
133) n-butylbenzene	17.096	92	2305	0.62	ug/L	90
134) 1,2,4,5-tetramethylben...	17.911	119	4145	0.62	ug/L	97
135) 1,2-dibromo-3-chloropr...	18.068	75	206	0.52	ug/L #	81
136) 1,3,5-trichlorobenzene	18.298	180	1964	0.65	ug/L	86
137) 1,2,4-trichlorobenzene	19.014	180	1427	0.58	ug/L	91
138) hexachlorobutadiene	19.155	225	1152	0.84	ug/L	96
139) naphthalene	19.328	128	2525	0.49	ug/L	83
141) 1,2,3-trichlorobenzene	19.605	180	1257	0.59	ug/L	94
142) hexachloroethane	17.545	119	742	0.60	ug/L	95
143) Cyclohexane	10.205	84	1342	0.57	ug/L #	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Manual Integration Approval Summary

Sample Number: VE8147-IC8147

Method: SW846 8260B

Lab FileID: E185153.D

Analyst approved: 11/29/11 17:45 Ying Li

Injection Time: 11/22/11 20:57

Supervisor approved: 12/02/11 13:41 Kanya Veerawat

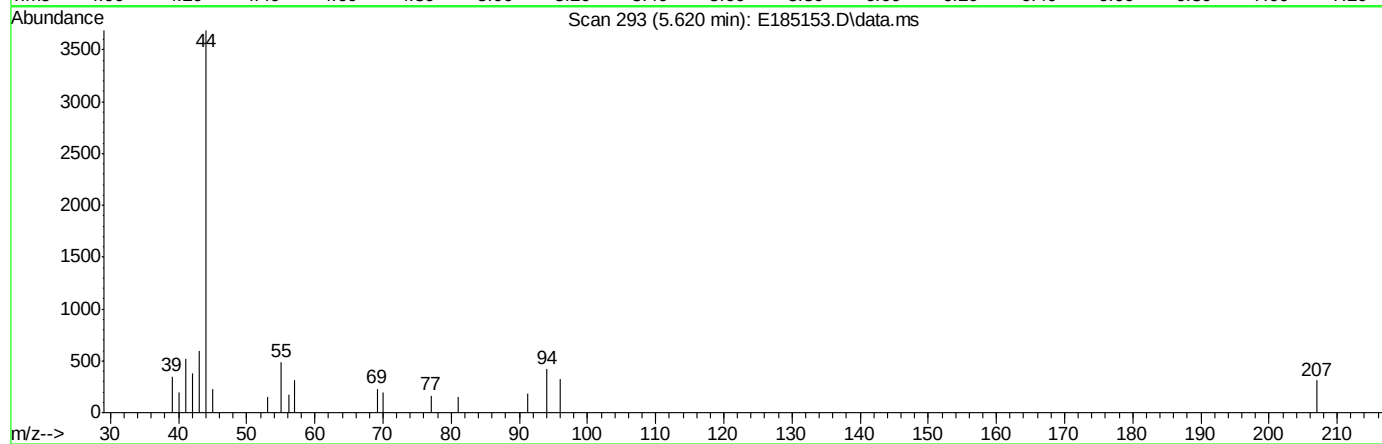
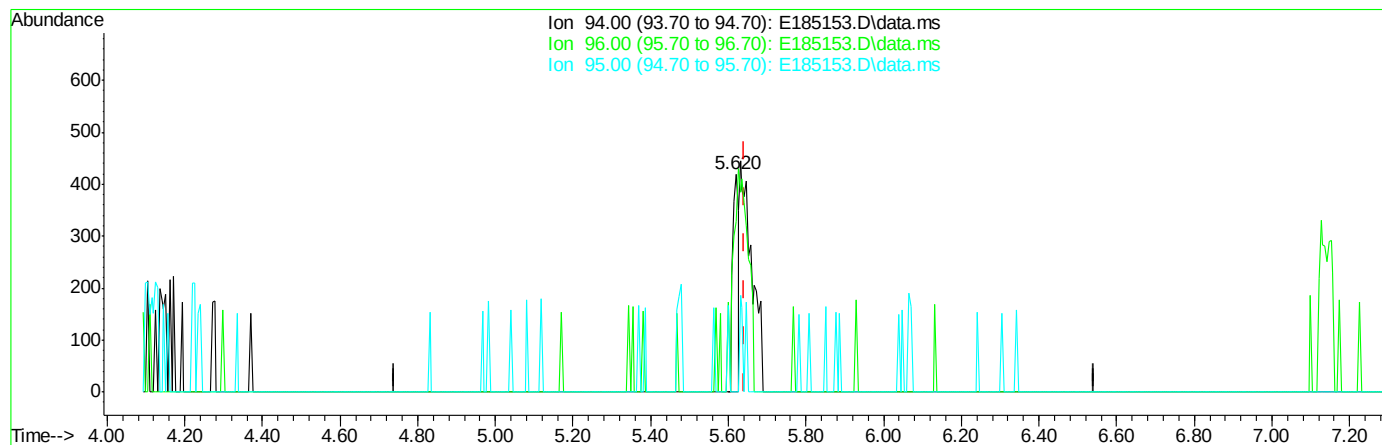
Parameter	CAS	Sig#	R.T. (min.)	Reason
Bromomethane	74-83-9		5.63	Split peak

6.7.23.1
6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185153.D
Acq On : 22 Nov 2011 8:57 pm
Operator : OksanaT
Sample : ic8147-0.5
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 22 21:21:16 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185153.D\data.ms

(18) bromomethane (M)

5.620min (-0.022) 0.25ug/L

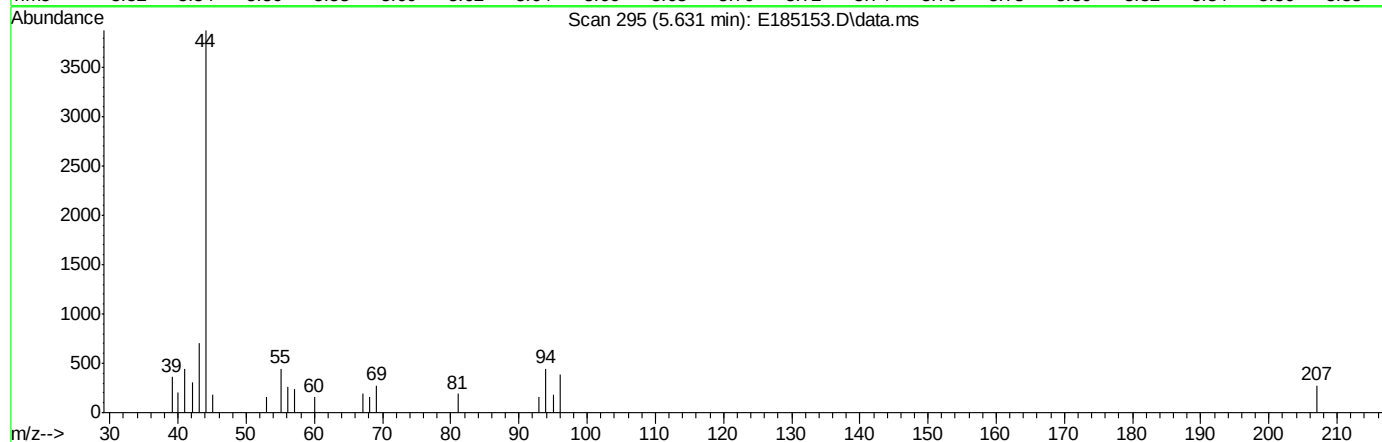
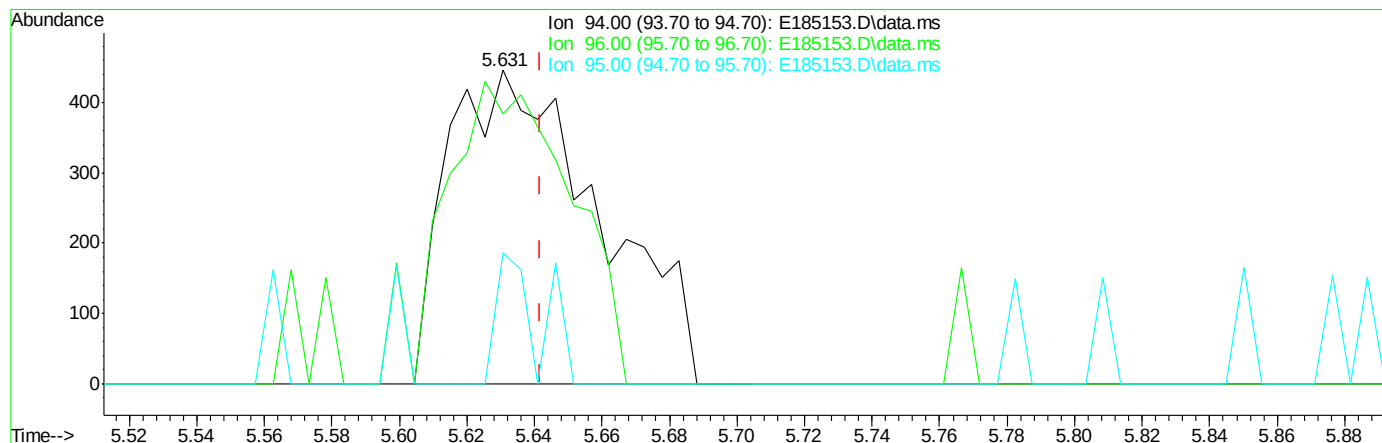
response 427

Ion	Exp%	Act%
94.00	100	100
96.00	93.70	37.14#
95.00	14.20	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185153.D
Acq On : 22 Nov 2011 8:57 pm
Operator : OksanaT
Sample : ic8147-0.5
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 22 21:21:16 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



(18) bromomethane (M)

5.631min (-0.011) 0.83ug/L m

response 1387

Ion	Exp%	Act%
94.00	100	100
96.00	93.70	86.10
95.00	14.20	41.93
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185154.D
 Acq On : 22 Nov 2011 9:27 pm
 Operator : OksanaT
 Sample : ic8147-1
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 08:43:29 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.749	65	116355	500.00	ug/L	-0.01
5) pentafluorobenzene	9.960	168	174214	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.875	114	249554	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.200	117	230325	50.00	ug/L	-0.02
111) 1,4-dichlorobenzene-d4	16.772	152	119471	50.00	ug/L	-0.01

System Monitoring Compounds

57) dibromofluoromethane (s)	10.007	113	1934	1.28	ug/L	-0.01
Spiked Amount	50.000	Range 77 - 120	Recovery	=	2.56%#	
58) 1,2-dichloroethane-d4 (s)	10.426	65	2292	1.29	ug/L	-0.01
Spiked Amount	50.000	Range 70 - 127	Recovery	=	2.58%#	
86) toluene-d8 (s)	12.574	98	7852	1.26	ug/L	-0.01
Spiked Amount	50.000	Range 79 - 120	Recovery	=	2.52%#	
113) 4-bromofluorobenzene (s)	15.476	95	3373	1.37	ug/L	-0.01
Spiked Amount	50.000	Range 76 - 118	Recovery	=	2.74%#	

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.880	59	1527	5.22	ug/L	61
11) chlorodifluoromethane	4.340	51	2731	1.46	ug/L	67
12) dichlorodifluoromethane	4.319	85	2310	0.97	ug/L #	49
15) chloromethane	4.680	50	4247	1.32	ug/L	97
16) vinyl chloride	4.957	62	2738	0.98	ug/L	76
18) bromomethane	5.632	94	2104	1.23	ug/L	82
19) chloroethane	5.809	64	1653	1.16	ug/L	68
21) trichlorofluoromethane	6.285	101	2026	0.78	ug/L	94
22) pentane	6.390	43	2847	0.99	ug/L #	75
23) ethyl ether	6.703	74	1351	1.26	ug/L #	70
27) acrolein	6.912	56	525913	1268.40	ug/L	100
28) 1,1-dichloroethene	7.137	96	1867	1.19	ug/L	88
30) acetone	7.111	58	298	1.65	ug/L #	1
31) allyl chloride	7.639	41	4370	1.30	ug/L	100
32) acetonitrile	7.535	40	720	4.80	ug/L #	46
33) iodomethane	7.404	142	3287	1.15	ug/L	96
35) carbon disulfide	7.561	76	5862	1.01	ug/L	96
36) methylene chloride	7.817	84	2415	1.19	ug/L	87
37) methyl acetate	7.597	43	1193	0.76	ug/L #	62
38) methyl tert butyl ether	8.157	73	6855	1.24	ug/L	94
39) trans-1,2-dichloroethene	8.199	96	2145	1.28	ug/L	88
40) di-isopropyl ether	8.742	45	9300	1.50	ug/L	76
41) ethyl tert-butyl ether	9.202	59	7700	1.29	ug/L	93
43) 1,1-dichloroethane	8.737	63	3637	1.15	ug/L	96
44) chloroprene	8.873	53	3073	1.26	ug/L	89
45) acrylonitrile	8.099	53	4371	5.41	ug/L	98
48) 2,2-dichloropropane	9.485	77	2940	1.26	ug/L	88
49) cis-1,2-dichloroethene	9.469	96	2434	1.27	ug/L	94
50) methyl acrylate	9.526	55	3042	1.60	ug/L #	69
51) propionitrile	9.479	54	3785	12.17	ug/L	93
52) bromochloromethane	9.767	128	1055	1.14	ug/L #	73
53) tetrahydrofuran	9.835	42	1631	2.20	ug/L	64
54) chloroform	9.819	83	3706	1.24	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185154.D
 Acq On : 22 Nov 2011 9:27 pm
 Operator : OksanaT
 Sample : ic8147-1
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 08:43:29 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
55) t-butyl formate	9.861	59	2006	1.23	ug/L #	56
56) Iso-octane	10.556	57	7270	1.25	ug/L	95
59) freon 113	7.101	151	743m	0.63	ug/L	
60) methacrylonitrile	9.673	41	1429	1.17	ug/L	78
61) 1,1,1-trichloroethane	10.107	97	2766	1.21	ug/L	89
62) tert-amyl methyl ether	10.567	73	7496	1.36	ug/L	95
66) epichlorohydrin	12.120	57	2135	9.84	ug/L	51
67) n-butyl alcohol	10.980	56	4350	63.29	ug/L	96
68) tert-amyl ethyl ether	11.409	87	3611	1.32	ug/L #	98
69) carbon tetrachloride	10.326	117	2294	1.15	ug/L	98
70) 1,1-dichloropropene	10.279	75	2459	1.09	ug/L	92
71) hexane	8.517	57	3285	1.52	ug/L	83
72) benzene	10.530	78	8201	1.13	ug/L	95
73) heptane	10.724	57	2302	1.82	ug/L #	75
74) isopropyl acetate	10.426	43	5221	1.30	ug/L	96
75) 1,2-dichloroethane	10.515	62	2502	1.12	ug/L	89
76) ethyl acrylate	11.220	55	3739	1.43	ug/L #	88
77) trichloroethene	11.246	95	1998	1.17	ug/L	96
79) 2-chloroethyl vinyl ether	12.015	63	5267	5.52	ug/L	95
80) methylcyclohexane	11.497	83	3030	1.10	ug/L	89
81) methyl methacrylate	11.487	69	2927	1.59	ug/L #	74
82) 1,2-dichloropropane	11.492	63	2264	1.20	ug/L	94
83) dibromomethane	11.644	93	1292	1.19	ug/L	95
84) bromodichloromethane	11.774	83	3060	1.32	ug/L	88
85) cis-1,3-dichloropropene	12.255	75	3739	1.22	ug/L	91
87) 4-methyl-2-pentanone	12.344	58	1031	1.24	ug/L #	94
88) toluene	12.658	92	5135	1.16	ug/L	88
89) 3-methyl-1-butanol	12.355	55	1931	18.04	ug/L #	64
90) trans-1,3-dichloropropene	12.836	75	3239	1.20	ug/L	96
91) ethyl methacrylate	12.831	69	3274	1.41	ug/L	87
92) 1,1,2-trichloroethane	13.050	83	1847	1.28	ug/L	98
93) 2-hexanone	13.259	58	793	0.99	ug/L #	39
96) tetrachloroethene	13.296	166	2243	1.15	ug/L	94
97) 1,3-dichloropropane	13.259	76	3275	1.16	ug/L	98
98) butyl acetate	13.338	56	1922	1.55	ug/L #	69
99) 3,3-dimethyl-1-butanol	13.421	57	3752	16.73	ug/L #	83
100) dibromochloromethane	13.552	129	2310	1.29	ug/L	94
101) 1,2-dibromoethane	13.725	107	2049	1.24	ug/L	92
103) chlorobenzene	14.242	112	5196	1.09	ug/L	88
104) 1,1,1,2-tetrachloroethane	14.300	131	2098	1.26	ug/L	92
105) ethylbenzene	14.300	91	9155	1.12	ug/L	92
106) m,p-xylene	14.415	106	7028	2.23	ug/L	98
107) o-xylene	14.875	106	3556	1.11	ug/L	97
109) styrene	14.885	104	6014	1.17	ug/L	98
110) bromoform	15.167	173	1625	1.24	ug/L	87
112) isopropylbenzene	15.251	105	9061	1.10	ug/L	95
114) bromobenzene	15.701	156	2651	1.21	ug/L	98
115) 1,1,2,2-tetrachloroethane	15.554	83	3358	1.36	ug/L	94
116) trans-1,4-dichloro-2-b...	15.612	53	625	1.06	ug/L #	59
117) 1,2,3-trichloropropane	15.638	110	735	1.16	ug/L	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185154.D
 Acq On : 22 Nov 2011 9:27 pm
 Operator : OksanaT
 Sample : ic8147-1
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 08:43:29 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

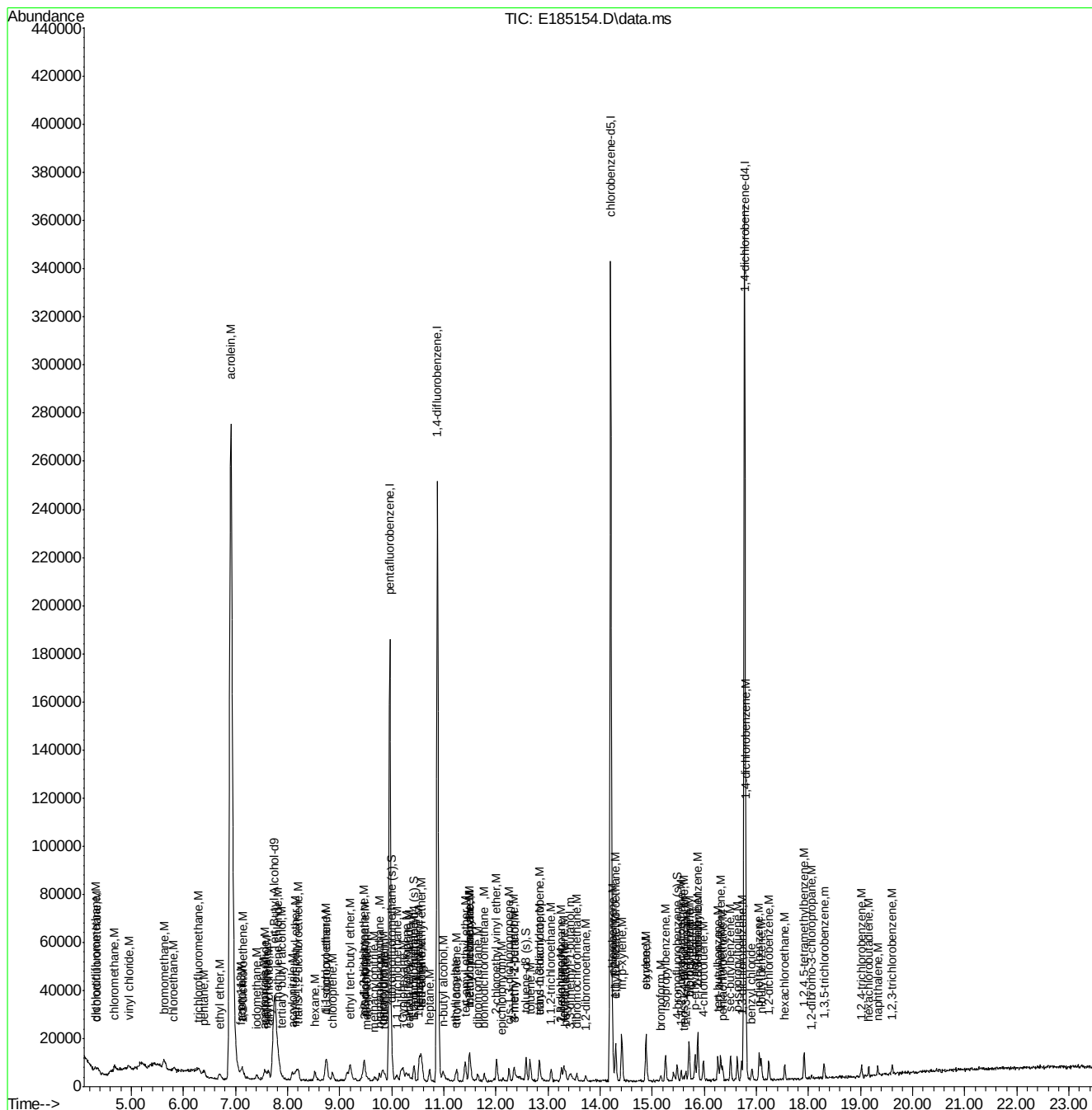
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) n-propylbenzene	15.706	91	10615	1.12	ug/L	97
119) p-ethyltoluene	15.821	105	10066	1.19	ug/L	98
120) 2-chlorotoluene	15.873	126	2251	1.15	ug/L	93
121) 4-chlorotoluene	15.978	91	6917	1.15	ug/L	95
122) 1,3,5-trimethylbenzene	15.873	105	8100	1.20	ug/L	98
123) tert-butylbenzene	16.260	119	6693	1.12	ug/L	92
124) pentachloroethane	16.354	167	1546	1.20	ug/L	92
125) 1,2,4-trimethylbenzene	16.312	105	7747	1.11	ug/L	88
126) sec-butylbenzene	16.506	105	9736	1.12	ug/L	96
127) 1,3-dichlorobenzene	16.715	146	4612	1.12	ug/L	96
128) p-isopropyltoluene	16.631	119	7717	1.10	ug/L	96
129) 1,4-dichlorobenzene	16.799	146	4237	1.02	ug/L	99
130) benzyl chloride	16.914	91	4837	1.13	ug/L	92
131) p-diethylbenzene	17.050	119	5174	1.13	ug/L	98
132) 1,2-dichlorobenzene	17.233	146	4473	1.12	ug/L	94
133) n-butylbenzene	17.091	92	3525	0.93	ug/L	97
134) 1,2,4,5-tetramethylben...	17.912	119	7780	1.14	ug/L	90
135) 1,2-dibromo-3-chloropr...	18.064	75	508	1.27	ug/L #	75
136) 1,3,5-trichlorobenzene	18.299	180	2891	0.95	ug/L	99
137) 1,2,4-trichlorobenzene	19.020	180	2141	0.86	ug/L	92
138) hexachlorobutadiene	19.151	225	1423	1.02	ug/L	99
139) naphthalene	19.324	128	4522	0.86	ug/L	98
141) 1,2,3-trichlorobenzene	19.601	180	1728	0.80	ug/L	93
142) hexachloroethane	17.546	119	1392	1.11	ug/L	99
143) Cyclohexane	10.211	84	2629	1.10	ug/L #	8

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E185154.D
Acq On : 22 Nov 2011 9:27 pm
Operator : OksanaT
Sample : ic8147-1
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 08:43:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



ME8147.M Mon Nov 28 16:56:41 2011 RPT1

Page: 4

Manual Integration Approval Summary

Sample Number: VE8147-IC8147

Method: SW846 8260B

Lab FileID: E185154.D

Analyst approved: 11/29/11 17:45 Ying Li

Injection Time: 11/22/11 21:27

Supervisor approved: 12/02/11 13:41 Kanya Veerawat

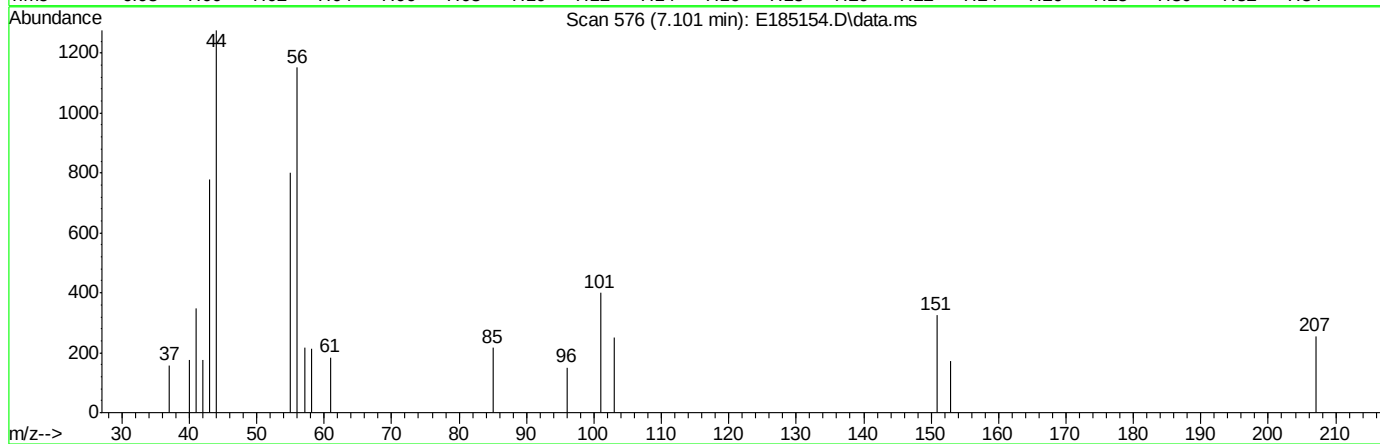
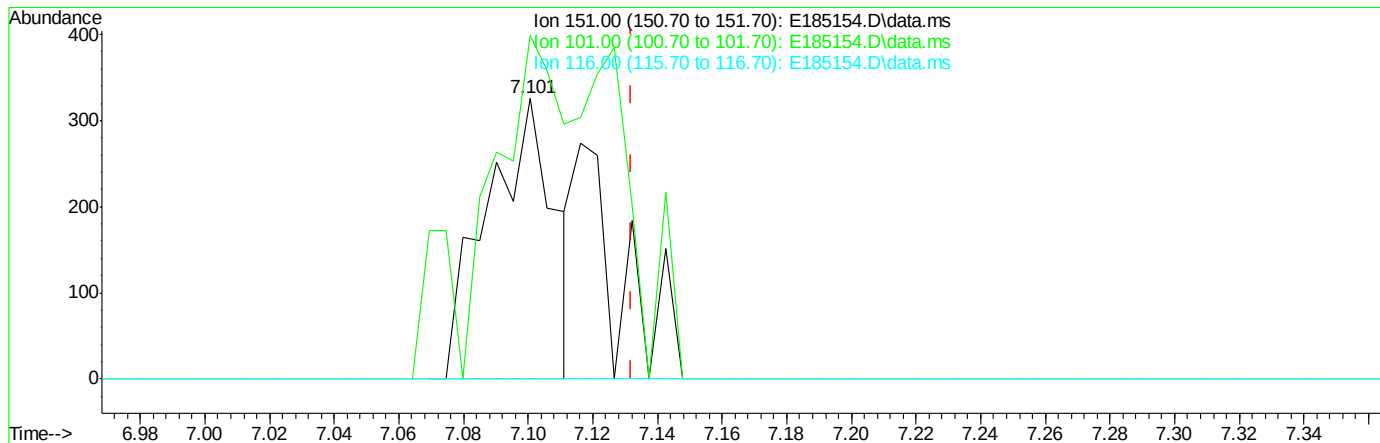
Parameter	CAS	Sig#	R.T. (min.)	Reason
Freon 113	76-13-1		7.10	Split peak

6.7.24.1
6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185154.D
Acq On : 22 Nov 2011 9:27 pm
Operator : OksanaT
Sample : ic8147-1
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 08:16:17 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185154.D\data.ms

(59) freon 113 (M)

7.101min (-0.031) 0.40ug/L

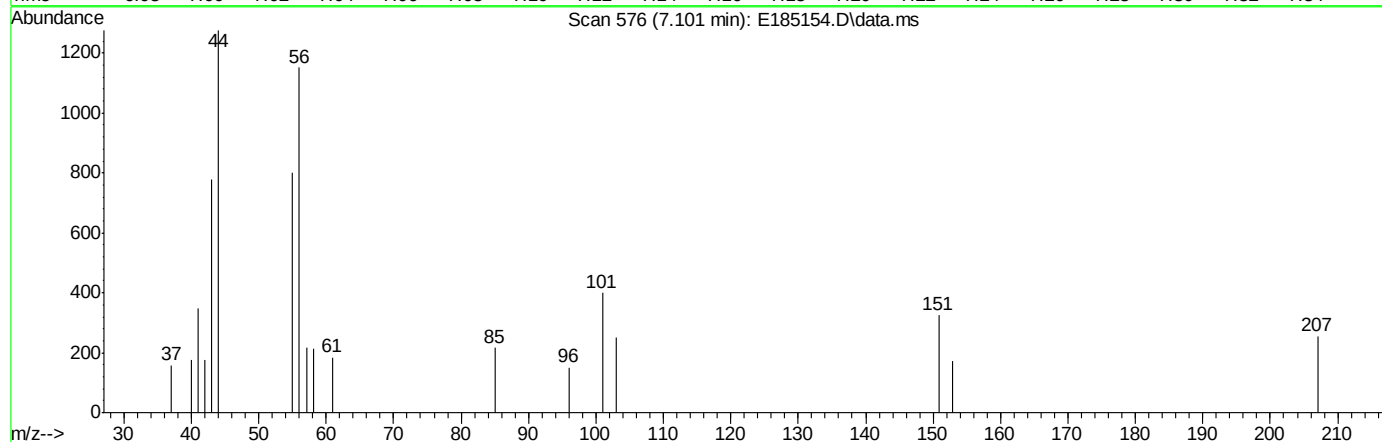
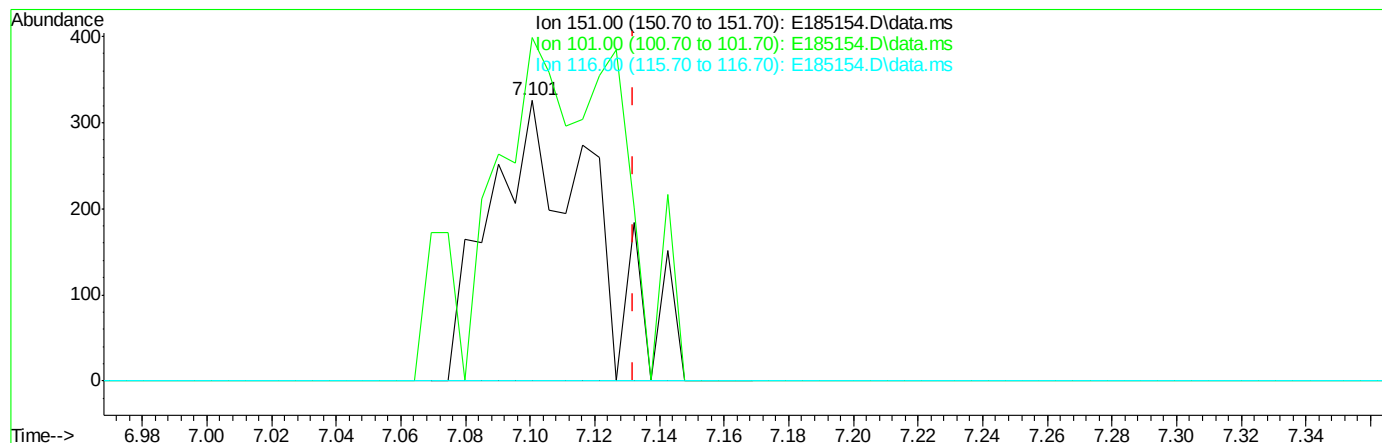
response 470

Ion	Exp%	Act%
151.00	100	100
101.00	132.30	69.63#
116.00	11.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185154.D
Acq On : 22 Nov 2011 9:27 pm
Operator : OksanaT
Sample : ic8147-1
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 23 08:16:17 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185154.D\data.ms

(59) freon 113 (M)

7.101min (-0.031) 0.63ug/L m

response 743

Ion	Exp%	Act%
151.00	100	100
101.00	132.30	122.39
116.00	11.60	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185155.D
 Acq On : 22 Nov 2011 9:57 pm
 Operator : OksanaT
 Sample : ic8147-2
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 08:43:53 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.753	65	114609	500.00	ug/L	0.00
5) pentafluorobenzene	9.959	168	171327	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.879	114	248921	50.00	ug/L	0.00
94) chlorobenzene-d5	14.204	117	228069	50.00	ug/L	-0.01
111) 1,4-dichlorobenzene-d4	16.771	152	118789	50.00	ug/L	-0.02

System Monitoring Compounds

57) dibromofluoromethane (s)	10.001	113	3273	2.21	ug/L	-0.02
Spiked Amount	50.000	Range	77 - 120	Recovery	=	4.42%#
58) 1,2-dichloroethane-d4 (s)	10.430	65	4392	2.51	ug/L	0.00
Spiked Amount	50.000	Range	70 - 127	Recovery	=	5.02%#
86) toluene-d8 (s)	12.573	98	13423	2.16	ug/L	-0.01
Spiked Amount	50.000	Range	79 - 120	Recovery	=	4.32%#
113) 4-bromofluorobenzene (s)	15.475	95	5513	2.25	ug/L	-0.02
Spiked Amount	50.000	Range	76 - 118	Recovery	=	4.50%#

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.858	59	2725	9.46	ug/L	86
11) chlorodifluoromethane	4.355	51	4124	2.24	ug/L	91
12) dichlorodifluoromethane	4.344	85	5322	2.28	ug/L	94
15) chloromethane	4.684	50	8109	2.55	ug/L	93
16) vinyl chloride	4.946	62	5964	2.18	ug/L	99
18) bromomethane	5.636	94	4060	2.42	ug/L	86
19) chloroethane	5.808	64	3204	2.29	ug/L	95
21) trichlorofluoromethane	6.305	101	5210	2.03	ug/L	90
22) pentane	6.394	43	5801	2.04	ug/L	# 82
23) ethyl ether	6.692	74	2644	2.51	ug/L	# 78
27) acrolein	6.906	56	1009049	2474.64	ug/L	100
28) 1,1-dichloroethene	7.141	96	3394	2.21	ug/L	98
30) acetone	7.131	58	1872	10.56	ug/L	# 66
31) allyl chloride	7.633	41	7406	2.23	ug/L	98
32) acetonitrile	7.528	40	2300	15.61	ug/L	# 59
33) iodomethane	7.403	142	6024	2.15	ug/L	95
35) carbon disulfide	7.565	76	11104	1.95	ug/L	92
36) methylene chloride	7.811	84	4393	2.21	ug/L	96
37) methyl acetate	7.596	43	4158	2.69	ug/L	# 82
38) methyl tert butyl ether	8.161	73	13762	2.54	ug/L	92
39) trans-1,2-dichloroethene	8.198	96	3605	2.19	ug/L	93
40) di-isopropyl ether	8.746	45	14814	2.42	ug/L	96
41) ethyl tert-butyl ether	9.201	59	12900	2.20	ug/L	93
43) 1,1-dichloroethane	8.736	63	7016	2.26	ug/L	97
44) chloroprene	8.861	53	4976	2.08	ug/L	98
45) acrylonitrile	8.083	53	10215	12.87	ug/L	97
46) vinyl acetate	8.720	86	525	1.63	ug/L	# 1
47) ethyl acetate	9.437	45	912	3.28	ug/L	# 11
48) 2,2-dichloropropane	9.489	77	5112	2.22	ug/L	90
49) cis-1,2-dichloroethene	9.463	96	4357	2.30	ug/L	88
50) methyl acrylate	9.531	55	3461	1.85	ug/L	# 87
51) propionitrile	9.468	54	7709	25.21	ug/L	94
52) bromochloromethane	9.761	128	2150	2.36	ug/L	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185155.D
 Acq On : 22 Nov 2011 9:57 pm
 Operator : OksanaT
 Sample : ic8147-2
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 08:43:53 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) tetrahydrofuran	9.829	42	2792	3.82	ug/L	76
54) chloroform	9.813	83	6922	2.35	ug/L	96
55) t-butyl formate	9.855	59	3926	2.45	ug/L #	86
56) Iso-octane	10.561	57	11258	1.96	ug/L #	86
59) freon 113	7.100	151	1521m	1.31	ug/L	
60) methacrylonitrile	9.667	41	3190	2.67	ug/L	93
61) 1,1,1-trichloroethane	10.101	97	5137	2.29	ug/L	99
62) tert-amyl methyl ether	10.571	73	12302	2.28	ug/L	91
65) tert amyl alcohol	10.367	55	879	9.78	ug/L	81
66) epichlorohydrin	12.129	57	3101	14.33	ug/L	88
67) n-butyl alcohol	10.979	56	7051	102.85	ug/L	100
68) tert-amyl ethyl ether	11.413	87	5763	2.10	ug/L	93
69) carbon tetrachloride	10.320	117	4116	2.06	ug/L	97
70) 1,1-dichloropropene	10.278	75	4592	2.03	ug/L	92
71) hexane	8.527	57	4912	2.28	ug/L	90
72) benzene	10.529	78	15326	2.11	ug/L	98
73) heptane	10.723	57	2947	2.34	ug/L	91
74) isopropyl acetate	10.419	43	8739	2.18	ug/L	99
75) 1,2-dichloroethane	10.514	62	5207	2.33	ug/L	94
76) ethyl acrylate	11.219	55	7241	2.78	ug/L #	80
77) trichloroethene	11.245	95	3676	2.16	ug/L	94
79) 2-chloroethyl vinyl ether	12.009	63	9305	9.77	ug/L	96
80) methylcyclohexane	11.502	83	4808	1.75	ug/L	94
81) methyl methacrylate	11.486	69	5228	2.86	ug/L	96
82) 1,2-dichloropropane	11.491	63	4496	2.39	ug/L	96
83) dibromomethane	11.648	93	2707	2.50	ug/L	89
84) bromodichloromethane	11.773	83	5679	2.45	ug/L	96
85) cis-1,3-dichloropropene	12.249	75	7051	2.31	ug/L	94
87) 4-methyl-2-pentanone	12.338	58	2143	2.59	ug/L	88
88) toluene	12.657	92	9429	2.14	ug/L	96
89) 3-methyl-1-butanol	12.354	55	5281	49.46	ug/L	93
90) trans-1,3-dichloropropene	12.830	75	6298	2.35	ug/L	97
91) ethyl methacrylate	12.830	69	6703	2.90	ug/L	99
92) 1,1,2-trichloroethane	13.060	83	3445	2.39	ug/L	97
93) 2-hexanone	13.243	58	1922	2.41	ug/L	89
96) tetrachloroethene	13.300	166	3853	2.00	ug/L	94
97) 1,3-dichloropropane	13.253	76	6706	2.40	ug/L	99
98) butyl acetate	13.331	56	3494	2.84	ug/L #	79
99) 3,3-dimethyl-1-butanol	13.420	57	6616	29.79	ug/L #	81
100) dibromochloromethane	13.551	129	4574	2.58	ug/L	95
101) 1,2-dibromoethane	13.724	107	4197	2.57	ug/L	99
103) chlorobenzene	14.236	112	10444	2.22	ug/L	86
104) 1,1,1,2-tetrachloroethane	14.293	131	4071	2.47	ug/L	95
105) ethylbenzene	14.299	91	16988	2.11	ug/L	97
106) m,p-xylene	14.414	106	13233	4.24	ug/L	95
107) o-xylene	14.879	106	6816	2.14	ug/L	93
109) styrene	14.879	104	12295	2.42	ug/L	98
110) bromoform	15.166	173	3475	2.67	ug/L	97
112) isopropylbenzene	15.255	105	17569	2.15	ug/L	97
114) bromobenzene	15.700	156	5132	2.35	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185155.D
 Acq On : 22 Nov 2011 9:57 pm
 Operator : OksanaT
 Sample : ic8147-2
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 08:43:53 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

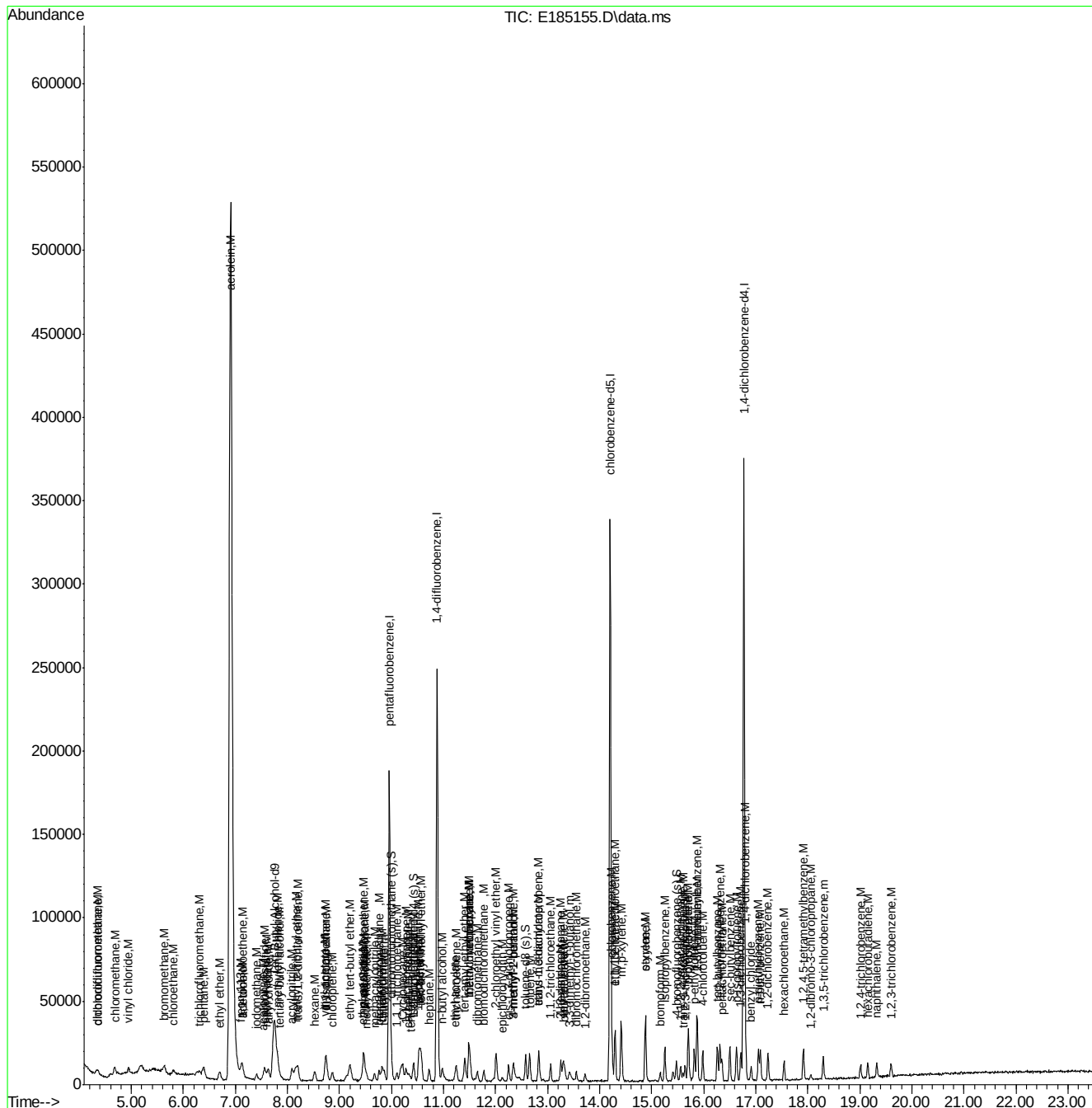
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) 1,1,2,2-tetrachloroethane	15.559	83	6250	2.54	ug/L	97
116) trans-1,4-dichloro-2-b...	15.600	53	1244	2.13	ug/L	97
117) 1,2,3-trichloropropane	15.642	110	1582	2.51	ug/L #	80
118) n-propylbenzene	15.710	91	20077	2.13	ug/L	99
119) p-ethyltoluene	15.820	105	16058	1.90	ug/L	98
120) 2-chlorotoluene	15.872	126	4494m	2.31	ug/L	
121) 4-chlorotoluene	15.982	91	13596	2.28	ug/L	95
122) 1,3,5-trimethylbenzene	15.872	105	14831	2.22	ug/L	96
123) tert-butylbenzene	16.259	119	12618	2.12	ug/L	96
124) pentachloroethane	16.348	167	3220	2.52	ug/L	98
125) 1,2,4-trimethylbenzene	16.311	105	15067	2.18	ug/L	97
126) sec-butylbenzene	16.505	105	18482	2.14	ug/L	98
127) 1,3-dichlorobenzene	16.714	146	8975	2.19	ug/L	95
128) p-isopropyltoluene	16.630	119	15127	2.17	ug/L	97
129) 1,4-dichlorobenzene	16.803	146	8766	2.12	ug/L	91
130) benzyl chloride	16.913	91	8447	1.98	ug/L	99
131) p-diethylbenzene	17.049	119	8263	1.82	ug/L	96
132) 1,2-dichlorobenzene	17.237	146	8860	2.24	ug/L	96
133) n-butylbenzene	17.085	92	7296	1.93	ug/L	94
134) 1,2,4,5-tetramethylben...	17.916	119	12953	1.91	ug/L	99
135) 1,2-dibromo-3-chloropr...	18.058	75	969	2.43	ug/L	87
136) 1,3,5-trichlorobenzene	18.293	180	6605	2.18	ug/L	99
137) 1,2,4-trichlorobenzene	19.014	180	4640	1.88	ug/L	90
138) hexachlorobutadiene	19.155	225	2975	2.15	ug/L	93
139) naphthalene	19.328	128	9834	1.88	ug/L	95
141) 1,2,3-trichlorobenzene	19.600	180	4040	1.88	ug/L	89
142) hexachloroethane	17.545	119	2660	2.14	ug/L	97
143) Cyclohexane	10.205	84	4653	1.95	ug/L #	8

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E185155.D
Acq On : 22 Nov 2011 9:57 pm
Operator : OksanaT
Sample : ic8147-2
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 08:43:53 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



ME8147.M Mon Nov 28 16:56:46 2011 RPT1

Page: 4

Manual Integration Approval Summary

Sample Number: VE8147-IC8147

Method: SW846 8260B

Lab FileID: E185155.D

Analyst approved: 11/29/11 17:45 Ying Li

Injection Time: 11/22/11 21:57

Supervisor approved: 12/02/11 13:41 Kanya Veerawat

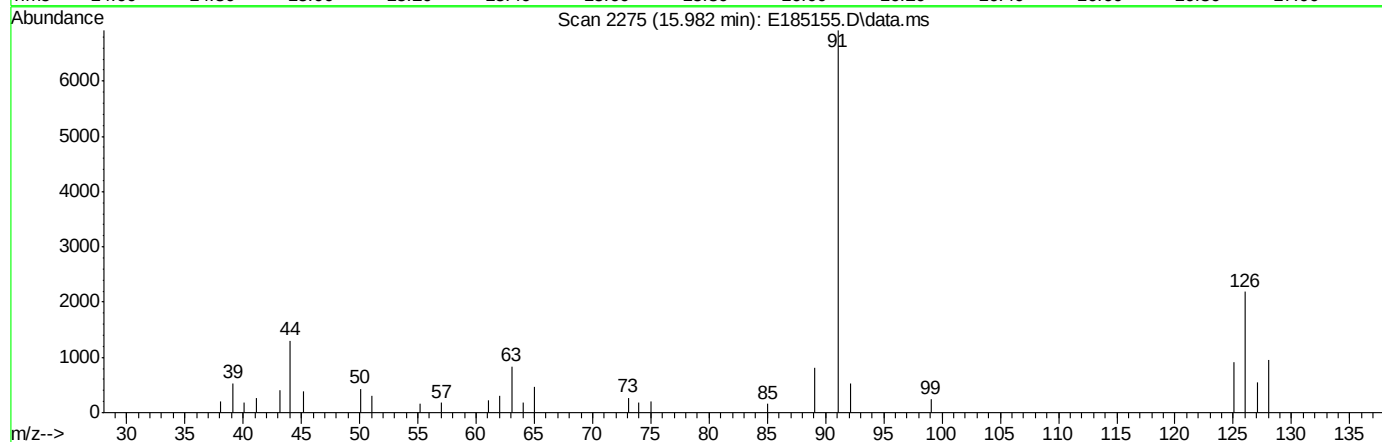
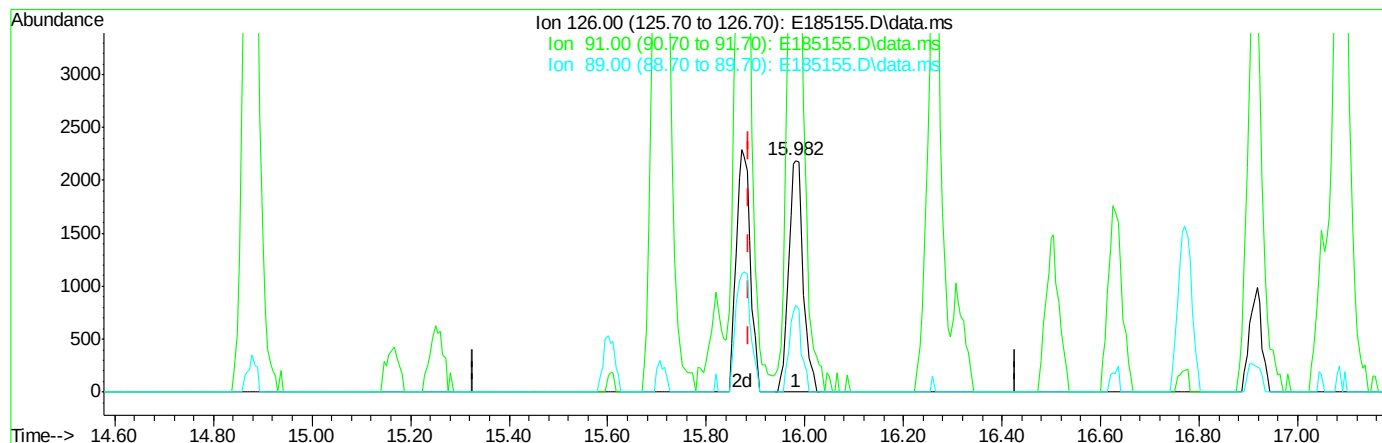
Parameter	CAS	Sig#	R.T. (min.)	Reason
Freon 113	76-13-1		7.10	Split peak
o-Chlorotoluene	95-49-8		15.87	Split peak

6.7.25.1
6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185155.D
Acq On : 22 Nov 2011 9:57 pm
Operator : OksanaT
Sample : ic8147-2
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 22 22:20:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185155.D\data.ms

(120) 2-chlorotoluene (M)

15.982min (+0.094) 2.30ug/L

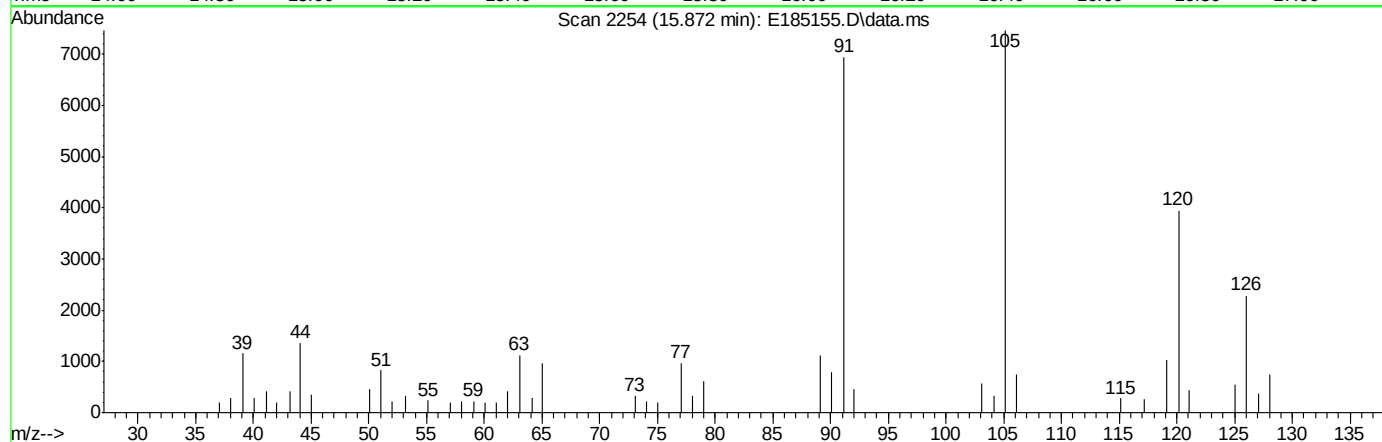
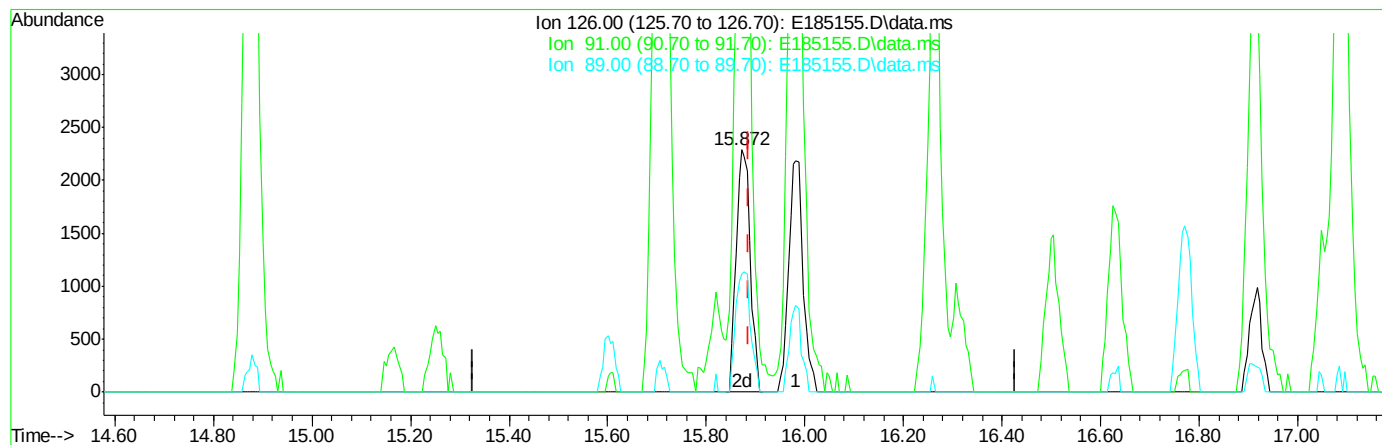
response 4476

Ion	Exp%	Act%
126.00	100	100
91.00	329.40	308.46
89.00	57.00	37.34
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185155.D
Acq On : 22 Nov 2011 9:57 pm
Operator : OksanaT
Sample : ic8147-2
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 22 22:20:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185155.D\data.ms

(120) 2-chlorotoluene (M)

15.872min (-0.015) 2.31ug/L m

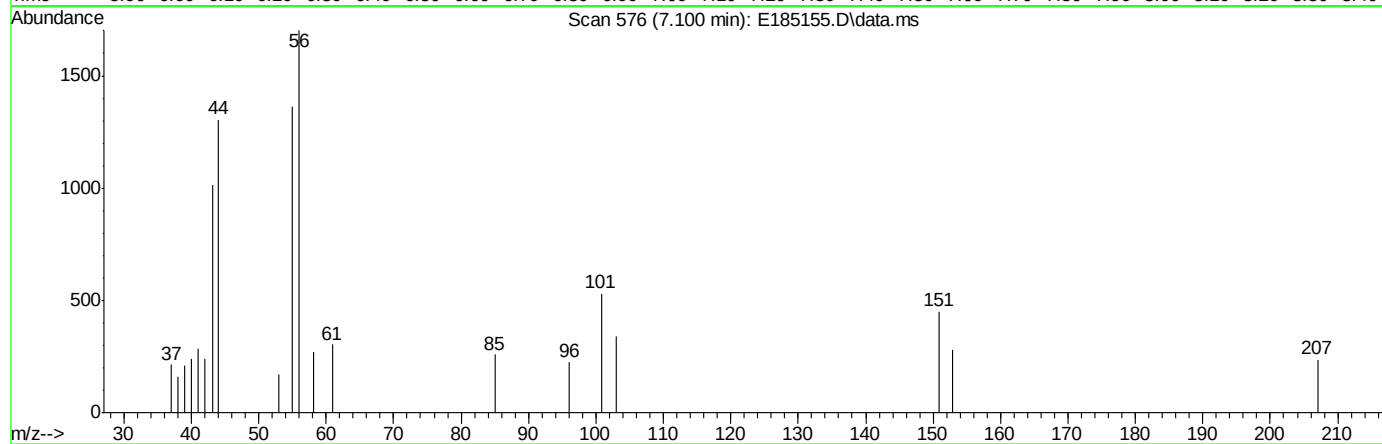
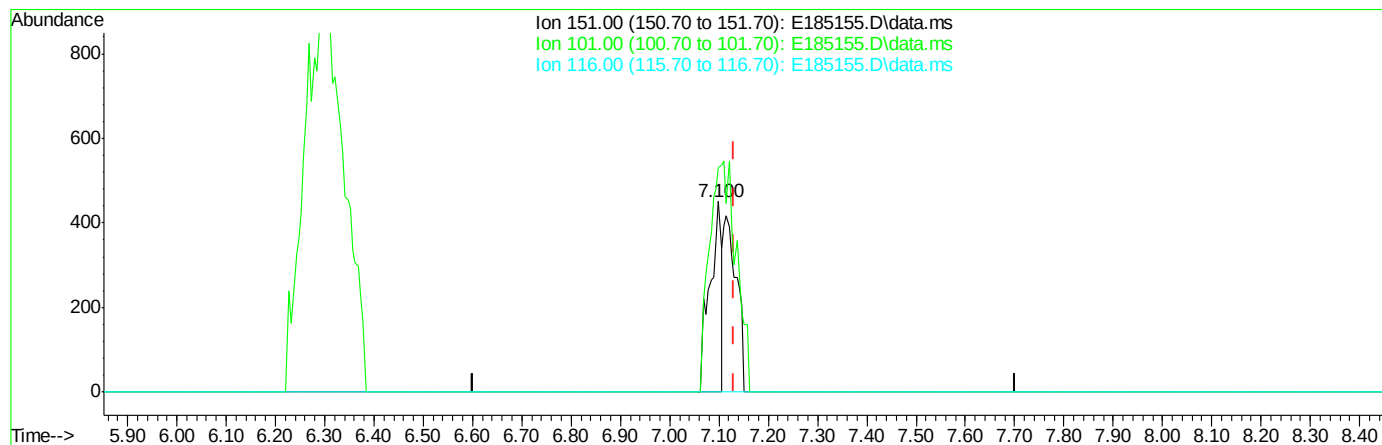
response 4494

Ion	Exp%	Act%
126.00	100	100
91.00	329.40	303.59
89.00	57.00	48.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185155.D
Acq On : 22 Nov 2011 9:57 pm
Operator : OksanaT
Sample : ic8147-2
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 08:18:26 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185155.D\data.ms

(59) freon 113 (M)

7.100min (-0.032) 0.63ug/L

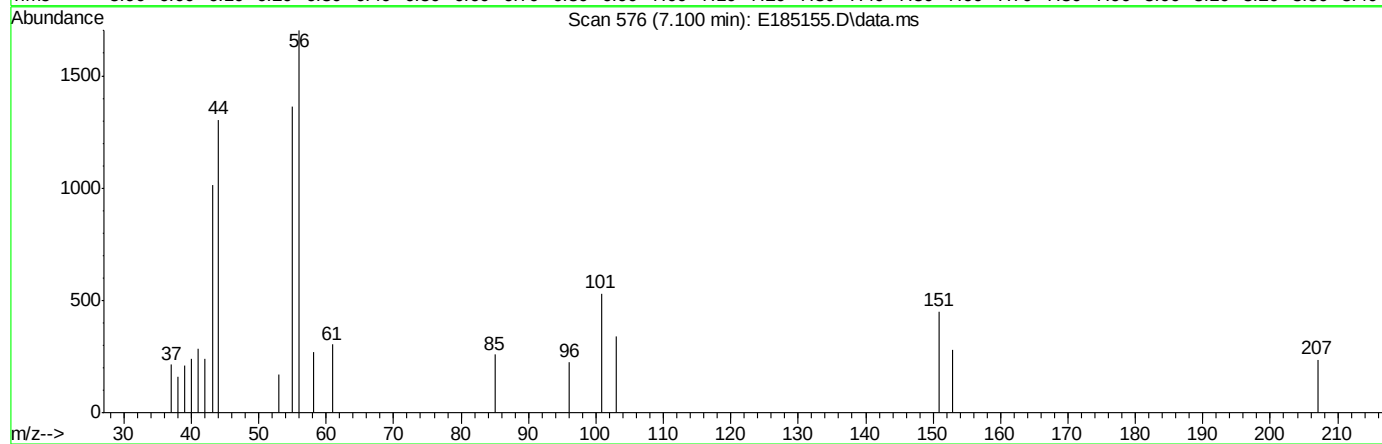
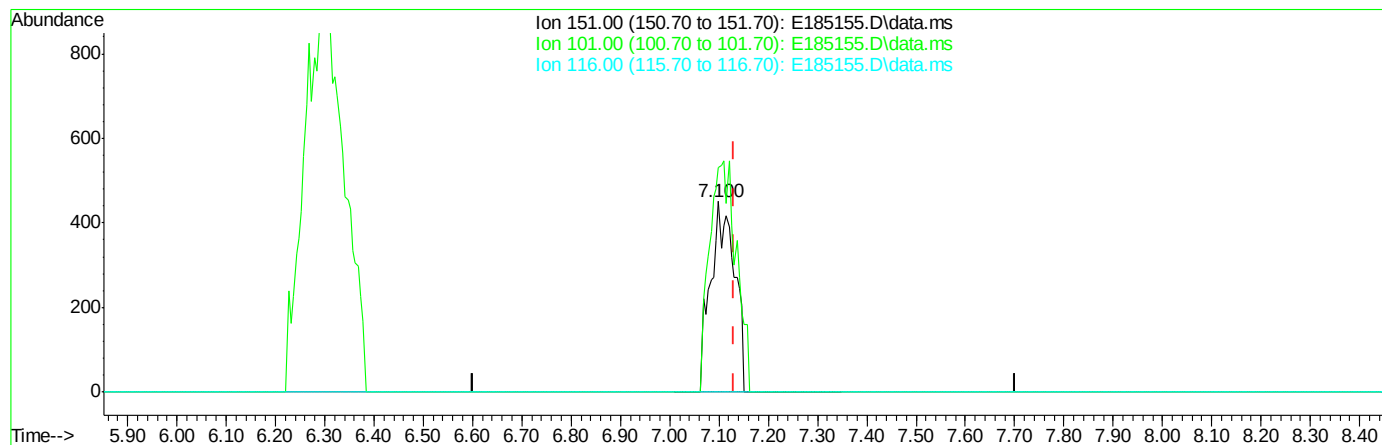
response 732

Ion	Exp%	Act%
151.00	100	100
101.00	132.30	117.52
116.00	11.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185155.D
Acq On : 22 Nov 2011 9:57 pm
Operator : OksanaT
Sample : ic8147-2
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 08:18:26 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185155.D\data.ms

(59) freon 113 (M)

7.100min (-0.032) 1.31ug/L m

response 1521

Ion	Exp%	Act%
151.00	100	100
101.00	132.30	117.52
116.00	11.60	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185156.D
 Acq On : 22 Nov 2011 10:27 pm
 Operator : OksanaT
 Sample : ic8147-5
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 23 08:20:06 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.748	65	117936	500.00	ug/L	-0.01
5) pentafluorobenzene	9.960	168	173887	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.874	114	251093	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.200	117	231185	50.00	ug/L	-0.02
111) 1,4-dichlorobenzene-d4	16.772	152	120994	50.00	ug/L	-0.02

System Monitoring Compounds

57) dibromofluoromethane (s)	10.007	113	8693	5.78	ug/L	-0.01
Spiked Amount	50.000	Range	77 - 120	Recovery	=	11.56%#
58) 1,2-dichloroethane-d4 (s)	10.425	65	10749	6.06	ug/L	-0.01
Spiked Amount	50.000	Range	70 - 127	Recovery	=	12.12%#
86) toluene-d8 (s)	12.574	98	36143	5.77	ug/L	-0.01
Spiked Amount	50.000	Range	79 - 120	Recovery	=	11.54%#
113) 4-bromofluorobenzene (s)	15.475	95	14128	5.66	ug/L	-0.01
Spiked Amount	50.000	Range	76 - 118	Recovery	=	11.32%#

Target Compounds

Qvalue

2) 1,4-dioxane	11.601	88	2601	106.81	ug/L	90
3) tertiary butyl alcohol	7.868	59	8079	27.26	ug/L	99
11) chlorodifluoromethane	4.345	51	11880	6.36	ug/L	94
12) dichlorodifluoromethane	4.345	85	13695	5.77	ug/L	96
15) chloromethane	4.679	50	18832	5.85	ug/L	97
16) vinyl chloride	4.946	62	15257	5.48	ug/L	95
18) bromomethane	5.631	94	9432	5.53	ug/L	98
19) chloroethane	5.814	64	8448	5.94	ug/L	99
21) trichlorofluoromethane	6.316	101	13939	5.35	ug/L	97
22) pentane	6.394	43	20218	7.01	ug/L	98
23) ethyl ether	6.692	74	6707	6.28	ug/L	87
27) acrolein	6.917	56	29177	70.50	ug/L	98
28) 1,1-dichloroethene	7.147	96	8632	5.53	ug/L	96
30) acetone	7.121	58	1105	6.14	ug/L	# 76
31) allyl chloride	7.633	41	18537	5.51	ug/L	94
32) acetonitrile	7.534	40	5114	34.19	ug/L	77
33) iodomethane	7.414	142	16141	5.66	ug/L	98
35) carbon disulfide	7.565	76	31344	5.42	ug/L	93
36) methylene chloride	7.811	84	10969	5.43	ug/L	97
37) methyl acetate	7.597	43	10838	6.91	ug/L	95
38) methyl tert butyl ether	8.166	73	33069	6.01	ug/L	85
39) trans-1,2-dichloroethene	8.203	96	9637	5.77	ug/L	92
40) di-isopropyl ether	8.747	45	39837	6.42	ug/L	91
41) ethyl tert-butyl ether	9.202	59	35518	5.97	ug/L	98
42) 2-butanone	9.411	72	1275	5.81	ug/L	# 64
43) 1,1-dichloroethane	8.736	63	18270	5.81	ug/L	98
44) chloroprene	8.862	53	15285	6.29	ug/L	97
45) acrylonitrile	8.083	53	24974	31.00	ug/L	95
46) vinyl acetate	8.710	86	1903	5.82	ug/L	# 81
47) ethyl acetate	9.432	45	2625	9.30	ug/L	# 75
48) 2,2-dichloropropane	9.479	77	12957	5.56	ug/L	97
49) cis-1,2-dichloroethene	9.463	96	10770	5.61	ug/L	94
50) methyl acrylate	9.520	55	11626	6.13	ug/L	# 93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185156.D
 Acq On : 22 Nov 2011 10:27 pm
 Operator : OksanaT
 Sample : ic8147-5
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 23 08:20:06 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.468	54	19243	62.00	ug/L	83
52) bromochloromethane	9.761	128	5535	6.00	ug/L	96
53) tetrahydrofuran	9.824	42	5943	8.02	ug/L	88
54) chloroform	9.813	83	17067	5.71	ug/L	95
55) t-butyl formate	9.855	59	10051	6.19	ug/L	89
56) Iso-octane	10.566	57	35909	6.16	ug/L	99
59) freon 113	7.110	151	6947	5.88	ug/L	80
60) methacrylonitrile	9.667	41	7581	6.24	ug/L	93
61) 1,1,1-trichloroethane	10.101	97	13255	5.81	ug/L	95
62) tert-amyl methyl ether	10.571	73	33386	6.08	ug/L	98
65) tert amyl alcohol	10.367	55	3117	34.39	ug/L #	60
66) epichlorohydrin	12.124	57	7302	33.46	ug/L	97
67) n-butyl alcohol	10.969	56	19500	281.97	ug/L	97
68) tert-amyl ethyl ether	11.408	87	17221	6.23	ug/L	98
69) carbon tetrachloride	10.320	117	11142	5.53	ug/L	98
70) 1,1-dichloropropene	10.273	75	12227	5.37	ug/L	95
71) hexane	8.522	57	14503	6.69	ug/L	98
72) benzene	10.535	78	38196	5.22	ug/L	99
73) heptane	10.723	57	8771	6.90	ug/L	95
74) isopropyl acetate	10.420	43	25505	6.32	ug/L	98
75) 1,2-dichloroethane	10.514	62	12839	5.70	ug/L	95
76) ethyl acrylate	11.214	55	17956	6.83	ug/L	95
77) trichloroethene	11.246	95	9746	5.67	ug/L	96
79) 2-chloroethyl vinyl ether	12.009	63	26511	27.59	ug/L	97
80) methylcyclohexane	11.502	83	15828	5.70	ug/L	98
81) methyl methacrylate	11.486	69	12837	6.95	ug/L	89
82) 1,2-dichloropropane	11.486	63	11264	5.93	ug/L	99
83) dibromomethane	11.643	93	6463	5.93	ug/L	92
84) bromodichloromethane	11.774	83	13838	5.91	ug/L	97
85) cis-1,3-dichloropropene	12.249	75	17915	5.81	ug/L	99
87) 4-methyl-2-pentanone	12.333	58	5461	6.54	ug/L #	85
88) toluene	12.652	92	24180	5.43	ug/L	99
89) 3-methyl-1-butanol	12.344	55	13205	122.61	ug/L	96
90) trans-1,3-dichloropropene	12.830	75	16291	6.02	ug/L	94
91) ethyl methacrylate	12.825	69	16145	6.91	ug/L	96
92) 1,1,2-trichloroethane	13.055	83	8582	5.89	ug/L	94
93) 2-hexanone	13.243	58	5017	6.23	ug/L	92
96) tetrachloroethene	13.300	166	10623	5.45	ug/L	98
97) 1,3-dichloropropane	13.258	76	16696	5.90	ug/L	100
98) butyl acetate	13.326	56	8930	7.16	ug/L	93
99) 3,3-dimethyl-1-butanol	13.431	57	13489	59.92	ug/L	93
100) dibromochloromethane	13.551	129	11306	6.29	ug/L	97
101) 1,2-dibromoethane	13.719	107	10209	6.16	ug/L	99
103) chlorobenzene	14.236	112	26184	5.49	ug/L	96
104) 1,1,1,2-tetrachloroethane	14.294	131	10032	6.01	ug/L	96
105) ethylbenzene	14.299	91	43642	5.34	ug/L	99
106) m,p-xylene	14.414	106	34493	10.91	ug/L	98
107) o-xylene	14.879	106	17947	5.56	ug/L	97
109) styrene	14.879	104	30993	6.02	ug/L	97
110) bromoform	15.167	173	8909	6.76	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185156.D
 Acq On : 22 Nov 2011 10:27 pm
 Operator : OksanaT
 Sample : ic8147-5
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 23 08:20:06 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

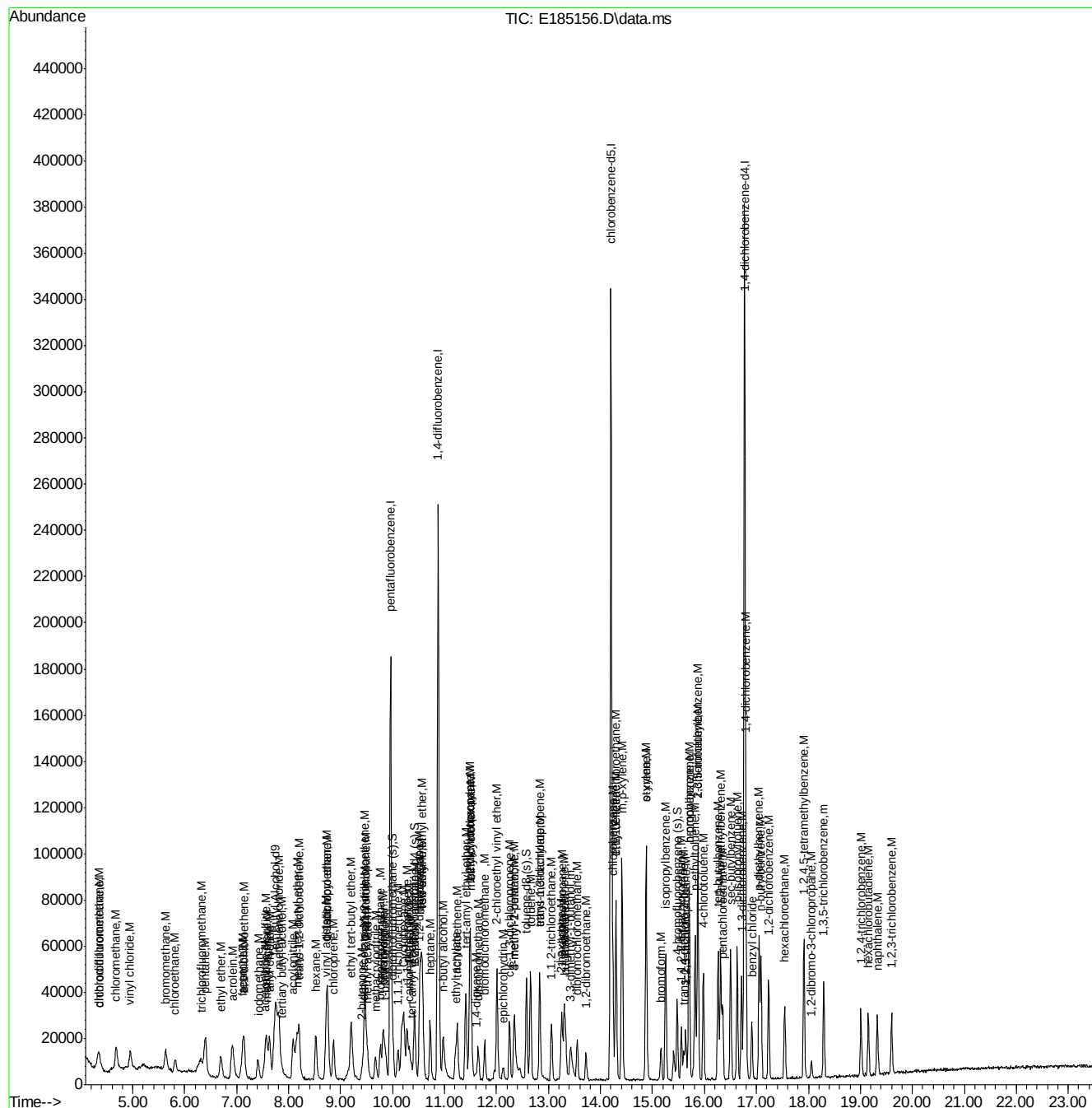
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) isopropylbenzene	15.256	105	45459	5.47	ug/L	99
114) bromobenzene	15.700	156	13033	5.86	ug/L	97
115) 1,1,2,2-tetrachloroethane	15.559	83	15137	6.05	ug/L	92
116) trans-1,4-dichloro-2-b...	15.601	53	3335	5.59	ug/L	90
117) 1,2,3-trichloropropane	15.637	110	3921	6.11	ug/L	97
118) n-propylbenzene	15.705	91	52568	5.48	ug/L	96
119) p-ethyltoluene	15.820	105	50720	5.91	ug/L	97
120) 2-chlorotoluene	15.872	126	11118	5.60	ug/L	97
121) 4-chlorotoluene	15.977	91	34205	5.62	ug/L	99
122) 1,3,5-trimethylbenzene	15.872	105	38390	5.64	ug/L	99
123) tert-butylbenzene	16.265	119	34151	5.63	ug/L	98
124) pentachloroethane	16.353	167	8100	6.23	ug/L	98
125) 1,2,4-trimethylbenzene	16.312	105	39229	5.56	ug/L	99
126) sec-butylbenzene	16.505	105	49392	5.62	ug/L	99
127) 1,3-dichlorobenzene	16.714	146	23379	5.61	ug/L	98
128) p-isopropyltoluene	16.631	119	41270	5.82	ug/L	98
129) 1,4-dichlorobenzene	16.798	146	22337	5.29	ug/L	97
130) benzyl chloride	16.913	91	23251	5.36	ug/L	99
131) p-diethylbenzene	17.054	119	26613	5.75	ug/L	96
132) 1,2-dichlorobenzene	17.237	146	22753	5.64	ug/L	99
133) n-butylbenzene	17.091	92	20393	5.31	ug/L	97
134) 1,2,4,5-tetramethylben...	17.911	119	40133	5.82	ug/L	98
135) 1,2-dibromo-3-chloropr...	18.058	75	2485	6.12	ug/L	97
136) 1,3,5-trichlorobenzene	18.293	180	17539	5.68	ug/L	98
137) 1,2,4-trichlorobenzene	19.009	180	13357	5.31	ug/L	96
138) hexachlorobutadiene	19.150	225	8224	5.83	ug/L	91
139) naphthalene	19.323	128	27433	5.16	ug/L	98
141) 1,2,3-trichlorobenzene	19.600	180	11543	5.26	ug/L	97
142) hexachloroethane	17.545	119	7721	6.11	ug/L	98
143) Cyclohexane	10.211	84	13704	5.64	ug/L #	8

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E185156.D
Acq On : 22 Nov 2011 10:27 pm
Operator : oksanaT
Sample : ic8147-5
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 23 08:20:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



ME8147.M Mon Nov 28 16:57:24 2011 RPT1

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185157.D
 Acq On : 22 Nov 2011 10:57 pm
 Operator : OksanaT
 Sample : ic8147-10
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 23 08:21:26 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.747	65	118378	500.00	ug/L	-0.01
5) pentafluorobenzene	9.959	168	171985	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.879	114	247050	50.00	ug/L	0.00
94) chlorobenzene-d5	14.199	117	228829	50.00	ug/L	-0.02
111) 1,4-dichlorobenzene-d4	16.771	152	119620	50.00	ug/L	-0.02

System Monitoring Compounds

57) dibromofluoromethane (s)	10.006	113	19431	13.05	ug/L	-0.01
Spiked Amount	50.000	Range	77 - 120	Recovery	=	26.10%#
58) 1,2-dichloroethane-d4 (s)	10.424	65	23029	13.13	ug/L	-0.01
Spiked Amount	50.000	Range	70 - 127	Recovery	=	26.26%#
86) toluene-d8 (s)	12.573	98	80241	13.03	ug/L	-0.01
Spiked Amount	50.000	Range	79 - 120	Recovery	=	26.06%#
113) 4-bromofluorobenzene (s)	15.474	95	30016	12.17	ug/L	-0.02
Spiked Amount	50.000	Range	76 - 118	Recovery	=	24.34%#

Target Compounds

						Qvalue
2) 1,4-dioxane	11.600	88	5520	225.84	ug/L	# 78
3) tertiary butyl alcohol	7.862	59	16235	54.57	ug/L	89
11) chlorodifluoromethane	4.349	51	25958	14.04	ug/L	99
12) dichlorodifluoromethane	4.339	85	31133	13.26	ug/L	98
15) chloromethane	4.684	50	40858	12.82	ug/L	100
16) vinyl chloride	4.956	62	34854	12.67	ug/L	99
18) bromomethane	5.635	94	19222	11.40	ug/L	96
19) chloroethane	5.813	64	18229	12.96	ug/L	95
21) trichlorofluoromethane	6.304	101	32216	12.50	ug/L	99
22) pentane	6.399	43	42912	15.05	ug/L	94
23) ethyl ether	6.697	74	14430	13.67	ug/L	93
27) acrolein	6.916	56	56290	137.52	ug/L	99
28) 1,1-dichloroethene	7.141	96	21009	13.60	ug/L	96
30) acetone	7.141	58	2755	15.47	ug/L	# 70
31) allyl chloride	7.638	41	46484	13.97	ug/L	95
32) acetonitrile	7.533	40	15880	107.33	ug/L	88
33) iodomethane	7.408	142	38457	13.64	ug/L	99
35) carbon disulfide	7.564	76	77236	13.50	ug/L	98
36) methylene chloride	7.815	84	23933	11.99	ug/L	95
37) methyl acetate	7.596	43	21289	13.73	ug/L	98
38) methyl tert butyl ether	8.160	73	68561	12.60	ug/L	96
39) trans-1,2-dichloroethene	8.202	96	22784	13.79	ug/L	98
40) di-isopropyl ether	8.746	45	81376	13.25	ug/L	94
41) ethyl tert-butyl ether	9.201	59	74369	12.65	ug/L	96
42) 2-butanone	9.399	72	2949	13.58	ug/L	# 1
43) 1,1-dichloroethane	8.735	63	41895	13.46	ug/L	98
44) chloroprene	8.861	53	33984	14.15	ug/L	99
45) acrylonitrile	8.082	53	51142	64.18	ug/L	98
46) vinyl acetate	8.704	86	3967	12.27	ug/L	92
47) ethyl acetate	9.426	45	4556	16.32	ug/L	93
48) 2,2-dichloropropane	9.483	77	30211	13.10	ug/L	97
49) cis-1,2-dichloroethene	9.462	96	24069	12.67	ug/L	95
50) methyl acrylate	9.509	55	24475	13.04	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185157.D
 Acq On : 22 Nov 2011 10:57 pm
 Operator : OksanaT
 Sample : ic8147-10
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 23 08:21:26 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.462	54	39971	130.21	ug/L	78
52) bromochloromethane	9.765	128	12082	13.23	ug/L	88
53) tetrahydrofuran	9.823	42	11034	15.05	ug/L	94
54) chloroform	9.812	83	38165	12.91	ug/L	97
55) t-butyl formate	9.859	59	21334	13.28	ug/L	94
56) Iso-octane	10.565	57	76201	13.22	ug/L	100
59) freon 113	7.120	151	15487	13.26	ug/L	83
60) methacrylonitrile	9.666	41	16763	13.95	ug/L	97
61) 1,1,1-trichloroethane	10.105	97	32114	14.24	ug/L	97
62) tert-amyl methyl ether	10.570	73	66268	12.21	ug/L	99
65) tert amyl alcohol	10.356	55	5127	57.49	ug/L	84
66) epichlorohydrin	12.123	57	13494	62.84	ug/L	96
67) n-butyl alcohol	10.968	56	41243	606.13	ug/L	99
68) tert-amyl ethyl ether	11.407	87	34153	12.56	ug/L	100
69) carbon tetrachloride	10.325	117	28164	14.20	ug/L	99
70) 1,1-dichloropropene	10.278	75	30814	13.75	ug/L	99
71) hexane	8.521	57	32091	15.04	ug/L	97
72) benzene	10.529	78	88317	12.28	ug/L	100
73) heptane	10.722	57	15341	12.27	ug/L	93
74) isopropyl acetate	10.419	43	50636	12.75	ug/L	99
75) 1,2-dichloroethane	10.513	62	28560	12.88	ug/L	98
76) ethyl acrylate	11.208	55	33561	12.97	ug/L	96
77) trichloroethene	11.245	95	22064	13.05	ug/L	100
79) 2-chloroethyl vinyl ether	12.003	63	55055	58.24	ug/L	97
80) methylcyclohexane	11.501	83	35887	13.14	ug/L	99
81) methyl methacrylate	11.485	69	26086	14.36	ug/L	96
82) 1,2-dichloropropane	11.485	63	24316	13.01	ug/L	99
83) dibromomethane	11.647	93	13981	13.03	ug/L	98
84) bromodichloromethane	11.773	83	30113	13.07	ug/L	98
85) cis-1,3-dichloropropene	12.249	75	38959	12.85	ug/L	98
87) 4-methyl-2-pentanone	12.327	58	10994	13.38	ug/L	96
88) toluene	12.651	92	55602	12.70	ug/L	100
89) 3-methyl-1-butanol	12.343	55	26200	247.24	ug/L	93
90) trans-1,3-dichloropropene	12.829	75	35262	13.24	ug/L	94
91) ethyl methacrylate	12.824	69	32904	14.32	ug/L	97
92) 1,1,2-trichloroethane	13.054	83	17842	12.45	ug/L	93
93) 2-hexanone	13.237	58	10149	12.81	ug/L	93
96) tetrachloroethene	13.299	166	25882	13.41	ug/L	100
97) 1,3-dichloropropane	13.252	76	35974	12.84	ug/L	99
98) butyl acetate	13.326	56	17965	14.54	ug/L	93
99) 3,3-dimethyl-1-butanol	13.425	57	27132	121.76	ug/L	95
100) dibromochloromethane	13.550	129	24233	13.61	ug/L	94
101) 1,2-dibromoethane	13.718	107	22145	13.50	ug/L	99
103) chlorobenzene	14.235	112	58846	12.47	ug/L	96
104) 1,1,1,2-tetrachloroethane	14.293	131	22168	13.41	ug/L	98
105) ethylbenzene	14.298	91	101747	12.58	ug/L	98
106) m,p-xylene	14.413	106	79965	25.56	ug/L	98
107) o-xylene	14.873	106	40587	12.70	ug/L	97
109) styrene	14.878	104	69300	13.61	ug/L	98
110) bromoform	15.166	173	18800	14.41	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185157.D
 Acq On : 22 Nov 2011 10:57 pm
 Operator : OksanaT
 Sample : ic8147-10
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 23 08:21:26 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

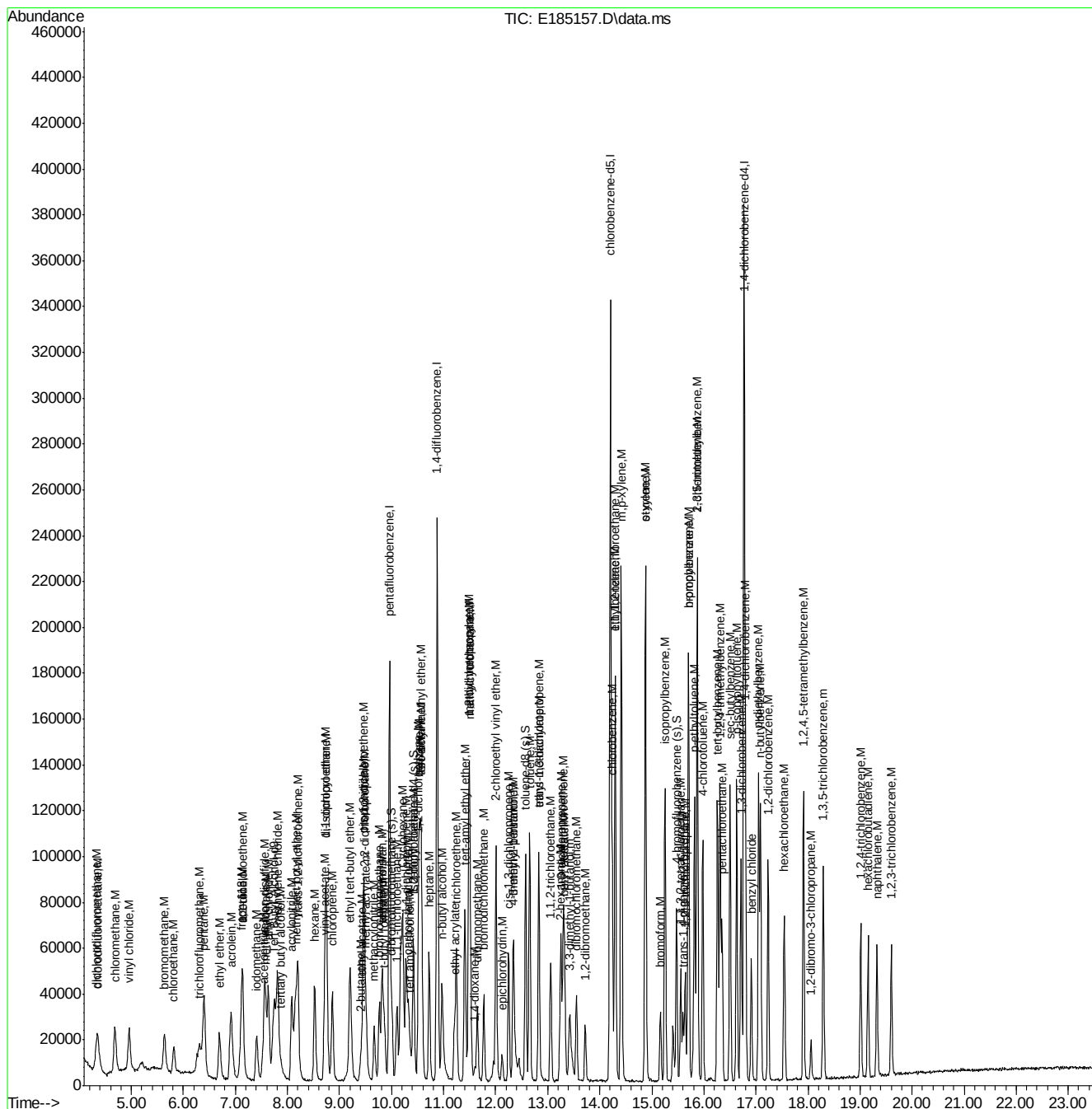
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) isopropylbenzene	15.255	105	105764	12.86	ug/L	98
114) bromobenzene	15.699	156	27756	12.62	ug/L	98
115) 1,1,2,2-tetrachloroethane	15.558	83	31345	12.67	ug/L	94
116) trans-1,4-dichloro-2-b...	15.600	53	6944	11.78	ug/L	89
117) 1,2,3-trichloropropane	15.642	110	7935	12.50	ug/L	90
118) n-propylbenzene	15.704	91	119989	12.64	ug/L	99
119) p-ethyltoluene	15.819	105	103500	12.19	ug/L	99
120) 2-chlorotoluene	15.872	126	24521	12.50	ug/L	94
121) 4-chlorotoluene	15.976	91	73555	12.23	ug/L	98
122) 1,3,5-trimethylbenzene	15.872	105	84049	12.49	ug/L	98
123) tert-butylbenzene	16.264	119	78917	13.16	ug/L	99
124) pentachloroethane	16.353	167	17515	13.63	ug/L	99
125) 1,2,4-trimethylbenzene	16.311	105	87106	12.50	ug/L	100
126) sec-butylbenzene	16.499	105	112345	12.93	ug/L	98
127) 1,3-dichlorobenzene	16.713	146	49984	12.13	ug/L	98
128) p-isopropyltoluene	16.630	119	93212	13.29	ug/L	100
129) 1,4-dichlorobenzene	16.802	146	49225	11.80	ug/L	97
130) benzyl chloride	16.912	91	47619	11.11	ug/L	99
131) p-diethylbenzene	17.048	119	55364	12.09	ug/L	99
132) 1,2-dichlorobenzene	17.236	146	49250	12.35	ug/L	98
133) n-butylbenzene	17.085	92	46506	12.25	ug/L	96
134) 1,2,4,5-tetramethylben...	17.911	119	82543	12.10	ug/L	98
135) 1,2-dibromo-3-chloropr...	18.057	75	5286	13.18	ug/L	92
136) 1,3,5-trichlorobenzene	18.297	180	37842	12.39	ug/L	98
137) 1,2,4-trichlorobenzene	19.014	180	29648	11.92	ug/L	95
138) hexachlorobutadiene	19.155	225	18521	13.28	ug/L	93
139) naphthalene	19.327	128	60474	11.51	ug/L	99
141) 1,2,3-trichlorobenzene	19.599	180	24193	11.15	ug/L	98
142) hexachloroethane	17.545	119	16948	13.56	ug/L	97
143) Cyclohexane	10.210	84	33535	13.97	ug/L #	8

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E185157.D
Acq On : 22 Nov 2011 10:57 pm
Operator : oksanaT
Sample : ic8147-10
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 23 08:21:26 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



ME8147.M Mon Nov 28 16:57:35 2011 RPT1

Page: 4

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185158.D
 Acq On : 22 Nov 2011 11:27 pm
 Operator : OksanaT
 Sample : ic8147-20
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 23 08:23:10 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.753	65	111706	500.00	ug/L	0.00
5) pentafluorobenzene	9.960	168	170292	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.875	114	245064	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.200	117	230852	50.00	ug/L	-0.02
111) 1,4-dichlorobenzene-d4	16.772	152	119158	50.00	ug/L	-0.02

System Monitoring Compounds

57) dibromofluoromethane (s)	10.007	113	37487	25.43	ug/L	-0.01
Spiked Amount	50.000	Range	77 - 120	Recovery	=	50.86%#
58) 1,2-dichloroethane-d4 (s)	10.425	65	44597	25.67	ug/L	-0.01
Spiked Amount	50.000	Range	70 - 127	Recovery	=	51.34%#
86) toluene-d8 (s)	12.574	98	151401	24.78	ug/L	-0.01
Spiked Amount	50.000	Range	79 - 120	Recovery	=	49.56%#
113) 4-bromofluorobenzene (s)	15.475	95	58370	23.75	ug/L	-0.01
Spiked Amount	50.000	Range	76 - 118	Recovery	=	47.50%#

Target Compounds

						Qvalue
2) 1,4-dioxane	11.596	88	11188	485.07	ug/L	# 84
3) tertiary butyl alcohol	7.863	59	32122	114.41	ug/L	96
11) chlorodifluoromethane	4.345	51	50738	27.71	ug/L	96
12) dichlorodifluoromethane	4.334	85	61035	26.25	ug/L	97
15) chloromethane	4.690	50	78588	24.91	ug/L	99
16) vinyl chloride	4.967	62	66358	24.36	ug/L	97
18) bromomethane	5.636	94	37635	22.53	ug/L	98
19) chloroethane	5.814	64	34325	24.64	ug/L	97
21) trichlorofluoromethane	6.300	101	62442	24.46	ug/L	98
22) pentane	6.394	43	86523	30.64	ug/L	99
23) ethyl ether	6.692	74	27869	26.66	ug/L	98
27) acrolein	6.912	56	112020	276.39	ug/L	98
28) 1,1-dichloroethene	7.142	96	39601	25.89	ug/L	99
30) acetone	7.110	58	5219m	29.61	ug/L	
31) allyl chloride	7.633	41	85279	25.88	ug/L	97
32) acetonitrile	7.534	40	31250	213.32	ug/L	98
33) iodomethane	7.408	142	73990	26.51	ug/L	98
35) carbon disulfide	7.560	76	144276	25.47	ug/L	96
36) methylene chloride	7.811	84	45494	23.01	ug/L	95
37) methyl acetate	7.591	43	42930	27.96	ug/L	98
38) methyl tert butyl ether	8.156	73	133005	24.69	ug/L	99
39) trans-1,2-dichloroethene	8.203	96	41743	25.51	ug/L	94
40) di-isopropyl ether	8.736	45	156509	25.74	ug/L	89
41) ethyl tert-butyl ether	9.202	59	143772	24.69	ug/L	99
42) 2-butanone	9.400	72	6186	28.76	ug/L	# 1
43) 1,1-dichloroethane	8.742	63	79699	25.87	ug/L	99
44) chloroprene	8.862	53	65065	27.36	ug/L	96
45) acrylonitrile	8.078	53	101398	128.50	ug/L	99
46) vinyl acetate	8.710	86	8373	26.15	ug/L	85
47) ethyl acetate	9.426	45	8275	29.93	ug/L	94
48) 2,2-dichloropropane	9.484	77	54276	23.77	ug/L	99
49) cis-1,2-dichloroethene	9.463	96	45417	24.15	ug/L	95
50) methyl acrylate	9.510	55	44659	24.03	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185158.D
 Acq On : 22 Nov 2011 11:27 pm
 Operator : OksanaT
 Sample : ic8147-20
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 23 08:23:10 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.463	54	75467	248.29	ug/L	87
52) bromochloromethane	9.766	128	22985	25.42	ug/L	95
53) tetrahydrofuran	9.824	42	19973	27.52	ug/L	97
54) chloroform	9.813	83	72558	24.79	ug/L	96
55) t-butyl formate	9.860	59	42592	26.79	ug/L	94
56) Iso-octane	10.566	57	142687	25.00	ug/L	100
59) freon 113	7.110	151	29514	25.52	ug/L	83
60) methacrylonitrile	9.667	41	32272	27.13	ug/L	99
61) 1,1,1-trichloroethane	10.101	97	61156	27.38	ug/L	98
62) tert-amyl methyl ether	10.571	73	128775	23.96	ug/L	98
65) tert amyl alcohol	10.362	55	9642	109.00	ug/L	87
66) epichlorohydrin	12.124	57	25593	120.15	ug/L	98
67) n-butyl alcohol	10.963	56	76563	1134.34	ug/L	99
68) tert-amyl ethyl ether	11.408	87	64505	23.92	ug/L	99
69) carbon tetrachloride	10.320	117	52984	26.93	ug/L	99
70) 1,1-dichloropropene	10.279	75	56667	25.48	ug/L	97
71) hexane	8.522	57	59777	28.24	ug/L	98
72) benzene	10.530	78	165849	23.24	ug/L	99
73) heptane	10.723	57	31871	25.70	ug/L	95
74) isopropyl acetate	10.415	43	100083	25.40	ug/L	98
75) 1,2-dichloroethane	10.514	62	55138	25.06	ug/L	98
76) ethyl acrylate	11.204	55	68595	26.73	ug/L	98
77) trichloroethene	11.246	95	41926	24.99	ug/L	97
79) 2-chloroethyl vinyl ether	12.004	63	108355	115.56	ug/L	98
80) methylcyclohexane	11.502	83	66373	24.50	ug/L	100
81) methyl methacrylate	11.481	69	47400	26.30	ug/L	93
82) 1,2-dichloropropane	11.486	63	46390	25.03	ug/L	99
83) dibromomethane	11.643	93	26869	25.25	ug/L	97
84) bromodichloromethane	11.769	83	57959	25.36	ug/L	97
85) cis-1,3-dichloropropene	12.250	75	76638	25.48	ug/L	97
87) 4-methyl-2-pentanone	12.328	58	22035	27.03	ug/L	92
88) toluene	12.652	92	105699	24.33	ug/L	99
89) 3-methyl-1-butanol	12.338	55	53157	505.69	ug/L	99
90) trans-1,3-dichloropropene	12.825	75	68069	25.77	ug/L	99
91) ethyl methacrylate	12.825	69	62364	27.36	ug/L	99
92) 1,1,2-trichloroethane	13.055	83	35140	24.73	ug/L	94
93) 2-hexanone	13.232	58	20080	25.56	ug/L	94
96) tetrachloroethene	13.300	166	48423	24.87	ug/L	97
97) 1,3-dichloropropane	13.253	76	70231	24.84	ug/L	98
98) butyl acetate	13.321	56	34487	27.67	ug/L	90
99) 3,3-dimethyl-1-butanol	13.421	57	54599	242.88	ug/L	98
100) dibromochloromethane	13.551	129	48385	26.94	ug/L	99
101) 1,2-dibromoethane	13.719	107	42871	25.91	ug/L	97
103) chlorobenzene	14.236	112	114951	24.15	ug/L	98
104) 1,1,1,2-tetrachloroethane	14.294	131	42271	25.35	ug/L	99
105) ethylbenzene	14.294	91	191526	23.48	ug/L	98
106) m,p-xylene	14.414	106	152575	48.35	ug/L	98
107) o-xylene	14.874	106	77890	24.15	ug/L	96
109) styrene	14.879	104	132694	25.83	ug/L	99
110) bromoform	15.162	173	36996	28.11	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185158.D
 Acq On : 22 Nov 2011 11:27 pm
 Operator : OksanaT
 Sample : ic8147-20
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 23 08:23:10 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

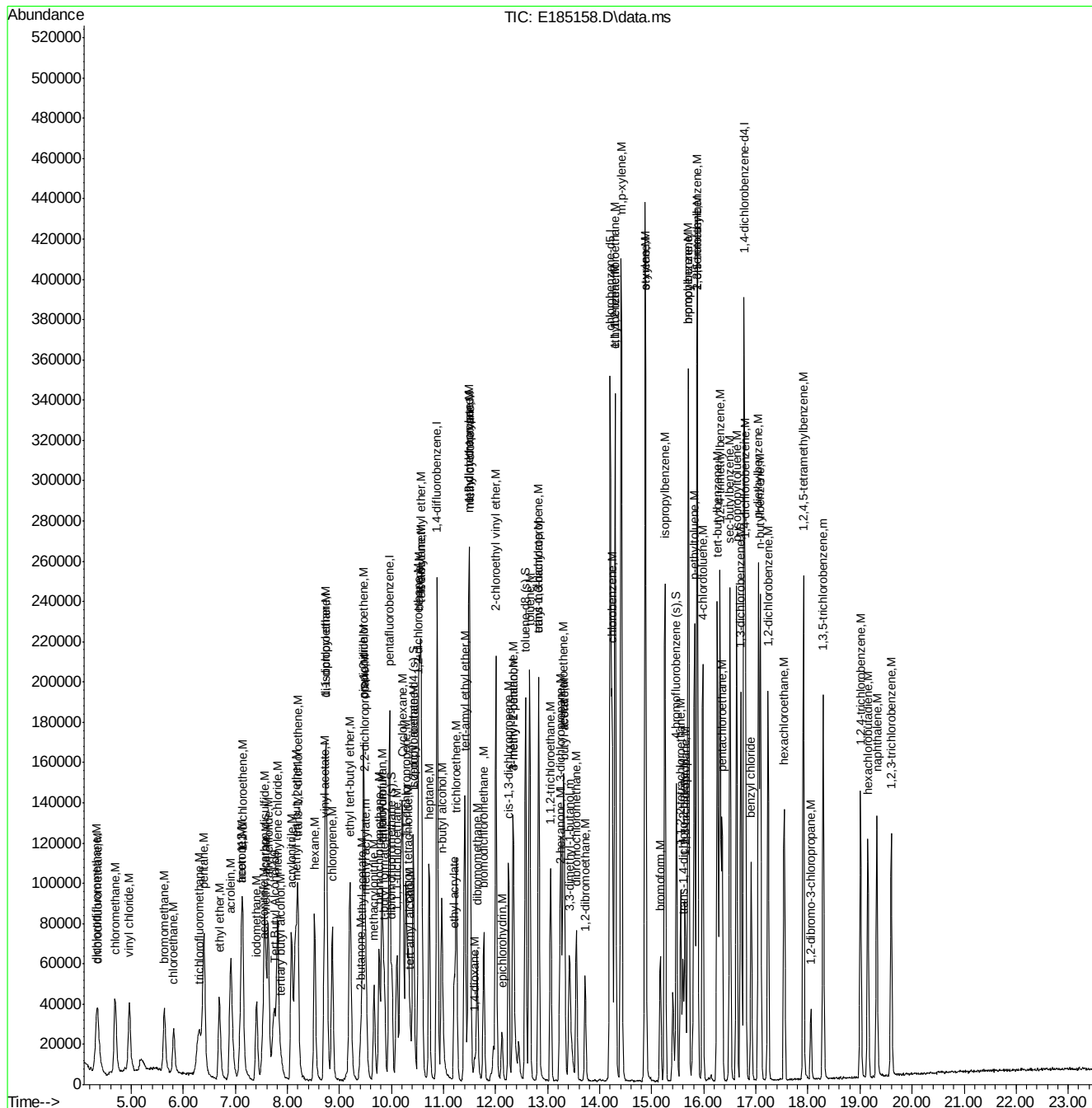
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) isopropylbenzene	15.250	105	200071	24.43	ug/L	99
114) bromobenzene	15.695	156	53003	24.19	ug/L	99
115) 1,1,2,2-tetrachloroethane	15.554	83	59589	24.18	ug/L	96
116) trans-1,4-dichloro-2-b...	15.601	53	14386	24.50	ug/L	97
117) 1,2,3-trichloropropane	15.637	110	15588	24.65	ug/L	96
118) n-propylbenzene	15.705	91	222738	23.56	ug/L	100
119) p-ethyltoluene	15.820	105	195246	23.08	ug/L	98
120) 2-chlorotoluene	15.873	126	46801	23.95	ug/L	89
121) 4-chlorotoluene	15.977	91	140376	23.43	ug/L	99
122) 1,3,5-trimethylbenzene	15.867	105	156899	23.40	ug/L	99
123) tert-butylbenzene	16.259	119	146046	24.45	ug/L	98
124) pentachloroethane	16.354	167	33434	26.11	ug/L	98
125) 1,2,4-trimethylbenzene	16.312	105	164818	23.74	ug/L	99
126) sec-butylbenzene	16.500	105	214111	24.74	ug/L	99
127) 1,3-dichlorobenzene	16.709	146	97938	23.86	ug/L	98
128) p-isopropyltoluene	16.631	119	175876	25.18	ug/L	100
129) 1,4-dichlorobenzene	16.798	146	96051	23.11	ug/L	99
130) benzyl chloride	16.908	91	93462	21.89	ug/L	99
131) p-diethylbenzene	17.049	119	108222	23.73	ug/L	97
132) 1,2-dichlorobenzene	17.232	146	95060	23.93	ug/L	97
133) n-butylbenzene	17.085	92	90778	24.00	ug/L	99
134) 1,2,4,5-tetramethylben...	17.911	119	161756	23.81	ug/L	99
135) 1,2-dibromo-3-chloropr...	18.058	75	10844	27.14	ug/L	99
136) 1,3,5-trichlorobenzene	18.293	180	76953	25.29	ug/L	98
137) 1,2,4-trichlorobenzene	19.009	180	61119	24.67	ug/L	98
138) hexachlorobutadiene	19.151	225	35396	25.48	ug/L	98
139) naphthalene	19.323	128	130400	24.91	ug/L	98
141) 1,2,3-trichlorobenzene	19.600	180	51871	24.00	ug/L	100
142) hexachloroethane	17.546	119	33571	26.96	ug/L	97
143) Cyclohexane	10.205	84	61645	25.77	ug/L #	8

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E185158.D
Acq On : 22 Nov 2011 11:27 pm
Operator : OksanaT
Sample : ic8147-20
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 23 08:23:10 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



ME8147.M Mon Nov 28 16:57:48 2011 RPT1

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9

Manual Integration Approval Summary

Sample Number: VE8147-IC8147

Method: SW846 8260B

Lab FileID: E185158.D

Analyst approved: 11/29/11 17:45 Ying Li

Injection Time: 11/22/11 23:27

Supervisor approved: 12/02/11 13:41 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason

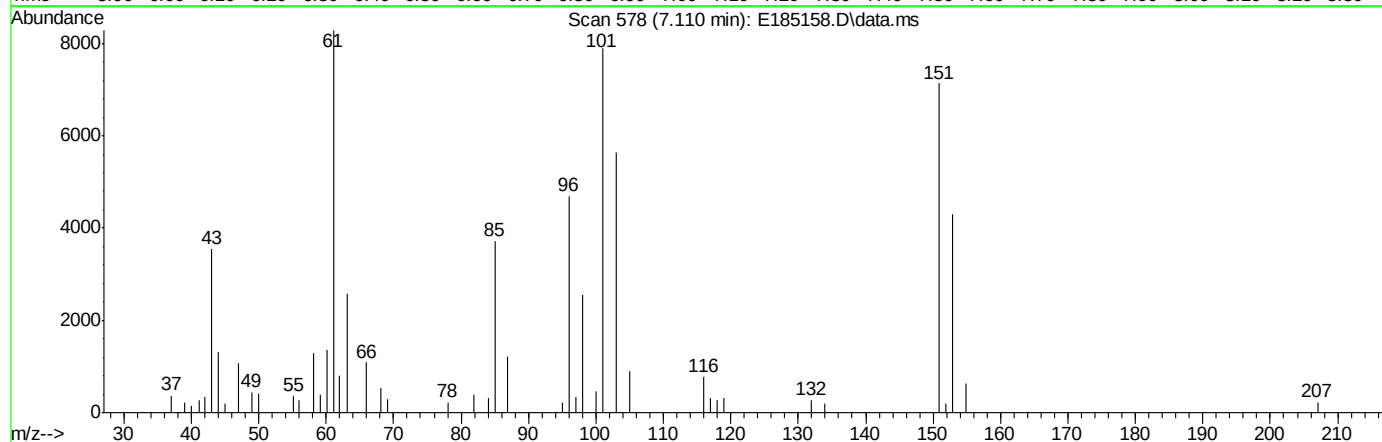
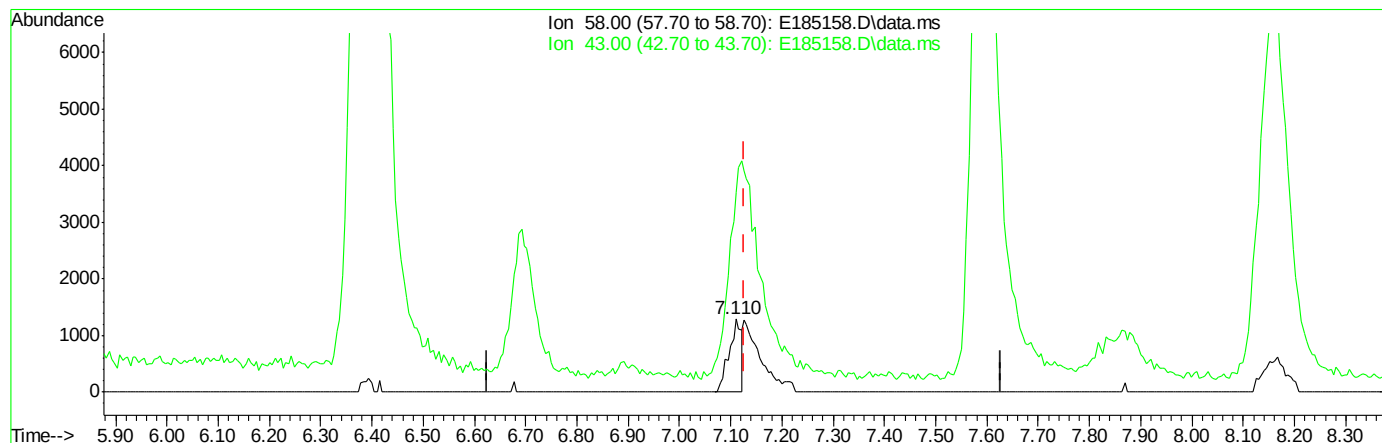
Acetone	67-64-1		7.11	Split peak

6.7.28.1
6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185158.D
Acq On : 22 Nov 2011 11:27 pm
Operator : OksanaT
Sample : ic8147-20
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 22 23:51:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185158.D\data.ms

(30) acetone (M)

7.110min (-0.017) 12.15ug/L

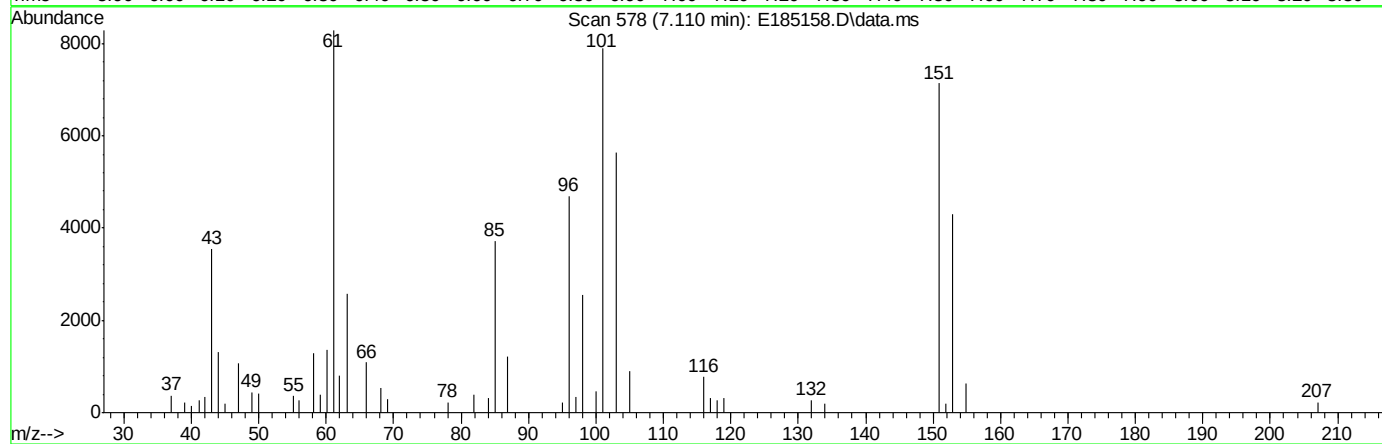
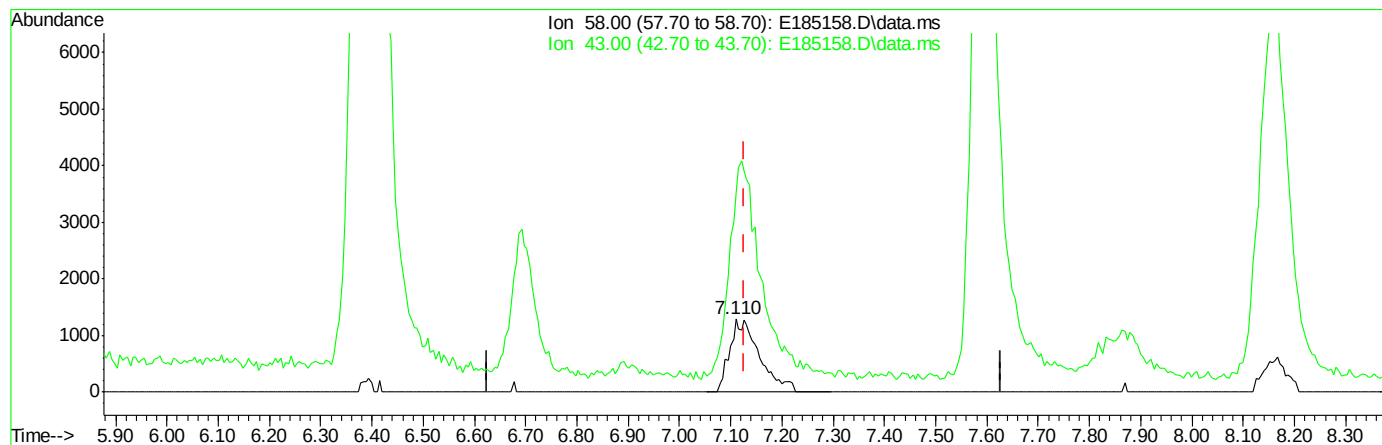
response 2142

Ion	Exp%	Act%
58.00	100	100
43.00	318.90	759.76#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E185158.D
Acq On : 22 Nov 2011 11:27 pm
Operator : OksanaT
Sample : ic8147-20
Misc : MS21604,VE8147,5,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 22 23:51:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



TIC: E185158.D\data.ms

(30) acetone (M)

7.110min (-0.017) 29.61ug/L m

response 5219

Ion	Exp%	Act%
58.00	100	100
43.00	318.90	311.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185159.D
 Acq On : 22 Nov 2011 11:57 pm
 Operator : OksanaT
 Sample : icc8147-50
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 23 08:06:29 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.737	65	108318	500.00	ug/L	-0.02
5) pentafluorobenzene	9.959	168	166163	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.879	114	241898	50.00	ug/L	0.00
94) chlorobenzene-d5	14.199	117	228828	50.00	ug/L	-0.02
111) 1,4-dichlorobenzene-d4	16.771	152	117685	50.00	ug/L	-0.02

System Monitoring Compounds

57) dibromofluoromethane (s)	10.006	113	90246	62.75	ug/L	-0.01
Spiked Amount	50.000	Range	77 - 120	Recovery	=	125.50%#
58) 1,2-dichloroethane-d4 (s)	10.424	65	101844	60.09	ug/L	-0.01
Spiked Amount	50.000	Range	70 - 127	Recovery	=	120.18%
86) toluene-d8 (s)	12.573	98	348057	57.71	ug/L	-0.01
Spiked Amount	50.000	Range	79 - 120	Recovery	=	115.42%
113) 4-bromofluorobenzene (s)	15.475	95	135622	55.88	ug/L	-0.02
Spiked Amount	50.000	Range	76 - 118	Recovery	=	111.76%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.590	88	27044	1209.20	ug/L	89
3) tertiary butyl alcohol	7.852	59	74982	275.43	ug/L	94
11) chlorodifluoromethane	4.349	51	119863	67.10	ug/L	98
12) dichlorodifluoromethane	4.339	85	151128	66.62	ug/L	96
15) chloromethane	4.700	50	196665	63.88	ug/L	99
16) vinyl chloride	4.971	62	163991	61.70	ug/L	99
18) bromomethane	5.630	94	90466	55.51	ug/L	99
19) chloroethane	5.808	64	82598	60.77	ug/L	97
21) trichlorofluoromethane	6.305	101	154476	62.01	ug/L	97
22) pentane	6.388	43	203021	73.69	ug/L	100
23) ethyl ether	6.692	74	67792	66.46	ug/L	97
27) acrolein	6.911	56	261131	660.31	ug/L	98
28) 1,1-dichloroethene	7.136	96	92543	62.02	ug/L	95
30) acetone	7.110	58	12021	69.89	ug/L	93
31) allyl chloride	7.627	41	202206	62.88	ug/L	99
32) acetonitrile	7.523	40	75068	525.17	ug/L	99
33) iodomethane	7.403	142	179031	65.74	ug/L	98
35) carbon disulfide	7.559	76	337540	61.07	ug/L	97
36) methylene chloride	7.810	84	108999	56.50	ug/L	93
37) methyl acetate	7.591	43	97669	65.19	ug/L	99
38) methyl tert butyl ether	8.155	73	313057	59.55	ug/L	98
39) trans-1,2-dichloroethene	8.197	96	98796	61.87	ug/L	93
40) di-isopropyl ether	8.741	45	358879	60.49	ug/L	98
41) ethyl tert-butyl ether	9.201	59	335123	58.99	ug/L	99
42) 2-butanone	9.394	72	15399	73.38	ug/L	# 1
43) 1,1-dichloroethane	8.736	63	183801	61.14	ug/L	99
44) chloroprene	8.861	53	151770	65.40	ug/L	99
45) acrylonitrile	8.077	53	237620	308.62	ug/L	100
46) vinyl acetate	8.704	86	19664	62.94	ug/L	91
47) ethyl acetate	9.426	45	18418	68.27	ug/L	90
48) 2,2-dichloropropane	9.483	77	126719	56.87	ug/L	99
49) cis-1,2-dichloroethene	9.462	96	107174	58.40	ug/L	97
50) methyl acrylate	9.504	55	112101	61.83	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185159.D
 Acq On : 22 Nov 2011 11:57 pm
 Operator : OksanaT
 Sample : icc8147-50
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 23 08:06:29 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.457	54	173377	584.59	ug/L	87
52) bromochloromethane	9.760	128	55841	63.30	ug/L	97
53) tetrahydrofuran	9.818	42	45803	64.68	ug/L	97
54) chloroform	9.813	83	170436	59.68	ug/L	97
55) t-butyl formate	9.854	59	99378	64.05	ug/L	95
56) Iso-octane	10.565	57	326019	58.55	ug/L	100
59) freon 113	7.110	151	71285	63.18	ug/L	90
60) methacrylonitrile	9.661	41	76316	65.74	ug/L	99
61) 1,1,1-trichloroethane	10.100	97	146339	67.15	ug/L	98
62) tert-amyl methyl ether	10.565	73	288464	55.02	ug/L	100
65) tert amyl alcohol	10.356	55	23935	274.12	ug/L	89
66) epichlorohydrin	12.118	57	60731	288.85	ug/L	95
67) n-butyl alcohol	10.958	56	184220	2765.08	ug/L	99
68) tert-amyl ethyl ether	11.407	87	157005	58.99	ug/L	99
69) carbon tetrachloride	10.320	117	125558	64.66	ug/L	97
70) 1,1-dichloropropene	10.278	75	133942	61.02	ug/L	99
71) hexane	8.521	57	138515	66.30	ug/L	99
72) benzene	10.529	78	387417	54.99	ug/L	99
73) heptane	10.722	57	80222	65.54	ug/L	98
74) isopropyl acetate	10.414	43	224772	57.80	ug/L	100
75) 1,2-dichloroethane	10.513	62	129592	59.68	ug/L	100
76) ethyl acrylate	11.203	55	164867	65.10	ug/L	99
77) trichloroethene	11.240	95	98584	59.53	ug/L	98
79) 2-chloroethyl vinyl ether	12.003	63	252011	272.28	ug/L	98
80) methylcyclohexane	11.496	83	152340	56.96	ug/L	99
81) methyl methacrylate	11.475	69	113041	63.53	ug/L	98
82) 1,2-dichloropropane	11.486	63	107245	58.61	ug/L	99
83) dibromomethane	11.642	93	65161	62.04	ug/L	100
84) bromodichloromethane	11.773	83	137843	61.11	ug/L	99
85) cis-1,3-dichloropropene	12.249	75	180547	60.80	ug/L	99
87) 4-methyl-2-pentanone	12.327	58	50367	62.60	ug/L	96
88) toluene	12.651	92	248956	58.06	ug/L	98
89) 3-methyl-1-butanol	12.338	55	118312	1140.26	ug/L	98
90) trans-1,3-dichloropropene	12.824	75	160381	61.52	ug/L	100
91) ethyl methacrylate	12.824	69	146969	65.33	ug/L	99
92) 1,1,2-trichloroethane	13.054	83	82961	59.14	ug/L	97
93) 2-hexanone	13.232	58	49653	64.02	ug/L	97
96) tetrachloroethene	13.300	166	114843	59.50	ug/L	99
97) 1,3-dichloropropane	13.253	76	165820	59.17	ug/L	99
98) butyl acetate	13.321	56	79514	64.37	ug/L	95
99) 3,3-dimethyl-1-butanol	13.415	57	129544	581.36	ug/L	98
100) dibromochloromethane	13.551	129	115739	65.01	ug/L	99
101) 1,2-dibromoethane	13.718	107	105538	64.34	ug/L	99
103) chlorobenzene	14.236	112	277321	58.78	ug/L	99
104) 1,1,1,2-tetrachloroethane	14.293	131	100964	61.07	ug/L	99
105) ethylbenzene	14.298	91	446121	55.17	ug/L	98
106) m,p-xylene	14.413	106	357110	114.17	ug/L	97
107) o-xylene	14.873	106	185322	57.97	ug/L	93
109) styrene	14.879	104	310035	60.88	ug/L	98
110) bromoform	15.166	173	90754	69.56	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185159.D
 Acq On : 22 Nov 2011 11:57 pm
 Operator : OksanaT
 Sample : icc8147-50
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 23 08:06:29 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

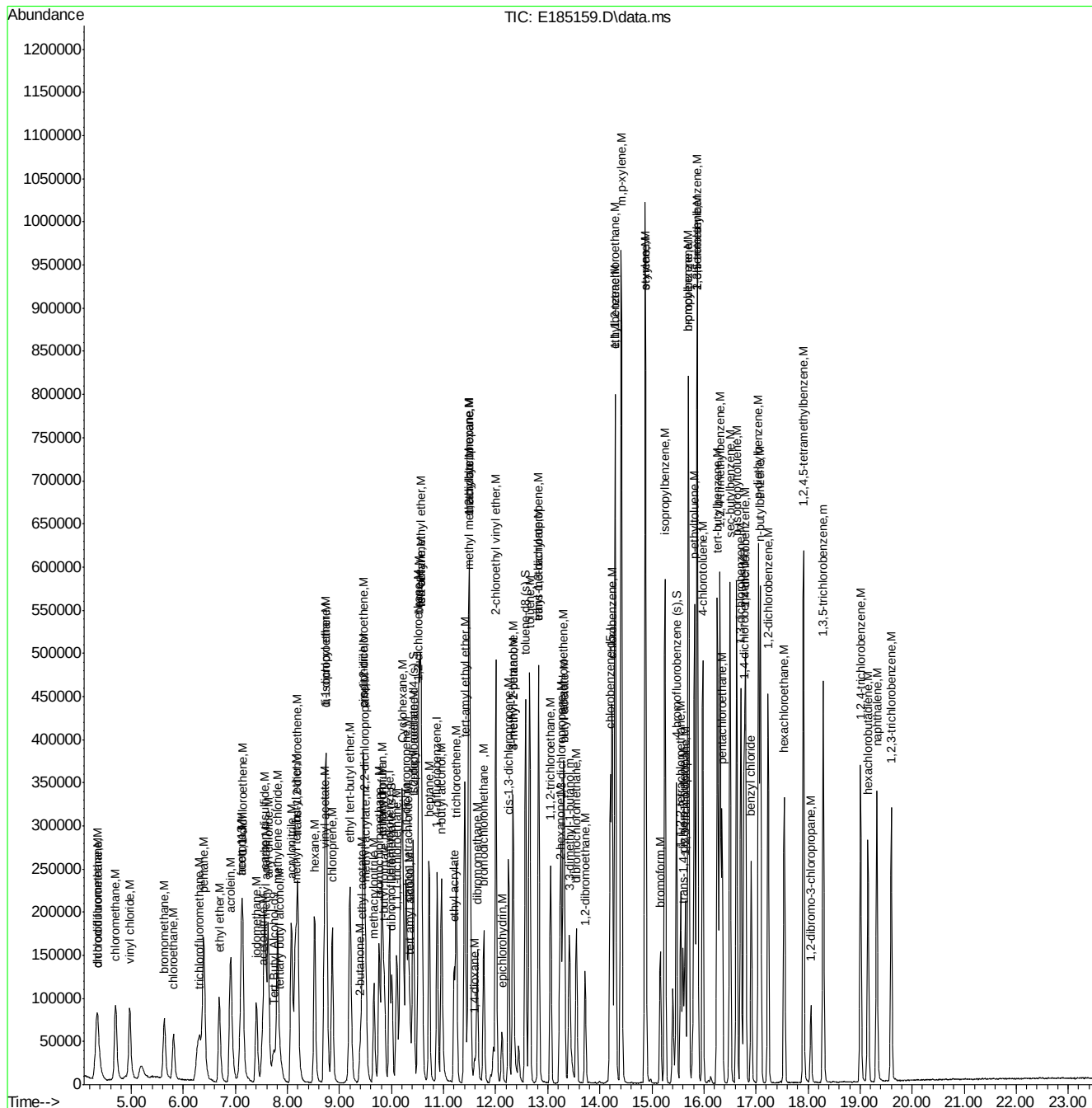
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) isopropylbenzene	15.250	105	469761	58.07	ug/L	99
114) bromobenzene	15.694	156	125881	58.16	ug/L	96
115) 1,1,2,2-tetrachloroethane	15.553	83	140283	57.63	ug/L	99
116) trans-1,4-dichloro-2-b...	15.595	53	35344	60.94	ug/L	97
117) 1,2,3-trichloropropane	15.642	110	37004	59.24	ug/L	97
118) n-propylbenzene	15.705	91	519451	55.64	ug/L	97
119) p-ethyltoluene	15.820	105	475082	56.87	ug/L	98
120) 2-chlorotoluene	15.872	126	109574	56.78	ug/L	89
121) 4-chlorotoluene	15.976	91	334700	56.55	ug/L	99
122) 1,3,5-trimethylbenzene	15.867	105	366447	55.34	ug/L	98
123) tert-butylbenzene	16.259	119	346428	58.73	ug/L	98
124) pentachloroethane	16.348	167	80393	63.58	ug/L	99
125) 1,2,4-trimethylbenzene	16.311	105	386379	56.34	ug/L	98
126) sec-butylbenzene	16.504	105	506192	59.22	ug/L	99
127) 1,3-dichlorobenzene	16.708	146	230053	56.75	ug/L	99
128) p-isopropyltoluene	16.630	119	420173	60.91	ug/L	98
129) 1,4-dichlorobenzene	16.802	146	227037	55.32	ug/L	100
130) benzyl chloride	16.907	91	223910	53.10	ug/L	99
131) p-diethylbenzene	17.048	119	267065	59.30	ug/L	98
132) 1,2-dichlorobenzene	17.231	146	229186	58.41	ug/L	99
133) n-butylbenzene	17.085	92	216659	58.00	ug/L	96
134) 1,2,4,5-tetramethylben...	17.911	119	408009	60.81	ug/L	100
135) 1,2-dibromo-3-chloropr...	18.057	75	26043	65.99	ug/L	98
136) 1,3,5-trichlorobenzene	18.292	180	188977	62.88	ug/L	98
137) 1,2,4-trichlorobenzene	19.009	180	156572	63.99	ug/L	99
138) hexachlorobutadiene	19.155	225	86063	62.72	ug/L	97
139) naphthalene	19.322	128	335049	64.80	ug/L	99
141) 1,2,3-trichlorobenzene	19.599	180	134489	63.01	ug/L	99
142) hexachloroethane	17.545	119	80758	65.65	ug/L	97
143) Cyclohexane	10.205	84	148522	62.87	ug/L #	8

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E185159.D
Acq On : 22 Nov 2011 11:57 pm
Operator : OksanaT
Sample : icc8147-50
Misc : MS21604, VE8147, 5, , 100, 5, 1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 23 08:06:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 22 15:30:01 2011
Response via : Initial Calibration



ME8147.M Mon Nov 28 16:57:58 2011 RPT1

Page: 4

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185161.D
 Acq On : 23 Nov 2011 12:57 am
 Operator : OksanaT
 Sample : ic8147-100
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 23 08:10:59 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.742	65	104709	500.00	ug/L	-0.02
5) pentafluorobenzene	9.959	168	162369	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.879	114	236012	50.00	ug/L	0.00
94) chlorobenzene-d5	14.199	117	228401	50.00	ug/L	-0.02
111) 1,4-dichlorobenzene-d4	16.771	152	115042	50.00	ug/L	-0.02

System Monitoring Compounds

57) dibromofluoromethane (s)	10.006	113	174551	124.20	ug/L	-0.01
Spiked Amount	50.000	Range 77 - 120	Recovery	=	248.40%#	
58) 1,2-dichloroethane-d4 (s)	10.424	65	196276	118.51	ug/L	-0.01
Spiked Amount	50.000	Range 70 - 127	Recovery	=	237.02%#	
86) toluene-d8 (s)	12.573	98	657015	111.65	ug/L	-0.01
Spiked Amount	50.000	Range 79 - 120	Recovery	=	223.30%#	
113) 4-bromofluorobenzene (s)	15.469	95	260626	109.86	ug/L	-0.02
Spiked Amount	50.000	Range 76 - 118	Recovery	=	219.72%#	

Target Compounds

						Qvalue
2) 1,4-dioxane	11.596	88	53011	2451.95	ug/L	90
3) tertiary butyl alcohol	7.857	59	144417	548.76	ug/L	92
11) chlorodifluoromethane	4.350	51	237874	136.27	ug/L	99
12) dichlorodifluoromethane	4.329	85	301122	135.84	ug/L	99
15) chloromethane	4.705	50	385575	128.16	ug/L	98
16) vinyl chloride	4.977	62	330241	127.14	ug/L	99
18) bromomethane	5.630	94	171907	107.95	ug/L	99
19) chloroethane	5.803	64	164560	123.89	ug/L	96
21) trichlorofluoromethane	6.310	101	305380	125.46	ug/L	98
22) pentane	6.388	43	388937	144.47	ug/L	100
23) ethyl ether	6.692	74	132640	133.08	ug/L	98
28) 1,1-dichloroethene	7.131	96	178916	122.70	ug/L	96
30) acetone	7.115	58	22373	133.11	ug/L	97
31) allyl chloride	7.627	41	384814	122.46	ug/L	98
32) acetonitrile	7.523	40	152143	1089.25	ug/L	98
33) iodomethane	7.408	142	352501	132.46	ug/L	99
35) carbon disulfide	7.559	76	634957	117.56	ug/L	98
36) methylene chloride	7.805	84	210435	111.63	ug/L	95
37) methyl acetate	7.591	43	190180	129.91	ug/L	99
38) methyl tert butyl ether	8.161	73	597513	116.32	ug/L	99
39) trans-1,2-dichloroethene	8.197	96	186890	119.78	ug/L	94
40) di-isopropyl ether	8.741	45	681873	117.62	ug/L	98
41) ethyl tert-butyl ether	9.201	59	644255	116.06	ug/L	99
42) 2-butanone	9.395	72	29733	144.99	ug/L	# 1
43) 1,1-dichloroethane	8.736	63	349323	118.91	ug/L	99
44) chloroprene	8.856	53	293896	129.61	ug/L	98
45) acrylonitrile	8.077	53	467864	621.86	ug/L	99
46) vinyl acetate	8.699	86	40314	132.05	ug/L	94
47) ethyl acetate	9.426	45	35728	135.53	ug/L	88
48) 2,2-dichloropropane	9.483	77	236699	108.71	ug/L	98
49) cis-1,2-dichloroethene	9.463	96	204974	114.30	ug/L	98
50) methyl acrylate	9.504	55	213793	120.67	ug/L	97
51) propionitrile	9.457	54	335924	1159.13	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185161.D
 Acq On : 23 Nov 2011 12:57 am
 Operator : OksanaT
 Sample : ic8147-100
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 23 08:10:59 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) bromochloromethane	9.761	128	107272	124.43	ug/L	98
53) tetrahydrofuran	9.818	42	86453	124.93	ug/L	98
54) chloroform	9.813	83	323687	115.99	ug/L	97
55) t-butyl formate	9.855	59	191939	126.60	ug/L	95
56) Iso-octane	10.566	57	600795	110.41	ug/L	99
59) freon 113	7.105	151	144380	130.94	ug/L	89
60) methacrylonitrile	9.661	41	150320	132.52	ug/L	100
61) 1,1,1-trichloroethane	10.100	97	279241	131.13	ug/L	99
62) tert-amyl methyl ether	10.566	73	545597	106.49	ug/L	99
65) tert amyl alcohol	10.351	55	44298	519.99	ug/L	94
66) epichlorohydrin	12.118	57	119613	583.09	ug/L	97
67) n-butyl alcohol	10.958	56	353512	5438.42	ug/L	97
68) tert-amyl ethyl ether	11.407	87	302130	116.35	ug/L	98
69) carbon tetrachloride	10.320	117	238633	125.96	ug/L	96
70) 1,1-dichloropropene	10.278	75	260069	121.44	ug/L	98
71) hexane	8.521	57	263740	129.39	ug/L	99
72) benzene	10.529	78	728959	106.06	ug/L	99
73) heptane	10.722	57	152143	127.40	ug/L	98
74) isopropyl acetate	10.414	43	424783	111.96	ug/L	100
75) 1,2-dichloroethane	10.508	62	247457	116.80	ug/L	99
76) ethyl acrylate	11.198	55	316537	128.10	ug/L	99
77) trichloroethene	11.240	95	188085	116.41	ug/L	96
79) 2-chloroethyl vinyl ether	12.003	63	488939	541.43	ug/L	98
80) methylcyclohexane	11.501	83	290913	111.48	ug/L	99
81) methyl methacrylate	11.475	69	209595	120.74	ug/L	95
82) 1,2-dichloropropane	11.486	63	204941	114.80	ug/L	99
83) dibromomethane	11.643	93	124208	121.21	ug/L	99
84) bromodichloromethane	11.773	83	265450	120.62	ug/L	99
85) cis-1,3-dichloropropene	12.249	75	348187	120.19	ug/L	99
87) 4-methyl-2-pentanone	12.327	58	95462	121.61	ug/L	95
88) toluene	12.652	92	476232	113.83	ug/L	96
89) 3-methyl-1-butanol	12.333	55	219211	2165.39	ug/L	97
90) trans-1,3-dichloropropene	12.824	75	307941	121.06	ug/L	95
91) ethyl methacrylate	12.824	69	280876	127.96	ug/L	99
92) 1,1,2-trichloroethane	13.054	83	158312	115.68	ug/L	96
93) 2-hexanone	13.227	58	95636	126.39	ug/L	94
96) tetrachloroethene	13.300	166	222857	115.68	ug/L	99
97) 1,3-dichloropropane	13.253	76	318503	113.86	ug/L	98
98) butyl acetate	13.321	56	155300	125.96	ug/L	96
99) 3,3-dimethyl-1-butanol	13.415	57	246399	1107.85	ug/L	99
100) dibromochloromethane	13.551	129	226235	127.31	ug/L	98
101) 1,2-dibromoethane	13.718	107	203663	124.39	ug/L	99
103) chlorobenzene	14.236	112	533335	113.26	ug/L	99
104) 1,1,1,2-tetrachloroethane	14.293	131	193168	117.07	ug/L	99
105) ethylbenzene	14.298	91	842309	104.37	ug/L	98
106) m,p-xylene	14.413	106	684471	219.23	ug/L	92
107) o-xylene	14.873	106	354502	111.10	ug/L	92
109) styrene	14.879	104	591803	116.43	ug/L	98
110) bromoform	15.161	173	175593	134.84	ug/L	99
112) isopropylbenzene	15.255	105	885289	111.95	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185161.D
 Acq On : 23 Nov 2011 12:57 am
 Operator : OksanaT
 Sample : ic8147-100
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 23 08:10:59 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
114) bromobenzene	15.694	156	239282	113.09	ug/L	97
115) 1,1,2,2-tetrachloroethane	15.553	83	270215	113.55	ug/L	99
116) trans-1,4-dichloro-2-b...	15.600	53	70438	124.24	ug/L	98
117) 1,2,3-trichloropropane	15.637	110	71816	117.61	ug/L	95
118) n-propylbenzene	15.705	91	976900	107.05	ug/L	97
119) p-ethyltoluene	15.820	105	887926	108.74	ug/L	96
120) 2-chlorotoluene	15.872	126	209423	111.01	ug/L #	85
121) 4-chlorotoluene	15.977	91	630372	108.96	ug/L	99
122) 1,3,5-trimethylbenzene	15.872	105	685322	105.86	ug/L	97
123) tert-butylbenzene	16.264	119	659290	114.34	ug/L	99
124) pentachloroethane	16.353	167	150513	121.76	ug/L	99
125) 1,2,4-trimethylbenzene	16.311	105	727735	108.56	ug/L	97
126) sec-butylbenzene	16.499	105	954794	114.27	ug/L	99
127) 1,3-dichlorobenzene	16.714	146	437882	110.49	ug/L	99
128) p-isopropyltoluene	16.630	119	791773	117.42	ug/L	98
129) 1,4-dichlorobenzene	16.803	146	434979	108.41	ug/L	98
130) benzyl chloride	16.907	91	429082	104.09	ug/L	98
131) p-diethylbenzene	17.048	119	503683	114.40	ug/L	97
132) 1,2-dichlorobenzene	17.231	146	432904	112.85	ug/L	97
133) n-butylbenzene	17.085	92	418265	114.54	ug/L	94
134) 1,2,4,5-tetramethylben...	17.911	119	772490	117.77	ug/L	97
135) 1,2-dibromo-3-chloropr...	18.052	75	51498	133.49	ug/L	97
136) 1,3,5-trichlorobenzene	18.293	180	364983	124.23	ug/L	99
137) 1,2,4-trichlorobenzene	19.009	180	315141	131.75	ug/L	98
138) hexachlorobutadiene	19.155	225	166014	123.76	ug/L	99
139) naphthalene	19.323	128	678976	134.34	ug/L	99
141) 1,2,3-trichlorobenzene	19.600	180	268400	128.64	ug/L	98
142) hexachloroethane	17.545	119	156540	130.19	ug/L	97
143) Cyclohexane	10.210	84	282267	122.24	ug/L #	8

(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.7.30

9

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185162.D
 Acq On : 23 Nov 2011 1:28 am
 Operator : OksanaT
 Sample : ic8147-200
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 23 08:10:34 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.737	65	97684	500.00	ug/L	-0.02
5) pentafluorobenzene	9.959	168	154322	50.00	ug/L	-0.01
63) 1,4-difluorobenzene	10.874	114	225321	50.00	ug/L	-0.01
94) chlorobenzene-d5	14.199	117	222763	50.00	ug/L	-0.02
111) 1,4-dichlorobenzene-d4	16.771	152	110416	50.00	ug/L	-0.02

System Monitoring Compounds

57) dibromofluoromethane (s)	10.006	113	342463	256.38	ug/L	-0.01
Spiked Amount	50.000	Range 77 - 120	Recovery	=	512.76%#	
58) 1,2-dichloroethane-d4 (s)	10.424	65	373729	237.41	ug/L	-0.01
Spiked Amount	50.000	Range 70 - 127	Recovery	=	474.82%#	
86) toluene-d8 (s)	12.573	98	1224242	217.92	ug/L	-0.01
Spiked Amount	50.000	Range 79 - 120	Recovery	=	435.84%#	
113) 4-bromofluorobenzene (s)	15.475	95	501735	220.35	ug/L	-0.02
Spiked Amount	50.000	Range 76 - 118	Recovery	=	440.70%#	

Target Compounds

						Qvalue
2) 1,4-dioxane	11.595	88	96092	4764.23	ug/L	# 89
3) tertiary butyl alcohol	7.863	59	267588	1089.91	ug/L	59
11) chlorodifluoromethane	4.344	51	475229	286.45	ug/L	98
12) dichlorodifluoromethane	4.328	85	587844	279.02	ug/L	98
15) chloromethane	4.715	50	757808	265.03	ug/L	98
16) vinyl chloride	4.987	62	640575	259.48	ug/L	99
18) bromomethane	5.620	94	297055	196.26	ug/L	98
19) chloroethane	5.792	64	310810	246.20	ug/L	95
21) trichlorofluoromethane	6.294	101	584895	252.82	ug/L	99
22) pentane	6.378	43	746147	291.60	ug/L	100
23) ethyl ether	6.692	74	250145	264.06	ug/L	96
28) 1,1-dichloroethene	7.131	96	331248	239.01	ug/L	95
30) acetone	7.120	58	41490	259.72	ug/L	94
31) allyl chloride	7.627	41	721232	241.49	ug/L	100
32) acetonitrile	7.518	40	285497	2150.57	ug/L	95
33) iodomethane	7.397	142	664037	262.55	ug/L	99
35) carbon disulfide	7.554	76	1176794	229.25	ug/L	98
36) methylene chloride	7.805	84	393529	219.64	ug/L	95
37) methyl acetate	7.591	43	356170	255.98	ug/L	99
38) methyl tert butyl ether	8.155	73	1093352	223.95	ug/L	99
39) trans-1,2-dichloroethene	8.192	96	352312	237.57	ug/L	94
40) di-isopropyl ether	8.741	45	1271331	230.74	ug/L	99
41) ethyl tert-butyl ether	9.201	59	1197893	227.04	ug/L	98
42) 2-butanone	9.394	72	51169	262.53	ug/L	# 1
43) 1,1-dichloroethane	8.736	63	659106	236.06	ug/L	98
44) chloroprene	8.856	53	560080	259.89	ug/L	97
45) acrylonitrile	8.072	53	856126	1197.26	ug/L	100
46) vinyl acetate	8.699	86	73600	253.65	ug/L	93
47) ethyl acetate	9.426	45	66489	265.36	ug/L	91
48) 2,2-dichloropropane	9.483	77	432058	208.77	ug/L	98
49) cis-1,2-dichloroethene	9.462	96	379464	222.64	ug/L	97
50) methyl acrylate	9.504	55	401690	238.54	ug/L	98
51) propionitrile	9.457	54	603590	2191.34	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185162.D
 Acq On : 23 Nov 2011 1:28 am
 Operator : OksanaT
 Sample : ic8147-200
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 23 08:10:34 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) bromochloromethane	9.760	128	199744	243.78	ug/L	98
53) tetrahydrofuran	9.813	42	158286	240.66	ug/L	98
54) chloroform	9.813	83	594999	224.34	ug/L	95
55) t-butyl formate	9.854	59	363557	252.29	ug/L	94
56) Iso-octane	10.566	57	1126527	217.82	ug/L	100
59) freon 113	7.105	151	276077	263.44	ug/L	93
60) methacrylonitrile	9.661	41	277002	256.94	ug/L	98
61) 1,1,1-trichloroethane	10.100	97	520618	257.24	ug/L	98
62) tert-amyl methyl ether	10.566	73	1017217	208.89	ug/L	99
65) tert amyl alcohol	10.351	55	82462	1013.90	ug/L	91
66) epichlorohydrin	12.118	57	226491	1156.48	ug/L	99
67) n-butyl alcohol	10.958	56	634987	10232.13	ug/L	97
68) tert-amyl ethyl ether	11.407	87	567878	229.07	ug/L	96
69) carbon tetrachloride	10.320	117	443317	245.11	ug/L	96
70) 1,1-dichloropropene	10.278	75	475987	232.81	ug/L	98
71) hexane	8.521	57	499180	256.51	ug/L	99
72) benzene	10.529	78	1333122	203.16	ug/L	99
73) heptane	10.722	57	309238	271.23	ug/L	99
74) isopropyl acetate	10.414	43	768549	212.17	ug/L	99
75) 1,2-dichloroethane	10.508	62	448424	221.69	ug/L	98
76) ethyl acrylate	11.198	55	582191	246.78	ug/L	99
77) trichloroethene	11.240	95	346129	224.38	ug/L	96
79) 2-chloroethyl vinyl ether	12.003	63	898050	1041.66	ug/L	98
80) methylcyclohexane	11.496	83	548545	220.19	ug/L	98
81) methyl methacrylate	11.475	69	382783	230.96	ug/L	92
82) 1,2-dichloropropane	11.486	63	372237	218.41	ug/L	98
83) dibromomethane	11.642	93	227347	232.38	ug/L	99
84) bromodichloromethane	11.773	83	483463	230.11	ug/L	98
85) cis-1,3-dichloropropene	12.249	75	636742	230.22	ug/L	98
87) 4-methyl-2-pentanone	12.327	58	173762	231.86	ug/L	91
88) toluene	12.651	92	878859	220.03	ug/L	92
89) 3-methyl-1-butanol	12.338	55	382390	3956.51	ug/L	95
90) trans-1,3-dichloropropene	12.824	75	563718	232.13	ug/L	96
91) ethyl methacrylate	12.819	69	503918	240.46	ug/L	97
92) 1,1,2-trichloroethane	13.054	83	291554	223.14	ug/L	94
93) 2-hexanone	13.227	58	176181	243.88	ug/L	98
96) tetrachloroethene	13.300	166	406615	216.41	ug/L	98
97) 1,3-dichloropropane	13.253	76	580681	212.84	ug/L	97
98) butyl acetate	13.321	56	289639	240.87	ug/L	91
99) 3,3-dimethyl-1-butanol	13.410	57	441849	2036.91	ug/L	98
100) dibromochloromethane	13.551	129	421312	243.09	ug/L	99
101) 1,2-dibromoethane	13.718	107	377433	236.35	ug/L	95
103) chlorobenzene	14.236	112	995408	216.73	ug/L	97
104) 1,1,1,2-tetrachloroethane	14.293	131	365233	226.95	ug/L	98
105) ethylbenzene	14.298	91	1534099	194.89	ug/L	95
106) m,p-xylene	14.413	106	1270257	417.15	ug/L	86
107) o-xylene	14.873	106	666041	214.02	ug/L	87
109) styrene	14.879	104	1087604	219.38	ug/L	98
110) bromoform	15.161	173	326890	257.37	ug/L	98
112) isopropylbenzene	15.255	105	1612560	212.46	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185162.D
 Acq On : 23 Nov 2011 1:28 am
 Operator : OksanaT
 Sample : ic8147-200
 Misc : MS21604,VE8147,5,,100,5,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 23 08:10:34 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 22 15:30:01 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
114) bromobenzene	15.694	156	448503	220.86	ug/L	94
115) 1,1,2,2-tetrachloroethane	15.553	83	493018	215.86	ug/L	100
116) trans-1,4-dichloro-2-b...	15.600	53	131646	241.93	ug/L	95
117) 1,2,3-trichloropropane	15.642	110	131558	224.48	ug/L	93
118) n-propylbenzene	15.705	91	1759810	200.92	ug/L	94
119) p-ethyltoluene	15.820	105	1622947	207.08	ug/L	94
120) 2-chlorotoluene	15.872	126	394402	217.82	ug/L #	80
121) 4-chlorotoluene	15.976	91	1149519	207.02	ug/L	97
122) 1,3,5-trimethylbenzene	15.872	105	1255629	202.09	ug/L	95
123) tert-butylbenzene	16.264	119	1202309	217.24	ug/L	97
124) pentachloroethane	16.353	167	286472	241.46	ug/L	98
125) 1,2,4-trimethylbenzene	16.311	105	1316334	204.59	ug/L	95
126) sec-butylbenzene	16.499	105	1721393	214.65	ug/L	96
127) 1,3-dichlorobenzene	16.714	146	801384	210.69	ug/L	97
128) p-isopropyltoluene	16.630	119	1427802	220.61	ug/L	96
129) 1,4-dichlorobenzene	16.802	146	802828	208.48	ug/L	98
130) benzyl chloride	16.907	91	785272	198.48	ug/L	97
131) p-diethylbenzene	17.053	119	949648	224.73	ug/L	97
132) 1,2-dichlorobenzene	17.231	146	789869	214.54	ug/L	96
133) n-butylbenzene	17.090	92	775224	221.18	ug/L	91
134) 1,2,4,5-tetramethylben...	17.911	119	1438230	228.46	ug/L	95
135) 1,2-dibromo-3-chloropr...	18.057	75	96599	260.88	ug/L	99
136) 1,3,5-trichlorobenzene	18.292	180	675606	239.59	ug/L	99
137) 1,2,4-trichlorobenzene	19.009	180	589896	256.94	ug/L	98
138) hexachlorobutadiene	19.155	225	308531	239.64	ug/L	97
139) naphthalene	19.322	128	1258957	259.53	ug/L	98
141) 1,2,3-trichlorobenzene	19.599	180	506801	253.07	ug/L	97
142) hexachloroethane	17.545	119	294749	255.40	ug/L	97
143) Cyclohexane	10.205	84	524720	236.75	ug/L #	8

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185194a.D
 Acq On : 24 Nov 2011 2:32 am
 Operator : OksanaT
 Sample : icv8147-50
 Misc : MS21882,VE8149,5,,100,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 29 08:31:42 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 23 08:52:07 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.738	65	121614	500.00	ug/L	0.00
5) pentafluorobenzene	9.960	168	206756	50.00	ug/L	0.00
63) 1,4-difluorobenzene	10.875	114	296092	50.00	ug/L	0.00
94) chlorobenzene-d5	14.200	117	284056	50.00	ug/L	0.00
111) 1,4-dichlorobenzene-d4	16.772	152	143153	50.00	ug/L	0.00

System Monitoring Compounds

57) dibromofluoromethane (s)	10.007	113	108236	49.13	ug/L	0.00
Spiked Amount	50.000	Range	77 - 120	Recovery	=	98.26%
58) 1,2-dichloroethane-d4 (s)	10.420	65	119634	44.55	ug/L	0.00
Spiked Amount	50.000	Range	70 - 127	Recovery	=	89.10%
86) toluene-d8 (s)	12.574	98	426435	48.10	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	96.20%
113) 4-bromofluorobenzene (s)	15.470	95	161965	44.93	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	89.86%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.596	88	35904	1524.09	ug/L	# 93
3) tertiary butyl alcohol	7.858	59	92141	280.25	ug/L	97
11) chlorodifluoromethane	4.345	51	125399	41.89	ug/L	99
12) dichlorodifluoromethane	4.329	85	177883	51.36	ug/L	99
15) chloromethane	4.695	50	236320	47.59	ug/L	99
16) vinyl chloride	4.967	62	201248	51.61	ug/L	100
18) bromomethane	5.631	94	107694	47.30	ug/L	96
19) chloroethane	5.809	64	103363	51.17	ug/L	100
21) trichlorofluoromethane	6.295	101	186623	50.69	ug/L	97
22) pentane	6.384	43	173157	35.94	ug/L	100
23) ethyl ether	6.692	74	80851	50.07	ug/L	97
27) acrolein	6.912	56	281731	429.75	ug/L	99
28) 1,1-dichloroethene	7.132	96	107623	47.71	ug/L	97
30) acetone	7.111	58	14028	47.48	ug/L	97
31) allyl chloride	7.628	41	230068	46.49	ug/L	99
32) acetonitrile	7.524	40	97247	512.17	ug/L	97
33) iodomethane	7.403	142	210918	51.29	ug/L	99
35) carbon disulfide	7.560	76	376768	48.38	ug/L	99
36) methylene chloride	7.806	84	130551	47.92	ug/L	96
37) methyl acetate	7.592	43	107859	43.17	ug/L	99
38) methyl tert butyl ether	8.156	73	713924	88.17	ug/L	99
39) trans-1,2-dichloroethene	8.198	96	113177	46.94	ug/L	98
40) di-isopropyl ether	8.742	45	420815	43.99	ug/L	99
41) ethyl tert-butyl ether	9.202	59	417117	49.42	ug/L	100
42) 2-butanone	9.395	72	16778	47.09	ug/L	# 99
43) 1,1-dichloroethane	8.737	63	221567	49.58	ug/L	99
44) chloroprene	8.862	53	175239	48.18	ug/L	99
45) acrylonitrile	8.073	53	290551	246.23	ug/L	98
46) vinyl acetate	8.705	86	25950	55.89	ug/L	95
47) ethyl acetate	9.427	45	21768	42.52	ug/L	90
48) 2,2-dichloropropane	9.479	77	139747	43.35	ug/L	98
49) cis-1,2-dichloroethene	9.458	96	127461	46.69	ug/L	98
50) methyl acrylate	9.510	55	131658	49.26	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185194a.D
 Acq On : 24 Nov 2011 2:32 am
 Operator : OksanaT
 Sample : icv8147-50
 Misc : MS21882,VE8149,5,,100,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 29 08:31:42 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 23 08:52:07 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.458	54	210191	462.49	ug/L	94
52) bromochloromethane	9.761	128	66067	50.38	ug/L	98
53) tetrahydrofuran	9.819	42	54163	44.80	ug/L	100
54) chloroform	9.814	83	202585	47.32	ug/L	100
55) t-butyl formate	9.855	59	123637	51.07	ug/L	98
56) Iso-octane	10.566	57	374812	46.06	ug/L #	78
59) freon 113	7.105	151	87740	48.89	ug/L	98
60) methacrylonitrile	9.662	41	93833	49.82	ug/L	99
61) 1,1,1-trichloroethane	10.101	97	173667	50.25	ug/L	99
62) tert-amyl methyl ether	10.566	73	366432	47.76	ug/L	97
65) tert amyl alcohol	10.352	55	54691	462.55	ug/L	95
66) epichlorohydrin	12.119	57	72610	232.70	ug/L	96
67) n-butyl alcohol	10.958	56	221767	2421.10	ug/L	98
68) tert-amyl ethyl ether	11.408	87	357233	90.70	ug/L	99
69) carbon tetrachloride	10.321	117	150497	53.04	ug/L	98
70) 1,1-dichloropropene	10.274	75	161443	52.10	ug/L	98
71) hexane	8.522	57	144363	41.73	ug/L	99
72) benzene	10.530	78	456692	48.51	ug/L	100
73) heptane	10.718	57	88661	43.73	ug/L	99
74) isopropyl acetate	10.415	43	267737	47.17	ug/L	100
75) 1,2-dichloroethane	10.509	62	153023	49.07	ug/L	98
76) ethyl acrylate	11.204	55	197908	48.01	ug/L	99
77) trichloroethene	11.241	95	120528	50.74	ug/L	97
78) 2-nitropropane	11.957	46	1538	83.87	ug/L #	1
79) 2-chloroethyl vinyl ether	12.004	63	283185	229.37	ug/L	99
80) methylcyclohexane	11.497	83	178171	48.07	ug/L	100
81) methyl methacrylate	11.476	69	127069	43.24	ug/L	99
82) 1,2-dichloropropane	11.481	63	127748	47.60	ug/L	98
83) dibromomethane	11.643	93	79311	50.60	ug/L	99
84) bromodichloromethane	11.769	83	164614	47.43	ug/L	99
85) cis-1,3-dichloropropene	12.245	75	210795	48.50	ug/L	99
87) 4-methyl-2-pentanone	12.328	58	59289	47.40	ug/L	97
88) toluene	12.652	92	296427	49.50	ug/L	99
89) 3-methyl-1-butanol	12.333	55	130844	907.98	ug/L	99
90) trans-1,3-dichloropropene	12.825	75	186254	48.12	ug/L	98
91) ethyl methacrylate	12.820	69	179037	46.37	ug/L	98
92) 1,1,2-trichloroethane	13.055	83	98159	46.55	ug/L	98
93) 2-hexanone	13.227	58	57077	49.26	ug/L	95
96) tetrachloroethene	13.295	166	136186	50.21	ug/L	97
97) 1,3-dichloropropane	13.254	76	198227	48.66	ug/L	98
98) butyl acetate	13.322	56	96603	44.88	ug/L	98
99) 3,3-dimethyl-1-butanol	13.416	57	139690	420.40	ug/L	98
100) dibromochloromethane	13.552	129	136240	47.69	ug/L	99
101) 1,2-dibromoethane	13.719	107	124510	48.48	ug/L	100
103) chlorobenzene	14.236	112	329695	49.49	ug/L	99
104) 1,1,1,2-tetrachloroethane	14.294	131	118963	47.71	ug/L	99
105) ethylbenzene	14.294	91	529037	47.63	ug/L	99
106) m,p-xylene	14.414	106	425578	97.87	ug/L	97
107) o-xylene	14.874	106	220314	49.06	ug/L	99
109) styrene	14.879	104	362896	47.52	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E185194a.D
 Acq On : 24 Nov 2011 2:32 am
 Operator : OksanaT
 Sample : icv8147-50
 Misc : MS21882,VE8149,5,,100,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 29 08:31:42 2011
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 23 08:52:07 2011
 Response via : Initial Calibration

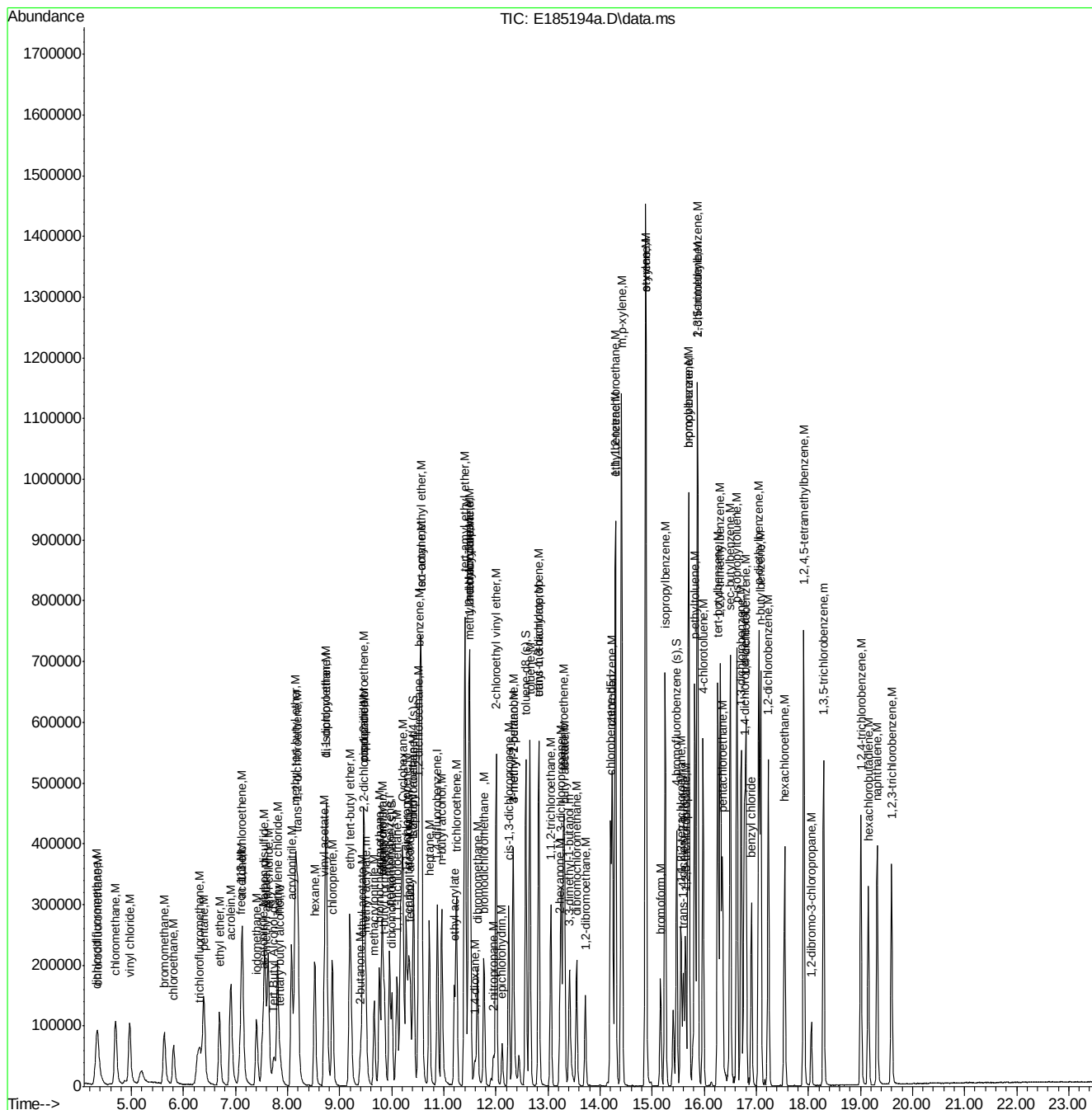
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) bromoform	15.162	173	104943	48.74	ug/L	97
112) isopropylbenzene	15.251	105	559984	49.83	ug/L	98
114) bromobenzene	15.695	156	148819	48.21	ug/L	99
115) 1,1,2,2-tetrachloroethane	15.554	83	161160	44.51	ug/L	98
116) trans-1,4-dichloro-2-b...	15.596	53	41826	52.30	ug/L	97
117) 1,2,3-trichloropropane	15.638	110	43816	48.05	ug/L	95
118) n-propylbenzene	15.706	91	627454	49.35	ug/L	99
119) p-ethyltoluene	15.821	105	547644	46.93	ug/L	100
120) 2-chlorotoluene	15.873	126	130096	47.78	ug/L	98
121) 4-chlorotoluene	15.977	91	392126	47.48	ug/L	99
122) 1,3,5-trimethylbenzene	15.868	105	443620	48.25	ug/L	99
123) tert-butylbenzene	16.260	119	421015	50.38	ug/L	100
124) pentachloroethane	16.349	167	96111	49.26	ug/L	99
125) 1,2,4-trimethylbenzene	16.307	105	464357	48.93	ug/L	98
126) sec-butylbenzene	16.500	105	596030	49.00	ug/L	100
127) 1,3-dichlorobenzene	16.709	146	274805	49.30	ug/L	100
128) p-isopropyltoluene	16.631	119	513273	51.33	ug/L	100
129) 1,4-dichlorobenzene	16.798	146	266726	48.63	ug/L	99
130) benzyl chloride	16.908	91	256265	47.41	ug/L	100
131) p-diethylbenzene	17.049	119	317104	50.34	ug/L	100
132) 1,2-dichlorobenzene	17.232	146	271605	49.53	ug/L	99
133) n-butylbenzene	17.086	92	260264	51.42	ug/L	98
134) 1,2,4,5-tetramethylben...	17.912	119	484140	51.18	ug/L	98
135) 1,2-dibromo-3-chloropr...	18.058	75	30348	49.98	ug/L	96
136) 1,3,5-trichlorobenzene	18.293	180	220866	50.93	ug/L	99
137) 1,2,4-trichlorobenzene	19.010	180	193118	56.51	ug/L	98
138) hexachlorobutadiene	19.151	225	98647	49.49	ug/L	100
139) naphthalene	19.323	128	392809	52.63	ug/L	100
141) 1,2,3-trichlorobenzene	19.600	180	159090	54.66	ug/L	98
142) hexachloroethane	17.541	119	99476	53.40	ug/L	98
143) Cyclohexane	10.206	84	169694	49.76	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E185194a.D
Acq On : 24 Nov 2011 2:32 am
Operator : oksanaT
Sample : icv8147-50
Misc : MS21882,VE8149,5,,100,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 29 08:31:42 2011
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Nov 23 08:52:07 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187213.D
 Acq On : 18 Jan 2012 9:02 pm
 Operator : dipap
 Sample : cc8147-50
 Misc : MS24397,VE8236,5,,100,5,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 19 13:23:30 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.733	65	124901	500.00	ug/L	0.00
5) pentafluorobenzene	9.950	168	231217	50.00	ug/L	0.00
63) 1,4-difluorobenzene	10.870	114	322587	50.00	ug/L	0.00
94) chlorobenzene-d5	14.195	117	307580	50.00	ug/L	0.00
111) 1,4-dichlorobenzene-d4	16.767	152	169462	50.00	ug/L	0.00

System Monitoring Compounds

57) dibromofluoromethane (s)	9.997	113	129460	52.55	ug/L	0.00
Spiked Amount	50.000	Range	77 - 120	Recovery	=	105.10%
58) 1,2-dichloroethane-d4 (s)	10.415	65	134649	44.84	ug/L	0.00
Spiked Amount	50.000	Range	70 - 127	Recovery	=	89.68%
86) toluene-d8 (s)	12.564	98	486461	50.36	ug/L	0.00
Spiked Amount	50.000	Range	79 - 120	Recovery	=	100.72%
113) 4-bromofluorobenzene (s)	15.465	95	188175	44.09	ug/L	0.00
Spiked Amount	50.000	Range	76 - 118	Recovery	=	88.18%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.586	88	36630	1513.98	ug/L	93
3) tertiary butyl alcohol	7.848	59	98207	290.84	ug/L	94
11) chlorodifluoromethane	4.350	51	162039	48.40	ug/L	96
12) dichlorodifluoromethane	4.335	85	192443	49.68	ug/L	96
15) chloromethane	4.690	50	234705	42.27	ug/L	99
16) vinyl chloride	4.973	62	205661	47.16	ug/L	100
18) bromomethane	5.631	94	131129	51.50	ug/L	99
19) chloroethane	5.809	64	110041	48.71	ug/L	99
21) trichlorofluoromethane	6.274	101	217766	52.89	ug/L	99
22) pentane	6.384	43	238227	44.22	ug/L	99
23) ethyl ether	6.687	74	85511	47.35	ug/L	98
27) acrolein	6.902	56	314549	429.05	ug/L	97
28) 1,1-dichloroethene	7.126	96	125271	49.66	ug/L	93
30) acetone	7.111	58	14398	43.57	ug/L	98
31) allyl chloride	7.623	41	220159	39.78	ug/L	93
32) acetonitrile	7.519	40	97723	460.91	ug/L	99
33) iodomethane	7.393	142	265858	57.81	ug/L	99
35) carbon disulfide	7.550	76	433372	49.76	ug/L	98
36) methylene chloride	7.801	84	148307	48.68	ug/L	92
37) methyl acetate	7.581	43	118788	42.51	ug/L	97
38) methyl tert butyl ether	8.151	73	407453	45.00	ug/L	97
39) trans-1,2-dichloroethene	8.188	96	134785	49.98	ug/L	92
40) di-isopropyl ether	8.731	45	441855	41.30	ug/L	97
41) ethyl tert-butyl ether	9.191	59	425530	45.08	ug/L	97
42) 2-butanone	9.380	72	18472	46.36	ug/L	# 89
43) 1,1-dichloroethane	8.731	63	238675	47.75	ug/L	98
44) chloroprene	8.852	53	190463	46.82	ug/L	95
45) acrylonitrile	8.067	53	290836	220.40	ug/L	98
46) vinyl acetate	8.700	86	23381	45.03	ug/L	73
47) ethyl acetate	9.416	45	21279	37.17	ug/L	89
48) 2,2-dichloropropane	9.474	77	176539	48.97	ug/L	99
49) cis-1,2-dichloroethene	9.453	96	149405	48.94	ug/L	94
50) methyl acrylate	9.500	55	130269	43.58	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187213.D
 Acq On : 18 Jan 2012 9:02 pm
 Operator : dipap
 Sample : cc8147-50
 Misc : MS24397,VE8236,5,,100,5,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 19 13:23:30 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) propionitrile	9.448	54	215886	424.77	ug/L	95
52) bromochloromethane	9.756	128	79893	54.48	ug/L #	86
53) tetrahydrofuran	9.808	42	52203	38.61	ug/L	95
54) chloroform	9.808	83	228267	47.68	ug/L	97
55) t-butyl formate	9.850	59	111467	41.17	ug/L	96
56) Iso-octane	10.556	57	405819	44.60	ug/L	100
59) freon 113	7.111	151	106632	53.13	ug/L	100
60) methacrylonitrile	9.652	41	90218	42.84	ug/L	95
61) 1,1,1-trichloroethane	10.096	97	200806	51.95	ug/L	97
62) tert-amyl methyl ether	10.561	73	377749	44.03	ug/L	99
66) epichlorohydrin	12.114	57	76432	224.83	ug/L	95
67) n-butyl alcohol	10.948	56	236149	2366.37	ug/L	95
69) carbon tetrachloride	10.316	117	178241	57.66	ug/L	99
70) 1,1-dichloropropene	10.268	75	177351	52.53	ug/L	97
71) hexane	8.517	57	164586	43.67	ug/L	97
72) benzene	10.519	78	513462	50.06	ug/L	98
73) heptane	10.713	57	92794	42.01	ug/L	97
74) isopropyl acetate	10.404	43	252834	40.89	ug/L	97
75) 1,2-dichloroethane	10.504	62	165770	48.79	ug/L	99
77) trichloroethene	11.236	95	138340	53.46	ug/L	91
78) 2-nitropropane	11.988	46	940	47.05	ug/L #	1
79) 2-chloroethyl vinyl ether	11.994	63	349592	259.90	ug/L	97
80) methylcyclohexane	11.492	83	205385	50.86	ug/L	95
81) methyl methacrylate	11.471	69	140280	43.81	ug/L	99
82) 1,2-dichloropropane	11.476	63	140489	48.04	ug/L	97
83) dibromomethane	11.638	93	87879	51.46	ug/L	92
84) bromodichloromethane	11.764	83	179493	47.47	ug/L	97
85) cis-1,3-dichloropropene	12.239	75	231881	48.97	ug/L	97
87) 4-methyl-2-pentanone	12.318	58	60957	44.73	ug/L	96
88) toluene	12.642	92	331239	50.77	ug/L	98
89) 3-methyl-1-butanol	12.328	55	148519	945.99	ug/L	98
90) trans-1,3-dichloropropene	12.815	75	206138	48.88	ug/L	94
91) ethyl methacrylate	12.815	69	182497	43.38	ug/L	96
92) 1,1,2-trichloroethane	13.045	83	107886	46.96	ug/L	98
93) 2-hexanone	13.222	58	57776	45.77	ug/L	90
96) tetrachloroethene	13.290	166	169213	57.62	ug/L	98
97) 1,3-dichloropropane	13.248	76	213619	48.43	ug/L	99
98) butyl acetate	13.311	56	95377	40.93	ug/L	96
99) 3,3-dimethyl-1-butanol	13.405	57	160096	444.96	ug/L	97
100) dibromochloromethane	13.541	129	160595	51.92	ug/L	99
101) 1,2-dibromoethane	13.708	107	141371	50.83	ug/L	99
103) chlorobenzene	14.226	112	377075	52.27	ug/L	97
104) 1,1,1,2-tetrachloroethane	14.289	131	140887	52.18	ug/L	99
105) ethylbenzene	14.289	91	593372	49.33	ug/L	99
106) m,p-xylene	14.409	106	484988	103.00	ug/L	97
107) o-xylene	14.864	106	252997	52.03	ug/L	99
109) styrene	14.869	104	415010	50.19	ug/L	98
110) bromoform	15.157	173	128019	54.91	ug/L	99
112) isopropylbenzene	15.246	105	634365	47.69	ug/L	97
114) bromobenzene	15.690	156	182135	49.84	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : E187213.D
 Acq On : 18 Jan 2012 9:02 pm
 Operator : dipap
 Sample : cc8147-50
 Misc : MS24397,VE8236,5,,100,5,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 19 13:23:30 2012
 Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
 Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 29 09:15:39 2011
 Response via : Initial Calibration

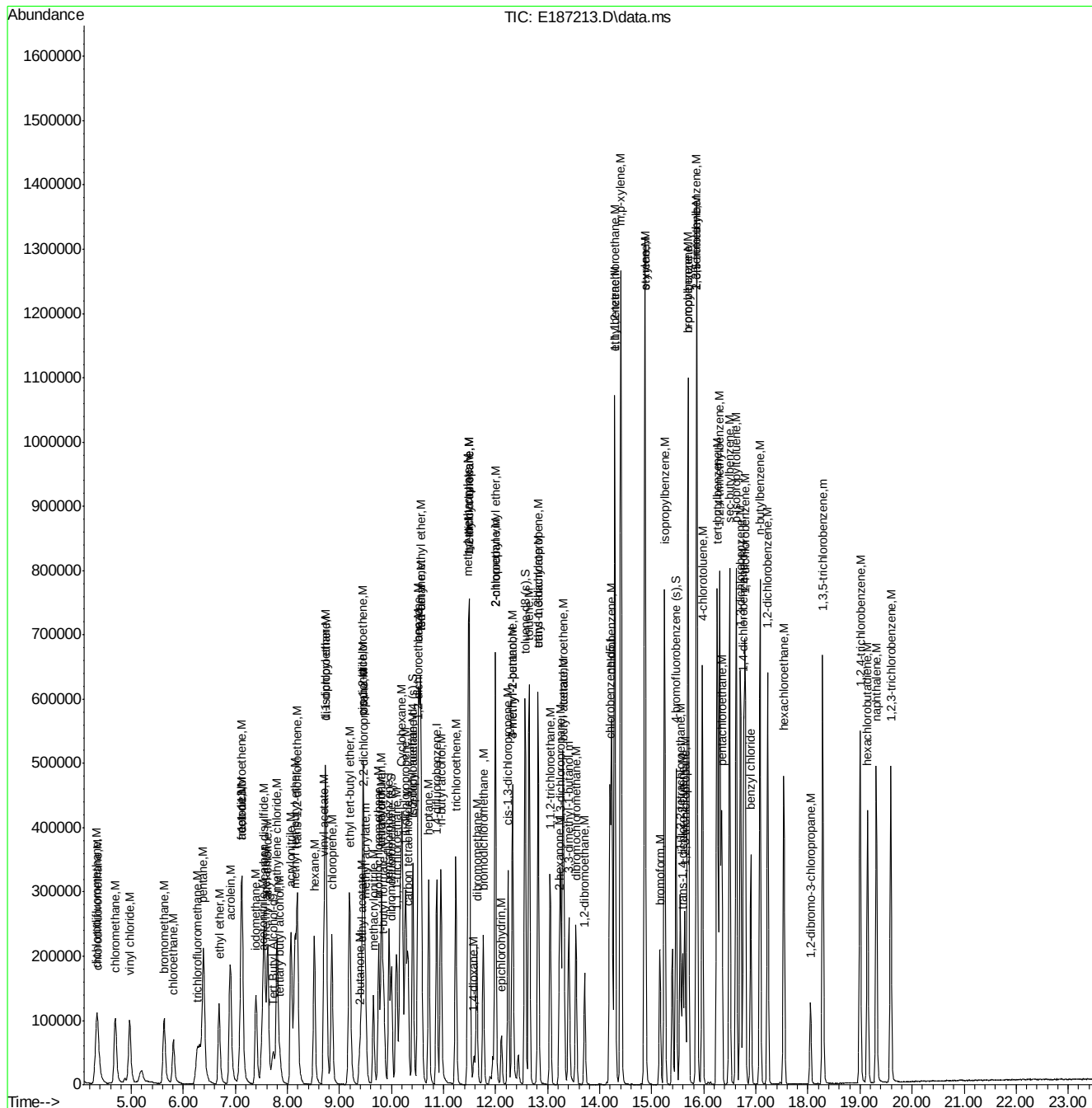
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) 1,1,2,2-tetrachloroethane	15.544	83	181528	42.35	ug/L	100
116) trans-1,4-dichloro-2-b...	15.591	53	44520	47.02	ug/L	96
117) 1,2,3-trichloropropane	15.632	110	51611	47.82	ug/L	90
118) n-propylbenzene	15.700	91	704358	46.80	ug/L	98
120) 2-chlorotoluene	15.868	126	159740	49.56	ug/L	90
121) 4-chlorotoluene	15.972	91	458984	46.95	ug/L	97
122) 1,3,5-trimethylbenzene	15.862	105	517168	47.52	ug/L	97
123) tert-butylbenzene	16.255	119	485015	49.03	ug/L	96
124) pentachloroethane	16.343	167	111390	48.23	ug/L	97
125) 1,2,4-trimethylbenzene	16.302	105	528485	47.04	ug/L	99
126) sec-butylbenzene	16.495	105	687833	47.76	ug/L	98
127) 1,3-dichlorobenzene	16.704	146	338235	51.25	ug/L	98
128) p-isopropyltoluene	16.620	119	585290	49.45	ug/L	99
129) 1,4-dichlorobenzene	16.793	146	335043	51.60	ug/L	97
130) benzyl chloride	16.903	91	309469	48.36	ug/L	98
132) 1,2-dichlorobenzene	17.227	146	336001	51.76	ug/L	97
133) n-butylbenzene	17.081	92	297409	49.63	ug/L	97
135) 1,2-dibromo-3-chloropr...	18.048	75	34975	48.66	ug/L	90
136) 1,3,5-trichlorobenzene	18.288	180	290011	56.50	ug/L	97
137) 1,2,4-trichlorobenzene	19.004	180	252853	62.50	ug/L	99
138) hexachlorobutadiene	19.146	225	131450	55.71	ug/L	100
139) naphthalene	19.313	128	506500	57.32	ug/L	99
141) 1,2,3-trichlorobenzene	19.590	180	219812	63.80	ug/L	99
142) hexachloroethane	17.535	119	114219	51.80	ug/L	98
143) Cyclohexane	10.201	84	190262	47.13	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E187213.D
Acq On : 18 Jan 2012 9:02 pm
Operator : dipap
Sample : cc8147-50
Misc : MS24397,VE8236,5,,100,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 19 13:23:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\ME8147.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 29 09:15:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117400.D
 Acq On : 8 Nov 2011 10:48 am
 Operator : RobertS
 Sample : IC5012-10
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 09 14:45:13 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.71	65	57950	500.00	ug/L	0.00
4) pentafluorobenzene	9.86	168	166375	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	228137	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	179847	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	84670	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	19969	13.53	ug/L	0.00
Spiked Amount 50.000	Range 67 - 131		Recovery =	27.06%#		
42) 1,2-dichloroethane-d4 (s)	10.38	65	18505	13.56	ug/L	0.00
Spiked Amount 50.000	Range 66 - 130		Recovery =	27.12%#		
71) toluene-d8 (s)	12.37	98	67832	14.64	ug/L	0.00
Spiked Amount 50.000	Range 76 - 125		Recovery =	29.28%#		
95) 4-bromofluorobenzene (s)	15.00	95	23871	14.41	ug/L	0.00
Spiked Amount 50.000	Range 53 - 142		Recovery =	28.82%#		

Target Compounds

						Qvalue
2) 1,4-dioxane	11.51	88	3041	248.57	ug/L	94
3) tertiary butyl alcohol	7.82	59	7694	49.90	ug/L	96
5) chlorodifluoromethane	4.21	51	13239	11.65	ug/L	94
6) dichlorodifluoromethane	4.17	85	15009	11.10	ug/L	98
7) chloromethane	4.53	50	19680	10.99	ug/L	99
8) vinyl chloride	4.78	62	15064	10.66	ug/L	98
9) bromomethane	5.48	94	10636	11.36	ug/L	95
10) chloroethane	5.67	64	7911	11.29	ug/L	94
12) trichlorofluoromethane	6.10	101	17039	10.80	ug/L	99
13) ethyl ether	6.52	74	7368	10.07	ug/L	89
14) acrolein	6.85	56	22577	108.73	ug/L	97
15) 1,1-dichloroethene	6.96	96	12883	11.39	ug/L	98
16) acetone	7.07	58	2340	12.23	ug/L #	77
17) allyl chloride	7.51	76	7900	10.75	ug/L	97
18) acetonitrile	7.59	40	8918	120.62	ug/L	89
19) iodomethane	7.28	142	27133	10.83	ug/L	96
20) iso-butyl alcohol	10.20	41	4569	109.48	ug/L	86
21) carbon disulfide	7.38	76	45137	11.40	ug/L	98
22) methylene chloride	7.72	84	14726	10.30	ug/L	97
23) methyl acetate	7.51	74	1803	10.45	ug/L #	81
24) methyl tert butyl ether	7.99	73	35822	10.18	ug/L	98
25) trans-1,2-dichloroethene	8.07	96	14263	10.93	ug/L	95
26) di-isopropyl ether	8.56	45	44917	10.27	ug/L	97
27) ethyl tert-butyl ether	9.02	59	37782	10.28	ug/L	99
28) 2-butanone	9.37	72	1973	11.74	ug/L	97
29) 1,1-dichloroethane	8.65	63	23775	10.44	ug/L	99
30) chloroprene	8.73	53	16920	11.31	ug/L	96
31) acrylonitrile	8.10	53	18416	52.35	ug/L	99
32) vinyl acetate	8.63	86	1484	8.76	ug/L	57
33) ethyl acetate	9.36	45	1482	9.66	ug/L #	1
34) 2,2-dichloropropane	9.37	77	18615	11.40	ug/L	99
35) cis-1,2-dichloroethene	9.38	96	15096	10.24	ug/L	99
36) propionitrile	9.52	54	14392	101.62	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117400.D
 Acq On : 8 Nov 2011 10:48 am
 Operator : RobertS
 Sample : IC5012-10
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 09 14:45:13 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.70	128	7875	10.46	ug/L	97
38) tetrahydrofuran	9.73	42	4166	10.39	ug/L	100
39) chloroform	9.75	83	23246	10.30	ug/L	97
40) tert-Butyl Formate	9.76	59	1834	8.60	ug/L	87
43) freon 113	6.90	151	10663	11.53	ug/L	99
44) methacrylonitrile	9.67	41	6175	9.46	ug/L	99
45) 1,1,1-trichloroethane	9.97	97	19734	11.59	ug/L	93
46) Cyclohexane	10.01	84	17686	11.81	ug/L #	3
47) 2,2,4-trimethylpentane	10.34	57	45927	11.62	ug/L	99
48) tert-amyl methyl ether	10.41	73	34970	10.68	ug/L	94
50) epichlorohydrin	12.05	57	4302	50.79	ug/L	87
51) n-butyl alcohol	10.94	56	15928	486.15	ug/L	96
52) carbon tetrachloride	10.15	117	17572	11.83	ug/L	96
53) 1,1-dichloropropene	10.14	75	16814	11.26	ug/L	95
54) hexane	8.30	57	16445	11.74	ug/L	99
55) Tert Amyl Alcohol	10.32	59	1946	52.18	ug/L #	85
56) benzene	10.41	78	52806	10.98	ug/L	99
57) heptane	10.50	57	9305	11.99	ug/L	99
58) isopropyl acetate	10.32	61	4469	10.65	ug/L	98
59) 1,2-dichloroethane	10.46	62	15038	10.40	ug/L	98
60) trichloroethene	11.11	95	14134	11.01	ug/L	93
61) ethyl acrylate	11.12	55	12836	10.69	ug/L	98
62) 2-nitropropane	11.93	41	2268	9.53	ug/L #	74
63) 2-chloroethyl vinyl ether	11.90	63	7148	63.80	ug/L	97
64) methyl methacrylate	11.37	69	6969	10.01	ug/L	95
65) 1,2-dichloropropane	11.39	63	13411	10.54	ug/L	91
66) methylcyclohexane	11.28	83	19518	11.58	ug/L	97
67) Tert-amyl ethyl ether	11.11	59	933	9.72	ug/L #	93
68) dibromomethane	11.56	93	7552	10.35	ug/L	94
69) bromodichloromethane	11.68	83	16907	10.39	ug/L	98
70) cis-1,3-dichloropropene	12.12	75	20315	10.18	ug/L	97
72) 4-methyl-2-pentanone	12.20	58	4255	10.40	ug/L	96
73) toluene	12.45	92	30702	10.83	ug/L	96
74) 3-methyl-1-butanol	12.24	70	5291	203.61	ug/L	96
75) trans-1,3-dichloropropene	12.67	75	16567	10.06	ug/L	95
76) ethyl methacrylate	12.62	69	12334	10.24	ug/L	96
77) 1,1,2-trichloroethane	12.88	83	8698	10.03	ug/L	97
78) 2-hexanone	13.04	58	5037	11.71	ug/L	96
80) tetrachloroethene	13.00	166	19121	11.01	ug/L	96
81) 1,3-dichloropropane	13.06	76	16648	10.57	ug/L	98
82) butyl acetate	13.08	56	6355	10.48	ug/L #	84
83) dibromochloromethane	13.32	129	13628	10.66	ug/L	95
84) 1,2-dibromoethane	13.48	107	10691	10.43	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.21	57	8316	98.60	ug/L	99
86) chlorobenzene	13.90	112	33920	10.62	ug/L	98
87) 1,1,1,2-tetrachloroethane	13.96	131	13050	10.81	ug/L	99
88) ethylbenzene	13.93	91	53408	11.12	ug/L	99
89) m,p-xylene	14.03	106	42435	22.82	ug/L	99
90) o-xylene	14.45	106	21214	11.03	ug/L	98
91) styrene	14.46	104	32085	10.55	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117400.D
 Acq On : 8 Nov 2011 10:48 am
 Operator : RobertS
 Sample : IC5012-10
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 09 14:45:13 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.76	173	9221	10.27	ug/L	98
94) isopropylbenzene	14.77	105	52048	11.01	ug/L	99
96) bromobenzene	15.20	156	15324	10.26	ug/L	97
97) cyclohexanone	15.00	55	23214	113.99	ug/L	97
98) 1,1,2,2-tetrachloroethane	15.12	83	12197	10.33	ug/L	98
99) trans-1,4-dichloro-2-buten	15.16	53	2188	8.66	ug/L	93
100) 1,2,3-trichloropropane	15.20	110	3017	10.25	ug/L	93
101) n-propylbenzene	15.18	91	60057	11.09	ug/L	99
102) 4-Ethyltoluene	15.27	105	43155	10.27	ug/L	97
103) 2-chlorotoluene	15.34	126	13516	10.92	ug/L	97
104) 4-chlorotoluene	15.44	91	35978	10.47	ug/L	96
105) 1,3,5-trimethylbenzene	15.32	105	41365	11.07	ug/L	99
106) tert-butylbenzene	15.66	119	36004	10.79	ug/L	97
107) pentachloroethane	15.77	167	7929	11.00	ug/L	99
108) 1,2,4-trimethylbenzene	15.71	105	41674	10.71	ug/L	91
109) sec-butylbenzene	15.88	105	53451	11.02	ug/L	99
110) 1,3-dichlorobenzene	16.09	146	27086	10.49	ug/L	99
111) p-isopropyltoluene	15.99	119	43167	10.89	ug/L	100
112) 1,4-dichlorobenzene	16.17	146	26885	10.37	ug/L	98
113) 1,2-dichlorobenzene	16.57	146	25375	10.17	ug/L	99
114) n-butylbenzene	16.40	92	21288	10.66	ug/L	95
115) p-Diethylbenzene	16.37	119	22803	10.51	ug/L	100
116) 1,2-dibromo-3-chloropropan	17.36	75	1930	9.96	ug/L	93
117) 1,3,5-Trichlorobenzene	17.50	180	22758	10.63	ug/L	98
118) 1,2,4-trichlorobenzene	18.15	180	19416	10.28	ug/L	99
119) 1,2,4,5-tetramethylbenzene	17.15	119	35109	9.88	ug/L	98
120) hexachlorobutadiene	18.23	225	11774	11.36	ug/L	100
121) naphthalene	18.44	128	29557	8.51	ug/L	97
122) 1,2,3-trichlorobenzene	18.70	180	16519	9.59	ug/L	96
123) hexachloroethane	16.80	119	7506	12.57	ug/L	95
124) Benzyl chloride	16.29	91	14771	11.72	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117401.D
 Acq On : 8 Nov 2011 11:18 am
 Operator : RobertS
 Sample : IC5012-2
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 09 14:45:34 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.72	65	57815	500.00	ug/L	0.01
4) pentafluorobenzene	9.87	168	173711	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	243997	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	186433	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	86222	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	11563	7.50	ug/L	0.00
Spiked Amount	50.000	Range 67 - 131	Recovery	=	15.00%#	
42) 1,2-dichloroethane-d4 (s)	10.38	65	10655	7.48	ug/L	0.00
Spiked Amount	50.000	Range 66 - 130	Recovery	=	14.96%#	
71) toluene-d8 (s)	12.38	98	37822	7.63	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	15.26%#	
95) 4-bromofluorobenzene (s)	15.00	95	13041	7.73	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	15.46%#	

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.82	59	1614	10.49	ug/L	78
5) chlorodifluoromethane	4.19	51	2097	1.77	ug/L	95
6) dichlorodifluoromethane	4.17	85	1183	0.84	ug/L	83
7) chloromethane	4.52	50	3696	1.98	ug/L	88
8) vinyl chloride	4.77	62	2459	1.67	ug/L	92
9) bromomethane	5.49	94	2109	2.16	ug/L	89
10) chloroethane	5.66	64	1279	1.75	ug/L	94
12) trichlorofluoromethane	6.11	101	1564	0.95	ug/L	95
13) ethyl ether	6.53	74	1459	1.91	ug/L	79
14) acrolein	6.86	56	3791	17.49	ug/L	90
15) 1,1-dichloroethene	6.97	96	2002	1.69	ug/L	84
16) acetone	7.09	58	360	1.80	ug/L	88
17) allyl chloride	7.52	76	1388	1.81	ug/L #	83
18) acetonitrile	7.61	40	1103	14.29	ug/L #	59
19) iodomethane	7.28	142	4738	1.81	ug/L	97
20) iso-butyl alcohol	10.21	41	797	18.29	ug/L	95
21) carbon disulfide	7.38	76	7159	1.73	ug/L	92
22) methylene chloride	7.73	84	2982	2.00	ug/L	94
23) methyl acetate	7.53	74	284	1.58	ug/L #	51
24) methyl tert butyl ether	8.00	73	6877	1.87	ug/L	97
25) trans-1,2-dichloroethene	8.07	96	2755	2.02	ug/L	88
26) di-isopropyl ether	8.57	45	8502	1.86	ug/L	94
27) ethyl tert-butyl ether	9.02	59	7202	1.88	ug/L	91
28) 2-butanone	9.39	72	242	1.38	ug/L #	1
29) 1,1-dichloroethane	8.65	63	4546	1.91	ug/L	98
30) chloroprene	8.74	53	2767	1.77	ug/L	95
31) acrylonitrile	8.12	53	2978	8.11	ug/L	93
33) ethyl acetate	9.36	45	171	1.07	ug/L #	13
34) 2,2-dichloropropane	9.37	77	3177	1.86	ug/L	88
35) cis-1,2-dichloroethene	9.39	96	2876	1.87	ug/L	96
36) propionitrile	9.53	54	2363	15.98	ug/L	71
37) bromochloromethane	9.70	128	1404	1.79	ug/L	89
38) tetrahydrofuran	9.74	42	1017	2.43	ug/L #	49

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117401.D
 Acq On : 8 Nov 2011 11:18 am
 Operator : RobertS
 Sample : IC5012-2
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 09 14:45:34 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) chloroform	9.76	83	4491	1.91	ug/L	90
43) freon 113	6.91	151	1626	1.68	ug/L #	66
44) methacrylonitrile	9.68	41	1262	1.85	ug/L	90
45) 1,1,1-trichloroethane	9.98	97	3214	1.81	ug/L	97
46) Cyclohexane	10.01	84	2953	1.89	ug/L #	88
47) 2,2,4-trimethylpentane	10.35	57	6724	1.63	ug/L	97
48) tert-amyl methyl ether	10.41	73	6736	1.97	ug/L	94
50) epichlorohydrin	12.06	57	640	7.06	ug/L	71
51) n-butyl alcohol	10.96	56	2672	76.25	ug/L	95
52) carbon tetrachloride	10.16	117	2583	1.63	ug/L	95
53) 1,1-dichloropropene	10.14	75	2919	1.83	ug/L	98
54) hexane	8.30	57	2684	1.79	ug/L	97
55) Tert Amyl Alcohol	10.33	59	354	8.88	ug/L #	75
56) benzene	10.42	78	9955	1.94	ug/L	96
57) heptane	10.51	57	1357	1.63	ug/L	89
58) isopropyl acetate	10.33	61	828	1.84	ug/L	99
59) 1,2-dichloroethane	10.47	62	2918	1.89	ug/L	95
60) trichloroethene	11.11	95	2551	1.86	ug/L	87
61) ethyl acrylate	11.13	55	2050	1.60	ug/L	99
62) 2-nitropropane	11.92	41	463	1.82	ug/L #	52
63) 2-chloroethyl vinyl ether	11.91	63	1131	36.26	ug/L	87
64) methyl methacrylate	11.38	69	1346	1.81	ug/L #	88
65) 1,2-dichloropropane	11.40	63	2608	1.92	ug/L	87
66) methylcyclohexane	11.29	83	2997	1.66	ug/L	85
68) dibromomethane	11.57	93	1534	1.97	ug/L	77
69) bromodichloromethane	11.69	83	3145	1.81	ug/L	99
70) cis-1,3-dichloropropene	12.12	75	3703	1.73	ug/L	99
72) 4-methyl-2-pentanone	12.21	58	836	1.91	ug/L	88
73) toluene	12.45	92	5903	1.95	ug/L	98
74) 3-methyl-1-butanol	12.26	70	799	28.75	ug/L #	73
75) trans-1,3-dichloropropene	12.68	75	3230	1.83	ug/L	86
76) ethyl methacrylate	12.63	69	2127	1.65	ug/L	95
77) 1,1,2-trichloroethane	12.89	83	1792	1.93	ug/L	89
78) 2-hexanone	13.04	58	718	1.56	ug/L	89
80) tetrachloroethene	13.01	166	3579	1.99	ug/L	99
81) 1,3-dichloropropane	13.07	76	3221	1.97	ug/L	95
82) butyl acetate	13.09	56	1049	1.67	ug/L #	66
83) dibromochloromethane	13.32	129	2504	1.89	ug/L	91
84) 1,2-dibromoethane	13.48	107	1998	1.88	ug/L	80
85) 3,3-Dimethyl-1-Butanol	13.21	57	1535	17.56	ug/L #	89
86) chlorobenzene	13.90	112	6600	1.99	ug/L	96
87) 1,1,1,2-tetrachloroethane	13.96	131	2509	2.00	ug/L	92
88) ethylbenzene	13.93	91	9830	1.97	ug/L	96
89) m,p-xylene	14.03	106	7499	3.89	ug/L	87
90) o-xylene	14.45	106	4046	2.03	ug/L	83
91) styrene	14.47	104	5748	1.82	ug/L	92
92) bromoform	14.77	173	1706	1.83	ug/L	94
94) isopropylbenzene	14.77	105	8923	1.85	ug/L	97
96) bromobenzene	15.20	156	3003	1.97	ug/L	85
97) cyclohexanone	15.00	55	3985	19.22	ug/L	78

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117401.D
 Acq On : 8 Nov 2011 11:18 am
 Operator : RobertS
 Sample : IC5012-2
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 09 14:45:34 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

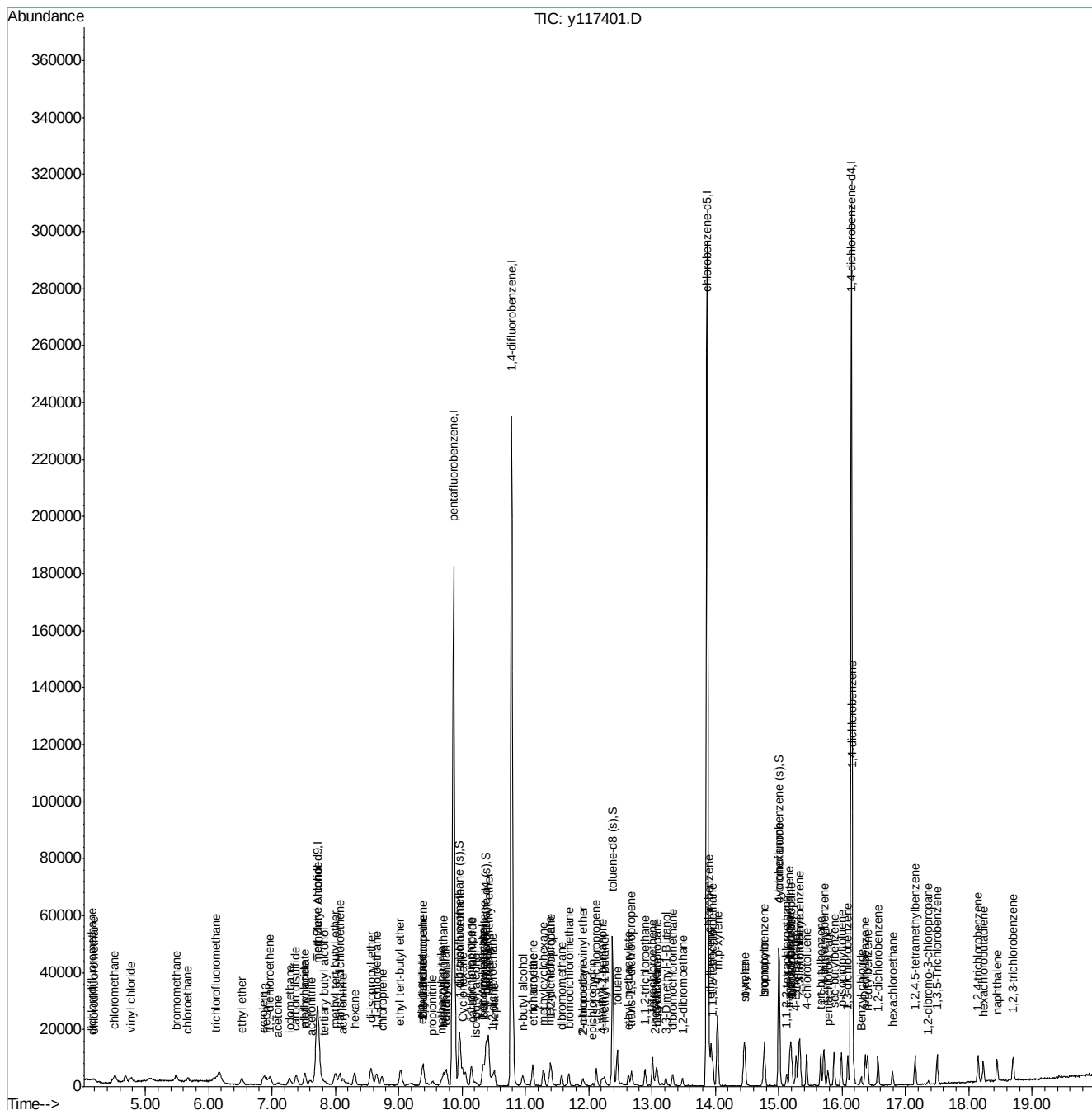
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) 1,1,2,2-tetrachloroethane	15.13	83	2298	1.91	ug/L	97
99) trans-1,4-dichloro-2-buten	15.16	53	349	1.36	ug/L #	69
100) 1,2,3-trichloropropane	15.20	110	629	2.10	ug/L	80
101) n-propylbenzene	15.18	91	10396	1.89	ug/L	98
102) 4-Ethyltoluene	15.27	105	8313	1.94	ug/L	98
103) 2-chlorotoluene	15.34	126	2440	1.94	ug/L	93
104) 4-chlorotoluene	15.44	91	6831	1.95	ug/L	98
105) 1,3,5-trimethylbenzene	15.32	105	7172	1.88	ug/L	92
106) tert-butylbenzene	15.67	119	6155	1.81	ug/L	93
107) pentachloroethane	15.78	167	1300	1.77	ug/L	82
108) 1,2,4-trimethylbenzene	15.71	105	7596	1.92	ug/L	88
109) sec-butylbenzene	15.88	105	8957	1.81	ug/L	98
110) 1,3-dichlorobenzene	16.10	146	4969	1.89	ug/L	99
111) p-isopropyltoluene	15.99	119	7327	1.82	ug/L	96
112) 1,4-dichlorobenzene	16.17	146	5139	1.95	ug/L	93
113) 1,2-dichlorobenzene	16.57	146	4899	1.93	ug/L	94
114) n-butylbenzene	16.39	92	3601	1.77	ug/L #	79
115) p-Diethylbenzene	16.37	119	3880	1.76	ug/L	98
116) 1,2-dibromo-3-chloropropan	17.36	75	410	2.08	ug/L #	61
117) 1,3,5-Trichlorobenzene	17.50	180	3867	1.77	ug/L	97
118) 1,2,4-trichlorobenzene	18.15	180	3316	1.72	ug/L	95
119) 1,2,4,5-tetramethylbenzene	17.15	119	5973	1.65	ug/L	99
120) hexachlorobutadiene	18.23	225	1969	1.87	ug/L	95
121) naphthalene	18.45	128	6832	1.93	ug/L	93
122) 1,2,3-trichlorobenzene	18.70	180	3334	1.90	ug/L	94
123) hexachloroethane	16.79	119	1041	5.25	ug/L	91
124) Benzyl chloride	16.30	91	2488	5.17	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117401.D
 Acq On : 8 Nov 2011 11:18 am
 Operator : Roberts
 Sample : IC5012-2
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 09 14:45:34 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117402.D
 Acq On : 8 Nov 2011 11:48 am
 Operator : RobertS
 Sample : IC5012-1
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 09 14:45:51 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.72	65	52639	500.00	ug/L	0.02
4) pentafluorobenzene	9.87	168	169859	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	234827	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	184723	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	84958	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.97	113	11269	7.48	ug/L	0.01
Spiked Amount	50.000	Range 67 - 131	Recovery	=	14.96%#	
42) 1,2-dichloroethane-d4 (s)	10.38	65	10225	7.34	ug/L	0.00
Spiked Amount	50.000	Range 66 - 130	Recovery	=	14.68%#	
71) toluene-d8 (s)	12.38	98	36698	7.69	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	15.38%#	
95) 4-bromofluorobenzene (s)	15.00	95	12703	7.64	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	15.28%#	

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.83	59	700	5.00	ug/L	63
5) chlorodifluoromethane	4.19	51	899	0.77	ug/L	61
6) dichlorodifluoromethane	4.14	85	1043	0.76	ug/L #	52
7) chloromethane	4.52	50	1924	1.05	ug/L	85
8) vinyl chloride	4.78	62	1200	0.83	ug/L	94
9) bromomethane	5.48	94	1048	1.10	ug/L	74
10) chloroethane	5.66	64	721	1.01	ug/L	72
12) trichlorofluoromethane	6.11	101	1102	0.68	ug/L	86
13) ethyl ether	6.52	74	609	0.82	ug/L #	63
14) acrolein	6.86	56	1732	8.17	ug/L	95
15) 1,1-dichloroethene	6.96	96	1169	1.01	ug/L #	80
17) allyl chloride	7.52	76	784	1.05	ug/L #	67
18) acetonitrile	7.60	40	164	2.17	ug/L #	31
19) iodomethane	7.28	142	2453	0.96	ug/L	92
20) iso-butyl alcohol	10.21	41	274	6.43	ug/L #	77
21) carbon disulfide	7.39	76	3865	0.96	ug/L	92
22) methylene chloride	7.73	84	1845	1.26	ug/L	89
24) methyl tert butyl ether	8.00	73	3830	1.07	ug/L	96
25) trans-1,2-dichloroethene	8.07	96	1403	1.05	ug/L	79
26) di-isopropyl ether	8.57	45	4098	0.92	ug/L	97
27) ethyl tert-butyl ether	9.03	59	3428	0.91	ug/L	96
29) 1,1-dichloroethane	8.65	63	2358	1.01	ug/L	91
30) chloroprene	8.73	53	1239	0.81	ug/L	85
31) acrylonitrile	8.12	53	1462	4.07	ug/L #	74
34) 2,2-dichloropropane	9.37	77	1600	0.96	ug/L	93
35) cis-1,2-dichloroethene	9.39	96	1582	1.05	ug/L	92
36) propionitrile	9.54	54	1177	8.14	ug/L	85
37) bromochloromethane	9.71	128	757	0.98	ug/L	79
38) tetrahydrofuran	9.73	42	514	1.26	ug/L #	67
39) chloroform	9.76	83	2545	1.11	ug/L	93
43) freon 113	6.90	151	596	0.63	ug/L	79
44) methacrylonitrile	9.67	41	641	0.96	ug/L #	58
45) 1,1,1-trichloroethane	9.98	97	1695	0.97	ug/L	83

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117402.D
 Acq On : 8 Nov 2011 11:48 am
 Operator : RobertS
 Sample : IC5012-1
 Misc : MS20977,VY5012,5.0,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 09 14:45:51 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Cyclohexane	10.01	84	1371	0.90	ug/L #	93
47) 2,2,4-trimethylpentane	10.34	57	2992	0.74	ug/L	91
48) tert-amyl methyl ether	10.42	73	3127	0.94	ug/L	99
50) epichlorohydrin	12.08	57	244	2.80	ug/L	57
51) n-butyl alcohol	10.96	56	1035	30.69	ug/L	95
52) carbon tetrachloride	10.15	117	1428	0.93	ug/L	86
53) 1,1-dichloropropene	10.14	75	1462	0.95	ug/L	94
54) hexane	8.30	57	1162	0.81	ug/L	89
56) benzene	10.42	78	5482	1.11	ug/L	92
57) heptane	10.50	57	520	0.65	ug/L	77
58) isopropyl acetate	10.35	61	328	0.76	ug/L #	29
59) 1,2-dichloroethane	10.47	62	1558	1.05	ug/L	82
60) trichloroethene	11.12	95	1338	1.01	ug/L	97
61) ethyl acrylate	11.13	55	906	0.73	ug/L #	64
62) 2-nitropropane	11.92	41	168	0.69	ug/L #	22
63) 2-chloroethyl vinyl ether	11.91	63	572	33.99	ug/L	91
64) methyl methacrylate	11.37	69	714	1.00	ug/L	91
65) 1,2-dichloropropane	11.40	63	1323	1.01	ug/L	93
66) methylcyclohexane	11.29	83	1309	0.75	ug/L	97
68) dibromomethane	11.57	93	708	0.94	ug/L	98
69) bromodichloromethane	11.68	83	1663	0.99	ug/L	89
70) cis-1,3-dichloropropene	12.13	75	2053	1.00	ug/L	93
72) 4-methyl-2-pentanone	12.22	58	379	0.90	ug/L #	83
73) toluene	12.45	92	3256	1.12	ug/L	89
74) 3-methyl-1-butanol	12.26	70	377	14.09	ug/L	87
75) trans-1,3-dichloropropene	12.68	75	1516	0.89	ug/L	85
76) ethyl methacrylate	12.63	69	956	0.77	ug/L	82
77) 1,1,2-trichloroethane	12.89	83	827	0.93	ug/L	94
78) 2-hexanone	13.04	58	333	0.75	ug/L #	34
80) tetrachloroethene	13.00	166	1993	1.12	ug/L	96
81) 1,3-dichloropropane	13.07	76	1616	1.00	ug/L	99
82) butyl acetate	13.09	56	383	0.61	ug/L #	66
83) dibromochloromethane	13.33	129	1144	0.87	ug/L	94
84) 1,2-dibromoethane	13.48	107	974	0.92	ug/L	97
85) 3,3-Dimethyl-1-Butanol	13.21	57	631	7.28	ug/L #	92
86) chlorobenzene	13.90	112	3372	1.03	ug/L	82
87) 1,1,1,2-tetrachloroethane	13.96	131	1224	0.99	ug/L	86
88) ethylbenzene	13.94	91	5260	1.07	ug/L	95
89) m,p-xylene	14.03	106	3902	2.04	ug/L	92
90) o-xylene	14.45	106	2027	1.03	ug/L	99
91) styrene	14.47	104	2852	0.91	ug/L	93
92) bromoform	14.76	173	802	0.87	ug/L	90
94) isopropylbenzene	14.77	105	4893	1.03	ug/L	96
96) bromobenzene	15.20	156	1610	1.07	ug/L	92
97) cyclohexanone	15.01	55	1883	9.22	ug/L #	70
98) 1,1,2,2-tetrachloroethane	15.13	83	1157	0.98	ug/L	91
100) 1,2,3-trichloropropane	15.20	110	313	1.06	ug/L	88
101) n-propylbenzene	15.18	91	5323	0.98	ug/L	89
102) 4-Ethyltoluene	15.27	105	4209	1.00	ug/L	98
103) 2-chlorotoluene	15.34	126	1277	1.03	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117402.D
 Acq On : 8 Nov 2011 11:48 am
 Operator : RobertS
 Sample : IC5012-1
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 09 14:45:51 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

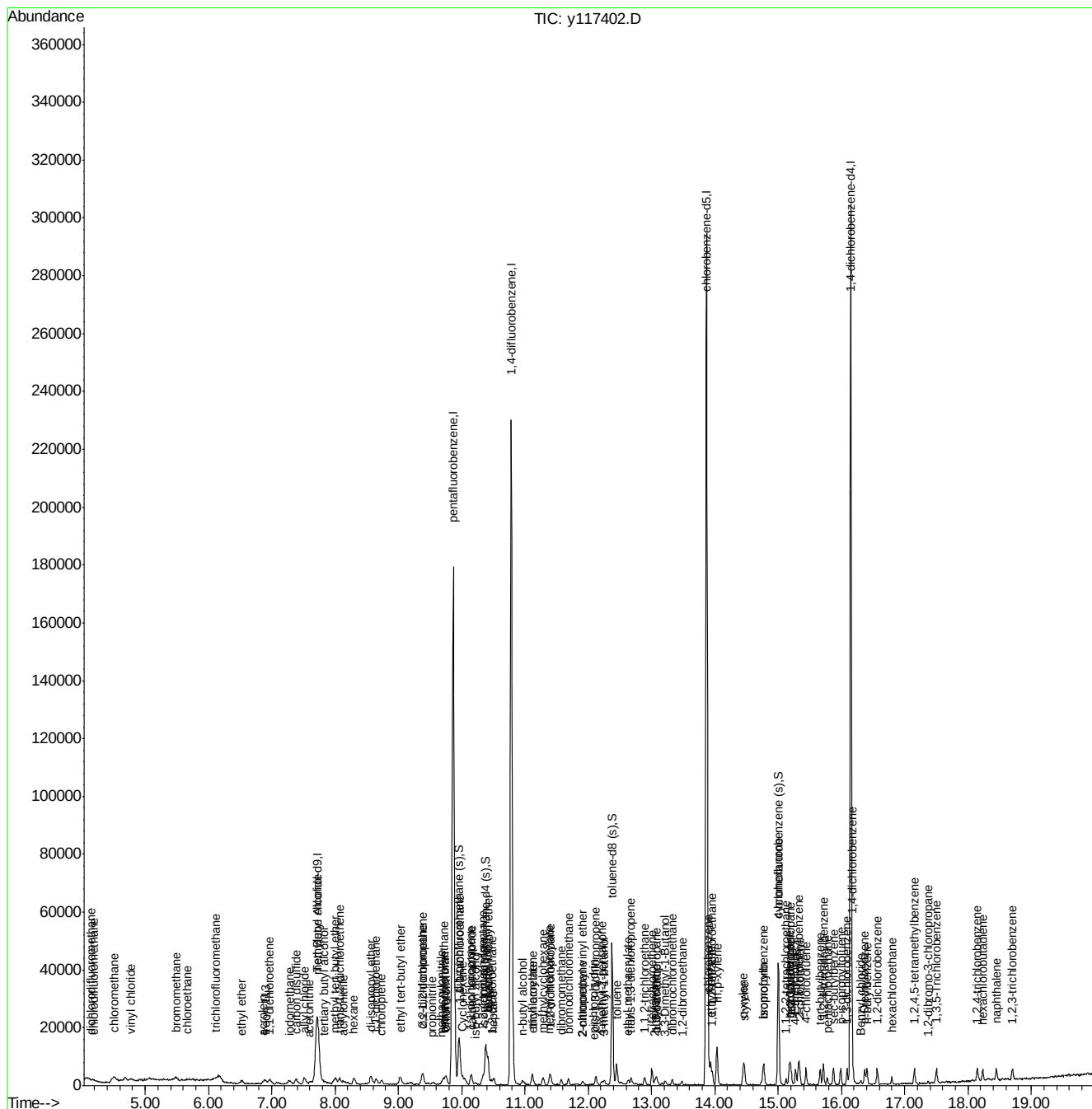
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) 4-chlorotoluene	15.44	91	3489	1.01	ug/L	90
105) 1,3,5-trimethylbenzene	15.32	105	3681	0.98	ug/L	98
106) tert-butylbenzene	15.66	119	3306	0.99	ug/L	89
107) pentachloroethane	15.78	167	666	0.92	ug/L	82
108) 1,2,4-trimethylbenzene	15.71	105	3920	1.00	ug/L	98
109) sec-butylbenzene	15.88	105	4605	0.95	ug/L	92
110) 1,3-dichlorobenzene	16.09	146	2567	0.99	ug/L	95
111) p-isopropyltoluene	15.99	119	3580	0.90	ug/L	92
112) 1,4-dichlorobenzene	16.17	146	2730	1.05	ug/L	95
113) 1,2-dichlorobenzene	16.57	146	2601	1.04	ug/L	88
114) n-butylbenzene	16.40	92	1921	0.96	ug/L #	77
115) p-Diethylbenzene	16.37	119	1854	0.85	ug/L	93
116) 1,2-dibromo-3-chloropropan	17.36	75	128	0.66	ug/L	91
117) 1,3,5-Trichlorobenzene	17.50	180	2058	0.96	ug/L	98
118) 1,2,4-trichlorobenzene	18.15	180	1715	0.90	ug/L	95
119) 1,2,4,5-tetramethylbenzene	17.15	119	3061	0.86	ug/L	99
120) hexachlorobutadiene	18.23	225	887	0.85	ug/L #	79
121) naphthalene	18.44	128	3567	1.02	ug/L	94
122) 1,2,3-trichlorobenzene	18.70	180	1579	0.91	ug/L	91
123) hexachloroethane	16.80	119	555	4.72	ug/L	89
124) Benzyl chloride	16.31	91	1114	4.47	ug/L #	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

```
Data Path : C:\MSDCHEM\1\DATA\  
Data File : y117402.D  
Acq On : 8 Nov 2011 11:48 am  
Operator : Roberts  
Sample : IC5012-1  
Misc : MS20977,VY5012,5.0,,,,,1  
ALS Vial : 4 Sample Multiplier: 1
```

Quant Time: Nov 09 14:45:51 2011
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Nov 09 07:18:17 2011
Response via : Initial Calibration



MYS5012.M Wed Nov 09 14:46:00 2011 RPT1

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117403.D
 Acq On : 8 Nov 2011 12:19 pm
 Operator : RobertS
 Sample : IC5012-0.5
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 08 13:44:09 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 12:15:09 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.72	65	56208	500.00	ug/L	0.00
4) pentafluorobenzene	9.87	168	170813	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	236716	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	183956	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	84230	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	10557	2.73	ug/L	0.00
Spiked Amount	50.000	Range 67 - 131	Recovery	=	5.46%#	
42) 1,2-dichloroethane-d4 (s)	10.38	65	9742	2.73	ug/L	0.00
Spiked Amount	50.000	Range 66 - 130	Recovery	=	5.46%#	
71) toluene-d8 (s)	12.38	98	34337	2.71	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	5.42%#	
95) 4-bromofluorobenzene (s)	15.00	95	12166	2.78	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	5.56%#	

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.83	59	455	3.00	ug/L	# 37
7) chloromethane	4.52	50	950	0.49	ug/L	85
8) vinyl chloride	4.77	62	465	0.35	ug/L	89
9) bromomethane	5.48	94	567	0.59	ug/L	73
10) chloroethane	5.66	64	203	0.28	ug/L	# 45
12) trichlorofluoromethane	6.12	101	139	0.85	ug/L	93
13) ethyl ether	6.54	74	351	0.50	ug/L	# 72
14) acrolein	6.86	56	828	4.19	ug/L	75
15) 1,1-dichloroethene	6.97	96	733	0.63	ug/L	# 73
17) allyl chloride	7.51	76	325	0.43	ug/L	# 56
18) acetonitrile	7.62	40	136	1.49	ug/L	# 2
19) iodomethane	7.28	142	1337	0.53	ug/L	89
20) iso-butyl alcohol	10.21	41	311	6.63	ug/L	# 59
21) carbon disulfide	7.38	76	1721	0.43	ug/L	92
22) methylene chloride	7.74	84	1073	0.72	ug/L	95
24) methyl tert butyl ether	8.01	73	1144	0.31	ug/L	89
25) trans-1,2-dichloroethene	8.07	96	640	0.45	ug/L	80
26) di-isopropyl ether	8.57	45	2310	0.54	ug/L	85
27) ethyl tert-butyl ether	9.03	59	1972	0.54	ug/L	90
29) 1,1-dichloroethane	8.65	63	1227	0.52	ug/L	77
30) chloroprene	8.74	53	587	0.41	ug/L	86
31) acrylonitrile	8.15	53	634	1.97	ug/L	# 64
34) 2,2-dichloropropane	9.38	77	910	0.54	ug/L	# 47
35) cis-1,2-dichloroethene	9.39	96	837	0.55	ug/L	# 76
36) propionitrile	9.55	54	555	4.21	ug/L	68
37) bromochloromethane	9.71	128	330	0.44	ug/L	85
38) tetrahydrofuran	9.74	42	475	1.02	ug/L	# 37
39) chloroform	9.75	83	1329	0.56	ug/L	94
44) methacrylonitrile	9.68	41	282	0.45	ug/L	84
45) 1,1,1-trichloroethane	9.98	97	766	0.43	ug/L	83
46) Cyclohexane	10.01	84	642	0.41	ug/L	# 82
47) 2,2,4-trimethylpentane	10.35	57	1452	0.39	ug/L	91
48) tert-amyl methyl ether	10.42	73	1952	0.58	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117403.D
 Acq On : 8 Nov 2011 12:19 pm
 Operator : RobertS
 Sample : IC5012-0.5
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 08 13:44:09 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 12:15:09 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) epichlorohydrin	12.07	57	149	1.67	ug/L	53
51) n-butyl alcohol	10.95	56	966	29.22	ug/L	90
52) carbon tetrachloride	10.15	117	683	0.45	ug/L	91
53) 1,1-dichloropropene	10.15	75	398	0.26	ug/L	86
54) hexane	8.31	57	630	0.42	ug/L	88
56) benzene	10.42	78	2907	0.55	ug/L	96
57) heptane	10.50	57	257	0.36	ug/L #	53
58) isopropyl acetate	10.37	61	131	0.33	ug/L #	28
59) 1,2-dichloroethane	10.47	62	728	0.48	ug/L	92
60) trichloroethene	11.12	95	702	0.52	ug/L #	78
61) ethyl acrylate	11.14	55	501	0.46	ug/L #	67
62) 2-nitropropane	12.22	41	145	0.63	ug/L #	58
63) 2-chloroethyl vinyl ether	11.92	63	262	3.73	ug/L #	45
64) methyl methacrylate	11.38	69	306	0.44	ug/L #	72
65) 1,2-dichloropropane	11.40	63	568	0.43	ug/L	88
66) methylcyclohexane	11.28	83	603	0.38	ug/L	94
68) dibromomethane	11.57	93	340	0.46	ug/L	87
69) bromodichloromethane	11.69	83	737	0.45	ug/L	77
70) cis-1,3-dichloropropene	12.13	75	1025	0.51	ug/L	85
72) 4-methyl-2-pentanone	12.37	58	194	0.44	ug/L #	1
73) toluene	12.46	92	1728	0.56	ug/L #	76
74) 3-methyl-1-butanol	12.25	70	288	13.12	ug/L #	60
75) trans-1,3-dichloropropene	12.68	75	744	0.46	ug/L	73
76) ethyl methacrylate	12.62	69	534	0.49	ug/L #	63
77) 1,1,2-trichloroethane	12.89	83	466	0.54	ug/L	80
78) 2-hexanone	13.06	58	104	0.24	ug/L #	1
80) tetrachloroethene	13.00	166	1010	0.53	ug/L	97
81) 1,3-dichloropropane	13.07	76	838	0.51	ug/L	86
82) butyl acetate	13.09	56	286	0.44	ug/L #	53
83) dibromochloromethane	13.33	129	626	0.50	ug/L	79
84) 1,2-dibromoethane	13.48	107	508	0.50	ug/L	78
85) 3,3-Dimethyl-1-Butanol	13.22	57	581	7.23	ug/L #	88
86) chlorobenzene	13.90	112	1676	0.50	ug/L	81
87) 1,1,1,2-tetrachloroethane	13.96	131	666	0.53	ug/L	90
88) ethylbenzene	13.93	91	2453	0.47	ug/L	90
89) m,p-xylene	14.04	106	2003	1.01	ug/L	93
90) o-xylene	14.45	106	1028	0.50	ug/L	83
91) styrene	14.47	104	1470	0.49	ug/L	95
92) bromoform	14.77	173	517	0.60	ug/L	85
94) isopropylbenzene	14.77	105	2430	0.51	ug/L	96
96) bromobenzene	15.20	156	815	0.53	ug/L	84
97) cyclohexanone	15.01	55	1423	6.97	ug/L #	76
98) 1,1,2,2-tetrachloroethane	15.13	83	859	0.74	ug/L	95
100) 1,2,3-trichloropropane	15.21	110	140	0.46	ug/L #	32
101) n-propylbenzene	15.18	91	2876	0.53	ug/L	98
102) 4-Ethyltoluene	15.28	105	2165	0.58	ug/L	95
103) 2-chlorotoluene	15.34	126	778	0.61	ug/L #	56
104) 4-chlorotoluene	15.44	91	1812	0.52	ug/L	94
105) 1,3,5-trimethylbenzene	15.32	105	2076	0.55	ug/L	88
106) tert-butylbenzene	15.67	119	1671	0.51	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117403.D
 Acq On : 8 Nov 2011 12:19 pm
 Operator : RobertS
 Sample : IC5012-0.5
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 08 13:44:09 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 12:15:09 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

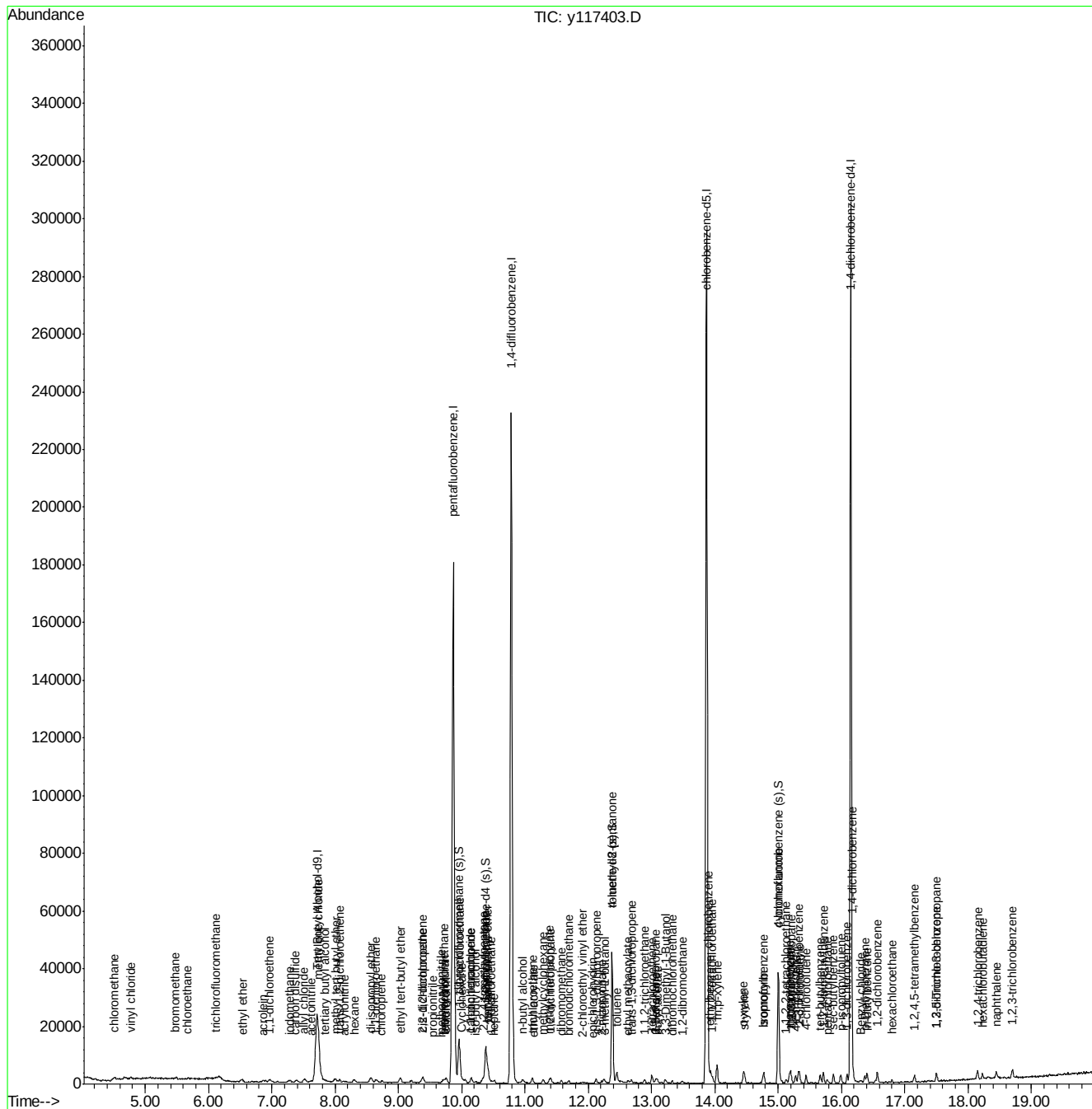
107) pentachloroethane	15.78	167	353	0.51	ug/L #	70
108) 1,2,4-trimethylbenzene	15.71	105	2392	0.61	ug/L	98
109) sec-butylbenzene	15.87	105	2542	0.53	ug/L	92
110) 1,3-dichlorobenzene	16.09	146	1565	0.61	ug/L	98
111) p-isopropyltoluene	15.99	119	1928	0.51	ug/L	95
112) 1,4-dichlorobenzene	16.17	146	2016	0.77	ug/L	97
113) 1,2-dichlorobenzene	16.57	146	1676	0.67	ug/L	93
114) n-butylbenzene	16.40	92	1134	0.59	ug/L	99
115) p-Diethylbenzene	16.37	119	1076	0.54	ug/L #	94
116) 1,2-dibromo-3-chloropropan	17.50	75	177	1.02	ug/L #	1
117) 1,3,5-Trichlorobenzene	17.50	180	1347	0.65	ug/L	94
118) 1,2,4-trichlorobenzene	18.15	180	1156	0.83	ug/L #	72
119) 1,2,4,5-tetramethylbenzene	17.16	119	1537	0.49	ug/L #	93
120) hexachlorobutadiene	18.24	225	606	0.60	ug/L	96
121) naphthalene	18.45	128	2621	0.63	ug/L	96
122) 1,2,3-trichlorobenzene	18.70	180	1262	0.80	ug/L	83
123) hexachloroethane	16.80	119	320	0.53	ug/L	85
124) Benzyl chloride	16.30	91	791	0.59	ug/L #	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

```
Data Path : C:\MSDChem\1\DATA\  
Data File : y117403.D  
Acq On : 8 Nov 2011 12:19 pm  
Operator : Roberts  
Sample : IC5012-0.5  
Misc : MS20977,VY5012,5.0,,,,1  
ALS Vial : 5 Sample Multiplier: 1
```

Quant Time: Nov 08 13:44:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 08 12:15:09 2011
Response via : Initial Calibration



MYS5012.M Wed Nov 09 14:46:16 2011 RPT1

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Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117404.D
 Acq On : 8 Nov 2011 12:49 pm
 Operator : RobertS
 Sample : ICC5012-50
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 08 13:44:20 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:44:13 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.71	65	54105	500.00	ug/L	0.00
4) pentafluorobenzene	9.87	168	169570	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	237865	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	190223	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	87144	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	75880	19.76	ug/L	0.00
Spiked Amount 50.000	Range 67 - 131		Recovery =	39.52%#		
42) 1,2-dichloroethane-d4 (s)	10.38	65	69809	19.70	ug/L	0.00
Spiked Amount 50.000	Range 66 - 130		Recovery =	39.40%#		
71) toluene-d8 (s)	12.38	98	250488	19.64	ug/L	0.00
Spiked Amount 50.000	Range 76 - 125		Recovery =	39.28%#		
95) 4-bromofluorobenzene (s)	15.00	95	87242	19.29	ug/L	0.00
Spiked Amount 50.000	Range 53 - 142		Recovery =	38.58%#		

Target Compounds

						Qvalue
2) 1,4-dioxane	11.51	88	14204	1250.69	ug/L	97
3) tertiary butyl alcohol	7.82	59	34948	239.04	ug/L	97
5) chlorodifluoromethane	4.19	51	54966	46.33	ug/L	98
6) dichlorodifluoromethane	4.16	85	67390	64.21	ug/L	97
7) chloromethane	4.53	50	84717	44.35	ug/L	100
8) vinyl chloride	4.79	62	69343	57.11	ug/L	96
9) bromomethane	5.48	94	44139	40.50	ug/L	99
10) chloroethane	5.67	64	35065	48.92	ug/L	99
12) trichlorofluoromethane	6.11	101	79239	43.07	ug/L	100
13) ethyl ether	6.52	74	35561	51.51	ug/L	98
14) acrolein	6.86	56	107070	546.24	ug/L	97
15) 1,1-dichloroethene	6.97	96	56888	49.36	ug/L	96
16) acetone	7.08	58	9918	41.59	ug/L	88
17) allyl chloride	7.52	76	36287	48.06	ug/L	96
18) acetonitrile	7.58	40	33658	370.31	ug/L	99
19) iodomethane	7.28	142	125470	50.01	ug/L	96
20) iso-butyl alcohol	10.20	41	20167	433.07	ug/L	97
21) carbon disulfide	7.38	76	198066	49.71	ug/L	98
22) methylene chloride	7.73	84	69443	46.98	ug/L	99
23) methyl acetate	7.51	74	8842	54.85	ug/L	92
24) methyl tert butyl ether	8.00	73	171504	52.36	ug/L	99
25) trans-1,2-dichloroethene	8.07	96	63498	45.37	ug/L	99
26) di-isopropyl ether	8.56	45	216022	50.56	ug/L	100
27) ethyl tert-butyl ether	9.03	59	182022	50.62	ug/L	98
28) 2-butanone	9.37	72	8689	43.21	ug/L	64
29) 1,1-dichloroethane	8.65	63	111969	48.01	ug/L	99
30) chloroprene	8.74	53	76381	53.14	ug/L	98
31) acrylonitrile	8.10	53	89834	281.32	ug/L	96
32) vinyl acetate	8.63	86	8040	53.16	ug/L	98
33) ethyl acetate	9.35	45	7473	63.73	ug/L	96
34) 2,2-dichloropropane	9.37	77	81568	48.50	ug/L	99
35) cis-1,2-dichloroethene	9.39	96	72163	47.88	ug/L	95
36) propionitrile	9.52	54	69255	528.63	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117404.D
 Acq On : 8 Nov 2011 12:49 pm
 Operator : RobertS
 Sample : ICC5012-50
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 08 13:44:20 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:44:13 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.71	128	37589	50.26	ug/L	96
38) tetrahydrofuran	9.73	42	18148	39.41	ug/L	98
39) chloroform	9.75	83	109654	46.32	ug/L	98
40) tert-Butyl Formate	9.77	59	10027	53.64	ug/L	93
43) freon 113	6.91	151	46663	56.55	ug/L	91
44) methacrylonitrile	9.67	41	32801	52.68	ug/L	97
45) 1,1,1-trichloroethane	9.97	97	86661	51.03	ug/L	97
46) Cyclohexane	10.01	84	78368	53.25	ug/L #	92
47) 2,2,4-trimethylpentane	10.34	57	200144	54.84	ug/L	97
48) tert-amyl methyl ether	10.41	73	161174	48.48	ug/L	99
50) epichlorohydrin	12.05	57	20893	232.90	ug/L	94
51) n-butyl alcohol	10.94	56	84477	2543.39	ug/L	98
52) carbon tetrachloride	10.16	117	78352	51.80	ug/L	95
53) 1,1-dichloropropene	10.14	75	77144	49.70	ug/L	97
54) hexane	8.30	57	71727	47.46	ug/L	98
55) Tert Amyl Alcohol	10.33	59	9336	248.66	ug/L #	76
56) benzene	10.42	78	238340	44.94	ug/L	100
57) heptane	10.51	57	40201	55.88	ug/L	98
58) isopropyl acetate	10.32	61	21838	59.40	ug/L	98
59) 1,2-dichloroethane	10.47	62	72879	48.33	ug/L	100
60) trichloroethene	11.11	95	65226	48.05	ug/L	99
61) ethyl acrylate	11.12	55	64356	59.31	ug/L	96
62) 2-nitropropane	11.92	41	11609	50.24	ug/L #	68
63) 2-chloroethyl vinyl ether	11.90	63	44049	286.13	ug/L	98
64) methyl methacrylate	11.37	69	35414	51.22	ug/L	98
65) 1,2-dichloropropane	11.40	63	64320	48.12	ug/L	99
66) methylcyclohexane	11.29	83	85767	53.36	ug/L	99
67) Tert-amyl ethyl ether	11.11	59	5044	51.85	ug/L #	76
68) dibromomethane	11.57	93	37946	51.70	ug/L	97
69) bromodichloromethane	11.69	83	82912	49.94	ug/L	99
70) cis-1,3-dichloropropene	12.12	75	103786	51.49	ug/L	99
72) 4-methyl-2-pentanone	12.20	58	20249	45.64	ug/L	94
73) toluene	12.45	92	139929	44.77	ug/L	96
74) 3-methyl-1-butanol	12.24	70	27792	1260.41	ug/L	98
75) trans-1,3-dichloropropene	12.68	75	86949	53.92	ug/L	97
76) ethyl methacrylate	12.62	69	63232	57.64	ug/L	97
77) 1,1,2-trichloroethane	12.89	83	43582	49.04	ug/L	94
78) 2-hexanone	13.04	58	23093	52.77	ug/L	98
80) tetrachloroethene	13.01	166	89415	45.46	ug/L	96
81) 1,3-dichloropropane	13.07	76	80131	47.13	ug/L	99
82) butyl acetate	13.08	56	30957	46.06	ug/L	98
83) dibromochloromethane	13.32	129	67646	52.12	ug/L	96
84) 1,2-dibromoethane	13.48	107	53945	51.33	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.21	57	44454	534.73	ug/L	98
86) chlorobenzene	13.90	112	162221	46.67	ug/L	99
87) 1,1,1,2-tetrachloroethane	13.96	131	61496	46.43	ug/L	99
88) ethylbenzene	13.93	91	244741	45.66	ug/L	99
89) m,p-xylene	14.04	106	190248	92.56	ug/L	100
90) o-xylene	14.45	106	97943	45.94	ug/L	98
91) styrene	14.46	104	161089	52.17	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117404.D
 Acq On : 8 Nov 2011 12:49 pm
 Operator : RobertS
 Sample : ICC5012-50
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 08 13:44:20 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:44:13 2011
 Response via : Initial Calibration

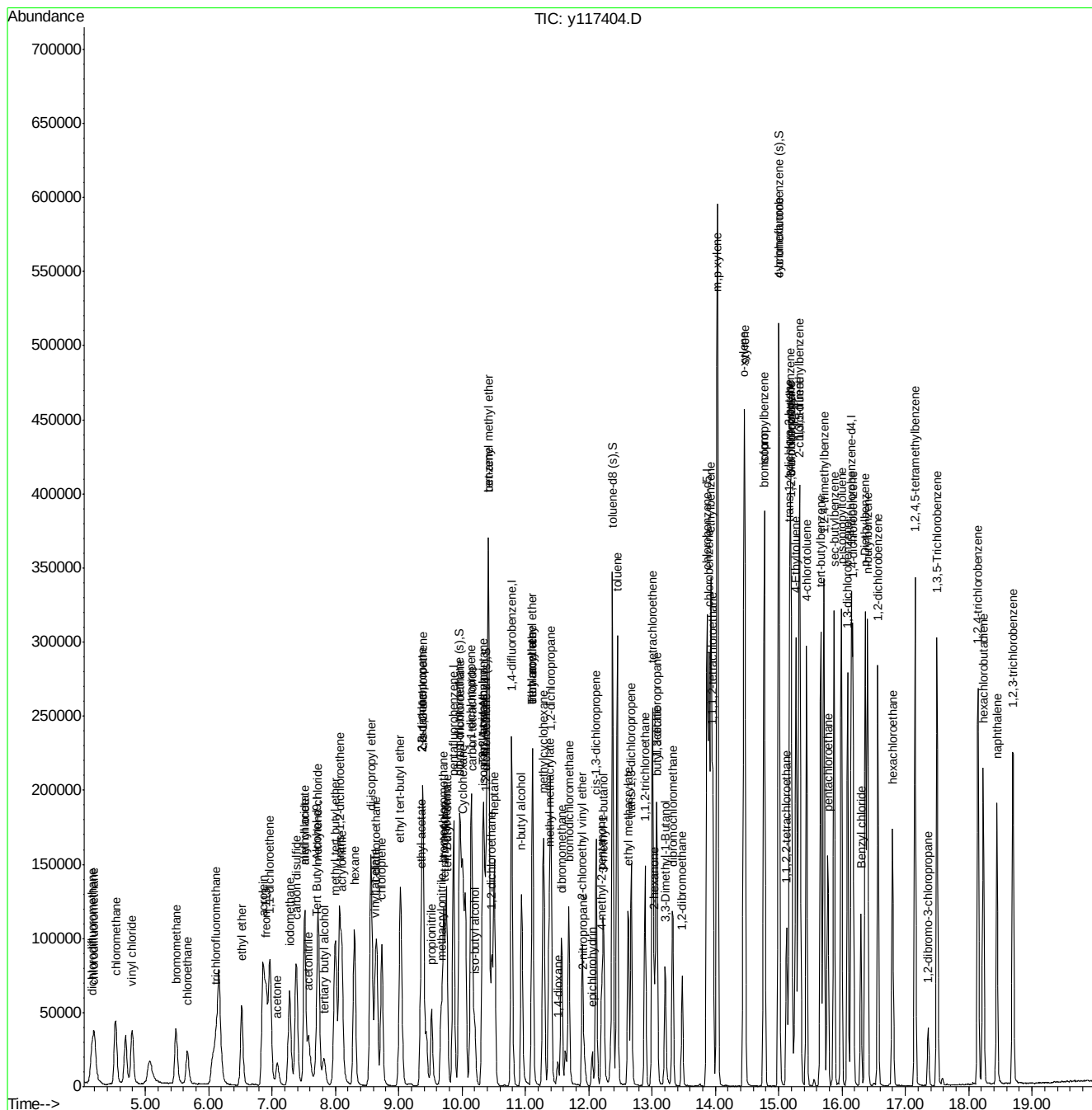
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.76	173	46891	50.14	ug/L	99
94) isopropylbenzene	14.77	105	237105	47.79	ug/L	99
96) bromobenzene	15.20	156	73094	45.45	ug/L	100
97) cyclohexanone	15.00	55	103606	490.68	ug/L	97
98) 1,1,2,2-tetrachloroethane	15.12	83	57252	42.56	ug/L	98
99) trans-1,4-dichloro-2-buten	15.16	53	12752	63.51	ug/L	91
100) 1,2,3-trichloropropane	15.20	110	14783	47.72	ug/L	95
101) n-propylbenzene	15.18	91	275036	48.84	ug/L	100
102) 4-Ethyltoluene	15.27	105	212917	47.82	ug/L	99
103) 2-chlorotoluene	15.34	126	61394	46.82	ug/L	99
104) 4-chlorotoluene	15.44	91	170162	47.56	ug/L	99
105) 1,3,5-trimethylbenzene	15.32	105	190095	48.92	ug/L	99
106) tert-butylbenzene	15.66	119	168178	49.43	ug/L	98
107) pentachloroethane	15.78	167	36146	50.29	ug/L	95
108) 1,2,4-trimethylbenzene	15.71	105	195194	48.20	ug/L	98
109) sec-butylbenzene	15.88	105	245756	49.98	ug/L	100
110) 1,3-dichlorobenzene	16.09	146	129876	49.12	ug/L	98
111) p-isopropyltoluene	15.99	119	204229	51.85	ug/L	99
112) 1,4-dichlorobenzene	16.17	146	127499	46.85	ug/L	99
113) 1,2-dichlorobenzene	16.57	146	124029	47.98	ug/L	99
114) n-butylbenzene	16.40	92	100937	50.63	ug/L	98
115) p-Diethylbenzene	16.37	119	116597	55.29	ug/L	100
116) 1,2-dibromo-3-chloropropan	17.36	75	9286	51.87	ug/L	86
117) 1,3,5-Trichlorobenzene	17.50	180	111658	52.28	ug/L	99
118) 1,2,4-trichlorobenzene	18.15	180	98849	48.57	ug/L	98
119) 1,2,4,5-tetramethylbenzene	17.15	119	191383	58.76	ug/L	100
120) hexachlorobutadiene	18.23	225	53711	51.70	ug/L	100
121) naphthalene	18.44	128	161787	54.37	ug/L	99
122) 1,2,3-trichlorobenzene	18.70	180	88275	51.75	ug/L	99
123) hexachloroethane	16.80	119	37555	60.32	ug/L	97
124) Benzyl chloride	16.30	91	83014	59.77	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : y117404.D
Acq On : 8 Nov 2011 12:49 pm
Operator : RobertsS
Sample : ICC5012-50
Misc : MS20977,VY5012,5.0,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 08 13:44:20 2011
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Tue Nov 08 13:44:13 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117405.D
 Acq On : 8 Nov 2011 1:19 pm
 Operator : RobertS
 Sample : IC5012-5
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 08 13:44:31 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:44:25 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.72	65	62373	500.00	ug/L	0.01
4) pentafluorobenzene	9.87	168	180199	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	251527	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	199432	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	92049	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	17770	5.45	ug/L	0.00
Spiked Amount 50.000	Range 67 - 131		Recovery =	10.90%#		
42) 1,2-dichloroethane-d4 (s)	10.38	65	16437	5.47	ug/L	0.00
Spiked Amount 50.000	Range 66 - 130		Recovery =	10.94%#		
71) toluene-d8 (s)	12.38	98	58144	5.41	ug/L	0.00
Spiked Amount 50.000	Range 76 - 125		Recovery =	10.82%#		
95) 4-bromofluorobenzene (s)	15.00	95	20265	5.33	ug/L	0.00
Spiked Amount 50.000	Range 53 - 142		Recovery =	10.66%#		

Target Compounds

						Qvalue
2) 1,4-dioxane	11.52	88	1299	99.19	ug/L	95
3) tertiary butyl alcohol	7.84	59	3785	22.71	ug/L	91
5) chlorodifluoromethane	4.20	51	5019	4.08	ug/L	90
6) dichlorodifluoromethane	4.16	85	5796	4.85	ug/L	97
7) chloromethane	4.52	50	9218	4.67	ug/L	93
8) vinyl chloride	4.78	62	6745	5.08	ug/L	92
9) bromomethane	5.48	94	4934	4.42	ug/L	93
10) chloroethane	5.67	64	3618	4.78	ug/L	97
12) trichlorofluoromethane	6.12	101	7530	4.66	ug/L	99
13) ethyl ether	6.52	74	4077	5.52	ug/L	85
14) acrolein	6.86	56	11172	52.42	ug/L	98
15) 1,1-dichloroethene	6.97	96	5889	4.82	ug/L	88
16) acetone	7.09	58	982	2.24	ug/L	87
17) allyl chloride	7.52	76	3616	4.55	ug/L	93
18) acetonitrile	7.59	40	3822	45.47	ug/L #	67
19) iodomethane	7.28	142	12370	4.64	ug/L	91
20) iso-butyl alcohol	10.22	41	2211	47.88	ug/L	87
21) carbon disulfide	7.39	76	19961	4.72	ug/L	99
22) methylene chloride	7.73	84	7377	4.79	ug/L	94
23) methyl acetate	7.52	74	751	4.25	ug/L #	15
24) methyl tert butyl ether	8.00	73	17844	5.08	ug/L	98
25) trans-1,2-dichloroethene	8.08	96	6410	4.41	ug/L	99
26) di-isopropyl ether	8.56	45	22385	4.92	ug/L	94
27) ethyl tert-butyl ether	9.03	59	19018	4.96	ug/L	98
28) 2-butanone	9.39	72	780	3.92	ug/L #	53
29) 1,1-dichloroethane	8.65	63	11507	4.69	ug/L	97
30) chloroprene	8.73	53	7576	4.88	ug/L	93
31) acrylonitrile	8.11	53	9339	26.68	ug/L	99
33) ethyl acetate	9.36	45	779	5.73	ug/L #	1
34) 2,2-dichloropropane	9.37	77	8076	4.55	ug/L	94
35) cis-1,2-dichloroethene	9.39	96	7547	4.76	ug/L	94
36) propionitrile	9.53	54	7307	51.50	ug/L	96
37) bromochloromethane	9.71	128	3812	4.79	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117405.D
 Acq On : 8 Nov 2011 1:19 pm
 Operator : RobertS
 Sample : IC5012-5
 Misc : MS20977,VY5012,5.0,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 08 13:44:31 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:44:25 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) tetrahydrofuran	9.73	42	2264	4.98	ug/L	93
39) chloroform	9.75	83	11390	4.61	ug/L	98
40) tert-Butyl Formate	9.77	59	432	2.10	ug/L #	10
43) freon 113	6.91	151	4430	4.89	ug/L	98
44) methacrylonitrile	9.67	41	3191	4.74	ug/L	91
45) 1,1,1-trichloroethane	9.97	97	8827	4.87	ug/L	99
46) Cyclohexane	10.01	84	7635	4.82	ug/L #	89
47) 2,2,4-trimethylpentane	10.34	57	19681	4.95	ug/L	98
48) tert-amyl methyl ether	10.42	73	17749	5.06	ug/L	96
50) epichlorohydrin	12.06	57	2076	22.66	ug/L	95
51) n-butyl alcohol	10.95	56	7903	223.08	ug/L	90
52) carbon tetrachloride	10.16	117	7655	4.74	ug/L	96
53) 1,1-dichloropropene	10.14	75	7837	4.78	ug/L	98
54) hexane	8.30	57	7050	4.49	ug/L	91
55) Tert Amyl Alcohol	10.33	59	982	24.78	ug/L #	85
56) benzene	10.42	78	25684	4.70	ug/L	98
57) heptane	10.51	57	4070	5.20	ug/L	98
58) isopropyl acetate	10.33	61	2340	5.80	ug/L	98
59) 1,2-dichloroethane	10.47	62	7905	4.99	ug/L	97
60) trichloroethene	11.11	95	6910	4.86	ug/L	96
61) ethyl acrylate	11.12	55	6776	5.64	ug/L	99
62) 2-nitropropane	11.93	41	1206	4.93	ug/L	86
63) 2-chloroethyl vinyl ether	11.91	63	3881	24.93	ug/L	97
64) methyl methacrylate	11.38	69	3724	5.05	ug/L	92
65) 1,2-dichloropropane	11.40	63	6629	4.73	ug/L	90
66) methylcyclohexane	11.29	83	8173	4.73	ug/L	95
67) Tert-amyl ethyl ether	11.11	59	485	4.63	ug/L #	80
68) dibromomethane	11.57	93	3752	4.80	ug/L	91
69) bromodichloromethane	11.69	83	8277	4.72	ug/L	98
70) cis-1,3-dichloropropene	12.12	75	10227	4.77	ug/L	96
72) 4-methyl-2-pentanone	12.20	58	2135	4.76	ug/L	99
73) toluene	12.45	92	14574	4.53	ug/L	96
74) 3-methyl-1-butanol	12.25	70	2497	100.55	ug/L	91
75) trans-1,3-dichloropropene	12.68	75	8340	4.80	ug/L	95
76) ethyl methacrylate	12.63	69	6278	5.21	ug/L	91
77) 1,1,2-trichloroethane	12.89	83	4512	4.82	ug/L	95
78) 2-hexanone	13.05	58	2160	4.58	ug/L	92
80) tetrachloroethene	13.01	166	10128	5.03	ug/L	98
81) 1,3-dichloropropane	13.07	76	8411	4.77	ug/L	97
82) butyl acetate	13.08	56	3253	4.81	ug/L	87
83) dibromochloromethane	13.33	129	6641	4.84	ug/L	94
84) 1,2-dibromoethane	13.48	107	5421	4.89	ug/L	95
85) 3,3-Dimethyl-1-Butanol	13.21	57	4183	46.91	ug/L #	98
86) chlorobenzene	13.90	112	16928	4.72	ug/L	96
87) 1,1,1,2-tetrachloroethane	13.96	131	6266	4.58	ug/L	91
88) ethylbenzene	13.94	91	25617	4.66	ug/L	97
89) m,p-xylene	14.04	106	20475	9.68	ug/L	98
90) o-xylene	14.45	106	9814	4.48	ug/L	90
91) styrene	14.47	104	16220	4.96	ug/L	95
92) bromoform	14.77	173	4736	4.83	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117405.D
 Acq On : 8 Nov 2011 1:19 pm
 Operator : RobertS
 Sample : IC5012-5
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 08 13:44:31 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:44:25 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) isopropylbenzene	14.77	105	24370	4.70	ug/L	98
96) bromobenzene	15.20	156	7921	4.75	ug/L	92
97) cyclohexanone	15.00	55	10819	48.74	ug/L	95
98) 1,1,2,2-tetrachloroethane	15.13	83	6054	4.39	ug/L	95
99) trans-1,4-dichloro-2-buten	15.17	53	1191	5.15	ug/L	90
100) 1,2,3-trichloropropane	15.20	110	1600	4.93	ug/L	72
101) n-propylbenzene	15.18	91	28343	4.79	ug/L	100
102) 4-Ethyltoluene	15.27	105	23424	5.11	ug/L	97
103) 2-chlorotoluene	15.34	126	6650	4.88	ug/L	96
104) 4-chlorotoluene	15.44	91	18045	4.83	ug/L	100
105) 1,3,5-trimethylbenzene	15.32	105	19231	4.71	ug/L	96
106) tert-butylbenzene	15.66	119	17142	4.78	ug/L	98
107) pentachloroethane	15.78	167	3458	4.55	ug/L	91
108) 1,2,4-trimethylbenzene	15.71	105	20542	4.85	ug/L	95
109) sec-butylbenzene	15.88	105	25525	4.91	ug/L	97
110) 1,3-dichlorobenzene	16.09	146	13665	4.91	ug/L	97
111) p-isopropyltoluene	15.99	119	20709	4.93	ug/L	99
112) 1,4-dichlorobenzene	16.17	146	13919	4.92	ug/L	95
113) 1,2-dichlorobenzene	16.57	146	12839	4.75	ug/L	97
114) n-butylbenzene	16.40	92	10715	5.07	ug/L	93
115) p-Diethylbenzene	16.37	119	11522	5.07	ug/L	96
116) 1,2-dibromo-3-chloropropan	17.36	75	995	5.21	ug/L #	71
117) 1,3,5-Trichlorobenzene	17.50	180	11230	4.92	ug/L	98
118) 1,2,4-trichlorobenzene	18.15	180	9885	4.85	ug/L	97
119) 1,2,4,5-tetramethylbenzene	17.15	119	18835	5.24	ug/L	99
120) hexachlorobutadiene	18.23	225	5495	4.97	ug/L	100
121) naphthalene	18.44	128	21955	6.51	ug/L	99
122) 1,2,3-trichlorobenzene	18.70	180	9390	5.20	ug/L	98
123) hexachloroethane	16.80	119	2926	4.23	ug/L	97
124) Benzyl chloride	16.30	91	6879	4.40	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.7.39



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117406.D
 Acq On : 8 Nov 2011 1:49 pm
 Operator : RobertS
 Sample : IC5012-20
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 09 07:17:44 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:51:19 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.71	65	58479	500.00	ug/L	0.00
4) pentafluorobenzene	9.87	168	179676	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	250016	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	200155	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	92155	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	78423	23.61	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	47.22%#
42) 1,2-dichloroethane-d4 (s)	10.38	65	73717	24.04	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	48.08%#
71) toluene-d8 (s)	12.38	98	255486	23.42	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	46.84%#
95) 4-bromofluorobenzene (s)	15.00	95	90351	23.36	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	46.72%#

Target Compounds

						Qvalue
2) 1,4-dioxane	11.51	88	6048	528.98	ug/L	96
3) tertiary butyl alcohol	7.83	59	15135	98.65	ug/L	96
5) chlorodifluoromethane	4.20	51	22335	18.64	ug/L	99
6) dichlorodifluoromethane	4.17	85	27929	19.93	ug/L	97
7) chloromethane	4.53	50	36779	18.95	ug/L	99
8) vinyl chloride	4.78	62	28434	21.43	ug/L	98
9) bromomethane	5.49	94	19983	18.97	ug/L	97
10) chloroethane	5.67	64	15195	20.30	ug/L	97
12) trichlorofluoromethane	6.13	101	32355	19.33	ug/L	99
13) ethyl ether	6.52	74	15412	20.49	ug/L	93
14) acrolein	6.86	56	45321	211.23	ug/L	99
15) 1,1-dichloroethene	6.97	96	23797	19.69	ug/L	99
16) acetone	7.09	58	4224	19.24	ug/L	92
17) allyl chloride	7.52	76	15433	19.83	ug/L	95
18) acetonitrile	7.59	40	14133	173.87	ug/L	97
19) iodomethane	7.28	142	53551	20.44	ug/L	98
20) iso-butyl alcohol	10.21	41	8647	190.50	ug/L	93
21) carbon disulfide	7.39	76	83476	20.02	ug/L	99
22) methylene chloride	7.73	84	30407	20.02	ug/L	98
23) methyl acetate	7.52	74	3872	22.82	ug/L	96
24) methyl tert butyl ether	8.00	73	73897	19.79	ug/L	97
25) trans-1,2-dichloroethene	8.07	96	27316	19.31	ug/L	94
26) di-isopropyl ether	8.56	45	94729	20.94	ug/L	99
27) ethyl tert-butyl ether	9.03	59	79393	20.80	ug/L	98
28) 2-butanone	9.37	72	3573	19.39	ug/L	86
29) 1,1-dichloroethane	8.65	63	48895	20.24	ug/L	99
30) chloroprene	8.74	53	32438	21.07	ug/L	97
31) acrylonitrile	8.11	53	39288	111.09	ug/L	94
32) vinyl acetate	8.63	86	3220	19.48	ug/L	55
33) ethyl acetate	9.36	45	3219	20.38	ug/L	# 20
34) 2,2-dichloropropane	9.37	77	33846	19.49	ug/L	99
35) cis-1,2-dichloroethene	9.39	96	31621	20.20	ug/L	97
36) propionitrile	9.52	54	30926	216.98	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117406.D
 Acq On : 8 Nov 2011 1:49 pm
 Operator : RobertS
 Sample : IC5012-20
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 09 07:17:44 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:51:19 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.71	128	16287	20.70	ug/L	99
38) tetrahydrofuran	9.74	42	7868	17.37	ug/L	96
39) chloroform	9.76	83	47794	19.72	ug/L	98
40) tert-Butyl Formate	9.77	59	3709	22.40	ug/L	92
43) freon 113	6.91	151	18777	20.89	ug/L	96
44) methacrylonitrile	9.67	41	13697	20.67	ug/L	97
45) 1,1,1-trichloroethane	9.98	97	35869	19.94	ug/L	98
46) Cyclohexane	10.02	84	32502	20.70	ug/L #	91
47) 2,2,4-trimethylpentane	10.34	57	84075	20.25	ug/L	99
48) tert-amyl methyl ether	10.42	73	70476	20.11	ug/L	94
50) epichlorohydrin	12.06	57	8656	98.11	ug/L	98
51) n-butyl alcohol	10.94	56	34885	1027.54	ug/L	99
52) carbon tetrachloride	10.16	117	32792	20.65	ug/L	95
53) 1,1-dichloropropene	10.14	75	32547	20.15	ug/L	98
54) hexane	8.30	57	29860	19.62	ug/L	97
55) Tert Amyl Alcohol	10.33	59	4132	105.13	ug/L #	93
56) benzene	10.42	78	104306	19.43	ug/L	99
57) heptane	10.51	57	16655	21.23	ug/L	98
58) isopropyl acetate	10.33	61	9553	23.21	ug/L	98
59) 1,2-dichloroethane	10.47	62	32144	20.42	ug/L	99
60) trichloroethene	11.11	95	27809	19.79	ug/L	96
61) ethyl acrylate	11.12	55	27026	22.07	ug/L	99
62) 2-nitropropane	11.93	41	4728m	19.51	ug/L	
63) 2-chloroethyl vinyl ether	11.90	63	17267	96.27	ug/L	95
64) methyl methacrylate	11.37	69	15032	20.46	ug/L	96
65) 1,2-dichloropropane	11.40	63	28363	20.60	ug/L	100
66) methylcyclohexane	11.29	83	35581	19.18	ug/L	96
67) Tert-amyl ethyl ether	11.11	59	2103	20.71	ug/L #	98
68) dibromomethane	11.57	93	16481	21.36	ug/L	93
69) bromodichloromethane	11.69	83	36614	21.23	ug/L	100
70) cis-1,3-dichloropropene	12.12	75	44051	20.83	ug/L	97
72) 4-methyl-2-pentanone	12.21	58	8841	20.15	ug/L	97
73) toluene	12.45	92	60898	19.40	ug/L	95
74) 3-methyl-1-butanol	12.24	70	11622	470.29	ug/L	99
75) trans-1,3-dichloropropene	12.68	75	37099	21.64	ug/L	99
76) ethyl methacrylate	12.63	69	27531	22.80	ug/L	99
77) 1,1,2-trichloroethane	12.89	83	19650	21.25	ug/L	95
78) 2-hexanone	13.04	58	10098	22.02	ug/L	99
80) tetrachloroethene	13.01	166	39859	19.69	ug/L	98
81) 1,3-dichloropropane	13.07	76	36069	20.55	ug/L	97
82) butyl acetate	13.08	56	13414	20.00	ug/L	97
83) dibromochloromethane	13.32	129	29688	21.67	ug/L	97
84) 1,2-dibromoethane	13.48	107	22992	20.76	ug/L	97
85) 3,3-Dimethyl-1-Butanol	13.21	57	17861	202.70	ug/L	99
86) chlorobenzene	13.90	112	71281	20.04	ug/L	98
87) 1,1,1,2-tetrachloroethane	13.96	131	27109	20.01	ug/L	96
88) ethylbenzene	13.93	91	107068	19.67	ug/L	99
89) m,p-xylene	14.04	106	83887	39.78	ug/L	100
90) o-xylene	14.45	106	42779	19.88	ug/L	93
91) styrene	14.47	104	71903	21.93	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117406.D
 Acq On : 8 Nov 2011 1:49 pm
 Operator : RobertS
 Sample : IC5012-20
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 09 07:17:44 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 13:51:19 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.76	173	20632	21.08	ug/L	98
94) isopropylbenzene	14.77	105	103353	20.16	ug/L	99
96) bromobenzene	15.20	156	33421	20.19	ug/L	96
97) cyclohexanone	15.00	55	46342	209.57	ug/L	93
98) 1,1,2,2-tetrachloroethane	15.13	83	26390	19.52	ug/L	95
99) trans-1,4-dichloro-2-buten	15.16	53	5620	24.10	ug/L	98
100) 1,2,3-trichloropropane	15.20	110	6652	20.54	ug/L	89
101) n-propylbenzene	15.18	91	119718	20.39	ug/L	100
102) 4-Ethyltoluene	15.27	105	89183	19.71	ug/L	100
103) 2-chlorotoluene	15.34	126	27951	20.58	ug/L	95
104) 4-chlorotoluene	15.44	91	76023	20.48	ug/L	100
105) 1,3,5-trimethylbenzene	15.32	105	84527	20.92	ug/L	98
106) tert-butylbenzene	15.66	119	73047	20.54	ug/L	99
107) pentachloroethane	15.78	167	14822	19.83	ug/L	97
108) 1,2,4-trimethylbenzene	15.71	105	86689	20.55	ug/L	96
109) sec-butylbenzene	15.88	105	107144	20.68	ug/L	99
110) 1,3-dichlorobenzene	16.09	146	57773	20.83	ug/L	97
111) p-isopropyltoluene	15.99	119	87929	20.97	ug/L	99
112) 1,4-dichlorobenzene	16.17	146	56930	20.16	ug/L	98
113) 1,2-dichlorobenzene	16.57	146	55354	20.66	ug/L	99
114) n-butylbenzene	16.40	92	43774	20.64	ug/L	97
115) p-Diethylbenzene	16.37	119	46797	20.50	ug/L	98
116) 1,2-dibromo-3-chloropropan	17.36	75	4119	21.37	ug/L	85
117) 1,3,5-Trichlorobenzene	17.50	180	47685	20.94	ug/L	99
118) 1,2,4-trichlorobenzene	18.15	180	41885	20.12	ug/L	96
119) 1,2,4,5-tetramethylbenzene	17.15	119	76643	21.11	ug/L	100
120) hexachlorobutadiene	18.23	225	23579	21.31	ug/L	98
121) naphthalene	18.44	128	70834	20.54	ug/L	98
122) 1,2,3-trichlorobenzene	18.70	180	37522	20.19	ug/L	96
123) hexachloroethane	16.80	119	14867	22.15	ug/L	99
124) Benzyl chloride	16.30	91	31296	20.62	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.7.40

9

9



Manual Integration Approval Summary

Sample Number: VY5012-IC5012

Method: SW846 8260B

Lab FileID: Y117406.D

Analyst approved: 11/09/11 14:59 Robert Szot

Injection Time: 11/08/11 13:49

Supervisor approved: 11/14/11 22:11 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason

2-Nitropropane	79-46-9		11.93	Missed peak

6.7.40.1
6

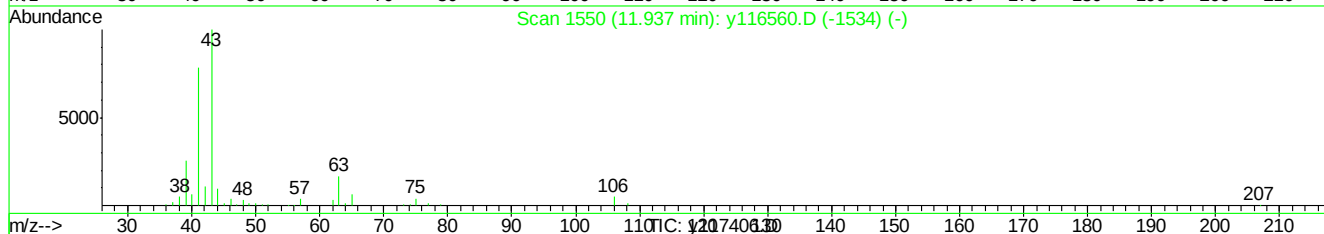
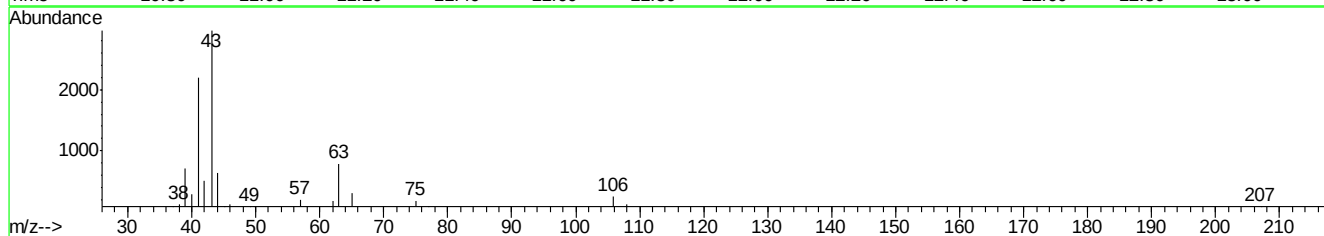
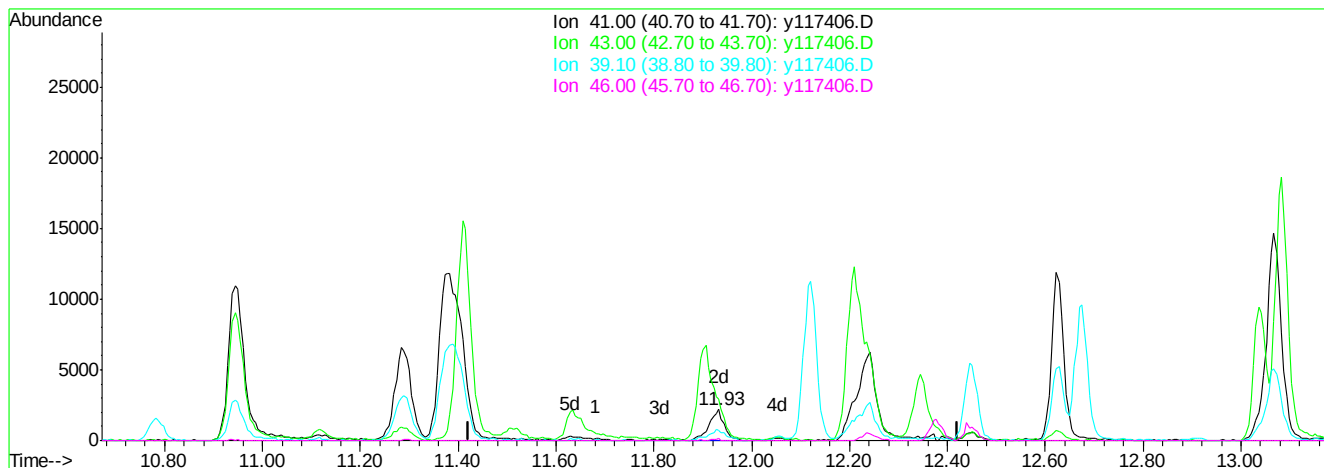
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\y117406.D Vial: 8
Acq On : 8 Nov 2011 1:49 pm Operator: Roberts
Sample : IC5012-20 Inst : MSY
Misc : MS20977,VY5012,5.0,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Quant Time: Nov 09 07:17:44 2011

Results File: MYS5012.RES

Method : C:\MSDCHEM\1\METHODS\MYS5012.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Nov 09 07:18:17 2011
Response via : Multiple Level Calibration



(62) 2-nitropropane

11.93min 19.51ug/L m

response 4728

Ion	Exp%	Act%
41.00	100	100
43.00	173.50	135.66#
39.10	29.50	31.96
46.00	3.80	5.75

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117408.D
 Acq On : 8 Nov 2011 3:29 pm
 Operator : RobertS
 Sample : IC5012-100
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 08 15:59:46 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 15:46:08 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.71	65	56214	500.00	ug/L	0.00
4) pentafluorobenzene	9.86	168	169895	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	242828	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	199252	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	91341	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.95	113	138334	86.11	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	172.22%#
42) 1,2-dichloroethane-d4 (s)	10.37	65	128115	85.93	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	171.86%#
71) toluene-d8 (s)	12.37	98	433734	50.35	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	100.70%
95) 4-bromofluorobenzene (s)	15.00	95	155311	45.35	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	90.70%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.50	88	30270	2668.98	ug/L	99
3) tertiary butyl alcohol	7.82	59	74538	505.60	ug/L	97
5) chlorodifluoromethane	4.20	51	118169	104.81	ug/L	98
6) dichlorodifluoromethane	4.17	85	139252	104.09	ug/L	98
7) chloromethane	4.54	50	180958	99.54	ug/L	97
8) vinyl chloride	4.80	62	141333	109.93	ug/L	97
9) bromomethane	5.48	94	76861	80.38	ug/L	99
10) chloroethane	5.66	64	69864	98.67	ug/L	97
12) trichlorofluoromethane	6.11	101	155119	99.07	ug/L	98
13) ethyl ether	6.52	74	79335	109.36	ug/L	98
14) acrolein	6.85	56	233839	1141.93	ug/L	99
15) 1,1-dichloroethene	6.96	96	111640	98.23	ug/L	98
16) acetone	7.08	58	18325	91.10	ug/L	99
17) allyl chloride	7.51	76	74922	101.69	ug/L	96
18) acetonitrile	7.57	40	74634	1003.06	ug/L	94
19) iodomethane	7.28	142	259035	103.55	ug/L	100
20) iso-butyl alcohol	10.20	41	41869	989.76	ug/L	93
21) carbon disulfide	7.38	76	398494	100.92	ug/L	99
22) methylene chloride	7.73	84	145478	101.06	ug/L	97
23) methyl acetate	7.51	74	19169	113.14	ug/L	95
24) methyl tert butyl ether	8.00	73	366996	103.52	ug/L	97
25) trans-1,2-dichloroethene	8.06	96	126132	95.55	ug/L	97
26) di-isopropyl ether	8.56	45	464400	106.53	ug/L	98
27) ethyl tert-butyl ether	9.02	59	393111	106.96	ug/L	99
28) 2-butanone	9.36	72	17040	98.84	ug/L	81
29) 1,1-dichloroethane	8.65	63	225956	98.89	ug/L	99
30) chloroprene	8.73	53	152243	103.11	ug/L	99
31) acrylonitrile	8.10	53	192288	554.34	ug/L	99
32) vinyl acetate	8.62	86	18589	114.26	ug/L	99
33) ethyl acetate	9.34	45	16142	105.98	ug/L	99
34) 2,2-dichloropropane	9.36	77	160296	98.30	ug/L	98
35) cis-1,2-dichloroethene	9.38	96	149345	100.64	ug/L	99
36) propionitrile	9.51	54	151957	1088.97	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117408.D
 Acq On : 8 Nov 2011 3:29 pm
 Operator : RobertS
 Sample : IC5012-100
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 08 15:59:46 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 15:46:08 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.70	128	79150	104.90	ug/L	95
38) tetrahydrofuran	9.72	42	38507	93.53	ug/L	99
39) chloroform	9.75	83	224116	98.29	ug/L	99
40) tert-Butyl Formate	9.76	59	25901	143.25	ug/L	87
43) freon 113	6.90	151	89554	103.89	ug/L	96
44) methacrylonitrile	9.66	41	70113	109.11	ug/L	98
45) 1,1,1-trichloroethane	9.97	97	171331	100.66	ug/L	97
46) Cyclohexane	10.01	84	150814	100.94	ug/L #	3
47) 2,2,4-trimethylpentane	10.34	57	393193	99.94	ug/L	99
48) tert-amyl methyl ether	10.41	73	337532	101.51	ug/L	99
50) epichlorohydrin	12.05	57	46097	531.89	ug/L	97
51) n-butyl alcohol	10.93	56	181542	5367.50	ug/L	99
52) carbon tetrachloride	10.15	117	153738	99.28	ug/L	97
53) 1,1-dichloropropene	10.14	75	150849	96.60	ug/L	98
54) hexane	8.29	57	139175	95.40	ug/L	99
55) Tert Amyl Alcohol	10.32	59	20668	529.57	ug/L #	82
56) benzene	10.41	78	475494	92.74	ug/L	99
57) heptane	10.50	57	77755	100.86	ug/L	99
58) isopropyl acetate	10.32	61	46799	112.40	ug/L	99
59) 1,2-dichloroethane	10.46	62	151270	98.83	ug/L	98
60) trichloroethene	11.11	95	130555	96.41	ug/L	98
61) ethyl acrylate	11.11	55	137628	111.58	ug/L	99
62) 2-nitropropane	11.92	41	25085	125.18	ug/L	89
63) 2-chloroethyl vinyl ether	11.90	63	104535	512.85	ug/L	98
64) methyl methacrylate	11.37	69	76149	105.15	ug/L	97
65) 1,2-dichloropropane	11.39	63	132996	99.10	ug/L	98
66) methylcyclohexane	11.28	83	168890	95.70	ug/L	100
67) Tert-amyl ethyl ether	11.11	59	10281	102.63	ug/L #	99
68) dibromomethane	11.57	93	80356	105.39	ug/L	99
69) bromodichloromethane	11.68	83	174529	102.68	ug/L	100
70) cis-1,3-dichloropropene	12.12	75	217969	104.77	ug/L	99
72) 4-methyl-2-pentanone	12.20	58	43695	101.86	ug/L	100
73) toluene	12.45	92	282582	94.08	ug/L	97
74) 3-methyl-1-butanol	12.23	70	61108	2392.61	ug/L	99
75) trans-1,3-dichloropropene	12.67	75	181389	106.35	ug/L	98
76) ethyl methacrylate	12.62	69	139431	113.57	ug/L	99
77) 1,1,2-trichloroethane	12.88	83	93874	103.12	ug/L	97
78) 2-hexanone	13.03	58	45423	99.96	ug/L	99
80) tetrachloroethene	13.00	166	170588	86.73	ug/L	97
81) 1,3-dichloropropane	13.06	76	167064	95.81	ug/L	98
82) butyl acetate	13.08	56	66639	99.86	ug/L	99
83) dibromochloromethane	13.32	129	146556	105.38	ug/L	95
84) 1,2-dibromoethane	13.48	107	116365	104.31	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.20	57	99227	1104.56	ug/L	99
86) chlorobenzene	13.89	112	336620	95.72	ug/L	100
87) 1,1,1,2-tetrachloroethane	13.96	131	126865	94.78	ug/L	98
88) ethylbenzene	13.93	91	485641	91.20	ug/L	100
89) m,p-xylene	14.03	106	372429	180.45	ug/L	100
90) o-xylene	14.45	106	199735	94.23	ug/L	99
91) styrene	14.46	104	331653	100.01	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117408.D
 Acq On : 8 Nov 2011 3:29 pm
 Operator : RobertS
 Sample : IC5012-100
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 08 15:59:46 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 15:46:08 2011
 Response via : Initial Calibration

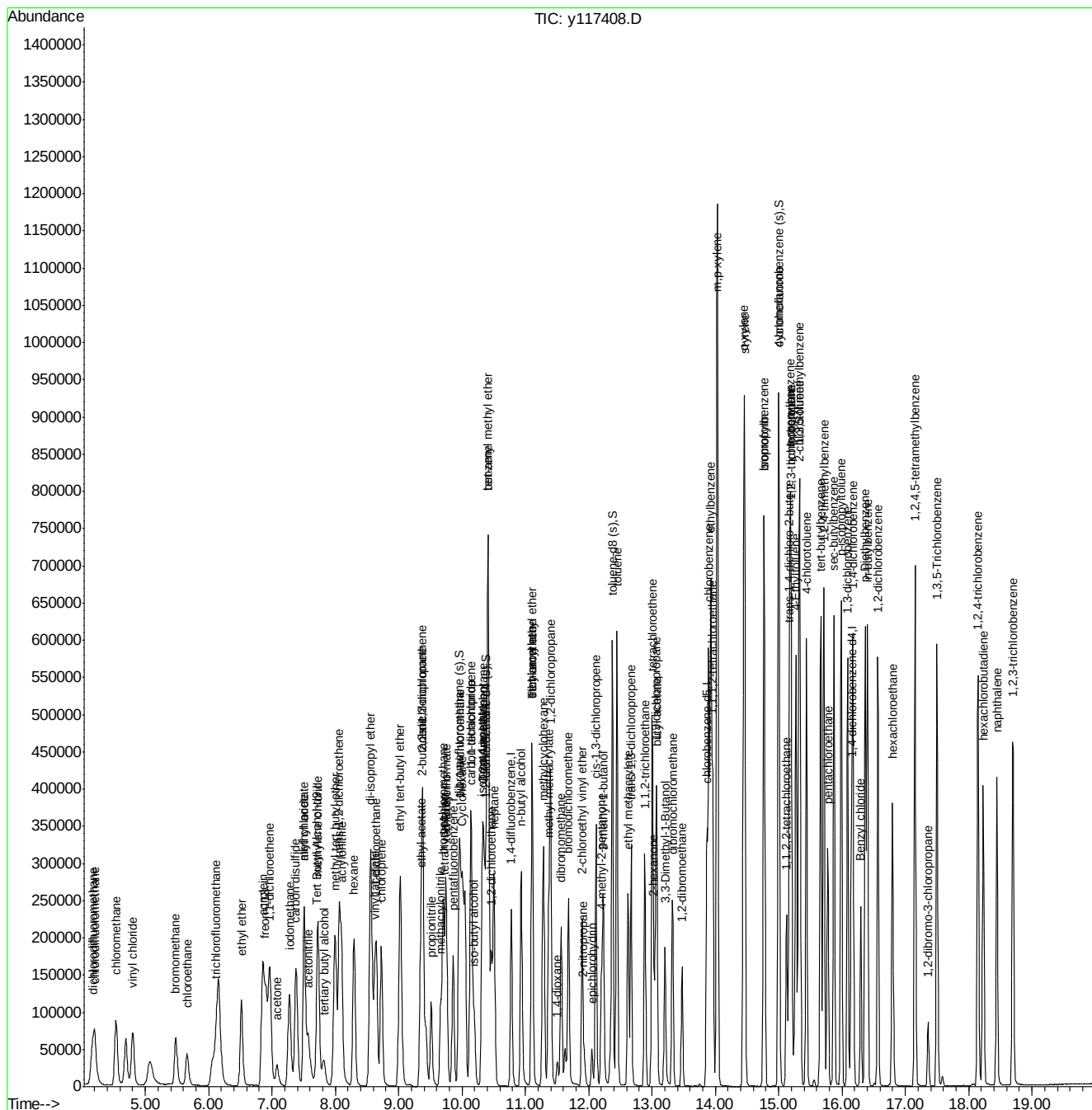
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.76	173	99608	101.25	ug/L	99
94) isopropylbenzene	14.77	105	470784	92.52	ug/L	99
96) bromobenzene	15.20	156	145408	88.49	ug/L	98
97) cyclohexanone	15.00	55	208016	941.58	ug/L	98
98) 1,1,2,2-tetrachloroethane	15.12	83	123092	92.16	ug/L	98
99) trans-1,4-dichloro-2-buten	15.16	53	27244	113.22	ug/L	89
100) 1,2,3-trichloropropane	15.20	110	29446	91.37	ug/L	95
101) n-propylbenzene	15.18	91	535357	91.69	ug/L	100
102) 4-Ethyltoluene	15.27	105	422147	94.70	ug/L	99
103) 2-chlorotoluene	15.34	126	121016	89.47	ug/L	99
104) 4-chlorotoluene	15.44	91	345558	93.53	ug/L	99
105) 1,3,5-trimethylbenzene	15.32	105	368898	91.43	ug/L	99
106) tert-butylbenzene	15.66	119	339719	95.94	ug/L	99
107) pentachloroethane	15.78	167	75806	102.47	ug/L	96
108) 1,2,4-trimethylbenzene	15.71	105	389507	92.74	ug/L	99
109) sec-butylbenzene	15.87	105	489658	94.81	ug/L	99
110) 1,3-dichlorobenzene	16.09	146	262829	94.93	ug/L	100
111) p-isopropyltoluene	15.99	119	406971	97.15	ug/L	99
112) 1,4-dichlorobenzene	16.17	146	259647	92.65	ug/L	98
113) 1,2-dichlorobenzene	16.57	146	259023	97.01	ug/L	99
114) n-butylbenzene	16.40	92	201665	95.42	ug/L	97
115) p-Diethylbenzene	16.37	119	230093	101.35	ug/L	99
116) 1,2-dibromo-3-chloropropan	17.36	75	20146	104.27	ug/L	95
117) 1,3,5-Trichlorobenzene	17.50	180	218462	96.04	ug/L	99
118) 1,2,4-trichlorobenzene	18.15	180	199903	96.20	ug/L	99
119) 1,2,4,5-tetramethylbenzene	17.15	119	395282	108.84	ug/L	100
120) hexachlorobutadiene	18.23	225	104816	94.55	ug/L	100
121) naphthalene	18.44	128	355485	105.07	ug/L	98
122) 1,2,3-trichlorobenzene	18.70	180	182483	98.48	ug/L	98
123) hexachloroethane	16.80	119	84375	124.61	ug/L	98
124) Benzyl chloride	16.29	91	173834	114.85	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117408.D
 Acq On : 8 Nov 2011 3:29 pm
 Operator : Roberts
 Sample : IC5012-100
 Misc : MS20977,VY5012,5.0,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 08 15:59:46 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 15:46:08 2011
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117409.D
 Acq On : 8 Nov 2011 3:59 pm
 Operator : RobertS
 Sample : IC5012-200
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 08 16:51:54 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 16:51:07 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.71	65	47891	500.00	ug/L	0.00
4) pentafluorobenzene	9.87	168	164244	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.79	114	235828	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	191160	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	84129	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	256198	175.79	ug/L	0.00
Spiked Amount	50.000	Range 67 - 131	Recovery	=	351.58%#	
42) 1,2-dichloroethane-d4 (s)	10.38	65	236748	175.79	ug/L	0.00
Spiked Amount	50.000	Range 66 - 130	Recovery	=	351.58%#	
71) toluene-d8 (s)	12.38	98	785899	155.68	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	311.36%#	
95) 4-bromofluorobenzene (s)	15.00	95	284869	166.62	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	333.24%#	

Target Compounds

						Qvalue
2) 1,4-dioxane	11.51	88	59880	7278.81	ug/L	99
3) tertiary butyl alcohol	7.83	59	139705	1218.73	ug/L	95
5) chlorodifluoromethane	4.20	51	228191	203.37	ug/L	98
6) dichlorodifluoromethane	4.17	85	261889	196.28	ug/L	98
7) chloromethane	4.54	50	344020	194.65	ug/L	98
8) vinyl chloride	4.81	62	273961	210.97	ug/L	96
9) bromomethane	5.47	94	109783	124.37	ug/L	100
10) chloroethane	5.65	64	121858	176.18	ug/L	97
12) trichlorofluoromethane	6.11	101	287260	184.36	ug/L	99
13) ethyl ether	6.52	74	157286	217.85	ug/L	99
14) acrolein	6.86	56	445343	2172.68	ug/L	100
15) 1,1-dichloroethene	6.97	96	213055	190.73	ug/L	98
16) acetone	7.08	58	29532	156.29	ug/L	93
17) allyl chloride	7.51	76	146518	202.05	ug/L	97
18) acetonitrile	7.58	40	150800	2066.02	ug/L	97
19) iodomethane	7.28	142	513344	207.59	ug/L	100
20) iso-butyl alcohol	10.20	41	79504	1929.67	ug/L	96
21) carbon disulfide	7.38	76	773228	197.88	ug/L	100
22) methylene chloride	7.73	84	285671	202.42	ug/L	99
23) methyl acetate	7.51	74	37835	222.13	ug/L	97
24) methyl tert butyl ether	8.00	73	710457	204.45	ug/L	99
25) trans-1,2-dichloroethene	8.07	96	245911	190.89	ug/L	100
26) di-isopropyl ether	8.56	45	919485	213.03	ug/L	98
27) ethyl tert-butyl ether	9.03	59	773747	213.22	ug/L	99
28) 2-butanone	9.36	72	29569	178.19	ug/L	66
29) 1,1-dichloroethane	8.65	63	448172	199.37	ug/L	100
30) chloroprene	8.73	53	305004	206.47	ug/L	98
31) acrylonitrile	8.10	53	372568	1072.83	ug/L	98
32) vinyl acetate	8.62	86	37251	222.66	ug/L	86
33) ethyl acetate	9.35	45	31825	210.20	ug/L	93
34) 2,2-dichloropropane	9.37	77	310038	192.40	ug/L	99
35) cis-1,2-dichloroethene	9.39	96	290641	199.61	ug/L	99
36) propionitrile	9.52	54	298219	2133.10	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117409.D
 Acq On : 8 Nov 2011 3:59 pm
 Operator : RobertS
 Sample : IC5012-200
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 08 16:51:54 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 16:51:07 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.71	128	155351	208.94	ug/L	98
38) tetrahydrofuran	9.73	42	73427	185.46	ug/L	99
39) chloroform	9.76	83	437764	196.57	ug/L	98
40) tert-Butyl Formate	9.76	59	64789	307.89	ug/L #	77
43) freon 113	6.91	151	168316	184.33	ug/L	91
44) methacrylonitrile	9.67	41	140975	218.68	ug/L	99
45) 1,1,1-trichloroethane	9.97	97	330668	196.70	ug/L	97
46) Cyclohexane	10.01	84	280206	189.56	ug/L #	3
47) 2,2,4-trimethylpentane	10.35	57	744059	190.73	ug/L	99
48) tert-amyl methyl ether	10.42	73	640128	198.03	ug/L	99
50) epichlorohydrin	12.05	57	94174	1089.26	ug/L	97
51) n-butyl alcohol	10.94	56	352563	10409.89	ug/L	98
52) carbon tetrachloride	10.16	117	294238	191.55	ug/L	98
53) 1,1-dichloropropene	10.14	75	297071	192.40	ug/L	99
54) hexane	8.30	57	274856	189.79	ug/L	98
55) Tert Amyl Alcohol	10.33	59	39407	1022.28	ug/L #	84
56) benzene	10.42	78	918495	184.84	ug/L	99
57) heptane	10.51	57	150752	187.84	ug/L	96
58) isopropyl acetate	10.33	61	92261	221.50	ug/L	100
59) 1,2-dichloroethane	10.47	62	299827	200.51	ug/L	98
60) trichloroethene	11.11	95	252020	189.94	ug/L	99
61) ethyl acrylate	11.12	55	267924	215.80	ug/L	99
62) 2-nitropropane	11.93	41	53088	256.91	ug/L	84
63) 2-chloroethyl vinyl ether	11.90	63	226027	1305.48	ug/L	98
64) methyl methacrylate	11.37	69	149452	207.58	ug/L	96
65) 1,2-dichloropropane	11.40	63	259235	197.02	ug/L	97
66) methylcyclohexane	11.29	83	321288	184.46	ug/L	99
67) Tert-amyl ethyl ether	11.11	59	19313	194.63	ug/L #	96
68) dibromomethane	11.57	93	158750	211.79	ug/L	96
69) bromodichloromethane	11.69	83	350323	235.30	ug/L	99
70) cis-1,3-dichloropropene	12.12	75	430800	209.80	ug/L	99
72) 4-methyl-2-pentanone	12.20	58	83446	196.96	ug/L	97
73) toluene	12.45	92	553258	187.41	ug/L	97
74) 3-methyl-1-butanol	12.24	70	115892	4363.35	ug/L	99
75) trans-1,3-dichloropropene	12.67	75	359838	212.90	ug/L	97
76) ethyl methacrylate	12.62	69	278891	227.31	ug/L	99
77) 1,1,2-trichloroethane	12.89	83	184192	206.08	ug/L	97
78) 2-hexanone	13.04	58	82771	184.34	ug/L	99
80) tetrachloroethene	13.01	166	308119	163.50	ug/L	98
81) 1,3-dichloropropane	13.07	76	325294	193.69	ug/L	99
82) butyl acetate	13.08	56	127245	196.90	ug/L	96
83) dibromochloromethane	13.32	129	289036	214.22	ug/L	96
84) 1,2-dibromoethane	13.48	107	230319	212.66	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.20	57	195695	2212.01	ug/L	99
86) chlorobenzene	13.90	112	665128	195.45	ug/L	99
87) 1,1,1,2-tetrachloroethane	13.96	131	246441	191.21	ug/L	98
88) ethylbenzene	13.93	91	938868	182.05	ug/L	100
89) m,p-xylene	14.03	106	719674	360.05	ug/L	99
90) o-xylene	14.45	106	391741	190.56	ug/L	99
91) styrene	14.47	104	645733	199.63	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117409.D
 Acq On : 8 Nov 2011 3:59 pm
 Operator : RobertS
 Sample : IC5012-200
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 08 16:51:54 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 16:51:07 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.76	173	195960	205.85	ug/L	99
94) isopropylbenzene	14.77	105	905428	191.97	ug/L	99
96) bromobenzene	15.20	156	279346	187.02	ug/L	97
97) cyclohexanone	15.00	55	355399	1730.09	ug/L	98
98) 1,1,2,2-tetrachloroethane	15.13	83	248617	202.88	ug/L	100
99) trans-1,4-dichloro-2-buten	15.16	53	55824	237.09	ug/L	89
100) 1,2,3-trichloropropane	15.20	110	55383	188.25	ug/L	96
101) n-propylbenzene	15.18	91	1026722	189.79	ug/L	100
102) 4-Ethyltoluene	15.27	105	786690	187.15	ug/L	99
103) 2-chlorotoluene	15.34	126	234258	189.37	ug/L	96
104) 4-chlorotoluene	15.44	91	682080	199.78	ug/L	99
105) 1,3,5-trimethylbenzene	15.32	105	723138	194.11	ug/L	99
106) tert-butylbenzene	15.67	119	666300	201.18	ug/L	99
107) pentachloroethane	15.78	167	164266	233.58	ug/L	97
108) 1,2,4-trimethylbenzene	15.71	105	756073	194.95	ug/L	98
109) sec-butylbenzene	15.88	105	948779	196.55	ug/L	100
110) 1,3-dichlorobenzene	16.09	146	512889	199.94	ug/L	99
111) p-isopropyltoluene	15.99	119	792928	201.48	ug/L	99
112) 1,4-dichlorobenzene	16.17	146	507206	196.48	ug/L	100
113) 1,2-dichlorobenzene	16.57	146	499369	201.60	ug/L	99
114) n-butylbenzene	16.40	92	390698	196.58	ug/L	96
115) p-Diethylbenzene	16.37	119	432718	200.88	ug/L	99
116) 1,2-dibromo-3-chloropropan	17.36	75	41190	216.00	ug/L	100
117) 1,3,5-Trichlorobenzene	17.50	180	420428	197.33	ug/L	98
118) 1,2,4-trichlorobenzene	18.15	180	392001	210.06	ug/L	98
119) 1,2,4,5-tetramethylbenzene	17.15	119	753687	215.38	ug/L	100
120) hexachlorobutadiene	18.23	225	195938	189.20	ug/L	100
121) naphthalene	18.44	128	722469	207.37	ug/L	98
122) 1,2,3-trichlorobenzene	18.70	180	357534	209.97	ug/L	99
123) hexachloroethane	16.80	119	175045	241.14	ug/L	99
124) Benzyl chloride	16.30	91	373082	247.90	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117410.D
 Acq On : 8 Nov 2011 4:29 pm
 Operator : RobertS
 Sample : IC5012-75
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 08 16:51:03 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 16:40:47 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.71	65	58904	500.00	ug/L	0.00
4) pentafluorobenzene	9.87	168	170799	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	243621	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	200999	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	90837	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	111576	73.62	ug/L	0.00
Spiked Amount	50.000	Range 67 - 131	Recovery	=	147.24%#	
42) 1,2-dichloroethane-d4 (s)	10.38	65	101184	72.25	ug/L	0.00
Spiked Amount	50.000	Range 66 - 130	Recovery	=	144.50%#	
71) toluene-d8 (s)	12.38	98	377173	71.68	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	143.36%#	
95) 4-bromofluorobenzene (s)	15.00	95	131810	70.56	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	141.12%	

Target Compounds

						Qvalue
2) 1,4-dioxane	11.51	88	24183	2034.90	ug/L	100
3) tertiary butyl alcohol	7.82	59	59053	418.84	ug/L	96
5) chlorodifluoromethane	4.20	51	98538	84.45	ug/L	100
6) dichlorodifluoromethane	4.17	85	121976	87.91	ug/L	97
7) chloromethane	4.54	50	146928	79.94	ug/L	99
8) vinyl chloride	4.80	62	130493	96.63	ug/L	99
9) bromomethane	5.48	94	72078	78.52	ug/L	97
10) chloroethane	5.67	64	64279	89.37	ug/L	100
12) trichlorofluoromethane	6.12	101	148382	91.58	ug/L	99
13) ethyl ether	6.52	74	62558	83.32	ug/L	99
14) acrolein	6.86	56	192668	903.89	ug/L	98
15) 1,1-dichloroethene	6.97	96	101169	87.09	ug/L	94
16) acetone	7.08	58	15808	80.45	ug/L	94
17) allyl chloride	7.52	76	63009	83.56	ug/L	98
18) acetonitrile	7.58	40	59178	779.65	ug/L	97
19) iodomethane	7.28	142	215398	83.76	ug/L	99
20) iso-butyl alcohol	10.20	41	34457	804.22	ug/L	96
21) carbon disulfide	7.38	76	357357	87.94	ug/L	99
22) methylene chloride	7.73	84	117957	80.37	ug/L	97
23) methyl acetate	7.51	74	14876	83.98	ug/L	92
24) methyl tert butyl ether	8.00	73	290981	80.52	ug/L	99
25) trans-1,2-dichloroethene	8.07	96	111623	83.32	ug/L	99
26) di-isopropyl ether	8.56	45	370269	82.49	ug/L	99
27) ethyl tert-butyl ether	9.03	59	305771	81.03	ug/L	98
28) 2-butanone	9.37	72	14071	81.54	ug/L	89
29) 1,1-dichloroethane	8.65	63	197171	84.35	ug/L	100
30) chloroprene	8.73	53	138728	90.31	ug/L	98
31) acrylonitrile	8.10	53	158148	437.92	ug/L	99
32) vinyl acetate	8.63	86	14696	84.47	ug/L	99
33) ethyl acetate	9.35	45	12825	81.46	ug/L	97
34) 2,2-dichloropropane	9.37	77	149512	89.22	ug/L	99
35) cis-1,2-dichloroethene	9.39	96	125479	82.87	ug/L	98
36) propionitrile	9.52	54	124737	857.98	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117410.D
 Acq On : 8 Nov 2011 4:29 pm
 Operator : RobertS
 Sample : IC5012-75
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 08 16:51:03 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 16:40:47 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.71	128	63099	81.61	ug/L	97
38) tetrahydrofuran	9.73	42	32141	78.06	ug/L	99
39) chloroform	9.76	83	189021	81.62	ug/L	99
40) tert-Butyl Formate	9.77	59	21455	98.05	ug/L	87
43) freon 113	6.91	151	82841	87.24	ug/L	95
44) methacrylonitrile	9.67	41	56576	84.39	ug/L	99
45) 1,1,1-trichloroethane	9.98	97	155560	88.98	ug/L	95
46) Cyclohexane	10.01	84	142331	92.59	ug/L #	97
47) 2,2,4-trimethylpentane	10.35	57	364077	89.74	ug/L	99
48) tert-amyl methyl ether	10.41	73	264316	78.63	ug/L	99
50) epichlorohydrin	12.05	57	37927	436.20	ug/L	97
51) n-butyl alcohol	10.94	56	145593	4161.32	ug/L	98
52) carbon tetrachloride	10.16	117	141481	89.16	ug/L	100
53) 1,1-dichloropropene	10.14	75	139065	87.18	ug/L	99
54) hexane	8.30	57	132511	88.57	ug/L	99
55) Tert Amyl Alcohol	10.33	59	16100	404.30	ug/L #	97
56) benzene	10.42	78	408820	79.64	ug/L	99
57) heptane	10.51	57	73457	88.60	ug/L	96
58) isopropyl acetate	10.33	61	36354	84.48	ug/L	98
59) 1,2-dichloroethane	10.47	62	121021	78.34	ug/L	98
60) trichloroethene	11.11	95	114301	83.39	ug/L	98
61) ethyl acrylate	11.12	55	112260	87.53	ug/L	99
62) 2-nitropropane	11.93	41	21602	107.45	ug/L	83
63) 2-chloroethyl vinyl ether	11.90	63	79372	460.67	ug/L	97
64) methyl methacrylate	11.37	69	61406	83.77	ug/L	99
65) 1,2-dichloropropane	11.40	63	110281	81.97	ug/L	99
66) methylcyclohexane	11.29	83	156262	103.82	ug/L	99
67) Tert-amyl ethyl ether	11.11	59	8646	84.35	ug/L #	99
68) dibromomethane	11.57	93	63694	83.26	ug/L	97
69) bromodichloromethane	11.69	83	142181	95.21	ug/L	99
70) cis-1,3-dichloropropene	12.12	75	179476	85.99	ug/L	99
72) 4-methyl-2-pentanone	12.20	58	35562	82.63	ug/L	96
73) toluene	12.45	92	247665	82.18	ug/L	97
74) 3-methyl-1-butanol	12.24	70	48384	1816.56	ug/L	98
75) trans-1,3-dichloropropene	12.68	75	149231	87.21	ug/L	99
76) ethyl methacrylate	12.62	69	113810	92.40	ug/L	98
77) 1,1,2-trichloroethane	12.89	83	75241	82.38	ug/L	96
78) 2-hexanone	13.04	58	38356	84.13	ug/L	99
80) tetrachloroethene	13.00	166	147321	74.25	ug/L	96
81) 1,3-dichloropropane	13.07	76	136577	77.65	ug/L	99
82) butyl acetate	13.08	56	53328	79.22	ug/L	97
83) dibromochloromethane	13.32	129	115894	82.61	ug/L	98
84) 1,2-dibromoethane	13.48	107	93458	83.05	ug/L	98
85) 3,3-Dimethyl-1-Butanol	13.20	57	80575	889.14	ug/L	99
86) chlorobenzene	13.90	112	284451	80.18	ug/L	99
87) 1,1,1,2-tetrachloroethane	13.96	131	104615	77.48	ug/L	98
88) ethylbenzene	13.93	91	433341	80.67	ug/L	100
89) m,p-xylene	14.03	106	335950	161.36	ug/L	99
90) o-xylene	14.45	106	174287	81.51	ug/L	99
91) styrene	14.47	104	284327	84.99	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117410.D
 Acq On : 8 Nov 2011 4:29 pm
 Operator : RobertS
 Sample : IC5012-75
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 08 16:51:03 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 16:40:47 2011
 Response via : Initial Calibration

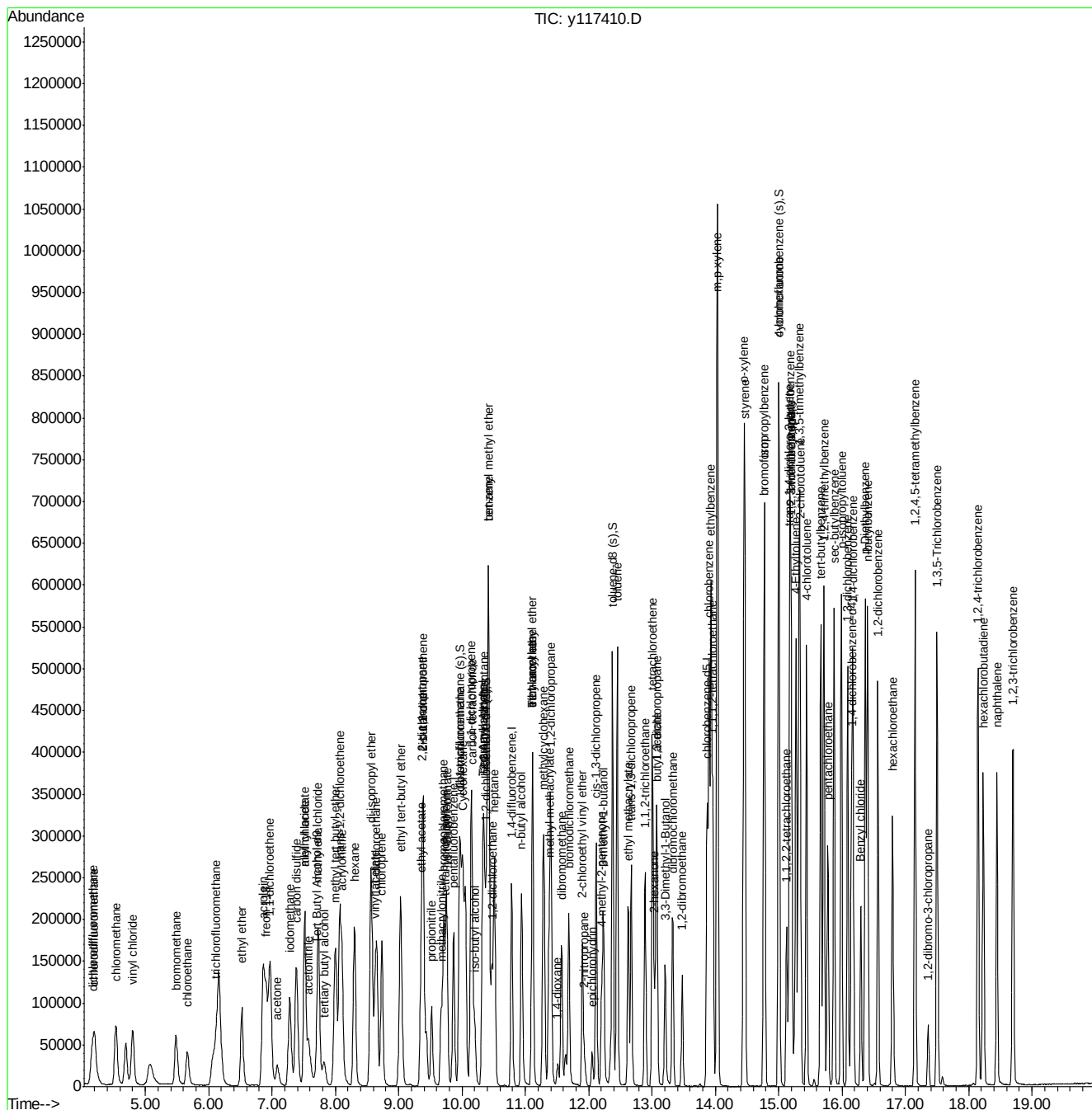
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.76	173	80203	80.82	ug/L	99
94) isopropylbenzene	14.77	105	427205	85.33	ug/L	99
96) bromobenzene	15.20	156	122230	75.89	ug/L	98
97) cyclohexanone	15.00	55	186996	858.30	ug/L	98
98) 1,1,2,2-tetrachloroethane	15.12	83	103954	79.04	ug/L	99
99) trans-1,4-dichloro-2-buten	15.16	53	23415	95.74	ug/L	89
100) 1,2,3-trichloropropane	15.20	110	24202	76.34	ug/L	98
101) n-propylbenzene	15.18	91	492511	85.84	ug/L	100
102) 4-Ethyltoluene	15.27	105	376067	83.96	ug/L	99
103) 2-chlorotoluene	15.34	126	105837	79.88	ug/L	95
104) 4-chlorotoluene	15.44	91	300791	82.63	ug/L	99
105) 1,3,5-trimethylbenzene	15.32	105	332657	83.93	ug/L	98
106) tert-butylbenzene	15.66	119	307603	87.86	ug/L	99
107) pentachloroethane	15.78	167	67992	92.10	ug/L	96
108) 1,2,4-trimethylbenzene	15.71	105	342469	82.86	ug/L	98
109) sec-butylbenzene	15.88	105	450708	88.40	ug/L	99
110) 1,3-dichlorobenzene	16.09	146	226784	82.97	ug/L	99
111) p-isopropyltoluene	15.99	119	371327	89.49	ug/L	99
112) 1,4-dichlorobenzene	16.17	146	224634	81.46	ug/L	99
113) 1,2-dichlorobenzene	16.57	146	216619	81.93	ug/L	99
114) n-butylbenzene	16.40	92	191298	91.61	ug/L	99
115) p-Diethylbenzene	16.37	119	213036	94.20	ug/L	99
116) 1,2-dibromo-3-chloropropan	17.36	75	16869	83.21	ug/L	86
117) 1,3,5-Trichlorobenzene	17.50	180	199327	88.61	ug/L	99
118) 1,2,4-trichlorobenzene	18.15	180	179424	91.49	ug/L	98
119) 1,2,4,5-tetramethylbenzene	17.15	119	346944	94.86	ug/L	100
120) hexachlorobutadiene	18.23	225	96589	88.30	ug/L	98
121) naphthalene	18.44	128	324428	92.61	ug/L	98
122) 1,2,3-trichlorobenzene	18.70	180	160058	89.10	ug/L	100
123) hexachloroethane	16.80	119	72397	96.85	ug/L	98
124) Benzyl chloride	16.30	91	158994	103.08	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117410.D
 Acq On : 8 Nov 2011 4:29 pm
 Operator : Roberts
 Sample : IC5012-75
 Misc : MS20977,VY5012,5.0,,,,,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 08 16:51:03 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Tue Nov 08 16:40:47 2011
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117411.D
 Acq On : 8 Nov 2011 5:48 pm
 Operator : RobertS
 Sample : ICV5012-50
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 09 14:47:45 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.71	65	54337	500.00	ug/L	0.00
4) pentafluorobenzene	9.87	168	160958	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	230629	50.00	ug/L	0.00
79) chlorobenzene-d5	13.87	117	189443	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.15	152	88839	50.00	ug/L	0.00

System Monitoring Compounds

41) dibromofluoromethane (s)	9.96	113	67423	47.21	ug/L	0.00
Spiked Amount	50.000	Range 67 - 131	Recovery	=	94.42%	
42) 1,2-dichloroethane-d4 (s)	10.38	65	64493	48.87	ug/L	0.00
Spiked Amount	50.000	Range 66 - 130	Recovery	=	97.74%	
71) toluene-d8 (s)	12.38	98	222374	47.47	ug/L	0.00
Spiked Amount	50.000	Range 76 - 125	Recovery	=	94.94%	
95) 4-bromofluorobenzene (s)	15.00	95	80810	46.48	ug/L	0.00
Spiked Amount	50.000	Range 53 - 142	Recovery	=	92.96%	

Target Compounds

						Qvalue
2) 1,4-dioxane	11.51	88	15040	1311.10	ug/L	99
3) tertiary butyl alcohol	7.82	59	40951	283.23	ug/L	95
5) chlorodifluoromethane	4.20	51	43661	39.71	ug/L	95
6) dichlorodifluoromethane	4.17	85	69362	53.05	ug/L	98
7) chloromethane	4.53	50	92346	53.32	ug/L	98
8) vinyl chloride	4.79	62	75062	54.88	ug/L	96
9) bromomethane	5.49	94	47532	52.47	ug/L	98
10) chloroethane	5.67	64	39683	58.54	ug/L	99
12) trichlorofluoromethane	6.12	101	84807	55.54	ug/L	95
13) ethyl ether	6.52	74	40806	57.67	ug/L	96
14) acrolein	6.86	56	127357	634.02	ug/L	100
15) 1,1-dichloroethene	6.97	96	58481	53.42	ug/L	95
16) acetone	7.08	58	9676	52.25	ug/L	86
17) allyl chloride	7.52	76	39965	56.24	ug/L	91
18) acetonitrile	7.58	40	41328	577.77	ug/L	99
19) iodomethane	7.28	142	128536	53.04	ug/L	97
20) iso-butyl alcohol	10.20	41	114317	2831.27	ug/L	96
21) carbon disulfide	7.39	76	200850	52.45	ug/L	99
22) methylene chloride	7.73	84	75643	54.69	ug/L	96
23) methyl acetate	7.51	74	9356	56.05	ug/L	96
24) methyl tert butyl ether	8.00	73	367839	108.02	ug/L	99
25) trans-1,2-dichloroethene	8.07	96	66471	52.65	ug/L	96
26) di-isopropyl ether	8.56	45	237922	56.25	ug/L	99
27) ethyl tert-butyl ether	9.03	59	213902	60.15	ug/L	98
28) 2-butanone	9.37	72	9455	58.14	ug/L	88
29) 1,1-dichloroethane	8.65	63	123893	56.24	ug/L	100
30) chloroprene	8.74	53	81779	56.49	ug/L	99
31) acrylonitrile	8.10	53	102990	302.62	ug/L	98
32) vinyl acetate	8.63	86	10429	63.61	ug/L	75
33) ethyl acetate	9.35	45	8684	58.53	ug/L	98
34) 2,2-dichloropropane	9.37	77	86405	54.72	ug/L	99
35) cis-1,2-dichloroethene	9.39	96	77320	54.19	ug/L	99
36) propionitrile	9.52	54	82822	604.50	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117411.D
 Acq On : 8 Nov 2011 5:48 pm
 Operator : RobertS
 Sample : ICV5012-50
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 09 14:47:45 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.71	128	39778	54.59	ug/L	96
38) tetrahydrofuran	9.73	42	21041	54.23	ug/L	98
39) chloroform	9.75	83	118059	54.10	ug/L	99
40) tert-Butyl Formate	9.77	59	14321	69.45	ug/L #	85
43) freon 113	6.91	151	46712	52.20	ug/L	96
44) methacrylonitrile	9.67	41	38562	61.04	ug/L	97
45) 1,1,1-trichloroethane	9.98	97	91831	55.74	ug/L	97
46) Cyclohexane	10.01	84	83798	57.85	ug/L #	3
47) 2,2,4-trimethylpentane	10.35	57	228162	59.68	ug/L	97
48) tert-amyl methyl ether	10.41	73	205275	64.80	ug/L	99
50) epichlorohydrin	12.06	57	26062	304.36	ug/L	94
51) n-butyl alcohol	10.94	56	97599	2946.70	ug/L	99
52) carbon tetrachloride	10.16	117	82338	54.81	ug/L	97
53) 1,1-dichloropropene	10.14	75	82476	54.62	ug/L	97
54) hexane	8.30	57	71536	50.51	ug/L	96
55) Tert Amyl Alcohol	10.32	59	40694	1079.46	ug/L #	18
56) benzene	10.42	78	254321	52.33	ug/L	99
57) heptane	10.51	57	44089	56.17	ug/L	98
58) isopropyl acetate	10.32	61	25153	59.29	ug/L #	15
59) 1,2-dichloroethane	10.47	62	78755	53.85	ug/L	100
60) trichloroethene	11.11	95	69762	53.76	ug/L	99
61) ethyl acrylate	11.12	55	73161	60.26	ug/L	98
62) 2-nitropropane	11.93	41	14221	59.13	ug/L	88
63) 2-chloroethyl vinyl ether	11.90	63	56165	282.73	ug/L	98
64) methyl methacrylate	11.37	69	39349	55.89	ug/L	96
65) 1,2-dichloropropane	11.40	63	71853	55.84	ug/L	96
66) methylcyclohexane	11.29	83	93004	54.60	ug/L	99
67) Tert-amyl ethyl ether	11.11	59	5284	54.45	ug/L #	93
68) dibromomethane	11.57	93	42386	57.48	ug/L	97
69) bromodichloromethane	11.69	83	92050	55.94	ug/L	98
70) cis-1,3-dichloropropene	12.12	75	112662	55.83	ug/L	99
72) 4-methyl-2-pentanone	12.20	58	24477	59.20	ug/L	98
73) toluene	12.45	92	154739	53.98	ug/L	98
74) 3-methyl-1-butanol	12.24	70	33816	1287.26	ug/L	98
75) trans-1,3-dichloropropene	12.67	75	96122	57.74	ug/L	98
76) ethyl methacrylate	12.62	69	76644	62.92	ug/L	100
77) 1,1,2-trichloroethane	12.89	83	48426	55.23	ug/L	97
78) 2-hexanone	13.04	58	26005	59.81	ug/L	99
80) tetrachloroethene	13.01	166	91308	49.90	ug/L	98
81) 1,3-dichloropropane	13.07	76	90198	54.37	ug/L	99
82) butyl acetate	13.08	56	38090	59.61	ug/L	99
83) dibromochloromethane	13.32	129	74221	55.12	ug/L	96
84) 1,2-dibromoethane	13.48	107	60294	55.82	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.21	57	55205	621.42	ug/L	99
86) chlorobenzene	13.90	112	180111	53.54	ug/L	99
87) 1,1,1,2-tetrachloroethane	13.96	131	66531	52.32	ug/L	97
88) ethylbenzene	13.93	91	268267	53.02	ug/L	99
89) m,p-xylene	14.03	106	209433	106.92	ug/L	100
90) o-xylene	14.45	106	108388	53.48	ug/L	99
91) styrene	14.47	104	179183	55.91	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y117411.D
 Acq On : 8 Nov 2011 5:48 pm
 Operator : RobertS
 Sample : ICV5012-50
 Misc : MS20977,VY5012,5.0,,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 09 14:47:45 2011
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Wed Nov 09 07:18:17 2011
 Response via : Initial Calibration

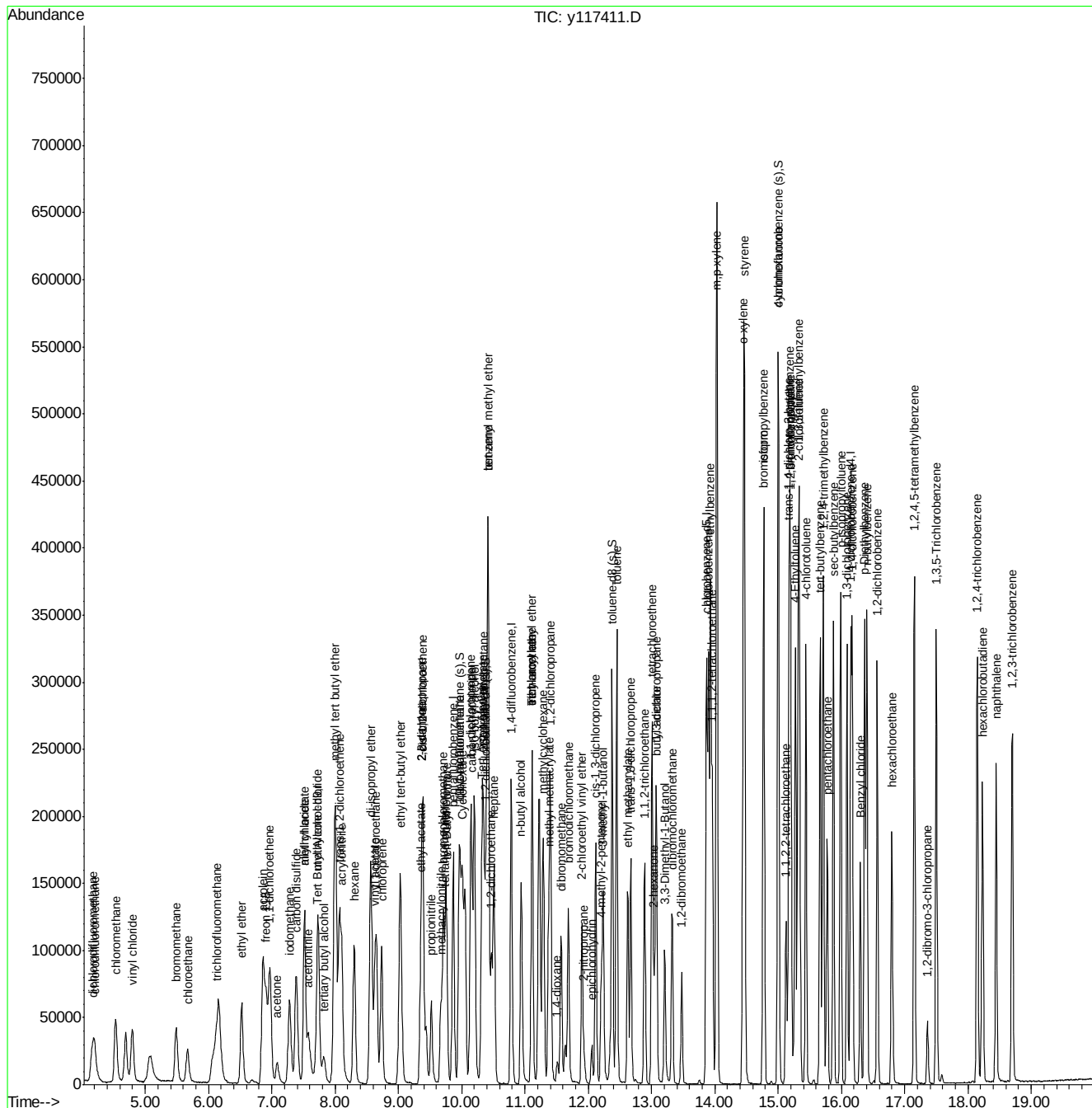
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) bromoform	14.76	173	51825	54.77	ug/L	99
94) isopropylbenzene	14.77	105	261294	52.70	ug/L	100
96) bromobenzene	15.20	156	80527	51.39	ug/L	98
97) cyclohexanone	15.00	55	127081	594.75	ug/L	97
98) 1,1,2,2-tetrachloroethane	15.12	83	65708	53.05	ug/L	97
99) trans-1,4-dichloro-2-buten	15.16	53	15349	57.91	ug/L	92
100) 1,2,3-trichloropropane	15.20	110	16148	52.28	ug/L	90
101) n-propylbenzene	15.18	91	305696	53.82	ug/L	99
102) 4-Ethyltoluene	15.27	105	229687	52.08	ug/L	99
103) 2-chlorotoluene	15.34	126	66738	51.39	ug/L	99
104) 4-chlorotoluene	15.44	91	187968	52.14	ug/L	99
105) 1,3,5-trimethylbenzene	15.32	105	207043	52.80	ug/L	99
106) tert-butylbenzene	15.66	119	182879	52.26	ug/L	99
107) pentachloroethane	15.78	167	42159	55.73	ug/L	95
108) 1,2,4-trimethylbenzene	15.71	105	218209	53.43	ug/L	99
109) sec-butylbenzene	15.88	105	269972	53.06	ug/L	100
110) 1,3-dichlorobenzene	16.09	146	145849	53.84	ug/L	99
111) p-isopropyltoluene	15.99	119	231394	55.63	ug/L	98
112) 1,4-dichlorobenzene	16.17	146	143071	52.59	ug/L	99
113) 1,2-dichlorobenzene	16.57	146	141636	54.10	ug/L	98
114) n-butylbenzene	16.40	92	115401	55.09	ug/L	99
115) p-Diethylbenzene	16.37	119	127178	55.88	ug/L	99
116) 1,2-dibromo-3-chloropropan	17.36	75	10686	52.54	ug/L	95
117) 1,3,5-Trichlorobenzene	17.50	180	124148	55.26	ug/L	98
118) 1,2,4-trichlorobenzene	18.15	180	115957	58.52	ug/L	99
119) 1,2,4,5-tetramethylbenzene	17.15	119	213649	57.33	ug/L	100
120) hexachlorobutadiene	18.23	225	57134	52.56	ug/L	96
121) naphthalene	18.44	128	207510	56.93	ug/L	97
122) 1,2,3-trichlorobenzene	18.70	180	101566	56.17	ug/L	99
123) hexachloroethane	16.80	119	41561	48.80	ug/L	98
124) Benzyl chloride	16.30	91	121565	65.39	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : y117411.D
Acq On : 8 Nov 2011 5:48 pm
Operator : Roberts
Sample : ICV5012-50
Misc : MS20977,VY5012,5.0,,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 09 14:47:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Nov 09 07:18:17 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119489.D
 Acq On : 17 Jan 2012 11:41 am
 Operator : RobertS
 Sample : CC5012-20
 Misc : MS24355,VY5108,5.0,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 18 15:57:16 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.70	65	45678	500.00	ug/L	-0.01
4) pentafluorobenzene	9.86	168	167416	50.00	ug/L	0.00
49) 1,4-difluorobenzene	10.78	114	219975	50.00	ug/L	0.00
79) chlorobenzene-d5	13.86	117	170024	50.00	ug/L	0.00
93) 1,4-dichlorobenzene-d4	16.14	152	80607	50.00	ug/L	-0.01

System Monitoring Compounds

41) dibromofluoromethane (s)	9.95	113	74979	50.47	ug/L	0.00
Spiked Amount	50.000	Range	67 - 131	Recovery	=	100.94%
42) 1,2-dichloroethane-d4 (s)	10.37	65	72986	53.17	ug/L	0.00
Spiked Amount	50.000	Range	66 - 130	Recovery	=	106.34%
71) toluene-d8 (s)	12.37	98	237322	53.12	ug/L	0.00
Spiked Amount	50.000	Range	76 - 125	Recovery	=	106.24%
95) 4-bromofluorobenzene (s)	14.99	95	79493	50.39	ug/L	0.00
Spiked Amount	50.000	Range	53 - 142	Recovery	=	100.78%

Target Compounds

						Qvalue
2) 1,4-dioxane	11.50	88	4411	457.42	ug/L	93
3) tertiary butyl alcohol	7.81	59	12432	102.28	ug/L	94
5) chlorodifluoromethane	4.20	51	25040	21.89	ug/L	91
6) dichlorodifluoromethane	4.17	85	37038	27.23	ug/L	92
7) chloromethane	4.53	50	38146	21.17	ug/L	97
8) vinyl chloride	4.79	62	30752	21.62	ug/L	98
9) bromomethane	5.48	94	23525	24.97	ug/L	96
10) chloroethane	5.66	64	15768	22.37	ug/L	97
12) trichlorofluoromethane	6.11	101	45440	28.61	ug/L	98
13) ethyl ether	6.52	74	12536	17.03	ug/L	97
14) acrolein	6.85	56	42372	202.80	ug/L	99
15) 1,1-dichloroethene	6.96	96	21402	18.80	ug/L	83
16) acetone	7.08	58	3975	20.64	ug/L	94
17) allyl chloride	7.51	76	13293	17.98	ug/L	89
18) acetonitrile	7.57	40	11262	151.37	ug/L	84
19) iodomethane	7.27	142	48417	19.21	ug/L	93
20) iso-butyl alcohol	10.20	41	7838	186.63	ug/L	87
21) carbon disulfide	7.38	76	73851	18.54	ug/L	98
22) methylene chloride	7.72	84	25537	17.75	ug/L	97
23) methyl acetate	7.51	74	3207	18.47	ug/L	97
24) methyl tert butyl ether	7.99	73	63476	17.92	ug/L	96
25) trans-1,2-dichloroethene	8.06	96	24759	18.85	ug/L	98
26) di-isopropyl ether	8.55	45	84168	19.13	ug/L	99
27) ethyl tert-butyl ether	9.02	59	70581	19.08	ug/L	95
28) 2-butanone	9.36	72	4346	25.69	ug/L	78
29) 1,1-dichloroethane	8.64	63	45691	19.94	ug/L	98
30) chloroprene	8.73	53	35918	23.85	ug/L	89
31) acrylonitrile	8.10	53	31473	88.91	ug/L	99
32) vinyl acetate	8.62	86	2838	16.64	ug/L	87
33) ethyl acetate	9.35	45	2809	18.20	ug/L	# 1
34) 2,2-dichloropropane	9.36	77	38197	23.25	ug/L	94
35) cis-1,2-dichloroethene	9.38	96	27818	18.74	ug/L	93
36) propionitrile	9.51	54	24524	172.09	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119489.D
 Acq On : 17 Jan 2012 11:41 am
 Operator : RobertS
 Sample : CC5012-20
 Misc : MS24355,VY5108,5.0,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 18 15:57:16 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) bromochloromethane	9.70	128	13999	18.47	ug/L	95
38) tetrahydrofuran	9.72	42	6665	16.51	ug/L	94
39) chloroform	9.75	83	47696	21.01	ug/L	99
40) tert-Butyl Formate	9.76	59	4377	20.41	ug/L	95
43) freon 113	6.91	151	19866	21.34	ug/L	100
44) methacrylonitrile	9.67	41	11309	17.21	ug/L	98
45) 1,1,1-trichloroethane	9.97	97	41224	24.06	ug/L	95
46) Cyclohexane	10.00	84	28360	18.82	ug/L #	3
47) 2,2,4-trimethylpentane	10.34	57	76057	19.13	ug/L	94
48) tert-amyl methyl ether	10.41	73	62792	19.06	ug/L	94
50) epichlorohydrin	12.05	57	8624	105.59	ug/L	96
51) n-butyl alcohol	10.93	56	27050	856.25	ug/L	89
52) carbon tetrachloride	10.15	117	38572	26.92	ug/L	94
53) 1,1-dichloropropene	10.13	75	33130	23.00	ug/L	97
54) hexane	8.30	57	24541	18.17	ug/L	94
56) benzene	10.41	78	94407	20.37	ug/L	99
57) heptane	10.50	57	15271	20.40	ug/L	95
58) isopropyl acetate	10.32	61	8728	21.57	ug/L	98
59) 1,2-dichloroethane	10.46	62	33238	23.83	ug/L	99
60) trichloroethene	11.11	95	26357	21.30	ug/L	98
62) 2-nitropropane	11.93	41	5601	24.42	ug/L #	50
63) 2-chloroethyl vinyl ether	11.90	63	5359	56.61	ug/L	96
64) methyl methacrylate	11.37	69	12632	18.81	ug/L	94
65) 1,2-dichloropropane	11.39	63	24242	19.75	ug/L	90
66) methylcyclohexane	11.28	83	32047	19.73	ug/L	98
68) dibromomethane	11.57	93	14630	20.80	ug/L	95
69) bromodichloromethane	11.68	83	35899	22.87	ug/L	99
70) cis-1,3-dichloropropene	12.12	75	38478	19.99	ug/L	96
72) 4-methyl-2-pentanone	12.19	58	12259	31.09	ug/L #	81
73) toluene	12.44	92	54376	19.89	ug/L	99
74) 3-methyl-1-butanol	12.23	70	9503	379.27	ug/L	86
75) trans-1,3-dichloropropene	12.66	75	33884	21.34	ug/L	94
76) ethyl methacrylate	12.62	69	22675	19.52	ug/L	95
77) 1,1,2-trichloroethane	12.88	83	16393	19.60	ug/L	93
78) 2-hexanone	13.03	58	11489	27.70	ug/L	91
80) tetrachloroethene	13.00	166	30747	18.72	ug/L	98
81) 1,3-dichloropropane	13.06	76	30678	20.60	ug/L	97
82) butyl acetate	13.08	56	11524	20.09	ug/L	100
83) dibromochloromethane	13.32	129	28497	23.58	ug/L	97
84) 1,2-dibromoethane	13.46	107	19954	20.58	ug/L	96
85) 3,3-Dimethyl-1-Butanol	13.20	57	15299	191.88	ug/L	96
86) chlorobenzene	13.89	112	62127	20.58	ug/L	97
87) 1,1,1,2-tetrachloroethane	13.95	131	26223	22.98	ug/L	97
88) ethylbenzene	13.93	91	99341	21.88	ug/L	99
89) m,p-xylene	14.02	106	75389	42.88	ug/L	92
90) o-xylene	14.44	106	37257	20.48	ug/L	91
91) styrene	14.46	104	60875	21.16	ug/L	96
92) bromoform	14.76	173	19726	23.23	ug/L	97
94) isopropylbenzene	14.77	105	98057	21.80	ug/L	97
96) bromobenzene	15.19	156	29112	20.47	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
 Data File : y119489.D
 Acq On : 17 Jan 2012 11:41 am
 Operator : RobertS
 Sample : CC5012-20
 Misc : MS24355,VY5108,5.0,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 18 15:57:16 2012
 Quant Method : C:\MSDCHEM\1\METHODS\MYS5012.M
 Quant Title : Method SW846 8260B, ZB624 60m x 0.25mm x 1.4um
 QLast Update : Mon Dec 12 12:09:02 2011
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) cyclohexanone	15.00	55	36900	190.33	ug/L	94
98) 1,1,2,2-tetrachloroethane	15.12	83	22073	19.64	ug/L	95
99) trans-1,4-dichloro-2-buten	15.15	53	6115	25.43	ug/L	87
100) 1,2,3-trichloropropane	15.19	110	5958	21.26	ug/L	99
101) n-propylbenzene	15.17	91	112067	21.74	ug/L	97
103) 2-chlorotoluene	15.33	126	24449	20.75	ug/L	93
104) 4-chlorotoluene	15.43	91	70922	21.68	ug/L	97
105) 1,3,5-trimethylbenzene	15.31	105	81335	22.86	ug/L	94
106) tert-butylbenzene	15.66	119	69237	21.80	ug/L	96
107) pentachloroethane	15.77	167	19931	29.04	ug/L	97
108) 1,2,4-trimethylbenzene	15.71	105	78890	21.29	ug/L	93
109) sec-butylbenzene	15.87	105	100256	21.72	ug/L	98
110) 1,3-dichlorobenzene	16.08	146	51941	21.13	ug/L	95
111) p-isopropyltoluene	15.98	119	82903	21.97	ug/L	95
112) 1,4-dichlorobenzene	16.16	146	51899	21.02	ug/L	99
113) 1,2-dichlorobenzene	16.56	146	48943	20.60	ug/L	94
114) n-butylbenzene	16.39	92	40859	21.50	ug/L	99
116) 1,2-dibromo-3-chloropropan	17.35	75	4329	23.46	ug/L #	73
117) 1,3,5-Trichlorobenzene	17.49	180	45579	22.36	ug/L	99
118) 1,2,4-trichlorobenzene	18.14	180	37958	21.11	ug/L	99
120) hexachlorobutadiene	18.22	225	25572	25.93	ug/L	97
121) naphthalene	18.44	128	58731	17.76	ug/L	99
122) 1,2,3-trichlorobenzene	18.69	180	33811	20.61	ug/L	99
123) hexachloroethane	16.79	119	19199	26.86	ug/L	98
124) Benzyl chloride	16.29	91	40289	26.34	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Date: 10.22.11

Print Analyst Name: Arzueles
Analyst Signature: Arzueles

Standard Data

Lot #	Description	Conc.
211197	60 A	WLP
1	61 B	↓
1	83 C	↓
1	76 A-Ten	WLP
1	49 INT ONLY	WLP

Standard Data

Lot #	Description	Conc.
211197	60 A	WLP
1	61 B	↓
1	83 C	↓
1	76 A-Ten	WLP
1	49 INT ONLY	WLP

Columns: DB 6116000000000000Method: V000Initial Cal. Method: M00400

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Arzueles

Date: 12/30

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	S U	Status (Data)	Comments	pH* < 2
	2591055	FFS				1							OK	12:53 AM	
	2591056	1C4096-05				2							OK	12:53 AM	
	2591057	1C4096-1				3							OK	12:53 AM	
	2591058	1C4096-2				4							OK	12:53 AM	
	2591059	1C4096-5				5							OK	12:53 AM	
	2591060	1C4096-10				6							OK	12:53 AM	
	2591061	1C4096-20				7							OK	12:53 AM	
	2591062	1C4096-50				8							OK	12:53 AM	
	2591063	1C4096-100				9							OK	12:53 AM	
	2591064	1C4096-200				10							OK	12:53 AM	
	2591065	1B				11							OK	12:53 AM	
	2591066	1M				12							OK	12:53 AM	
	2591067	1C4096-50				13							OK	12:53 AM	
	2591068	1C4096-50				14							OK	12:53 AM	
	2591069														
	2591070														
	2591071														

X = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
computer miscalculation; 4 = analyst's correction error

Form: OR001-9

v. Date: 2/14/2007

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ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V2B4134

Print Analyst Name: ARACELIS

Analyst Signature: M

Date: 1.10.18

Standard Data

Standard Data

Lot #	Description	Conc.
W11177	100% 100% 100%	W11177
1	100% 100% 100%	1
1	100% 100% 100%	1
1	100% 100% 100%	1

Lot #	Description	Conc.
W11177	100% 100% 100%	W11177
1	100% 100% 100%	1
1	100% 100% 100%	1
1	100% 100% 100%	1

Columns: 60m (W11177, A11177)

Method V2B41

Initial Cal. Method M1000

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: RW

Date: 1/1/9

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L	I	S	Status (Data)	Comments	pH < 2
	2591888	B53				23							OK	8/41 PM	
	2591889	CC4000-S				24							OK	8/41 PM	
	2591890	VS				25							OK		
	2591891	MS				26							OK		
	2591892	VS				27							OK	8/41 PM	
	2591893	24379 STRACHMO				28	5		1				OK	8/41 PM	
	2591894	V				29							OK		
	2591895	24379 STRACHMO				30	5		1				OK		
	2591896	24379 STRACHMO				31	5		1				OK		
	2591897	24379 STRACHMO				32	5		1				OK		
	2591898	24379 STRACHMO				33	5		1				OK		
	2591899	24379 STRACHMO				34	5		1				OK		
	2591900	24379 STRACHMO				35	5		1				OK		
	2591901	24379 STRACHMO				36	5		1				OK		
	2591902	24379 STRACHMO				37	5		1				OK		
	2591903	24379 STRACHMO				38	5		1				OK		
	2591904	24379 STRACHMO				39	5		1				OK		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

91

Date: 1.10.18

Print Analyst Name: Ben Arceles

Analyst Signature: [Signature]

Standard Data

[illegible]

Standard Data

Lot #	Description	Conc.

Columns: 684

Method 

Initial Cal. Method *MBWR*

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 1/19

Date: 1/1/81

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH* <2
2591205	JAT7031-1	243605 TEL481	STB	1	40	S			↳	-	ML	↳		-
2591200	JAT7031-2	↓	STB	8	41	S			↓	-	b	60		-
2591207	JAL6883-1	24370 PAXLIMB	G	1	42	S			↓	-	PIC			-
2591208	JAT7057-1	24378 TECHM2MA	G	4	43	S			↓	-	HL	17		-
2591209	JAT7057-2	↓	↓	↓	44	S			↓	-	↓	47		-
2591210	JAT7057-3	↓	↓	↓	45	12/30		5x		-	↓	34	8:09 AM	9

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

93

Print Analyst Name: Emily T
 Analyst Signature: [Signature]

Date: 10/28/11 (FRI)

Standard Data

Lot #	Description	Conc.
111131-138	100% Acetone	100 ppm
111131-139	100% Acetone	100 ppm
111131-140	100% Acetone	100 ppm
111131-141	100% Acetone	100 ppm
111131-142	100% Acetone	100 ppm

Standard Data

Lot #	Description	Conc.
111131-129	100% Acetone	100 ppm
111131-130	100% Acetone	100 ppm
111131-131	100% Acetone	100 ppm
111131-132	100% Acetone	100 ppm
111131-133	100% Acetone	100 ppm

Columns: DB224 (60m x 0.25mm x 1.4um)

Method 8260

Initial Cal. Method 111131-140 111131-141
24-10-28/11

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 11/1/11

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH < 2
	D188518	BEB				1						OK	8:53am	
	188519	IC7671-0.5				2						OK	0.5ul AB, C Acetone, 600, S-1000	
	188520	IC7671-1				3						OK	1ul AB, C Acetone, 600, S-1000	
	188521	IC7671-2				4						OK	2ul AB, C Acetone, 600, S-1000	
	188522	IC7671-5				5						OK	5ul AB, C Acetone, 600, S-1000	
	188523	IC7671-10				6						OK	5ul AB, C Acetone, 600, S-1000	
	188524	IC7671-20				7						OK	10ul AB, C Acetone, 600, S-1000	
	188525	IC7671-50				8						OK	25ul AB, C Acetone, 600, S-1000	
	188526	IC7671-50				9						OK	25ul AB, C Acetone, 600, S-1000	
	188527	IC7671-100				10						OK	50ul AB, C Acetone, 600, S-1000	
	188528	IC7671-200				11						OK	100ul AB, C Acetone, 600, S-1000	
	188529	IB				12								
	188530	IB				13								
	188531	MB				14						OK		
	188532	BS				15						OK	25ul AB, C Acetone, 600, S-1000	
	188533	IB				16								
R	188534	JA89370.5	20081 AUG11MBE		2	17	5.5/10	100				OK		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
 Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
 Rev. Date: 2/14/2007

237

Date: 10/28/11 (Fri)

Print Analyst Name: Emily T
Analyst Signature: 

Standard Data

Lot #	Description	Conc.

Standard Data

[illegible]

Columns: 20x100cm x 0.25mm x 1.4um

Method 8260

Initial Cal. Method M0767

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date: 11/2

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH* <2
P	188535	JA89370-1	20081 PAH/TOB	5	2	18	5.5/10	100				OK		
	188536	JA89370-5u	↓	↓	↓	19	↓	↓				OK	25ul APCL Acciden	750
	188537	JA89370-5u	↓	↓	↓	20	↓	↓				OK	↓	
	188538	1B				21								
4XCL														

X = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
 Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Id: OR001-9

Date: 2/14/2007

239

Date: 1/19/12

 Print Analyst Name: Emily T
 Analyst Signature: [Signature]
Standard Data

Lot #	Description	Conc.
102	100ppm	100ppm
104	100ppm	100ppm
124	100ppm	100ppm
128	100ppm	100ppm

Standard Data

Lot #	Description	Conc.
124	100ppm	100ppm
126	100ppm	100ppm
128	100ppm	100ppm
130	100ppm	100ppm

 Columns: DB624 (6mm x 0.25mm x 1.4um)

 Method 82100

 Initial Cal. Method MD7671

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

 Supervisor Signature: [Signature]

 Date: 1/20/2012

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L	I	S	Status (Data)	Comments	pH < 2
	D191677	BFB				1							OK	q-32 am	
	191678	CC7671-20				2							OK	100ppm Acrolein	
	191679	IB				3							OK		
	191680	MB				4							OK		
	191681	BS				5							OK	25ul extract, CA	
	191682	IB				6							OK		
OK	191683	JA96854-2	24258 STRAGM		4	7	4.9/5	5					OK		
R	191684	JA96858-30	24182 TCC114		3	8	5.7/5	100					OK		
R	191685	JA96760-2	24207 NPT TCC114		3	9	4.6/5	10					OK	RR 100X	
R	191686	JA96760-4	24207 NPT TCC114		3	10	4.9/5	5					OK		
R	191687	JA96994-1	24357 NPT TCC114		4	11	4.6/5	100					OK		
	191688	JA96938-12m	24218 TCC114		3	12	5.3/5	100					OK	25ul extract, CA	
	191689	JA96938-12m	24218 TCC114		3	13	5.3/5	100					OK		
	191690	IB				14							OK		
R	191691	JA96938-12	24291 TCC114		3	15	4.4/5	100					OK	US2438 TCC114	TR
R	191692	JA96938-12	24318 TCC114		3	16	5.3/5	100					OK	US24291 TCC114	RR /w/level
R	191693	JA96938-31	24318 TCC114		3	17	5.3/5	100					OK	dilute due to high pH	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

181



Batch ID: VD7804

Date: 4/19/12

Print Analyst Name: Emily T

Analyst Signature:

Standard Data

Standard Data

[illegible]

Lot #	Description	Conc.
	See page 18	

Columns: DB624 (60m x 0.25mm x 4m)

Method 8260

Initial Cal. Method 407671

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date: 1/20/2012

[illegible]

Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

183

Date: 11/22/2011

Print Analyst Name: Ousame
Analyst Signature: O. Paraskevova

Standard Data

Lot #	Description	Conc.
011.119727	ExpA	1000ppm
011.119734	ExpB	1
011.119738	ExpC	1
011.119713	ExpD	1000ppm
011.119733	anolin	1

Standard Data

Lot #	Description	Conc.
011.119714	DM out of 1000	250/1000ppm
011.119717	A std	1000ppm
011.119733	B	1
011.119722	C	1
011.119749	S	1

Columns: 25.629/60mm x 0.15mm x 1.2

Method 2860

Initial Cal. Method ME78448147

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 11/28/2011

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	S U	Status (Data)	Comments	pH <2
7E	185152	BFA	8260			13	2ul						OK	A b c S Sure Acc	
	185153	IC8147-0.5				14	1						OK	A-B-C-2001-1000-50/1000 25ul 25ul 25ul 25ul 25ul 25ul	
	185154	IC8147-1				15							OK	1ul 1ul 1ul 1ul 1ul 1ul	
	185155	IC8147-2				16							OK	2ul 2ul 2ul 2ul 2ul 2ul	
	185156	IC8147-5				17							OK	5ul 5ul 5ul 5ul 5ul 5ul	
	185157	IC8147-10				18							OK	10ul 10ul 10ul 10ul 10ul 10ul	
	185158	IC8147-20				19							OK	10ul 10ul 10ul 10ul 10ul 10ul	
	185159	IC8147-50				20							OK	20ul 20ul 20ul 20ul 20ul 20ul	
	185160	IC8147-50				21							NG	20ul 20ul 20ul 20ul 20ul 20ul S. Sure 20ul 20ul	
	185161	IC8147-100				22							OK	10ul 10ul 10ul 10ul 10ul 10ul	
	185162	IC8147-200				23							OK	10ul 10ul 10ul 10ul 10ul 10ul	
	185163	SS				24							Chump		
	185164	SS				25									
	185165	SS				26									
	185166	SS				27									
														7C 11/28/2011	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

189

Date: 11/23/2011

Print Analyst Name: Oksana
Analyst Signature: O. Parasivashvili

Standard Data

Lot #	Description	Conc.
011-197 27	ExTA	100ppm
011-197 34	ExTUS	L
011-197 36	ExTC	L
011-197 13	ExFAOR	1000ppm
011-197 33	acrolens	L

Standard Data

Lot #	Description	Conc.
011-197 136	Int/curr	250/2500ppm
011-197 17	A Std	100ppm
011-197 23	B	L
011-197 43	C	L
5182	on in water	

Columns: 25' 604/600x0.1mmx14.4

Method MSD

Initial Cal. Method MS 8147

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 11/23/2011

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	S U	Status (Data)	Comments	pH* <2
76	185190	BFA				24							OK		12.3/Am
	185191	CC 8147-50				25							OK	A.B.C. can. result 367	
	185192	EB				26							W ok		
	185193	MD				27							W OK		
	185194	2CV8147-50 H				28							W OK	ExTA. can. result 367	
	185195	DA92554-13	21882 TC1117			29	6.6/100	100					W OK	A.B.C. can. result 367	
	185196	DA92554-13				30							W OK		
	185197	DA92554-13				31							W OK		
	185198	EB				32							W ok		
	185199	DA92237-5	21732 TC1117			33	6.1/100	100					W NO	Rinc/o	
	185200	DA92237-6				34	6.1/100						W NO	Rinc/o	
	185201	DA92237-12				35	5.8/100						W HQ	Rinc/o	
	185202	DA92521-14	21899 TC1117			36	6.4/100	100					W OK		
	185203	DA92521-13	21899 X4L			37	5.2/100						W OK		
	185204	DA92521-5	21899 TC1117			38	5.9/100						W NO	R.L.L.	
	185205	DA92521-4	21899 TC1117			39	5.1/100						W NO	R.L.L.	
	185206	DA92521-3				40	6.2/100						W OK		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

195

Date: 1/18/2012

Print Analyst Name: Quisame
Analyst Signature: D. Parasurama

Standard Data

Lot #	Description	Conc.
011.119798	ExtA	100ppm
011.119712	ExtB	
011.1197126	ExtC	
011.119785	Extact	1000ppm
011.1197128	acrolam	

Standard Data

Lot #	Description	Conc.
011.119790	ExtB/ExtC	250/250ppm
011.1197102	A Std	100ppm
011.1197104	B	
011.1197129	C	
51188	Omni mean	

Columns: 215-609/60m x 0.05mm x 4m

Method V8080

Initial Cal. Method ME 8147

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 1/18/2012

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	S U	Status (Data)	Comments	pH <2
1	1878212	Bth				26							OK	8.13dpm	
	1878213	cc 8147-50				27							OK	A.B.C. an. mul	
	1878214	IS				28							w clamp		
	1878215	MB				29							OK		
	1878216	IS				30							OK	ExtA, ExtB, ExtC, ExtD mul	
	1878217	DA97134-2mg	24397 SCO	S	2	31	10/10mg	100ul					OK	A.B.C. an. mul	
	1878218	DA97134-2mg				32							OK		
	1878219	IS				33							w clamp		
	1878220	DA97134-2				34							OK		
	1878221	DA97134-1				35							OK		
	1878222	DA97134-3				36							OK		
	1878223	DA96854-2	24358 SRTA6M	S	4	37	4.9/10mg	100ul					OK	R20x	
	1878224	DA97047-1	24392 BTXMS	S	3	38	5.7/10mg	100ul					OK	R5x	
	1878225	DA97047-2				39	4.8/10mg	100ul					OK	R50x	
	1878226	DA96996-6	24355 TCM+10	S	3	40	5.7/10mg	100ul					OK	R5x	
	1878227	DA96996-8				41	5.3/10mg						OK	R25x	
	1878228	DA96996-5				42	5.1/10mg						OK	R10x	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

241

Date: 1/18/2012

Print Analyst Name: O. Parameas
Analyst Signature: O. Parameas

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See pg 34	

Columns: 215-624/600 x 0.001/4

Method *NSD*

Initial Cal. Method *ME 8147*

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 1/19/2012

Date: 1/19/2012

[illegible]

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

243

Date: 11/17/12

 Print Analyst Name: Robert S207
 Analyst Signature: [Signature]

Standard Data

Lot #	Description	Conc.
V011-1197-102	8260A	100-1000ppm
V011-1197-104	8260B	100-5000ppm
V011-1197-124	8260C	100ppm
V011-1197-114	8260 ISLBN	2500-10000ppm
V011-1197-111	Acrolein	1000ppm

Standard Data

Lot #	Description	Conc.
V011-1197-88	ExtA	100-1000ppm
V011-1197-122	ExtB	100-5000ppm
V011-1197-126	ExtC	100ppm
V011-1197-85	ExtAcrolein	100ppm

 Columns: 2B-624

 Method 8260

 Initial Cal. Method MY55012

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

 Supervisor Signature: [Signature]

 Date: 1/24/12

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH + 2
	Y119486	BFB				1					✓	NG	1754	
	Y119487	BFB				1					✓	OK		
	Y119488	CC 501L-20				2					✓	NG	VCL	
	Y119489	CC 501L-20				2					✓	OK	10ml A,B,C, Acrolein 750 H2O	
	Y119490	IB				3					✓	-		
	Y119491	MB				4					✓	OK		
	Y119492	BS				5					✓	OK	2.5ml ExtA, ExtB, ExtC ExtAcrolein 750ml H2O	
	Y119493	IB				6					✓	-		
	Y119494	JA96920-1	24317 TCL11	✓	5	7	6.0				✓	OK		
	Y119495	JA96920-2			5	8	5.6				✓	OK		
	Y119496	JA96920-3			5	9	5.5				✓	OK		
	Y119497	JA96920-4	↓	↓	4	10	5.9				✓	OK		
	Y119498	JA96920-3ms	ms		5	11	5.4				✓	OK	2.5ml A,B,C, Acrolein 750ml Sample	
	Y119499	IB				12					✓	-		
	Y119500	JA96920-40R	DUP	✓	4	13	5.6				✓	OK		
	Y119501	JA96996-2	24355 NJSPCL11110	✓	5	14	4.7				✓	OK		
	Y119502	JA97164-2	24455 TCL11 + TBA	✓	6	15	6.0				✓	OK/R	RA 1x as CF	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

59

Date: 1/17/12

Print Analyst Name: Robert Sot

Analyst Signature: [Signature]

Standard Data

Standard Data

Lot #	Description	Conc.
	See	page

Lot #	Description	Conc.
59		

Columns: 2B-624

Method 8260

Initial Cal. Method *MY55012*

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date: 1/24/12

[illegible]

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * If pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

61

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54195-MB1	M84309.D	1	01/14/12	KLS	01/13/12	OP54195	EM3363

The QC reported here applies to the following samples:

Method: SW846 8270D

JA96854-1, JA96854-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	29	8.3	ug/kg	
208-96-8	Acenaphthylene	ND	29	9.1	ug/kg	
120-12-7	Anthracene	ND	29	10	ug/kg	
56-55-3	Benzo(a)anthracene	ND	29	9.3	ug/kg	
50-32-8	Benzo(a)pyrene	ND	29	8.7	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	29	9.5	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	29	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	29	11	ug/kg	
218-01-9	Chrysene	ND	29	9.7	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	29	9.7	ug/kg	
206-44-0	Fluoranthene	ND	29	13	ug/kg	
86-73-7	Fluorene	ND	29	9.4	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	29	9.9	ug/kg	
91-20-3	Naphthalene	ND	29	7.8	ug/kg	
85-01-8	Phenanthrene	ND	29	13	ug/kg	
129-00-0	Pyrene	ND	29	11	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	77%	21-116%
4165-62-2	Phenol-d5	74%	19-117%
118-79-6	2,4,6-Tribromophenol	94%	24-136%
4165-60-0	Nitrobenzene-d5	98%	21-122%
321-60-8	2-Fluorobiphenyl	91%	30-117%
1718-51-0	Terphenyl-d14	106%	31-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.24	280	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Page 1 of 1

Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54208-MB1	R91073.D	1	01/16/12	RG	01/13/12	OP54208	ER3517

The QC reported here applies to the following samples:

Method: SW846 8270D

JA96854-3, JA96854-4

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.26	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.23	ug/l	
120-12-7	Anthracene	ND	1.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.23	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.23	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.46	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.32	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.51	ug/l	
218-01-9	Chrysene	ND	1.0	0.29	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.38	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.32	ug/l	
86-73-7	Fluorene	ND	1.0	0.28	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.37	ug/l	
91-20-3	Naphthalene	ND	1.0	0.26	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.29	ug/l	
129-00-0	Pyrene	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	86%
321-60-8	2-Fluorobiphenyl	87%
1718-51-0	Terphenyl-d14	96%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike Summary**Job Number:** JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54195-BS1	M84310.D	1	01/14/12	KLS	01/13/12	OP54195	EM3363

The QC reported here applies to the following samples:**Method:** SW846 8270D

JA96854-1, JA96854-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1430	976	68	55-114
208-96-8	Acenaphthylene	1430	960	67	50-103
120-12-7	Anthracene	1430	1040	73	59-121
56-55-3	Benzo(a)anthracene	1430	1020	71	54-119
50-32-8	Benzo(a)pyrene	1430	1070	75	59-122
205-99-2	Benzo(b)fluoranthene	1430	979	69	45-133
191-24-2	Benzo(g,h,i)perylene	1430	1030	72	57-122
207-08-9	Benzo(k)fluoranthene	1430	1410	99	49-131
218-01-9	Chrysene	1430	1050	74	55-120
53-70-3	Dibenzo(a,h)anthracene	1430	1060	74	58-125
206-44-0	Fluoranthene	1430	989	69	57-119
86-73-7	Fluorene	1430	1020	71	57-117
193-39-5	Indeno(1,2,3-cd)pyrene	1430	1080	76	57-127
91-20-3	Naphthalene	1430	1010	71	49-111
85-01-8	Phenanthrene	1430	1000	70	58-118
129-00-0	Pyrene	1430	1090	76	54-122

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	66%	21-116%
4165-62-2	Phenol-d5	67%	19-117%
118-79-6	2,4,6-Tribromophenol	76%	24-136%
4165-60-0	Nitrobenzene-d5	80%	21-122%
321-60-8	2-Fluorobiphenyl	74%	30-117%
1718-51-0	Terphenyl-d14	81%	31-129%

Blank Spike Summary

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Job Number: JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54208-BS1	R91054.D	1	01/14/12	KLS	01/13/12	OP54208	ER3516

The QC reported here applies to the following samples:**Method:** SW846 8270D

JA96854-3, JA96854-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	43.9	88	57-118
208-96-8	Acenaphthylene	50	41.6	83	49-110
120-12-7	Anthracene	50	46.5	93	63-128
56-55-3	Benzo(a)anthracene	50	40.2	80	59-124
50-32-8	Benzo(a)pyrene	50	45.4	91	63-129
205-99-2	Benzo(b)fluoranthene	50	43.3	87	50-139
191-24-2	Benzo(g,h,i)perylene	50	47.3	95	61-132
207-08-9	Benzo(k)fluoranthene	50	54.2	108	53-140
218-01-9	Chrysene	50	38.8	78	59-128
53-70-3	Dibenzo(a,h)anthracene	50	45.7	91	61-135
206-44-0	Fluoranthene	50	46.1	92	61-129
86-73-7	Fluorene	50	46.4	93	62-124
193-39-5	Indeno(1,2,3-cd)pyrene	50	51.2	102	59-138
91-20-3	Naphthalene	50	39.8	80	47-107
85-01-8	Phenanthrene	50	41.9	84	62-124
129-00-0	Pyrene	50	37.8	76	56-126

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	88%	38-129%
321-60-8	2-Fluorobiphenyl	90%	42-117%
1718-51-0	Terphenyl-d14	95%	14-132%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JA96854**Account:** LANGAN Langan Engineering & Environmental**Project:** 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54195-MS	M84318.D	1	01/14/12	KLS	01/13/12	OP54195	EM3363
OP54195-MSD	M84319.D	1	01/14/12	KLS	01/13/12	OP54195	EM3363
JA96820-1	M84317.D	1	01/14/12	KLS	01/13/12	OP54195	EM3363

The QC reported here applies to the following samples:**Method:** SW846 8270D

JA96854-1, JA96854-2

CAS No.	Compound	JA96820-1 ug/kg	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND	1710	1410	83	1330	78	6	30-122/31
208-96-8	Acenaphthylene	70.1	1710	1440	80	1340	74	7	32-107/29
120-12-7	Anthracene	39.9	1710	1560	89	1560	89	0	33-130/30
56-55-3	Benzo(a)anthracene	118	1710	1600	87	1630	88	2	29-127/33
50-32-8	Benzo(a)pyrene	159	1710	1620	85	1620	85	0	28-134/34
205-99-2	Benzo(b)fluoranthene	188	1710	1760	92	1830	96	4	19-143/38
191-24-2	Benzo(g,h,i)perylene	138	1710	1580	84	1660	89	5	27-135/34
207-08-9	Benzo(k)fluoranthene	119	1710	1750	95	1710	93	2	20-138/40
218-01-9	Chrysene	183	1710	1700	89	1700	89	0	29-129/32
53-70-3	Dibenzo(a,h)anthracene	38.7	1710	1570	90	1620	93	3	32-135/34
206-44-0	Fluoranthene	263	1710	1610	79	1610	79	0	25-132/33
86-73-7	Fluorene	ND	1710	1450	85	1460	85	1	32-125/32
193-39-5	Indeno(1,2,3-cd)pyrene	122	1710	1640	89	1660	90	1	29-138/35
91-20-3	Naphthalene	70.8	1710	1390	77	1110	61	22	25-117/32
85-01-8	Phenanthrene	103	1710	1560	85	1550	85	1	28-132/34
129-00-0	Pyrene	350	1710	2120	104	2130	104	0	27-132/33

CAS No.	Surrogate Recoveries	MS	MSD	JA96820-1	Limits
367-12-4	2-Fluorophenol	69%	55%	65%	21-116%
4165-62-2	Phenol-d5	69%	57%	63%	19-117%
118-79-6	2,4,6-Tribromophenol	88%	91%	97%	24-136%
4165-60-0	Nitrobenzene-d5	82%	68%	82%	21-122%
321-60-8	2-Fluorobiphenyl	82%	73%	85%	30-117%
1718-51-0	Terphenyl-d14	100%	107%	114%	31-129%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JA96854

Account: LANGAN Langan Engineering & Environmental

Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54208-MS	R91064.D	1	01/14/12	KLS	01/13/12	OP54208	ER3516
OP54208-MSD	R91065.D	1	01/14/12	KLS	01/13/12	OP54208	ER3516
JA96827-1	R91063.D	1	01/14/12	KLS	01/13/12	OP54208	ER3516

The QC reported here applies to the following samples:

Method: SW846 8270D

JA96854-3, JA96854-4

CAS No.	Compound	JA96827-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		100	90.2	90	87.0	87	4	55-119/21
208-96-8	Acenaphthylene	ND		100	85.5	86	82.3	82	4	47-110/20
120-12-7	Anthracene	ND		100	93.4	93	89.2	89	5	59-128/21
56-55-3	Benzo(a)anthracene	ND		100	81.3	81	78.6	79	3	54-124/21
50-32-8	Benzo(a)pyrene	ND		100	92.1	92	87.4	87	5	57-129/21
205-99-2	Benzo(b)fluoranthene	ND		100	84.0	84	86.9	87	3	46-138/28
191-24-2	Benzo(g,h,i)perylene	ND		100	96.1	96	92.7	93	4	52-135/23
207-08-9	Benzo(k)fluoranthene	ND		100	123	123	96.7	97	24	45-141/30
218-01-9	Chrysene	ND		100	78.9	79	75.1	75	5	55-127/20
53-70-3	Dibenzo(a,h)anthracene	ND		100	93.3	93	90.0	90	4	54-136/23
206-44-0	Fluoranthene	0.46	J	100	92.7	92	90.5	90	2	55-129/20
86-73-7	Fluorene	ND		100	94.2	94	90.4	90	4	57-125/21
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	105	105	102	102	3	53-138/23
91-20-3	Naphthalene	1.7		100	83.6	82	81.9	80	2	40-116/24
85-01-8	Phenanthrene	ND		100	85.6	86	83.6	84	2	57-126/21
129-00-0	Pyrene	ND		100	78.0	78	74.6	75	4	50-128/21

CAS No.	Surrogate Recoveries	MS	MSD	JA96827-1	Limits
4165-60-0	Nitrobenzene-d5	91%	87%	73%	38-129%
321-60-8	2-Fluorobiphenyl	90%	89%	77%	42-117%
1718-51-0	Terphenyl-d14	95%	94%	84%	14-132%

Instrument Performance Check (DFTPP)

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3346-DFTPP
Lab File ID: M83966.D
Instrument ID: GCMSM
Injection Date: 12/21/11
Injection Time: 14:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	14929	47.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	12262	38.8	Pass
70	Less than 2.0% of mass 69	39	0.12 (0.32) ^a	Pass
127	40.0 - 60.0% of mass 198	14822	47.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	31563	100.0	Pass
199	5.0 - 9.0% of mass 198	2239	7.09	Pass
275	10.0 - 30.0% of mass 198	7050	22.3	Pass
365	1.0 - 100.0% of mass 198	753	2.39	Pass
441	Present, but less than mass 443	2752	8.72 (77.2) ^b	Pass
442	40.0 - 100.0% of mass 198	18735	59.4	Pass
443	17.0 - 23.0% of mass 442	3567	11.3 (19.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM3346-IC3346	M83967.D	12/21/11	14:18	00:15	Initial cal 100
EM3346-IC3346	M83968.D	12/21/11	15:08	01:05	Initial cal 1
EM3346-ICC3346	M83969.D	12/21/11	15:43	01:40	Initial cal 50
EM3346-IC3346	M83970.D	12/21/11	16:12	02:09	Initial cal 25
EM3346-IC3346	M83971.D	12/21/11	16:49	02:46	Initial cal 2
EM3346-IC3346	M83972.D	12/21/11	17:19	03:16	Initial cal 5
EM3346-IC3346	M83973.D	12/21/11	17:48	03:45	Initial cal 10
EM3346-IC3346	M83974.D	12/21/11	18:18	04:15	Initial cal 80

Instrument Performance Check (DFTPP)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3347-DFTPP	Injection Date: 12/21/11
Lab File ID: M83975.D	Injection Time: 19:02
Instrument ID: GCMSM	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	9138	45.6	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	7627	38.1	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
127	40.0 - 60.0% of mass 198	9229	46.1	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	20020	100.0	Pass
199	5.0 - 9.0% of mass 198	1321	6.60	Pass
275	10.0 - 30.0% of mass 198	4760	23.8	Pass
365	1.0 - 100.0% of mass 198	474	2.37	Pass
441	Present, but less than mass 443	1790	8.94 (81.2) ^b	Pass
442	40.0 - 100.0% of mass 198	11384	56.9	Pass
443	17.0 - 23.0% of mass 442	2205	11.0 (19.4) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM3347-IC3347	M83976.D	12/21/11	19:17	00:15	Initial cal 100
EM3347-IC3347	M83977.D	12/21/11	19:46	00:44	Initial cal 80
EM3347-ICC3347	M83978.D	12/21/11	20:16	01:14	Initial cal 50
EM3347-IC3347	M83979.D	12/21/11	20:46	01:44	Initial cal 25
EM3347-IC3347	M83980.D	12/21/11	21:15	02:13	Initial cal 10
EM3347-IC3347	M83981.D	12/21/11	21:45	02:43	Initial cal 5
EM3347-IC3347	M83982.D	12/21/11	22:29	03:27	Initial cal 2
EM3347-IC3347	M83983.D	12/21/11	22:59	03:57	Initial cal 1
EM3347-ICV3346	M83984.D	12/21/11	23:28	04:26	Initial cal verification 50
EM3347-ICV3346	M83985.D	12/21/11	23:58	04:56	Initial cal verification 50
EM3347-ICV3347	M83985A.D	12/21/11	23:58	04:56	Initial cal verification 50
EM3347-ICV3346	M83986.D	12/22/11	00:27	05:25	Initial cal verification 50
EM3347-ICV3347	M83986A.D	12/22/11	00:27	05:25	Initial cal verification 50
EM3347-ICV3346	M83987.D	12/22/11	00:57	05:55	Initial cal verification 50
EM3347-ICV3346	M83988.D	12/22/11	01:41	06:39	Initial cal verification 50
EM3347-ICV3347	M83988A.D	12/22/11	01:41	06:39	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3363-DFTPP	Injection Date: 01/14/12
Lab File ID: M84306.D	Injection Time: 09:16
Instrument ID: GCMSM	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	37442	58.0	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	28856	44.7	Pass
70	Less than 2.0% of mass 69	95	0.15 (0.33) ^a	Pass
127	40.0 - 60.0% of mass 198	32799	50.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	64565	100.0	Pass
199	5.0 - 9.0% of mass 198	4498	6.97	Pass
275	10.0 - 30.0% of mass 198	13696	21.2	Pass
365	1.0 - 100.0% of mass 198	1523	2.36	Pass
441	Present, but less than mass 443	4503	6.97 (84.3) ^b	Pass
442	40.0 - 100.0% of mass 198	27292	42.3	Pass
443	17.0 - 23.0% of mass 442	5343	8.28 (19.6) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM3363-CC3346	M84307.D	01/14/12	09:28	00:12	Continuing cal 50
EM3363-CC3347	M84308.D	01/14/12	09:57	00:41	Continuing cal 50
OP54195-MB1	M84309.D	01/14/12	10:33	01:17	Method Blank
OP54195-BS1	M84310.D	01/14/12	11:03	01:47	Blank Spike
ZZZZZZ	M84311.D	01/14/12	11:32	02:16	(unrelated sample)
JA96854-1	M84312.D	01/14/12	12:07	02:51	SS-1 001
JA96854-2	M84313.D	01/14/12	12:37	03:21	SS-2 002
ZZZZZZ	M84314.D	01/14/12	13:06	03:50	(unrelated sample)
ZZZZZZ	M84315.D	01/14/12	13:36	04:20	(unrelated sample)
ZZZZZZ	M84316.D	01/14/12	14:05	04:49	(unrelated sample)
JA96820-1	M84317.D	01/14/12	14:50	05:34	(used for QC only; not part of job JA96854)
OP54195-MS	M84318.D	01/14/12	15:19	06:03	Matrix Spike
OP54195-MSD	M84319.D	01/14/12	15:49	06:33	Matrix Spike Duplicate
ZZZZZZ	M84320.D	01/14/12	16:18	07:02	(unrelated sample)
ZZZZZZ	M84321.D	01/14/12	16:48	07:32	(unrelated sample)
ZZZZZZ	M84322.D	01/14/12	17:18	08:02	(unrelated sample)
ZZZZZZ	M84323.D	01/14/12	17:47	08:31	(unrelated sample)
ZZZZZZ	M84324.D	01/14/12	18:31	09:15	(unrelated sample)
ZZZZZZ	M84325.D	01/14/12	19:01	09:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample:	EM3363-DFTPP	Injection Date:	01/14/12
Lab File ID:	M84306.D	Injection Time:	09:16
Instrument ID:	GCMSM		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M84326.D	01/14/12	19:31	10:15	(unrelated sample)
ZZZZZZ	M84327.D	01/14/12	20:00	10:44	(unrelated sample)
ZZZZZZ	M84328.D	01/14/12	20:30	11:14	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3455-DFTPP
Lab File ID: R89824.D
Instrument ID: GCMSR
Injection Date: 09/16/11
Injection Time: 10:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	99221	33.6	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	108024	36.6	Pass
70	Less than 2.0% of mass 69	662	0.22 (0.61) ^a	Pass
127	40.0 - 60.0% of mass 198	148536	50.4	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	294869	100.0	Pass
199	5.0 - 9.0% of mass 198	20096	6.82	Pass
275	10.0 - 30.0% of mass 198	74435	25.2	Pass
365	1.0 - 100.0% of mass 198	8875	3.01	Pass
441	Present, but less than mass 443	28683	9.73 (78.4) ^b	Pass
442	40.0 - 100.0% of mass 198	183005	62.1	Pass
443	17.0 - 23.0% of mass 442	36576	12.4 (20.0) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3455-IC3455	R89825.D	09/16/11	10:38	00:15	Initial cal 100
ER3455-IC3455	R89826.D	09/16/11	11:14	00:51	Initial cal 80
ER3455-ICC3455	R89827.D	09/16/11	11:50	01:27	Initial cal 50
ER3455-IC3455	R89828.D	09/16/11	12:26	02:03	Initial cal 25
ER3455-IC3455	R89829.D	09/16/11	12:59	02:36	Initial cal 10
ER3455-IC3455	R89830.D	09/16/11	13:36	03:13	Initial cal 5
ER3455-IC3455	R89831.D	09/16/11	14:12	03:49	Initial cal 2
ER3455-IC3455	R89832.D	09/16/11	14:51	04:28	Initial cal 1
ER3455-ICV3455	R89833A.D	09/16/11	15:35	05:12	Initial cal verification 50
ER3455-ICV3454	R89833.D	09/16/11	15:35	05:12	Initial cal verification 50
ER3455-ICV3455	R89834A.D	09/16/11	16:11	05:48	Initial cal verification 50
ER3455-ICV3454	R89834.D	09/16/11	16:11	05:48	Initial cal verification 50
ER3455-ICV3454	R89835.D	09/16/11	16:47	06:24	Initial cal verification 50
ER3455-ICV3454	R89836.D	09/16/11	17:28	07:05	Initial cal verification 50
ER3455-ICV3455	R89837A.D	09/16/11	18:05	07:42	Initial cal verification 50
ER3455-ICV3454	R89837.D	09/16/11	18:05	07:42	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3499-DFTPP	Injection Date: 12/20/11
Lab File ID: R90735.D	Injection Time: 13:50
Instrument ID: GCMSR	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	69640	38.3	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	74106	40.8	Pass
70	Less than 2.0% of mass 69	705	0.39 (0.95) ^a	Pass
127	40.0 - 60.0% of mass 198	91232	50.2	Pass
197	Less than 1.0% of mass 198	412	0.23	Pass
198	Base peak, 100% relative abundance	181824	100.0	Pass
199	5.0 - 9.0% of mass 198	12403	6.82	Pass
275	10.0 - 30.0% of mass 198	47667	26.2	Pass
365	1.0 - 100.0% of mass 198	5881	3.23	Pass
441	Present, but less than mass 443	23661	13.0 (76.8) ^b	Pass
442	40.0 - 100.0% of mass 198	150525	82.8	Pass
443	17.0 - 23.0% of mass 442	30790	16.9 (20.5) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3499-ICC3499	R90736.D	12/20/11	14:05	00:15	Initial cal 25
ER3499-IC3499	R90737.D	12/20/11	14:56	01:06	Initial cal 1
ER3499-IC3499	R90738.D	12/20/11	15:34	01:44	Initial cal 2
ER3499-IC3499	R90739.D	12/20/11	16:05	02:15	Initial cal 5
ER3499-IC3499	R90740.D	12/20/11	16:42	02:52	Initial cal 10
ER3499-IC3499	R90741.D	12/20/11	17:18	03:28	Initial cal 50
ER3499-IC3499	R90742.D	12/20/11	17:54	04:04	Initial cal 80
ER3499-IC3499	R90743.D	12/20/11	18:30	04:40	Initial cal 100
ER3499-ICV3499	R90744.D	12/20/11	19:06	05:16	Initial cal verification 50
ER3499-ICV3499	R90745.D	12/20/11	19:43	05:53	Initial cal verification 50
ER3499-ICV3499	R90746.D	12/20/11	20:19	06:29	Initial cal verification 50
ER3499-ICV3499	R90747.D	12/20/11	20:55	07:05	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3516-DFTPP	Injection Date: 01/14/12
Lab File ID: R91050.D	Injection Time: 11:26
Instrument ID: GCMSR	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	15673	42.7	Pass
68	Less than 2.0% of mass 69	300	0.82 (1.73) ^a	Pass
69	Mass 69 relative abundance	17306	47.1	Pass
70	Less than 2.0% of mass 69	123	0.33 (0.71) ^a	Pass
127	40.0 - 60.0% of mass 198	19111	52.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	36740	100.0	Pass
199	5.0 - 9.0% of mass 198	2304	6.27	Pass
275	10.0 - 30.0% of mass 198	9008	24.5	Pass
365	1.0 - 100.0% of mass 198	1136	3.09	Pass
441	Present, but less than mass 443	4316	11.7 (81.1) ^b	Pass
442	40.0 - 100.0% of mass 198	29311	79.8	Pass
443	17.0 - 23.0% of mass 442	5324	14.5 (18.2) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3516-CC3499	R91051.D	01/14/12	12:20	00:54	Continuing cal 25
ER3516-CC3455	R91052.D	01/14/12	12:55	01:29	Continuing cal 25
OP54208-BS1	R91054.D	01/14/12	14:00	02:34	Blank Spike
ZZZZZZ	R91058.D	01/14/12	16:25	04:59	(unrelated sample)
ZZZZZZ	R91061.D	01/14/12	18:13	06:47	(unrelated sample)
ZZZZZZ	R91062.D	01/14/12	18:42	07:16	(unrelated sample)
JA96827-1	R91063.D	01/14/12	19:18	07:52	(used for QC only; not part of job JA96854)
OP54208-MS	R91064.D	01/14/12	19:54	08:28	Matrix Spike
OP54208-MSD	R91065.D	01/14/12	20:31	09:05	Matrix Spike Duplicate
ZZZZZZ	R91066.D	01/14/12	21:07	09:41	(unrelated sample)
ZZZZZZ	R91067.D	01/14/12	21:43	10:17	(unrelated sample)
OP54187-MS	R91068.D	01/14/12	22:19	10:53	Matrix Spike
OP54187-MSD	R91069.D	01/14/12	22:55	11:29	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3517-DFTPP	Injection Date: 01/16/12
Lab File ID: R91070.D	Injection Time: 08:39
Instrument ID: GCMSR	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	18219	41.5	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	20291	46.3	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
127	40.0 - 60.0% of mass 198	21397	48.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	43864	100.0	Pass
199	5.0 - 9.0% of mass 198	3412	7.78	Pass
275	10.0 - 30.0% of mass 198	11174	25.5	Pass
365	1.0 - 100.0% of mass 198	1215	2.77	Pass
441	Present, but less than mass 443	5046	11.5 (65.3) ^b	Pass
442	40.0 - 100.0% of mass 198	34991	79.8	Pass
443	17.0 - 23.0% of mass 442	7730	17.6 (22.1) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3517-CC3499	R91071.D	01/16/12	08:49	00:10	Continuing cal 25
ER3517-CC3455	R91072.D	01/16/12	09:36	00:57	Continuing cal 25
OP54208-MB1	R91073.D	01/16/12	10:17	01:38	Method Blank
JA96854-3	R91075.D	01/16/12	11:26	02:47	GW-1 003
JA96854-4	R91076.D	01/16/12	11:59	03:20	GW-2 004
ZZZZZZ	R91077.D	01/16/12	12:35	03:56	(unrelated sample)
ZZZZZZ	R91078.D	01/16/12	13:11	04:32	(unrelated sample)
ZZZZZZ	R91079.D	01/16/12	13:47	05:08	(unrelated sample)
ZZZZZZ	R91080.D	01/16/12	14:24	05:45	(unrelated sample)
ZZZZZZ	R91081.D	01/16/12	15:00	06:21	(unrelated sample)
ZZZZZZ	R91082.D	01/16/12	15:36	06:57	(unrelated sample)
ZZZZZZ	R91083.D	01/16/12	16:12	07:33	(unrelated sample)
ZZZZZZ	R91084.D	01/16/12	16:41	08:02	(unrelated sample)
ZZZZZZ	R91085.D	01/16/12	17:17	08:38	(unrelated sample)
ZZZZZZ	R91086.D	01/16/12	17:54	09:15	(unrelated sample)
ZZZZZZ	R91087.D	01/16/12	18:30	09:51	(unrelated sample)
ZZZZZZ	R91088.D	01/16/12	19:06	10:27	(unrelated sample)
ZZZZZZ	R91089.D	01/16/12	19:42	11:03	(unrelated sample)

Semivolatile Internal Standard Area Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std: EM3363-CC3346	Injection Date: 01/14/12
Lab File ID: M84307.D	Injection Time: 09:28
Instrument ID: GCMSM	Method: SW846 8270D

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	43576	5.31	175488	7.50	114212	10.92	172613	13.83	152442	18.24	113791	20.00
Upper Limit ^a	87152	5.81	350976	8.00	228424	11.42	345226	14.33	304884	18.74	227582	20.50
Lower Limit ^b	21788	4.81	87744	7.00	57106	10.42	86307	13.33	76221	17.74	56896	19.50

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT
OP54195-MB1	46381	5.30	170053	7.50	116212	10.91	169645	13.81	151201	18.22	100209	19.99
OP54195-BS1	44567	5.30	170537	7.49	107456	10.91	154527	13.82	140483	18.23	94284	19.99
ZZZZZZ	41907	5.30	163576	7.49	99515	10.91	130998	13.82	108611	18.23	89240	19.99
JA96854-1	45566	5.30	174747	7.50	111706	10.91	159531	13.81	118744	18.22	84608	19.99
JA96854-2	41041	5.30	153765	7.50	97400	10.91	158853	13.81	132852	18.23	88172	19.99
ZZZZZZ	49517	5.30	184758	7.50	122081	10.91	174796	13.81	136284	18.23	89867	19.99
ZZZZZZ	49980	5.30	193368	7.49	122122	10.91	173756	13.82	137866	18.23	92813	19.99
ZZZZZZ	44859	5.30	175355	7.49	107646	10.91	158479	13.82	123096	18.23	84923	19.99
JA96820-1	47920	5.30	177327	7.49	109294	10.91	157638	13.82	114932	18.23	82325	19.99
OP54195-MS	45318	5.30	169046	7.50	98682	10.91	137902	13.82	104044	18.22	74529	19.99
OP54195-MSD	46477	5.30	175868	7.49	102490	10.91	145579	13.82	108635	18.23	78253	19.99
ZZZZZZ	50362	5.30	188660	7.49	105406	10.91	141134	13.82	110098	18.23	83803	19.99
ZZZZZZ	45403	5.30	171343	7.51	89033	10.91	118913	13.82	97626	18.23	79446	19.99
ZZZZZZ	44716	5.30	161933	7.49	82559	10.91	109146	13.82	96399	18.23	77556	19.98
ZZZZZZ	43479	5.30	154574	7.50	75297	10.92	98220	13.83	88039	18.23	75271	20.00
ZZZZZZ	46437	5.30	158965	7.50	74794	10.92	99052	13.83	82802	18.24	73342	20.00
ZZZZZZ	45652	5.30	157212	7.52	71965	10.92	92500	13.84	84457	18.25	76537	20.01
ZZZZZZ	45376	5.30	163191	7.55	74111	10.92	101262	13.85	82079	18.25	74660	20.01
ZZZZZZ	41583	5.30	159326	7.53	76339	10.92	99036	13.83	84272	18.24	76580	20.00
ZZZZZZ	43144	5.30	159903	7.51	77128	10.92	99107	13.83	85571	18.24	77760	20.00

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std: ER3516-CC3499	Injection Date: 01/14/12
Lab File ID: R91051.D	Injection Time: 12:20
Instrument ID: GCMSR	Method: SW846 8270D

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	470389	7.45	1622908	10.20	931079	14.32	1477753	17.78	1344646	22.12	1225598	23.64
Upper Limit ^a	940778	7.95	3245816	10.70	1862158	14.82	2955506	18.28	2689292	22.62	2451196	24.14
Lower Limit ^b	235195	6.95	811454	9.70	465540	13.82	738877	17.28	672323	21.62	612799	23.14

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT
OP54208-BS1	290112	7.44	1030834	10.20	571187	14.32	891885	17.77	845228	22.12	768787	23.64
ZZZZZZ	308481	7.44	1094569	10.19	585237	14.31	884001	17.77	811905	22.11	637594	23.64
ZZZZZZ	283825	7.45	987310	10.20	537475	14.31	826019	17.77	770730	22.11	603982*	23.63
ZZZZZZ	272580	7.44	976840	10.20	516434	14.31	781290	17.77	724342	22.11	569580*	23.63
JA96827-1	278866	7.44	1011643	10.20	533442	14.31	842146	17.77	784936	22.11	622242	23.63
OP54208-MS	274222	7.44	965751	10.20	535322	14.32	827712	17.77	777520	22.12	705549	23.63
OP54208-MSD	286029	7.45	1006370	10.20	559241	14.32	857703	17.77	820107	22.12	755709	23.63
ZZZZZZ	297701	7.44	1044545	10.20	561214	14.31	849156	17.77	788254	22.12	643478	23.63
ZZZZZZ	308931	7.44	1050259	10.20	534782	14.31	780132	17.77	740214	22.11	630019	23.63
OP54187-MS	283114	7.45	985787	10.21	528676	14.32	810287	17.77	792631	22.12	741348	23.64
OP54187-MSD	270464	7.44	954224	10.21	515045	14.32	789236	17.78	754315	22.12	701350	23.64

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std: ER3517-CC3499	Injection Date: 01/16/12
Lab File ID: R91071.D	Injection Time: 08:49
Instrument ID: GCMSR	Method: SW846 8270D

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	469105	7.45	1582187	10.21	911455	14.32	1409032	17.78	1311756	22.12	1176643	23.64
Upper Limit ^a	938210	7.95	3164374	10.71	1822910	14.82	2818064	18.28	2623512	22.62	2353286	24.14
Lower Limit ^b	234553	6.95	791094	9.71	455728	13.82	704516	17.28	655878	21.62	588322	23.14

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP54208-MB1	323038	7.44	1109536	10.20	589046	14.31	906530	17.76	813926	22.11	616307	23.63
JA96854-3	304802	7.44	1105698	10.19	577470	14.31	872494	17.76	790216	22.11	620225	23.63
JA96854-4	291132	7.44	1047922	10.20	543086	14.31	821045	17.76	753579	22.11	608402	23.63
ZZZZZZ	341447	7.44	1197921	10.20	620523	14.31	930858	17.77	848146	22.11	659072	23.63
ZZZZZZ	309016	7.45	1067747	10.20	558767	14.31	844370	17.77	778157	22.11	609644	23.63
ZZZZZZ	300954	7.45	1044232	10.21	563966	14.31	868193	17.77	803411	22.11	641291	23.63
ZZZZZZ	286604	7.45	1005698	10.20	529846	14.31	773575	17.77	727139	22.11	568284*	23.63
ZZZZZZ	291010	7.45	1010039	10.21	598311	14.35	925558	17.80	923689	22.12	769105	23.63
ZZZZZZ	288610	7.44	1000884	10.21	626771	14.40	933707	17.86	864937	22.13	515605*	23.65
ZZZZZZ	292343	7.44	1041427	10.22	558750	14.31	854672	17.76	802725	22.11	653912	23.63
ZZZZZZ	268708	7.44	938831	10.19	477934	14.31	708250	17.76	680518	22.11	559360*	23.63
ZZZZZZ	265152	7.44	928486	10.19	465636	14.31	710845	17.77	691707	22.11	570434*	23.63
ZZZZZZ	253353	7.45	884962	10.20	453870*	14.31	671352*	17.77	648604*	22.11	538154*	23.63
ZZZZZZ	253105	7.44	903131	10.20	491096	14.31	755350	17.77	703317	22.11	563313*	23.63
ZZZZZZ	356989	7.44	1243948	10.19	653456	14.31	989833	17.77	935825	22.11	748515	23.63
ZZZZZZ	374625	7.44	1321196	10.20	704640	14.31	1069395	17.77	1015323	22.11	817498	23.63

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Method: SW846 8270D	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA96854-3	R91075.D	71.0	77.0	90.0
JA96854-4	R91076.D	75.0	78.0	87.0
OP54208-BS1	R91054.D	88.0	90.0	95.0
OP54208-MB1	R91073.D	86.0	87.0	96.0
OP54208-MS	R91064.D	91.0	90.0	95.0
OP54208-MSD	R91065.D	87.0	89.0	94.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	38-129%
S2 = 2-Fluorobiphenyl	42-117%
S3 = Terphenyl-d14	14-132%

Semivolatile Surrogate Recovery Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Method: SW846 8270D	Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA96854-1	M84312.D	79.0	82.0	112.0
JA96854-2	M84313.D	55.0	52.0	75.0
OP54195-BS1	M84310.D	80.0	74.0	81.0
OP54195-MB1	M84309.D	98.0	91.0	106.0
OP54195-MS	M84318.D	82.0	82.0	100.0
OP54195-MSD	M84319.D	68.0	73.0	107.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	21-122%
S2 = 2-Fluorobiphenyl	30-117%
S3 = Terphenyl-d14	31-129%

7.6.2
7

Initial Calibration Summary

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Job Number: JA96854

Sample: EM3346-ICC3346

Account: LANGAN Langan Engineering & Environmental

Lab FileID: M83969.D

Project: 111 Washington Street, New York, NY

Response Factor Report MSM

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:10:09 2011
 Response via : Initial Calibration

Calibration Files

2 =M83971.D 5 =M83972.D 100 =M83967.D 50 =M83969.D
 1 =M83968.D 10 =M83973.D 80 =M83974.D 25 =M83970.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.710	0.768	0.603	0.573		0.571	0.608	0.544	0.625	13.18
3) Pyridine	1.431	1.424	1.626	1.528	1.756	1.468	1.584	1.431	1.531	7.73
4) N-Nitrosodim	1.130	0.979	1.113	1.041		1.016	1.081	1.001	1.052	5.50
5) 2-Fluorophen	1.315	1.293	1.510	1.440	1.631	1.361	1.532	1.367	1.431	8.27
6) Indene	2.465	2.333	2.234	2.220	3.030	2.347	2.305	2.211	2.393	11.31
7) Cumene	3.389	3.182	3.235	3.205	4.449	3.268	3.361	3.195	3.411	12.51
8) Phenol-d5	1.724	1.550	1.734	1.695	2.230	1.612	1.782	1.649	1.747	11.93
9) Phenol	1.913	1.779	1.902	1.879	2.486	1.825	1.932	1.849	1.946	11.51
10) Aniline	2.202	1.978	1.787	1.726	2.815	2.015	1.814	1.782	2.015	17.85
11) bis(2-Chloro	1.268	1.194	1.197	1.201	1.549	1.233	1.215	1.181	1.255	9.71
12) 2-Chlorophen	1.491	1.337	1.381	1.398	1.737	1.434	1.414	1.385	1.447	8.66
13) Decane	2.394	2.124	1.874	1.895	3.041	2.085	1.829	1.963	2.151	18.75
14) 1,3-Dichloro	1.746	1.647	1.514	1.501	2.182	1.666	1.589	1.531	1.672	13.33
15) 1,4-Dichloro	1.733	1.583	1.509	1.530	2.303	1.614	1.573	1.541	1.673	15.76
16) Benzyl alcoh	0.875	0.871	0.916	0.895	1.105	0.900	0.936	0.871	0.921	8.44
17) 1,2-Dichloro	1.610	1.529	1.435	1.438	2.035	1.525	1.514	1.444	1.566	12.68
18) Acetophenone	2.030	1.818	1.760	1.737	2.436	1.808	1.823	1.742	1.894	12.55
19) 2-Methylphen	1.279	1.181	1.183	1.175	1.544	1.197	1.218	1.159	1.242	10.25
20) 2,2'-oxybis(	0.438	0.426	0.423	0.410	0.521	0.451	0.429	0.416	0.439	8.04
21) 3&4-Methylph	1.347	1.227	1.307	1.277	1.618	1.287	1.344	1.243	1.331	9.28
22) n-Nitroso-di	0.968	0.872	0.874	0.852	1.124	0.897	0.900	0.843	0.916	10.06
23) Hexachloroet	0.636	0.575	0.538	0.529	0.662	0.555	0.574	0.537	0.576	8.46
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.354	0.325	0.317	0.316	0.452	0.334	0.332	0.310	0.342	13.50
26) Nitrobenzene	0.377	0.347	0.333	0.330	0.463	0.348	0.345	0.332	0.359	12.39
27) Quinoline	0.711	0.651	0.665	0.658	0.882	0.679	0.694	0.642	0.698	11.17
28) Isophorone	0.637	0.609	0.592	0.582	0.809	0.618	0.616	0.577	0.630	11.93
29) 2-Nitropheno	0.205	0.184	0.203	0.202	0.222	0.201	0.215	0.195	0.203	5.74
30) 2,4-Dimethyl	0.325	0.293	0.325	0.306	0.351	0.307	0.336	0.283	0.316	7.18
31) Benzoic acid	0.168	0.183	0.271	0.264	0.189	0.226	0.277	0.266	0.231	19.47
32) bis(2-Chloro	0.389	0.342	0.347	0.344	0.456	0.361	0.359	0.345	0.368	10.52
33) 2,4-Dichloro	0.313	0.302	0.304	0.302	0.354	0.314	0.325	0.297	0.314	5.88
34) 2,6-Dichloro	0.313	0.299	0.289	0.289	0.380	0.301	0.309	0.285	0.308	9.92
35) 1,3,5-Trichl	0.384	0.350	0.325	0.333	0.476	0.361	0.351	0.328	0.364	13.56
36) 1,2,4-Trichl	0.366	0.342	0.321	0.326	0.436	0.352	0.341	0.328	0.352	10.57
37) 1,2,3-Trichl	0.345	0.319	0.307	0.310	0.416	0.330	0.328	0.307	0.333	10.80
38) Naphthalene	1.128	0.995	0.919	0.933	1.393	1.015	0.959	0.935	1.035	15.43
39) 4-Chloroanil	0.456	0.417	0.403	0.406	0.535	0.432	0.422	0.404	0.434	10.15
40) 2,3-Dichloro	0.394	0.363	0.349	0.349	0.495	0.376	0.367	0.351	0.380	12.82
41) Caprolactam	0.217	0.195	0.227	0.218	0.285	0.200	0.227	0.205	0.222	12.71
42) Hexachlorobu	0.211	0.198	0.176	0.180	0.233	0.195	0.195	0.176	0.196	10.01
43) 4-Chloro-3-m	0.268	0.264	0.301	0.298	0.320	0.283	0.317	0.282	0.292	7.12
44) 2-Methylnaph	0.672	0.625	0.603	0.610	0.796	0.626	0.642	0.603	0.647	9.93
45) 1-Methylnaph	0.740	0.681	0.648	0.660	0.902	0.685	0.682	0.654	0.707	11.90

Initial Calibration Summary

Page 2 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: EM3346-ICC3346
 Lab FileID: M83969.D

46)	Dimethylnaph	0.643	0.594	0.556	0.562	0.726	0.611	0.591	0.563	0.606	9.36
47)	I Acenaphthene-d10	-----ISTD-----									
48)	Hexachlorocy	0.239	0.246	0.326	0.315	0.282	0.289	0.342	0.295	0.292	12.40
49)	2,4,6-Trichl	0.359	0.349	0.365	0.368	0.415	0.376	0.385	0.366	0.373	5.37
50)	2,4,5-Trichl	0.382	0.368	0.393	0.400	0.481	0.397	0.404	0.387	0.401	8.43
51)	2-Fluorobiph	1.298	1.170	1.083	1.137	1.611	1.209	1.130	1.149	1.223	13.83
52)	2-Chloronaph	1.190	1.129	1.027	1.058	1.489	1.151	1.062	1.063	1.146	13.03
53)	Biphenyl	1.456	1.346	1.187	1.228	1.777	1.361	1.236	1.252	1.355	14.16
54)	2-Nitroanili	0.316	0.305	0.333	0.334	0.375	0.326	0.328	0.326	0.330	6.22
55)	Dimethylphth	1.298	1.197	1.165	1.172	1.564	1.254	1.225	1.184	1.257	10.48
56)	Acenaphthyle	1.761	1.660	1.621	1.645	2.209	1.760	1.664	1.662	1.748	11.07
57)	2,6-Dinitrot	0.267	0.259	0.281	0.282	0.291	0.284	0.291	0.279	0.279	4.06
58)	3-Nitroanili	0.292	0.279	0.324	0.324	0.348	0.316	0.336	0.318	0.317	7.08
59)	Acenaphthene	1.139	1.064	1.004	1.022	1.420	1.077	1.036	1.033	1.099	12.38
60)	2,4-Dinitrop			0.181	0.173		0.113	0.186	0.155	0.162	18.20
61)	4-Nitropheno		0.102	0.160	0.158		0.142	0.164	0.148	0.146	15.61
62)	Dibenzofuran	1.710	1.543	1.426	1.450	2.098	1.576	1.481	1.481	1.596	13.91
63)	2,4-Dinitrot	0.339	0.338	0.386	0.387	0.369	0.380	0.401	0.378	0.372	6.10
64)	2,3,4,6-Tetr	0.300	0.299	0.332	0.331	0.347	0.323	0.355	0.323	0.326	6.05
65)	Diethylphtha	1.218	1.114	1.099	1.131	1.467	1.171	1.138	1.131	1.184	10.17
66)	Fluorene	1.355	1.218	1.188	1.206	1.715	1.266	1.248	1.215	1.301	13.46
67)	4-Chlorophen	0.638	0.595	0.554	0.572	0.806	0.622	0.582	0.584	0.619	12.93
68)	4-Nitroanili	0.256	0.295	0.322	0.327	0.367	0.325	0.329	0.324	0.318	10.00
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-			0.170	0.161		0.132	0.172	0.149	0.157	10.52
71)	n-Nitrosodip	0.561	0.525	0.544	0.531	0.748	0.552	0.558	0.528	0.568	12.99
72)	1,2-Diphenyl	0.706	0.648	0.718	0.698	0.920	0.672	0.712	0.638	0.714	12.38
73)	2,4,6-Tribo	0.082	0.079	0.092	0.089	0.081	0.086	0.096	0.085	0.086	6.85
74)	4-Bromopheny	0.194	0.196	0.203	0.199	0.268	0.203	0.214	0.194	0.209	11.90
75)	Hexachlorobe	0.217	0.210	0.212	0.204	0.289	0.212	0.224	0.199	0.221	13.01
76)	Pentachlorop	0.126	0.125	0.159	0.155	0.159	0.142	0.167	0.150	0.148	10.68
77)	Phenanthrene	1.198	1.085	1.014	1.017	1.566	1.113	1.042	1.020	1.132	16.47
78)	Anthracene	1.191	1.078	1.015	1.016	1.509	1.120	1.044	1.043	1.127	14.67
79)	Carbazole	1.143	1.028	1.027	1.027	1.477	1.062	1.058	1.024	1.106	14.02
80)	Di-n-butylph	1.232	1.160	1.254	1.244	1.605	1.228	1.308	1.217	1.281	10.70
81)	Fluoranthene	1.359	1.225	1.261	1.278	1.892	1.285	1.309	1.248	1.357	16.22
82)	Octadecane	0.595	0.555	0.569	0.556	0.710	0.568	0.560	0.558	0.584	8.99
83)	I Chrysene-d12	-----ISTD-----									
84)	Pyrene	1.391	1.320	1.204	1.215	1.978	1.295	1.262	1.237	1.363	18.77
85)	Butyl steara	0.426	0.409	0.371	0.374		0.397	0.376	0.388	0.392	5.20
86)	Terphenyl-d1	0.810	0.749	0.725	0.722	1.081	0.743	0.756	0.726	0.789	15.36
87)	Butylbenzylp	0.514	0.502	0.547	0.550	0.688	0.524	0.563	0.536	0.553	10.47
88)	Benzo[a]anth	1.352	1.225	1.164	1.177	1.980	1.227	1.208	1.188	1.315	20.90
----- Linear regression ----- Coefficient = 0.9995											
Response Ratio = 0.01291 + 1.17425 *A											
89)	3,3'-Dichlor	0.365	0.339	0.406	0.399	0.474	0.384	0.425	0.399	0.399	10.11
90)	Chrysene	1.340	1.193	1.049	1.046	1.802	1.171	1.077	1.089	1.221	20.85
----- Linear regression ----- Coefficient = 0.9997											
Response Ratio = 0.02003 + 1.04889 *A											
91)	bis(2-Ethylh	0.617	0.627	0.684	0.691	0.820	0.672	0.691	0.677	0.685	8.98
92)	I Perylene-d12	-----ISTD-----									
93)	Di-n-octylph	1.149	1.212	1.496	1.475	1.445	1.344	1.573	1.407	1.388	10.43
94)	Benzo[b]fluo	1.619	1.099	1.379	1.527	1.795	1.204	1.549	1.346	1.440	15.80
95)	Benzo[k]fluo	1.172	1.414	1.077	0.949	1.916	1.365	1.041	1.126	1.257	24.57

Initial Calibration Summary

Page 3 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3346-ICC3346
Lab FileID: M83969.D

----- Linear regression ----- Coefficient = 0.9959
Response Ratio = 0.02511 + 1.03865 *A

96)	Benzo[a]pyre	1.237	1.098	1.117	1.136	1.662	1.151	1.168	1.142	1.214	15.29
97)	Indeno[1,2,3	1.180	1.121	1.227	1.226	1.622	1.226	1.273	1.235	1.264	12.01
98)	Dibenz(a,h)a	0.830	0.784	0.967	0.955	1.162	0.884	0.993	0.935	0.939	12.27
99)	Dibenz[a,h]a	0.977	0.939	1.016	1.024	1.348	1.034	1.041	1.039	1.052	11.84
100)	7,12-Dimethy	0.609	0.490	0.605	0.609	0.725	0.545	0.658	0.555	0.599	12.05
101)	Benzo[g,h,i]	0.985	0.943	0.996	0.998	1.425	1.019	1.042	1.009	1.052	14.59

(#) = Out of Range ### Number of calibration levels exceeded format ###

MM3346.M

Thu Dec 22 09:10:55 2011

GCMSM

7.7.1

7

Initial Calibration Summary

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: EM3347-ICC3347
 Lab FileID: M83978.D

Response Factor Report MSM

Method : C:\HPCHEM\1\METHODS\MM3346a.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration

Calibration Files

2 =M83982.D 5 =M83981.D 100 =M83976.D 50 =M83978.D
 1 =M83983.D 10 =M83980.D 80 =M83977.D 25 =M83979.D

Compound	2	5	100	50	1	10	80	25	Avg %RSD
102) I 1,4-Dichlorobenzene-d	-----ISTD-----								
103) Benzaldehyde	0.939	1.002	0.959	1.014	0.831	0.998	0.982	1.001	0.966 6.21
104) I Acenaphthene-d10a	-----ISTD-----								
105) 1,2,4,5-Tetr	0.484	0.574	0.529	0.529	0.518	0.531	0.546	0.545	0.532 4.85
106) 2-bromonapht	0.448	0.506	0.469	0.483	0.440	0.487	0.489	0.489	0.477 4.73
107) 1-chloronaph	0.917	1.034	0.934	0.956	1.000	1.002	0.970	1.004	0.977 4.09
108) I Phenanthrene-d10a	-----ISTD-----								
109) Atrazine	0.088	0.112	0.116	0.119	0.092	0.113	0.120	0.114	0.109 11.29
110) Methyl parat	0.089	0.145	0.203	0.207		0.165	0.206	0.195	0.173 25.27
	----- Linear regression ----- Coefficient = 0.9996								
	Response Ratio = -0.00696 + 0.20754 *A								
111) Parathion	0.102	0.131	0.129		0.109	0.128	0.124	0.120	10.05
112) o-terphenyl	0.551	0.642	0.576	0.602	0.586	0.622	0.593	0.617	0.599 4.75
113) I Chrysene-d12a	-----ISTD-----								
114) Benzidine	0.505	0.540	0.656		0.567	0.590	0.643	0.583	10.01
115) 1-chloroocta	0.280	0.365	0.338	0.352	0.263	0.360	0.358	0.364	0.335 12.08
116) I Naphthalene-d8a	-----ISTD-----								
117) hydroquinone	0.211	0.316	0.331		0.255	0.324	0.294	0.288	16.23

(#) = Out of Range ### Number of calibration levels exceeded format ###

MM3346.M

Thu Dec 22 09:56:17 2011

GCMSM

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3346
 Lab FileID: M83984.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83984.D Vial: 18
 Acq On : 21 Dec 2011 11:28 pm Operator: olgaa
 Sample : icv3346-50 Inst : MSM
 Misc : op53696,em3347,acids Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:10:09 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	-0.01	5.39
9 t	Phenol	1.946	1.637	15.9	95	-0.01	4.93
12 t	2-Chlorophenol	1.447	1.423	1.7	110	0.00	5.12
19 t	2-Methylphenol	1.242	1.183	4.8	109	0.00	5.88
21 t	3&4-Methylphenol	1.331	1.238	7.0	105	-0.02	6.12
24 I	Naphthalene-d8	1.000	1.000	0.0	95	-0.01	7.60
29 t	2-Nitrophenol	0.203	0.222	-9.4	105	-0.01	6.95
30 t	2,4-Dimethylphenol	0.316	0.367	-16.1	114	0.00	7.07
31 t	Benzoic acid	0.231	0.256	-10.8	92	-0.03	7.30
33 t	2,4-Dichlorophenol	0.314	0.326	-3.8	103	0.00	7.38
34 t	2,6-Dichlorophenol	0.308	0.319	-3.6	105	0.00	7.81
43 t	4-Chloro-3-methylphenol	0.292	0.296	-1.4	95	-0.02	8.77
47 I	Acenaphthene-d10	1.000	1.000	0.0	95	0.00	11.02
49 t	2,4,6-Trichlorophenol	0.373	0.400	-7.2	103	0.00	9.58
50 t	2,4,5-Trichlorophenol	0.401	0.429	-7.0	102	-0.01	9.64
60 t	2,4-Dinitrophenol	0.162	0.126	22.2	70	0.00	11.22
61 t	4-Nitrophenol	0.146	0.149	-2.1	90	0.00	11.40
64	2,3,4,6-Tetrachlorophenol	0.326	0.328	-0.6	94	0.00	11.76
69 I	Phenanthrene-d10	1.000	1.000	0.0	93	0.00	13.94
70 t	4,6-Dinitro-2-methylpheno	0.157	0.149	5.1	86	-0.01	12.33
76 t	Pentachlorophenol	0.148	0.158	-6.8	94	0.00	13.72

(#) = Out of Range
 M83969.D MM3346.M

SPCC's out = 0 CCC's out = 0
 Thu Dec 22 09:13:02 2011 GCMSM

Initial Calibration Verification

Page 1 of 2

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3346
 Lab FileID: M83985.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83985.D Vial: 19
 Acq On : 21 Dec 2011 11:58 pm Operator: olgaa
 Sample : icv3346-50 Inst : MSM
 Misc : op53696,em3347,bn1 Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:10:09 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	5.39
3 t	Pyridine	1.531	1.194	22.0	82	0.00	2.46
4 t	N-Nitrosodimethylamine	1.052	0.762	27.6	77	0.00	2.43
11 t	bis(2-Chloroethyl)ether	1.255	1.148	8.5	101	0.00	5.04
14 t	1,3-Dichlorobenzene	1.672	1.613	3.5	113	0.00	5.34
15 t	1,4-Dichlorobenzene	1.673	1.578	5.7	109	0.00	5.43
16 t	Benzyl alcohol	0.921	0.827	10.2	97	0.00	5.65
17 t	1,2-Dichlorobenzene	1.566	1.429	8.7	105	0.00	5.73
20 t	2,2'-oxybis(1-Chloropropa	0.439	0.412	6.2	106	0.00	5.92
22 t	n-Nitroso-di-n-propylamin	0.916	0.802	12.4	99	-0.02	6.15
23 t	Hexachloroethane	0.576	0.575	0.2	115	0.00	6.23
24 I	Naphthalene-d8	1.000	1.000	0.0	95	0.00	7.60
26 t	Nitrobenzene	0.359	0.335	6.7	96	0.00	6.39
28 t	Isophorone	0.630	0.597	5.2	97	0.00	6.80
32 t	bis(2-Chloroethoxy)methan	0.368	0.373	-1.4	103	0.00	7.25
36 t	1,2,4-Trichlorobenzene	0.352	0.363	-3.1	106	0.00	7.54
38 t	Naphthalene	1.035	0.995	3.9	101	0.00	7.64
42 t	Hexachlorobutadiene	0.196	0.209	-6.6	110	0.00	8.01
44 t	2-Methylnaphthalene	0.647	0.609	5.9	95	0.00	8.96
47 I	Acenaphthene-d10	1.000	1.000	0.0	89	0.00	11.03
48 t	Hexachlorocyclopentadiene	0.292	0.306	-4.8	86	0.00	9.42
52 t	2-Chloronaphthalene	1.146	1.178	-2.8	99	0.00	9.89
54 t	2-Nitroaniline	0.330	0.319	3.3	85	0.00	10.19
55 t	Dimethylphthalate	1.257	1.256	0.1	95	0.00	10.66
56 t	Acenaphthylene	1.748	1.596	8.7	86	0.00	10.71
57 t	2,6-Dinitrotoluene	0.279	0.286	-2.5	90	0.00	10.78
58 t	3-Nitroaniline	0.317	0.283	10.7	78	0.00	11.03
59 t	Acenaphthene	1.099	1.073	2.4	93	0.00	11.09
62 t	Dibenzofuran	1.596	1.550	2.9	95	0.00	11.41
63 t	2,4-Dinitrotoluene	0.372	0.342	8.1	79	0.00	11.53
65 t	Diethylphthalate	1.184	1.141	3.6	90	0.00	12.09
66 t	Fluorene	1.301	1.266	2.7	94	0.00	12.09
67 t	4-Chlorophenyl-phenylethe	0.619	0.616	0.5	96	0.00	12.14
68 t	4-Nitroaniline	0.318	0.294	7.5	80	0.00	12.25
69 I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00	13.93
71 t	n-Nitrosodiphenylamine	0.568	0.524	7.7	87	0.00	12.40

Initial Calibration Verification

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3346
Lab FileID: M83985.D

72 t	1,2-Diphenylhydrazine	0.714	0.706	1.1	89	0.00	12.44
74 t	4-Bromophenyl-phenylether	0.209	0.208	0.5	92	0.01	13.11
75 t	Hexachlorobenzene	0.221	0.208	5.9	90	0.01	13.35
77 t	Phenanthrene	1.132	1.100	2.8	95	0.01	13.99
78 t	Anthracene	1.127	1.076	4.5	93	0.00	14.07
79 t	Carbazole	1.106	1.001	9.5	85	0.01	14.44
80 t	Di-n-butylphthalate	1.281	1.221	4.7	86	0.02	15.33
81 t	Fluoranthene	1.357	1.223	9.9	84	0.01	16.19
83 I	Chrysene-d12	1.000	1.000	0.0	81	0.03	18.34
84 t	Pyrene	1.363	1.261	7.5	84	0.02	16.54
87 t	Butylbenzylphthalate	0.553	0.545	1.4	80	0.03	17.68
----- True Calc. % Drift -----							
88 t	Benzo[a]anthracene	50.000	49.820	0.4	81	0.03	18.31
90 t	Chrysene	50.000	53.239	-6.5	87	0.03	18.37
----- AvgRF CCRF % Dev -----							
91 t	bis(2-Ethylhexyl)phthalat	0.685	0.680	0.7	79	0.05	18.53
92 I	Perylene-d12	1.000	1.000	0.0	76	0.05	20.12
93 t	Di-n-octylphthalate	1.388	1.505	-8.4	77	0.05	19.28
94 t	Benzo[b]fluoranthene	1.440	1.300	9.7	64	0.04	19.67
----- True Calc. % Drift -----							
95 t	Benzo[k]fluoranthene	50.000	60.679	-21.4	102	0.04	19.70
----- AvgRF CCRF % Dev -----							
96 t	Benzo[a]pyrene	1.214	1.206	0.7	80	0.05	20.05
97 t	Indeno[1,2,3-cd]pyrene	1.264	1.389	-9.9	86	0.12	21.62
99 t	Dibenz[a,h]anthracene	1.052	1.125	-6.9	83	0.13	21.66
101 t	Benzo[g,h,i]perylene	1.052	1.127	-7.1	85	0.15	22.06

(#) = Out of Range
M83969.D MM3346.M

SPCC's out = 0 CCC's out = 0
Thu Dec 22 09:19:20 2011 GCMSM

7.7.4

7

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3347
Lab FileID: M83985A.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83985A.D Vial: 19
Acq On : 21 Dec 2011 11:58 pm Operator: olgaa
Sample : icv3347-50 Inst : MSM
Misc : op53696,em3347,bn1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104 I	Acenaphthene-d10a	1.000	1.000	0.0	103	0.00	11.03
105 t	1,2,4,5-Tetrachlorobenzen	0.532	0.544	-2.3	106	0.00	9.37

(#) = Out of Range
M83978.D MM3346.M

SPCC's out = 0 CCC's out = 0
Thu Dec 22 09:59:15 2011 GCMSM

7.7.5

7

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3346
 Lab FileID: M83986.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83986.D Vial: 20
 Acq On : 22 Dec 2011 12:27 am Operator: olgaa
 Sample : icv3346-50 Inst : MSM
 Misc : op53696,em3347,bn2 Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:10:09 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	-0.01	5.39
2 t	1,4-Dioxane	0.625	0.571	8.6	104	-0.01	2.18
6 t	Indene	2.393	2.379	0.6	112	-0.01	5.85
7 t	Cumene	3.411	3.460	-1.4	113	0.00	4.31
13 t	Decane	2.151	2.049	4.7	113	0.00	5.19
18 t	Acetophenone	1.894	1.771	6.5	107	-0.01	6.09
24 I	Naphthalene-d8	1.000	1.000	0.0	99	-0.01	7.60
27 t	Quinoline	0.698	0.675	3.3	102	-0.02	8.27
40 t	2,3-Dichloroaniline	0.380	0.338	11.1	96	0.00	9.58
41 t	Caprolactam	0.222	0.189	14.9	86	-0.06	8.37
45 t	1-Methylnaphthalene	0.707	0.691	2.3	104	0.00	9.16
46 t	Dimethylnaphthalene	0.606	0.598	1.3	106	0.00	10.19
47 I	Acenaphthene-d10	1.000	1.000	0.0	93	0.00	11.02
53 t	Biphenyl	1.355	1.416	-4.5	107	0.00	9.90
69 I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	13.93
82 t	Octadecane	0.584	0.584	0.0	94	0.02	13.92
92 I	Perylene-d12	1.000	1.000	0.0	81	0.04	20.11
100 t	7,12-Dimethylbenz(a)anthr	0.599	0.634	-5.8	84	0.03	19.68

(#) = Out of Range
 M83969.D MM3346.M

SPCC's out = 0 CCC's out = 0
 Thu Dec 22 09:21:05 2011 GCMSM

7.7.6

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Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3347
Lab FileID: M83986A.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83986A.D Vial: 20
Acq On : 22 Dec 2011 12:27 am Operator: olgaa
Sample : icv3347-50 Inst : MSM
Misc : op53696,em3347,bn2 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	119	-0.01	5.39
103 t	Benzaldehyde	0.966	1.054	-9.1	123	0.00	4.76
108 I	Phenanthrene-d10a	1.000	1.000	0.0	100	-0.01	13.93
109 t	Atrazine	0.109	0.127	-16.5	107	0.00	13.59

(#) = Out of Range
M83978.D MM3346.M

SPCC's out = 0 CCC's out = 0
Thu Dec 22 10:05:32 2011 GCMSM

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3346
Lab FileID: M83987.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83987.D Vial: 21
Acq On : 22 Dec 2011 12:57 am Operator: olgaa
Sample : icv3346-50 Inst : MSM
Misc : op53696,em3347,3rd Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:10:09 2011
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	0.00	5.39
10 t	Aniline	2.015	1.870	7.2	99	0.00	4.96
24 I	Naphthalene-d8	1.000	1.000	0.0	89	0.00	7.60
39 t	4-Chloroaniline	0.434	0.440	-1.4	97	0.00	7.81

(#) = Out of Range
M83969.D MM3346.M

SPCC's out = 0 CCC's out = 0
Thu Dec 22 09:22:24 2011 GCMSM

7.7.8

7

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3346
Lab FileID: M83988.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83988.D Vial: 22
Acq On : 22 Dec 2011 1:41 am Operator: olgaa
Sample : icv3346-50 Inst : MSM
Misc : op53696,em3347, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:10:09 2011
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I Chrysene-d12	1.000	1.000	0.0	151	0.02	18.33
89 t 3,3'-Dichlorobenzidine	0.399	0.377	5.5	143	0.03	18.33

(#) = Out of Range
M83969.D MM3346.M

SPCC's out = 0 CCC's out = 0
Thu Dec 22 09:24:09 2011 GCMSM

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3347-ICV3347
Lab FileID: M83988A.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83988A.D Vial: 22
Acq On : 22 Dec 2011 1:41 am Operator: olgaa
Sample : icv3347-50 Inst : MSM
Misc : op53696,em3347, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
113 I Chrysene-d12a	1.000	1.000	0.0	170	0.00	18.33
114 t Benzidine	0.583	0.642	-10.1	167	0.00	16.47

(#) = Out of Range
M83978.D MM3346.M

SPCC's out = 0 CCC's out = 0
Thu Dec 22 10:08:05 2011 GCMSM

7.7.10

7

Continuing Calibration Summary

Page 1 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: EM3363-CC3346
 Lab FileID: M84307.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3363\M84307.D
 Acq On : 14 Jan 2012 9:28 am
 Sample : cc3346-50
 Misc : op54138,em3363,1000,,,1,1
 MS Integration Params: LSCINT.P

Vial: 2
 Operator: kristis
 Inst : MSM
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	139	-0.10	5.31
2 t	1,4-Dioxane	0.625	0.447	28.5#	108	-0.08	2.11
3 t	Pyridine	1.531	1.255	18.0	114	-0.07	2.38
4 t	N-Nitrosodimethylamine	1.052	1.306	-24.1#	174	-0.07	2.36
5 S	2-Fluorophenol	1.431	1.377	3.8	133	-0.07	3.61
6 t	Indene	2.393	2.278	4.8	142	-0.11	5.75
7 t	Cumene	3.411	3.374	1.1	146	-0.10	4.22
8 S	Phenol-d5	1.747	1.636	6.4	134	-0.07	4.84
9 t	Phenol	1.946	1.738	10.7	128	-0.07	4.86
10 t	Aniline	2.015	1.640	18.6	132	-0.10	4.87
11 t	bis(2-Chloroethyl)ether	1.255	1.152	8.2	133	-0.10	4.96
12 t	2-Chlorophenol	1.447	1.329	8.2	132	-0.09	5.04
13 t	Decane	2.151	2.422	-12.6	177	-0.10	5.10
14 t	1,3-Dichlorobenzene	1.672	1.542	7.8	142	-0.11	5.25
15 t	1,4-Dichlorobenzene	1.673	1.544	7.7	140	-0.10	5.33
16 t	Benzyl alcohol	0.921	0.902	2.1	140	-0.09	5.58
17 t	1,2-Dichlorobenzene	1.566	1.502	4.1	145	-0.10	5.63
18 t	Acetophenone	1.894	1.810	4.4	144	-0.10	6.01
19 t	2-Methylphenol	1.242	1.166	6.1	138	-0.07	5.81
20 t	2,2'-oxybis(1-Chloropropa	0.439	0.419	4.6	141	-0.10	5.84
21 t	3&4-Methylphenol	1.331	1.252	5.9	136	-0.09	6.05
22 t	n-Nitroso-di-n-propylamin	0.916	0.880	3.9	143	-0.11	6.06
23 t	Hexachloroethane	0.576	0.569	1.2	149	-0.12	6.13
24 I	Naphthalene-d8	1.000	1.000	0.0	142	-0.11	7.50
25 S	Nitrobenzene-d5	0.342	0.340	0.6	153	-0.11	6.26
26 t	Nitrobenzene	0.359	0.346	3.6	149	-0.11	6.29
27 t	Quinoline	0.698	0.662	5.2	143	-0.11	8.19
28 t	Isophorone	0.630	0.619	1.7	151	-0.10	6.72
29 t	2-Nitrophenol	0.203	0.206	-1.5	145	-0.11	6.86
30 t	2,4-Dimethylphenol	0.316	0.324	-2.5	150	-0.09	6.98
31 t	Benzoic acid	0.231	0.273	-18.2	147	-0.07	7.25
32 t	bis(2-Chloroethoxy)methan	0.368	0.347	5.7	143	-0.10	7.15
33 t	2,4-Dichlorophenol	0.314	0.319	-1.6	150	-0.09	7.30
34 t	2,6-Dichlorophenol	0.308	0.305	1.0	150	-0.10	7.72
35 t	1,3,5-Trichlorobenzene	0.364	0.336	7.7	143	-0.11	6.87
36 t	1,2,4-Trichlorobenzene	0.352	0.330	6.2	144	-0.11	7.44
37 t	1,2,3-Trichlorobenzene	0.333	0.315	5.4	145	-0.11	7.89
38 t	Naphthalene	1.035	0.943	8.9	144	-0.11	7.53
39 t	4-Chloroaniline	0.434	0.412	5.1	144	-0.11	7.71
40 t	2,3-Dichloroaniline	0.380	0.364	4.2	148	-0.11	9.48
41 t	Caprolactam	0.222	0.246	-10.8	160	-0.10	8.34

Continuing Calibration Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3363-CC3346
Lab FileID: M84307.D

42 t	Hexachlorobutadiene	0.196	0.194	1.0	153	-0.11	7.91
43 t	4-Chloro-3-methylphenol	0.292	0.327	-12.0	156	-0.07	8.71
44 t	2-Methylnaphthalene	0.647	0.635	1.9	148	-0.11	8.86
45 t	1-Methylnaphthalene	0.707	0.681	3.7	147	-0.11	9.05
46 t	Dimethylnaphthalene	0.606	0.597	1.5	151	-0.11	10.09
47 I	Acenaphthene-d10	1.000	1.000	0.0	148	-0.11	10.92
48 t	Hexachlorocyclopentadiene	0.292	0.322	-10.3	151	-0.11	9.31
49 t	2,4,6-Trichlorophenol	0.373	0.363	2.7	146	-0.10	9.49
50 t	2,4,5-Trichlorophenol	0.401	0.381	5.0	141	-0.09	9.57
51 S	2-Fluorobiphenyl	1.223	1.107	9.5	144	-0.12	9.63
52 t	2-Chloronaphthalene	1.146	1.046	8.7	147	-0.11	9.79
53 t	Biphenyl	1.355	1.250	7.7	151	-0.11	9.80
54 t	2-Nitroaniline	0.330	0.368	-11.5	163	-0.11	10.09
55 t	Dimethylphthalate	1.257	1.185	5.7	150	-0.12	10.56
56 t	Acenaphthylene	1.748	1.622	7.2	146	-0.11	10.61
57 t	2,6-Dinitrotoluene	0.279	0.276	1.1	145	-0.11	10.67
58 t	3-Nitroaniline	0.317	0.314	0.9	144	-0.10	10.93
59 t	Acenaphthene	1.099	0.999	9.1	145	-0.11	10.98
60 t	2,4-Dinitrophenol	0.162	0.139	14.2	119	-0.08	11.14
61 t	4-Nitrophenol	0.146	0.170	-16.4	159	-0.05	11.35
62 t	Dibenzofuran	1.596	1.473	7.7	151	-0.11	11.30
63 t	2,4-Dinitrotoluene	0.372	0.373	-0.3	143	-0.10	11.44
64	2,3,4,6-Tetrachlorophenol	0.326	0.317	2.8	143	-0.10	11.66
65 t	Diethylphthalate	1.184	1.154	2.5	152	-0.13	11.97
66 t	Fluorene	1.301	1.208	7.1	149	-0.11	11.98
67 t	4-Chlorophenyl-phenylethe	0.619	0.557	10.0	145	-0.12	12.03
68 t	4-Nitroaniline	0.318	0.299	6.0	136	-0.11	12.15
69 I	Phenanthrene-d10	1.000	1.000	0.0	139	-0.11	13.83
70 t	4,6-Dinitro-2-methylpheno	0.157	0.155	1.3	135	-0.10	12.24
71 t	n-Nitrosodiphenylamine	0.568	0.559	1.6	147	-0.11	12.29
72 t	1,2-Diphenylhydrazine	0.714	0.764	-7.0	152	-0.11	12.34
73 S	2,4,6-Tribromophenol	0.086	0.086	0.0	135	-0.11	12.50
74 t	4-Bromophenyl-phenylether	0.209	0.207	1.0	145	-0.11	12.99
75 t	Hexachlorobenzene	0.221	0.212	4.1	145	-0.11	13.24
76 t	Pentachlorophenol	0.148	0.147	0.7	132	-0.10	13.63
77 t	Phenanthrene	1.132	0.998	11.8	137	-0.11	13.87
78 t	Anthracene	1.127	1.044	7.4	143	-0.11	13.96
79 t	Carbazole	1.106	1.073	3.0	145	-0.11	14.32
80 t	Di-n-butylphthalate	1.281	1.264	1.3	141	-0.10	15.21
81 t	Fluoranthene	1.357	1.209	10.9	132	-0.10	16.08
82 t	Octadecane	0.584	0.653	-11.8	163	-0.11	13.80
83 I	Chrysene-d12	1.000	1.000	0.0	115	-0.07	18.24
84 t	Pyrene	1.363	1.297	4.8	123	-0.09	16.43
85	Butyl stearate	0.392	0.466	-18.9	144	-0.07	17.64
86 S	Terphenyl-d14	0.789	0.738	6.5	118	-0.09	16.76
87 t	Butylbenzylphthalate	0.553	0.617	-11.6	129	-0.09	17.56
----- True		Calc.	% Drift	-----			
88 t	Benzo[a]anthracene	50.000	47.342	5.3	110	-0.10	18.20
----- AvgRF		CCRF	% Dev	-----			
89 t	3,3'-Dichlorobenzidine	0.399	0.391	2.0	113	-0.09	18.21
----- True		Calc.	% Drift	-----			
90 t	Chrysene	50.000	48.279	3.4	114	-0.07	18.27
----- AvgRF		CCRF	% Dev	-----			

Continuing Calibration Summary

Page 3 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: EM3363-CC3346
Lab FileID: M84307.D

91 t	bis(2-Ethylhexyl)phthalat	0.685	0.756	-10.4	126	-0.07	18.40
92 I	Perylene-d12	1.000	1.000	0.0	102	-0.07	20.00
93 t	Di-n-octylphthalate	1.388	1.761	-26.9#	122	-0.07	19.16
94 t	Benzo[b]fluoranthene	1.440	1.293	10.2	86	-0.06	19.56
----- True		Calc.	% Drift	-----			
95 t	Benzo[k]fluoranthene	50.000	58.296	-16.6	132	-0.06	19.59
----- AvgRF		CCRF	% Dev	-----			
96 t	Benzo[a]pyrene	1.214	1.158	4.6	104	-0.07	19.92
97 t	Indeno[1,2,3-cd]pyrene	1.264	1.218	3.6	101	-0.10	21.41
98 t	Dibenz(a,h)acridine	0.939	0.922	1.8	98	-0.10	21.08
99 t	Dibenz[a,h]anthracene	1.052	1.029	2.2	102	-0.11	21.42
100 t	7,12-Dimethylbenz(a)anthr	0.599	0.632	-5.5	106	-0.07	19.58
101 t	Benzo[g,h,i]perylene	1.052	0.969	7.9	99	-0.11	21.81

(#) = Out of Range
M83978.D MM3346.M

SPCC's out = 0 CCC's out = 0
Mon Jan 16 13:42:29 2012 GCMSM

7.7.11
7

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: EM3363-CC3347
 Lab FileID: M84308.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3363\M84308.D Vial: 3
 Acq On : 14 Jan 2012 9:57 am Operator: kristis
 Sample : cc3347-50 Inst : MSM
 Misc : op54138,em3363,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	161	-0.10	5.30
103 t	Benzaldehyde	0.966	0.805	16.7	128	-0.09	4.67
104 I	Acenaphthene-d10a	1.000	1.000	0.0	182	-0.11	10.91
105 t	1,2,4,5-Tetrachlorobenzen	0.532	0.532	0.0	183	-0.11	9.26
106 I	Phenanthrene-d10a	1.000	1.000	0.0	176	-0.12	13.82
107 t	Atrazine	0.109	0.123	-12.8	181	-0.11	13.48
110 I	Chrysene-d12a	1.000	1.000	0.0	152	-0.10	18.23
111 t	Benzidine	0.583	0.345	40.8#	80	-0.11	16.36

(#) = Out of Range
 M83978.D MM3346.M

SPCC's out = 0 CCC's out = 0
 Mon Jan 16 13:45:27 2012 GCMSM

7.7.12

7

Initial Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3455-ICC3455
Lab FileID: R89827.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3455.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Mon Sep 19 09:28:04 2011
 Response via : Initial Calibration

Calibration Files

2 =R89831.D 5 =R89830.D 100 =R89825.D 50 =R89827.D
 1 =R89832.D 10 =R89829.D 80 =R89826.D 25 =R89828.D

Compound	2	5	100	50	1	10	80	25	Avg %RSD
102) I 1,4-Dichlorobenzene-d	-----ISTD-----								
103) Benzaldehyde	0.792	0.866	0.937	0.918	0.781	0.976	0.936	0.919	8.00
104) I Acenaphthene-d10a	-----ISTD-----								
105) 1,2,4,5-Tetr	0.488	0.510	0.521	0.524	0.475	0.556	0.521	0.523	4.80
106) 2-Bromonapht	0.497	0.520	0.550	0.552	0.454	0.580	0.548	0.547	7.43
107) Atrazine	0.119	0.149	0.181	0.181		0.181	0.180	0.174	14.38
108) I Phenanthrene-d10a	-----ISTD-----								
109) o-terphenyl	0.546	0.580	0.571	0.595	0.522	0.651	0.580	0.622	6.95
110) I Chrysene-d12a	-----ISTD-----								
111) Benzidine	0.096	0.513	0.551		0.207	0.494	0.587	0.408	50.12
----- Quadratic regression -----									Coefficient = 0.9943
Response Ratio = -0.07466 + 0.66833 *A + -0.05497 *A^2									
112) 1-chloroocta	0.206	0.267	0.279	0.299		0.313	0.285	0.305	12.83

(#) = Out of Range ### Number of calibration levels exceeded format ###									

MR3454.M

Mon Sep 19 09:33:00 2011

NJMSR

7.7.13

7

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3455-ICV3455
Lab FileID: R89833A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R89833A.D Vial: 10
Acq On : 16 Sep 2011 3:35 pm Operator: larisap
Sample : icv3455-50 Inst : MSR
Misc : op51699,er3455, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3455.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Mon Sep 19 09:28:04 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
104 I	Acenaphthene-d10a	1.000	1.000	0.0	95	0.00	14.81
105 I	1,2,4,5-Tetrachlorobenzen	0.515	0.500	2.9	90	0.00	12.82

(#) = Out of Range
R89827.D MR3454.M

SPCC's out = 0 CCC's out = 0
Mon Sep 19 09:44:49 2011 NJMSR

7.7.14

7

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3455-ICV3455
 Lab FileID: R89834A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R89834A.D
 Acq On : 16 Sep 2011 4:11 pm
 Sample : icv3455-50
 Misc : op51699,er3455,
 MS Integration Params: RTEINT.P

Vial: 11
 Operator: larisap
 Inst : MSR
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MR3455.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Mon Sep 19 09:28:04 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	87	-0.01	7.86
103	Benzaldehyde	0.891	1.085	-21.8	103	-0.02	7.00
104 I	Acenaphthene-d10a	1.000	1.000	0.0	85	0.00	14.80
107	Atrazine	0.166	0.188	-13.3	88	-0.02	17.88

(#) = Out of Range
 R89827.D MR3454.M

SPCC's out = 0 CCC's out = 0
 Mon Sep 19 09:45:41 2011 NJMSR

7.7.15

7

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3455-ICV3455
Lab FileID: R89837A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R89837A.D Vial: 14
Acq On : 16 Sep 2011 6:05 pm Operator: larisap
Sample : icv3455-50 Inst : MSR
Misc : op51699,er3455, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3455.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Mon Sep 19 09:28:04 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
110 I	Chrysene-d12a	1.000	1.000	0.0	135	0.00	22.42
	----- True Calc. % Drift -----						
111 t	Benzidine	50.000	64.690	-29.4	169	0.14	20.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R89827.D MR3454.M Mon Sep 19 09:39:46 2011 NJMSR

7.7.16

7

Initial Calibration Summary

Page 1 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3499-ICC3499
 Lab FileID: R90736.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 11:16:16 2011
 Response via : Initial Calibration

Calibration Files

2 =R90738.D 5 =R90739.D 100 =R90743.D 50 =R90741.D
 1 =R90737.D 10 =R90740.D 80 =R90742.D 25 =R90736.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.653	0.650	0.565	0.544		0.619	0.576	0.616	0.603	7.07
3) Pyridine	1.191	1.394	1.323	1.314		1.451	1.355	1.447	1.354	6.66
4) N-Nitrosodim	0.556	0.638	0.652	0.649		0.678	0.672	0.725	0.653	7.84
5) 2-Fluorophen	1.085	1.172	1.277	1.276	1.406	1.366	1.328	1.501	1.301	10.08
6) Indene	2.447	2.392	1.989	2.065	2.997	2.386	2.078	2.401	2.344	13.67
7) Cumene	3.716	3.557	2.933	3.043	4.660	3.620	3.015	3.552	3.512	15.88
8) Phenol-d5	1.423	1.523	1.319	1.346	1.674	1.549	1.388	1.619	1.480	8.82
9) Phenol	1.532	1.634	1.372	1.394	1.974	1.613	1.429	1.704	1.582	12.59
10) Aniline	2.019	1.887	1.568	1.642	2.483	1.974	1.632	1.672	1.859	16.35
11) bis(2-Chloro	1.268	1.190	1.086	1.037	1.627	1.196	1.103	1.203	1.214	15.10
12) 2-Chlorophen	1.506	1.381	1.212	1.231	1.746	1.429	1.269	1.456	1.404	12.53
13) Decane	1.672	1.584	1.345	1.357	2.206	1.589	1.374	1.544	1.584	17.68
14) 1,3-Dichloro	1.818	1.673	1.465	1.483	2.244	1.673	1.521	1.691	1.696	14.88
15) 1,4-Dichloro	1.748	1.649	1.431	1.474	2.197	1.651	1.480	1.683	1.664	14.64
16) Benzyl alcoh	0.556	0.613	0.782	0.763	0.573	0.685	0.806	0.888	0.708	16.97
17) 1,2-Dichloro	1.611	1.562	1.332	1.371	2.094	1.619	1.379	1.537	1.563	15.53
18) Acetophenone	1.683	1.684	1.557	1.572	2.078	1.768	1.613	1.815	1.721	9.86
19) 2-Methylphen	1.163	1.196	1.021	1.039	1.548	1.200	1.064	1.213	1.181	14.18
20) 2,2'-oxybis(	0.452	0.435	0.412	0.401	0.564	0.458	0.423	0.453	0.450	11.24
21) 3&4-Methylph	1.155	1.178	1.056	1.089	1.062	1.275	1.092	1.240	1.143	7.24
22) n-Nitroso-di	0.732	0.721	0.653	0.680	0.961	0.748	0.681	0.775	0.744	12.98
23) Hexachloroet	0.558	0.522	0.465	0.461	0.739	0.528	0.481	0.525	0.535	16.68
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.342	0.338	0.331	0.345	0.412	0.366	0.355	0.407	0.362	8.61
26) Nitrobenzene	0.354	0.376	0.325	0.342	0.461	0.382	0.347	0.397	0.373	11.43
27) Quinoline	0.657	0.677	0.635	0.666	0.874	0.714	0.673	0.743	0.705	10.80
28) Isophorone	0.610	0.624	0.551	0.589	0.811	0.657	0.590	0.676	0.639	12.55
29) 2-Nitropheno	0.166	0.199	0.194	0.202	0.226	0.208	0.204	0.233	0.204	9.94
30) 2,4-Dimethyl	0.315	0.337	0.320	0.328	0.405	0.340	0.337	0.356	0.342	8.26
31) Benzoic acid			0.259	0.247		0.133	0.275	0.245	0.232	24.48
----- Linear regression ----- Coefficient = 0.9960										
Response Ratio = -0.02860 + 0.27717 *A										
32) bis(2-Chloro	0.378	0.370	0.335	0.352	0.472	0.381	0.354	0.405	0.381	11.19
33) 2,4-Dichloro	0.248	0.281	0.280	0.297	0.328	0.322	0.297	0.337	0.299	9.93
34) 2,6-Dichloro	0.289	0.299	0.273	0.288	0.384	0.316	0.289	0.327	0.308	11.37
35) 1,3,5-Trichl	0.388	0.389	0.312	0.332	0.517	0.394	0.331	0.381	0.381	16.75
36) 1,2,4-Trichl	0.384	0.361	0.304	0.324	0.469	0.366	0.325	0.370	0.363	14.01
37) 1,2,3-Trichl	0.359	0.346	0.296	0.315	0.438	0.358	0.318	0.361	0.349	12.43
38) Naphthalene	1.161	1.060		0.894	1.441	1.088	0.836	1.064	1.078	18.22
39) 4-Chloroanil	0.403	0.434	0.369	0.411	0.500	0.454	0.392	0.439	0.425	9.59
40) 2,3-Dichloro	0.363	0.349	0.311	0.338	0.436	0.371	0.333	0.382	0.360	10.56
41) Caprolactam	0.084	0.111	0.147	0.145		0.138	0.157	0.159	0.134	20.49
----- Linear regression ----- Coefficient = 0.9974										

Initial Calibration Summary

Page 2 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3499-ICC3499
 Lab FileID: R90736.D

Response Ratio = -0.00217 + 0.15141 *A

42)	Hexachlorobu	0.211	0.192	0.174	0.184	0.251	0.199	0.186	0.206	0.201	11.85
43)	4-Chloro-3-m	0.257	0.288	0.283	0.299	0.316	0.313	0.302	0.342	0.300	8.44
44)	2-Methylnaph	0.912	0.842	0.614	0.688	1.104	0.834	0.662	0.814	0.809	19.47
45)	1-Methylnaph	0.781	0.739	0.593	0.645	0.984	0.760	0.629	0.743	0.734	16.64
46)	Dimethylnaph	0.666	0.647	0.535	0.590	0.856	0.669	0.569	0.670	0.650	15.03

47)	I Acenaphthene-d10	-----ISTD-----									
48)	Hexachlorocy	0.141	0.249	0.268		0.220	0.267	0.259	0.234		20.83
----- Linear regression ----- Coefficient = 0.9962											
Response Ratio = -0.01004 + 0.26025 *A											

49)	2,4,6-Trichl	0.329	0.342	0.334	0.340	0.434	0.391	0.348	0.390	0.364	10.29
50)	2,4,5-Trichl	0.337	0.343	0.380	0.373	0.347	0.383	0.396	0.416	0.372	7.49
51)	2-Fluorobiph	1.450	1.335	1.021	1.084	1.743	1.320	1.070	1.349	1.296	18.43
52)	2-Chloronaph	1.233	1.192	0.967	1.027	1.638	1.234	1.017	1.189	1.187	17.76
53)	Biphenyl	1.690	1.535		1.235	2.049	1.542	1.178	1.463	1.528	19.09
54)	2-Nitroanili	0.230	0.268	0.308	0.307	0.244	0.329	0.326	0.349	0.295	14.54
55)	Dimethylphth	1.373	1.277	1.029	1.098	1.673	1.317	1.074	1.306	1.268	16.39
56)	Acenaphthyle	2.041	1.914		1.505	2.497	1.952	1.411	1.840	1.880	19.12
57)	2,6-Dinitrot	0.239	0.266	0.280	0.278		0.281	0.296	0.309	0.278	7.94
58)	3-Nitroanili	0.183	0.267	0.314	0.320		0.306	0.329	0.345	0.295	18.70
59)	Acenaphthene	1.215	1.184	0.930	0.986	1.614	1.184	0.973	1.155	1.155	18.75
60)	2,4-Dinitrop		0.022	0.175	0.155		0.077	0.184	0.146	0.126	50.35
----- Linear regression ----- Coefficient = 0.9962											
Response Ratio = -0.05242 + 0.18780 *A											

61)	4-Nitropheno	0.048	0.153	0.142		0.066	0.157	0.138	0.117		40.82
----- Linear regression ----- Coefficient = 0.9984											
Response Ratio = -0.01848 + 0.16211 *A											

62)	Dibenzofuran	1.753	1.637	1.265	1.370	2.204	1.672	1.317	1.640	1.607	18.83
63)	2,4-Dinitrot	0.319	0.344	0.368	0.377		0.400	0.388	0.430	0.375	9.68
64)	2,3,4,6-Tetr	0.233	0.248	0.308	0.305		0.299	0.319	0.340	0.293	13.18
65)	Diethylphtha	1.404	1.266	1.019	1.094	1.795	1.306	1.068	1.300	1.282	19.33
66)	Fluorene	1.384	1.324	1.075	1.148	1.801	1.374	1.124	1.358	1.323	17.31
67)	4-Chlorophen	0.645	0.610	0.502	0.527	0.839	0.607	0.532	0.605	0.609	17.38
68)	4-Nitroanili		0.222	0.320	0.314		0.303	0.341	0.344	0.307	14.49

69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-		0.158	0.148		0.106	0.165	0.156	0.147		15.97
71)	n-Nitrosodip	0.621	0.585	0.491	0.517	0.781	0.625	0.519	0.627	0.596	15.54
72)	1,2-Diphenyl	0.791	0.765	0.658	0.631	0.966	0.773	0.695	0.753	0.754	13.69
73)	2,4,6-Tribo	0.105	0.109	0.118	0.120		0.118	0.127	0.134	0.119	8.29
74)	4-Bromopheny	0.229	0.227	0.213	0.216	0.265	0.242	0.224	0.254	0.234	7.91
75)	Hexachlorobe	0.267	0.252	0.225	0.231	0.331	0.264	0.238	0.267	0.259	12.82
76)	Pentachlorop		0.092	0.149	0.147		0.124	0.156	0.168	0.139	19.75
77)	Phenanthrene	1.309	1.206		0.930	1.639	1.195		1.145	1.237	18.87
78)	Anthracene	1.282	1.211	0.931	1.010	1.600	1.254	0.976	1.215	1.185	18.24
79)	Carbazole	1.120	1.058	0.880	0.961	1.339	1.136	0.938	1.148	1.073	13.69
80)	Di-n-butylph	1.385	1.364	0.978	1.138	1.774	1.426	1.041	1.414	1.315	19.48
81)	Fluoranthene	1.301	1.243	0.901	1.012	1.587	1.282	0.941	1.266	1.192	19.14
82)	Octadecane	0.526	0.500	0.392	0.416	0.689	0.520	0.414	0.497	0.494	19.15

83)	I Chrysene-d12	-----ISTD-----									
84)	Pyrene	1.514	1.482		1.120	2.043	1.504		1.435	1.516	19.62
85)	Butyl steara	0.409	0.415	0.289	0.312		0.415	0.311	0.438	0.370	16.98
86)	Terphenyl-d1	0.913	0.891	0.694	0.766		0.932	0.735	0.974	0.844	12.99
87)	Butylbenzylp	0.637	0.661	0.552	0.598	0.865	0.691	0.582	0.729	0.664	15.03

Initial Calibration Summary

Page 3 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3499-ICC3499
Lab FileID: R90736.D

88)	Benzo[a]anth	1.284	1.270		1.035	1.767	1.307		1.315	1.330	17.94
89)	3,3'-Dichlor	0.236	0.311	0.386	0.397	0.334	0.375	0.408	0.421	0.359	17.25
90)	Chrysene	1.260	1.252		0.968	1.709	1.244		1.217	1.275	18.81
91)	bis(2-Ethylh	0.868	0.886	0.662	0.758		0.926	0.704	0.952	0.822	13.82
92)	I Perylene-d12										
93)	Di-n-octylph	1.770	1.686		1.210		1.704	1.134	1.627	1.522	18.12
94)	Benzo[b]fluo	1.645	1.472	1.251	1.186	1.896	1.421	1.253	1.485	1.451	16.21
95)	Benzo[k]fluo	1.237	1.162	0.673	0.960	1.776	1.332	0.807	1.159	1.138	29.94
	----- Quadratic regression -----										
	Response Ratio = 0.00730 + 1.27673 *A + -0.24148 *A^2										0.9993
96)	Benzo[a]pyre	1.223	1.140	0.946	1.045	1.553	1.194	1.017	1.224	1.168	15.96
97)	Indeno[1,2,3	0.733	0.852	0.868	1.139	0.968	1.060	0.930	1.249	0.975	17.18
98)	Dibenz(a,h)a	0.460	0.565	0.715	0.886		0.762	0.768	0.955	0.730	23.60
	----- Quadratic regression -----										
	Response Ratio = -0.05223 + 1.10474 *A + -0.14922 *A^2										0.9993
99)	Dibenz[a,h]a	0.472	0.602	0.721	0.930	0.670	0.819	0.769	1.017	0.750	23.38
	----- Quadratic regression -----										
	Response Ratio = -0.03941 + 1.15036 *A + -0.16912 *A^2										0.9982
100)	7,12-Dimethy	0.710	0.573	0.566	0.571		0.622	0.610	0.586	0.605	8.37
101)	Benzo[g,h,i]	0.681	0.776	0.690	0.973	0.945	0.924	0.741	1.075	0.851	17.31

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR3499.M

Thu Dec 22 11:16:37 2011

NJMSR

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3499-ICV3499
 Lab FileID: R90744.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90744.D Vial: 10
 Acq On : 20 Dec 2011 7:06 pm Operator: rachelg
 Sample : icv3499-50 Inst : MSR
 Misc : op53255,er3499,acid 2nd source Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 11:16:16 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	7.54
9 t	Phenol	1.582	1.590	-0.5	101	0.00	7.08
12 t	2-Chlorophenol	1.404	1.379	1.8	100	0.00	7.22
19 t	2-Methylphenol	1.181	1.187	-0.5	102	0.00	8.27
21 t	3&4-Methylphenol	1.143	1.253	-9.6	102	0.00	8.60
24 I	Naphthalene-d8	1.000	1.000	0.0	90	0.00	10.30
29 t	2-Nitrophenol	0.204	0.233	-14.2	104	0.00	9.53
30 t	2,4-Dimethylphenol	0.342	0.378	-10.5	104	0.00	9.75
	----- True Calc. % Drift -----						
31 t	Benzoic acid	50.000	45.676	8.6	84	0.14	10.20
	----- AvgRF CCRF % Dev -----						
33 t	2,4-Dichlorophenol	0.299	0.321	-7.4	98	-0.02	10.09
34 t	2,6-Dichlorophenol	0.308	0.319	-3.6	100	0.00	10.60
43 t	4-Chloro-3-methylphenol	0.300	0.334	-11.3	101	-0.01	11.84
47 I	Acenaphthene-d10	1.000	1.000	0.0	91	0.00	14.43
49 t	2,4,6-Trichlorophenol	0.364	0.383	-5.2	103	0.00	12.74
50 t	2,4,5-Trichlorophenol	0.372	0.413	-11.0	101	-0.02	12.84
	----- True Calc. % Drift -----						
60 t	2,4-Dinitrophenol	50.000	45.692	8.6	76	-0.02	14.69
61 t	4-Nitrophenol	50.000	47.099	5.8	88	-0.07	15.04
	----- AvgRF CCRF % Dev -----						
64	2,3,4,6-Tetrachlorophenol	0.293	0.313	-6.8	93	0.00	15.34
69 I	Phenanthrene-d10	1.000	1.000	0.0	87	0.00	17.89
70 t	4,6-Dinitro-2-methylpheno	0.147	0.149	-1.4	88	0.00	16.00
76 t	Pentachlorophenol	0.139	0.166	-19.4	98	0.00	17.66

(#) = Out of Range
 R90741.D MR3499.M

SPCC's out = 0 CCC's out = 0
 Thu Dec 22 11:17:29 2011 NJMSR

7.7.18

7

Initial Calibration Verification

Page 1 of 2

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3499-ICV3499
 Lab FileID: R90745.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90745.D Vial: 11
 Acq On : 20 Dec 2011 7:43 pm Operator: rachelg
 Sample : icv3499-50 Inst : MSR
 Misc : op53255,er3499,bn#1 2nd source Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 13:20:39 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	7.54
3 t	Pyridine	1.354	1.562	-15.4	105	-0.06	3.21
4 t	N-Nitrosodimethylamine	0.653	0.777	-19.0	106	-0.05	3.22
11 t	bis(2-Chloroethyl)ether	1.214	1.233	-1.6	105	0.00	7.13
14 t	1,3-Dichlorobenzene	1.696	1.646	2.9	98	0.00	7.46
15 t	1,4-Dichlorobenzene	1.664	1.595	4.1	96	0.00	7.57
16 t	Benzyl alcohol	0.708	0.851	-20.2	99	0.00	7.95
17 t	1,2-Dichlorobenzene	1.563	1.491	4.6	96	0.00	7.95
20 t	2,2'-oxybis(1-Chloropropa	0.450	0.476	-5.8	105	0.00	8.27
22 t	n-Nitroso-di-n-propylamin	0.744	0.838	-12.6	109	0.00	8.56
23 t	Hexachloroethane	0.535	0.528	1.3	101	0.00	8.59
24 I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	10.31
26 t	Nitrobenzene	0.373	0.372	0.3	100	0.00	8.82
28 t	Isophorone	0.639	0.636	0.5	99	0.00	9.35
32 t	bis(2-Chloroethoxy)methan	0.381	0.414	-8.7	108	0.00	9.93
36 t	1,2,4-Trichlorobenzene	0.363	0.352	3.0	100	0.00	10.23
38 t	Naphthalene	1.078	0.951	11.8	98	0.00	10.35
42 t	Hexachlorobutadiene	0.201	0.204	-1.5	101	0.00	10.83
44 t	2-Methylnaphthalene	0.809	0.730	9.8	97	0.00	11.96
47 I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00	14.43
	----- True	Calc.	% Drift	-----			
48 t	Hexachlorocyclopentadiene	50.000	44.502	11.0	76	0.00	12.52
	----- AvgRF	CCRF	% Dev	-----			
52 t	2-Chloronaphthalene	1.187	1.144	3.6	100	0.00	13.08
54 t	2-Nitroaniline	0.295	0.335	-13.6	98	0.00	13.47
55 t	Dimethylphthalate	1.268	1.214	4.3	99	0.01	14.05
56 t	Acenaphthylene	1.880	1.536	18.3	92	0.00	14.05
57 t	2,6-Dinitrotoluene	0.278	0.300	-7.9	97	0.02	14.17
58 t	3-Nitroaniline	0.295	0.286	3.1	80	0.00	14.47
59 t	Acenaphthene	1.155	1.080	6.5	98	0.01	14.50
62 t	Dibenzofuran	1.607	1.516	5.7	99	0.00	14.89
63 t	2,4-Dinitrotoluene	0.375	0.391	-4.3	93	0.01	15.07
65 t	Diethylphthalate	1.282	1.207	5.9	99	0.01	15.74
66 t	Fluorene	1.323	1.304	1.4	102	0.00	15.70
67 t	4-Chlorophenyl-phenylethe	0.609	0.588	3.4	100	0.00	15.78
68 t	4-Nitroaniline	0.307	0.323	-5.2	92	0.02	15.94
69 I	Phenanthrene-d10	1.000	1.000	0.0	91	0.00	17.89

Initial Calibration Verification

Page 2 of 2

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3499-ICV3499
Lab FileID: R90745.D

71 t	n-Nitrosodiphenylamine	0.596	0.551	7.6	97	0.01	16.09
72 t	1,2-Diphenylhydrazine	0.754	0.695	7.8	100	0.01	16.14
74 t	4-Bromophenyl-phenylether	0.234	0.243	-3.8	103	0.00	16.91
75 t	Hexachlorobenzene	0.259	0.245	5.4	97	0.01	17.19
77 t	Phenanthrene	1.237	1.065	13.9	104	0.01	17.95
78 t	Anthracene	1.185	1.093	7.8	99	0.00	18.05
79 t	Carbazole	1.073	1.040	3.1	99	0.00	18.51
80 t	Di-n-butylphthalate	1.315	1.256	4.5	101	0.00	19.49
81 t	Fluoranthene	1.192	1.103	7.5	99	0.00	20.30
83 I	Chrysene-d12	1.000	1.000	0.0	90	0.00	22.19
84 t	Pyrene	1.516	1.217	19.7	98	0.00	20.62
87 t	Butylbenzylphthalate	0.664	0.673	-1.4	102	0.00	21.62
88 t	Benzo[a]anthracene	1.330	1.148	13.7	100	0.00	22.17
89 t	3,3'-Dichlorobenzidine	0.359	0.277	22.8	63	0.00	22.18
90 t	Chrysene	1.275	1.081	15.2	101	0.00	22.22
91 t	bis(2-Ethylhexyl)phthalat	0.822	0.868	-5.6	103	0.00	22.32
92 I	Perylene-d12	1.000	1.000	0.0	92	0.00	23.73
93 t	Di-n-octylphthalate	1.522	1.338	12.1	101	0.00	22.94
94 t	Benzo[b]fluoranthene	1.451	1.145	21.1	89	0.00	23.32
95 t	Benzo[k]fluoranthene	50.000	58.687	-17.4	104	0.01	23.34
96 t	Benzo[a]pyrene	1.168	1.103	5.6	97	0.00	23.66
97 t	Indeno[1,2,3-cd]pyrene	0.975	1.226	-25.7	99	0.02	25.07
99 t	Dibenz[a,h]anthracene	50.000	56.319	-12.6	98	0.02	25.08
101 t	Benzo[g,h,i]perylene	0.851	1.064	-25.0	100	0.02	25.45

(#) = Out of Range
R90741.D MR3499.M

SPCC's out = 0 CCC's out = 0
Wed Dec 21 13:57:57 2011 NJMSR

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3499-ICV3499
 Lab FileID: R90746.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90746.D Vial: 12
 Acq On : 20 Dec 2011 8:19 pm Operator: rachelg
 Sample : icv3499-50 Inst : MSR
 Misc : op53255,er3499,bn#2 2nd source Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 13:20:39 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	0.00	7.54
2 t	1,4-Dioxane	0.603	0.640	-6.1	107	-0.09	2.74
6 t	Indene	2.344	2.307	1.6	101	0.00	8.12
7 t	Cumene	3.512	3.562	-1.4	106	-0.02	6.07
13 t	Decane	1.584	1.594	-0.6	106	-0.01	7.33
18 t	Acetophenone	1.721	1.775	-3.1	102	0.00	8.47
24 I	Naphthalene-d8	1.000	1.000	0.0	98	0.00	10.30
27 t	Quinoline	0.705	0.669	5.1	98	0.00	11.13
40 t	2,3-Dichloroaniline	0.360	0.321	10.8	93	0.00	12.73
----- True Calc. % Drift -----							
41 t	Caprolactam	50.000	47.601	4.8	96	0.03	11.34
----- AvgRF CCRF % Dev -----							
45 t	1-Methylnaphthalene	0.734	0.684	6.8	104	0.00	12.20
46 t	Dimethylnaphthalene	0.650	0.613	5.7	102	0.01	13.45
47 I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00	14.43
53 t	Biphenyl	1.528	1.482	3.0	108	0.01	13.11
69 I	Phenanthrene-d10	1.000	1.000	0.0	89	0.00	17.89
82 t	Octadecane	0.494	0.522	-5.7	111	0.00	17.94
92 I	Perylene-d12	1.000	1.000	0.0	76	0.00	23.72
100 t	7,12-Dimethylbenz(a)anthr	0.605	0.681	-12.6	90	0.00	23.33

(#) = Out of Range
 R90741.D MR3499.M

SPCC's out = 0 CCC's out = 0
 Wed Dec 21 14:08:24 2011 NJMSR

7.7.20

7

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3499-ICV3499
Lab FileID: R90747.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90747.D Vial: 13
Acq On : 20 Dec 2011 8:55 pm Operator: rachelg
Sample : icv3499-50 Inst : MSR
Misc : op53255,er3499,3rd source Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	75	0.00	7.54
10 t	Aniline	1.859	1.793	3.6	82	0.00	7.00
24 I	Naphthalene-d8	1.000	1.000	0.0	81	0.00	10.31
39 t	4-Chloroaniline	0.425	0.430	-1.2	84	0.00	10.59

(#) = Out of Range
R90741.D MR3499.M

SPCC's out = 0 CCC's out = 0
Wed Dec 21 14:08:52 2011 NJMSR

7.7.21

7

Continuing Calibration Summary

Page 1 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3516-CC3499
 Lab FileID: R91051.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D
 Acq On : 14 Jan 2012 12:20 pm
 Sample : cc3499-25
 Misc : op53255,er3516,1000,,,1,1
 MS Integration Params: RTEINT.P

Vial: 2
 Operator: kristis
 Inst : MSR
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Tue Jan 24 15:10:48 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	0.09	7.45
2 t	1,4-Dioxane	0.603	0.629	-4.3	110	0.08	2.77
3 t	Pyridine	1.354	1.505	-11.2	112	0.06	3.16
4 t	N-Nitrosodimethylamine	0.653	0.792	-21.3	118	0.07	3.17
5 S	2-Fluorophenol	1.301	1.482	-13.9	107	0.10	5.22
6 t	Indene	2.344	2.414	-3.0	109	0.09	8.02
7 t	Cumene	3.512	3.659	-4.2	111	0.08	5.99
8 S	Phenol-d5	1.480	1.642	-10.9	110	0.08	6.97
9 t	Phenol	1.582	1.671	-5.6	106	0.09	6.99
10 t	Aniline	1.859	1.535	17.4	99	0.09	6.90
11 t	bis(2-Chloroethyl)ether	1.214	1.160	4.4	104	0.07	7.05
12 t	2-Chlorophenol	1.404	1.427	-1.6	106	0.09	7.13
13 t	Decane	1.584	1.431	9.7	100	0.08	7.25
14 t	1,3-Dichlorobenzene	1.696	1.713	-1.0	109	0.09	7.37
15 t	1,4-Dichlorobenzene	1.664	1.702	-2.3	109	0.09	7.48
16 t	Benzyl alcohol	0.708	0.788	-11.3	96	0.09	7.85
17 t	1,2-Dichlorobenzene	1.563	1.557	0.4	109	0.08	7.85
18 t	Acetophenone	1.721	1.790	-4.0	107	0.08	8.38
19 t	2-Methylphenol	1.181	1.148	2.8	102	0.09	8.20
20 t	2,2'-oxybis(1-Chloropropa	0.450	0.448	0.4	107	0.09	8.17
21 t	3&4-Methylphenol	1.143	1.242	-8.7	108	0.09	8.52
22 t	n-Nitroso-di-n-propylamin	0.744	0.802	-7.8	112	0.08	8.47
23 t	Hexachloroethane	0.535	0.549	-2.6	113	0.09	8.49
24 I	Naphthalene-d8	1.000	1.000	0.0	111	0.09	10.20
25 S	Nitrobenzene-d5	0.362	0.404	-11.6	110	0.08	8.68
26 t	Nitrobenzene	0.373	0.385	-3.2	108	0.08	8.72
27 t	Quinoline	0.705	0.726	-3.0	109	0.08	11.03
28 t	Isophorone	0.639	0.666	-4.2	110	0.09	9.25
29 t	2-Nitrophenol	0.204	0.229	-12.3	110	0.09	9.43
30 t	2,4-Dimethylphenol	0.342	0.346	-1.2	108	0.09	9.66
	----- True		Calc.	% Drift		-----	
31 t	Benzoic acid	25.000	24.044	3.8	100	0.11	10.08
	----- AvgRF		CCRF	% Dev		-----	
32 t	bis(2-Chloroethoxy)methan	0.381	0.385	-1.0	106	0.08	9.83
33 t	2,4-Dichlorophenol	0.299	0.331	-10.7	109	0.09	10.00
34 t	2,6-Dichlorophenol	0.308	0.315	-2.3	107	0.09	10.50
35 t	1,3,5-Trichlorobenzene	0.381	0.378	0.8	110	0.09	9.43
36 t	1,2,4-Trichlorobenzene	0.363	0.360	0.8	108	0.09	10.13
37 t	1,2,3-Trichlorobenzene	0.349	0.349	0.0	108	0.09	10.67

Continuing Calibration Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3516-CC3499
Lab FileID: R91051.D

38 t	Naphthalene	1.078	1.054	2.2	110	0.09	10.25
39 t	4-Chloroaniline	0.425	0.430	-1.2	109	0.08	10.50
40 t	2,3-Dichloroaniline	0.360	0.377	-4.7	110	0.09	12.62
----- True Calc. % Drift -----							
41 t	Caprolactam	25.000	25.523	-2.1	106	0.07	11.29
----- AvgRF CCRF % Dev -----							
42 t	Hexachlorobutadiene	0.201	0.212	-5.5	114	0.09	10.72
43 t	4-Chloro-3-methylphenol	0.300	0.348	-16.0	113	0.09	11.76
44 t	2-Methylnaphthalene	0.809	0.798	1.4	109	0.09	11.85
45 t	1-Methylnaphthalene	0.734	0.734	0.0	110	0.09	12.09
46 t	Dimethylnaphthalene	0.650	0.664	-2.2	110	0.09	13.33
47 I	Acenaphthene-d10	1.000	1.000	0.0	110	0.09	14.32
----- True Calc. % Drift -----							
48 t	Hexachlorocyclopentadiene	50.000	46.646	6.7	99	0.09	12.41
----- AvgRF CCRF % Dev -----							
49 t	2,4,6-Trichlorophenol	0.364	0.385	-5.8	108	0.09	12.65
50 t	2,4,5-Trichlorophenol	0.372	0.403	-8.3	106	0.09	12.76
51 S	2-Fluorobiphenyl	1.296	1.364	-5.2	111	0.09	12.81
52 t	2-Chloronaphthalene	1.187	1.169	1.5	108	0.09	12.97
53 t	Biphenyl	1.528	1.498	2.0	112	0.09	12.99
54 t	2-Nitroaniline	0.295	0.364	-23.4	114	0.09	13.37
55 t	Dimethylphthalate	1.268	1.314	-3.6	110	0.08	13.94
56 t	Acenaphthylene	1.880	1.861	1.0	111	0.09	13.94
57 t	2,6-Dinitrotoluene	0.278	0.319	-14.7	113	0.08	14.06
58 t	3-Nitroaniline	0.295	0.342	-15.9	108	0.08	14.37
59 t	Acenaphthene	1.155	1.172	-1.5	111	0.09	14.39
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	41.488	17.0	85	0.09	14.60
61 t	4-Nitrophenol	25.000	24.136	3.5	101	0.10	14.96
----- AvgRF CCRF % Dev -----							
62 t	Dibenzofuran	1.607	1.677	-4.4	112	0.09	14.78
63 t	2,4-Dinitrotoluene	0.375	0.433	-15.5	110	0.08	14.96
64	2,3,4,6-Tetrachlorophenol	0.293	0.342	-16.7	110	0.09	15.23
65 t	Diethylphthalate	1.282	1.307	-2.0	110	0.08	15.64
66 t	Fluorene	1.323	1.374	-3.9	111	0.09	15.58
67 t	4-Chlorophenyl-phenylethe	0.609	0.617	-1.3	112	0.09	15.66
68 t	4-Nitroaniline	0.307	0.333	-8.5	106	0.08	15.85
69 I	Phenanthrene-d10	1.000	1.000	0.0	113	0.09	17.78
70 t	4,6-Dinitro-2-methylpheno	0.147	0.129	12.2	94	0.07	15.91
71 t	n-Nitrosodiphenylamine	0.596	0.607	-1.8	110	0.08	15.98
72 t	1,2-Diphenylhydrazine	0.754	0.739	2.0	111	0.08	16.03
73 S	2,4,6-Tribromophenol	0.119	0.141	-18.5	119	0.09	16.21
74 t	4-Bromophenyl-phenylether	0.234	0.258	-10.3	115	0.09	16.80
75 t	Hexachlorobenzene	0.259	0.277	-6.9	118	0.09	17.07
76 t	Pentachlorophenol	0.139	0.159	-14.4	107	0.08	17.56
77 t	Phenanthrene	1.237	1.148	7.2	113	0.09	17.83
78 t	Anthracene	1.185	1.195	-0.8	111	0.08	17.93
79 t	Carbazole	1.073	1.093	-1.9	108	0.09	18.40
80 t	Di-n-butylphthalate	1.315	1.375	-4.6	110	0.07	19.40
81 t	Fluoranthene	1.192	1.216	-2.0	109	0.11	20.21
82 t	Octadecane	0.494	0.454	8.1	104	0.08	17.83

7.7.22

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Continuing Calibration Summary

Page 3 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3516-CC3499
Lab FileID: R91051.D

83 I	Chrysene-d12	1.000	1.000	0.0	118	0.04	22.12
84 t	Pyrene	1.516	1.355	10.6	111	0.06	20.54
85	Butyl stearate	0.370	0.375	-1.4	101	0.04	21.61
86 S	Terphenyl-d14	0.844	0.935	-10.8	113	0.05	20.84
87 t	Butylbenzylphthalate	0.664	0.664	0.0	107	0.04	21.55
88 t	Benzo[a]anthracene	1.330	1.252	5.9	112	0.05	22.10
89 t	3,3'-Dichlorobenzidine	0.359	0.448	-24.8	125	0.04	22.11
90 t	Chrysene	1.275	1.186	7.0	115	0.04	22.15
91 t	bis(2-Ethylhexyl)phthalat	0.822	0.846	-2.9	105	0.04	22.25
92 I	Perylene-d12	1.000	1.000	0.0	114	0.05	23.64
93 t	Di-n-octylphthalate	1.522	1.513	0.6	106	0.04	22.87
94 t	Benzo[b]fluoranthene	1.451	1.474	-1.6	113	0.05	23.23
----- True Calc. % Drift -----							
95 t	Benzo[k]fluoranthene	25.000	26.024	-4.1	115	0.05	23.27
----- AvgRF CCRF % Dev -----							
96 t	Benzo[a]pyrene	1.168	1.197	-2.5	111	0.06	23.58
97 t	Indeno[1,2,3-cd]pyrene	0.975	1.127	-15.6	103	0.08	24.95
----- True Calc. % Drift -----							
98 t	Dibenz(a,h)acridine	25.000	24.704	1.2	109	0.07	24.63
99 t	Dibenz[a,h]anthracene	25.000	23.783	4.9	105	0.08	24.95
----- AvgRF CCRF % Dev -----							
100 t	7,12-Dimethylbenz(a)anthr	0.605	0.541	10.6	105	0.04	23.25
101 t	Benzo[g,h,i]perylene	0.851	0.862	-1.3	91	0.09	25.31

(#) = Out of Range
 R91193.D MR3499.M

SPCC's out = 0 CCC's out = 0
 Tue Jan 24 16:59:47 2012 NJMSR

7.7.22
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Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3516-CC3455
 Lab FileID: R91052.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3516\R91052.D Vial: 3
 Acq On : 14 Jan 2012 12:55 pm Operator: kristis
 Sample : cc3455-25 Inst : MSR
 Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Tue Jan 24 17:05:50 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	93	0.08	7.44
103	Benzaldehyde	0.891	0.832	6.6	84	0.03	6.60
104 I	Acenaphthene-d10a	1.000	1.000	0.0	75	0.08	14.31
105 I	1,2,4,5-Tetrachlorobenzen	0.515	0.571	-10.9	82	-0.01	12.34
106	Atrazine	0.166	0.188	-13.3	81	0.09	17.41
107 I	Chrysene-d12a	1.000	1.000	0.0	63	0.11	22.11
	----- True Calc. % Drift -----						
108 t	Benzidine	25.000	22.683	9.3	49	0.08	20.48

(#) = Out of Range
 R91193.D MR3499.M

SPCC's out = 0 CCC's out = 0
 Tue Jan 24 17:06:49 2012 NJMSR

7.7.23

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Continuing Calibration Summary

Page 1 of 3

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: ER3517-CC3499
 Lab FileID: R91071.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D
 Acq On : 16 Jan 2012 8:49 am
 Sample : CC3499-25
 Misc : op53255,er3517,1000,,,1,1
 MS Integration Params: RTEINT.P

Vial: 2
 Operator: rachelg
 Inst : MSR
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Jan 12 11:38:55 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	-0.10	7.45
2 t	1,4-Dioxane	0.603	0.647	-7.3	113	-0.10	2.74
3 t	Pyridine	1.354	1.489	-10.0	111	-0.10	3.16
4 t	N-Nitrosodimethylamine	0.653	0.797	-22.1	119	-0.10	3.17
5 S	2-Fluorophenol	1.301	1.488	-14.4	107	-0.11	5.21
6 t	Indene	2.344	2.435	-3.9	109	-0.10	8.03
7 t	Cumene	3.512	3.690	-5.1	112	-0.10	5.99
8 S	Phenol-d5	1.480	1.620	-9.5	108	-0.09	6.97
9 t	Phenol	1.582	1.613	-2.0	102	-0.09	6.99
10 t	Aniline	1.859	1.546	16.8	100	-0.10	6.90
11 t	bis(2-Chloroethyl)ether	1.214	1.170	3.6	105	-0.10	7.04
12 t	2-Chlorophenol	1.404	1.429	-1.8	106	-0.10	7.12
13 t	Decane	1.584	1.420	10.4	99	-0.10	7.25
14 t	1,3-Dichlorobenzene	1.696	1.677	1.1	107	-0.10	7.37
15 t	1,4-Dichlorobenzene	1.664	1.681	-1.0	108	-0.10	7.48
16 t	Benzyl alcohol	0.708	0.749	-5.8	91	-0.10	7.85
17 t	1,2-Dichlorobenzene	1.563	1.569	-0.4	110	-0.11	7.85
18 t	Acetophenone	1.721	1.779	-3.4	106	-0.10	8.37
19 t	2-Methylphenol	1.181	1.129	4.4	100	-0.09	8.19
20 t	2,2'-oxybis(1-Chloropropa	0.450	0.457	-1.6	109	-0.10	8.18
21 t	3&4-Methylphenol	1.143	1.191	-4.2	104	-0.10	8.51
22 t	n-Nitroso-di-n-propylamin	0.744	0.794	-6.7	111	-0.10	8.47
23 t	Hexachloroethane	0.535	0.542	-1.3	111	-0.11	8.49
24 I	Naphthalene-d8	1.000	1.000	0.0	108	-0.09	10.21
25 S	Nitrobenzene-d5	0.362	0.405	-11.9	108	-0.10	8.68
26 t	Nitrobenzene	0.373	0.394	-5.6	107	-0.10	8.72
27 t	Quinoline	0.705	0.728	-3.3	106	-0.11	11.03
28 t	Isophorone	0.639	0.665	-4.1	107	-0.10	9.25
29 t	2-Nitrophenol	0.204	0.228	-11.8	106	-0.10	9.43
30 t	2,4-Dimethylphenol	0.342	0.352	-2.9	107	-0.09	9.65
	----- True		Calc.	% Drift		-----	
31 t	Benzoic acid	25.000	15.817	36.7	57	0.00	10.07
	----- AvgRF		CCRF	% Dev		-----	
32 t	bis(2-Chloroethoxy)methan	0.381	0.387	-1.6	104	-0.10	9.83
33 t	2,4-Dichlorophenol	0.299	0.320	-7.0	103	-0.11	10.00
34 t	2,6-Dichlorophenol	0.308	0.315	-2.3	104	-0.11	10.50
35 t	1,3,5-Trichlorobenzene	0.381	0.385	-1.0	109	-0.10	9.43
36 t	1,2,4-Trichlorobenzene	0.363	0.360	0.8	105	-0.10	10.13
37 t	1,2,3-Trichlorobenzene	0.349	0.343	1.7	103	-0.11	10.67

Continuing Calibration Summary

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Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3517-CC3499
Lab FileID: R91071.D

38 t	Naphthalene	1.078	1.064	1.3	109	-0.10	10.25
39 t	4-Chloroaniline	0.425	0.426	-0.2	105	-0.10	10.50
40 t	2,3-Dichloroaniline	0.360	0.374	-3.9	106	-0.10	12.63
----- True Calc. % Drift -----							
41 t	Caprolactam	25.000	25.106	-0.4	101	-0.02	11.29
----- AvgRF CCRF % Dev -----							
42 t	Hexachlorobutadiene	0.201	0.212	-5.5	111	-0.11	10.72
43 t	4-Chloro-3-methylphenol	0.300	0.344	-14.7	109	-0.09	11.77
44 t	2-Methylnaphthalene	0.809	0.803	0.7	107	-0.10	11.85
45 t	1-Methylnaphthalene	0.734	0.729	0.7	106	-0.11	12.09
46 t	Dimethylnaphthalene	0.650	0.654	-0.6	106	-0.10	13.34
47 I	Acenaphthene-d10	1.000	1.000	0.0	107	-0.11	14.32
----- True Calc. % Drift -----							
48 t	Hexachlorocyclopentadiene	50.000	43.259	13.5	90	-0.11	12.41
----- AvgRF CCRF % Dev -----							
49 t	2,4,6-Trichlorophenol	0.364	0.379	-4.1	104	-0.10	12.65
50 t	2,4,5-Trichlorophenol	0.372	0.391	-5.1	101	-0.11	12.75
51 S	2-Fluorobiphenyl	1.296	1.355	-4.6	108	-0.10	12.82
52 t	2-Chloronaphthalene	1.187	1.174	1.1	106	-0.11	12.97
53 t	Biphenyl	1.528	1.444	5.5	106	-0.10	12.99
54 t	2-Nitroaniline	0.295	0.355	-20.3	109	-0.10	13.37
55 t	Dimethylphthalate	1.268	1.297	-2.3	106	-0.10	13.93
56 t	Acenaphthylene	1.880	1.822	3.1	106	-0.10	13.94
57 t	2,6-Dinitrotoluene	0.278	0.304	-9.4	105	-0.09	14.06
58 t	3-Nitroaniline	0.295	0.335	-13.6	104	-0.10	14.36
59 t	Acenaphthene	1.155	1.151	0.3	107	-0.10	14.39
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	34.084	31.8	63	-0.11	14.60
61 t	4-Nitrophenol	25.000	23.147	7.4	94	-0.14	14.96
----- AvgRF CCRF % Dev -----							
62 t	Dibenzofuran	1.607	1.631	-1.5	107	-0.11	14.77
63 t	2,4-Dinitrotoluene	0.375	0.423	-12.8	105	-0.10	14.96
64	2,3,4,6-Tetrachlorophenol	0.293	0.328	-11.9	103	-0.11	15.23
65 t	Diethylphthalate	1.282	1.292	-0.8	107	-0.10	15.63
66 t	Fluorene	1.323	1.330	-0.5	105	-0.11	15.58
67 t	4-Chlorophenyl-phenylethe	0.609	0.611	-0.3	108	-0.11	15.66
68 t	4-Nitroaniline	0.307	0.315	-2.6	98	-0.09	15.84
69 I	Phenanthrene-d10	1.000	1.000	0.0	108	-0.11	17.78
70 t	4,6-Dinitro-2-methylpheno	0.147	0.124	15.6	86	-0.10	15.91
71 t	n-Nitrosodiphenylamine	0.596	0.602	-1.0	104	-0.10	15.99
72 t	1,2-Diphenylhydrazine	0.754	0.741	1.7	106	-0.10	16.03
73 S	2,4,6-Tribromophenol	0.119	0.140	-17.6	113	-0.11	16.22
74 t	4-Bromophenyl-phenylether	0.234	0.252	-7.7	107	-0.11	16.79
75 t	Hexachlorobenzene	0.259	0.266	-2.7	107	-0.11	17.08
76 t	Pentachlorophenol	0.139	0.155	-11.5	100	-0.11	17.56
77 t	Phenanthrene	1.237	1.158	6.4	109	-0.11	17.83
78 t	Anthracene	1.185	1.202	-1.4	107	-0.11	17.93
79 t	Carbazole	1.073	1.055	1.7	99	-0.11	18.39
80 t	Di-n-butylphthalate	1.315	1.364	-3.7	104	-0.09	19.40
81 t	Fluoranthene	1.192	1.227	-2.9	105	-0.08	20.21
82 t	Octadecane	0.494	0.459	7.1	100	-0.11	17.82

7.7.24

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Continuing Calibration Summary

Page 3 of 3

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3517-CC3499
Lab FileID: R91071.D

83	I	Chrysene-d12	1.000	1.000	0.0	115	-0.07	22.12
84	t	Pyrene	1.516	1.334	12.0	107	-0.08	20.53
85		Butyl stearate	0.370	0.367	0.8	96	-0.06	21.61
86	S	Terphenyl-d14	0.844	0.913	-8.2	108	-0.08	20.84
87	t	Butylbenzylphthalate	0.664	0.639	3.8	101	-0.07	21.55
88	t	Benzo[a]anthracene	1.330	1.244	6.5	109	-0.07	22.10
89	t	3,3'-Dichlorobenzidine	0.359	0.426	-18.7	116	-0.07	22.10
90	t	Chrysene	1.275	1.131	11.3	107	-0.07	22.14
91	t	bis(2-Ethylhexyl)phthalat	0.822	0.819	0.4	99	-0.07	22.25
92	I	Perylene-d12	1.000	1.000	0.0	109	-0.09	23.64
93	t	Di-n-octylphthalate	1.522	1.554	-2.1	104	-0.07	22.86
94	t	Benzo[b]fluoranthene	1.451	1.369	5.7	101	-0.08	23.23
----- True Calc. % Drift -----								
95	t	Benzo[k]fluoranthene	25.000	27.996	-12.0	118	-0.07	23.26
----- AvgRF CCRF % Dev -----								
96	t	Benzo[a]pyrene	1.168	1.216	-4.1	108	-0.09	23.57
97	t	Indeno[1,2,3-cd]pyrene	0.975	1.138	-16.7	99	-0.12	24.94
----- True Calc. % Drift -----								
98	t	Dibenz(a,h)acridine	25.000	24.639	1.4	104	-0.12	24.62
99	t	Dibenz[a,h]anthracene	25.000	24.426	2.3	103	-0.12	24.95
----- AvgRF CCRF % Dev -----								
100	t	7,12-Dimethylbenz(a)anthr	0.605	0.522	13.7	97	-0.07	23.25
101	t	Benzo[g,h,i]perylene	0.851	0.921	-8.2	94	-0.13	25.30

(#) = Out of Range
 R90736.D MR3499.M

SPCC's out = 0 CCC's out = 0
 Mon Jan 23 14:08:04 2012 NJMSR

7.7.24

7

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: ER3517-CC3455
Lab FileID: R91072.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3517\R91072.D Vial: 3
 Acq On : 16 Jan 2012 9:36 am Operator: rachelg
 Sample : CC3455-25 Inst : MSR
 Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Tue Jan 17 08:53:28 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.050 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)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	94	-0.10	7.44
103	Benzaldehyde	0.891	0.811	9.0	83	-0.21	6.61
104 I	Acenaphthene-d10a	1.000	1.000	0.0	72	-0.11	14.32
105 I	1,2,4,5-Tetrachlorobenzen	0.515	0.579	-12.4	80	-0.22	12.33
106	Atrazine	0.166	0.184	-10.8	76	-0.24	17.41
107 I	Chrysene-d12a	1.000	1.000	0.0	60	-0.08	22.11
	----- True Calc. % Drift -----						
108 t	Benzidine	25.000	22.710	9.2	47	0.00	20.48

(#) = Out of Range
 R90736.D MR3499.M

SPCC's out = 0 CCC's out = 0
 Tue Jan 17 08:54:44 2012 NJMSR

7.7.25

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GC/MS Semi-volatiles

Raw Data

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84312.D Vial: 7
 Acq On : 14 Jan 2012 12:07 pm Operator: kristis
 Sample : ja96854-1 Inst : MSM
 Misc : op54195,em3363,35.2,,,1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Jan 16 14:13 2012 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.30	152	45566	40.00	ppb	-0.10
24) Naphthalene-d8	7.50	136	174747	40.00	ppb	-0.11
47) Acenaphthene-d10	10.91	164	111706	40.00	ppb	-0.11
69) Phenanthrene-d10	13.81	188	159531	40.00	ppb	-0.12
83) Chrysene-d12	18.22	240	118744	40.00	ppb	-0.09
92) Perylene-d12	19.99	264	84608	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	5.30	152	45566	40.00	ppb	-0.10
104) Acenaphthene-d10a	10.91	164	111706	40.00	ppb	-0.11
106) Phenanthrene-d10a	13.81	188	159531	40.00	ppb	-0.13
110) Chrysene-d12a	18.22	240	118744	40.00	ppb	-0.11
112) Naphthalene-d8a	7.50	136	174747	40.00	ppb	-0.11
System Monitoring Compounds						
5) 2-Fluorophenol	3.61	112	53236	32.66	ppb	-0.07
Spiked Amount 50.000			Recovery =	65.32%		
8) Phenol-d5	4.84	99	65379	32.85	ppb	-0.08
Spiked Amount 50.000			Recovery =	65.70%		
25) Nitrobenzene-d5	6.25	82	59261	39.61	ppb	-0.11
Spiked Amount 50.000			Recovery =	79.22%		
51) 2-Fluorobiphenyl	9.63	172	139804	40.92	ppb	-0.12
Spiked Amount 50.000			Recovery =	81.84%		
73) 2,4,6-Tribromophenol	12.49	330	16754	48.79	ppb	-0.11
Spiked Amount 50.000			Recovery =	97.58%		
86) Terphenyl-d14	16.75	244	131026	55.94	ppb	-0.09
Spiked Amount 50.000			Recovery =	111.88%		
Target Compounds						
38) Naphthalene	7.53	128	6953	1.54	ppb	Qvalue 97

(#) = qualifier out of range (m) = manual integration

M84312.D MM3346.M Mon Jan 16 14:13:54 2012 GCMSM

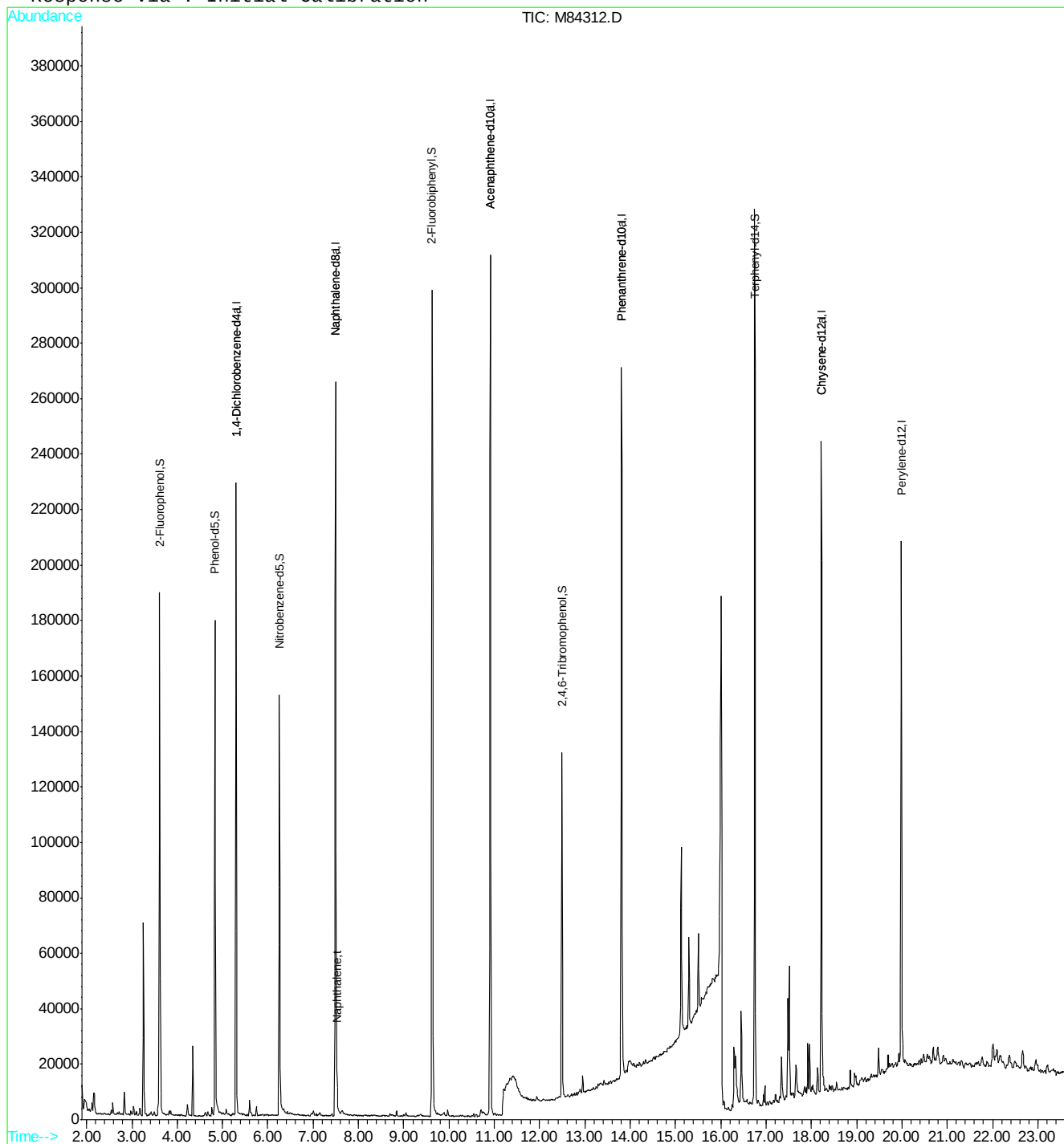
Quantitation Report

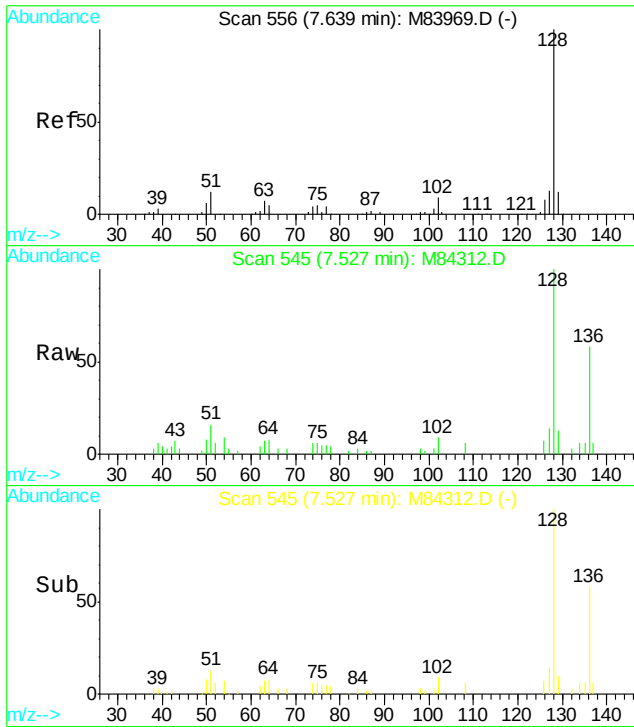
Data File : C:\HPCHEM\1\DATA\EM3363\M84312.D
Acq On : 14 Jan 2012 12:07 pm
Sample : ja96854-1
Misc : op54195,em3363,35.2,,,1,1
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:13 2012

Vial: 7
Operator: kristis
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

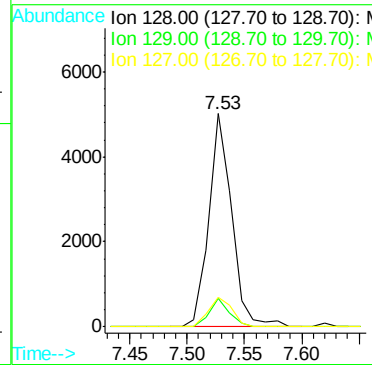
Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration





#38
Naphthalene
Concen: 1.54 ppb
RT: 7.53 min Scan# 545
Delta R.T. -0.11 min
Lab File: M84312.D
Acq: 14 Jan 2012 12:07 pm

Tgt Ion:	128	Resp:	6953
Ion	Ratio	Lower	Upper
128	100		
129	13.1	0.0	41.5
127	14.0	0.0	43.5



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84313.D

Vial: 8

Acq On : 14 Jan 2012 12:37 pm

Operator: kristis

Sample : ja96854-2

Inst : MSM

Misc : op54195,em3363,35.2,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 14:14 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.30	152	41041	40.00	ppb	-0.10
24) Naphthalene-d8	7.50	136	153765	40.00	ppb	-0.11
47) Acenaphthene-d10	10.91	164	97400	40.00	ppb	-0.11
69) Phenanthrene-d10	13.81	188	158853	40.00	ppb	-0.12
83) Chrysene-d12	18.23	240	132852	40.00	ppb	-0.08
92) Perylene-d12	19.99	264	88172	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	5.30	152	41041	40.00	ppb	-0.10
104) Acenaphthene-d10a	10.91	164	97400	40.00	ppb	-0.11
106) Phenanthrene-d10a	13.81	188	158853	40.00	ppb	-0.13
110) Chrysene-d12a	18.23	240	132852	40.00	ppb	-0.10
112) Naphthalene-d8a	7.50	136	153765	40.00	ppb	-0.11

System Monitoring Compounds

5) 2-Fluorophenol	3.61	112	33297	22.68	ppb	-0.07
Spiked Amount	50.000		Recovery	=	45.36%	
8) Phenol-d5	4.84	99	38971	21.74	ppb	-0.08
Spiked Amount	50.000		Recovery	=	43.48%	
25) Nitrobenzene-d5	6.25	82	36129	27.44	ppb	-0.11
Spiked Amount	50.000		Recovery	=	54.88%	
51) 2-Fluorobiphenyl	9.63	172	77408	25.98	ppb	-0.12
Spiked Amount	50.000		Recovery	=	51.96%	
73) 2,4,6-Tribromophenol	12.49	330	11268	32.95	ppb	-0.11
Spiked Amount	50.000		Recovery	=	65.90%	
86) Terphenyl-d14	16.75	244	98692	37.66	ppb	-0.09
Spiked Amount	50.000		Recovery	=	75.32%	

Target Compounds

						Qvalue
38) Naphthalene	7.54	128	177228	44.56	ppb	95
59) Acenaphthene	10.96	153	2423	0.91	ppb	92
66) Fluorene	11.97	166	4040	1.28	ppb	96
77) Phenanthrene	13.86	178	9671	2.15	ppb	98
78) Anthracene	13.94	178	2614	0.58	ppb	94
81) Fluoranthene	16.08	202	4182	0.78	ppb	95
84) Pyrene	16.43	202	4215	0.93	ppb	99

(#) = qualifier out of range (m) = manual integration

M84313.D MM3346.M

Mon Jan 16 14:14:58 2012

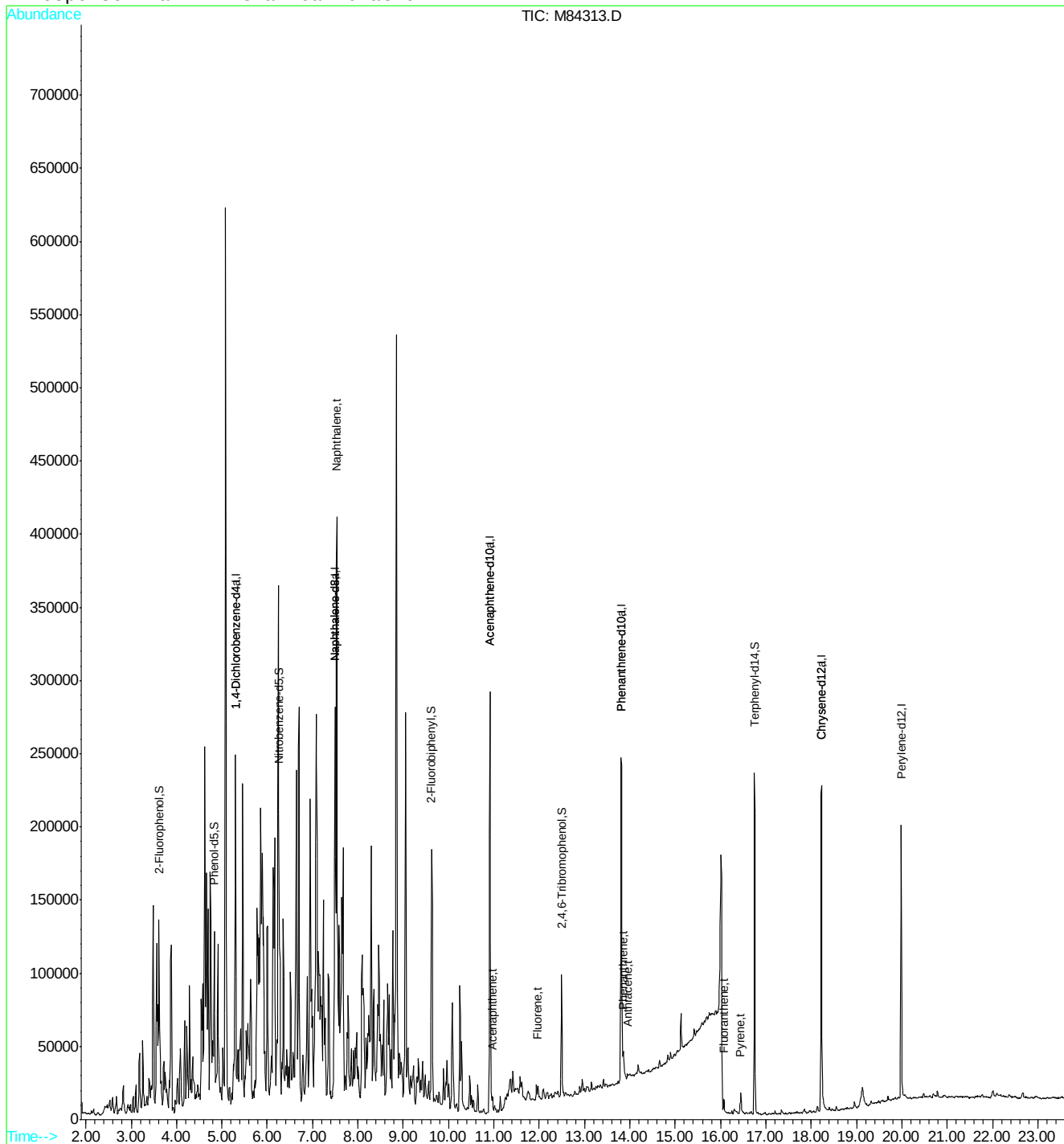
GCMSM

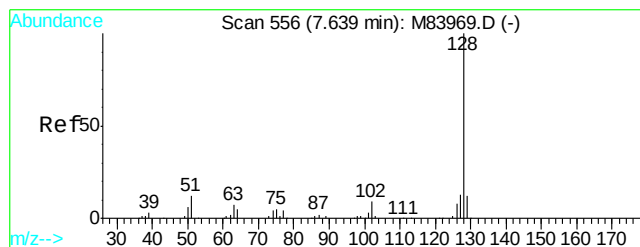
Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3363\M84313.D Vial: 8
 Acq On : 14 Jan 2012 12:37 pm Operator: kristis
 Sample : ja96854-2 Inst : MSM
 Misc : op54195,em3363,35.2,,,1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Jan 16 14:14 2012 Quant Results File: MM3346.RES

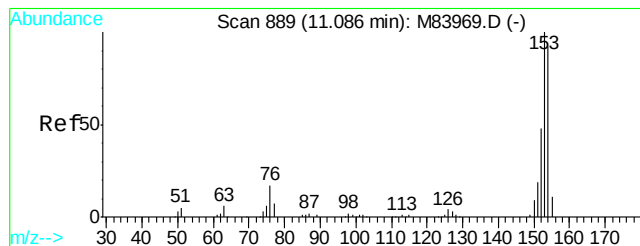
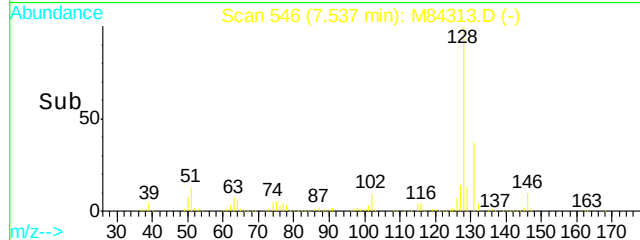
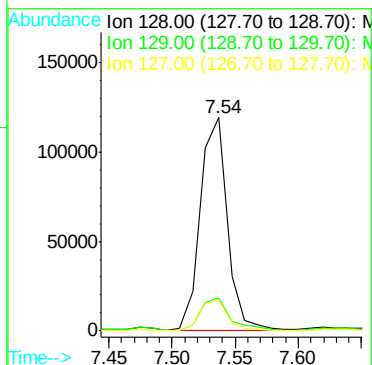
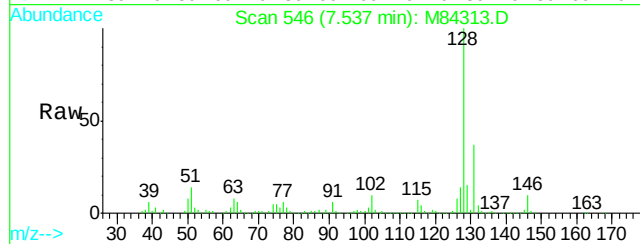
Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration





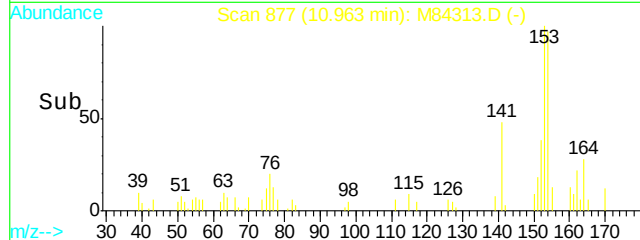
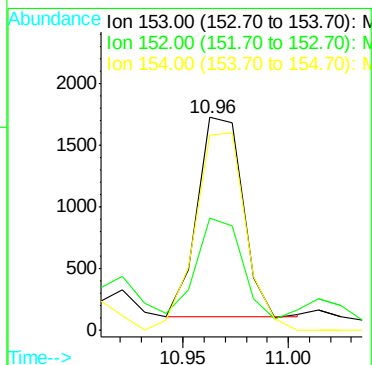
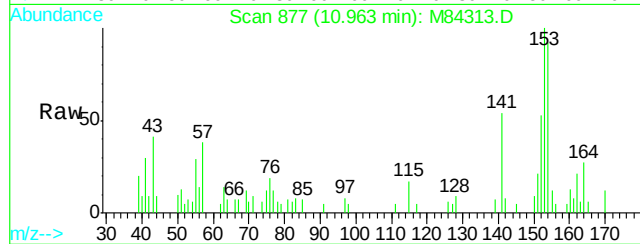
#38
Naphthalene
Concen: 44.56 ppb
RT: 7.54 min Scan# 546
Delta R.T. -0.10 min
Lab File: M84313.D
Acq: 14 Jan 2012 12:37 pm

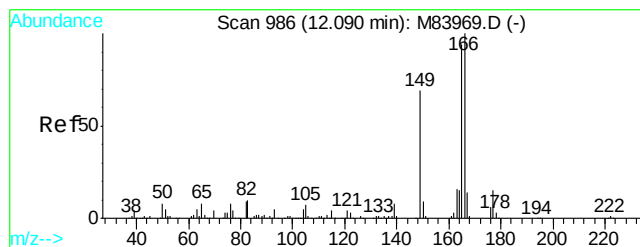
Tgt Ion	Ratio	Lower	Upper
128	100		
129	15.0	0.0	41.5
127	14.2	0.0	43.5



#59
Acenaphthene
Concen: 0.91 ppb
RT: 10.96 min Scan# 877
Delta R.T. -0.12 min
Lab File: M84313.D
Acq: 14 Jan 2012 12:37 pm

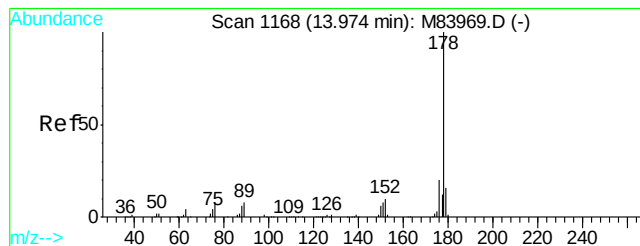
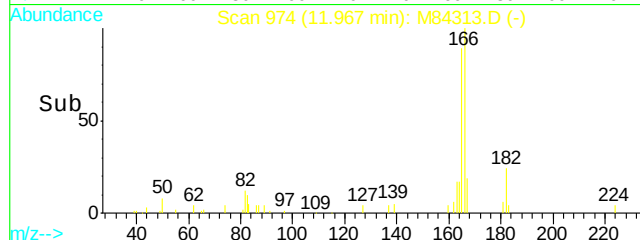
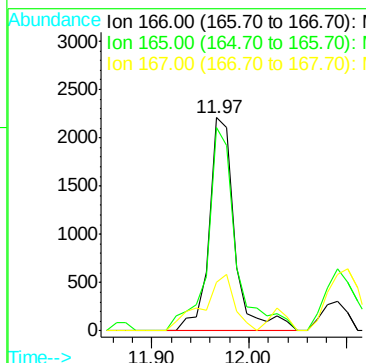
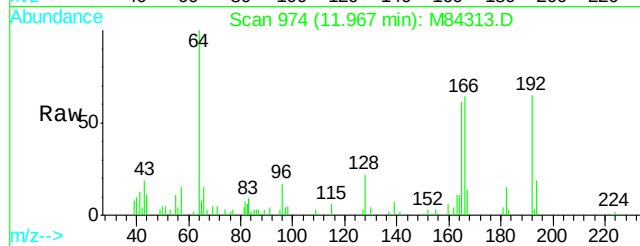
Tgt Ion	Ratio	Lower	Upper
153	100		
152	47.4	18.4	78.4
154	96.2	55.3	115.3





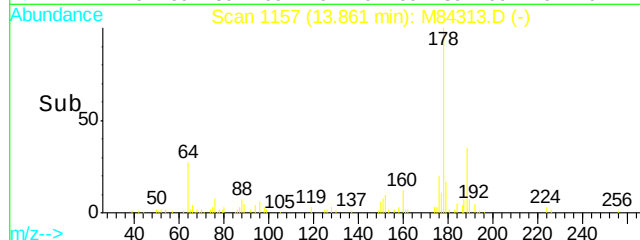
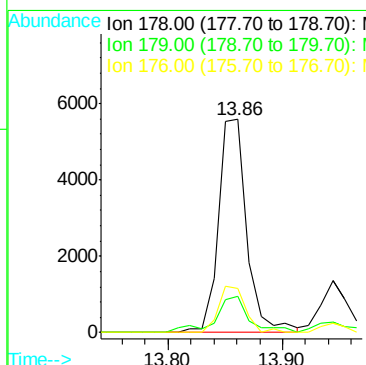
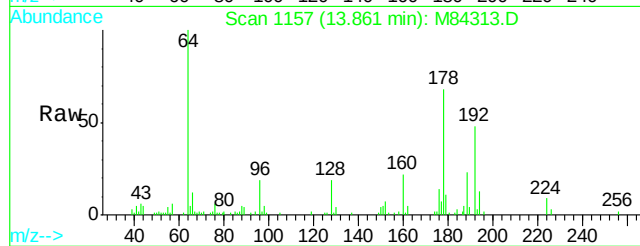
#66
Fluorene
Concen: 1.28 ppb
RT: 11.97 min Scan# 974
Delta R.T. -0.12 min
Lab File: M84313.D
Acq: 14 Jan 2012 12:37 pm

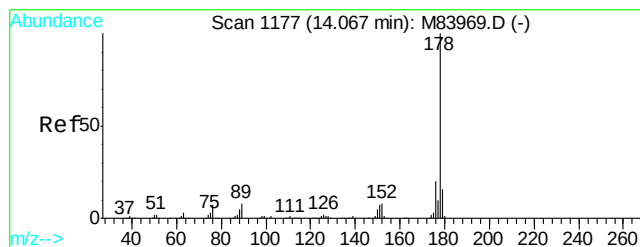
Tgt Ion	Ratio	Lower	Upper
166	100		
165	95.4	63.6	123.6
167	22.7	0.0	44.0



#77
Phenanthrene
Concen: 2.15 ppb
RT: 13.86 min Scan# 1157
Delta R.T. -0.11 min
Lab File: M84313.D
Acq: 14 Jan 2012 12:37 pm

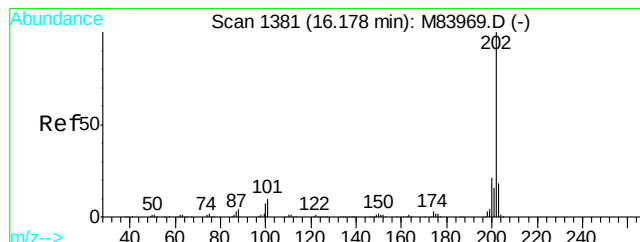
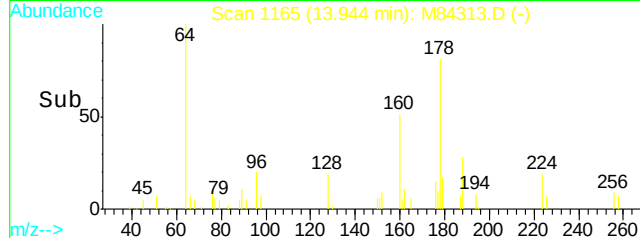
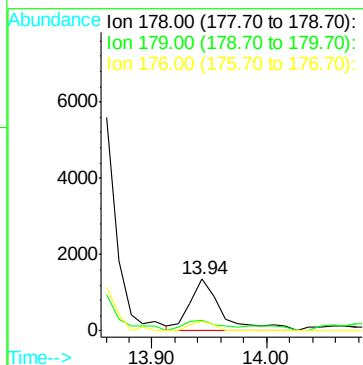
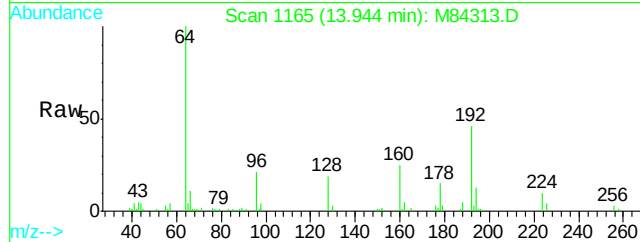
Tgt Ion	Ratio	Lower	Upper
178	100		
179	17.0	0.0	46.1
176	20.7	0.0	50.2





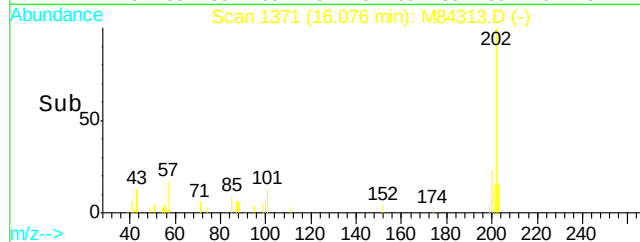
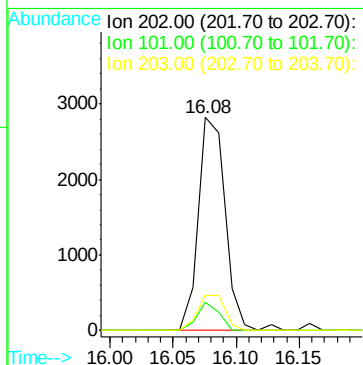
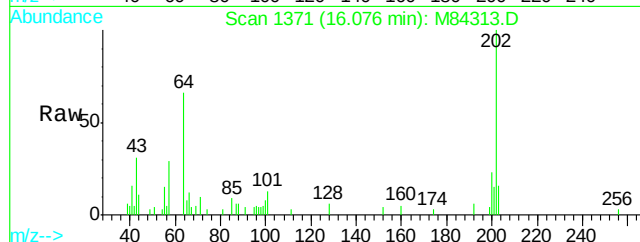
#78
 Anthracene
 Concen: 0.58 ppb
 RT: 13.94 min Scan# 1165
 Delta R.T. -0.12 min
 Lab File: M84313.D
 Acq: 14 Jan 2012 12:37 pm

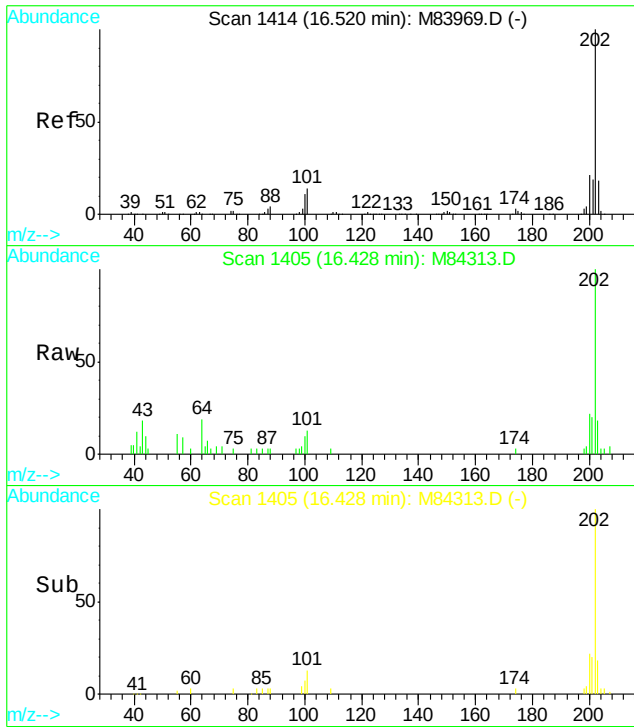
Tgt Ion:	178	Resp:	2614
Ion Ratio	Lower	Upper	
178	100		
179	21.7	0.0	46.1
176	19.5	0.0	49.7



#81
 Fluoranthene
 Concen: 0.78 ppb
 RT: 16.08 min Scan# 1371
 Delta R.T. -0.10 min
 Lab File: M84313.D
 Acq: 14 Jan 2012 12:37 pm

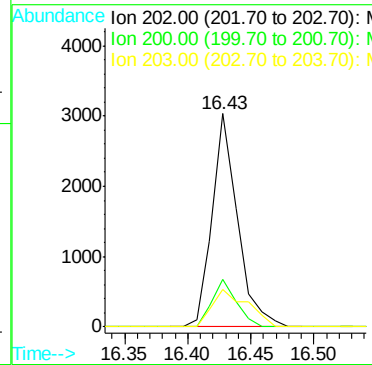
Tgt Ion:	202	Resp:	4182
Ion Ratio	Lower	Upper	
202	100		
101	13.1	0.0	39.9
203	16.4	0.0	47.7





#84
Pyrene
Concen: 0.93 ppb
RT: 16.43 min Scan# 1405
Delta R.T. -0.09 min
Lab File: M84313.D
Acq: 14 Jan 2012 12:37 pm

Tgt Ion:	202	Resp:	4215
Ion Ratio	Lower	Upper	
202	100		
200	22.2	0.0	51.5
203	17.7	0.0	48.2



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3517\R91075.D Vial: 6
 Acq On : 16 Jan 2012 11:26 am Operator: rachelg
 Sample : JA96854-3 Inst : MSR
 Misc : op54208,er3517,900,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 17 9:45 2012 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Jan 12 11:38:55 2012
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.44	152	304802	40.00	ppb	-0.10
24) Naphthalene-d8	10.19	136	1105698	40.00	ppb	-0.11
47) Acenaphthene-d10	14.31	164	577470	40.00	ppb	-0.12
69) Phenanthrene-d10	17.76	188	872494	40.00	ppb	-0.12
83) Chrysene-d12	22.11	240	790216	40.00	ppb	-0.08
92) Perylene-d12	23.63	264	620225	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.44	152	304802	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.31	164	577470	40.00	ppb	-0.12
107) Chrysene-d12a	22.11	240	790216	40.00	ppb	-0.08

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	8.68	82	356498	35.62	ppb	-0.11
Spiked Amount	50.000		Recovery	=	71.24%	
51) 2-Fluorobiphenyl	12.81	172	717147	38.32	ppb	-0.11
Spiked Amount	50.000		Recovery	=	76.64%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	20.84	244	753147	45.19	ppb	-0.08
Spiked Amount	50.000		Recovery	=	90.38%	

Target Compounds

81) Fluoranthene	20.22	202	13008	0.50	ppb	Qvalue 93

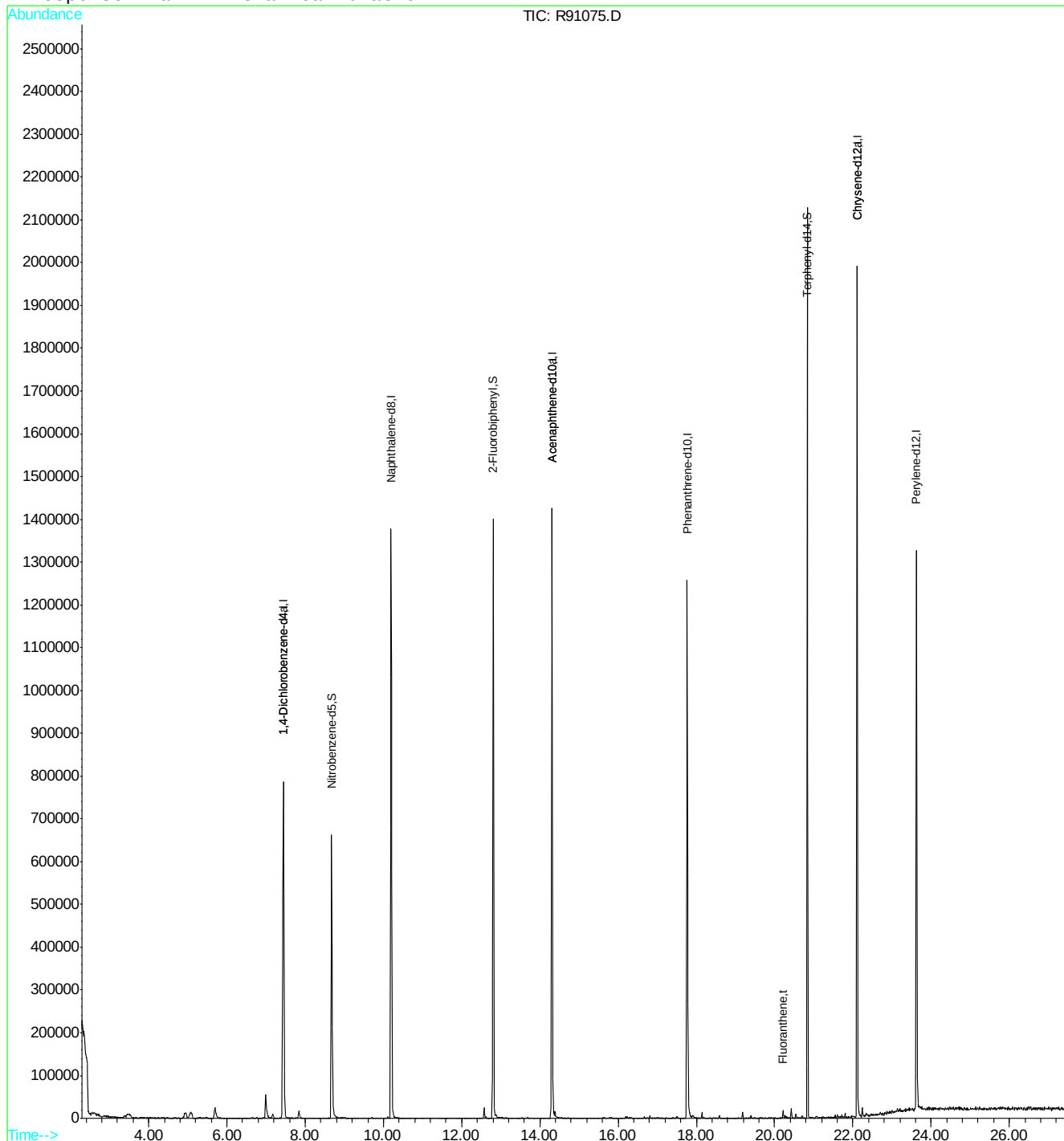
(#) = qualifier out of range (m) = manual integration

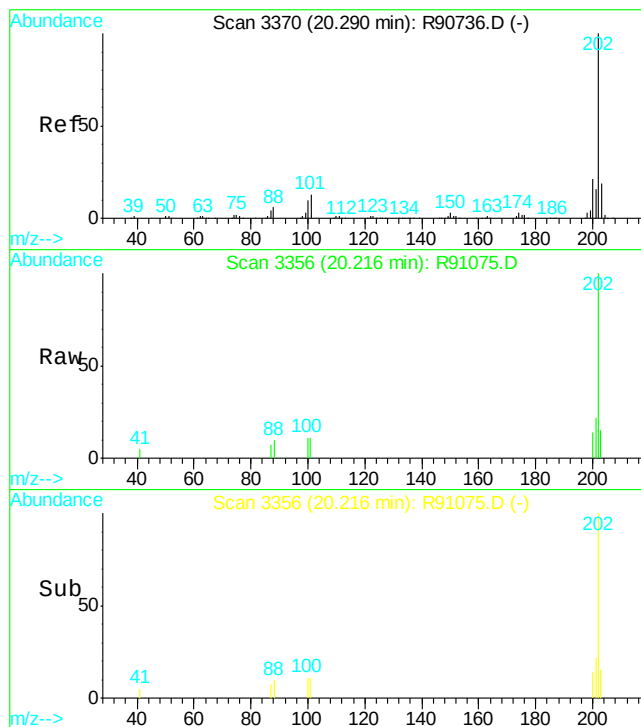
R91075.D MR3499.M Tue Jan 17 09:46:18 2012 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3517\R91075.D Vial: 6
 Acq On : 16 Jan 2012 11:26 am Operator: rachelg
 Sample : JA96854-3 Inst : MSR
 Misc : op54208,er3517,900,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 17 9:45 2012 Quant Results File: MR3499.RES

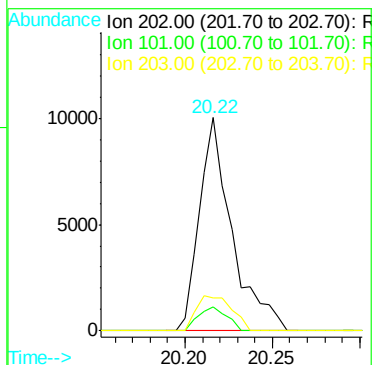
Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Jan 12 11:38:55 2012
 Response via : Initial Calibration





#81
Fluoranthene
Concen: 0.50 ppb
RT: 20.22 min Scan# 3356
Delta R.T. -0.08 min
Lab File: R91075.D
Acq: 16 Jan 2012 11:26 am

Tgt Ion:	202	Resp:	13008
Ion	Ratio	Lower	Upper
202	100		
101	11.1	0.0	43.2
203	15.4	0.0	49.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3517\R91076.D Vial: 7
 Acq On : 16 Jan 2012 11:59 am Operator: rachelg
 Sample : JA96854-4 Inst : MSR
 Misc : op54208,er3517,965,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 17 9:50 2012 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Jan 12 11:38:55 2012
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.44	152	291132	40.00	ppb	-0.11
24) Naphthalene-d8	10.20	136	1047922	40.00	ppb	-0.10
47) Acenaphthene-d10	14.31	164	543086	40.00	ppb	-0.12
69) Phenanthrene-d10	17.76	188	821045	40.00	ppb	-0.12
83) Chrysene-d12	22.11	240	753579	40.00	ppb	-0.08
92) Perylene-d12	23.63	264	608402	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.44	152	291132	40.00	ppb	-0.11
104) Acenaphthene-d10a	14.31	164	543086	40.00	ppb	-0.12
107) Chrysene-d12a	22.11	240	753579	40.00	ppb	-0.08

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	8.68	82	353460	37.26	ppb	-0.11
Spiked Amount	50.000		Recovery	=	74.52%	
51) 2-Fluorobiphenyl	12.81	172	684936	38.91	ppb	-0.11
Spiked Amount	50.000		Recovery	=	77.82%	
73) 2,4,6-Tribromophenol	0.00	330	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	20.84	244	689231	43.36	ppb	-0.08
Spiked Amount	50.000		Recovery	=	86.72%	

Target Compounds

59) Acenaphthene	14.38	153	23548	1.50	ppb	Qvalue 85
81) Fluoranthene	20.22	202	10783	0.44	ppb	95

8.1.4
8

(#) = qualifier out of range (m) = manual integration

R91076.D MR3499.M Tue Jan 17 09:50:35 2012 NJMSR

Page 1

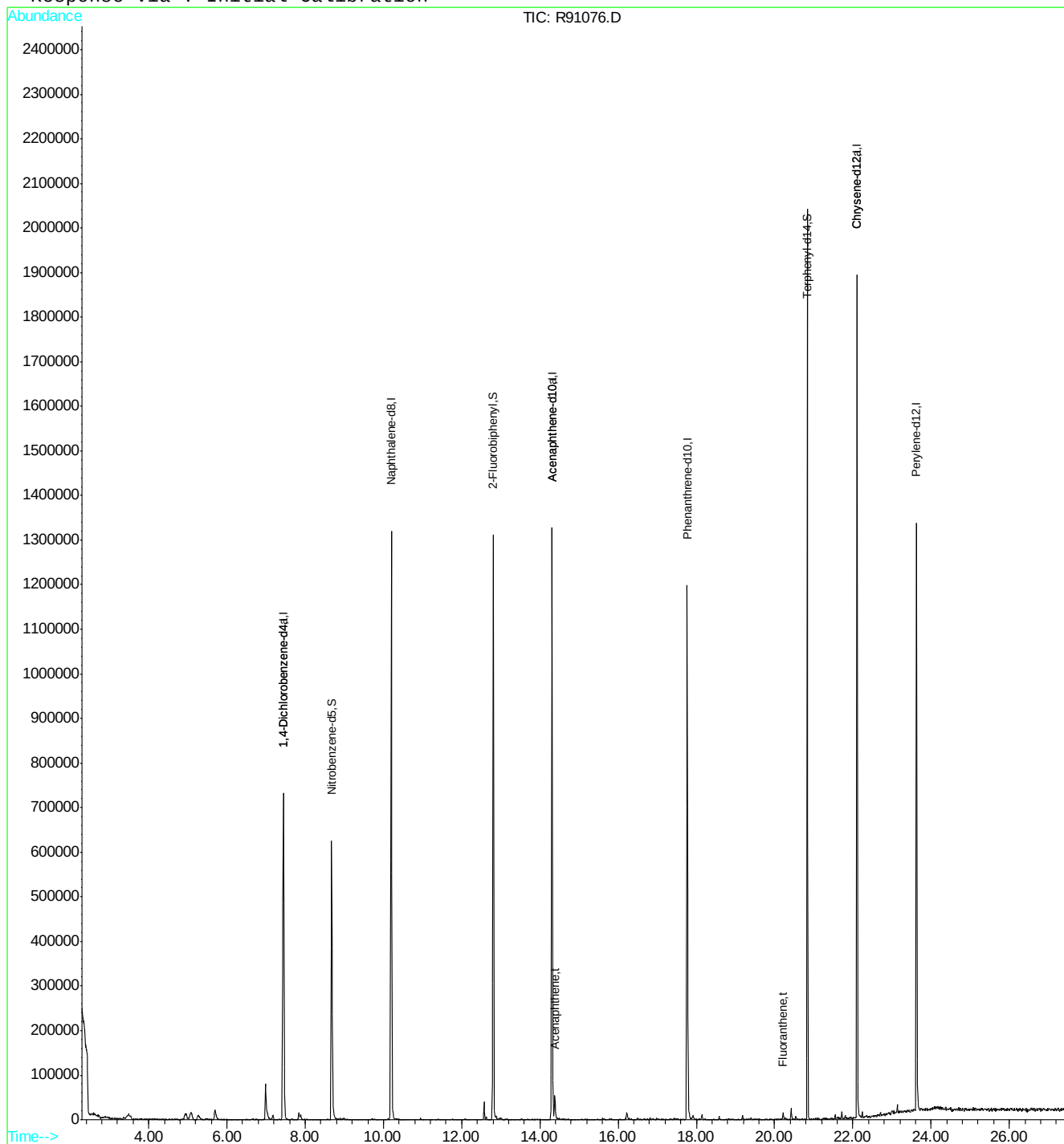
Quantitation Report

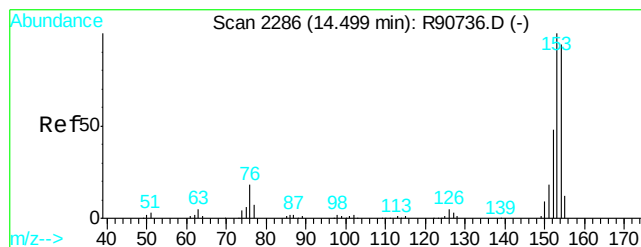
Data File : C:\HPCHEM\1\DATA\ER3517\R91076.D
Acq On : 16 Jan 2012 11:59 am
Sample : JA96854-4
Misc : op54208,er3517,965,,,1,1
MS Integration Params: RTEINT.P
Quant Time: Jan 17 9:50 2012

Vial: 7
Operator: rachelg
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3499.RES

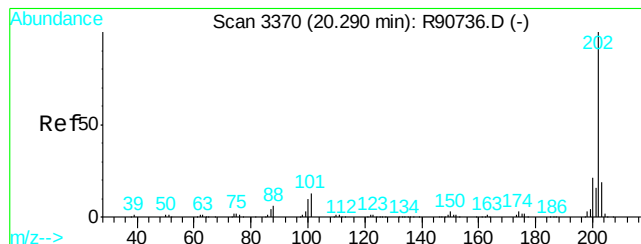
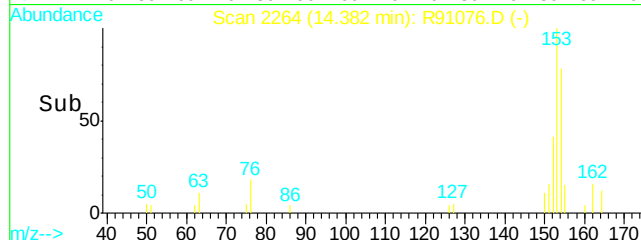
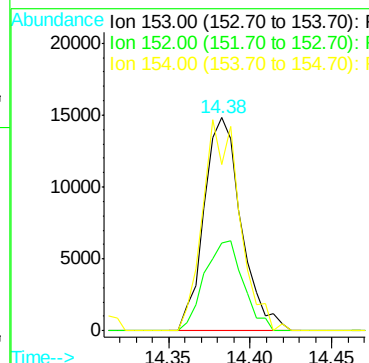
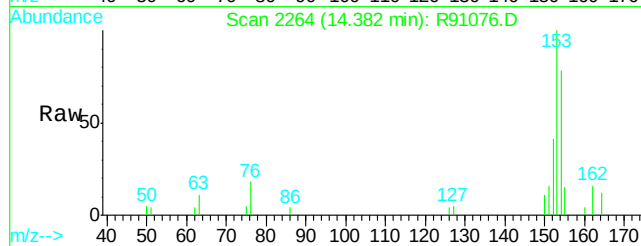
Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Initial Calibration





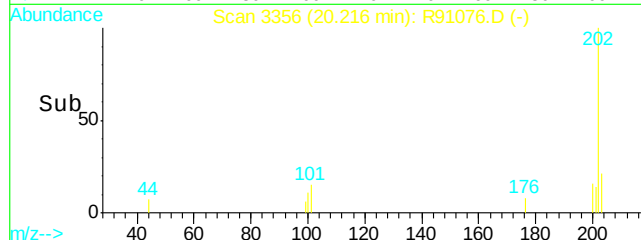
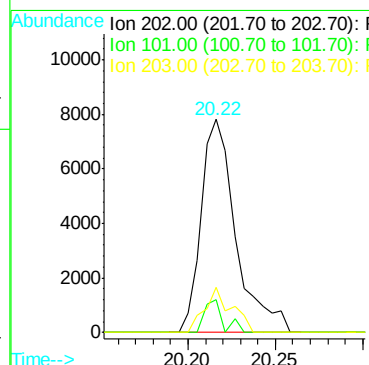
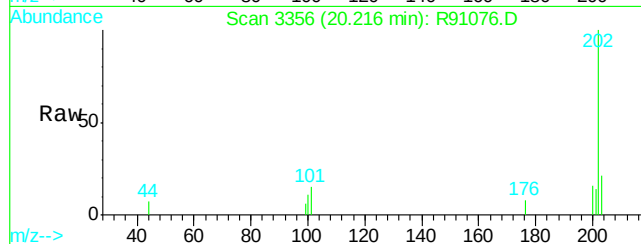
#59
Acenaphthene
Concen: 1.50 ppb
RT: 14.38 min Scan# 2264
Delta R.T. -0.11 min
Lab File: R91076.D
Acq: 16 Jan 2012 11:59 am

Tgt Ion:	153	Resp:	23548
Ion Ratio	Lower	Upper	
153	100		
152	41.4	18.3	78.3
154	77.9	64.2	124.2



#81
Fluoranthene
Concen: 0.44 ppb
RT: 20.22 min Scan# 3356
Delta R.T. -0.08 min
Lab File: R91076.D
Acq: 16 Jan 2012 11:59 am

Tgt Ion:	202	Resp:	10783
Ion Ratio	Lower	Upper	
202	100		
101	15.4	0.0	43.2
203	21.2	0.0	49.1



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84309.D

Vial: 4

Acq On : 14 Jan 2012 10:33 am

Operator: kristis

Sample : op54195-mb1

Inst : MSM

Misc : op54195,em3363,35.0,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 14:01 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.30	152	46381	40.00	ppb	-0.10
24) Naphthalene-d8	7.50	136	170053	40.00	ppb	-0.11
47) Acenaphthene-d10	10.91	164	116212	40.00	ppb	-0.11
69) Phenanthrene-d10	13.81	188	169645	40.00	ppb	-0.12
83) Chrysene-d12	18.22	240	151201	40.00	ppb	-0.09
92) Perylene-d12	19.99	264	100209	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	5.30	152	46381	40.00	ppb	-0.10
104) Acenaphthene-d10a	10.91	164	116212	40.00	ppb	-0.11
106) Phenanthrene-d10a	13.81	188	169645	40.00	ppb	-0.13
110) Chrysene-d12a	18.22	240	151201	40.00	ppb	-0.11
112) Naphthalene-d8a	7.50	136	170053	40.00	ppb	-0.11

System Monitoring Compounds

5) 2-Fluorophenol	3.61	112	63618	38.34	ppb	-0.07
Spiked Amount	50.000		Recovery	=	76.68%	
8) Phenol-d5	4.84	99	75401	37.22	ppb	-0.08
Spiked Amount	50.000		Recovery	=	74.44%	
25) Nitrobenzene-d5	6.25	82	71217	48.92	ppb	-0.11
Spiked Amount	50.000		Recovery	=	97.84%	
51) 2-Fluorobiphenyl	9.63	172	161561	45.45	ppb	-0.12
Spiked Amount	50.000		Recovery	=	90.90%	
73) 2,4,6-Tribromophenol	12.49	330	17215	47.14	ppb	-0.11
Spiked Amount	50.000		Recovery	=	94.28%	
86) Terphenyl-d14	16.76	244	157736	52.88	ppb	-0.08
Spiked Amount	50.000		Recovery	=	105.76%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

M84309.D MM3346.M

Mon Jan 16 14:01:37 2012

GCMSM

Page 1

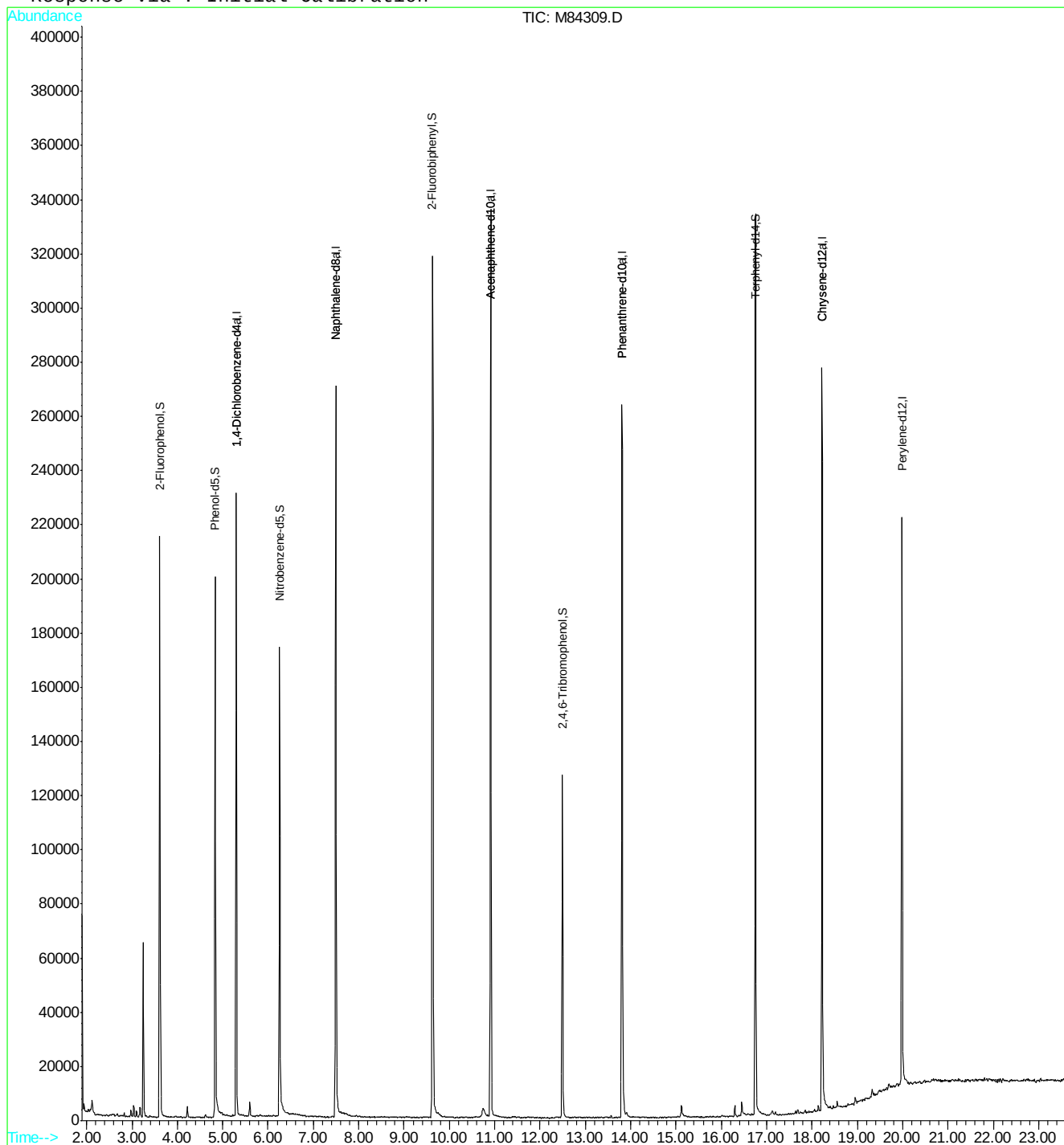
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3363\M84309.D
Acq On : 14 Jan 2012 10:33 am
Sample : op54195-mb1
Misc : op54195,em3363,35.0,,,1,1
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:01 2012

Vial: 4
Operator: kristis
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3517\R91073.D Vial: 4
 Acq On : 16 Jan 2012 10:17 am Operator: rachelg
 Sample : OP54208-MB1 Inst : MSR
 Misc : op54208,er3517,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 17 9:42 2012 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Jan 12 11:38:55 2012
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.44	152	323038	40.00	ppb	-0.11
24) Naphthalene-d8	10.20	136	1109536	40.00	ppb	-0.10
47) Acenaphthene-d10	14.31	164	589046	40.00	ppb	-0.11
69) Phenanthrene-d10	17.76	188	906530	40.00	ppb	-0.12
83) Chrysene-d12	22.11	240	813926	40.00	ppb	-0.08
92) Perylene-d12	23.63	264	616307	40.00	ppb	-0.10
102) 1,4-Dichlorobenzene-d4a	7.44	152	323038	40.00	ppb	-0.11
104) Acenaphthene-d10a	14.31	164	589046	40.00	ppb	-0.11
107) Chrysene-d12a	22.11	240	813926	40.00	ppb	-0.08

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	8.68	82	434218	43.23	ppb	-0.11
Spiked Amount	50.000		Recovery	=	86.46%	
51) 2-Fluorobiphenyl	12.81	172	829363	43.44	ppb	-0.11
Spiked Amount	50.000		Recovery	=	86.88%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	20.84	244	820875	47.82	ppb	-0.08
Spiked Amount	50.000		Recovery	=	95.64%	

Target Compounds

Qvalue

 (#) = qualifier out of range (m) = manual integration

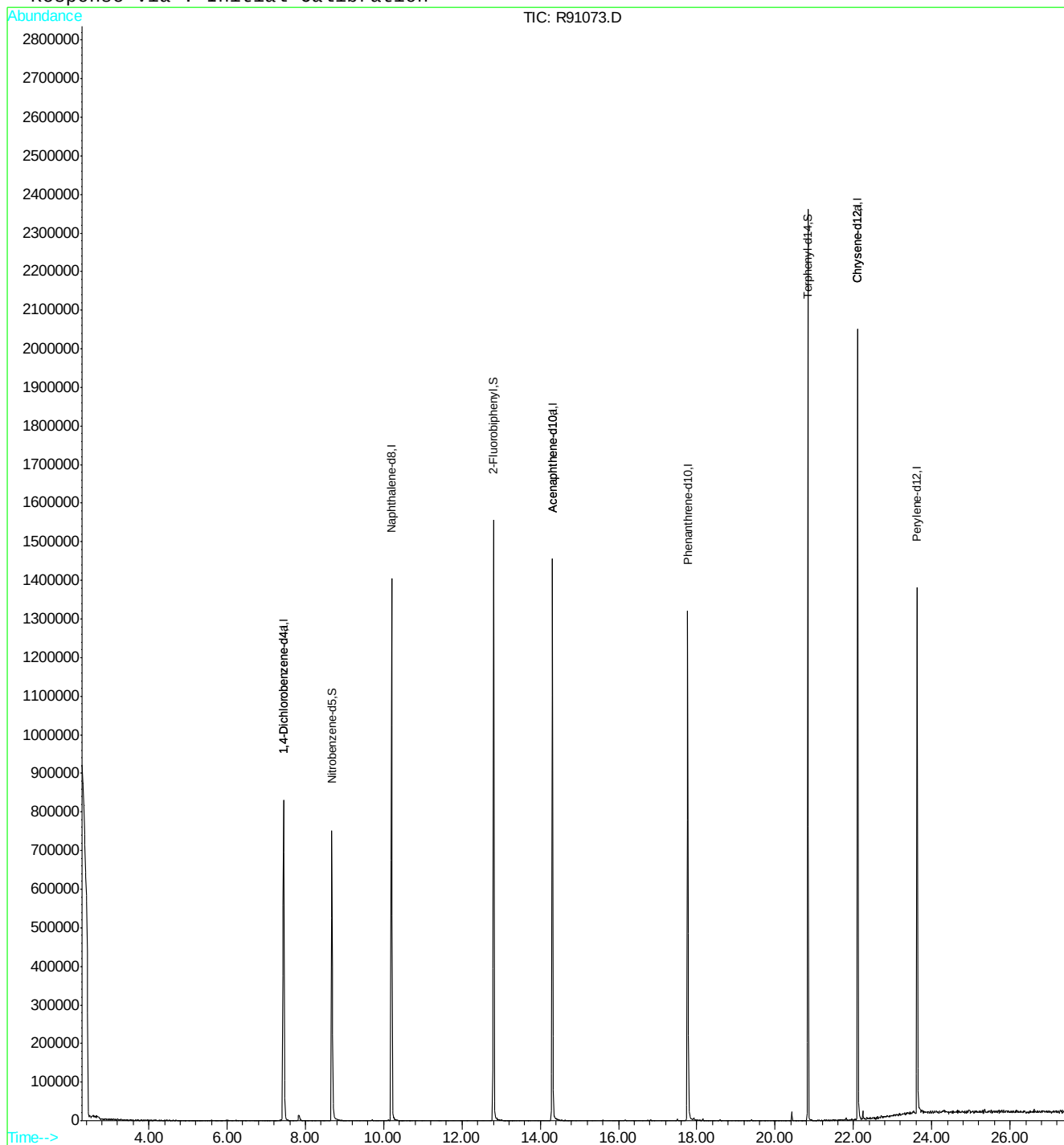
R91073.D MR3499.M Tue Jan 17 09:42:23 2012 NJMSR

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3517\R91073.D Vial: 4
Acq On : 16 Jan 2012 10:17 am Operator: rachelg
Sample : OP54208-MB1 Inst : MSR
Misc : op54208,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 17 9:42 2012 Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84310.D

Vial: 5

Acq On : 14 Jan 2012 11:03 am

Operator: kristis

Sample : op54195-bs1

Inst : MSM

Misc : op54195,em3363,35.0,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 14:08 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.30	152	44567	40.00	ppb	-0.10
24) Naphthalene-d8	7.49	136	170537	40.00	ppb	-0.12
47) Acenaphthene-d10	10.91	164	107456	40.00	ppb	-0.12
69) Phenanthrene-d10	13.82	188	154527	40.00	ppb	-0.12
83) Chrysene-d12	18.23	240	140483	40.00	ppb	-0.08
92) Perylene-d12	19.99	264	94284	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	5.30	152	44567	40.00	ppb	-0.10
104) Acenaphthene-d10a	10.91	164	107456	40.00	ppb	-0.11
106) Phenanthrene-d10a	13.82	188	154527	40.00	ppb	-0.12
110) Chrysene-d12a	18.23	240	140483	40.00	ppb	-0.10
112) Naphthalene-d8a	7.49	136	170537	40.00	ppb	-0.11

System Monitoring Compounds

5) 2-Fluorophenol	3.61	112	52515	32.94	ppb	-0.07
Spiked Amount 50.000			Recovery =	65.88%		
8) Phenol-d5	4.84	99	65414	33.61	ppb	-0.07
Spiked Amount 50.000			Recovery =	67.22%		
25) Nitrobenzene-d5	6.26	82	58422	40.01	ppb	-0.10
Spiked Amount 50.000			Recovery =	80.02%		
51) 2-Fluorobiphenyl	9.64	172	121152	36.86	ppb	-0.12
Spiked Amount 50.000			Recovery =	73.72%		
73) 2,4,6-Tribromophenol	12.50	330	12593	37.86	ppb	-0.10
Spiked Amount 50.000			Recovery =	75.72%		
86) Terphenyl-d14	16.76	244	112504	40.60	ppb	-0.08
Spiked Amount 50.000			Recovery =	81.20%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.13	88	8466	12.15	ppb	92
3) Pyridine	2.39	79	31970	18.74	ppb	77
4) N-Nitrosodimethylamine	2.36	42	45515	38.84	ppb	# 62
6) Indene	5.75	116	91425	34.29	ppb	100
7) Cumene	4.22	105	119961	31.57	ppb	98
9) Phenol	4.85	94	66598	30.72	ppb	# 58
10) Aniline	4.86	93	64550m	28.75	ppb	
11) bis(2-Chloroethyl)ether	4.96	93	44279	31.67	ppb	99
12) 2-Chlorophenol	5.03	128	54292	33.67	ppb	94
13) Decane	5.10	43	89817	37.48	ppb	91
14) 1,3-Dichlorobenzene	5.25	146	60112	32.27	ppb	98
15) 1,4-Dichlorobenzene	5.33	146	60625	32.52	ppb	98
16) Benzyl alcohol	5.57	108	36208	35.28	ppb	95
17) 1,2-Dichlorobenzene	5.62	146	59748	34.24	ppb	99
18) Acetophenone	6.00	105	74361	35.23	ppb	99
19) 2-Methylphenol	5.80	108	47189	34.10	ppb	100
20) 2,2'-oxybis(1-Chloropropan	5.83	121	17195	35.14	ppb	# 60
21) 3&4-Methylphenol	6.04	108	48942	33.00	ppb	93
22) n-Nitroso-di-n-propylamine	6.05	70	36708	35.95	ppb	75
23) Hexachloroethane	6.13	201	22178	34.58	ppb	91
26) Nitrobenzene	6.29	77	57128	37.28	ppb	98
27) Quinoline	8.18	129	105958	35.61	ppb	98
28) Isophorone	6.71	82	102502	38.15	ppb	94

(#) = qualifier out of range (m) = manual integration

M84310.D MM3346.M

Mon Jan 16 14:08:43 2012

GCMSM

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84310.D

Vial: 5

Acq On : 14 Jan 2012 11:03 am

Operator: kristis

Sample : op54195-bs1

Inst : MSM

Misc : op54195,em3363,35.0,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 14:08 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2-Nitrophenol	6.85	139	31196	35.96	ppb	72
30) 2,4-Dimethylphenol	6.98	107	56869	42.25	ppb	92
31) Benzoic acid	7.21	105	41920	42.63	ppb	96
32) bis(2-Chloroethoxy)methane	7.14	93	59360	37.85	ppb	99
33) 2,4-Dichlorophenol	7.30	162	49150	36.73	ppb	96
34) 2,6-Dichlorophenol	7.72	162	46430	35.34	ppb	97
36) 1,2,4-Trichlorobenzene	7.43	180	54471	36.34	ppb	96
38) Naphthalene	7.53	128	156427	35.46	ppb	100
39) 4-Chloroaniline	7.71	127	52945	28.59	ppb	96
40) 2,3-Dichloroaniline	9.48	161	54791	33.79	ppb	98
41) Caprolactam	8.32	55	38387	40.60	ppb	94
42) Hexachlorobutadiene	7.90	225	32540	39.03	ppb	100
43) 4-Chloro-3-methylphenol	8.70	107	47967	38.59	ppb	95
44) 2-Methylnaphthalene	8.85	141	97709	35.41	ppb	96
45) 1-Methylnaphthalene	9.06	142	110809	36.79	ppb	98
46) Dimethylnaphthalene	10.08	156	95466	36.96	ppb	95
48) Hexachlorocyclopentadiene	9.30	237	66998	85.45	ppb	98
49) 2,4,6-Trichlorophenol	9.49	196	34054	34.01	ppb	96
50) 2,4,5-Trichlorophenol	9.56	196	36223	33.58	ppb	99
52) 2-Chloronaphthalene	9.78	162	107040	34.77	ppb	97
53) Biphenyl	9.79	154	132353	36.35	ppb	99
54) 2-Nitroaniline	10.08	65	35285	39.75	ppb	81
55) Dimethylphthalate	10.56	163	116472	34.49	ppb	100
56) Acenaphthylene	10.60	152	157838	33.62	ppb	99
57) 2,6-Dinitrotoluene	10.66	165	26119	34.79	ppb	88
58) 3-Nitroaniline	10.92	138	24250	28.47	ppb	94
59) Acenaphthene	10.97	153	100866	34.15	ppb	94
60) 2,4-Dinitrophenol	11.13	184	23986	55.18	ppb	87
61) 4-Nitrophenol	11.34	109	14323	36.55	ppb #	1
62) Dibenzofuran	11.29	168	144527	33.72	ppb	84
63) 2,4-Dinitrotoluene	11.43	165	35047	35.04	ppb	88
64) 2,3,4,6-Tetrachlorophenol	11.66	232	27041	30.85	ppb	97
65) Diethylphthalate	11.97	149	115034	36.18	ppb	99
66) Fluorene	11.97	166	124381	35.58	ppb	100
67) 4-Chlorophenyl-phenylether	12.03	204	56746	34.11	ppb	94
68) 4-Nitroaniline	12.14	138	27077	31.68	ppb	88
70) 4,6-Dinitro-2-methylphenol	12.23	198	19117	31.57	ppb	84
71) n-Nitrosodiphenylamine	12.29	169	82240	37.45	ppb	100
72) 1,2-Diphenylhydrazine	12.33	77	117098	42.45	ppb	98
74) 4-Bromophenyl-phenylether	12.98	248	30760	38.12	ppb	95
75) Hexachlorobenzene	13.24	284	31226	36.60	ppb	91
76) Pentachlorophenol	13.62	266	18537	32.48	ppb	99
77) Phenanthrene	13.86	178	153575	35.13	ppb	100
78) Anthracene	13.95	178	158208	36.34	ppb	98
79) Carbazole	14.32	167	150650	35.27	ppb	99
80) Di-n-butylphthalate	15.21	149	195975	39.60	ppb	99
81) Fluoranthene	16.08	202	181381	34.60	ppb	99
82) Octadecane	13.80	57	105312	46.69	ppb	94
84) Pyrene	16.44	202	183252	38.29	ppb	99

(#) = qualifier out of range (m) = manual integration

M84310.D MM3346.M

Mon Jan 16 14:08:43 2012

GCMSM

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84310.D Vial: 5
 Acq On : 14 Jan 2012 11:03 am Operator: kristis
 Sample : op54195-bs1 Inst : MSM
 Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Jan 16 14:08 2012 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87) Butylbenzylphthalate	17.55	149	82597	42.52	ppb	79
88) Benzo[a]anthracene	18.21	228	148478	35.56	ppb	99
89) 3,3'-Dichlorobenzidine	18.22	252	47897	34.18	ppb	96
90) Chrysene	18.26	228	137738	36.63	ppb	98
91) bis(2-Ethylhexyl)phthalate	18.40	149	101412	42.17	ppb	98
93) Di-n-octylphthalate	19.15	149	169451	51.81	ppb	88
94) Benzo[b]fluoranthene	19.55	252	116270m	34.26	ppb	
95) Benzo[k]fluoranthene	19.58	252	123167m	49.34	ppb	
96) Benzo[a]pyrene	19.92	252	107626	37.62	ppb	95
97) Indeno[1,2,3-cd]pyrene	21.40	276	112338	37.71	ppb	96
99) Dibenz[a,h]anthracene	21.41	278	91941	37.07	ppb	97
100) 7,12-Dimethylbenz(a)anthra	19.57	256	64298	45.51	ppb	92
101) Benzo[g,h,i]perylene	21.79	276	89580	36.12	ppb	97
103) Benzaldehyde	4.67	105	38261	35.56	ppb	94
105) 1,2,4,5-Tetrachlorobenzene	9.26	216	55787	39.05	ppb	98
107) Atrazine	13.47	215	17614	41.78	ppb #	83
111) Benzidine	16.35	184	30338	14.81	ppb	98

(#) = qualifier out of range (m) = manual integration

M84310.D MM3346.M Mon Jan 16 14:08:44 2012 GCMSM

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Quantitation Report

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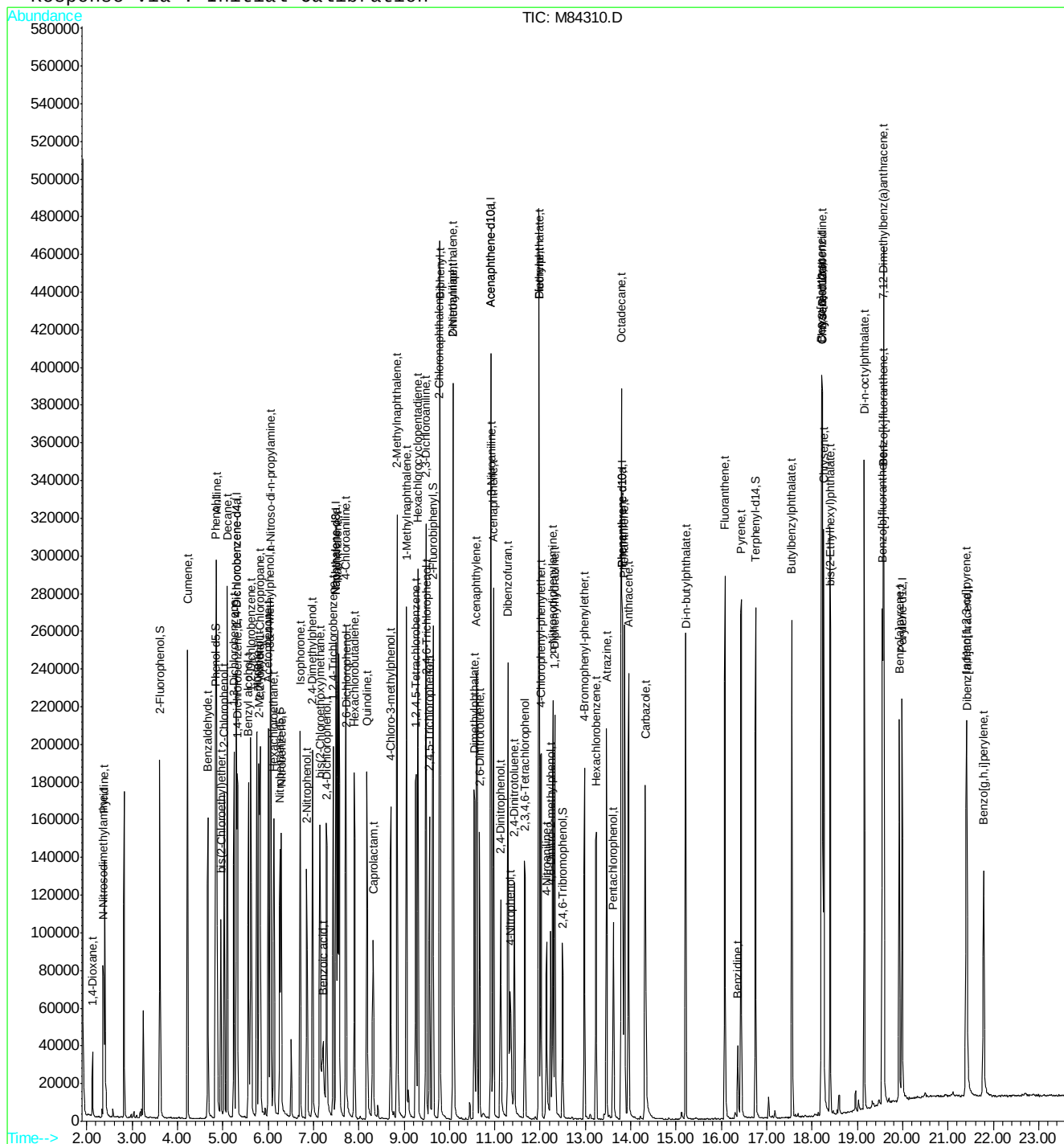
Data File   : C:\HPCHEM\1\DATA\EM3363\M84310.D
Acq On      : 14 Jan 2012  11:03 am
Sample      : op54195-bs1
Misc        : op54195,em3363,35.0,,,1,1
MS Integration Params: LSCINT.P
Quant Time  : Jan 16 14:08 2012

```

```
Vial: 5
Operator: kristis
Inst      : MSM
Multiplr: 1.00
```

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M84310.D MM3346.M

Mon Jan 16 14:08:45 2012

GCMSSM

Page 4

Manual Integration Approval Summary

Sample Number: OP54195-BS1

Method: SW846 8270D

Lab FileID: M84310.D

Analyst approved: 01/16/12 15:42 Olga Azarihn

Injection Time: 01/14/12 11:03

Supervisor approved: 01/16/12 15:50 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Aniline	62-53-3		4.86	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		19.55	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.58	Overlapping peak

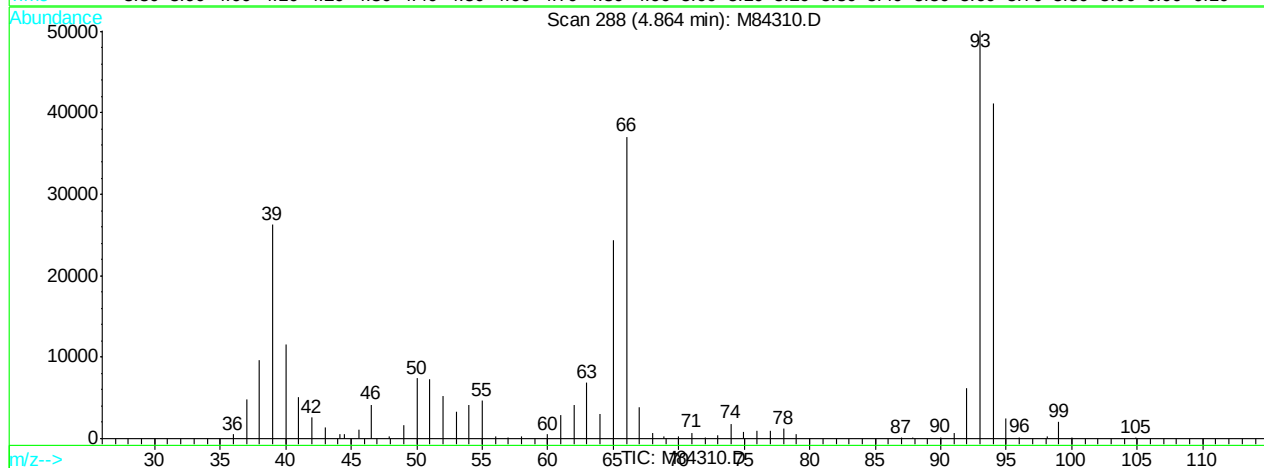
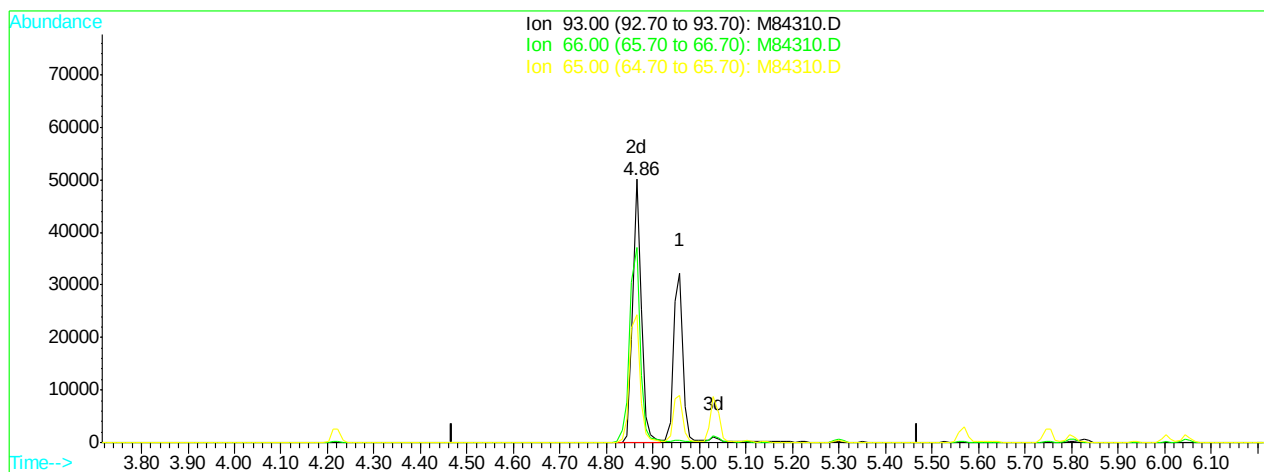
8.3.1.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84310.D Vial: 5
Acq On : 14 Jan 2012 11:03 am Operator: kristis
Sample : op54195-bs1 Inst : MSM
Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:08 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(10) Aniline (t)

4.86min 28.75ppb m

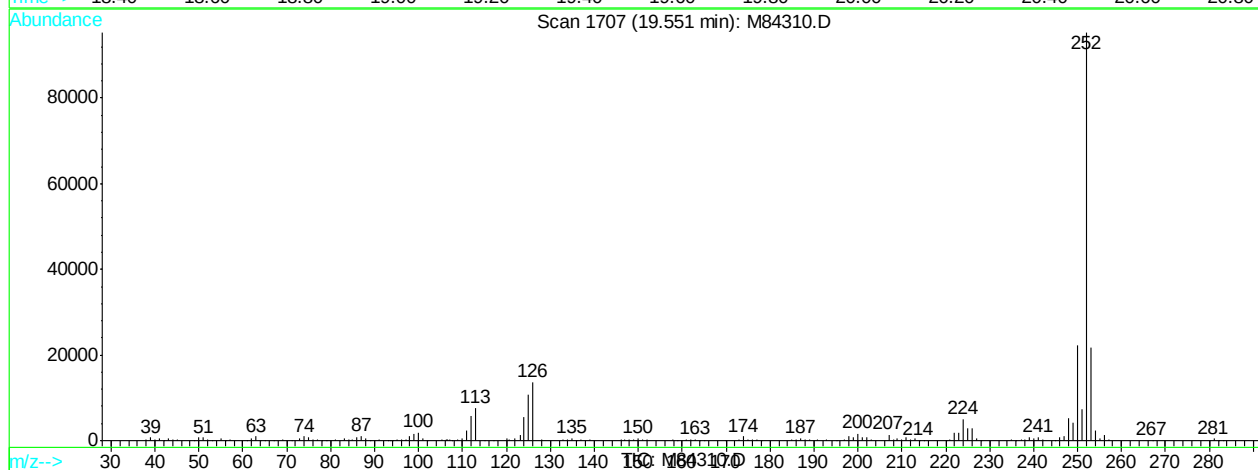
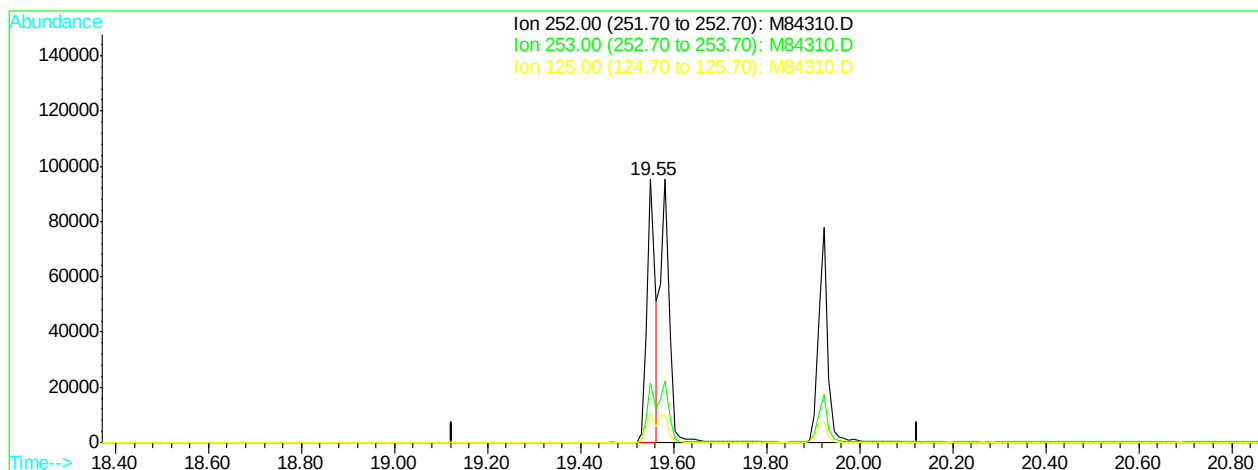
response 64550

Ion	Exp%	Act%
93.00	100	100
66.00	18.80	73.92#
65.00	5.10	48.53#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84310.D Vial: 5
Acq On : 14 Jan 2012 11:03 am Operator: kristis
Sample : op54195-bs1 Inst : MSM
Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:08 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.55min 34.26ppb m

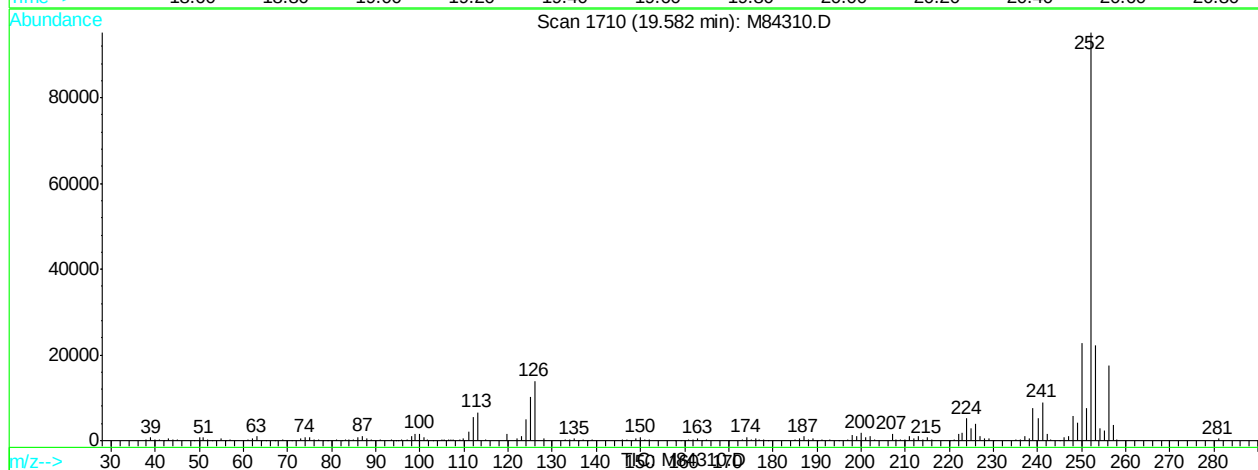
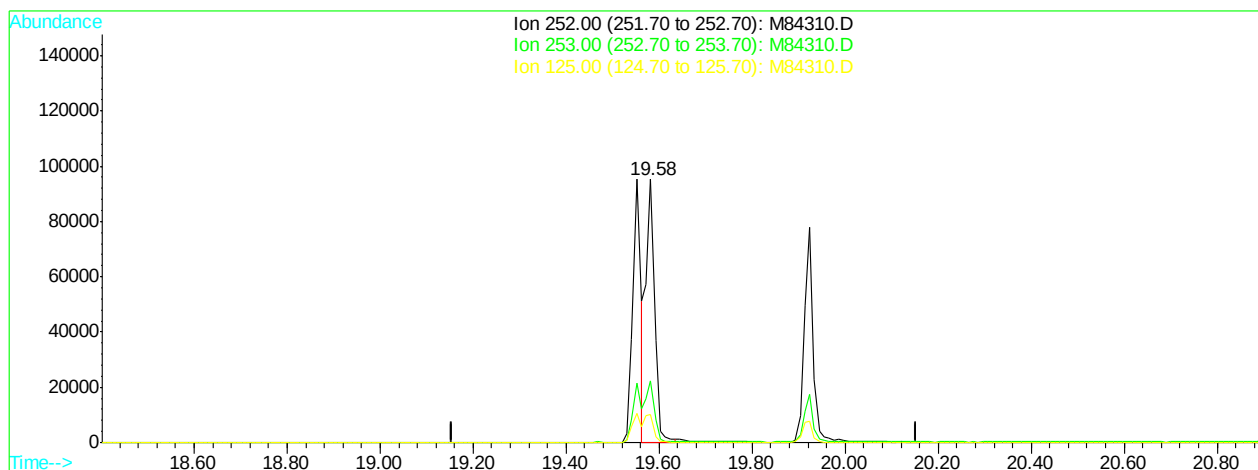
response 116270

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.77
125.00	9.90	11.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84310.D Vial: 5
Acq On : 14 Jan 2012 11:03 am Operator: kristis
Sample : op54195-bs1 Inst : MSM
Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:08 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.58min 49.34ppb m

response 123167

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	23.33
125.00	10.60	10.66
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91054.D

Vial: 5

Acq On : 14 Jan 2012 2:00 pm

Operator: kristis

Sample : op54208-bs1

Inst : MSR

Misc : op54208,er3516,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 24 13:13 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Jan 18 11:28:10 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.44	152	290112	40.00	ppb	-0.10
24) Naphthalene-d8	10.20	136	1030834	40.00	ppb	-0.10
47) Acenaphthene-d10	14.32	164	571187	40.00	ppb	-0.11
69) Phenanthrene-d10	17.77	188	891885	40.00	ppb	-0.11
83) Chrysene-d12	22.12	240	845228	40.00	ppb	-0.07
92) Perylene-d12	23.64	264	768787	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	7.44	152	290112	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.32	164	571187	40.00	ppb	-0.11
107) Chrysene-d12a	22.12	240	845228	40.00	ppb	-0.07

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	8.68	82	409538	43.89	ppb	-0.10
Spiked Amount	50.000		Recovery	=	87.78%	
51) 2-Fluorobiphenyl	12.81	172	835392	45.13	ppb	-0.10
Spiked Amount	50.000		Recovery	=	90.26%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	20.84	244	846354	47.47	ppb	-0.08
Spiked Amount	50.000		Recovery	=	94.94%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.74	88	41034	9.38	ppb	72
3) Pyridine	3.18	79	193451m	19.70	ppb	
4) N-Nitrosodimethylamine	3.19	42	66735	14.09	ppb	92
6) Indene	8.02	116	712937	41.93	ppb	99
7) Cumene	5.99	105	1025487	40.26	ppb	99
10) Aniline	6.90	93	277784	20.60	ppb	92
11) bis(2-Chloroethyl)ether	7.04	93	347119	39.43	ppb	94
13) Decane	7.25	43	396976	34.56	ppb	94
14) 1,3-Dichlorobenzene	7.37	146	461290	37.50	ppb	99
15) 1,4-Dichlorobenzene	7.48	146	459616	38.08	ppb	92
16) Benzyl alcohol	7.85	108	112797	21.96	ppb	88
17) 1,2-Dichlorobenzene	7.86	146	445290	39.28	ppb	99
18) Acetophenone	8.37	105	575116	46.07	ppb	96
20) 2,2'-oxybis(1-Chloropropan	8.17	121	131051	40.18	ppb	# 81
22) n-Nitroso-di-n-propylamine	8.46	70	249920	46.33	ppb	96
23) Hexachloroethane	8.49	201	150161	38.70	ppb	98
26) Nitrobenzene	8.72	77	399941	41.62	ppb	98
27) Quinoline	11.03	129	800702	44.08	ppb	97
28) Isophorone	9.24	82	721915	43.87	ppb	99
32) bis(2-Chloroethoxy)methane	9.82	93	441799	45.01	ppb	98
36) 1,2,4-Trichlorobenzene	10.13	180	380931	40.73	ppb	99
38) Naphthalene	10.25	128	1105617	39.81	ppb	100
39) 4-Chloroaniline	10.50	127	324931	29.64	ppb	97
40) 2,3-Dichloroaniline	12.63	161	421136	45.35	ppb	97
41) Caprolactam	11.17	55	14158	4.20	ppb	90

(#) = qualifier out of range (m) = manual integration

R91054.D MR3499.M

Tue Jan 24 13:13:22 2012

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91054.D

Vial: 5

Acq On : 14 Jan 2012 2:00 pm

Operator: kristis

Sample : op54208-bs1

Inst : MSR

Misc : op54208,er3516,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 24 13:13 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Jan 18 11:28:10 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) Hexachlorobutadiene	10.72	225	232428	44.97	ppb	99
44) 2-Methylnaphthalene	11.85	142	813207	39.02	ppb	100
45) 1-Methylnaphthalene	12.09	142	823928	43.55	ppb	99
46) Dimethylnaphthalene	13.34	156	743598	44.38	ppb	98
48) Hexachlorocyclopentadiene	12.41	237	317654	87.02	ppb	94
52) 2-Chloronaphthalene	12.97	162	721711	42.57	ppb	96
53) Biphenyl	13.00	154	959272	43.98	ppb	98
54) 2-Nitroaniline	13.37	65	210569	49.96	ppb	97
55) Dimethylphthalate	13.94	163	680203	37.56	ppb	98
56) Acenaphthylene	13.94	152	1116285	41.58	ppb	99
57) 2,6-Dinitrotoluene	14.05	165	195717	49.22	ppb	96
58) 3-Nitroaniline	14.37	138	178034	42.28	ppb	99
59) Acenaphthene	14.39	153	724843	43.95	ppb	98
62) Dibenzofuran	14.78	168	1004652	43.77	ppb	97
63) 2,4-Dinitrotoluene	14.96	165	258771	48.28	ppb	99
65) Diethylphthalate	15.64	149	781663	42.71	ppb	99
66) Fluorene	15.59	166	877049	46.41	ppb	98
67) 4-Chlorophenyl-phenylether	15.67	204	391902	45.10	ppb	98
68) 4-Nitroaniline	15.83	138	184935	42.12	ppb	91
71) n-Nitrosodiphenylamine	15.99	169	604804	45.54	ppb	99
72) 1,2-Diphenylhydrazine	16.03	77	746669	44.41	ppb	99
74) 4-Bromophenyl-phenylether	16.80	248	259403	49.76	ppb	94
75) Hexachlorobenzene	17.08	284	276377	47.78	ppb	93
77) Phenanthrene	17.83	178	1156408	41.91	ppb	99
78) Anthracene	17.93	178	1228729	46.51	ppb	99
79) Carbazole	18.40	167	1094554	45.77	ppb	99
80) Di-n-butylphthalate	19.40	149	1371815	46.78	ppb	98
81) Fluoranthene	20.21	202	1225276	46.12	ppb	98
82) Octadecane	17.83	57	481199	43.67	ppb	97
84) Pyrene	20.53	202	1211023	37.80	ppb	99
87) Butylbenzylphthalate	21.55	149	587499	41.84	ppb	99
88) Benzo[a]anthracene	22.10	228	1130955	40.24	ppb	98
89) 3,3'-Dichlorobenzidine	22.10	252	291018	38.41	ppb	97
90) Chrysene	22.15	228	1045633	38.81	ppb	98
91) bis(2-Ethylhexyl)phthalate	22.25	149	780128	44.90	ppb	97
93) Di-n-octylphthalate	22.87	149	1281004	43.79	ppb	99
94) Benzo[b]fluoranthene	23.24	252	1206323	43.25	ppb	99
95) Benzo[k]fluoranthene	23.27	252	994343m	54.17	ppb	
96) Benzo[a]pyrene	23.58	252	1018242	45.36	ppb	98
97) Indeno[1,2,3-cd]pyrene	24.95	276	958861	51.19	ppb	100
99) Dibenz[a,h]anthracene	24.96	278	809733	45.65	ppb	95
100) 7,12-Dimethylbenz(a)anthra	23.25	256	603860	51.91	ppb	96
101) Benzo[g,h,i]perylene	25.32	276	773713	47.32	ppb	95
103) Benzaldehyde	6.61	105	309778	47.96	ppb	94
105) 1,2,4,5-Tetrachlorobenzene	12.34	216	378017	51.42	ppb	95
106) Atrazine	17.43	215	133322	56.08	ppb	95
108) Benzidine	20.49	184	256088	23.76	ppb	99

(#) = qualifier out of range (m) = manual integration

R91054.D MR3499.M

Tue Jan 24 13:13:22 2012

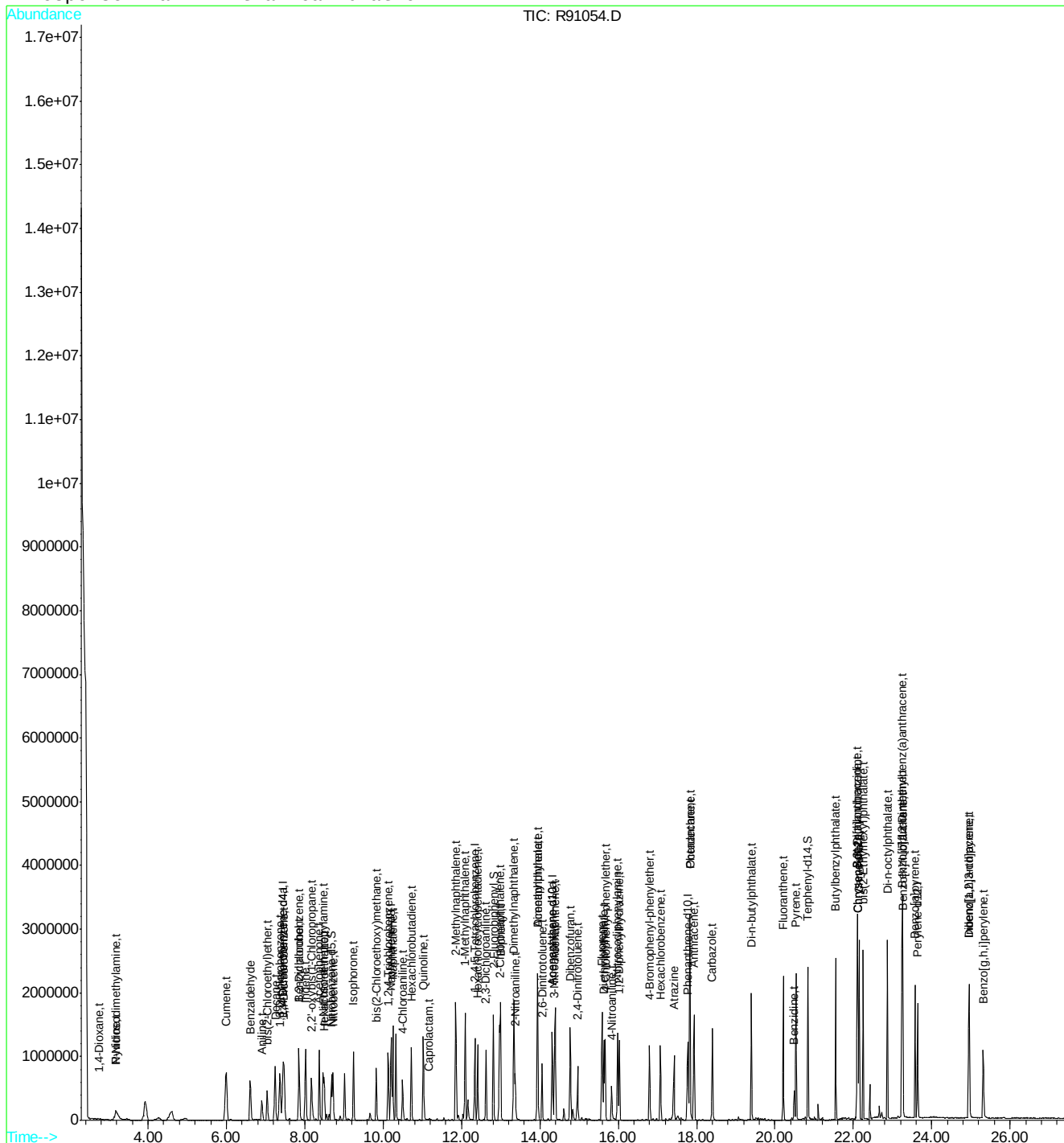
NJMSR

Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3516\R91054.D Vial: 5
Acq On : 14 Jan 2012 2:00 pm Operator: kristis
Sample : op54208-bs1 Inst : MSR
Misc : op54208,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 13:13 2012 Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 12:59:48 2012
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:

OP54208-BS1

Lab FileID:

R91054.D

Injection Time:

01/14/12 14:00

Method:

SW846 8270D

Analyst approved:

01/24/12 08:52 Rachel Gregor

Supervisor approved:

01/24/12 12:52 Kristi Schollenberger

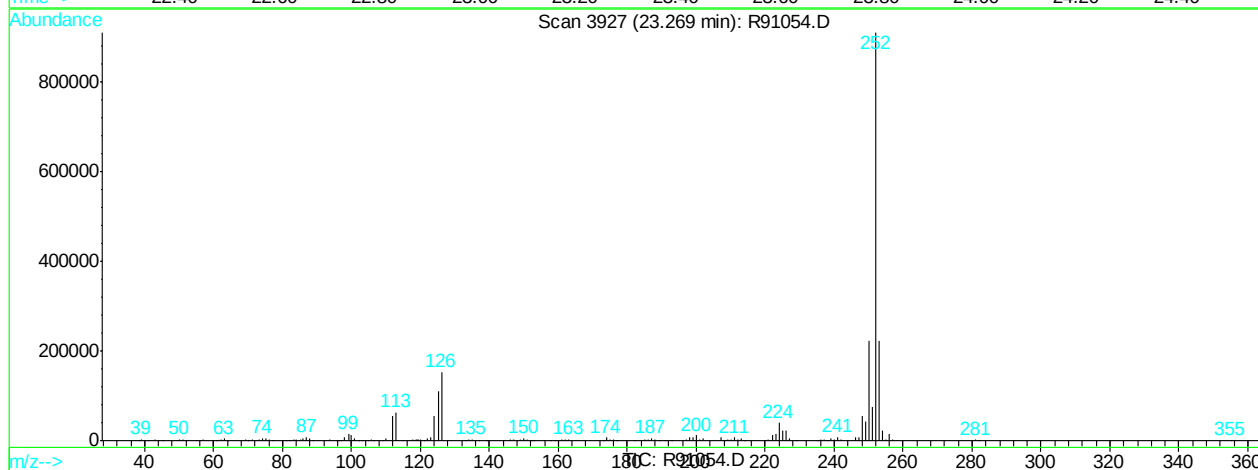
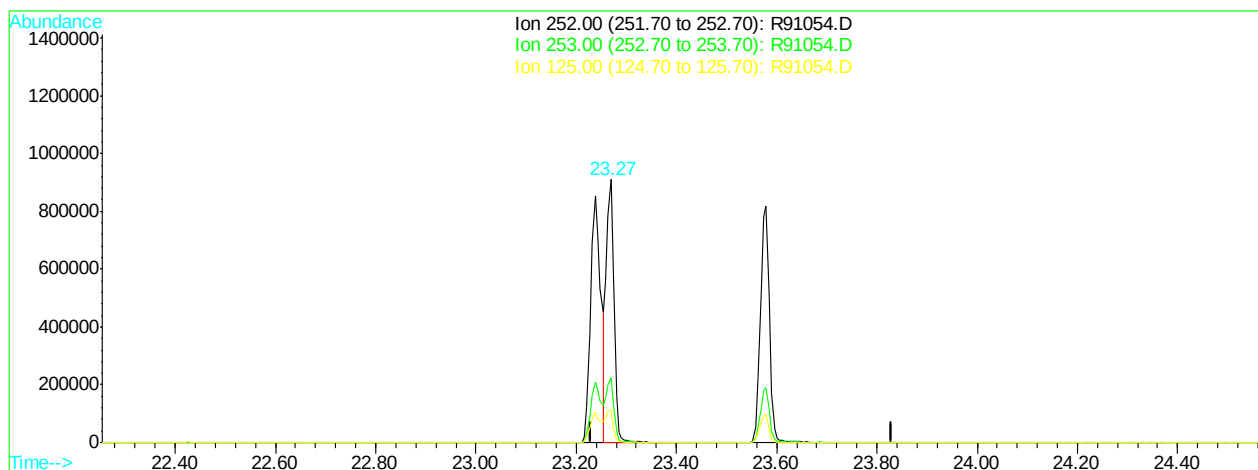
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pyridine	110-86-1		3.18	Split peak
Benzo(k)fluoranthene	207-08-9		23.27	Overlapping peak

8.3.2.1
8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91054.D Vial: 5
Acq On : 14 Jan 2012 2:00 pm Operator: kristis
Sample : op54208-bs1 Inst : MSR
Misc : op54208,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 13:09 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 12:59:48 2012
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

23.27min 54.17ppb m

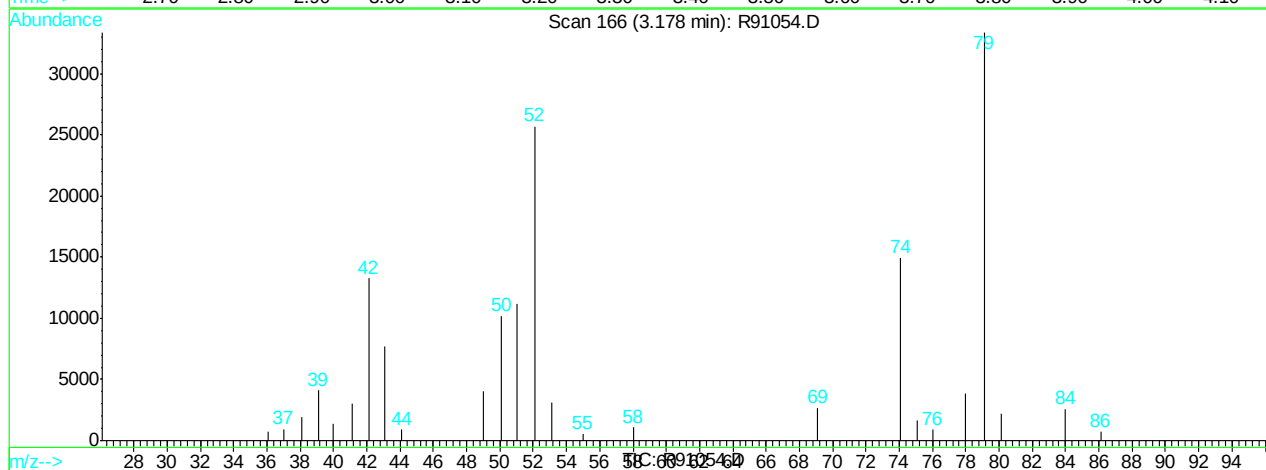
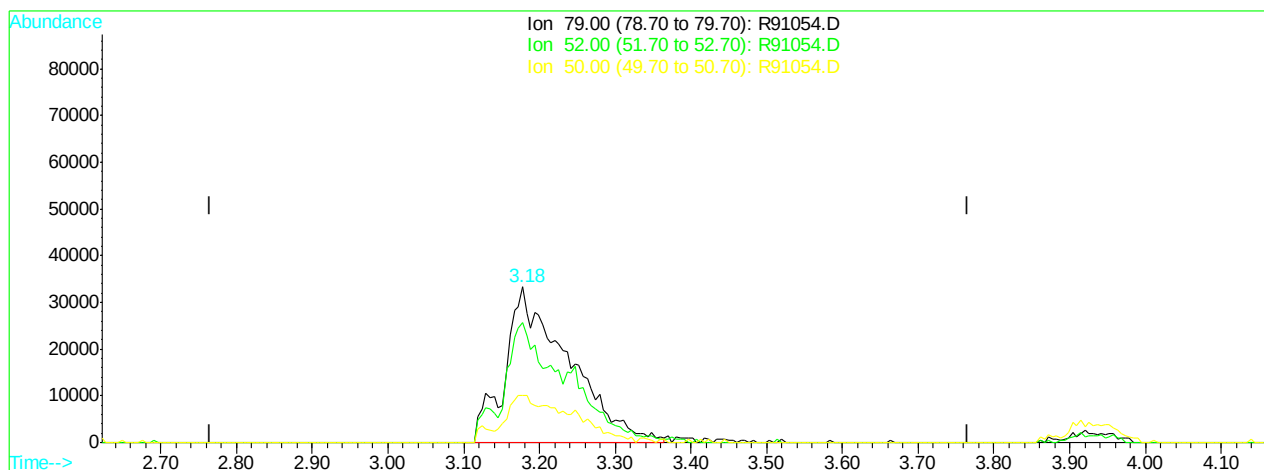
response 994343

Ion	Exp%	Act%
252.00	100	100
253.00	23.60	24.53
125.00	12.30	11.97
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91054.D Vial: 5
Acq On : 14 Jan 2012 2:00 pm Operator: kristis
Sample : op54208-bs1 Inst : MSR
Misc : op54208,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 13:09 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 12:59:48 2012
Response via : Multiple Level Calibration



(3) Pyridine (t)

3.18min 19.70ppb m

response 193451

Ion	Exp%	Act%
79.00	100	100
52.00	72.90	76.97
50.00	27.40	30.59
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84318.D

Vial: 13

Acq On : 14 Jan 2012 3:19 pm

Operator: kristis

Sample : op54195-ms

Inst : MSM

Misc : op54195,em3363,35.0,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 14:19 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.30	152	45318	40.00	ppb	-0.11
24) Naphthalene-d8	7.50	136	169046	40.00	ppb	-0.11
47) Acenaphthene-d10	10.91	164	98682	40.00	ppb	-0.12
69) Phenanthrene-d10	13.82	188	137902	40.00	ppb	-0.12
83) Chrysene-d12	18.22	240	104044	40.00	ppb	-0.09
92) Perylene-d12	19.99	264	74529	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	5.30	152	45318	40.00	ppb	-0.10
104) Acenaphthene-d10a	10.91	164	98682	40.00	ppb	-0.11
106) Phenanthrene-d10a	13.82	188	137902	40.00	ppb	-0.12
110) Chrysene-d12a	18.22	240	104044	40.00	ppb	-0.10
112) Naphthalene-d8a	7.50	136	169046	40.00	ppb	-0.10

System Monitoring Compounds

5) 2-Fluorophenol	3.62	112	56134	34.62	ppb	-0.06
Spiked Amount 50.000			Recovery =	69.24%		
8) Phenol-d5	4.85	99	68378	34.55	ppb	-0.06
Spiked Amount 50.000			Recovery =	69.10%		
25) Nitrobenzene-d5	6.26	82	59661	41.22	ppb	-0.11
Spiked Amount 50.000			Recovery =	82.44%		
51) 2-Fluorobiphenyl	9.63	172	123546	40.93	ppb	-0.12
Spiked Amount 50.000			Recovery =	81.86%		
73) 2,4,6-Tribromophenol	12.50	330	12993	43.77	ppb	-0.11
Spiked Amount 50.000			Recovery =	87.54%		
86) Terphenyl-d14	16.76	244	102896	50.13	ppb	-0.09
Spiked Amount 50.000			Recovery =	100.26%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.14	88	8712	12.30	ppb	81
3) Pyridine	2.40	79	39122	22.55	ppb	76
4) N-Nitrosodimethylamine	2.39	42	52975	44.46	ppb #	67
6) Indene	5.75	116	98270	36.25	ppb	99
7) Cumene	4.21	105	117078	30.30	ppb	96
9) Phenol	4.86	94	75155	34.10	ppb #	42
10) Aniline	4.87	93	79544m	34.85	ppb	
11) bis(2-Chloroethyl)ether	4.96	93	50601	35.59	ppb	98
12) 2-Chlorophenol	5.04	128	59160	36.08	ppb	98
13) Decane	5.09	43	79620	32.68	ppb	87
14) 1,3-Dichlorobenzene	5.25	146	64308	33.95	ppb	99
15) 1,4-Dichlorobenzene	5.33	146	65117	34.35	ppb	98
16) Benzyl alcohol	5.58	108	41598	39.87	ppb	96
17) 1,2-Dichlorobenzene	5.62	146	64240	36.20	ppb	98
18) Acetophenone	6.00	105	80585	37.55	ppb	96
19) 2-Methylphenol	5.80	108	50766	36.08	ppb	99
20) 2,2'-oxybis(1-Chloropropan	5.83	121	19440	39.07	ppb #	48
21) 3&4-Methylphenol	6.05	108	53766	35.65	ppb	97
22) n-Nitroso-di-n-propylamine	6.06	70	42048	40.50	ppb	81
23) Hexachloroethane	6.13	201	23321	35.76	ppb	87
26) Nitrobenzene	6.29	77	62437	41.11	ppb	97
27) Quinoline	8.19	129	115242	39.07	ppb	99
28) Isophorone	6.71	82	116167	43.62	ppb	90

(#) = qualifier out of range (m) = manual integration

M84318.D MM3346.M

Mon Jan 16 14:19:48 2012

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84318.D

Vial: 13

Acq On : 14 Jan 2012 3:19 pm

Operator: kristis

Sample : op54195-ms

Inst : MSM

Misc : op54195,em3363,35.0,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 14:19 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2-Nitrophenol	6.86	139	33974	39.51	ppb	78
30) 2,4-Dimethylphenol	6.98	107	62806	47.07	ppb	95
31) Benzoic acid	7.23	105	49274	50.55	ppb	98
32) bis(2-Chloroethoxy)methane	7.14	93	68100	43.81	ppb	99
33) 2,4-Dichlorophenol	7.30	162	52162	39.33	ppb	98
34) 2,6-Dichlorophenol	7.72	162	50435	38.72	ppb	98
36) 1,2,4-Trichlorobenzene	7.43	180	60394	40.64	ppb	96
38) Naphthalene	7.53	128	178106	40.73	ppb	99
39) 4-Chloroaniline	7.71	127	66819	36.40	ppb	95
40) 2,3-Dichloroaniline	9.48	161	62448	38.85	ppb	100
41) Caprolactam	8.32	55	42387	45.23	ppb	94
42) Hexachlorobutadiene	7.91	225	35691	43.19	ppb	98
43) 4-Chloro-3-methylphenol	8.70	107	51884	42.11	ppb	93
44) 2-Methylnaphthalene	8.85	141	110632	40.45	ppb	96
45) 1-Methylnaphthalene	9.05	142	124216	41.60	ppb	98
46) Dimethylnaphthalene	10.08	156	104674	40.88	ppb	96
48) Hexachlorocyclopentadiene	9.31	237	59928	83.23	ppb	99
49) 2,4,6-Trichlorophenol	9.49	196	37414	40.69	ppb	96
50) 2,4,5-Trichlorophenol	9.56	196	40483	40.87	ppb	98
52) 2-Chloronaphthalene	9.79	162	117575	41.59	ppb	98
53) Biphenyl	9.79	154	142308	42.56	ppb	99
54) 2-Nitroaniline	10.09	65	39429	48.37	ppb	90
55) Dimethylphthalate	10.56	163	131765	42.49	ppb	100
56) Acenaphthylene	10.61	152	181709	42.14	ppb	99
57) 2,6-Dinitrotoluene	10.66	165	29221	42.38	ppb	84
58) 3-Nitroaniline	10.92	138	29673	37.94	ppb	95
59) Acenaphthene	10.97	153	112071	41.32	ppb	95
60) 2,4-Dinitrophenol	11.12	184	18636	46.68	ppb	83
61) 4-Nitrophenol	11.35	109	16454	45.72	ppb #	1
62) Dibenzofuran	11.29	168	158828	40.35	ppb	85
63) 2,4-Dinitrotoluene	11.44	165	38090	41.47	ppb	97
64) 2,3,4,6-Tetrachlorophenol	11.66	232	29448	36.59	ppb	98
65) Diethylphthalate	11.97	149	129100	44.21	ppb	99
66) Fluorene	11.97	166	136571	42.54	ppb	99
67) 4-Chlorophenyl-phenylether	12.03	204	62751	41.08	ppb	93
68) 4-Nitroaniline	12.14	138	29029	36.98	ppb	85
70) 4,6-Dinitro-2-methylphenol	12.23	198	16769	31.03	ppb	88
71) n-Nitrosodiphenylamine	12.28	169	91593	46.74	ppb	99
72) 1,2-Diphenylhydrazine	12.33	77	132362	53.77	ppb	95
74) 4-Bromophenyl-phenylether	12.98	248	34138	47.40	ppb	93
75) Hexachlorobenzene	13.24	284	34103	44.79	ppb	98
76) Pentachlorophenol	13.62	266	19760	38.79	ppb	98
77) Phenanthrene	13.86	178	178444	45.74	ppb	100
78) Anthracene	13.95	178	176840	45.52	ppb	99
79) Carbazole	14.32	167	164827	43.24	ppb	98
80) Di-n-butylphthalate	15.21	149	208708	47.26	ppb	100
81) Fluoranthene	16.08	202	219942	47.01	ppb	98
82) Octadecane	13.80	57	119012	59.13	ppb	91
84) Pyrene	16.43	202	219399	61.89	ppb	99

(#) = qualifier out of range (m) = manual integration

M84318.D MM3346.M

Mon Jan 16 14:19:48 2012

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84318.D Vial: 13
 Acq On : 14 Jan 2012 3:19 pm Operator: kristis
 Sample : op54195-ms Inst : MSM
 Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Jan 16 14:19 2012 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87) Butylbenzylphthalate	17.56	149	82965	57.66	ppb	93
88) Benzo[a]anthracene	18.20	228	144424	46.85	ppb	97
89) 3,3'-Dichlorobenzidine	18.21	252	44654	43.03	ppb	95
90) Chrysene	18.27	228	138165	49.88	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.40	149	98941	55.55	ppb	100
93) Di-n-octylphthalate	19.15	149	164005	63.44	ppb	83
94) Benzo[b]fluoranthene	19.56	252	137869m	51.39	ppb	
95) Benzo[k]fluoranthene	19.58	252	100893m	51.17	ppb	
96) Benzo[a]pyrene	19.92	252	107458	47.51	ppb	96
97) Indeno[1,2,3-cd]pyrene	21.40	276	112846	47.92	ppb	97
99) Dibenz[a,h]anthracene	21.41	278	90065	45.94	ppb	99
100) 7,12-Dimethylbenz(a)anthra	19.57	256	55708	49.88	ppb	89
101) Benzo[g,h,i]perylene	21.80	276	90614	46.22	ppb	96
103) Benzaldehyde	4.67	105	46358	42.37	ppb	93
105) 1,2,4,5-Tetrachlorobenzene	9.26	216	62205	47.42	ppb	99
107) Atrazine	13.47	215	18079	48.05	ppb	96
111) Benzidine	16.36	184	15693	10.34	ppb	99

(#) = qualifier out of range (m) = manual integration

M84318.D MM3346.M Mon Jan 16 14:19:49 2012 GCMSM

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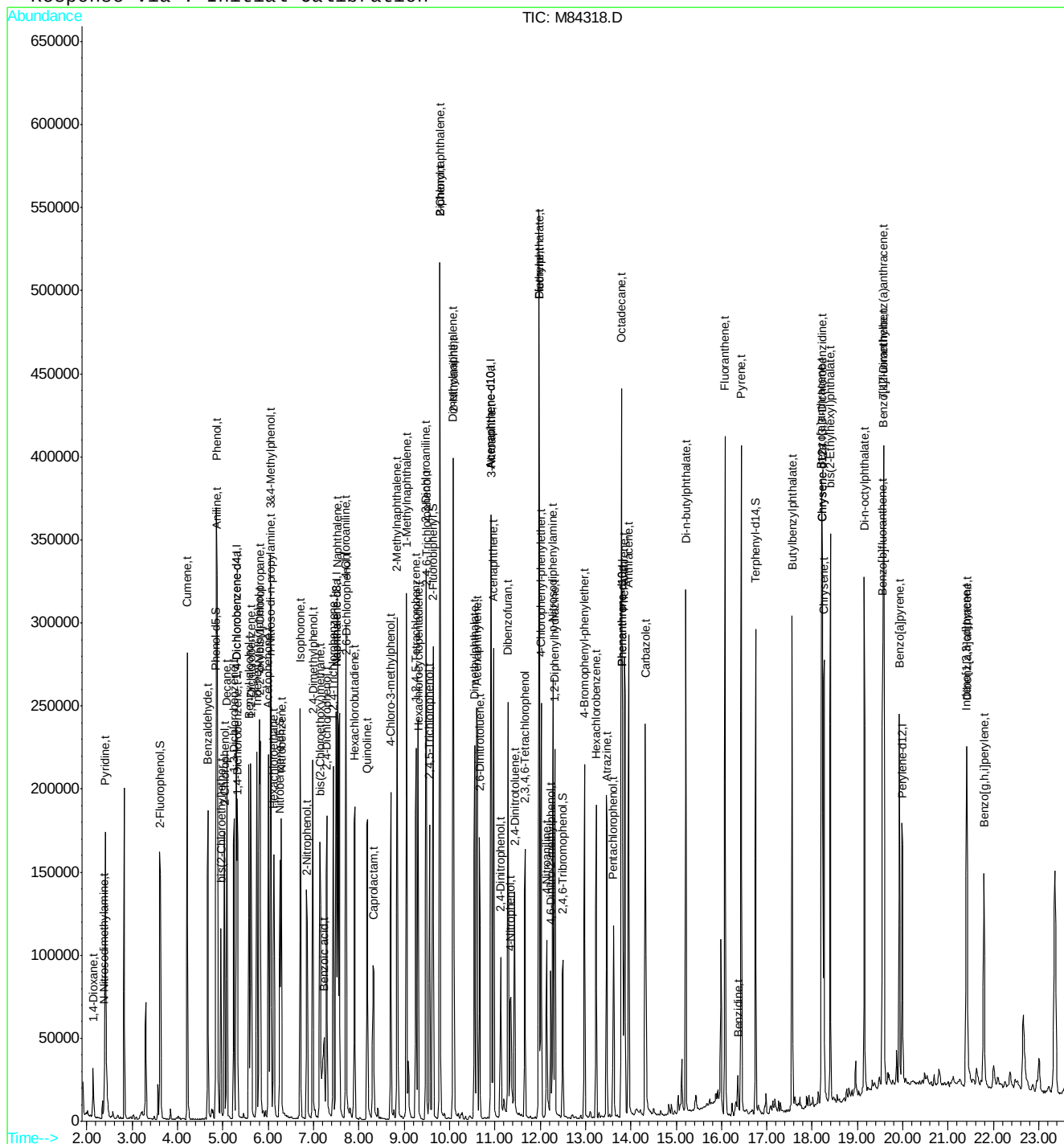
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3363\M84318.D
Acq On : 14 Jan 2012 3:19 pm
Sample : op54195-ms
Misc : op54195,em3363,35.0,,,1,1
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:19 2012 0

Vial: 13
Operator: kristis
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M84318.D MM3346.M

Mon Jan 16 14:19:50 2012

GCMSSM

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Manual Integration Approval Summary

Sample Number:

OP54195-MS

Method:

SW846 8270D

Lab FileID:

M84318.D

Analyst approved:

01/23/12 11:05 Olga Azarihn

Injection Time:

01/14/12 15:19

Supervisor approved:

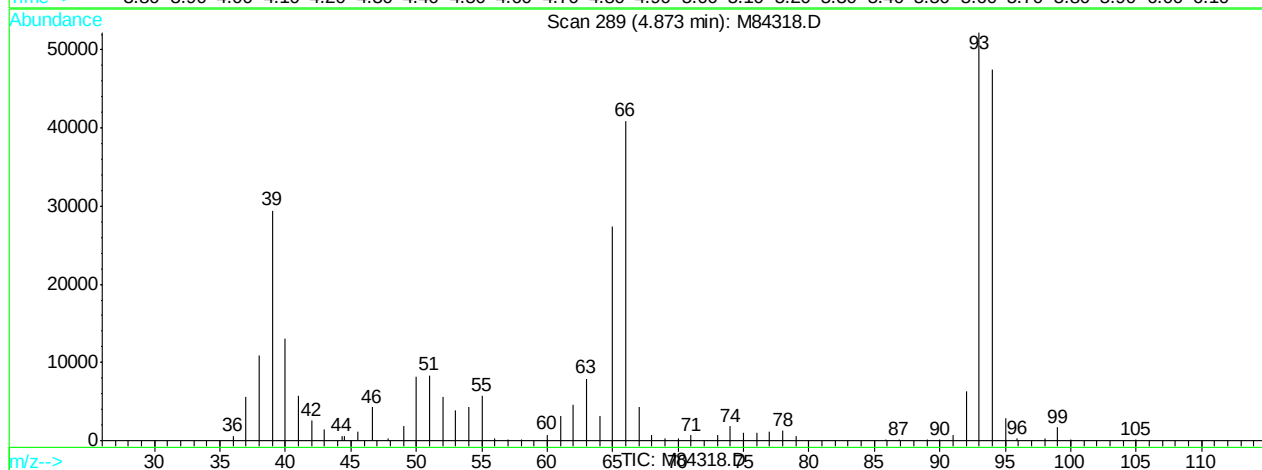
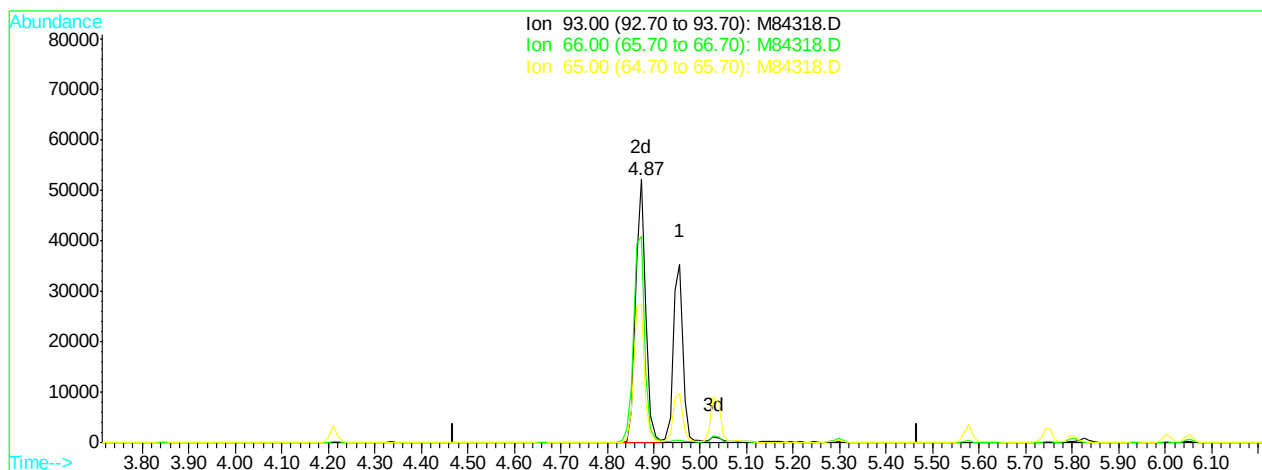
01/23/12 14:37 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Aniline	62-53-3		4.87	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		19.56	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.58	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84318.D Vial: 13
Acq On : 14 Jan 2012 3:19 pm Operator: kristis
Sample : op54195-ms Inst : MSM
Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:19 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(10) Aniline (t)

4.87min 34.85ppb m

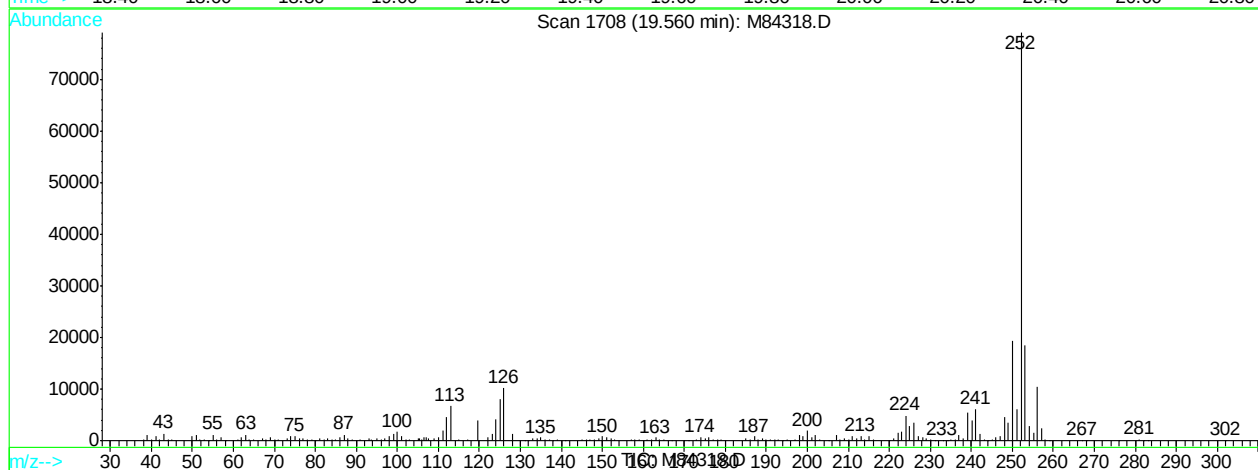
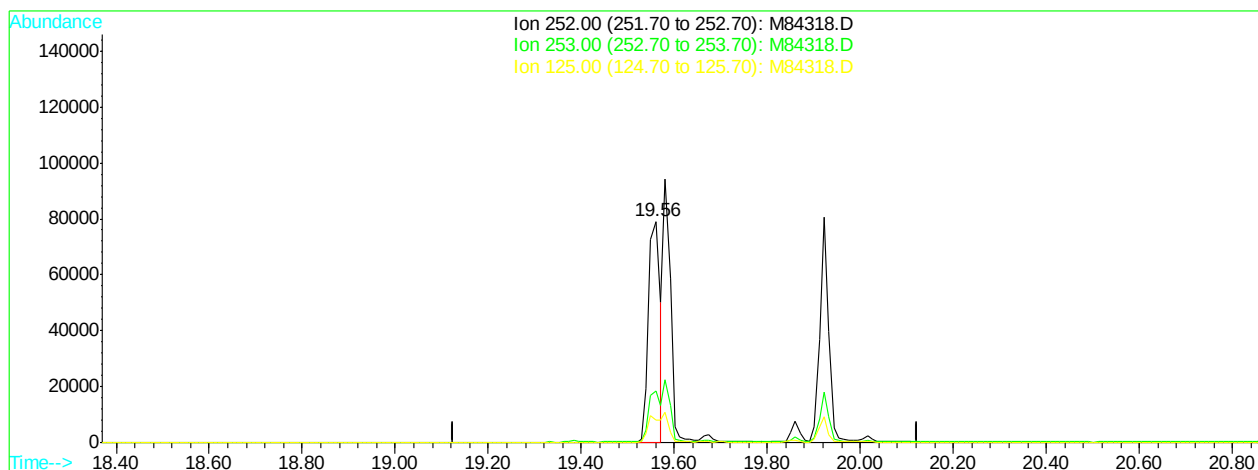
response 79544

Ion	Exp%	Act%
93.00	100	100
66.00	18.80	78.34#
65.00	5.10	52.43#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84318.D Vial: 13
 Acq On : 14 Jan 2012 3:19 pm Operator: kristis
 Sample : op54195-ms Inst : MSM
 Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Jan 16 14:19 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.56min 51.39ppb m

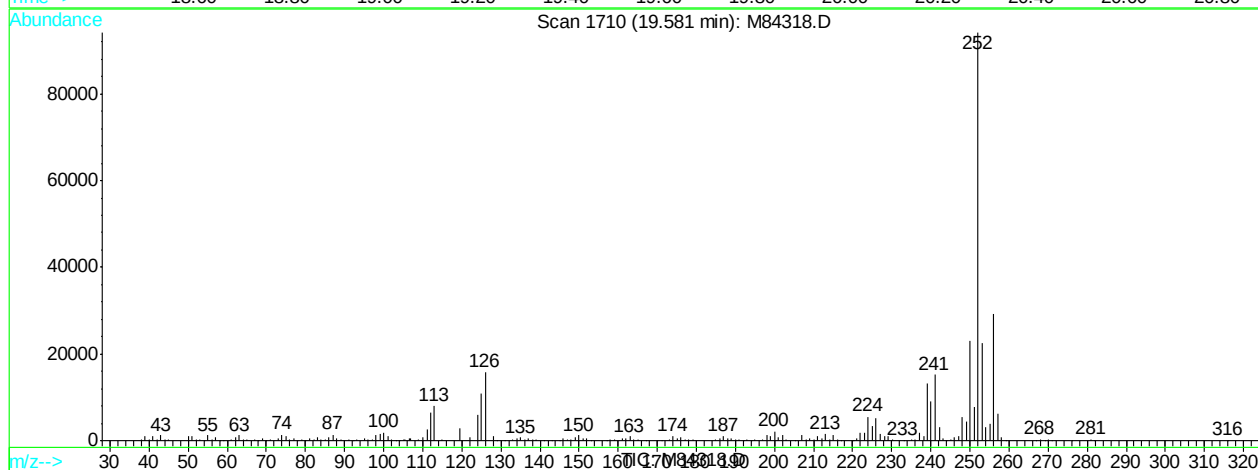
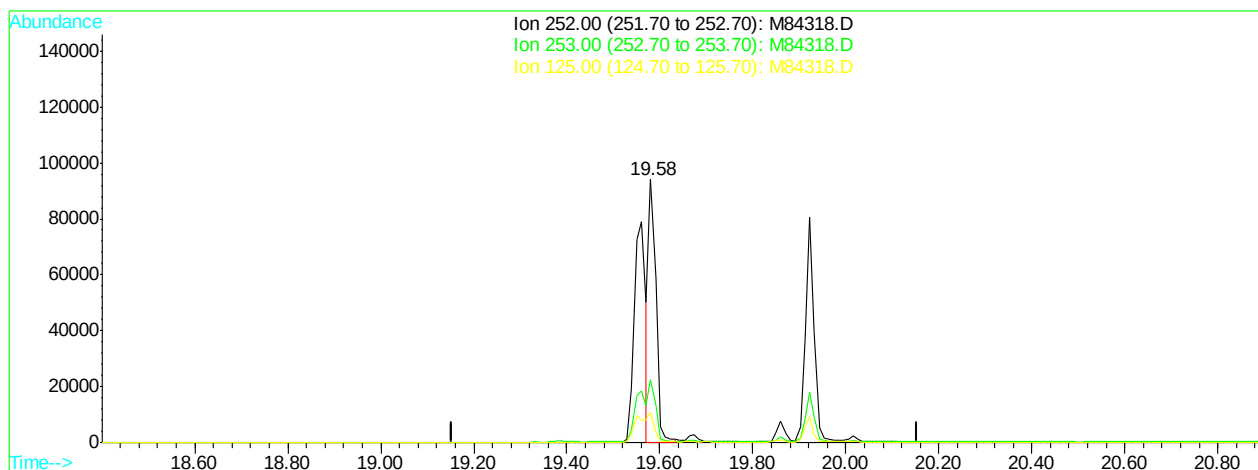
response 137869

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	23.49
125.00	9.90	10.25
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84318.D Vial: 13
Acq On : 14 Jan 2012 3:19 pm Operator: kristis
Sample : op54195-ms Inst : MSM
Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:19 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.58min 51.17ppb m

response 100893

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	24.00
125.00	10.60	11.49
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84319.D

Vial: 14

Acq On : 14 Jan 2012 3:49 pm

Operator: kristis

Sample : op54195-msd

Inst : MSM

Misc : op54195,em3363,35.0,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 14:21 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.30	152	46477	40.00	ppb	-0.10
24) Naphthalene-d8	7.49	136	175868	40.00	ppb	-0.11
47) Acenaphthene-d10	10.91	164	102490	40.00	ppb	-0.11
69) Phenanthrene-d10	13.82	188	145579	40.00	ppb	-0.11
83) Chrysene-d12	18.23	240	108635	40.00	ppb	-0.08
92) Perylene-d12	19.99	264	78253	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	5.30	152	46477	40.00	ppb	-0.10
104) Acenaphthene-d10a	10.91	164	102490	40.00	ppb	-0.11
106) Phenanthrene-d10a	13.82	188	145579	40.00	ppb	-0.12
110) Chrysene-d12a	18.23	240	108635	40.00	ppb	-0.10
112) Naphthalene-d8a	7.49	136	175868	40.00	ppb	-0.11

System Monitoring Compounds

5) 2-Fluorophenol	3.61	112	45743	27.51	ppb	-0.07
Spiked Amount 50.000			Recovery =	55.02%		
8) Phenol-d5	4.84	99	57619	28.39	ppb	-0.07
Spiked Amount 50.000			Recovery =	56.78%		
25) Nitrobenzene-d5	6.26	82	50900	33.81	ppb	-0.10
Spiked Amount 50.000			Recovery =	67.62%		
51) 2-Fluorobiphenyl	9.64	172	114342	36.47	ppb	-0.11
Spiked Amount 50.000			Recovery =	72.94%		
73) 2,4,6-Tribromophenol	12.50	330	14246	45.46	ppb	-0.10
Spiked Amount 50.000			Recovery =	90.92%		
86) Terphenyl-d14	16.76	244	114473	53.42	ppb	-0.08
Spiked Amount 50.000			Recovery =	106.84%		

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.14	88	7262	9.99	ppb	83
3) Pyridine	2.40	79	31705	17.82	ppb	73
4) N-Nitrosodimethylamine	2.38	42	44609	36.51	ppb	70
6) Indene	5.74	116	81379	29.27	ppb	98
7) Cumene	4.21	105	98637	24.89	ppb	95
9) Phenol	4.86	94	66158	29.27	ppb	# 37
10) Aniline	4.86	93	63276m	27.03	ppb	
11) bis(2-Chloroethyl)ether	4.95	93	41374	28.38	ppb	95
12) 2-Chlorophenol	5.03	128	49781	29.61	ppb	94
13) Decane	5.09	43	68180	27.28	ppb	87
14) 1,3-Dichlorobenzene	5.24	146	51878	26.71	ppb	94
15) 1,4-Dichlorobenzene	5.32	146	52391	26.95	ppb	99
16) Benzyl alcohol	5.57	108	35194	32.89	ppb	96
17) 1,2-Dichlorobenzene	5.62	146	53276	29.27	ppb	97
18) Acetophenone	6.00	105	68288	31.03	ppb	97
19) 2-Methylphenol	5.80	108	47105	32.64	ppb	100
20) 2,2'-oxybis(1-Chloropropan	5.83	121	16073	31.49	ppb	# 57
21) 3&4-Methylphenol	6.04	108	50826	32.86	ppb	95
22) n-Nitroso-di-n-propylamine	6.05	70	36760m	34.52	ppb	
23) Hexachloroethane	6.13	201	18719	27.99	ppb	88
26) Nitrobenzene	6.29	77	53169	33.65	ppb	98
27) Quinoline	8.18	129	113201	36.89	ppb	97
28) Isophorone	6.71	82	102302	36.92	ppb	92

(#) = qualifier out of range (m) = manual integration

M84319.D MM3346.M

Mon Jan 16 14:21:33 2012

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84319.D

Vial: 14

Acq On : 14 Jan 2012 3:49 pm

Operator: kristis

Sample : op54195-msd

Inst : MSM

Misc : op54195,em3363,35.0,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 14:21 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2-Nitrophenol	6.85	139	30071	33.61	ppb	73
30) 2,4-Dimethylphenol	6.98	107	58734	42.31	ppb	90
31) Benzoic acid	7.23	105	51737	51.02	ppb	95
32) bis(2-Chloroethoxy)methane	7.14	93	59218	36.62	ppb	99
33) 2,4-Dichlorophenol	7.30	162	49749	36.05	ppb	97
34) 2,6-Dichlorophenol	7.72	162	47443	35.01	ppb	99
36) 1,2,4-Trichlorobenzene	7.43	180	50957	32.96	ppb	96
38) Naphthalene	7.53	128	148394	32.62	ppb	99
39) 4-Chloroaniline	7.71	127	60802	31.83	ppb	94
40) 2,3-Dichloroaniline	9.48	161	59978	35.87	ppb	98
41) Caprolactam	8.33	55	44365	45.50	ppb	96
42) Hexachlorobutadiene	7.90	225	29236	34.01	ppb	100
43) 4-Chloro-3-methylphenol	8.70	107	55703	43.45	ppb	# 25
44) 2-Methylnaphthalene	8.85	141	95101	33.42	ppb	96
45) 1-Methylnaphthalene	9.06	142	111424	35.87	ppb	98
46) Dimethylnaphthalene	10.08	156	99655	37.41	ppb	97
48) Hexachlorocyclopentadiene	9.30	237	47953	64.12	ppb	99
49) 2,4,6-Trichlorophenol	9.49	196	39398	41.25	ppb	95
50) 2,4,5-Trichlorophenol	9.56	196	44144	42.91	ppb	100
52) 2-Chloronaphthalene	9.78	162	108665	37.01	ppb	96
53) Biphenyl	9.79	154	133127	38.33	ppb	100
54) 2-Nitroaniline	10.09	65	40563	47.92	ppb	95
55) Dimethylphthalate	10.56	163	137962	42.83	ppb	100
56) Acenaphthylene	10.60	152	175678	39.23	ppb	100
57) 2,6-Dinitrotoluene	10.66	165	30748	42.94	ppb	85
58) 3-Nitroaniline	10.92	138	31601	38.90	ppb	94
59) Acenaphthene	10.97	153	109843	38.99	ppb	97
60) 2,4-Dinitrophenol	11.13	184	17944	43.28	ppb	94
61) 4-Nitrophenol	11.35	109	17969	48.07	ppb	# 1
62) Dibenzofuran	11.29	168	159190	38.94	ppb	85
63) 2,4-Dinitrotoluene	11.44	165	41138	43.13	ppb	97
64) 2,3,4,6-Tetrachlorophenol	11.66	232	33006	39.48	ppb	97
65) Diethylphthalate	11.97	149	136178	44.90	ppb	100
66) Fluorene	11.97	166	142580	42.77	ppb	99
67) 4-Chlorophenyl-phenylether	12.03	204	64010	40.35	ppb	92
68) 4-Nitroaniline	12.14	138	30420	37.31	ppb	81
70) 4,6-Dinitro-2-methylphenol	12.23	198	16299	28.57	ppb	# 56
71) n-Nitrosodiphenylamine	12.29	169	98703	47.71	ppb	98
72) 1,2-Diphenylhydrazine	12.33	77	139726	53.77	ppb	96
74) 4-Bromophenyl-phenylether	12.98	248	35788	47.07	ppb	94
75) Hexachlorobenzene	13.24	284	36584	45.52	ppb	95
76) Pentachlorophenol	13.62	266	22486	41.82	ppb	99
77) Phenanthrene	13.86	178	187303	45.47	ppb	100
78) Anthracene	13.95	178	187595	45.74	ppb	99
79) Carbazole	14.32	167	172797	42.94	ppb	99
80) Di-n-butylphthalate	15.21	149	221963	47.61	ppb	100
81) Fluoranthene	16.08	202	232666	47.11	ppb	98
82) Octadecane	13.80	57	128297	60.38	ppb	91
84) Pyrene	16.44	202	231077	62.43	ppb	99

(#) = qualifier out of range (m) = manual integration

M84319.D MM3346.M

Mon Jan 16 14:21:33 2012

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84319.D Vial: 14
 Acq On : 14 Jan 2012 3:49 pm Operator: kristis
 Sample : op54195-msd Inst : MSM
 Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Jan 16 14:21 2012 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87) Butylbenzylphthalate	17.56	149	86764	57.76	ppb	94
88) Benzo[a]anthracene	18.21	228	153124	47.58	ppb	98
89) 3,3'-Dichlorobenzidine	18.22	252	45919	42.38	ppb	97
90) Chrysene	18.27	228	144224	49.86	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.40	149	107272	57.68	ppb	99
93) Di-n-octylphthalate	19.15	149	170060	62.65	ppb	83
94) Benzo[b]fluoranthene	19.55	252	150599m	53.47	ppb	
95) Benzo[k]fluoranthene	19.58	252	103690m	50.06	ppb	
96) Benzo[a]pyrene	19.92	252	112417	47.34	ppb	97
97) Indeno[1,2,3-cd]pyrene	21.40	276	120421	48.70	ppb	97
99) Dibenz[a,h]anthracene	21.41	278	97438	47.33	ppb	99
100) 7,12-Dimethylbenz(a)anthra	19.57	256	59185	50.47	ppb	88
101) Benzo[g,h,i]perylene	21.80	276	99727	48.45	ppb	96
103) Benzaldehyde	4.67	105	40549	36.14	ppb	90
105) 1,2,4,5-Tetrachlorobenzene	9.26	216	55144	40.47	ppb	97
107) Atrazine	13.48	215	18943	47.69	ppb	92
111) Benzidine	16.35	184	15840	10.00	ppb	96

8.4.2
8

 (#) = qualifier out of range (m) = manual integration

M84319.D MM3346.M Mon Jan 16 14:21:33 2012 GCMSM

Page 3

Quantitation Report

```

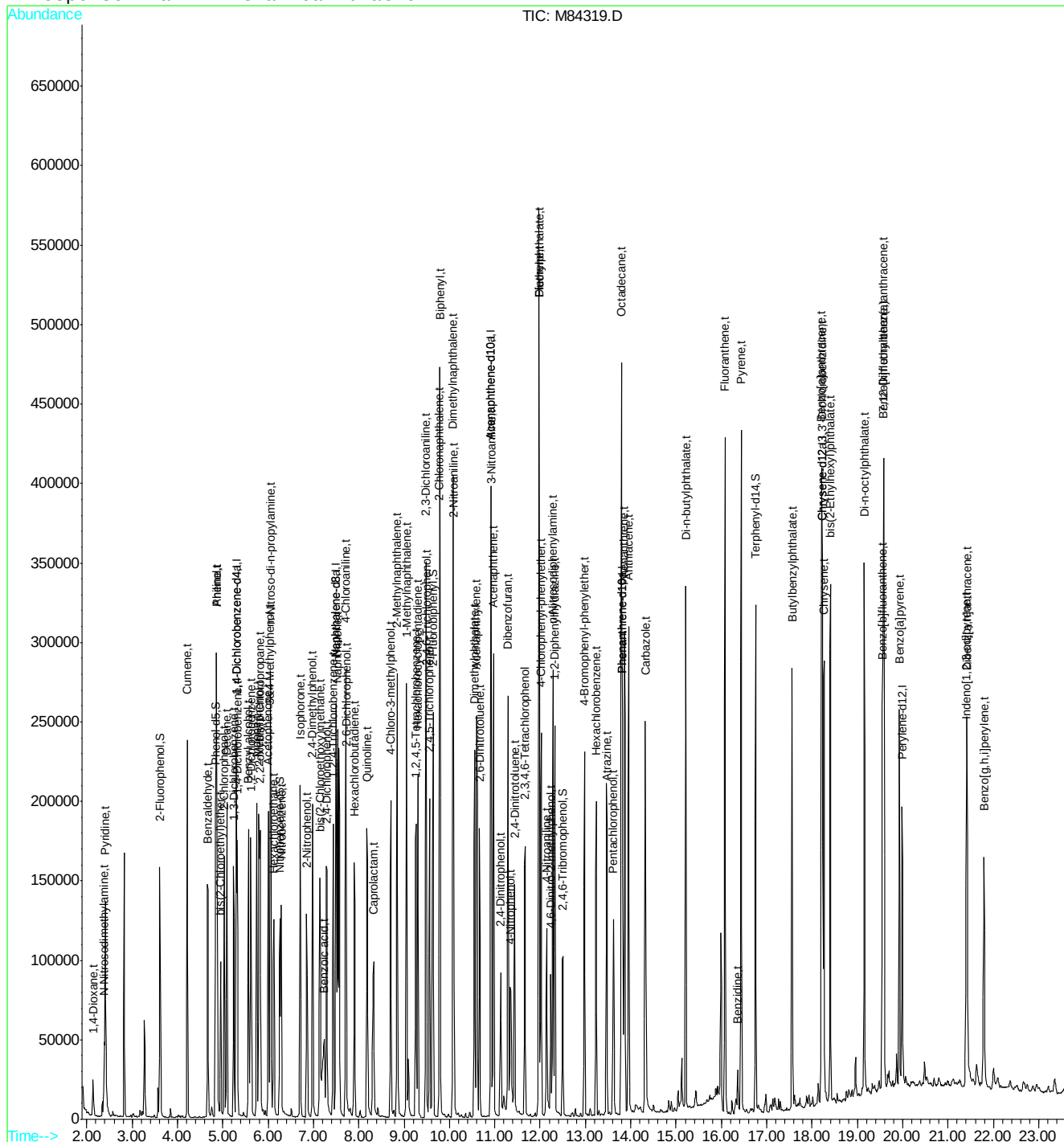
Data File   : C:\HPCHEM\1\DATA\EM3363\M84319.D
Acq On      : 14 Jan 2012   3:49 pm
Sample      : op54195-msd
Misc        : op54195,em3363,35.0,,,1,1
MS Integration Params: LSCINT.P
Quant Time  : Jan 16 14:21 2012

```

Vial: 14
Operator: kristis
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M84319.D MM3346.M

Mon Jan 16 14:21:34 2012

GCMSSM

Page 4

Manual Integration Approval Summary

Sample Number:

OP54195-MSD

Lab FileID:

M84319.D

Injection Time:

01/14/12 15:49

Method:

SW846 8270D

Analyst approved:

01/23/12 11:05 Olga Azarihn

Supervisor approved:

01/23/12 14:37 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Aniline	62-53-3		4.86	Poor instrument integration
N-Nitroso-di-n-propylamine	621-64-7		6.05	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		19.55	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.58	Overlapping peak

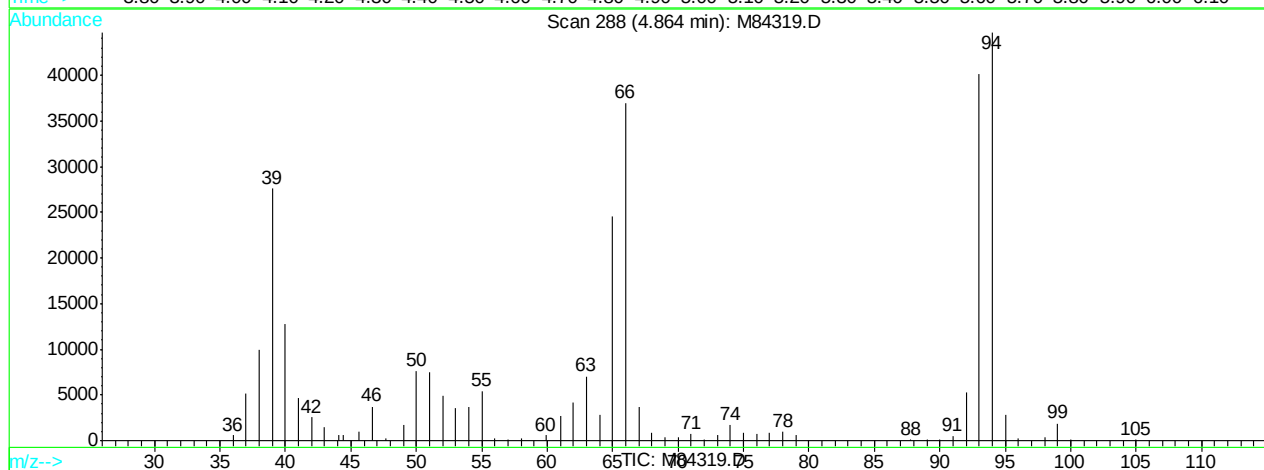
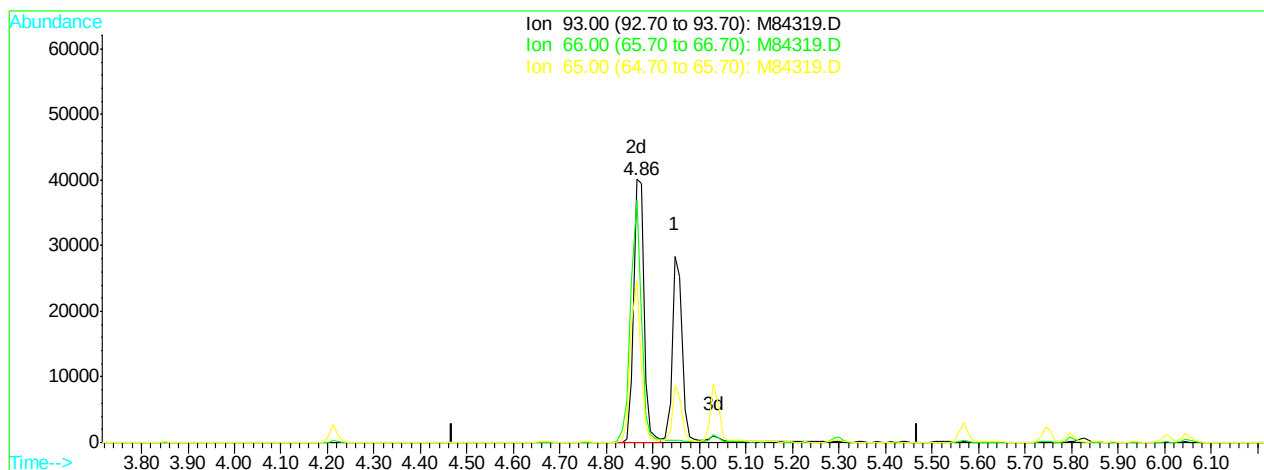
8.4.2.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84319.D Vial: 14
Acq On : 14 Jan 2012 3:49 pm Operator: kristis
Sample : op54195-msd Inst : MSM
Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:20 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(10) Aniline (t)

4.86min 27.03ppb m

response 63276

Ion	Exp%	Act%
93.00	100	100
66.00	18.80	92.18#
65.00	5.10	61.30#
0.00	0.00	0.00

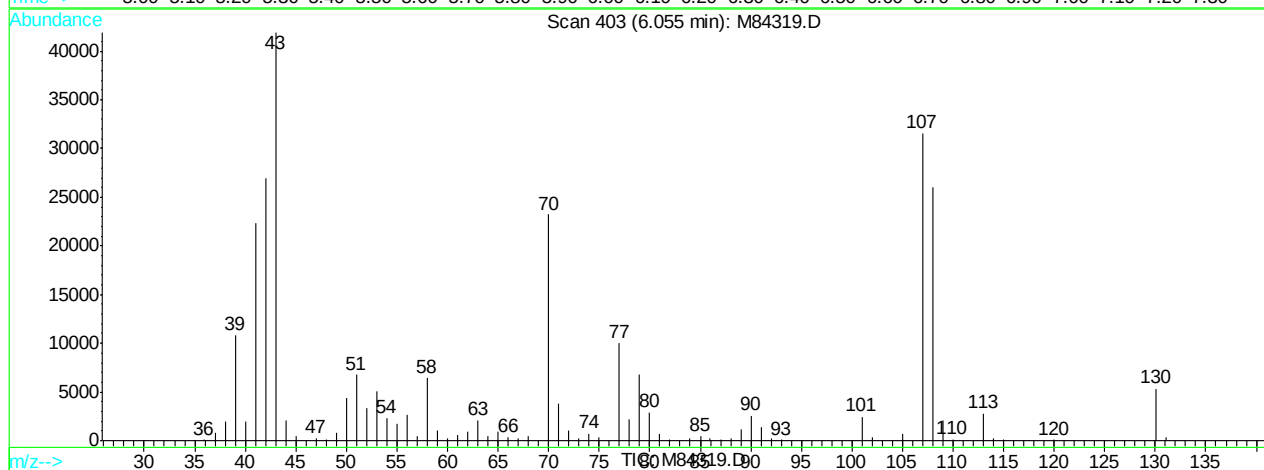
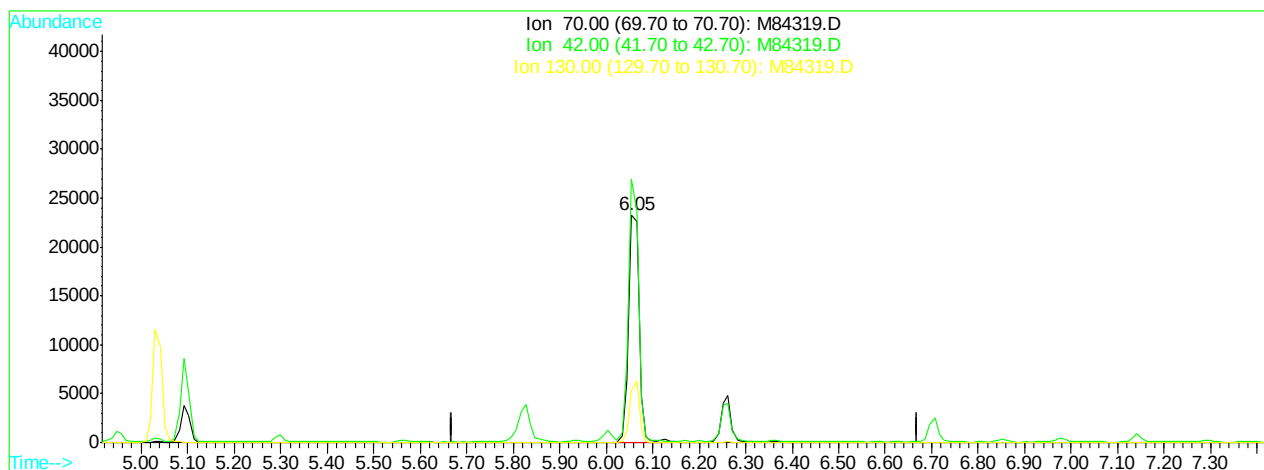
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84319.D
Acq On : 14 Jan 2012 3:49 pm
Sample : op54195-msd
Misc : op54195,em3363,35.0,,,1,1
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:21 2012

Vial: 14
Operator: kristis
Inst : MSM
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(22) n-Nitroso-di-n-propylamine (t)

6.05min 34.52ppb m

response 36760

Ion	Exp%	Act%

70.00	100	100

42.00	83.00	115.83#

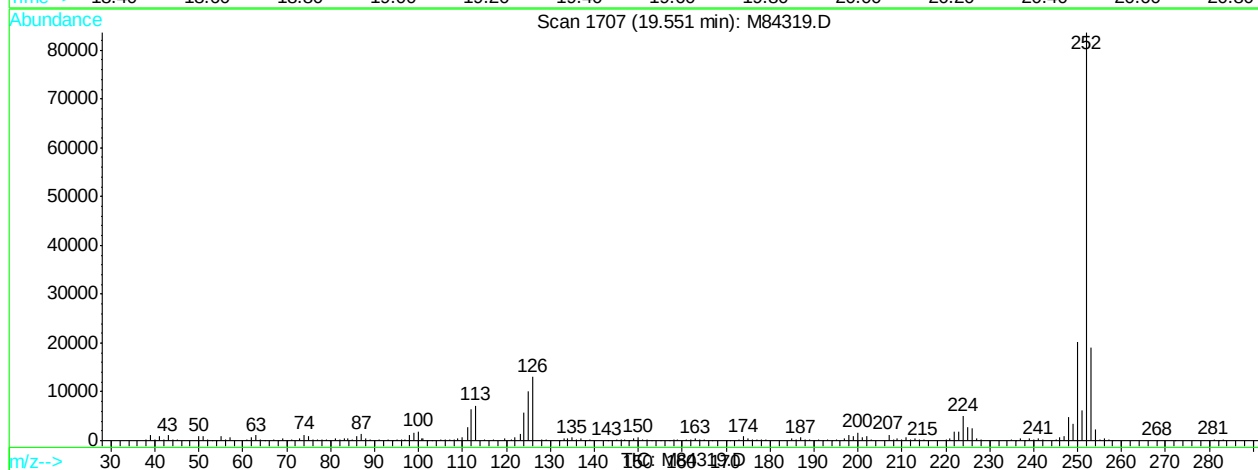
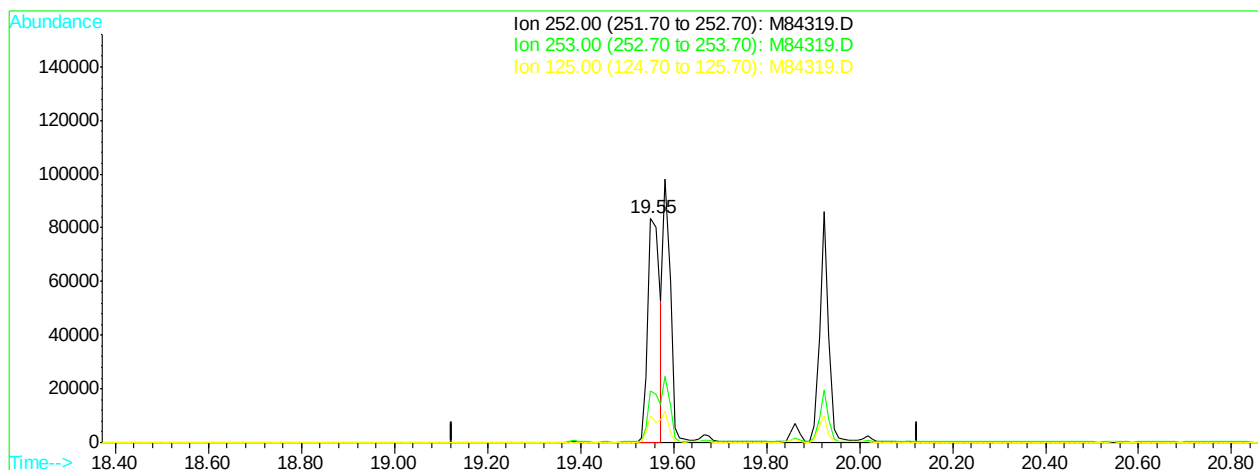
130.00	27.90	22.81

0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84319.D Vial: 14
Acq On : 14 Jan 2012 3:49 pm Operator: kristis
Sample : op54195-msd Inst : MSM
Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:21 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.55min 53.47ppb m

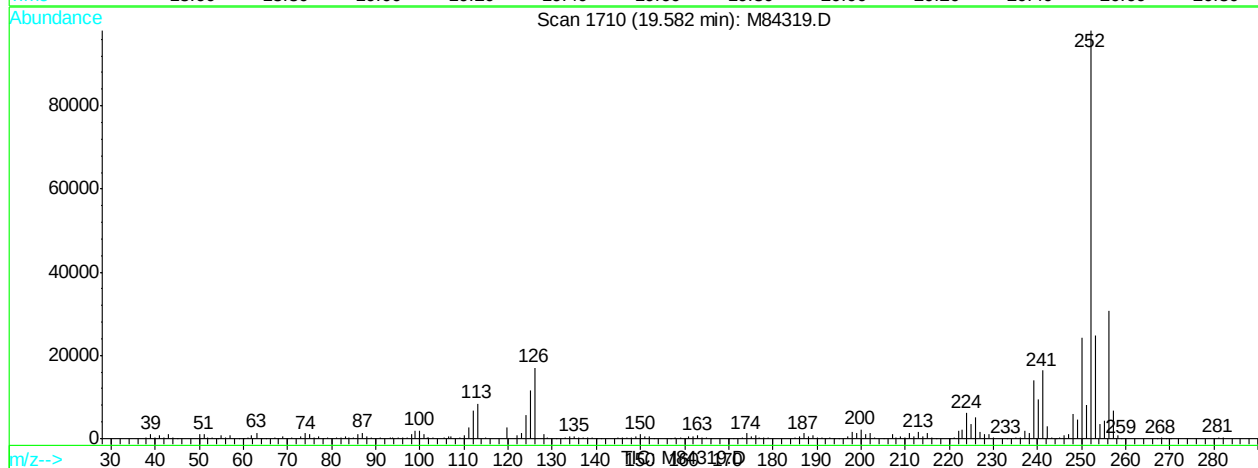
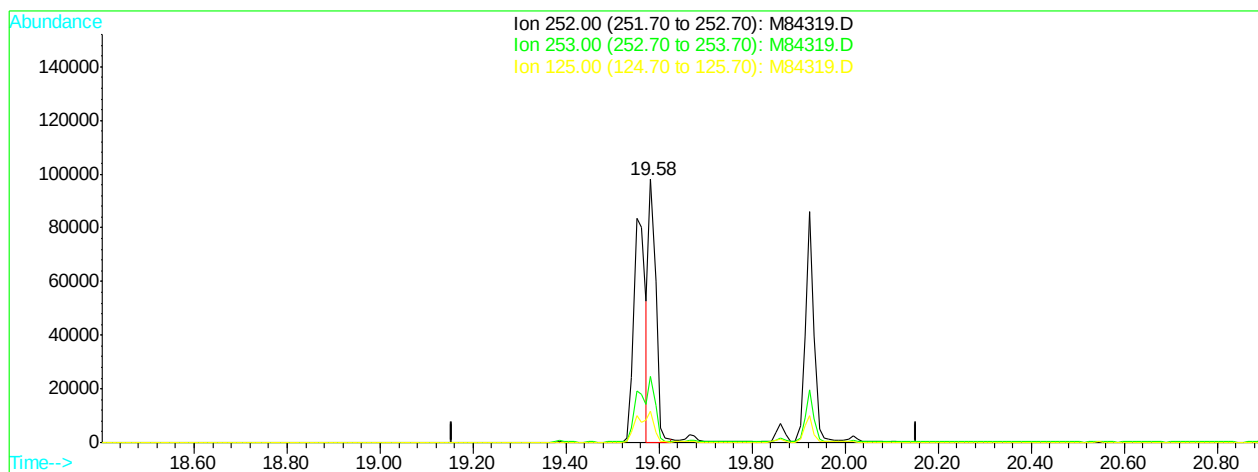
response 150599

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.86
125.00	9.90	12.08
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84319.D Vial: 14
Acq On : 14 Jan 2012 3:49 pm Operator: kristis
Sample : op54195-msd Inst : MSM
Misc : op54195,em3363,35.0,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 14:21 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.58min 50.06ppb m

response 103690

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	25.15
125.00	10.60	11.85
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91064.D

Vial: 15

Acq On : 14 Jan 2012 7:54 pm

Operator: kristis

Sample : op54208-ms

Inst : MSR

Misc : op54208,er3516,500,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 20 16:58 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Jan 12 11:38:55 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.44	152	274222	40.00	ppb	-0.10
24) Naphthalene-d8	10.20	136	965751	40.00	ppb	-0.10
47) Acenaphthene-d10	14.32	164	535322	40.00	ppb	-0.11
69) Phenanthrene-d10	17.77	188	827712	40.00	ppb	-0.11
83) Chrysene-d12	22.12	240	777520	40.00	ppb	-0.07
92) Perylene-d12	23.63	264	705549	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.44	152	274222	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.32	164	535322	40.00	ppb	-0.11
107) Chrysene-d12a	22.12	240	777520	40.00	ppb	-0.07

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	8.68	82	397928	45.52	ppb	-0.10
Spiked Amount	50.000		Recovery	=	91.04%	
51) 2-Fluorobiphenyl	12.81	172	782771	45.12	ppb	-0.10
Spiked Amount	50.000		Recovery	=	90.24%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	20.84	244	781948	47.68	ppb	-0.08
Spiked Amount	50.000		Recovery	=	95.36%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.74	88	84625m	20.46	ppb	
3) Pyridine	3.17	79	286125	30.83	ppb	92
4) N-Nitrosodimethylamine	3.18	42	106014	23.68	ppb	89
6) Indene	8.02	116	702381	43.70	ppb	95
7) Cumene	5.99	105	1033953	42.94	ppb	99
10) Aniline	6.90	93	308300	24.18	ppb	85
11) bis(2-Chloroethyl)ether	7.04	93	336377	40.43	ppb	95
13) Decane	7.24	43	394449	36.33	ppb	95
14) 1,3-Dichlorobenzene	7.37	146	460290	39.59	ppb	96
15) 1,4-Dichlorobenzene	7.47	146	457975	40.14	ppb	94
16) Benzyl alcohol	7.85	108	177786	36.62	ppb	96
17) 1,2-Dichlorobenzene	7.86	146	441927	41.24	ppb	97
18) Acetophenone	8.37	105	566745	48.03	ppb	97
20) 2,2'-oxybis(1-Chloropropan	8.17	121	132629	43.02	ppb	90
22) n-Nitroso-di-n-propylamine	8.46	70	244161	47.88	ppb	99
23) Hexachloroethane	8.49	201	150317	40.99	ppb	96
26) Nitrobenzene	8.72	77	383905	42.64	ppb	95
27) Quinoline	11.03	129	773470	45.45	ppb	96
28) Isophorone	9.24	82	699387	45.36	ppb	98
32) bis(2-Chloroethoxy)methane	9.82	93	422562	45.95	ppb	95
36) 1,2,4-Trichlorobenzene	10.13	180	372171	42.47	ppb	98
38) Naphthalene	10.25	128	1087394	41.80	ppb	100
39) 4-Chloroaniline	10.50	127	320964	31.25	ppb	99
40) 2,3-Dichloroaniline	12.62	161	402614	46.28	ppb	98
41) Caprolactam	11.17	55	31342	9.15	ppb	98

(#)=qualifier out of range (m)=manual integration

R91064.D MR3499.M

Fri Jan 20 16:59:02 2012

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91064.D

Vial: 15

Acq On : 14 Jan 2012 7:54 pm

Operator: kristis

Sample : op54208-ms

Inst : MSR

Misc : op54208,er3516,500,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 20 16:58 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Jan 12 11:38:55 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) Hexachlorobutadiene	10.72	225	222118	45.87	ppb	97
44) 2-Methylnaphthalene	11.85	142	775685	39.73	ppb	98
45) 1-Methylnaphthalene	12.10	142	806812	45.52	ppb	97
46) Dimethylnaphthalene	13.34	156	732239	46.65	ppb	98
48) Hexachlorocyclopentadiene	12.41	237	311628	91.01	ppb	96
52) 2-Chloronaphthalene	12.97	162	694482	43.71	ppb	97
53) Biphenyl	13.00	154	923166	45.16	ppb	98
54) 2-Nitroaniline	13.37	65	203210	51.45	ppb	94
55) Dimethylphthalate	13.94	163	656568	38.68	ppb	100
56) Acenaphthylene	13.94	152	1075786	42.76	ppb	98
57) 2,6-Dinitrotoluene	14.06	165	182478	48.97	ppb	93
58) 3-Nitroaniline	14.37	138	175524	44.48	ppb	97
59) Acenaphthene	14.39	153	697489	45.12	ppb	99
62) Dibenzofuran	14.78	168	975518	45.35	ppb	98
63) 2,4-Dinitrotoluene	14.96	165	243595	48.50	ppb	96
65) Diethylphthalate	15.63	149	759544	44.29	ppb	98
66) Fluorene	15.59	166	834099	47.09	ppb	100
67) 4-Chlorophenyl-phenylether	15.66	204	366385	44.99	ppb	96
68) 4-Nitroaniline	15.83	138	182082	44.25	ppb	91
71) n-Nitrosodiphenylamine	15.98	169	569150	46.17	ppb	98
72) 1,2-Diphenylhydrazine	16.03	77	707199	45.33	ppb	98
74) 4-Bromophenyl-phenylether	16.80	248	248874	51.44	ppb	99
75) Hexachlorobenzene	17.08	284	258295	48.12	ppb	97
77) Phenanthrene	17.83	178	1095904	42.80	ppb	99
78) Anthracene	17.93	178	1145101	46.70	ppb	99
79) Carbazole	18.40	167	1033780	46.58	ppb	100
80) Di-n-butylphthalate	19.40	149	1290703	47.43	ppb	99
81) Fluoranthene	20.21	202	1143382	46.37	ppb	100
82) Octadecane	17.83	57	465136	45.49	ppb	98
84) Pyrene	20.54	202	1149030	38.99	ppb	98
87) Butylbenzylphthalate	21.55	149	551396	42.69	ppb	98
88) Benzo[a]anthracene	22.10	228	1050406	40.63	ppb	97
89) 3,3'-Dichlorobenzidine	22.11	252	272679	39.13	ppb	98
90) Chrysene	22.15	228	977945	39.45	ppb	97
91) bis(2-Ethylhexyl)phthalate	22.25	149	724007	45.30	ppb	96
93) Di-n-octylphthalate	22.86	149	1171218	43.63	ppb	99
94) Benzo[b]fluoranthene	23.23	252	1075240	42.01	ppb	99
95) Benzo[k]fluoranthene	23.27	252	988196m	61.59	ppb	
96) Benzo[a]pyrene	23.58	252	948958	46.07	ppb	99
97) Indeno[1,2,3-cd]pyrene	24.94	276	903594	52.56	ppb	94
99) Dibenz[a,h]anthracene	24.95	278	756435	46.65	ppb	95
100) 7,12-Dimethylbenz(a)anthra	23.25	256	539275	50.51	ppb	97
101) Benzo[g,h,i]perylene	25.31	276	720883	48.04	ppb	96
103) Benzaldehyde	6.61	105	315443	51.67	ppb	96
105) 1,2,4,5-Tetrachlorobenzene	12.34	216	370498	53.77	ppb	98
106) Atrazine	17.43	215	122176	54.84	ppb	95
108) Benzidine	20.48	184	231525	23.42	ppb	98

(#) = qualifier out of range (m) = manual integration

R91064.D MR3499.M

Fri Jan 20 16:59:02 2012

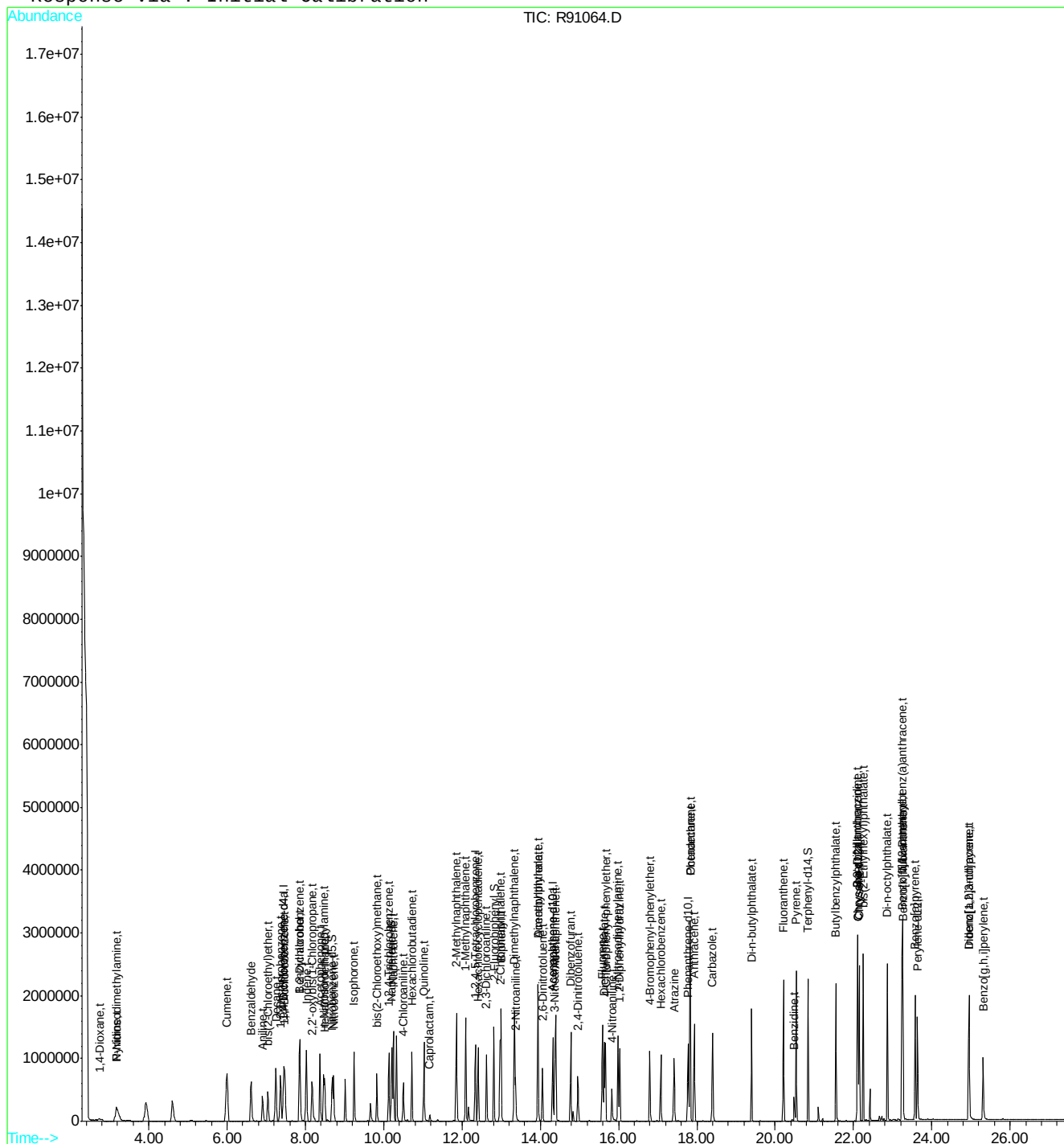
NJMSR

Page 2

Quantitation Report

Data File	: C:\HPCHEM\1\DATA\ER3516\R91064.D	Vial	: 15
Acq On	: 14 Jan 2012 7:54 pm	Operator	: kristis
Sample	: op54208-ms	Inst	: MSR
Misc	: op54208,er3516,500,,,1,1	Multiplr	: 1.00
MS Integration Params: RTEINT.P			
Quant Time	: Jan 20 16:58 2012	Quant Results File	: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 20 13:44:39 2012
Response via : Initial Calibration



8.4.3

Manual Integration Approval Summary

Sample Number:

OP54208-MS

Method:

SW846 8270D

Lab FileID:

R91064.D

Analyst approved:

01/23/12 11:34 Cheng-Hwan Ao

Injection Time:

01/14/12 19:54

Supervisor approved:

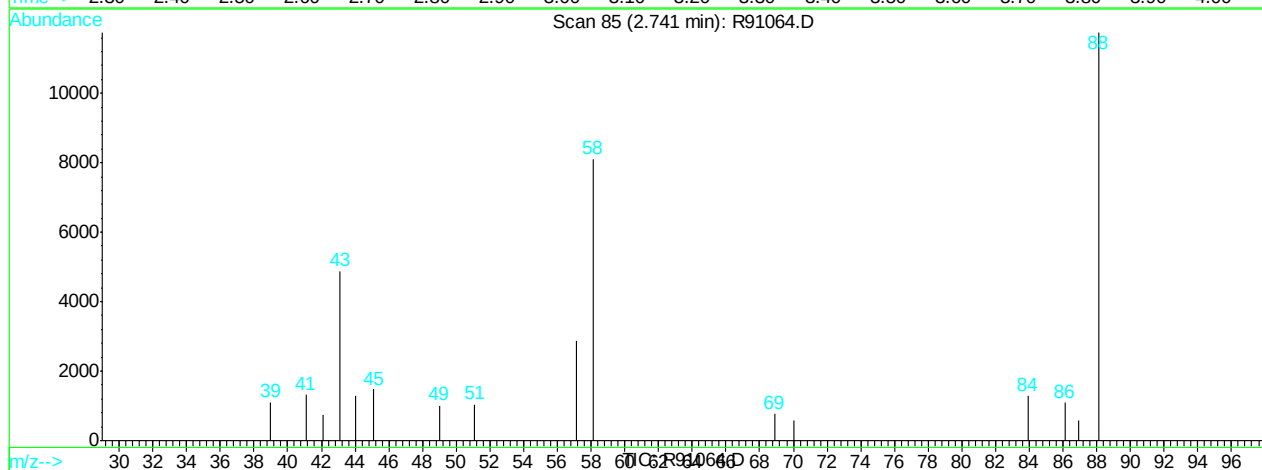
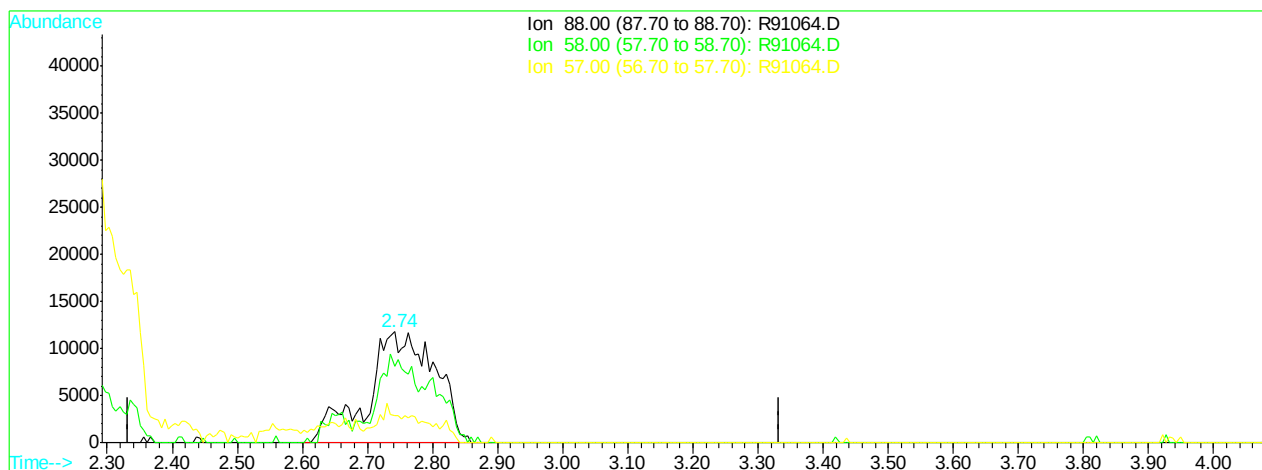
01/24/12 12:52 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.74	Poorly defined baseline
Benzo(k)fluoranthene	207-08-9		23.27	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91064.D Vial: 15
Acq On : 14 Jan 2012 7:54 pm Operator: kristis
Sample : op54208-ms Inst : MSR
Misc : op54208,er3516,500,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 20 16:56 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 20 13:44:39 2012
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.74min 20.46ppb m

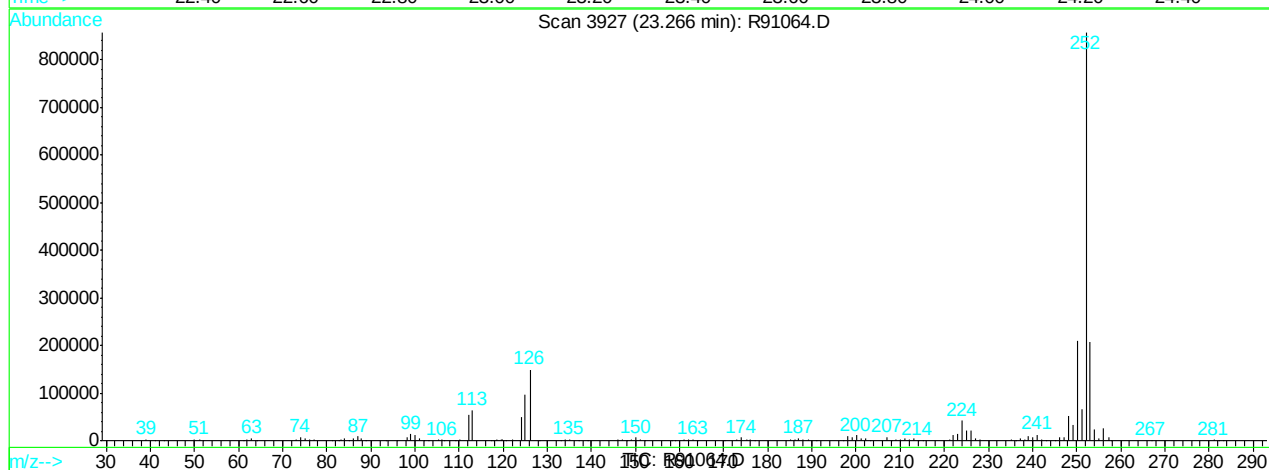
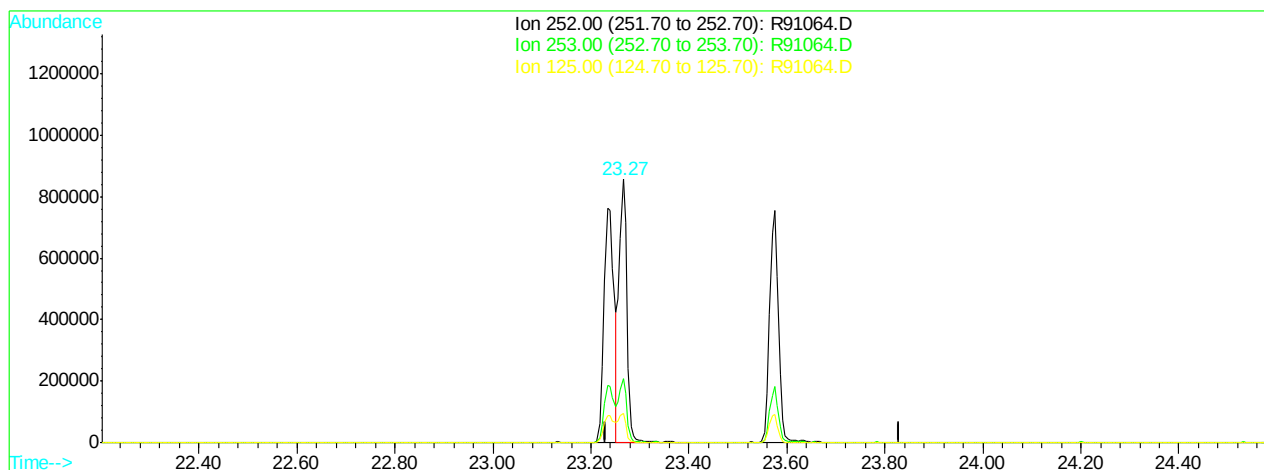
response 84625

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	69.07
57.00	26.80	24.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91064.D Vial: 15
Acq On : 14 Jan 2012 7:54 pm Operator: kristis
Sample : op54208-ms Inst : MSR
Misc : op54208,er3516,500,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 20 16:58 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 20 13:44:39 2012
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

23.27min 61.59ppb m

response 988196

Ion	Exp%	Act%
252.00	100	100
253.00	23.60	24.07
125.00	12.30	11.28
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91065.D

Vial: 16

Acq On : 14 Jan 2012 8:31 pm

Operator: kristis

Sample : op54208-msd

Inst : MSR

Misc : op54208,er3516,500,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 20 17:04 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Fri Jan 20 17:02:11 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.45	152	286029	40.00	ppb	0.00
24) Naphthalene-d8	10.20	136	1006370	40.00	ppb	0.00
47) Acenaphthene-d10	14.32	164	559241	40.00	ppb	0.00
69) Phenanthrene-d10	17.77	188	857703	40.00	ppb	0.00
83) Chrysene-d12	22.12	240	820107	40.00	ppb	0.00
92) Perylene-d12	23.63	264	755709	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.45	152	286029	40.00	ppb	0.00
104) Acenaphthene-d10a	14.32	164	559241	40.00	ppb	0.00
107) Chrysene-d12a	22.12	240	820107	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	8.68	82	397370	43.62	ppb	0.00
Spiked Amount	50.000		Recovery	=	87.24%	
51) 2-Fluorobiphenyl	12.81	172	809998	44.69	ppb	0.00
Spiked Amount	50.000		Recovery	=	89.38%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	20.84	244	808847	46.76	ppb	0.00
Spiked Amount	50.000		Recovery	=	93.52%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.74	88	86908m	20.15	ppb	
3) Pyridine	3.17	79	307056	31.72	ppb	96
4) N-Nitrosodimethylamine	3.17	42	108845	23.31	ppb	82
6) Indene	8.02	116	732635	43.70	ppb	99
7) Cumene	5.99	105	1071940	42.68	ppb	99
10) Aniline	6.91	93	316640	23.81	ppb	83
11) bis(2-Chloroethyl)ether	7.04	93	346112	39.88	ppb	94
13) Decane	7.25	43	413766	36.54	ppb	99
14) 1,3-Dichlorobenzene	7.37	146	468264	38.61	ppb	98
15) 1,4-Dichlorobenzene	7.47	146	468712	39.39	ppb	96
16) Benzyl alcohol	7.85	108	174949	34.54	ppb	97
17) 1,2-Dichlorobenzene	7.86	146	448452	40.12	ppb	97
18) Acetophenone	8.37	105	583809	47.44	ppb	96
20) 2,2'-oxybis(1-Chloropropan	8.17	121	138637	43.11	ppb	# 71
22) n-Nitroso-di-n-propylamine	8.47	70	247488	46.53	ppb	95
23) Hexachloroethane	8.50	201	155918	40.76	ppb	97
26) Nitrobenzene	8.72	77	396635	42.28	ppb	93
27) Quinoline	11.02	129	800784	45.15	ppb	98
28) Isophorone	9.24	82	710243	44.21	ppb	100
32) bis(2-Chloroethoxy)methane	9.83	93	430310	44.91	ppb	99
36) 1,2,4-Trichlorobenzene	10.13	180	383298	41.97	ppb	98
38) Naphthalene	10.24	128	1110298	40.95	ppb	99
39) 4-Chloroaniline	10.50	127	323595	30.24	ppb	97
40) 2,3-Dichloroaniline	12.62	161	419028	46.22	ppb	98
41) Caprolactam	11.17	55	31679	8.89	ppb	91

(#) = qualifier out of range (m) = manual integration

R91065.D MR3499.M

Fri Jan 20 17:04:23 2012

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91065.D

Vial: 16

Acq On : 14 Jan 2012 8:31 pm

Operator: kristis

Sample : op54208-msd

Inst : MSR

Misc : op54208,er3516,500,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 20 17:04 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Fri Jan 20 17:02:11 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) Hexachlorobutadiene	10.72	225	217053	43.01	ppb	93
44) 2-Methylnaphthalene	11.85	142	800987	39.37	ppb	98
45) 1-Methylnaphthalene	12.09	142	811195	43.92	ppb	97
46) Dimethylnaphthalene	13.34	156	733358	44.83	ppb	98
48) Hexachlorocyclopentadiene	12.41	237	312917	87.54	ppb	95
52) 2-Chloronaphthalene	12.97	162	695830	41.92	ppb	98
53) Biphenyl	13.00	154	947579	44.37	ppb	97
54) 2-Nitroaniline	13.37	65	199470	48.34	ppb	97
55) Dimethylphthalate	13.94	163	606824	34.22	ppb	97
56) Acenaphthylene	13.94	152	1081251	41.14	ppb	99
57) 2,6-Dinitrotoluene	14.05	165	185980	47.77	ppb	98
58) 3-Nitroaniline	14.37	138	176082	42.71	ppb	93
59) Acenaphthene	14.39	153	702692	43.51	ppb	100
62) Dibenzofuran	14.77	168	992785	44.18	ppb	97
63) 2,4-Dinitrotoluene	14.96	165	239987	45.73	ppb	92
65) Diethylphthalate	15.63	149	746623	41.67	ppb	99
66) Fluorene	15.59	166	836439	45.21	ppb	97
67) 4-Chlorophenyl-phenylether	15.67	204	370534	43.55	ppb	97
68) 4-Nitroaniline	15.83	138	181119	42.13	ppb	90
71) n-Nitrosodiphenylamine	15.98	169	565529	44.28	ppb	98
72) 1,2-Diphenylhydrazine	16.03	77	698656	43.21	ppb	97
74) 4-Bromophenyl-phenylether	16.80	248	246734	49.21	ppb	96
75) Hexachlorobenzene	17.08	284	260017	46.75	ppb	95
77) Phenanthrene	17.82	178	1108889	41.79	ppb	98
78) Anthracene	17.93	178	1133222	44.60	ppb	99
79) Carbazole	18.40	167	1041212	45.27	ppb	99
80) Di-n-butylphthalate	19.40	149	1285681	45.59	ppb	99
81) Fluoranthene	20.21	202	1155615	45.23	ppb	98
82) Octadecane	17.83	57	471432	44.49	ppb	99
84) Pyrene	20.54	202	1160346	37.32	ppb	97
87) Butylbenzylphthalate	21.55	149	571015	41.91	ppb	99
88) Benzo[a]anthracene	22.10	228	1072208	39.32	ppb	97
89) 3,3'-Dichlorobenzidine	22.10	252	282842	38.48	ppb	100
90) Chrysene	22.15	228	982313	37.57	ppb	98
91) bis(2-Ethylhexyl)phthalate	22.25	149	734377	43.57	ppb	95
93) Di-n-octylphthalate	22.87	149	1204894	41.90	ppb	98
94) Benzo[b]fluoranthene	23.24	252	1191587	43.46	ppb	100
95) Benzo[k]fluoranthene	23.27	252	905157	48.35	ppb	94
96) Benzo[a]pyrene	23.57	252	963728	43.68	ppb	99
97) Indeno[1,2,3-cd]pyrene	24.95	276	934670	50.76	ppb	94
99) Dibenz[a,h]anthracene	24.95	278	786731	45.02	ppb	94
100) 7,12-Dimethylbenz(a)anthra	23.25	256	563299	49.26	ppb	96
101) Benzo[g,h,i]perylene	25.31	276	744634	46.33	ppb	96
103) Benzaldehyde	6.61	105	325241	51.07	ppb	96
105) 1,2,4,5-Tetrachlorobenzene	12.34	216	363330	50.48	ppb	99
106) Atrazine	17.42	215	129186	55.50	ppb	93
108) Benzidine	20.49	184	249258m	23.83	ppb	

(#) = qualifier out of range (m) = manual integration

R91065.D MR3499.M

Fri Jan 20 17:04:23 2012

NJMSR

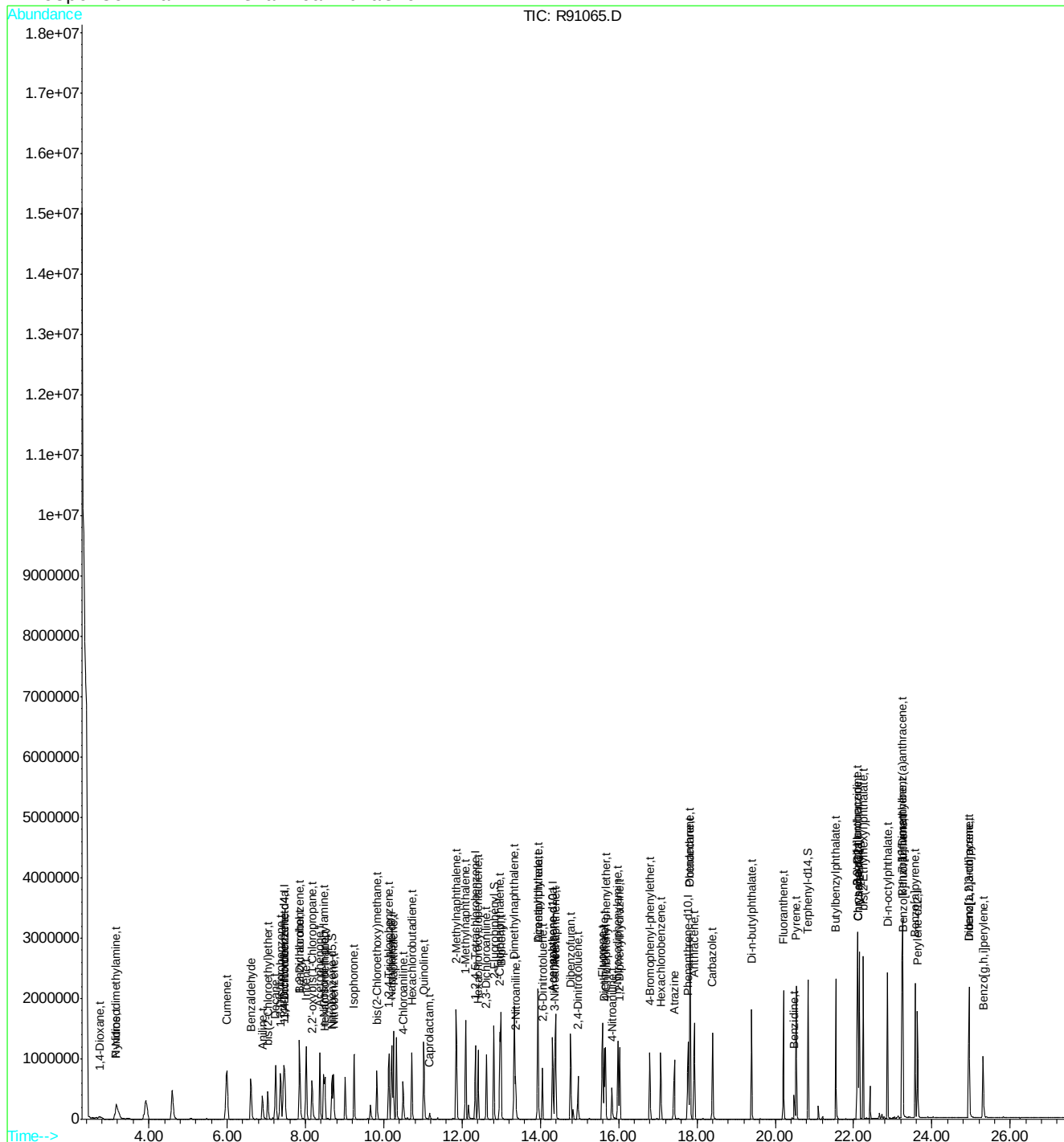
Page 2

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Data File : C:\HPCHEM\1\DATA\ER3516\R91065.D          Vial: 16
Acq On    : 14 Jan 2012   8:31 pm                    Operator: kristis
Sample    : op54208-msd                               Inst  : MSR
Misc      : op54208,er3516,500,,,1,1                 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 20 17:04 2012                          Quant Results File: MR3499.RES

```

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 20 17:02:11 2012
Response via : Initial Calibration



Page 3

Manual Integration Approval Summary

Sample Number: OP54208-MSD

Method: SW846 8270D

Lab FileID: R91065.D

Analyst approved: 01/23/12 11:34 Cheng-Hwan Ao

Injection Time: 01/14/12 20:31

Supervisor approved: 01/24/12 12:52 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.74	Poorly defined baseline
Benzidine	92-87-5		20.49	Poorly defined baseline

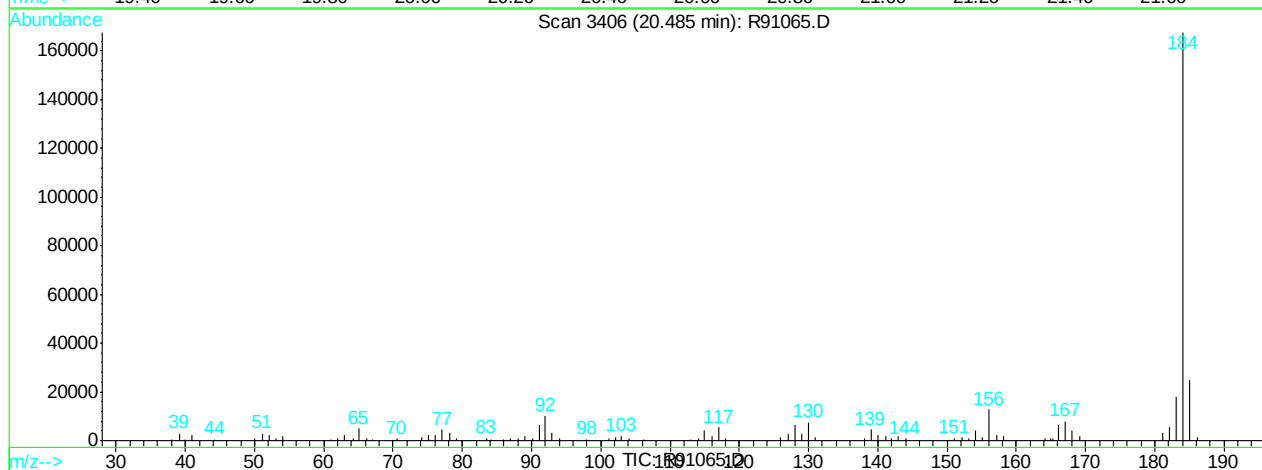
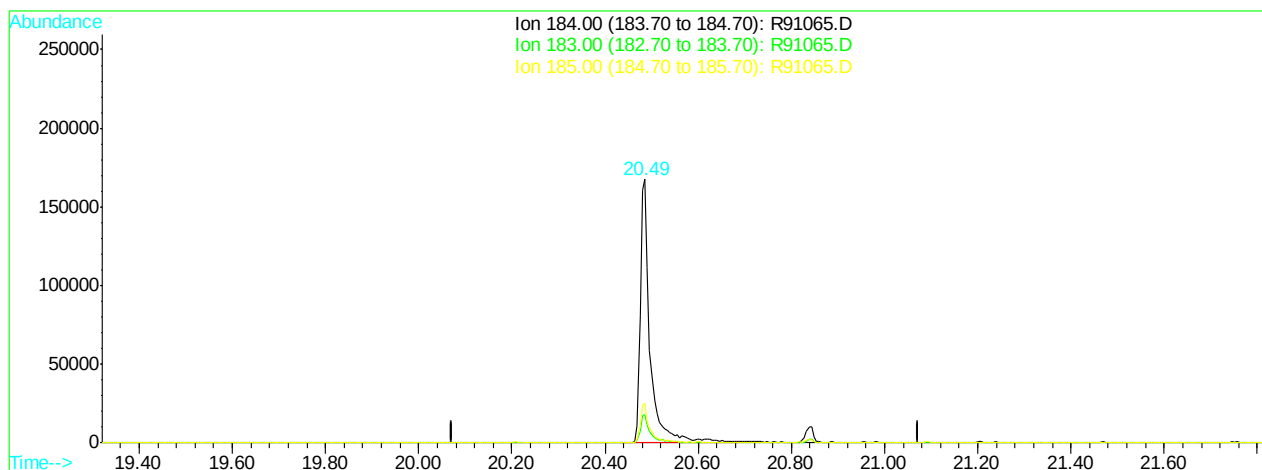
8.4.4.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91065.D Vial: 16
Acq On : 14 Jan 2012 8:31 pm Operator: kristis
Sample : op54208-msd Inst : MSR
Misc : op54208,er3516,500,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 20 17:02 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 20 17:02:11 2012
Response via : Multiple Level Calibration



(108) Benzidine (t)

20.49min 23.83ppb m

response 249258

Ion	Exp%	Act%
184.00	100	100
183.00	12.50	10.64
185.00	14.50	14.74
0.00	0.00	0.00

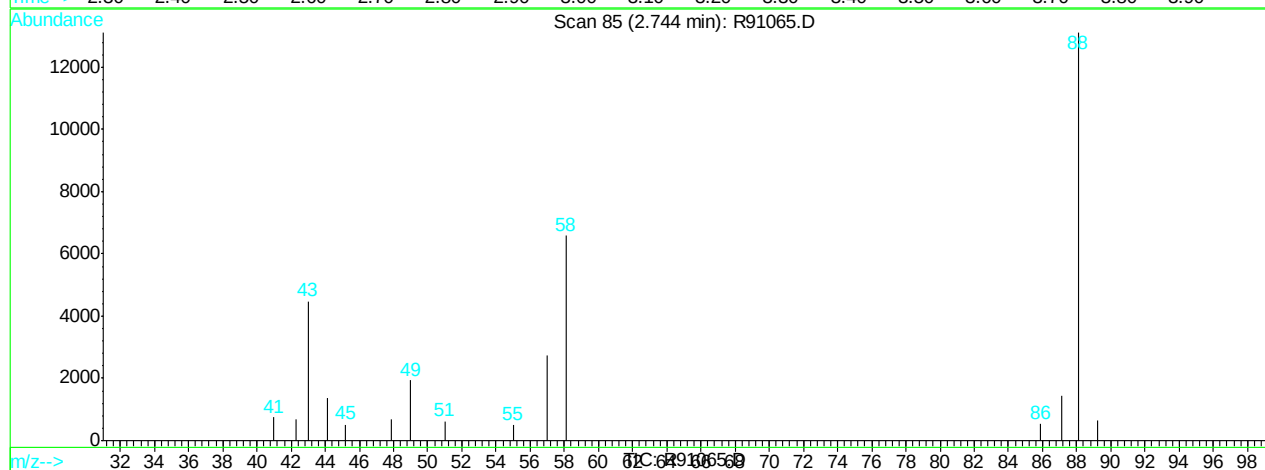
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91065.D
Acq On : 14 Jan 2012 8:31 pm
Sample : op54208-msd
Misc : op54208,er3516,500,,,1,1
MS Integration Params: RTEINT.P
Quant Time: Jan 20 17:04 2012

Vial: 16
Operator: kristis
Inst : MSR
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 20 17:02:11 2012
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

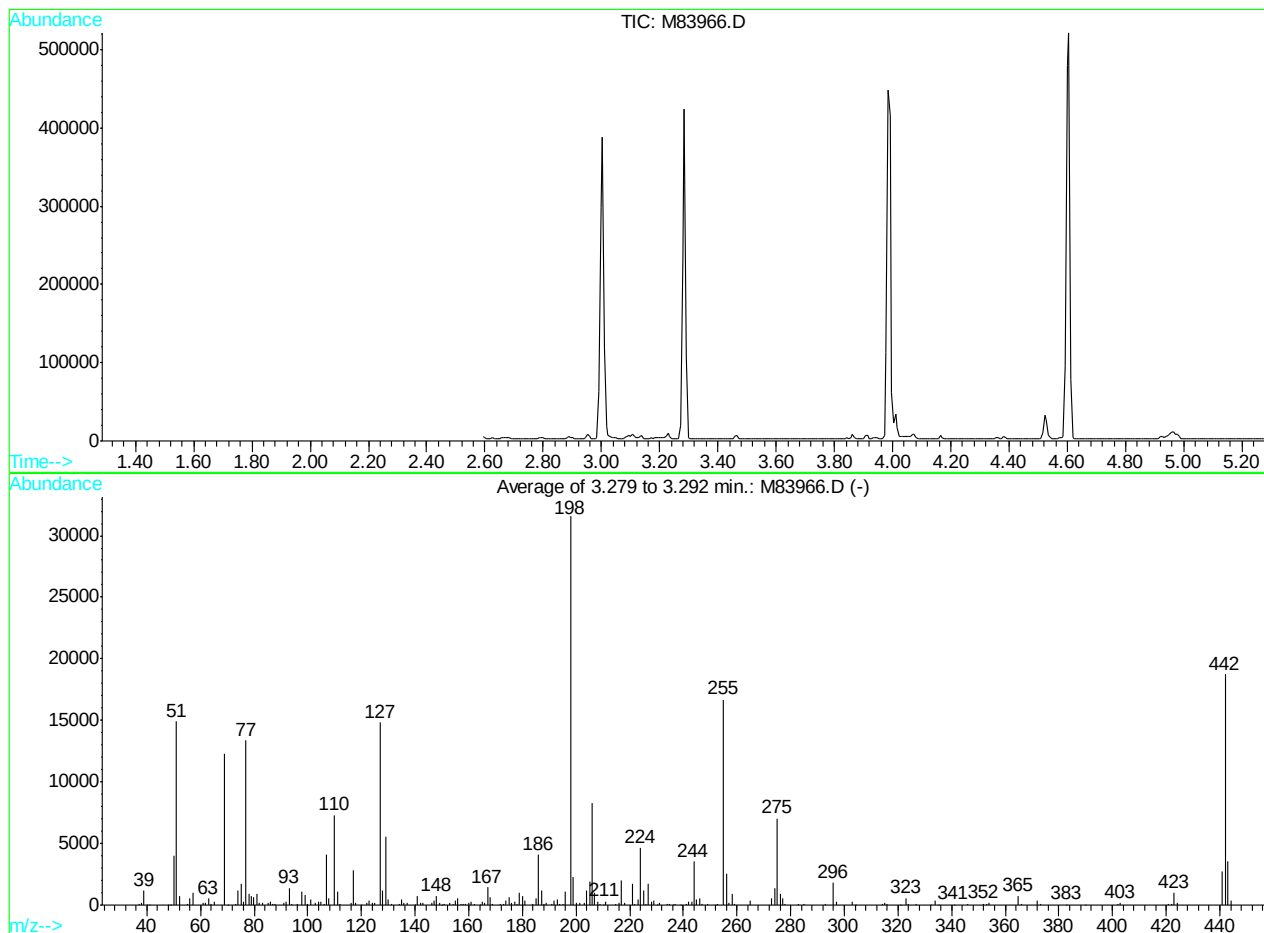
2.74min 20.15ppb m

response 86908

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	50.23
57.00	26.80	20.96
0.00	0.00	0.00

DFTPP

Data File : C:\HPCHEM\1\DATA\EM3346\M83966.D Vial: 1
Acq On : 21 Dec 2011 2:03 pm Operator: olgaa
Sample : dftpp Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um



AutoFind: Scans 108, 109, 110; Background Corrected with Scan 104

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
51	198	30	60	47.3	14929	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.8	12262	PASS
70	69	0.00	2	0.3	39	PASS
127	198	40	60	47.0	14822	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	31563	PASS
199	198	5	9	7.1	2239	PASS
275	198	10	30	22.3	7050	PASS
365	198	1	100	2.4	753	PASS
441	443	0.10	100	77.2	2752	PASS
442	198	40	100	59.4	18735	PASS
443	442	17	23	19.0	3567	PASS

Average of 3.279 to 3.292 min.: M83966.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.95	82	56.00	533	75.00	1775	86.90	100
38.00	217	57.00	999	76.10	303	87.90	69
39.00	1171	60.95	149	77.00	13371	91.00	166
39.90	15	61.90	181	78.00	903	92.00	257
41.00	26	63.00	515	79.00	757	92.95	1408
48.00	35	64.00	80	79.95	651	93.95	88
49.00	24	65.00	300	80.90	878	96.00	92
50.00	4011	68.90	12262	81.95	184	97.90	1108
50.95	14929	70.00	39	83.00	219	99.00	808
52.00	759	73.00	109	85.00	154	99.95	77
54.95	97	74.00	1207	85.90	316	100.90	499

Average of 3.279 to 3.292 min.: M83966.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
102.90	154	117.90	202	133.90	125	149.00	151
103.90	316	119.90	35	134.95	433	149.90	42
104.90	285	121.95	225	135.95	157	150.95	89
106.00	62	122.90	413	137.00	207	152.95	182
107.00	4116	123.95	168	139.90	37	153.95	128
107.95	595	124.95	178	140.90	712	154.95	388
110.00	7319	127.00	14822	141.90	209	156.00	584
111.00	1099	128.00	1176	142.95	142	157.00	114
112.00	105	129.00	5597	146.00	143	158.00	102
116.00	196	129.90	431	147.00	357	158.90	89
117.00	2805	130.95	87	147.95	766	159.95	216

Average of 3.279 to 3.292 min.: M83966.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
161.00	314	175.00	601	187.95	108	201.50	160
162.00	56	175.95	174	188.90	200	202.95	212
164.00	35	176.95	251	191.00	79	204.00	1159
164.90	282	178.00	52	191.95	392	205.00	1958
166.00	204	178.90	1047	193.00	465	206.00	8247
166.95	1422	180.00	717	194.00	72	207.00	1048
168.00	672	180.90	346	195.00	59	207.90	238
168.90	72	184.00	83	196.00	1077	208.90	52
171.90	111	185.00	547	197.90	31563	210.20	39
172.90	119	186.00	4078	198.90	2239	210.95	306
173.90	340	187.00	1194	199.95	161	214.90	62

Average of 3.279 to 3.292 min.: M83966.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
216.00	197	228.90	365	244.00	3526	259.00	118
216.90	2022	230.00	36	245.00	495	264.95	366
217.90	214	231.00	147	245.95	581	273.00	523
221.00	1735	234.00	60	246.90	63	274.00	1342
222.00	83	235.00	63	248.90	66	275.00	7050
223.00	467	235.90	47	252.10	46	276.00	898
224.00	4639	237.00	82	252.90	75	276.95	531
225.00	1209	238.90	37	255.00	16691	278.00	68
226.00	128	240.90	103	256.00	2580	283.00	64
227.00	1696	241.95	263	256.95	154	285.00	65
227.95	237	243.05	255	258.00	881	292.95	108

Average of 3.279 to 3.292 min.: M83966.D

dftpp

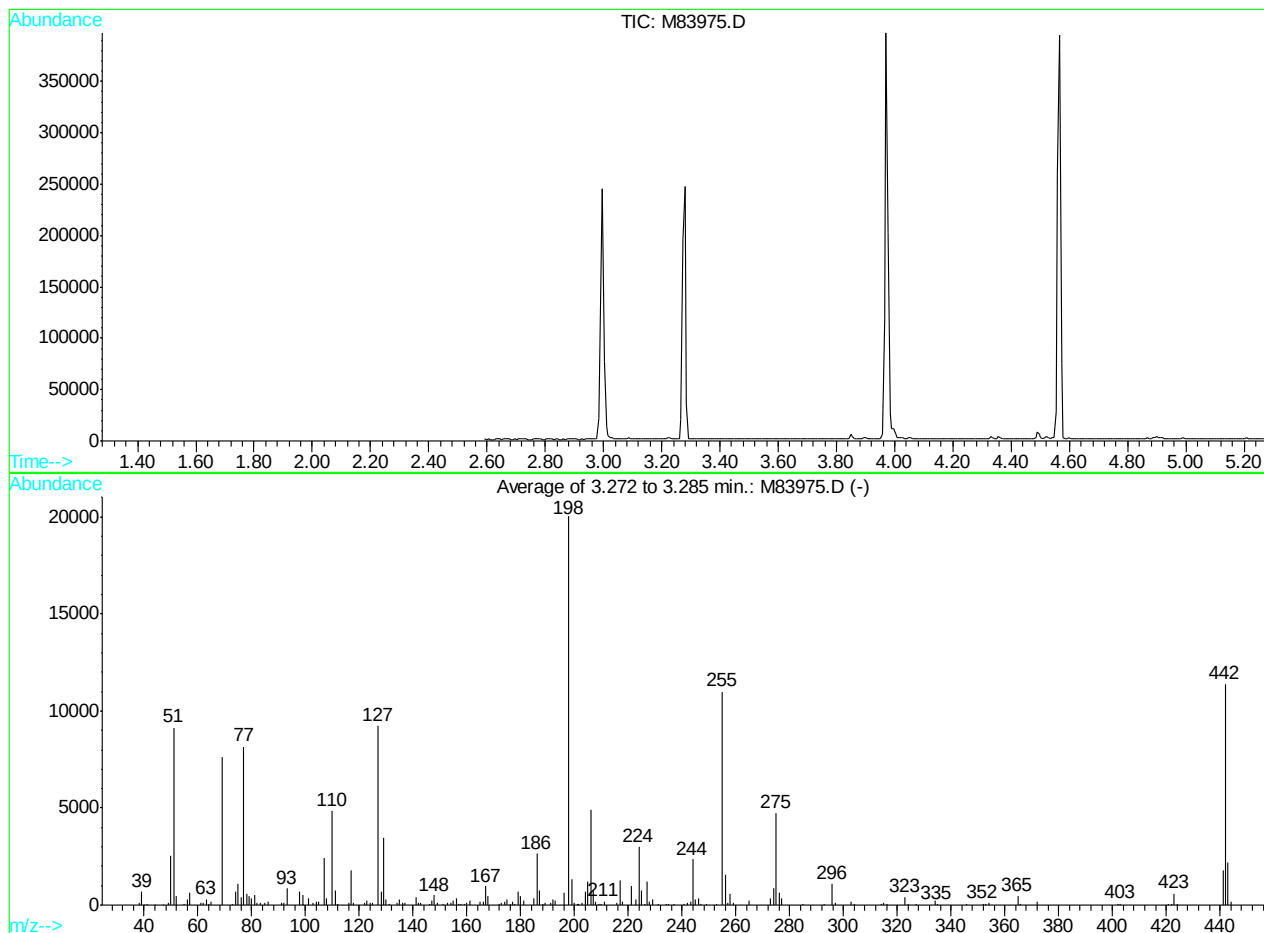
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.00	1812	332.00	41	373.00	57	443.00	3567
296.95	287	334.00	340	382.90	35	444.00	339
303.00	237	335.00	39	390.00	35		
304.00	38	340.90	41	402.00	52		

314.00	66	346.00	52	403.00	147
314.90	211	352.00	139	420.95	114
316.00	100	353.00	84	422.00	107
321.00	37	353.95	171	423.00	997
323.00	592	364.90	753	424.00	160
323.90	83	365.90	107	441.00	2752
326.90	100	372.00	355	442.00	18735

DFTPP

Data File : C:\HPCHEM\1\DATA\EM3346\M83975.D Vial: 1
 Acq On : 21 Dec 2011 7:02 pm Operator: olgaa
 Sample : dftpp Inst : MSM
 Misc : op53696,em3347, Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : C:\HPCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
 Title : DFTPP, HP-5MS 30m x .25mm x .25um



AutoFind: Scans 107, 108, 109; Background Corrected with Scan 103

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.6	9138	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.1	7627	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	46.1	9229	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	20020	PASS
199	198	5	9	6.6	1321	PASS
275	198	10	30	23.8	4760	PASS
365	198	1	100	2.4	474	PASS
441	443	0.10	100	81.2	1790	PASS
442	198	40	100	56.9	11384	PASS
443	442	17	23	19.4	2205	PASS

Average of 3.272 to 3.285 min.: M83975.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.95	125	55.90	268	76.05	381	91.95	143
39.00	676	56.95	615	77.00	8149	92.95	848
39.95	29	60.95	101	78.00	604	97.95	704
41.00	71	61.95	104	78.90	479	98.90	502
43.95	3	63.00	317	79.90	338	99.10	35
46.95	17	64.00	35	80.90	541	101.00	373
48.95	105	64.95	153	81.95	137	102.90	120
50.00	2567	68.90	7627	82.95	136	103.90	195
51.00	9138	72.90	35	84.95	95	105.00	201
52.00	463	74.00	700	85.90	168	107.00	2432
54.90	43	74.95	1123	90.90	129	107.90	331

Average of 3.272 to 3.285 min.: M83975.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
110.00	4827	128.00	707	146.00	36	159.00	36
110.95	741	128.95	3487	146.95	216	159.90	122
111.95	81	129.90	279	147.90	513	160.95	206
115.95	138	130.90	37	148.95	111	164.90	163
116.95	1817	133.90	103	151.10	38	166.00	161
117.90	132	134.95	287	152.95	113	167.00	965
121.90	130	136.00	97	153.85	95	167.95	438
122.95	253	137.00	130	154.95	204	171.90	79
123.85	119	140.90	415	155.95	346	172.95	108
124.90	122	141.90	138	156.90	52	173.95	179
127.00	9229	142.95	105	157.90	42	175.00	291

Average of 3.272 to 3.285 min.: M83975.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.00	74	190.90	91	205.00	1215	222.90	306
176.95	155	191.90	274	206.00	4905	224.00	2997
177.90	34	192.95	241	207.00	752	225.00	750
178.90	685	195.95	662	207.95	160	225.95	85
179.95	463	197.90	20020	208.90	39	226.95	1205
180.95	223	198.90	1321	209.90	49	227.90	162
184.95	328	199.90	108	211.00	178	228.90	274
186.00	2646	201.30	82	215.90	114	231.00	47
187.00	771	201.70	36	216.90	1276	233.90	35
188.00	44	202.95	126	217.90	163	234.90	45
188.90	144	204.00	712	221.00	993	237.00	50

Average of 3.272 to 3.285 min.: M83975.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
240.90	33	256.90	141	295.90	1088	334.90	39
241.95	142	257.95	555	296.90	142	345.90	53
243.00	185	258.90	115	303.00	154	352.00	75
244.00	2352	264.95	210	304.00	35	352.90	52
245.00	285	272.90	353	313.90	35	353.90	98
246.00	321	273.95	856	314.95	115	364.90	474
246.95	81	275.00	4760	316.00	43	365.90	43
248.90	39	276.00	619	323.00	427	372.00	185
252.80	49	276.90	354	324.00	58	401.90	54
255.00	10974	285.00	46	326.90	37	402.90	72
256.00	1539	293.00	78	334.00	210	420.90	56

Average of 3.272 to 3.285 min.: M83975.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
421.90	36						
423.00	598						
424.00	69						
441.00	1790						

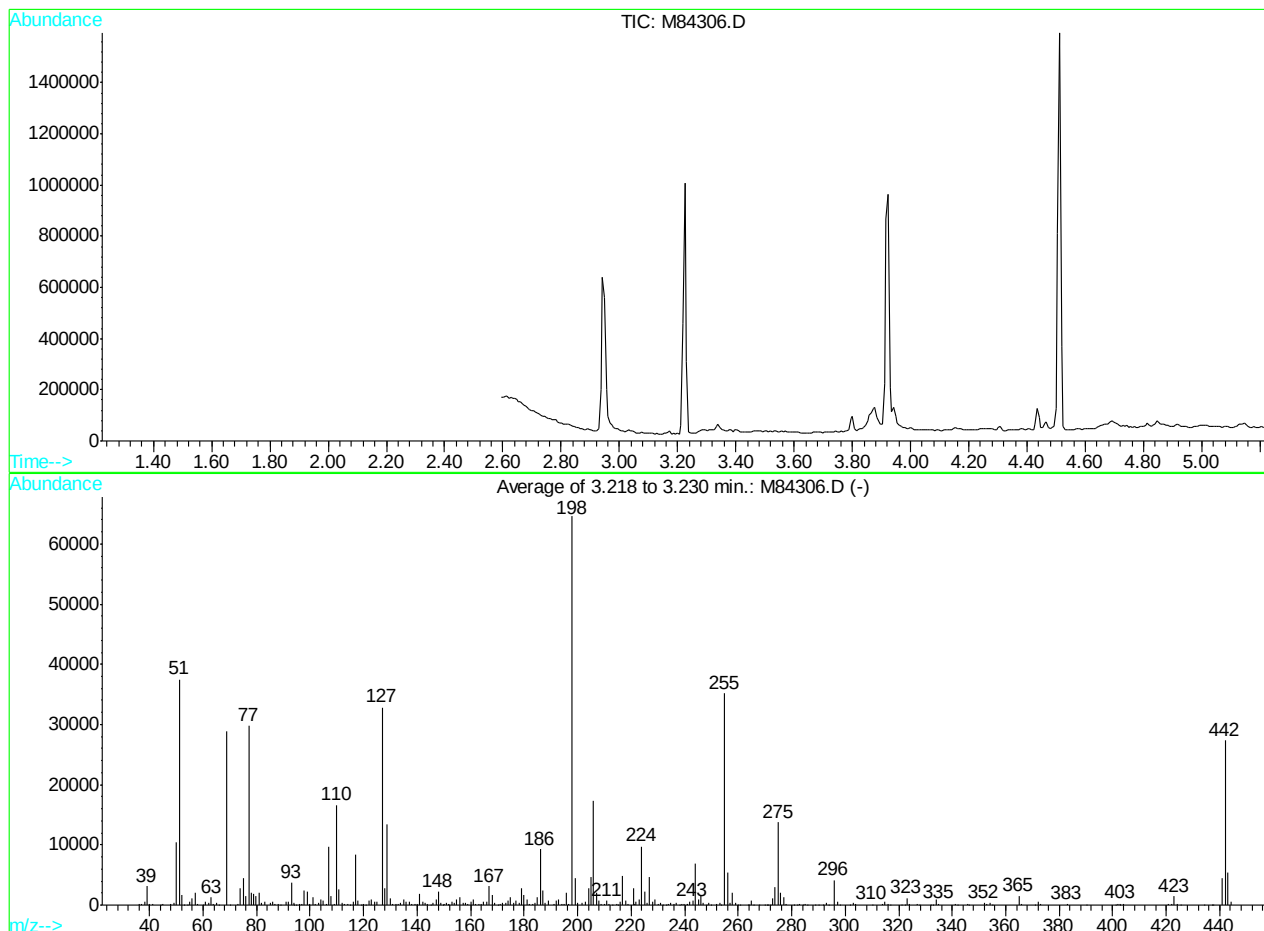
442.00	11384
443.00	2205
443.95	200

8.5.2

8

DFTPP

Data File : C:\HPCHEM\1\DATA\EM3363\M84306.D Vial: 1
Acq On : 14 Jan 2012 9:16 am Operator: kristis
Sample : dftpp Inst : MSM
Misc : op54138,em3363,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
Title : DFTPP, HP-5MS 30m x .25mm x .25um



AutoFind: Scans 98, 99, 100; Background Corrected with Scan 94

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.0	37442	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.7	28856	PASS
70	69	0.00	2	0.3	95	PASS
127	198	40	60	50.8	32799	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	64565	PASS
199	198	5	9	7.0	4498	PASS
275	198	10	30	21.2	13696	PASS
365	198	1	100	2.4	1523	PASS
441	443	0.10	100	84.3	4503	PASS
442	198	40	100	42.3	27292	PASS
443	442	17	23	19.6	5343	PASS

Average of 3.218 to 3.230 min.: M84306.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	114	51.00	37442	63.00	1297	77.95	2042
36.90	259	51.95	1695	63.90	187	78.90	1934
38.00	601	53.00	47	64.95	471	79.90	1556
39.00	3082	53.95	56	65.90	38	80.95	2132
39.95	162	55.00	635	68.90	28856	81.95	451
41.00	137	55.95	1172	70.00	95	82.95	503
43.95	50	57.00	2058	72.90	176	85.00	379
45.00	166	57.95	109	74.00	2844	85.90	630
47.95	166	59.90	59	74.95	4490	86.90	161
48.95	337	60.95	604	76.00	1580	87.90	147
49.95	10361	62.00	455	77.00	29780	89.00	41

Average of 3.218 to 3.230 min.: M84306.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.00	593	100.90	1334	111.90	310	122.95	940
91.90	531	101.90	148	113.00	103	123.90	592
92.90	3669	102.95	303	114.00	140	124.90	524
93.90	290	103.95	982	115.00	15	127.00	32799
94.10	42	104.90	731	116.00	640	128.00	2730
94.95	30	106.00	221	116.90	8404	128.90	13500
95.95	183	106.90	9636	117.95	713	129.95	1207
97.00	118	107.95	1429	118.95	4	130.90	152
97.90	2516	109.10	174	119.90	110	131.95	237
98.95	2168	109.90	16612	120.95	41	132.95	176
99.95	134	110.90	2619	121.95	704	133.90	458

Average of 3.218 to 3.230 min.: M84306.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.90	904	145.95	361	154.90	991	165.95	564
135.90	491	147.00	943	156.00	1388	166.90	3115
136.95	549	147.95	2183	157.00	396	167.95	1663
138.00	166	148.95	327	157.85	317	168.95	372
139.00	137	149.80	59	158.90	278	170.00	54
139.85	239	150.00	111	159.95	525	170.95	100
140.90	1841	151.00	323	160.90	943	171.90	405
141.95	523	151.60	59	161.95	257	172.95	444
142.90	459	151.90	148	162.95	129	174.00	747
143.95	112	152.90	547	164.05	131	175.00	1393
145.20	35	153.90	383	164.90	575	176.00	401

Average of 3.218 to 3.230 min.: M84306.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.90	706	188.00	350	199.95	372	211.70	102
177.95	312	188.95	684	201.45	341	212.80	53
178.90	2753	190.95	263	202.90	638	214.80	158
180.00	1708	192.00	773	204.00	2771	215.00	41
181.00	920	193.00	874	205.00	4619	215.95	502
182.00	213	193.95	208	206.00	17279	216.90	4918
183.00	122	195.05	149	206.95	2060	217.95	671
183.90	296	195.95	2003	207.95	801	219.00	109
185.00	1402	196.60	191	208.90	229	221.00	2800
186.00	9275	197.90	64565	209.95	255	221.50	190
186.95	2418	198.90	4498	210.95	733	221.85	477

Average of 3.218 to 3.230 min.: M84306.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
222.90	990	234.00	280	244.00	6965	255.90	5358
224.00	9742	234.90	343	245.00	988	256.90	444
225.00	2279	235.90	245	245.90	1630	257.90	2123
226.00	325	236.90	291	246.95	357	258.95	365

226.90	4574	238.00	41	248.00	54	260.00	74
227.95	635	238.95	173	248.90	338	260.80	60
228.95	964	239.90	132	250.00	36	263.70	58
229.95	117	240.80	126	251.95	115	263.90	76
230.95	367	241.00	149	253.00	320	264.90	842
232.00	58	242.00	543	253.70	80	265.85	21
232.90	75	243.00	661	255.00	35163	267.70	34

Average of 3.218 to 3.230 min.: M84306.D
dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
269.90	42	281.90	41	296.95	633	322.10	43
270.80	43	283.00	165	297.80	42	323.00	1202
271.00	37	284.00	77	301.90	71	323.95	242
272.00	36	285.00	216	302.95	460	326.90	226
273.00	1153	285.90	38	303.95	123	327.90	83
273.90	2930	288.90	63	310.00	48	331.90	73
275.00	13696	289.90	38	314.00	199	332.90	47
275.90	1968	291.80	46	314.90	484	334.00	854
276.90	1309	292.95	323	315.95	270	334.95	214
277.95	253	293.90	76	317.00	37	340.95	122
280.80	39	295.90	4117	321.10	62	342.00	59

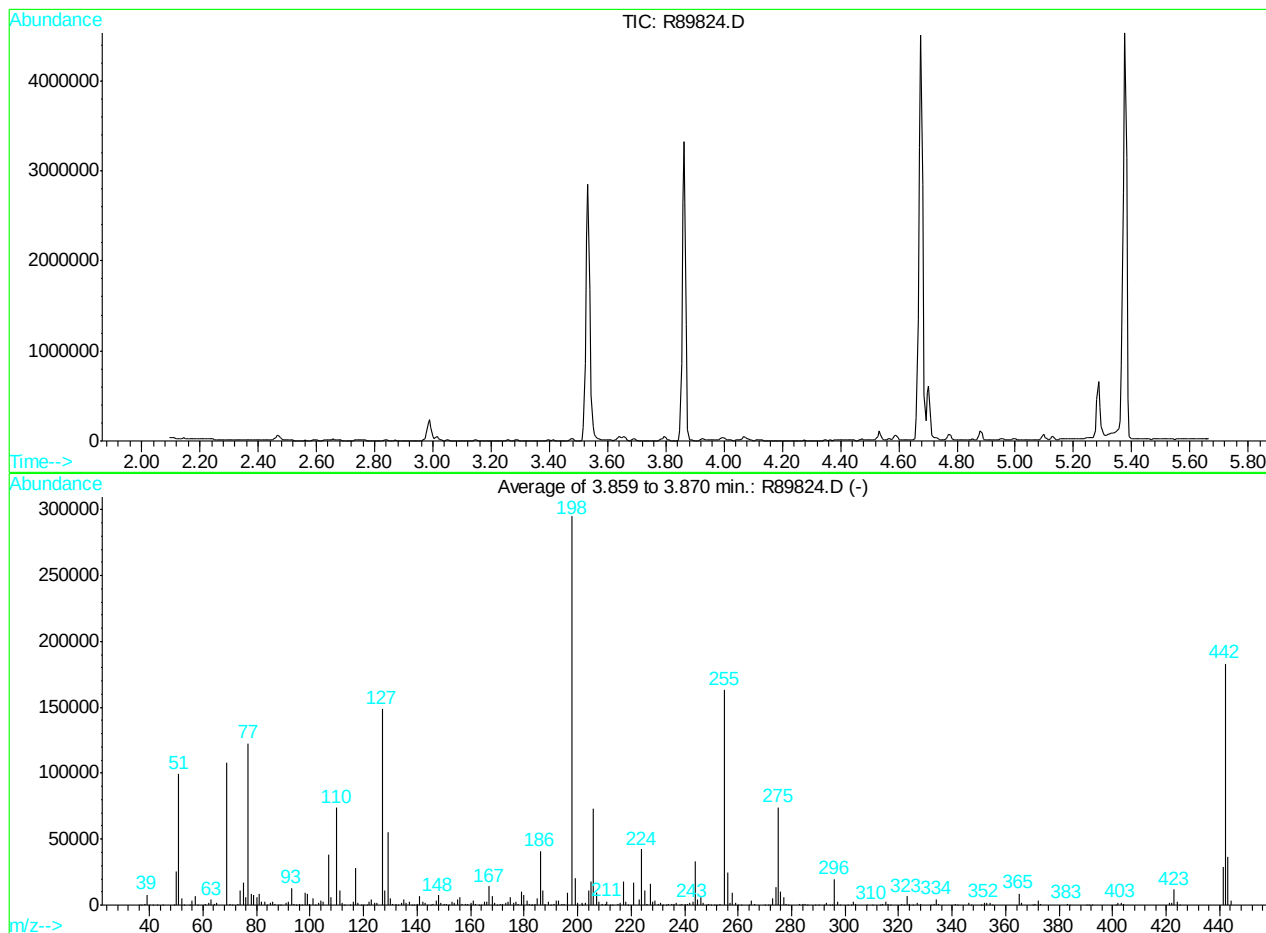
Average of 3.218 to 3.230 min.: M84306.D
dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
345.90	172	382.95	161	425.30	34		
346.10	70	390.00	46	434.10	35		
351.95	340	400.90	39	437.20	34		
352.95	249	401.90	131	437.50	59		
353.95	319	402.80	48	441.00	4503		
355.00	41	402.95	232	442.00	27292		
364.90	1523	404.00	113	443.00	5343		
365.90	215	420.95	210	444.05	483		
371.00	77	421.95	239				
372.00	517	423.00	1461				
372.95	172	423.95	253				

DFTPPR

Data File : C:\HPCHEM\1\DATA\ER3455\R89824.D Vial: 1
Acq On : 16 Sep 2011 10:23 am Operator: larisap
Sample : dftpp Inst : MSR
Misc : op51699,er3455, Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPPR.M (RTE Integrator)
Title : DFTPP, ZB-5MSI 30m x .25mm x .25um



AutoFind: Scans 331, 332, 333; Background Corrected with Scan 325

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.6	99221	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	36.6	108024	PASS
70	69	0.00	2	0.6	662	PASS
127	198	40	60	50.4	148536	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	294869	PASS
199	198	5	9	6.8	20096	PASS
275	198	10	30	25.2	74435	PASS
365	198	1	100	3.0	8875	PASS
441	443	0.10	100	78.4	28683	PASS
442	198	40	100	62.1	183005	PASS
443	442	17	23	20.0	36576	PASS

Average of 3.859 to 3.870 min.: R89824.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	113	52.00	5204	69.00	108024	81.00	8554
37.05	406	53.00	273	70.00	662	82.00	2230
38.10	1219	55.05	451	71.05	214	83.00	2210
39.05	8026	56.00	3060	73.05	847	83.95	185
39.95	213	57.00	7168	74.00	10695	85.00	1687
41.00	188	58.00	313	75.00	16672	86.00	2330
43.00	72	61.00	1196	76.10	6148	87.00	1090
45.00	136	62.00	1353	77.00	122661	88.00	452
49.10	420	63.00	4223	78.00	8800	88.90	196
50.00	25785	64.05	559	79.00	7369	91.00	1947
51.00	99221	65.00	2072	80.00	5807	92.00	2248

Average of 3.859 to 3.870 min.: R89824.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	12971	104.00	3021	118.00	2128	130.00	4726
94.00	871	105.00	2872	119.05	305	131.00	1034
95.00	254	107.00	38636	119.95	444	132.00	499
96.10	704	108.00	6035	121.05	180	132.90	205
97.00	87	110.00	73792	122.00	2564	134.00	1515
98.00	9714	111.00	11217	123.00	4092	135.00	4516
99.00	8223	112.00	1419	123.95	1747	136.00	1806
100.05	628	112.90	359	125.00	1801	137.00	2318
101.00	4825	115.00	85	127.00	148536	137.90	326
102.00	266	116.05	2196	128.00	10952	139.00	239
103.00	1729	117.00	28472	129.00	55421	140.00	664

Average of 3.859 to 3.870 min.: R89824.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.00	6751	151.95	362	163.00	234	174.00	2934
142.00	2330	153.00	2259	163.95	377	175.00	5575
143.00	1661	153.95	1671	165.00	2624	176.00	1726
144.00	396	155.00	4139	166.00	2355	177.00	2563
145.05	402	156.00	6050	167.00	14204	177.95	866
146.00	1266	156.95	1256	168.00	6916	179.00	10632
147.00	3557	157.95	1282	169.00	1315	180.00	7391
148.00	7657	159.00	1080	169.95	403	181.00	3471
148.95	1690	160.00	2143	170.95	645	182.00	585
150.00	527	161.00	3371	172.00	1293	182.80	106
151.15	1050	162.00	1033	173.00	1644	183.00	150

Average of 3.859 to 3.870 min.: R89824.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
184.00	865	195.05	603	207.00	9556	218.95	222
185.00	5192	196.00	9547	208.00	2221	221.00	16759
186.00	41115	198.00	294869	209.00	841	223.00	4359
187.00	11449	199.00	20096	210.25	871	224.00	42475
188.00	1177	200.00	1600	211.00	2941	225.00	10942
189.00	2427	201.50	1405	212.00	114	226.05	811
190.00	339	201.70	286	213.05	214	227.00	16609
191.00	1104	203.00	1946	215.00	827	228.00	2251
192.00	3539	204.00	10691	216.05	1513	229.00	3595
193.05	3844	205.00	17685	217.00	18222	230.00	552
194.00	895	206.00	72835	218.00	2531	231.05	1549

Average of 3.859 to 3.870 min.: R89824.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
232.00	211	243.10	2433	255.00	163123	271.05	275
232.95	278	244.05	33251	256.00	24485	271.95	362
234.00	1143	245.00	4672	257.05	1864	273.00	5108
235.00	1231	246.00	6092	258.00	9345	274.00	13318

236.00	911	247.00	1313	259.00	1469	275.00	74435
237.00	1463	247.95	277	260.00	153	276.00	9984
238.00	103	249.00	1120	261.05	273	277.00	6057
238.95	709	250.00	231	264.00	345	278.00	1011
240.00	587	251.10	136	265.00	3734	278.90	109
241.00	1045	252.05	258	266.00	664	283.05	761
242.00	2133	253.00	733	269.90	92	284.00	472

Average of 3.859 to 3.870 min.: R89824.D
dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
285.05	1029	301.05	289	321.00	686	341.05	665
285.90	95	302.05	413	322.05	294	342.10	115
288.95	223	303.05	2258	323.05	6650	346.00	1602
290.00	94	304.00	622	324.05	1292	346.90	167
292.10	141	307.90	99	325.10	90	351.00	100
293.00	1403	310.10	162	327.00	1325	352.05	2067
294.10	284	313.00	96	328.00	688	353.05	1364
294.95	210	314.00	1084	332.00	454	354.05	1993
296.00	19748	315.00	2308	333.05	713	355.05	388
297.00	2845	316.00	1292	334.10	4453	365.00	8875
297.90	86	317.00	89	335.00	1195	366.00	1327

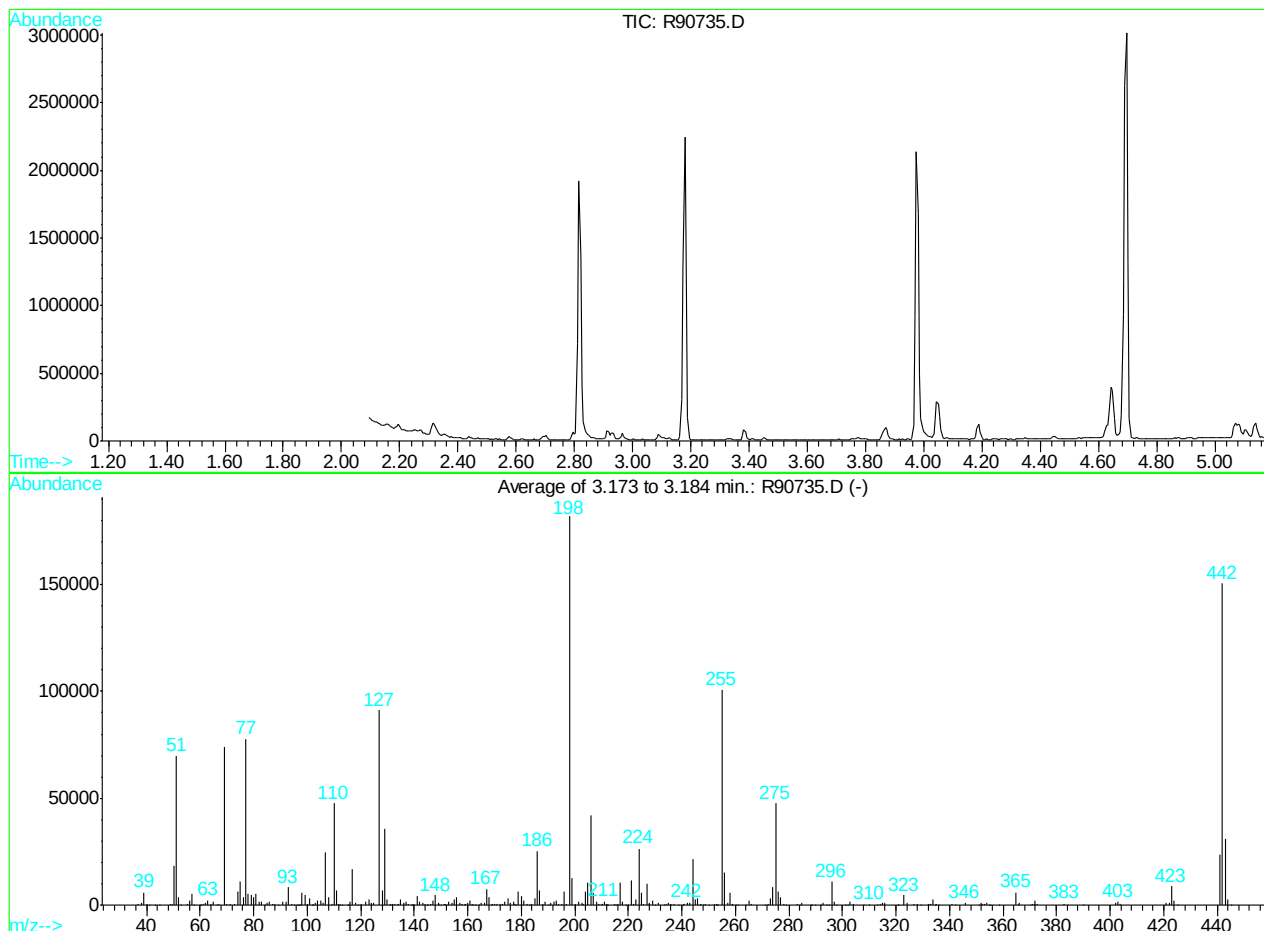
Average of 3.859 to 3.870 min.: R89824.D
dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
370.10	84	403.05	2071				
371.05	543	404.05	777				
372.05	3656	421.05	1782				
373.05	828	422.05	1590				
383.05	937	423.05	11559				
384.00	135	424.10	2244				
390.10	442	425.10	89				
391.10	158	441.10	28683				
392.10	119	442.10	183005				
401.00	133	443.10	36576				
402.05	1487	444.05	3190				

DFTPPR

Data File : C:\HPCHEM\1\DATA\ER3499\R90735.D Vial: 1
Acq On : 20 Dec 2011 1:50 pm Operator: rachelg
Sample : dftpp Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPPR.M (RTE Integrator)
Title : DFTPP, ZB-5MSI 30m x .25mm x .25um



AutoFind: Scans 203, 204, 205; Background Corrected with Scan 197

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.3	69640	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.8	74106	PASS
70	69	0.00	2	1.0	705	PASS
127	198	40	60	50.2	91232	PASS
197	198	0.00	1	0.2	412	PASS
198	198	100	100	100.0	181824	PASS
199	198	5	9	6.8	12403	PASS
275	198	10	30	26.2	47667	PASS
365	198	1	100	3.2	5881	PASS
441	443	0.10	100	76.8	23661	PASS
442	198	40	100	82.8	150525	PASS
443	442	17	23	20.5	30790	PASS

Average of 3.173 to 3.184 min.: R90735.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	375	52.05	3586	64.05	367	77.10	77656
38.05	889	52.95	273	65.05	1357	78.05	5392
39.10	6028	55.10	563	66.00	105	79.00	4792
40.05	559	55.95	2301	67.05	324	80.00	3755
41.00	84	57.00	5485	69.00	74106	81.00	5465
43.00	74	57.90	84	70.00	705	82.05	1571
45.00	243	59.90	89	71.05	364	82.95	1408
49.00	492	60.10	123	73.00	734	84.00	236
49.20	105	61.00	686	74.00	6550	85.00	870
50.10	18268	62.00	1286	75.00	10846	86.00	1499
51.10	69640	63.00	2188	76.05	3767	87.00	680

Average of 3.173 to 3.184 min.: R90735.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	359	98.05	5926	108.00	3659	117.95	1196
89.00	226	99.05	4920	109.10	796	118.80	91
91.05	1434	100.00	282	110.00	47491	120.10	395
92.05	1350	101.00	3369	111.00	6846	122.00	1432
92.95	8359	101.90	111	111.90	655	123.05	2387
94.10	669	102.20	141	112.10	142	123.95	878
94.90	178	103.05	836	112.95	251	125.00	1091
96.20	156	104.00	2233	115.00	193	127.00	91232
96.80	131	105.00	1938	115.20	112	128.00	6847
97.20	143	106.05	947	116.00	1447	129.00	35832
97.40	140	107.00	24872	117.00	16580	130.00	2753

Average of 3.173 to 3.184 min.: R90735.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
130.90	188	139.10	266	148.90	1008	157.95	718
131.05	368	139.85	387	149.10	139	158.85	244
132.05	508	141.00	4144	149.95	234	159.10	311
132.90	348	142.00	1469	151.05	528	159.90	1301
133.90	547	143.05	1086	151.65	480	161.00	2335
134.10	392	144.00	382	152.00	102	161.80	450
135.05	2488	144.90	98	152.95	1374	162.20	129
136.05	1176	145.10	120	153.95	1105	163.00	173
137.00	1467	146.00	771	155.05	2636	164.00	252
137.95	328	147.00	1972	156.00	3928	164.95	982
138.90	85	147.95	4505	157.05	988	166.10	1130

Average of 3.173 to 3.184 min.: R90735.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
167.00	7488	176.10	1188	186.00	25299	196.80	412
168.00	3793	177.00	1654	187.00	7000	198.00	181824
168.80	117	177.70	307	188.00	707	199.00	12403
169.05	506	178.00	258	189.00	1428	200.05	707
170.00	384	179.00	6421	189.95	191	201.45	1344
171.05	336	180.00	4088	190.95	844	202.90	988
171.95	586	180.95	2171	192.05	1801	203.10	282
172.85	484	182.00	521	193.00	2381	204.00	6272
173.10	573	182.85	199	194.00	390	205.00	10346
173.95	1551	183.95	623	195.00	451	206.00	42203
175.00	3310	185.00	3106	196.00	6398	206.95	5933

Average of 3.173 to 3.184 min.: R90735.D

dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
207.95	1708	217.00	10634	227.90	318	238.90	213
208.95	657	217.95	1722	228.05	1181	240.20	125
210.10	522	219.05	234	229.00	1938	240.95	422
210.40	471	220.00	94	229.95	264	241.95	1284

210.95	1588	221.00	11772	231.00	903	243.00	821
211.80	409	222.00	457	233.10	169	244.00	21282
212.10	113	223.00	2748	233.95	582	245.05	2607
212.40	96	224.00	26243	234.95	841	245.95	3365
214.90	574	225.00	5732	235.80	134	246.80	147
215.30	100	225.95	448	236.00	375	247.05	529
216.10	807	226.95	10064	237.00	727	247.80	186

Average of 3.173 to 3.184 min.: R90735.D
dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
248.95	652	259.00	637	276.00	6200	292.90	912
250.10	111	259.90	142	276.95	3812	294.00	120
252.05	305	260.90	207	278.05	455	294.90	201
252.80	129	263.90	129	279.10	126	295.95	10822
253.00	418	264.95	2276	283.05	643	296.95	1565
253.30	87	265.95	513	283.90	108	297.90	147
255.00	100581	271.00	163	284.95	986	301.00	119
256.00	15242	272.10	381	288.00	91	302.00	274
257.00	1091	273.00	3344	288.70	126	302.95	1580
258.00	5882	274.00	8195	290.00	145	303.95	548
258.80	215	275.00	47667	291.90	91	307.90	97

Average of 3.173 to 3.184 min.: R90735.D
dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
310.00	125	329.10	108	351.00	88	370.30	97
313.00	99	331.95	481	351.90	834	370.90	292
314.00	322	332.20	117	352.10	516	371.80	358
314.95	1094	332.95	402	352.90	714	372.00	1903
316.00	875	334.00	2666	354.05	1251	372.90	686
320.80	221	334.80	84	354.95	263	383.00	596
321.00	150	335.05	712	355.20	100	384.00	91
323.00	4625	336.10	90	358.70	172	390.00	198
324.00	999	340.90	486	364.95	5881	401.95	1074
326.90	747	342.10	244	365.80	164	402.95	1422
327.95	480	345.85	1032	365.95	842	403.95	628

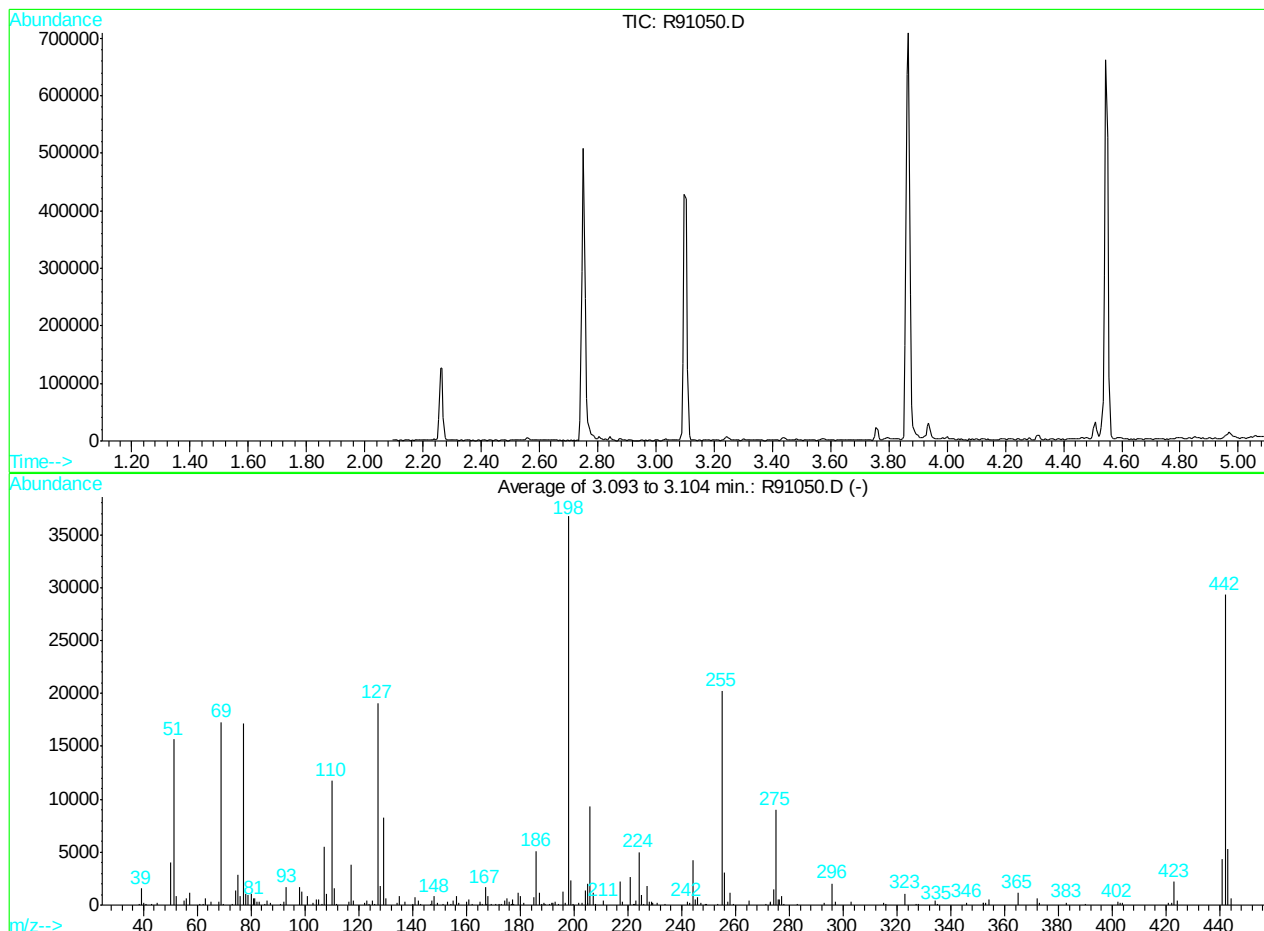
Average of 3.173 to 3.184 min.: R90735.D
dftpp

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
420.90	1269						
422.00	1215						
423.00	8767						
423.95	2127						
425.00	97						
441.00	23661						
442.00	150525						
443.00	30790						
444.00	2529						
445.05	263						

DFTPPR

Data File : C:\HPCHEM\1\DATA\ER3516\R91050.D Vial: 1
Acq On : 14 Jan 2012 11:26 am Operator: kristis
Sample : DFTPP Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPPR.M (RTE Integrator)
Title : DFTPP, ZB-5MSI 30m x .25mm x .25um



AutoFind: Scans 188, 189, 190; Background Corrected with Scan 184

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.7	15673	PASS
68	69	0.00	2	1.7	300	PASS
69	198	0.00	100	47.1	17306	PASS
70	69	0.00	2	0.7	123	PASS
127	198	40	60	52.0	19111	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	36740	PASS
199	198	5	9	6.3	2304	PASS
275	198	10	30	24.5	9008	PASS
365	198	1	100	3.1	1136	PASS
441	443	0.10	100	81.1	4316	PASS
442	198	40	100	79.8	29311	PASS
443	442	17	23	18.2	5324	PASS

Average of 3.093 to 3.104 min.: R91050.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.20	117	57.00	1133	75.95	854	87.00	261
39.05	1579	61.00	84	77.10	17183	90.90	156
40.05	204	62.20	101	78.00	1029	92.05	361
41.00	134	63.05	622	79.00	1003	93.05	1746
43.00	91	65.00	346	79.90	1112	97.95	1667
45.10	186	68.10	300	80.90	611	99.00	1308
50.10	3991	69.00	17306	81.10	620	101.00	851
51.10	15673	69.80	123	82.10	279	103.00	234
52.05	842	73.10	85	83.05	287	104.00	502
55.00	408	74.05	1379	85.00	108	105.00	512
56.05	608	75.00	2834	85.95	434	106.10	89

Average of 3.093 to 3.104 min.: R91050.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
107.00	5467	123.80	143	141.05	770	156.10	839
108.05	1086	125.00	415	142.05	384	157.05	208
110.00	11759	125.90	98	142.80	109	159.95	368
110.95	1550	127.05	19111	146.80	148	160.90	506
111.90	89	128.05	1837	147.15	464	162.00	146
116.15	314	129.00	8317	148.00	830	164.90	112
117.00	3849	129.95	667	149.00	176	165.05	281
117.95	422	134.10	182	151.10	84	165.90	139
122.00	264	134.95	844	153.00	320	166.95	1677
122.20	129	137.10	299	154.00	148	167.50	128
123.00	478	140.10	124	154.95	402	168.10	879

Average of 3.093 to 3.104 min.: R91050.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.10	107	180.05	892	193.00	315	205.05	1998
170.80	101	181.10	172	194.10	87	206.00	9290
172.00	99	185.00	778	195.95	1247	207.05	1221
173.10	90	186.00	5113	196.50	170	208.10	130
174.00	460	187.05	1222	198.00	36740	210.95	389
175.05	633	187.80	128	198.95	2304	217.00	2199
175.95	287	188.90	177	199.80	88	218.00	308
176.80	106	189.10	110	201.70	239	221.00	2631
177.05	507	191.00	95	203.05	241	222.00	110
177.70	103	191.70	265	204.05	1409	222.70	125
179.00	1212	192.00	250	204.90	257	223.05	405

Average of 3.093 to 3.104 min.: R91050.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
224.00	5001	244.05	4274	259.10	125	283.00	92
225.00	962	244.95	538	264.95	403	292.95	197
226.00	131	246.05	781	271.10	88	295.95	2062
227.00	1767	246.90	185	272.80	193	297.00	275
228.10	361	248.80	116	273.00	344	302.95	349
228.90	368	249.20	88	274.00	1450	314.95	244
229.10	213	253.50	111	275.00	9008	316.00	138
231.05	266	255.00	20218	275.90	563	323.00	1072
233.90	86	256.00	3051	276.10	507	326.90	95
242.05	365	257.05	311	276.95	836	327.80	141
243.10	231	258.05	1183	277.90	97	334.00	477

Average of 3.093 to 3.104 min.: R91050.D

DFTPP

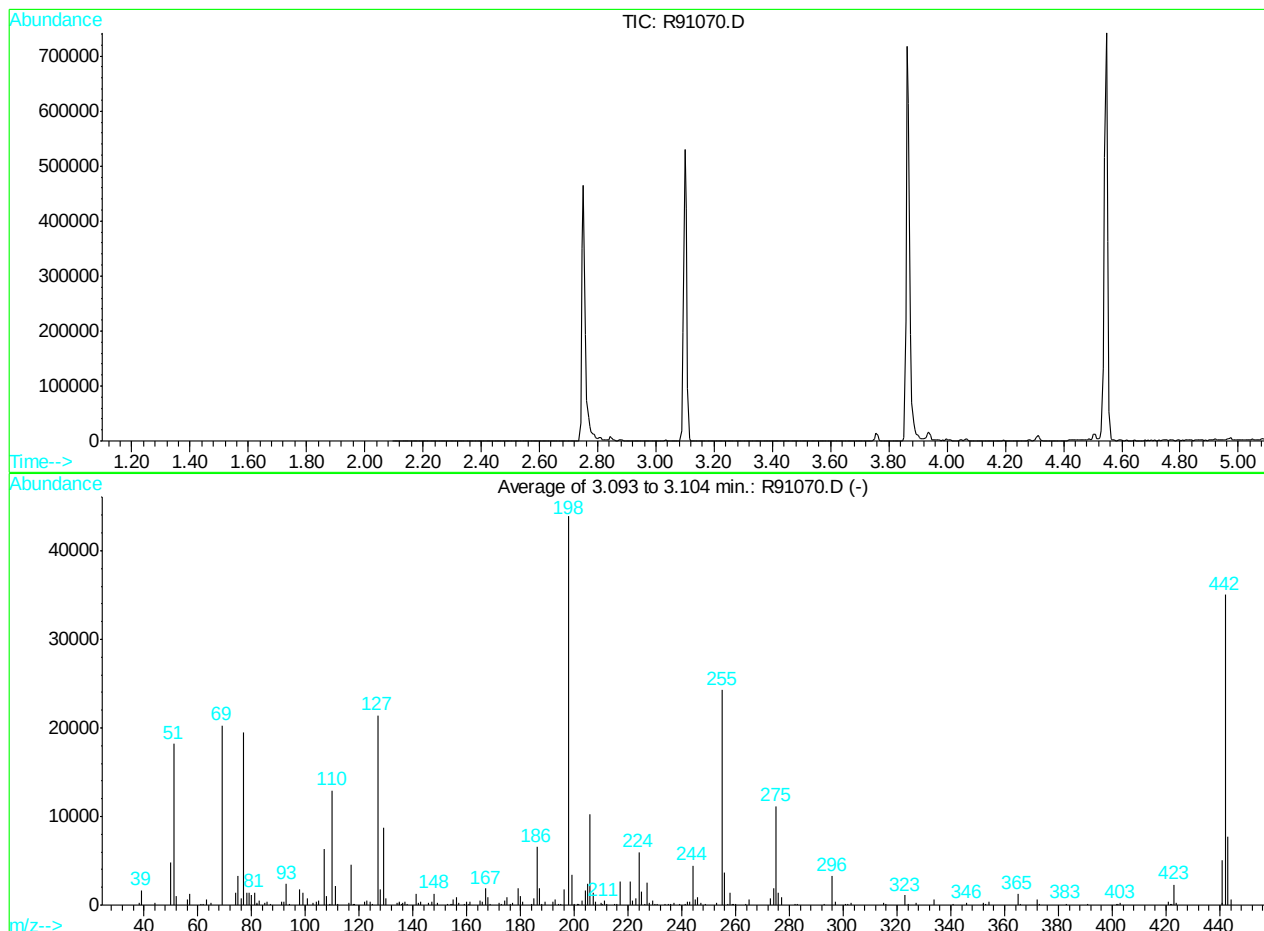
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
335.00	101	401.90	280				
346.00	244	403.05	203				
351.90	170	403.90	183				
352.10	244	421.00	210				

352.80	241	422.10	186
354.00	545	423.00	2198
364.90	1136	424.05	465
372.10	615	441.00	4316
373.00	264	442.00	29311
383.10	219	443.00	5324
390.00	89	444.00	608

DFTPPR

Data File : C:\HPCHEM\1\DATA\ER3517\R91070.D Vial: 1
Acq On : 16 Jan 2012 8:39 am Operator: rachelg
Sample : DFTPP Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPPR.M (RTE Integrator)
Title : DFTPP, ZB-5MSI 30m x .25mm x .25um



AutoFind: Scans 188, 189, 190; Background Corrected with Scan 184

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result
51	198	30	60	41.5	18219	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.3	20291	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	48.8	21397	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	43864	PASS
199	198	5	9	7.8	3412	PASS
275	198	10	30	25.5	11174	PASS
365	198	1	100	2.8	1215	PASS
441	443	0.10	100	65.3	5046	PASS
442	198	40	100	79.8	34991	PASS
443	442	17	23	22.1	7730	PASS

Average of 3.093 to 3.104 min.: R91070.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.05	221	65.00	241	82.15	251	100.95	795
39.05	1678	69.00	20291	82.95	473	103.05	255
43.95	198	74.05	1454	85.00	311	103.90	364
50.10	4763	75.05	3243	85.90	327	105.00	501
51.10	18219	76.05	795	86.90	104	107.00	6366
52.10	970	77.10	19530	91.00	345	108.00	972
56.00	697	78.05	1414	91.95	367	109.00	117
57.00	1292	79.05	1434	93.00	2391	110.00	12961
61.00	92	80.05	1113	94.20	108	111.00	2116
62.00	116	81.00	1451	98.05	1737	111.90	131
63.05	662	81.90	98	99.05	1408	116.05	293

Average of 3.093 to 3.104 min.: R91070.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.00	4611	134.10	232	147.00	430	160.80	148
117.90	134	134.80	209	147.95	1308	161.05	430
118.10	84	135.10	417	148.95	251	164.95	503
122.00	388	135.70	117	152.80	164	165.90	323
123.00	512	136.00	223	154.15	178	167.05	1894
124.00	394	137.05	419	154.40	89	168.00	877
125.10	101	137.70	97	155.10	694	168.90	98
127.00	21397	141.05	1283	156.05	856	172.20	223
128.00	1724	142.00	308	157.10	268	172.90	95
129.00	8772	142.90	375	159.00	163	174.00	452
130.00	743	145.90	225	160.05	330	174.95	887

Average of 3.093 to 3.104 min.: R91070.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.10	106	192.05	444	202.95	501	215.80	183
176.95	276	193.05	691	204.00	1668	216.95	2679
178.95	1902	194.20	126	205.00	2442	220.95	2680
180.00	1014	194.90	118	206.00	10194	221.80	547
180.90	412	196.00	1803	207.05	1361	222.95	707
184.10	98	198.00	43864	207.90	343	224.00	5954
184.95	720	198.95	3412	210.10	201	224.95	1501
186.00	6532	200.00	147	210.40	131	226.10	142
187.10	1858	201.10	109	211.05	485	227.00	2473
188.00	130	201.30	146	212.00	101	228.05	265
189.05	351	201.70	114	215.00	101	229.00	490

Average of 3.093 to 3.104 min.: R91070.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
230.10	93	245.00	602	260.10	97	296.00	3289
231.00	131	246.00	920	263.90	91	297.05	404
233.90	97	246.90	233	265.05	642	301.00	84
234.90	85	248.90	96	273.00	748	301.80	87
235.90	133	252.90	225	274.00	1846	302.95	259
237.00	196	255.00	24284	275.00	11174	314.90	268
239.00	93	256.00	3722	276.00	1361	315.90	135
241.10	89	256.90	115	277.00	940	323.05	1098
242.05	375	258.00	1368	282.00	101	324.00	103
243.05	350	258.70	85	282.80	156	326.95	221
244.05	4489	259.10	149	292.90	126	333.90	605

Average of 3.093 to 3.104 min.: R91070.D

DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
340.80	105	390.90	91	442.00	34991		
345.95	237	401.80	108	443.00	7730		
352.00	87	402.10	106	444.05	614		
352.20	197	403.05	228				

352.80	102	420.90	326
354.00	407	421.80	90
364.95	1215	422.10	167
366.00	118	423.00	2297
371.95	612	423.90	305
373.10	100	440.90	277
382.80	155	441.05	5046

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83967.D

Vial: 2

Acq On : 21 Dec 2011 2:18 pm

Operator: olgaa

Sample : ic3346-100

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 21 14:53 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 13:24:21 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	24189	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	97267	40.00	ppb	0.00
47) Acenaphthene-d10	11.02	164	60876	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	95238	40.00	ppb	0.00
83) Chrysene-d12	18.31	240	100945	40.00	ppb	0.00
92) Perylene-d12	20.07	264	83253	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.40	152	24189	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	60876	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	95238	40.00	ppb	0.00
113) Chrysene-d12a	18.31	240	100945	40.00	ppb	0.00
116) Naphthalene-d8a	7.61	136	97267	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	3.70	112	91317	93.47	ppb	0.01
Spiked Amount 50.000			Recovery	=	186.94%	
8) Phenol-d5	4.93	99	104872	89.35	ppb	0.00
Spiked Amount 50.000			Recovery	=	178.70%	
25) Nitrobenzene-d5	6.37	82	77198	82.82	ppb	-0.01
Spiked Amount 50.000			Recovery	=	165.64%	
51) 2-Fluorobiphenyl	9.75	172	164835	80.41	ppb	0.00
Spiked Amount 50.000			Recovery	=	160.82%	
73) 2,4,6-Tribromophenol	12.62	330	21901	95.39	ppb	0.00
Spiked Amount 50.000			Recovery	=	190.78%	
86) Terphenyl-d14	16.84	244	183001	70.85	ppb	0.00
Spiked Amount 50.000			Recovery	=	141.70%	
106) 2-bromonaphthalene	0.00	127	0d	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0d	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery	=	0.00%#	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.20	88	36490	54.16	ppb	73
3) Pyridine	2.46	79	98335	86.87	ppb	# 76
4) N-Nitrosodimethylamine	2.44	42	67307	83.62	ppb	85
6) Indene	5.86	116	135074	83.40	ppb	97
7) Cumene	4.32	105	195637	87.43	ppb	98
9) Phenol	4.94	94	115027	88.82	ppb	99
10) Aniline	4.97	93	108086	78.80	ppb	81
11) bis(2-Chloroethyl)ether	5.06	93	72394	83.99	ppb	93
12) 2-Chlorophenol	5.13	128	83500	86.68	ppb	96
13) Decane	5.21	43	113319	73.43	ppb	92
14) 1,3-Dichlorobenzene	5.35	146	91542	82.38	ppb	98
15) 1,4-Dichlorobenzene	5.43	146	91237	82.23	ppb	96
16) Benzyl alcohol	5.67	108	55414	90.62	ppb	83
17) 1,2-Dichlorobenzene	5.74	146	86780	82.23	ppb	95
18) Acetophenone	6.12	105	106404	84.74	ppb	92
19) 2-Methylphenol	5.89	108	71553	83.52	ppb	99
20) 2,2'-oxybis(1-Chloropropan	5.93	121	25572	100.95	ppb	# 5
21) 3&4-Methylphenol	6.15	108	79060	88.90	ppb	# 84
22) n-Nitroso-di-n-propylamine	6.18	70	52862	81.39	ppb	90

(#) = qualifier out of range (m) = manual integration

M83967.D MM3346.M

Thu Dec 22 16:13:04 2011

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83967.D

Vial: 2

Acq On : 21 Dec 2011 2:18 pm

Operator: olgaa

Sample : ic3346-100

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 21 14:53 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 13:24:21 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) Hexachloroethane	6.24	201	32547	86.90	ppb	88
26) Nitrobenzene	6.40	77	81028	82.61	ppb	92
27) Quinoline	8.30	129	161715	85.47	ppb	99
28) Isophorone	6.82	82	143901	81.04	ppb	95
29) 2-Nitrophenol	6.97	139	49300	88.63	ppb	92
30) 2,4-Dimethylphenol	7.08	107	78946	91.10	ppb	92
31) Benzoic acid	7.37	105	65996	100.18	ppb	95
32) bis(2-Chloroethoxy)methane	7.26	93	84268	84.00	ppb	99
33) 2,4-Dichlorophenol	7.39	162	73823	90.38	ppb	95
34) 2,6-Dichlorophenol	7.83	162	70292	86.04	ppb	97
35) 1,3,5-Trichlorobenzene	6.98	180	79066	85.65	ppb	98
36) 1,2,4-Trichlorobenzene	7.55	180	78054	83.64	ppb	94
37) 1,2,3-Trichlorobenzene	7.99	180	74767	85.54	ppb	97
38) Naphthalene	7.65	128	223435	83.40	ppb	99
39) 4-Chloroaniline	7.82	127	98056	84.10	ppb	95
40) 2,3-Dichloroaniline	9.60	161	84837	86.93	ppb	94
41) Caprolactam	8.48	55	55299	69.10	ppb	80
42) Hexachlorobutadiene	8.02	225	42899	85.18	ppb	99
43) 4-Chloro-3-methylphenol	8.80	107	73122	91.51	ppb	97
44) 2-Methylnaphthalene	8.96	141	146514	84.73	ppb	96
45) 1-Methylnaphthalene	9.17	142	157537	84.88	ppb	96
46) Dimethylnaphthalene	10.20	156	135317	81.03	ppb	96
48) Hexachlorocyclopentadiene	9.43	237	99361	213.00	ppb	98
49) 2,4,6-Trichlorophenol	9.60	196	55530	87.74	ppb	98
50) 2,4,5-Trichlorophenol	9.66	196	59847	88.63	ppb	99
52) 2-Chloronaphthalene	9.91	162	156365	80.05	ppb	97
53) Biphenyl	9.91	154	180586	79.92	ppb	99
54) 2-Nitroaniline	10.20	65	50704	83.85	ppb	93
55) Dimethylphthalate	10.67	163	177229	80.71	ppb	98
56) Acenaphthylene	10.71	152	246712	81.53	ppb	99
57) 2,6-Dinitrotoluene	10.79	165	42802	92.03	ppb	73
58) 3-Nitroaniline	11.03	138	49384	89.46	ppb	94
59) Acenaphthene	11.10	153	152850	79.36	ppb	95
60) 2,4-Dinitrophenol	11.23	184	55198	198.80	ppb	93
61) 4-Nitrophenol	11.43	109	24410	101.46	ppb #	48
62) Dibenzofuran	11.42	168	217015	76.81	ppb	91
63) 2,4-Dinitrotoluene	11.54	165	58728	92.13	ppb	87
64) 2,3,4,6-Tetrachlorophenol	11.77	232	50541	91.03	ppb	96
65) Diethylphthalate	12.10	149	167309	80.20	ppb	97
66) Fluorene	12.09	166	180742	78.04	ppb	99
67) 4-Chlorophenyl-phenylether	12.14	204	84361	78.87	ppb	94
68) 4-Nitroaniline	12.28	138	49006	90.59	ppb #	72
70) 4,6-Dinitro-2-methylphenol	12.35	198	40384	95.44	ppb	91
71) n-Nitrosodiphenylamine	12.40	169	129531	78.07	ppb	99
72) 1,2-Diphenylhydrazine	12.45	77	170958	80.85	ppb	98
74) 4-Bromophenyl-phenylether	13.09	248	48349	78.31	ppb	96
75) Hexachlorobenzene	13.35	284	50544	75.22	ppb	95
76) Pentachlorophenol	13.73	266	75659	193.10	ppb	99
77) Phenanthrene	13.98	178	241354	69.26	ppb	99

(#) = qualifier out of range (m) = manual integration

M83967.D MM3346.M

Thu Dec 22 16:13:04 2011

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83967.D Vial: 2
 Acq On : 21 Dec 2011 2:18 pm Operator: olgaa
 Sample : ic3346-100 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 21 14:53 2011 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 13:24:21 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Anthracene	14.07	178	241716	71.22	ppb	99
79) Carbazole	14.43	167	244568	68.59	ppb	99
80) Di-n-butylphthalate	15.32	149	298460	80.91	ppb	98
81) Fluoranthene	16.18	202	300182	72.17	ppb	96
82) Octadecane	13.91	57	135391	76.65	ppb	86
84) Pyrene	16.53	202	303968	65.64	ppb	99
85) Butyl stearate	17.71	56	93723	61.74	ppb	81
87) Butylbenzylphthalate	17.65	149	138087	84.70	ppb	99
88) Benzo[a]anthracene	18.29	228	293844	68.83	ppb	99
89) 3,3'-Dichlorobenzidine	18.30	252	102525	81.54	ppb	98
90) Chrysene	18.34	228	264832	66.04	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.48	149	172551	87.81	ppb	92
93) Di-n-octylphthalate	19.23	149	311307	93.84	ppb	96
94) Benzo[b]fluoranthene	19.64	252	287027	70.00	ppb	98
95) Benzo[k]fluoranthene	19.67	252	224179	73.98	ppb	99
96) Benzo[a]pyrene	20.01	252	232434	72.45	ppb	100
97) Indeno[1,2,3-cd]pyrene	21.52	276	255450	80.83	ppb	93
98) Dibenz(a,h)acridine	21.18	279	201185	85.54	ppb	100
99) Dibenz[a,h]anthracene	21.54	278	211366	82.55	ppb	99
100) 7,12-Dimethylbenz(a)anthra	19.66	256	125979	80.12	ppb	96
101) Benzo[g,h,i]perylene	21.92	276	207383	79.39	ppb	93

(#) = qualifier out of range (m) = manual integration

M83967.D MM3346.M Thu Dec 22 16:13:05 2011 GCMSM

Page 3

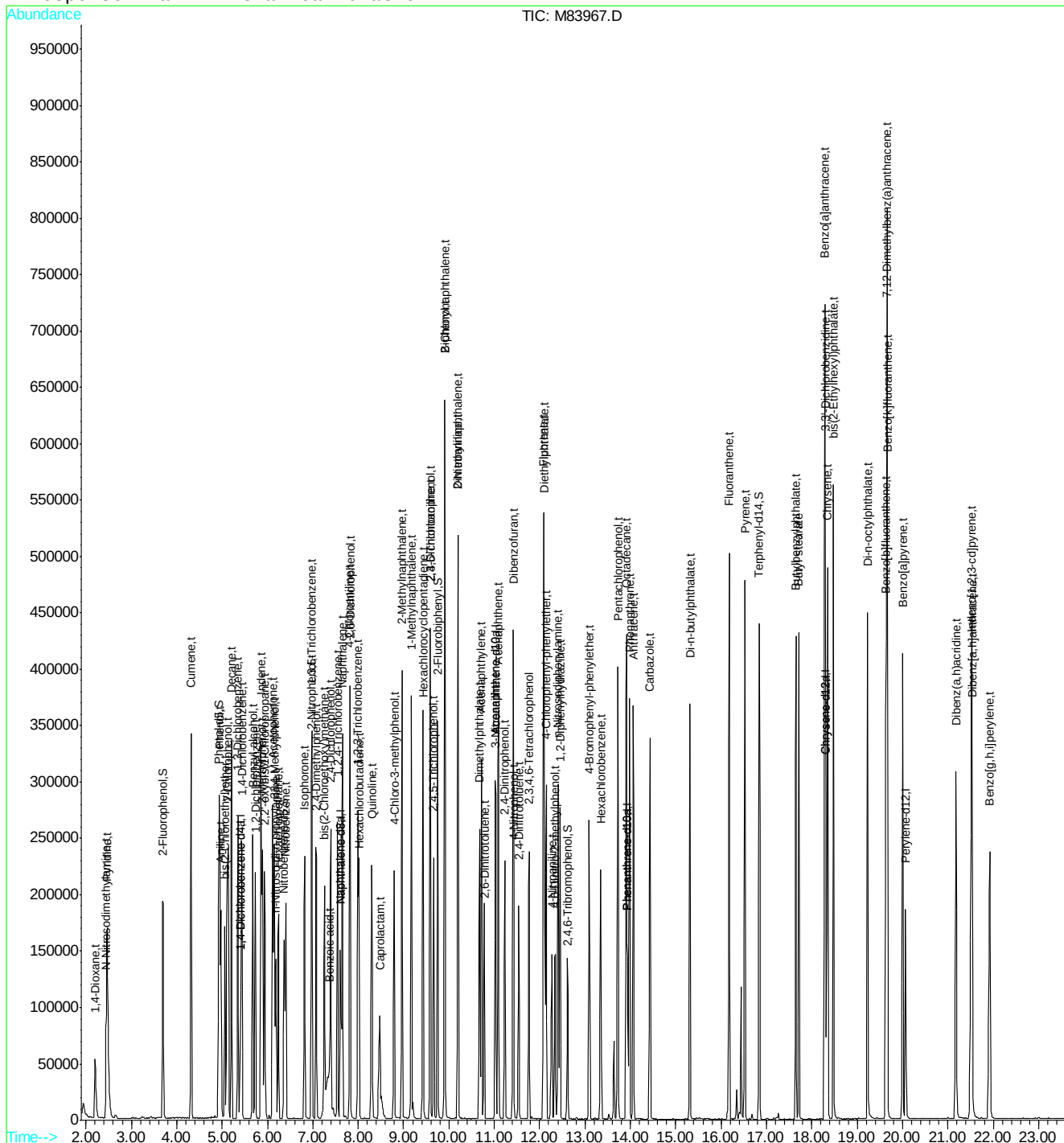
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83967.D
Acq On : 21 Dec 2011 2:18 pm
Sample : ic3346-100
Misc : op53696,em3346,
MS Integration Params: LSCINT.P
Quant Time: Dec 21 14:53 2011 0

```
Vial: 2
Operator: olgaa
Inst      : MSM
Multiplr: 1.00
```

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M83967.D MM3346.M

Thu Dec 22 16:13:06 2011

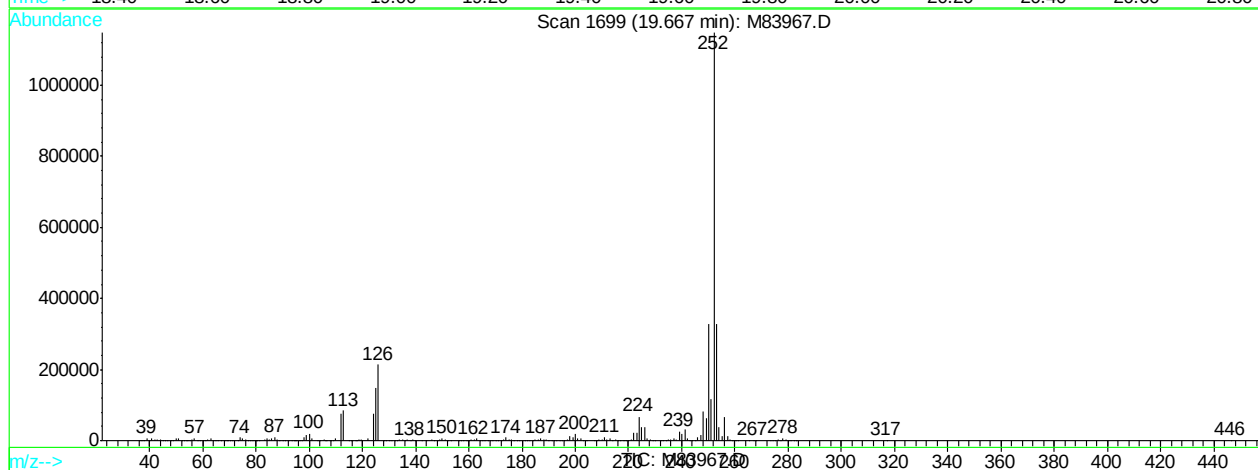
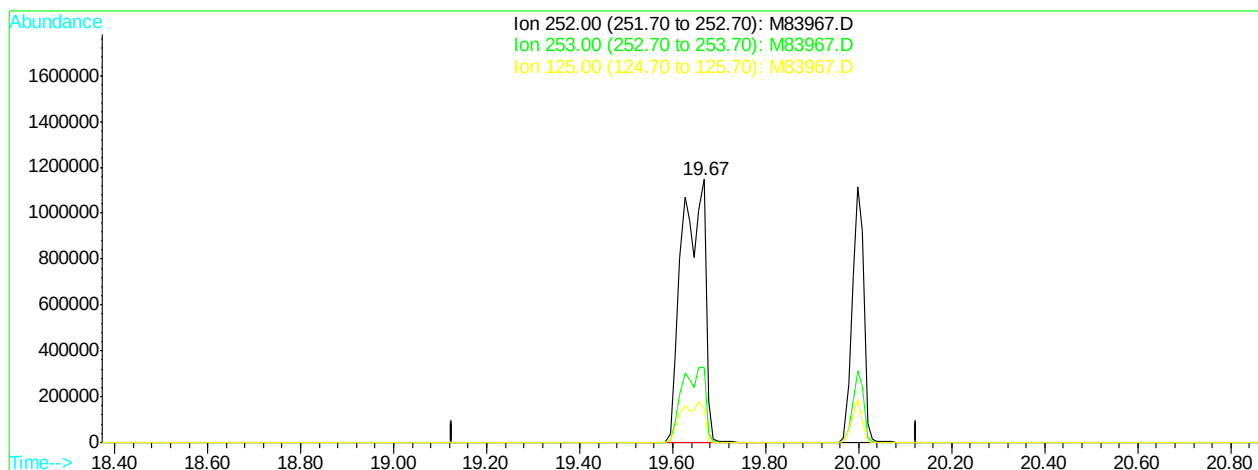
GCMSSM

Page 4

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83967.D Vial: 2
Acq On : 21 Dec 2011 10:27 am Operator: olgaa
Sample : ic3346-100 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 21 10:53 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 10:53:03 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.67min 138.69ppb

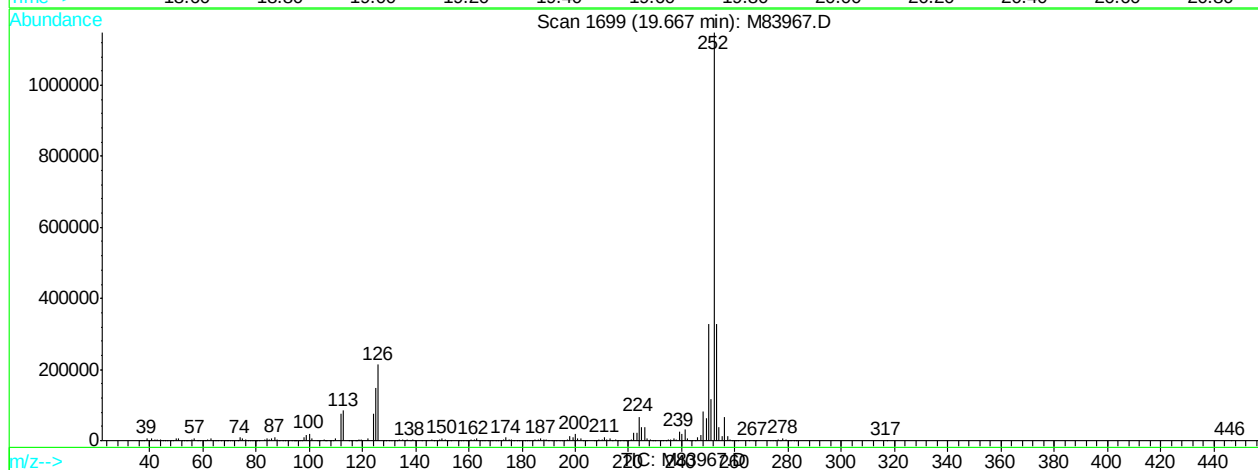
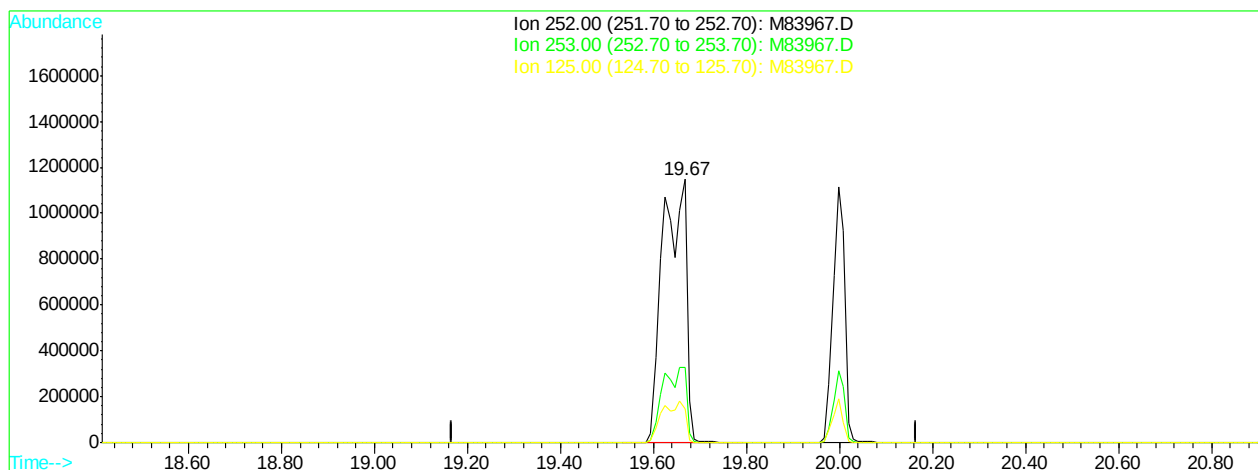
response 4004081

Ion	Exp%	Act%
252.00	100	100
253.00	21.10	28.51
125.00	8.10	12.90
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83967.D Vial: 2
Acq On : 21 Dec 2011 10:27 am Operator: olgaa
Sample : ic3346-100 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 21 10:53 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 10:53:03 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.67min 187.18ppb

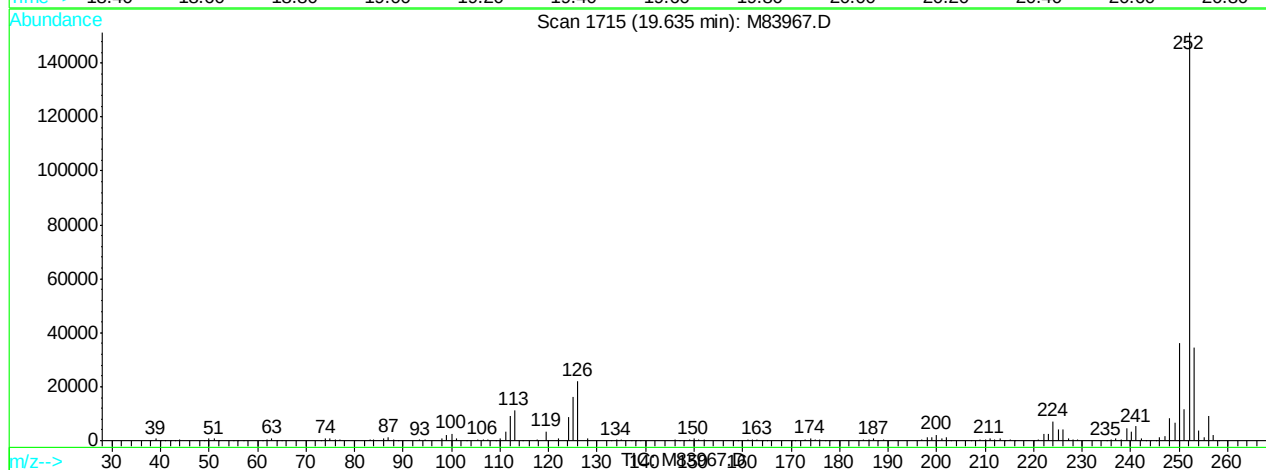
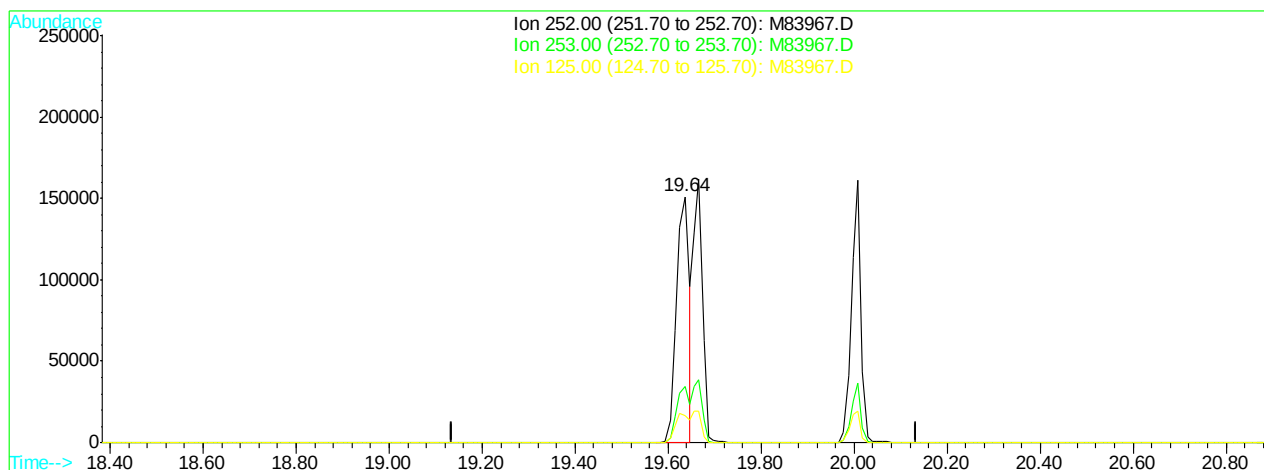
response 4004081

Ion	Exp%	Act%
252.00	100	100
253.00	23.90	28.51
125.00	10.10	12.90
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83967.D Vial: 2
Acq On : 21 Dec 2011 2:18 pm Operator: olgaa
Sample : ic3346-100 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 21 14:53 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 28 11:26:36 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.64min 70.00ppb

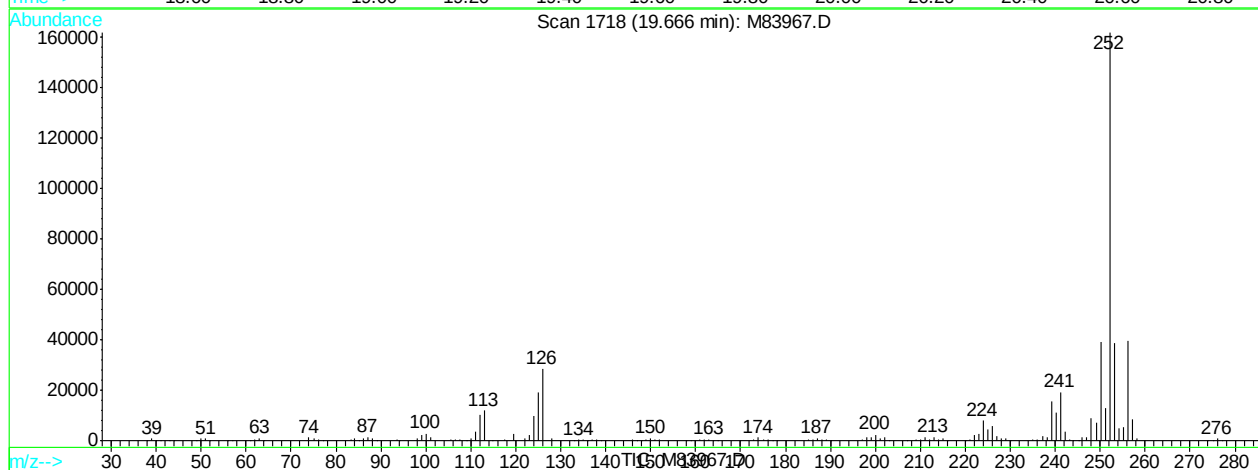
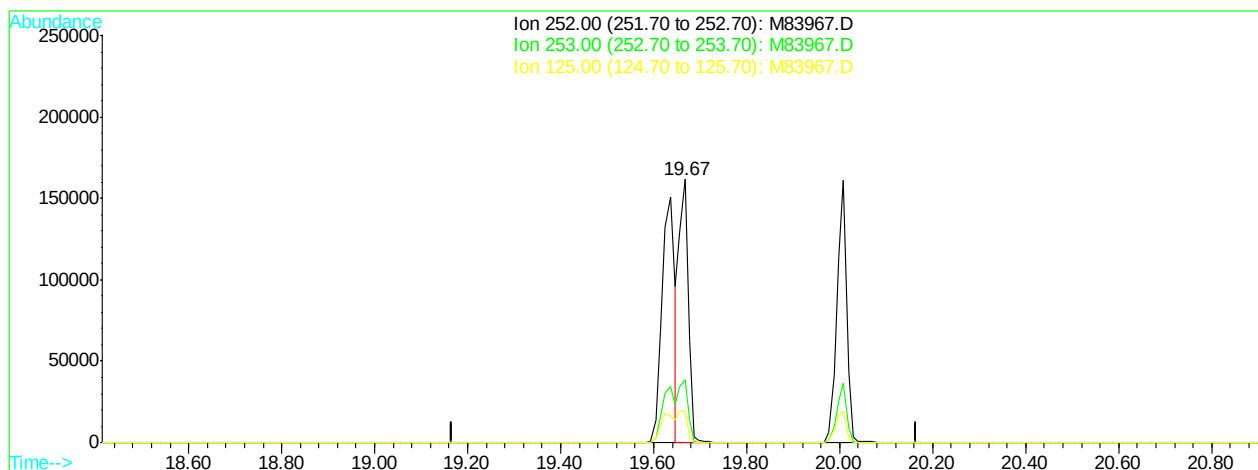
response 287027

Ion	Exp%	Act%
252.00	100	100
253.00	21.10	21.97
125.00	8.10	9.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83967.D Vial: 2
Acq On : 21 Dec 2011 2:18 pm Operator: olgaa
Sample : ic3346-100 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 21 14:53 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 28 11:26:36 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.67min 73.98ppb

response 224179

Ion	Exp%	Act%
252.00	100	100
253.00	23.90	23.55
125.00	10.10	10.94
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83968.D

Vial: 3

Acq On : 21 Dec 2011 3:08 pm

Operator: olgaa

Sample : ic3346-1

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:03 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:01:51 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	31250	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	120476	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	75336	40.00	ppb	0.00
69) Phenanthrene-d10	13.92	188	122010	40.00	ppb	-0.01
83) Chrysene-d12	18.30	240	127977	40.00	ppb	-0.01
92) Perylene-d12	20.07	264	111187	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.40	152	31250	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	75336	40.00	ppb	0.00
108) Phenanthrene-d10a	13.92	188	122010	40.00	ppb	-0.01
113) Chrysene-d12a	18.30	240	127977	40.00	ppb	-0.01
116) Naphthalene-d8a	7.60	136	120476	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	3.68	112	1274	1.14	ppb	0.00
Spiked Amount 50.000			Recovery =			2.28%
8) Phenol-d5	4.90	99	1742	1.28	ppb	-0.01
Spiked Amount 50.000			Recovery =			2.56%
25) Nitrobenzene-d5	6.35	82	1360	1.32	ppb	-0.01
Spiked Amount 50.000			Recovery =			2.64%
51) 2-Fluorobiphenyl	9.74	172	3035	1.32	ppb	-0.01
Spiked Amount 50.000			Recovery =			2.64%
73) 2,4,6-Tribromophenol	12.59	330	247	0.94	ppb	-0.01
Spiked Amount 50.000			Recovery =			1.88%
86) Terphenyl-d14	16.84	244	3458	1.37	ppb	0.00
Spiked Amount 50.000			Recovery =			2.74%
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0d	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery =			0.00%#

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.20	88	761	1.56	ppb	85
3) Pyridine	2.49	79	1372	1.15	ppb	95
4) N-Nitrosodimethylamine	2.44	42	1922	2.34	ppb	92
6) Indene	5.86	116	2367	1.27	ppb	96
7) Cumene	4.31	105	3476	1.30	ppb	97
9) Phenol	4.93	94	1942	1.28	ppb	98
10) Aniline	4.97	93	2199	1.40	ppb	92
11) bis(2-Chloroethyl)ether	5.05	93	1210	1.23	ppb	93
12) 2-Chlorophenol	5.12	128	1357	1.20	ppb	97
13) Decane	5.19	43	2376	1.41	ppb	99
14) 1,3-Dichlorobenzene	5.34	146	1705	1.31	ppb	99
15) 1,4-Dichlorobenzene	5.42	146	1799	1.38	ppb	91
16) Benzyl alcohol	5.66	108	863	1.20	ppb	89
17) 1,2-Dichlorobenzene	5.72	146	1590	1.30	ppb	98
18) Acetophenone	6.10	105	1903	1.29	ppb	100
19) 2-Methylphenol	5.87	108	1206	1.24	ppb	95
20) 2,2'-oxybis(1-Chloropropan	5.93	121	407	1.19	ppb	# 80
21) 3&4-Methylphenol	6.12	108	1264	1.22	ppb	89
22) n-Nitroso-di-n-propylamine	6.16	70	878	1.23	ppb	96

(#) = qualifier out of range (m) = manual integration

M83968.D MM3346.M

Thu Dec 22 16:13:19 2011

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83968.D

Vial: 3

Acq On : 21 Dec 2011 3:08 pm

Operator: olgaa

Sample : ic3346-1

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:03 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:01:51 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) Hexachloroethane	6.23	201	517	1.15	ppb	# 76
26) Nitrobenzene	6.38	77	1395	1.29	ppb	98
27) Quinoline	8.27	129	2658	1.26	ppb	97
28) Isophorone	6.81	82	2438	1.28	ppb	97
29) 2-Nitrophenol	6.95	139	670	1.09	ppb	80
30) 2,4-Dimethylphenol	7.06	107	1058	1.11	ppb	96
31) Benzoic acid	7.18	105	568	0.82	ppb	99
32) bis(2-Chloroethoxy)methane	7.24	93	1372	1.24	ppb	96
33) 2,4-Dichlorophenol	7.38	162	1066	1.13	ppb	96
34) 2,6-Dichlorophenol	7.81	162	1144	1.23	ppb	96
35) 1,3,5-Trichlorobenzene	6.96	180	1433	1.31	ppb	91
36) 1,2,4-Trichlorobenzene	7.53	180	1313	1.24	ppb	98
37) 1,2,3-Trichlorobenzene	7.98	180	1252	1.25	ppb	98
38) Naphthalene	7.64	128	4195	1.35	ppb	99
39) 4-Chloroaniline	7.80	127	1610	1.23	ppb	97
40) 2,3-Dichloroaniline	9.58	161	1490	1.30	ppb	95
41) Caprolactam	8.36	55	858	1.28	ppb	91
42) Hexachlorobutadiene	8.01	225	703	1.19	ppb	98
43) 4-Chloro-3-methylphenol	8.76	107	963	1.10	ppb	100
44) 2-Methylnaphthalene	8.95	141	2396	1.23	ppb	99
45) 1-Methylnaphthalene	9.16	142	2717	1.28	ppb	98
46) Dimethylnaphthalene	10.18	156	2188	1.20	ppb	92
48) Hexachlorocyclopentadiene	9.42	237	1064	1.94	ppb	99
49) 2,4,6-Trichlorophenol	9.57	196	781	1.11	ppb	95
50) 2,4,5-Trichlorophenol	9.63	196	905	1.20	ppb	90
52) 2-Chloronaphthalene	9.88	162	2805	1.30	ppb	99
53) Biphenyl	9.89	154	3347	1.31	ppb	98
54) 2-Nitroaniline	10.18	65	707	1.14	ppb	97
55) Dimethylphthalate	10.65	163	2945	1.24	ppb	98
56) Acenaphthylene	10.71	152	4161	1.26	ppb	98
57) 2,6-Dinitrotoluene	10.76	165	549	1.04	ppb	86
58) 3-Nitroaniline	11.00	138	655	1.10	ppb	# 81
59) Acenaphthene	11.07	153	2675	1.29	ppb	91
60) 2,4-Dinitrophenol	11.21	184	157	0.52	ppb	# 66
61) 4-Nitrophenol	11.38	109	176	0.64	ppb	# 52
62) Dibenzofuran	11.39	168	3951	1.31	ppb	89
63) 2,4-Dinitrotoluene	11.52	165	695	0.99	ppb	98
64) 2,3,4,6-Tetrachlorophenol	11.76	232	654	1.06	ppb	97
65) Diethylphthalate	12.07	149	2763	1.24	ppb	97
66) Fluorene	12.08	166	3230	1.32	ppb	100
67) 4-Chlorophenyl-phenylether	12.13	204	1518	1.30	ppb	93
68) 4-Nitroaniline	12.22	138	692	1.15	ppb	98
70) 4,6-Dinitro-2-methylphenol	12.30	198	235	0.49	ppb	61
71) n-Nitrosodiphenylamine	12.38	169	2282	1.32	ppb	93
72) 1,2-Diphenylhydrazine	12.43	77	2806	1.29	ppb	98
74) 4-Bromophenyl-phenylether	13.09	248	818	1.28	ppb	86
75) Hexachlorobenzene	13.34	284	883	1.31	ppb	85
76) Pentachlorophenol	13.70	266	973	2.16	ppb	96
77) Phenanthrene	13.96	178	4777	1.38	ppb	99

(#)=qualifier out of range (m)=manual integration

M83968.D MM3346.M

Thu Dec 22 16:13:19 2011

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83968.D

Vial: 3

Acq On : 21 Dec 2011 3:08 pm

Operator: olgaa

Sample : ic3346-1

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:03 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:01:51 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Anthracene	14.05	178	4602	1.34	ppb	98
79) Carbazole	14.42	167	4504	1.34	ppb	97
80) Di-n-butylphthalate	15.31	149	4895	1.25	ppb	96
81) Fluoranthene	16.17	202	5772	1.39	ppb	99
82) Octadecane	13.90	57	2165	1.22	ppb	95
84) Pyrene	16.52	202	6327	1.45	ppb	98
85) Butyl stearate	17.71	56	2967	2.37	ppb	98
87) Butylbenzylphthalate	17.64	149	2200	1.24	ppb	84
88) Benzo[a]anthracene	18.28	228	6335	1.25	ppb	99
89) 3,3'-Dichlorobenzidine	18.29	252	1518	1.19	ppb	93
90) Chrysene	18.33	228	5766	0.95	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.47	149	2623	1.20	ppb	97
93) Di-n-octylphthalate	19.22	149	4018	1.04	ppb	97
94) Benzo[b]fluoranthene	19.61	252	4989m	1.25	ppb	
95) Benzo[k]fluoranthene	19.64	252	5325m	0.88	ppb	
96) Benzo[a]pyrene	19.98	252	4619	1.37	ppb	97
97) Indeno[1,2,3-cd]pyrene	21.49	276	4510	1.28	ppb	95
98) Dibenz(a,h)acridine	21.15	279	3230	1.24	ppb	100
99) Dibenz[a,h]anthracene	21.51	278	3747	1.28	ppb	99
100) 7,12-Dimethylbenz(a)anthra	19.63	256	2016	1.21	ppb	96
101) Benzo[g,h,i]perylene	21.88	276	3962	1.35	ppb	95

8.6.2
8-----
(#) = qualifier out of range (m) = manual integration

M83968.D MM3346.M

Thu Dec 22 16:13:20 2011

GCMSM

Page 3

Quantitation Report

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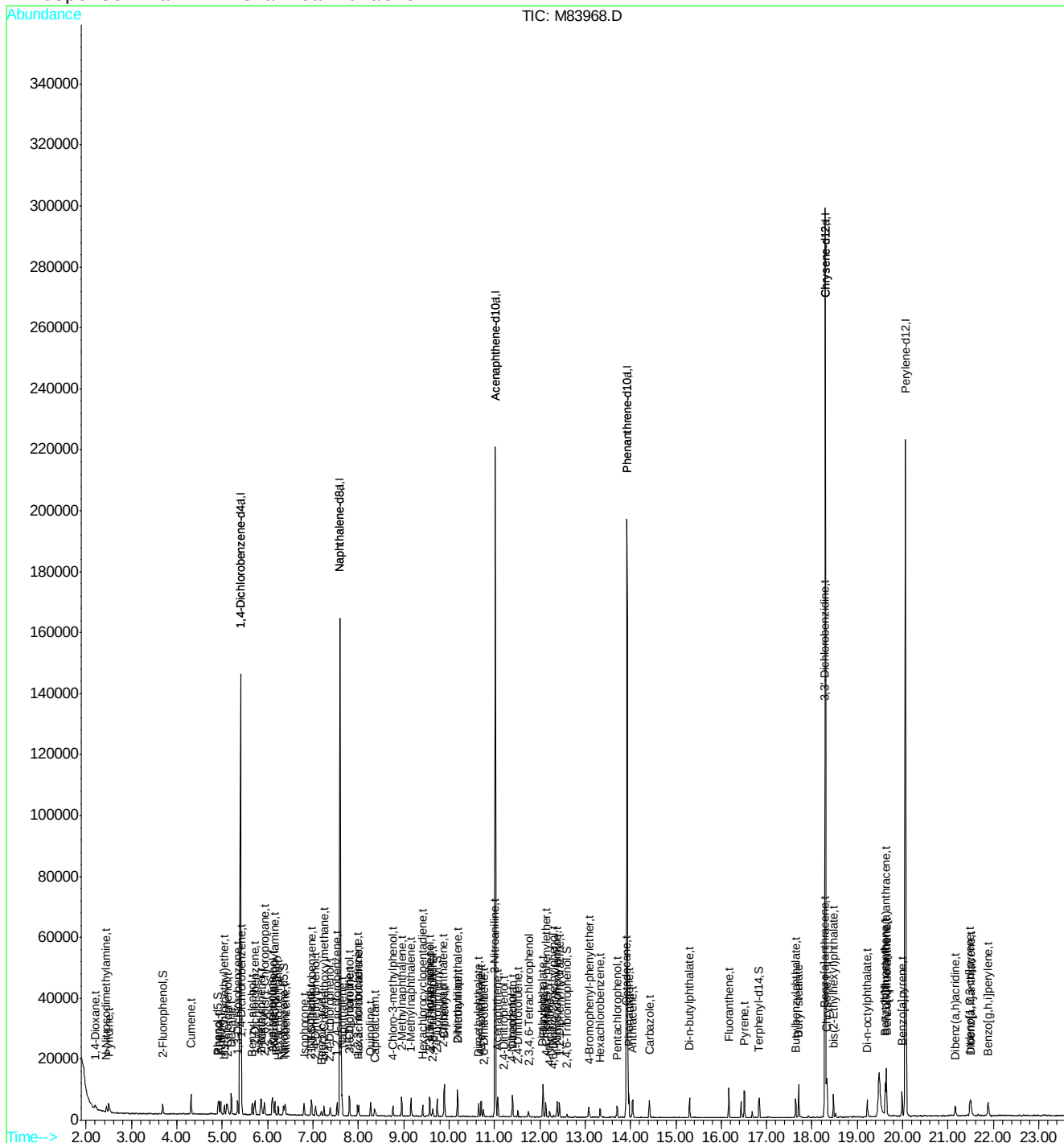
Data File   : C:\HPCHEM\1\DATA\EM3346\M83968.D
Acq On      : 21 Dec 2011   3:08 pm
Sample      : ic3346-1
Misc        : op53696,em3346,
MS Integration Params: LSCINT.P
Quant Time  : Dec 22   9:03 2011           0

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Vial: 3
Operator: olgaa
Inst      : MSM
Multiplr: 1.00
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Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M83968.D MM3346.M

Thu Dec 22 16:13:21 2011

GCMSSM

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Manual Integration Approval Summary

Sample Number:

EM3346-IC3346

Method:

SW846 8270D

Lab FileID:

M83968.D

Analyst approved:

12/22/11 16:30 Olga Azarihn

Injection Time:

12/21/11 15:08

Supervisor approved:

12/28/11 11:57 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.61	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.64	Overlapping peak

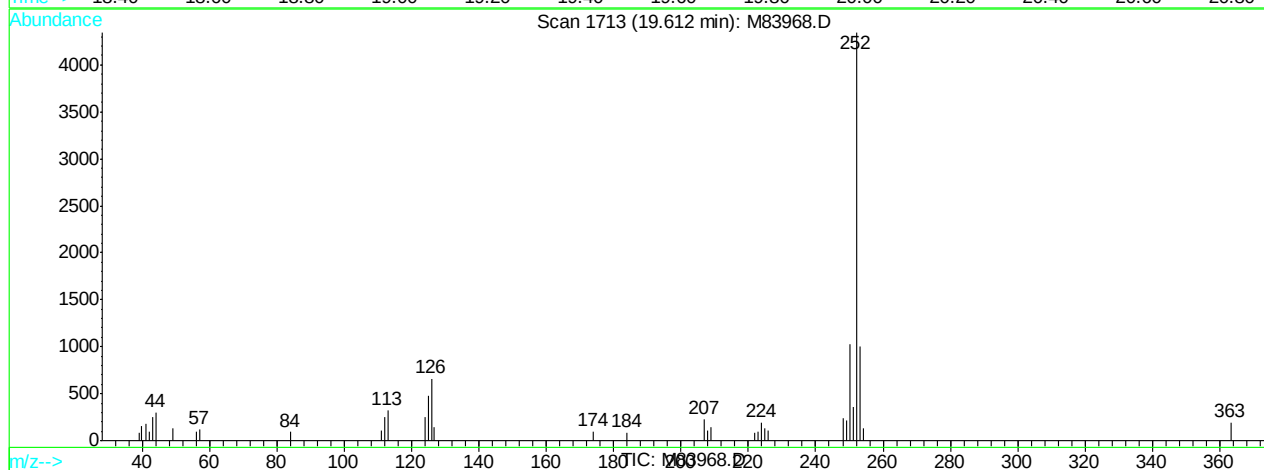
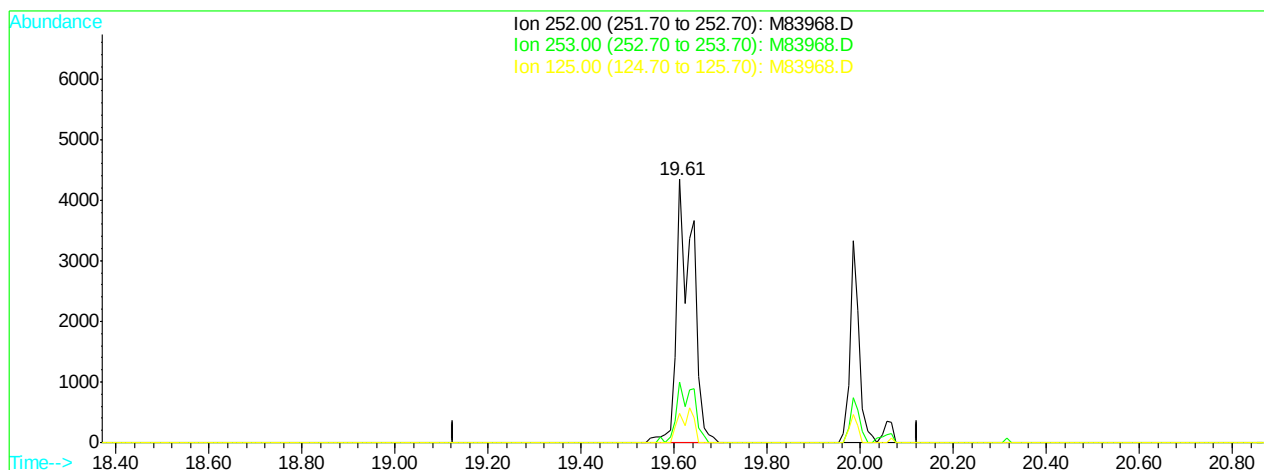
8.6.2.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83968.D Vial: 3
Acq On : 21 Dec 2011 3:08 pm Operator: olgaa
Sample : ic3346-1 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 21 16:19 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 16:17:02 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.61min 2.46ppb

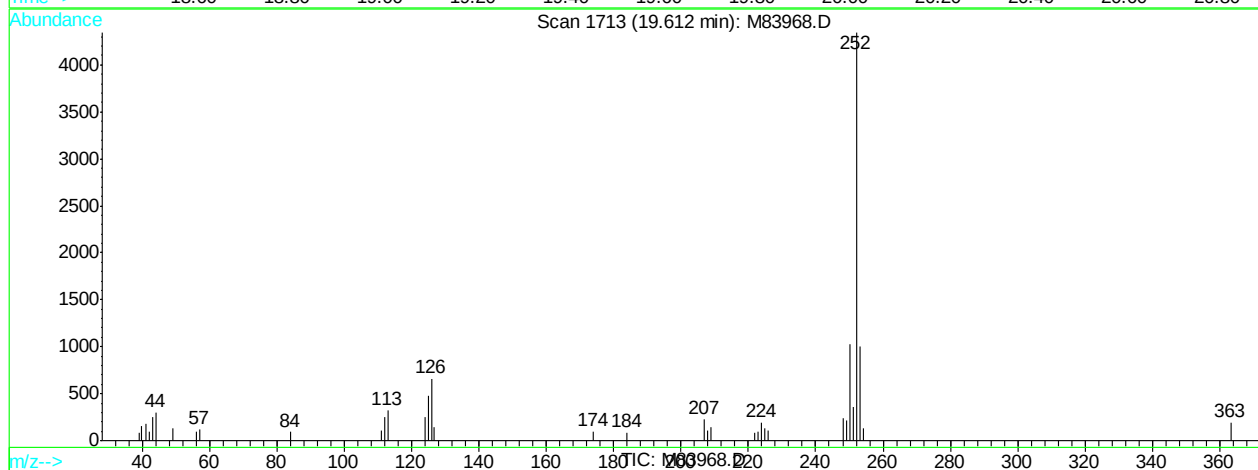
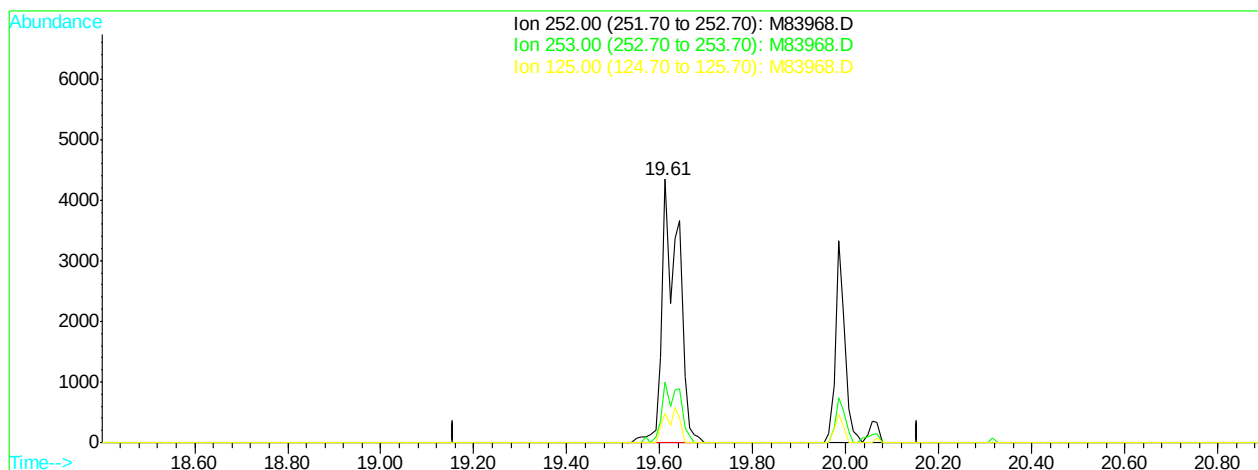
response 10698

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.95
125.00	9.90	11.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83968.D Vial: 3
Acq On : 21 Dec 2011 3:08 pm Operator: olgaa
Sample : ic3346-1 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 21 16:19 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 16:17:02 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.61min 2.93ppb

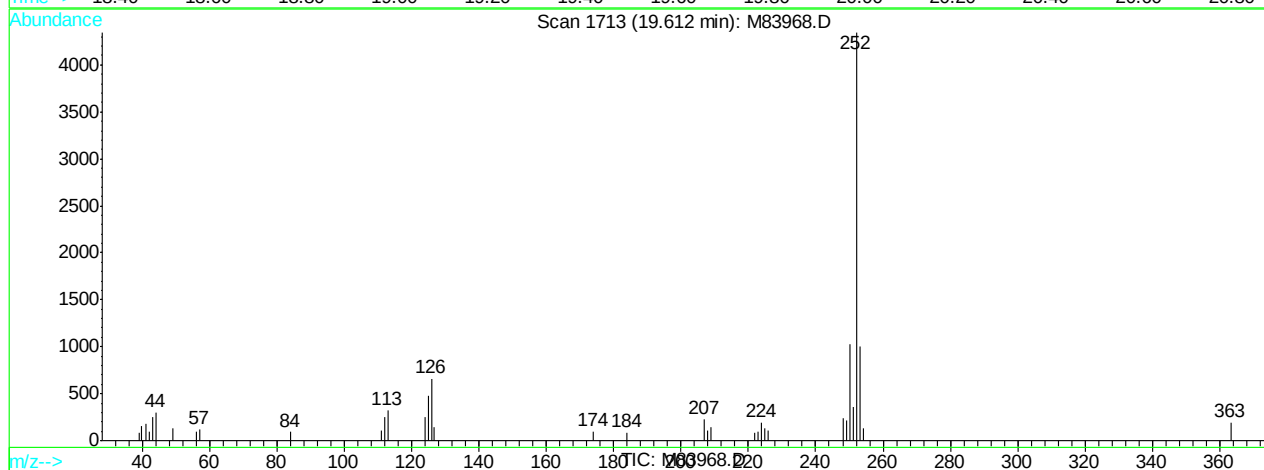
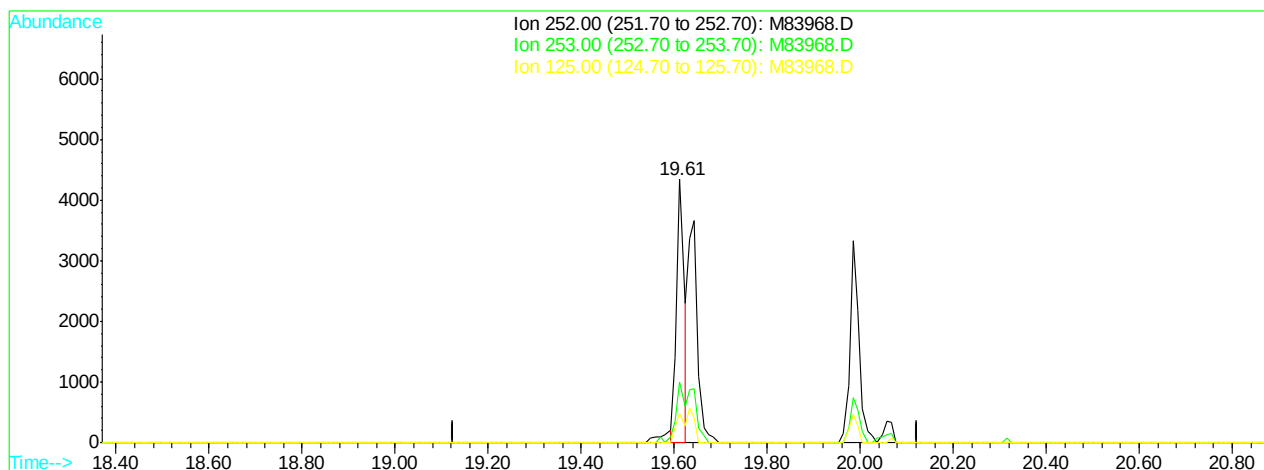
response 10698

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	22.95
125.00	10.60	11.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83968.D Vial: 3
Acq On : 21 Dec 2011 3:08 pm Operator: olgaa
Sample : ic3346-1 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:03 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.61min 1.25ppb m

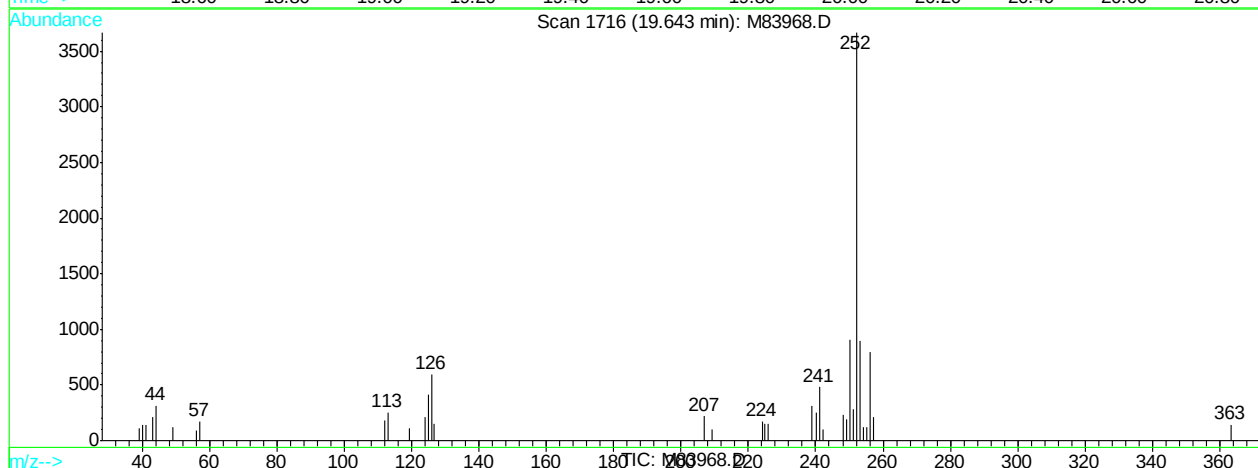
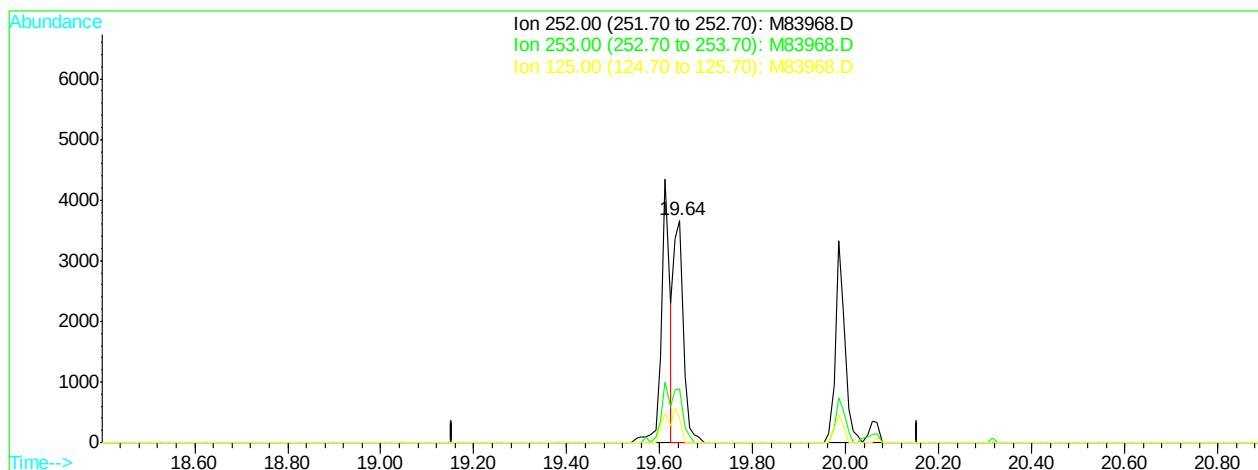
response 4989

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.95
125.00	9.90	11.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83968.D Vial: 3
 Acq On : 21 Dec 2011 3:08 pm Operator: olgaa
 Sample : ic3346-1 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 9:03 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.64min 0.88ppb m

response 5325

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	24.41
125.00	10.60	11.29
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83969.D

Vial: 4

Acq On : 21 Dec 2011 3:43 pm

Operator: olgaa

Sample : icc3346-50

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 21 16:16 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 16:15:54 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	31443	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	123497	40.00	ppb	0.00
47) Acenaphthene-d10	11.02	164	76926	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	123941	40.00	ppb	0.00
83) Chrysene-d12	18.31	240	132072	40.00	ppb	0.00
92) Perylene-d12	20.07	264	111764	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.40	152	31443	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	76926	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	123941	40.00	ppb	0.00
113) Chrysene-d12a	18.31	240	132072	40.00	ppb	0.00
116) Naphthalene-d8a	7.61	136	123497	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	3.69	112	56592	45.84	ppb	0.00
Spiked Amount 50.000			Recovery =	91.68%		
8) Phenol-d5	4.92	99	66621	42.76	ppb	0.00
Spiked Amount 50.000			Recovery =	85.52%		
25) Nitrobenzene-d5	6.37	82	48714	41.04	ppb	0.00
Spiked Amount 50.000			Recovery =	82.08%		
51) 2-Fluorobiphenyl	9.75	172	109377	42.21	ppb	0.00
Spiked Amount 50.000			Recovery =	84.42%		
73) 2,4,6-Tribromophenol	12.61	330	13745	51.29	ppb	0.00
Spiked Amount 50.000			Recovery =	102.58%		
86) Terphenyl-d14	16.84	244	119231	39.99	ppb	0.00
Spiked Amount 50.000			Recovery =	79.98%		
106) 2-bromonaphthalene	0.00	127	0d	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0d	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery =	0.00%#		

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.20	88	22525	36.33	ppb	75
3) Pyridine	2.45	79	60048	45.17	ppb	77
4) N-Nitrosodimethylamine	2.43	42	40930	29.14	ppb	90
6) Indene	5.86	116	87255	42.18	ppb	96
7) Cumene	4.32	105	125957	41.70	ppb	96
9) Phenol	4.94	94	73847	42.82	ppb	92
10) Aniline	4.97	93	67855	37.51	ppb	93
11) bis(2-Chloroethyl)ether	5.05	93	47208	43.74	ppb	91
12) 2-Chlorophenol	5.12	128	54945	44.84	ppb	95
13) Decane	5.20	43	74492	38.56	ppb	90
14) 1,3-Dichlorobenzene	5.35	146	58984	40.60	ppb	96
15) 1,4-Dichlorobenzene	5.42	146	60123	40.13	ppb	98
16) Benzyl alcohol	5.66	108	35177	44.29	ppb	88
17) 1,2-Dichlorobenzene	5.72	146	56520	41.44	ppb	95
18) Acetophenone	6.11	105	68260	41.40	ppb	93
19) 2-Methylphenol	5.88	108	46187	43.09	ppb	99
20) 2,2'-oxybis(1-Chloropropan	5.93	121	16134	43.49	ppb	# 10
21) 3&4-Methylphenol	6.14	108	50190	43.65	ppb	86
22) n-Nitroso-di-n-propylamine	6.17	70	33504	42.66	ppb	93

(#) = qualifier out of range (m) = manual integration

M83969.D MM3346.M

Thu Dec 22 16:13:47 2011

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83969.D

Vial: 4

Acq On : 21 Dec 2011 3:43 pm

Operator: olgaa

Sample : icc3346-50

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 21 16:16 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 16:15:54 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) Hexachloroethane	6.24	201	20779	44.06	ppb	83
26) Nitrobenzene	6.40	77	50952	41.45	ppb	88
27) Quinoline	8.29	129	101534	42.50	ppb	97
28) Isophorone	6.81	82	89912	41.57	ppb	96
29) 2-Nitrophenol	6.97	139	31192	47.52	ppb	95
30) 2,4-Dimethylphenol	7.07	107	47285	45.32	ppb	91
31) Benzoic acid	7.33	105	40707	57.33	ppb	93
32) bis(2-Chloroethoxy)methane	7.25	93	53177	42.95	ppb	100
33) 2,4-Dichlorophenol	7.38	162	46682	45.99	ppb	96
34) 2,6-Dichlorophenol	7.82	162	44634	43.23	ppb	97
35) 1,3,5-Trichlorobenzene	6.98	180	51481	41.64	ppb	97
36) 1,2,4-Trichlorobenzene	7.55	180	50359	43.10	ppb	92
37) 1,2,3-Trichlorobenzene	7.99	180	47823	42.84	ppb	98
38) Naphthalene	7.64	128	143970	40.34	ppb	99
39) 4-Chloroaniline	7.82	127	62673	43.29	ppb	98
40) 2,3-Dichloroaniline	9.59	161	53819	41.33	ppb	96
41) Caprolactam	8.44	55	33591	42.48	ppb	82
42) Hexachlorobutadiene	8.01	225	27744	43.85	ppb	98
43) 4-Chloro-3-methylphenol	8.79	107	45960	47.99	ppb	96
44) 2-Methylnaphthalene	8.96	141	94212	43.65	ppb	94
45) 1-Methylnaphthalene	9.16	142	101917	42.60	ppb	97
46) Dimethylnaphthalene	10.20	156	86762	43.81	ppb	96
48) Hexachlorocyclopentadiene	9.42	237	60659	103.60	ppb	98
49) 2,4,6-Trichlorophenol	9.59	196	35408	47.24	ppb	96
50) 2,4,5-Trichlorophenol	9.66	196	38453	45.77	ppb	100
52) 2-Chloronaphthalene	9.90	162	101704	42.03	ppb	98
53) Biphenyl	9.91	154	118073	41.43	ppb	98
54) 2-Nitroaniline	10.20	65	32104	47.12	ppb	86
55) Dimethylphthalate	10.67	163	112685	42.95	ppb	99
56) Acenaphthylene	10.71	152	158143	42.94	ppb	99
57) 2,6-Dinitrotoluene	10.78	165	27156	49.31	ppb	78
58) 3-Nitroaniline	11.02	138	31159	48.20	ppb	92
59) Acenaphthene	11.09	153	98277	42.15	ppb	95
60) 2,4-Dinitrophenol	11.22	184	33289	155.23	ppb	92
61) 4-Nitrophenol	11.41	109	15238	62.43	ppb #	1
62) Dibenzofuran	11.41	168	139406	41.14	ppb	87
63) 2,4-Dinitrotoluene	11.53	165	37234	51.29	ppb	90
64) 2,3,4,6-Tetrachlorophenol	11.76	232	31792	48.67	ppb	98
65) Diethylphthalate	12.10	149	108724	44.06	ppb	98
66) Fluorene	12.09	166	115924	41.53	ppb	99
67) 4-Chlorophenyl-phenylether	12.14	204	54962	42.02	ppb	90
68) 4-Nitroaniline	12.26	138	31443	47.43	ppb #	72
70) 4,6-Dinitro-2-methylphenol	12.34	198	24901	65.16	ppb	87
71) n-Nitrosodiphenylamine	12.40	169	82209	41.07	ppb	99
72) 1,2-Diphenylhydrazine	12.44	77	108125	42.61	ppb	96
74) 4-Bromophenyl-phenylether	13.09	248	30832	42.23	ppb	95
75) Hexachlorobenzene	13.34	284	31569	40.61	ppb	90
76) Pentachlorophenol	13.73	266	47980	97.27	ppb	98
77) Phenanthrene	13.97	178	157579	39.43	ppb	99

(#)=qualifier out of range (m)=manual integration

M83969.D MM3346.M

Thu Dec 22 16:13:47 2011

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83969.D

Vial: 4

Acq On : 21 Dec 2011 3:43 pm

Operator: olgaa

Sample : icc3346-50

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 21 16:16 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 16:15:54 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Anthracene	14.07	178	157339	40.24	ppb	99
79) Carbazole	14.43	167	159168	41.03	ppb	98
80) Di-n-butylphthalate	15.31	149	192739	43.52	ppb	99
81) Fluoranthene	16.18	202	198047	40.54	ppb	99
82) Octadecane	13.90	57	86204	43.52	ppb	85
84) Pyrene	16.52	202	200638	38.19	ppb	100
85) Butyl stearate	17.71	56	61737	28.79	ppb	79
87) Butylbenzylphthalate	17.65	149	90860	44.57	ppb	97
88) Benzo[a]anthracene	18.28	228	194248	37.42	ppb	98
89) 3,3'-Dichlorobenzidine	18.30	252	65827	45.27	ppb	98
90) Chrysene	18.34	228	172718	36.69	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.48	149	114060	45.95	ppb	94
93) Di-n-octylphthalate	19.23	149	206019	50.14	ppb	96
94) Benzo[b]fluoranthene	19.62	252	213308	48.11	ppb	98
95) Benzo[k]fluoranthene	19.66	252	132627	31.72	ppb	99
96) Benzo[a]pyrene	20.00	252	158733	40.89	ppb	98
97) Indeno[1,2,3-cd]pyrene	21.51	276	171222	43.01	ppb	97
98) Dibenz(a,h)acridine	21.18	279	133486	44.89	ppb	99
99) Dibenz[a,h]anthracene	21.53	278	143087	43.33	ppb	97
100) 7,12-Dimethylbenz(a)anthra	19.66	256	85074	45.77	ppb	92
101) Benzo[g,h,i]perylene	21.91	276	139402	41.20	ppb	93

86.3

8

(#) = qualifier out of range (m) = manual integration

M83969.D MM3346.M

Thu Dec 22 16:13:48 2011

GCMSM

Page 3

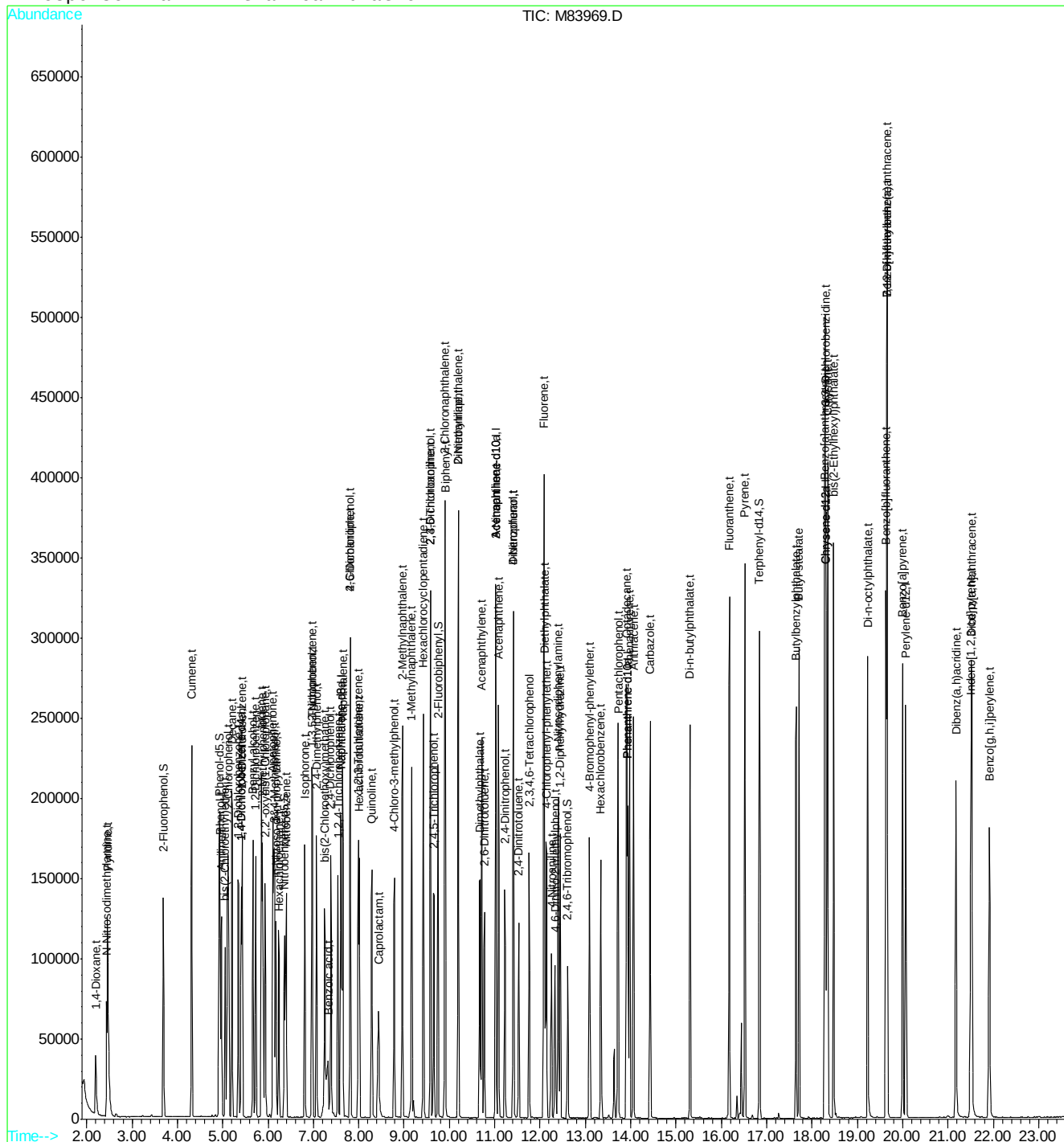
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83969.D
Acq On : 21 Dec 2011 3:43 pm
Sample : icc3346-50
Misc : op53696,em3346,
MS Integration Params: LSCINT.P
Quant Time: Dec 21 16:16 2011 0

Vial: 4
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M83969.D MM3346.M

Thu Dec 22 16:13:49 2011

GCMSSM

Page 4

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83970.D

Vial: 5

Acq On : 21 Dec 2011 4:12 pm

Operator: olgaa

Sample : ic3346-25

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 21 16:32 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 16:21:29 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	32894	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	130305	40.00	ppb	0.00
47) Acenaphthene-d10	11.02	164	80362	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	130620	40.00	ppb	0.00
83) Chrysene-d12	18.31	240	137579	40.00	ppb	0.00
92) Perylene-d12	20.07	264	118068	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.40	152	32894	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	80362	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	130620	40.00	ppb	0.00
113) Chrysene-d12a	18.31	240	137579	40.00	ppb	0.00
116) Naphthalene-d8a	7.61	136	130305	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	3.69	112	28095	22.38	ppb	0.00
Spiked Amount 50.000			Recovery =	44.76%		
8) Phenol-d5	4.91	99	33899	21.85	ppb	0.00
Spiked Amount 50.000			Recovery =	43.70%		
25) Nitrobenzene-d5	6.36	82	25214	21.41	ppb	0.00
Spiked Amount 50.000			Recovery =	42.82%		
51) 2-Fluorobiphenyl	9.74	172	57728	22.50	ppb	0.00
Spiked Amount 50.000			Recovery =	45.00%		
73) 2,4,6-Tribromophenol	12.61	330	6922	24.30	ppb	0.00
Spiked Amount 50.000			Recovery =	48.60%		
86) Terphenyl-d14	16.84	244	62436	21.54	ppb	0.00
Spiked Amount 50.000			Recovery =	43.08%		
106) 2-bromonaphthalene	0.00	127	0d	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount 50.000	Range 1 - 150		Recovery =	0.00%#		

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.20	88	11182	18.97	ppb	99
3) Pyridine	2.46	79	29413	21.85	ppb	97
4) N-Nitrosodimethylamine	2.43	42	20575	16.27	ppb	98
6) Indene	5.85	116	45449	22.16	ppb	98
7) Cumene	4.32	105	65688	22.01	ppb	98
9) Phenol	4.93	94	38015	22.13	ppb	99
10) Aniline	4.96	93	36632	21.12	ppb	78
11) bis(2-Chloroethyl)ether	5.05	93	24280	22.44	ppb	96
12) 2-Chlorophenol	5.12	128	28480	23.01	ppb	97
13) Decane	5.20	43	40354	21.62	ppb	99
14) 1,3-Dichlorobenzene	5.34	146	31469	22.09	ppb	97
15) 1,4-Dichlorobenzene	5.43	146	31691	21.65	ppb	100
16) Benzyl alcohol	5.66	108	17898	22.39	ppb	92
17) 1,2-Dichlorobenzene	5.73	146	29681	22.06	ppb	100
18) Acetophenone	6.11	105	35823	22.03	ppb	98
19) 2-Methylphenol	5.88	108	23831	22.28	ppb	98
20) 2,2'-oxybis(1-Chloropropan	5.93	121	8549	23.03	ppb	99
21) 3&4-Methylphenol	6.13	108	25547	22.18	ppb	98
22) n-Nitroso-di-n-propylamine	6.16	70	17328	22.18	ppb	94

(#) = qualifier out of range (m) = manual integration

M83970.D MM3346.M

Thu Dec 22 16:14:01 2011

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83970.D

Vial: 5

Acq On : 21 Dec 2011 4:12 pm

Operator: olgaa

Sample : ic3346-25

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 21 16:32 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 16:21:29 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) Hexachloroethane	6.23	201	11035	23.29	ppb	87
26) Nitrobenzene	6.39	77	27000	22.07	ppb	96
27) Quinoline	8.28	129	52325	21.85	ppb	99
28) Isophorone	6.80	82	46978	21.81	ppb	97
29) 2-Nitrophenol	6.96	139	15899	23.34	ppb	84
30) 2,4-Dimethylphenol	7.06	107	23037	21.60	ppb	96
31) Benzoic acid	7.28	105	21669	27.57	ppb	97
32) bis(2-Chloroethoxy)methane	7.25	93	28091	22.56	ppb	99
33) 2,4-Dichlorophenol	7.38	162	24226	23.24	ppb	97
34) 2,6-Dichlorophenol	7.82	162	23237	22.34	ppb	99
35) 1,3,5-Trichlorobenzene	6.98	180	26694	21.67	ppb	98
36) 1,2,4-Trichlorobenzene	7.54	180	26725	22.72	ppb	95
37) 1,2,3-Trichlorobenzene	7.98	180	25032	22.32	ppb	98
38) Naphthalene	7.64	128	76140	21.61	ppb	100
39) 4-Chloroaniline	7.81	127	32939	22.57	ppb	98
40) 2,3-Dichloroaniline	9.59	161	28564	22.06	ppb	97
41) Caprolactam	8.40	55	16688	21.06	ppb	98
42) Hexachlorobutadiene	8.01	225	14313	22.36	ppb	97
43) 4-Chloro-3-methylphenol	8.78	107	23002	23.07	ppb	98
44) 2-Methylnaphthalene	8.95	141	49081	22.51	ppb	97
45) 1-Methylnaphthalene	9.16	142	53295	22.21	ppb	99
46) Dimethylnaphthalene	10.19	156	45865	22.89	ppb	99
48) Hexachlorocyclopentadiene	9.42	237	29602	47.82	ppb	99
49) 2,4,6-Trichlorophenol	9.59	196	18359	23.88	ppb	98
50) 2,4,5-Trichlorophenol	9.65	196	19445	22.80	ppb	99
52) 2-Chloronaphthalene	9.90	162	53399	22.31	ppb	99
53) Biphenyl	9.90	154	62899	22.41	ppb	99
54) 2-Nitroaniline	10.19	65	16357	23.43	ppb	97
55) Dimethylphthalate	10.66	163	59447	22.76	ppb	99
56) Acenaphthylene	10.71	152	83467	22.76	ppb	99
57) 2,6-Dinitrotoluene	10.77	165	14031	24.50	ppb	98
58) 3-Nitroaniline	11.01	138	15978	23.95	ppb	100
59) Acenaphthene	11.09	153	51896	22.48	ppb	95
60) 2,4-Dinitrophenol	11.21	184	15594	58.78	ppb	98
61) 4-Nitrophenol	11.40	109	7433	26.92	ppb #	82
62) Dibenzofuran	11.41	168	74365	22.33	ppb	90
63) 2,4-Dinitrotoluene	11.53	165	18972	24.80	ppb	85
64) 2,3,4,6-Tetrachlorophenol	11.76	232	16202	23.95	ppb	92
65) Diethylphthalate	12.08	149	56798	22.94	ppb	98
66) Fluorene	12.08	166	61015	22.18	ppb	100
67) 4-Chlorophenyl-phenylether	12.13	204	29343	22.68	ppb	93
68) 4-Nitroaniline	12.24	138	16289	23.93	ppb	98
70) 4,6-Dinitro-2-methylphenol	12.32	198	12124	27.34	ppb	85
71) n-Nitrosodiphenylamine	12.39	169	43145	21.75	ppb	98
72) 1,2-Diphenylhydrazine	12.44	77	52078	20.48	ppb	93
74) 4-Bromophenyl-phenylether	13.09	248	15877	21.76	ppb	94
75) Hexachlorobenzene	13.34	284	16250	21.16	ppb	92
76) Pentachlorophenol	13.72	266	24423	47.41	ppb	100
77) Phenanthrene	13.97	178	83243	21.26	ppb	98

(#)=qualifier out of range (m)=manual integration

M83970.D MM3346.M

Thu Dec 22 16:14:02 2011

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83970.D Vial: 5
 Acq On : 21 Dec 2011 4:12 pm Operator: olgaa
 Sample : ic3346-25 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 21 16:32 2011 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 16:21:29 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Anthracene	14.06	178	85137	22.10	ppb	98
79) Carbazole	14.42	167	83572	21.74	ppb	99
80) Di-n-butylphthalate	15.31	149	99327	22.24	ppb	99
81) Fluoranthene	16.17	202	101894	21.12	ppb	98
82) Octadecane	13.90	57	45518	22.79	ppb	99
84) Pyrene	16.52	202	106362	21.10	ppb	99
85) Butyl stearate	17.71	56	33400	20.00	ppb	98
87) Butylbenzylphthalate	17.64	149	46114	22.53	ppb	85
88) Benzo[a]anthracene	18.28	228	102139	20.62	ppb	99
89) 3,3'-Dichlorobenzidine	18.29	252	34275	23.37	ppb	97
90) Chrysene	18.34	228	93611	20.95	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.48	149	58179	23.12	ppb	99
93) Di-n-octylphthalate	19.22	149	103790	23.89	ppb	95
94) Benzo[b]fluoranthene	19.63	252	99344	21.48	ppb	97
95) Benzo[k]fluoranthene	19.65	252	83103	21.53	ppb	96
96) Benzo[a]pyrene	20.00	252	84261	21.88	ppb	96
97) Indeno[1,2,3-cd]pyrene	21.50	276	91160	22.73	ppb	99
98) Dibenz(a,h)acridine	21.17	279	68960	22.73	ppb	98
99) Dibenz[a,h]anthracene	21.52	278	76679	23.00	ppb	99
100) 7,12-Dimethylbenz(a)anthra	19.65	256	40924	21.45	ppb	95
101) Benzo[g,h,i]perylene	21.90	276	74465	22.13	ppb	99

8.6.4
8

(#) = qualifier out of range (m) = manual integration

M83970.D MM3346.M Thu Dec 22 16:14:02 2011 GCMSM

Page 3

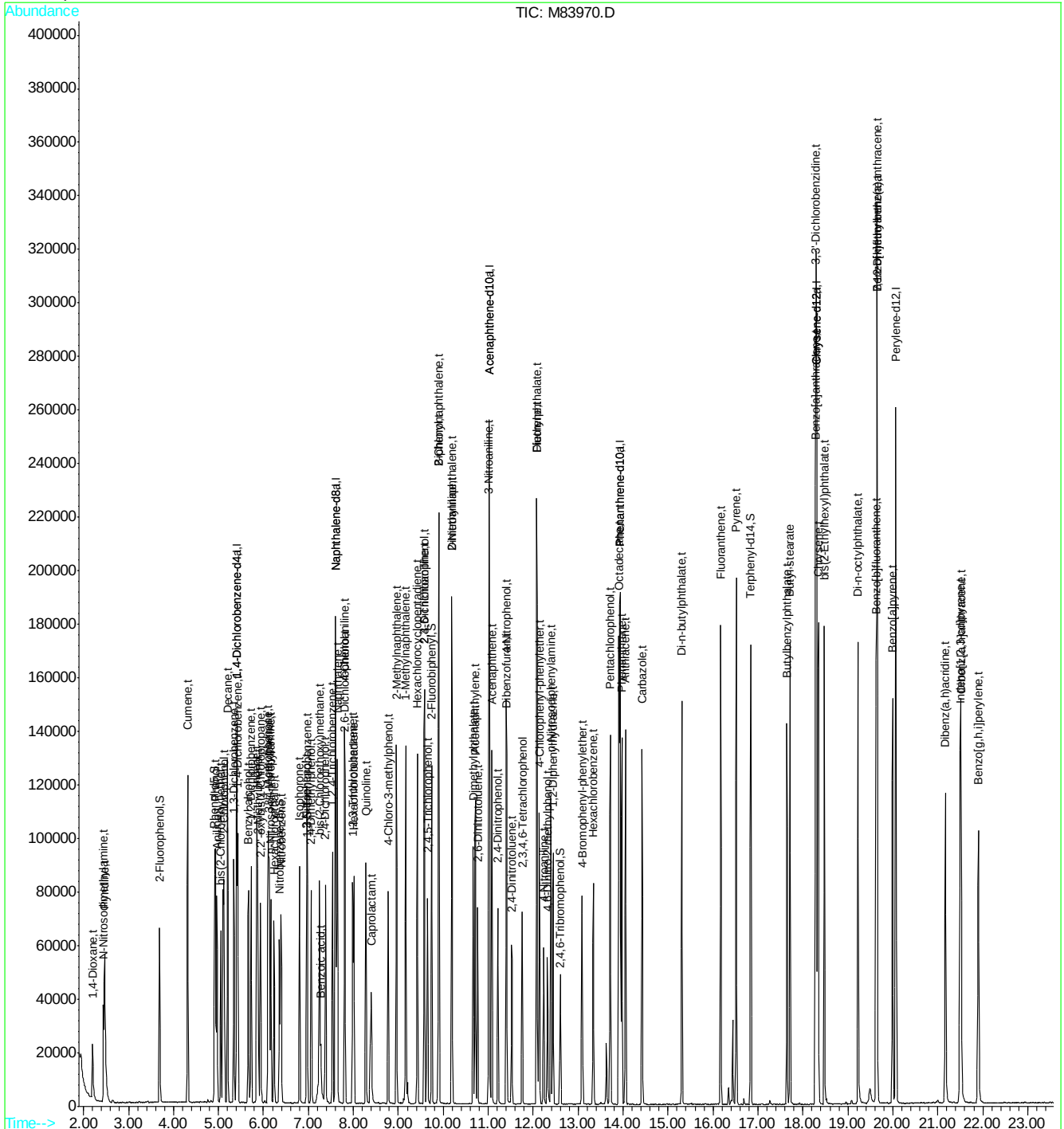
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83970.D
Acq On : 21 Dec 2011 4:12 pm
Sample : ic3346-25
Misc : op53696,em3346,
MS Integration Params: LSCINT.P
Quant Time: Dec 21 16:32 2011 Q

Vial: 5
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M83970.D MM3346.M

Thu Dec 22 16:14:03 2011

GCMSSM

Page 4

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83971.D
 Acq On : 21 Dec 2011 4:49 pm
 Sample : ic3346-2
 Misc : op53696,em3346,
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 8:46 2011

Vial: 6
 Operator: olgaa
 Inst : MSM
 Multiplr: 1.00

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 16:33:32 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	32204	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	124259	40.00	ppb	0.00
47) Acenaphthene-d10	11.02	164	79464	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	131886	40.00	ppb	0.00
83) Chrysene-d12	18.30	240	141359	40.00	ppb	-0.01
92) Perylene-d12	20.07	264	118668	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.40	152	32204	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	79464	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	131886	40.00	ppb	0.00
113) Chrysene-d12a	18.30	240	141359	40.00	ppb	-0.01
116) Naphthalene-d8a	7.61	136	124259	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	3.68	112	2118	1.77	ppb	0.00
Spiked Amount 50.000			Recovery =			3.54%
8) Phenol-d5	4.91	99	2776	1.89	ppb	-0.01
Spiked Amount 50.000			Recovery =			3.78%
25) Nitrobenzene-d5	6.35	82	2202	2.03	ppb	-0.01
Spiked Amount 50.000			Recovery =			4.06%
51) 2-Fluorobiphenyl	9.74	172	5156	2.08	ppb	-0.01
Spiked Amount 50.000			Recovery =			4.16%
73) 2,4,6-Tribromophenol	12.60	330	539	1.89	ppb	-0.01
Spiked Amount 50.000			Recovery =			3.78%
86) Terphenyl-d14	16.84	244	5723	1.99	ppb	0.00
Spiked Amount 50.000			Recovery =			3.98%
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0d	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery =			0.00%#

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.19	88	1144	2.11	ppb	95
3) Pyridine	2.48	79	2305	1.81	ppb	94
4) N-Nitrosodimethylamine	2.44	42	1820	1.61	ppb	98
6) Indene	5.86	116	3969	2.03	ppb	99
7) Cumene	4.32	105	5457	1.92	ppb	97
9) Phenol	4.93	94	3081	1.89	ppb	97
10) Aniline	4.97	93	3545	2.17	ppb	91
11) bis(2-Chloroethyl)ether	5.05	93	2042	1.98	ppb	98
12) 2-Chlorophenol	5.12	128	2401	2.02	ppb	93
13) Decane	5.19	43	3855	2.18	ppb	98
14) 1,3-Dichlorobenzene	5.34	146	2811	2.08	ppb	96
15) 1,4-Dichlorobenzene	5.42	146	2790	2.01	ppb	94
16) Benzyl alcohol	5.66	108	1409	1.85	ppb	93
17) 1,2-Dichlorobenzene	5.72	146	2593	2.03	ppb	98
18) Acetophenone	6.11	105	3268	2.12	ppb	96
19) 2-Methylphenol	5.88	108	2059	2.02	ppb	99
20) 2,2'-oxybis(1-Chloropropan	5.93	121	705	1.98	ppb	96
21) 3&4-Methylphenol	6.12	108	2169	1.98	ppb	86
22) n-Nitroso-di-n-propylamine	6.16	70	1558	2.10	ppb	98

(#) = qualifier out of range (m) = manual integration

M83971.D MM3346.M Thu Dec 22 16:14:25 2011 GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83971.D

Vial: 6

Acq On : 21 Dec 2011 4:49 pm

Operator: olgaa

Sample : ic3346-2

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:46 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 16:33:32 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) Hexachloroethane	6.23	201	1024	2.25	ppb	86
26) Nitrobenzene	6.39	77	2341	2.07	ppb	96
27) Quinoline	8.27	129	4417	2.00	ppb	98
28) Isophorone	6.81	82	3959	1.99	ppb	98
29) 2-Nitrophenol	6.95	139	1273	1.99	ppb	84
30) 2,4-Dimethylphenol	7.06	107	2017	2.05	ppb	97
31) Benzoic acid	7.18	105	1045	1.36	ppb	96
32) bis(2-Chloroethoxy)methane	7.24	93	2419	2.09	ppb	98
33) 2,4-Dichlorophenol	7.38	162	1946	1.99	ppb	91
34) 2,6-Dichlorophenol	7.81	162	1944	2.01	ppb	99
35) 1,3,5-Trichlorobenzene	6.96	180	2385	2.10	ppb	99
36) 1,2,4-Trichlorobenzene	7.53	180	2275	2.08	ppb	96
37) 1,2,3-Trichlorobenzene	7.98	180	2144	2.06	ppb	97
38) Naphthalene	7.64	128	7011	2.16	ppb	99
39) 4-Chloroaniline	7.80	127	2830	2.08	ppb	96
40) 2,3-Dichloroaniline	9.58	161	2449	2.04	ppb	95
41) Caprolactam	8.36	55	1351	1.86	ppb	98
42) Hexachlorobutadiene	8.01	225	1310	2.20	ppb	96
43) 4-Chloro-3-methylphenol	8.77	107	1667	1.79	ppb	97
44) 2-Methylnaphthalene	8.95	141	4178	2.06	ppb	98
45) 1-Methylnaphthalene	9.16	142	4600	2.07	ppb	98
46) Dimethylnaphthalene	10.18	156	3997	2.14	ppb	99
48) Hexachlorocyclopentadiene	9.42	237	1902	3.14	ppb	99
49) 2,4,6-Trichlorophenol	9.58	196	1426	1.90	ppb	98
50) 2,4,5-Trichlorophenol	9.64	196	1519	1.84	ppb	99
52) 2-Chloronaphthalene	9.88	162	4728	2.05	ppb	96
53) Biphenyl	9.89	154	5786	2.14	ppb	98
54) 2-Nitroaniline	10.18	65	1254	1.85	ppb	96
55) Dimethylphthalate	10.66	163	5157	2.04	ppb	99
56) Acenaphthylene	10.71	152	6998	1.97	ppb	99
57) 2,6-Dinitrotoluene	10.76	165	1060	1.88	ppb	99
58) 3-Nitroaniline	11.01	138	1159	1.78	ppb	# 71
59) Acenaphthene	11.08	153	4526	2.03	ppb	96
60) 2,4-Dinitrophenol	11.21	184	319	1.16	ppb	79
61) 4-Nitrophenol	11.39	109	389	1.40	ppb	# 40
62) Dibenzofuran	11.39	168	6793	2.12	ppb	89
63) 2,4-Dinitrotoluene	11.52	165	1348	1.79	ppb	94
64) 2,3,4,6-Tetrachlorophenol	11.76	232	1193	1.80	ppb	89
65) Diethylphthalate	12.08	149	4841	2.02	ppb	99
66) Fluorene	12.08	166	5382	2.04	ppb	99
67) 4-Chlorophenyl-phenylether	12.13	204	2534	2.03	ppb	88
68) 4-Nitroaniline	12.22	138	1018	1.53	ppb	89
70) 4,6-Dinitro-2-methylphenol	12.32	198	421	0.92	ppb	83
71) n-Nitrosodiphenylamine	12.38	169	3697	1.91	ppb	98
72) 1,2-Diphenylhydrazine	12.43	77	4658	1.90	ppb	98
74) 4-Bromophenyl-phenylether	13.09	248	1277	1.79	ppb	93
75) Hexachlorobenzene	13.34	284	1430	1.92	ppb	88
76) Pentachlorophenol	13.71	266	1661	3.24	ppb	95
77) Phenanthrene	13.96	178	7898	2.08	ppb	99

(#) = qualifier out of range (m) = manual integration

M83971.D MM3346.M

Thu Dec 22 16:14:26 2011

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83971.D

Vial: 6

Acq On : 21 Dec 2011 4:49 pm

Operator: olgaa

Sample : ic3346-2

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:46 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 16:33:32 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Anthracene	14.05	178	7856	2.08	ppb	97
79) Carbazole	14.42	167	7535	2.01	ppb	97
80) Di-n-butylphthalate	15.31	149	8126	1.85	ppb	99
81) Fluoranthene	16.17	202	8959	1.91	ppb	98
82) Octadecane	13.90	57	3925	1.99	ppb	98
84) Pyrene	16.52	202	9834	1.98	ppb	99
85) Butyl stearate	17.71	56	3012	1.85	ppb	98
87) Butylbenzylphthalate	17.65	149	3630	1.77	ppb	99
88) Benzo[a]anthracene	18.28	228	9555	1.96	ppb	99
89) 3,3'-Dichlorobenzidine	18.29	252	2583	1.74	ppb	94
90) Chrysene	18.33	228	9469	2.15	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.47	149	4363	1.72	ppb	98
93) Di-n-octylphthalate	19.23	149	6820	1.58	ppb	98
94) Benzo[b]fluoranthene	19.61	252	9607m	2.14	ppb	
95) Benzo[k]fluoranthene	19.64	252	6952m	1.86	ppb	
96) Benzo[a]pyrene	20.00	252	7337	1.96	ppb	93
97) Indeno[1,2,3-cd]pyrene	21.50	276	6999	1.78	ppb	99
98) Dibenz(a,h)acridine	21.17	279	4923	1.65	ppb	100
99) Dibenz[a,h]anthracene	21.52	278	5798	1.77	ppb	97
100) 7,12-Dimethylbenz(a)anthra	19.64	256	3613	1.95	ppb	95
101) Benzo[g,h,i]perylene	21.89	276	5842	1.78	ppb	99

8.6.5
8-----
(#) = qualifier out of range (m) = manual integration

M83971.D MM3346.M

Thu Dec 22 16:14:26 2011

GCMSM

Page 3

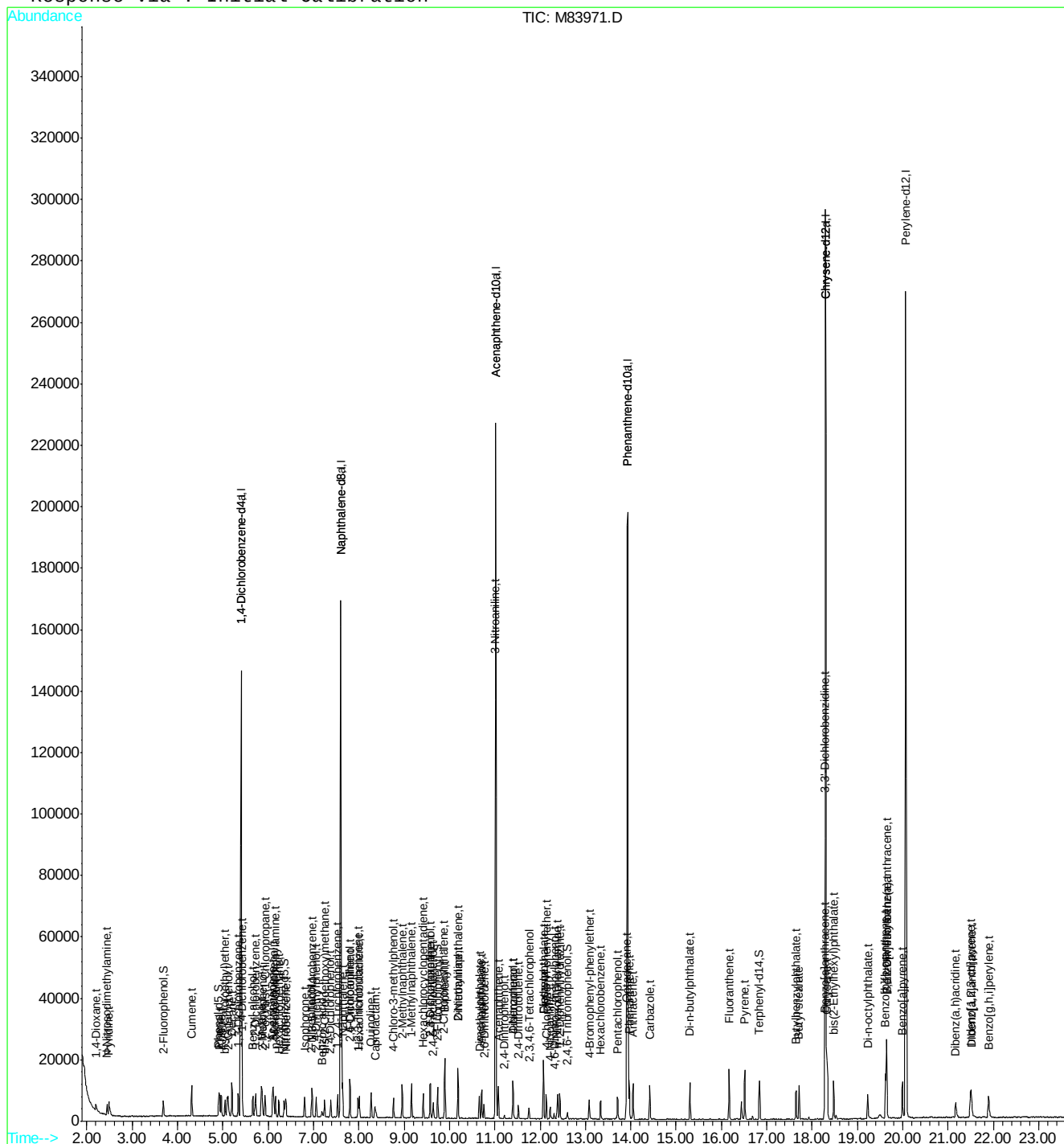
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83971.D
Acq On : 21 Dec 2011 4:49 pm
Sample : ic3346-2
Misc : op53696,em3346,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:46 2011 0

```
Vial: 6
Operator: olgaa
Inst      : MSM
Multiplr: 1.00
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Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M83971.D MM3346.M

Thu Dec 22 16:14:27 2011

GCMSSM

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Manual Integration Approval Summary

Sample Number:

EM3346-IC3346

Lab FileID:

M83971.D

Injection Time:

12/21/11 16:49

Method:

SW846 8270D

Analyst approved:

12/22/11 16:30 Olga Azarihn

Supervisor approved:

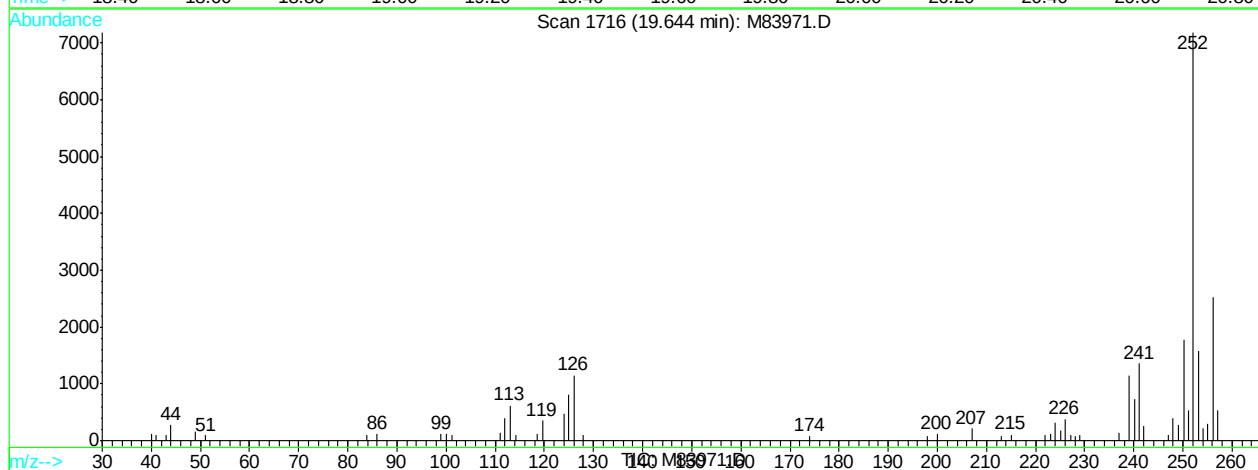
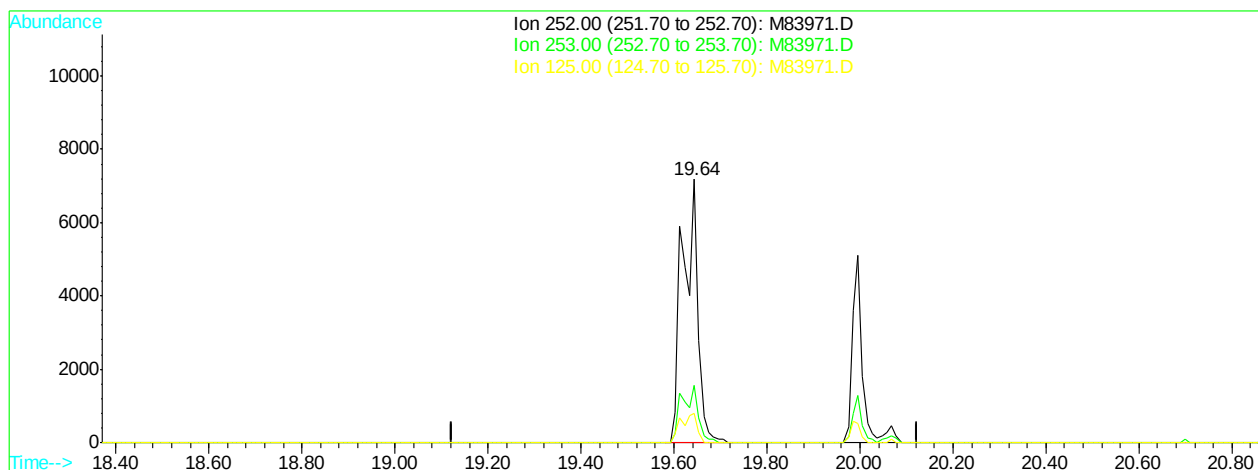
12/28/11 11:57 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.61	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.64	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83971.D Vial: 6
Acq On : 21 Dec 2011 4:49 pm Operator: olgaa
Sample : ic3346-2 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:45 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 16:33:32 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.64min 3.70ppb

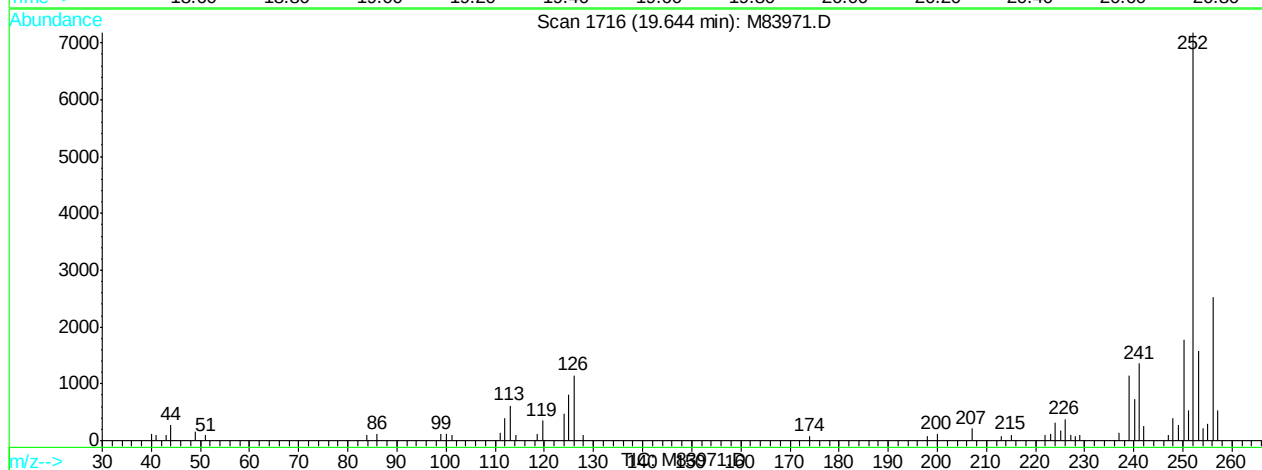
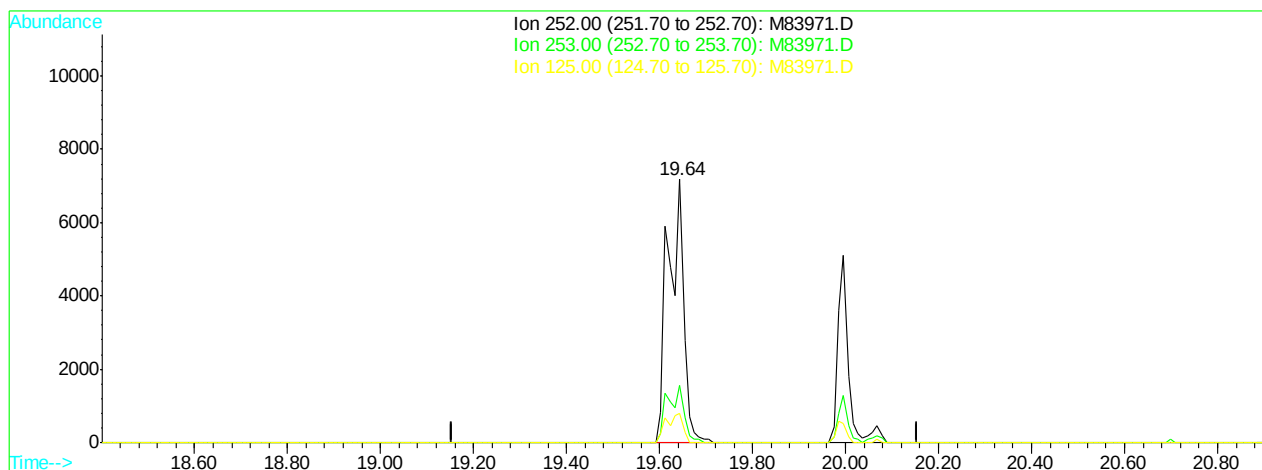
response 16616

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	21.90
125.00	9.90	11.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83971.D Vial: 6
Acq On : 21 Dec 2011 4:49 pm Operator: olgaa
Sample : ic3346-2 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:45 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 16:33:32 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.64min 4.44ppb

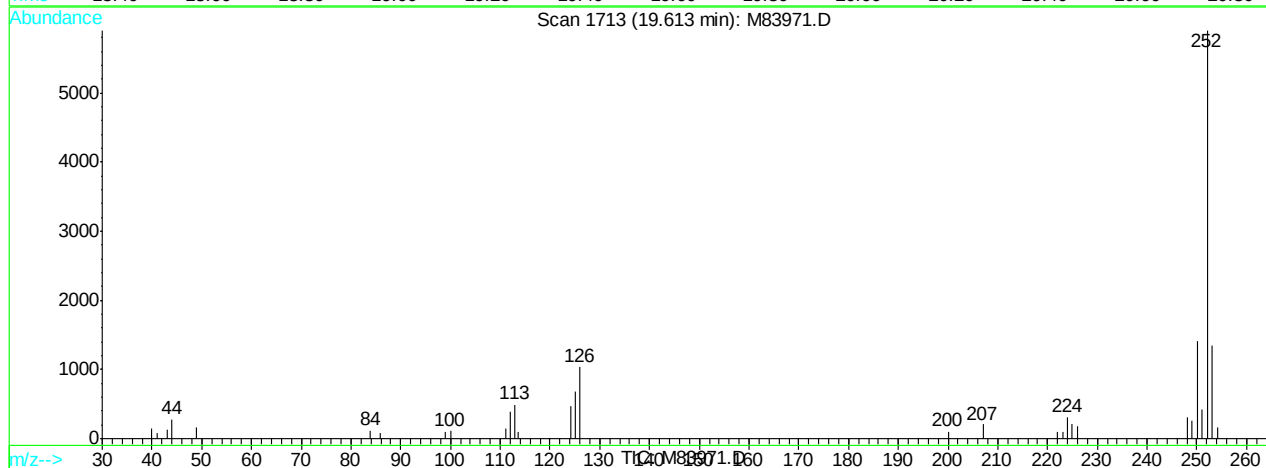
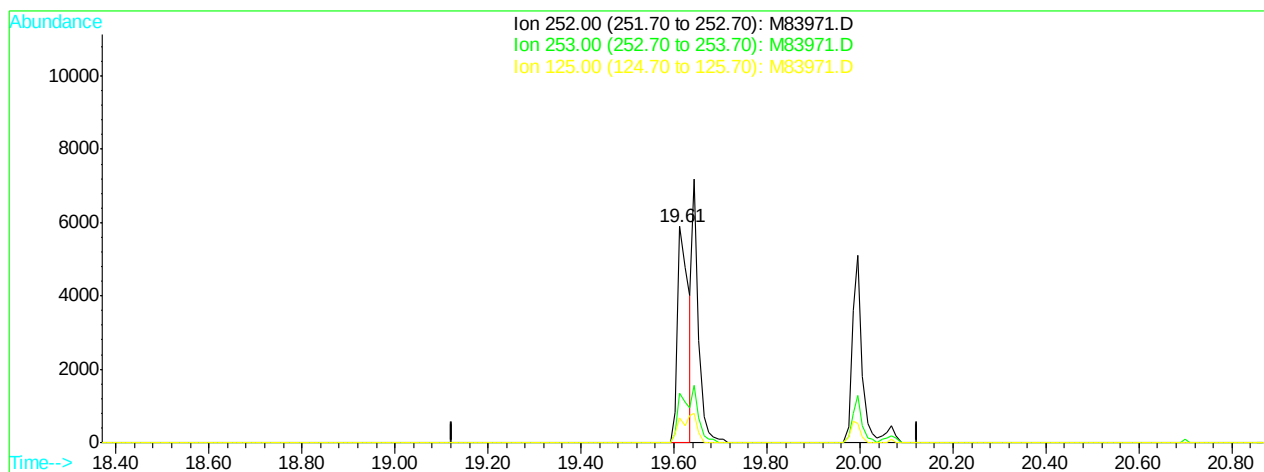
response 16616

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	21.90
125.00	10.60	11.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83971.D Vial: 6
 Acq On : 21 Dec 2011 4:49 pm Operator: olgaa
 Sample : ic3346-2 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 8:46 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.61min 2.14ppb m

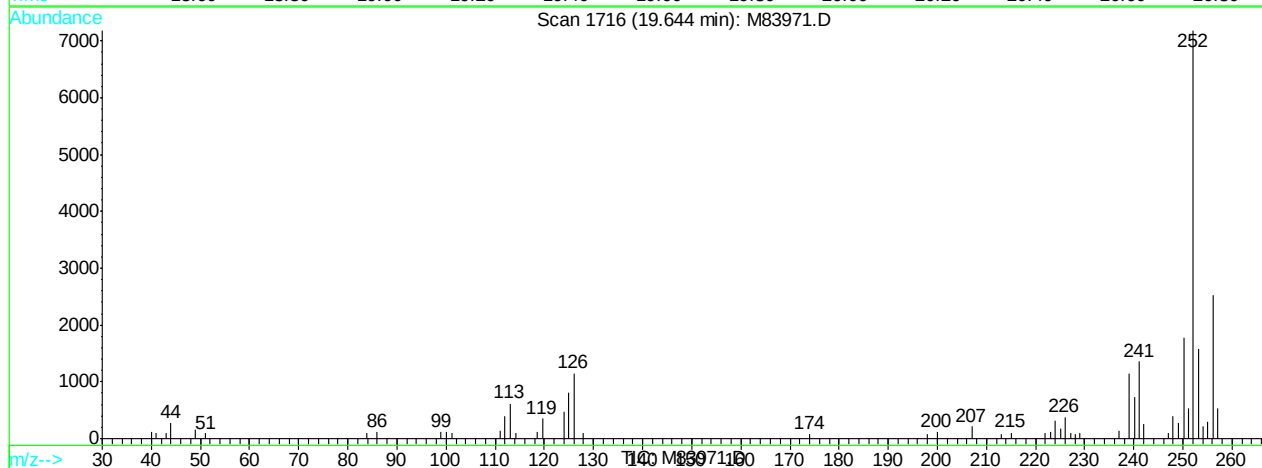
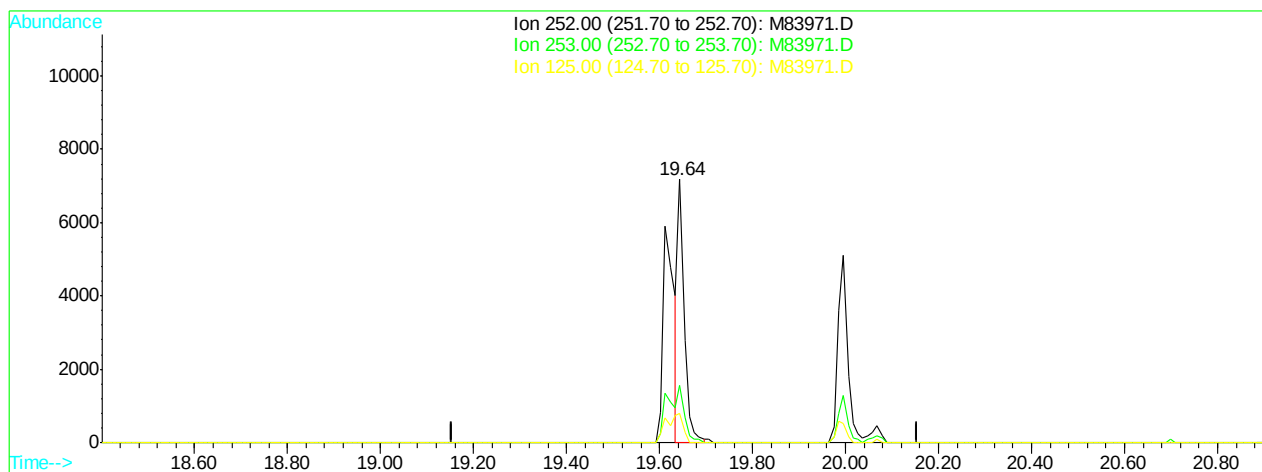
response 9607

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.91
125.00	9.90	11.61
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83971.D Vial: 6
 Acq On : 21 Dec 2011 4:49 pm Operator: olgaa
 Sample : ic3346-2 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 8:46 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.64min 1.86ppb m

response 6952

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	21.90
125.00	10.60	11.22
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83972.D

Vial: 7

Acq On : 21 Dec 2011 5:19 pm

Operator: olgaa

Sample : ic3346-5

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:47 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 08:46:56 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	32533	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	125849	40.00	ppb	0.00
47) Acenaphthene-d10	11.02	164	79243	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	127732	40.00	ppb	0.00
83) Chrysene-d12	18.31	240	131943	40.00	ppb	0.00
92) Perylene-d12	20.08	264	109358	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.40	152	32533	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	79243	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	127732	40.00	ppb	0.00
113) Chrysene-d12a	18.31	240	131943	40.00	ppb	0.00
116) Naphthalene-d8a	7.61	136	125849	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	3.68	112	5257	4.45	ppb	0.00
Spiked Amount 50.000			Recovery =			8.90%
8) Phenol-d5	4.91	99	6303	4.29	ppb	-0.01
Spiked Amount 50.000			Recovery =			8.58%
25) Nitrobenzene-d5	6.35	82	5113	4.65	ppb	-0.01
Spiked Amount 50.000			Recovery =			9.30%
51) 2-Fluorobiphenyl	9.74	172	11588	4.66	ppb	-0.01
Spiked Amount 50.000			Recovery =			9.32%
73) 2,4,6-Tribromophenol	12.61	330	1259	4.60	ppb	0.00
Spiked Amount 50.000			Recovery =			9.20%
86) Terphenyl-d14	16.84	244	12358	4.61	ppb	0.00
Spiked Amount 50.000			Recovery =			9.22%
106) 2-bromonaphthalene	0.00	127	0d	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0d	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery =			0.00%#

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.20	88	3124	5.64	ppb	97
3) Pyridine	2.48	79	5792	4.58	ppb	94
4) N-Nitrosodimethylamine	2.44	42	3982	3.63	ppb	98
6) Indene	5.85	116	9488	4.80	ppb	99
7) Cumene	4.32	105	12942	4.55	ppb	98
9) Phenol	4.93	94	7233	4.43	ppb	98
10) Aniline	4.96	93	8042	4.79	ppb	82
11) bis(2-Chloroethyl)ether	5.05	93	4857	4.67	ppb	97
12) 2-Chlorophenol	5.12	128	5439	4.52	ppb	98
13) Decane	5.20	43	8636	4.75	ppb	98
14) 1,3-Dichlorobenzene	5.34	146	6696	4.86	ppb	96
15) 1,4-Dichlorobenzene	5.42	146	6436	4.59	ppb	99
16) Benzyl alcohol	5.66	108	3541	4.67	ppb	93
17) 1,2-Dichlorobenzene	5.72	146	6219	4.80	ppb	97
18) Acetophenone	6.11	105	7395	4.68	ppb	99
19) 2-Methylphenol	5.87	108	4802	4.66	ppb	97
20) 2,2'-oxybis(1-Chloropropan	5.93	121	1732	4.82	ppb	99
21) 3&4-Methylphenol	6.12	108	4988	4.51	ppb	90
22) n-Nitroso-di-n-propylamine	6.16	70	3548	4.68	ppb	95

(#) = qualifier out of range (m) = manual integration

M83972.D MM3346.M

Thu Dec 22 16:14:53 2011

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83972.D

Vial: 7

Acq On : 21 Dec 2011 5:19 pm

Operator: olgaa

Sample : ic3346-5

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:47 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 08:46:56 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) Hexachloroethane	6.23	201	2338	4.95	ppb	85
26) Nitrobenzene	6.39	77	5452	4.72	ppb	99
27) Quinoline	8.27	129	10240	4.57	ppb	99
28) Isophorone	6.80	82	9587	4.76	ppb	98
29) 2-Nitrophenol	6.96	139	2898	4.48	ppb	82
30) 2,4-Dimethylphenol	7.06	107	4608	4.61	ppb	97
31) Benzoic acid	7.19	105	2884	3.96	ppb	91
32) bis(2-Chloroethoxy)methane	7.24	93	5375	4.54	ppb	99
33) 2,4-Dichlorophenol	7.38	162	4745	4.80	ppb	97
34) 2,6-Dichlorophenol	7.81	162	4702	4.80	ppb	95
35) 1,3,5-Trichlorobenzene	6.97	180	5511	4.74	ppb	98
36) 1,2,4-Trichlorobenzene	7.53	180	5386	4.82	ppb	98
37) 1,2,3-Trichlorobenzene	7.98	180	5025	4.74	ppb	97
38) Naphthalene	7.64	128	15654	4.69	ppb	99
39) 4-Chloroaniline	7.80	127	6563	4.73	ppb	99
40) 2,3-Dichloroaniline	9.58	161	5708	4.68	ppb	97
41) Caprolactam	8.36	55	3062	4.22	ppb	93
42) Hexachlorobutadiene	8.01	225	3107	5.06	ppb	99
43) 4-Chloro-3-methylphenol	8.77	107	4153	4.49	ppb	97
44) 2-Methylnaphthalene	8.95	141	9838	4.76	ppb	96
45) 1-Methylnaphthalene	9.16	142	10707	4.72	ppb	96
46) Dimethylnaphthalene	10.18	156	9337	4.86	ppb	98
48) Hexachlorocyclopentadiene	9.42	237	4879	8.44	ppb	99
49) 2,4,6-Trichlorophenol	9.57	196	3458	4.66	ppb	95
50) 2,4,5-Trichlorophenol	9.64	196	3646	4.50	ppb	98
52) 2-Chloronaphthalene	9.88	162	11179	4.84	ppb	98
53) Biphenyl	9.89	154	13331	4.88	ppb	98
54) 2-Nitroaniline	10.18	65	3021	4.53	ppb	94
55) Dimethylphthalate	10.66	163	11854	4.69	ppb	99
56) Acenaphthylene	10.71	152	16447	4.67	ppb	99
57) 2,6-Dinitrotoluene	10.76	165	2565	4.62	ppb	96
58) 3-Nitroaniline	11.01	138	2759	4.34	ppb	92
59) Acenaphthene	11.08	153	10535	4.73	ppb	97
60) 2,4-Dinitrophenol	11.21	184	1370	5.85	ppb	98
61) 4-Nitrophenol	11.40	109	1015	3.89	ppb #	58
62) Dibenzofuran	11.41	168	15282	4.72	ppb	84
63) 2,4-Dinitrotoluene	11.52	165	3347	4.54	ppb	96
64) 2,3,4,6-Tetrachlorophenol	11.76	232	2966	4.58	ppb	95
65) Diethylphthalate	12.08	149	11035	4.61	ppb	100
66) Fluorene	12.08	166	12060	4.56	ppb	99
67) 4-Chlorophenyl-phenylether	12.13	204	5898	4.72	ppb	96
68) 4-Nitroaniline	12.22	138	2921	4.62	ppb	95
70) 4,6-Dinitro-2-methylphenol	12.32	198	1480	3.74	ppb	94
71) n-Nitrosodiphenylamine	12.39	169	8389	4.51	ppb	97
72) 1,2-Diphenylhydrazine	12.43	77	10348	4.40	ppb	95
74) 4-Bromophenyl-phenylether	13.09	248	3123	4.62	ppb	96
75) Hexachlorobenzene	13.34	284	3346	4.67	ppb	92
76) Pentachlorophenol	13.71	266	3978	8.32	ppb	99
77) Phenanthrene	13.97	178	17320	4.66	ppb	98

(#)=qualifier out of range (m)=manual integration

M83972.D MM3346.M

Thu Dec 22 16:14:54 2011

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83972.D

Vial: 7

Acq On : 21 Dec 2011 5:19 pm

Operator: olgaa

Sample : ic3346-5

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:47 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 08:46:56 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Anthracene	14.06	178	17208	4.67	ppb	98
79) Carbazole	14.42	167	16409	4.51	ppb	99
80) Di-n-butylphthalate	15.32	149	18529	4.43	ppb	98
81) Fluoranthene	16.17	202	19555	4.35	ppb	97
82) Octadecane	13.90	57	8866	4.65	ppb	99
84) Pyrene	16.52	202	21775	4.70	ppb	98
85) Butyl stearate	17.72	56	6738	4.50	ppb	98
87) Butylbenzylphthalate	17.65	149	8286	4.43	ppb	91
88) Benzo[a]anthracene	18.29	228	20200	4.46	ppb	97
89) 3,3'-Dichlorobenzidine	18.30	252	5590	4.15	ppb	98
90) Chrysene	18.34	228	19683	4.72	ppb	97
91) bis(2-Ethylhexyl)phthalate	18.49	149	10337	4.49	ppb	99
93) Di-n-octylphthalate	19.24	149	16574	4.35	ppb	100
94) Benzo[b]fluoranthene	19.62	252	15022m	3.58	ppb	
95) Benzo[k]fluoranthene	19.65	252	19330m	5.68	ppb	
96) Benzo[a]pyrene	20.01	252	15007	4.36	ppb	96
97) Indeno[1,2,3-cd]pyrene	21.52	276	15328	4.32	ppb	99
98) Dibenz(a,h)acridine	21.19	279	10712	4.04	ppb	100
99) Dibenz[a,h]anthracene	21.54	278	12835	4.34	ppb	98
100) 7,12-Dimethylbenz(a)anthra	19.64	256	6694	3.95	ppb	90
101) Benzo[g,h,i]perylene	21.91	276	12891	4.36	ppb	98

866
8-----
(#) = qualifier out of range (m) = manual integration

M83972.D MM3346.M

Thu Dec 22 16:14:54 2011

GCMSM

Page 3


```

      Vial: 7
Operator: olgaa
Inst      : MSM
Multiplr: 1.00
Results File: MM3346.RES

```

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:

EM3346-IC3346

Lab FileID:

M83972.D

Injection Time:

12/21/11 17:19

Method:

SW846 8270D

Analyst approved:

12/22/11 16:30 Olga Azarihn

Supervisor approved:

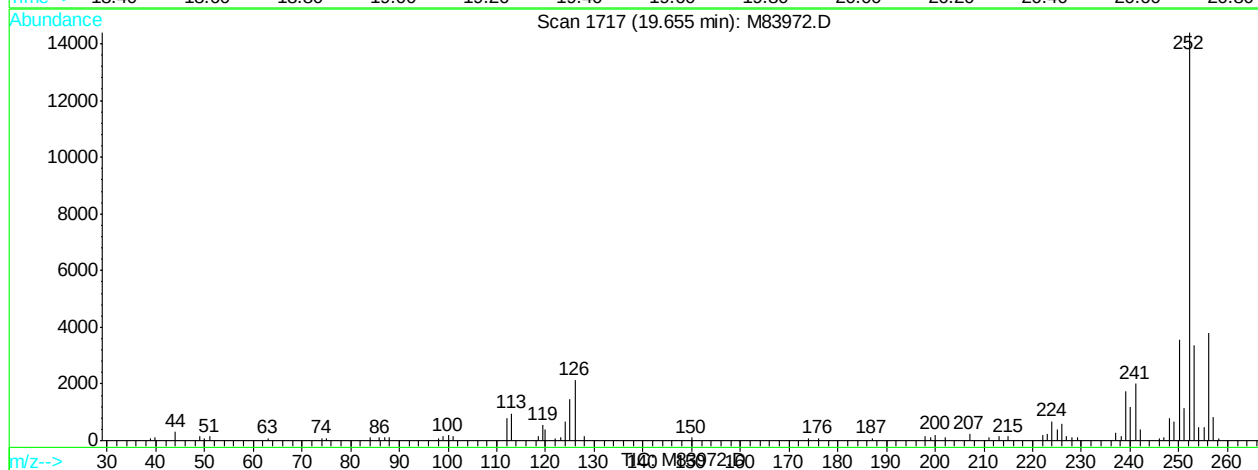
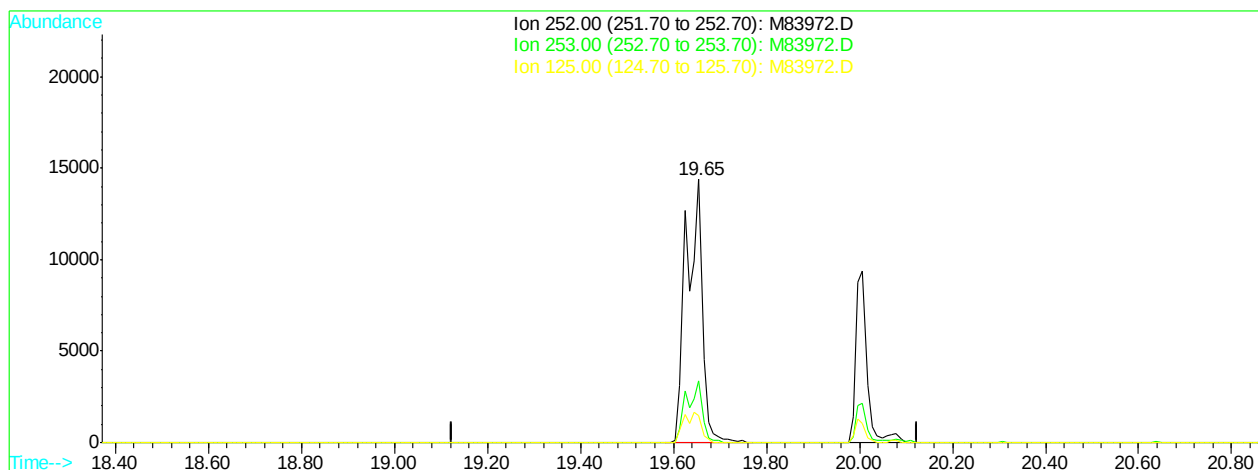
12/28/11 11:57 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.62	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.65	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83972.D Vial: 7
Acq On : 21 Dec 2011 5:19 pm Operator: olgaa
Sample : ic3346-5 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:47 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 08:46:56 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.65min 8.24ppb

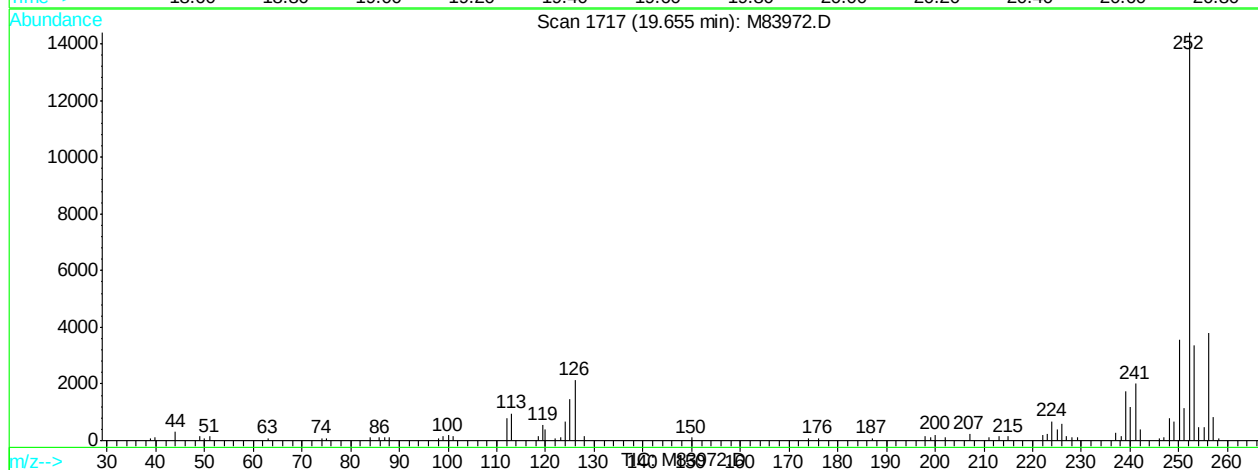
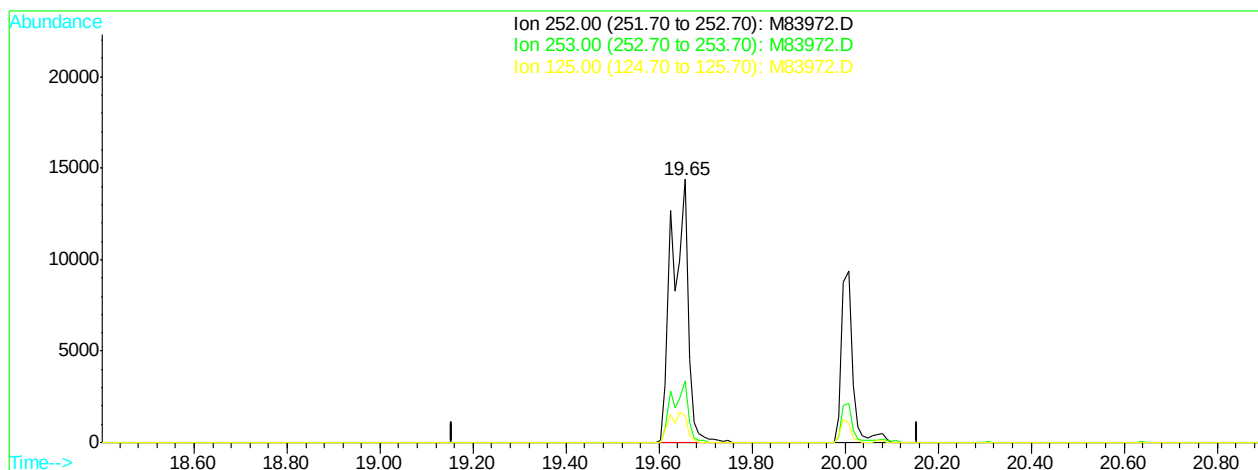
response 34545

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	23.49
125.00	9.90	10.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83972.D Vial: 7
Acq On : 21 Dec 2011 5:19 pm Operator: olgaa
Sample : ic3346-5 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:47 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 08:46:56 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.65min 10.16ppb

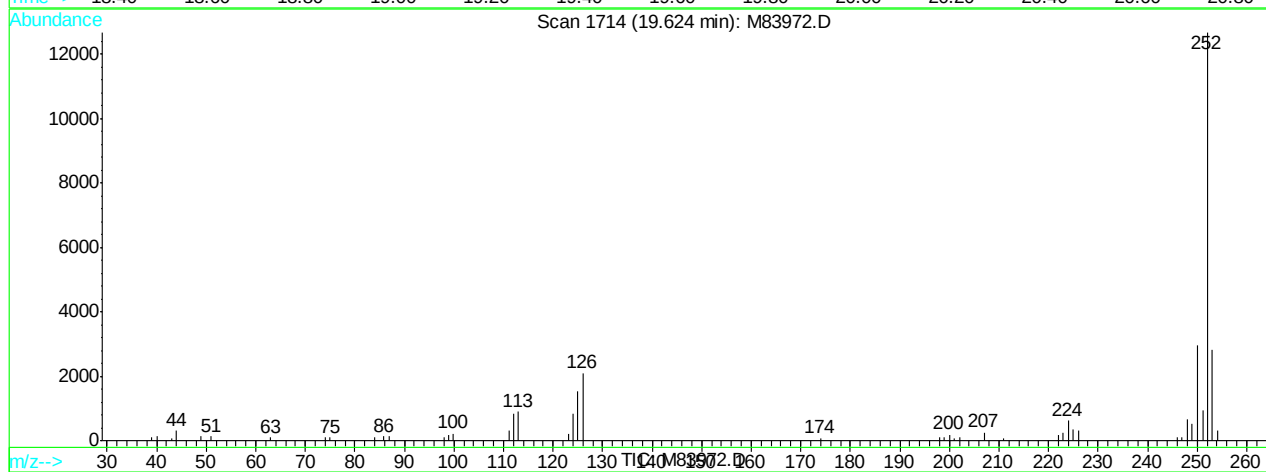
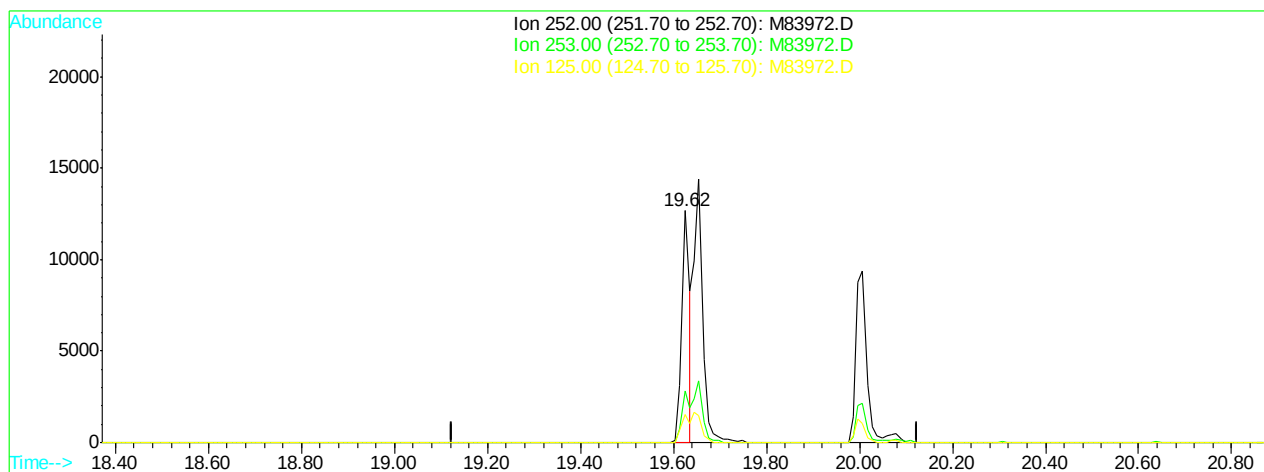
response 34545

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	23.49
125.00	10.60	10.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83972.D Vial: 7
Acq On : 21 Dec 2011 5:19 pm Operator: olgaa
Sample : ic3346-5 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:47 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.62min 3.58ppb m

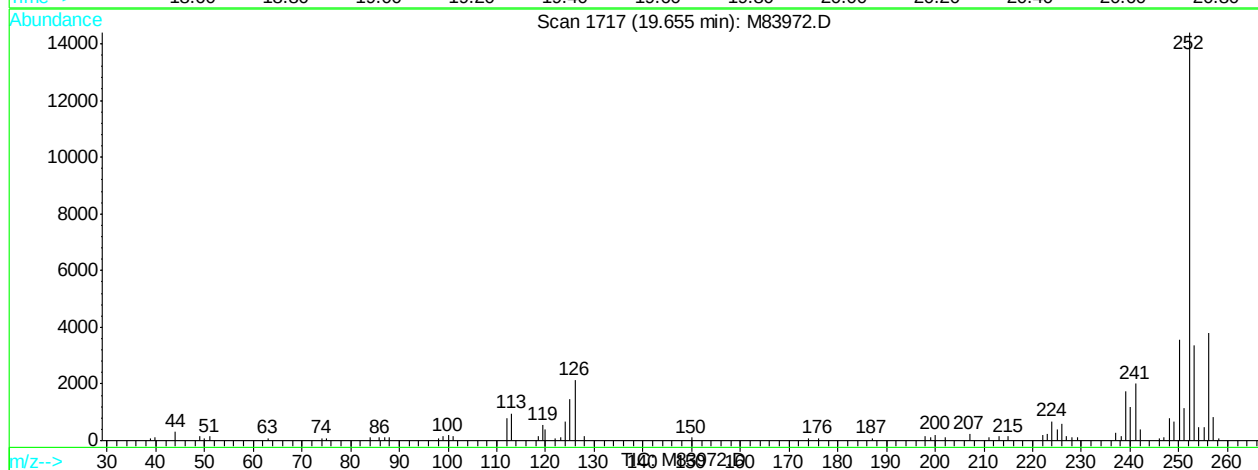
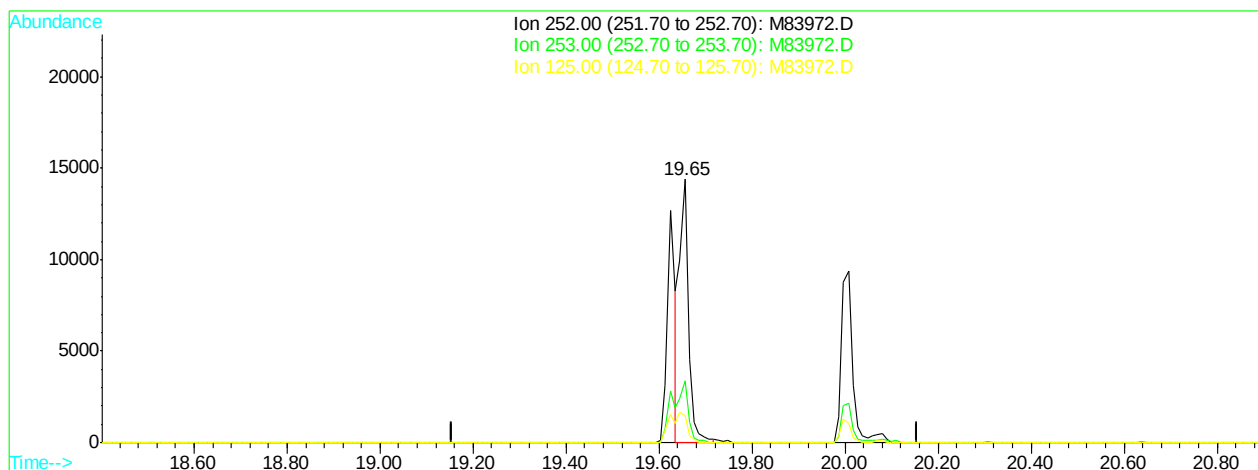
response 15022

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.28
125.00	9.90	12.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83972.D Vial: 7
Acq On : 21 Dec 2011 5:19 pm Operator: olgaa
Sample : ic3346-5 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:47 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.65min 5.68ppb m

response 19330

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	23.49
125.00	10.60	10.14
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83973.D

Vial: 8

Acq On : 21 Dec 2011 5:48 pm

Operator: olgaa

Sample : ic3346-10

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:49 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 08:48:07 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	34900	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	133493	40.00	ppb	0.00
47) Acenaphthene-d10	11.02	164	83025	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	135603	40.00	ppb	0.00
83) Chrysene-d12	18.31	240	143923	40.00	ppb	0.00
92) Perylene-d12	20.08	264	121583	40.00	ppb	0.01
102) 1,4-Dichlorobenzene-d4a	5.40	152	34900	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	83025	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	135603	40.00	ppb	0.00
113) Chrysene-d12a	18.31	240	143923	40.00	ppb	0.00
116) Naphthalene-d8a	7.61	136	133493	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	3.69	112	11872	9.54	ppb	0.00
Spiked Amount 50.000			Recovery =			19.08%
8) Phenol-d5	4.91	99	14067	9.14	ppb	-0.01
Spiked Amount 50.000			Recovery =			18.28%
25) Nitrobenzene-d5	6.36	82	11141	9.66	ppb	-0.01
Spiked Amount 50.000			Recovery =			19.32%
51) 2-Fluorobiphenyl	9.74	172	25098	9.74	ppb	-0.01
Spiked Amount 50.000			Recovery =			19.48%
73) 2,4,6-Tribromophenol	12.61	330	2899	10.12	ppb	0.00
Spiked Amount 50.000			Recovery =			20.24%
86) Terphenyl-d14	16.84	244	26745	9.27	ppb	0.00
Spiked Amount 50.000			Recovery =			18.54%
106) 2-bromonaphthalene	0.00	127	0d	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0d	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery =			0.00%#

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.20	88	4980	8.21	ppb	99
3) Pyridine	2.46	79	12805	9.58	ppb	99
4) N-Nitrosodimethylamine	2.44	42	8861	7.89	ppb	92
6) Indene	5.85	116	20474	9.72	ppb	98
7) Cumene	4.32	105	28517	9.49	ppb	99
9) Phenol	4.93	94	15919	9.27	ppb	99
10) Aniline	4.96	93	17580	9.84	ppb	85
11) bis(2-Chloroethyl)ether	5.05	93	10756	9.74	ppb	94
12) 2-Chlorophenol	5.12	128	12511	9.86	ppb	94
13) Decane	5.20	43	18189	9.41	ppb	100
14) 1,3-Dichlorobenzene	5.34	146	14532	9.87	ppb	96
15) 1,4-Dichlorobenzene	5.42	146	14082	9.50	ppb	98
16) Benzyl alcohol	5.65	108	7849	9.76	ppb	97
17) 1,2-Dichlorobenzene	5.72	146	13309	9.64	ppb	98
18) Acetophenone	6.11	105	15776	9.42	ppb	97
19) 2-Methylphenol	5.87	108	10440	9.55	ppb	98
20) 2,2'-oxybis(1-Chloropropan	5.93	121	3933	10.27	ppb	# 85
21) 3&4-Methylphenol	6.12	108	11230	9.63	ppb	90
22) n-Nitroso-di-n-propylamine	6.16	70	7830	9.73	ppb	100

(#) = qualifier out of range (m) = manual integration

M83973.D MM3346.M

Thu Dec 22 16:15:24 2011

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83973.D

Vial: 8

Acq On : 21 Dec 2011 5:48 pm

Operator: olgaa

Sample : ic3346-10

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:49 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 08:48:07 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) Hexachloroethane	6.23	201	4841	9.58	ppb	86
26) Nitrobenzene	6.39	77	11629	9.58	ppb	99
27) Quinoline	8.27	129	22672	9.68	ppb	99
28) Isophorone	6.80	82	20630	9.74	ppb	97
29) 2-Nitrophenol	6.96	139	6702	9.94	ppb	88
30) 2,4-Dimethylphenol	7.06	107	10250	9.79	ppb	98
31) Benzoic acid	7.23	105	7555	10.13	ppb	98
32) bis(2-Chloroethoxy)methane	7.25	93	12060	9.76	ppb	98
33) 2,4-Dichlorophenol	7.38	162	10471	10.05	ppb	98
34) 2,6-Dichlorophenol	7.82	162	10040	9.73	ppb	96
35) 1,3,5-Trichlorobenzene	6.97	180	12040	9.86	ppb	98
36) 1,2,4-Trichlorobenzene	7.54	180	11764	9.98	ppb	97
37) 1,2,3-Trichlorobenzene	7.98	180	10999	9.86	ppb	98
38) Naphthalene	7.64	128	33876	9.66	ppb	99
39) 4-Chloroaniline	7.81	127	14416	9.89	ppb	99
40) 2,3-Dichloroaniline	9.59	161	12558	9.82	ppb	96
41) Caprolactam	8.36	55	6681	8.92	ppb	97
42) Hexachlorobutadiene	8.01	225	6523	9.99	ppb	97
43) 4-Chloro-3-methylphenol	8.77	107	9437	9.79	ppb	99
44) 2-Methylnaphthalene	8.95	141	20908	9.62	ppb	96
45) 1-Methylnaphthalene	9.16	142	22861	9.59	ppb	99
46) Dimethylnaphthalene	10.19	156	20383	10.05	ppb	98
48) Hexachlorocyclopentadiene	9.42	237	11983	20.32	ppb	98
49) 2,4,6-Trichlorophenol	9.58	196	7799	10.15	ppb	100
50) 2,4,5-Trichlorophenol	9.64	196	8246	9.89	ppb	96
52) 2-Chloronaphthalene	9.89	162	23881	9.92	ppb	99
53) Biphenyl	9.90	154	28253	9.90	ppb	99
54) 2-Nitroaniline	10.19	65	6769	9.84	ppb	98
55) Dimethylphthalate	10.66	163	26027	9.93	ppb	99
56) Acenaphthylene	10.71	152	36537	10.00	ppb	99
57) 2,6-Dinitrotoluene	10.77	165	5903	10.28	ppb	100
58) 3-Nitroaniline	11.01	138	6558	10.06	ppb	92
59) Acenaphthene	11.09	153	22363	9.67	ppb	95
60) 2,4-Dinitrophenol	11.21	184	4711	20.61	ppb	95
61) 4-Nitrophenol	11.40	109	2951	11.21	ppb	93
62) Dibenzofuran	11.41	168	32719	9.74	ppb	85
63) 2,4-Dinitrotoluene	11.52	165	7892	10.38	ppb	99
64) 2,3,4,6-Tetrachlorophenol	11.76	232	6703	10.03	ppb	92
65) Diethylphthalate	12.08	149	24301	9.81	ppb	100
66) Fluorene	12.08	166	26276	9.62	ppb	97
67) 4-Chlorophenyl-phenylether	12.13	204	12907	9.95	ppb	93
68) 4-Nitroaniline	12.22	138	6739	10.30	ppb	99
70) 4,6-Dinitro-2-methylphenol	12.32	198	4489	11.15	ppb	95
71) n-Nitrosodiphenylamine	12.39	169	18725	9.64	ppb	99
72) 1,2-Diphenylhydrazine	12.44	77	22765	9.31	ppb	94
74) 4-Bromophenyl-phenylether	13.09	248	6879	9.71	ppb	94
75) Hexachlorobenzene	13.34	284	7187	9.56	ppb	90
76) Pentachlorophenol	13.72	266	9599	19.45	ppb	98
77) Phenanthrene	13.97	178	37721	9.68	ppb	98

(#)=qualifier out of range (m)=manual integration

M83973.D MM3346.M

Thu Dec 22 16:15:24 2011

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83973.D Vial: 8
 Acq On : 21 Dec 2011 5:48 pm Operator: olgaa
 Sample : ic3346-10 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 8:49 2011 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 08:48:07 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Anthracene	14.06	178	37980	9.81	ppb	98
79) Carbazole	14.42	167	36006	9.48	ppb	99
80) Di-n-butylphthalate	15.32	149	41634	9.56	ppb	99
81) Fluoranthene	16.17	202	43546	9.33	ppb	97
82) Octadecane	13.90	57	19262	9.62	ppb	99
84) Pyrene	16.52	202	46582	9.31	ppb	98
85) Butyl stearate	17.72	56	14271	8.88	ppb	95
87) Butylbenzylphthalate	17.65	149	18867	9.43	ppb	93
88) Benzo[a]anthracene	18.29	228	44159	9.11	ppb	98
89) 3,3'-Dichlorobenzidine	18.30	252	13824	9.68	ppb	98
90) Chrysene	18.34	228	42129	9.34	ppb	98
91) bis(2-Ethylhexyl)phthalate	18.49	149	24171	9.79	ppb	99
93) Di-n-octylphthalate	19.23	149	40838	9.85	ppb	93
94) Benzo[b]fluoranthene	19.63	252	36594m	8.24	ppb	
95) Benzo[k]fluoranthene	19.66	252	41483m	10.73	ppb	
96) Benzo[a]pyrene	20.01	252	34993	9.35	ppb	95
97) Indeno[1,2,3-cd]pyrene	21.51	276	37271	9.67	ppb	98
98) Dibenz(a,h)acridine	21.19	279	26868	9.42	ppb	100
99) Dibenz[a,h]anthracene	21.53	278	31436	9.78	ppb	96
100) 7,12-Dimethylbenz(a)anthra	19.65	256	16558	9.10	ppb	91
101) Benzo[g,h,i]perylene	21.91	276	30974	9.62	ppb	99

(#) = qualifier out of range (m) = manual integration

M83973.D MM3346.M Thu Dec 22 16:15:24 2011 GCMSM

Page 3

Quantitation Report

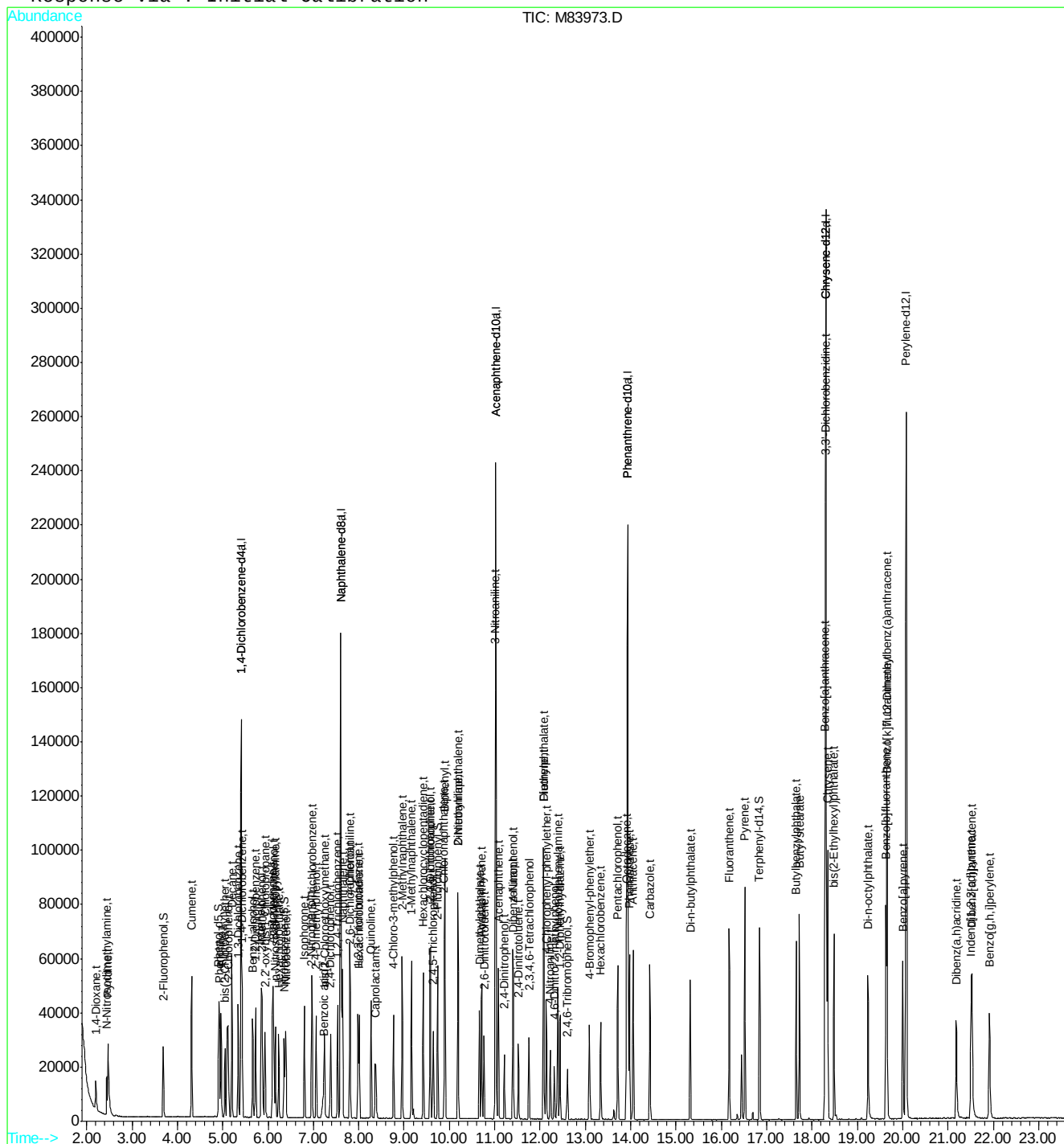
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      Vial: 8
Operator: olgaa
Inst      : MSM
Multiplr: 1.00

Results File: MM3346.RES

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Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: EM3346-IC3346

Method: SW846 8270D

Lab FileID: M83973.D

Analyst approved: 12/22/11 16:30 Olga Azarihn

Injection Time: 12/21/11 17:48

Supervisor approved: 12/28/11 11:57 Cheng-Hwan Ao

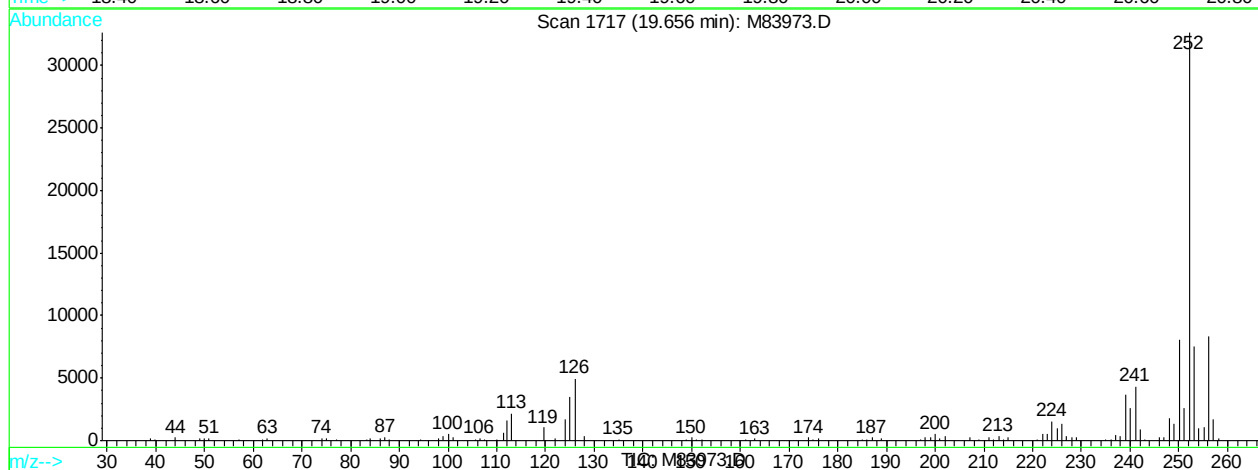
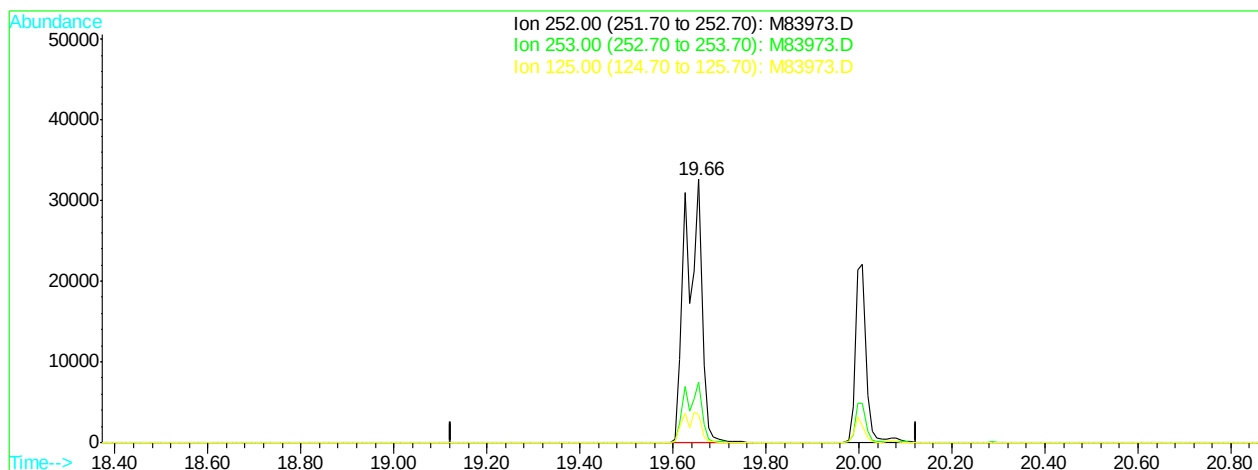
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.63	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.66	Overlapping peak

8.6.7.1
8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83973.D Vial: 8
Acq On : 21 Dec 2011 5:48 pm Operator: olgaa
Sample : ic3346-10 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:48 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 08:48:07 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.66min 17.64ppb

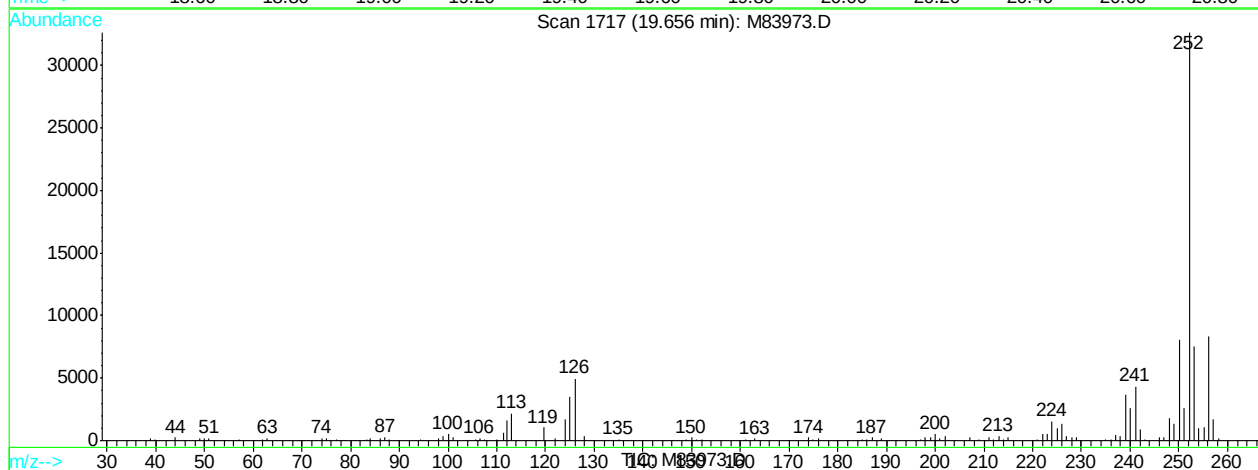
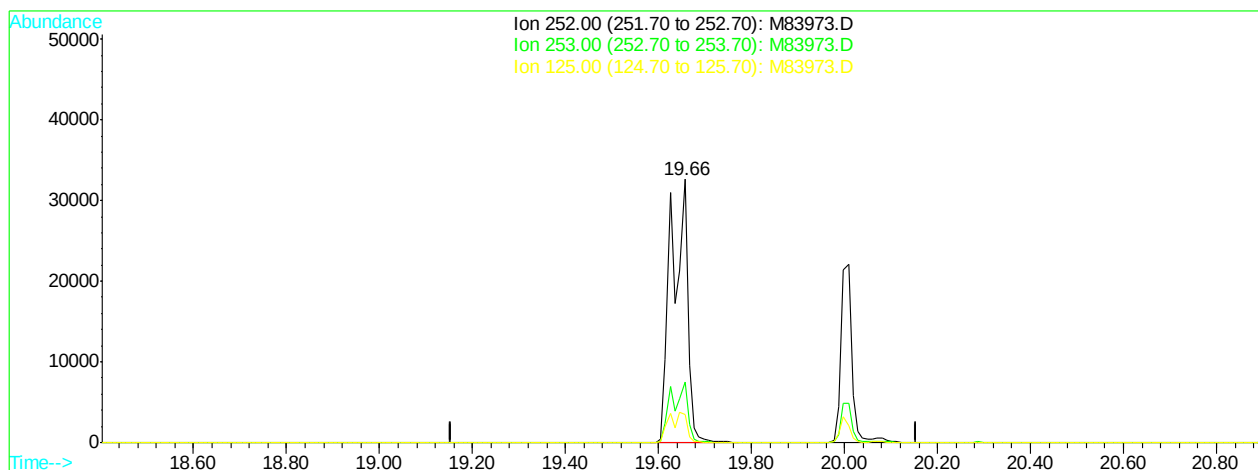
response 78324

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	23.12
125.00	9.90	10.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83973.D Vial: 8
Acq On : 21 Dec 2011 5:48 pm Operator: olgaa
Sample : ic3346-10 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:48 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 08:48:07 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.66min 20.25ppb

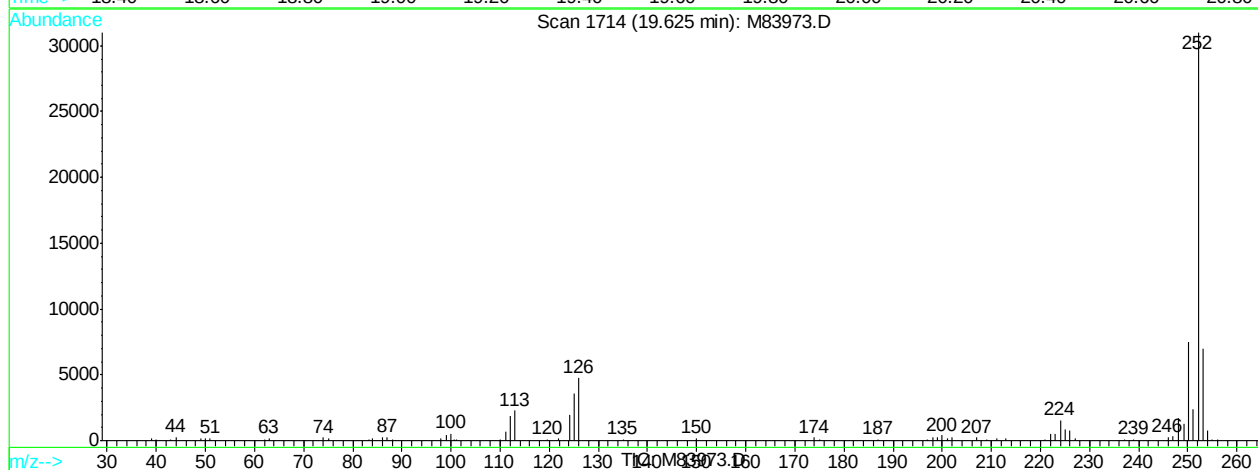
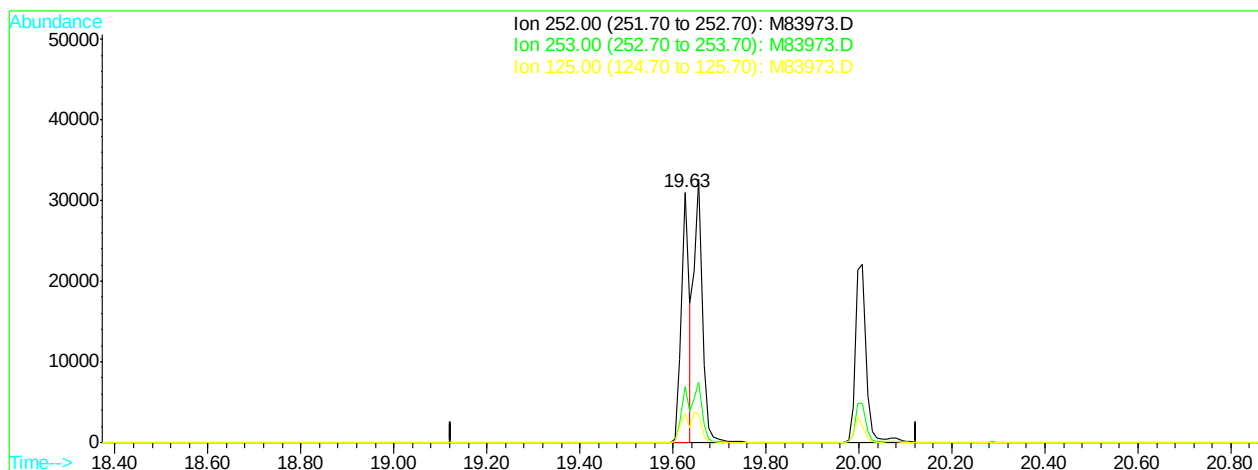
response 78324

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	23.12
125.00	10.60	10.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83973.D Vial: 8
 Acq On : 21 Dec 2011 5:48 pm Operator: olgaa
 Sample : ic3346-10 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 8:49 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.63min 8.24ppb m

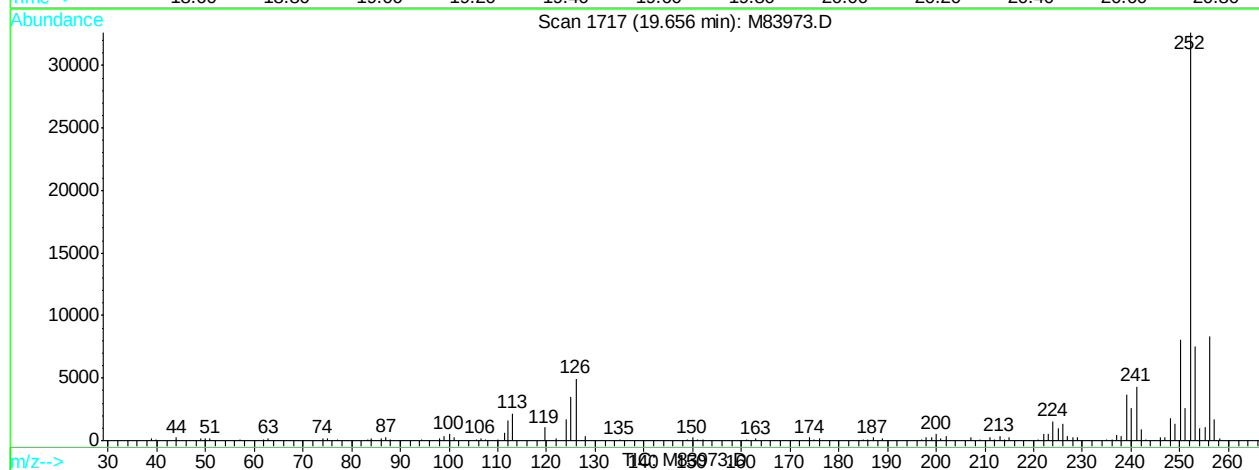
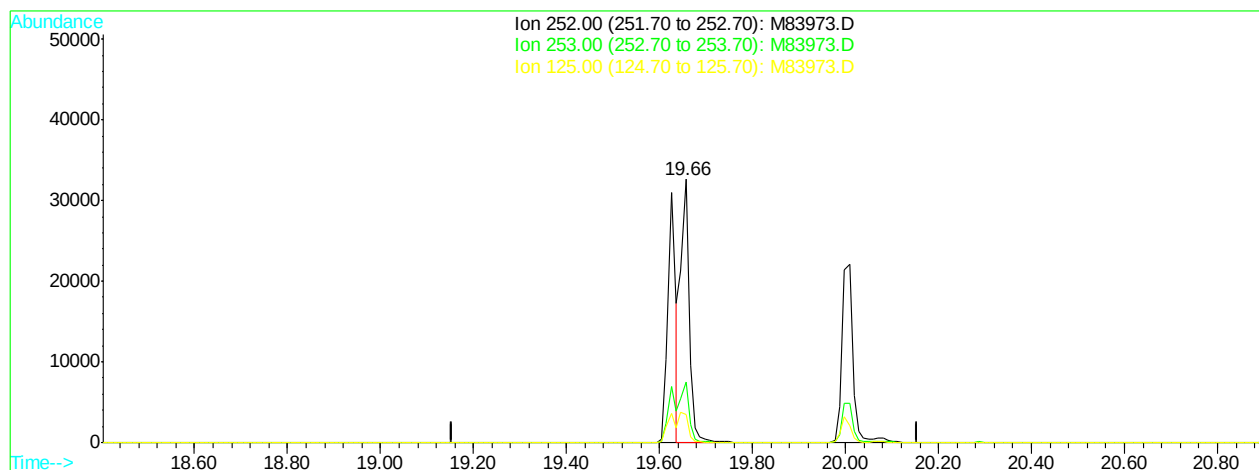
response 36594

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.50
125.00	9.90	11.45
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83973.D Vial: 8
Acq On : 21 Dec 2011 5:48 pm Operator: olgaa
Sample : ic3346-10 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:49 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.66min 10.73ppb m

response 41483

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	23.12
125.00	10.60	10.73
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83974.D

Vial: 9

Acq On : 21 Dec 2011 6:18 pm

Operator: olgaa

Sample : ic3346-80

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:50 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 08:49:28 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	33653	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	133681	40.00	ppb	0.00
47) Acenaphthene-d10	11.03	164	85430	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	133774	40.00	ppb	0.00
83) Chrysene-d12	18.32	240	142858	40.00	ppb	0.00
92) Perylene-d12	20.09	264	117377	40.00	ppb	0.02
102) 1,4-Dichlorobenzene-d4a	5.40	152	33653	40.00	ppb	0.00
104) Acenaphthene-d10a	11.03	164	85430	40.00	ppb	0.00
108) Phenanthrene-d10a	13.94	188	133774	40.00	ppb	0.00
113) Chrysene-d12a	18.32	240	142858	40.00	ppb	0.00
116) Naphthalene-d8a	7.61	136	133681	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	3.68	112	103089	86.50	ppb	0.00
Spiked Amount 50.000			Recovery =	173.00%		
8) Phenol-d5	4.93	99	119936	81.83	ppb	0.00
Spiked Amount 50.000			Recovery =	163.66%		
25) Nitrobenzene-d5	6.38	82	88825	77.28	ppb	0.00
Spiked Amount 50.000			Recovery =	154.56%		
51) 2-Fluorobiphenyl	9.75	172	193028	73.07	ppb	0.00
Spiked Amount 50.000			Recovery =	146.14%		
73) 2,4,6-Tribromophenol	12.62	330	25742	90.93	ppb	0.00
Spiked Amount 50.000			Recovery =	181.86%		
86) Terphenyl-d14	16.85	244	215991	76.19	ppb	0.00
Spiked Amount 50.000			Recovery =	152.38%		
106) 2-bromonaphthalene	0.00	127	0d	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0d	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery =	0.00%#		

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.19	88	40917	71.76	ppb	100
3) Pyridine	2.45	79	106610	83.18	ppb	99
4) N-Nitrosodimethylamine	2.43	42	72776	69.28	ppb	98
6) Indene	5.86	116	155124	76.65	ppb	99
7) Cumene	4.32	105	226185	78.66	ppb	99
9) Phenol	4.95	94	130008	79.35	ppb	94
10) Aniline	4.97	93	122118	71.03	ppb	69
11) bis(2-Chloroethyl)ether	5.06	93	81775	77.11	ppb	98
12) 2-Chlorophenol	5.13	128	95148	77.89	ppb	98
13) Decane	5.21	43	123103	66.61	ppb	95
14) 1,3-Dichlorobenzene	5.35	146	106980	75.52	ppb	99
15) 1,4-Dichlorobenzene	5.43	146	105883	74.58	ppb	98
16) Benzyl alcohol	5.67	108	63006	81.50	ppb	99
17) 1,2-Dichlorobenzene	5.73	146	101885	76.95	ppb	98
18) Acetophenone	6.12	105	122710	76.59	ppb	98
19) 2-Methylphenol	5.89	108	81996	78.26	ppb	99
20) 2,2'-oxybis(1-Chloropropan	5.94	121	28885	77.91	ppb	# 81
21) 3&4-Methylphenol	6.15	108	90446	80.87	ppb	99
22) n-Nitroso-di-n-propylamine	6.18	70	60590	78.39	ppb	98

(#) = qualifier out of range (m) = manual integration

M83974.D MM3346.M

Thu Dec 22 16:15:57 2011

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83974.D

Vial: 9

Acq On : 21 Dec 2011 6:18 pm

Operator: olgaa

Sample : ic3346-80

Inst : MSM

Misc : op53696,em3346,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 8:50 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 08:28 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) Hexachloroethane	6.24	201	38616	79.70	ppb	96
26) Nitrobenzene	6.41	77	92331	76.45	ppb	99
27) Quinoline	8.30	129	185626	79.53	ppb	99
28) Isophorone	6.82	82	164749	77.98	ppb	99
29) 2-Nitrophenol	6.97	139	57602	85.42	ppb	86
30) 2,4-Dimethylphenol	7.08	107	89847	85.94	ppb	98
31) Benzoic acid	7.39	105	74171	99.10	ppb	100
32) bis(2-Chloroethoxy)methane	7.26	93	95930	77.76	ppb	100
33) 2,4-Dichlorophenol	7.39	162	86857	83.22	ppb	99
34) 2,6-Dichlorophenol	7.82	162	82746	80.39	ppb	98
35) 1,3,5-Trichlorobenzene	6.99	180	93844	76.87	ppb	98
36) 1,2,4-Trichlorobenzene	7.55	180	91042	77.13	ppb	99
37) 1,2,3-Trichlorobenzene	7.99	180	87762	78.74	ppb	97
38) Naphthalene	7.65	128	256436	73.40	ppb	99
39) 4-Chloroaniline	7.82	127	112926	77.48	ppb	98
40) 2,3-Dichloroaniline	9.59	161	98005	76.70	ppb	97
41) Caprolactam	8.49	55	60713	82.20	ppb	98
42) Hexachlorobutadiene	8.02	225	52194	79.85	ppb	98
43) 4-Chloro-3-methylphenol	8.80	107	84708	88.02	ppb	90
44) 2-Methylnaphthalene	8.96	141	171566	79.23	ppb	98
45) 1-Methylnaphthalene	9.17	142	182263	76.80	ppb	99
46) Dimethylnaphthalene	10.21	156	158107	77.81	ppb	99
48) Hexachlorocyclopentadiene	9.43	237	116734	191.94	ppb	100
49) 2,4,6-Trichlorophenol	9.59	196	65766	83.00	ppb	99
50) 2,4,5-Trichlorophenol	9.67	196	68943	80.46	ppb	99
52) 2-Chloronaphthalene	9.91	162	181385	73.33	ppb	99
53) Biphenyl	9.92	154	211113	72.02	ppb	99
54) 2-Nitroaniline	10.21	65	56099	79.43	ppb	97
55) Dimethylphthalate	10.68	163	209257	77.65	ppb	100
56) Acenaphthylene	10.72	152	284276	75.63	ppb	99
57) 2,6-Dinitrotoluene	10.78	165	49753	83.85	ppb	96
58) 3-Nitroaniline	11.03	138	57385	85.47	ppb	97
59) Acenaphthene	11.10	153	176968	74.74	ppb	99
60) 2,4-Dinitrophenol	11.24	184	63529	268.97	ppb	96
61) 4-Nitrophenol	11.43	109	27995	101.63	ppb	# 67
62) Dibenzofuran	11.42	168	253081	73.52	ppb	93
63) 2,4-Dinitrotoluene	11.55	165	68524	87.14	ppb	88
64) 2,3,4,6-Tetrachlorophenol	11.77	232	60631	88.12	ppb	97
65) Diethylphthalate	12.11	149	194361	76.46	ppb	98
66) Fluorene	12.10	166	213306	76.31	ppb	99
67) 4-Chlorophenyl-phenylether	12.14	204	99509	74.61	ppb	93
68) 4-Nitroaniline	12.29	138	56186	83.08	ppb	100
70) 4,6-Dinitro-2-methylphenol	12.36	198	46138	114.31	ppb	98
71) n-Nitrosodiphenylamine	12.41	169	149306	78.33	ppb	99
72) 1,2-Diphenylhydrazine	12.45	77	190581	79.78	ppb	100
74) 4-Bromophenyl-phenylether	13.10	248	57335	82.37	ppb	97
75) Hexachlorobenzene	13.35	284	59827	81.16	ppb	96
76) Pentachlorophenol	13.73	266	89430	184.44	ppb	99
77) Phenanthrene	13.99	178	278777	72.83	ppb	100

(#)=qualifier out of range (m)=manual integration

M83974.D MM3346.M

Thu Dec 22 16:15:57 2011

GCMSM

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83974.D Vial: 9
 Acq On : 21 Dec 2011 6:18 pm Operator: olgaa
 Sample : ic3346-80 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 8:50 2011 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 08:49:28 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Anthracene	14.08	178	279211	73.31	ppb	100
79) Carbazole	14.44	167	283190	76.12	ppb	99
80) Di-n-butylphthalate	15.32	149	349971	81.94	ppb	99
81) Fluoranthene	16.19	202	350157	76.77	ppb	98
82) Octadecane	13.91	57	149770	76.25	ppb	98
84) Pyrene	16.54	202	360585	73.31	ppb	99
85) Butyl stearate	17.73	56	107347	68.40	ppb	88
87) Butylbenzylphthalate	17.66	149	160929	81.68	ppb	93
88) Benzo[a]anthracene	18.30	228	345196	72.65	ppb	99
89) 3,3'-Dichlorobenzidine	18.31	252	121507	86.08	ppb	98
90) Chrysene	18.36	228	307614	69.38	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.50	149	197523	80.88	ppb	96
93) Di-n-octylphthalate	19.25	149	369235	92.45	ppb	98
94) Benzo[b]fluoranthene	19.67	252	363689m	87.03	ppb	
95) Benzo[k]fluoranthene	19.69	252	244373m	64.78	ppb	
96) Benzo[a]pyrene	20.03	252	274239	76.58	ppb	97
97) Indeno[1,2,3-cd]pyrene	21.55	276	298825	80.66	ppb	97
98) Dibenz(a,h)acridine	21.21	279	233034	85.31	ppb	99
99) Dibenz[a,h]anthracene	21.59	278	244374	79.02	ppb	99
100) 7,12-Dimethylbenz(a)anthra	19.68	256	154510	89.08	ppb	96
101) Benzo[g,h,i]perylene	21.99	276	244655	79.13	ppb	98

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8

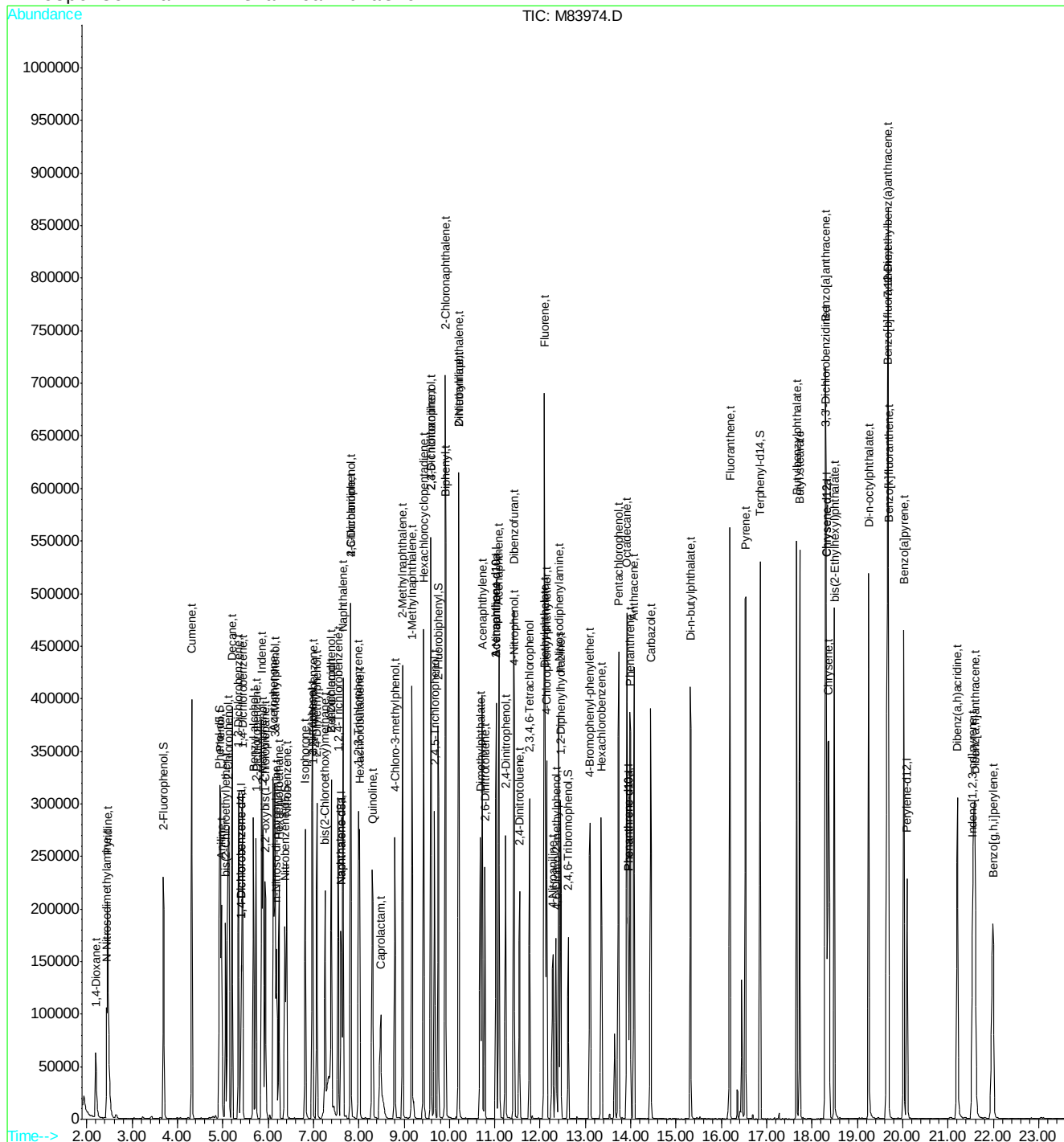
(#) = qualifier out of range (m) = manual integration

M83974.D MM3346.M Thu Dec 22 16:15:58 2011 GCMSM

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Data File	: C:\HPCHEM\1\DATA\EM3346\M83974.D	Vial	: 9
Acq On	: 21 Dec 2011 6:18 pm	Operator	: olgaa
Sample	: ic3346-80	Inst	: MSM
Misc	: op53696,em3346,	Multiplr	: 1.00
MS Integration Params: LSCINT.P			
Quant Time	: Dec 22 8:50 2011	Quant Results File	: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



8.6.8

Manual Integration Approval Summary

Sample Number: EM3346-IC3346

Method: SW846 8270D

Lab FileID: M83974.D

Analyst approved: 12/22/11 16:30 Olga Azarihn

Injection Time: 12/21/11 18:18

Supervisor approved: 12/28/11 11:57 Cheng-Hwan Ao

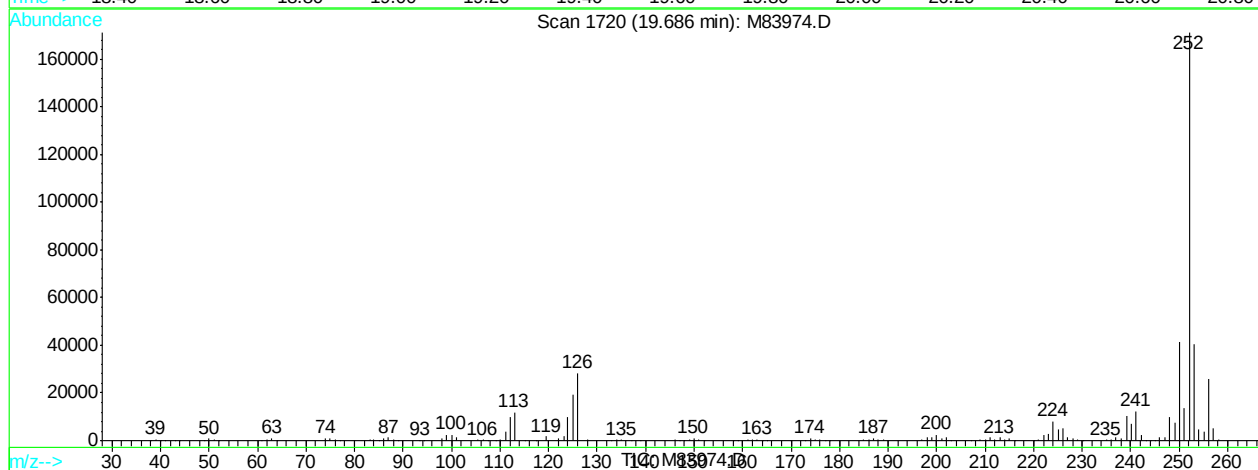
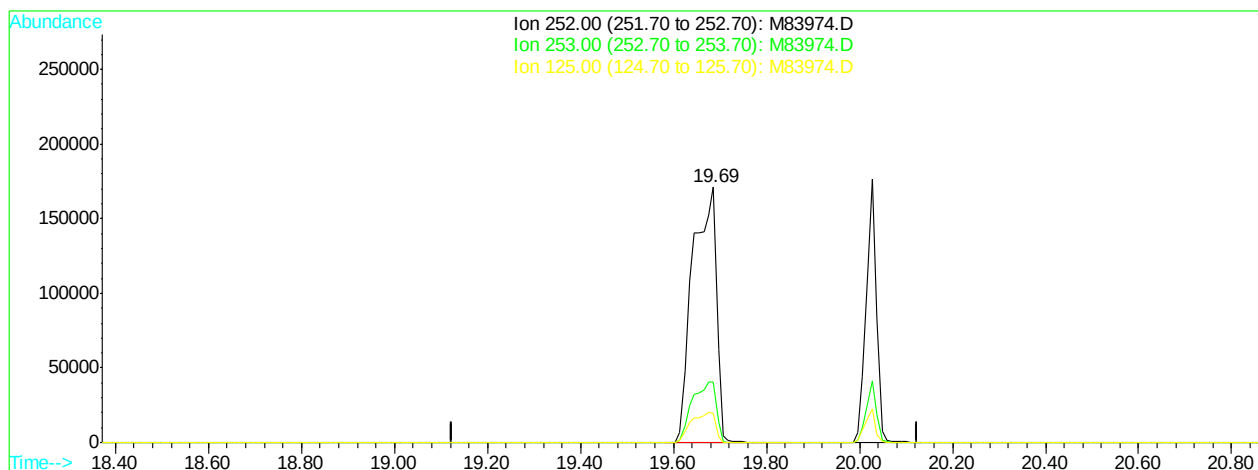
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.67	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.69	Overlapping peak

8.6.8.1
8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83974.D Vial: 9
Acq On : 21 Dec 2011 6:18 pm Operator: olgaa
Sample : ic3346-80 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:49 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 08:49:28 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.69min 145.85ppb

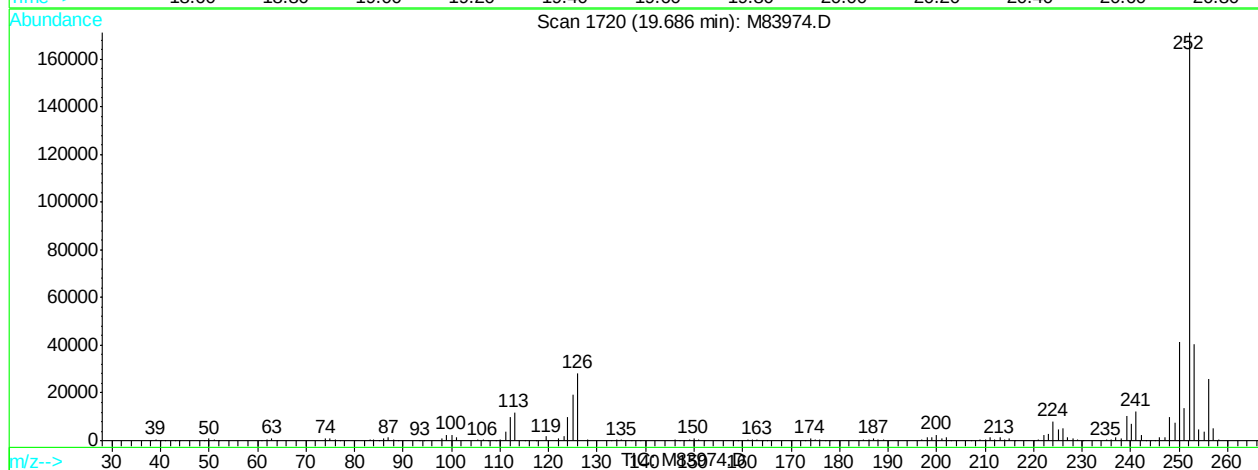
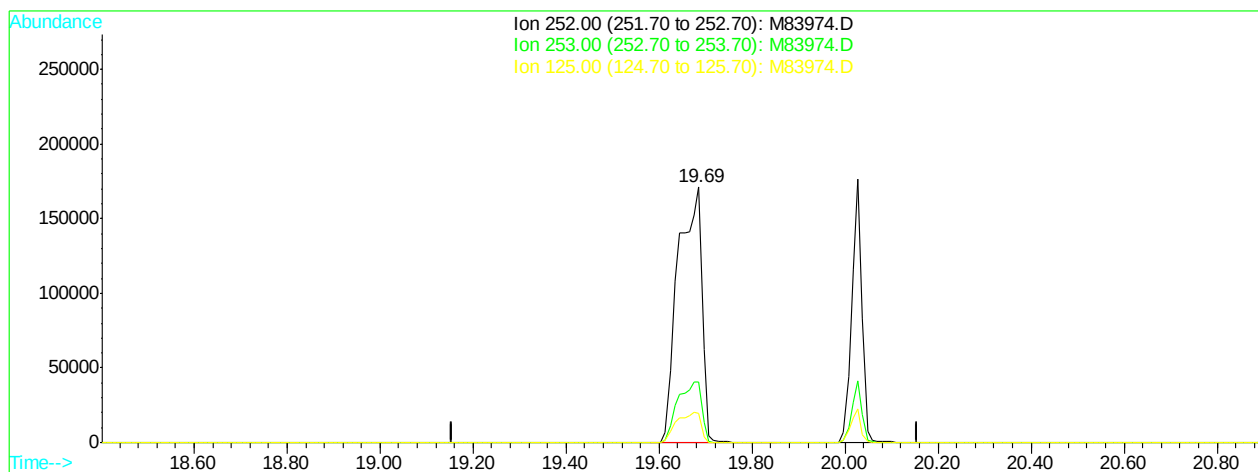
response 609507

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	23.75
125.00	9.90	11.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83974.D Vial: 9
Acq On : 21 Dec 2011 6:18 pm Operator: olgaa
Sample : ic3346-80 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:49 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 08:49:28 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.69min 161.56ppb

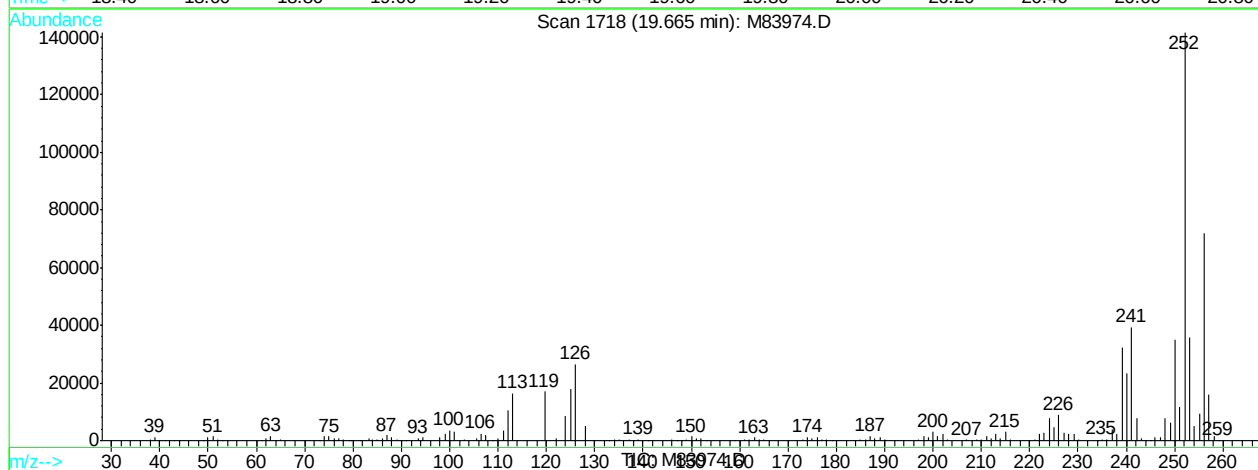
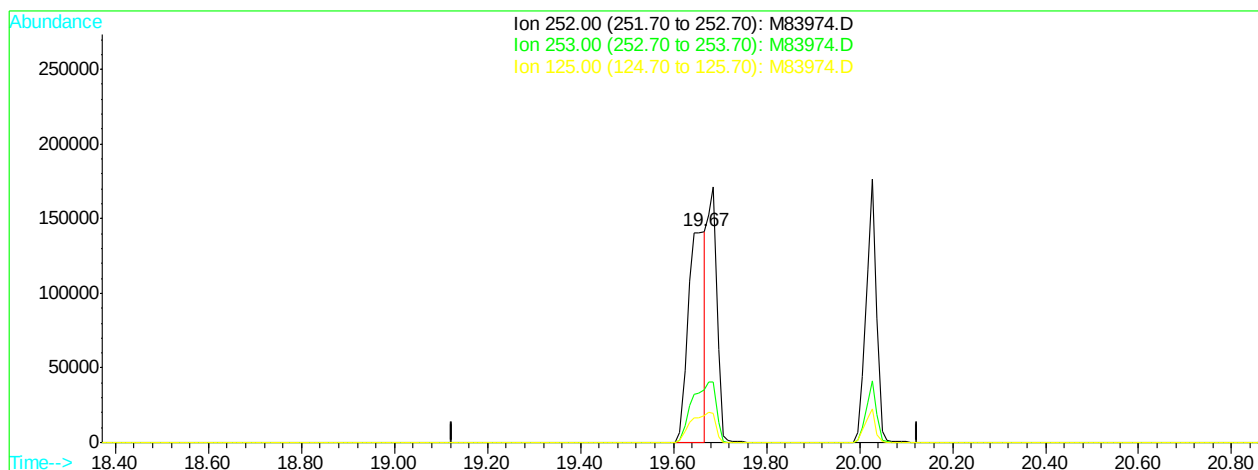
response 609507

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	23.75
125.00	10.60	11.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83974.D Vial: 9
Acq On : 21 Dec 2011 6:18 pm Operator: olgaa
Sample : ic3346-80 Inst : MSM
Misc : op53696,em3346, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 8:50 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.67min 87.03ppb m

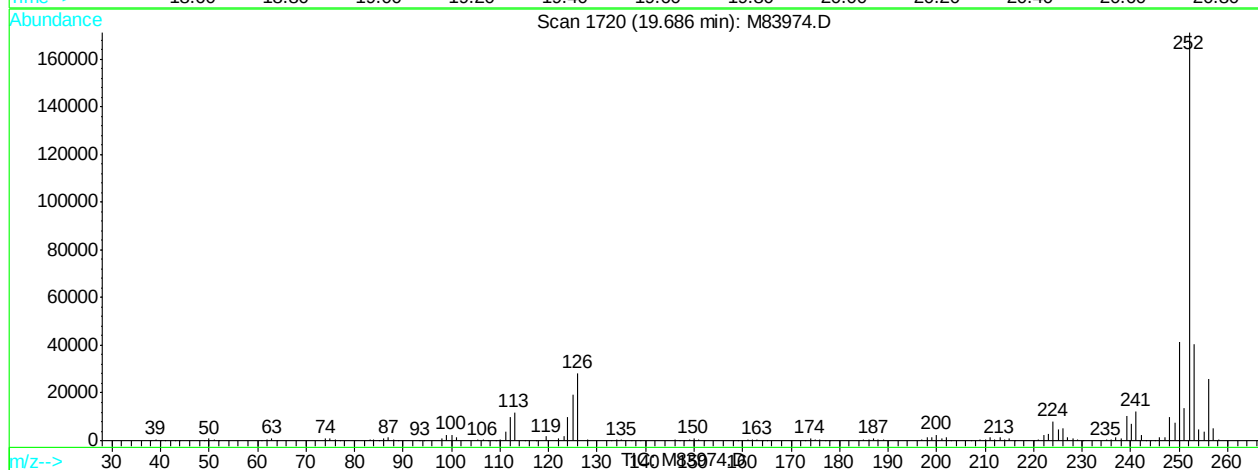
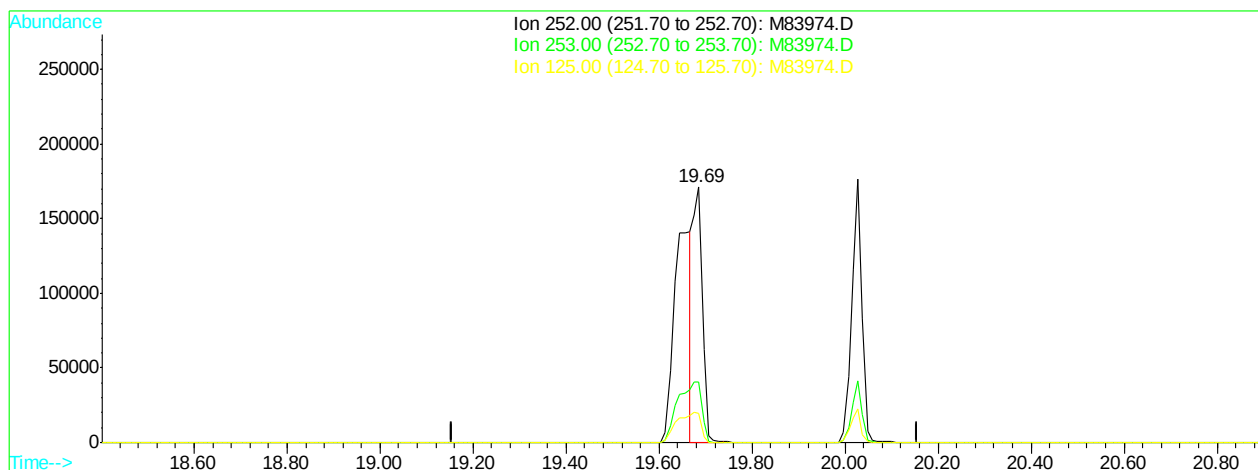
response 363689

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	25.16
125.00	9.90	12.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83974.D Vial: 9
 Acq On : 21 Dec 2011 6:18 pm Operator: olgaa
 Sample : ic3346-80 Inst : MSM
 Misc : op53696,em3346, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 8:50 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.69min 64.78ppb m

response 244373

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	23.74
125.00	10.60	11.26
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83976.D

Vial: 10

Acq On : 21 Dec 2011 7:17 pm

Operator: olgaa

Sample : ic3347-100

Inst : MSM

Misc : op53696,em3347,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:35 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:33:41 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	26455	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	104535	40.00	ppb	0.00
47) Acenaphthene-d10	11.03	164	60356	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	101638	40.00	ppb	0.00
83) Chrysene-d12	18.32	240	106716	40.00	ppb	0.00
92) Perylene-d12	20.10	264	91742	40.00	ppb	0.03
102) 1,4-Dichlorobenzene-d4a	5.40	152	26455	40.00	ppb	0.00
104) Acenaphthene-d10a	11.03	164	60356	40.00	ppb	0.01
108) Phenanthrene-d10a	13.94	188	101638	40.00	ppb	0.00
113) Chrysene-d12a	18.32	240	106716	40.00	ppb	0.00
116) Naphthalene-d8a	7.61	136	104535	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	10.97	127	70811	97.16	ppb	0.00
112) o-terphenyl	14.88	230	146467	95.70	ppb	0.00
115) 1-chlorooctadecane	16.14	57	90164	95.88	ppb	0.00
Spiked Amount 50.000	Range 1 - 150		Recovery	=	191.76%#	

Target Compounds

						Qvalue
103) Benzaldehyde	4.77	105	63439	94.60	ppb	99
105) 1,2,4,5-Tetrachlorobenzene	9.38	216	79758	99.94	ppb	99
107) 1-chloronaphthalene	9.97	162	140876	97.70	ppb	98
109) Atrazine	13.60	215	29516	97.59	ppb	96
110) Methyl parathion	14.88	109	51468	98.09	ppb	85
111) Parathion	15.62	109	33255	101.43	ppb	99
114) Benzidine	16.47	184	144009	82.32	ppb	99
117) hydroquinone	8.51	110	82489	95.31	ppb	99

(#) = qualifier out of range (m) = manual integration

M83976.D MM3346.M

Thu Dec 22 16:16:38 2011

GCMSM

Page 1

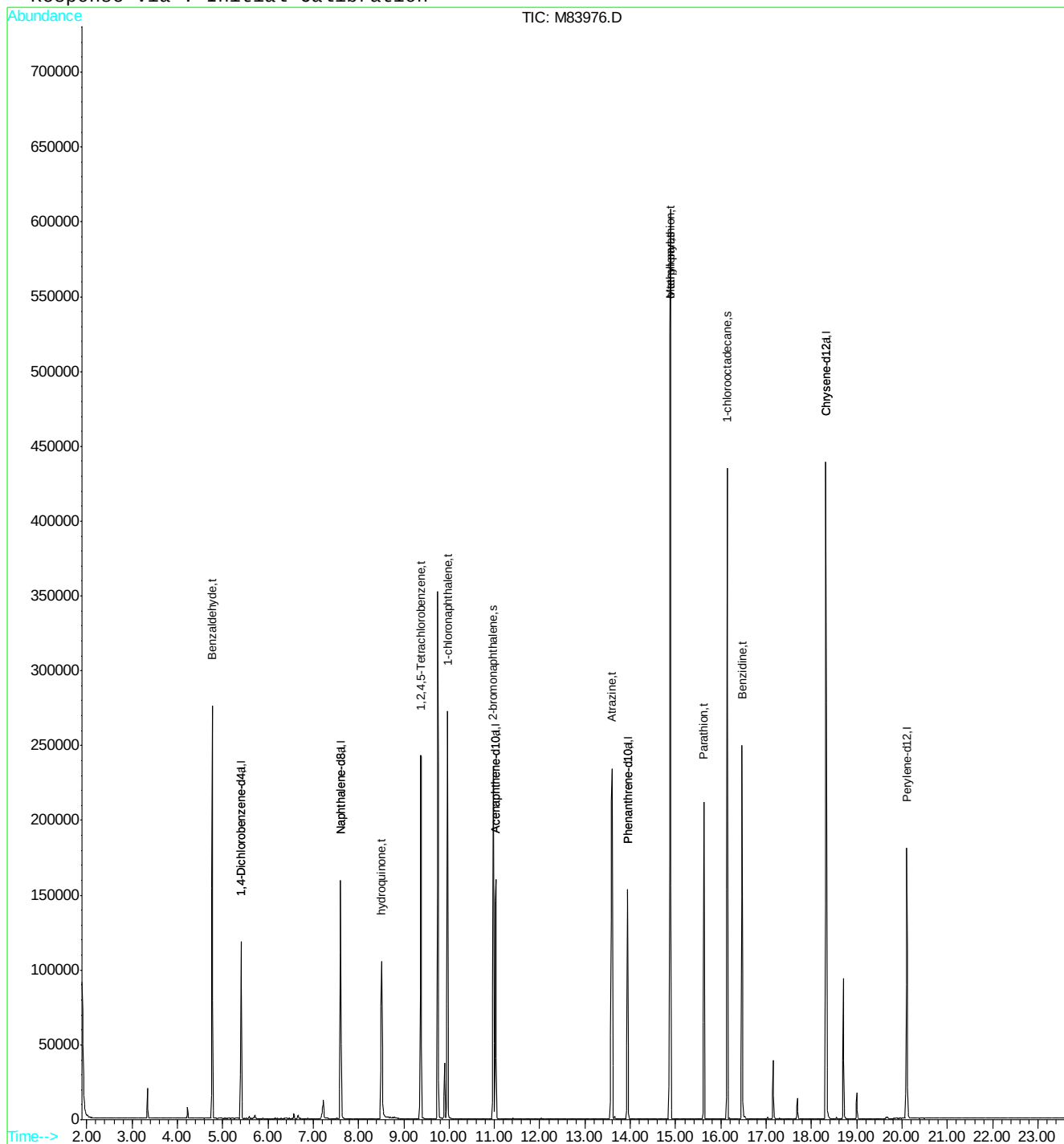
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83976.D
Acq On : 21 Dec 2011 7:17 pm
Sample : ic3347-100
Misc : op53696,em3347,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:35 2011

Vial: 10
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83977.D

Vial: 11

Acq On : 21 Dec 2011 7:46 pm

Operator: olgaa

Sample : ic3347-80

Inst : MSM

Misc : op53696,em3347,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:35 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:33:41 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	26515	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	102941	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	60860	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	102963	40.00	ppb	0.00
83) Chrysene-d12	18.32	240	105099	40.00	ppb	0.01
92) Perylene-d12	20.10	264	92300	40.00	ppb	0.03
102) 1,4-Dichlorobenzene-d4a	5.40	152	26515	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	60860	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	102963	40.00	ppb	0.00
113) Chrysene-d12a	18.32	240	105099	40.00	ppb	0.00
116) Naphthalene-d8a	7.60	136	102941	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	10.97	127	59566	81.05	ppb	0.00
112) o-terphenyl	14.87	230	122112	78.76	ppb	0.00
115) 1-chlorooctadecane	16.14	57	75211	81.21	ppb	0.00
Spiked Amount 50.000	Range	1 - 150	Recovery	=	162.42%#	

Target Compounds

						Qvalue
103) Benzaldehyde	4.76	105	52061	77.46	ppb	99
105) 1,2,4,5-Tetrachlorobenzene	9.37	216	66420	82.54	ppb	99
107) 1-chloronaphthalene	9.96	162	118070	81.21	ppb	99
109) Atrazine	13.59	215	24739	80.74	ppb	94
110) Methyl parathion	14.87	109	42441	79.84	ppb	97
111) Parathion	15.62	109	26315	79.23	ppb	98
114) Benzidine	16.47	184	123927	71.93	ppb	99
117) hydroquinone	8.51	110	66610	78.16	ppb	99

(#) = qualifier out of range (m) = manual integration

M83977.D MM3346.M

Thu Dec 22 16:16:52 2011

GCMSM

Page 1

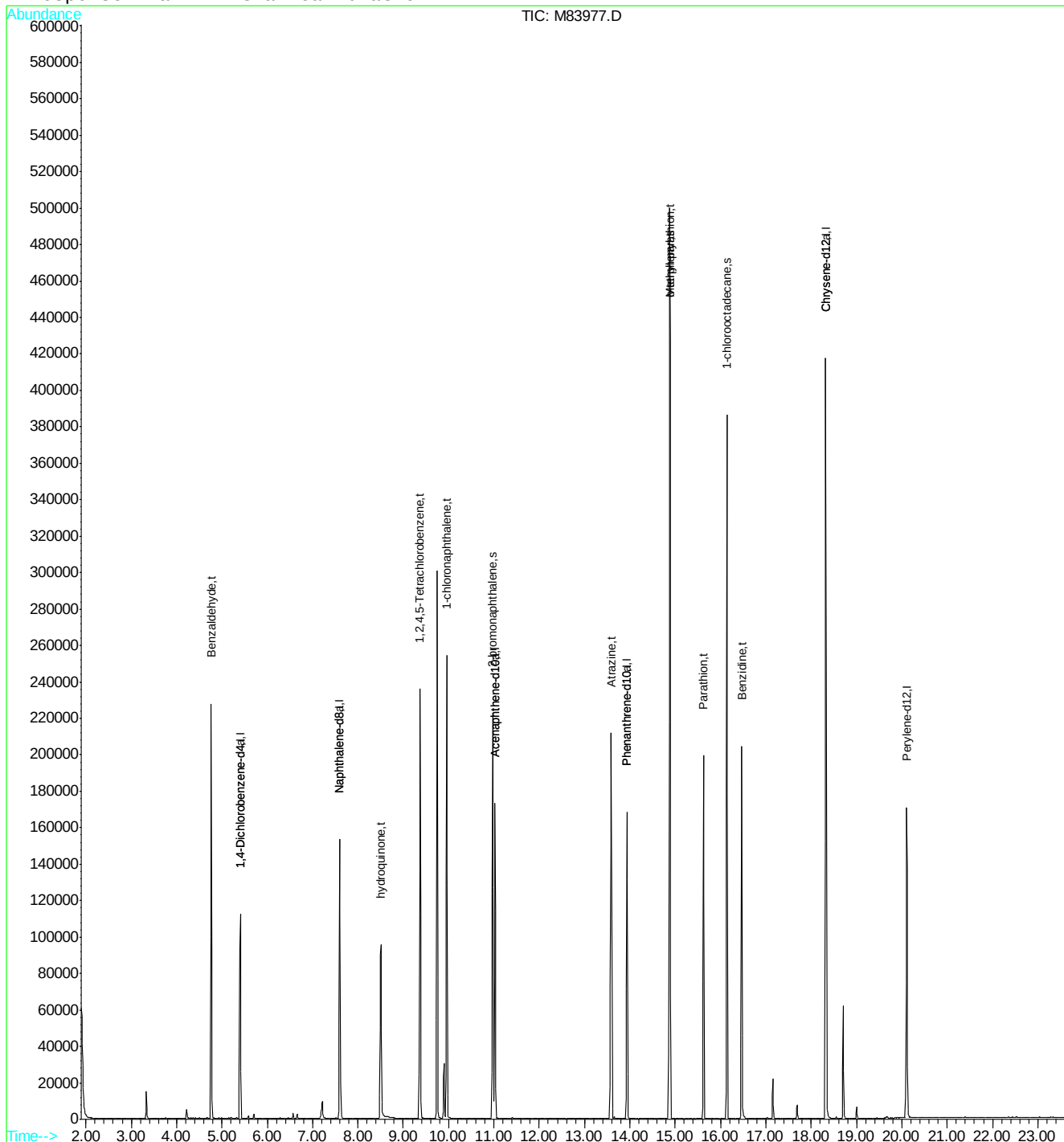
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83977.D
Acq On : 21 Dec 2011 7:46 pm
Sample : ic3347-80
Misc : op53696,em3347,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:35 2011

Vial: 11
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83978.D

Vial: 12

Acq On : 21 Dec 2011 8:16 pm

Operator: olgaa

Sample : icc3347-50

Inst : MSM

Misc : op53696,em3347,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:36 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:33:41 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	27682	40.00	ppb	0.00
24) Naphthalene-d8	7.61	136	108606	40.00	ppb	0.00
47) Acenaphthene-d10	11.02	164	66350	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	110750	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	117563	40.00	ppb	0.02
92) Perylene-d12	20.11	264	101505	40.00	ppb	0.04
102) 1,4-Dichlorobenzene-d4a	5.40	152	27682	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	66350	40.00	ppb	0.00
108) Phenanthrene-d10a	13.94	188	110750	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	117563	40.00	ppb	0.00
116) Naphthalene-d8a	7.61	136	108606	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	10.97	127	40060	50.00	ppb	0.00
112) o-terphenyl	14.88	230	83382	50.00	ppb	0.00
115) 1-chlorooctadecane	16.13	57	51798	50.00	ppb	0.00
Spiked Amount 50.000	Range 1 - 150		Recovery	=	100.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	4.76	105	35086	50.00	ppb	100
105) 1,2,4,5-Tetrachlorobenzene	9.37	216	43867	50.00	ppb	100
107) 1-chloronaphthalene	9.96	162	79256	50.00	ppb	100
109) Atrazine	13.59	215	16478	50.00	ppb	100
110) Methyl parathion	14.87	109	28588	50.00	ppb	100
111) Parathion	15.62	109	17862	50.00	ppb	100
114) Benzidine	16.47	184	96356	50.00	ppb	100
117) hydroquinone	8.50	110	44959	50.00	ppb	100

(#) = qualifier out of range (m) = manual integration

M83978.D MM3346.M

Thu Dec 22 16:17:16 2011

GCMSM

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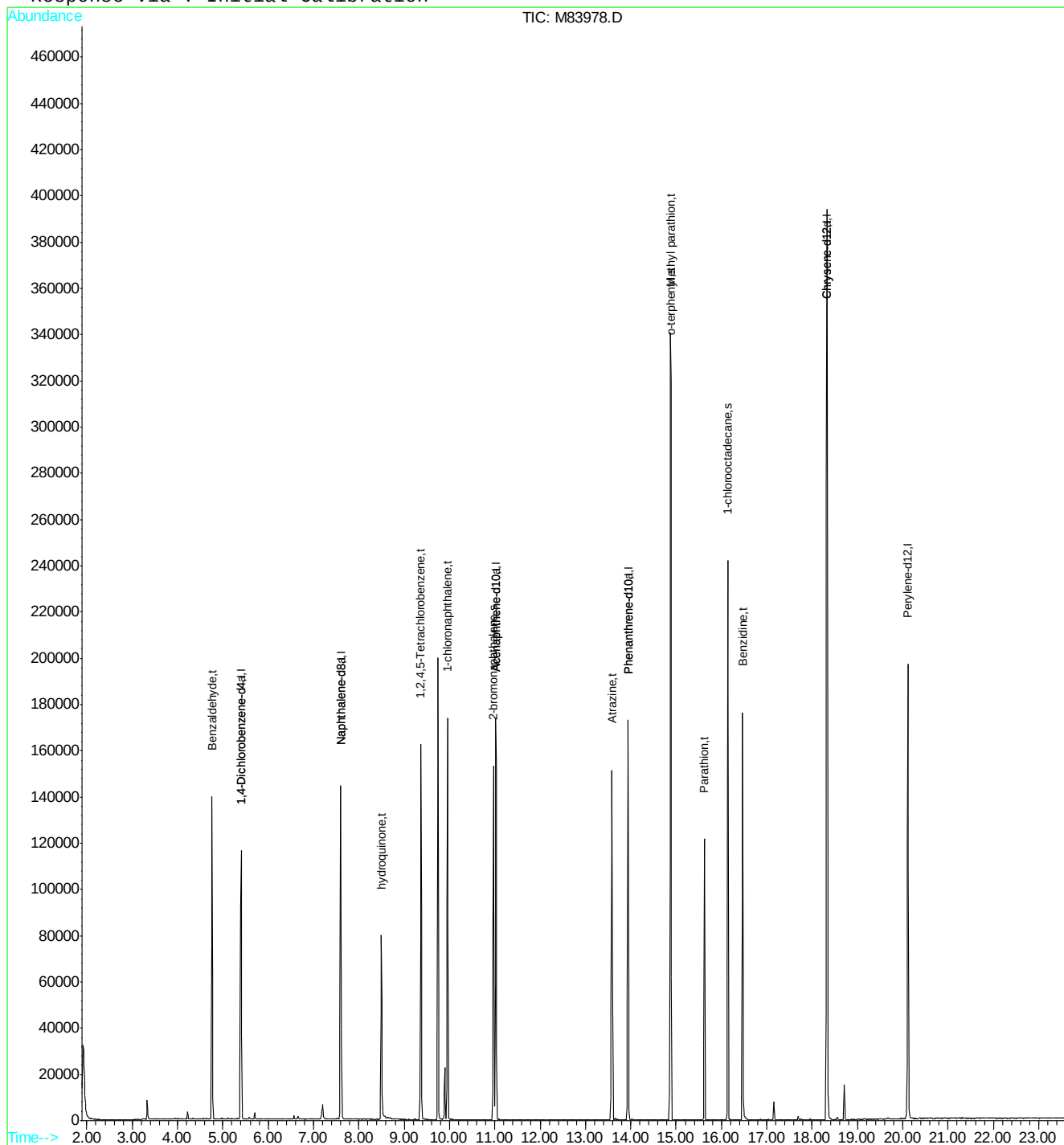
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83978.D
Acq On : 21 Dec 2011 8:16 pm
Sample : icc3347-50
Misc : op53696,em3347,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:36 2011

Vial: 12
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83979.D

Vial: 13

Acq On : 21 Dec 2011 8:46 pm

Operator: olgaa

Sample : ic3347-25

Inst : MSM

Misc : op53696,em3347,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:36 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:33:41 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	33786	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	128100	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	76673	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	124933	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	126651	40.00	ppb	0.02
92) Perylene-d12	20.11	264	107499	40.00	ppb	0.04
102) 1,4-Dichlorobenzene-d4a	5.40	152	33786	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	76673	40.00	ppb	0.00
108) Phenanthrene-d10a	13.94	188	124933	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	126651	40.00	ppb	0.00
116) Naphthalene-d8a	7.60	136	128100	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	10.97	127	23455	25.33	ppb	0.00
112) o-terphenyl	14.87	230	48148	25.59	ppb	0.00
115) 1-chlorooctadecane	16.14	57	28845	25.85	ppb	0.00
Spiked Amount 50.000	Range 1 - 150		Recovery	=	51.70%	

Target Compounds

						Qvalue
103) Benzaldehyde	4.76	105	21141	24.68	ppb	99
105) 1,2,4,5-Tetrachlorobenzene	9.37	216	26109	25.75	ppb	97
107) 1-chloronaphthalene	9.96	162	48106	26.26	ppb	100
109) Atrazine	13.58	215	8875	23.87	ppb	92
110) Methyl parathion	14.87	109	15234	23.62	ppb	92
111) Parathion	15.62	109	9660	23.97	ppb	96
114) Benzidine	16.47	184	50883	24.51	ppb	99
117) hydroquinone	8.49	110	23561	22.22	ppb	94

(#) = qualifier out of range (m) = manual integration

M83979.D MM3346.M

Thu Dec 22 16:17:38 2011

GCMSM

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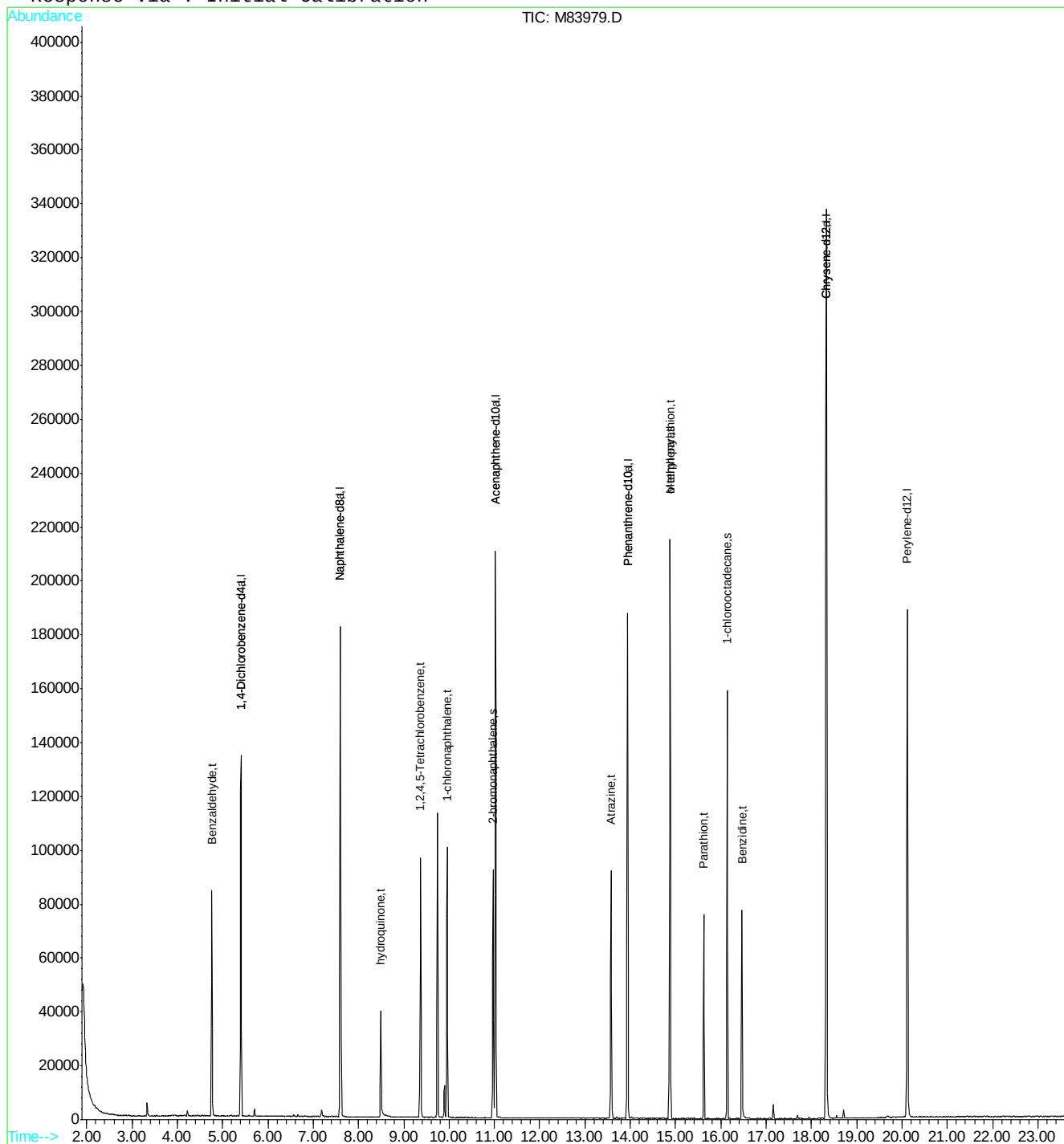
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83979.D
Acq On : 21 Dec 2011 8:46 pm
Sample : ic3347-25
Misc : op53696,em3347,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:36 2011

Vial: 13
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83980.D

Vial: 14

Acq On : 21 Dec 2011 9:15 pm

Operator: olgaa

Sample : ic3347-10

Inst : MSM

Misc : op53696,em3347,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:38 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:33:41 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	31847	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	123180	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	76820	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	126788	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	132065	40.00	ppb	0.02
92) Perylene-d12	20.12	264	113131	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.40	152	31847	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	76820	40.00	ppb	0.00
108) Phenanthrene-d10a	13.94	188	126788	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	132065	40.00	ppb	0.00
116) Naphthalene-d8a	7.60	136	123180	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	10.97	127	9354	10.08	ppb	0.00
112) o-terphenyl	14.87	230	19703	10.32	ppb	-0.01
115) 1-chlorooctadecane	16.13	57	11889	10.22	ppb	0.00
Spiked Amount 50.000	Range 1 - 150		Recovery	=	20.44%	

Target Compounds

						Qvalue
103) Benzaldehyde	4.76	105	7944	9.84	ppb	98
105) 1,2,4,5-Tetrachlorobenzene	9.37	216	10189	10.03	ppb	94
107) 1-chloronaphthalene	9.96	162	19247	10.49	ppb	98
109) Atrazine	13.58	215	3569	9.46	ppb	90
110) Methyl parathion	14.87	109	5242	8.01	ppb	89
111) Parathion	15.62	109	3448	8.43	ppb	97
114) Benzidine	16.47	184	18732	8.65	ppb	99
117) hydroquinone	8.49	110	7864	7.71	ppb	97

(#) = qualifier out of range (m) = manual integration

M83980.D MM3346.M

Thu Dec 22 16:17:53 2011

GCMSM

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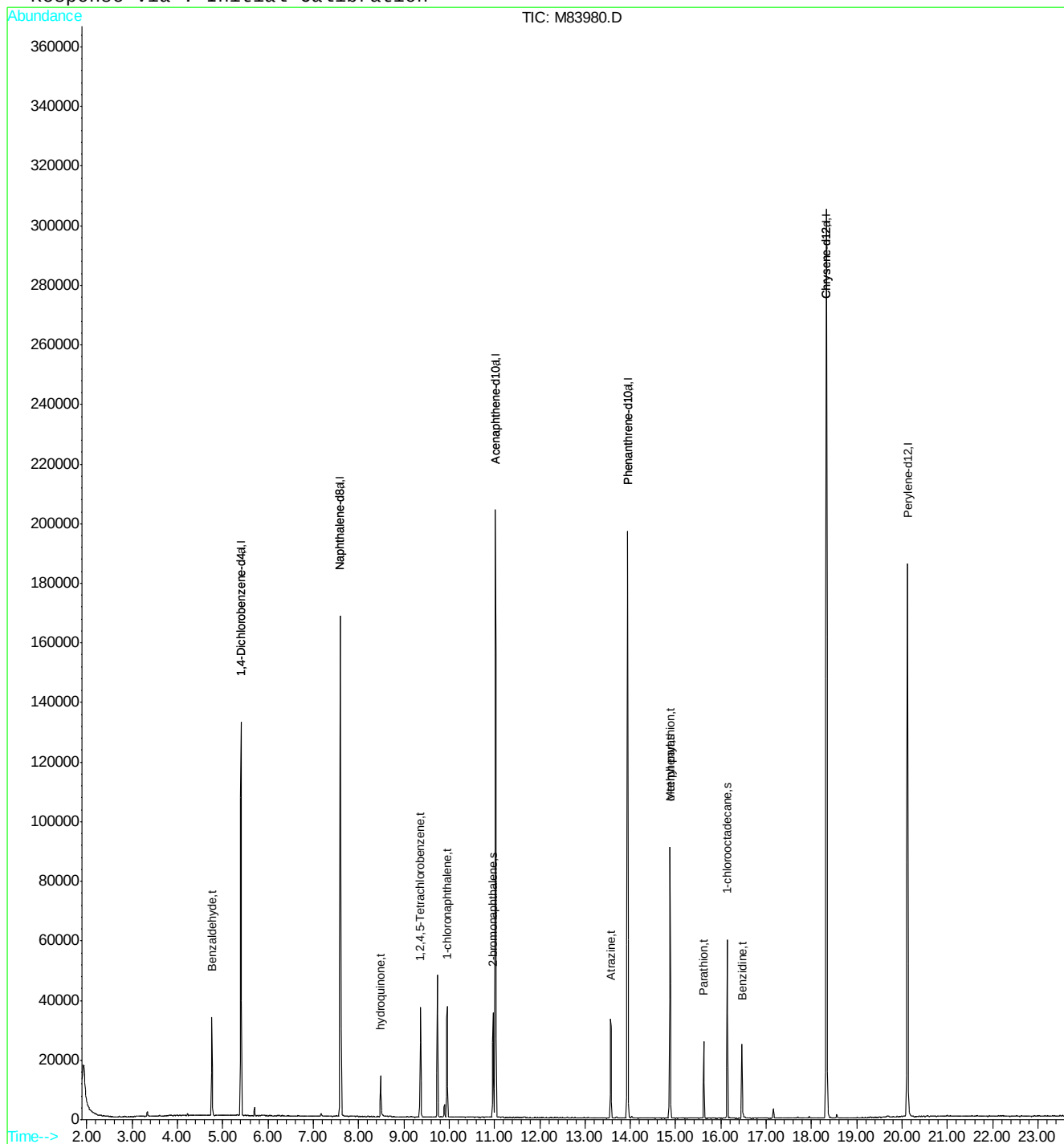
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83980.D
Acq On : 21 Dec 2011 9:15 pm
Sample : ic3347-10
Misc : op53696,em3347,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:38 2011

Vial: 14
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83981.D

Vial: 15

Acq On : 21 Dec 2011 9:45 pm

Operator: olgaa

Sample : ic3347-5

Inst : MSM

Misc : op53696,em3347,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:39 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:33:41 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	33320	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	129988	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	82230	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	135398	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	142055	40.00	ppb	0.02
92) Perylene-d12	20.12	264	119817	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.40	152	33320	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	82230	40.00	ppb	0.00
108) Phenanthrene-d10a	13.94	188	135398	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	142055	40.00	ppb	0.00
116) Naphthalene-d8a	7.60	136	129988	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	10.97	127	5201	5.24	ppb	0.00
112) o-terphenyl	14.87	230	10867	5.33	ppb	0.00
115) 1-chlorooctadecane	16.14	57	6486	5.18	ppb	0.00
Spiked Amount 50.000	Range 1 - 150		Recovery	=	10.36%	

Target Compounds

						Qvalue
103) Benzaldehyde	4.76	105	4173	4.94	ppb	93
105) 1,2,4,5-Tetrachlorobenzene	9.37	216	5898	5.42	ppb	94
107) 1-chloronaphthalene	9.96	162	10631	5.41	ppb	98
109) Atrazine	13.58	215	1893	4.70	ppb	90
110) Methyl parathion	14.87	109	2450	3.50	ppb	85
111) Parathion	15.62	109	1723	3.95	ppb	89
114) Benzidine	16.47	184	8972	3.85	ppb	98
117) hydroquinone	8.49	110	3425	3.18	ppb	97

(#) = qualifier out of range (m) = manual integration

M83981.D MM3346.M

Thu Dec 22 16:18:09 2011

GCMSM

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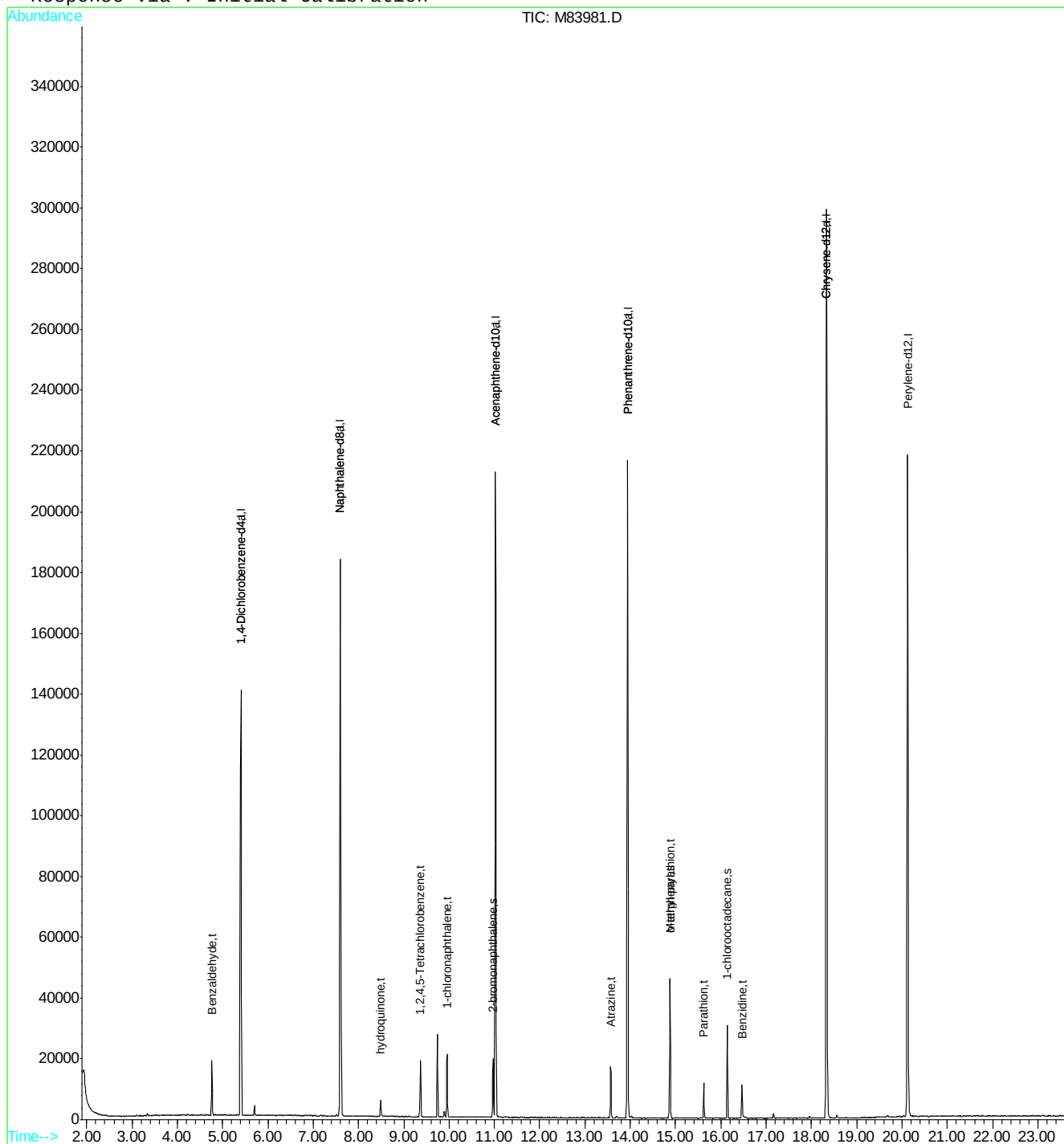
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83981.D
Acq On : 21 Dec 2011 9:45 pm
Sample : ic3347-5
Misc : op53696,em3347,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:39 2011

Vial: 15
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83982.D

Vial: 16

Acq On : 21 Dec 2011 10:29 pm

Operator: olgaa

Sample : ic3347-2

Inst : MSM

Misc : op53696,em3347,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:53 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:51:47 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	31986	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	123624	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	78691	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	129035	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	137210	40.00	ppb	0.02
92) Perylene-d12	20.12	264	114021	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.40	152	31986	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	78691	40.00	ppb	0.00
108) Phenanthrene-d10a	13.94	188	129035	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	137210	40.00	ppb	0.00
116) Naphthalene-d8a	7.60	136	123624	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
106) 2-bromonaphthalene	10.97	127	1763	1.88	ppb	0.00
112) o-terphenyl	14.87	230	3558	1.84	ppb	0.00
Spiked Amount	50.000		Recovery	=	3.68%	
115) 1-chlorooctadecane	16.14	57	1924	1.67	ppb	0.00
Spiked Amount	50.000		Recovery	=	3.34%	

Target Compounds

						Qvalue
103) Benzaldehyde	4.76	105	1502	1.95	ppb	98
105) 1,2,4,5-Tetrachlorobenzene	9.37	216	1903	1.82	ppb	96
107) 1-chloronaphthalene	9.96	162	3607	1.88	ppb	97
109) Atrazine	13.57	215	566	1.61	ppb	86
110) Methyl parathion	14.87	109	576	2.20	ppb	90
111) Parathion	15.62	109	412	1.06	ppb	92
114) Benzidine	16.47	184	2249	1.12	ppb	97
117) hydroquinone	8.50	110	544	0.61	ppb	96

(#) = qualifier out of range (m) = manual integration

M83982.D MM3346.M

Thu Dec 22 16:18:21 2011

GCMSM

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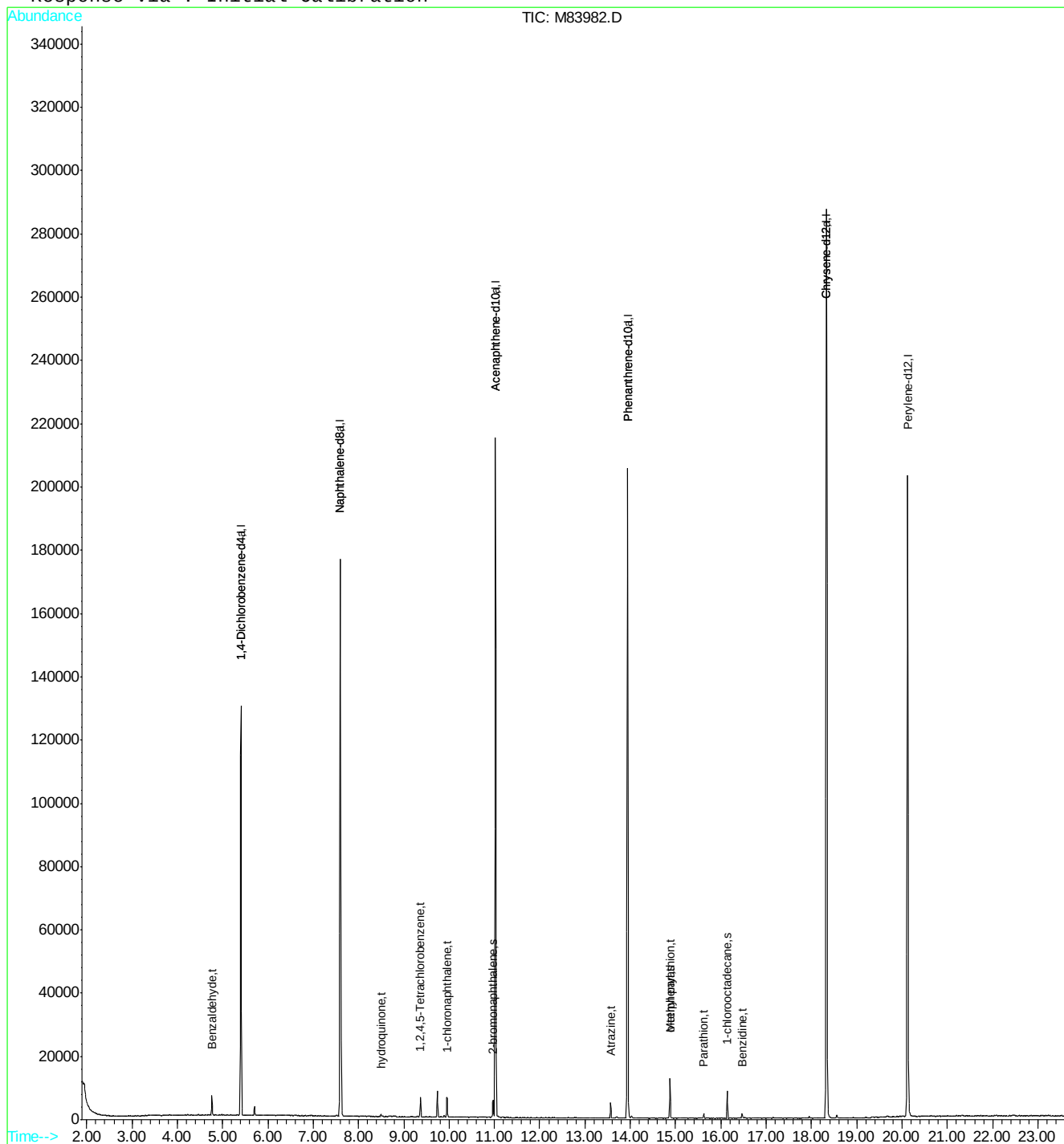
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83982.D
Acq On : 21 Dec 2011 10:29 pm
Sample : ic3347-2
Misc : op53696,em3347,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:53 2011

Vial: 16
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83983.D Vial: 17
 Acq On : 21 Dec 2011 10:59 pm Operator: olgaa
 Sample : ic3347-1 Inst : MSM
 Misc : op53696,em3347, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 9:41 2011 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:33:41 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.40	152	31200	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	120669	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	74912	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	118790	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	126002	40.00	ppb	0.02
92) Perylene-d12	20.12	264	106406	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.40	152	31200	40.00	ppb	0.00
104) Acenaphthene-d10a	11.02	164	74912	40.00	ppb	0.00
108) Phenanthrene-d10a	13.94	188	118790	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	126002	40.00	ppb	0.00
116) Naphthalene-d8a	7.60	136	120669	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	10.97	127	824	0.91	ppb	0.00
112) o-terphenyl	14.87	230	1739	0.97	ppb	-0.01
115) 1-chlorooctadecane	16.14	57	827	0.74	ppb	0.00
Spiked Amount 50.000	Range 1 - 150		Recovery	=	1.48%	

Target Compounds

						Qvalue
103) Benzaldehyde	4.76	105	648	0.82	ppb	89
105) 1,2,4,5-Tetrachlorobenzene	9.37	216	970	0.98	ppb	95
107) 1-chloronaphthalene	9.96	162	1872	1.05	ppb	96
109) Atrazine	13.57	215	273	0.77	ppb	# 75
110) Methyl parathion	14.87	109	195	0.32	ppb	# 76
114) Benzidine	16.47	184	836	0.40	ppb	75

(#) = qualifier out of range (m) = manual integration

M83983.D MM3346.M Thu Dec 22 16:18:49 2011 GCMSM

Page 1

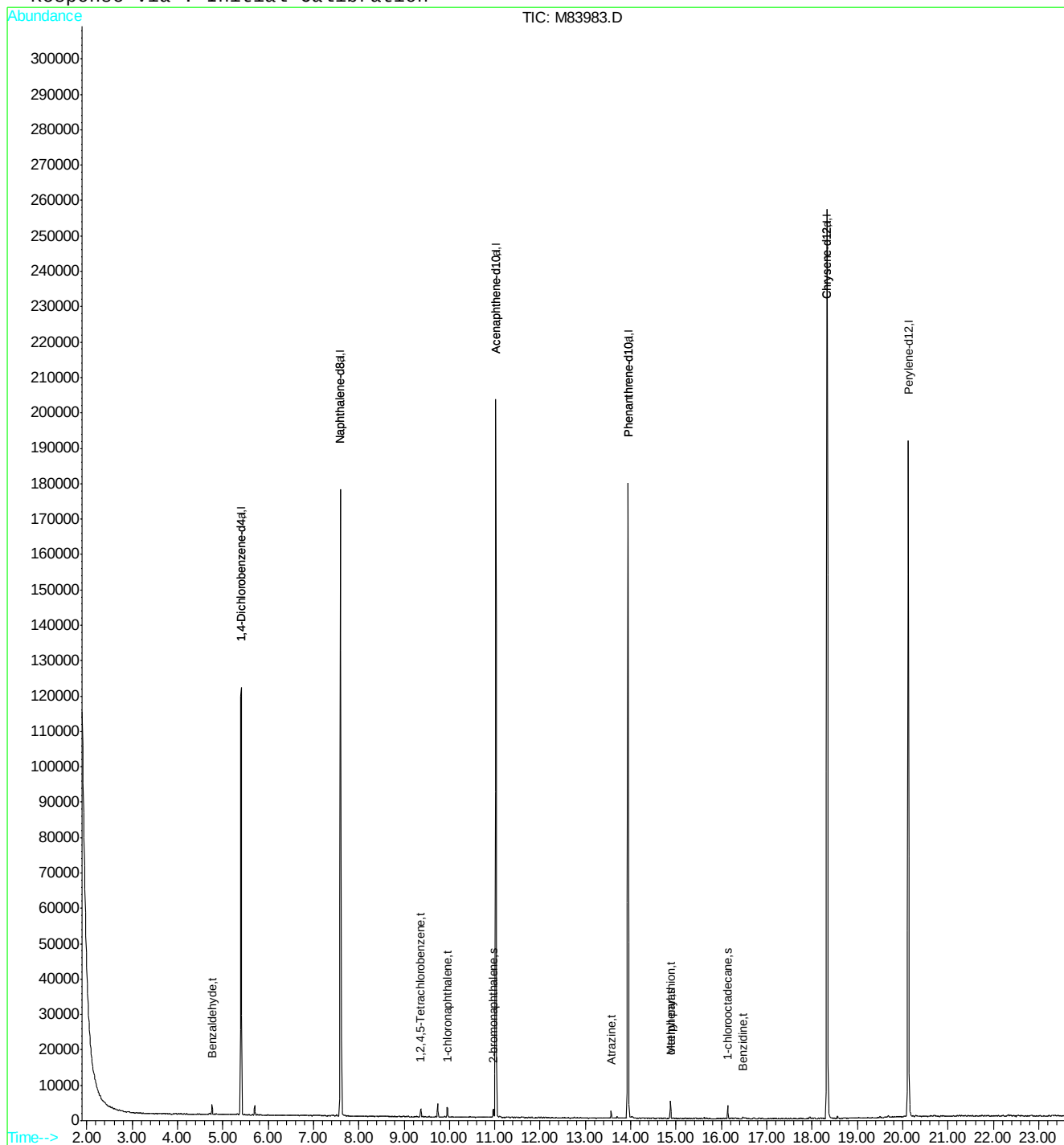
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83983.D
Acq On : 21 Dec 2011 10:59 pm
Sample : ic3347-1
Misc : op53696,em3347,
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:41 2011

Vial: 17
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83984.D

Vial: 18

Acq On : 21 Dec 2011 11:28 pm

Operator: olgaa

Sample : icv3346-50

Inst : MSM

Misc : op53696,em3347,acids

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:12 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:10:09 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.39	152	34100	40.00	ppb	-0.01
24) Naphthalene-d8	7.60	136	117727	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	73094	40.00	ppb	0.00
69) Phenanthrene-d10	13.94	188	115513	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	115689	40.00	ppb	0.02
92) Perylene-d12	20.12	264	94900	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.39	152	34100	40.00	ppb	-0.01
104) Acenaphthene-d10a	11.02	164	73094	40.00	ppb	0.00
108) Phenanthrene-d10a	13.94	188	115513	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	115689	40.00	ppb	0.02
116) Naphthalene-d8a	7.60	136	117727	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount	50.000	Range 1 - 150	Recovery	=	0.00%#	

Target Compounds

						Qvalue
9) Phenol	4.93	94	69794	42.08	ppb	99
12) 2-Chlorophenol	5.12	128	60666	49.17	ppb	93
19) 2-Methylphenol	5.88	108	50441	47.64	ppb	98
21) 3&4-Methylphenol	6.12	108	52784	46.51	ppb	98
29) 2-Nitrophenol	6.95	139	32661	54.54	ppb	78
30) 2,4-Dimethylphenol	7.07	107	54011	58.12	ppb	100
31) Benzoic acid	7.30	105	37652	55.47	ppb	98
33) 2,4-Dichlorophenol	7.38	162	48021	51.99	ppb	97
34) 2,6-Dichlorophenol	7.81	162	46921	51.73	ppb	97
43) 4-Chloro-3-methylphenol	8.77	107	43604	50.81	ppb	96
49) 2,4,6-Trichlorophenol	9.58	196	36546	53.65	ppb	98
50) 2,4,5-Trichlorophenol	9.64	196	39217	53.45	ppb	100
60) 2,4-Dinitrophenol	11.22	184	11533	39.00	ppb	89
61) 4-Nitrophenol	11.40	109	13646	51.19	ppb	# 4
64) 2,3,4,6-Tetrachlorophenol	11.76	232	29976	50.28	ppb	97
70) 4,6-Dinitro-2-methylphenol	12.33	198	21462	47.41	ppb	96
76) Pentachlorophenol	13.72	266	22760	53.34	ppb	98

(#) = qualifier out of range (m) = manual integration

M83984.D MM3346.M

Thu Dec 22 16:19:02 2011

GCMSM

Page 1

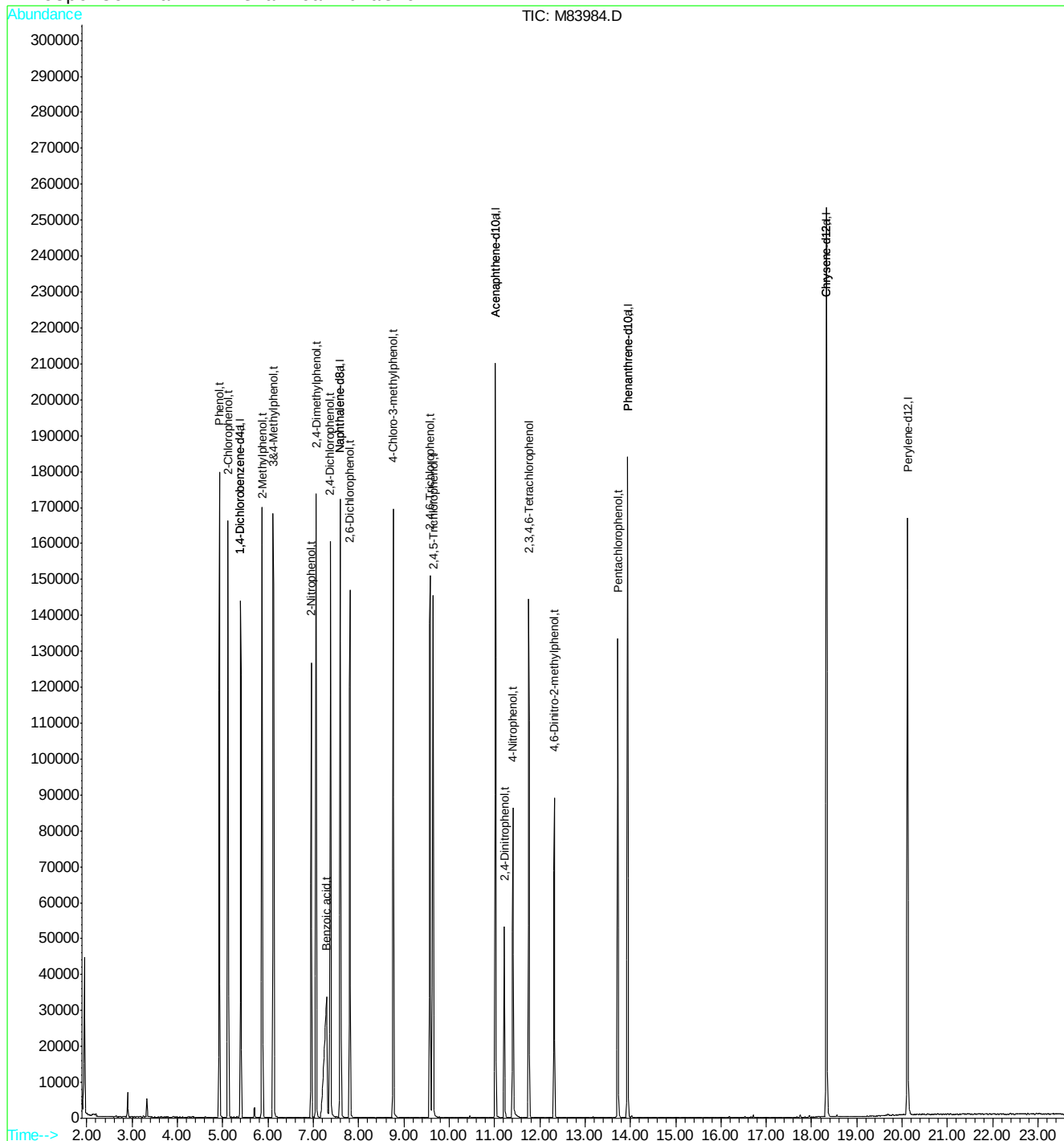
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83984.D
Acq On : 21 Dec 2011 11:28 pm
Sample : icv3346-50
Misc : op53696,em3347,acids
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:12 2011

Vial: 18
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Cheng-Hwan Ao
12/28/11 11:46

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83985.D

Vial: 19

Acq On : 21 Dec 2011 11:58 pm

Operator: olgaa

Sample : icv3346-50

Inst : MSM

Misc : op53696,em3347,bn1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:18 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:10:09 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.39	152	33177	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	117133	40.00	ppb	0.00
47) Acenaphthene-d10	11.03	164	68517	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	108761	40.00	ppb	0.00
83) Chrysene-d12	18.34	240	106382	40.00	ppb	0.03
92) Perylene-d12	20.12	264	84581	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.39	152	33177	40.00	ppb	0.00
104) Acenaphthene-d10a	11.03	164	68517	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	108761	40.00	ppb	0.00
113) Chrysene-d12a	18.34	240	106382	40.00	ppb	0.03
116) Naphthalene-d8a	7.60	136	117133	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery	=	0.00%#	

Target Compounds

						Qvalue
3) Pyridine	2.46	79	49534	39.01	ppb	93
4) N-Nitrosodimethylamine	2.43	42	31609	36.24	ppb	93
11) bis(2-Chloroethyl)ether	5.04	93	47595	45.73	ppb	96
14) 1,3-Dichlorobenzene	5.34	146	66892	48.24	ppb	99
15) 1,4-Dichlorobenzene	5.43	146	65453	47.17	ppb	98
16) Benzyl alcohol	5.65	108	34293	44.89	ppb	98
17) 1,2-Dichlorobenzene	5.73	146	59276	45.63	ppb	97
20) 2,2'-oxybis(1-Chloropropan	5.92	121	17078	46.88	ppb	# 90
22) n-Nitroso-di-n-propylamine	6.15	70	33276	43.78	ppb	97
23) Hexachloroethane	6.23	201	23840	49.93	ppb	99
26) Nitrobenzene	6.39	77	49043	46.60	ppb	99
28) Isophorone	6.80	82	87399	47.36	ppb	97
32) bis(2-Chloroethoxy)methane	7.25	93	54662	50.75	ppb	99
36) 1,2,4-Trichlorobenzene	7.54	180	53159	51.63	ppb	100
38) Naphthalene	7.64	128	145676	48.08	ppb	100
42) Hexachlorobutadiene	8.01	225	30594	53.43	ppb	98
44) 2-Methylnaphthalene	8.96	141	89217	47.08	ppb	98
48) Hexachlorocyclopentadiene	9.42	237	26282	52.57	ppb	99
52) 2-Chloronaphthalene	9.89	162	100854	51.38	ppb	98

(#) = qualifier out of range (m) = manual integration

M83985.D MM3346.M

Thu Dec 22 16:19:19 2011

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83985.D Vial: 19
 Acq On : 21 Dec 2011 11:58 pm Operator: olgaa
 Sample : icv3346-50 Inst : MSM
 Misc : op53696,em3347,bn1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 9:18 2011 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:10:09 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 2-Nitroaniline	10.19	65	27333	48.30	ppb	95
55) Dimethylphthalate	10.66	163	107531	49.94	ppb	99
56) Acenaphthylene	10.71	152	136729	45.67	ppb	100
57) 2,6-Dinitrotoluene	10.78	165	24474	51.12	ppb	95
58) 3-Nitroaniline	11.03	138	24231	44.62	ppb	95
59) Acenaphthene	11.09	153	91882	48.79	ppb	93
62) Dibenzofuran	11.41	168	132734	48.57	ppb	80
63) 2,4-Dinitrotoluene	11.53	165	29265	45.89	ppb	95
65) Diethylphthalate	12.09	149	97720	48.20	ppb	99
66) Fluorene	12.09	166	108448	48.66	ppb	99
67) 4-Chlorophenyl-phenylether	12.14	204	52717	49.70	ppb	96
68) 4-Nitroaniline	12.25	138	25204	46.25	ppb	97
71) n-Nitrosodiphenylamine	12.40	169	71173	46.05	ppb	97
72) 1,2-Diphenylhydrazine	12.44	77	96036	49.47	ppb	99
74) 4-Bromophenyl-phenylether	13.11	248	28345	49.90	ppb	94
75) Hexachlorobenzene	13.35	284	28332	47.19	ppb	90
77) Phenanthrene	13.99	178	149525	48.59	ppb	99
78) Anthracene	14.07	178	146255	47.73	ppb	100
79) Carbazole	14.44	167	136023	45.24	ppb	99
80) Di-n-butylphthalate	15.33	149	166060	47.68	ppb	100
81) Fluoranthene	16.19	202	166299	45.07	ppb	99
84) Pyrene	16.54	202	167682	46.26	ppb	99
87) Butylbenzylphthalate	17.68	149	72410	49.22	ppb	97
88) Benzo[a]anthracene	18.31	228	156958	49.82	ppb	99
90) Chrysene	18.37	228	150646	53.24	ppb	99
91) bis(2-Ethylhexyl)phthalate	18.53	149	90437	49.66	ppb	97
93) Di-n-octylphthalate	19.28	149	159069	54.21	ppb	96
94) Benzo[b]fluoranthene	19.67	252	137425m	45.14	ppb	
95) Benzo[k]fluoranthene	19.70	252	135389m	60.68	ppb	
96) Benzo[a]pyrene	20.05	252	127468	49.66	ppb	96
97) Indeno[1,2,3-cd]pyrene	21.62	276	146873	54.96	ppb	93
99) Dibenz[a,h]anthracene	21.66	278	118974	53.47	ppb	98
101) Benzo[g,h,i]perylene	22.06	276	119151	53.55	ppb	98

(#) = qualifier out of range (m) = manual integration

M83985.D MM3346.M Thu Dec 22 16:19:20 2011 GCMSM

Page 2

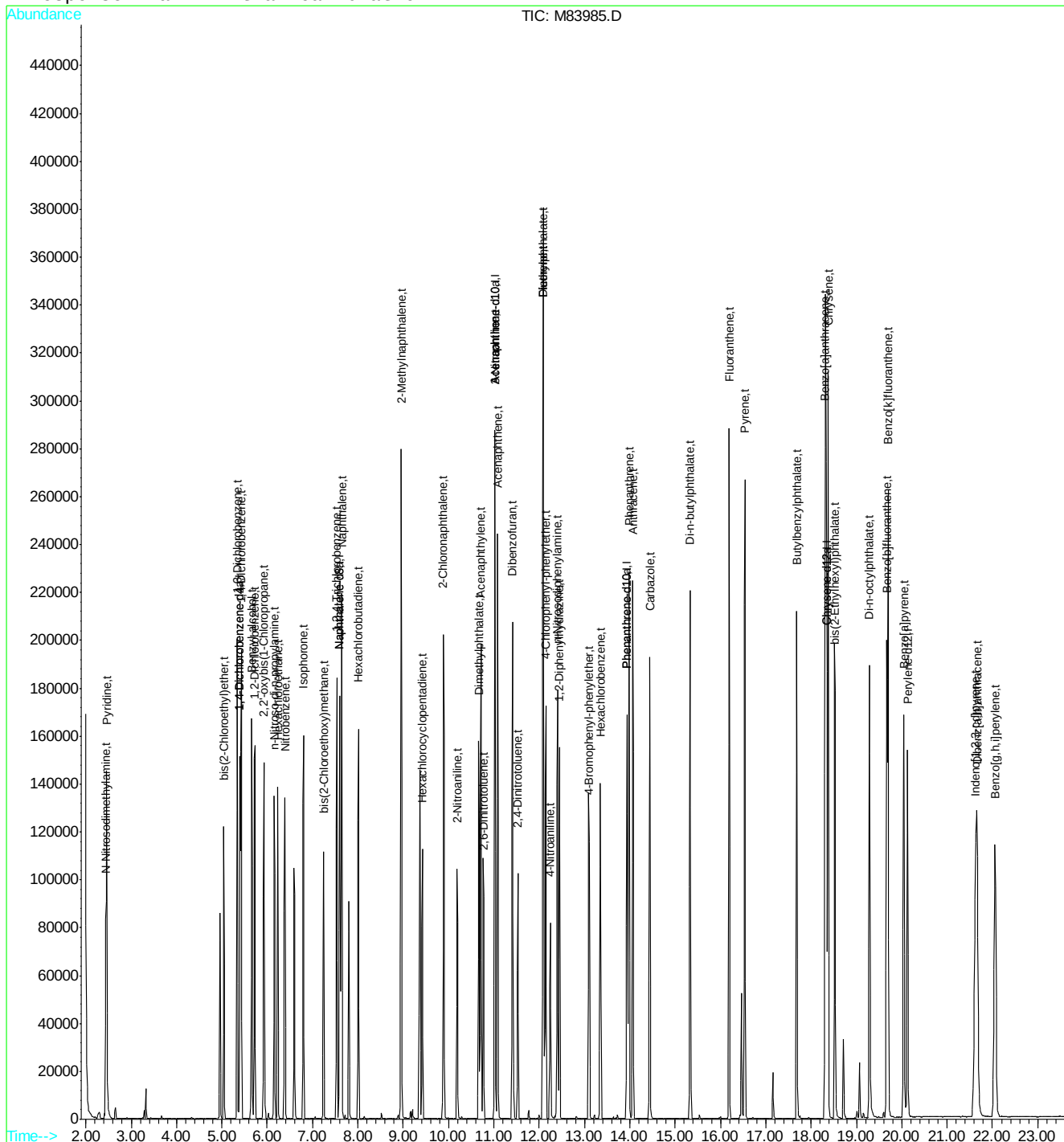
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83985.D
Acq On : 21 Dec 2011 11:58 pm
Sample : icv3346-50
Misc : op53696,em3347,bn1
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:18 2011

Vial: 19
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:

EM3347-ICV3346

Method:

SW846 8270D

Lab FileID:

M83985.D

Analyst approved:

12/22/11 16:31 Olga Azarihn

Injection Time:

12/21/11 23:58

Supervisor approved:

12/28/11 11:46 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.67	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.70	Overlapping peak

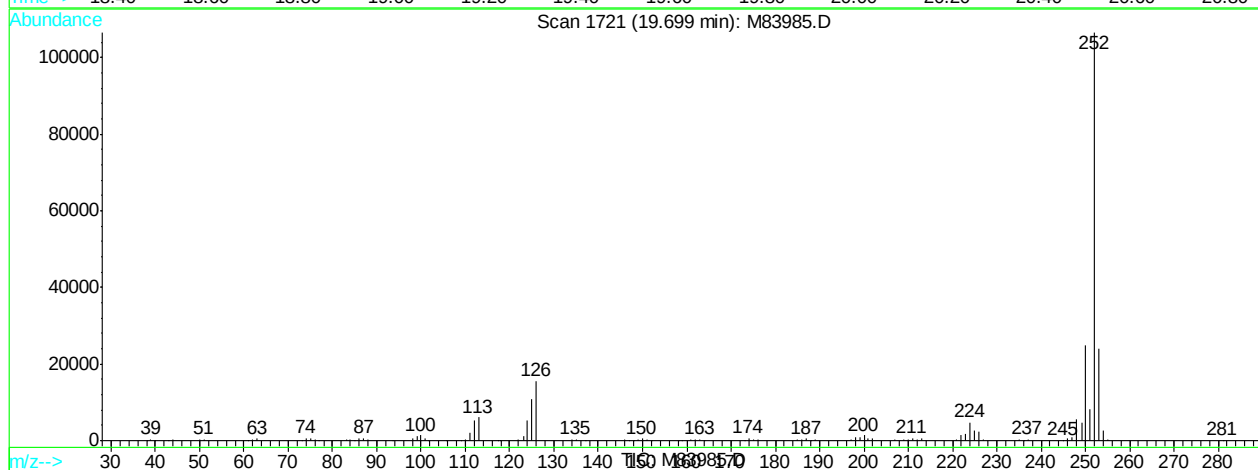
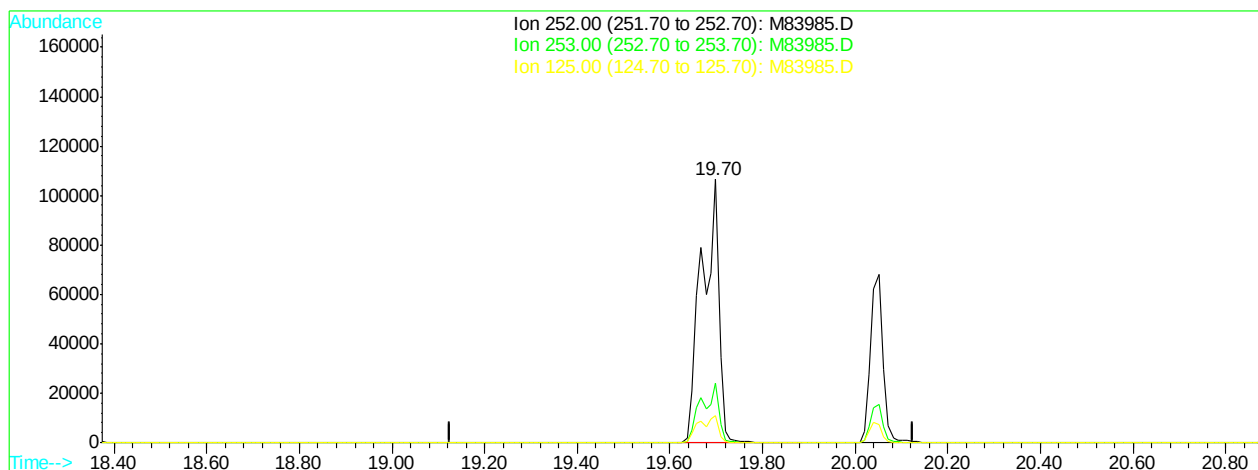
8.6.18.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83985.D Vial: 19
Acq On : 21 Dec 2011 11:58 pm Operator: olgaa
Sample : icv3346-50 Inst : MSM
Misc : op53696,em3347,bn1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:18 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:10:09 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.70min 89.91ppb

response 273730

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.49
125.00	9.90	10.05
0.00	0.00	0.00

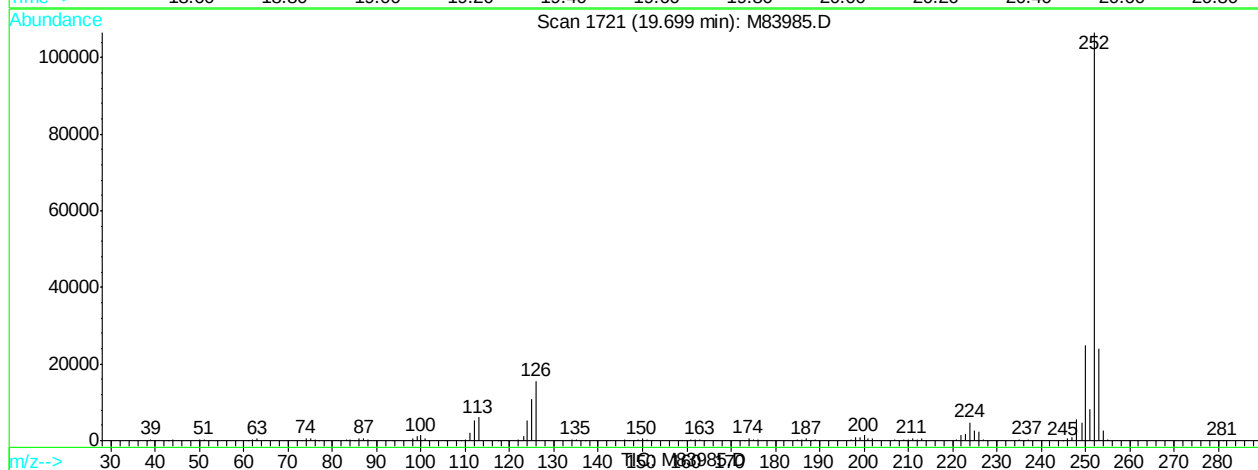
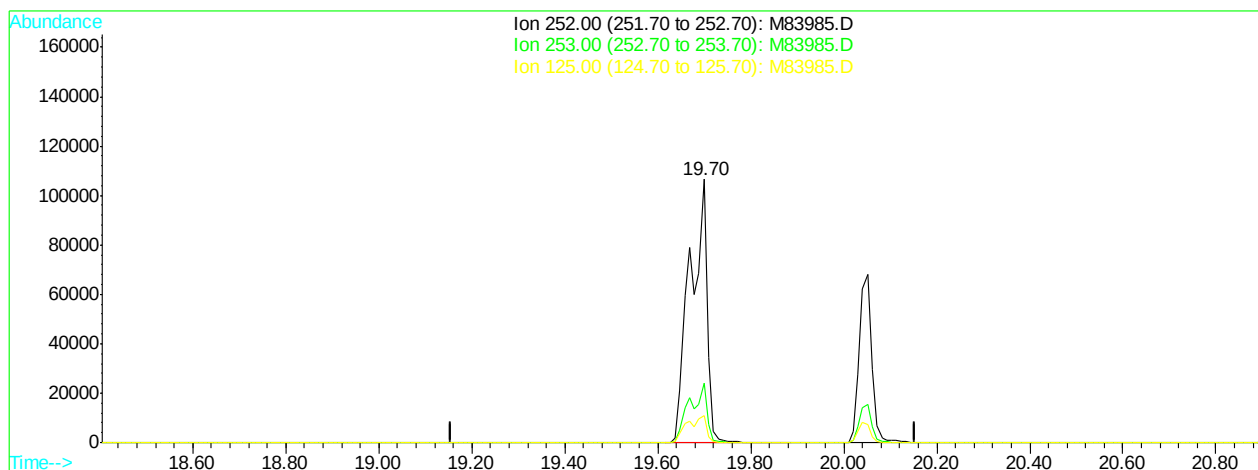
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83985.D
Acq On : 21 Dec 2011 11:58 pm
Sample : icv3346-50
Misc : op53696,em3347,bn1
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:18 2011

Vial: 19
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:10:09 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.70min 123.67ppb

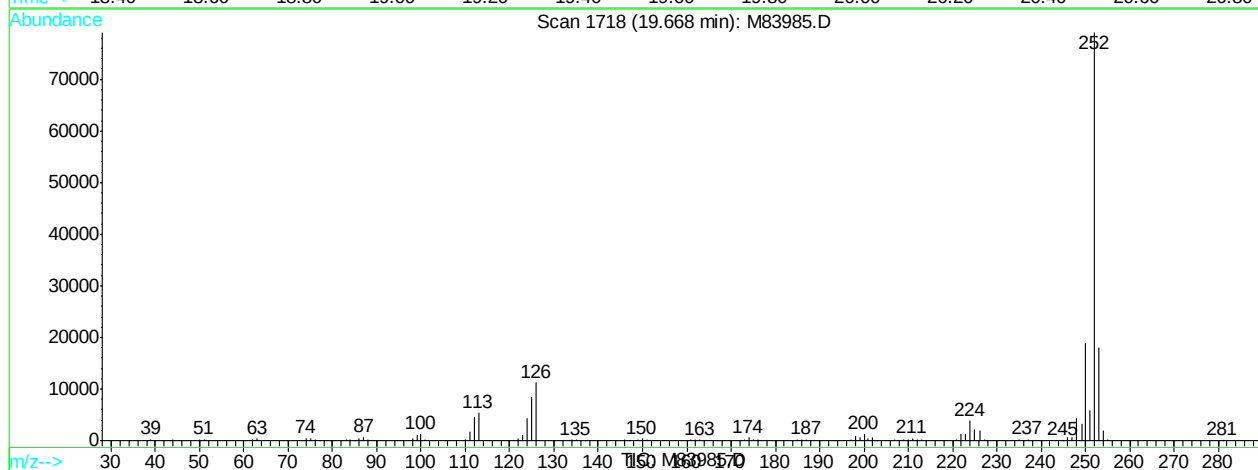
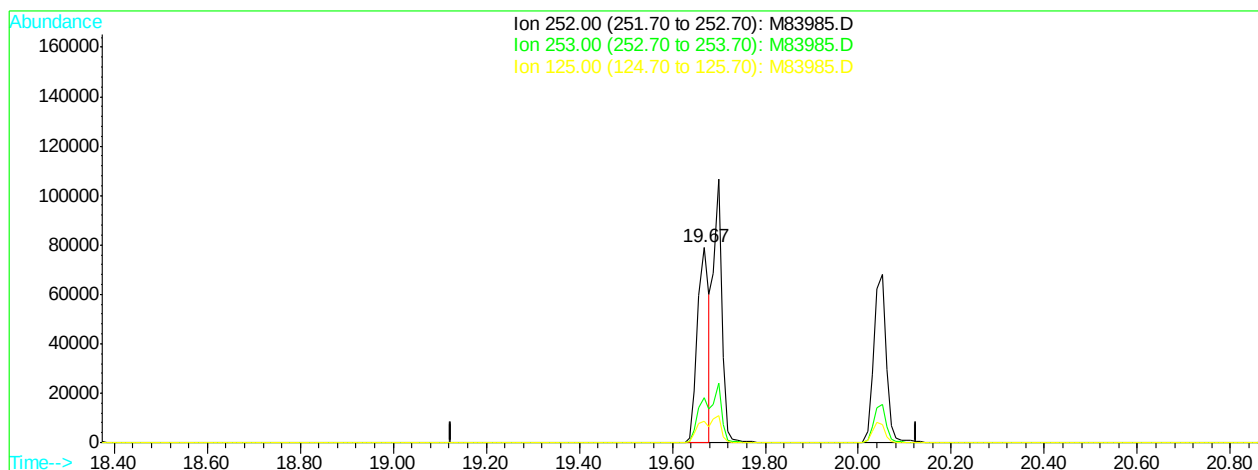
response 273730

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	22.49
125.00	10.60	10.05
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83985.D Vial: 19
Acq On : 21 Dec 2011 11:58 pm Operator: olgaa
Sample : icv3346-50 Inst : MSM
Misc : op53696,em3347,bn1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:18 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(94) Benzo[b]fluoranthene (t)

19.67min 45.14ppb m

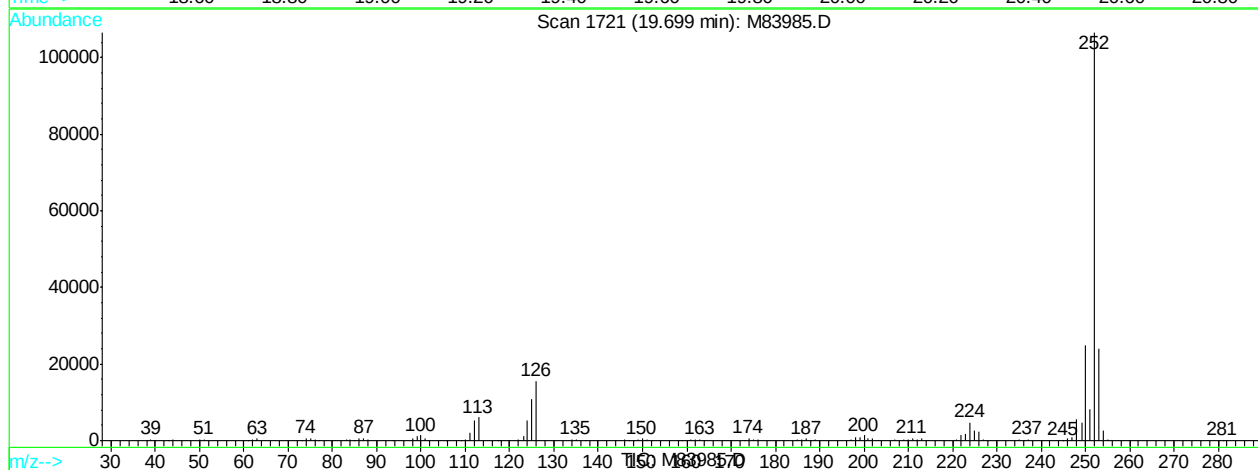
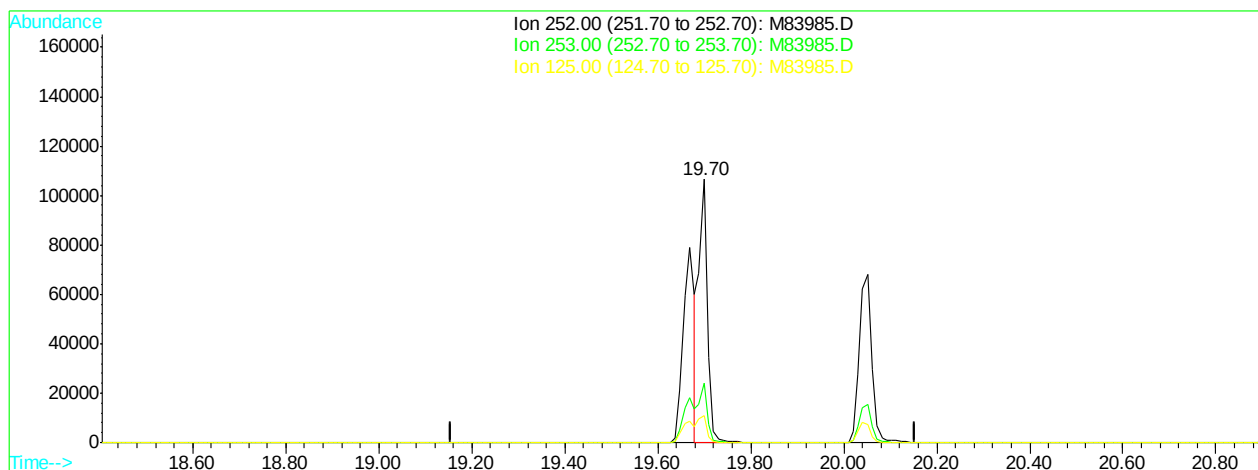
response 137425

Ion	Exp%	Act%
252.00	100	100
253.00	21.40	22.83
125.00	9.90	10.81
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3346\M83985.D Vial: 19
Acq On : 21 Dec 2011 11:58 pm Operator: olgaa
Sample : icv3346-50 Inst : MSM
Misc : op53696,em3347,bn1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:18 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

19.70min 60.68ppb m

response 135389

Ion	Exp%	Act%
252.00	100	100
253.00	24.60	22.49
125.00	10.60	10.05
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83985A.D Vial: 19
 Acq On : 21 Dec 2011 11:58 pm Operator: olgaa
 Sample : icv3347-50 Inst : MSM
 Misc : op53696,em3347,bn1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 9:58 2011 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.39	152	33177	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	117133	40.00	ppb	0.00
47) Acenaphthene-d10	11.03	164	68517	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	108761	40.00	ppb	0.00
83) Chrysene-d12	18.34	240	106382	40.00	ppb	0.03
92) Perylene-d12	20.12	264	84581	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.39	152	33177	40.00	ppb	0.00
104) Acenaphthene-d10a	11.03	164	68517	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	108761	40.00	ppb	0.00
113) Chrysene-d12a	18.34	240	106382	40.00	ppb	0.01
116) Naphthalene-d8a	7.60	136	117133	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	0.00	127	0d	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

						Qvalue
105) 1,2,4,5-Tetrachlorobenzene	9.37	216	46611	51.17	ppb	99

(#) = qualifier out of range (m) = manual integration

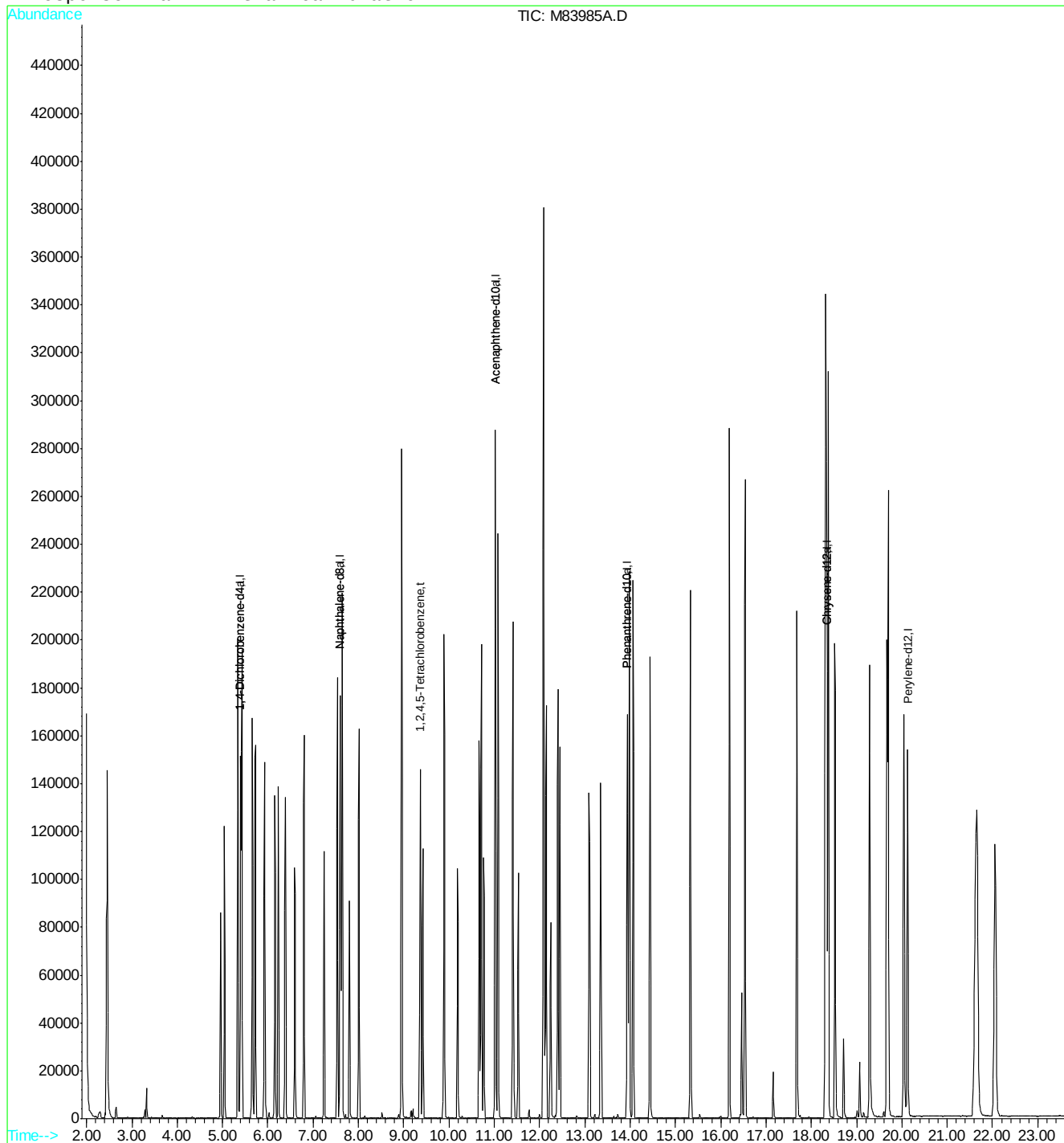
M83985A.D MM3346.M Thu Dec 22 16:19:49 2011 GCMSM

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83985A.D Vial: 19
Acq On : 21 Dec 2011 11:58 pm Operator: olgaa
Sample : icv3347-50 Inst : MSM
Misc : op53696,em3347,bn1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:58 2011 Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83986.D

Vial: 20

Acq On : 22 Dec 2011 12:27 am

Operator: olgaa

Sample : icv3346-50

Inst : MSM

Misc : op53696,em3347,bn2

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:20 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:10:09 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.39	152	32834	40.00	ppb	-0.01
24) Naphthalene-d8	7.60	136	122764	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	71411	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	111038	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	116660	40.00	ppb	0.02
92) Perylene-d12	20.11	264	90498	40.00	ppb	0.04
102) 1,4-Dichlorobenzene-d4a	5.39	152	32834	40.00	ppb	-0.01
104) Acenaphthene-d10a	11.02	164	71411	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	111038	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	116660	40.00	ppb	0.02
116) Naphthalene-d8a	7.60	136	122764	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery	=	0.00%#	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.18	88	23415	45.61	ppb	90
6) Indene	5.85	116	97655	49.72	ppb	99
7) Cumene	4.31	105	142000	50.72	ppb	99
13) Decane	5.19	43	84095	47.64	ppb	96
18) Acetophenone	6.09	105	72698	46.75	ppb	99
27) Quinoline	8.27	129	103591	48.36	ppb	99
40) 2,3-Dichloroaniline	9.58	161	51810	44.38	ppb	98
41) Caprolactam	8.37	55	28937	42.51	ppb	97
45) 1-Methylnaphthalene	9.16	142	106040	48.90	ppb	99
46) Dimethylnaphthalene	10.19	156	91785	49.36	ppb	99
53) Biphenyl	9.90	154	126415	52.24	ppb	99
82) Octadecane	13.92	57	81014	49.99	ppb	95
100) 7,12-Dimethylbenz(a)anthra	19.68	256	71711	52.88	ppb	93

(#) = qualifier out of range (m) = manual integration

M83986.D MM3346.M

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GCMSM

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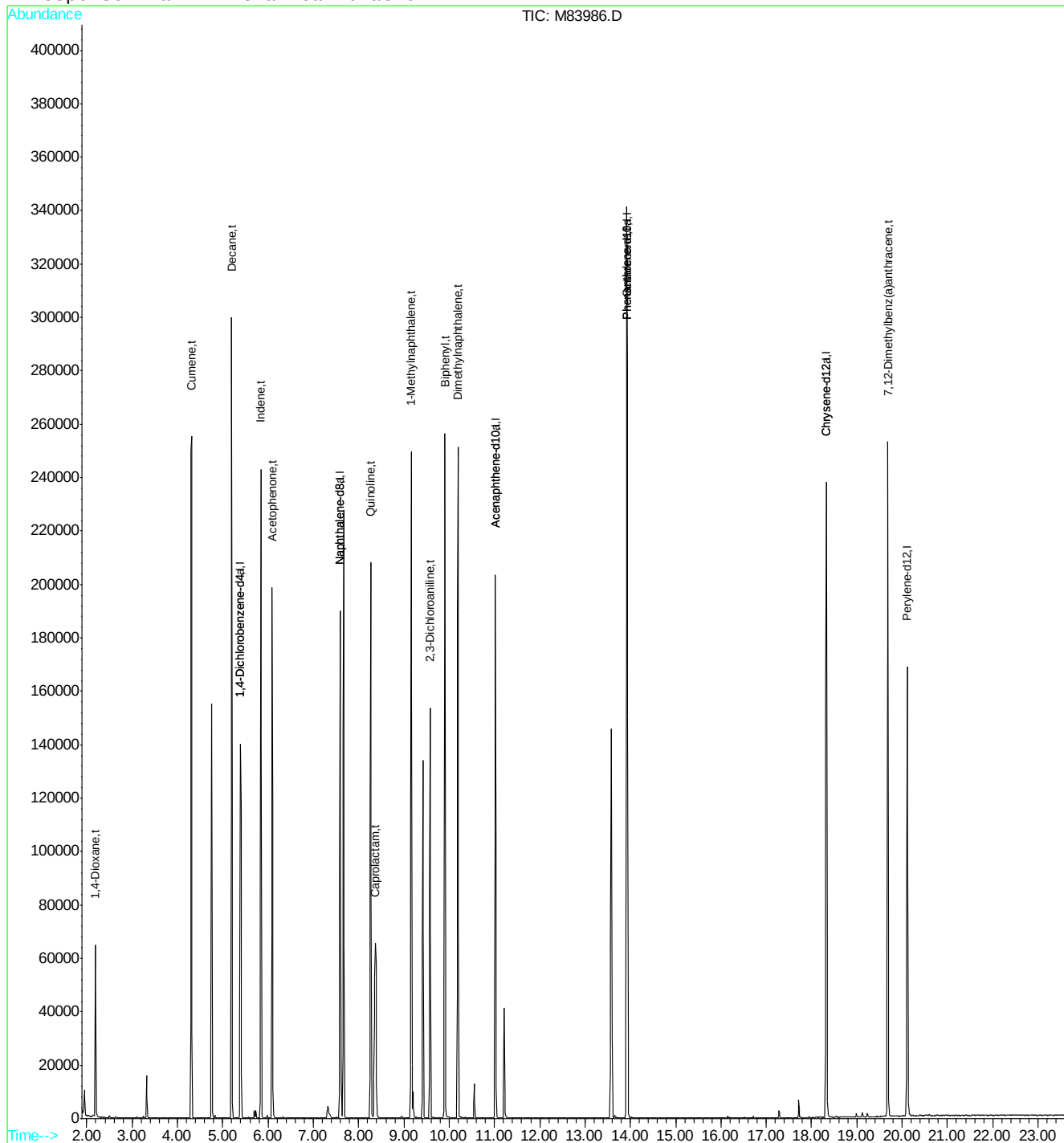
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83986.D
Acq On : 22 Dec 2011 12:27 am
Sample : icv3346-50
Misc : op53696,em3347,bn2
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:20 2011

Vial: 20
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83986A.D

Vial: 20

Acq On : 22 Dec 2011 12:27 am

Operator: olgaa

Sample : icv3347-50

Inst : MSM

Misc : op53696,em3347,bn2

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 10:04 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.39	152	32834	40.00	ppb	-0.01
24) Naphthalene-d8	7.60	136	122764	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	71411	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	111038	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	116660	40.00	ppb	0.02
92) Perylene-d12	20.11	264	90498	40.00	ppb	0.04
102) 1,4-Dichlorobenzene-d4a	5.39	152	32834	40.00	ppb	-0.01
104) Acenaphthene-d10a	11.02	164	71411	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	111038	40.00	ppb	-0.01
113) Chrysene-d12a	18.33	240	116660	40.00	ppb	0.00
116) Naphthalene-d8a	7.60	136	122764	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	4.76	105	43268	54.58	ppb	97
109) Atrazine	13.59	215	17608	58.12	ppb	95

(#) = qualifier out of range (m) = manual integration

M83986A.D MM3346.M

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GCMSM

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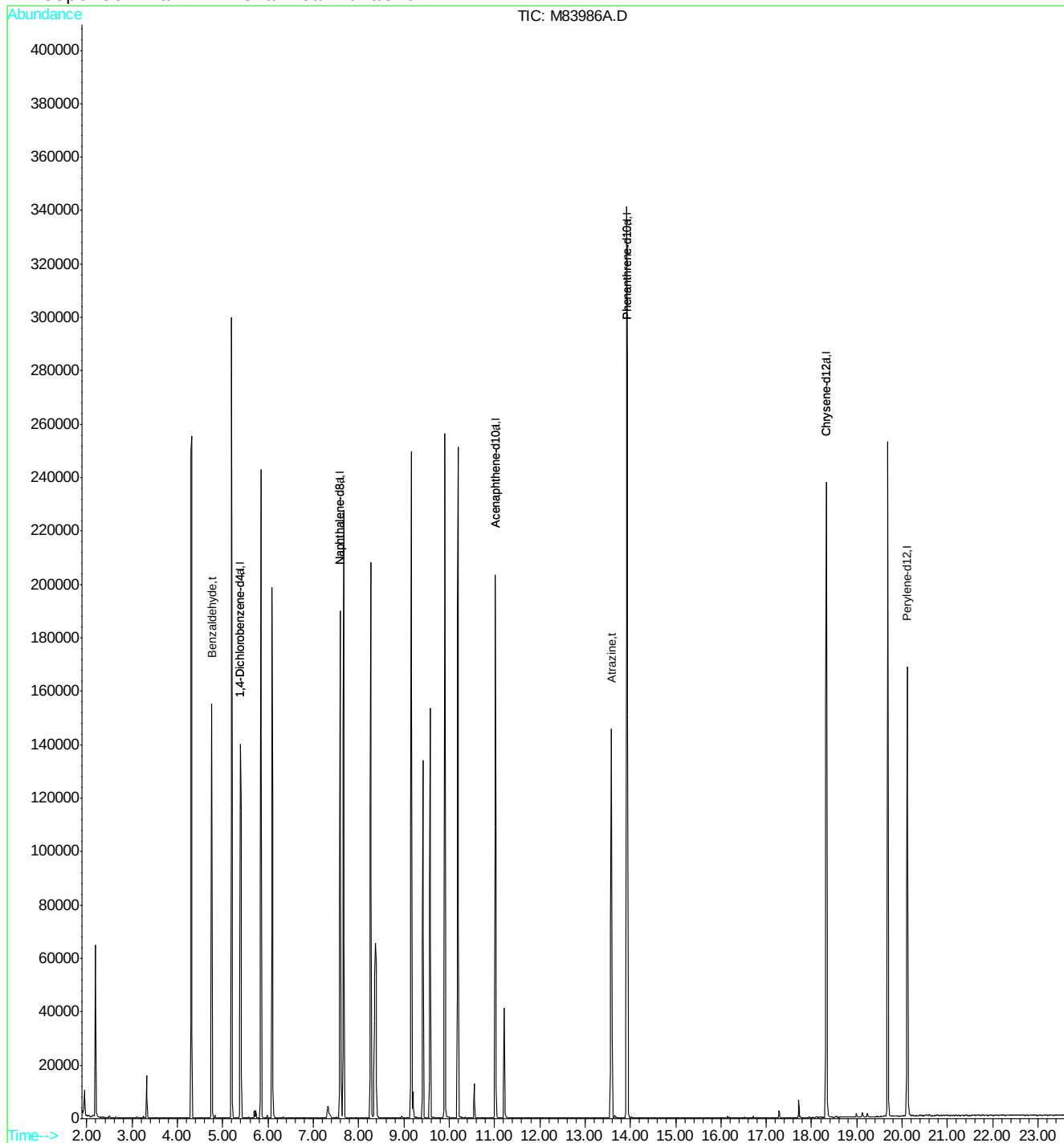
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83986A.D
Acq On : 22 Dec 2011 12:27 am
Sample : icv3347-50
Misc : op53696,em3347,bn2
MS Integration Params: LSCINT.P
Quant Time: Dec 22 10:04 2011

Vial: 20
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M83986A.D MM3346.M

Thu Dec 22 16:20:14 2011

GCMSM

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83987.D

Vial: 21

Acq On : 22 Dec 2011 12:57 am

Operator: olgaa

Sample : icv3346-50

Inst : MSM

Misc : op53696,em3347,3rd

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:21 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:10:09 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.39	152	28724	40.00	ppb	0.00
24) Naphthalene-d8	7.60	136	110295	40.00	ppb	0.00
47) Acenaphthene-d10	11.03	164	67200	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	113190	40.00	ppb	0.00
83) Chrysene-d12	18.32	240	122196	40.00	ppb	0.01
92) Perylene-d12	20.11	264	102346	40.00	ppb	0.04
102) 1,4-Dichlorobenzene-d4a	5.39	152	28724	40.00	ppb	0.00
104) Acenaphthene-d10a	11.03	164	67200	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	113190	40.00	ppb	0.00
113) Chrysene-d12a	18.32	240	122196	40.00	ppb	0.01
116) Naphthalene-d8a	7.60	136	110295	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount	50.000	Range	1 - 150	Recovery	=	0.00%#

Target Compounds

						Qvalue
10) Aniline	4.96	93	67126	46.39	ppb	53
39) 4-Chloroaniline	7.81	127	60646	50.63	ppb	97

(#) = qualifier out of range (m) = manual integration

M83987.D MM3346.M

Thu Dec 22 16:20:27 2011

GCMSM

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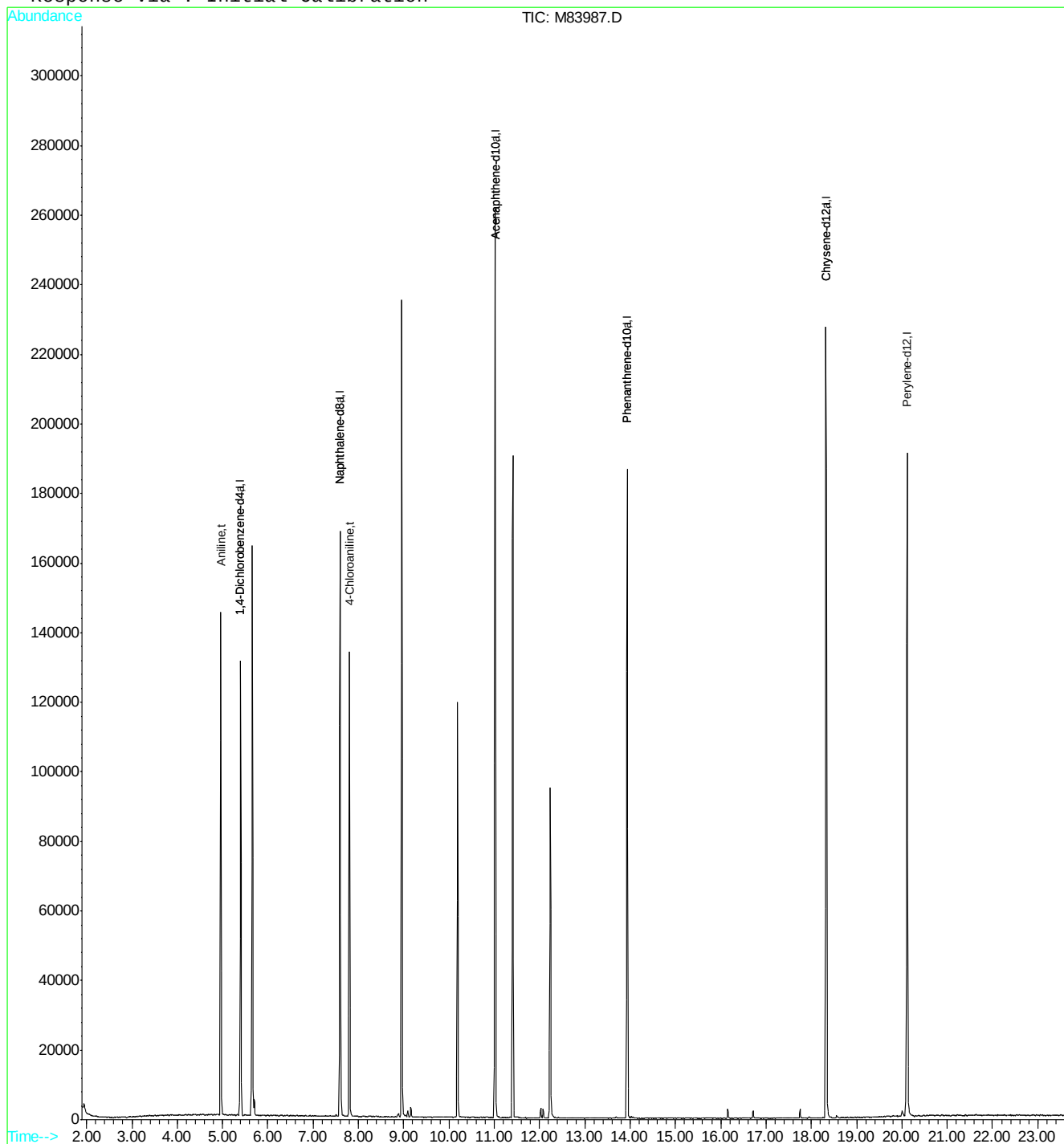
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83987.D
Acq On : 22 Dec 2011 12:57 am
Sample : icv3346-50
Misc : op53696,em3347,3rd
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:21 2011

Vial: 21
Operator: olgaa
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83988.D

Vial: 22

Acq On : 22 Dec 2011 1:41 am

Operator: olgaa

Sample : icv3346-50

Inst : MSM

Misc : op53696,em3347,

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Dec 22 9:23 2011

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:10:09 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.39	152	49794	40.00	ppb	-0.01
24) Naphthalene-d8	7.60	136	175142	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	113086	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	187145	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	200009	40.00	ppb	0.02
92) Perylene-d12	20.12	264	164910	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.39	152	49794	40.00	ppb	-0.01
104) Acenaphthene-d10a	11.02	164	113086	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	187145	40.00	ppb	0.00
113) Chrysene-d12a	18.33	240	200009	40.00	ppb	0.02
116) Naphthalene-d8a	7.60	136	175142	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount 50.000	Range	1 - 150	Recovery	=	0.00%#	

Target Compounds

89) 3,3'-Dichlorobenzidine	18.33	252	94347	47.29	ppb	Qvalue 97

(#) = qualifier out of range (m) = manual integration

M83988.D MM3346.M

Thu Dec 22 16:20:39 2011

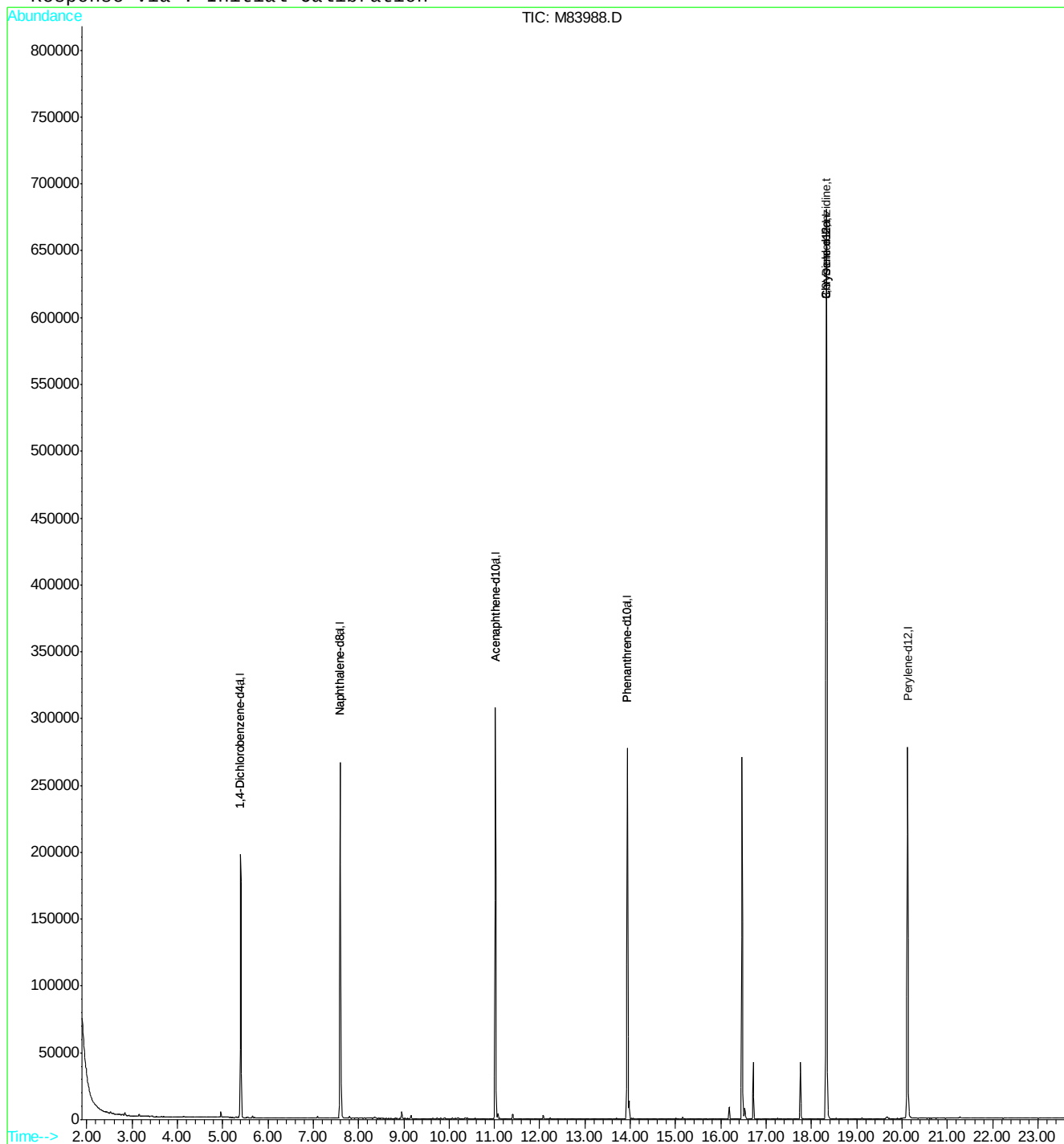
GCMSM

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83988.D Vial: 22
Acq On : 22 Dec 2011 1:41 am Operator: olgaa
Sample : icv3346-50 Inst : MSM
Misc : op53696,em3347, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 9:23 2011 Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3346\M83988A.D Vial: 22
 Acq On : 22 Dec 2011 1:41 am Operator: olgaa
 Sample : icv3347-50 Inst : MSM
 Misc : op53696,em3347, Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Dec 22 10:06 2011 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.39	152	49794	40.00	ppb	-0.01
24) Naphthalene-d8	7.60	136	175142	40.00	ppb	-0.01
47) Acenaphthene-d10	11.02	164	113086	40.00	ppb	0.00
69) Phenanthrene-d10	13.93	188	187145	40.00	ppb	0.00
83) Chrysene-d12	18.33	240	200009	40.00	ppb	0.02
92) Perylene-d12	20.12	264	164910	40.00	ppb	0.05
102) 1,4-Dichlorobenzene-d4a	5.39	152	49794	40.00	ppb	-0.01
104) Acenaphthene-d10a	11.02	164	113086	40.00	ppb	0.00
108) Phenanthrene-d10a	13.93	188	187145	40.00	ppb	-0.01
113) Chrysene-d12a	18.33	240	200009	40.00	ppb	0.00
116) Naphthalene-d8a	7.60	136	175142	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
106) 2-bromonaphthalene	0.00	127	0	0.00	ppb	
112) o-terphenyl	0.00	230	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
115) 1-chlorooctadecane	0.00	57	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

						Qvalue
114) Benzidine	16.47	184	160602	55.05	ppb	99

(#) = qualifier out of range (m) = manual integration

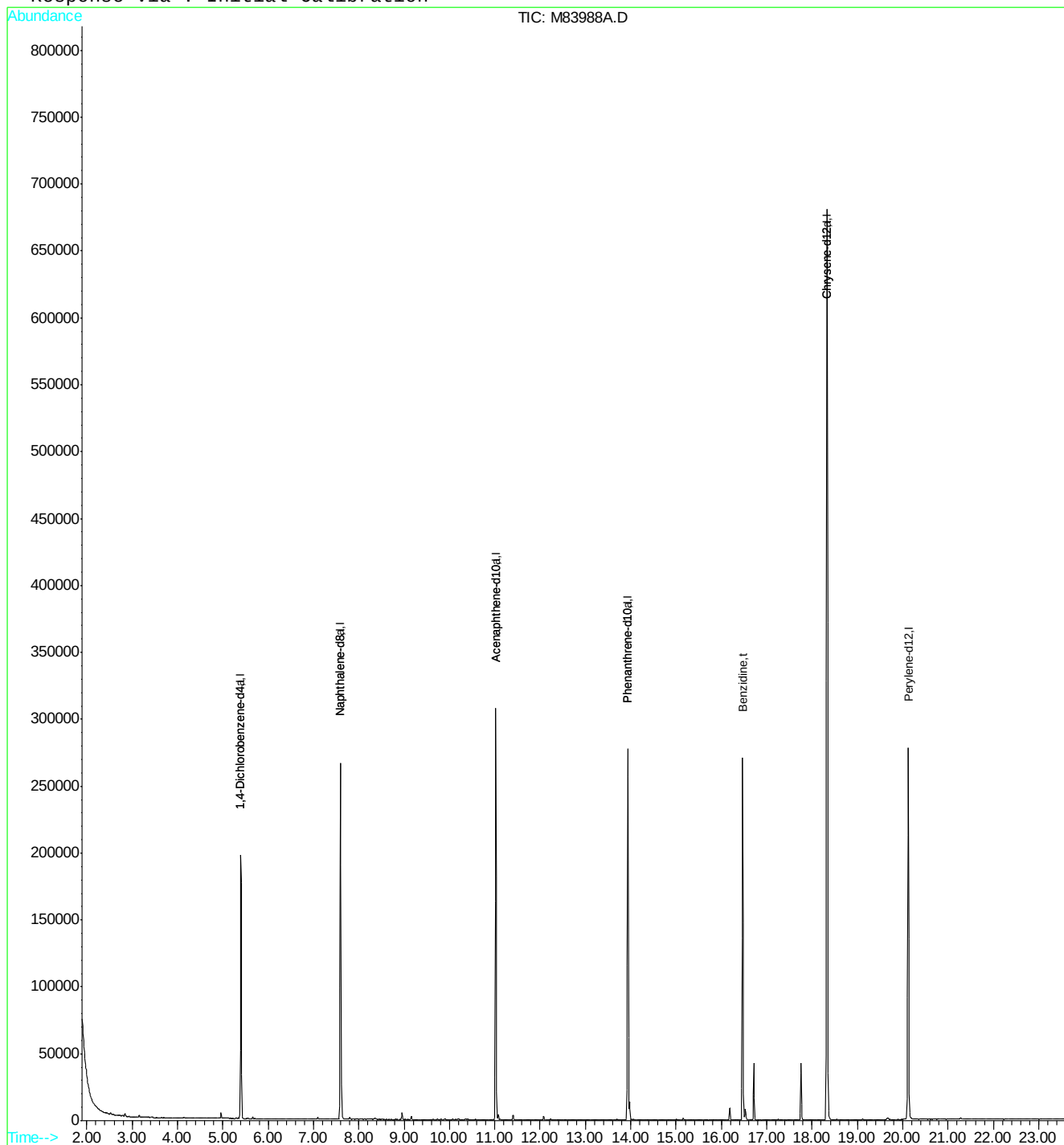
M83988A.D MM3346.M Thu Dec 22 16:20:51 2011 GCMSM

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3346\M83988A.D Vial: 22
Acq On : 22 Dec 2011 1:41 am Operator: olgaa
Sample : icv3347-50 Inst : MSM
Misc : op53696,em3347, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 22 10:06 2011 Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84307.D

Vial: 2

Acq On : 14 Jan 2012 9:28 am

Operator: kristis

Sample : cc3346-50

Inst : MSM

Misc : op54138,em3363,1000,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 13:41 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.31	152	43576	40.00	ppb	-0.10
24) Naphthalene-d8	7.50	136	175488	40.00	ppb	-0.11
47) Acenaphthene-d10	10.92	164	114212	40.00	ppb	-0.11
69) Phenanthrene-d10	13.83	188	172613	40.00	ppb	-0.11
83) Chrysene-d12	18.24	240	152442	40.00	ppb	-0.07
92) Perylene-d12	20.00	264	113791	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	5.31	152	43576	40.00	ppb	-0.09
104) Acenaphthene-d10a	10.92	164	114212	40.00	ppb	-0.10
106) Phenanthrene-d10a	13.83	188	172613	40.00	ppb	-0.11
110) Chrysene-d12a	18.24	240	152442	40.00	ppb	-0.09
112) Naphthalene-d8a	7.50	136	175488	40.00	ppb	-0.10

System Monitoring Compounds

5) 2-Fluorophenol	3.61	112	75015	48.12	ppb	-0.07
Spiked Amount	50.000		Recovery	=	96.24%	
8) Phenol-d5	4.84	99	89104	46.82	ppb	-0.07
Spiked Amount	50.000		Recovery	=	93.64%	
25) Nitrobenzene-d5	6.26	82	74578	49.64	ppb	-0.11
Spiked Amount	50.000		Recovery	=	99.28%	
51) 2-Fluorobiphenyl	9.63	172	158019	45.23	ppb	-0.12
Spiked Amount	50.000		Recovery	=	90.46%	
73) 2,4,6-Tribromophenol	12.50	330	18555	49.94	ppb	-0.11
Spiked Amount	50.000		Recovery	=	99.88%	
86) Terphenyl-d14	16.76	244	140627	46.76	ppb	-0.09
Spiked Amount	50.000		Recovery	=	93.52%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.11	88	24348	35.74	ppb	77
3) Pyridine	2.38	79	68348	40.98	ppb	77
4) N-Nitrosodimethylamine	2.36	42	71159	62.11	ppb	77
6) Indene	5.75	116	124088	47.60	ppb	99
7) Cumene	4.22	105	183758	49.46	ppb	99
9) Phenol	4.86	94	94642	44.65	ppb	# 53
10) Aniline	4.87	93	89336m	40.70	ppb	
11) bis(2-Chloroethyl)ether	4.96	93	62736	45.89	ppb	99
12) 2-Chlorophenol	5.04	128	72395	45.92	ppb	100
13) Decane	5.10	43	131904	56.30	ppb	91
14) 1,3-Dichlorobenzene	5.25	146	83997	46.12	ppb	96
15) 1,4-Dichlorobenzene	5.33	146	84109	46.14	ppb	100
16) Benzyl alcohol	5.58	108	49143	48.98	ppb	99
17) 1,2-Dichlorobenzene	5.63	146	81828	47.95	ppb	97
18) Acetophenone	6.01	105	98571	47.77	ppb	100
19) 2-Methylphenol	5.81	108	63522	46.95	ppb	99
20) 2,2'-oxybis(1-Chloropropan	5.84	121	22808	47.67	ppb	# 79
21) 3&4-Methylphenol	6.05	108	68210	47.04	ppb	98
22) n-Nitroso-di-n-propylamine	6.06	70	47941	48.02	ppb	80
23) Hexachloroethane	6.13	201	30969	49.39	ppb	82
26) Nitrobenzene	6.29	77	75965	48.18	ppb	93
27) Quinoline	8.19	129	145132	47.40	ppb	97
28) Isophorone	6.72	82	135855	49.14	ppb	95

(#) = qualifier out of range (m) = manual integration

M84307.D MM3346.M

Mon Jan 16 13:41:58 2012

GCMSM

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84307.D

Vial: 2

Acq On : 14 Jan 2012 9:28 am

Operator: kristis

Sample : cc3346-50

Inst : MSM

Misc : op54138,em3363,1000,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 13:41 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2-Nitrophenol	6.86	139	45207	50.64	ppb	88
30) 2,4-Dimethylphenol	6.98	107	70987	51.25	ppb	96
31) Benzoic acid	7.25	105	59871	59.17	ppb	96
32) bis(2-Chloroethoxy)methane	7.15	93	76034	47.12	ppb	99
33) 2,4-Dichlorophenol	7.30	162	70041	50.87	ppb	99
34) 2,6-Dichlorophenol	7.72	162	66842	49.44	ppb	98
35) 1,3,5-Trichlorobenzene	6.87	180	73653	46.18	ppb	99
36) 1,2,4-Trichlorobenzene	7.44	180	72399	46.93	ppb	98
37) 1,2,3-Trichlorobenzene	7.89	180	69162	47.36	ppb	99
38) Naphthalene	7.53	128	206915	45.59	ppb	99
39) 4-Chloroaniline	7.71	127	90284	47.37	ppb	94
40) 2,3-Dichloroaniline	9.48	161	79885	47.87	ppb	97
41) Caprolactam	8.34	55	53868	55.37	ppb	96
42) Hexachlorobutadiene	7.91	225	42493	49.53	ppb	98
43) 4-Chloro-3-methylphenol	8.71	107	71640	56.01	ppb	95
44) 2-Methylnaphthalene	8.86	141	139193	49.03	ppb	98
45) 1-Methylnaphthalene	9.05	142	149410	48.20	ppb	97
46) Dimethylnaphthalene	10.09	156	130922	49.25	ppb	98
48) Hexachlorocyclopentadiene	9.31	237	91828	110.19	ppb	99
49) 2,4,6-Trichlorophenol	9.49	196	51782	48.65	ppb	99
50) 2,4,5-Trichlorophenol	9.57	196	54388	47.44	ppb	99
52) 2-Chloronaphthalene	9.79	162	149334	45.64	ppb	100
53) Biphenyl	9.80	154	178450	46.11	ppb	99
54) 2-Nitroaniline	10.09	65	52473	55.62	ppb	85
55) Dimethylphthalate	10.56	163	169192	47.14	ppb	99
56) Acenaphthylene	10.61	152	231541	46.40	ppb	99
57) 2,6-Dinitrotoluene	10.67	165	39387	49.36	ppb	91
58) 3-Nitroaniline	10.93	138	44865	49.56	ppb	97
59) Acenaphthene	10.98	153	142553	45.41	ppb	96
60) 2,4-Dinitrophenol	11.14	184	39691	85.91	ppb	92
61) 4-Nitrophenol	11.35	109	24281	58.29	ppb	# 1
62) Dibenzofuran	11.30	168	210307	46.16	ppb	82
63) 2,4-Dinitrotoluene	11.44	165	53191	50.04	ppb	93
64) 2,3,4,6-Tetrachlorophenol	11.66	232	45321	48.65	ppb	98
65) Diethylphthalate	11.97	149	164806	48.77	ppb	98
66) Fluorene	11.98	166	172438	46.41	ppb	99
67) 4-Chlorophenyl-phenylether	12.03	204	79558	45.00	ppb	90
68) 4-Nitroaniline	12.15	138	42732	47.04	ppb	89
70) 4,6-Dinitro-2-methylphenol	12.24	198	33503	49.53	ppb	86
71) n-Nitrosodiphenylamine	12.29	169	120547	49.14	ppb	99
72) 1,2-Diphenylhydrazine	12.34	77	164755	53.47	ppb	98
74) 4-Bromophenyl-phenylether	12.99	248	44651	49.53	ppb	97
75) Hexachlorobenzene	13.24	284	45750	48.01	ppb	99
76) Pentachlorophenol	13.63	266	63400	99.43	ppb	99
77) Phenanthrene	13.87	178	215343	44.09	ppb	99
78) Anthracene	13.96	178	225342	46.34	ppb	99
79) Carbazole	14.32	167	231454	48.51	ppb	99
80) Di-n-butylphthalate	15.21	149	272654	49.32	ppb	99
81) Fluoranthene	16.08	202	260931	44.56	ppb	98

(#)=qualifier out of range (m)=manual integration

M84307.D MM3346.M

Mon Jan 16 13:41:58 2012

GCMSM

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84307.D Vial: 2
 Acq On : 14 Jan 2012 9:28 am Operator: kristis
 Sample : cc3346-50 Inst : MSM
 Misc : op54138,em3363,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P
 Quant Time: Jan 16 13:41 2012 Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Dec 22 09:55:24 2011
 Response via : Initial Calibration
 DataAcq Meth : MM3346

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82) Octadecane	13.80	57	140814	55.89	ppb	93
84) Pyrene	16.43	202	247230	47.60	ppb	99
85) Butyl stearate	17.64	56	88887	59.57	ppb	97
87) Butylbenzylphthalate	17.56	149	117534	55.76	ppb	88
88) Benzo[a]anthracene	18.20	228	213826	47.34	ppb	97
89) 3,3'-Dichlorobenzidine	18.21	252	74580	49.05	ppb	97
90) Chrysene	18.27	228	196042	48.28	ppb	98
91) bis(2-Ethylhexyl)phthalate	18.40	149	144146	55.23	ppb	100
93) Di-n-octylphthalate	19.16	149	250546	63.47	ppb	94
94) Benzo[b]fluoranthene	19.56	252	183949	44.91	ppb	98
95) Benzo[k]fluoranthene	19.59	252	175105	58.30	ppb	94
96) Benzo[a]pyrene	19.92	252	164659	47.69	ppb	98
97) Indeno[1,2,3-cd]pyrene	21.41	276	173207	48.17	ppb	99
98) Dibenz(a,h)acridine	21.08	279	131112	49.11	ppb	100
99) Dibenz[a,h]anthracene	21.42	278	146338	48.89	ppb	97
100) 7,12-Dimethylbenz(a)anthra	19.58	256	89958	52.75	ppb	92
101) Benzo[g,h,i]perylene	21.81	276	137858	46.06	ppb	94

(#) = qualifier out of range (m) = manual integration

M84307.D MM3346.M Mon Jan 16 13:41:58 2012 GCMSM

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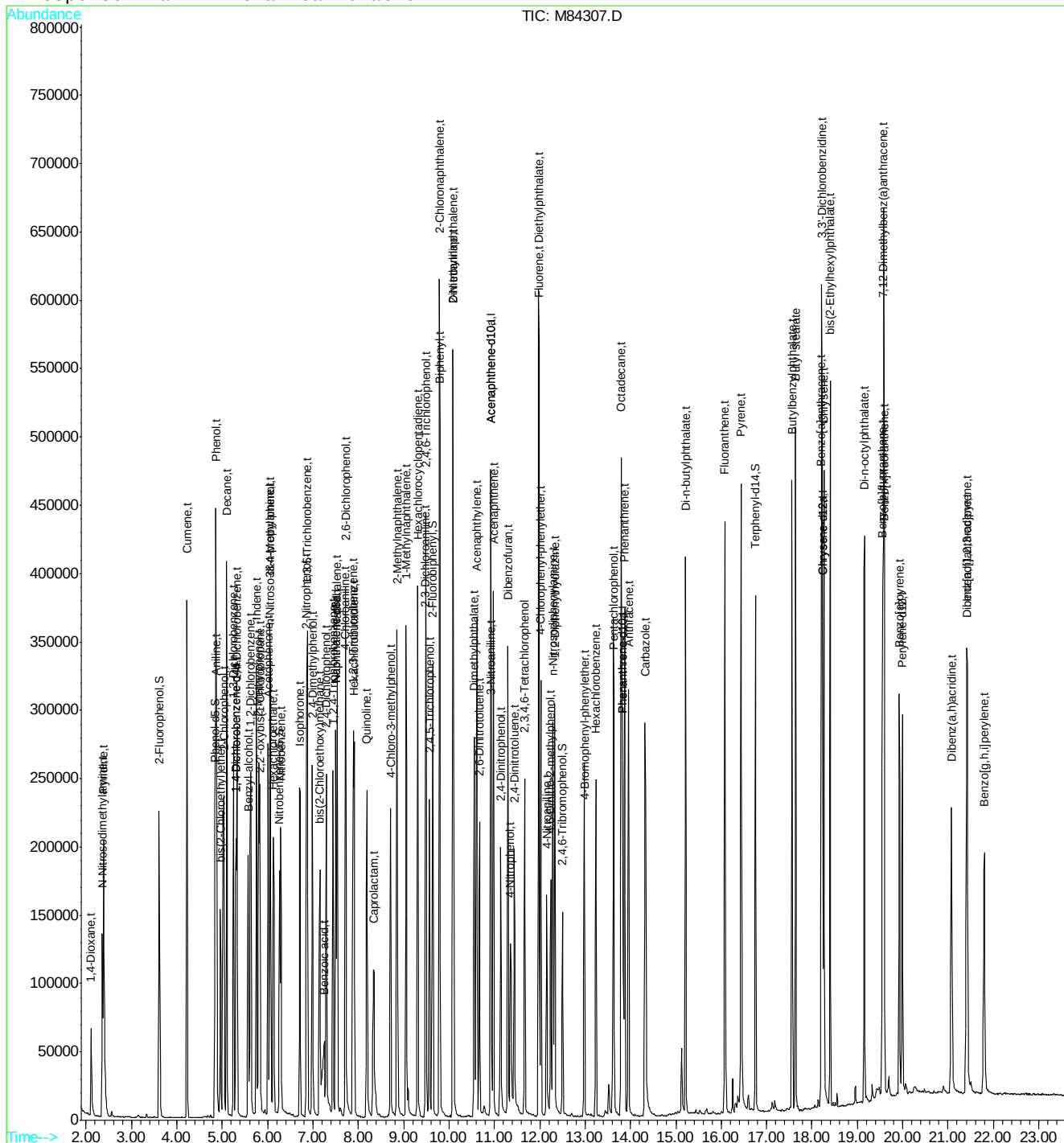
Quantitation Report

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Data File : C:\HPCHEM\1\DATA\EM3363\M84307.D
Acq On    : 14 Jan 2012    9:28 am
Sample    : cc3346-50
Misc      : op54138,em3363,1000,,,1,1
MS Integration Params: LSCINT.P
Quant Time: Jan 16 13:41 2012    0
```

Vial: 2
Operator: kristis
Inst : MSM
Multiplr: 1.00

Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



M84307.D MM3346.M

Mon Jan 16 13:41:59 2012

GCMSSM

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8.6.25

Manual Integration Approval Summary

Sample Number: EM3363-CC3346

Method: SW846 8270D

Lab FileID: M84307.D

Analyst approved: 01/16/12 15:42 Olga Azarihn

Injection Time: 01/14/12 09:28

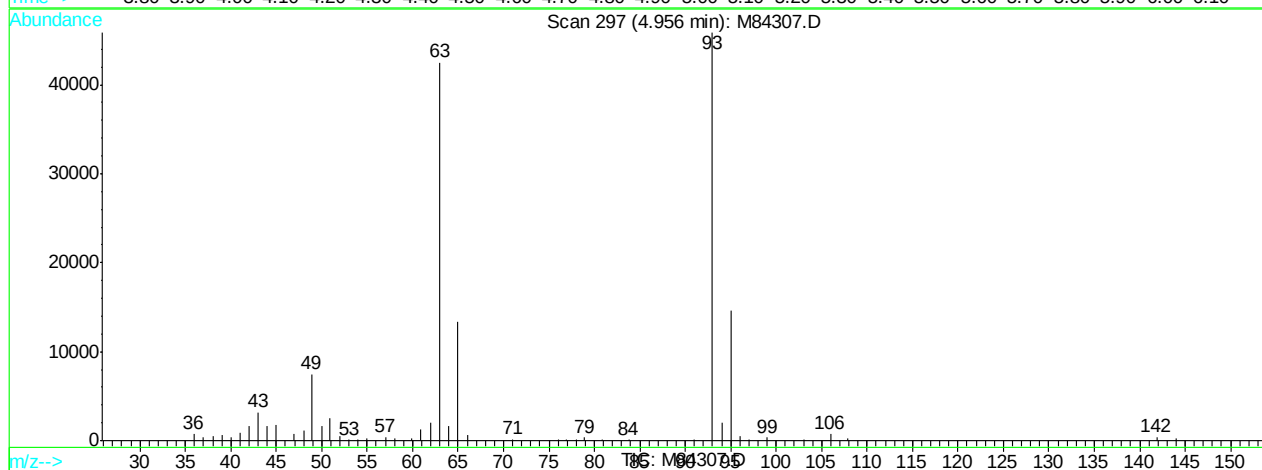
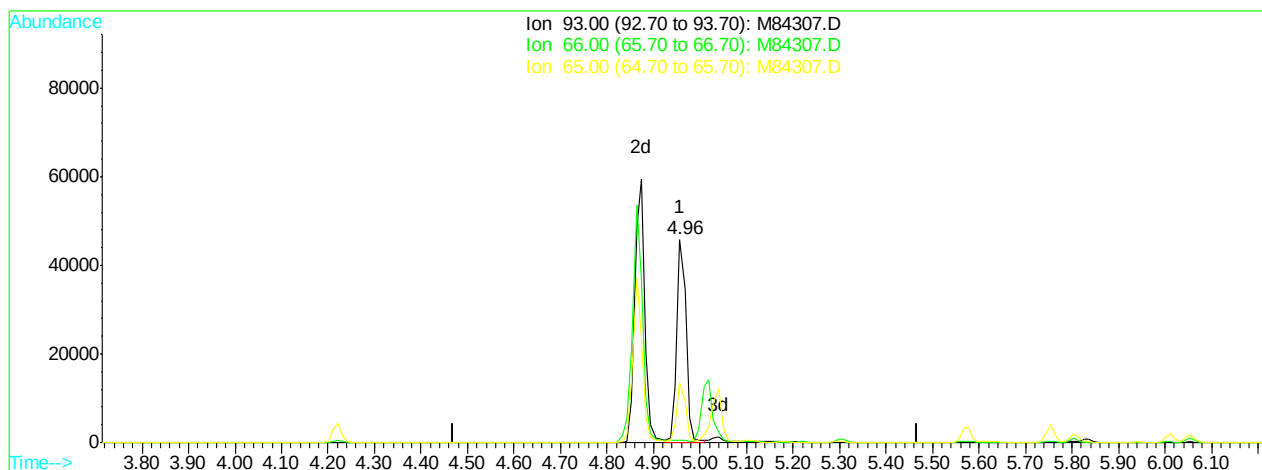
Supervisor approved: 01/16/12 15:50 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Aniline	62-53-3		4.87	Poor instrument integration

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84307.D Vial: 2
Acq On : 14 Jan 2012 9:28 am Operator: kristis
Sample : cc3346-50 Inst : MSM
Misc : op54138,em3363,1000,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 14 9:43 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(10) Aniline (t)

4.96min 28.58ppb

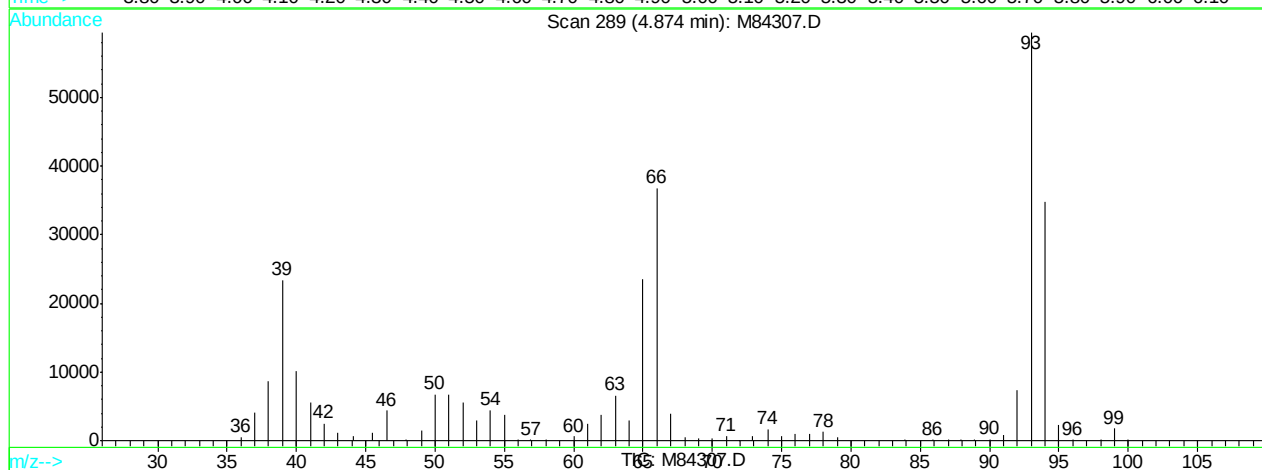
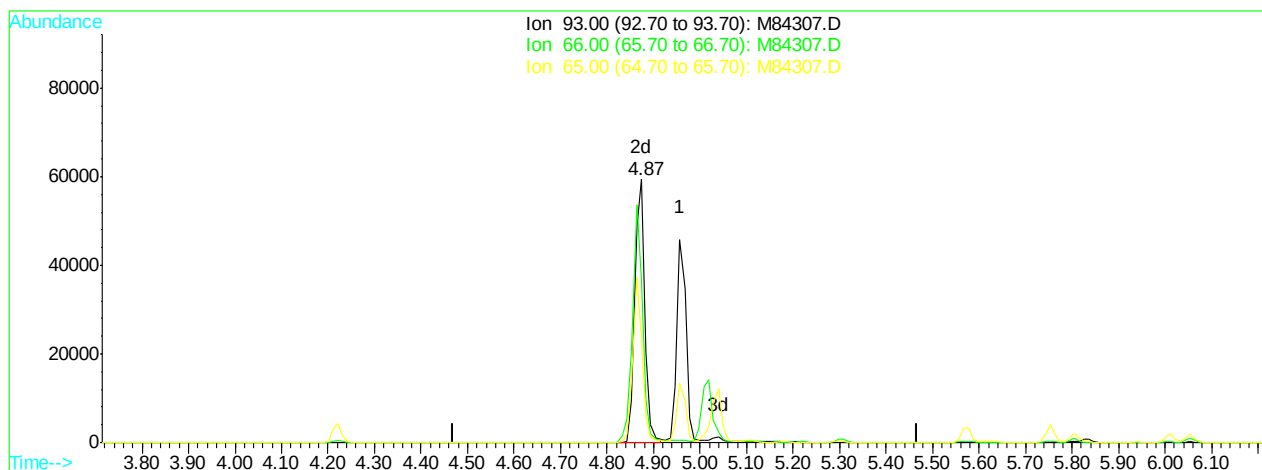
response 62736

Ion	Exp%	Act%
93.00	100	100
66.00	18.80	0.00
65.00	5.10	27.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3363\M84307.D Vial: 2
Acq On : 14 Jan 2012 9:28 am Operator: kristis
Sample : cc3346-50 Inst : MSM
Misc : op54138,em3363,1000,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 13:41 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Multiple Level Calibration



(10) Aniline (t)

4.87min 40.70ppb m

response 89336

Ion	Exp%	Act%
93.00	100	100
66.00	18.80	61.82#
65.00	5.10	39.54#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3363\M84308.D

Vial: 3

Acq On : 14 Jan 2012 9:57 am

Operator: kristis

Sample : cc3347-50

Inst : MSM

Misc : op54138,em3363,1000,,,1,1

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jan 16 13:44 2012

Quant Results File: MM3346.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Dec 22 09:55:24 2011

Response via : Initial Calibration

DataAcq Meth : MM3346

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.30	152	44504	40.00	ppb	-0.10
24) Naphthalene-d8	7.50	136	185706	40.00	ppb	-0.11
47) Acenaphthene-d10	10.91	164	120872	40.00	ppb	-0.11
69) Phenanthrene-d10	13.82	188	194929	40.00	ppb	-0.11
83) Chrysene-d12	18.23	240	179002	40.00	ppb	-0.08
92) Perylene-d12	19.99	264	128877	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	5.30	152	44504	40.00	ppb	-0.10
104) Acenaphthene-d10a	10.91	164	120872	40.00	ppb	-0.11
106) Phenanthrene-d10a	13.82	188	194929	40.00	ppb	-0.12
110) Chrysene-d12a	18.23	240	179002	40.00	ppb	-0.10
112) Naphthalene-d8a	7.50	136	185706	40.00	ppb	-0.11

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	4.67	105	44790	41.69	ppb	95
105) 1,2,4,5-Tetrachlorobenzene	9.26	216	80315	49.98	ppb	99
107) Atrazine	13.48	215	29855	56.13	ppb	93
111) Benzidine	16.36	184	77184	29.56	ppb	99

(#) = qualifier out of range (m) = manual integration

M84308.D MM3346.M

Mon Jan 16 13:45:07 2012

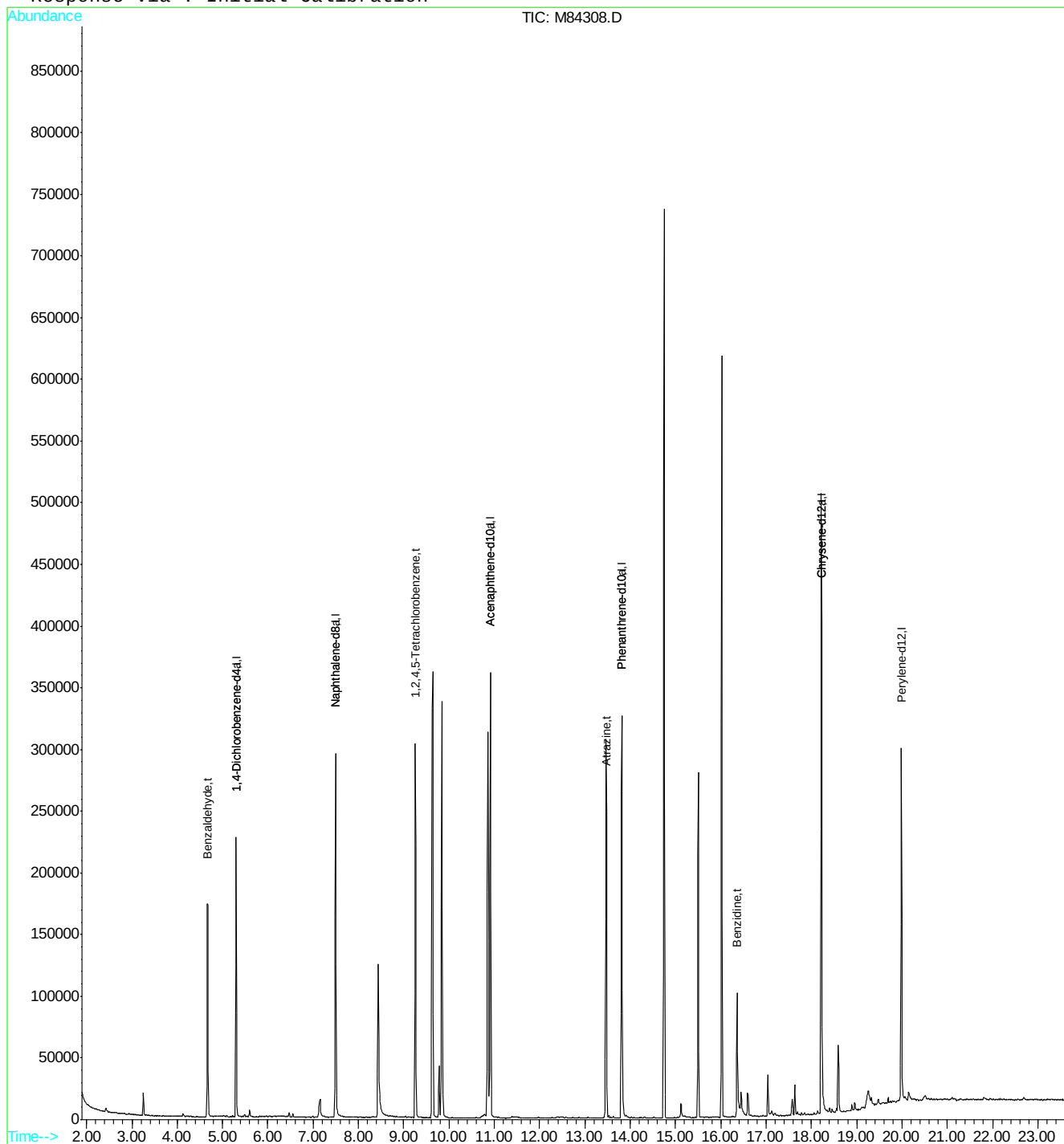
GCMSM

Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3363\M84308.D Vial: 3
Acq On : 14 Jan 2012 9:57 am Operator: kristis
Sample : cc3347-50 Inst : MSM
Misc : op54138,em3363,1000,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 16 13:44 2012 Quant Results File: MM3346.RES

Method : C:\HPCHEM\1\METHODS\MM3346.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 09:55:24 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3455\R89825.D

Vial: 2

Acq On : 16 Sep 2011 10:38 am

Operator: larisap

Sample : ic3455-100

Inst : MSR

Misc : op51699,er3455,

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 16 15:03 2011

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Fri Sep 16 15:03:07 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.88	152	465311	40.00	ppb	0.00
24) Naphthalene-d8	10.65	136	1759205	40.00	ppb	-0.01
47) Acenaphthene-d10	14.80	164	995478	40.00	ppb	0.00
69) Phenanthrene-d10	18.27	188	1539008	40.00	ppb	-0.01
83) Chrysene-d12	22.42	240	1613286	40.00	ppb	0.00
92) Perylene-d12	24.01	264	1523909	40.00	ppb	-0.01
102) 1,4-Dichlorobenzene-d4a	7.88	152	465311	40.00	ppb	0.00
104) Acenaphthene-d10a	14.80	164	995478	40.00	ppb	0.00
108) Phenanthrene-d10	18.27	188	1539008	40.00	ppb	-0.02
110) Chrysene-d12a	22.42	240	1613286	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.02	105	1089734	100.00	ppb	95
105) 1,2,4,5-Tetrachlorobenzene	12.82	216	1297446	100.00	ppb	99
106) 2-Bromonaphthalene	14.74	127	1368567	100.00	ppb	# 100
107) Atrazine	17.90	215	451256	100.00	ppb	# 78
109) o-terphenyl	19.32	230	2195690	100.00	ppb	# 45
111) Benzidine	20.81	184	2067998	100.00	ppb	96
112) 1-chlorooctadecane	20.52	57	1126522	100.00	ppb	# 2

(#) = qualifier out of range (m) = manual integration

R89825.D MR3454.M

Fri Sep 16 15:03:37 2011

NJMSR

Page 1

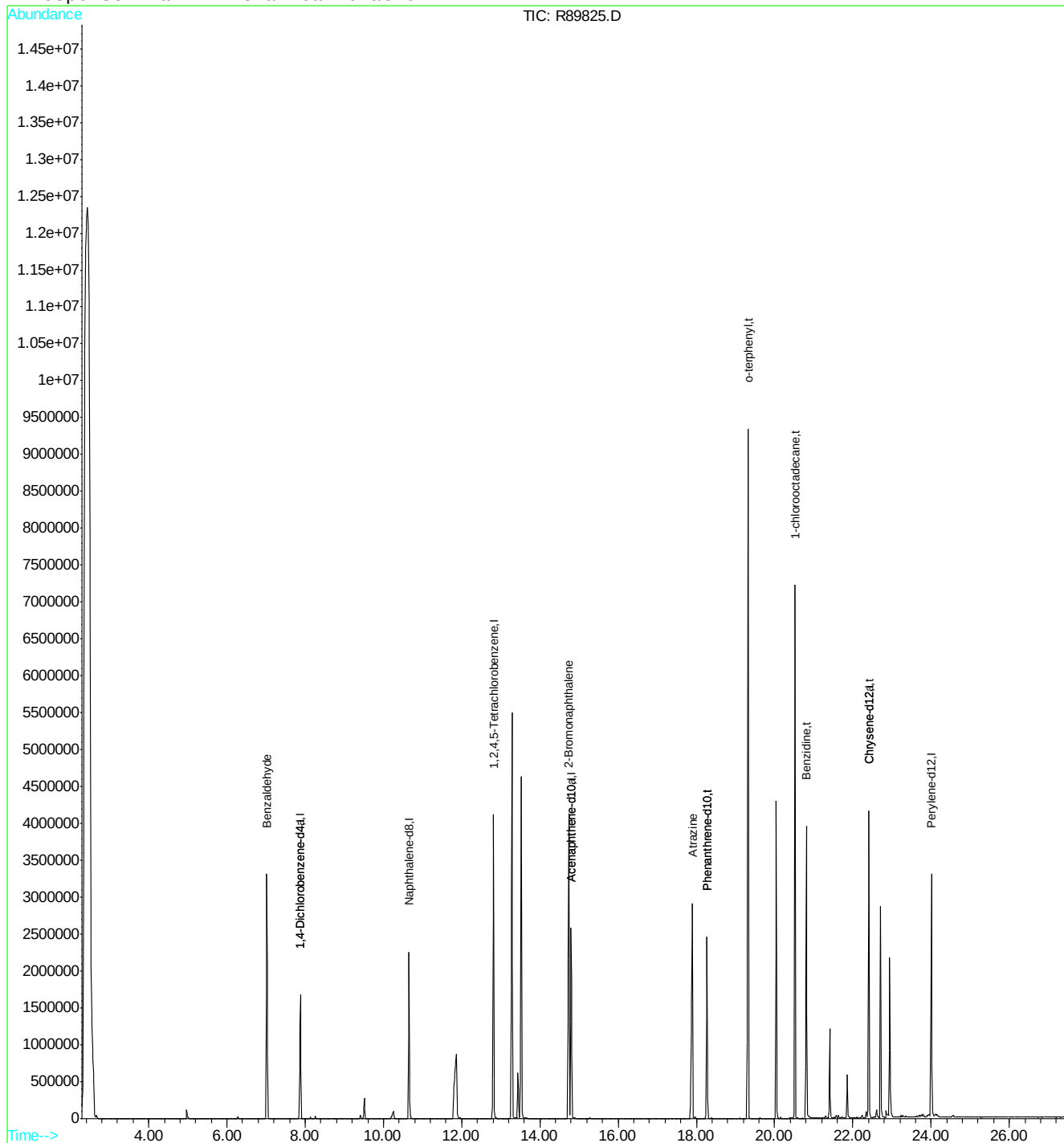
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3455\R89825.D
Acq On : 16 Sep 2011 10:38 am
Sample : ic3455-100
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 16 15:03 2011

Vial: 2
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Sep 16 15:03:07 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3455\R89826.D

Vial: 3

Acq On : 16 Sep 2011 11:14 am

Operator: larisap

Sample : ic3455-80

Inst : MSR

Misc : op51699,er3455,

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 16 15:04 2011

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Fri Sep 16 15:03:07 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.86	152	426179	40.00	ppb	0.00
24) Naphthalene-d8	10.65	136	1629795	40.00	ppb	-0.01
47) Acenaphthene-d10	14.80	164	943334	40.00	ppb	0.00
69) Phenanthrene-d10	18.27	188	1465873	40.00	ppb	-0.01
83) Chrysene-d12	22.41	240	1551122	40.00	ppb	0.00
92) Perylene-d12	24.01	264	1476326	40.00	ppb	-0.01
102) 1,4-Dichlorobenzene-d4a	7.86	152	426179	40.00	ppb	0.00
104) Acenaphthene-d10a	14.80	164	943334	40.00	ppb	0.00
108) Phenanthrene-d10	18.27	188	1465873	40.00	ppb	-0.02
110) Chrysene-d12a	22.41	240	1551122	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.01	105	797981	79.95	ppb	93
105) 1,2,4,5-Tetrachlorobenzene	12.82	216	983666	80.01	ppb	100
106) 2-Bromonaphthalene	14.74	127	1034605	79.78	ppb	# 100
107) Atrazine	17.90	215	340074	79.53	ppb	# 77
109) o-terphenyl	19.32	230	1701707	81.37	ppb	# 45
111) Benzidine	20.81	184	1530973	77.00	ppb	96
112) 1-chlorooctadecane	20.52	57	883523	81.57	ppb	# 3

(#) = qualifier out of range (m) = manual integration

R89826.D MR3454.M

Fri Sep 16 15:04:34 2011

NJMSR

Page 1

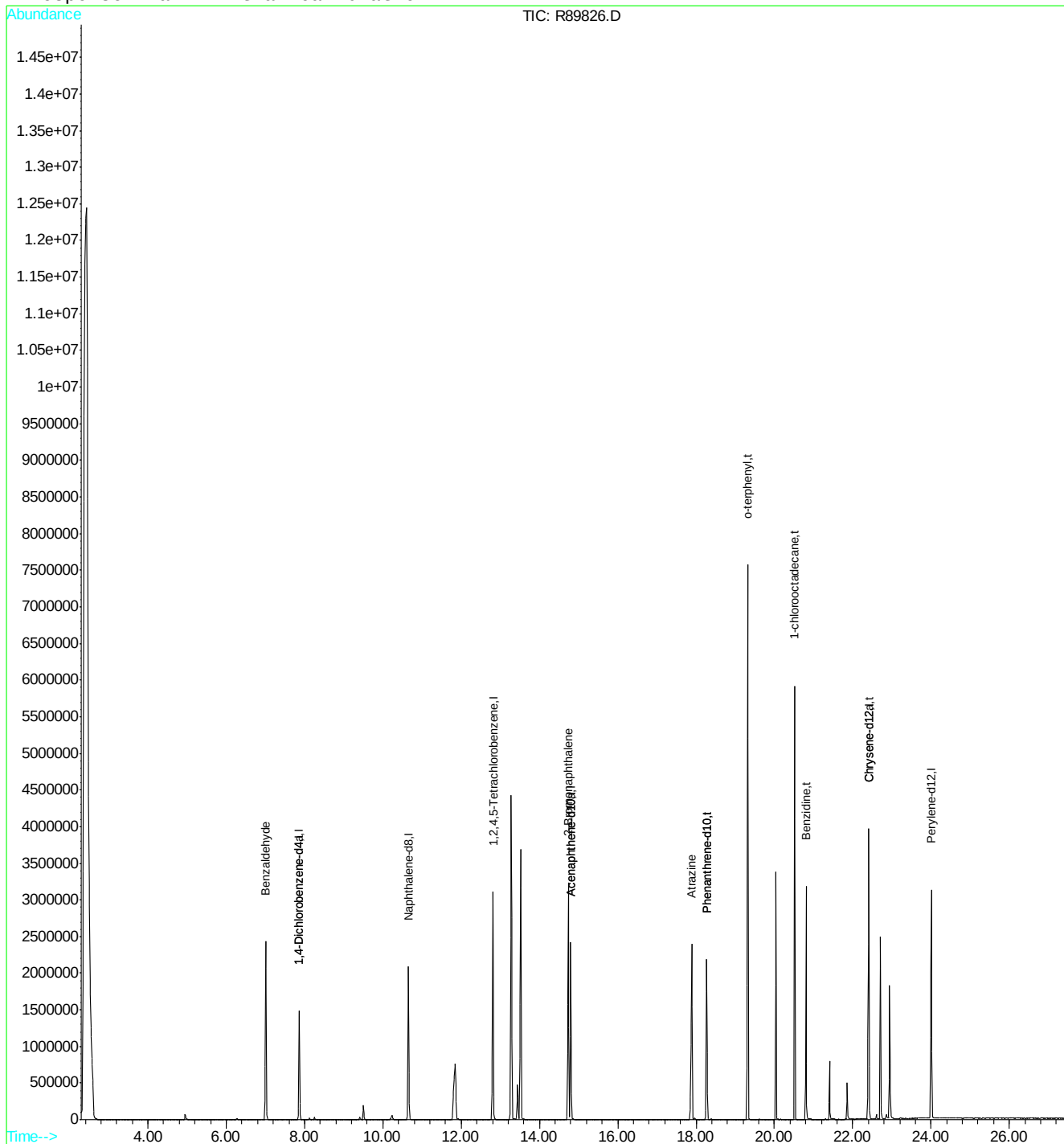
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3455\R89826.D
Acq On : 16 Sep 2011 11:14 am
Sample : ic3455-80
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 16 15:04 2011

Vial: 3
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Sep 16 15:03:07 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3455\R89827.D

Vial: 4

Acq On : 16 Sep 2011 11:50 am

Operator: larisap

Sample : icc3455-50

Inst : MSR

Misc : op51699,er3455,

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 16 15:05 2011

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Fri Sep 16 15:03:07 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.86	152	425107	40.00	ppb	-0.01
24) Naphthalene-d8	10.65	136	1625736	40.00	ppb	-0.01
47) Acenaphthene-d10	14.80	164	942399	40.00	ppb	0.00
69) Phenanthrene-d10	18.27	188	1492346	40.00	ppb	-0.01
83) Chrysene-d12	22.41	240	1573100	40.00	ppb	-0.01
92) Perylene-d12	24.00	264	1496254	40.00	ppb	-0.02
102) 1,4-Dichlorobenzene-d4a	7.86	152	425107	40.00	ppb	-0.01
104) Acenaphthene-d10a	14.80	164	942399	40.00	ppb	0.00
108) Phenanthrene-d10	18.27	188	1492346	40.00	ppb	-0.02
110) Chrysene-d12a	22.41	240	1573100	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.00	105	487847	49.00	ppb	94
105) 1,2,4,5-Tetrachlorobenzene	12.81	216	617055	50.24	ppb	100
106) 2-Bromonaphthalene	14.74	127	650185	50.18	ppb	# 100
107) Atrazine	17.89	215	212888	49.83	ppb	# 78
109) o-terphenyl	19.31	230	1110758	52.17	ppb	# 47
111) Benzidine	20.80	184	1083864	53.75	ppb	96
112) 1-chlorooctadecane	20.52	57	588021	53.53	ppb	# 6

(#) = qualifier out of range (m) = manual integration

R89827.D MR3454.M

Fri Sep 16 15:05:16 2011

NJMSR

Page 1

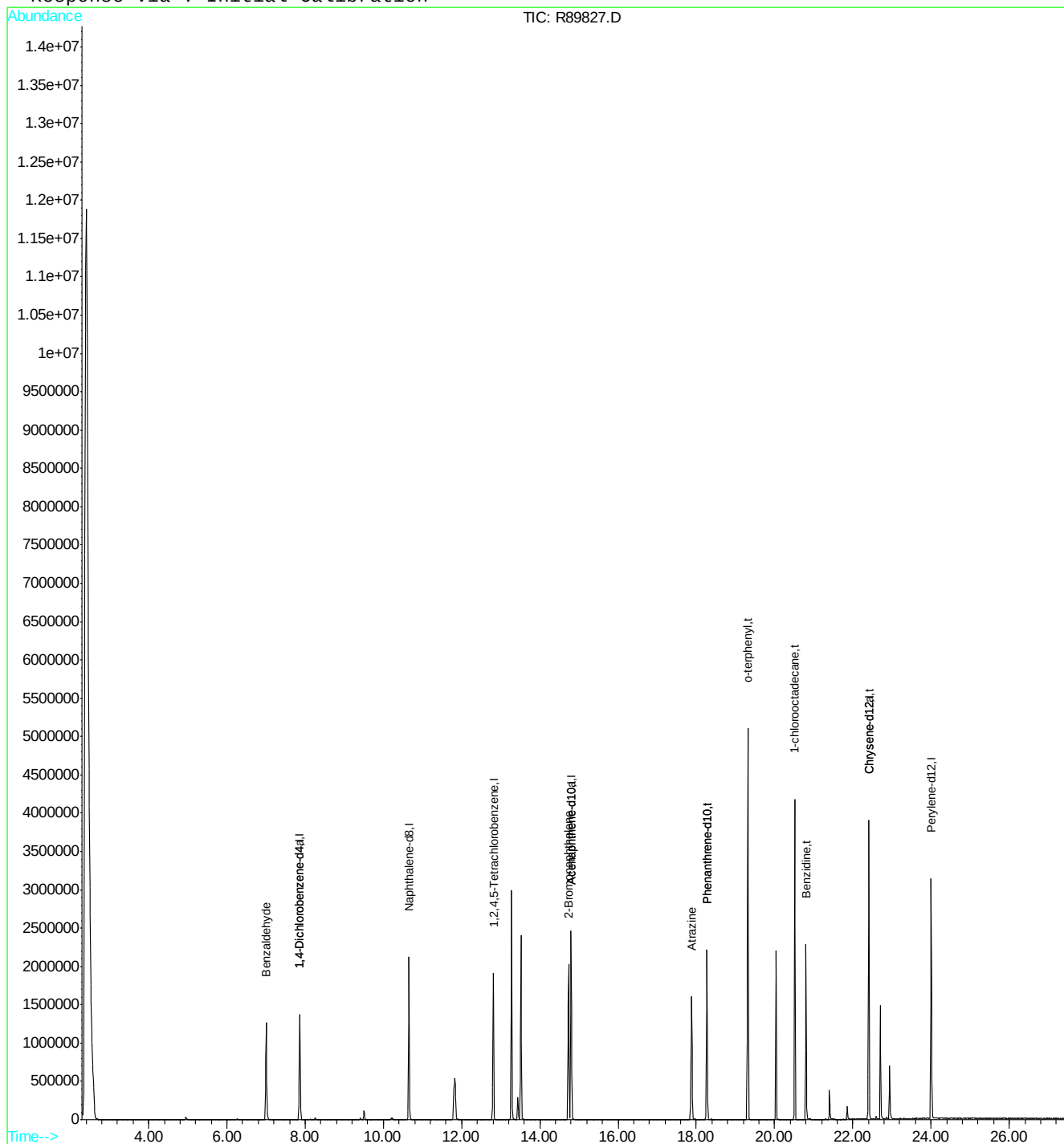
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3455\R89827.D
Acq On : 16 Sep 2011 11:50 am
Sample : icc3455-50
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 16 15:05 2011

Vial: 4
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Sep 16 15:03:07 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3455\R89828.D

Vial: 5

Acq On : 16 Sep 2011 12:26 pm

Operator: larisap

Sample : ic3455-25

Inst : MSR

Misc : op51699,er3455,

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 16 15:05 2011

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Fri Sep 16 15:03:07 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.86	152	426303	40.00	ppb	-0.01
24) Naphthalene-d8	10.66	136	1651868	40.00	ppb	-0.01
47) Acenaphthene-d10	14.80	164	947765	40.00	ppb	0.00
69) Phenanthrene-d10	18.27	188	1482026	40.00	ppb	-0.01
83) Chrysene-d12	22.41	240	1573543	40.00	ppb	-0.01
92) Perylene-d12	24.01	264	1507027	40.00	ppb	-0.02
102) 1,4-Dichlorobenzene-d4a	7.86	152	426303	40.00	ppb	0.00
104) Acenaphthene-d10a	14.80	164	947765	40.00	ppb	0.00
108) Phenanthrene-d10	18.27	188	1482026	40.00	ppb	-0.02
110) Chrysene-d12a	22.41	240	1573543	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.00	105	244792	24.52	ppb	94
105) 1,2,4,5-Tetrachlorobenzene	12.81	216	309512	25.06	ppb	99
106) 2-Bromonaphthalene	14.73	127	324278	24.89	ppb	# 100
107) Atrazine	17.87	215	103053	23.99	ppb	# 81
109) o-terphenyl	19.32	230	576162	27.25	ppb	# 48
111) Benzidine	20.80	184	576955	28.60	ppb	98
112) 1-chlorooctadecane	20.51	57	300027	27.31	ppb	# 5

(#) = qualifier out of range (m) = manual integration

R89828.D MR3454.M

Fri Sep 16 15:05:56 2011

NJMSR

Page 1

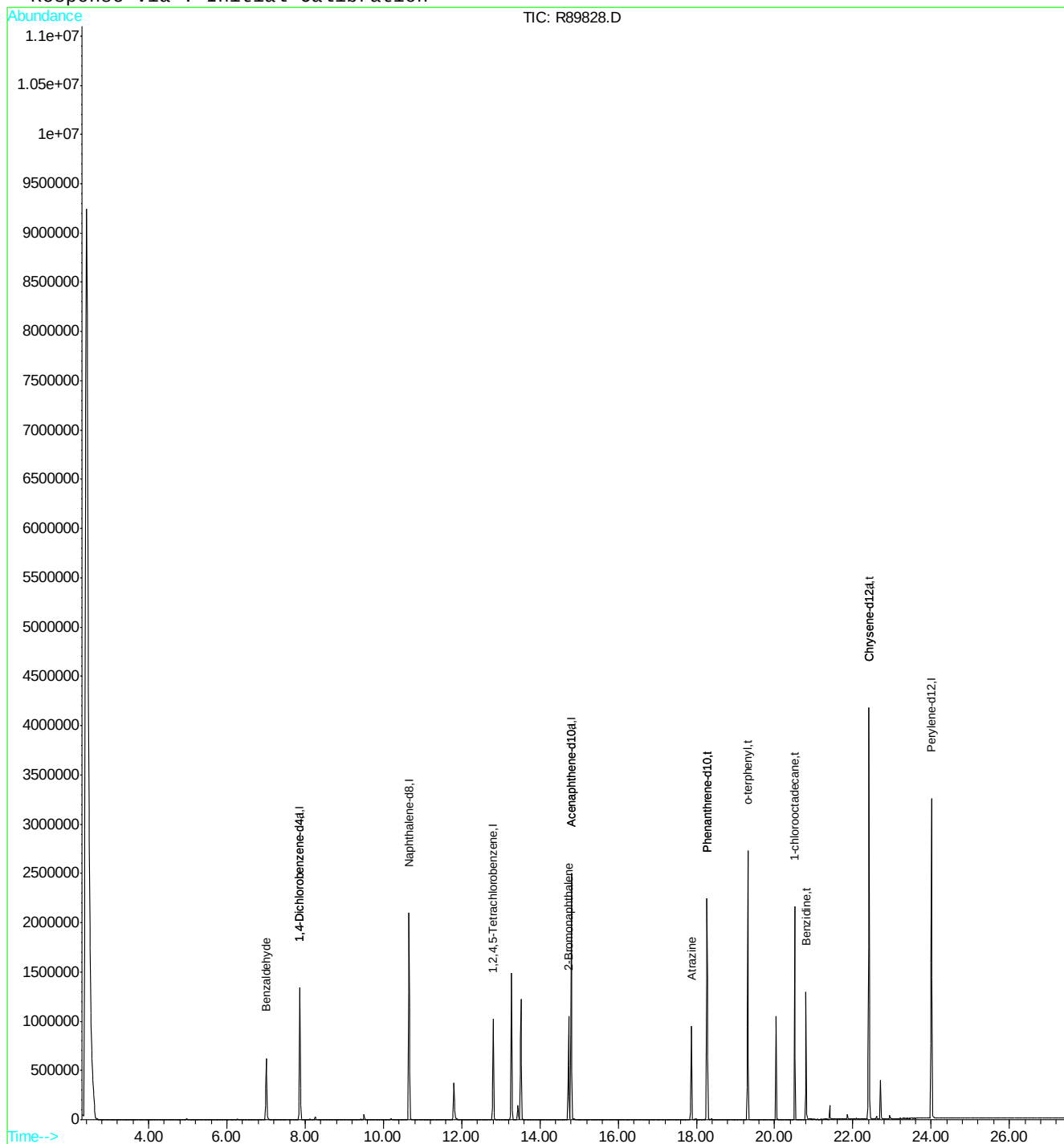
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3455\R89828.D
Acq On : 16 Sep 2011 12:26 pm
Sample : ic3455-25
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 16 15:05 2011

Vial: 5
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Sep 16 15:03:07 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3455\R89829.D

Vial: 6

Acq On : 16 Sep 2011 12:59 pm

Operator: larisap

Sample : ic3455-10

Inst : MSR

Misc : op51699,er3455,

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 16 15:28 2011

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Fri Sep 16 15:26:49 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.87	152	430699	40.00	ppb	0.00
24) Naphthalene-d8	10.65	136	1665744	40.00	ppb	-0.01
47) Acenaphthene-d10	14.80	164	946257	40.00	ppb	0.00
69) Phenanthrene-d10	18.27	188	1501727	40.00	ppb	-0.01
83) Chrysene-d12	22.42	240	1592875	40.00	ppb	0.00
92) Perylene-d12	24.01	264	1505769	40.00	ppb	-0.01
102) 1,4-Dichlorobenzene-d4a	7.87	152	430699	40.00	ppb	0.00
104) Acenaphthene-d10a	14.80	164	946257	40.00	ppb	0.00
108) Phenanthrene-d10	18.27	188	1501727	40.00	ppb	-0.02
110) Chrysene-d12a	22.42	240	1592875	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.01	105	105110	10.96	ppb	99
105) 1,2,4,5-Tetrachlorobenzene	12.81	216	131616	10.81	ppb	99
106) 2-Bromonaphthalene	14.73	127	137164	10.92	ppb	100
107) Atrazine	17.87	215	42818	10.87	ppb	97
109) o-terphenyl	19.31	230	244265	11.15	ppb	97
111) Benzidine	20.80	184	82272	7.94	ppb	95
112) 1-chlorooctadecane	20.51	57	124469	11.20	ppb	97

(#) = qualifier out of range (m) = manual integration

R89829.D MR3454.M

Fri Sep 16 15:28:08 2011

NJMSR

Page 1

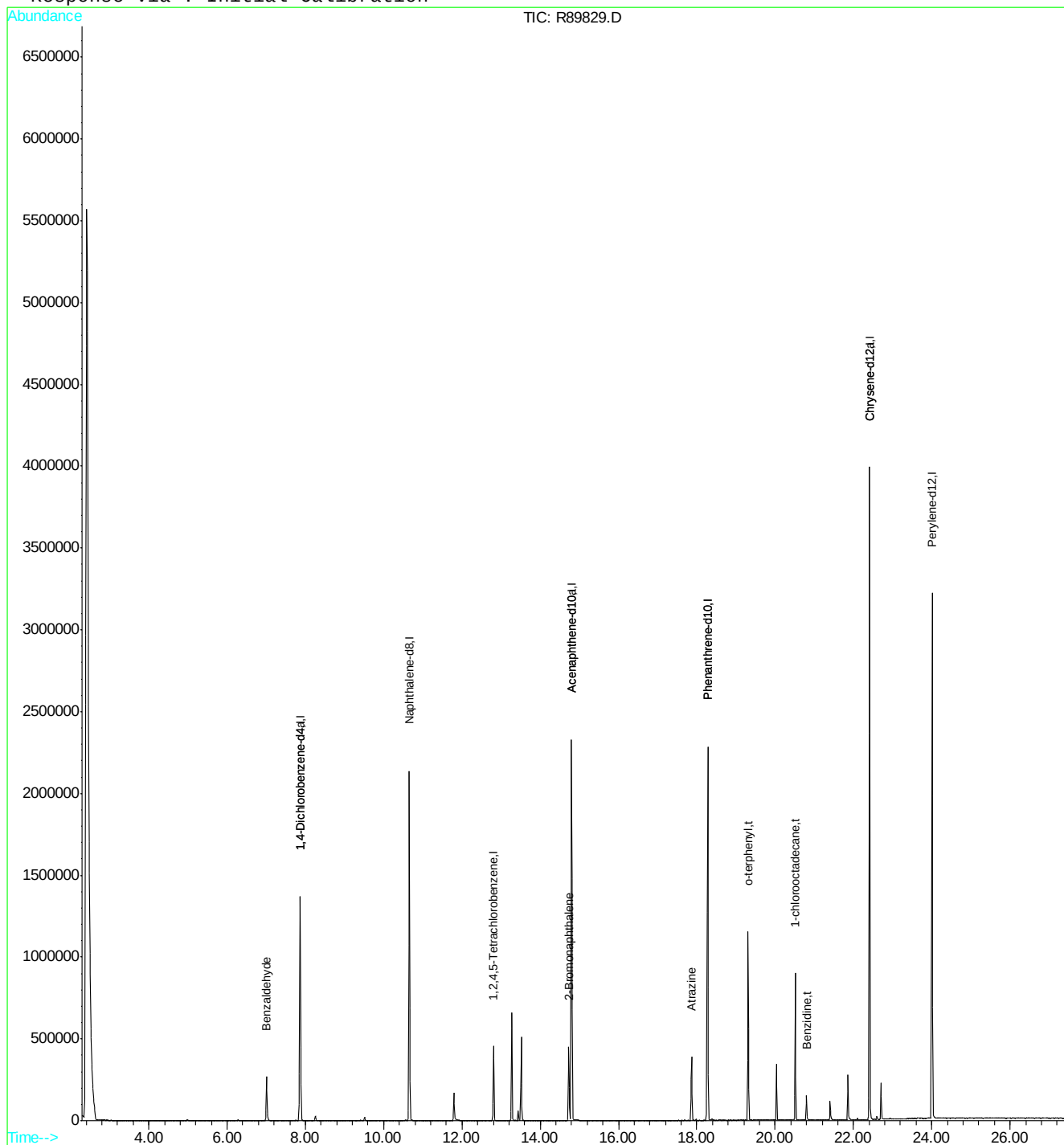
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3455\R89829.D
Acq On : 16 Sep 2011 12:59 pm
Sample : ic3455-10
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 16 15:28 2011

Vial: 6
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Sep 16 15:26:49 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3455\R89830.D

Vial: 7

Acq On : 16 Sep 2011 1:36 pm

Operator: larisap

Sample : ic3455-5

Inst : MSR

Misc : op51699,er3455,

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 19 9:25 2011

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Mon Sep 19 09:25:01 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.87	152	443273	40.00	ppb	0.00
24) Naphthalene-d8	10.66	136	1704153	40.00	ppb	0.00
47) Acenaphthene-d10	14.80	164	961414	40.00	ppb	0.00
69) Phenanthrene-d10	18.27	188	1532544	40.00	ppb	0.00
83) Chrysene-d12	22.41	240	1594720	40.00	ppb	0.00
92) Perylene-d12	24.01	264	1539652	40.00	ppb	-0.02
102) 1,4-Dichlorobenzene-d4a	7.87	152	443273	40.00	ppb	0.00
104) Acenaphthene-d10a	14.80	164	961414	40.00	ppb	0.00
108) Phenanthrene-d10a	18.27	188	1532544	40.00	ppb	-0.02
110) Chrysene-d12a	22.41	240	1594720	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.01	105	47975	4.83	ppb	97
105) 1,2,4,5-Tetrachlorobenzene	12.81	216	61279	4.93	ppb	100
106) 2-Bromonaphthalene	14.73	127	62500	4.87	ppb	98
107) Atrazine	17.86	215	17923	4.46	ppb	97
109) o-terphenyl	19.31	230	111163	4.95	ppb	97
111) Benzidine	20.80	184	19077	5.23	ppb	93
112) 1-chlorooctadecane	20.51	57	53279	4.76	ppb	96

(#) = qualifier out of range (m) = manual integration

R89830.D MR3454.M

Mon Sep 19 09:30:05 2011

NJMSR

Page 1

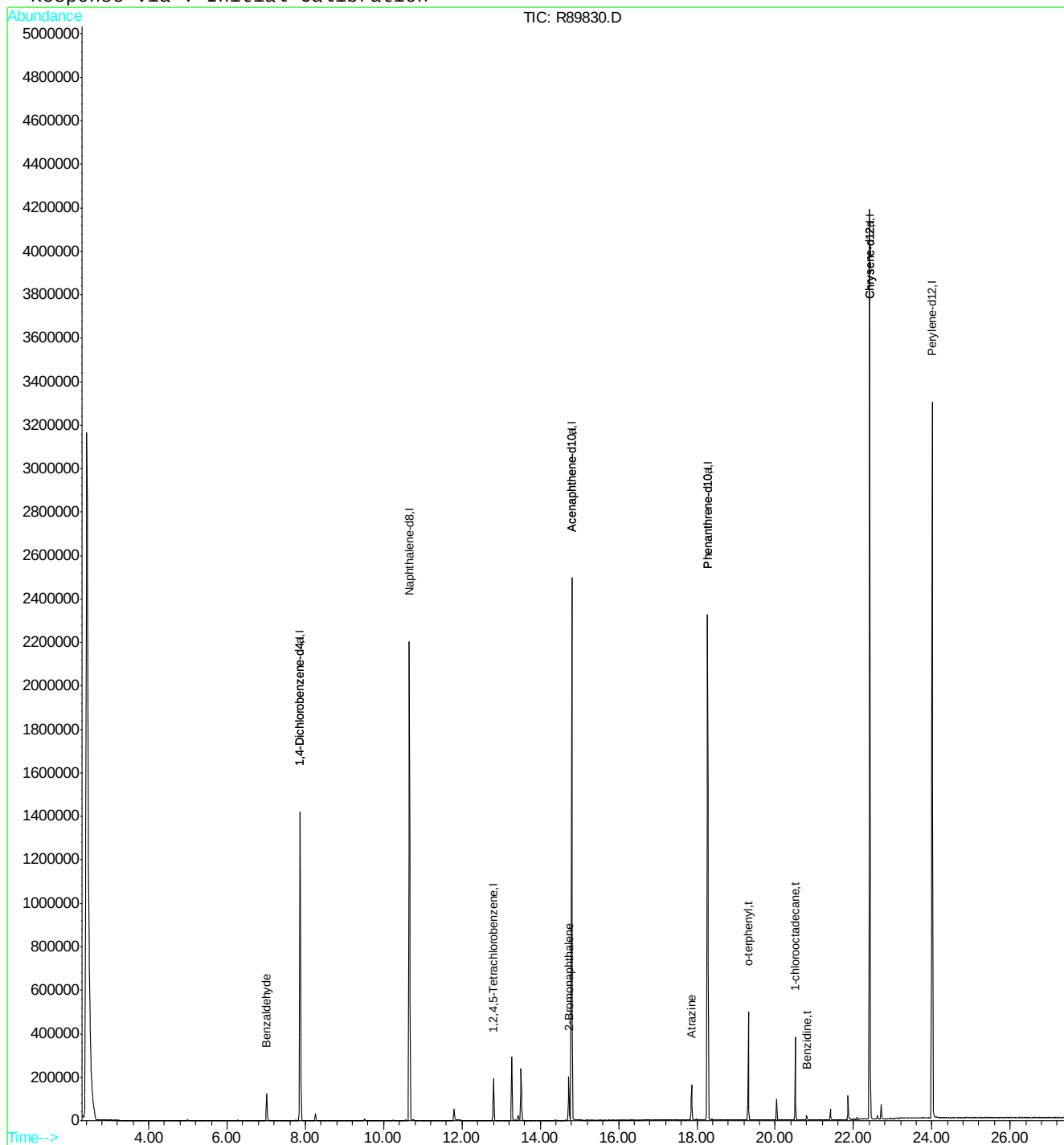
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3455\R89830.D
Acq On : 16 Sep 2011 1:36 pm
Sample : ic3455-5
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 19 9:25 2011

Vial: 7
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Mon Sep 19 09:28:04 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3455\R89831.D

Vial: 8

Acq On : 16 Sep 2011 2:12 pm

Operator: larisap

Sample : ic3455-2

Inst : MSR

Misc : op51699,er3455,

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Sep 16 15:08 2011

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Fri Sep 16 15:03:07 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.87	152	429055	40.00	ppb	0.00
24) Naphthalene-d8	10.66	136	1663547	40.00	ppb	0.00
47) Acenaphthene-d10	14.80	164	935017	40.00	ppb	0.00
69) Phenanthrene-d10	18.28	188	1479726	40.00	ppb	0.00
83) Chrysene-d12	22.42	240	1562600	40.00	ppb	0.00
92) Perylene-d12	24.01	264	1515733	40.00	ppb	-0.01
102) 1,4-Dichlorobenzene-d4a	7.87	152	429055	40.00	ppb	0.00
104) Acenaphthene-d10a	14.80	164	935017	40.00	ppb	0.00
108) Phenanthrene-d10	18.28	188	1479726	40.00	ppb	-0.01
110) Chrysene-d12a	22.42	240	1562600	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.01	105	16983	1.69	ppb	91
105) 1,2,4,5-Tetrachlorobenzene	12.81	216	22829	1.87	ppb	99
106) 2-Bromonaphthalene	14.73	127	23241	1.81	ppb	# 100
107) Atrazine	17.86	215	5562	1.31	ppb	# 71
109) o-terphenyl	19.31	230	40381	1.91	ppb	# 52
112) 1-chlorooctadecane	20.51	57	16101	1.48	ppb	# 1

(#) = qualifier out of range (m) = manual integration

R89831.D MR3454.M

Fri Sep 16 15:08:50 2011

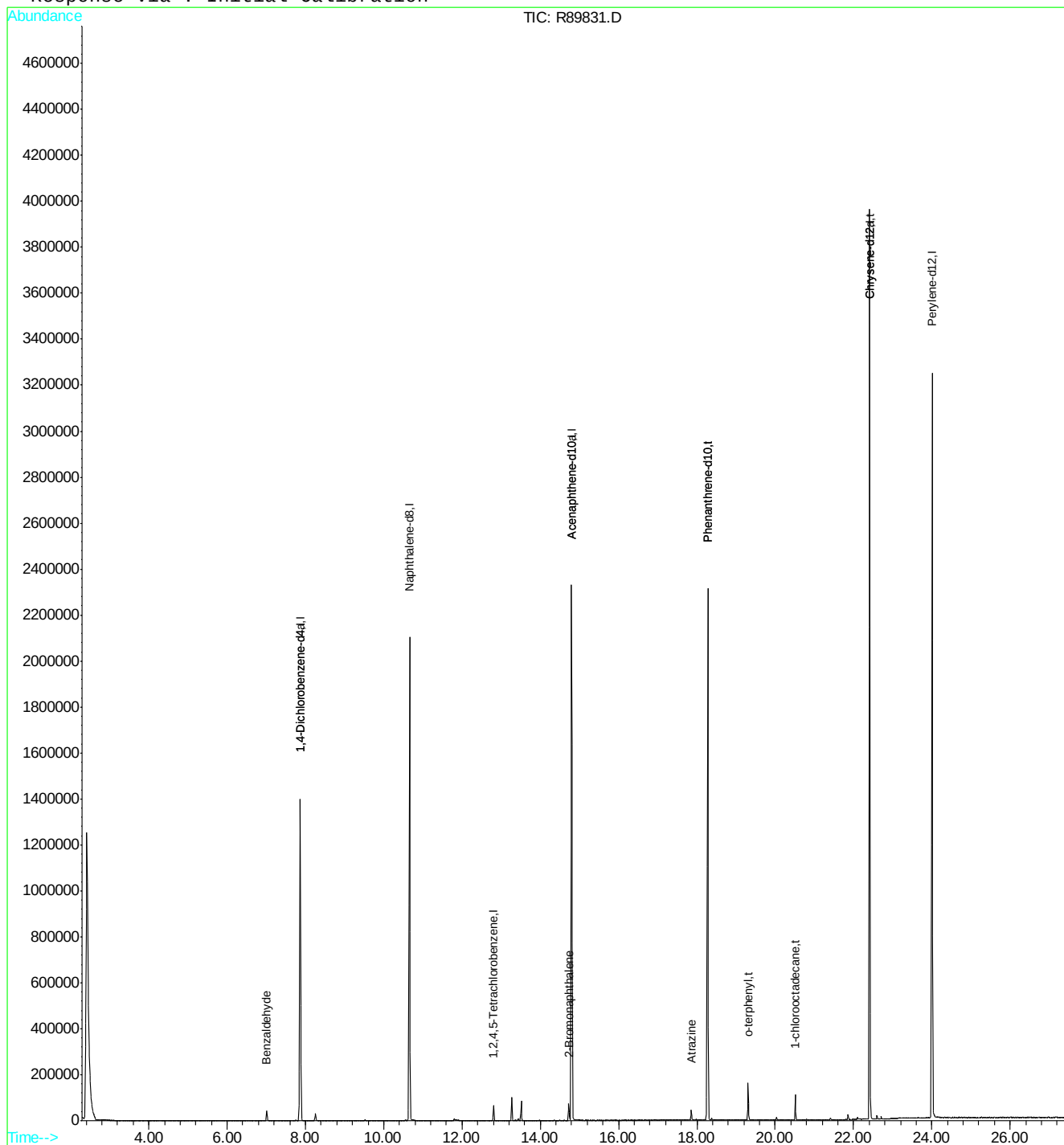
NJMSR

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3455\R89831.D Vial: 8
Acq On : 16 Sep 2011 2:12 pm Operator: larisap
Sample : ic3455-2 Inst : MSR
Misc : op51699,er3455, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 16 15:08 2011 Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Sep 16 15:03:07 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3455\R89832.D Vial: 9
 Acq On : 16 Sep 2011 2:51 pm Operator: larisap
 Sample : ic3455-1 Inst : MSR
 Misc : op51699,er3455, Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Sep 16 15:19 2011 Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Fri Sep 16 15:18:39 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.87	152	421742	40.00	ppb	0.00
24) Naphthalene-d8	10.65	136	1638239	40.00	ppb	-0.01
47) Acenaphthene-d10	14.80	164	917632	40.00	ppb	0.00
69) Phenanthrene-d10	18.27	188	1455242	40.00	ppb	-0.01
83) Chrysene-d12	22.42	240	1514164	40.00	ppb	0.00
92) Perylene-d12	24.01	264	1471519	40.00	ppb	-0.01
102) 1,4-Dichlorobenzene-d4a	7.87	152	421742	40.00	ppb	0.00
104) Acenaphthene-d10a	14.80	164	917632	40.00	ppb	0.00
108) Phenanthrene-d10	18.27	188	1455242	40.00	ppb	-0.02
110) Chrysene-d12a	22.42	240	1514164	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.02	105	8233	0.86	ppb	97
105) 1,2,4,5-Tetrachlorobenzene	12.81	216	10896	0.91	ppb	95
106) 2-Bromonaphthalene	14.73	127	10424	0.84	ppb	96
107) Atrazine	17.86	215	2350	0.62	ppb	96
109) o-terphenyl	19.31	230	18993	0.88	ppb	99
112) 1-chlorooctadecane	20.51	57	5943	0.56	ppb	96

(#) = qualifier out of range (m) = manual integration

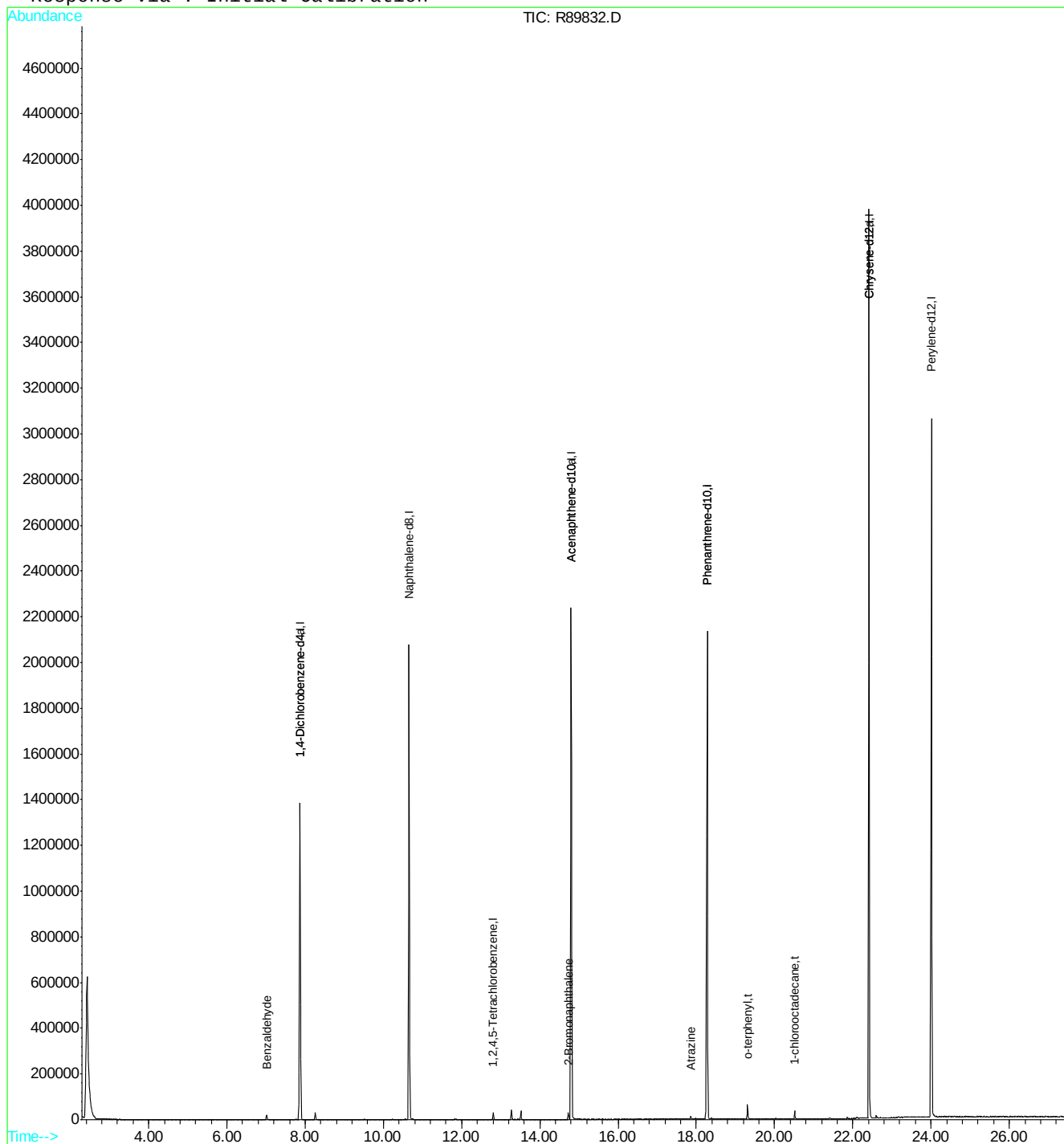
R89832.D MR3454.M Fri Sep 16 15:19:22 2011 NJMSR

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3455\R89832.D Vial: 9
Acq On : 16 Sep 2011 2:51 pm Operator: larisap
Sample : ic3455-1 Inst : MSR
Misc : op51699,er3455, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Sep 16 15:19 2011 Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Sep 16 15:18:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\R89833A.D
 Acq On : 16 Sep 2011 3:35 pm
 Sample : icv3455-50
 Misc : op51699,er3455,
 MS Integration Params: RTEINT.P
 Quant Time: Sep 19 9:44 2011

Vial: 10
 Operator: larisap
 Inst : MSR
 Multiplr: 1.00

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Mon Sep 19 09:28:04 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.86	152	414320	40.00	ppb	0.00
24) Naphthalene-d8	10.66	136	1601089	40.00	ppb	0.00
47) Acenaphthene-d10	14.81	164	891068	40.00	ppb	0.00
69) Phenanthrene-d10	18.28	188	1433772	40.00	ppb	0.00
83) Chrysene-d12	22.42	240	1561899	40.00	ppb	0.00
92) Perylene-d12	24.01	264	1467622	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.86	152	414320	40.00	ppb	0.00
104) Acenaphthene-d10a	14.81	164	891068	40.00	ppb	0.00
108) Phenanthrene-d10a	18.28	188	1433772	40.00	ppb	0.00
110) Chrysene-d12a	22.42	240	1561899	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

105) 1,2,4,5-Tetrachlorobenzene	12.82	216	556749	48.55	ppb	Qvalue 99

(#) = qualifier out of range (m) = manual integration

R89833A.D MR3454.M Mon Sep 19 09:44:19 2011 NJMSR

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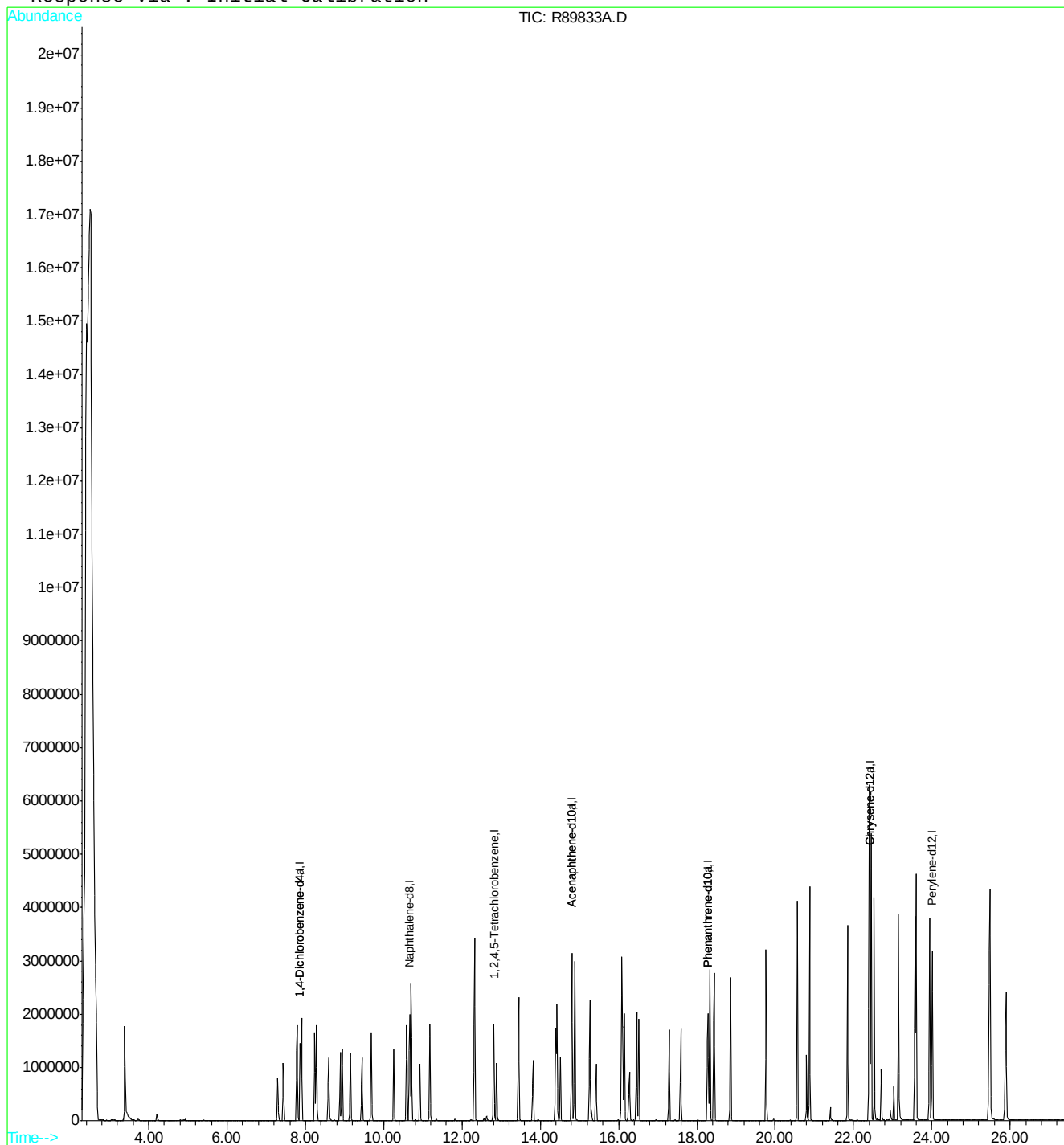
Quantitation Report

Data File : C:_RESTORE\R89833A.D
Acq On : 16 Sep 2011 3:35 pm
Sample : icv3455-50
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 19 9:44 2011

Vial: 10
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Mon Sep 19 09:28:04 2011
Response via : Initial Calibration



R89833A.D MR3454.M

Mon Sep 19 09:44:20 2011

NJMSR

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Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\R89834A.D
 Acq On : 16 Sep 2011 4:11 pm
 Sample : icv3455-50
 Misc : op51699,er3455,
 MS Integration Params: RTEINT.P
 Quant Time: Sep 19 9:45 2011

Vial: 11
 Operator: larisap
 Inst : MSR
 Multiplr: 1.00

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Mon Sep 19 09:28:04 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.86	152	370811	40.00	ppb	-0.01
24) Naphthalene-d8	10.65	136	1397630	40.00	ppb	-0.01
47) Acenaphthene-d10	14.80	164	798387	40.00	ppb	0.00
69) Phenanthrene-d10	18.27	188	1257753	40.00	ppb	-0.01
83) Chrysene-d12	22.41	240	1299746	40.00	ppb	-0.01
92) Perylene-d12	24.00	264	1215551	40.00	ppb	-0.02
102) 1,4-Dichlorobenzene-d4a	7.86	152	370811	40.00	ppb	-0.01
104) Acenaphthene-d10a	14.80	164	798387	40.00	ppb	0.00
108) Phenanthrene-d10a	18.27	188	1257753	40.00	ppb	-0.02
110) Chrysene-d12a	22.41	240	1299746	40.00	ppb	-0.01

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	7.00	105	502894	60.92	ppb	99
107) Atrazine	17.88	215	187243	56.35	ppb	99

(#) = qualifier out of range (m) = manual integration

R89834A.D MR3454.M Mon Sep 19 09:45:11 2011 NJMSR

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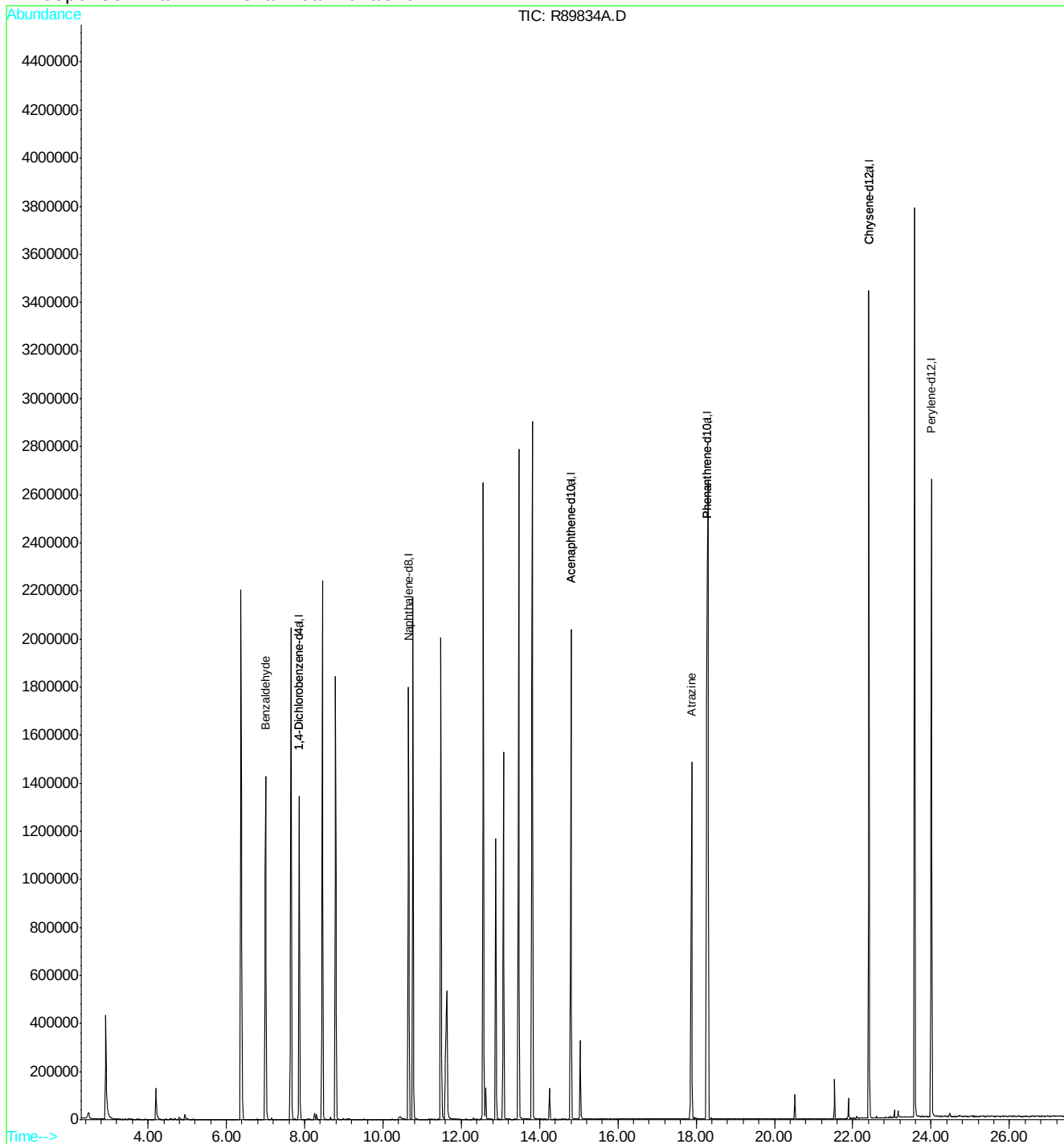
Quantitation Report

Data File : C:_RESTORE\R89834A.D
Acq On : 16 Sep 2011 4:11 pm
Sample : icv3455-50
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 19 9:45 2011

Vial: 11
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Mon Sep 19 09:28:04 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\R89837A.D
 Acq On : 16 Sep 2011 6:05 pm
 Sample : icv3455-50
 Misc : op51699,er3455,
 MS Integration Params: RTEINT.P
 Quant Time: Sep 19 9:39 2011

Vial: 14
 Operator: larisap
 Inst : MSR
 Multiplr: 1.00

Quant Results File: MR3454.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Mon Sep 19 09:28:04 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.87	152	580417	40.00	ppb	0.00
24) Naphthalene-d8	10.66	136	2082746	40.00	ppb	0.00
47) Acenaphthene-d10	14.81	164	1177531	40.00	ppb	0.00
69) Phenanthrene-d10	18.28	188	1913101	40.00	ppb	0.00
83) Chrysene-d12	22.42	240	2124764	40.00	ppb	0.00
92) Perylene-d12	24.01	264	1985172	40.00	ppb	-0.01
102) 1,4-Dichlorobenzene-d4a	7.87	152	580417	40.00	ppb	0.00
104) Acenaphthene-d10a	14.81	164	1177531	40.00	ppb	0.00
108) Phenanthrene-d10a	18.28	188	1913101	40.00	ppb	-0.01
110) Chrysene-d12a	22.42	240	2124764	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0d	0.00	ppb	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

111) Benzidine	20.81	184	1832424	64.69	ppb	Qvalue 98

(#) = qualifier out of range (m) = manual integration

R89837A.D MR3454.M Mon Sep 19 09:39:20 2011 NJMSR

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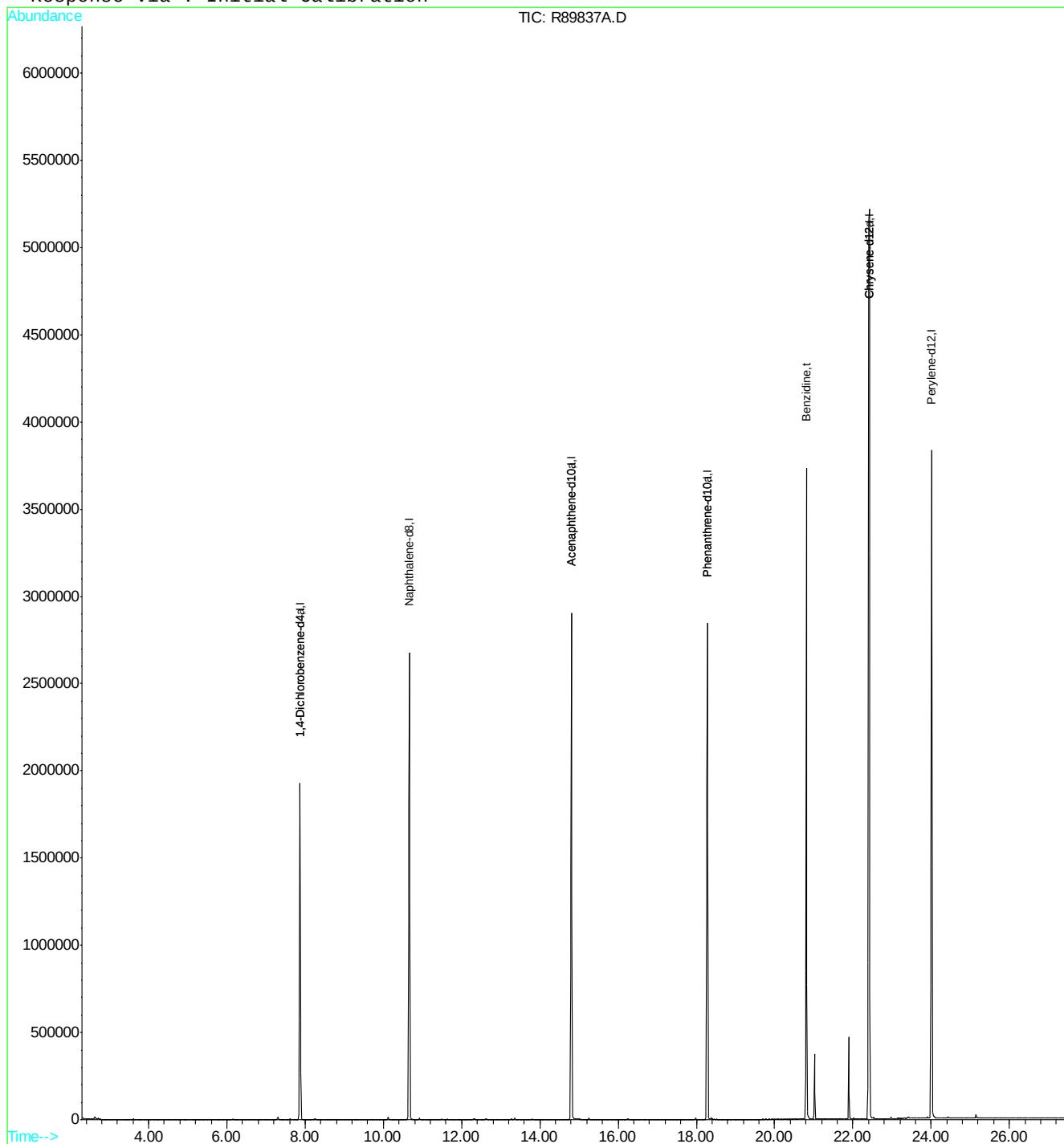
Quantitation Report

Data File : C:_RESTORE\R89837A.D
Acq On : 16 Sep 2011 6:05 pm
Sample : icv3455-50
Misc : op51699,er3455,
MS Integration Params: RTEINT.P
Quant Time: Sep 19 9:39 2011

Vial: 14
Operator: larisap
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3454.RES

Method : C:\HPCHEM\1\METHODS\MR3454.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Mon Sep 19 09:28:04 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90736.D

Vial: 2

Acq On : 20 Dec 2011 2:05 pm

Operator: rachelg

Sample : icc3499-25

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 9:51 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 08:45:47 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	435161	40.00	ppb	0.00
24) Naphthalene-d8	10.31	136	1458286	40.00	ppb	0.00
47) Acenaphthene-d10	14.43	164	849992	40.00	ppb	0.00
69) Phenanthrene-d10	17.89	188	1305546	40.00	ppb	0.00
83) Chrysene-d12	22.19	240	1140021	40.00	ppb	0.00
92) Perylene-d12	23.73	264	1078342	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.55	152	435161	40.00	ppb	0.00
104) Acenaphthene-d10a	14.43	164	849992	40.00	ppb	0.00
107) Chrysene-d12a	22.19	240	1140021	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	5.29	112	408359	25.82	ppb	0.00
Spiked Amount	50.000		Recovery	=	51.64%	
8) Phenol-d5	7.05	99	440297	24.58	ppb	0.00
Spiked Amount	50.000		Recovery	=	49.16%	
25) Nitrobenzene-d5	8.78	82	370972	24.85	ppb	0.00
Spiked Amount	50.000		Recovery	=	49.70%	
51) 2-Fluorobiphenyl	12.92	172	716443	21.81	ppb	0.00
Spiked Amount	50.000		Recovery	=	43.62%	
73) 2,4,6-Tribromophenol	16.33	330	109179	25.00	ppb	0.00
Spiked Amount	50.000		Recovery	=	50.00%	
86) Terphenyl-d14	20.92	244	694063	25.00	ppb	0.00
Spiked Amount	50.000		Recovery	=	50.00%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.81	88	167610m	20.95	ppb	
3) Pyridine	3.25	79	393604	23.31	ppb	100
4) N-Nitrosodimethylamine	3.25	42	197145	22.87	ppb	100
6) Indene	8.13	116	652948	22.24	ppb	100
7) Cumene	6.09	105	966133	21.63	ppb	100
9) Phenol	7.08	94	463471	25.00	ppb	100
10) Aniline	7.00	93	454756	20.12	ppb	100
11) bis(2-Chloroethyl)ether	7.14	93	327270	21.25	ppb	100
12) 2-Chlorophenol	7.22	128	395981	22.73	ppb	100
13) Decane	7.35	43	419882	20.59	ppb	100
14) 1,3-Dichlorobenzene	7.47	146	459846	21.48	ppb	100
15) 1,4-Dichlorobenzene	7.58	146	457843	21.69	ppb	100
16) Benzyl alcohol	7.94	108	241563	30.38	ppb	100
17) 1,2-Dichlorobenzene	7.96	146	417967	21.16	ppb	100
18) Acetophenone	8.48	105	493512	23.31	ppb	100
19) 2-Methylphenol	8.29	108	330032	21.97	ppb	100
20) 2,2'-oxybis(1-Chloropropan	8.27	121	123245	22.28	ppb	100
21) 3&4-Methylphenol	8.61	108	337229	26.94	ppb	100
22) n-Nitroso-di-n-propylamine	8.57	70	210697	22.31	ppb	100
23) Hexachloroethane	8.60	201	142849	20.77	ppb	100
26) Nitrobenzene	8.82	77	362101	23.15	ppb	100
27) Quinoline	11.15	129	677162	22.97	ppb	100
28) Isophorone	9.35	82	616535	22.74	ppb	100
29) 2-Nitrophenol	9.53	139	212146	25.37	ppb	100
30) 2,4-Dimethylphenol	9.75	107	324658	23.41	ppb	100

(#)=qualifier out of range (m)=manual integration

R90736.D MR3499.M

Wed Dec 21 13:51:55 2011

NJMSR

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90736.D

Vial: 2

Acq On : 20 Dec 2011 2:05 pm

Operator: rachelg

Sample : icc3499-25

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 9:51 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 08:45:47 2011

Response via : Initial Calibration

DataAcq Meth : MR3454

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.15	105	222931	25.00	ppb	100
32) bis(2-Chloroethoxy)methane	9.93	93	368752	23.07	ppb	100
33) 2,4-Dichlorophenol	10.10	162	307147	25.34	ppb	100
34) 2,6-Dichlorophenol	10.60	162	298077	23.00	ppb	100
35) 1,3,5-Trichlorobenzene	9.54	180	347590	21.23	ppb	100
36) 1,2,4-Trichlorobenzene	10.24	180	337534	22.06	ppb	100
37) 1,2,3-Trichlorobenzene	10.78	180	329090	22.59	ppb	100
38) Naphthalene	10.35	128	969520	21.24	ppb	100
39) 4-Chloroaniline	10.60	127	399977	23.37	ppb	100
40) 2,3-Dichloroaniline	12.73	161	347848	23.33	ppb	100
41) Caprolactam	11.36	55	145182	25.00	ppb	100
42) Hexachlorobutadiene	10.83	225	188041	22.54	ppb	100
43) 4-Chloro-3-methylphenol	11.86	107	311936	25.98	ppb	100
44) 2-Methylnaphthalene	11.96	142	741871	21.22	ppb	100
45) 1-Methylnaphthalene	12.20	142	677292	21.51	ppb	100
46) Dimethylnaphthalene	13.44	156	610403	21.95	ppb	100
48) Hexachlorocyclopentadiene	12.52	237	274865	50.00	ppb	100
49) 2,4,6-Trichlorophenol	12.75	196	207285	23.66	ppb	100
50) 2,4,5-Trichlorophenol	12.85	196	220896	27.25	ppb	100
52) 2-Chloronaphthalene	13.08	162	631753	21.03	ppb	100
53) Biphenyl	13.11	154	777384	20.83	ppb	100
54) 2-Nitroaniline	13.47	65	185589	29.43	ppb	100
55) Dimethylphthalate	14.05	163	693988	21.93	ppb	100
56) Acenaphthylene	14.05	152	977493	21.21	ppb	100
57) 2,6-Dinitrotoluene	14.16	165	164263	25.00	ppb	100
58) 3-Nitroaniline	14.47	138	183369	34.86	ppb	100
59) Acenaphthene	14.50	153	613716	20.86	ppb	100
60) 2,4-Dinitrophenol	14.70	184	155043	50.00	ppb	100
61) 4-Nitrophenol	15.06	109	73290	25.00	ppb	100
62) Dibenzofuran	14.89	168	870999	21.33	ppb	100
63) 2,4-Dinitrotoluene	15.07	165	228537	25.00	ppb	100
64) 2,3,4,6-Tetrachlorophenol	15.34	232	180802	25.00	ppb	100
65) Diethylphthalate	15.74	149	690565	21.00	ppb	100
66) Fluorene	15.70	166	721278	21.49	ppb	100
67) 4-Chlorophenyl-phenylether	15.78	204	321656	20.96	ppb	100
68) 4-Nitroaniline	15.94	138	182537	25.00	ppb	100
70) 4,6-Dinitro-2-methylphenol	16.02	198	127446	25.00	ppb	100
71) n-Nitrosodiphenylamine	16.09	169	511891	22.28	ppb	100
72) 1,2-Diphenylhydrazine	16.14	77	614576	21.91	ppb	100
74) 4-Bromophenyl-phenylether	16.91	248	207268	24.45	ppb	100
75) Hexachlorobenzene	17.19	284	218024	22.33	ppb	100
76) Pentachlorophenol	17.67	266	274203	50.00	ppb	100
77) Phenanthrene	17.95	178	934281	20.56	ppb	100
78) Anthracene	18.05	178	991584	21.58	ppb	100
79) Carbazole	18.51	167	936437	23.07	ppb	100
80) Di-n-butylphthalate	19.49	149	1153599	22.18	ppb	100
81) Fluoranthene	20.29	202	1033242	22.19	ppb	100
82) Octadecane	17.93	57	405229	20.95	ppb	100
84) Pyrene	20.62	202	1022610	20.63	ppb	100

(#)=qualifier out of range (m)=manual integration

R90736.D MR3499.M

Wed Dec 21 13:51:55 2011

NJMSR

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90736.D Vial: 2
 Acq On : 20 Dec 2011 2:05 pm Operator: rachelg
 Sample : icc3499-25 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 9:51 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 08:45:47 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3454

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Butyl stearate	21.68	56	312327	25.00	ppb	100
87) Butylbenzylphthalate	21.62	149	519340	22.86	ppb	100
88) Benzo[a]anthracene	22.17	228	937277	21.34	ppb	100
89) 3,3'-Dichlorobenzidine	22.18	252	300059	27.88	ppb	100
90) Chrysene	22.22	228	867466	20.80	ppb	100
91) bis(2-Ethylhexyl)phthalate	22.32	149	678092	21.80	ppb	100
93) Di-n-octylphthalate	22.93	149	1096855	25.00	ppb	100
94) Benzo[b]fluoranthene	23.31	252	1000516	21.96	ppb	100
95) Benzo[k]fluoranthene	23.34	252	781029	19.73	ppb	100
96) Benzo[a]pyrene	23.66	252	824832	22.03	ppb	100
97) Indeno[1,2,3-cd]pyrene	25.07	276	841661	28.17	ppb	100
98) Dibenz(a,h)acridine	24.75	279	643759	25.00	ppb	100
99) Dibenz[a,h]anthracene	25.08	278	685640	30.15	ppb	100
100) 7,12-Dimethylbenz(a)anthra	23.33	256	394811	25.00	ppb	100
101) Benzo[g,h,i]perylene	25.45	276	724443	26.60	ppb	100

8.6.38

8

 (#) = qualifier out of range (m) = manual integration

R90736.D MR3499.M Wed Dec 21 13:51:56 2011 NJMSR

Page 3

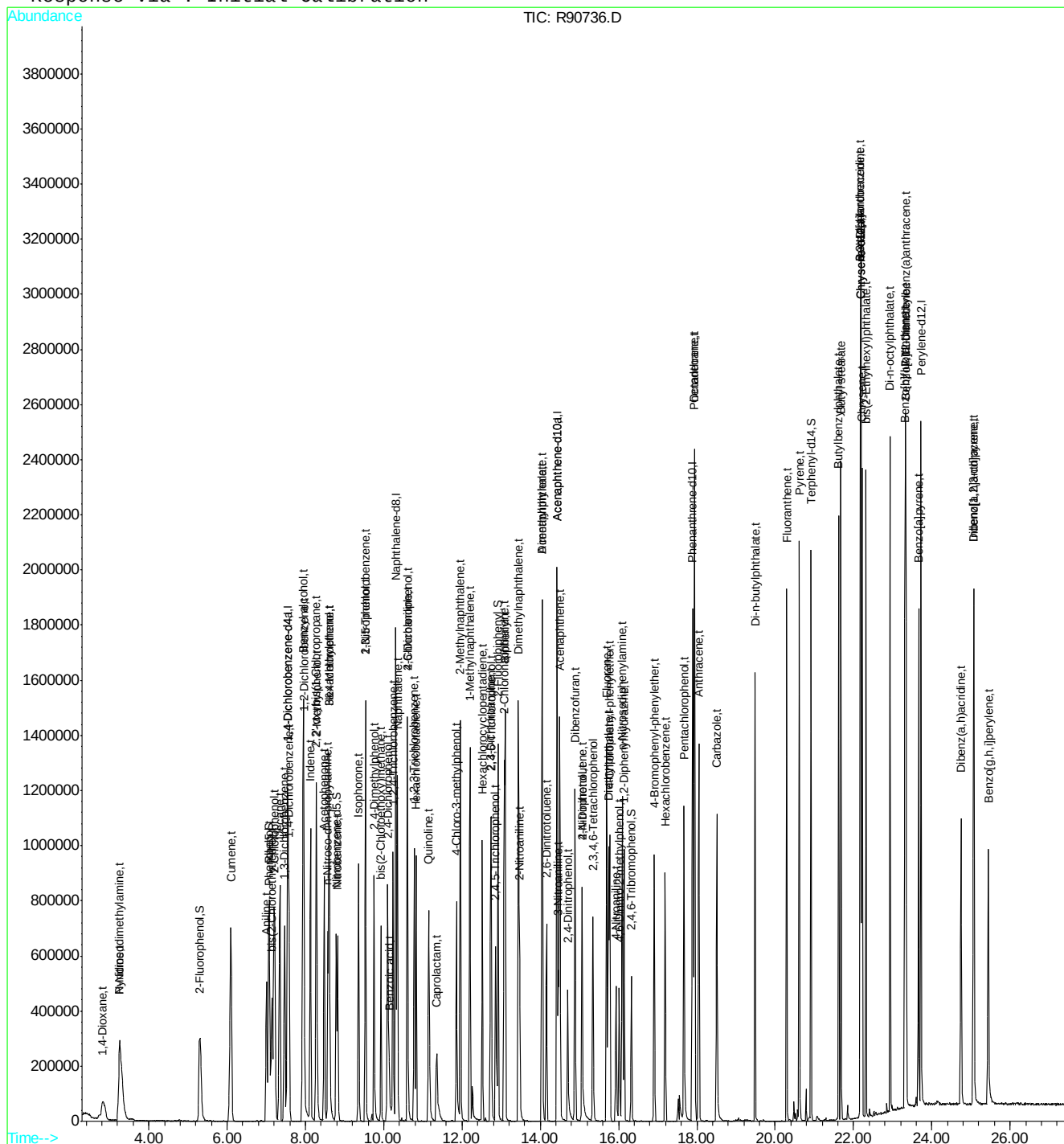
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90736.D
Acq On : 20 Dec 2011 2:05 pm
Sample : icc3499-25
Misc : op53255,er3499,1000,,,1,1
MS Integration Params: RTEINT.P
Quant Time: Dec 21 9:51 2011 0

Vial: 2
Operator: rachelg
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



R90736.D MR3499.M

Wed Dec 21 13:51:57 2011

NJMSR

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8.6.38

Manual Integration Approval Summary

Sample Number:ER3499-ICC3499

Method:SW846 8270D

Lab FileID:R90736.D

Analyst approved:12/22/11 09:53 Rachel Gregor

Injection Time:12/20/11 14:05

Supervisor approved:12/24/11 22:41 Wen Wen Chi

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.81	Poor instrument integration

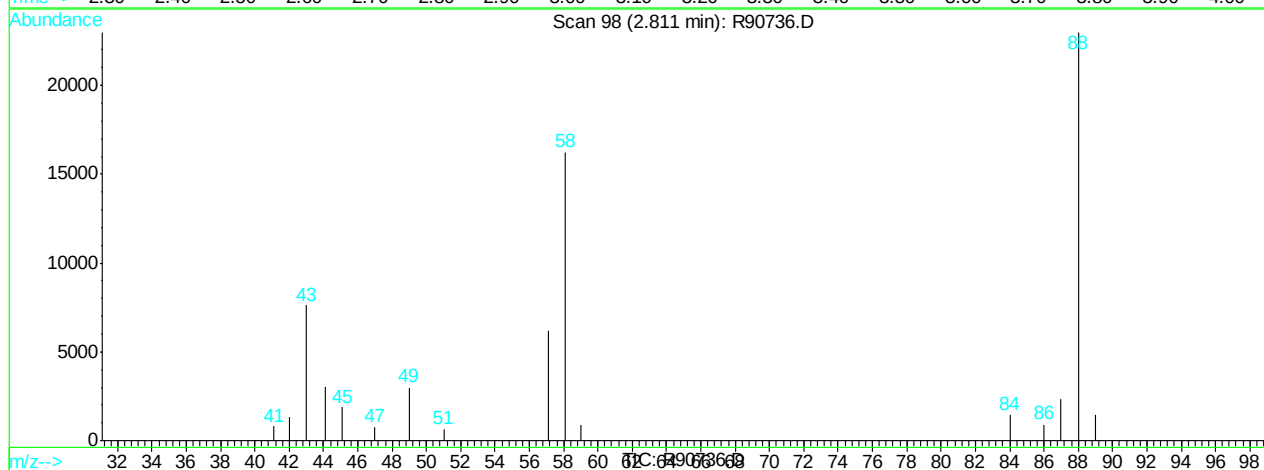
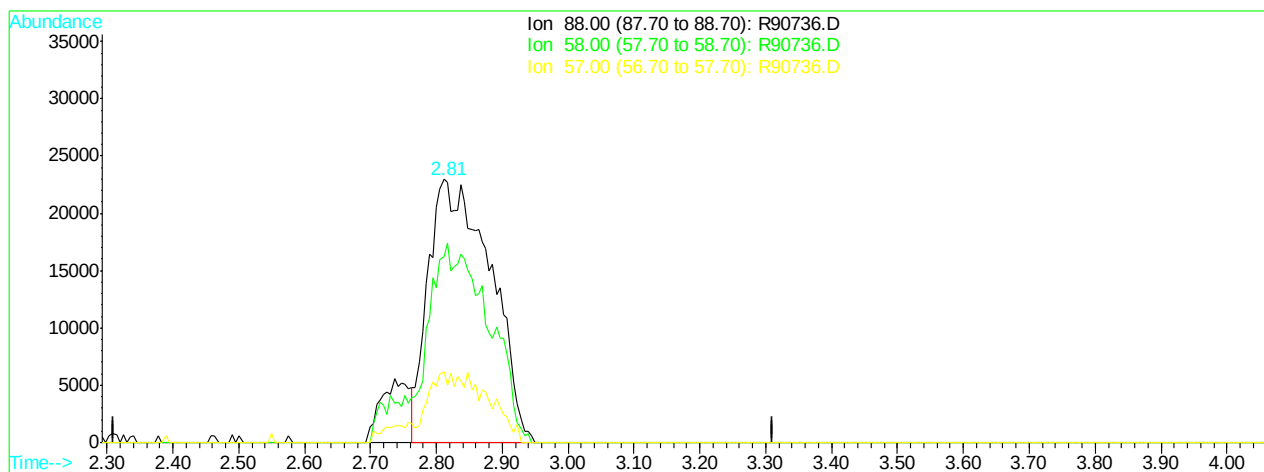
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8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90736.D Vial: 2
Acq On : 20 Dec 2011 2:05 pm Operator: rachelg
Sample : icc3499-25 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 8:46 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Dec 20 15:36:41 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.81min 18.81ppb

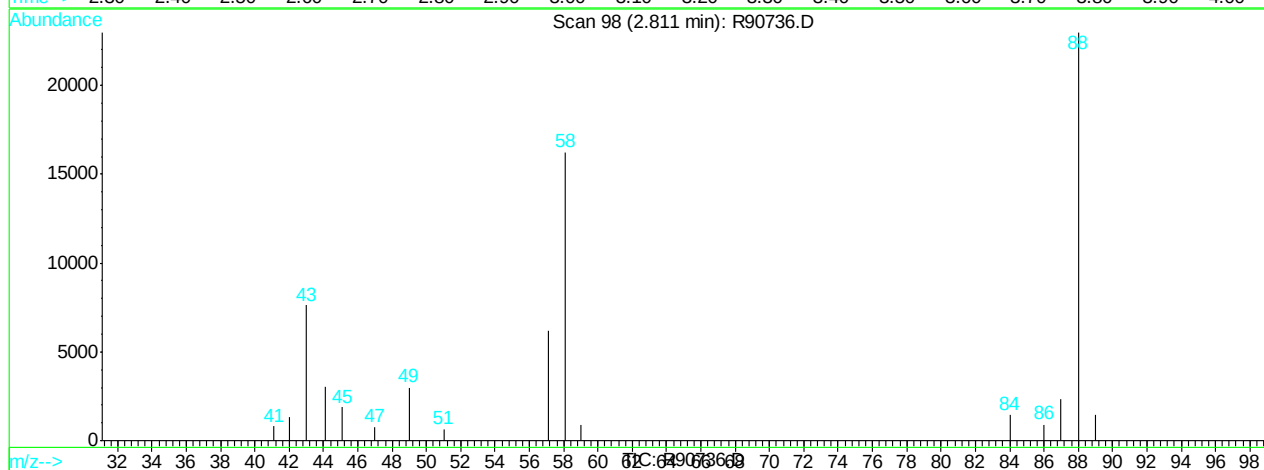
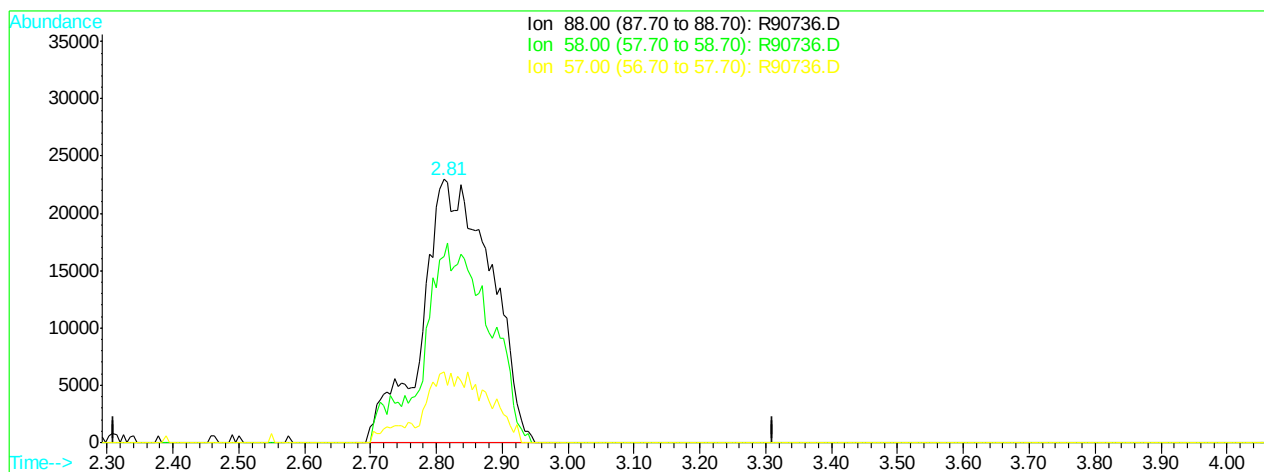
response 150548

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	69.33
57.00	26.80	25.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90736.D Vial: 2
Acq On : 20 Dec 2011 2:05 pm Operator: rachelg
Sample : icc3499-25 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 9:51 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.81min 20.95ppb m

response 167610

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	70.73
57.00	26.80	26.81
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90737.D

Vial: 3

Acq On : 20 Dec 2011 2:56 pm

Operator: rachelg

Sample : ic3499-1

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 11:55 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 11:08:17 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	419170	40.00	ppb	0.00
24) Naphthalene-d8	10.31	136	1456892	40.00	ppb	0.00
47) Acenaphthene-d10	14.43	164	809625	40.00	ppb	0.00
69) Phenanthrene-d10	17.89	188	1242787	40.00	ppb	0.00
83) Chrysene-d12	22.19	240	1066554	40.00	ppb	0.00
92) Perylene-d12	23.72	264	844873	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.55	152	419170	40.00	ppb	0.00
104) Acenaphthene-d10a	14.43	164	809625	40.00	ppb	0.00
107) Chrysene-d12a	22.19	240	1066554	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	5.35	112	14734	1.08	ppb	0.03
Spiked Amount	50.000		Recovery	=	2.16%	
8) Phenol-d5	7.09	99	17545	1.13	ppb	0.03
Spiked Amount	50.000		Recovery	=	2.26%	
25) Nitrobenzene-d5	8.80	82	15000	1.14	ppb	0.01
Spiked Amount	50.000		Recovery	=	2.28%	
51) 2-Fluorobiphenyl	12.92	172	35270	1.34	ppb	0.00
Spiked Amount	50.000		Recovery	=	2.68%	
73) 2,4,6-Tribromophenol	16.33	330	4064	1.10	ppb	0.01
Spiked Amount	50.000		Recovery	=	2.20%	
86) Terphenyl-d14	20.92	244	32935	1.46	ppb	0.00
Spiked Amount	50.000		Recovery	=	2.92%	

Target Compounds

						Qvalue
6) Indene	8.13	116	31405	1.28	ppb	94
7) Cumene	6.09	105	48834	1.33	ppb	96
9) Phenol	7.11	94	20691	1.25	ppb	93
10) Aniline	7.02	93	26020	1.34	ppb	95
11) bis(2-Chloroethyl)ether	7.15	93	17054	1.34	ppb	93
12) 2-Chlorophenol	7.24	128	18301	1.24	ppb	97
13) Decane	7.34	43	23114	1.39	ppb	88
14) 1,3-Dichlorobenzene	7.47	146	23518	1.32	ppb	96
15) 1,4-Dichlorobenzene	7.58	146	23020	1.32	ppb	91
16) Benzyl alcohol	8.03	108	6009	0.81	ppb	# 58
17) 1,2-Dichlorobenzene	7.97	146	21945	1.34	ppb	88
18) Acetophenone	8.49	105	21771	1.21	ppb	90
19) 2-Methylphenol	8.31	108	16222	1.31	ppb	91
20) 2,2'-oxybis(1-Chloropropan	8.27	121	5909	1.25	ppb	97
21) 3&4-Methylphenol	8.65	108	11124	0.93	ppb	92
22) n-Nitroso-di-n-propylamine	8.58	70	10072	1.29	ppb	95
23) Hexachloroethane	8.60	201	7745	1.38	ppb	80
26) Nitrobenzene	8.84	77	16777	1.24	ppb	93
27) Quinoline	11.16	129	31832	1.24	ppb	96
28) Isophorone	9.36	82	29531	1.27	ppb	98
29) 2-Nitrophenol	9.55	139	8231	1.11	ppb	86
30) 2,4-Dimethylphenol	9.77	107	14736	1.18	ppb	94
32) bis(2-Chloroethoxy)methane	9.93	93	17205	1.24	ppb	98
33) 2,4-Dichlorophenol	10.15	162	11945	1.10	ppb	98
34) 2,6-Dichlorophenol	10.62	162	13984	1.25	ppb	89

(#) = qualifier out of range (m) = manual integration

R90737.D MR3499.M

Wed Dec 21 13:52:19 2011

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90737.D

Vial: 3

Acq On : 20 Dec 2011 2:56 pm

Operator: rachelg

Sample : ic3499-1

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 11:55 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 11:08:17 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35) 1,3,5-Trichlorobenzene	9.54	180	18821	1.36	ppb	100
36) 1,2,4-Trichlorobenzene	10.24	180	17082	1.29	ppb	89
37) 1,2,3-Trichlorobenzene	10.78	180	15957	1.26	ppb	93
38) Naphthalene	10.35	128	52469	1.38	ppb	99
39) 4-Chloroaniline	10.63	127	18212	1.18	ppb	92
40) 2,3-Dichloroaniline	12.74	161	15889	1.21	ppb	97
41) Caprolactam	11.34	55	3442	1.20	ppb #	54
42) Hexachlorobutadiene	10.83	225	9153	1.25	ppb	100
43) 4-Chloro-3-methylphenol	11.90	107	11521	1.05	ppb #	32
44) 2-Methylnaphthalene	11.96	142	40209	1.37	ppb	98
45) 1-Methylnaphthalene	12.21	142	35844	1.34	ppb	85
46) Dimethylnaphthalene	13.44	156	31179	1.32	ppb	92
48) Hexachlorocyclopentadiene	12.53	237	2800	2.07	ppb	75
49) 2,4,6-Trichlorophenol	12.76	196	8789	1.19	ppb	77
50) 2,4,5-Trichlorophenol	12.91	196	7027	0.94	ppb	94
52) 2-Chloronaphthalene	13.08	162	33161	1.38	ppb	91
53) Biphenyl	13.10	154	41472	1.39	ppb	97
54) 2-Nitroaniline	13.50	65	4944	0.83	ppb #	56
55) Dimethylphthalate	14.04	163	33855	1.32	ppb	96
56) Acenaphthylene	14.05	152	50543	1.38	ppb	94
57) 2,6-Dinitrotoluene	14.16	165	5663	1.00	ppb	78
58) 3-Nitroaniline	14.55	138	3035	0.54	ppb	79
59) Acenaphthene	14.50	153	32673	1.40	ppb	96
62) Dibenzofuran	14.89	168	44616	1.37	ppb	96
63) 2,4-Dinitrotoluene	15.09	165	6878	0.91	ppb	90
64) 2,3,4,6-Tetrachlorophenol	15.36	232	5096	0.86	ppb	98
65) Diethylphthalate	15.73	149	36340	1.40	ppb	98
66) Fluorene	15.70	166	36451	1.36	ppb	94
67) 4-Chlorophenyl-phenylether	15.77	204	16982	1.38	ppb	93
70) 4,6-Dinitro-2-methylphenol	16.04	198	179	0.04	ppb #	34
71) n-Nitrosodiphenylamine	16.09	169	24257	1.31	ppb	99
72) 1,2-Diphenylhydrazine	16.14	77	30014	1.28	ppb	94
74) 4-Bromophenyl-phenylether	16.91	248	8245	1.13	ppb	89
75) Hexachlorobenzene	17.19	284	10287	1.28	ppb	82
76) Pentachlorophenol	17.70	266	3886	0.98	ppb	80
77) Phenanthrene	17.94	178	50938	0.60	ppb	96
78) Anthracene	18.05	178	49718	1.35	ppb	96
79) Carbazole	18.52	167	41617	1.25	ppb	100
80) Di-n-butylphthalate	19.49	149	55104	1.35	ppb	94
81) Fluoranthene	20.30	202	49295	1.33	ppb	97
82) Octadecane	17.93	57	21404	1.39	ppb	91
84) Pyrene	20.62	202	54473	1.47	ppb	94
85) Butyl stearate	21.68	56	20890	2.12	ppb	94
87) Butylbenzylphthalate	21.62	149	23070	1.30	ppb	89
88) Benzo[a]anthracene	22.17	228	47124	1.44	ppb	95
89) 3,3'-Dichlorobenzidine	22.19	252	8912	0.93	ppb #	78
90) Chrysene	22.22	228	45577	1.46	ppb	94
91) bis(2-Ethylhexyl)phthalate	22.32	149	32830	1.41	ppb	90
93) Di-n-octylphthalate	22.93	149	49586	1.61	ppb	96

(#) = qualifier out of range (m) = manual integration

R90737.D MR3499.M

Wed Dec 21 13:52:19 2011

NJMSR

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90737.D

Vial: 3

Acq On : 20 Dec 2011 2:56 pm

Operator: rachelg

Sample : ic3499-1

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 11:55 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 11:08:17 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94) Benzo[b]fluoranthene	23.31	252	40039	1.31	ppb	93
95) Benzo[k]fluoranthene	23.34	252	37517	1.17	ppb	86
96) Benzo[a]pyrene	23.66	252	32812	1.33	ppb	93
97) Indeno[1,2,3-cd]pyrene	25.08	276	20441	0.99	ppb	94
98) Dibenz(a,h)acridine	24.76	279	12738	2.46	ppb	71
99) Dibenz[a,h]anthracene	25.09	278	14152	1.97	ppb	87
100) 7,12-Dimethylbenz(a)anthra	23.32	256	18286	1.43	ppb	91
101) Benzo[g,h,i]perylene	25.45	276	19970	1.11	ppb	96

8.6.39

8

(#) = qualifier out of range (m) = manual integration

R90737.D MR3499.M

Wed Dec 21 13:52:20 2011

NJMSR

Page 3

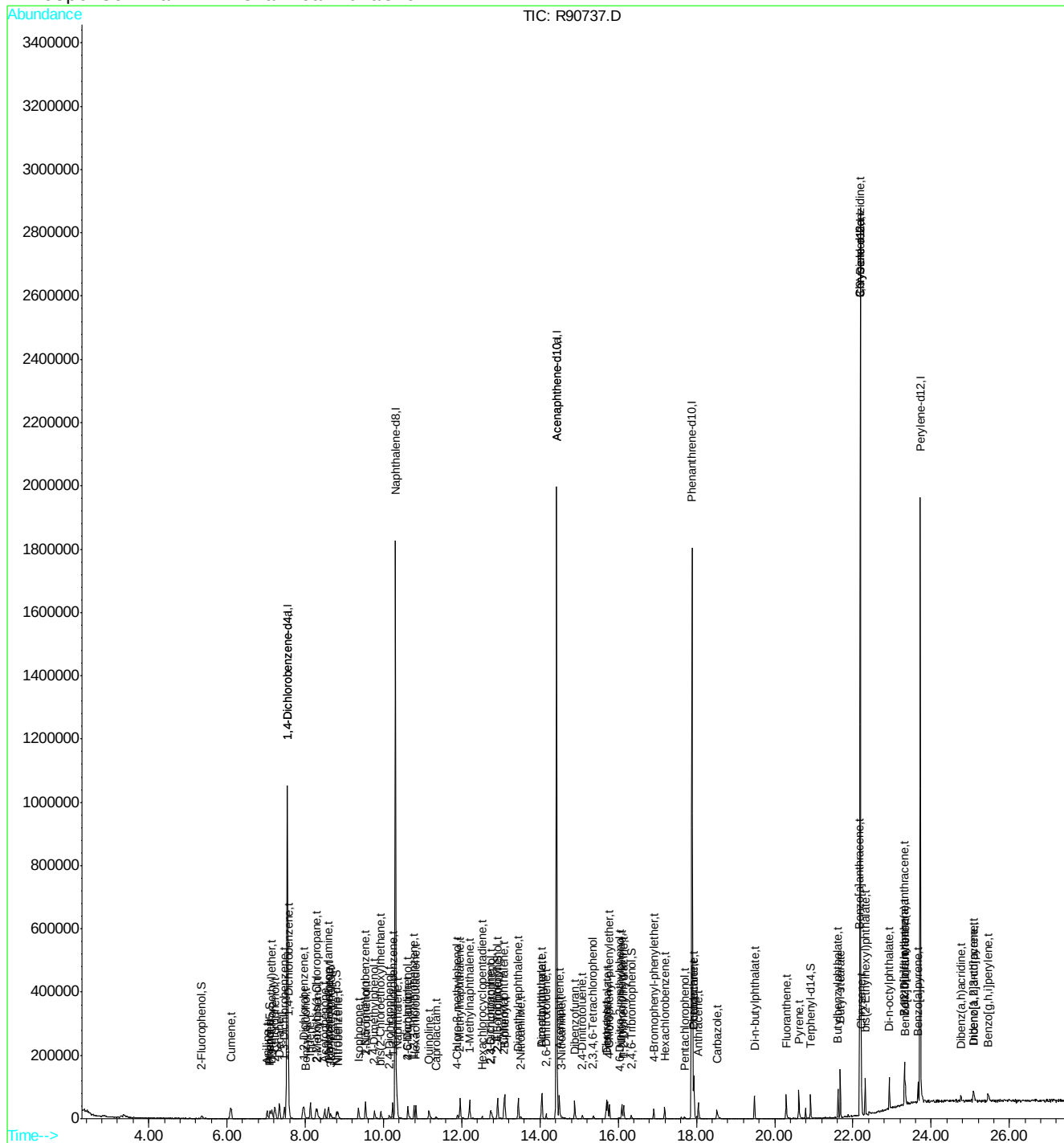
Quantitation Report

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Data File : C:\HPCHEM\1\DATA\ER3499\R90737.D
Acq On    : 20 Dec 2011    2:56 pm
Sample    : ic3499-1
Misc      : op53255,er3499,1000,,,1,1
MS Integration Params: RTEINT.P
Quant Time: Dec 21 11:55 2011
```

```
Vial: 3
Operator: rachelg
Inst      : MSR
Multiplr: 1.00
```

Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



R90737.D MR3499.M

Wed Dec 21 13:52:21 2011

NJMSR

Page 4

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90738.D

Vial: 4

Acq On : 20 Dec 2011 3:34 pm

Operator: rachelg

Sample : ic3499-2

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 22 11:15 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 11:04:27 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	358239	40.00	ppb	0.00
24) Naphthalene-d8	10.30	136	1263303	40.00	ppb	0.00
47) Acenaphthene-d10	14.42	164	686162	40.00	ppb	0.00
69) Phenanthrene-d10	17.88	188	1063451	40.00	ppb	0.00
83) Chrysene-d12	22.18	240	951130	40.00	ppb	0.00
92) Perylene-d12	23.72	264	708982	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.54	152	358239	40.00	ppb	0.00
104) Acenaphthene-d10a	14.42	164	686162	40.00	ppb	0.00
107) Chrysene-d12a	22.18	240	951130	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	5.37	112	19443	1.67	ppb	0.05
Spiked Amount	50.000		Recovery	=	3.34%	
8) Phenol-d5	7.09	99	25493	1.92	ppb	0.03
Spiked Amount	50.000		Recovery	=	3.84%	
25) Nitrobenzene-d5	8.79	82	21601	1.89	ppb	0.00
Spiked Amount	50.000		Recovery	=	3.78%	
51) 2-Fluorobiphenyl	12.91	172	49735	2.24	ppb	0.00
Spiked Amount	50.000		Recovery	=	4.48%	
73) 2,4,6-Tribromophenol	16.34	330	5592	1.77	ppb	0.01
Spiked Amount	50.000		Recovery	=	3.54%	
86) Terphenyl-d14	20.91	244	43439	2.17	ppb	0.00
Spiked Amount	50.000		Recovery	=	4.34%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.86	88	11700m	2.17	ppb	
3) Pyridine	3.38	79	21340	1.76	ppb	90
4) N-Nitrosodimethylamine	3.29	42	9968	1.70	ppb	# 49
6) Indene	8.13	116	43834	2.09	ppb	96
7) Cumene	6.09	105	66556	2.12	ppb	97
9) Phenol	7.11	94	27440	1.94	ppb	79
10) Aniline	7.02	93	36161	2.17	ppb	95
11) bis(2-Chloroethyl)ether	7.15	93	22711	2.09	ppb	94
12) 2-Chlorophenol	7.24	128	26969	2.15	ppb	92
13) Decane	7.34	43	29942	2.11	ppb	88
14) 1,3-Dichlorobenzene	7.47	146	32570	2.14	ppb	94
15) 1,4-Dichlorobenzene	7.58	146	31302	2.10	ppb	95
16) Benzyl alcohol	7.99	108	9960	1.57	ppb	87
17) 1,2-Dichlorobenzene	7.96	146	28849	2.06	ppb	95
18) Acetophenone	8.49	105	30142	1.96	ppb	87
19) 2-Methylphenol	8.30	108	20834	1.97	ppb	83
20) 2,2'-oxybis(1-Chloropropan	8.28	121	8100	2.01	ppb	# 69
21) 3&4-Methylphenol	8.64	108	20689	2.02	ppb	90
22) n-Nitroso-di-n-propylamine	8.57	70	13111	1.97	ppb	90
23) Hexachloroethane	8.61	201	9998	2.09	ppb	89
26) Nitrobenzene	8.83	77	22348	1.90	ppb	96
27) Quinoline	11.16	129	41501	1.86	ppb	97
28) Isophorone	9.36	82	38535	1.91	ppb	94
29) 2-Nitrophenol	9.55	139	10503	1.63	ppb	92
30) 2,4-Dimethylphenol	9.77	107	19895	1.84	ppb	97

(#) = qualifier out of range (m) = manual integration

R90738.D MR3499.M

Thu Dec 22 11:15:58 2011

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90738.D

Vial: 4

Acq On : 20 Dec 2011 3:34 pm

Operator: rachelg

Sample : ic3499-2

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 22 11:15 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 11:04:27 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.27	105	188	4.15	ppb	# 20
32) bis(2-Chloroethoxy)methane	9.93	93	23872	1.98	ppb	90
33) 2,4-Dichlorophenol	10.14	162	15635	1.66	ppb	93
34) 2,6-Dichlorophenol	10.62	162	18242	1.87	ppb	86
35) 1,3,5-Trichlorobenzene	9.54	180	24533	2.04	ppb	84
36) 1,2,4-Trichlorobenzene	10.23	180	24233	2.11	ppb	99
37) 1,2,3-Trichlorobenzene	10.78	180	22664	2.06	ppb	92
38) Naphthalene	10.35	128	73321	2.15	ppb	96
39) 4-Chloroaniline	10.62	127	25458	1.90	ppb	93
40) 2,3-Dichloroaniline	12.73	161	22916	2.01	ppb	90
41) Caprolactam	11.32	55	5285	1.68	ppb	# 59
42) Hexachlorobutadiene	10.82	225	13329	2.10	ppb	89
43) 4-Chloro-3-methylphenol	11.88	107	16259	1.72	ppb	63
44) 2-Methylnaphthalene	11.96	142	57596	2.26	ppb	97
45) 1-Methylnaphthalene	12.20	142	49308	2.13	ppb	95
46) Dimethylnaphthalene	13.44	156	42040	2.05	ppb	90
48) Hexachlorocyclopentadiene	12.52	237	5232	2.71	ppb	85
49) 2,4,6-Trichlorophenol	12.76	196	11276	1.81	ppb	93
50) 2,4,5-Trichlorophenol	12.89	196	11546m	1.81	ppb	
52) 2-Chloronaphthalene	13.08	162	42314	2.08	ppb	97
53) Biphenyl	13.10	154	57988	2.21	ppb	98
54) 2-Nitroaniline	13.50	65	7888	1.56	ppb	85
55) Dimethylphthalate	14.03	163	47091	2.16	ppb	97
56) Acenaphthylene	14.05	152	70031	2.17	ppb	98
57) 2,6-Dinitrotoluene	14.15	165	8214	1.72	ppb	86
58) 3-Nitroaniline	14.52	138	6267	1.32	ppb	87
59) Acenaphthene	14.49	153	41672	2.10	ppb	99
62) Dibenzofuran	14.89	168	60142	2.18	ppb	95
63) 2,4-Dinitrotoluene	15.08	165	10957	1.70	ppb	79
64) 2,3,4,6-Tetrachlorophenol	15.36	232	7997	1.59	ppb	84
65) Diethylphthalate	15.73	149	48157	2.19	ppb	91
66) Fluorene	15.69	166	47467	2.09	ppb	90
67) 4-Chlorophenyl-phenylether	15.77	204	22136	2.12	ppb	88
68) 4-Nitroaniline	15.99	138	3017	0.57	ppb	# 73
70) 4,6-Dinitro-2-methylphenol	16.04	198	474	0.12	ppb	# 34
71) n-Nitrosodiphenylamine	16.08	169	33012	2.08	ppb	96
72) 1,2-Diphenylhydrazine	16.13	77	42076	2.10	ppb	97
74) 4-Bromophenyl-phenylether	16.91	248	12193	1.96	ppb	96
75) Hexachlorobenzene	17.18	284	14177	2.06	ppb	89
76) Pentachlorophenol	17.69	266	6287	1.70	ppb	# 70
77) Phenanthrene	17.93	178	69601	2.20	ppb	95
78) Anthracene	18.04	178	68142	2.16	ppb	96
79) Carbazole	18.52	167	59574	2.09	ppb	92
80) Di-n-butylphthalate	19.48	149	73661	2.11	ppb	96
81) Fluoranthene	20.29	202	69168	2.18	ppb	97
82) Octadecane	17.93	57	27954	2.13	ppb	95
84) Pyrene	20.61	202	71988	2.18	ppb	96
85) Butyl stearate	21.68	56	19448	2.21	ppb	96
87) Butylbenzylphthalate	21.62	149	30295	1.92	ppb	96

(#) = qualifier out of range (m) = manual integration

R90738.D MR3499.M

Thu Dec 22 11:15:58 2011

NJMSR

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90738.D Vial: 4
Acq On : 20 Dec 2011 3:34 pm Operator: rachelg
Sample : ic3499-2 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 11:15 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 11:04:27 2011
Response via : Initial Calibration
DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
88) Benzo[a]anthracene	22.17	228	61066	2.09	ppb	96
89) 3,3'-Dichlorobenzidine	22.19	252	11217	1.32	ppb	84
90) Chrysene	22.22	228	59912	2.15	ppb	94
91) bis(2-Ethylhexyl)phthalate	22.32	149	41287	1.99	ppb	92
93) Di-n-octylphthalate	22.93	149	62758	2.33	ppb	96
94) Benzo[b]fluoranthene	23.31	252	58328	2.27	ppb	96
95) Benzo[k]fluoranthene	23.34	252	43868	1.72	ppb	90
96) Benzo[a]pyrene	23.66	252	43351	2.09	ppb	98
97) Indeno[1,2,3-cd]pyrene	25.07	276	25980	1.50	ppb	89
98) Dibenz(a,h)acridine	24.76	279	16289	2.75	ppb	86
99) Dibenz[a,h]anthracene	25.09	278	16735	2.21	ppb	98
100) 7,12-Dimethylbenz(a)anthra	23.32	256	25161	2.35	ppb	97
101) Benzo[g,h,i]perylene	25.45	276	24142	1.60	ppb	97

(#) = qualifier out of range (m) = manual integration

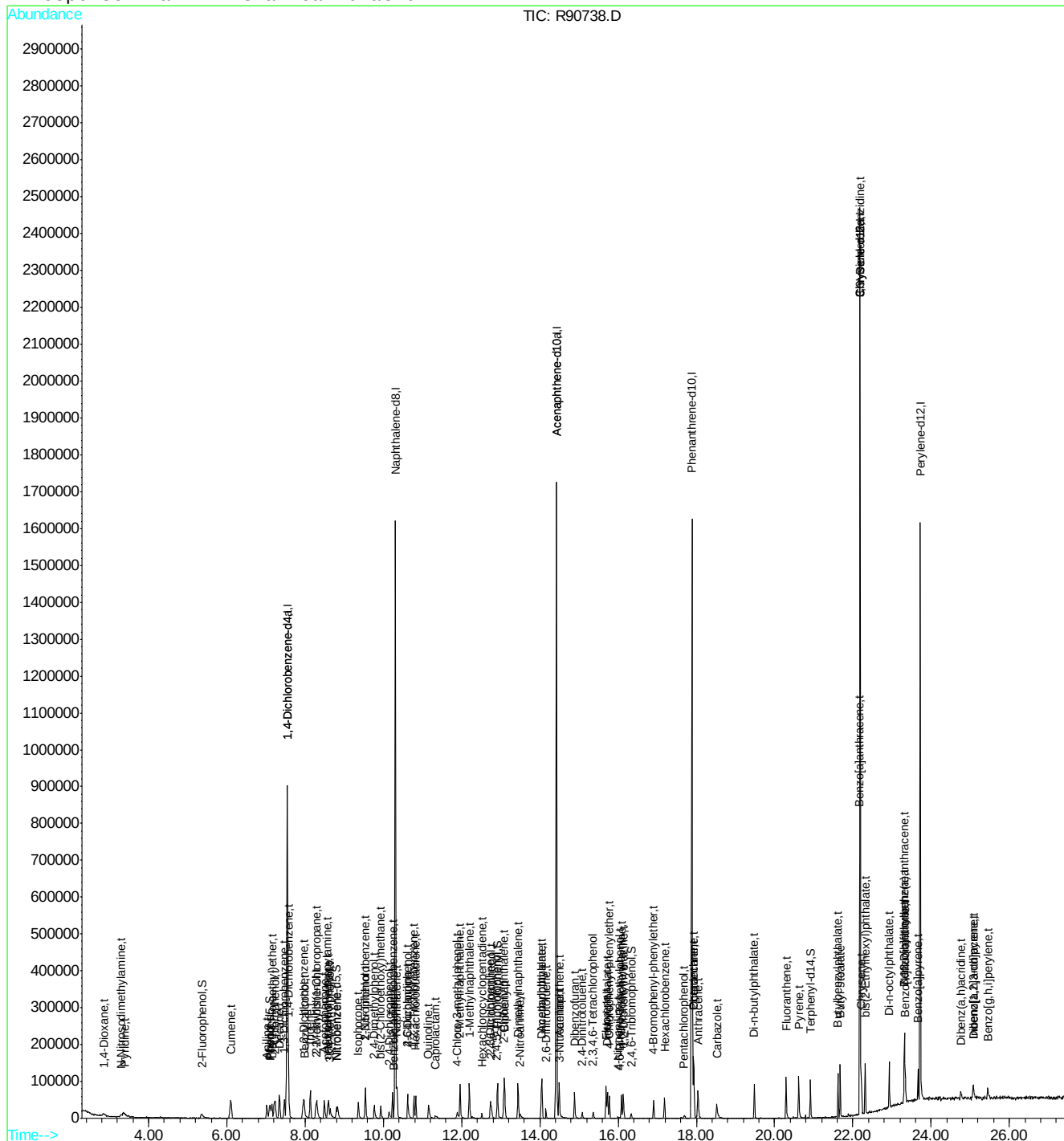
R90738.D MR3499.M Thu Dec 22 11:15:58 2011 NJMSR

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Quantitation Report

Data File	: C:\HPCHEM\1\DATA\ER3499\R90738.D	Vial	: 4
Acq On	: 20 Dec 2011 3:34 pm	Operator	: rachelg
Sample	: ic3499-2	Inst	: MSR
Misc	: op53255,er3499,1000,,,1,1	Multiplr	: 1.00
MS Integration Params: RTEINT.P			
Quant Time	: Dec 22 11:15 2011	Quant Results File	: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



R90738.D MR3499.M

Thu Dec 22 11:15:59 2011

NJMSR

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8.6.40



Manual Integration Approval Summary

Sample Number: ER3499-IC3499

Method: SW846 8270D

Lab FileID: R90738.D

Analyst approved: 12/22/11 09:53 Rachel Gregor

Injection Time: 12/20/11 15:34

Supervisor approved: 12/24/11 22:41 Wen Wen Chi

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.86	Poor instrument integration

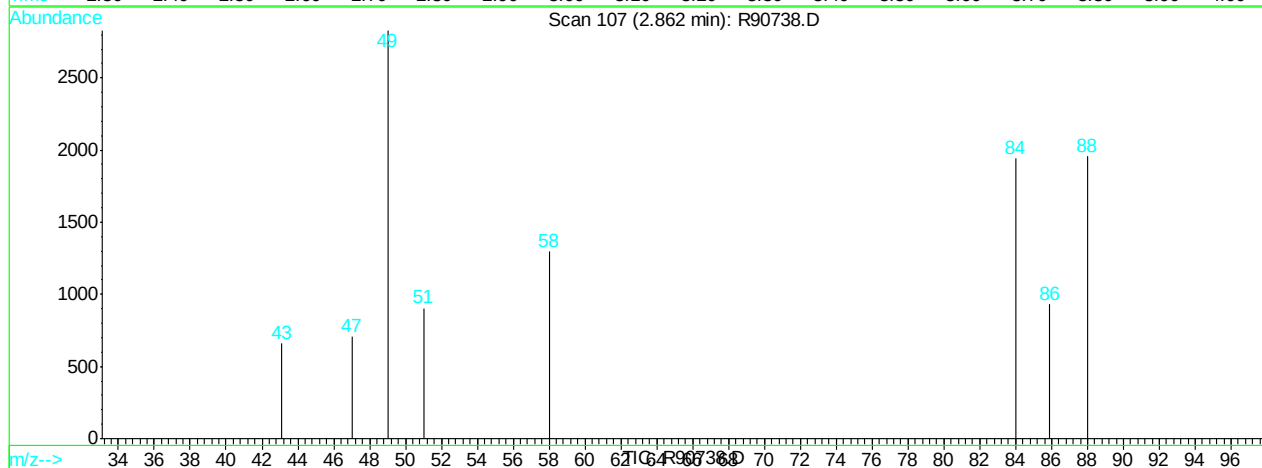
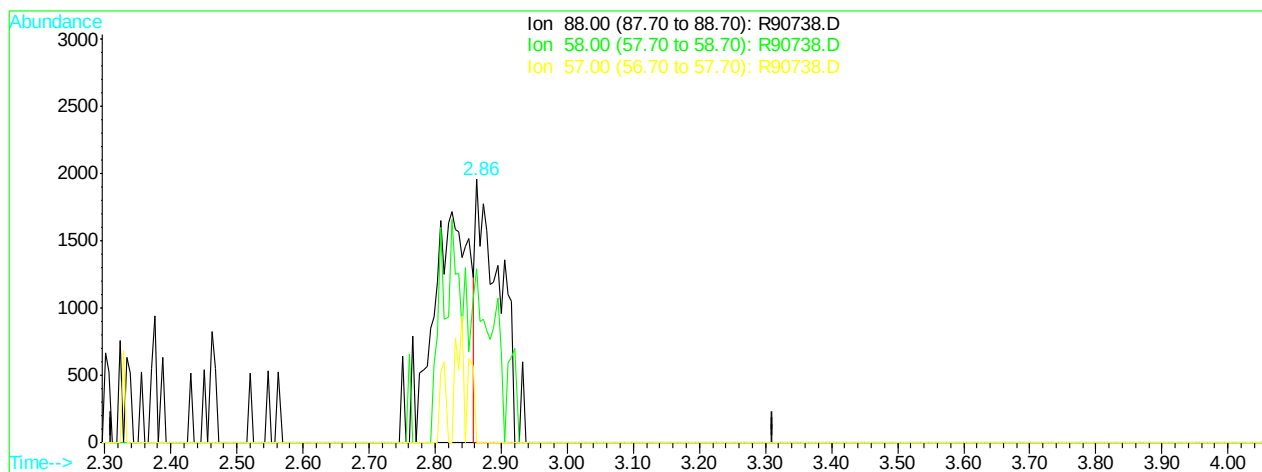
8.6.40.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90738.D Vial: 4
Acq On : 20 Dec 2011 3:34 pm Operator: rachelg
Sample : ic3499-2 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 9:53 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 09:53:46 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.86min 0.87ppb

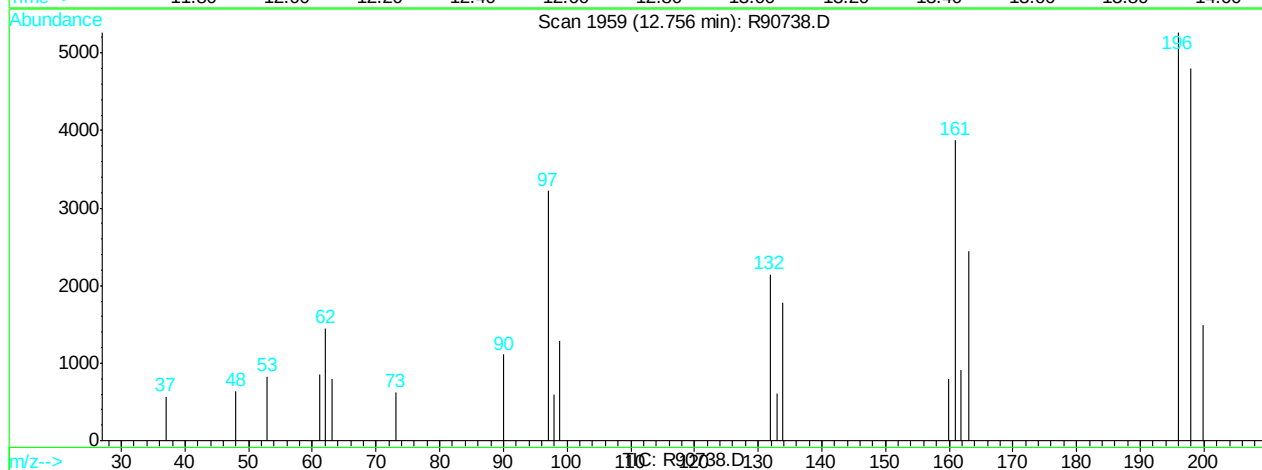
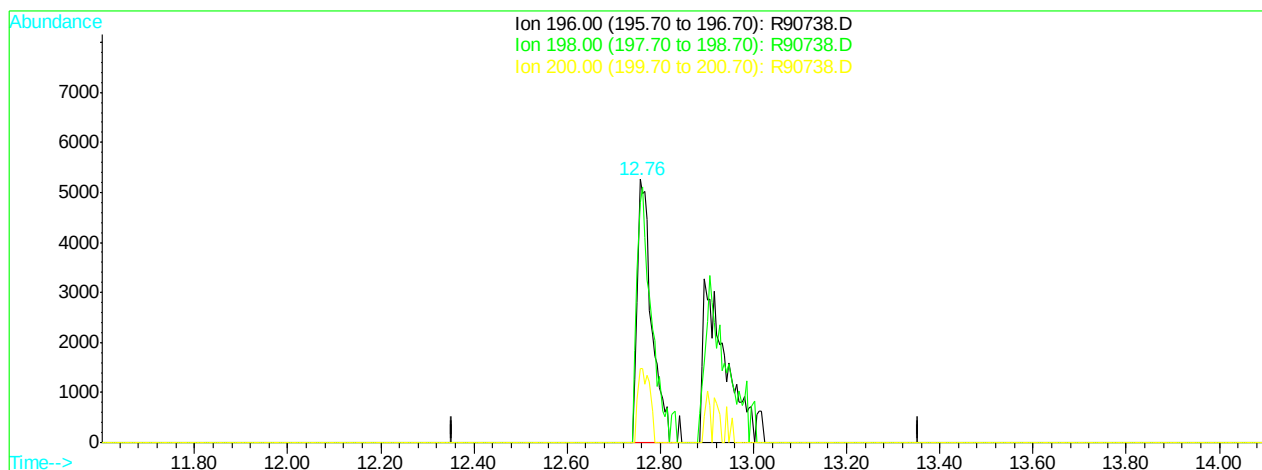
response 4778

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	56.32
57.00	26.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90738.D Vial: 4
 Acq On : 20 Dec 2011 3:34 pm Operator: rachelg
 Sample : ic3499-2 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 9:54 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 09:53:46 2011
 Response via : Multiple Level Calibration



(50) 2,4,5-Trichlorophenol (t)

12.76min 1.72ppb

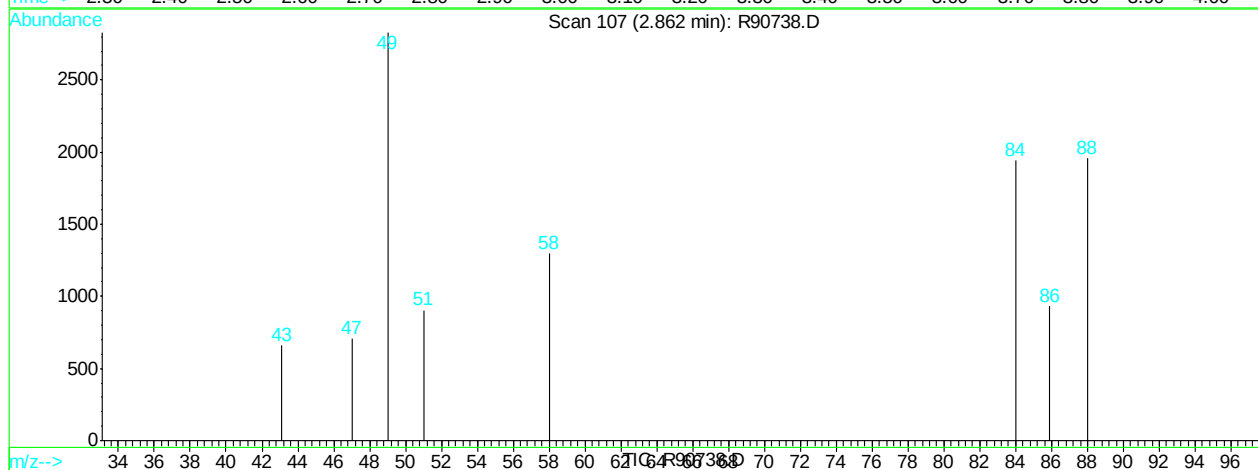
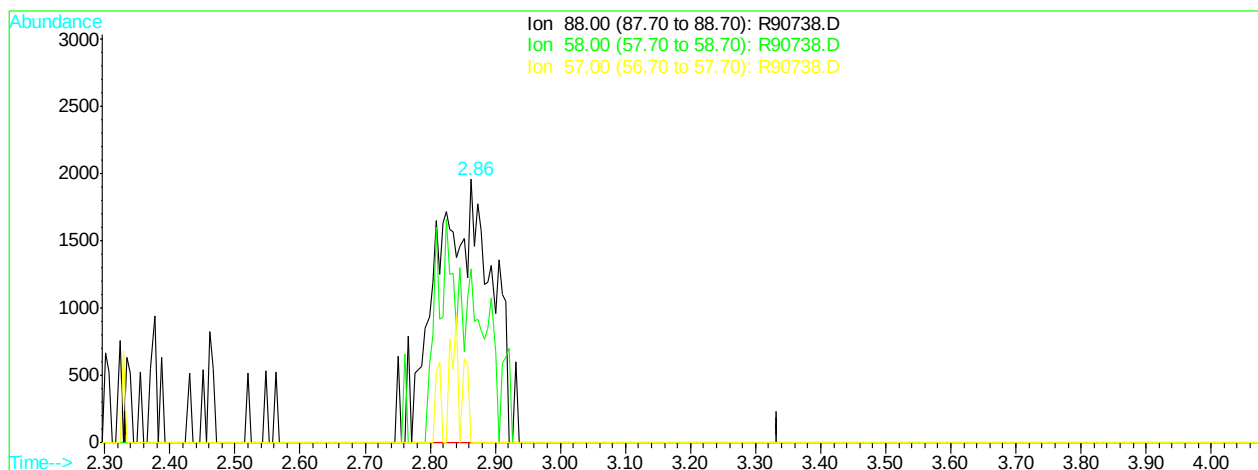
response 11276

Ion	Exp%	Act%
196.00	100	100
198.00	94.70	85.82
200.00	32.20	28.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90738.D Vial: 4
 Acq On : 20 Dec 2011 3:34 pm Operator: rachelg
 Sample : ic3499-2 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 11:05 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 13:20:39 2011
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.86min 2.17ppb m

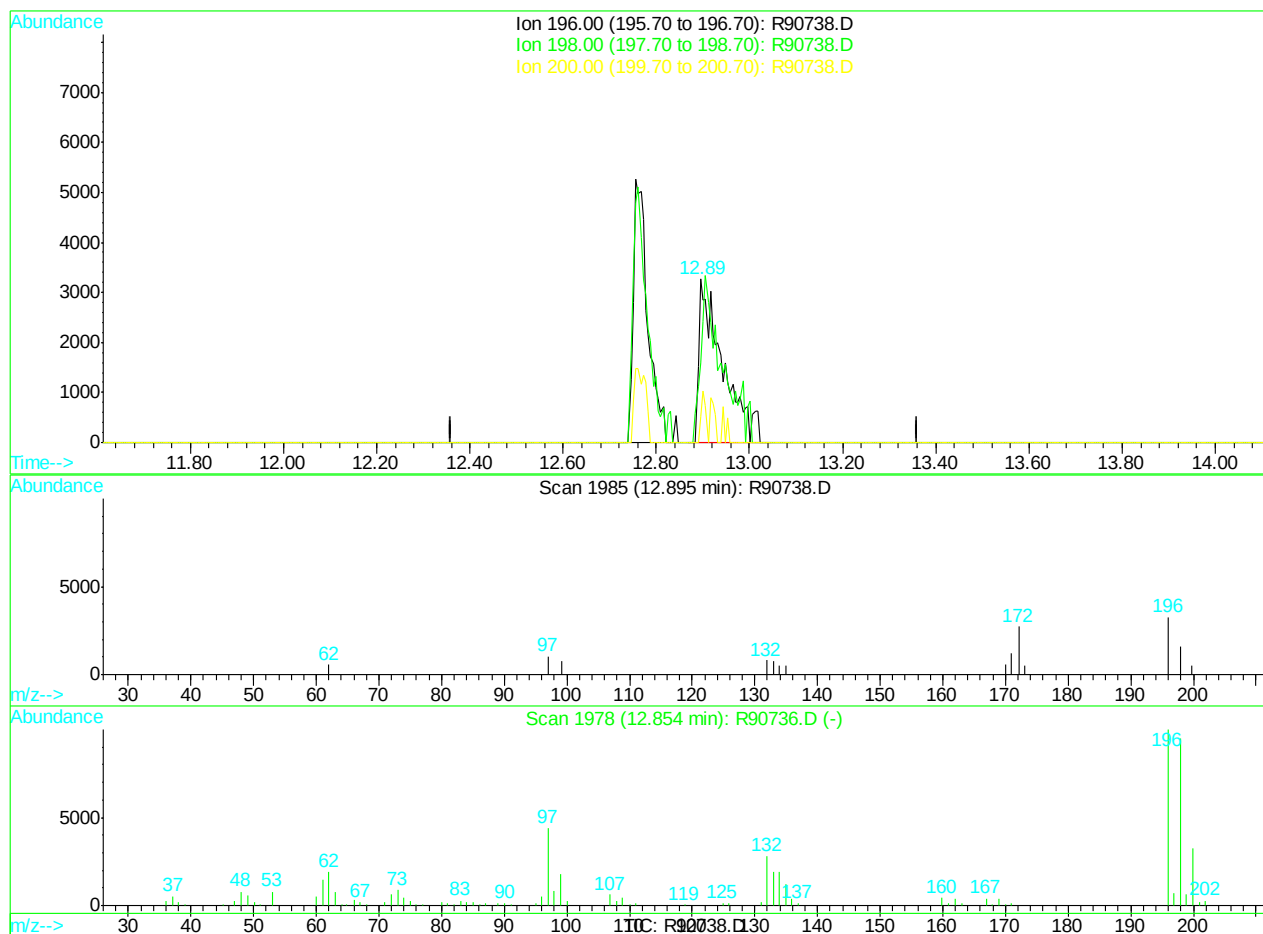
response 11700

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	66.19
57.00	26.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90738.D Vial: 4
 Acq On : 20 Dec 2011 3:34 pm Operator: rachelg
 Sample : ic3499-2 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 22 11:15 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 13:20:39 2011
 Response via : Multiple Level Calibration



(50) 2,4,5-Trichlorophenol (t)

12.89min 1.81ppb m

response 11546

Ion	Exp%	Act%
196.00	100	100
198.00	94.70	48.71#
200.00	32.20	16.03
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90739.D

Vial: 5

Acq On : 20 Dec 2011 4:05 pm

Operator: rachelg

Sample : ic3499-5

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 12:00 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 11:57:34 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	379864	40.00	ppb	0.00
24) Naphthalene-d8	10.31	136	1313304	40.00	ppb	0.00
47) Acenaphthene-d10	14.42	164	737718	40.00	ppb	0.00
69) Phenanthrene-d10	17.89	188	1145158	40.00	ppb	0.00
83) Chrysene-d12	22.19	240	1014139	40.00	ppb	0.00
92) Perylene-d12	23.72	264	844080	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.54	152	379864	40.00	ppb	0.00
104) Acenaphthene-d10a	14.42	164	737718	40.00	ppb	0.00
107) Chrysene-d12a	22.19	240	1014139	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	5.32	112	55666	4.50	ppb	0.00
Spiked Amount	50.000		Recovery	=	9.00%	
8) Phenol-d5	7.07	99	72336	5.15	ppb	0.00
Spiked Amount	50.000		Recovery	=	10.30%	
25) Nitrobenzene-d5	8.79	82	55503	4.67	ppb	0.00
Spiked Amount	50.000		Recovery	=	9.34%	
51) 2-Fluorobiphenyl	12.91	172	123090	5.15	ppb	0.00
Spiked Amount	50.000		Recovery	=	10.30%	
73) 2,4,6-Tribromophenol	16.32	330	15603	4.59	ppb	0.00
Spiked Amount	50.000		Recovery	=	9.18%	
86) Terphenyl-d14	20.92	244	112947	5.28	ppb	0.00
Spiked Amount	50.000		Recovery	=	10.56%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.83	88	30875m	5.39	ppb	
3) Pyridine	3.30	79	66197	5.15	ppb	95
4) N-Nitrosodimethylamine	3.28	42	30305	4.89	ppb	# 69
6) Indene	8.13	116	113578	5.10	ppb	96
7) Cumene	6.10	105	168915	5.06	ppb	95
9) Phenol	7.10	94	77605	5.17	ppb	96
10) Aniline	7.00	93	89577	5.07	ppb	96
11) bis(2-Chloroethyl)ether	7.14	93	56489	4.90	ppb	95
12) 2-Chlorophenol	7.22	128	65552	4.92	ppb	94
13) Decane	7.34	43	75216	5.00	ppb	98
14) 1,3-Dichlorobenzene	7.47	146	79461	4.93	ppb	94
15) 1,4-Dichlorobenzene	7.58	146	78308	4.96	ppb	94
16) Benzyl alcohol	7.97	108	29114	4.33	ppb	95
17) 1,2-Dichlorobenzene	7.96	146	74173	5.00	ppb	98
18) Acetophenone	8.48	105	79941	4.89	ppb	100
19) 2-Methylphenol	8.29	108	56795	5.07	ppb	96
20) 2,2'-oxybis(1-Chloropropan	8.27	121	20650	4.84	ppb	# 80
21) 3&4-Methylphenol	8.62	108	55926	5.15	ppb	89
22) n-Nitroso-di-n-propylamine	8.57	70	34225	4.85	ppb	88
23) Hexachloroethane	8.60	201	24779	4.88	ppb	89
26) Nitrobenzene	8.82	77	61685	5.04	ppb	93
27) Quinoline	11.15	129	111060	4.80	ppb	95
28) Isophorone	9.35	82	102382	4.88	ppb	99
29) 2-Nitrophenol	9.54	139	32622	4.87	ppb	88
30) 2,4-Dimethylphenol	9.76	107	55303	4.92	ppb	96

(#) = qualifier out of range (m) = manual integration

R90739.D MR3499.M

Wed Dec 21 13:53:11 2011

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90739.D

Vial: 5

Acq On : 20 Dec 2011 4:05 pm

Operator: rachelg

Sample : ic3499-5

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 12:00 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 11:57:34 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.14	105	11765	5.42	ppb	# 63
32) bis(2-Chloroethoxy)methane	9.93	93	60665	4.85	ppb	94
33) 2,4-Dichlorophenol	10.12	162	46111	4.70	ppb	91
34) 2,6-Dichlorophenol	10.61	162	49153	4.86	ppb	95
35) 1,3,5-Trichlorobenzene	9.54	180	63898	5.11	ppb	94
36) 1,2,4-Trichlorobenzene	10.23	180	59238	4.97	ppb	96
37) 1,2,3-Trichlorobenzene	10.78	180	56772	4.96	ppb	95
38) Naphthalene	10.35	128	174000	5.09	ppb	97
39) 4-Chloroaniline	10.61	127	71281	5.10	ppb	98
40) 2,3-Dichloroaniline	12.73	161	57325	4.85	ppb	97
41) Caprolactam	11.30	55	18151	4.22	ppb	90
42) Hexachlorobutadiene	10.82	225	31583	4.80	ppb	94
43) 4-Chloro-3-methylphenol	11.86	107	47259	4.80	ppb	93
44) 2-Methylnaphthalene	11.96	142	138187	5.20	ppb	97
45) 1-Methylnaphthalene	12.20	142	121291	5.03	ppb	97
46) Dimethylnaphthalene	13.44	156	106219	4.98	ppb	95
48) Hexachlorocyclopentadiene	12.52	237	26060	6.97	ppb	96
49) 2,4,6-Trichlorophenol	12.75	196	31544	4.70	ppb	92
50) 2,4,5-Trichlorophenol	12.88	196	31611	4.62	ppb	96
52) 2-Chloronaphthalene	13.07	162	109930	5.02	ppb	99
53) Biphenyl	13.10	154	141530	5.19	ppb	92
54) 2-Nitroaniline	13.48	65	24712	4.54	ppb	93
55) Dimethylphthalate	14.03	163	117789	5.04	ppb	99
56) Acenaphthylene	14.05	152	176457	5.27	ppb	98
57) 2,6-Dinitrotoluene	14.15	165	24501	4.77	ppb	95
58) 3-Nitroaniline	14.48	138	24592	4.82	ppb	94
59) Acenaphthene	14.49	153	109149	5.12	ppb	94
60) 2,4-Dinitrophenol	14.76	184	3969	12.31	ppb	# 61
61) 4-Nitrophenol	15.18	109	4384m	6.03	ppb	
62) Dibenzofuran	14.88	168	150990	5.09	ppb	97
63) 2,4-Dinitrotoluene	15.07	165	31767	4.59	ppb	97
64) 2,3,4,6-Tetrachlorophenol	15.34	232	22862	4.23	ppb	96
65) Diethylphthalate	15.73	149	116747	4.94	ppb	98
66) Fluorene	15.69	166	122080	5.00	ppb	97
67) 4-Chlorophenyl-phenylether	15.77	204	56286	5.02	ppb	99
68) 4-Nitroaniline	15.94	138	20487	4.02	ppb	96
70) 4,6-Dinitro-2-methylphenol	16.01	198	8481	2.02	ppb	95
71) n-Nitrosodiphenylamine	16.08	169	83756	4.91	ppb	92
72) 1,2-Diphenylhydrazine	16.13	77	109461	5.07	ppb	97
74) 4-Bromophenyl-phenylether	16.91	248	32474	4.85	ppb	93
75) Hexachlorobenzene	17.19	284	36065	4.86	ppb	91
76) Pentachlorophenol	17.67	266	26248	7.17	ppb	96
77) Phenanthrene	17.93	178	172570	4.87	ppb	97
78) Anthracene	18.04	178	173286	5.11	ppb	95
79) Carbazole	18.51	167	151399	4.93	ppb	99
80) Di-n-butylphthalate	19.48	149	195308	5.19	ppb	98
81) Fluoranthene	20.29	202	177905	5.22	ppb	99
82) Octadecane	17.93	57	71611	5.06	ppb	98
84) Pyrene	20.62	202	187907	4.89	ppb	96

(#) = qualifier out of range (m) = manual integration

R90739.D MR3499.M

Wed Dec 21 13:53:11 2011

NJMSR

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90739.D Vial: 5
 Acq On : 20 Dec 2011 4:05 pm Operator: rachelg
 Sample : ic3499-5 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 12:00 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 11:57:34 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Butyl stearate	21.67	56	52575	5.61	ppb	96
87) Butylbenzylphthalate	21.62	149	83841	4.98	ppb	94
88) Benzo[a]anthracene	22.17	228	161050	4.78	ppb	95
89) 3,3'-Dichlorobenzidine	22.18	252	39428	4.34	ppb	97
90) Chrysene	22.21	228	158741	4.91	ppb	93
91) bis(2-Ethylhexyl)phthalate	22.32	149	112301	5.07	ppb	92
93) Di-n-octylphthalate	22.93	149	177845	5.54	ppb	96
94) Benzo[b]fluoranthene	23.31	252	155337	5.07	ppb	97
95) Benzo[k]fluoranthene	23.34	252	122597	4.41	ppb	94
96) Benzo[a]pyrene	23.66	252	120257	4.88	ppb	95
97) Indeno[1,2,3-cd]pyrene	25.06	276	89896	4.37	ppb	88
98) Dibenz(a,h)acridine	24.75	279	59600	4.52	ppb	97
99) Dibenz[a,h]anthracene	25.07	278	63567	4.05	ppb	93
100) 7,12-Dimethylbenz(a)anthra	23.32	256	60427	4.73	ppb	95
101) Benzo[g,h,i]perylene	25.43	276	81902	4.56	ppb	99

8.6.41
8

 (#) = qualifier out of range (m) = manual integration

R90739.D MR3499.M Wed Dec 21 13:53:12 2011 NJMSR

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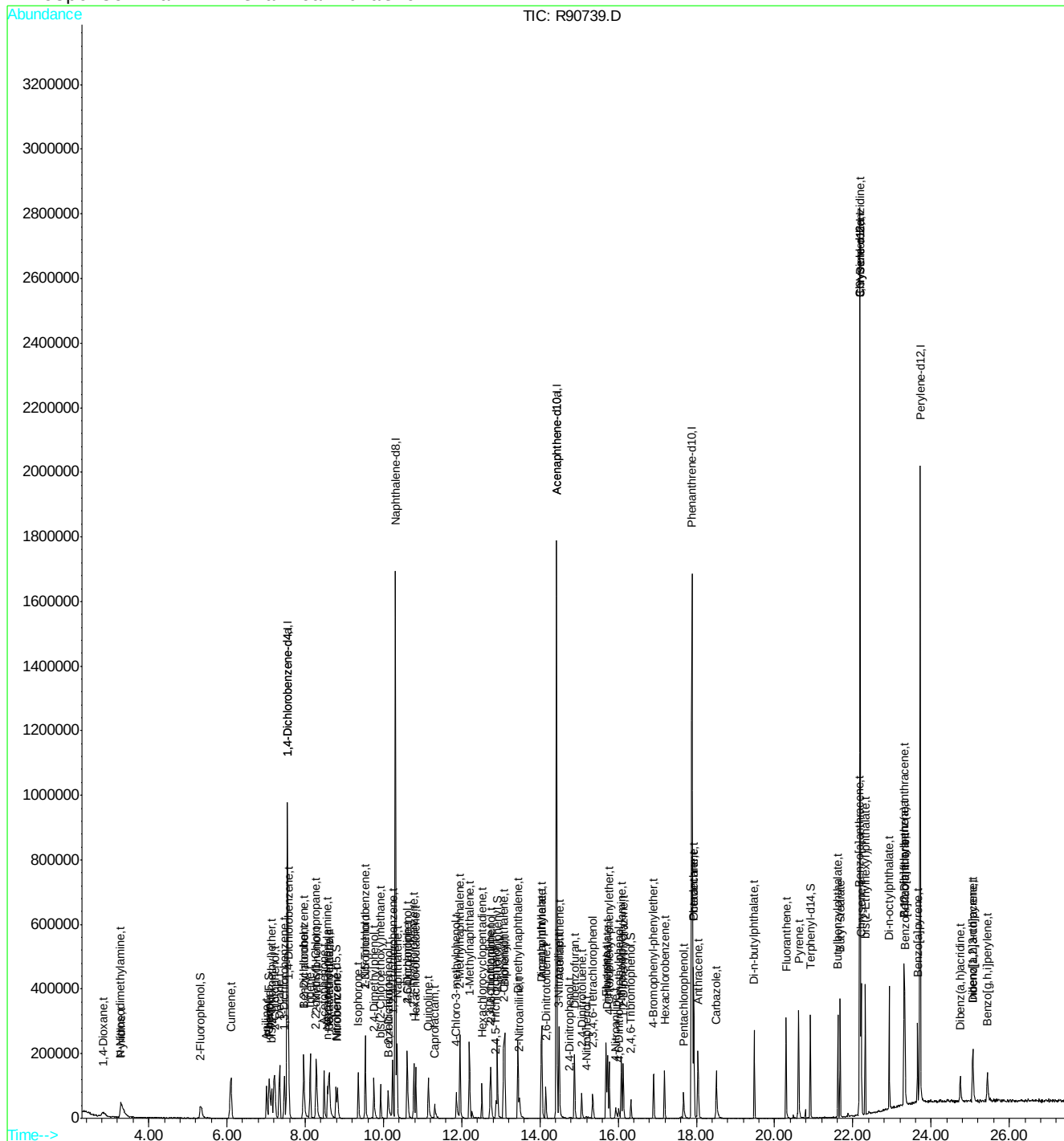
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90739.D
Acq On : 20 Dec 2011 4:05 pm
Sample : ic3499-5
Misc : op53255,er3499,1000,,,1,1
MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:00 2011

Vial: 5
Operator: rachelg
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:ER3499-IC3499

Method:SW846 8270D

Lab FileID:R90739.D

Analyst approved:12/22/11 09:53 Rachel Gregor

Injection Time:12/20/11 16:05

Supervisor approved:12/24/11 22:41 Wen Wen Chi

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.83	Poor instrument integration
4-Nitrophenol	100-02-7		15.18	Poor instrument integration

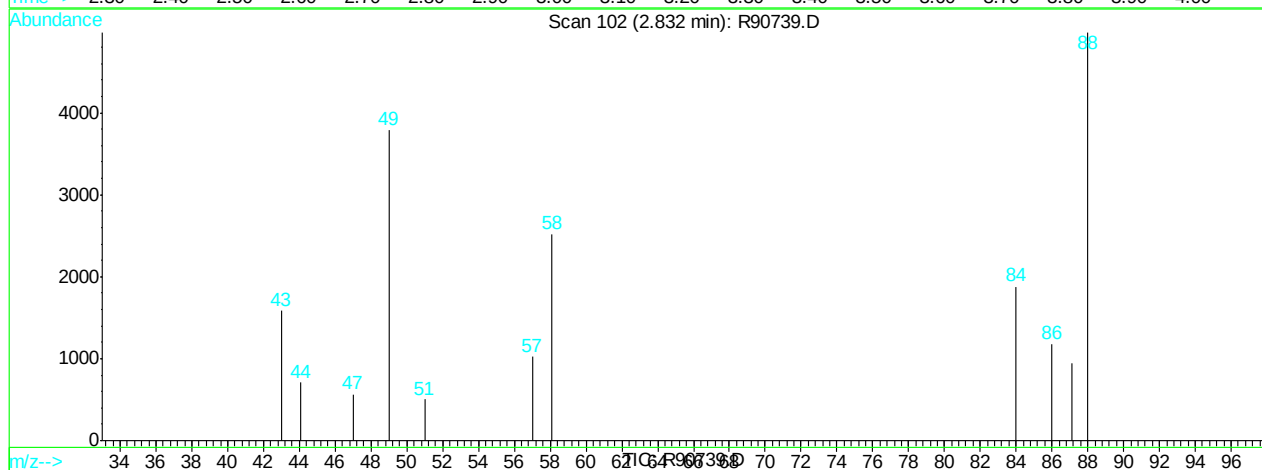
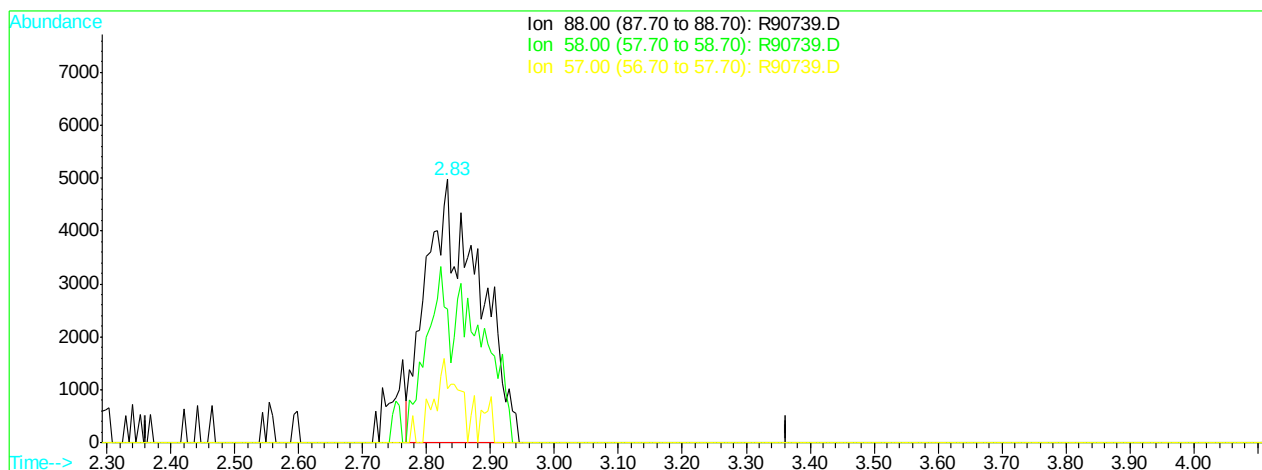
8.6.41.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90739.D Vial: 5
 Acq On : 20 Dec 2011 4:05 pm Operator: rachelg
 Sample : ic3499-5 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:02 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 10:02:33 2011
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.83min 4.70ppb

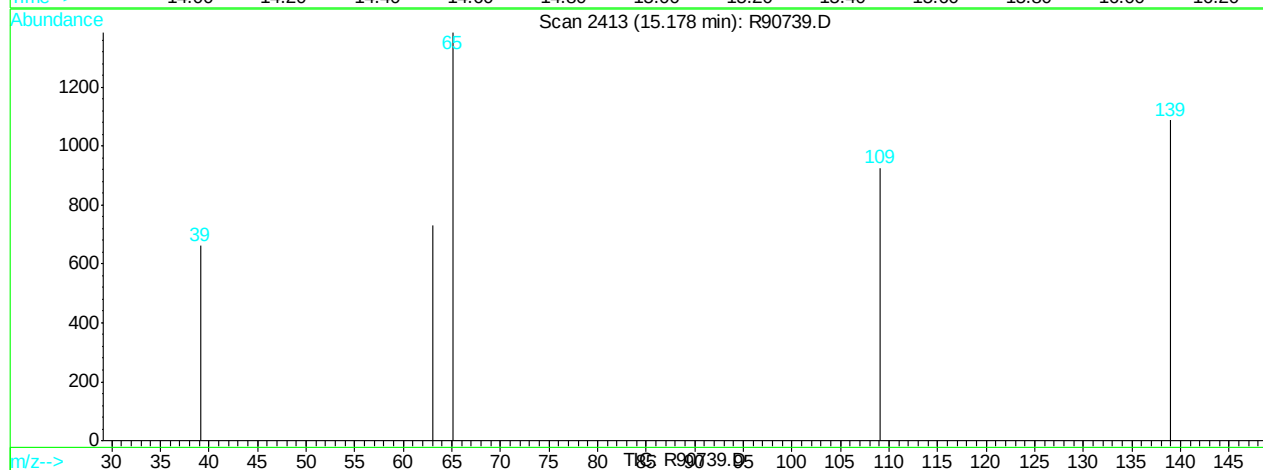
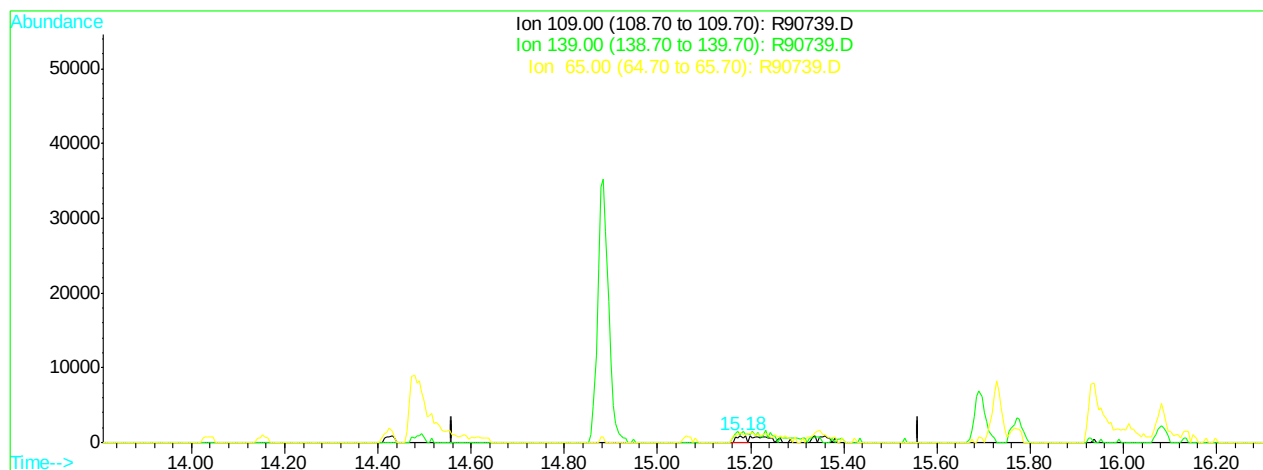
response 28305

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	55.00
57.00	26.80	22.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90739.D Vial: 5
 Acq On : 20 Dec 2011 4:05 pm Operator: rachelg
 Sample : ic3499-5 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:04 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 10:03:56 2011
 Response via : Multiple Level Calibration



(61) 4-Nitrophenol (t)

15.18min 0.47ppb

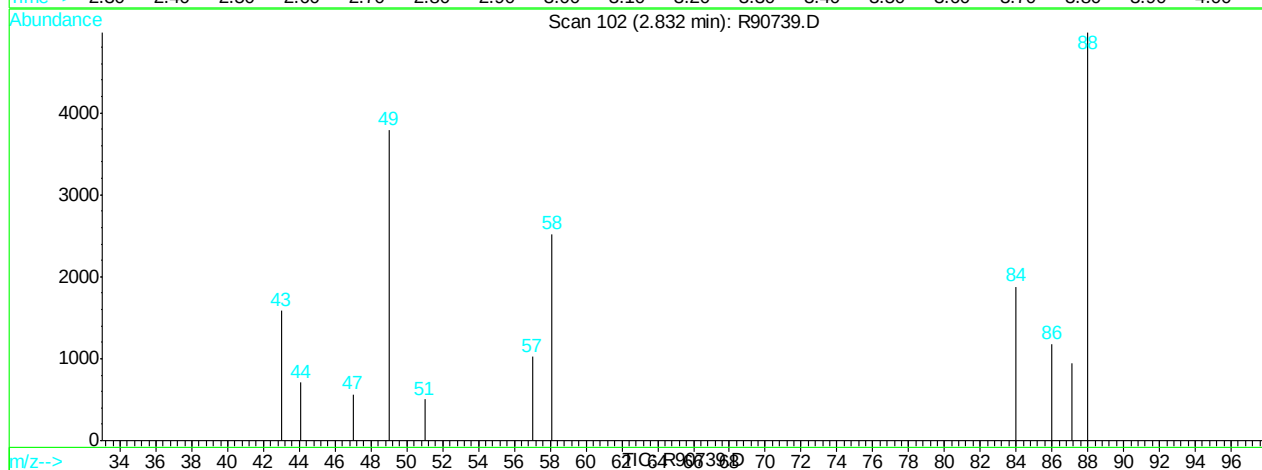
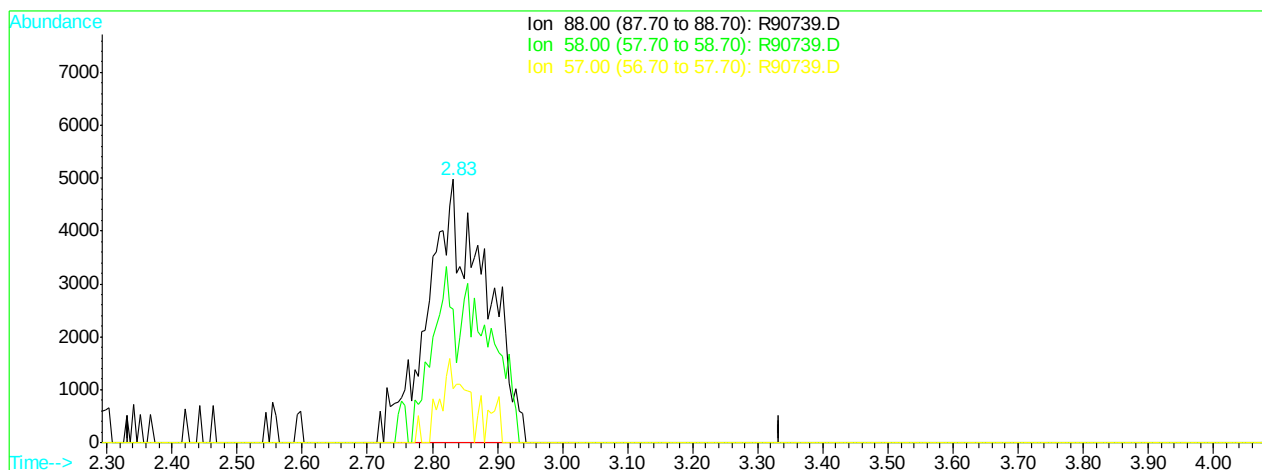
response 1207

Ion	Exp%	Act%
109.00	100	100
139.00	173.20	53.89#
65.00	160.70	83.10#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90739.D Vial: 5
Acq On : 20 Dec 2011 4:05 pm Operator: rachelg
Sample : ic3499-5 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:00 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.83min 5.39ppb m

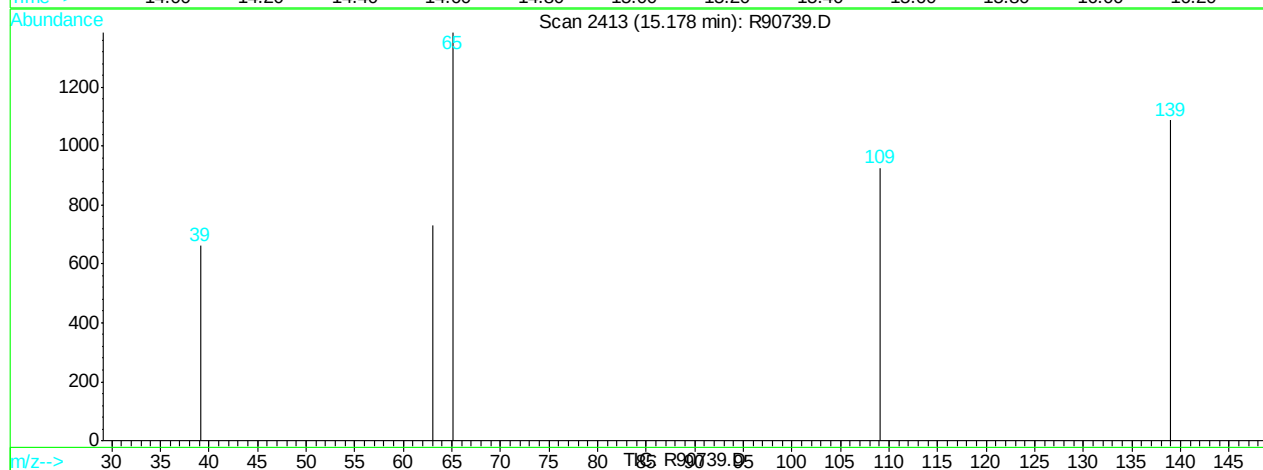
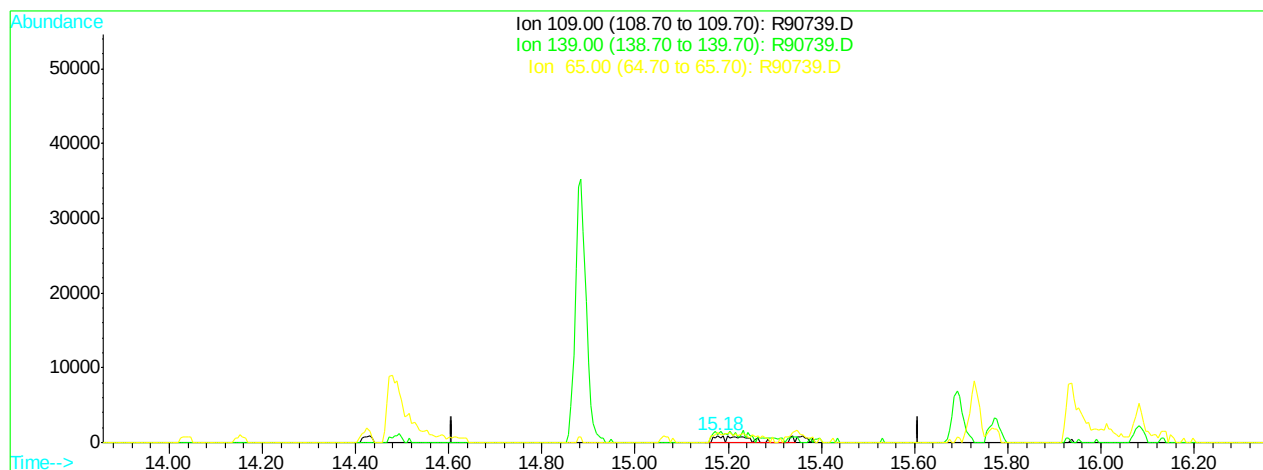
response 30875

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	50.69
57.00	26.80	20.55
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90739.D Vial: 5
 Acq On : 20 Dec 2011 4:05 pm Operator: rachelg
 Sample : ic3499-5 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 12:00 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 13:20:39 2011
 Response via : Multiple Level Calibration



(61) 4-Nitrophenol (t)

15.18min 6.03ppb m

response 4384

Ion	Exp%	Act%
109.00	100	100
139.00	173.20	117.60#
65.00	160.70	149.68
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90740.D

Vial: 6

Acq On : 20 Dec 2011 4:42 pm

Operator: rachelg

Sample : ic3499-10

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 10:47 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 10:46:01 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	384395	40.00	ppb	0.00
24) Naphthalene-d8	10.31	136	1321057	40.00	ppb	0.00
47) Acenaphthene-d10	14.43	164	751248	40.00	ppb	0.00
69) Phenanthrene-d10	17.89	188	1168264	40.00	ppb	0.00
83) Chrysene-d12	22.19	240	1041867	40.00	ppb	0.00
92) Perylene-d12	23.72	264	921033	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.54	152	384395	40.00	ppb	0.00
104) Acenaphthene-d10a	14.43	164	751248	40.00	ppb	0.00
107) Chrysene-d12a	22.19	240	1041867	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	5.32	112	131268	10.50	ppb	0.00
Spiked Amount	50.000		Recovery	=	21.00%	
8) Phenol-d5	7.06	99	148881	10.47	ppb	0.00
Spiked Amount	50.000		Recovery	=	20.94%	
25) Nitrobenzene-d5	8.78	82	121013	10.12	ppb	0.00
Spiked Amount	50.000		Recovery	=	20.24%	
51) 2-Fluorobiphenyl	12.91	172	247932	10.18	ppb	0.00
Spiked Amount	50.000		Recovery	=	20.36%	
73) 2,4,6-Tribromophenol	16.32	330	34395	9.92	ppb	0.00
Spiked Amount	50.000		Recovery	=	19.84%	
86) Terphenyl-d14	20.92	244	242727	11.05	ppb	0.00
Spiked Amount	50.000		Recovery	=	22.10%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.83	88	59465m	10.26	ppb	
3) Pyridine	3.27	79	139443	10.72	ppb	97
4) N-Nitrosodimethylamine	3.27	42	65182	10.39	ppb	89
6) Indene	8.13	116	229277	10.18	ppb	93
7) Cumene	6.09	105	347853	10.31	ppb	98
9) Phenol	7.08	94	155005	10.57	ppb	96
10) Aniline	7.00	93	189666	10.61	ppb	99
11) bis(2-Chloroethyl)ether	7.14	93	114980	9.86	ppb	97
12) 2-Chlorophenol	7.22	128	137297	10.18	ppb	97
13) Decane	7.34	43	152691	10.03	ppb	97
14) 1,3-Dichlorobenzene	7.46	146	160801	9.87	ppb	99
15) 1,4-Dichlorobenzene	7.58	146	158657	9.92	ppb	95
16) Benzyl alcohol	7.95	108	65855	9.68	ppb	95
17) 1,2-Dichlorobenzene	7.96	146	155543	10.36	ppb	96
18) Acetophenone	8.47	105	169926	10.27	ppb	99
19) 2-Methylphenol	8.28	108	115356	10.17	ppb	98
20) 2,2'-oxybis(1-Chloropropan	8.27	121	43981	10.18	ppb	91
21) 3&4-Methylphenol	8.61	108	122511	11.15	ppb	90
22) n-Nitroso-di-n-propylamine	8.57	70	71891	10.06	ppb	97
23) Hexachloroethane	8.60	201	50708	9.86	ppb	89
26) Nitrobenzene	8.82	77	126324	10.26	ppb	95
27) Quinoline	11.14	129	235946	10.13	ppb	96
28) Isophorone	9.35	82	217107	10.29	ppb	98
29) 2-Nitrophenol	9.53	139	68825	10.21	ppb	86
30) 2,4-Dimethylphenol	9.75	107	112346	9.94	ppb	97

(#)=qualifier out of range (m)=manual integration

R90740.D MR3499.M

Wed Dec 21 13:53:46 2011

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90740.D

Vial: 6

Acq On : 20 Dec 2011 4:42 pm

Operator: rachelg

Sample : ic3499-10

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 10:47 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 10:46:01 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.07	105	43782	8.91	ppb	85
32) bis(2-Chloroethoxy)methane	9.92	93	125854	10.01	ppb	98
33) 2,4-Dichlorophenol	10.11	162	106181	10.77	ppb	97
34) 2,6-Dichlorophenol	10.61	162	104378	10.25	ppb	97
35) 1,3,5-Trichlorobenzene	9.53	180	130187	10.36	ppb	98
36) 1,2,4-Trichlorobenzene	10.23	180	120869	10.08	ppb	98
37) 1,2,3-Trichlorobenzene	10.78	180	118155	10.25	ppb	97
38) Naphthalene	10.35	128	359357	10.46	ppb	98
39) 4-Chloroaniline	10.60	127	149983	10.68	ppb	98
40) 2,3-Dichloroaniline	12.73	161	122432	10.29	ppb	95
41) Caprolactam	11.31	55	45590	9.69	ppb	87
42) Hexachlorobutadiene	10.82	225	65750	9.93	ppb	92
43) 4-Chloro-3-methylphenol	11.85	107	103423	10.43	ppb	96
44) 2-Methylnaphthalene	11.95	142	275547	10.32	ppb	97
45) 1-Methylnaphthalene	12.20	142	251035	10.35	ppb	98
46) Dimethylnaphthalene	13.44	156	220877	10.29	ppb	98
48) Hexachlorocyclopentadiene	12.52	237	82515	18.42	ppb	94
49) 2,4,6-Trichlorophenol	12.74	196	73493	10.76	ppb	90
50) 2,4,5-Trichlorophenol	12.86	196	71929	10.30	ppb	97
52) 2-Chloronaphthalene	13.07	162	231838	10.40	ppb	98
53) Biphenyl	13.10	154	289625	10.73	ppb	96
54) 2-Nitroaniline	13.47	65	61778	11.14	ppb	90
55) Dimethylphthalate	14.04	163	247339	10.38	ppb	98
56) Acenaphthylene	14.05	152	366536	10.38	ppb	95
57) 2,6-Dinitrotoluene	14.15	165	52773	10.09	ppb	94
58) 3-Nitroaniline	14.46	138	57407	10.37	ppb	95
59) Acenaphthene	14.49	153	222366	10.25	ppb	96
60) 2,4-Dinitrophenol	14.71	184	28976	19.38	ppb #	65
61) 4-Nitrophenol	15.11	109	12326	8.20	ppb #	78
62) Dibenzofuran	14.88	168	314043	10.40	ppb	99
63) 2,4-Dinitrotoluene	15.06	165	75130	10.66	ppb	95
64) 2,3,4,6-Tetrachlorophenol	15.34	232	56174	10.20	ppb	98
65) Diethylphthalate	15.73	149	245309	10.19	ppb	99
66) Fluorene	15.69	166	258071	10.38	ppb	96
67) 4-Chlorophenyl-phenylether	15.77	204	113993	9.97	ppb	99
68) 4-Nitroaniline	15.92	138	56982	9.87	ppb	99
70) 4,6-Dinitro-2-methylphenol	16.01	198	31017	7.24	ppb	91
71) n-Nitrosodiphenylamine	16.08	169	182569	10.49	ppb	94
72) 1,2-Diphenylhydrazine	16.13	77	225651	10.25	ppb	95
74) 4-Bromophenyl-phenylether	16.90	248	70742	10.36	ppb	99
75) Hexachlorobenzene	17.18	284	77025	10.17	ppb	100
76) Pentachlorophenol	17.67	266	72179	17.74	ppb	100
77) Phenanthrene	17.94	178	349112	10.76	ppb	96
78) Anthracene	18.04	178	366372	10.59	ppb	98
79) Carbazole	18.51	167	331685	10.59	ppb	98
80) Di-n-butylphthalate	19.48	149	416613	10.85	ppb	97
81) Fluoranthene	20.29	202	374484	10.76	ppb	99
82) Octadecane	17.93	57	151924	10.53	ppb	96
84) Pyrene	20.61	202	391661	11.01	ppb	96

(#) = qualifier out of range (m) = manual integration

R90740.D MR3499.M

Wed Dec 21 13:53:46 2011

NJMSR

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90740.D Vial: 6
 Acq On : 20 Dec 2011 4:42 pm Operator: rachelg
 Sample : ic3499-10 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:47 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 10:46:01 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Butyl stearate	21.67	56	108059	11.22	ppb	97
87) Butylbenzylphthalate	21.62	149	180090	10.41	ppb	99
88) Benzo[a]anthracene	22.17	228	340408	10.49	ppb	95
89) 3,3'-Dichlorobenzidine	22.18	252	97634	10.46	ppb	98
90) Chrysene	22.21	228	323980	10.67	ppb	95
91) bis(2-Ethylhexyl)phthalate	22.32	149	241081	11.26	ppb	95
93) Di-n-octylphthalate	22.93	149	392399	11.20	ppb	97
94) Benzo[b]fluoranthene	23.31	252	327270	9.79	ppb	99
95) Benzo[k]fluoranthene	23.33	252	306750	10.75	ppb	96
96) Benzo[a]pyrene	23.66	252	275034	10.23	ppb	95
97) Indeno[1,2,3-cd]pyrene	25.06	276	244018	10.87	ppb	94
98) Dibenz(a,h)acridine	24.74	279	175565	9.07	ppb	97
99) Dibenz[a,h]anthracene	25.07	278	188609	8.77	ppb	95
100) 7,12-Dimethylbenz(a)anthra	23.32	256	143276	10.28	ppb	97
101) Benzo[g,h,i]perylene	25.44	276	212793	10.86	ppb	98

8.6.42
8

 (#) = qualifier out of range (m) = manual integration

R90740.D MR3499.M Wed Dec 21 13:53:47 2011 NJMSR

Page 3

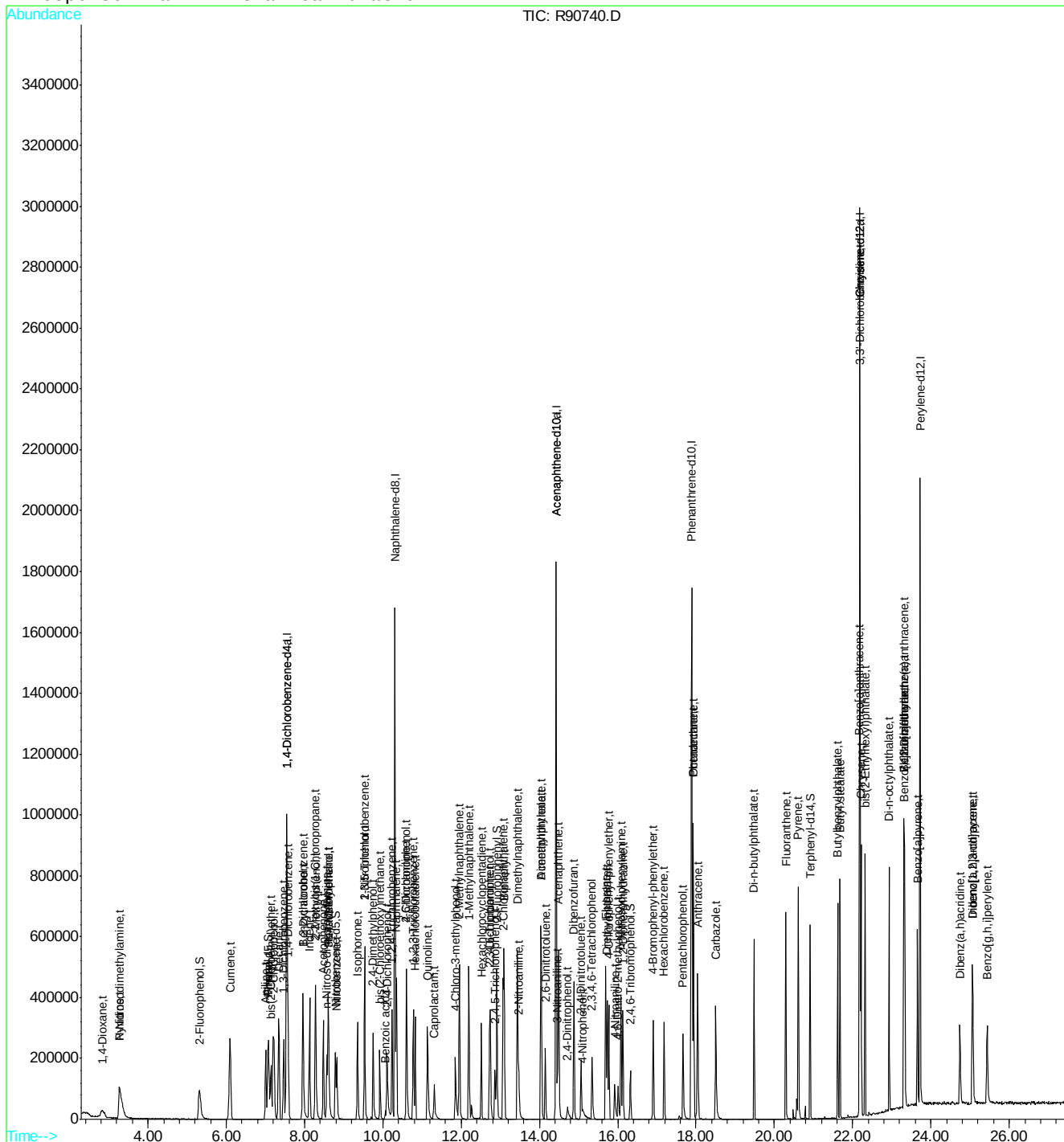
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90740.D
Acq On : 20 Dec 2011 4:42 pm
Sample : ic3499-10
Misc : op53255,er3499,1000,,1,1
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:47 2011

Vial: 6
Operator: rachelg
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: ER3499-IC3499

Method: SW846 8270D

Lab FileID: R90740.D

Analyst approved: 12/22/11 09:53 Rachel Gregor

Injection Time: 12/20/11 16:42

Supervisor approved: 12/24/11 22:41 Wen Wen Chi

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.83	Poor instrument integration

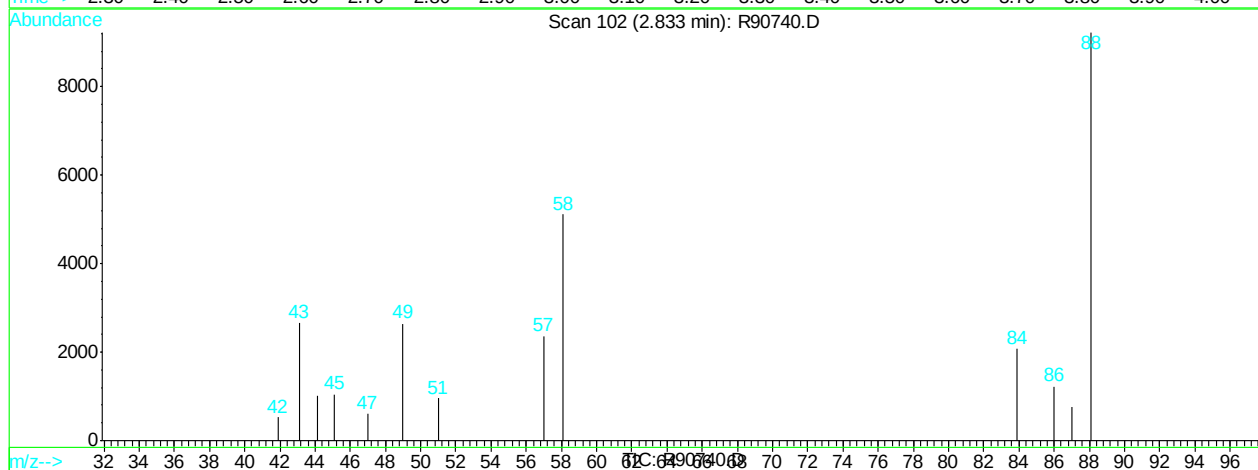
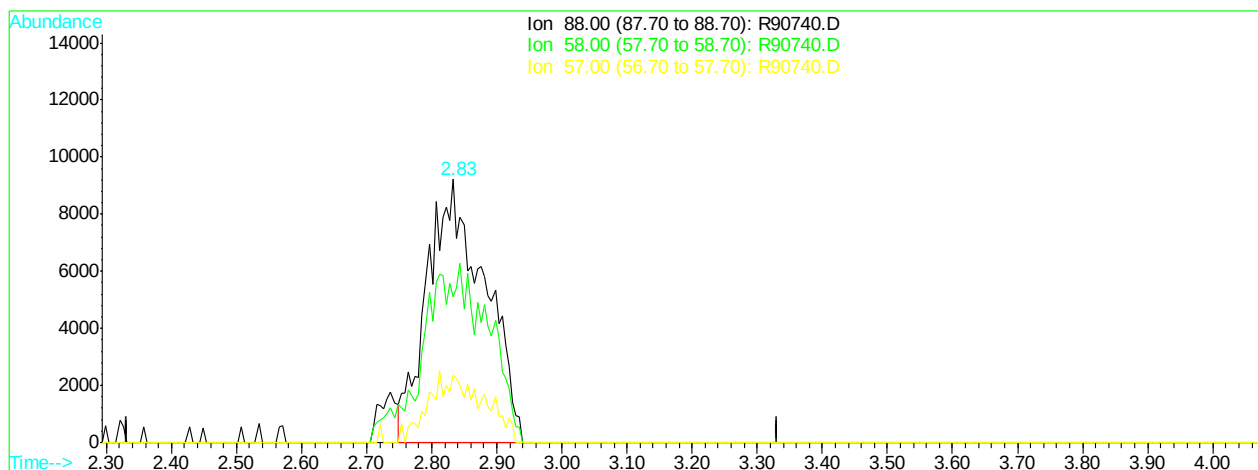
8.6.42.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90740.D Vial: 6
Acq On : 20 Dec 2011 4:42 pm Operator: rachelg
Sample : ic3499-10 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:05 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 10:05:37 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.83min 9.13ppb

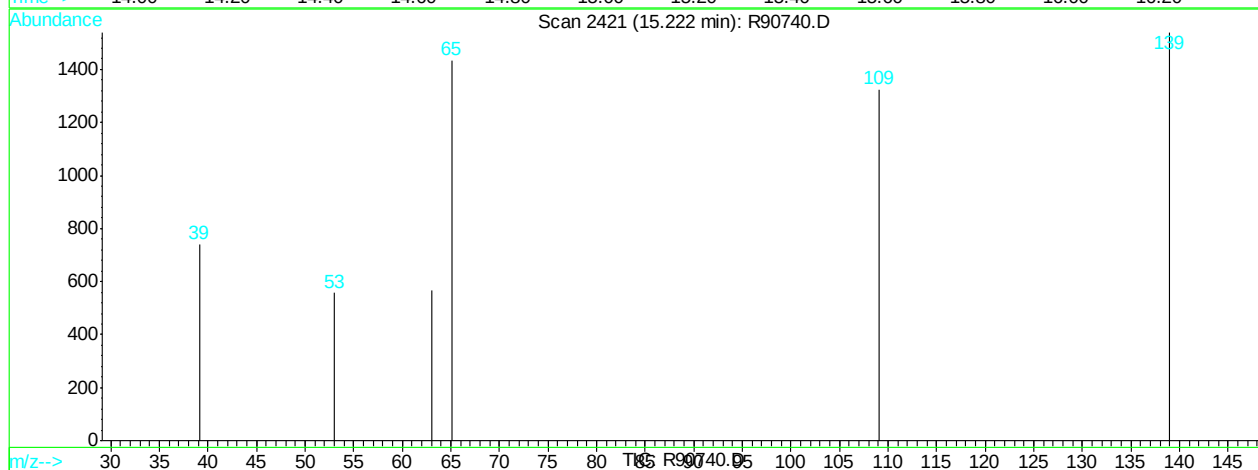
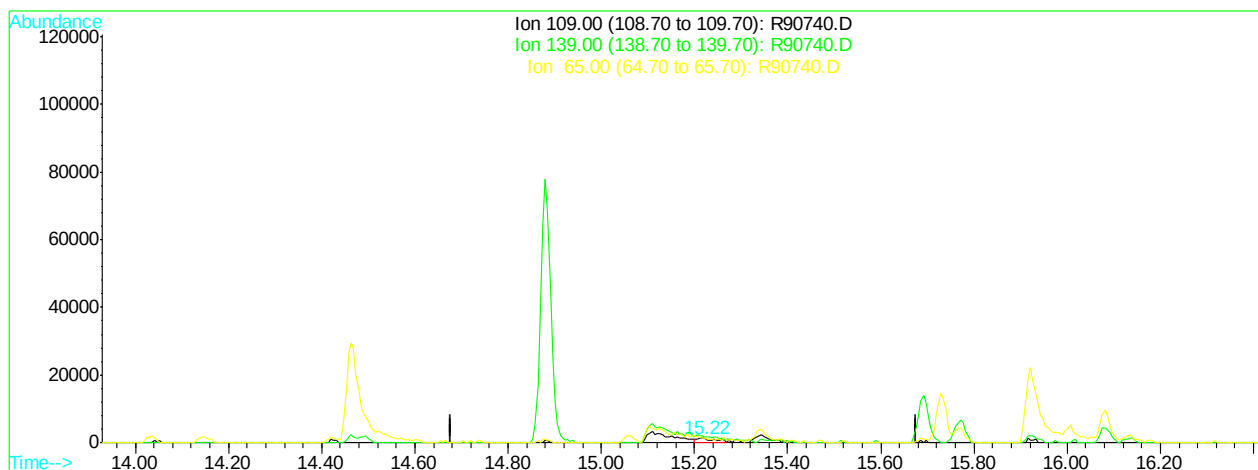
response 56132

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	52.08
57.00	26.80	27.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90740.D Vial: 6
 Acq On : 20 Dec 2011 4:42 pm Operator: rachelg
 Sample : ic3499-10 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:05 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 10:05:37 2011
 Response via : Multiple Level Calibration



(61) 4-Nitrophenol (t)

15.22min 1.99ppb

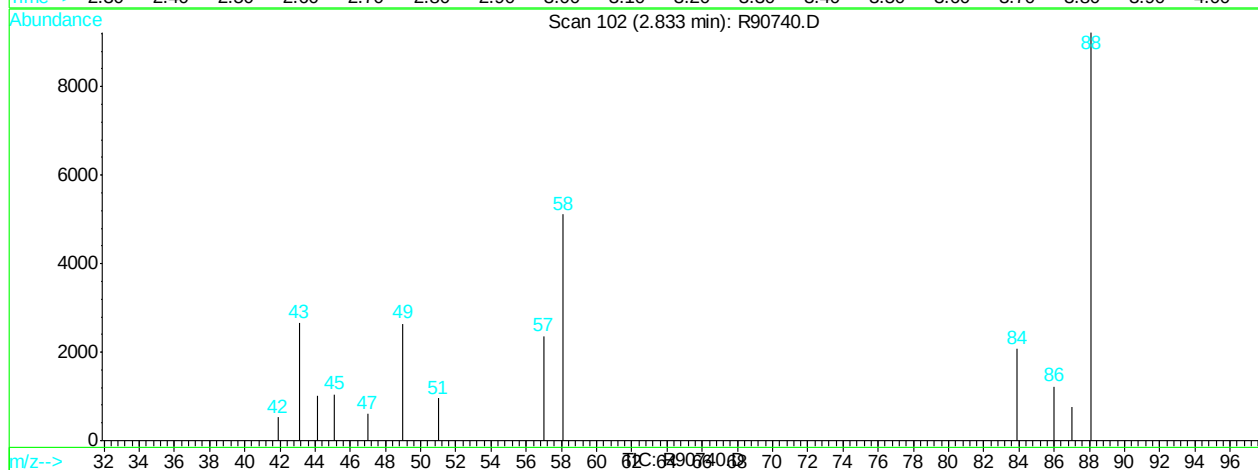
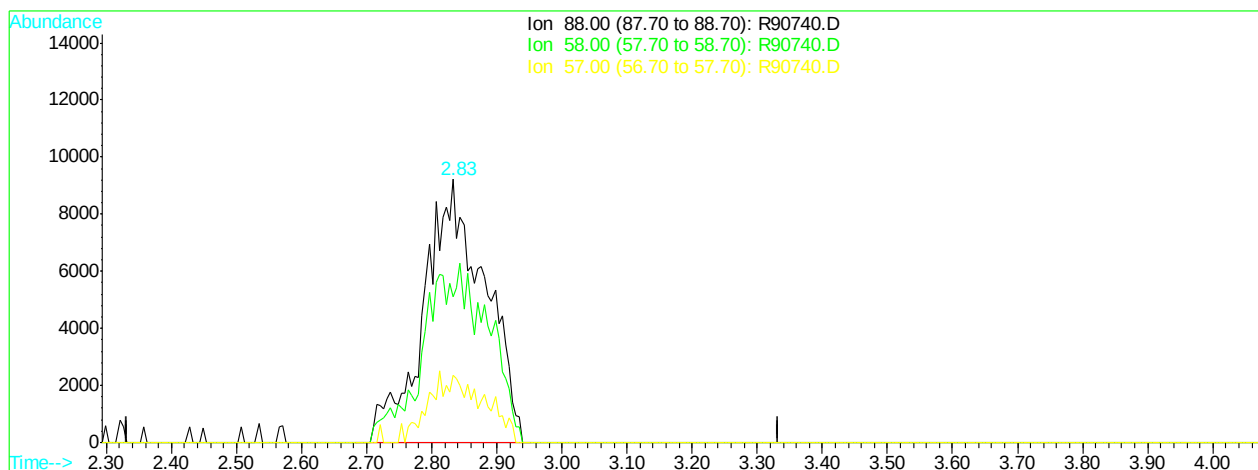
response 3474

Ion	Exp%	Act%
109.00	100	100
139.00	173.20	22.82#
65.00	160.70	10.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90740.D Vial: 6
Acq On : 20 Dec 2011 4:42 pm Operator: rachelg
Sample : ic3499-10 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:47 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.83min 10.26ppb m

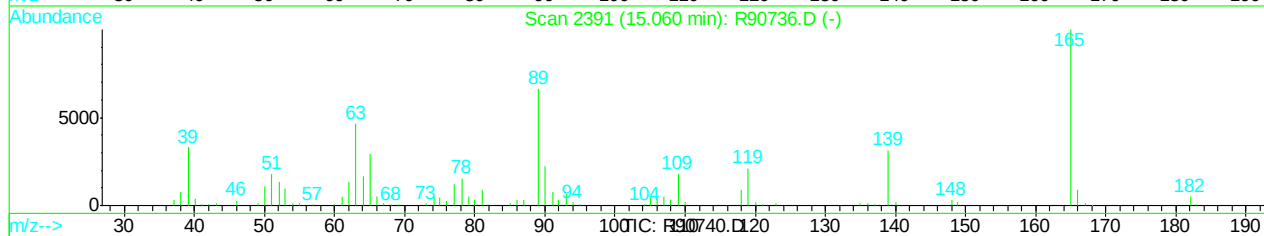
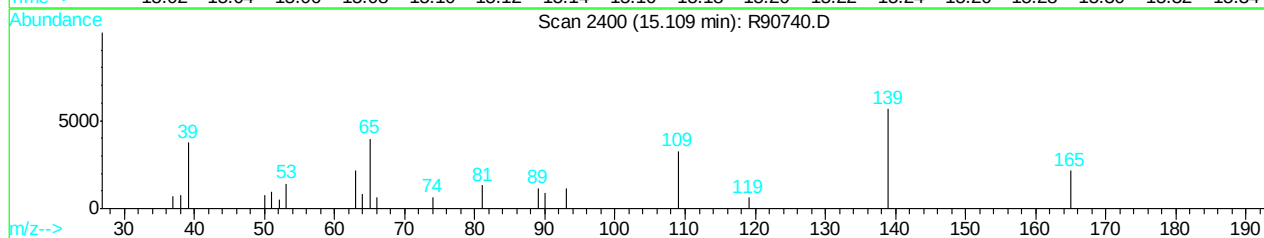
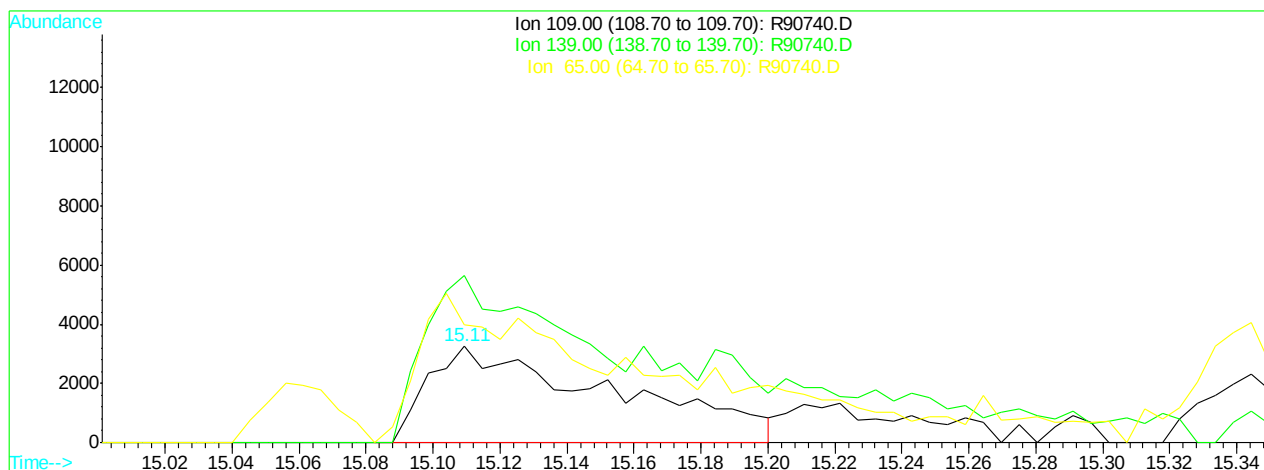
response 59465

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	55.48
57.00	26.80	25.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90740.D Vial: 6
Acq On : 20 Dec 2011 4:42 pm Operator: rachelg
Sample : ic3499-10 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:47 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Dec 22 11:16:16 2011
Response via : Multiple Level Calibration



(61) 4-Nitrophenol (t)

15.11min 8.20ppb

response 12326

Ion	Exp%	Act%
109.00	100	100
139.00	173.20	168.90
65.00	160.70	105.13#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90741.D

Vial: 7

Acq On : 20 Dec 2011 5:18 pm

Operator: rachelg

Sample : ic3499-50

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 10:08 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 10:07:10 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	426845	40.00	ppb	0.00
24) Naphthalene-d8	10.31	136	1432135	40.00	ppb	0.00
47) Acenaphthene-d10	14.43	164	847183	40.00	ppb	0.00
69) Phenanthrene-d10	17.89	188	1329821	40.00	ppb	0.00
83) Chrysene-d12	22.20	240	1186094	40.00	ppb	0.01
92) Perylene-d12	23.73	264	1170115	40.00	ppb	0.01
102) 1,4-Dichlorobenzene-d4a	7.55	152	426845	40.00	ppb	0.00
104) Acenaphthene-d10a	14.43	164	847183	40.00	ppb	0.00
107) Chrysene-d12a	22.20	240	1186094	40.00	ppb	0.01

System Monitoring Compounds

5) 2-Fluorophenol	5.30	112	680754	48.84	ppb	-0.02
Spiked Amount	50.000		Recovery	=	97.68%	
8) Phenol-d5	7.06	99	718350	43.21	ppb	0.00
Spiked Amount	50.000		Recovery	=	86.42%	
25) Nitrobenzene-d5	8.79	82	618093	46.27	ppb	0.00
Spiked Amount	50.000		Recovery	=	92.54%	
51) 2-Fluorobiphenyl	12.92	172	1147585	37.65	ppb	0.01
Spiked Amount	50.000		Recovery	=	75.30%	
73) 2,4,6-Tribromophenol	16.33	330	199640	51.57	ppb	0.01
Spiked Amount	50.000		Recovery	=	103.14%	
86) Terphenyl-d14	20.92	244	1136073	41.30	ppb	0.00
Spiked Amount	50.000		Recovery	=	82.60%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.81	88	290050	42.83	ppb	94
3) Pyridine	3.24	79	700894	47.91	ppb	98
4) N-Nitrosodimethylamine	3.25	42	346235	49.96	ppb	95
6) Indene	8.13	116	1101741	40.90	ppb	98
7) Cumene	6.09	105	1623469	39.82	ppb	97
9) Phenol	7.08	94	743958	43.01	ppb	97
10) Aniline	7.00	93	876070	40.91	ppb	98
11) bis(2-Chloroethyl)ether	7.15	93	553053	39.96	ppb	97
12) 2-Chlorophenol	7.22	128	656932	40.95	ppb	99
13) Decane	7.35	43	724161	39.48	ppb	98
14) 1,3-Dichlorobenzene	7.47	146	791247	40.74	ppb	99
15) 1,4-Dichlorobenzene	7.58	146	786715	41.29	ppb	96
16) Benzyl alcohol	7.95	108	406842	57.49	ppb	99
17) 1,2-Dichlorobenzene	7.96	146	731352	40.69	ppb	99
18) Acetophenone	8.48	105	838756	43.54	ppb	97
19) 2-Methylphenol	8.29	108	554615	41.11	ppb	100
20) 2,2'-oxybis(1-Chloropropan	8.27	121	213751	42.41	ppb	88
21) 3&4-Methylphenol	8.61	108	580785	46.05	ppb	95
22) n-Nitroso-di-n-propylamine	8.58	70	362903	43.19	ppb	97
23) Hexachloroethane	8.60	201	246061	40.14	ppb	95
26) Nitrobenzene	8.83	77	611841	43.37	ppb	97
27) Quinoline	11.16	129	1192454	45.44	ppb	98
28) Isophorone	9.36	82	1055011	43.61	ppb	98
29) 2-Nitrophenol	9.54	139	362281	49.02	ppb	97
30) 2,4-Dimethylphenol	9.75	107	587767	46.83	ppb	96

(#)=qualifier out of range (m)=manual integration

R90741.D MR3499.M

Wed Dec 21 13:54:08 2011

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90741.D

Vial: 7

Acq On : 20 Dec 2011 5:18 pm

Operator: rachelg

Sample : ic3499-50

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 10:08 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 10:07:10 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.19	105	443019	65.61	ppb	83
32) bis(2-Chloroethoxy)methane	9.93	93	630472	43.90	ppb	98
33) 2,4-Dichlorophenol	10.10	162	531224	48.97	ppb	100
34) 2,6-Dichlorophenol	10.61	162	515260	44.55	ppb	99
35) 1,3,5-Trichlorobenzene	9.54	180	594850	40.13	ppb	97
36) 1,2,4-Trichlorobenzene	10.24	180	580417	41.57	ppb	97
37) 1,2,3-Trichlorobenzene	10.78	180	564632	42.36	ppb	96
38) Naphthalene	10.35	128	1600808	38.46	ppb	96
39) 4-Chloroaniline	10.61	127	736544	46.12	ppb	98
40) 2,3-Dichloroaniline	12.73	161	604932	44.45	ppb	99
41) Caprolactam	11.42	55	259802	59.05	ppb	97
42) Hexachlorobutadiene	10.83	225	330151	43.49	ppb	95
43) 4-Chloro-3-methylphenol	11.86	107	535837	49.33	ppb	100
44) 2-Methylnaphthalene	11.96	142	1231260	38.16	ppb	98
45) 1-Methylnaphthalene	12.20	142	1154489	40.24	ppb	98
46) Dimethylnaphthalene	13.45	156	1055944	42.05	ppb	99
48) Hexachlorocyclopentadiene	12.52	237	566758	129.55	ppb	98
49) 2,4,6-Trichlorophenol	12.75	196	359832	45.03	ppb	96
50) 2,4,5-Trichlorophenol	12.86	196	394713	51.05	ppb	95
52) 2-Chloronaphthalene	13.08	162	1087672	39.58	ppb	96
53) Biphenyl	13.11	154	1308368	37.31	ppb	96
54) 2-Nitroaniline	13.48	65	325189	54.05	ppb	100
55) Dimethylphthalate	14.05	163	1162667	39.52	ppb	98
56) Acenaphthylene	14.06	152	1593664	36.73	ppb	96
57) 2,6-Dinitrotoluene	14.16	165	294694	50.81	ppb	97
58) 3-Nitroaniline	14.47	138	339030	64.02	ppb	97
59) Acenaphthene	14.51	153	1043741	38.79	ppb	98
60) 2,4-Dinitrophenol	14.71	184	328058	189.99	ppb	95
61) 4-Nitrophenol	15.05	109	150659	78.85	ppb	85
62) Dibenzofuran	14.90	168	1451289	38.47	ppb	96
63) 2,4-Dinitrotoluene	15.08	165	399547	50.51	ppb	98
64) 2,3,4,6-Tetrachlorophenol	15.34	232	323095	54.46	ppb	95
65) Diethylphthalate	15.75	149	1158909	38.69	ppb	99
66) Fluorene	15.70	166	1215992	39.65	ppb	95
67) 4-Chlorophenyl-phenylether	15.78	204	558145	39.84	ppb	99
68) 4-Nitroaniline	15.96	138	332989	65.71	ppb	95
70) 4,6-Dinitro-2-methylphenol	16.03	198	245561	56.30	ppb	# 72
71) n-Nitrosodiphenylamine	16.10	169	859258	39.90	ppb	98
72) 1,2-Diphenylhydrazine	16.15	77	1049014	38.98	ppb	98
74) 4-Bromophenyl-phenylether	16.91	248	358269	44.25	ppb	96
75) Hexachlorobenzene	17.20	284	384750	41.91	ppb	95
76) Pentachlorophenol	17.68	266	489159	133.04	ppb	96
77) Phenanthrene	17.95	178	1546075	35.80	ppb	96
78) Anthracene	18.06	178	1678386	38.47	ppb	96
79) Carbazole	18.52	167	1598030	41.43	ppb	98
80) Di-n-butylphthalate	19.49	149	1891681	38.64	ppb	97
81) Fluoranthene	20.30	202	1682306	37.88	ppb	95
82) Octadecane	17.94	57	690793	38.03	ppb	98
84) Pyrene	20.62	202	1660300	35.09	ppb	95

(#) = qualifier out of range (m) = manual integration

R90741.D MR3499.M

Wed Dec 21 13:54:08 2011

NJMSR

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90741.D Vial: 7
 Acq On : 20 Dec 2011 5:18 pm Operator: rachelg
 Sample : ic3499-50 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:08 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 10:07:10 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Butyl stearate	21.68	56	462621	37.22	ppb	99
87) Butylbenzylphthalate	21.62	149	886556	41.71	ppb	98
88) Benzo[a]anthracene	22.17	228	1534864	37.27	ppb	95
89) 3,3'-Dichlorobenzidine	22.18	252	588346	59.15	ppb	96
90) Chrysene	22.22	228	1435746	36.23	ppb	92
91) bis(2-Ethylhexyl)phthalate	22.32	149	1124163	38.98	ppb	95
93) Di-n-octylphthalate	22.94	149	1770361	35.66	ppb	93
94) Benzo[b]fluoranthene	23.32	252	1735150	37.45	ppb	94
95) Benzo[k]fluoranthene	23.35	252	1403527	35.98	ppb	92
96) Benzo[a]pyrene	23.67	252	1528974	41.26	ppb	94
97) Indeno[1,2,3-cd]pyrene	25.08	276	1665293	58.55	ppb	97
98) Dibenz(a,h)acridine	24.76	279	1295585	64.61	ppb	97
99) Dibenz[a,h]anthracene	25.09	278	1360567	64.94	ppb	98
100) 7,12-Dimethylbenz(a)anthra	23.34	256	834610	45.82	ppb	97
101) Benzo[g,h,i]perylene	25.46	276	1423192	55.26	ppb	97

8.6.43

8

(#) = qualifier out of range (m) = manual integration

R90741.D MR3499.M Wed Dec 21 13:54:09 2011 NJMSR

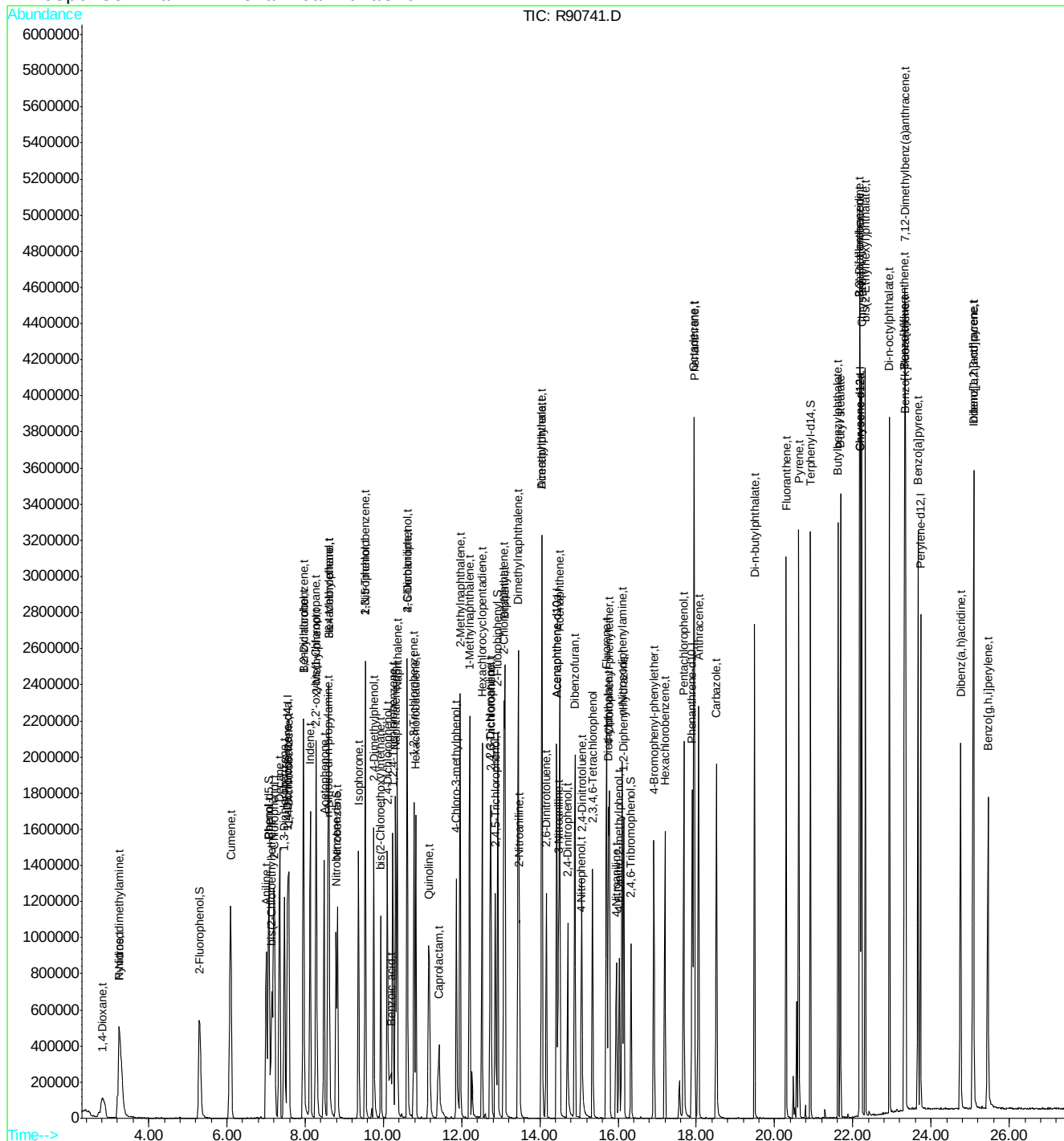
Page 3

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Data File : C:\HPCHEM\1\DATA\ER3499\R90741.D          Vial: 7
Acq On    : 20 Dec 2011   5:18 pm                    Operator: rachelg
Sample    : ic3499-50                                Inst  : MSR
Misc      : op53255,er3499,1000,,,1,1               Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:08 2011                        Quant Results File: MR3499.RES

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Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90742.D

Vial: 8

Acq On : 20 Dec 2011 5:54 pm

Operator: rachelg

Sample : ic3499-80

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 10:09 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 10:08:23 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	428895	40.00	ppb	0.00
24) Naphthalene-d8	10.32	136	1476298	40.00	ppb	0.01
47) Acenaphthene-d10	14.43	164	861952	40.00	ppb	0.00
69) Phenanthrene-d10	17.90	188	1326347	40.00	ppb	0.01
83) Chrysene-d12	22.20	240	1173289	40.00	ppb	0.01
92) Perylene-d12	23.73	264	1072351	40.00	ppb	0.01
102) 1,4-Dichlorobenzene-d4a	7.55	152	428895	40.00	ppb	0.00
104) Acenaphthene-d10a	14.43	164	861952	40.00	ppb	0.00
107) Chrysene-d12a	22.20	240	1173289	40.00	ppb	0.01

System Monitoring Compounds

5) 2-Fluorophenol	5.29	112	1138807	81.62	ppb	-0.02
Spiked Amount	50.000		Recovery	=	163.24%	
8) Phenol-d5	7.07	99	1190187	72.90	ppb	0.00
Spiked Amount	50.000		Recovery	=	145.80%	
25) Nitrobenzene-d5	8.80	82	1049248	77.16	ppb	0.01
Spiked Amount	50.000		Recovery	=	154.32%	
51) 2-Fluorobiphenyl	12.94	172	1845349	62.06	ppb	0.02
Spiked Amount	50.000		Recovery	=	124.12%	
73) 2,4,6-Tribromophenol	16.34	330	337440	86.85	ppb	0.02
Spiked Amount	50.000		Recovery	=	173.70%	
86) Terphenyl-d14	20.92	244	1724476	65.66	ppb	0.00
Spiked Amount	50.000		Recovery	=	131.32%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.82	88	493826m	74.71	ppb	
3) Pyridine	3.23	79	1162380	79.74	ppb	98
4) N-Nitrosodimethylamine	3.24	42	576561	82.81	ppb	92
6) Indene	8.13	116	1782876	67.93	ppb	98
7) Cumene	6.09	105	2586539	65.35	ppb	94
9) Phenol	7.09	94	1226103	72.58	ppb	98
10) Aniline	7.01	93	1399593	67.08	ppb	71
11) bis(2-Chloroethyl)ether	7.16	93	945733	70.36	ppb	96
12) 2-Chlorophenol	7.23	128	1088769	69.64	ppb	98
13) Decane	7.35	43	1178395	66.26	ppb	98
14) 1,3-Dichlorobenzene	7.48	146	1304617	68.98	ppb	97
15) 1,4-Dichlorobenzene	7.58	146	1269129	68.27	ppb	91
16) Benzyl alcohol	7.96	108	691016	94.81	ppb	99
17) 1,2-Dichlorobenzene	7.96	146	1182626	67.58	ppb	99
18) Acetophenone	8.50	105	1383792	73.06	ppb	97
19) 2-Methylphenol	8.29	108	912459	69.37	ppb	99
20) 2,2'-oxybis(1-Chloropropan	8.27	121	363224	73.58	ppb	# 85
21) 3&4-Methylphenol	8.62	108	936623	74.90	ppb	88
22) n-Nitroso-di-n-propylamine	8.59	70	583956	70.78	ppb	98
23) Hexachloroethane	8.60	201	412946	69.33	ppb	97
26) Nitrobenzene	8.84	77	1024122	72.02	ppb	97
27) Quinoline	11.18	129	1988191	74.63	ppb	98
28) Isophorone	9.38	82	1742137	71.38	ppb	98
29) 2-Nitrophenol	9.54	139	602899	79.39	ppb	95
30) 2,4-Dimethylphenol	9.76	107	994082	77.65	ppb	94

(#)=qualifier out of range (m)=manual integration

R90742.D MR3499.M

Wed Dec 21 13:55:09 2011

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90742.D

Vial: 8

Acq On : 20 Dec 2011 5:54 pm

Operator: rachelg

Sample : ic3499-80

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 10:09 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 10:08:23 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.28	105	812247	105.70	ppb	82
32) bis(2-Chloroethoxy)methane	9.95	93	1046014	72.13	ppb	96
33) 2,4-Dichlorophenol	10.11	162	876372	78.64	ppb	96
34) 2,6-Dichlorophenol	10.62	162	854688	73.01	ppb	98
35) 1,3,5-Trichlorobenzene	9.54	180	977061	66.12	ppb	99
36) 1,2,4-Trichlorobenzene	10.24	180	961055	68.71	ppb	98
37) 1,2,3-Trichlorobenzene	10.79	180	938666	70.10	ppb	96
38) Naphthalene	10.36	128	2467804	59.81	ppb	90
39) 4-Chloroaniline	10.62	127	1158659	71.30	ppb	96
40) 2,3-Dichloroaniline	12.74	161	984658	71.51	ppb	99
41) Caprolactam	11.50	55	462857	98.49	ppb	98
42) Hexachlorobutadiene	10.83	225	548230	71.61	ppb	94
43) 4-Chloro-3-methylphenol	11.88	107	891747	79.82	ppb	99
44) 2-Methylnaphthalene	11.97	142	1954742	61.19	ppb	96
45) 1-Methylnaphthalene	12.21	142	1856152	64.87	ppb	98
46) Dimethylnaphthalene	13.46	156	1681307	66.71	ppb	97
48) Hexachlorocyclopentadiene	12.53	237	921723	192.83	ppb	97
49) 2,4,6-Trichlorophenol	12.77	196	600720	75.13	ppb	97
50) 2,4,5-Trichlorophenol	12.87	196	683166	86.54	ppb	97
52) 2-Chloronaphthalene	13.09	162	1752869	64.95	ppb	93
53) Biphenyl	13.12	154	2031054	59.44	ppb	90
54) 2-Nitroaniline	13.49	65	561262	90.46	ppb	99
55) Dimethylphthalate	14.06	163	1850763	64.06	ppb	96
56) Acenaphthylene	14.06	152	2432714	57.66	ppb	89
57) 2,6-Dinitrotoluene	14.18	165	509426	86.05	ppb	96
58) 3-Nitroaniline	14.49	138	567992	100.72	ppb	95
59) Acenaphthene	14.52	153	1677281	63.65	ppb	96
60) 2,4-Dinitrophenol	14.73	184	633248	294.25	ppb	96
61) 4-Nitrophenol	15.06	109	271068	121.86	ppb	92
62) Dibenzofuran	14.90	168	2270973	61.53	ppb	90
63) 2,4-Dinitrotoluene	15.09	165	668694	82.91	ppb	98
64) 2,3,4,6-Tetrachlorophenol	15.35	232	550428	89.59	ppb	97
65) Diethylphthalate	15.76	149	1840417	62.76	ppb	93
66) Fluorene	15.71	166	1936857	64.29	ppb	95
67) 4-Chlorophenyl-phenylether	15.78	204	916797	66.58	ppb	99
68) 4-Nitroaniline	15.99	138	587384	107.19	ppb	97
70) 4,6-Dinitro-2-methylphenol	16.06	198	437544	96.53	ppb	88
71) n-Nitrosodiphenylamine	16.12	169	1376098	66.29	ppb	94
72) 1,2-Diphenylhydrazine	16.16	77	1843301	71.29	ppb	96
74) 4-Bromophenyl-phenylether	16.92	248	594214	75.02	ppb	99
75) Hexachlorobenzene	17.21	284	632062	70.95	ppb	98
76) Pentachlorophenol	17.70	266	829595	212.19	ppb	95
77) Phenanthrene	17.96	178	2397971	58.44	ppb	89
78) Anthracene	18.07	178	2589011	61.87	ppb	89
79) Carbazole	18.53	167	2487014	66.55	ppb	92
80) Di-n-butylphthalate	19.50	149	2762544	58.80	ppb	91
81) Fluoranthene	20.30	202	2495215	58.71	ppb	86
82) Octadecane	17.95	57	1098260	63.14	ppb	96
84) Pyrene	20.63	202	2457621	55.26	ppb	83

(#)=qualifier out of range (m)=manual integration

R90742.D MR3499.M

Wed Dec 21 13:55:09 2011

NJMSR

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90742.D Vial: 8
 Acq On : 20 Dec 2011 5:54 pm Operator: rachelg
 Sample : ic3499-80 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:09 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 10:08:23 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Butyl stearate	21.69	56	730154	62.58	ppb	87
87) Butylbenzylphthalate	21.63	149	1365894	66.81	ppb	95
88) Benzo[a]anthracene	22.18	228	2261069	57.96	ppb	83
89) 3,3'-Dichlorobenzidine	22.19	252	958254	94.51	ppb	91
90) Chrysene	22.23	228	2098825	56.11	ppb	79
91) bis(2-Ethylhexyl)phthalate	22.32	149	1651207	60.09	ppb	86
93) Di-n-octylphthalate	22.94	149	2432032	56.71	ppb	85
94) Benzo[b]fluoranthene	23.33	252	2688320	66.08	ppb	87
95) Benzo[k]fluoranthene	23.36	252	1731154m	50.80	ppb	
96) Benzo[a]pyrene	23.67	252	2180439	66.13	ppb	89
97) Indeno[1,2,3-cd]pyrene	25.08	276	1993592	74.37	ppb	92
98) Dibenz(a,h)acridine	24.76	279	1648174	84.73	ppb	93
99) Dibenz[a,h]anthracene	25.10	278	1649353	81.83	ppb	96
100) 7,12-Dimethylbenz(a)anthra	23.35	256	1307650	79.67	ppb	98
101) Benzo[g,h,i]perylene	25.46	276	1588581	66.15	ppb	96

8.6.44

8

(#) = qualifier out of range (m) = manual integration

R90742.D MR3499.M Wed Dec 21 13:55:10 2011 NJMSR

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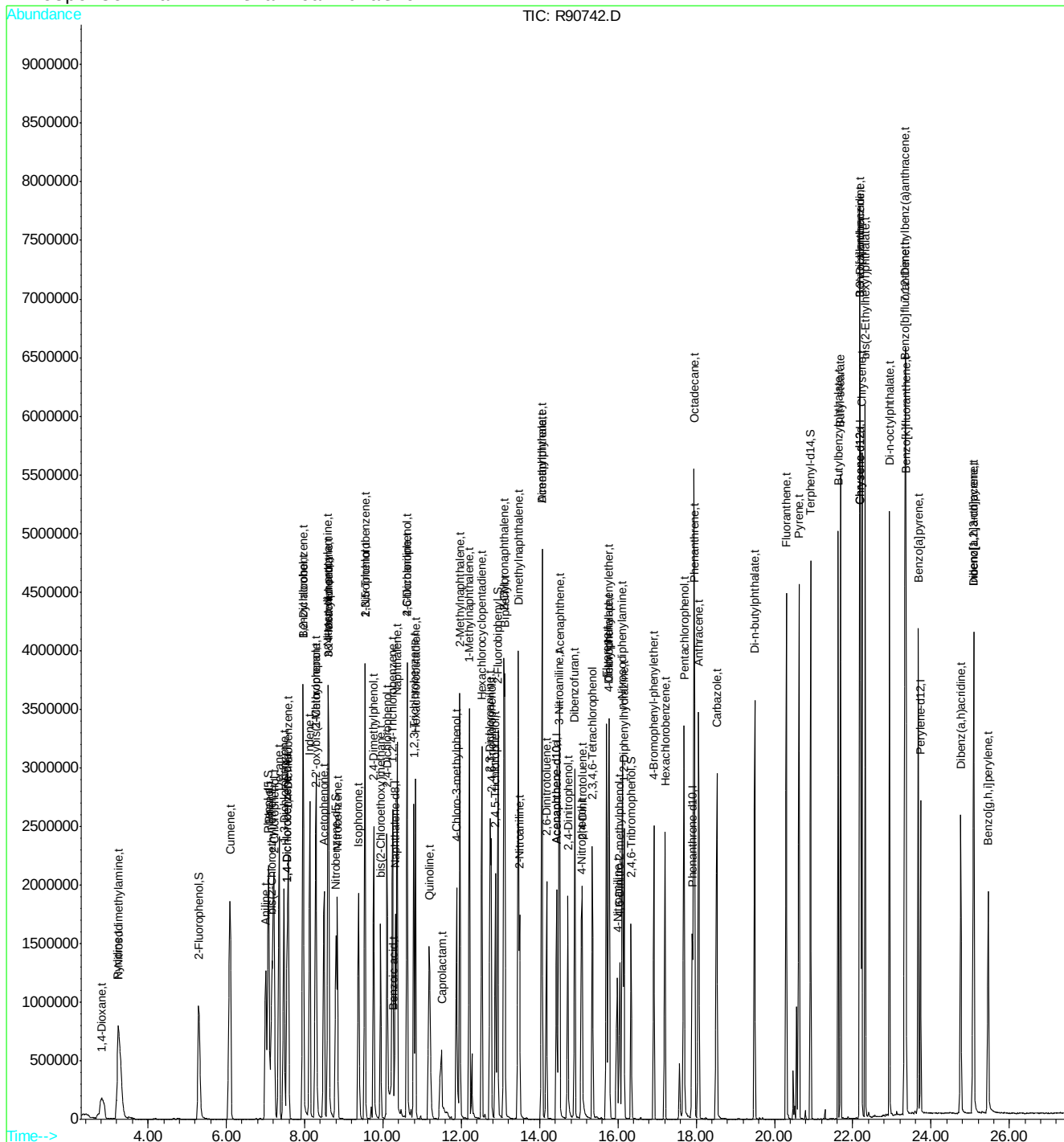
Quantitation Report

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Data File : C:\HPCHEM\1\DATA\ER3499\R90742.D          Vial: 8
Acq On    : 20 Dec 2011   5:54 pm                    Operator: rachelg
Sample    : ic3499-80                                Inst  : MSR
Misc      : op53255,er3499,1000,,,1,1               Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:09 2011                        Quant Results File: MR3499.RES

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Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



R90742.D MR3499.M

Wed Dec 21 13:55:12 2011

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8.6.44

Manual Integration Approval Summary

Sample Number:ER3499-IC3499

Method:SW846 8270D

Lab FileID:R90742.D

Analyst approved:12/22/11 09:54 Rachel Gregor

Injection Time:12/20/11 17:54

Supervisor approved:12/24/11 22:41 Wen Wen Chi

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.82	Poor instrument integration
Benzo(k)fluoranthene	207-08-9		23.36	Overlapping peak

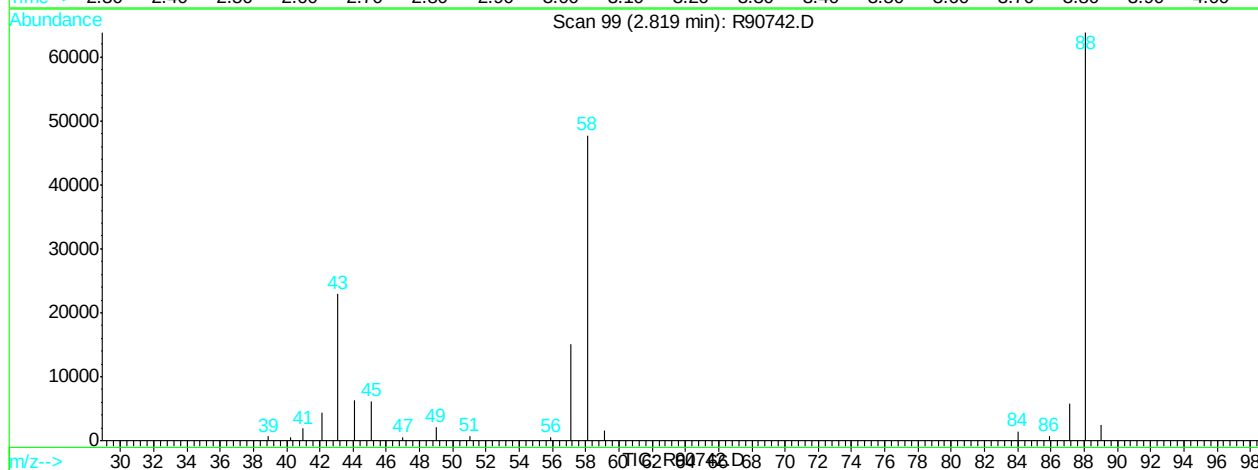
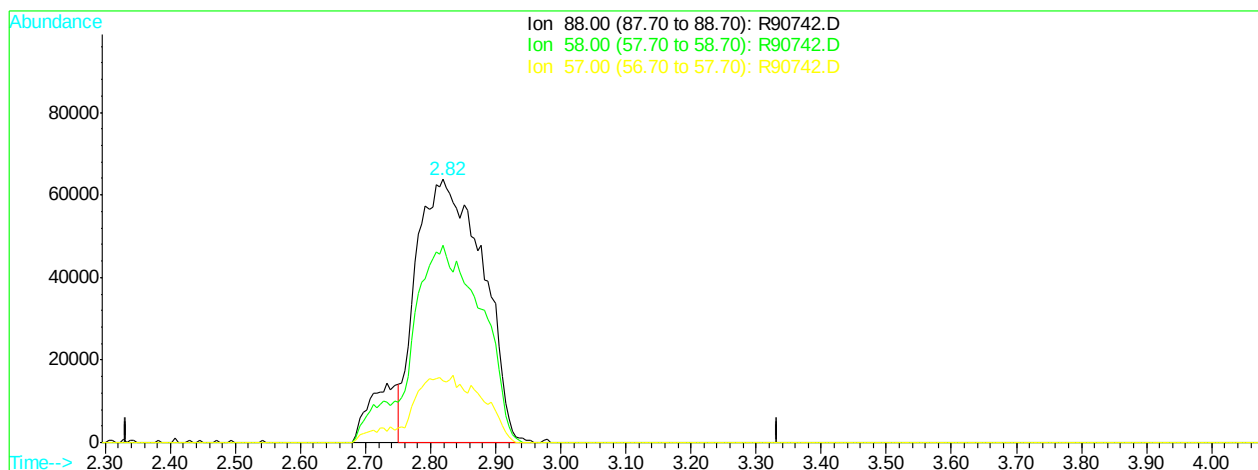
8.6.44.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90742.D Vial: 8
 Acq On : 20 Dec 2011 5:54 pm Operator: rachelg
 Sample : ic3499-80 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:08 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 10:08:23 2011
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.82min 68.06ppb

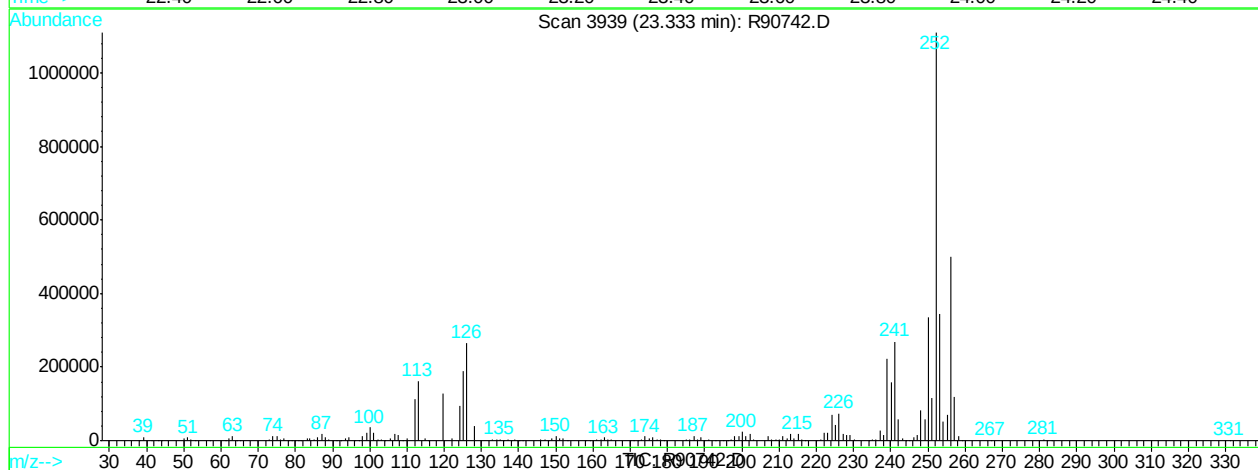
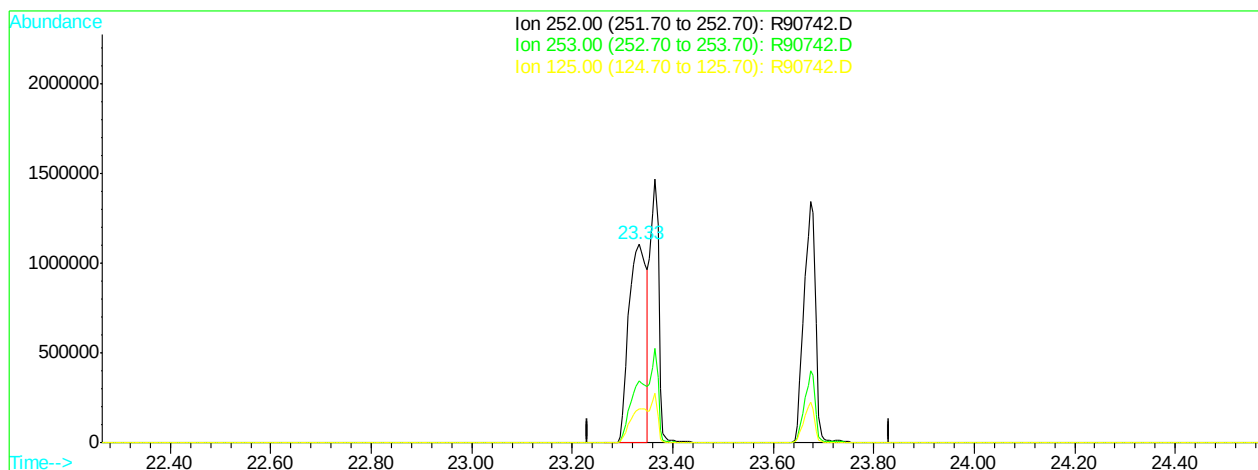
response 449871

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	75.62
57.00	26.80	23.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90742.D Vial: 8
Acq On : 20 Dec 2011 5:54 pm Operator: rachelg
Sample : ic3499-80 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:08 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 10:08:23 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

23.33min 78.89ppb

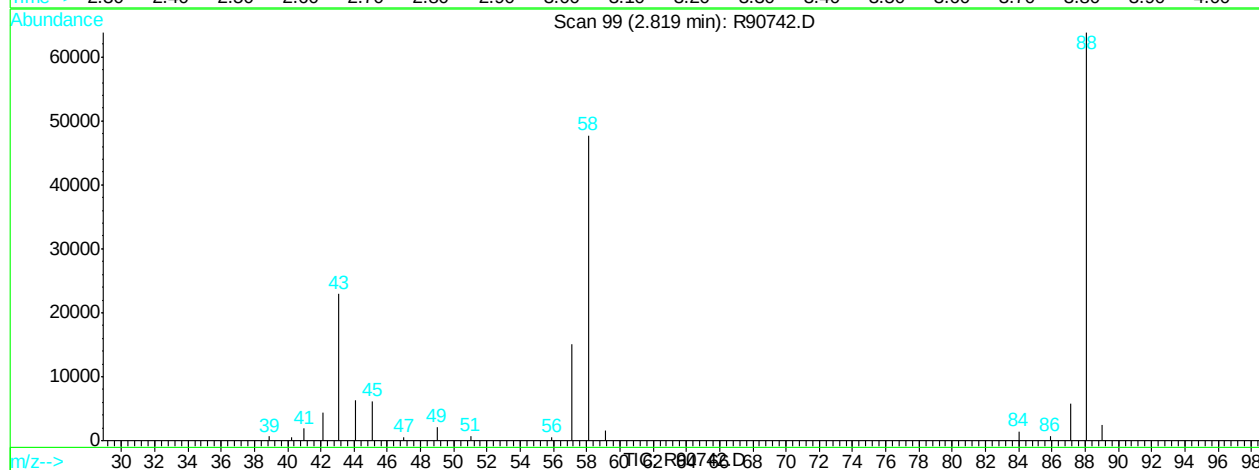
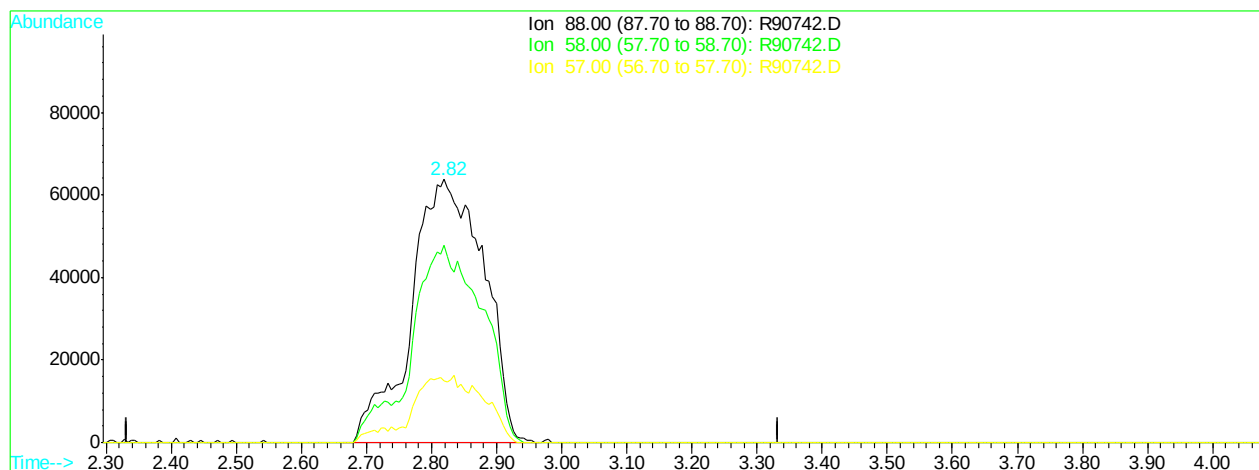
response 2688320

Ion	Exp%	Act%
252.00	100	100
253.00	23.60	29.58
125.00	12.30	16.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90742.D Vial: 8
 Acq On : 20 Dec 2011 5:54 pm Operator: rachelg
 Sample : ic3499-80 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:09 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 13:20:39 2011
 Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.82min 74.71ppb m

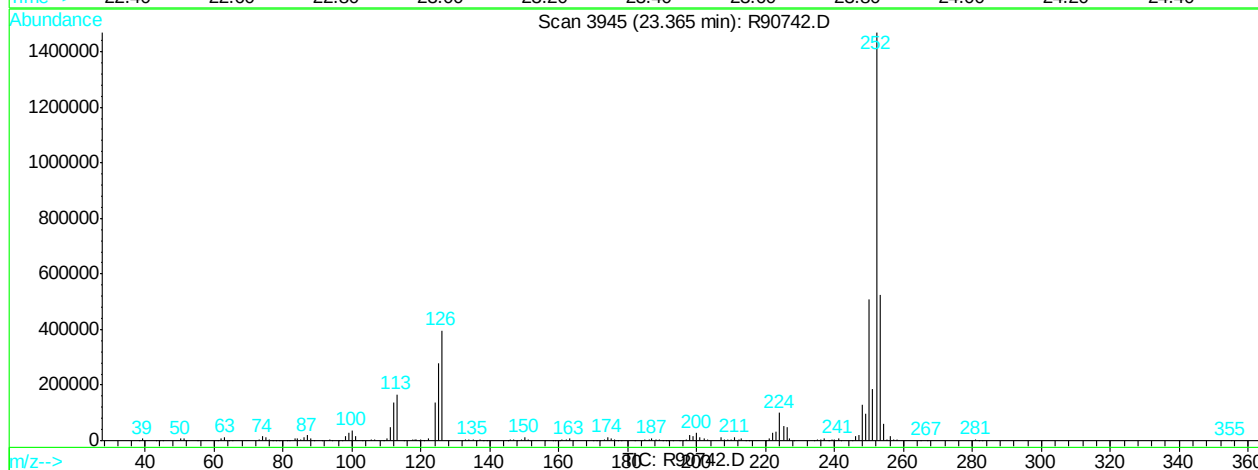
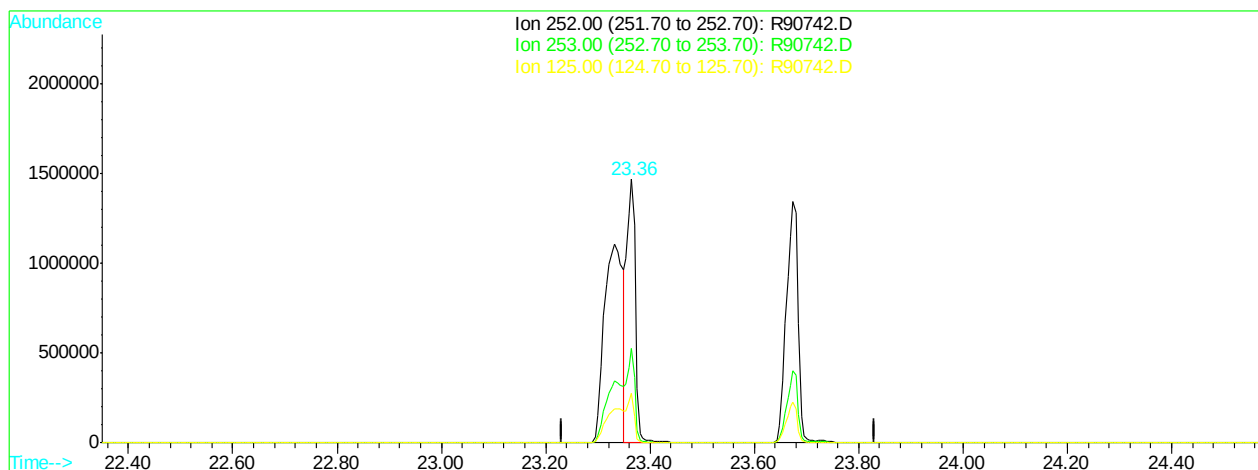
response 493826

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	74.86
57.00	26.80	23.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90742.D Vial: 8
Acq On : 20 Dec 2011 5:54 pm Operator: rachelg
Sample : ic3499-80 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:09 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

23.36min 50.80ppb m

response 1731154

Ion	Exp%	Act%
252.00	100	100
253.00	23.60	35.63
125.00	12.30	18.89
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90743.D

Vial: 9

Acq On : 20 Dec 2011 6:30 pm

Operator: rachelg

Sample : ic3499-100

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 10:10 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 10:09:47 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.55	152	356414	40.00	ppb	0.00
24) Naphthalene-d8	10.32	136	1253802	40.00	ppb	0.00
47) Acenaphthene-d10	14.44	164	715588	40.00	ppb	0.01
69) Phenanthrene-d10	17.90	188	1115009	40.00	ppb	0.01
83) Chrysene-d12	22.20	240	983329	40.00	ppb	0.01
92) Perylene-d12	23.73	264	915163	40.00	ppb	0.01
102) 1,4-Dichlorobenzene-d4a	7.55	152	356414	40.00	ppb	0.00
104) Acenaphthene-d10a	14.44	164	715588	40.00	ppb	0.01
107) Chrysene-d12a	22.20	240	983329	40.00	ppb	0.01

System Monitoring Compounds

5) 2-Fluorophenol	5.30	112	1137734	97.85	ppb	-0.02
Spiked Amount	50.000		Recovery	=	195.70%	
8) Phenol-d5	7.07	99	1174900	87.71	ppb	0.00
Spiked Amount	50.000		Recovery	=	175.42%	
25) Nitrobenzene-d5	8.80	82	1036371	90.20	ppb	0.02
Spiked Amount	50.000		Recovery	=	180.40%	
51) 2-Fluorobiphenyl	12.93	172	1826681	76.45	ppb	0.02
Spiked Amount	50.000		Recovery	=	152.90%	
73) 2,4,6-Tribromophenol	16.34	330	329292	99.40	ppb	0.02
Spiked Amount	50.000		Recovery	=	198.80%	
86) Terphenyl-d14	20.92	244	1706700	79.93	ppb	0.00
Spiked Amount	50.000		Recovery	=	159.86%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.82	88	503283m	92.65	ppb	
3) Pyridine	3.24	79	1178841	97.37	ppb	97
4) N-Nitrosodimethylamine	3.24	42	580585	99.76	ppb	95
6) Indene	8.13	116	1772256	83.04	ppb	99
7) Cumene	6.09	105	2613656	81.60	ppb	93
9) Phenol	7.09	94	1222512	88.45	ppb	96
10) Aniline	7.00	93	1397221	82.48	ppb	86
11) bis(2-Chloroethyl)ether	7.16	93	967263	88.11	ppb	99
12) 2-Chlorophenol	7.23	128	1079677	84.67	ppb	99
13) Decane	7.35	43	1198301	83.12	ppb	96
14) 1,3-Dichlorobenzene	7.47	146	1305075	84.71	ppb	96
15) 1,4-Dichlorobenzene	7.58	146	1275429	84.33	ppb	91
16) Benzyl alcohol	7.97	108	696545	112.04	ppb	92
17) 1,2-Dichlorobenzene	7.96	146	1187279	83.49	ppb	98
18) Acetophenone	8.50	105	1387345	89.25	ppb	96
19) 2-Methylphenol	8.30	108	909388	84.80	ppb	99
20) 2,2'-oxybis(1-Chloropropan	8.28	121	366765	90.44	ppb	# 81
21) 3&4-Methylphenol	8.62	108	941087	91.39	ppb	95
22) n-Nitroso-di-n-propylamine	8.60	70	581477	86.23	ppb	99
23) Hexachloroethane	8.61	201	414380	85.34	ppb	93
26) Nitrobenzene	8.84	77	1017793	85.49	ppb	98
27) Quinoline	11.19	129	1990584	88.83	ppb	97
28) Isophorone	9.38	82	1726089	84.58	ppb	95
29) 2-Nitrophenol	9.55	139	608494	94.45	ppb	95
30) 2,4-Dimethylphenol	9.77	107	1001835	92.53	ppb	94

(#) = qualifier out of range (m) = manual integration

R90743.D MR3499.M

Wed Dec 21 13:55:35 2011

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90743.D

Vial: 9

Acq On : 20 Dec 2011 6:30 pm

Operator: rachelg

Sample : ic3499-100

Inst : MSR

Misc : op53255,er3499,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 10:10 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 10:09:47 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.28	105	812147	115.19	ppb	80
32) bis(2-Chloroethoxy)methane	9.94	93	1049997	86.46	ppb	95
33) 2,4-Dichlorophenol	10.11	162	876351	92.82	ppb	96
34) 2,6-Dichlorophenol	10.62	162	856410	87.23	ppb	100
35) 1,3,5-Trichlorobenzene	9.55	180	976483	79.79	ppb	100
36) 1,2,4-Trichlorobenzene	10.25	180	953170	81.89	ppb	97
37) 1,2,3-Trichlorobenzene	10.79	180	928313	83.09	ppb	93
38) Naphthalene	10.36	128	2461433	72.87	ppb	90
39) 4-Chloroaniline	10.62	127	1155886	85.08	ppb	97
40) 2,3-Dichloroaniline	12.74	161	974276	84.59	ppb	98
41) Caprolactam	11.50	55	460688	111.14	ppb	98
42) Hexachlorobutadiene	10.83	225	546439	85.32	ppb	94
43) 4-Chloro-3-methylphenol	11.88	107	885534	93.35	ppb	98
44) 2-Methylnaphthalene	11.97	142	1924802	73.41	ppb	95
45) 1-Methylnaphthalene	12.21	142	1858323	78.59	ppb	98
46) Dimethylnaphthalene	13.46	156	1676095	80.21	ppb	96
48) Hexachlorocyclopentadiene	12.53	237	891851	215.89	ppb	97
49) 2,4,6-Trichlorophenol	12.76	196	598327	90.93	ppb	96
50) 2,4,5-Trichlorophenol	12.87	196	679863	102.54	ppb	98
52) 2-Chloronaphthalene	13.09	162	1729515	79.32	ppb	91
53) Biphenyl	13.12	154	2025164	74.11	ppb	90
54) 2-Nitroaniline	13.49	65	551111	105.03	ppb	98
55) Dimethylphthalate	14.06	163	1841116	79.01	ppb	96
56) Acenaphthylene	14.07	152	2423486	72.06	ppb	89
57) 2,6-Dinitrotoluene	14.18	165	500995	100.67	ppb	97
58) 3-Nitroaniline	14.49	138	562068	115.77	ppb	96
59) Acenaphthene	14.52	153	1664329	78.36	ppb	94
60) 2,4-Dinitrophenol	14.73	184	624379	299.25	ppb	90
61) 4-Nitrophenol	15.07	109	273686	134.16	ppb	91
62) Dibenzofuran	14.91	168	2262957	76.37	ppb	91
63) 2,4-Dinitrotoluene	15.09	165	658425	97.74	ppb	98
64) 2,3,4,6-Tetrachlorophenol	15.35	232	551177	105.95	ppb	97
65) Diethylphthalate	15.77	149	1823422	77.27	ppb	93
66) Fluorene	15.71	166	1923925	79.14	ppb	96
67) 4-Chlorophenyl-phenylether	15.79	204	898584	80.53	ppb	99
68) 4-Nitroaniline	15.99	138	573288	119.26	ppb	94
70) 4,6-Dinitro-2-methylphenol	16.05	198	440482	109.92	ppb	87
71) n-Nitrosodiphenylamine	16.12	169	1367704	80.34	ppb	95
72) 1,2-Diphenylhydrazine	16.16	77	1834999	85.75	ppb	96
74) 4-Bromophenyl-phenylether	16.93	248	594417	90.07	ppb	97
75) Hexachlorobenzene	17.20	284	627110	85.11	ppb	98
76) Pentachlorophenol	17.69	266	830052	239.53	ppb	96
77) Phenanthrene	17.96	178	2390247	72.07	ppb	90
78) Anthracene	18.07	178	2595545	76.25	ppb	90
79) Carbazole	18.53	167	2454384	80.05	ppb	92
80) Di-n-butylphthalate	19.49	149	2726932	71.76	ppb	91
81) Fluoranthene	20.30	202	2510680	73.04	ppb	89
82) Octadecane	17.95	57	1092964	77.07	ppb	96
84) Pyrene	20.63	202	2401858	67.41	ppb	84

(#)=qualifier out of range (m)=manual integration

R90743.D MR3499.M

Wed Dec 21 13:55:35 2011

NJMSR

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90743.D Vial: 9
 Acq On : 20 Dec 2011 6:30 pm Operator: rachelg
 Sample : ic3499-100 Inst : MSR
 Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 10:10 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 10:09:47 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Butyl stearate	21.68	56	709242	75.26	ppb	93
87) Butylbenzylphthalate	21.63	149	1356547	81.08	ppb	95
88) Benzo[a]anthracene	22.18	228	2219739	70.68	ppb	85
89) 3,3'-Dichlorobenzidine	22.19	252	948556	108.81	ppb	91
90) Chrysene	22.23	228	2090298	69.65	ppb	83
91) bis(2-Ethylhexyl)phthalate	22.32	149	1627556	73.28	ppb	88
93) Di-n-octylphthalate	22.94	149	2456329	70.54	ppb	82
94) Benzo[b]fluoranthene	23.34	252	2861127	84.51	ppb	86
95) Benzo[k]fluoranthene	23.36	252	1540232m	55.88	ppb	
96) Benzo[a]pyrene	23.68	252	2165026	78.89	ppb	90
97) Indeno[1,2,3-cd]pyrene	25.08	276	1985464	87.67	ppb	93
98) Dibenz(a,h)acridine	24.76	279	1636525	97.62	ppb	94
99) Dibenz[a,h]anthracene	25.09	278	1648490	95.52	ppb	95
100) 7,12-Dimethylbenz(a)anthra	23.35	256	1295637	92.56	ppb	98
101) Benzo[g,h,i]perylene	25.46	276	1578780	78.99	ppb	95

8.6.45

8

 (#) = qualifier out of range (m) = manual integration

R90743.D MR3499.M Wed Dec 21 13:55:36 2011 NJMSR

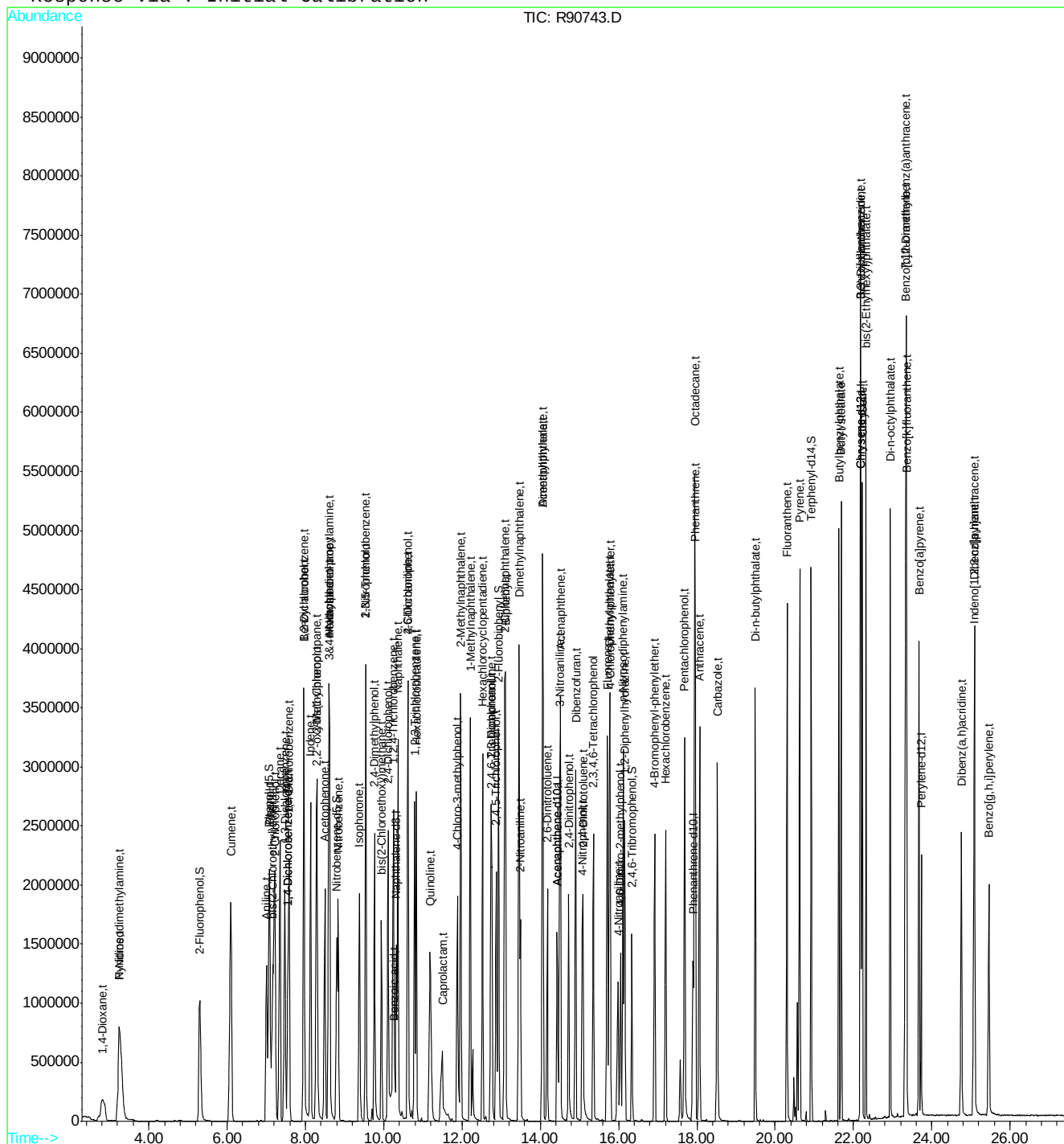
Page 3

Quantitation Report

Vial: 9
Operator: rachelg
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



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8
8.6.45

Manual Integration Approval Summary

Sample Number:ER3499-IC3499

Method:SW846 8270D

Lab FileID:R90743.D

Analyst approved:12/22/11 09:54 Rachel Gregor

Injection Time:12/20/11 18:30

Supervisor approved:12/24/11 22:41 Wen Wen Chi

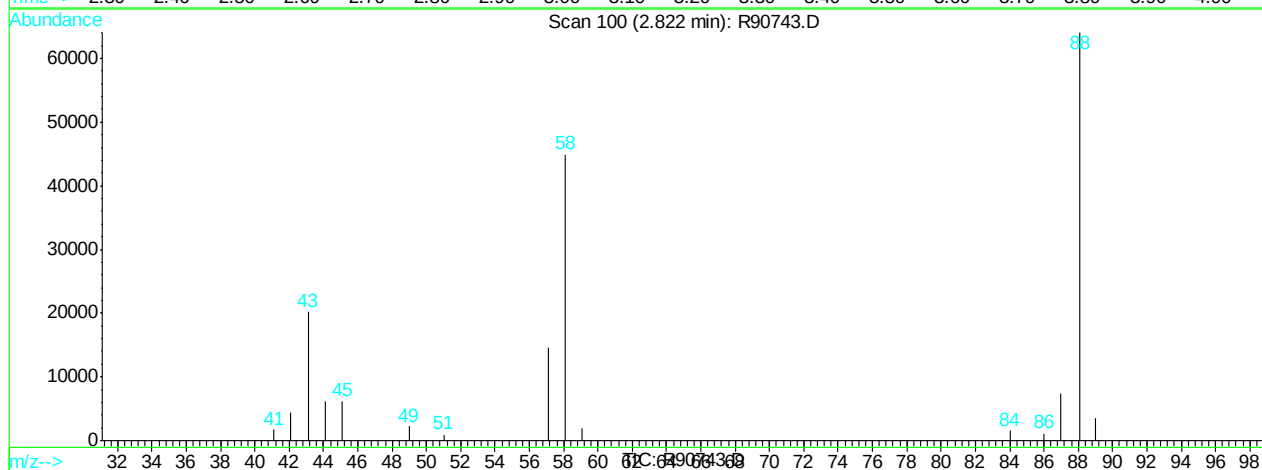
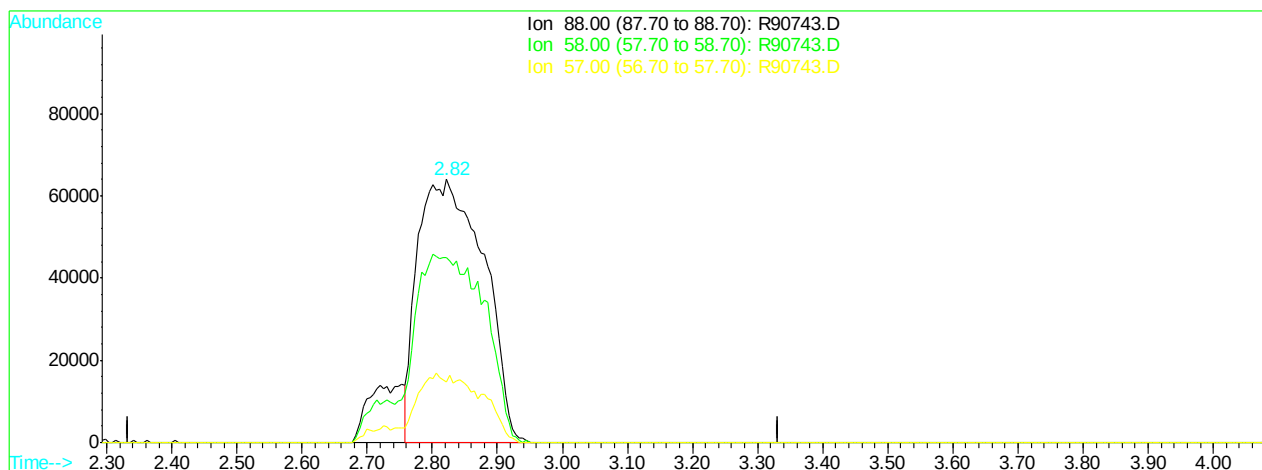
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.82	Poor instrument integration
Benzo(k)fluoranthene	207-08-9		23.36	Overlapping peak

8.6.45.1
8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90743.D Vial: 9
Acq On : 20 Dec 2011 6:30 pm Operator: rachelg
Sample : ic3499-100 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:09 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 10:09:47 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.82min 82.63ppb

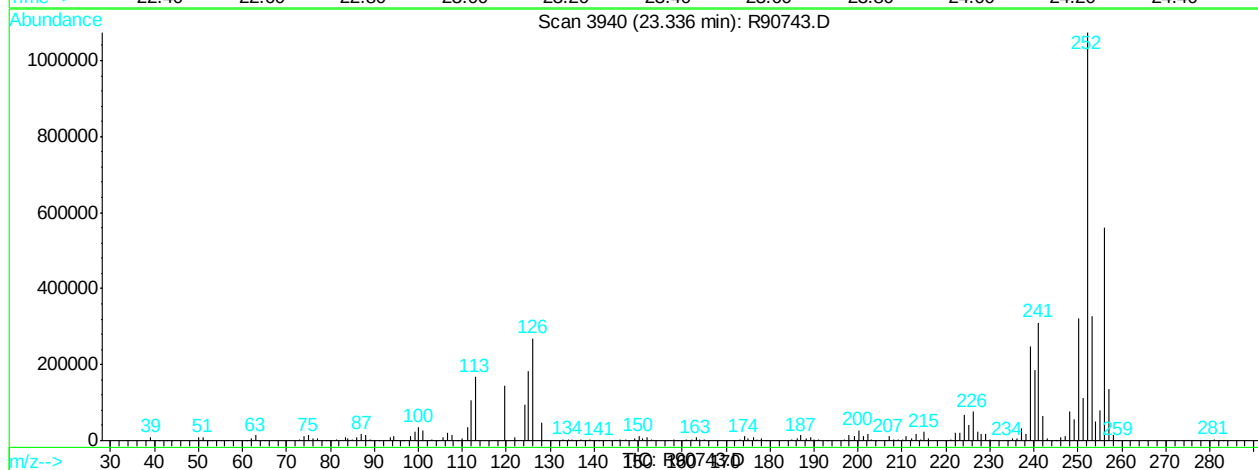
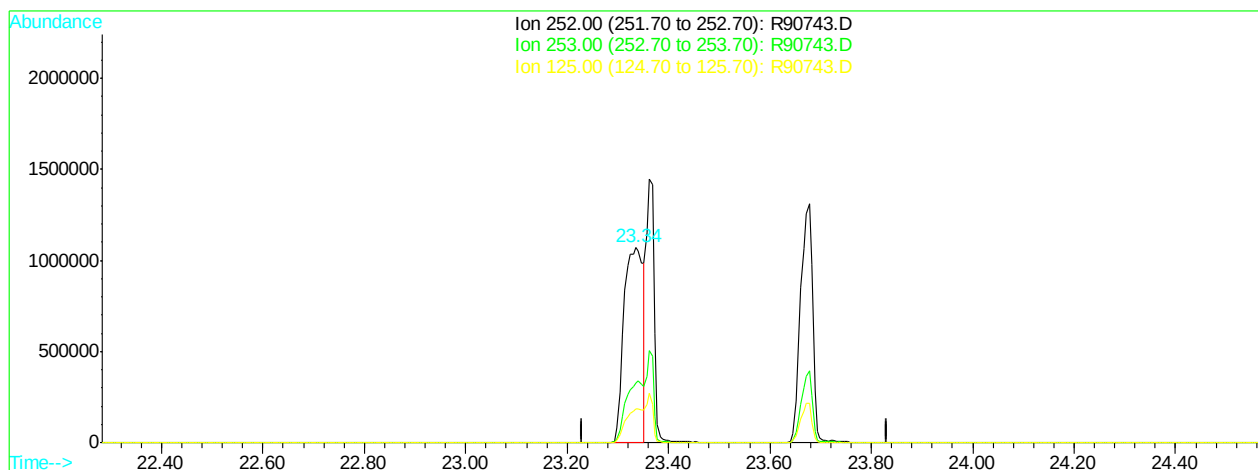
response 448873

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	68.20
57.00	26.80	22.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90743.D Vial: 9
Acq On : 20 Dec 2011 6:30 pm Operator: rachelg
Sample : ic3499-100 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:10 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 10:09:47 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

23.34min 103.80ppb

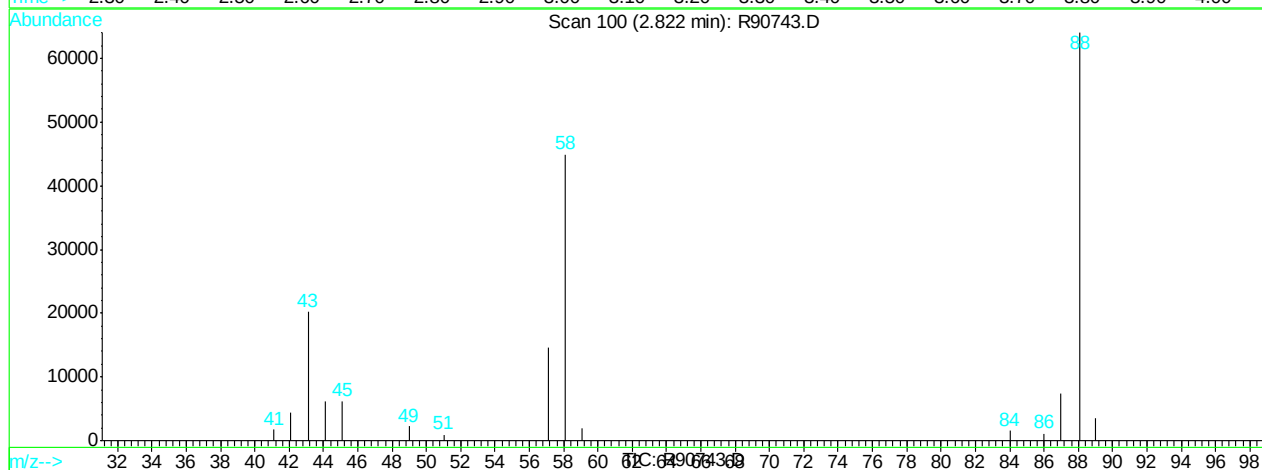
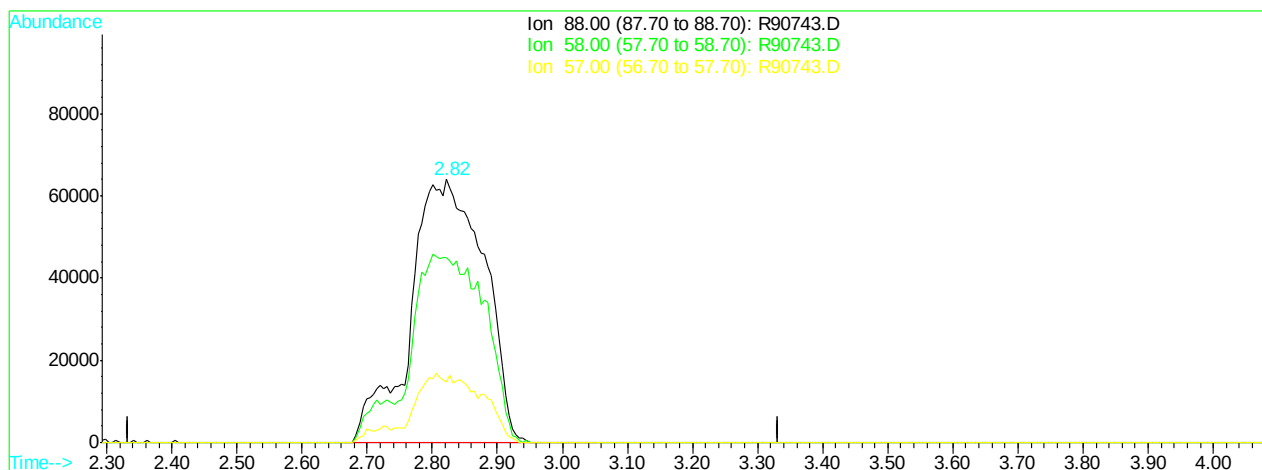
response 2861127

Ion	Exp%	Act%
252.00	100	100
253.00	23.60	29.94
125.00	12.30	16.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90743.D Vial: 9
Acq On : 20 Dec 2011 6:30 pm Operator: rachelg
Sample : ic3499-100 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:10 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.82min 92.65ppb m

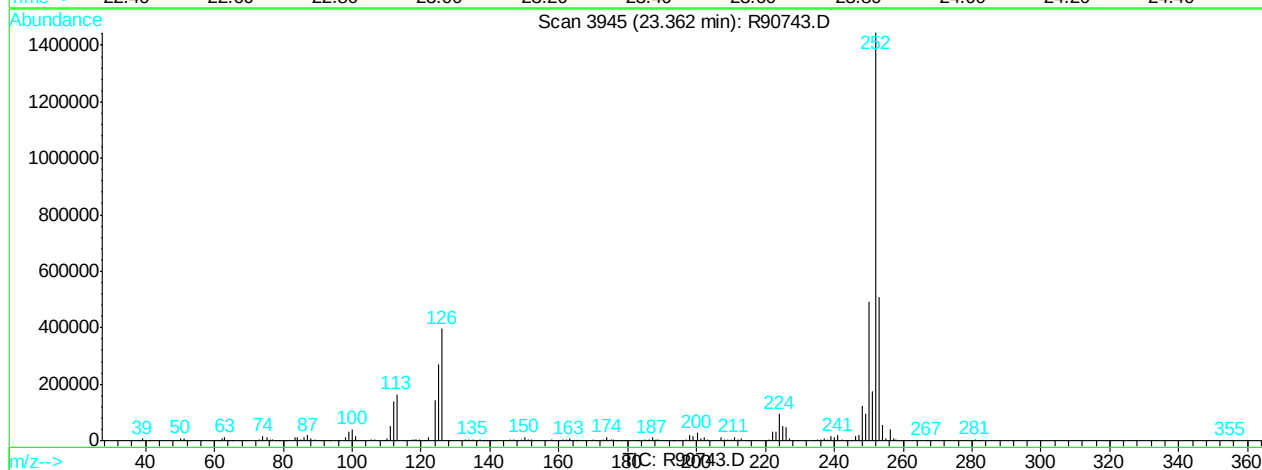
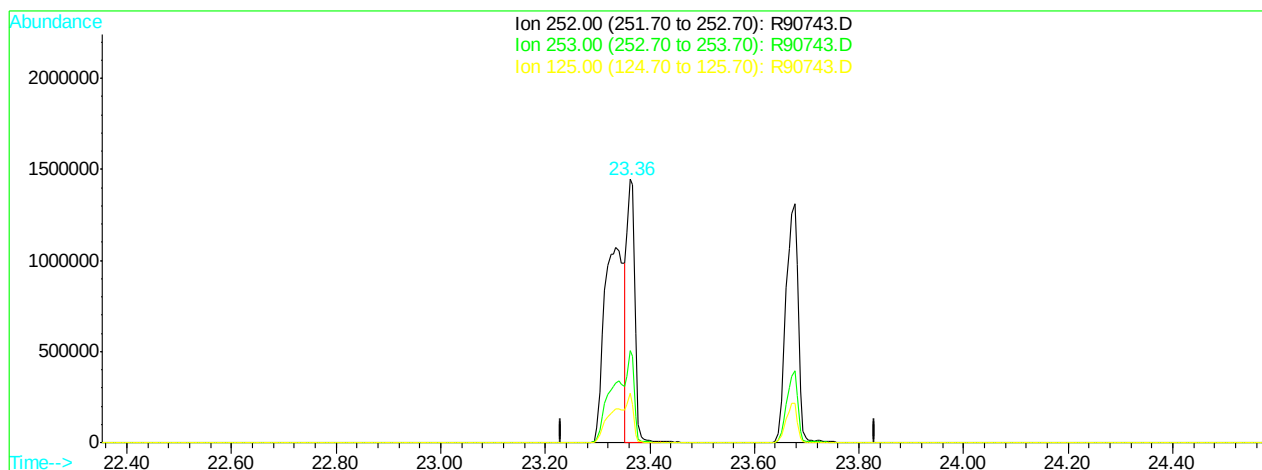
response 503283

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	70.17
57.00	26.80	22.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90743.D Vial: 9
Acq On : 20 Dec 2011 6:30 pm Operator: rachelg
Sample : ic3499-100 Inst : MSR
Misc : op53255,er3499,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 10:10 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration



(95) Benzo[k]fluoranthene (t)

23.36min 55.88ppb m

response 1540232

Ion	Exp%	Act%
252.00	100	100
253.00	23.60	35.14
125.00	12.30	18.73
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90744.D Vial: 10
 Acq On : 20 Dec 2011 7:06 pm Operator: rachelg
 Sample : icv3499-50 Inst : MSR
 Misc : op53255,er3499,acid 2nd source Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 12:07 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 12:05:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	379459	40.00	ppb	0.00
24) Naphthalene-d8	10.30	136	1295462	40.00	ppb	0.00
47) Acenaphthene-d10	14.43	164	771983	40.00	ppb	0.00
69) Phenanthrene-d10	17.89	188	1158497	40.00	ppb	0.00
83) Chrysene-d12	22.19	240	1085413	40.00	ppb	0.00
92) Perylene-d12	23.72	264	879695	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.54	152	379459	40.00	ppb	0.00
104) Acenaphthene-d10a	14.43	164	771983	40.00	ppb	0.00
107) Chrysene-d12a	22.19	240	1085413	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
9) Phenol	7.08	94	754117	50.26	ppb	98
12) 2-Chlorophenol	7.22	128	653900	49.11	ppb	98
19) 2-Methylphenol	8.27	108	563004	50.27	ppb	99
21) 3&4-Methylphenol	8.60	108	594170	54.79	ppb	97
29) 2-Nitrophenol	9.53	139	378074	57.20	ppb	# 73
30) 2,4-Dimethylphenol	9.75	107	611739	55.20	ppb	93
31) Benzoic acid	10.20	105	372975	45.68	ppb	83
33) 2,4-Dichlorophenol	10.09	162	520482	53.84	ppb	99
34) 2,6-Dichlorophenol	10.60	162	516424	51.73	ppb	100
43) 4-Chloro-3-methylphenol	11.84	107	541048	55.67	ppb	99
49) 2,4,6-Trichlorophenol	12.74	196	370034	52.72	ppb	98
50) 2,4,5-Trichlorophenol	12.84	196	398552	55.69	ppb	98
60) 2,4-Dinitrophenol	14.69	184	125143	45.69	ppb	96
61) 4-Nitrophenol	15.04	109	133090	47.10	ppb	87
64) 2,3,4,6-Tetrachlorophenol	15.34	232	301821	53.32	ppb	99
70) 4,6-Dinitro-2-methylphenol	16.00	198	215772	50.81	ppb	93
76) Pentachlorophenol	17.66	266	239855	59.46	ppb	96

(#) = qualifier out of range (m) = manual integration

R90744.D MR3499.M Wed Dec 21 13:56:05 2011 NJMSR

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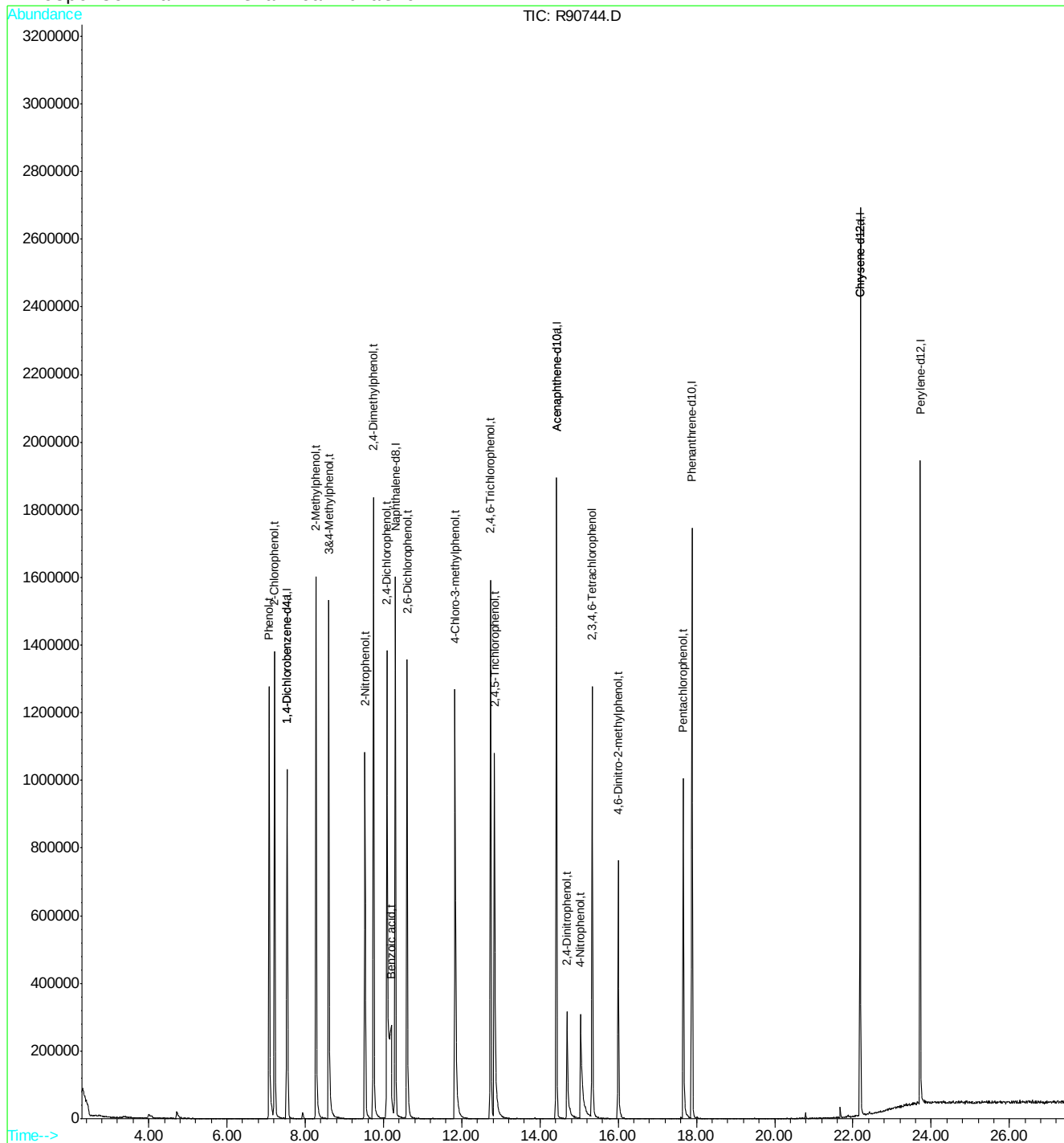
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90744.D
Acq On : 20 Dec 2011 7:06 pm
Sample : icv3499-50
Misc : op53255,er3499,acid 2nd source
MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:07 2011

Vial: 10
Operator: rachelg
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90745.D

Vial: 11

Acq On : 20 Dec 2011 7:43 pm

Operator: rachelg

Sample : icv3499-50

Inst : MSR

Misc : op53255,er3499,bn#1 2nd source

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 21 12:10 2011

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Wed Dec 21 12:05:57 2011

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	378116	40.00	ppb	0.00
24) Naphthalene-d8	10.31	136	1313001	40.00	ppb	0.00
47) Acenaphthene-d10	14.43	164	760427	40.00	ppb	0.00
69) Phenanthrene-d10	17.89	188	1211817	40.00	ppb	0.00
83) Chrysene-d12	22.19	240	1071166	40.00	ppb	0.00
92) Perylene-d12	23.73	264	1074121	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.54	152	378116	40.00	ppb	0.00
104) Acenaphthene-d10a	14.43	164	760427	40.00	ppb	0.00
107) Chrysene-d12a	22.19	240	1071166	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
3) Pyridine	3.21	79	738474	57.71	ppb	95
4) N-Nitrosodimethylamine	3.22	42	367399	59.53	ppb	98
11) bis(2-Chloroethyl)ether	7.13	93	582709	50.79	ppb	92
14) 1,3-Dichlorobenzene	7.46	146	777766	48.51	ppb	99
15) 1,4-Dichlorobenzene	7.57	146	754004	47.93	ppb	93
16) Benzyl alcohol	7.95	108	401988	60.04	ppb	99
17) 1,2-Dichlorobenzene	7.95	146	704657	47.69	ppb	99
20) 2,2'-oxybis(1-Chloropropan	8.27	121	224860	52.90	ppb	93
22) n-Nitroso-di-n-propylamine	8.56	70	396070	56.33	ppb	99
23) Hexachloroethane	8.59	201	249397	49.32	ppb	95
26) Nitrobenzene	8.82	77	609778	49.81	ppb	99
28) Isophorone	9.35	82	1043021	49.76	ppb	98
32) bis(2-Chloroethoxy)methane	9.93	93	679989	54.39	ppb	95
36) 1,2,4-Trichlorobenzene	10.23	180	578070	48.52	ppb	99
38) Naphthalene	10.35	128	1561287	44.14	ppb	96
42) Hexachlorobutadiene	10.83	225	334241	50.77	ppb	92
44) 2-Methylnaphthalene	11.96	142	1197407	45.11	ppb	99
48) Hexachlorocyclopentadiene	12.52	237	212546	44.50	ppb	98
52) 2-Chloronaphthalene	13.08	162	1087280	48.17	ppb	98
54) 2-Nitroaniline	13.47	65	318816	56.82	ppb	96
55) Dimethylphthalate	14.05	163	1153476	47.84	ppb	98
56) Acenaphthylene	14.05	152	1460096	40.85	ppb	98
57) 2,6-Dinitrotoluene	14.17	165	284803	53.80	ppb	99
58) 3-Nitroaniline	14.47	138	271797	48.49	ppb	99
59) Acenaphthene	14.50	153	1026957	46.77	ppb	100

(#)=qualifier out of range (m)=manual integration

R90745.D MR3499.M

Wed Dec 21 13:56:46 2011

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90745.D Vial: 11
 Acq On : 20 Dec 2011 7:43 pm Operator: rachelg
 Sample : icv3499-50 Inst : MSR
 Misc : op53255,er3499,bn#1 2nd source Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 12:10 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 12:05:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
62) Dibenzofuran	14.89	168	1441295	47.17	ppb	96
63) 2,4-Dinitrotoluene	15.07	165	371238	52.03	ppb	95
65) Diethylphthalate	15.74	149	1147700	47.11	ppb	98
66) Fluorene	15.70	166	1239582	49.27	ppb	100
67) 4-Chlorophenyl-phenylether	15.78	204	559071	48.33	ppb	99
68) 4-Nitroaniline	15.94	138	307023	52.53	ppb	95
71) n-Nitrosodiphenylamine	16.09	169	834414	46.24	ppb	96
72) 1,2-Diphenylhydrazine	16.14	77	1052535	46.08	ppb	98
74) 4-Bromophenyl-phenylether	16.91	248	367953	51.94	ppb	99
75) Hexachlorobenzene	17.19	284	371851	47.32	ppb	96
77) Phenanthrene	17.95	178	1613782	43.05	ppb	97
78) Anthracene	18.05	178	1655118	46.11	ppb	97
79) Carbazole	18.51	167	1575339	48.48	ppb	99
80) Di-n-butylphthalate	19.49	149	1901936	47.74	ppb	97
81) Fluoranthene	20.30	202	1670828	46.29	ppb	95
84) Pyrene	20.62	202	1629840	40.14	ppb	95
87) Butylbenzylphthalate	21.62	149	901436	50.66	ppb	99
88) Benzo[a]anthracene	22.17	228	1537240	43.16	ppb	95
89) 3,3'-Dichlorobenzidine	22.18	252	371474	38.69	ppb	97
90) Chrysene	22.22	228	1447716	42.40	ppb	93
91) bis(2-Ethylhexyl)phthalate	22.32	149	1162105	52.78	ppb	97
93) Di-n-octylphthalate	22.94	149	1796187	43.95	ppb	94
94) Benzo[b]fluoranthene	23.32	252	1537523	39.46	ppb	87
95) Benzo[k]fluoranthene	23.34	252	1461536	58.69	ppb	87
96) Benzo[a]pyrene	23.66	252	1480483	47.21	ppb	94
97) Indeno[1,2,3-cd]pyrene	25.07	276	1646008	62.89	ppb	94
99) Dibenz[a,h]anthracene	25.08	278	1337297	56.32	ppb	99
101) Benzo[g,h,i]perylene	25.45	276	1429129	62.56	ppb	97

86.47
8

(#) = qualifier out of range (m) = manual integration

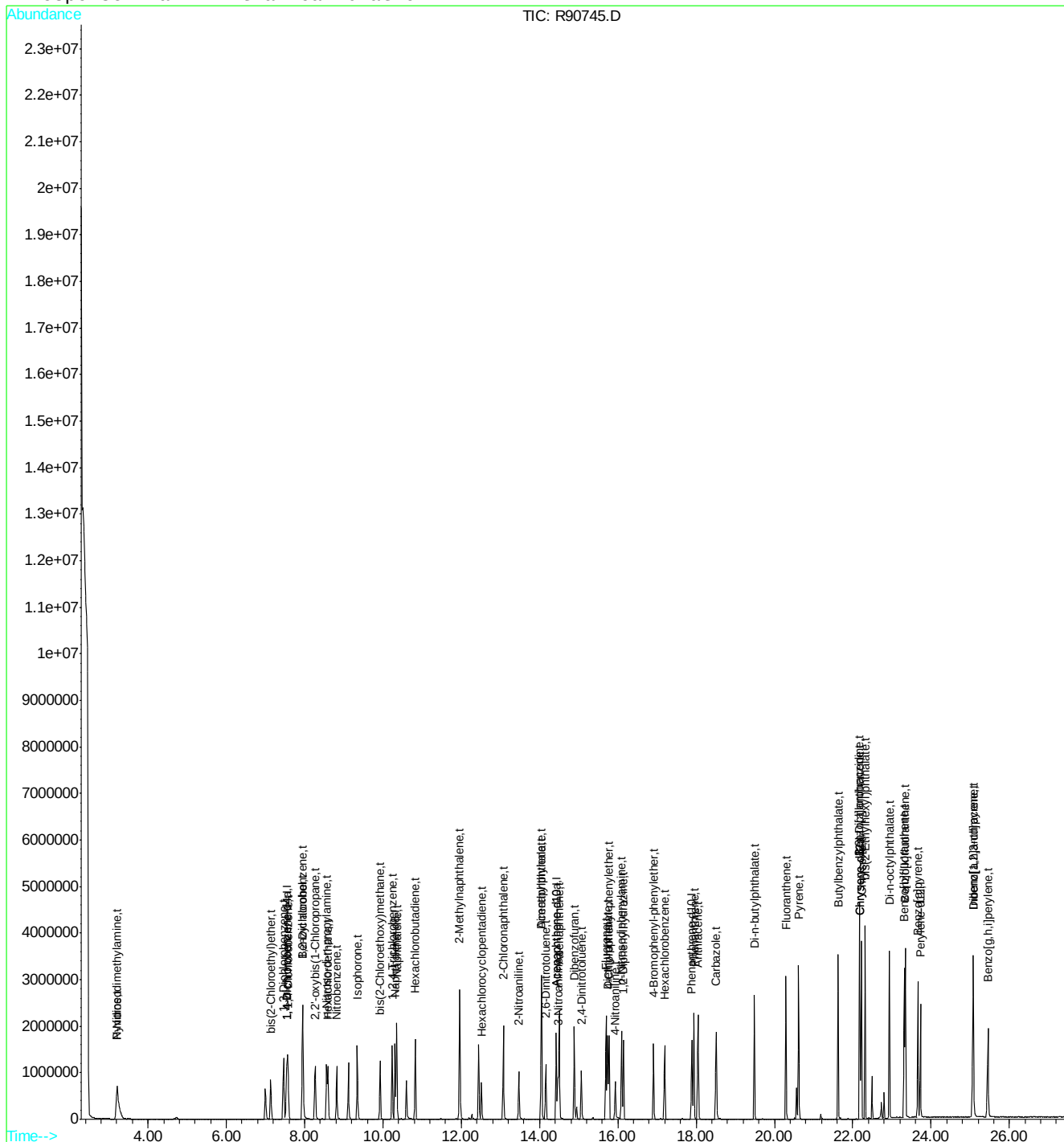
R90745.D MR3499.M Wed Dec 21 13:56:46 2011 NJMSR

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90745.D Vial: 11
Acq On : 20 Dec 2011 7:43 pm Operator: rachelg
Sample : icv3499-50 Inst : MSR
Misc : op53255,er3499,bn#1 2nd source Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:10 2011 Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



Wen Wen Chi
12/24/11 22:41

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90746.D Vial: 12
 Acq On : 20 Dec 2011 8:19 pm Operator: rachelg
 Sample : icv3499-50 Inst : MSR
 Misc : op53255,er3499,bn#2 2nd source Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 14:00 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 12:05:57 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	386601	40.00	ppb	0.00
24) Naphthalene-d8	10.30	136	1404593	40.00	ppb	0.00
47) Acenaphthene-d10	14.43	164	765899	40.00	ppb	0.00
69) Phenanthrene-d10	17.89	188	1178456	40.00	ppb	0.00
83) Chrysene-d12	22.19	240	1104596	40.00	ppb	0.00
92) Perylene-d12	23.72	264	886751	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.54	152	386601	40.00	ppb	0.00
104) Acenaphthene-d10a	14.43	164	765899	40.00	ppb	0.00
107) Chrysene-d12a	22.19	240	1104596	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.74	88	309460m	53.08	ppb	
6) Indene	8.12	116	1115032	49.21	ppb	98
7) Cumene	6.07	105	1721148	50.71	ppb	95
13) Decane	7.33	43	770125	50.31	ppb	97
18) Acetophenone	8.47	105	857766	51.57	ppb	98
27) Quinoline	11.13	129	1174230	47.44	ppb	98
40) 2,3-Dichloroaniline	12.73	161	562759	44.47	ppb	99
41) Caprolactam	11.34	55	250043	47.60	ppb	96
45) 1-Methylnaphthalene	12.20	142	1200153	46.55	ppb	99
46) Dimethylnaphthalene	13.45	156	1076024	47.13	ppb	98
53) Biphenyl	13.11	154	1418692	48.50	ppb	99
82) Octadecane	17.94	57	768673	52.80	ppb	98
100) 7,12-Dimethylbenz(a)anthra	23.33	256	754490	56.23	ppb	98

(#) = qualifier out of range (m) = manual integration

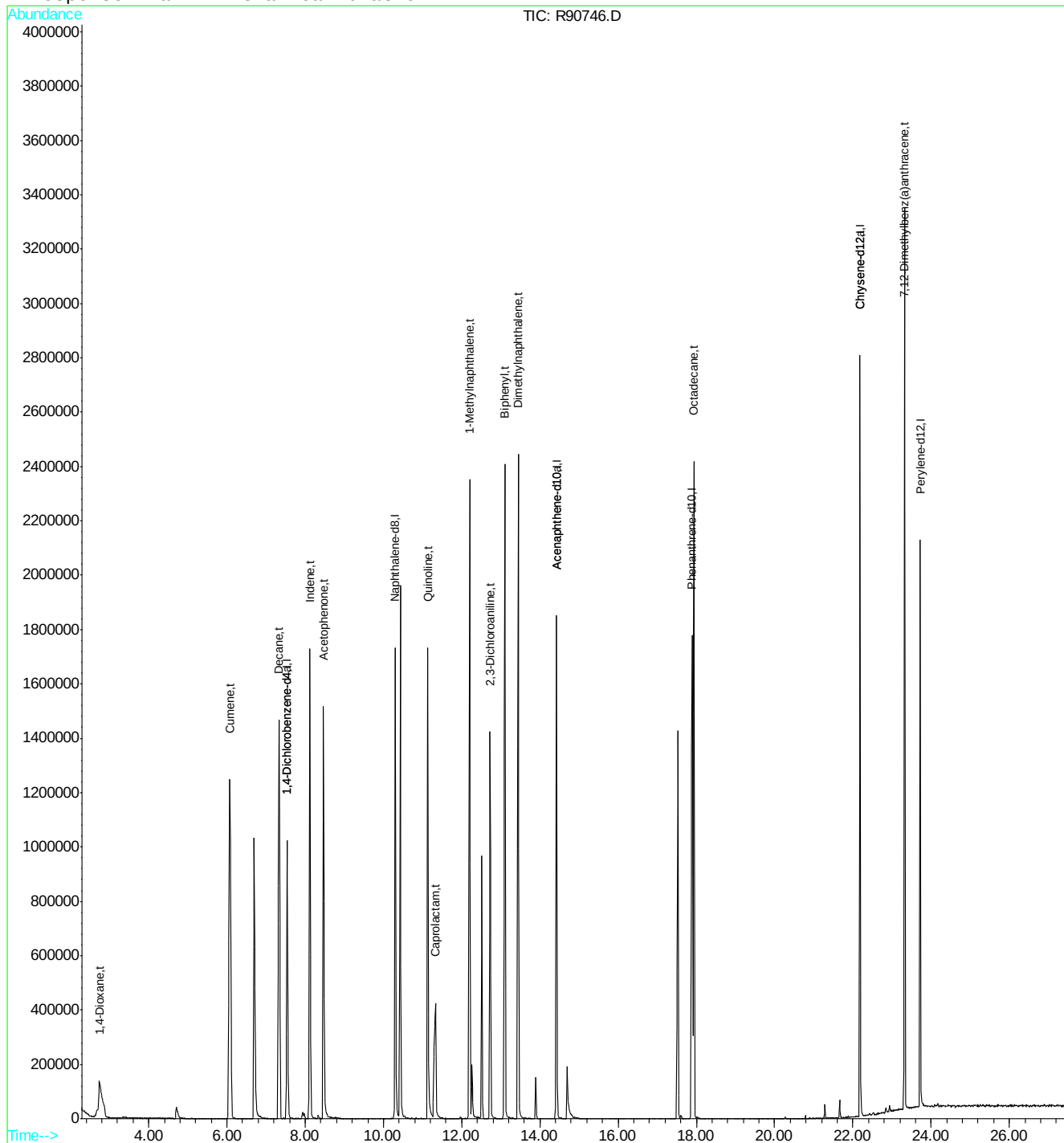
R90746.D MR3499.M Wed Dec 21 14:00:34 2011 NJMSR

Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90746.D Vial: 12
Acq On : 20 Dec 2011 8:19 pm Operator: rachelg
Sample : icv3499-50 Inst : MSR
Misc : op53255,er3499,bn#2 2nd source Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 14:00 2011 Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:ER3499-ICV3499

Method:SW846 8270D

Lab FileID:R90746.D

Analyst approved:12/22/11 09:54 Rachel Gregor

Injection Time:12/20/11 20:19

Supervisor approved:12/24/11 22:41 Wen Wen Chi

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.74	Poor instrument integration

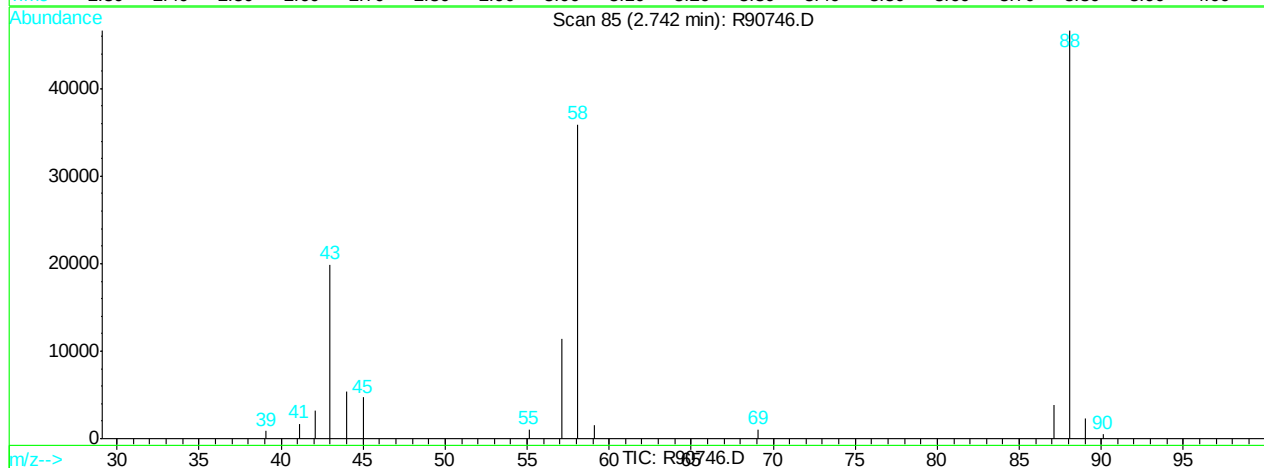
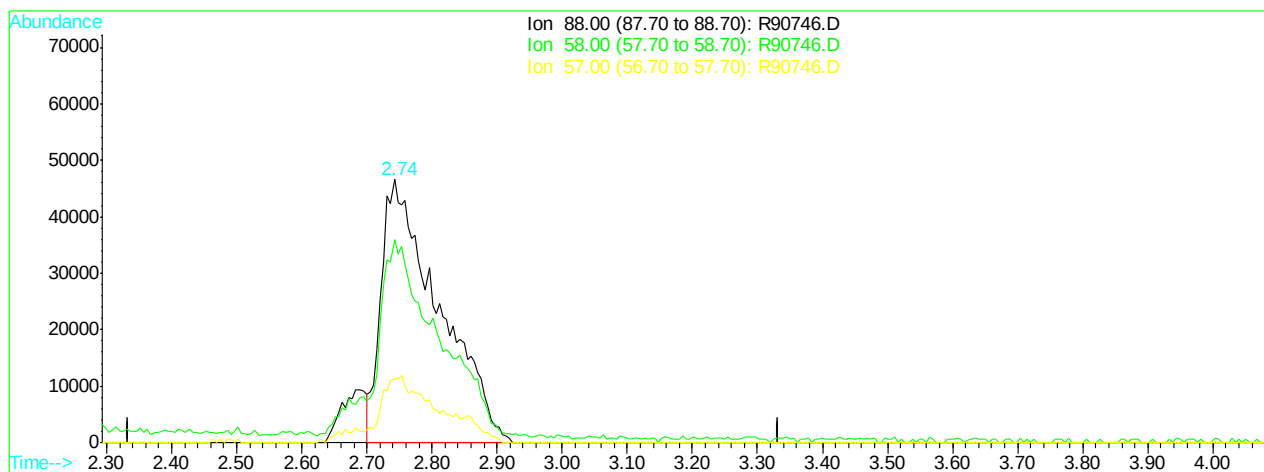
8.6.48.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90746.D Vial: 12
Acq On : 20 Dec 2011 8:19 pm Operator: rachelg
Sample : icv3499-50 Inst : MSR
Misc : op53255,er3499,bn#2 2nd source Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 12:14 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.74min 48.80ppb

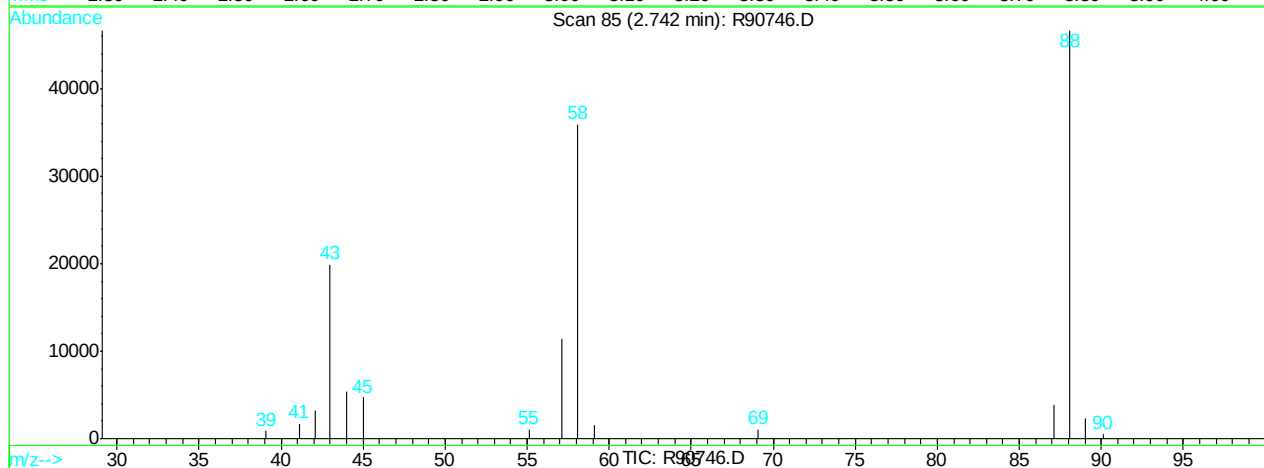
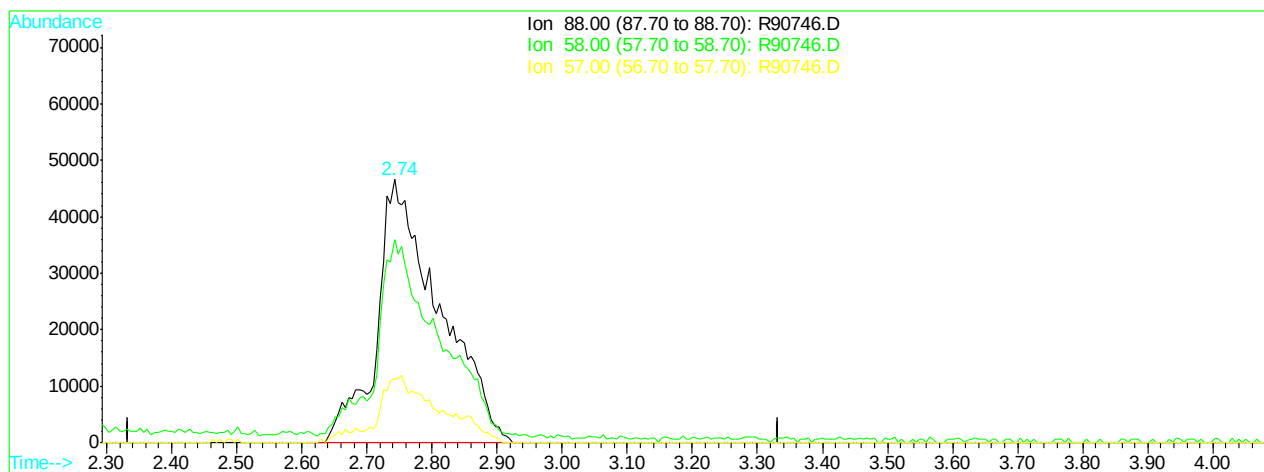
response 284491

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	74.17
57.00	26.80	24.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3499\R90746.D Vial: 12
Acq On : 20 Dec 2011 8:19 pm Operator: rachelg
Sample : icv3499-50 Inst : MSR
Misc : op53255,er3499,bn#2 2nd source Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 13:57 2011 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.74min 53.08ppb m

response 309460

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	77.05
57.00	26.80	24.46
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3499\R90747.D Vial: 13
 Acq On : 20 Dec 2011 8:55 pm Operator: rachelg
 Sample : icv3499-50 Inst : MSR
 Misc : op53255,er3499,3rd source Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 21 14:08 2011 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Wed Dec 21 13:20:39 2011
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.54	152	321435	40.00	ppb	0.00
24) Naphthalene-d8	10.31	136	1153299	40.00	ppb	0.00
47) Acenaphthene-d10	14.42	164	623430	40.00	ppb	0.00
69) Phenanthrene-d10	17.88	188	972517	40.00	ppb	0.00
83) Chrysene-d12	22.19	240	876868	40.00	ppb	0.00
92) Perylene-d12	23.72	264	634656	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	7.54	152	321435	40.00	ppb	0.00
104) Acenaphthene-d10a	14.42	164	623430	40.00	ppb	0.00
107) Chrysene-d12a	22.19	240	876868	40.00	ppb	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
10) Aniline	7.00	93	720599	48.23	ppb	87
39) 4-Chloroaniline	10.59	127	619713	50.53	ppb	99

(#) = qualifier out of range (m) = manual integration

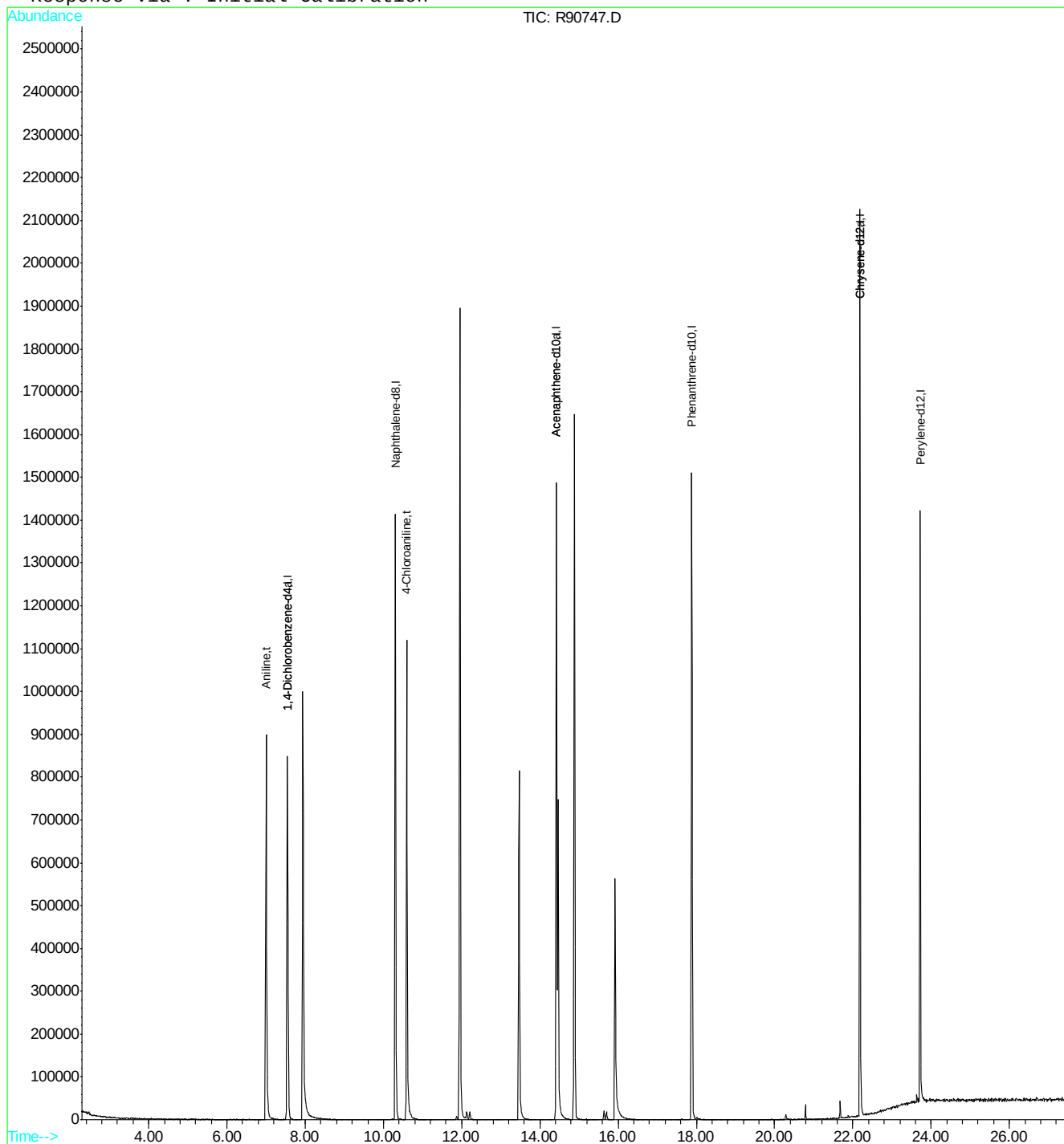
R90747.D MR3499.M Wed Dec 21 14:08:59 2011 NJMSR

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3499\R90747.D Vial: 13
Acq On : 20 Dec 2011 8:55 pm Operator: rachelg
Sample : icv3499-50 Inst : MSR
Misc : op53255,er3499,3rd source Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 21 14:08 2011 Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Dec 21 13:20:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D

Vial: 2

Acq On : 14 Jan 2012 12:20 pm

Operator: kristis

Sample : cc3499-25

Inst : MSR

Misc : op53255,er3516,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 24 16:59 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Jan 12 11:38:55 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.45	152	470389	40.00	ppb	-0.10
24) Naphthalene-d8	10.20	136	1622908	40.00	ppb	-0.10
47) Acenaphthene-d10	14.32	164	931079	40.00	ppb	-0.11
69) Phenanthrene-d10	17.78	188	1477753	40.00	ppb	-0.11
83) Chrysene-d12	22.12	240	1344646	40.00	ppb	-0.07
92) Perylene-d12	23.64	264	1225598	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	7.45	152	470389	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.32	164	931079	40.00	ppb	-0.11
107) Chrysene-d12a	22.12	240	1344646	40.00	ppb	-0.07

System Monitoring Compounds

5) 2-Fluorophenol	5.22	112	435741	28.47	ppb	-0.10
Spiked Amount	50.000		Recovery	=	56.94%	
8) Phenol-d5	6.97	99	482863	27.74	ppb	-0.09
Spiked Amount	50.000		Recovery	=	55.48%	
25) Nitrobenzene-d5	8.68	82	409881	27.90	ppb	-0.10
Spiked Amount	50.000		Recovery	=	55.80%	
51) 2-Fluorobiphenyl	12.81	172	793463	26.29	ppb	-0.10
Spiked Amount	50.000		Recovery	=	52.58%	
73) 2,4,6-Tribromophenol	16.21	330	130069	29.65	ppb	-0.11
Spiked Amount	50.000		Recovery	=	59.30%	
86) Terphenyl-d14	20.84	244	785870	27.71	ppb	-0.08
Spiked Amount	50.000		Recovery	=	55.42%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.77	88	185068m	26.09	ppb	
3) Pyridine	3.16	79	442499m	27.80	ppb	
4) N-Nitrosodimethylamine	3.17	42	232864m	30.33	ppb	
6) Indene	8.02	116	709763	25.74	ppb	99
7) Cumene	5.99	105	1075590	26.04	ppb	98
9) Phenol	6.99	94	491151	26.41	ppb	94
10) Aniline	6.90	93	451363	20.64	ppb	97
11) bis(2-Chloroethyl)ether	7.05	93	341169	23.90	ppb	95
12) 2-Chlorophenol	7.13	128	419526	25.42	ppb	97
13) Decane	7.25	43	420664	22.59	ppb	98
14) 1,3-Dichlorobenzene	7.37	146	503524	25.25	ppb	98
15) 1,4-Dichlorobenzene	7.48	146	500427	25.57	ppb	96
16) Benzyl alcohol	7.85	108	231693	27.82	ppb	96
17) 1,2-Dichlorobenzene	7.85	146	457617	24.90	ppb	96
18) Acetophenone	8.38	105	526383	26.01	ppb	96
19) 2-Methylphenol	8.20	108	337362	24.30	ppb	96
20) 2,2'-oxybis(1-Chloropropan	8.17	121	131640	24.89	ppb	# 77
21) 3&4-Methylphenol	8.52	108	365286	27.17	ppb	98
22) n-Nitroso-di-n-propylamine	8.47	70	235814	26.96	ppb	97
23) Hexachloroethane	8.49	201	161364	25.65	ppb	93
26) Nitrobenzene	8.72	77	390428	25.80	ppb	95
27) Quinoline	11.03	129	736528	25.75	ppb	96
28) Isophorone	9.25	82	675996	26.09	ppb	99
29) 2-Nitrophenol	9.43	139	232687	28.10	ppb	96
30) 2,4-Dimethylphenol	9.66	107	350595	25.25	ppb	98

(#) = qualifier out of range (m) = manual integration

R91051.D MR3499.M

Tue Jan 24 16:59:34 2012

NJMSR

Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D

Vial: 2

Acq On : 14 Jan 2012 12:20 pm

Operator: kristis

Sample : cc3499-25

Inst : MSR

Misc : op53255,er3516,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 24 16:59 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Jan 12 11:38:55 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.08	105	223982m	24.04	ppb	
32) bis(2-Chloroethoxy)methane	9.83	93	390203	25.25	ppb	97
33) 2,4-Dichlorophenol	10.00	162	336156	27.76	ppb	98
34) 2,6-Dichlorophenol	10.50	162	319844	25.58	ppb	97
35) 1,3,5-Trichlorobenzene	9.43	180	383573	24.84	ppb	95
36) 1,2,4-Trichlorobenzene	10.13	180	365625	24.83	ppb	99
37) 1,2,3-Trichlorobenzene	10.67	180	353975	25.01	ppb	98
38) Naphthalene	10.25	128	1068621	24.44	ppb	98
39) 4-Chloroaniline	10.50	127	436586	25.30	ppb	100
40) 2,3-Dichloroaniline	12.62	161	381898	26.12	ppb	94
41) Caprolactam	11.29	55	153277m	25.52	ppb	
42) Hexachlorobutadiene	10.72	225	215251	26.45	ppb	95
43) 4-Chloro-3-methylphenol	11.76	107	353213	29.01	ppb	85
44) 2-Methylnaphthalene	11.85	142	808972	24.65	ppb	99
45) 1-Methylnaphthalene	12.09	142	744100	24.98	ppb	97
46) Dimethylnaphthalene	13.33	156	673699	25.54	ppb	98
48) Hexachlorocyclopentadiene	12.41	237	273232	46.65	ppb	95
49) 2,4,6-Trichlorophenol	12.65	196	224133	26.48	ppb	97
50) 2,4,5-Trichlorophenol	12.76	196	234479	27.09	ppb	97
52) 2-Chloronaphthalene	12.97	162	680028	24.61	ppb	96
53) Biphenyl	12.99	154	871695	24.52	ppb	99
54) 2-Nitroaniline	13.37	65	211724	30.82	ppb	92
55) Dimethylphthalate	13.94	163	764519	25.90	ppb	97
56) Acenaphthylene	13.94	152	1083088	24.75	ppb	99
57) 2,6-Dinitrotoluene	14.06	165	185424	28.61	ppb	94
58) 3-Nitroaniline	14.37	138	198906	28.98	ppb	97
59) Acenaphthene	14.39	153	681739	25.36	ppb	99
60) 2,4-Dinitrophenol	14.60	184	132554	41.49	ppb	94
61) 4-Nitrophenol	14.96	109	73869	24.14	ppb	# 78
62) Dibenzofuran	14.78	168	975616	26.08	ppb	98
63) 2,4-Dinitrotoluene	14.96	165	252065	28.85	ppb	99
64) 2,3,4,6-Tetrachlorophenol	15.23	232	198952	29.14	ppb	93
65) Diethylphthalate	15.64	149	760603	25.50	ppb	100
66) Fluorene	15.58	166	799548	25.96	ppb	97
67) 4-Chlorophenyl-phenylether	15.66	204	359067	25.35	ppb	99
68) 4-Nitroaniline	15.85	138	193496	27.04	ppb	90
70) 4,6-Dinitro-2-methylphenol	15.91	198	119501	22.06	ppb	95
71) n-Nitrosodiphenylamine	15.98	169	561046	25.49	ppb	100
72) 1,2-Diphenylhydrazine	16.03	77	682150	24.49	ppb	98
74) 4-Bromophenyl-phenylether	16.80	248	238127	27.57	ppb	95
75) Hexachlorobenzene	17.07	284	256217	26.73	ppb	96
76) Pentachlorophenol	17.56	266	294392	57.21	ppb	95
77) Phenanthrene	17.83	178	1059868	23.18	ppb	99
78) Anthracene	17.93	178	1104100	25.22	ppb	98
79) Carbazole	18.40	167	1009716	25.48	ppb	99
80) Di-n-butylphthalate	19.40	149	1270161	26.14	ppb	98
81) Fluoranthene	20.21	202	1123174	25.52	ppb	99
82) Octadecane	17.83	57	419682	22.99	ppb	97
84) Pyrene	20.54	202	1138870	22.34	ppb	98

(#) = qualifier out of range (m) = manual integration

R91051.D MR3499.M

Tue Jan 24 16:59:35 2012

NJMSR

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
 Acq On : 14 Jan 2012 12:20 pm Operator: kristis
 Sample : cc3499-25 Inst : MSR
 Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 24 16:59 2012 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Jan 12 11:38:55 2012
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Butyl stearate	21.61	56	315304	25.36	ppb	95
87) Butylbenzylphthalate	21.55	149	558232	24.99	ppb	99
88) Benzo[a]anthracene	22.10	228	1052174	23.54	ppb	96
89) 3,3'-Dichlorobenzidine	22.11	252	376287	31.22	ppb	94
90) Chrysene	22.15	228	996450	23.25	ppb	98
91) bis(2-Ethylhexyl)phthalate	22.25	149	710910	25.72	ppb	97
93) Di-n-octylphthalate	22.87	149	1158975	24.85	ppb	98
94) Benzo[b]fluoranthene	23.23	252	1129305	25.40	ppb	99
95) Benzo[k]fluoranthene	23.27	252	901698	26.02	ppb	98
96) Benzo[a]pyrene	23.58	252	916796	25.62	ppb	98
97) Indeno[1,2,3-cd]pyrene	24.95	276	863421	28.91	ppb	98
98) Dibenz(a,h)acridine	24.63	279	702439	24.70	ppb	97
99) Dibenz[a,h]anthracene	24.95	278	716699	23.78	ppb	95
100) 7,12-Dimethylbenz(a)anthra	23.25	256	414260	22.34	ppb	96
101) Benzo[g,h,i]perylene	25.31	276	660527	25.34	ppb	97

8.6.50

8

(#) = qualifier out of range (m) = manual integration

R91051.D MR3499.M Tue Jan 24 16:59:35 2012 NJMSR

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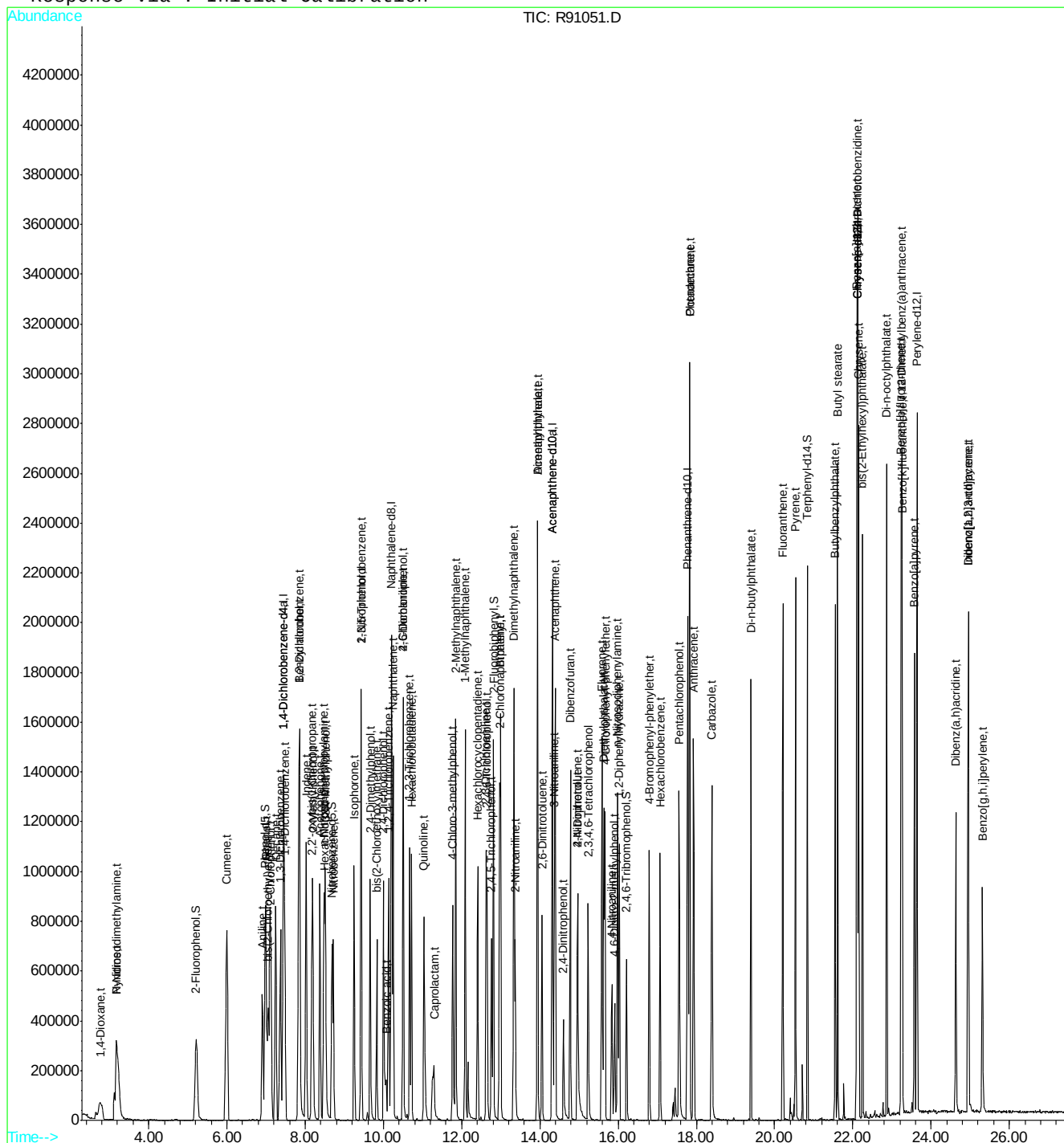
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D
Acq On : 14 Jan 2012 12:20 pm
Sample : cc3499-25
Misc : op53255,er3516,1000,,,1,1
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:59 2012 0

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Vial: 2
Operator: kristis
Inst      : MSR
Multiplr: 1.00
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Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Initial Calibration



R91051.D MR3499.M

Tue Jan 24 16:59:36 2012

NJMSR

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8.6.50

Manual Integration Approval Summary

Sample Number:ER3516-CC3499

Method:SW846 8270D

Lab FileID:R91051.D

Analyst approved:01/25/12 08:07 Cheng-Hwan Ao

Injection Time:01/14/12 12:20

Supervisor approved:01/25/12 08:08 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.77	Poor instrument integration
Pyridine	110-86-1		3.16	Poor instrument integration
n-Nitrosodimethylamine	62-75-9		3.17	Poor instrument integration
Benzoic Acid	65-85-0		10.08	Poor instrument integration
Caprolactam	105-60-2		11.29	Poor instrument integration

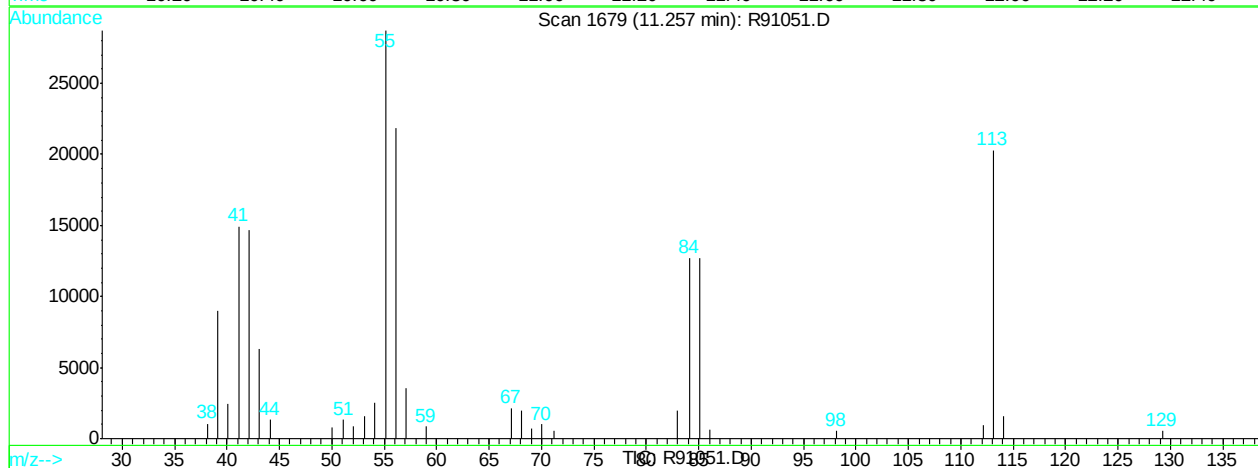
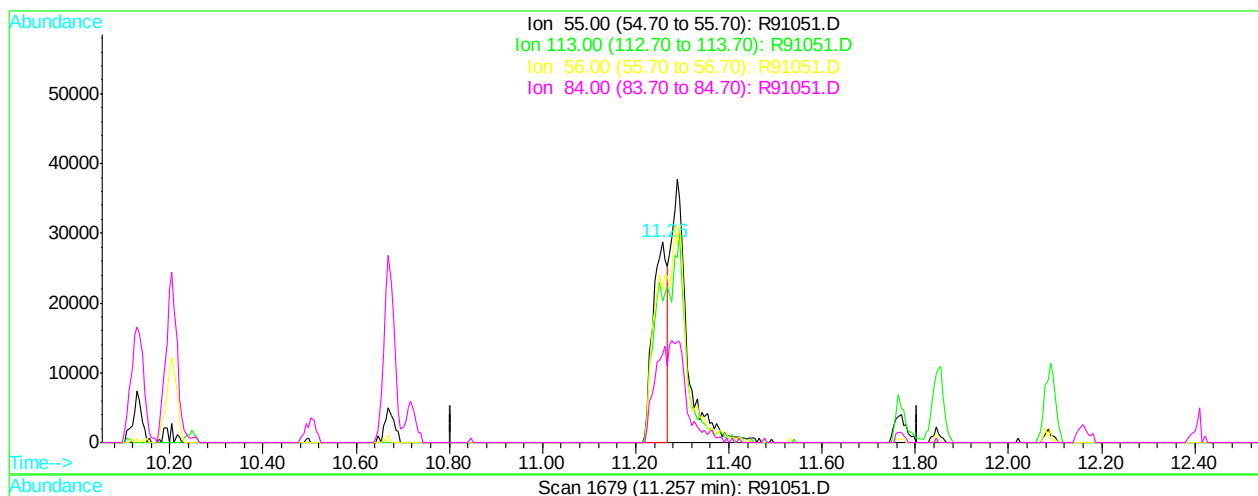
8.6.50.1

8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:57 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Multiple Level Calibration



(41) Caprolactam (t)

11.26min 10.48ppb

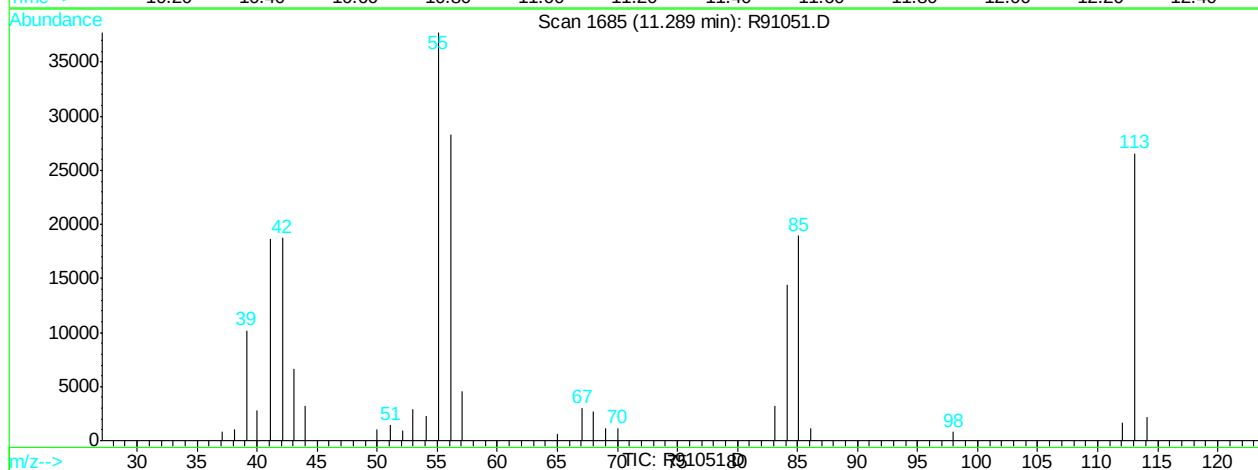
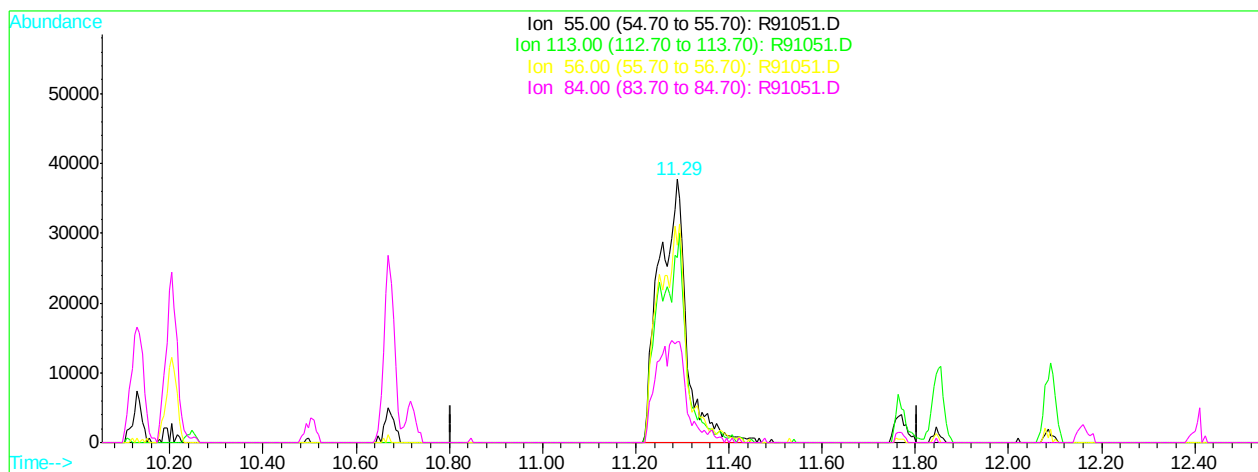
response 60844

Ion	Exp%	Act%
55.00	100	100
113.00	76.50	56.44
56.00	79.90	61.21
84.00	41.00	45.41

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:58 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Multiple Level Calibration



(41) Caprolactam (t)

11.29min 25.52ppb m

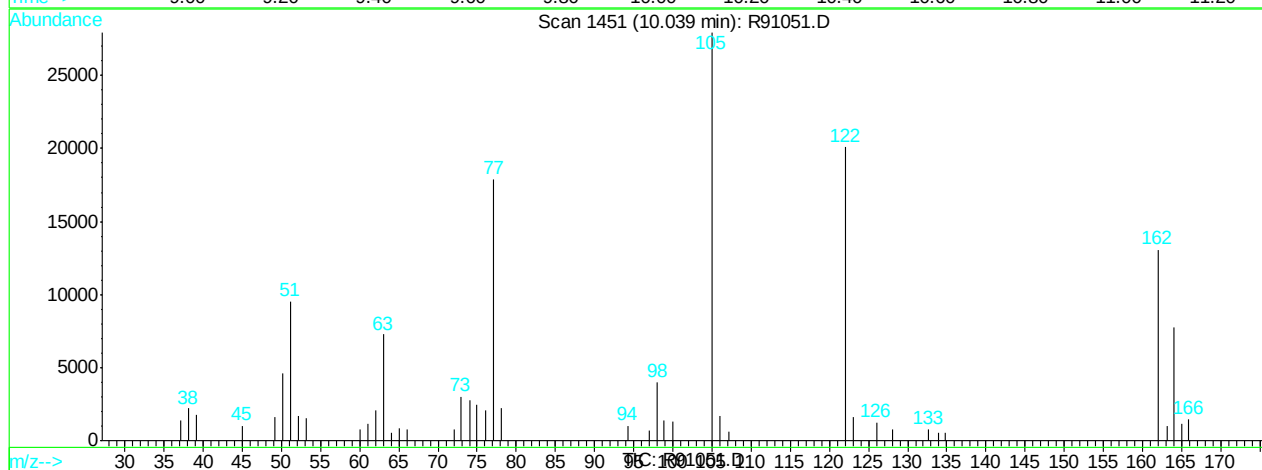
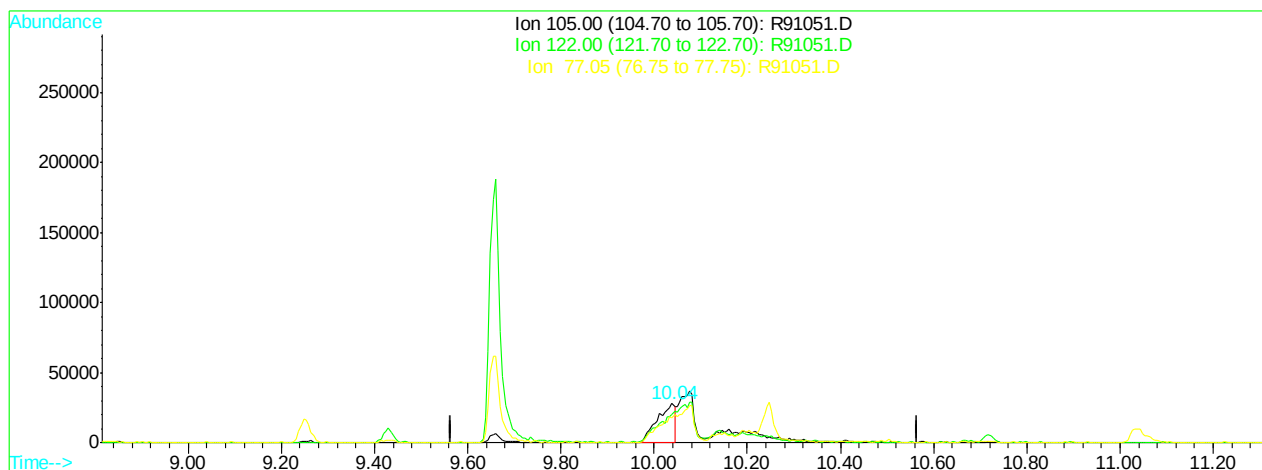
response 153277

Ion	Exp%	Act%
55.00	100	100
113.00	76.50	70.47
56.00	79.90	74.97
84.00	41.00	38.29

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:58 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Single Level Calibration



(31) Benzoic acid (t)

10.04min 10.54ppb

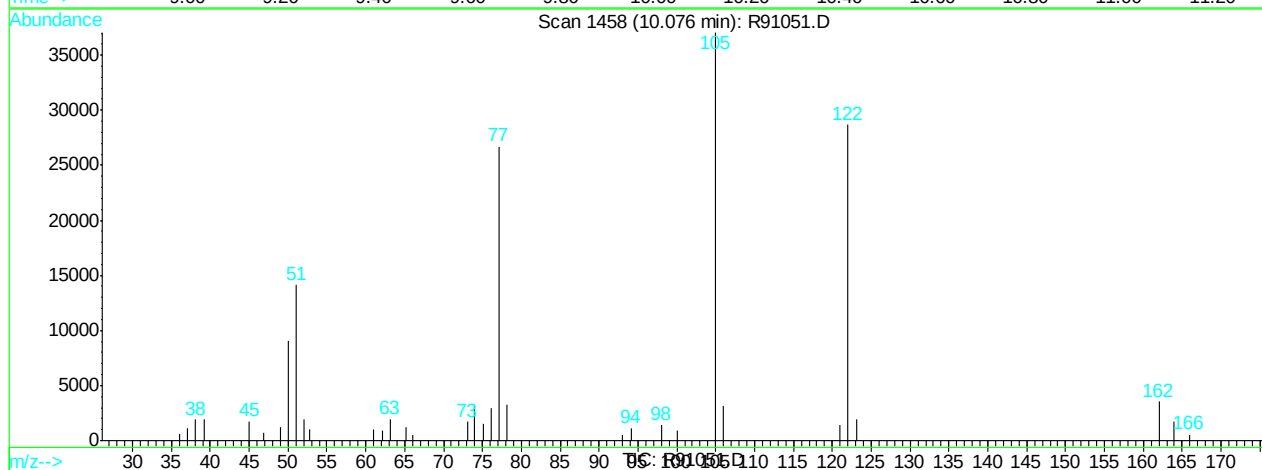
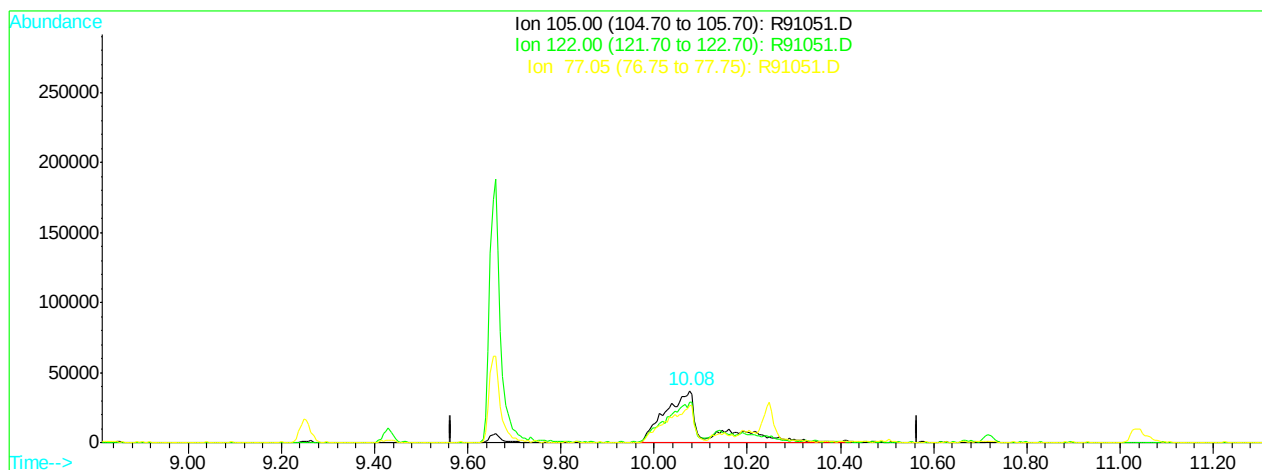
response 72088

Ion	Exp%	Act%
105.00	100	100
122.00	74.00	58.34
77.05	41.20	50.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:58 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Single Level Calibration



(31) Benzoic acid (t)

10.08min 24.04ppb m

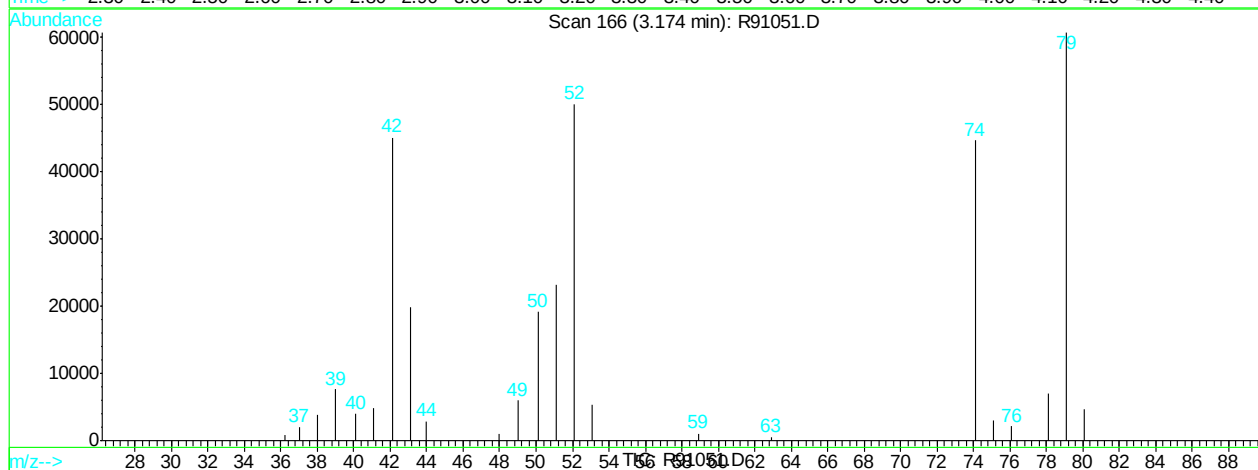
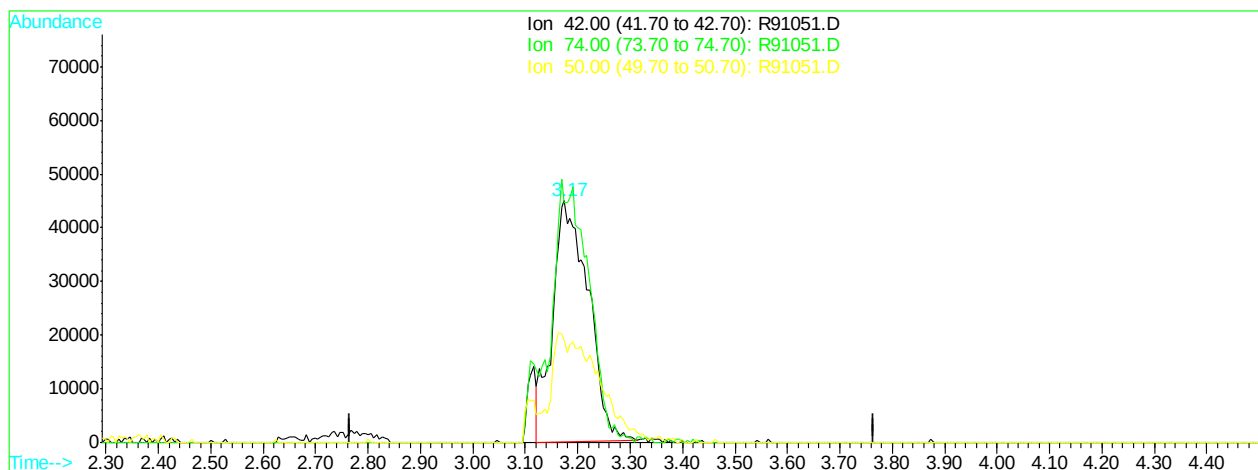
response 223982

Ion	Exp%	Act%
105.00	100	100
122.00	74.00	77.39
77.05	41.20	72.01#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:58 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Multiple Level Calibration



(4) N-Nitrosodimethylamine (t)

3.17min 27.47ppb

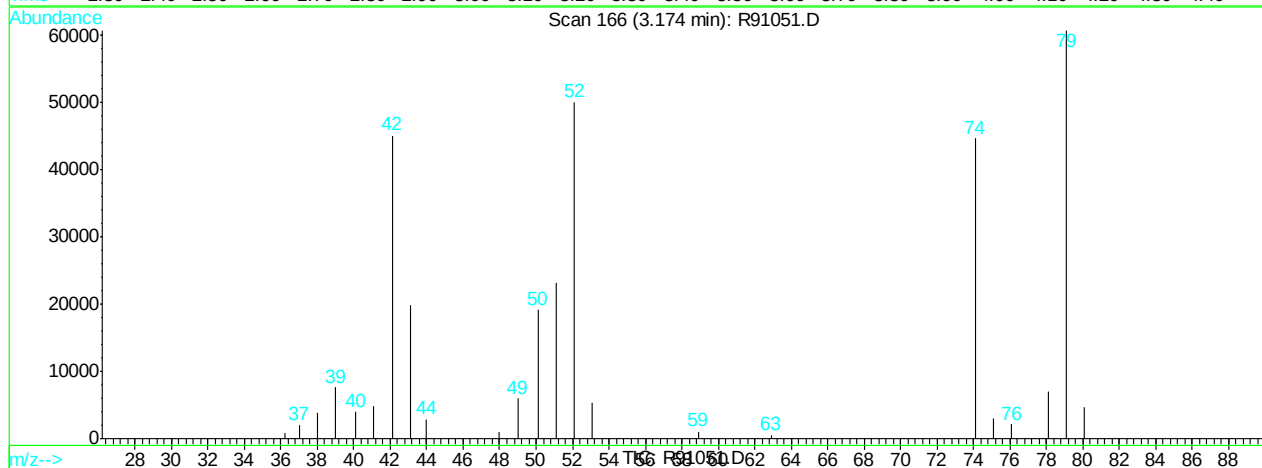
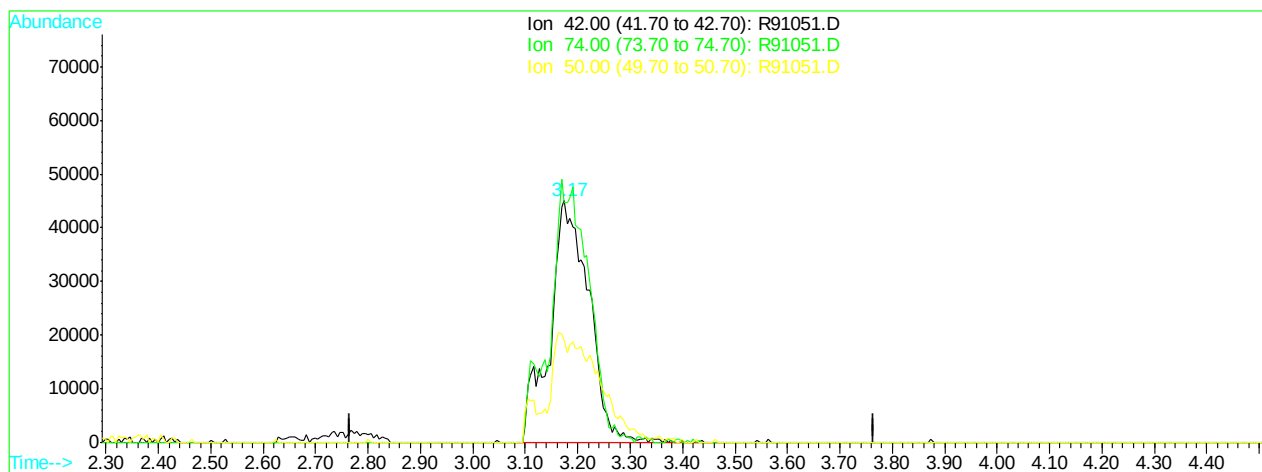
response 210887

Ion	Exp%	Act%
42.00	100	100
74.00	105.10	94.32
50.00	39.10	39.50
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:59 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Multiple Level Calibration



(4) N-Nitrosodimethylamine (t)

3.17min 30.33ppb m

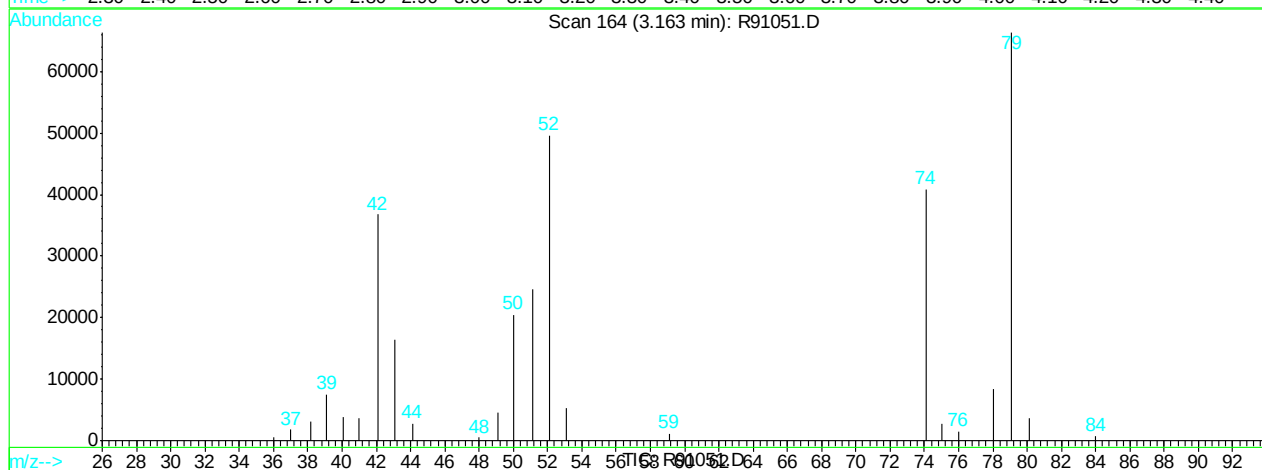
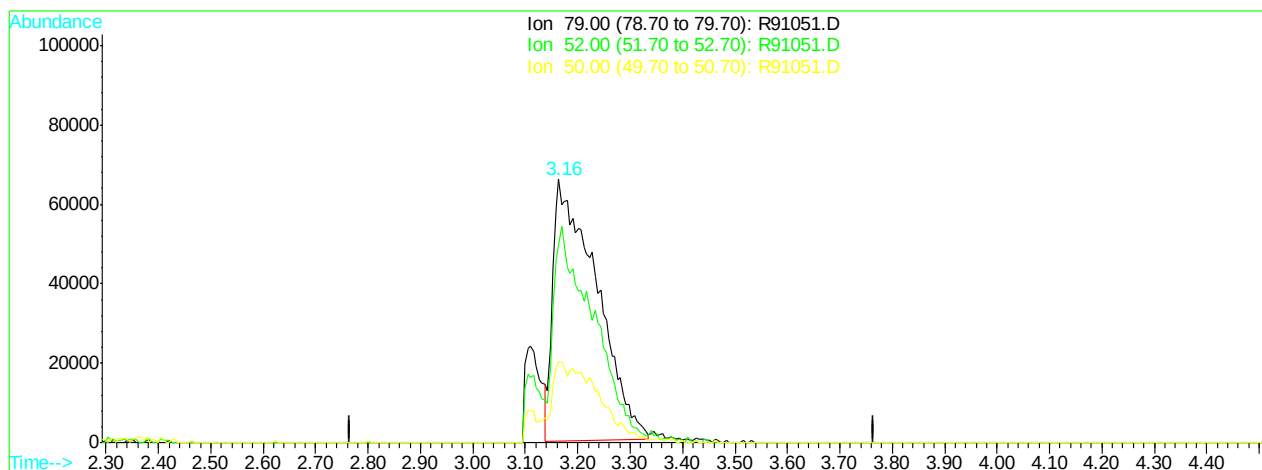
response 232864

Ion	Exp%	Act%
42.00	100	100
74.00	105.10	99.08
50.00	39.10	42.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:59 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Multiple Level Calibration



(3) Pyridine (t)

3.16min 23.69ppb

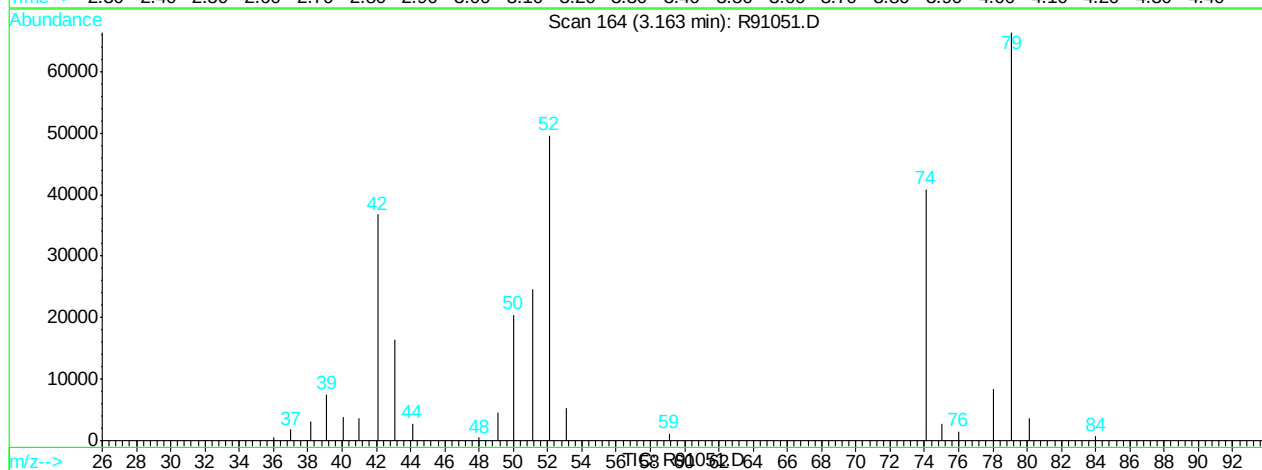
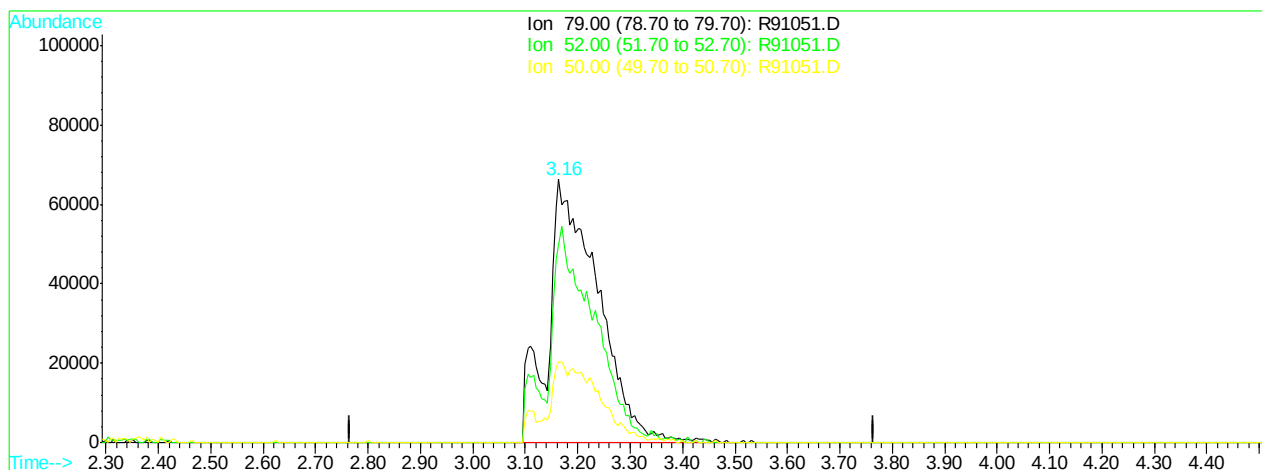
response 377139

Ion	Exp%	Act%
79.00	100	100
52.00	72.90	74.98
50.00	27.40	29.57
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:59 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Multiple Level Calibration



(3) Pyridine (t)

3.16min 27.80ppb m

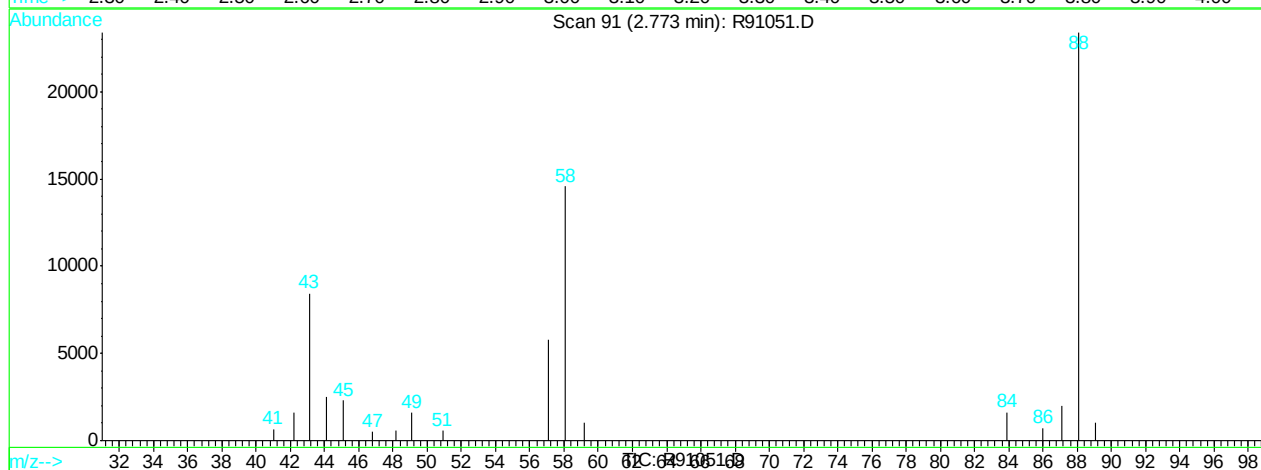
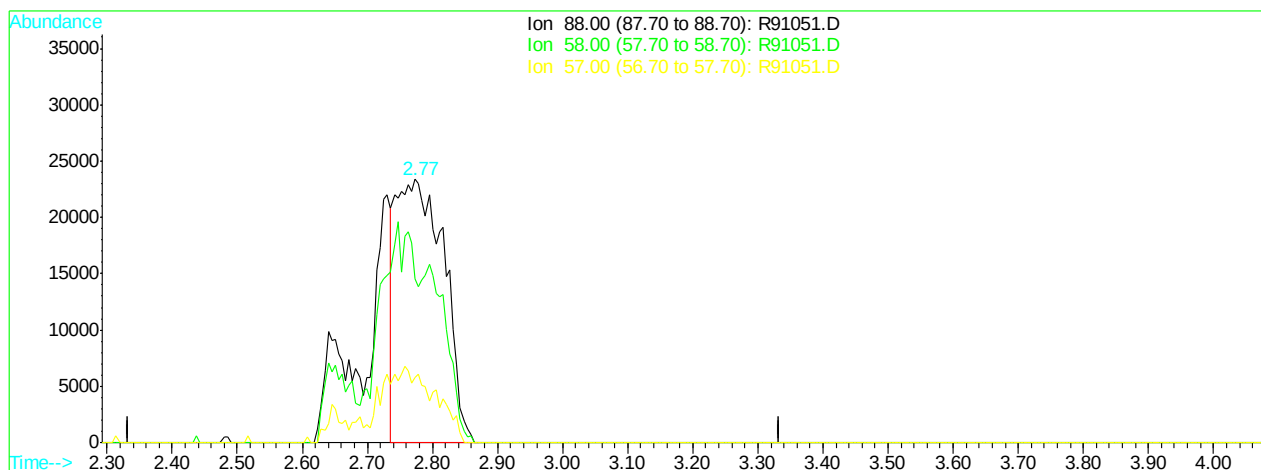
response 442499

Ion	Exp%	Act%
79.00	100	100
52.00	72.90	74.79
50.00	27.40	30.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:59 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.77min 16.79ppb

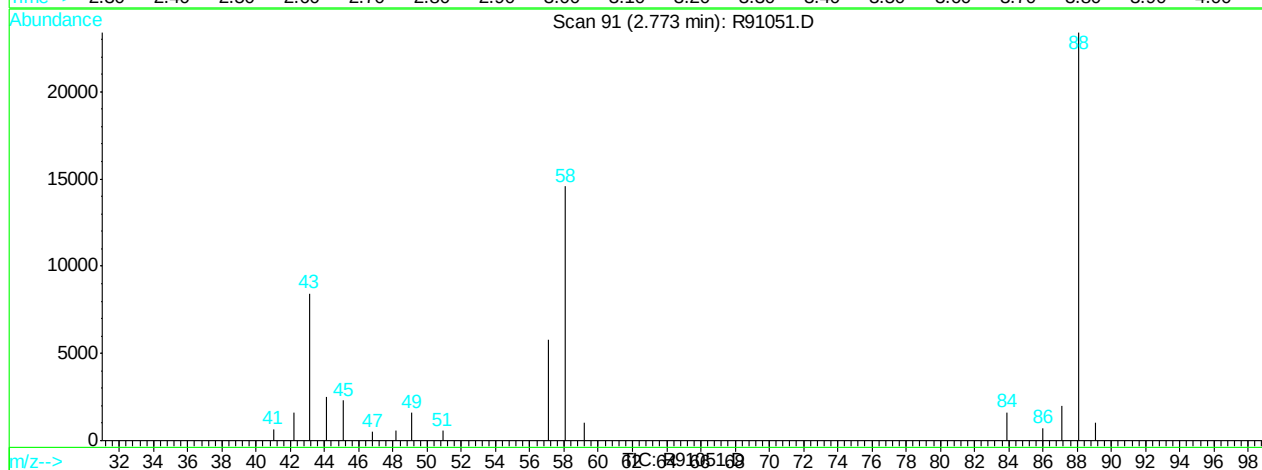
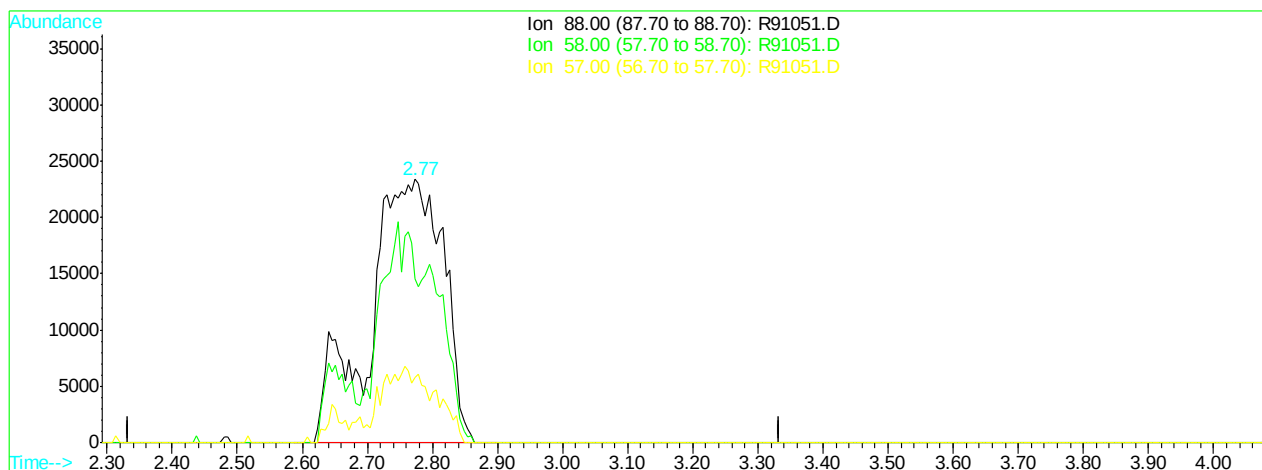
response 119101

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	53.99
57.00	26.80	24.58
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3516\R91051.D Vial: 2
Acq On : 14 Jan 2012 12:20 pm Operator: kristis
Sample : cc3499-25 Inst : MSR
Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 24 16:59 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 15:10:48 2012
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.77min 26.09ppb m

response 185068

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	62.30
57.00	26.80	24.80
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3516\R91052.D Vial: 3
 Acq On : 14 Jan 2012 12:55 pm Operator: kristis
 Sample : cc3455-25 Inst : MSR
 Misc : op53255,er3516,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 24 17:06 2012 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Tue Jan 24 17:05:50 2012
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.44	152	397208	40.00	ppb	0.08
24) Naphthalene-d8	10.19	136	1391738	40.00	ppb	0.08
47) Acenaphthene-d10	14.31	164	713425	40.00	ppb	0.08
69) Phenanthrene-d10	17.77	188	1139199	40.00	ppb	0.08
83) Chrysene-d12	22.11	240	987009	40.00	ppb	0.11
92) Perylene-d12	23.63	264	774625	40.00	ppb	0.04
102) 1,4-Dichlorobenzene-d4a	7.44	152	397208	40.00	ppb	0.08
104) Acenaphthene-d10a	14.31	164	713425	40.00	ppb	0.08
107) Chrysene-d12a	22.11	240	987009	40.00	ppb	0.11

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	6.60	105	206599	23.36	ppb	95
105) 1,2,4,5-Tetrachlorobenzene	12.34	216	254754	27.74	ppb	97
106) Atrazine	17.41	215	83975	28.28	ppb	96
108) Benzidine	20.48	184	282927	22.68	ppb	98

(#) = qualifier out of range (m) = manual integration

R91052.D MR3499.M Tue Jan 24 17:06:35 2012 NJMSR

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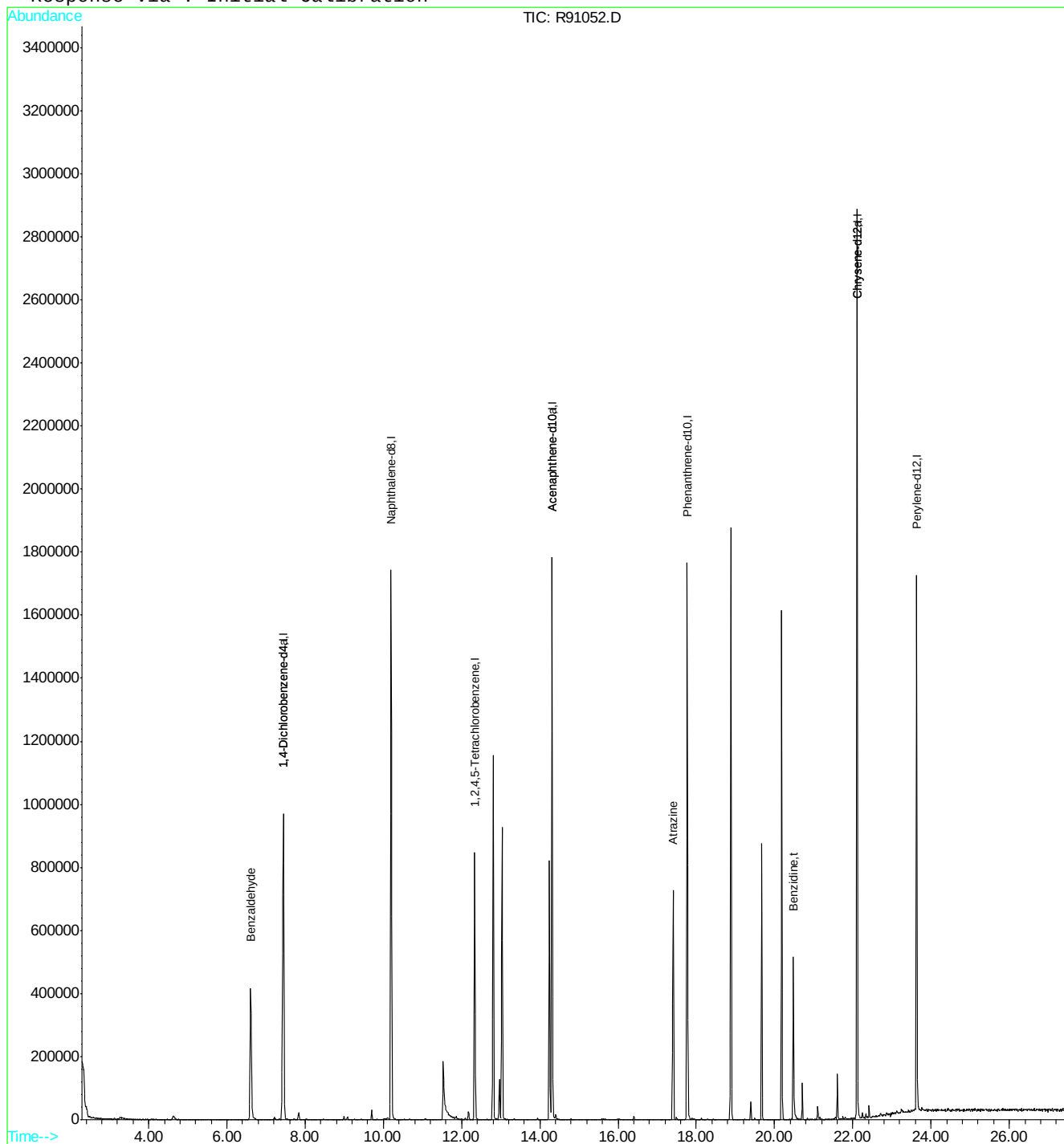
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3516\R91052.D
Acq On : 14 Jan 2012 12:55 pm
Sample : cc3455-25
Misc : op53255,er3516,1000,,,1,1
MS Integration Params: RTEINT.P
Quant Time: Jan 24 17:06 2012

Vial: 3
Operator: kristis
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 24 17:05:50 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D

Vial: 2

Acq On : 16 Jan 2012 8:49 am

Operator: rachelg

Sample : CC3499-25

Inst : MSR

Misc : op53255,er3517,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 23 14:07 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Jan 12 11:38:55 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.45	152	469105	40.00	ppb	-0.10
24) Naphthalene-d8	10.21	136	1582187	40.00	ppb	-0.09
47) Acenaphthene-d10	14.32	164	911455	40.00	ppb	-0.11
69) Phenanthrene-d10	17.78	188	1409032	40.00	ppb	-0.11
83) Chrysene-d12	22.12	240	1311756	40.00	ppb	-0.07
92) Perylene-d12	23.64	264	1176643	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.45	152	469105	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.32	164	911455	40.00	ppb	-0.11
107) Chrysene-d12a	22.12	240	1311756	40.00	ppb	-0.07

System Monitoring Compounds

5) 2-Fluorophenol	5.21	112	436253	28.58	ppb	-0.11
Spiked Amount	50.000		Recovery	=	57.16%	
8) Phenol-d5	6.97	99	475070	27.37	ppb	-0.09
Spiked Amount	50.000		Recovery	=	54.74%	
25) Nitrobenzene-d5	8.68	82	400235	27.95	ppb	-0.10
Spiked Amount	50.000		Recovery	=	55.90%	
51) 2-Fluorobiphenyl	12.82	172	771673	26.12	ppb	-0.10
Spiked Amount	50.000		Recovery	=	52.24%	
73) 2,4,6-Tribromophenol	16.22	330	122867	29.38	ppb	-0.11
Spiked Amount	50.000		Recovery	=	58.76%	
86) Terphenyl-d14	20.84	244	748846	27.07	ppb	-0.08
Spiked Amount	50.000		Recovery	=	54.14%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.74	88	189814m	26.83	ppb	
3) Pyridine	3.16	79	436453m	27.49	ppb	
4) N-Nitrosodimethylamine	3.17	42	233649m	30.51	ppb	
6) Indene	8.03	116	713918	25.97	ppb	93
7) Cumene	5.99	105	1081922	26.27	ppb	98
9) Phenol	6.99	94	472951	25.50	ppb	93
10) Aniline	6.90	93	453345	20.79	ppb	90
11) bis(2-Chloroethyl)ether	7.04	93	342984	24.10	ppb	93
12) 2-Chlorophenol	7.12	128	419103	25.46	ppb	91
13) Decane	7.25	43	416402	22.42	ppb	97
14) 1,3-Dichlorobenzene	7.37	146	491670	24.72	ppb	98
15) 1,4-Dichlorobenzene	7.48	146	492869	25.25	ppb	92
16) Benzyl alcohol	7.85	108	219624	26.44	ppb	98
17) 1,2-Dichlorobenzene	7.85	146	460053	25.10	ppb	97
18) Acetophenone	8.37	105	521523	25.84	ppb	98
19) 2-Methylphenol	8.19	108	330989	23.91	ppb	92
20) 2,2'-oxybis(1-Chloropropan	8.18	121	134111	25.43	ppb	# 64
21) 3&4-Methylphenol	8.51	108	349094	26.04	ppb	96
22) n-Nitroso-di-n-propylamine	8.47	70	232919	26.70	ppb	96
23) Hexachloroethane	8.49	201	158806	25.31	ppb	91
26) Nitrobenzene	8.72	77	389161	26.38	ppb	98
27) Quinoline	11.03	129	720152	25.83	ppb	94
28) Isophorone	9.25	82	657197	26.02	ppb	98
29) 2-Nitrophenol	9.43	139	225273	27.90	ppb	91
30) 2,4-Dimethylphenol	9.65	107	348495	25.75	ppb	98

(#) = qualifier out of range (m) = manual integration

R91071.D MR3499.M

Mon Jan 23 14:07:42 2012

NJMSR

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D

Vial: 2

Acq On : 16 Jan 2012 8:49 am

Operator: rachelg

Sample : CC3499-25

Inst : MSR

Misc : op53255,er3517,1000,,,1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 23 14:07 2012

Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)

Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um

Last Update : Thu Jan 12 11:38:55 2012

Response via : Initial Calibration

DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Benzoic acid	10.07	105	128169	15.82	ppb	84
32) bis(2-Chloroethoxy)methane	9.83	93	382590	25.40	ppb	98
33) 2,4-Dichlorophenol	10.00	162	316472	26.80	ppb	98
34) 2,6-Dichlorophenol	10.50	162	311211	25.53	ppb	93
35) 1,3,5-Trichlorobenzene	9.43	180	380368	25.27	ppb	98
36) 1,2,4-Trichlorobenzene	10.13	180	355777	24.78	ppb	91
37) 1,2,3-Trichlorobenzene	10.67	180	339525	24.60	ppb	97
38) Naphthalene	10.25	128	1052052	24.68	ppb	96
39) 4-Chloroaniline	10.50	127	421519	25.05	ppb	98
40) 2,3-Dichloroaniline	12.63	161	369790	25.94	ppb	98
41) Caprolactam	11.29	55	146936m	25.11	ppb	
42) Hexachlorobutadiene	10.72	225	209167	26.37	ppb	96
43) 4-Chloro-3-methylphenol	11.77	107	340259	28.66	ppb	86
44) 2-Methylnaphthalene	11.85	142	794437	24.83	ppb	86
45) 1-Methylnaphthalene	12.09	142	720681	24.82	ppb	94
46) Dimethylnaphthalene	13.34	156	646799	25.15	ppb	99
48) Hexachlorocyclopentadiene	12.41	237	247386	43.26	ppb	95
49) 2,4,6-Trichlorophenol	12.65	196	215897	26.06	ppb	91
50) 2,4,5-Trichlorophenol	12.75	196	222848	26.30	ppb	98
52) 2-Chloronaphthalene	12.97	162	668530	24.71	ppb	97
53) Biphenyl	12.99	154	822333	23.62	ppb	99
54) 2-Nitroaniline	13.37	65	202136	30.06	ppb	97
55) Dimethylphthalate	13.93	163	739067	25.57	ppb	98
56) Acenaphthylene	13.94	152	1037940	24.23	ppb	94
57) 2,6-Dinitrotoluene	14.06	165	172930	27.26	ppb	96
58) 3-Nitroaniline	14.36	138	191105	28.44	ppb	98
59) Acenaphthene	14.39	153	655830	24.92	ppb	90
60) 2,4-Dinitrophenol	14.60	184	98075	34.08	ppb	93
61) 4-Nitrophenol	14.96	109	68661	23.15	ppb	85
62) Dibenzofuran	14.77	168	929257	25.37	ppb	97
63) 2,4-Dinitrotoluene	14.96	165	241079	28.19	ppb	95
64) 2,3,4,6-Tetrachlorophenol	15.23	232	186627	27.93	ppb	98
65) Diethylphthalate	15.63	149	736275	25.21	ppb	93
66) Fluorene	15.58	166	757724	25.13	ppb	99
67) 4-Chlorophenyl-phenylether	15.66	204	348104	25.10	ppb	93
68) 4-Nitroaniline	15.84	138	179466	25.62	ppb	84
70) 4,6-Dinitro-2-methylphenol	15.91	198	109457	21.19	ppb	90
71) n-Nitrosodiphenylamine	15.99	169	530105	25.26	ppb	95
72) 1,2-Diphenylhydrazine	16.03	77	652947	24.58	ppb	98
74) 4-Bromophenyl-phenylether	16.79	248	221585	26.90	ppb	90
75) Hexachlorobenzene	17.08	284	234129	25.62	ppb	95
76) Pentachlorophenol	17.56	266	273796	55.81	ppb	99
77) Phenanthrene	17.83	178	1019788	23.40	ppb	99
78) Anthracene	17.93	178	1058617	25.36	ppb	98
79) Carbazole	18.39	167	929458	24.60	ppb	97
80) Di-n-butylphthalate	19.40	149	1201471	25.93	ppb	98
81) Fluoranthene	20.21	202	1080394	25.74	ppb	99
82) Octadecane	17.82	57	403791	23.20	ppb	97
84) Pyrene	20.53	202	1093677	21.99	ppb	98

(#)=qualifier out of range (m)=manual integration

R91071.D MR3499.M

Mon Jan 23 14:07:42 2012

NJMSR

Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
 Acq On : 16 Jan 2012 8:49 am Operator: rachelg
 Sample : CC3499-25 Inst : MSR
 Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 23 14:07 2012 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Thu Jan 12 11:38:55 2012
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Butyl stearate	21.61	56	300967	24.82	ppb	91
87) Butylbenzylphthalate	21.55	149	523538	24.03	ppb	96
88) Benzo[a]anthracene	22.10	228	1020192	23.39	ppb	94
89) 3,3'-Dichlorobenzidine	22.10	252	348963	29.68	ppb	99
90) Chrysene	22.14	228	926969	22.17	ppb	99
91) bis(2-Ethylhexyl)phthalate	22.25	149	671531	24.91	ppb	97
93) Di-n-octylphthalate	22.86	149	1142662	25.52	ppb	97
94) Benzo[b]fluoranthene	23.23	252	1006743	23.58	ppb	98
95) Benzo[k]fluoranthene	23.26	252	920842	28.00	ppb	96
96) Benzo[a]pyrene	23.57	252	894165	26.03	ppb	98
97) Indeno[1,2,3-cd]pyrene	24.94	276	836739	29.19	ppb	90
98) Dibenz(a,h)acridine	24.62	279	672619	24.64	ppb	97
99) Dibenz[a,h]anthracene	24.95	278	705978	24.43	ppb	90
100) 7,12-Dimethylbenz(a)anthra	23.25	256	383644	21.55	ppb	97
101) Benzo[g,h,i]perylene	25.30	276	677413	27.07	ppb	95

8.6.52

8

 (#) = qualifier out of range (m) = manual integration

R91071.D MR3499.M Mon Jan 23 14:07:42 2012 NJMSR

Page 3

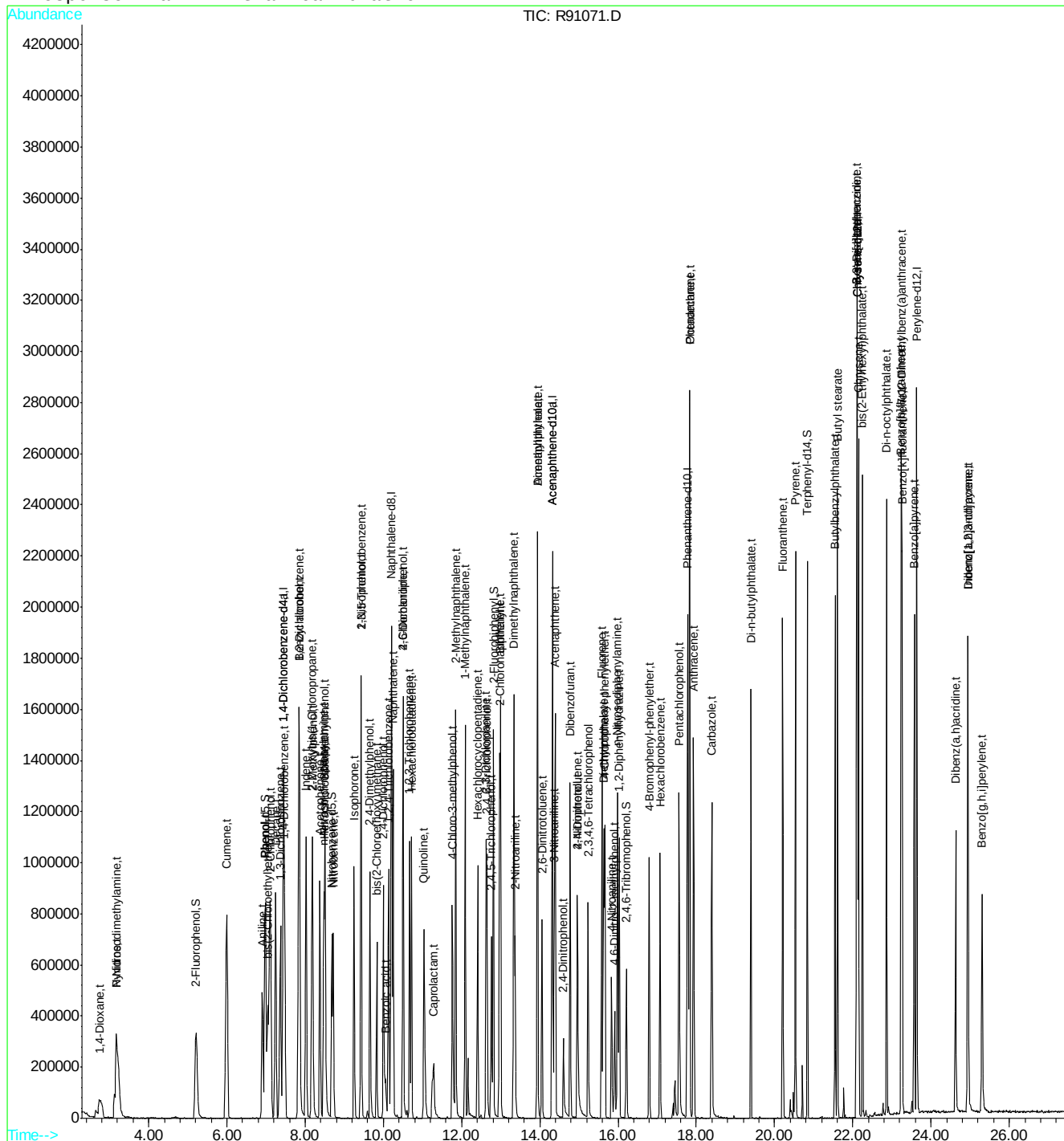
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D
Acq On : 16 Jan 2012 8:49 am
Sample : CC3499-25
Misc : op53255,er3517,1000,,1,1
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:07 2012

Vial: 2
Operator: rachelg
Inst : MSR
Multiplr: 1.00

Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: ER3517-CC3499

Method: SW846 8270D

Lab FileID: R91071.D

Analyst approved: 01/23/12 14:22 Cheng-Hwan Ao

Injection Time: 01/16/12 08:49

Supervisor approved: 01/23/12 14:23 Cheng-Hwan Ao

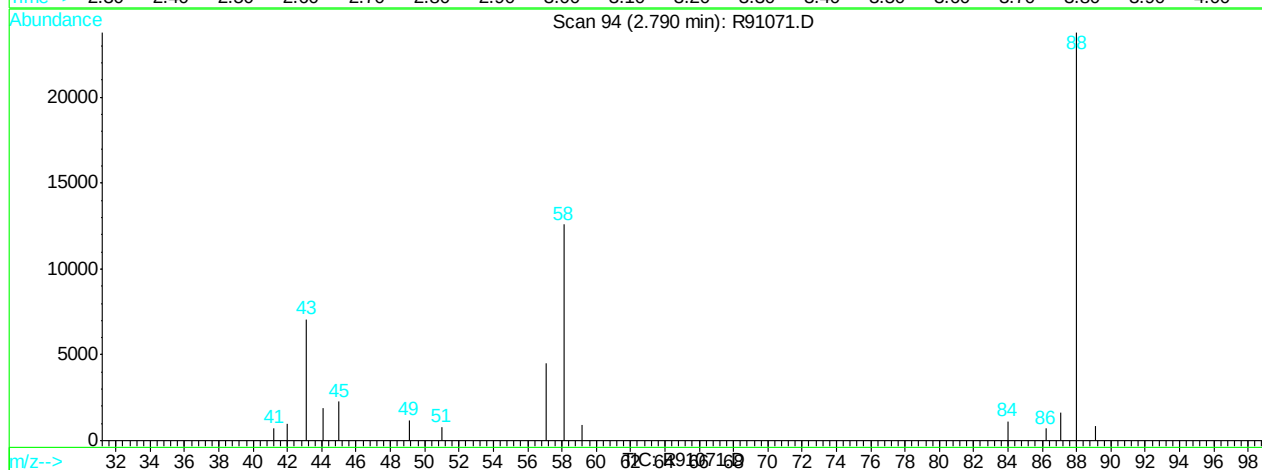
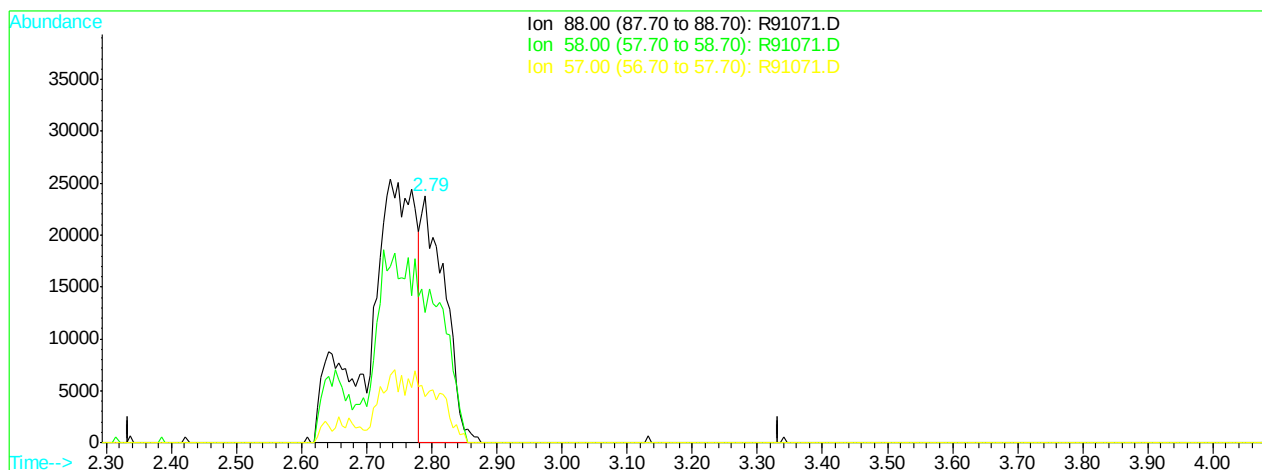
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.74	Poorly defined baseline
Pyridine	110-86-1		3.16	Poorly defined baseline
n-Nitrosodimethylamine	62-75-9		3.17	Poorly defined baseline
Caprolactam	105-60-2		11.29	Poorly defined baseline

8.6.52.1
8

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
Acq On : 16 Jan 2012 8:49 am Operator: rachelg
Sample : CC3499-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:05 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.79min 8.45ppb

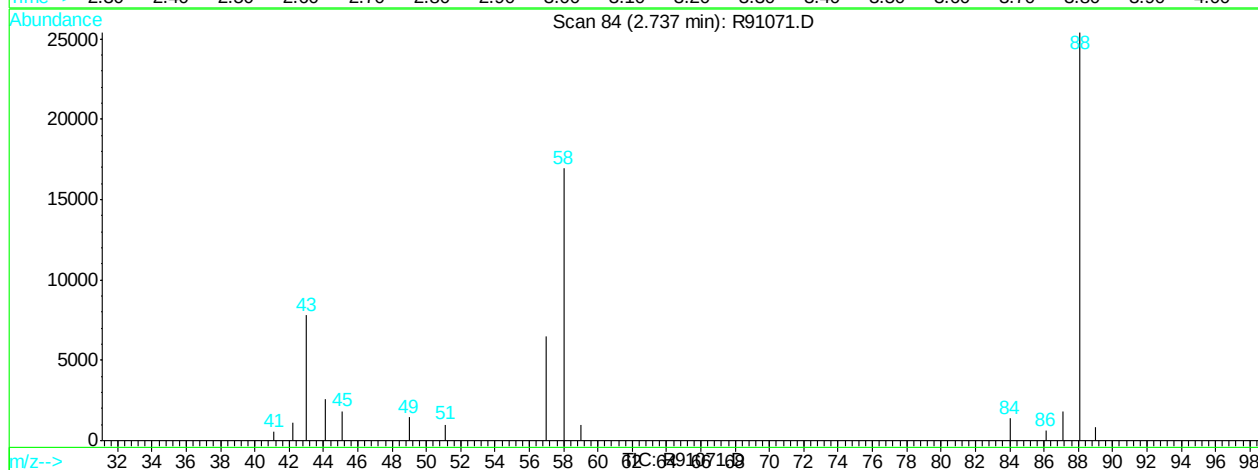
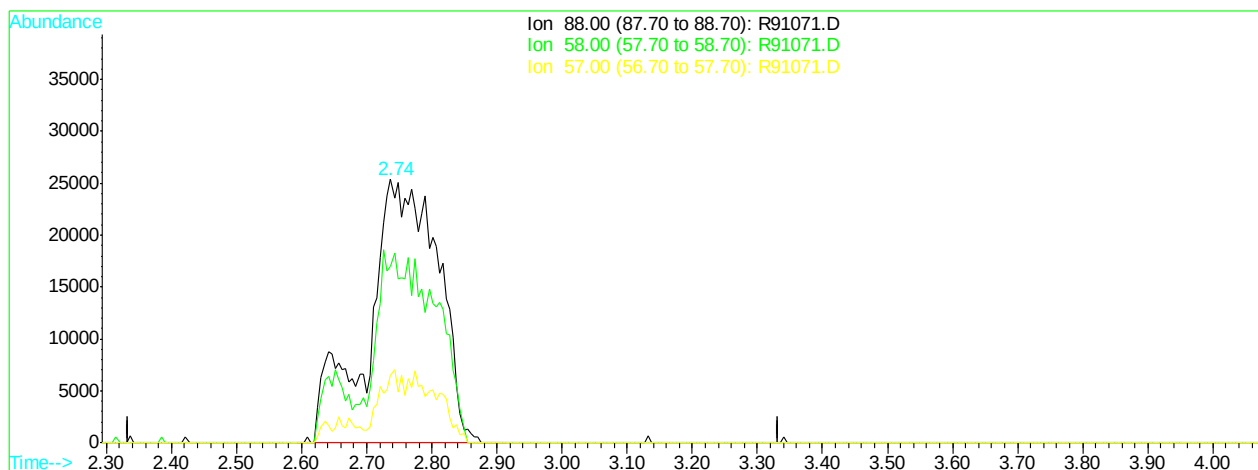
response 59795

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	40.96
57.00	26.80	12.97
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
Acq On : 16 Jan 2012 8:49 am Operator: rachelg
Sample : CC3499-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:05 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Multiple Level Calibration



(2) 1,4-Dioxane (t)

2.74min 26.83ppb m

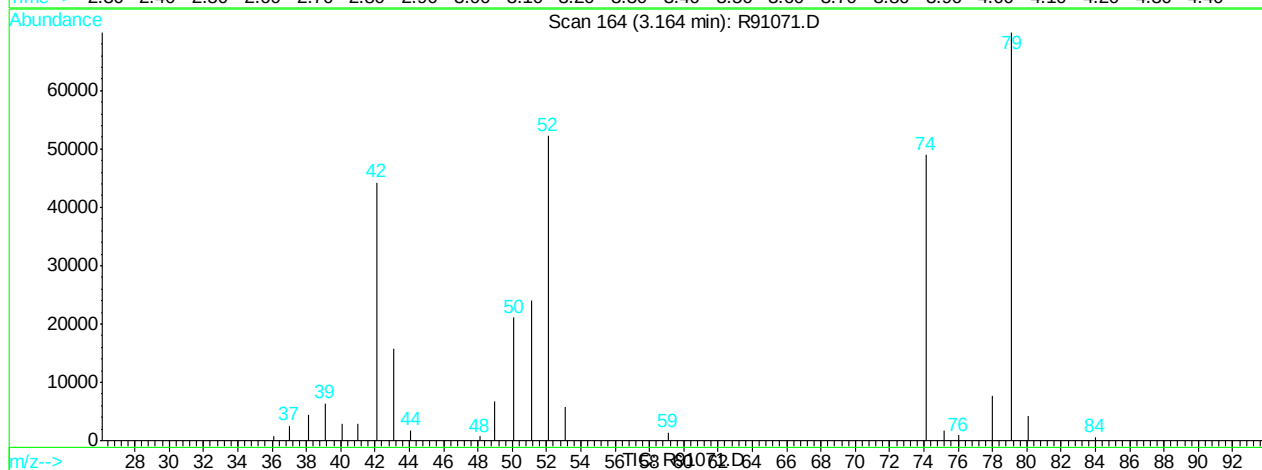
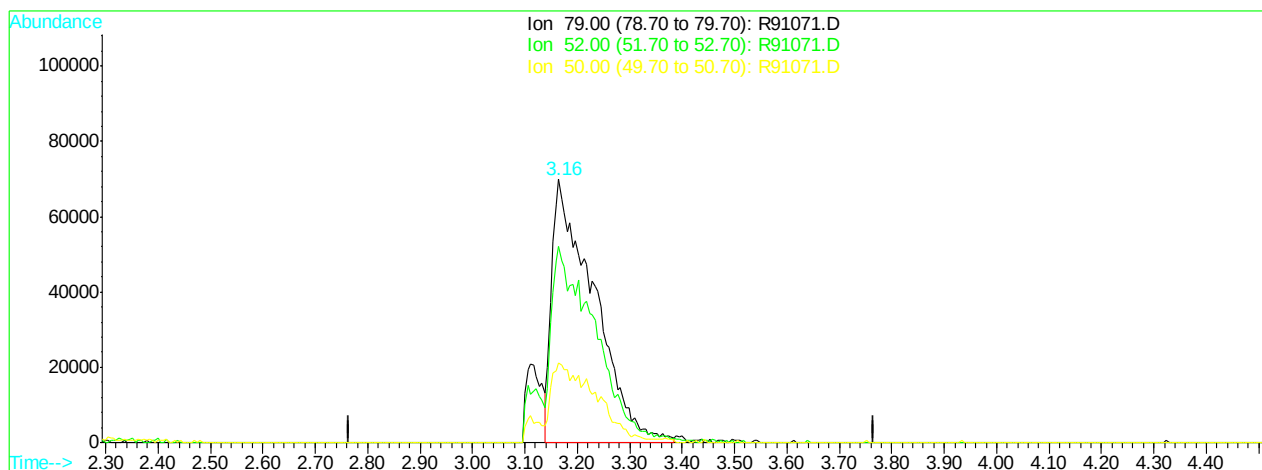
response 189814

Ion	Exp%	Act%
88.00	100	100
58.00	70.70	66.75
57.00	26.80	25.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
Acq On : 16 Jan 2012 8:49 am Operator: rachelg
Sample : CC3499-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:05 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Multiple Level Calibration



(3) Pyridine (t)

3.16min 24.45ppb

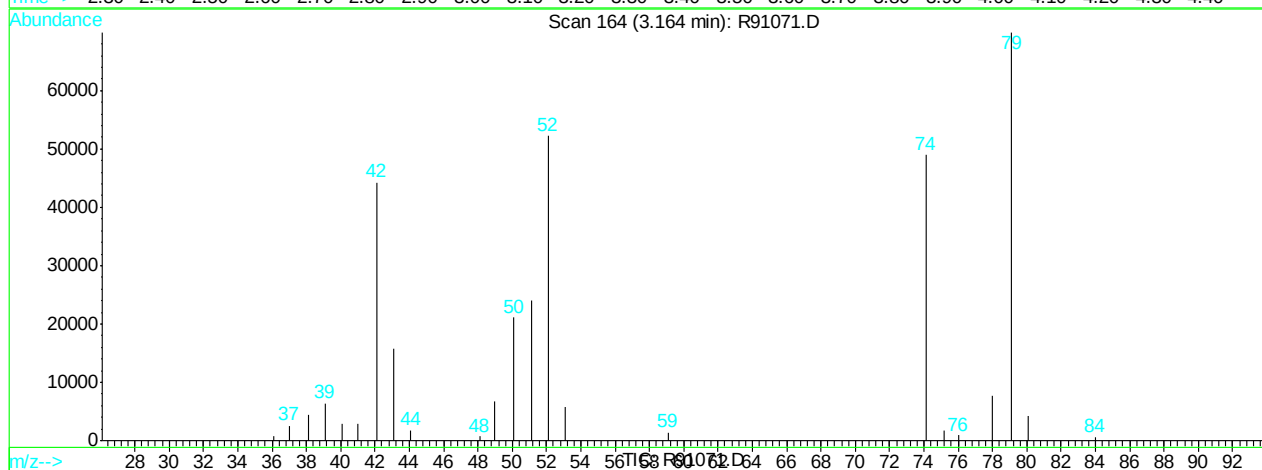
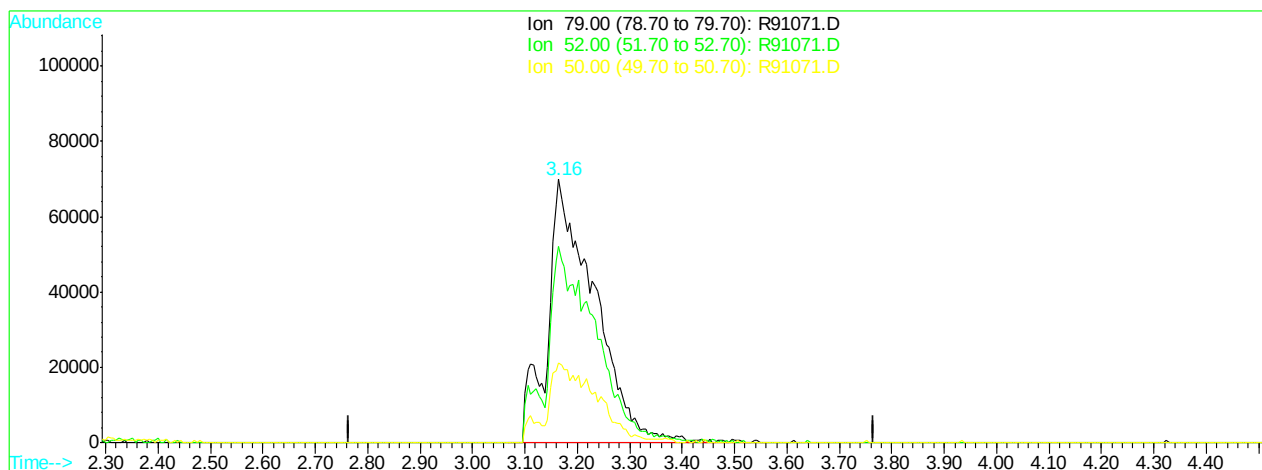
response 388104

Ion	Exp%	Act%
79.00	100	100
52.00	72.90	75.00
50.00	27.40	29.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
Acq On : 16 Jan 2012 8:49 am Operator: rachelg
Sample : CC3499-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:06 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Multiple Level Calibration



(3) Pyridine (t)

3.16min 27.49ppb m

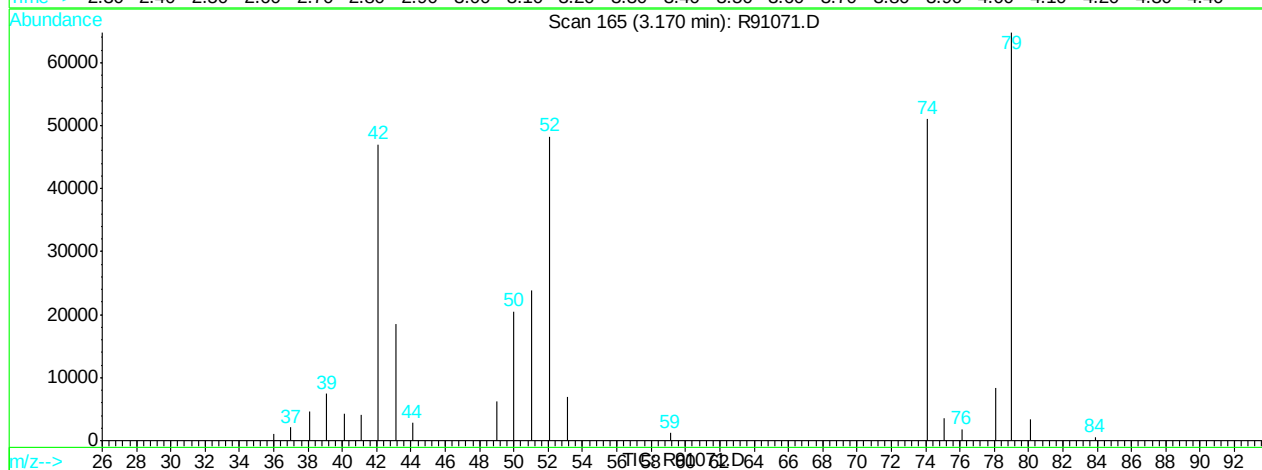
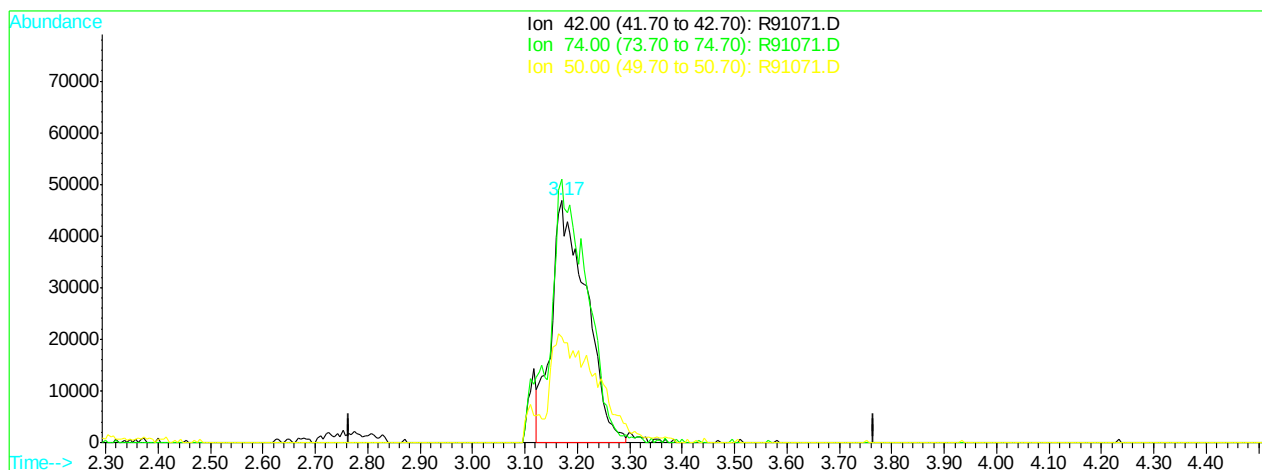
response 436453

Ion	Exp%	Act%
79.00	100	100
52.00	72.90	74.71
50.00	27.40	30.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
Acq On : 16 Jan 2012 8:49 am Operator: rachelg
Sample : CC3499-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:06 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Multiple Level Calibration



(4) N-Nitrosodimethylamine (t)

3.17min 28.11ppb

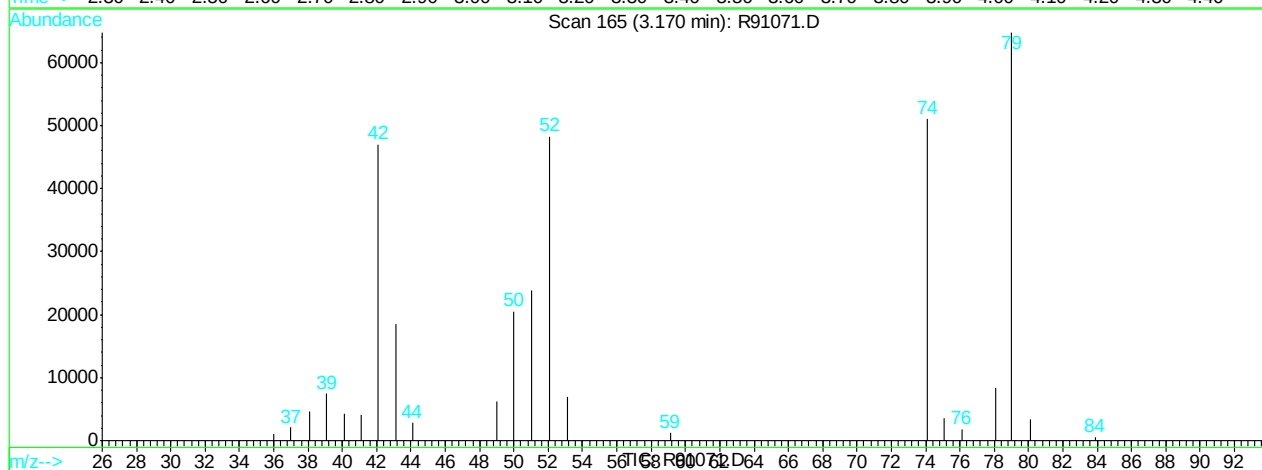
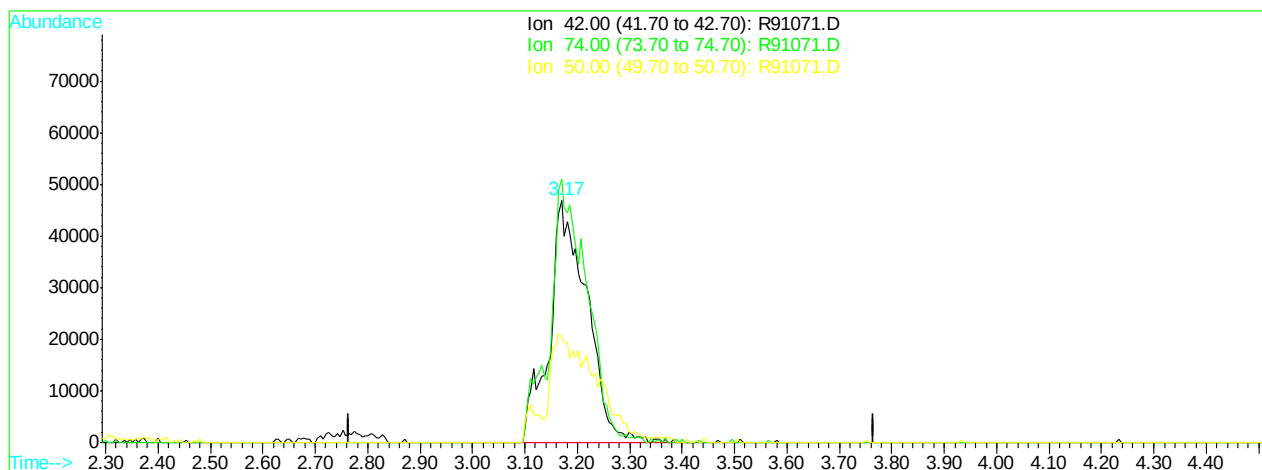
response 215285

Ion	Exp%	Act%
42.00	100	100
74.00	105.10	106.24
50.00	39.10	38.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
Acq On : 16 Jan 2012 8:49 am Operator: rachelg
Sample : CC3499-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:06 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Multiple Level Calibration



(4) N-Nitrosodimethylamine (t)

3.17min 30.51ppb m

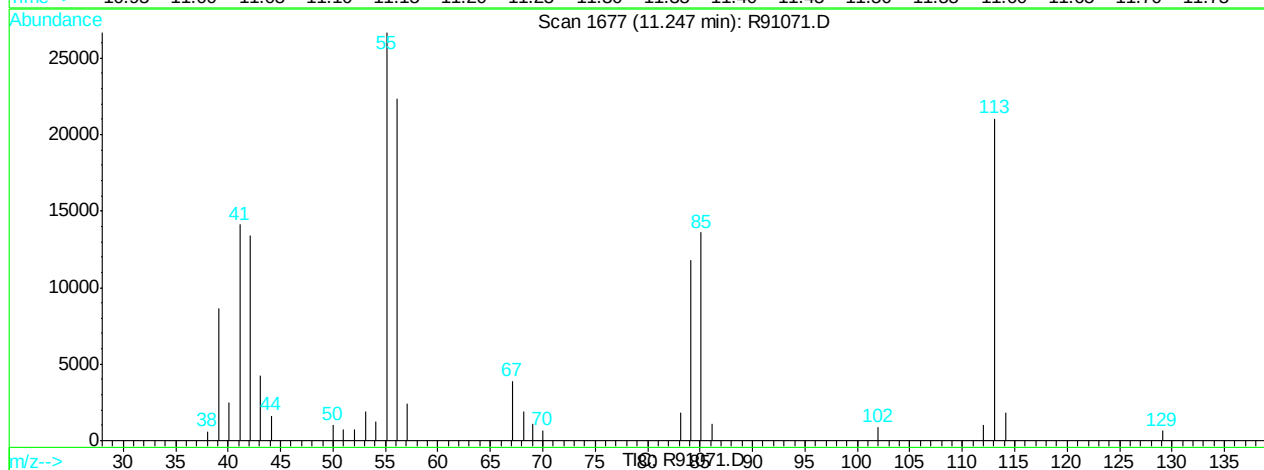
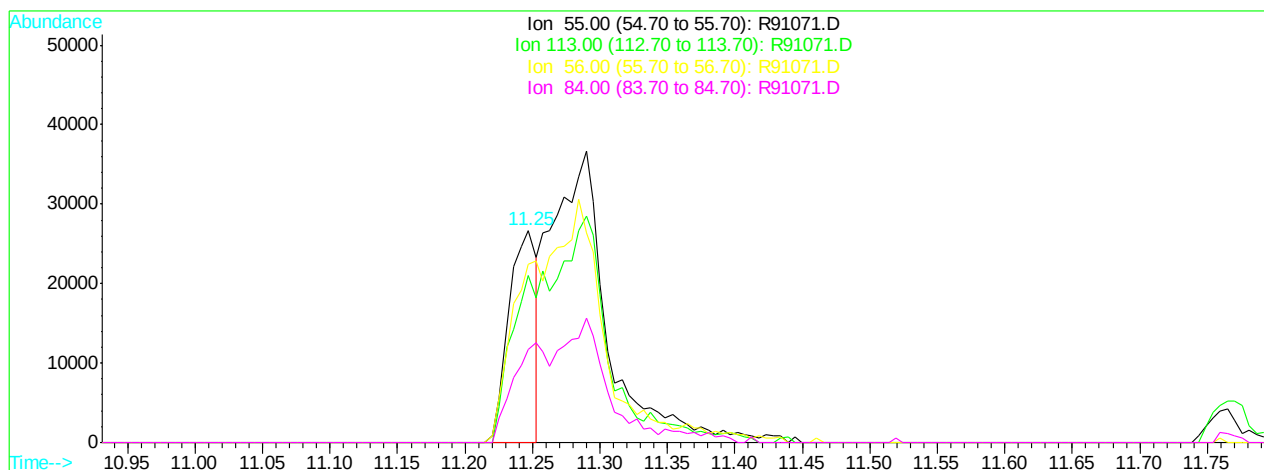
response 233649

Ion	Exp%	Act%
42.00	100	100
74.00	105.10	108.53
50.00	39.10	43.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
Acq On : 16 Jan 2012 8:49 am Operator: rachelg
Sample : CC3499-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:06 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Multiple Level Calibration



(41) Caprolactam (t)

11.25min 6.89ppb

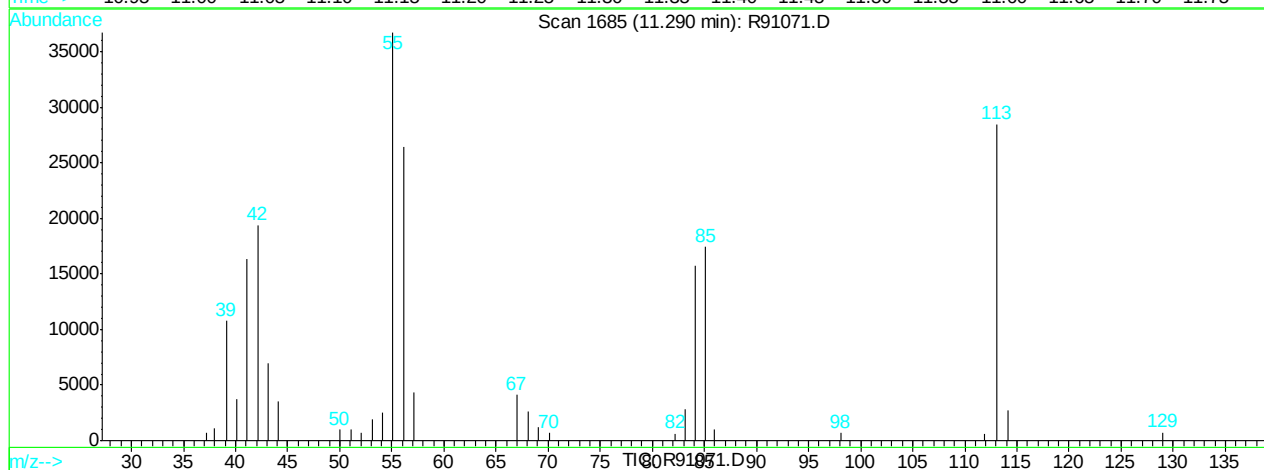
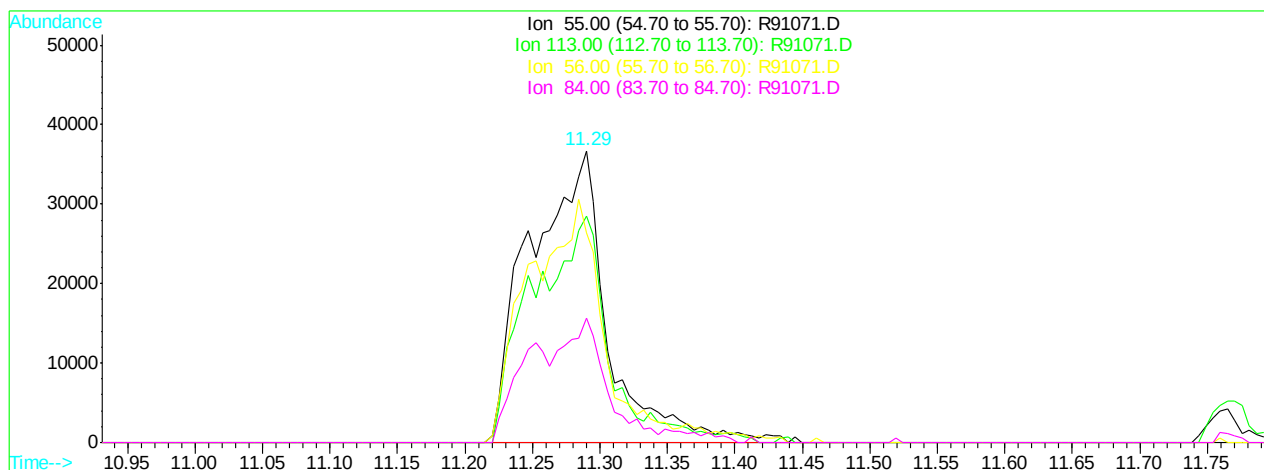
response 37825

Ion	Exp%	Act%
55.00	100	100
113.00	76.50	79.58
56.00	79.90	72.89
84.00	41.00	36.41

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\ER3517\R91071.D Vial: 2
Acq On : 16 Jan 2012 8:49 am Operator: rachelg
Sample : CC3499-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 23 14:06 2012 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Thu Jan 12 11:38:55 2012
Response via : Multiple Level Calibration



(41) Caprolactam (t)

11.29min 25.11ppb m

response 146936

Ion	Exp%	Act%
55.00	100	100
113.00	76.50	77.58
56.00	79.90	72.02
84.00	41.00	42.75

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3517\R91072.D Vial: 3
 Acq On : 16 Jan 2012 9:36 am Operator: rachelg
 Sample : CC3455-25 Inst : MSR
 Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 17 8:54 2012 Quant Results File: MR3499.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
 Last Update : Tue Jan 17 08:53:28 2012
 Response via : Initial Calibration
 DataAcq Meth : MR3499

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.44	152	399950	40.00	ppb	-0.10
24) Naphthalene-d8	10.20	136	1365243	40.00	ppb	-0.10
47) Acenaphthene-d10	14.32	164	681809	40.00	ppb	-0.11
69) Phenanthrene-d10	17.77	188	1066355	40.00	ppb	-0.12
83) Chrysene-d12	22.11	240	947838	40.00	ppb	-0.08
92) Perylene-d12	23.63	264	735011	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.44	152	399950	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.32	164	681809	40.00	ppb	-0.11
107) Chrysene-d12a	22.11	240	947838	40.00	ppb	-0.08

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	
86) Terphenyl-d14	0.00	244	0d	0.00	ppb	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds

						Qvalue
103) Benzaldehyde	6.61	105	202669	22.76	ppb	93
105) 1,2,4,5-Tetrachlorobenzene	12.33	216	246758	28.12	ppb	99
106) Atrazine	17.41	215	78412	27.63	ppb	90
108) Benzidine	20.48	184	272095	22.71	ppb	95

(#) = qualifier out of range (m) = manual integration

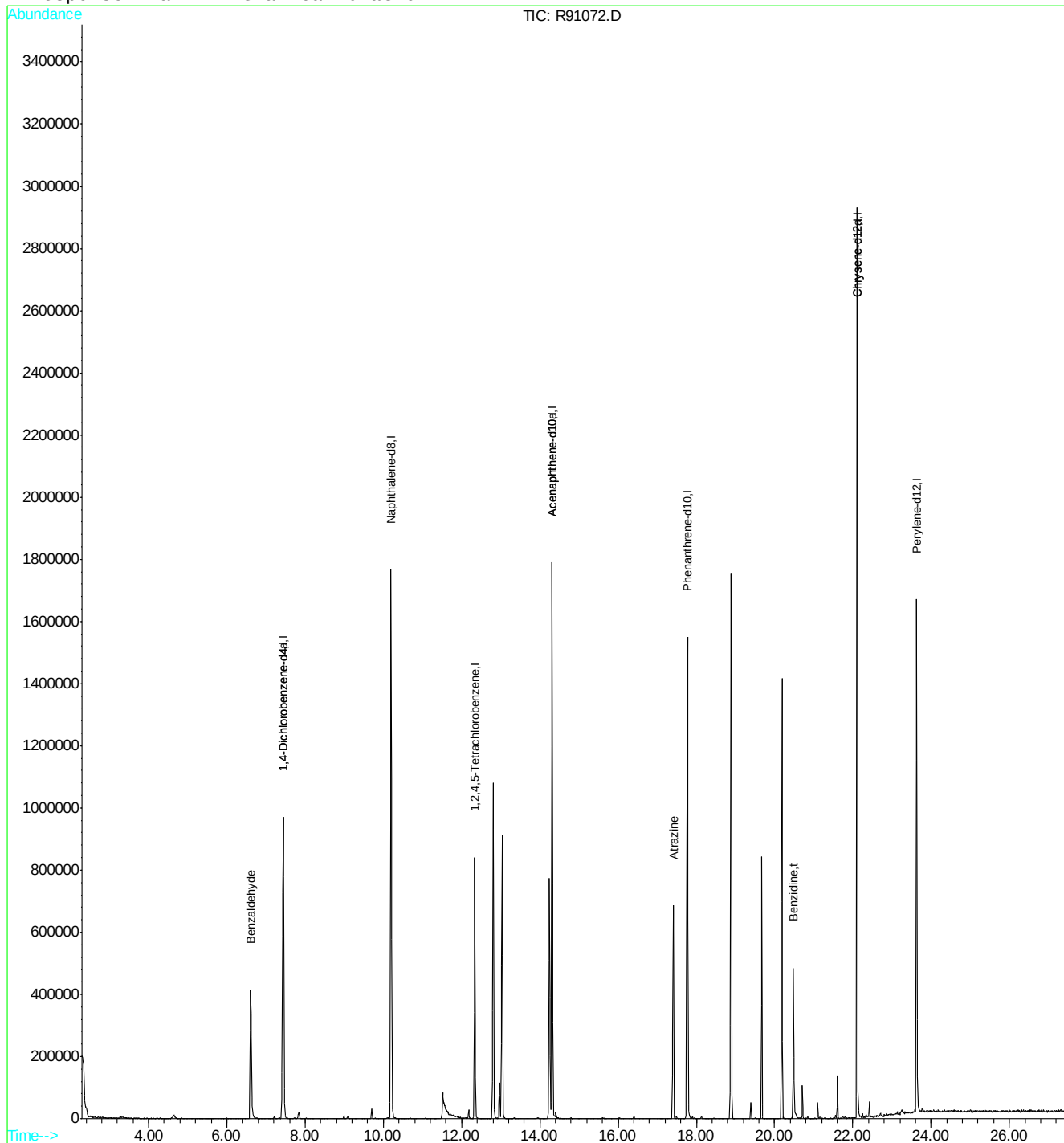
R91072.D MR3499.M Tue Jan 17 08:54:32 2012 NJMSR

Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3517\R91072.D Vial: 3
Acq On : 16 Jan 2012 9:36 am Operator: rachelg
Sample : CC3455-25 Inst : MSR
Misc : op53255,er3517,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 17 8:54 2012 Quant Results File: MR3499.RES

Method : C:\HPCHEM\1\METHODS\MR3499.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Jan 17 08:53:28 2012
Response via : Initial Calibration





Batch ID: EW3746

Date: 12-21-11

Analyst Signature: CA

Standard Data		
Lot #	Description	Conc.
SU1695-	104 DFHP	SDP 100
CH1761	IS	recopy 100
QF153	room 100	-

Columns: 2/b - 5m Si (30m x 0.25mm x 0.25mm)

Method SUA/625

Initial Cal. Method *new 3346*

Injection Volume: 1 μ l

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date: 12-22-11

[illegible]

ITX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: QR015-05

Rev. Date: 1/16/2006

Date: 12-21-11

Analyst Signature: GA

Standard Data

Standard Data

Lot #	Description	Conc.

Lot #	Description	Conc.
SV11675	10% DFPP	SDP124
CH1761	Is	residue
DF173	non kw	-

Columns: 2B-5m51/30m40.15m40.1

Method 8200/62

Initial Cal. Method EW3346

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 12/21/11

R	Data File	Sample ID	Ext. Batch	Test	M T X	ALS #	Dilution n.	L +	I S	S U	Status (Data)	Comments
	M 83975	DFPP			W	1					OK	7:02 PM
	83976	103347-100		TOL2		10					OK	SV11-675-124A
	83977	103347-80				11					OK	-124B
	83978	103347-50				12					OK	-124C
	83979	103347-25				13					OK	-124D
	83980	103347-10				14					OK	-124E
	83981	103347-5				15					OK	-124F
	83982	103347-2				16					OK	-124G
	83983	103347-1				17					OK	-124H
	83984	10V3346-50		Acids		18					OK	OP11-683-18
	83985	10V3346-50		BW1		19					OK	-23
	83986	10V3346-50		BW2		20					OK	-22
	83987	10V3346-50		3rd		21					OK	SV11-675-118
	83988	10V3346-50		3,3-DCEB		22					OK	SV11-675-66

ITX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-05
Rev. Date: 1/16/2006

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Date: 1-14-12

Analyst Signature: [Signature]

Standard Data

Standard Data

Lot #	Description	Conc.

Lot #	Description	Conc.
SW-65101	DEFIN	SUPPLY
SW-65114	BWA	SUPPLY
SW-65124	KLK2	SUPPLY
DEF20	MALIKMAYAL	—
CH1761	1st SHL	SUPPLY

Columns: 2815, 3000, 240000

Method: 0234625

Initial Cal. Method: 1/1/3346

Injection Volume: 100

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 1/16/12

Data File	Sample ID	Ext. Batch	Test	M T X	ALS #	Dilution	L +	I S	S U	Status (Data)	Comments
184306	DEFIN			W	1					OK	9:16 acc
84307	23346-SD			W	2					OK	
84308	23347-SD			W	3					OK	
84309	Q54155-MB	54155-1	AB220+	S	4		+			OK	
84310	Q54155-BS				5					OK	
84311	245682-2		AB220		6					OK	
84312	245685-4		21AMPET		7					OK	
84313	-2				8					OK	
84314	245685-1		AB220		9					OK	
84315	245682-2		11A+220A		10					OK	
84316	-3				11					OK	
84317	-1				12					OK	
84318	Q54155-MS		AB220		13					OK	
84319	Q54155-MD				14					OK	
84320	245683-5AA		AB220		15		+			OK	
84321	-40				16		+			OK	in 1:10
84322	-6AA				17		+			OK	

ITX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

sample volume/weight used and final volumes refer to extraction log.

193

If strikeouts must be initialed, dated and reason code applied as follows:

= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

form: OR015-05

rev. Date: 1/16/2006

Analyst Signature: B. J. Smith

Standard Data

[illegible]

Standard Data

Lot #	Description	Conc.
DE920	Ad Honeywell	—
CV174	ht Sh	99% 100%

Columns: 28151 30116 40116 40116

Method ELV/625

Initial Cal. Method 113346

Injection Volume: 1.02

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 1764

[illegible]

ITX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

195

All strikeouts must be initialed, dated and reason code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05

ev. Date: 1/16/2006

SEMI-VOLATILE by GCMS ANALYSIS LOG

 Batch ID: ER3455

 Date: 9-16-2011

 Analyst Signature: R
Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU11-67554	DFTPP	50 ppm
CH1961	Int. Std.	4000 ppm
DESO+	HW MCL	—

 Columns: 7B 5/11, 30mm 5mm 8µm

 Method: 820/625

 Initial Cal. Method: H33455

 Injection Volume: 1.0 µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

 Supervisor Signature: [Signature]

 Date: 9/16/11

R	Data File	Sample ID	Ext. Batch	Test	M T X	ALS #	Dilution a.	L +	I S	S U	Status (Data)	Comments
	89824	DFTPP				W 1					OK	10:23am
	89825	IC3455-100		TCL42		2					OK	SU11-675-82A
	89826	IC3455-80				3					OK	-82B
	89827	IC3455-50				4					OK	-82C
	89828	IC3455-25				5					OK	-82D
	89829	IC3455-10				6					OK	-82E
	89830	IC3455-5				7					OK	-82F
	89831	IC3455-2				8					OK	-82G
	89832	IC3455-1				9					OK	-82H
	89833	ICV3454-50		BW #1		10					OK	0711-611-66
	89834	ICV3454-50		BW #2		11					OK	0711-611-65
	89835	ICV3454-50		acid		12					OK	0711-611-01
	89836	ICV3454-50		3rd source		13					OK	SU10-604-130
	89837	ICV3454-50		benzidine		14					OK	SU11-675-66

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ample volume/weight used and final volumes refer to extraction log.

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If strikeouts must be initialed, dated and reason code applied as follows:

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Form: OR015-05

Rev. Date: 1/16/2006

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: ER3499

Date: 12/20/2011

Analyst Signature: Rchedon

Standard Data

Lot #	Description	Conc.
SV11-603-113	DATA	100ppm
SV11-603-114		50ppm
SV11-603-115		50ppm
SV11-603-116		25ppm
SV11-603-117		10ppm
SV11-603-118		5ppm

Standard Data

Lot #	Description	Conc.
SV11-603-104	DETPP	50ppm
~~SV11-603-105~~	~~BNA~~	~~25ppm~~
-108	TCL42	25ppm
SV11-603-119	Reit	2ppm
DF153	DCM honeywell	
CH1761	Int. Std.	4000ppm

Columns: 265msi 30mx. 25mm x. 25mm

Method 8270/625

Initial Cal. Method MR3454-99

Injection Volume: 1uL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 12-21-11

Data File	Sample ID	Ext. Batch	Test	M T X	ALS #	Dilution n.	L +	I S	S U	Status (Data)	Comments
R90735	DETPP			W	1					OK	1.50ppm
90736	~~CC3454-102~~ ^{to 12/20/11} ic3499-25			W	2					OK	
90737	~~CC3455-25~~ ^{to 12/20/11} ic3499-1			W	3					OK	SV11-603-116
90738	ic3499-2			W	4					OK	
90739	ic3499-5			W	5					OK	
90740	ic3499-10			W	6					OK	
90741	ic3499-50			W	7					OK	
90742	ic3499-80			W	8					OK	
90743	ic3499-100			W	9					OK	
90744	icv3499-50	Actual 2 nd source		W	10					OK	911-603-78
90745	icv3499-50	Bu #1 2 nd source		W	11					OK	911-603-23
90746	icv3499-50	Bu #2 2 nd source		W	12					OK	911-603-22
90747	icv3499-50	Online 3 rd source		W	13					OK	SV11-603-116
90748	icv3499-50	Denise 5 th source		W	14					OK not using	SV11-603-116 not needed

IX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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1 strikeouts must be initialed, dated and reason code applied as follows:

= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05

Date: 1/16/2006

Date: 1-14-12

 Analyst Signature: [Signature]
Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SW-105-201	DF1DP	50ppm
SW-105-202	BVA	25ppm
SW-105-203	TLU2	25ppm
DE520	Methylmercury	—
CH1761	ht std	400ppm

 Columns: 2P150i 30m x 0.25mm x 0.5um

 Method: 5010/605

 Initial Cal. Method: MR595

 Injection Volume: 1.0ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

 Supervisor Signature: [Signature]

 Date: 1/16/12

R	Data File	Sample ID	Ext. Batch	Test	M T X	ALS #	Dilutio n.	L +	I S	S U	Status (Data)	Comments
	R91050	DF1DP				1					OK	11:26am
	91051	CC3455-25				2					OK	
	91052	CC3455-25				3					OK	
	91053	OPS4206-178	54206-1	REDO	W	4		+UL	/		not using	Re-run for CF1
	91054	OPS4206-178				5			/		not using	OK
	91055	2496523-4		Boycut		6		+UL	/		not using	Re-run for CF1
	91056	2496554-3		Boycut		7		UL	/		not using	
	91057	-4				8		UL	/		not using	
	91058	2496521-1		Day		9			/		OK	
	91059	-2				10		UL	/		not using	Re-run for CF1
	91060	2496523-1		Boycut		11		+UL	/		not using	
	91061	-2				12		+UL	/		not using	interval in CF1
	91062	-3				13		+UL	/		OK	
	91063	2496527-1		Boycut		14		+UL	/		OK	
	91064	OPS4206-178		REDO		15			/		OK	
	91065	OPS4206-178				16			/		OK	
	91066	2496523-5	54152-1	Boycut	W	17		+UL	/		OK	

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Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-05

Rev. Date: 1/16/2006

SEMI-VOLATILE by GCMS ANALYSIS LOG

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: ER3517

Date: 01/16/2012
Standard Data

Analyst Signature: R. Chedon

Lot #	Description	Conc.

Lot #	Description	Conc.
SV11-073	DFTPP	50ppm
-80	BNA	25ppm
-124	TCL42	25ppm
DE920	DCM Honeywell	
CH1761	Int. Std.	100ppm

Columns: 285msi 30m x 25mm x 25µm

Method 8270/625

Initial Cal. Method MR3499

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 1/7/12

R	Data File	Sample ID	Ext. Batch	Test	M T X	ALS #	Dilutio n.	L +	I S	S U	Status (Data)	Comments
	R91070	DFTPP			W	1					OK	8:39am
	91071	CC3499-25			W	2					OK	
	91072	CC3455-25			W	3					OK	
R	91073	OP54208-MB1	54208-1	B8270	W	4					OK	R6 01/17/12 CFT
2	91074	JA96823-4	54208-1	BNJTL11+	W	5		+66			OK	R6 01/17/12 CFT CFI
R	91075	JA96884-3	54208-1	BTAGMPET	W	6					OK	R6 01/17/12 CFT
2	91076	-4			W	7					OK	R6 01/17/12 CFT
R	91077	JA96921-2	54208-1	PAH	W	8					OK	R6 01/17/12 CFT
2	91078	JA96823-1	54208-1	BNJTL11+	W	9		+66			OK	R6 01/17/12 CFT
2	91079	JA96823-2	54208-1	BNJTL11+	W	10		+66			OK	R6 01/17/12 CFT RR1:5
3	91080	-3			W	11		+66			OK	CFI
R	91081	OP54187-MS	54187-1	A88270	W	12	2	+66			OK	R6 01/17/12 CFT
2	91082	-2			W	13	5	+66			OK	CFI
	91083	JA96802-3	54187-1	ABNJTL11+	W	14	5	+66			OK	RR1:25
	91084	JA96827-2	54208-1	BNJTCLT	W	15		+66			OK	Re-run for CFI
	91085	-3			W	16		+66			OK	Re-run for CFI
	91086	-4			W	17		+66			OK	Re-run for CFI R6 01/17/12

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rm: OR015-05

v. Date: 1/16/2006

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SEMI-VOLATILE by GCMS ANALYSIS LOG

[illegible]


ACCUTEST:

LIQUID/LIQUID EXTRACTION

EXTRACTION TIME: 12:45 in Separatory Funnel

for sim 54208A-1

Continuous Liquid Liquid

Supervisor Review

EXTRACT METHOD (circle one)

SW846 3510C / EPA 60

series / EPA 500 series / CLP / other_

SW846 3520C / CLP / other_

Signature 

EXTRACTION DATE: 1-3-72

ANALYST: 283

METHOD: 38270 Water B

42 Nitrogen Evap T

Date 4-13-12

SURROGATE SPIKE DATA															
Sample #	Sample Bottle #	Analysis Type	Sample Description	Sample Vol (ml) Oil Wt. (g)	pH Adjust (ml)		Final Extract	Extract Cleanup			Comments	Lot #	Conc. (PPM)	AMT ADDED (ML)	
					>11	<2		Vol(ml)	Color	GPC					Cu
JA96827-1	MB 1	BN	Dark	1000	1		1	Clear				BASE	OP15346	50	1
	BS 1		Dark	1000	1		1	Yellow				ACID			
	MS		brown	100	1		1	Yellow				PCB			
	MSD		green	500	1		1	Yellow				HERB			
JA96827-2	BS 12	BSim	Dark	1000	1		1	Yellow				WITNESS SIGN: <u>BS/mhp</u>			AMT ADDED
	MS		Yellow	1000	1		1	Yellow				MATRIX SPIKE DATA			
	MSD		Yellow	1000	1		1	Yellow				Lot #	Conc.		
	JA96827-1	2	BN	Green	1000	1		1	Yellow			BSim	OP15347	50	1
JA96827-2	2		Yellow	1000	1		1	Yellow				ACID	OP15349	50	1
	1		Green	1000	1		1	Yellow				DEFT-GUSE#2	OP15346	50	1
	2		Green	1000	1		1	Yellow				PCB BS1M	OP15343	1	1
	2		Dark	1000	1		1	Clear				HERB			
JA96823-1	2		Yellow	1000	1		1	Yellow				WITNESS SIGN: <u>BS/mhp</u>			AMT
	2		Dark	1000	1		1	Yellow				SOLVENT DATA			
	2		Dark	1000	1		1	Yellow				Lot #	Brand	X/ML	
	JA96854-3	2		Green	900	1		1	Clear			METH CHLOR	DF153	Mw	360
JA96921-1	2		Green	905	1		1	Clear				HEXANE			
	1		Yellow	1000	1		1	Yellow				ACETONE			
	2		Yellow	1000	1		1	Yellow				ETH ETHER			
	2											REAGENT/FILTER MEDIA			
JA96921-2												Lot #	Brand		
												SODIUM SULF	OP1530	Fisher	
												FILTER PAPER	FC061962	Fisher	
												1:1 H2SO4			
JA96921-2												10N NaOH	4061347	VWR	
												COPPER			
												FLORISIL			
												SULFURIC ACID			
COMMENTS:															

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See back for instructions

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV3747-MB2	UV94795.D	1	01/17/12	RP	n/a	n/a	GUV3747

The QC reported here applies to the following samples: Method: SW846 8015C
JA96854-1R

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	1.8	mg/kg	

CAS No.	Surrogate Recoveries	Limits
98-08-8	aaa-Trifluorotoluene	89% 66-119%

9.1.1
9

Method Blank Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV3751-MB1	UV94876.D	1	01/20/12	RP	n/a	n/a	GUV3751

The QC reported here applies to the following samples: Method: SW846 8015C
JA96854-2R

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	1.8	mg/kg	

CAS No.	Surrogate Recoveries	Limits
98-08-8	aaa-Trifluorotoluene	84% 66-119%

9.1.2
9

Method Blank Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV3747-MB1	UV94786.D	1	01/17/12	RP	n/a	n/a	GUV3747

The QC reported here applies to the following samples: Method: SW846 8015C
GUV3747-BS, JA96374-18AMS, JA96374-18AMSD

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	1.8	mg/kg	

CAS No.	Surrogate Recoveries	Limits
98-08-8	aaa-Trifluorotoluene	83% 66-119%

9.1.3
9

Blank Spike Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV3747-BS	UV94787.D	1	01/17/12	RP	n/a	n/a	GUV3747

The QC reported here applies to the following samples: Method: SW846 8015C

JA96854-1R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	400	376	94	70-120

CAS No.	Surrogate Recoveries	BSP	Limits
98-08-8	aaa-Trifluorotoluene	103%	66-119%

9.2.1
9

Blank Spike Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV3751-BS	UV94877.D	1	01/20/12	RP	n/a	n/a	GUV3751

The QC reported here applies to the following samples: Method: SW846 8015C
JA96854-2R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	400	424	106	70-120

CAS No.	Surrogate Recoveries	BSP	Limits
98-08-8	aaa-Trifluorotoluene	110%	66-119%

9.2.2
9

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA96374-18AMS	UV94792.D	1	01/17/12	RP	n/a	n/a	GUV3747
JA96374-18AMSD	UV94793.D	1	01/17/12	RP	n/a	n/a	GUV3747
JA96374-18A	UV94791.D	1	01/17/12	RP	n/a	n/a	GUV3747

The QC reported here applies to the following samples:

Method: SW846 8015C

JA96854-1R

CAS No.	Compound	JA96374-18ASpike mg/kg	Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	21.6		563	553	94	552	94	0	61-128/14

CAS No.	Surrogate Recoveries	MS	MSD	JA96374-18ALimits
98-08-8	aaa-Trifluorotoluene	112%	111%	98% 66-119%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA96480-23MS	UV94883.D	1	01/20/12	RP	n/a	n/a	GUV3751
JA96480-23MSD	UV94885.D	1	01/20/12	RP	n/a	n/a	GUV3751
JA96480-23	UV94878.D	1	01/20/12	RP	n/a	n/a	GUV3751

The QC reported here applies to the following samples: Method: SW846 8015C

JA96854-2R

CAS No.	Compound	JA96480-23 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	499	513	103	500	100	2	61-128/14

CAS No.	Surrogate Recoveries	MS	MSD	JA96480-23	Limits
98-08-8	aaa-Trifluorotoluene	84%	83%	82%	66-119%

9.3.2
9

Volatile Surrogate Recovery Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Method: SW846 8015C	Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
JA96854-1R	UV94803.D	89.0
JA96854-2R	UV94884.D	104.0
GUV3747-BS	UV94787.D	103.0
GUV3747-MB2	UV94795.D	89.0
GUV3751-BS	UV94877.D	110.0
GUV3751-MB1	UV94876.D	84.0
JA96374-18AMS	UV94792.D	112.0
JA96374-18AMSDUV	94793.D	111.0
JA96480-23MS	UV94883.D	84.0
JA96480-23MSD	UV94885.D	83.0
GUV3747-MB1	UV94786.D	83.0

Surrogate Compounds	Recovery Limits
S1 = aaa-Trifluorotoluene	66-119%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std:	GUV3745-CC3371	Injection Date:	01/17/12
Lab File ID:	UV94772.D	Injection Time:	01:48
Instrument ID:	GCUV	Method:	SW846 8015C

S1 ^a
RT

Check Std	7.58

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
GUV3747-RT	UV94784.D	01/17/12	10:10	7.59

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std:	GUV3747-CC3371	Injection Date:	01/17/12
Lab File ID:	UV94785.D	Injection Time:	10:46
Instrument ID:	GCUV	Method:	SW846 8015C

S1^a
RT

Check Std	7.59

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
GUV3747-MB1	UV94786.D	01/17/12	11:21	7.59
GUV3747-BS	UV94787.D	01/17/12	11:55	7.59
ZZZZZZ	UV94788.D	01/17/12	12:30	7.58
ZZZZZZ	UV94789.D	01/17/12	13:00	7.59
ZZZZZZ	UV94790.D	01/17/12	13:30	7.59
JA96374-18A	UV94791.D	01/17/12	14:00	7.59
JA96374-18AMS	UV94792.D	01/17/12	14:30	7.59
JA96374-18AMSDUV	94793.D	01/17/12	15:00	7.59

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

9.5.2
9

GC Surrogate Retention Time Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std:	GUV3747-CC3371	Injection Date:	01/17/12
Lab File ID:	UV94794.D	Injection Time:	15:30
Instrument ID:	GCUV	Method:	SW846 8015C

S1 ^a
RT

Check Std	7.59

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
GUV3747-MB2	UV94795.D	01/17/12	16:07	7.59
ZZZZZZ	UV94796.D	01/17/12	16:41	7.59
ZZZZZZ	UV94797.D	01/17/12	17:11	7.59
ZZZZZZ	UV94798.D	01/17/12	17:41	7.59
ZZZZZZ	UV94799.D	01/17/12	18:11	7.59
ZZZZZZ	UV94800.D	01/17/12	18:41	7.59
ZZZZZZ	UV94801.D	01/17/12	19:11	7.59
ZZZZZZ	UV94802.D	01/17/12	19:41	7.59
JA96854-1R	UV94803.D	01/17/12	20:11	7.59

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

9.5.3
9

GC Surrogate Retention Time Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std:	GUV3750-CC3371	Injection Date:	01/20/12
Lab File ID:	UV94872.D	Injection Time:	02:35
Instrument ID:	GCUV	Method:	SW846 8015C

S1 ^a
RT

Check Std	7.58

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
GUV3751-RT	UV94874.D	01/20/12	04:34	7.58

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Check Std:	GUV3751-CC3371	Injection Date:	01/20/12
Lab File ID:	UV94875.D	Injection Time:	05:04
Instrument ID:	GCUV	Method:	SW846 8015C

S1^a
RT

Check Std	7.58

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
GUV3751-MB1	UV94876.D	01/20/12	06:03	7.58
GUV3751-BS	UV94877.D	01/20/12	07:03	7.58
JA96480-23	UV94878.D	01/20/12	07:33	7.58
ZZZZZZ	UV94879.D	01/20/12	08:02	7.58
ZZZZZZ	UV94880.D	01/20/12	08:32	7.58
ZZZZZZ	UV94881.D	01/20/12	09:02	7.58
ZZZZZZ	UV94882.D	01/20/12	09:31	7.58
JA96480-23MS	UV94883.D	01/20/12	10:01	7.58
JA96854-2R	UV94884.D	01/20/12	10:31	7.58
JA96480-23MSD	UV94885.D	01/20/12	11:01	7.58

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

9.5.5
6

Initial Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: GUV3371-ICC3371
Lab FileID: UV85383.D

Response Factor Report GCUV

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:12:52 2010
Response via : Initial Calibration

Calibration Files

0.2 =uv85380.D 0.8 =UV85381.D 4 =UV85382.D 8 =UV85383.D
20 =UV85384.D 40 =UV85386.D 30 =UV85385.D

Compound	0.2	0.8	4	8	20	40	30	Avg	%RSD
1)H TPH-GRO (C6-C10)	3.207	2.659	3.342	3.165	2.960	2.834	3.042	3.030	E4 7.72
2)H TPH-GRO (C6-C12)	3.172	2.365	3.075	2.922	2.715	2.624	2.796	2.810	E4 9.81
3)S a,a,a-Trifluoroto	3.934	4.082	4.400	4.400	4.533	4.755	5.007	4.444	E4 8.30

(#) = Out of Range

MUV3371.M

Mon Dec 06 09:41:16 2010

GCUV

9.6.1

9

Initial Calibration Verification

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: GUV3371-ICV3371
Lab FileID: UV85389.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\UV85389.D Vial: 15
Acq On : 2 Dec 2010 10:33 pm Operator: nikitat
Sample : icv3371-8000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon Dec 06 09:12:52 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GR0 (C6-C10)	30.298	28.106 E3	7.2	89	0.00	4.94-13.07
2 H	TPH-GR0 (C6-C12)	28.099	28.545 E3	-1.6	98	0.00	4.63-13.37
3 S	a,a,a-Trifluorotoluene	44.444	46.366 E3	-4.3	105	0.00	7.56- 7.62

Average % D = 4.4

(0.0 %) 0 of 3 compounds'%D > 15

(#) = Out of Range
UV85389.D MUV3371.M

SPCC's out = 0 CCC's out = 0
Mon Dec 06 09:41:17 2010 GCUV

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: GUV3745-CC3371
Lab FileID: UV94772.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\UV94772.D Vial: 64
Acq On : 17 Jan 2012 1:48 am Operator: RICHAP
Sample : CC3371-8000 Inst : GCUV
Misc : GC38151,GUV3745,5.0,,,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GRO (C6-C10)	30.298	31.478 E3	-3.9	99	0.00	4.94-13.07
2 H	TPH-GRO (C6-C12)	28.099	29.061 E3	-3.4	99	0.00	4.63-13.37
3 S	a,a,a-Trifluorotoluene	44.444	45.795 E3	-3.0	104	0.01	7.55- 7.61

Average % D = 3.5

(0.0 %) 0 of 3 compounds'%D > 15

(#) = Out of Range
UV85383.D MUV3371.M

SPCC's out = 0 CCC's out = 0
Tue Jan 17 10:23:45 2012 GCUV

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: GUV3747-CC3371
Lab FileID: UV94785.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\UV94785.D Vial: 4
 Acq On : 17 Jan 2012 10:46 am Operator: RICHAP
 Sample : CC3371-4000 Inst : GCUV
 Misc : GC38120,GUV3747,10.0,100,10,,1 Multiplr: 1.00
 IntFile : autoint1.e

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GRO)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GRO (C6-C10)	30.298	27.967 E3	7.7	84	0.00	4.94-13.07
2 H	TPH-GRO (C6-C12)	28.099	25.563 E3	9.0	83	0.00	4.63-13.37
3 S	a,a,a-Trifluorotoluene	44.444	40.039 E3	9.9	91	0.02	7.56- 7.62

Average % D = 8.9

(0.0 %) 0 of 3 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 UV85382.D MUV3371.M Wed Jan 18 10:00:25 2012 GCUV

9.6.4
9

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: GUV3747-CC3371
Lab FileID: UV94794.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\UV94794.D Vial: 13
 Acq On : 17 Jan 2012 3:30 pm Operator: RICHAP
 Sample : CC3371-8000 Inst : GCUV
 Misc : GC38102,GUV3747,10.0,100,10,,1 Multiplr: 1.00
 IntFile : autoint1.e

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GRO)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GRO (C6-C10)	30.298	29.624 E3	2.2	94	0.00	4.94-13.07
2 H	TPH-GRO (C6-C12)	28.099	26.757 E3	4.8	92	0.00	4.63-13.37
3 S	a,a,a-Trifluorotoluene	44.444	47.480 E3	-6.8	108	0.02	7.56- 7.62

Average % D = 4.6

(0.0 %) 0 of 3 compounds'%D > 15

(#) = Out of Range
 UV85383.D MUV3371.M

SPCC's out = 0 CCC's out = 0
 Wed Jan 18 10:05:38 2012 GCUV

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
 Account: LANGAN Langan Engineering & Environmental
 Project: 111 Washington Street, New York, NY

Sample: GUV3747-CC3371
 Lab FileID: UV94805.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\UV94805.D Vial: 24
 Acq On : 17 Jan 2012 9:11 pm Operator: RICHAP
 Sample : CC3371-4000 Inst : GCUV
 Misc : GC38170,GUV3747,10.0,100,10,,1 Multiplr: 1.00
 IntFile : autoint1.e

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GRO)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GRO (C6-C10)	30.298	30.826 E3	-1.7	92	0.00	4.94-13.07
2 H	TPH-GRO (C6-C12)	28.099	29.038 E3	-3.3	94	0.00	4.63-13.37
3 S	a,a,a-Trifluorotoluene	44.444	45.480 E3	-2.3	103	0.02	7.56- 7.62

Average % D = 2.5

(0.0 %) 0 of 3 compounds'%D > 15

(#) = Out of Range
 UV85382.D MUV3371.M

SPCC's out = 0 CCC's out = 0
 Wed Jan 18 10:17:33 2012 GCUV

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: GUV3750-CC3371
Lab FileID: UV94872.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\UV94872.D Vial: 49
 Acq On : 20 Jan 2012 2:35 am Operator: RICHAP
 Sample : CC3371-4000 Inst : GCUV
 Misc : GC38159,GUV3750,5,,,,1 Multiplr: 1.00
 IntFile : autoint1.e

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GR0)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GR0 (C6-C10)	30.298	31.618 E3	-4.4	95	0.00	4.94-13.07
2 H	TPH-GR0 (C6-C12)	28.099	29.109 E3	-3.6	95	0.00	4.63-13.37
3 S	a,a,a-Trifluorotoluene	44.444	42.910 E3	3.5	98	0.01	7.55- 7.61

Average % D = 3.8

(0.0 %) 0 of 3 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 UV85382.D MUV3371.M Fri Jan 20 17:50:58 2012 GCUV

9.6.7
6

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: GUV3751-CC3371
Lab FileID: UV94875.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\UV94875.D Vial: 52
 Acq On : 20 Jan 2012 5:04 am Operator: RICHAP
 Sample : CC3371-4000 Inst : GCUV
 Misc : GC38118,GUV3751,10.0,,100,10,1 Multiplr: 1.00
 IntFile : autoint1.e

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GR0)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GR0 (C6-C10)	30.298	34.116 E3	-12.6	102	0.00	4.94-13.07
2 H	TPH-GR0 (C6-C12)	28.099	31.089 E3	-10.6	101	0.00	4.63-13.37
3 S	a,a,a-Trifluorotoluene	44.444	43.629 E3	1.8	99	0.01	7.55- 7.61

Average % D = 8.4

(0.0 %) 0 of 3 compounds'%D > 15

(#) = Out of Range
 UV85382.D MUV3371.M

SPCC's out = 0 CCC's out = 0
 Fri Jan 20 17:03:28 2012 GCUV

Continuing Calibration Summary

Page 1 of 1

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: GUV3751-CC3371
Lab FileID: UV94886.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\UV94886.D Vial: 63
 Acq On : 20 Jan 2012 11:30 am Operator: RICHAP
 Sample : CC3371-8000 Inst : GCUV
 Misc : GC38118,GUV3751,10.0,,100,10,1 Multiplr: 1.00
 IntFile : autoint1.e

Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GR0)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GR0 (C6-C10)	30.298	32.665 E3	-7.8	103	0.00	4.94-13.07
2 H	TPH-GR0 (C6-C12)	28.099	29.697 E3	-5.7	102	0.00	4.63-13.37
3 S	a,a,a-Trifluorotoluene	44.444	43.722 E3	1.6	99	0.00	7.55- 7.61

Average % D = 5.0

(0.0 %) 0 of 3 compounds'%D > 15

(#) = Out of Range
 UV85383.D MUV3371.M

SPCC's out = 0 CCC's out = 0
 Fri Jan 20 17:05:34 2012 GCUV

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94803.D Vial: 22
Acq On : 17 Jan 2012 8:11 pm Operator: RICHAP
Sample : JA96854-1R Inst : GCUV
Misc : GC38170,GUV3747,10.0,100,10,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:16 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	11903143	267.825 ug/l
Spiked Amount 300.000		Recovery	= 89.27%

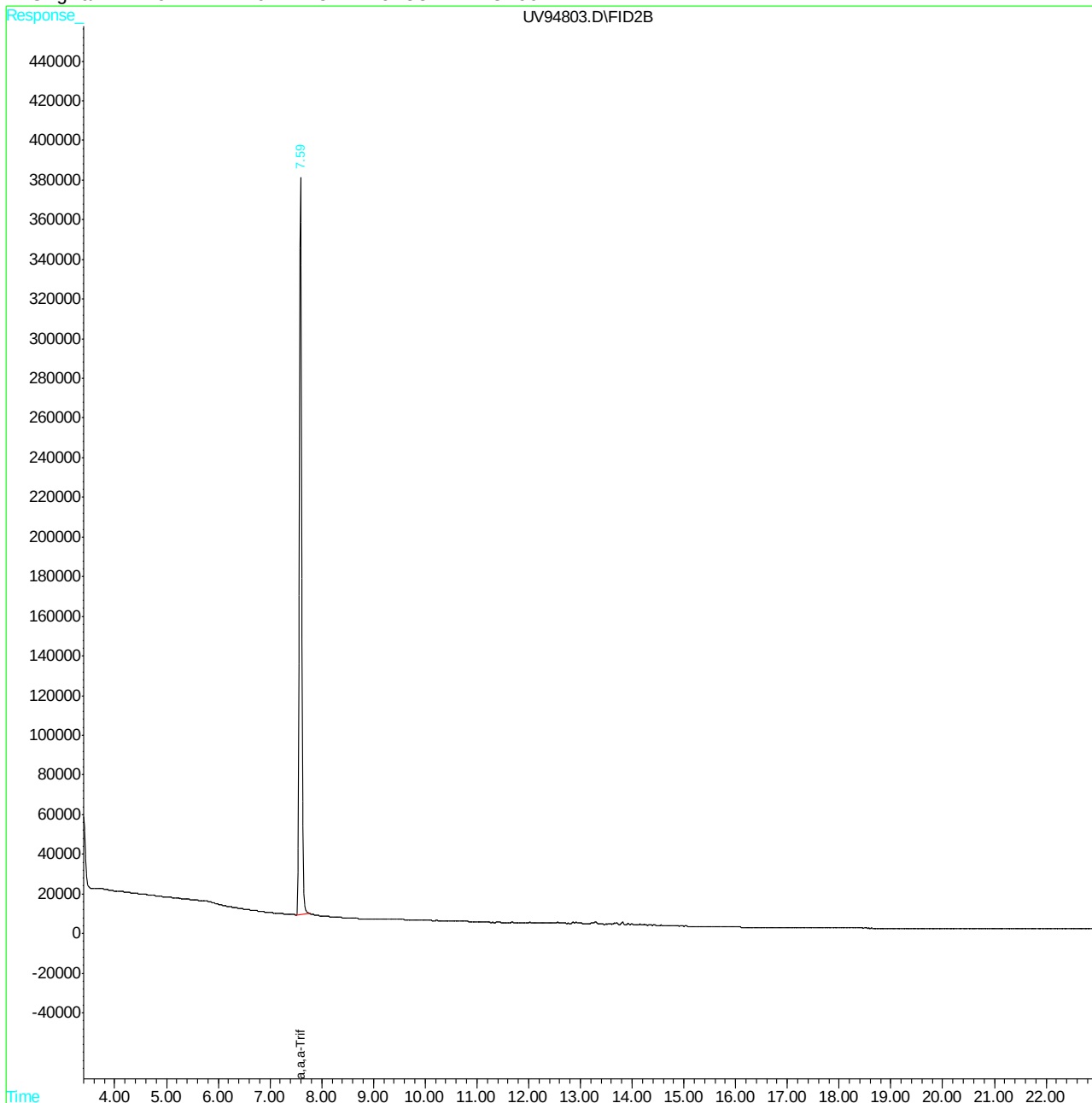
Target Compounds

Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94803.D Vial: 22
 Acq On : 17 Jan 2012 8:11 pm Operator: RICHAP
 Sample : JA96854-1R Inst : GCUV
 Misc : GC38170, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jan 18 10:16 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GR0)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Multiple Level Calibration
 DataAcq Meth : MUV3371.M

Volume Inj. :
 Signal Phase : crossbond phenylmethyl polysiloxane
 Signal Info : DB-624 75m x 0.53mm x 3.0um



10.1.1
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94884.D Vial: 61
Acq On : 20 Jan 2012 10:31 am Operator: RICHAP
Sample : JA96854-2R Inst : GCUV
Misc : GC38170, GUV3751, 10.0, , 50, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 10:56 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

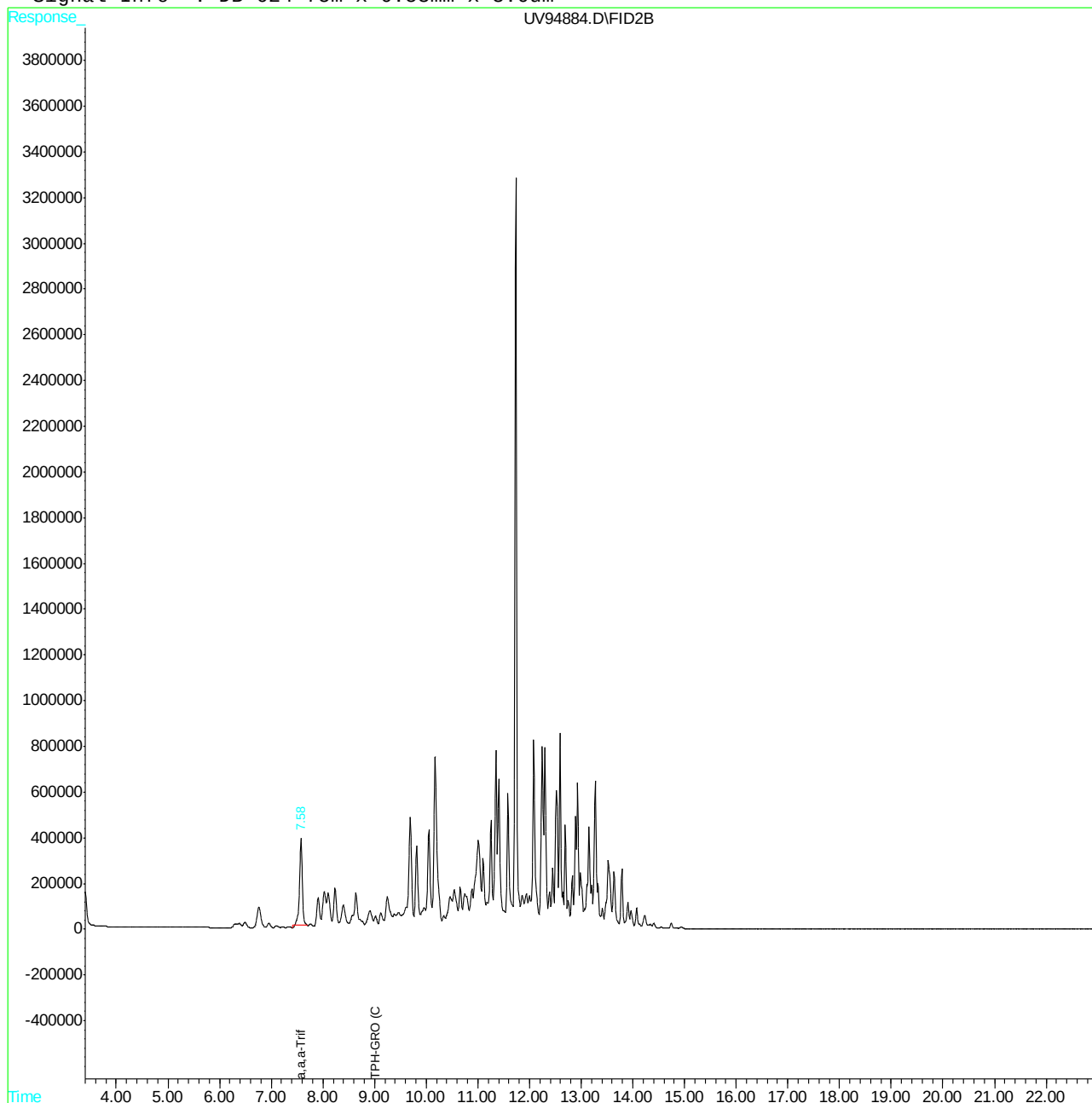
System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	13849600	311.621 ug/l
Spiked Amount 300.000		Recovery	= 103.87%
Target Compounds			
1) H TPH-GR0 (C6-C10)	9.00	373959082	12342.837 ug/l

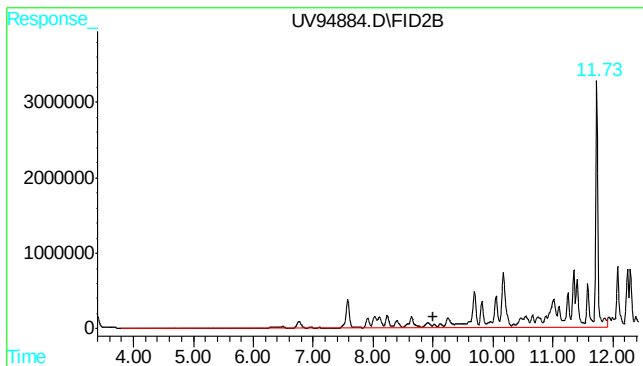
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94884.D Vial: 61
 Acq On : 20 Jan 2012 10:31 am Operator: RICHAP
 Sample : JA96854-2R Inst : GCUV
 Misc : GC38170, GUV3751, 10.0, , 50, 10, 1 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jan 20 10:56 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GR0)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Multiple Level Calibration
 DataAcq Meth : MUV3371.M

Volume Inj. :
 Signal Phase : crossbond phenylmethyl polysiloxane
 Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)
R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 373959082
Conc: 12342.84 ug/l m

10.1.2
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94795.D Vial: 14
Acq On : 17 Jan 2012 4:07 pm Operator: RICHAP
Sample : MB2 Inst : GCUV
Misc : GC38163, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:06 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	11810458	265.739 ug/l
Spiked Amount 300.000		Recovery =	88.58%

Target Compounds

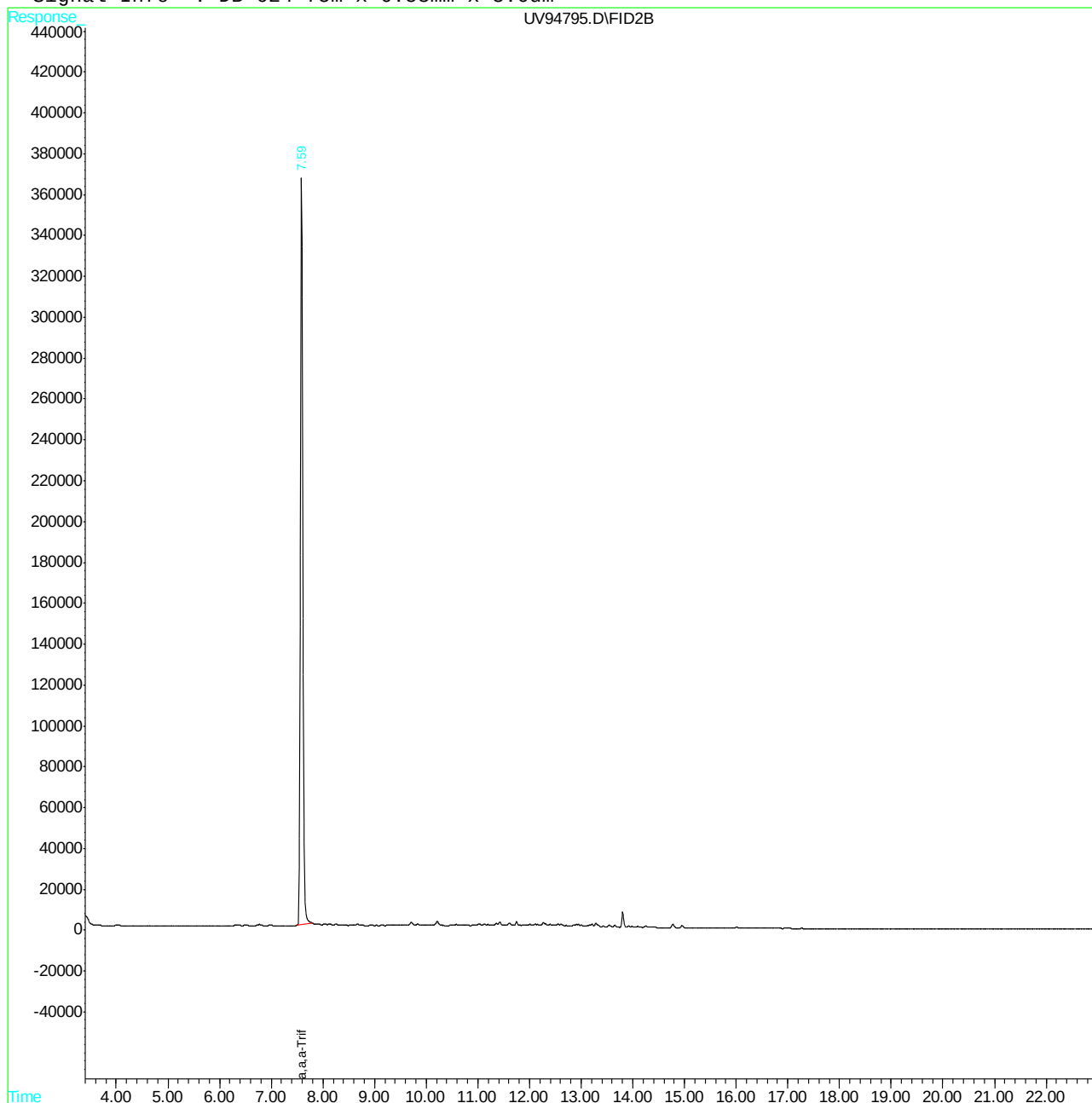
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94795.D MUV3371.M Wed Jan 18 10:06:52 2012 GCUV

Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94795.D Vial: 14
Acq On : 17 Jan 2012 4:07 pm Operator: RICHAP
Sample : MB2 Inst : GCUV
Misc : GC38163, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:06 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94876.D Vial: 53
Acq On : 20 Jan 2012 6:03 am Operator: RICHAP
Sample : MB1 Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 17:03 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	11173691	251.412 ug/l
Spiked Amount 300.000		Recovery	= 83.80%

Target Compounds

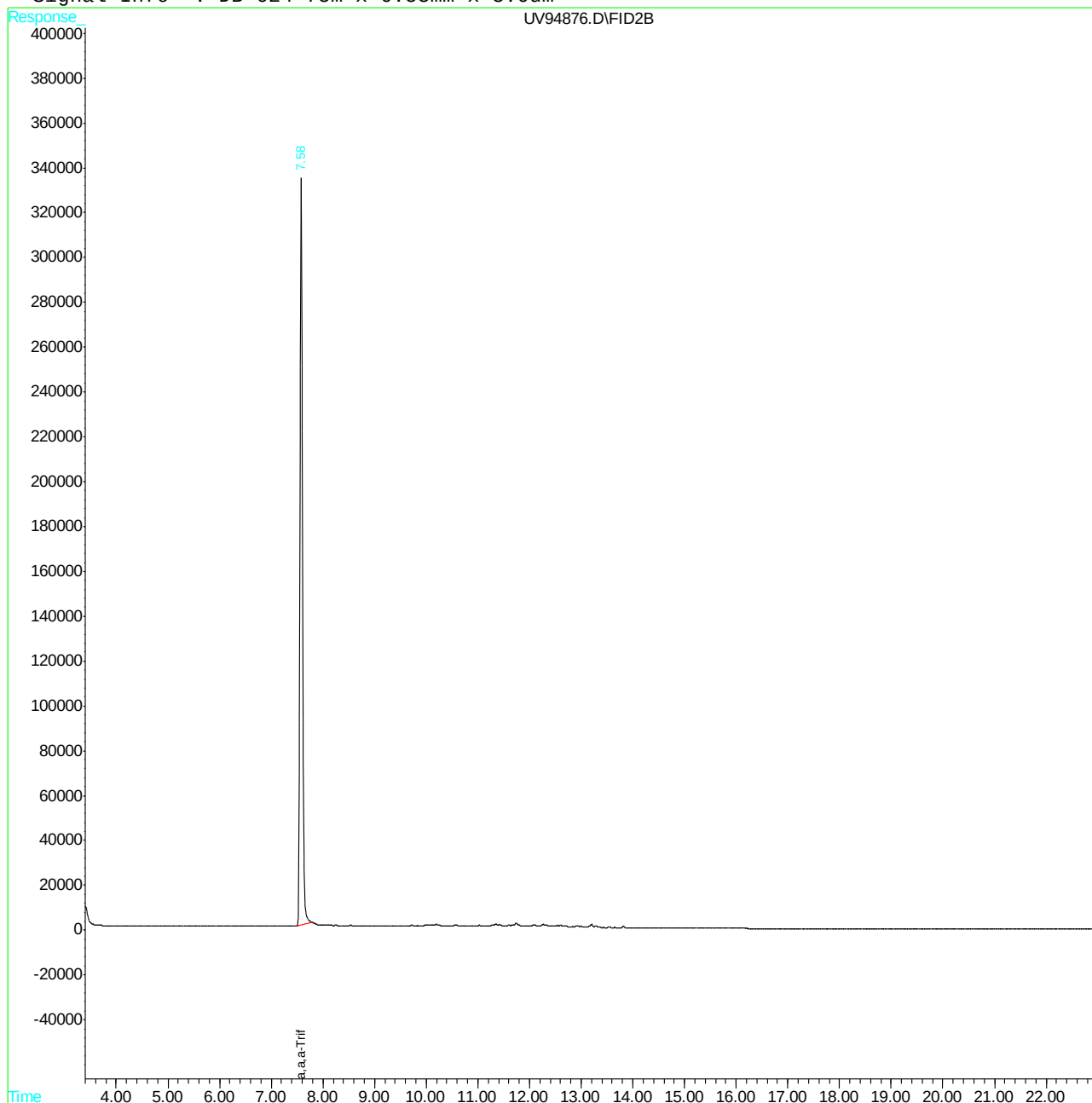
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94876.D MUV3371.M Fri Jan 20 17:03:42 2012 GCUV

Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94876.D Vial: 53
Acq On : 20 Jan 2012 6:03 am Operator: RICHAP
Sample : MB1 Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 17:03 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94786.D Vial: 5
Acq On : 17 Jan 2012 11:21 am Operator: RICHAP
Sample : MB1 Inst : GCUV
Misc : GC38120, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:00 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	11063622	248.935 ug/l
Spiked Amount 300.000		Recovery =	82.98%

Target Compounds

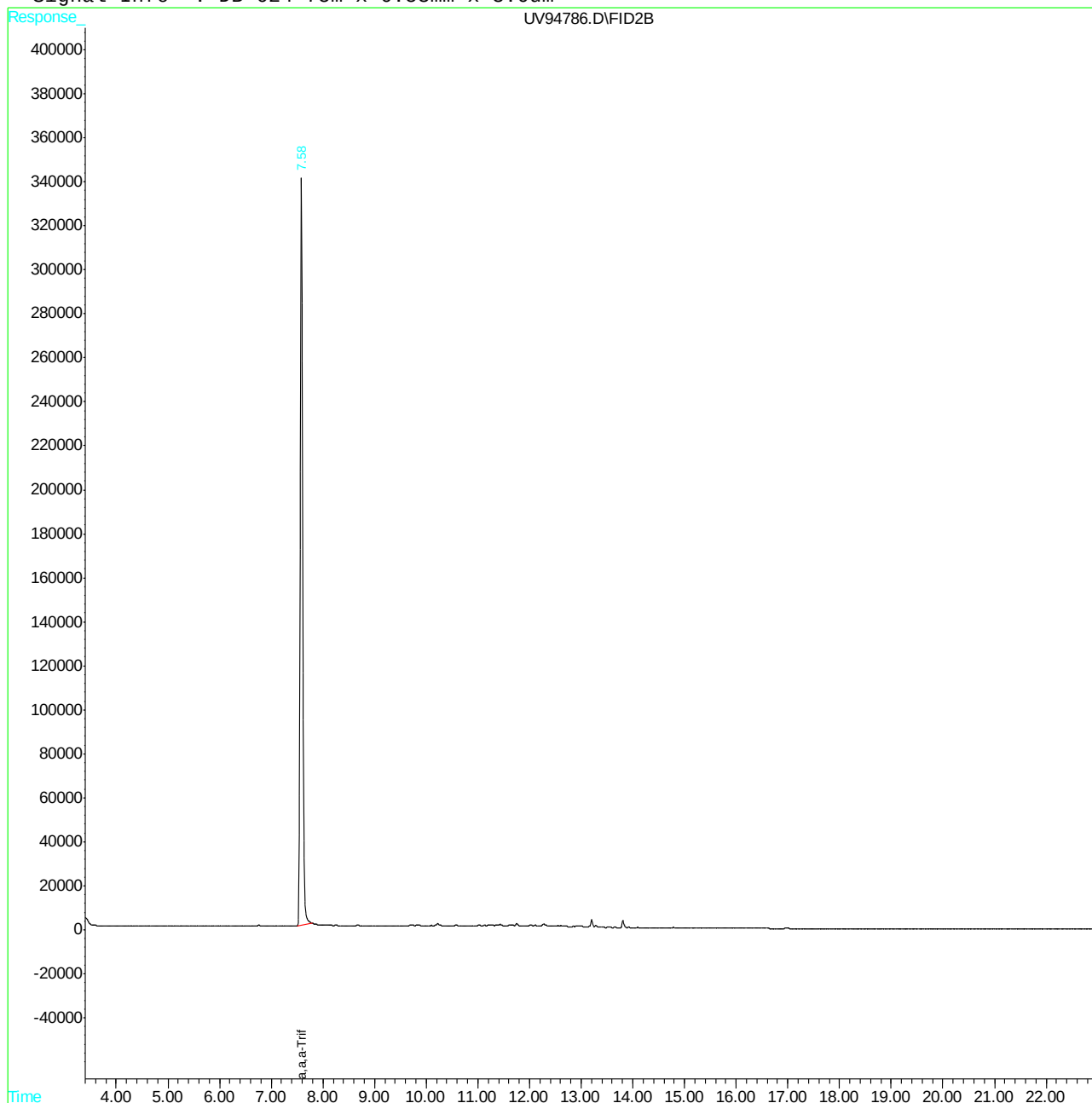
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94786.D MUV3371.M Wed Jan 18 10:00:45 2012 GCUV

Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94786.D Vial: 5
Acq On : 17 Jan 2012 11:21 am Operator: RICHAP
Sample : MB1 Inst : GCUV
Misc : GC38120, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:00 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94787.D Vial: 6
Acq On : 17 Jan 2012 11:55 am Operator: RICHAP
Sample : BS Inst : GCUV
Misc : GC38120, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:01 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	13678439	307.770 ug/l
Spiked Amount 300.000		Recovery	= 102.59%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	227989371	7524.983 ug/l

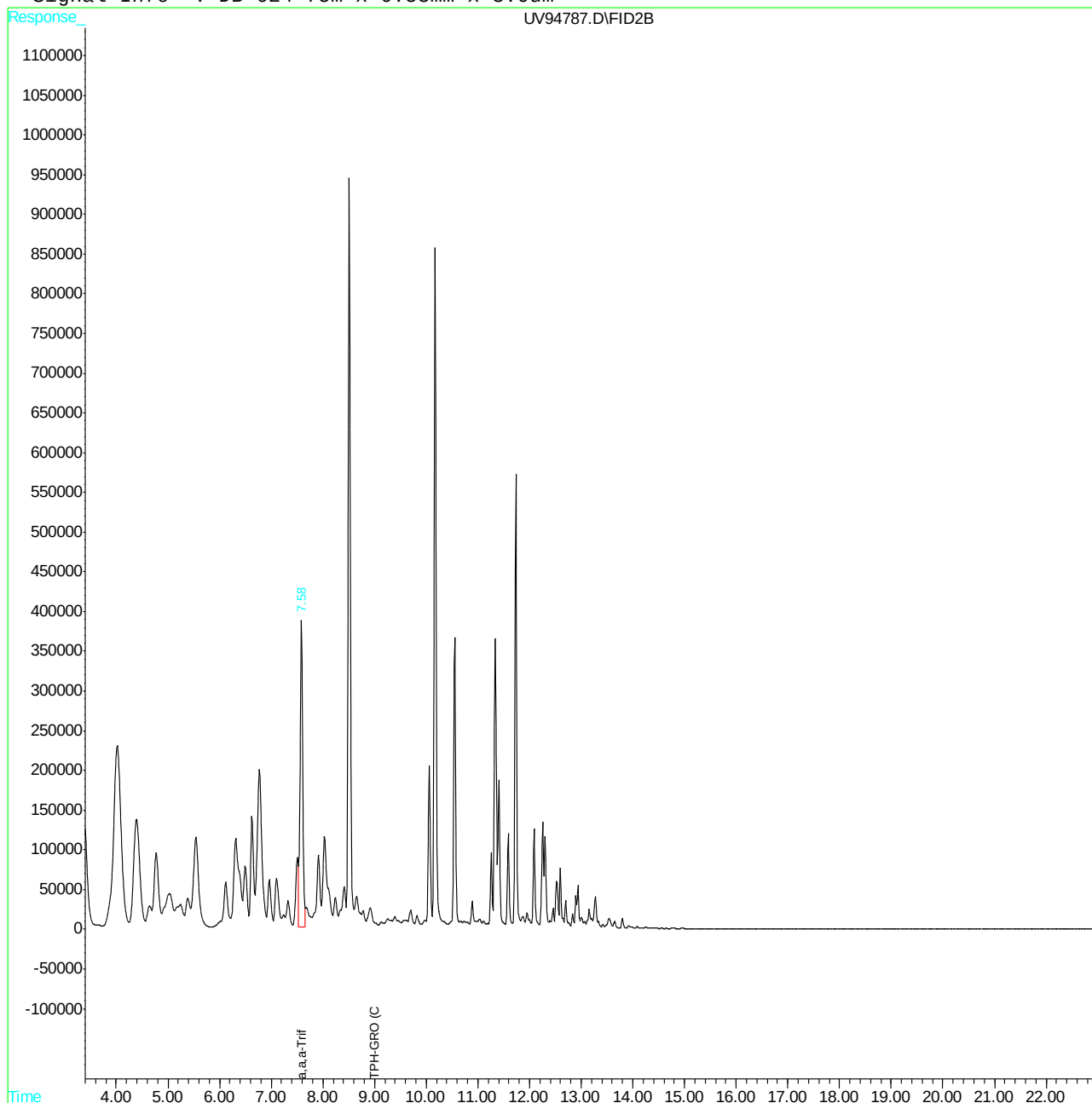
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94787.D MUV3371.M Wed Jan 18 10:01:06 2012 GCUV

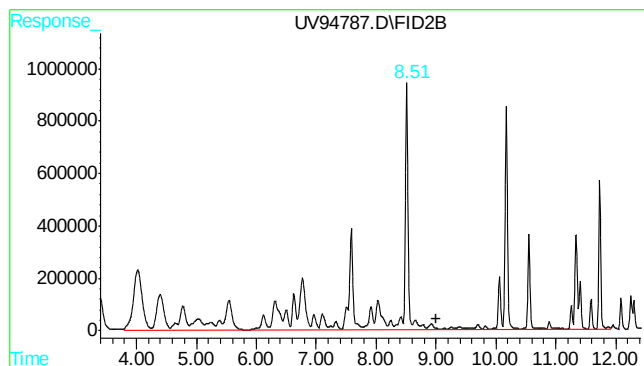
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94787.D Vial: 6
Acq On : 17 Jan 2012 11:55 am Operator: RICHAP
Sample : BS Inst : GCUV
Misc : GC38120, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:01 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)
 R.T.: 9.000 min
 Delta R.T.: 0.000 min
 Response: 227989371
 Conc: 7524.98 ug/l m

10.3.1
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94877.D Vial: 54
Acq On : 20 Jan 2012 7:03 am Operator: RICHAP
Sample : BS Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 17:03 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	14621062	328.979 ug/l
Spiked Amount 300.000		Recovery	= 109.66%
Target Compounds			
1) H TPH-GR0 (C6-C10)	9.00	256891074	8478.908 ug/l

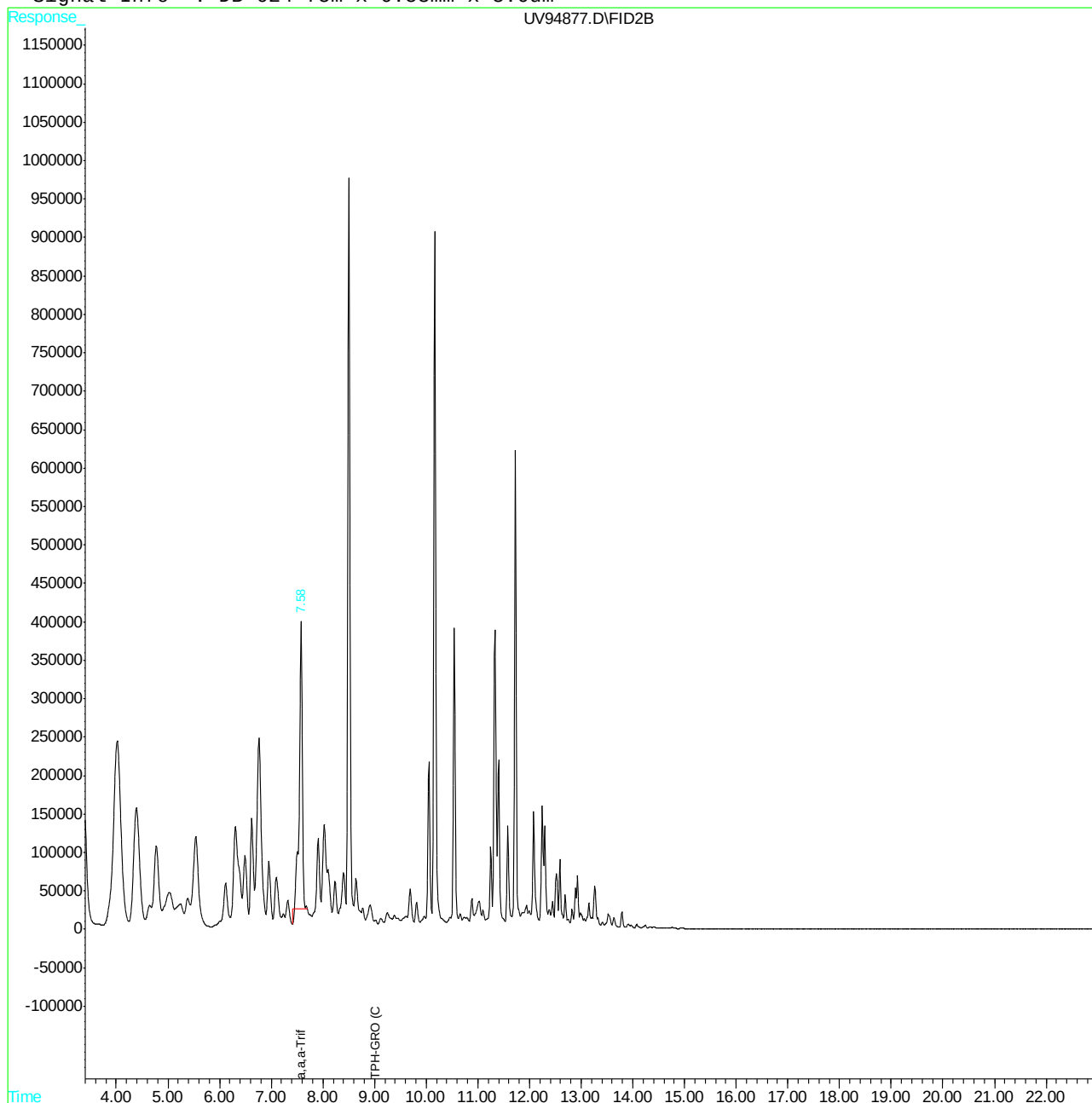
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94877.D MUV3371.M Fri Jan 20 17:04:00 2012 GCUV

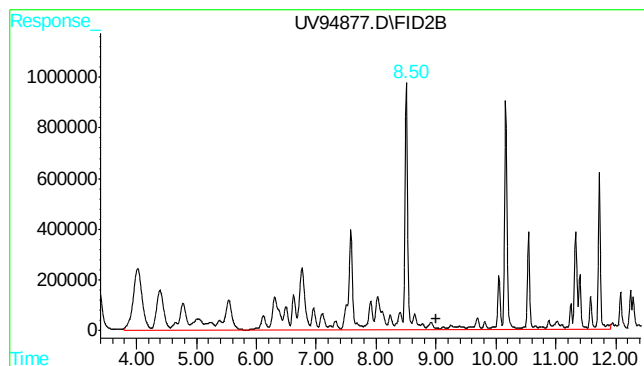
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94877.D Vial: 54
Acq On : 20 Jan 2012 7:03 am Operator: RICHAP
Sample : BS Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 17:03 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)
 R.T.: 9.000 min
 Delta R.T.: 0.000 min
 Response: 256891074
 Conc: 8478.91 ug/l m

10.3.2
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94792.D Vial: 11
Acq On : 17 Jan 2012 2:30 pm Operator: RICHAP
Sample : JA96374-18AMS Inst : GCUV
Misc : GC38102, GUV3747, 10.4, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:04 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	14937291	336.094 ug/l
Spiked Amount 300.000		Recovery	= 112.03%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	238323563	7866.072 ug/l

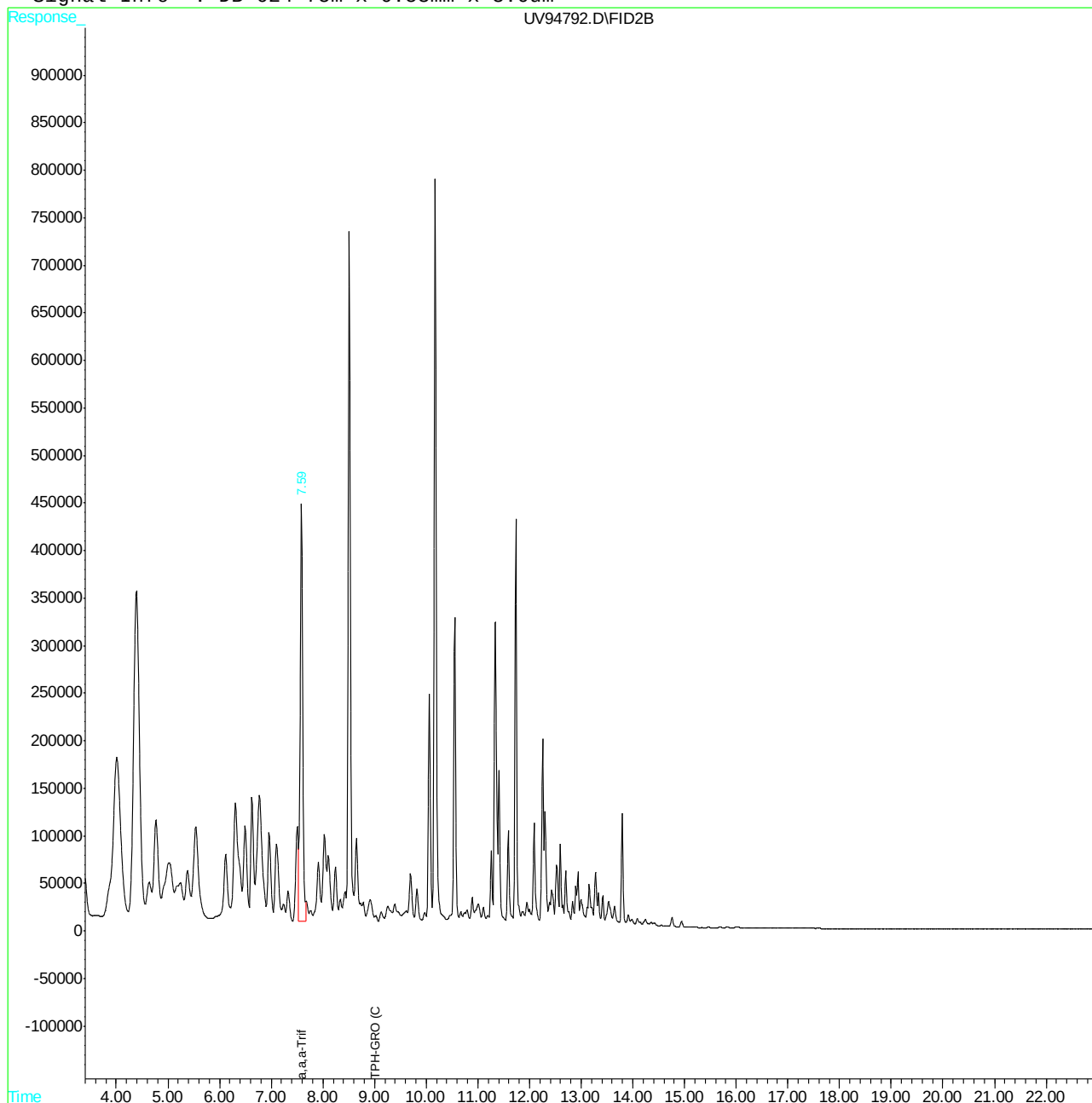
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94792.D MUV3371.M Wed Jan 18 10:04:19 2012 GCUV

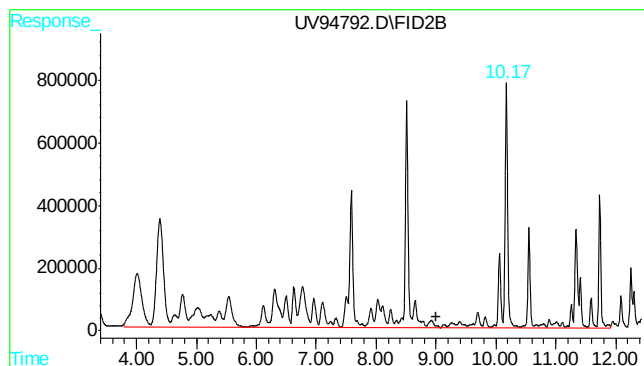
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94792.D Vial: 11
Acq On : 17 Jan 2012 2:30 pm Operator: RICHAP
Sample : JA96374-18AMS Inst : GCUV
Misc : GC38102, GUV3747, 10.4, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:04 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)
 R.T.: 9.000 min
 Delta R.T.: 0.000 min
 Response: 238323563
 Conc: 7866.07 ug/l m

10.4.1
 10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94793.D Vial: 12
Acq On : 17 Jan 2012 3:00 pm Operator: RICHAP
Sample : JA96374-18AMSD Inst : GCUV
Misc : GC38102, GUV3747, 10.4, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:04 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	14835066	333.794 ug/l
Spiked Amount 300.000		Recovery	= 111.26%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	237662524	7844.254 ug/l

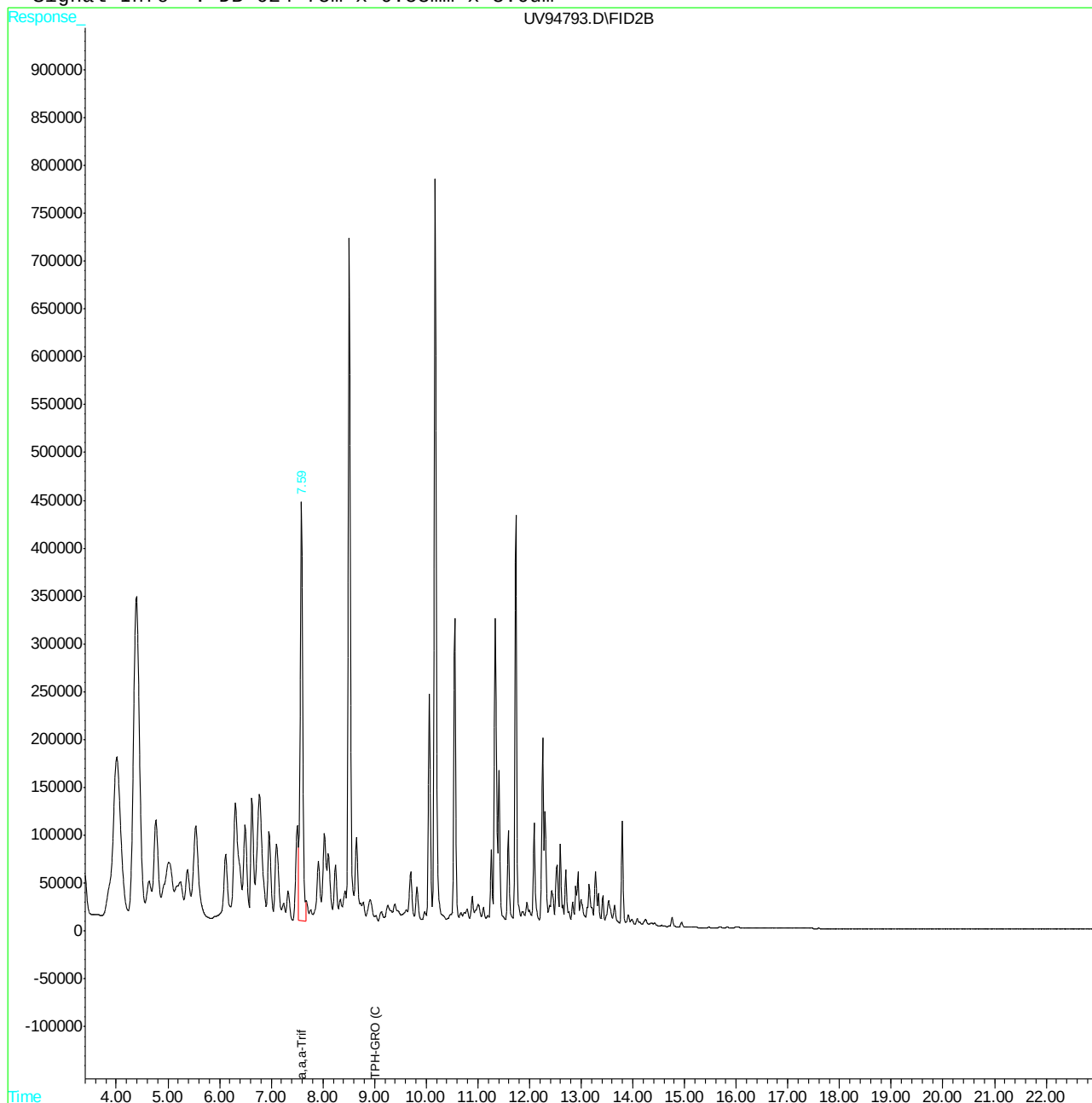
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94793.D MUV3371.M Wed Jan 18 10:04:49 2012 GCUV

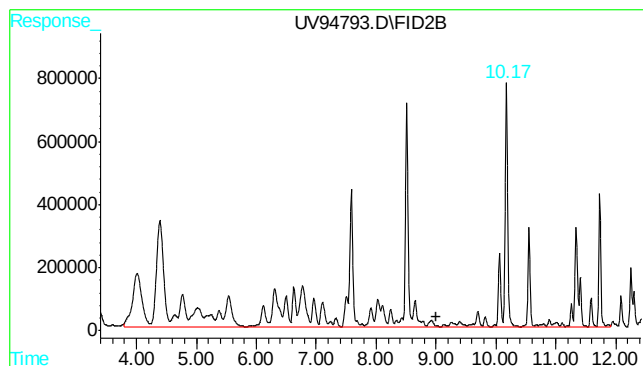
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94793.D Vial: 12
Acq On : 17 Jan 2012 3:00 pm Operator: RICHAP
Sample : JA96374-18AMSD Inst : GCUV
Misc : GC38102, GUV3747, 10.4, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 18 10:04 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min

Delta R.T.: 0.000 min

Response: 237662524

Conc: 7844.25 ug/l m

10.4.2
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94883.D Vial: 60
Acq On : 20 Jan 2012 10:01 am Operator: RICHAP
Sample : JA96480-23MS Inst : GCUV
Misc : GC38170, GUV3751, 10.1, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 17:04 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	11188493	251.745 ug/l
Spiked Amount 300.000		Recovery	= 83.92%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	249378299	8230.943 ug/l

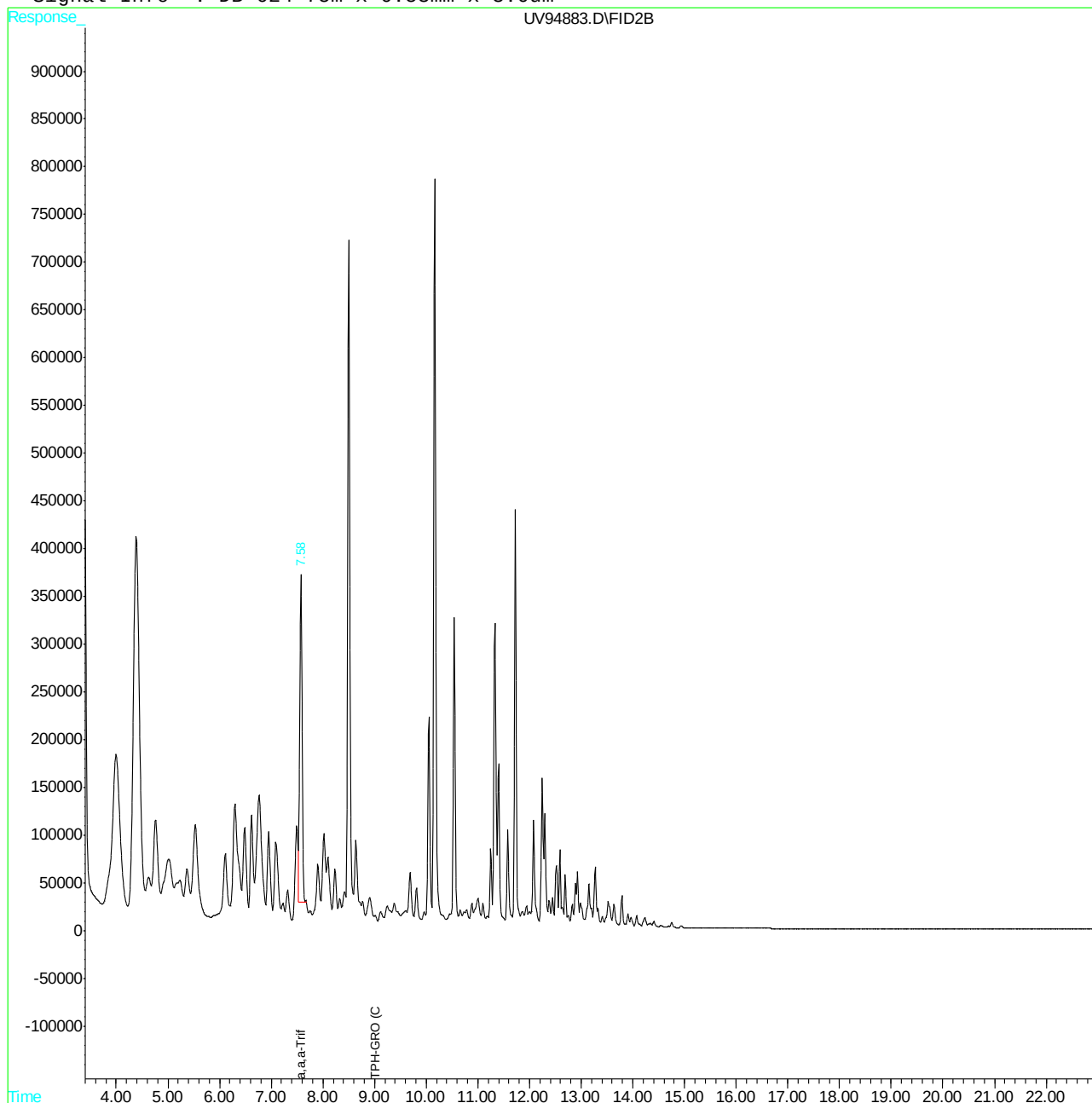
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94883.D MUV3371.M Fri Jan 20 17:04:20 2012 GCUV

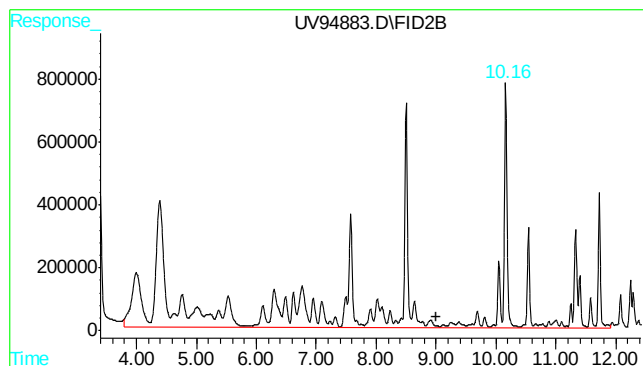
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94883.D Vial: 60
Acq On : 20 Jan 2012 10:01 am Operator: RICHAP
Sample : JA96480-23MS Inst : GCUV
Misc : GC38170, GUV3751, 10.1, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 17:04 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 249378299
Conc: 8230.94 ug/l m

10.4.3
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94885.D Vial: 62
Acq On : 20 Jan 2012 11:01 am Operator: RICHAP
Sample : JA96480-23MSD Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 17:04 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	11062257	248.905 ug/l
Spiked Amount 300.000		Recovery	= 82.97%
Target Compounds			
1) H TPH-GR0 (C6-C10)	9.00	243104311	8023.864 ug/l

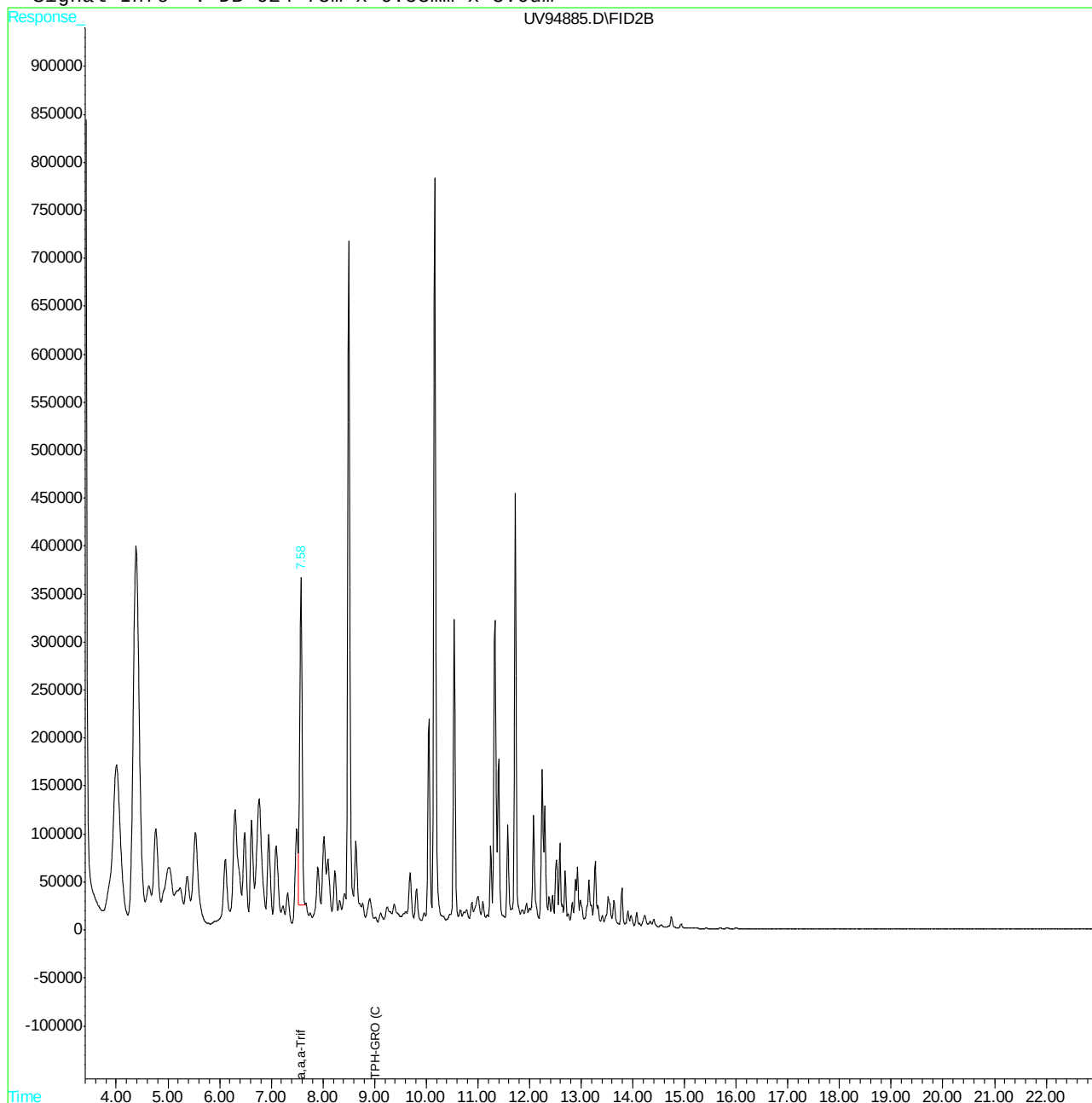
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94885.D MUV3371.M Fri Jan 20 17:04:41 2012 GCUV

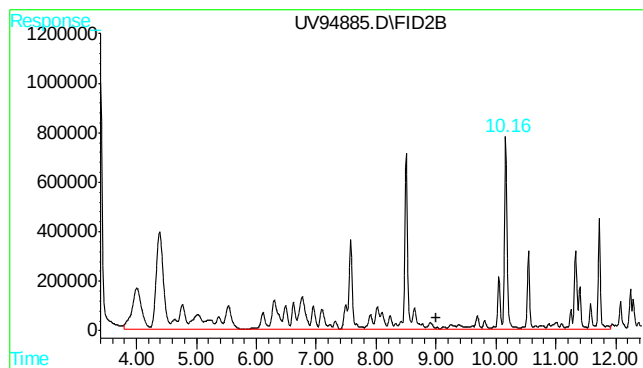
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94885.D Vial: 62
Acq On : 20 Jan 2012 11:01 am Operator: RICHAP
Sample : JA96480-23MSD Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 17:04 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min

Delta R.T.: 0.000 min

Response: 243104311

Conc: 8023.86 ug/l m

10.4.4
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85378.D Vial: 4
Acq On : 2 Dec 2010 5:05 pm Operator: nikitat
Sample : rt Inst : GCUV
Misc : GC35290, GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:02 2010 Quant Results File: MUVGRORT.RES

Quant Method : C:\HPCHEM\1\METHODS\MUVGRORT.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon May 03 11:03:54 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
5) S a,a,a-Trifluorotoluene	7.59	11462485	309.098 ug/l
Spiked Amount 300.000		Recovery	= 103.03%
Target Compounds			
1) t 2-Methylpentane	4.02	14018650	541.634 ug/l
2) t 1,2,4-Trimethylbenzene	11.73	14179605	313.021 ug/l
3) t n-Hexane	0.00	0	N.D. d
4) t n-Dodecane	0.00	0	N.D. d

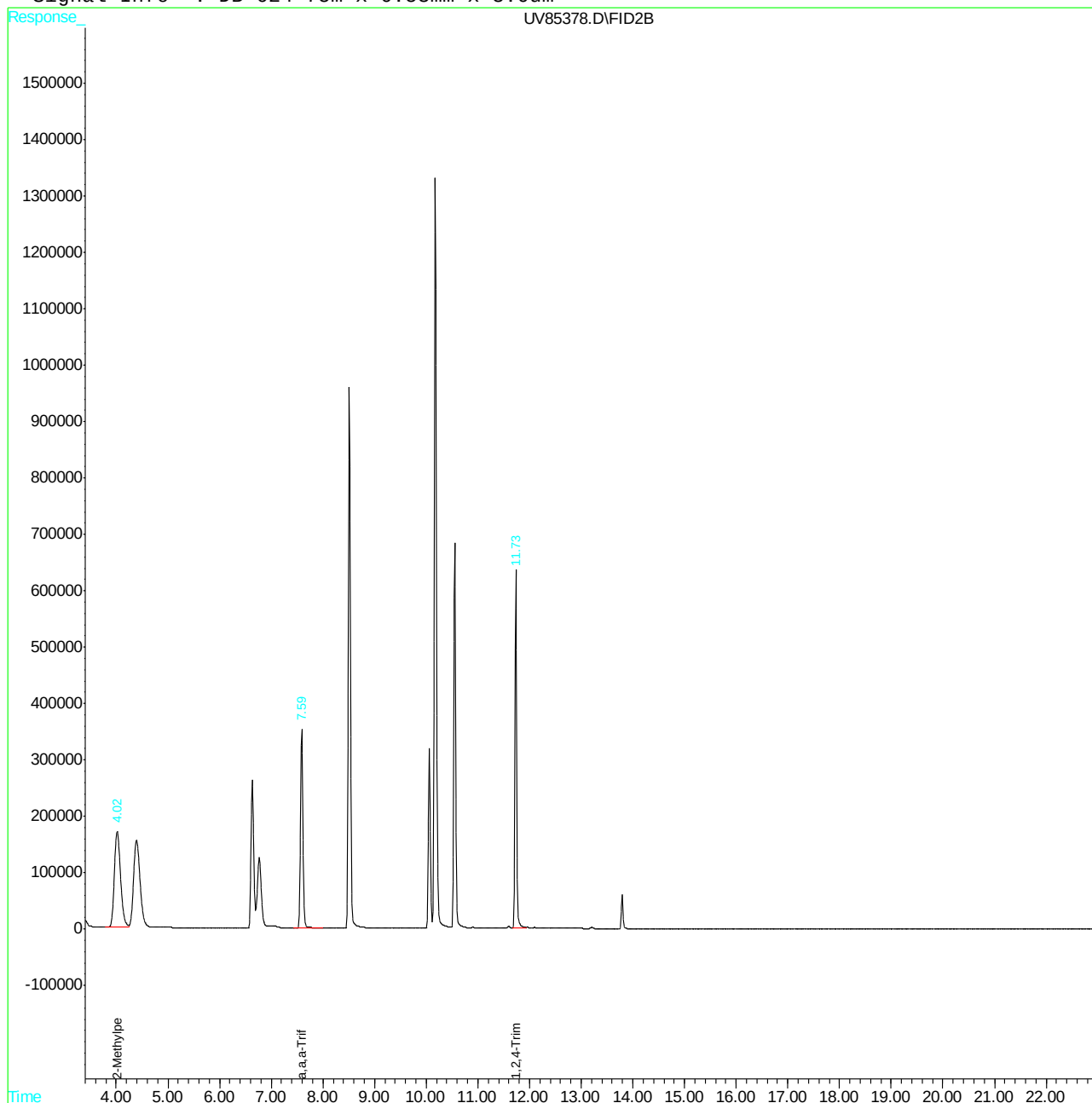
(f)=RT Delta > 1/2 Window (m)=manual int.
UV85378.D MUVGRORT.M Mon Dec 06 09:03:15 2010 GCUV

Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85378.D Vial: 4
 Acq On : 2 Dec 2010 5:05 pm Operator: nikitat
 Sample : rt Inst : GCUV
 Misc : GC35290, GUV3371,,,,,1 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Dec 6 9:02 2010 Quant Results File: MUVGRORT.RES

Quant Method : C:\HPCHEM\1\METHODS\MUVGRORT.M (Chemstation Integrator)
 Title : Method SW846 8015B (GRO)
 Last Update : Mon May 03 11:03:54 2010
 Response via : Single Level Calibration
 DataAcq Meth : MUV3371.M

Volume Inj. :
 Signal Phase : crossbond phenylmethyl polysiloxane
 Signal Info : DB-624 75m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94784.D Vial: 3
Acq On : 17 Jan 2012 10:10 am Operator: RICHAP
Sample : RT Inst : GCUV
Misc : GC38120, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 10:59 2012 Quant Results File: MUVGRORT.RES

Quant Method : C:\HPCHEM\1\METHODS\MUVGRORT.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon May 03 11:03:54 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
5) S a,a,a-Trifluorotoluene	7.59	11365865	306.493 ug/l
Spiked Amount 300.000		Recovery	= 102.16%
Target Compounds			
1) t 2-Methylpentane	4.02	1894052	73.180 ug/l
2) t 1,2,4-Trimethylbenzene	11.73	3323713	73.372 ug/l
3) t n-Hexane	4.78	1260682	624.920
4) t n-Dodecane	13.20	2367497	3846.399

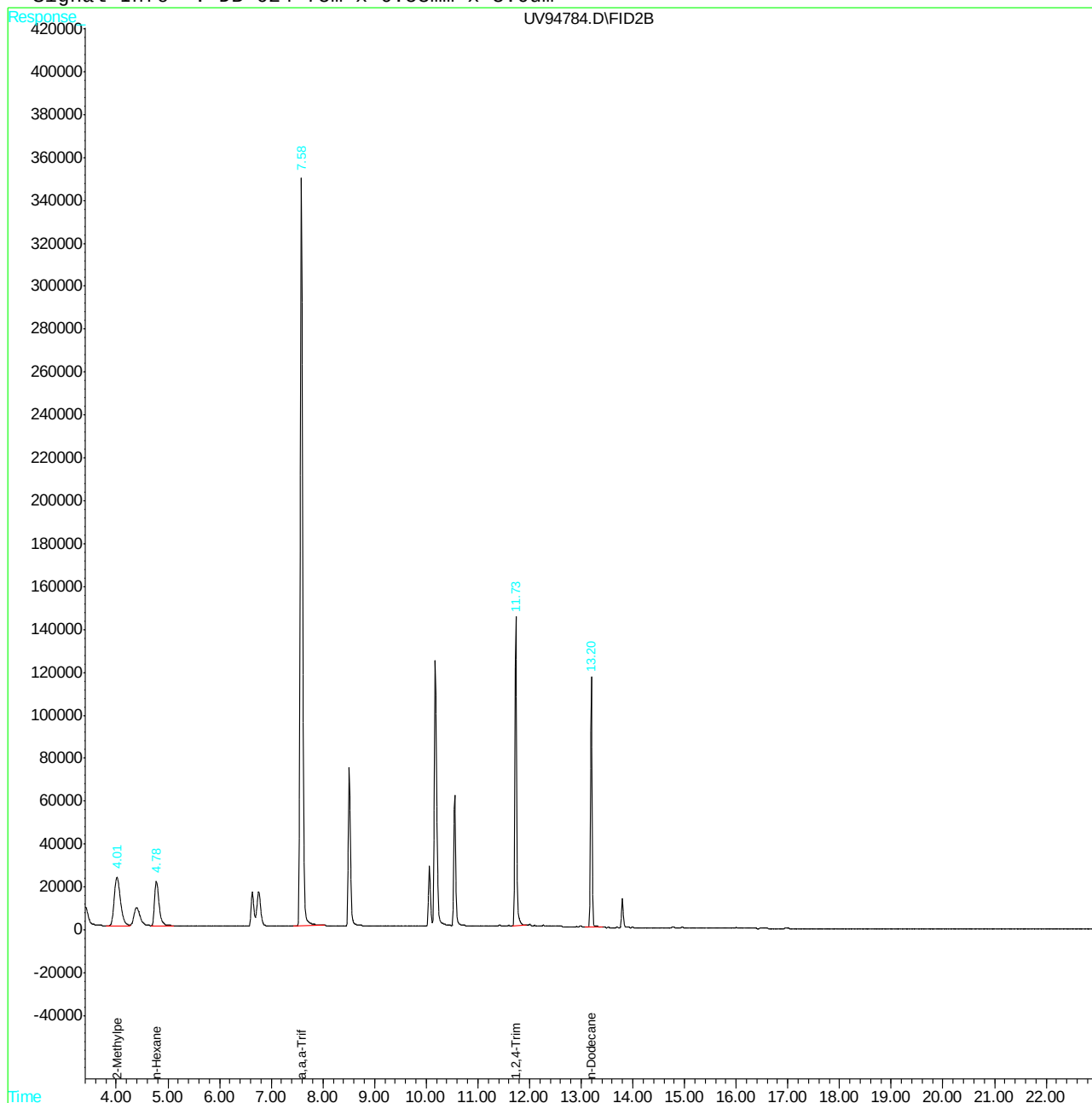
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94784.D MUVGRORT.M Wed Jan 18 09:59:26 2012 GCUV

Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94784.D Vial: 3
 Acq On : 17 Jan 2012 10:10 am Operator: RICHAP
 Sample : RT Inst : GCUV
 Misc : GC38120, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jan 17 10:59 2012 Quant Results File: MUVGRORT.RES

Quant Method : C:\HPCHEM\1\METHODS\MUVGRORT.M (Chemstation Integrator)
 Title : Method SW846 8015B (GRO)
 Last Update : Mon May 03 11:03:54 2010
 Response via : Single Level Calibration
 DataAcq Meth : MUV3371.M

Volume Inj. :
 Signal Phase : crossbond phenylmethyl polysiloxane
 Signal Info : DB-624 75m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94874.D Vial: 51
 Acq On : 20 Jan 2012 4:34 am Operator: RICHAP
 Sample : RT Inst : GCUV
 Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jan 20 9:14 2012 Quant Results File: MUVGRORT.RES

Quant Method : C:\HPCHEM\1\METHODS\MUVGRORT.M (Chemstation Integrator)
 Title : Method SW846 8015B (GR0)
 Last Update : Mon May 03 11:03:54 2010
 Response via : Initial Calibration
 DataAcq Meth : MUV3371.M

Volume Inj. :
 Signal Phase : crossbond phenylmethyl polysiloxane
 Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
5) S a,a,a-Trifluorotoluene	7.58	11104883	299.455 ug/l
Spiked Amount 300.000		Recovery =	99.82%
Target Compounds			
1) t 2-Methylpentane	4.02	903286	34.900 ug/l
2) t 1,2,4-Trimethylbenzene	11.73	2668808	58.915 ug/l
3) t n-Hexane	4.79	764237	378.832
4) t n-Dodecane	13.19	1995045	3241.287

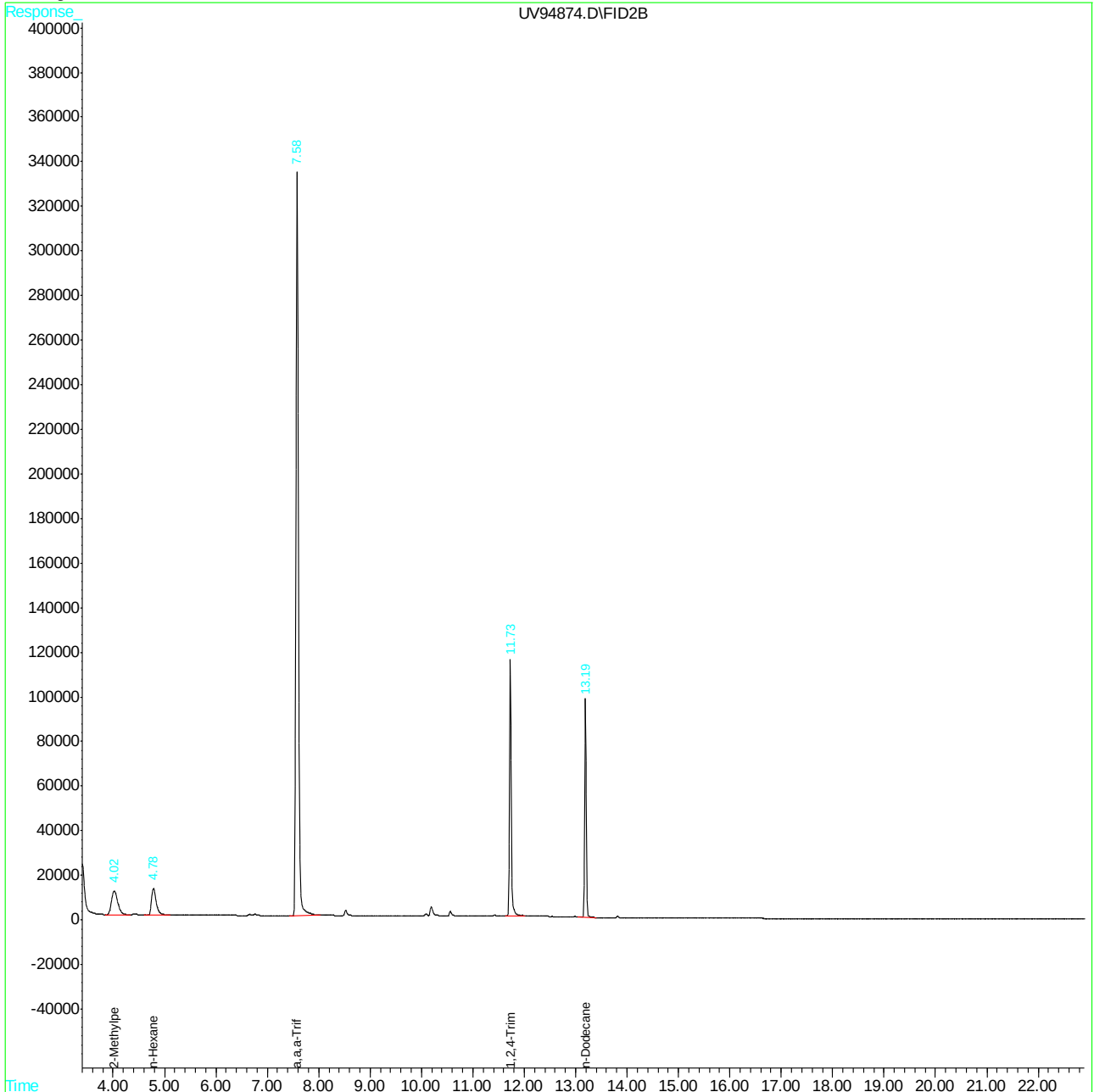
10.5.3
10

Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94874.D Vial: 51
Acq On : 20 Jan 2012 4:34 am Operator: RICHAP
Sample : RT Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 9:14 2012 Quant Results File: MUVGRORT.RES

Quant Method : C:\HPCHEM\1\METHODS\MUVGRORT.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon May 03 11:03:54 2010
Response via : Single Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85380.D Vial: 6
Acq On : 2 Dec 2010 6:05 pm Operator: nikitat
Sample : ic3371-200 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:07 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:07:21 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	3933514	100.000 ug/l
Spiked Amount 300.000		Recovery =	33.33%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	6414244	200.000 ug/l
2) H TPH-GRO (C6-C12)	9.00	6343856	200.000 ug/l

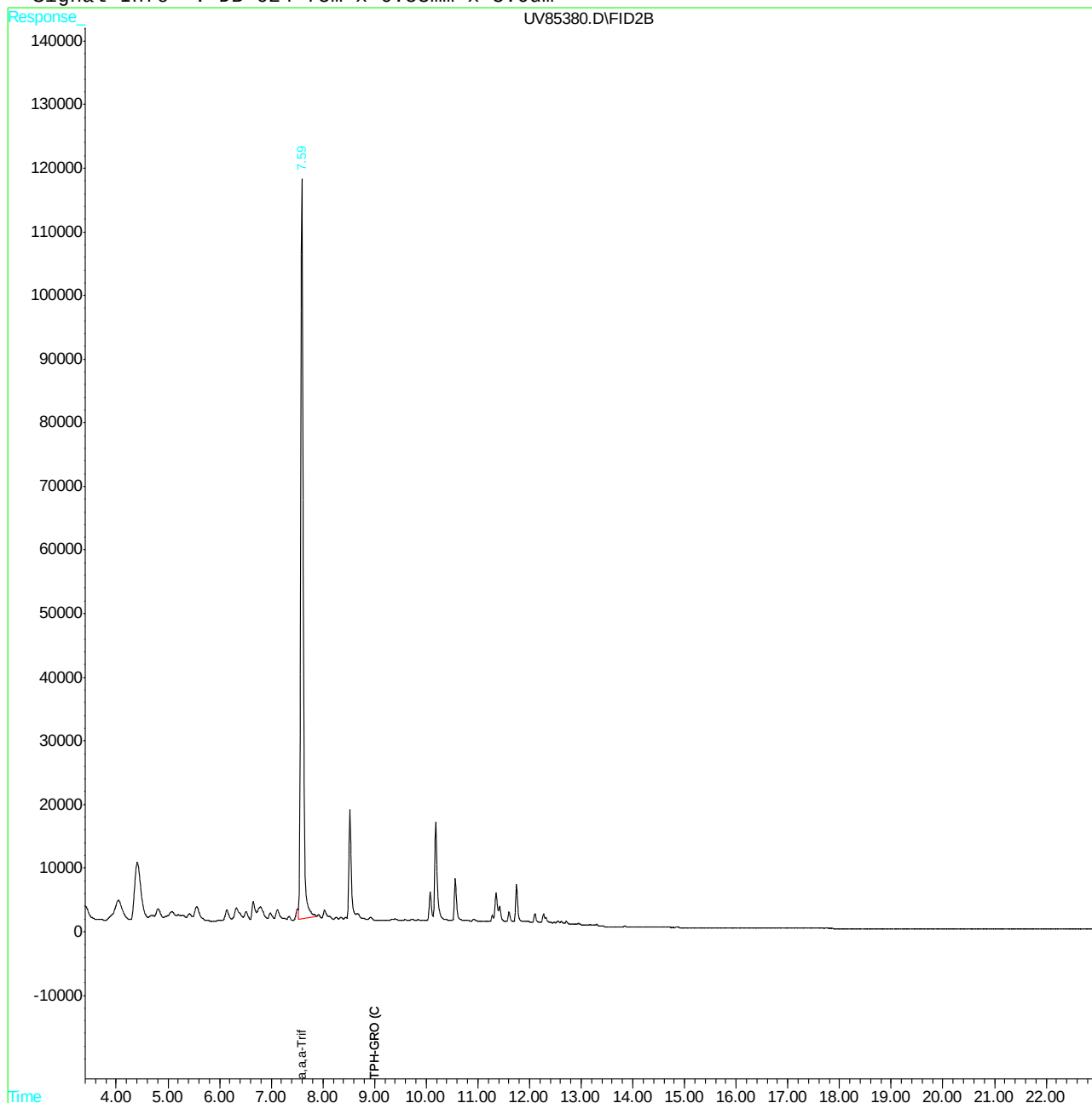
(f)=RT Delta > 1/2 Window (m)=manual int.
UV85380.D MUV3371.M Mon Dec 06 09:39:39 2010 GCUV

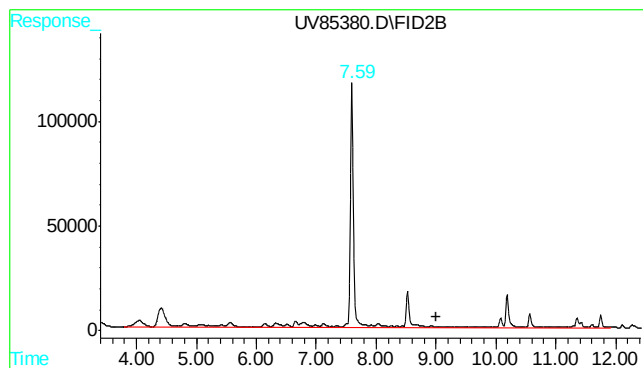
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85380.D Vial: 6
Acq On : 2 Dec 2010 6:05 pm Operator: nikitat
Sample : ic3371-200 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:07 2010 Quant Results File: MUV3371.RES

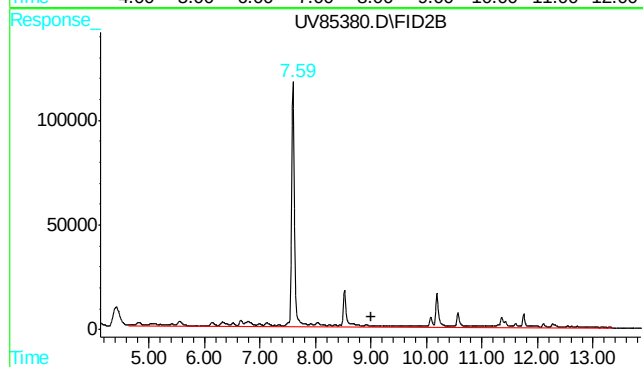
Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:07:21 2010
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)
R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 6414244
Conc: 200.00 ug/l m



#2 TPH-GR0 (C6-C12)
R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 6343856
Conc: 200.00 ug/l m

10.6.1
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85381.D Vial: 7
Acq On : 2 Dec 2010 6:35 pm Operator: nikitat
Sample : ic3371-800 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:07 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:07:43 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	8164851	207.571 ug/l
Spiked Amount 300.000		Recovery =	69.19%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	21272867	663.301 ug/l
2) H TPH-GRO (C6-C12)	9.00	18921777	596.539 ug/l

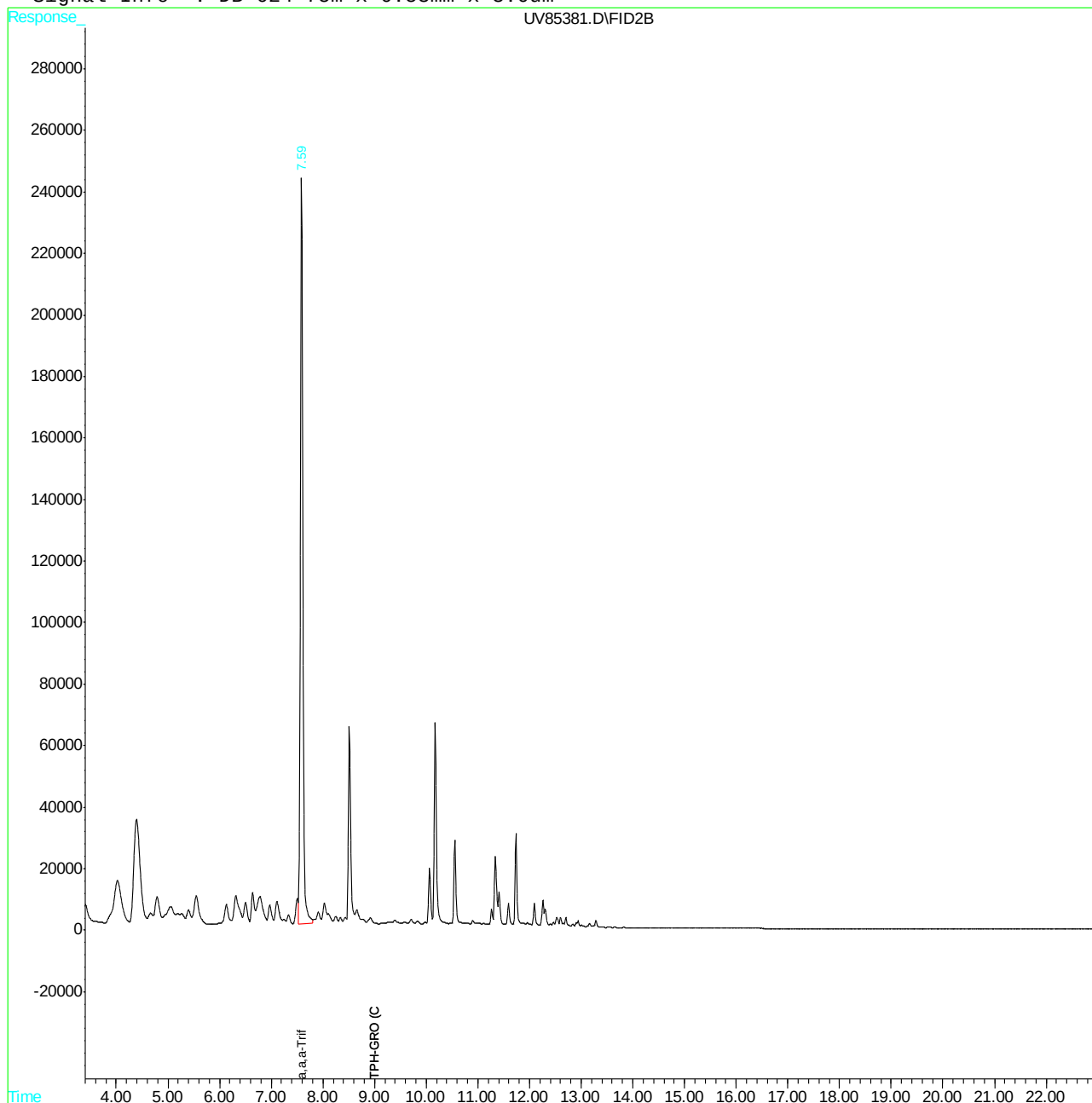
(f)=RT Delta > 1/2 Window (m)=manual int.
UV85381.D MUV3371.M Mon Dec 06 09:39:50 2010 GCUV

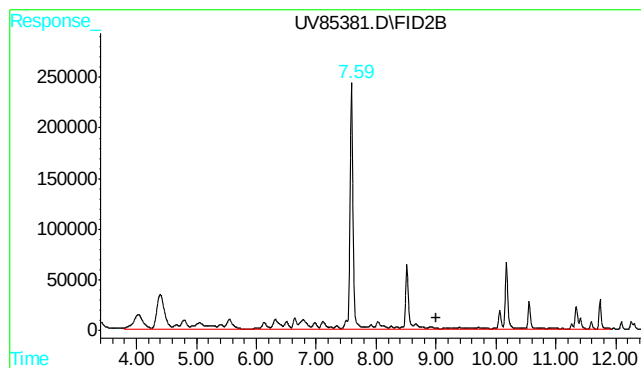
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85381.D Vial: 7
Acq On : 2 Dec 2010 6:35 pm Operator: nikitat
Sample : ic3371-800 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:07 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:07:43 2010
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

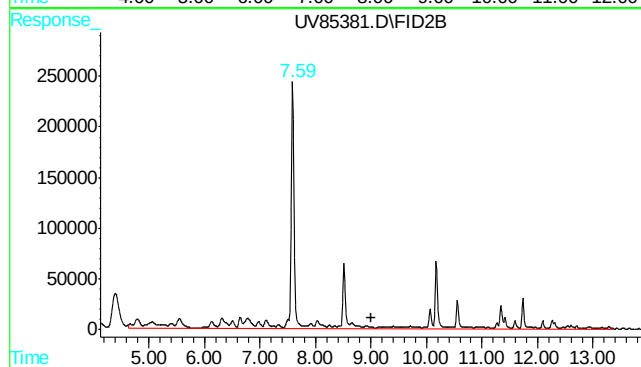
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GRO (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 21272867
Conc: 663.30 ug/l m



#2 TPH-GRO (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 18921777
Conc: 596.54 ug/l m

10.6.2
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85382.D Vial: 8
Acq On : 2 Dec 2010 7:04 pm Operator: nikitat
Sample : IC3371-4000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 9 18:43 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Wed Dec 01 09:01:04 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	13201492	299.461 ug/l
Spiked Amount 300.000		Recovery	= 99.82%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	133738631	4557.272 ug/l
2) H TPH-GRO (C6-C12)	9.00	123245070	4505.666 ug/l

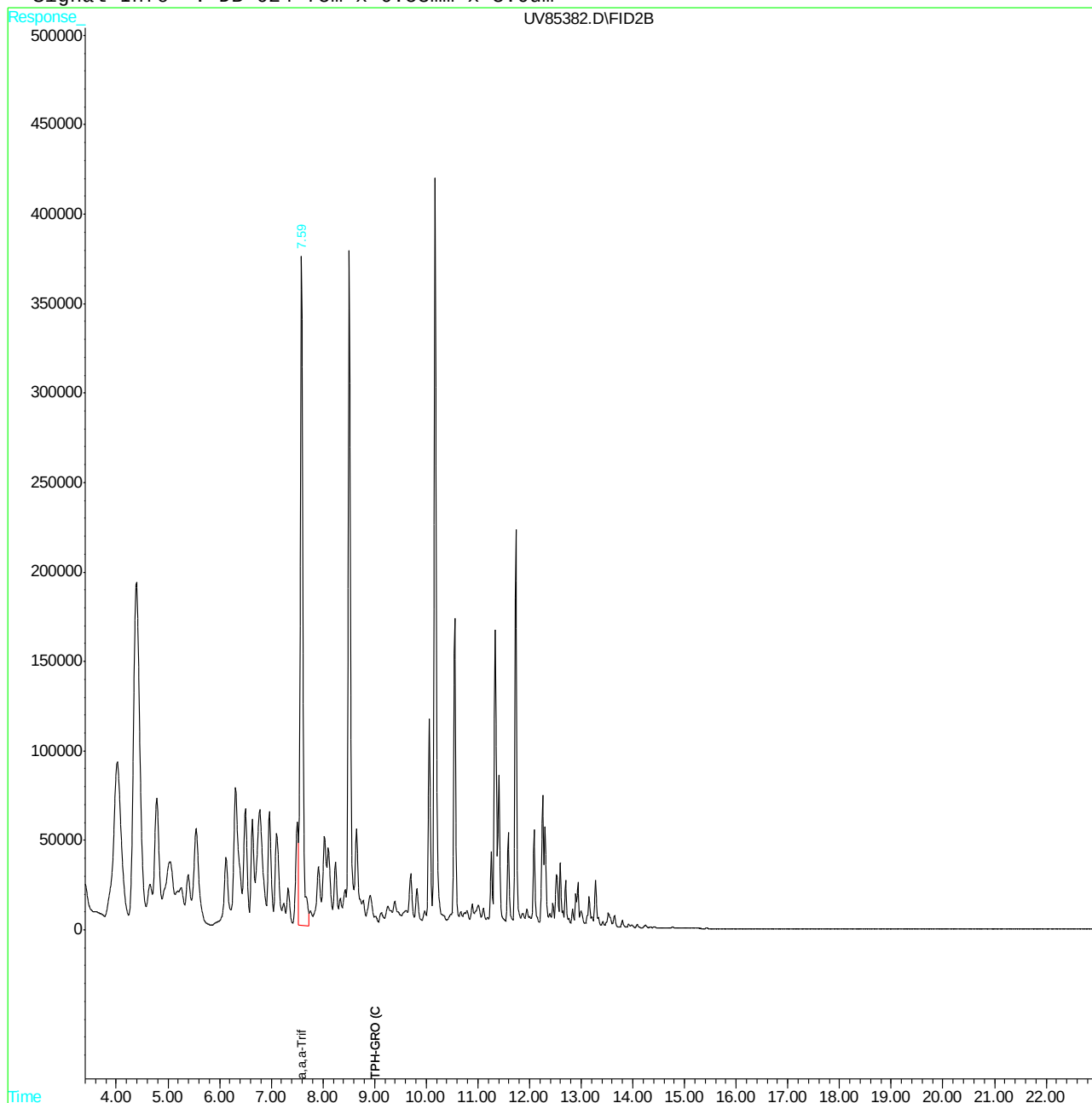
(f)=RT Delta > 1/2 Window (m)=manual int.
UV85382.D MUV3371.M Fri Sep 09 12:15:16 2011 GCUV

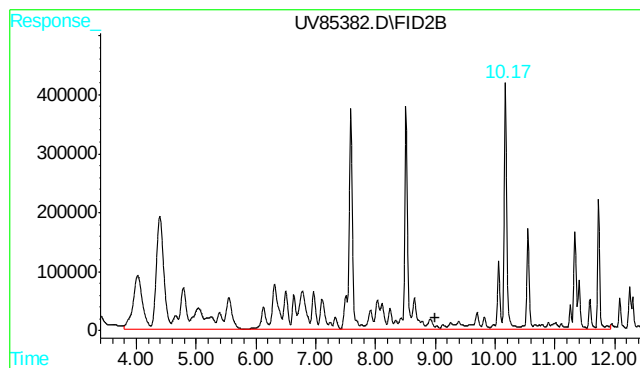
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85382.D Vial: 8
Acq On : 2 Dec 2010 7:04 pm Operator: nikitat
Sample : ic3371-4000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 9 18:43 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Wed Dec 01 09:01:04 2010
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

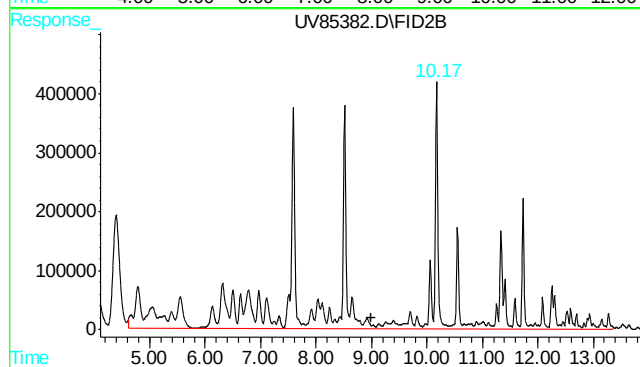
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 133738631
Conc: 4557.27 ug/l m



#2 TPH-GR0 (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 123245070
Conc: 4505.67 ug/l m

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85383.D Vial: 9
Acq On : 2 Dec 2010 7:34 pm Operator: nikitat
Sample : icc3371-8000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 9 18:43 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:08:53 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	13199301	313.966 ug/l
Spiked Amount 300.000		Recovery	= 104.66%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	253167622	8184.686 ug/l
2) H TPH-GRO (C6-C12)	9.00	233780749	8107.031 ug/l

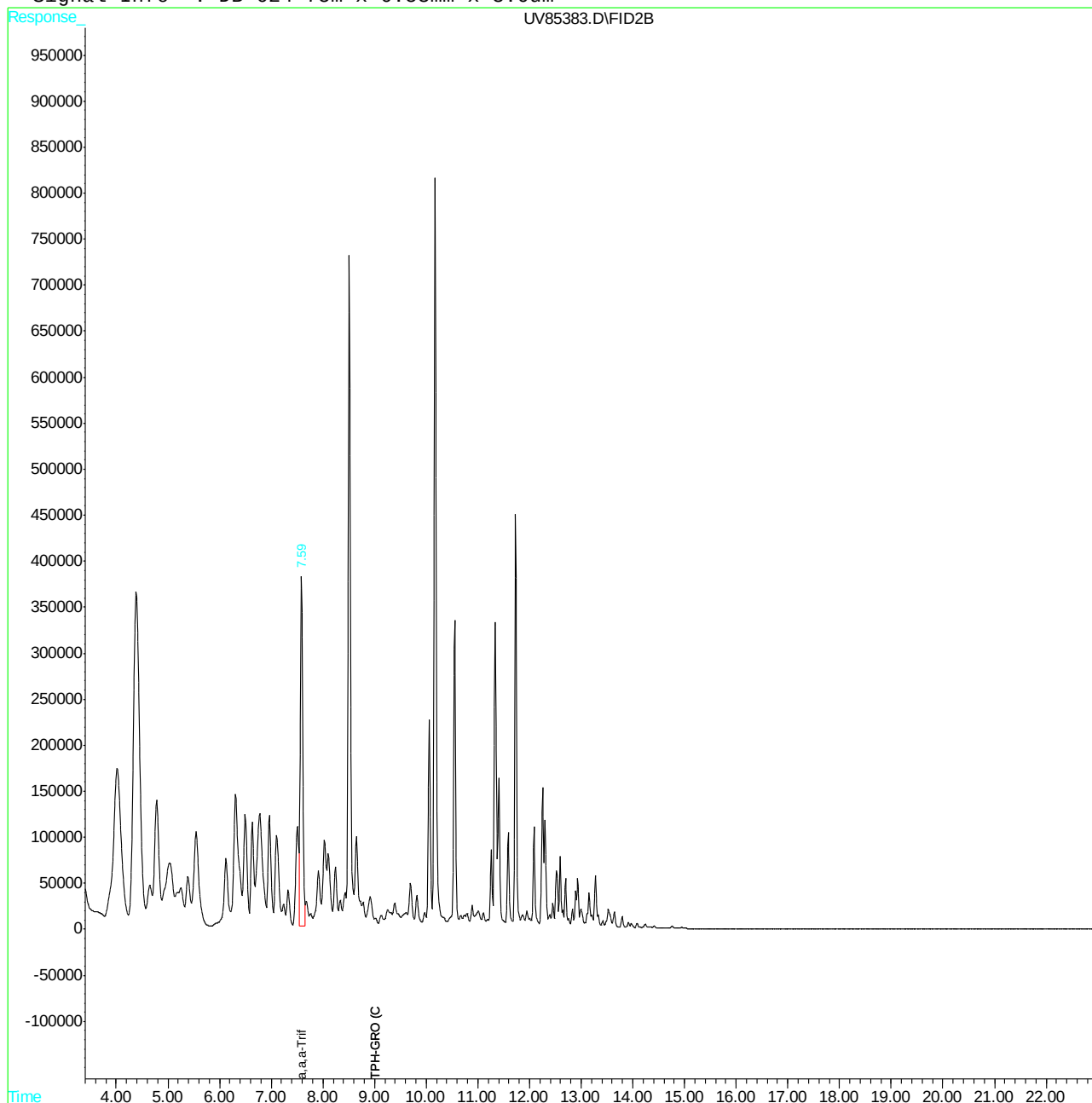
10.6.4
10

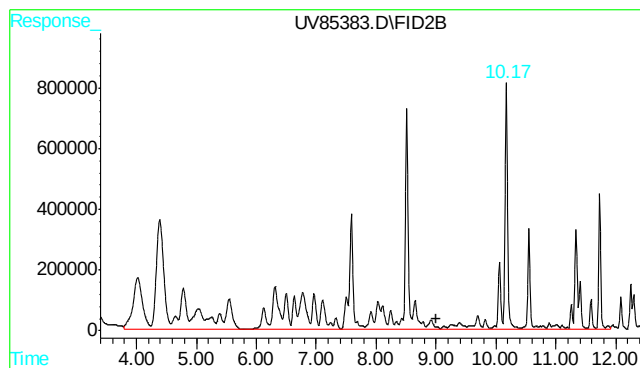
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85383.D Vial: 9
Acq On : 2 Dec 2010 7:34 pm Operator: nikitat
Sample : icc3371-8000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 9 18:43 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:08:53 2010
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

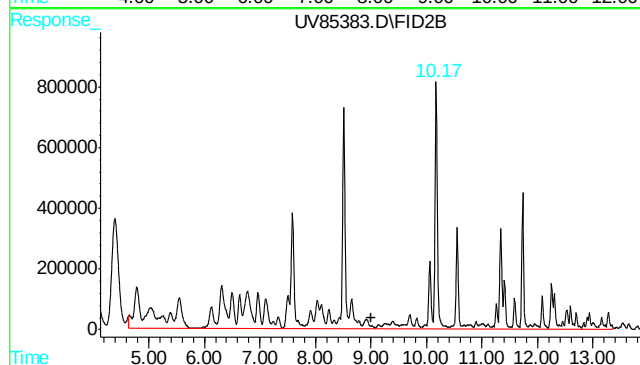
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 253167622
Conc: 8184.69 ug/l m



#2 TPH-GR0 (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 233780749
Conc: 8107.03 ug/l m

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85384.D Vial: 10
Acq On : 2 Dec 2010 8:04 pm Operator: nikitat
Sample : IC3371-20000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 9 18:43 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:08:53 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

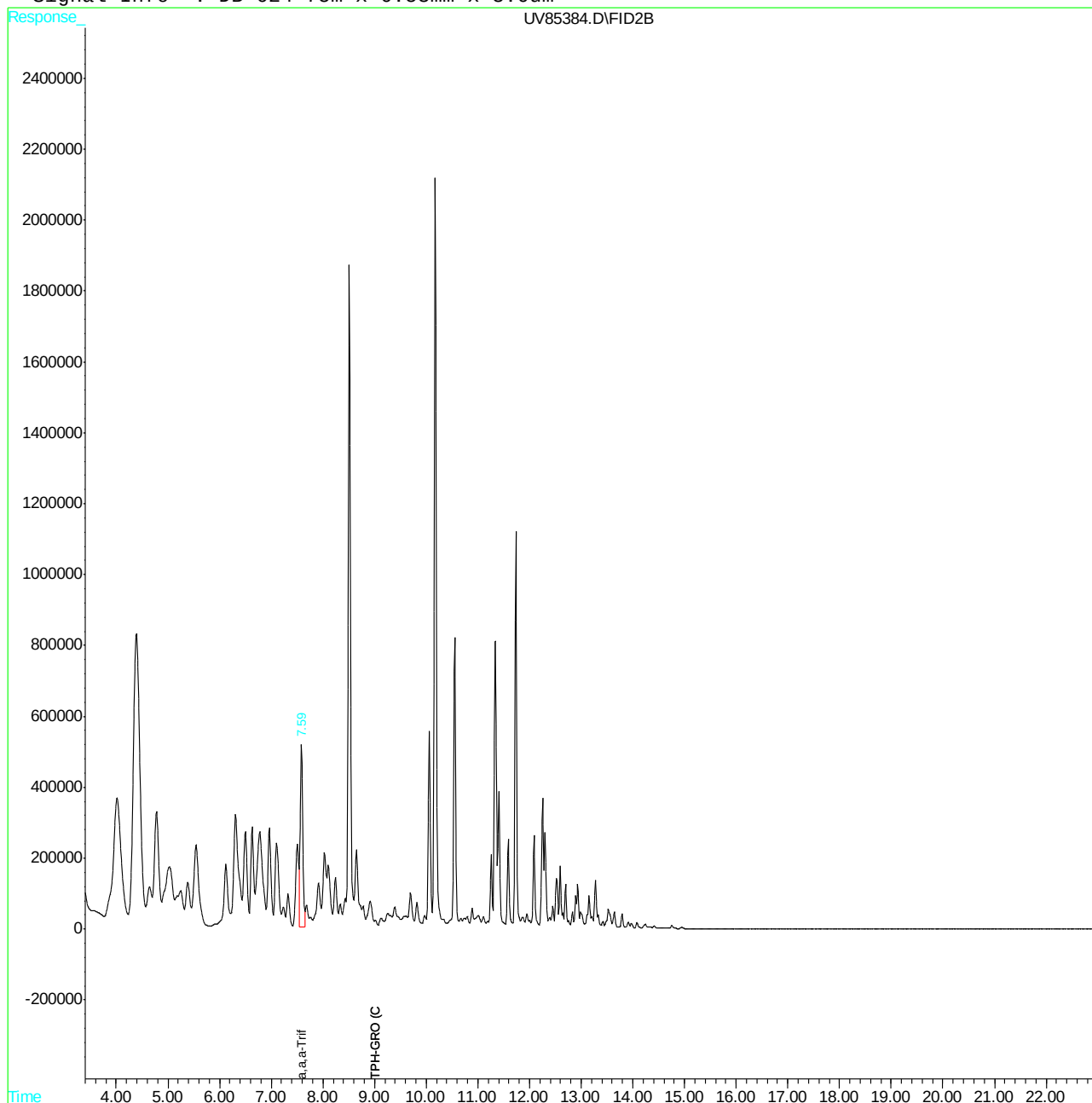
System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	18130835	431.271 ug/l
Spiked Amount 300.000		Recovery	= 143.76%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	591953308	19137.330 ug/l
2) H TPH-GRO (C6-C12)	9.00	542912604	18827.083 ug/l

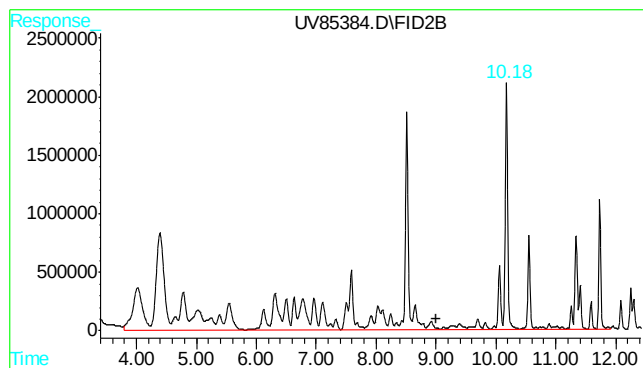
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85384.D Vial: 10
Acq On : 2 Dec 2010 8:04 pm Operator: nikitat
Sample : ic3371-20000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 9 18:43 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:08:53 2010
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

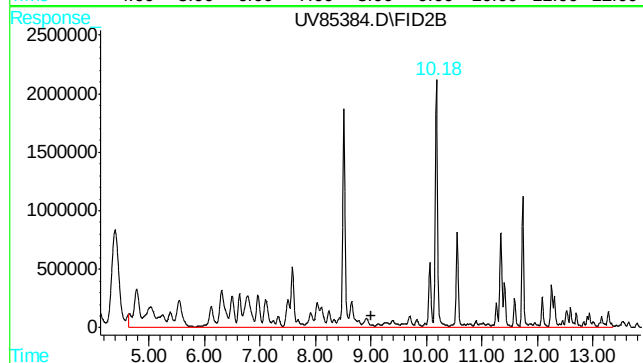
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 591953308
Conc: 19137.33 ug/l m



#2 TPH-GR0 (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 542912604
Conc: 18827.08 ug/l m

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85385.D Vial: 11
Acq On : 2 Dec 2010 8:34 pm Operator: nikitat
Sample : IC3371-30000 Inst : GCUV
Misc : GC35290, GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:09 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:08:53 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	25035159	595.501 ug/l
Spiked Amount 300.000		Recovery	= 198.50%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	912661587	29505.546 ug/l
2) H TPH-GRO (C6-C12)	9.00	838828251	29088.824 ug/l

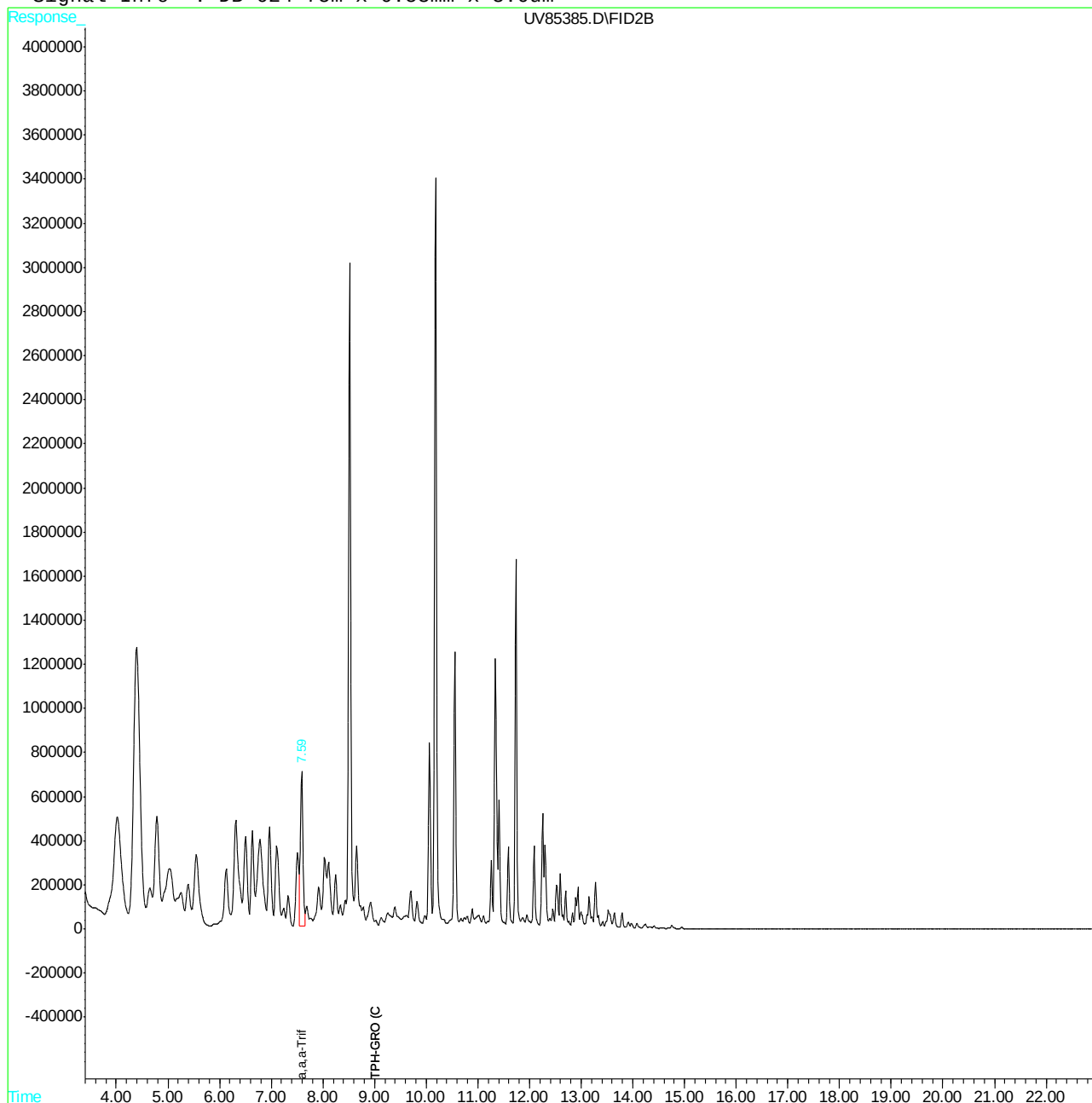
(f)=RT Delta > 1/2 Window (m)=manual int.
UV85385.D MUV3371.M Mon Dec 06 09:40:33 2010 GCUV

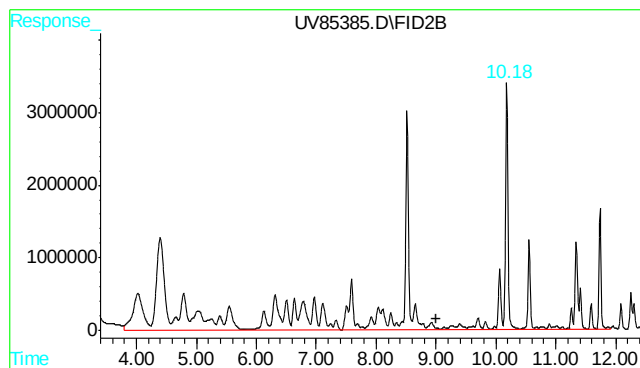
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85385.D Vial: 11
Acq On : 2 Dec 2010 8:34 pm Operator: nikitat
Sample : ic3371-30000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:09 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:08:53 2010
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

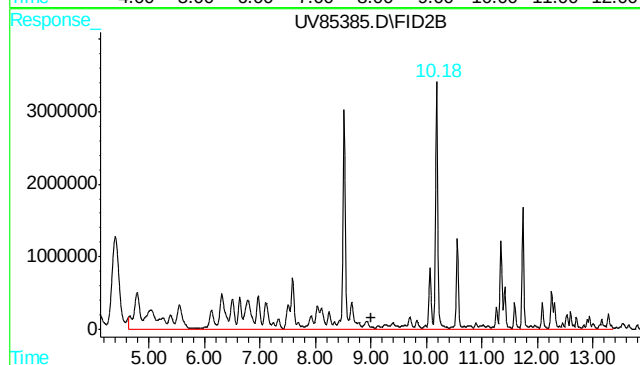
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 912661587
Conc: 29505.55 ug/l m



#2 TPH-GR0 (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 838828251
Conc: 29088.82 ug/l m

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85386.D Vial: 12
Acq On : 2 Dec 2010 9:04 pm Operator: nikitat
Sample : IC3371-40000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:09 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:08:53 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	28528162	678.587 ug/l
Spiked Amount 300.000		Recovery	= 226.20%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	1133457314	36643.678 ug/l
2) H TPH-GRO (C6-C12)	9.00	1049477849	36393.715 ug/l

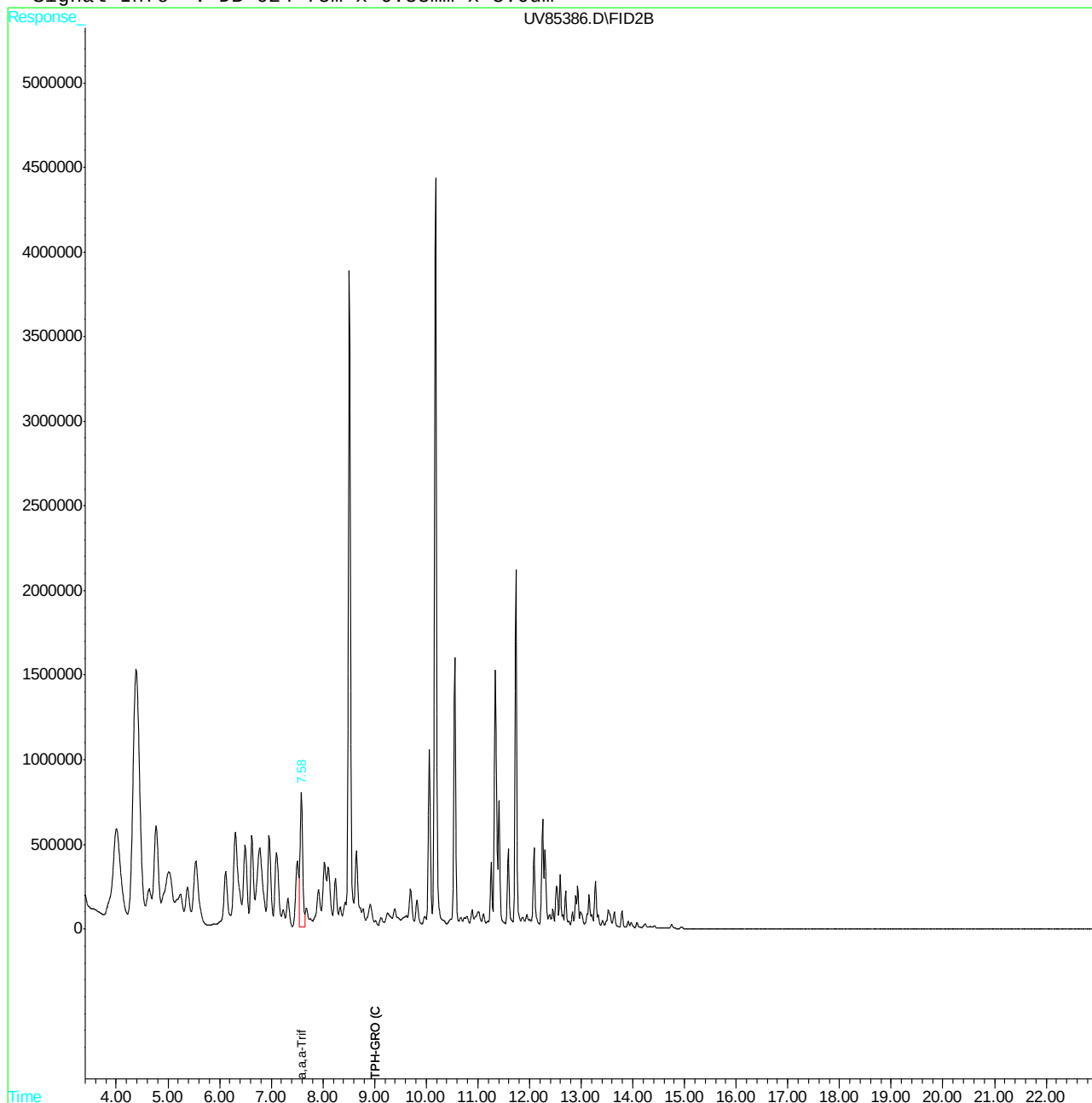
(f)=RT Delta > 1/2 Window (m)=manual int.
UV85386.D MUV3371.M Mon Dec 06 09:40:44 2010 GCUV

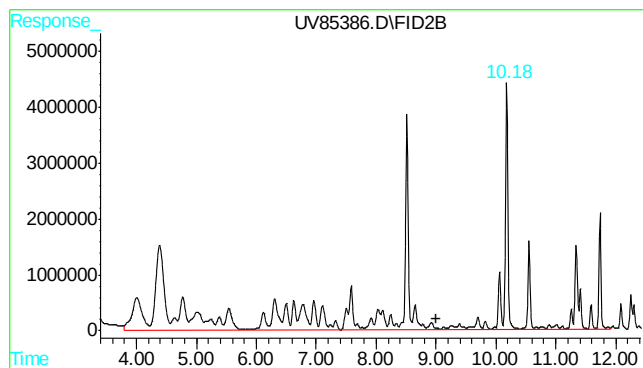
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85386.D Vial: 12
Acq On : 2 Dec 2010 9:04 pm Operator: nikitat
Sample : ic3371-40000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 6 9:09 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Dec 06 09:08:53 2010
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

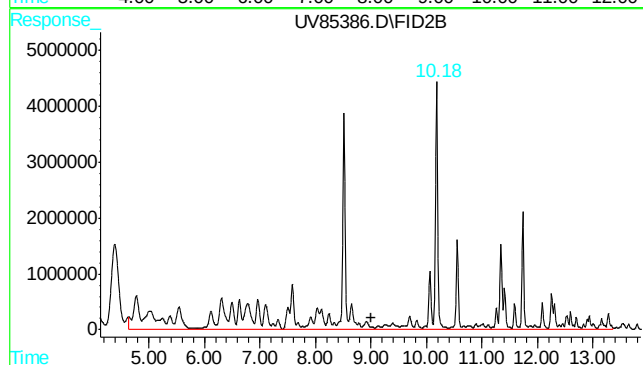
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 1133457314
Conc: 36643.68 ug/l m



#2 TPH-GR0 (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 1049477849
Conc: 36393.71 ug/l m

10.6.7
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV85389.D Vial: 15
Acq On : 2 Dec 2010 10:33 pm Operator: nikitat
Sample : icv3371-8000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 9 18:43 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Wed Dec 01 09:01:04 2010
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	13909754	315.527 ug/l
Spiked Amount 300.000		Recovery	= 105.18%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	225057620	7669.055 ug/l
2) H TPH-GRO (C6-C12)	9.00	228674404	8360.014 ug/l

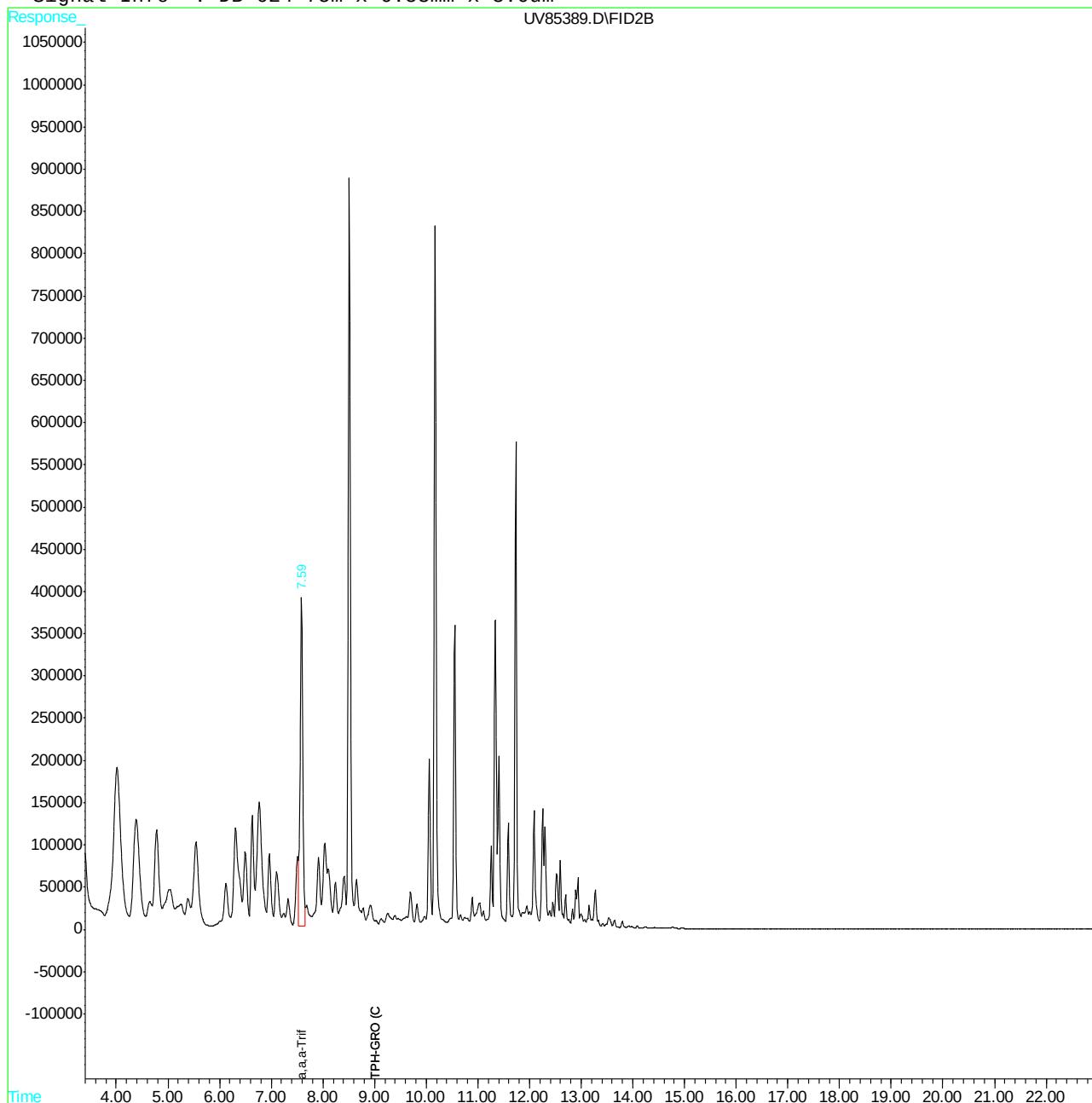
(f)=RT Delta > 1/2 Window (m)=manual int.
UV85389.D MUV3371.M Thu Aug 25 11:31:37 2011 GCUV

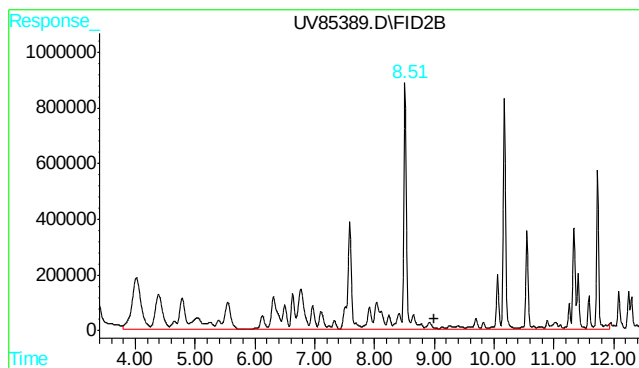
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV85389.D Vial: 15
Acq On : 2 Dec 2010 10:33 pm Operator: nikitat
Sample : icv3371-8000 Inst : GCUV
Misc : GC35290,GUV3371,,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 9 18:43 2010 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Wed Dec 01 09:01:04 2010
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

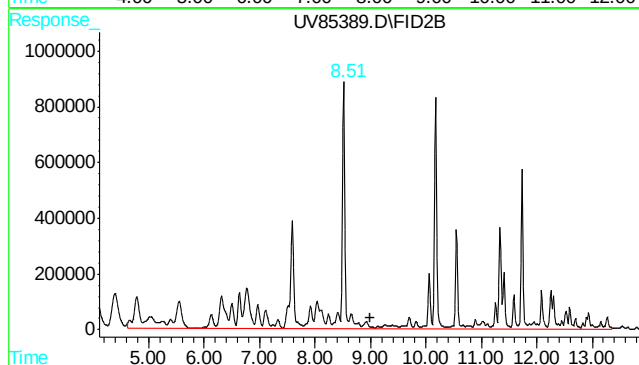
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 225057620
Conc: 7669.05 ug/l m



#2 TPH-GR0 (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 228674404
Conc: 8360.01 ug/l m

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94772.D Vial: 64
Acq On : 17 Jan 2012 1:48 am Operator: RICHAP
Sample : CC3371-8000 Inst : GCUV
Misc : GC38151, GUV3745, 5.0, , , , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 2:11 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	13738611	309.123 ug/l
Spiked Amount 300.000		Recovery	= 103.04%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	251827236	8311.772 ug/l
2) H TPH-GRO (C6-C12)	9.00	232485660	8273.903 ug/l

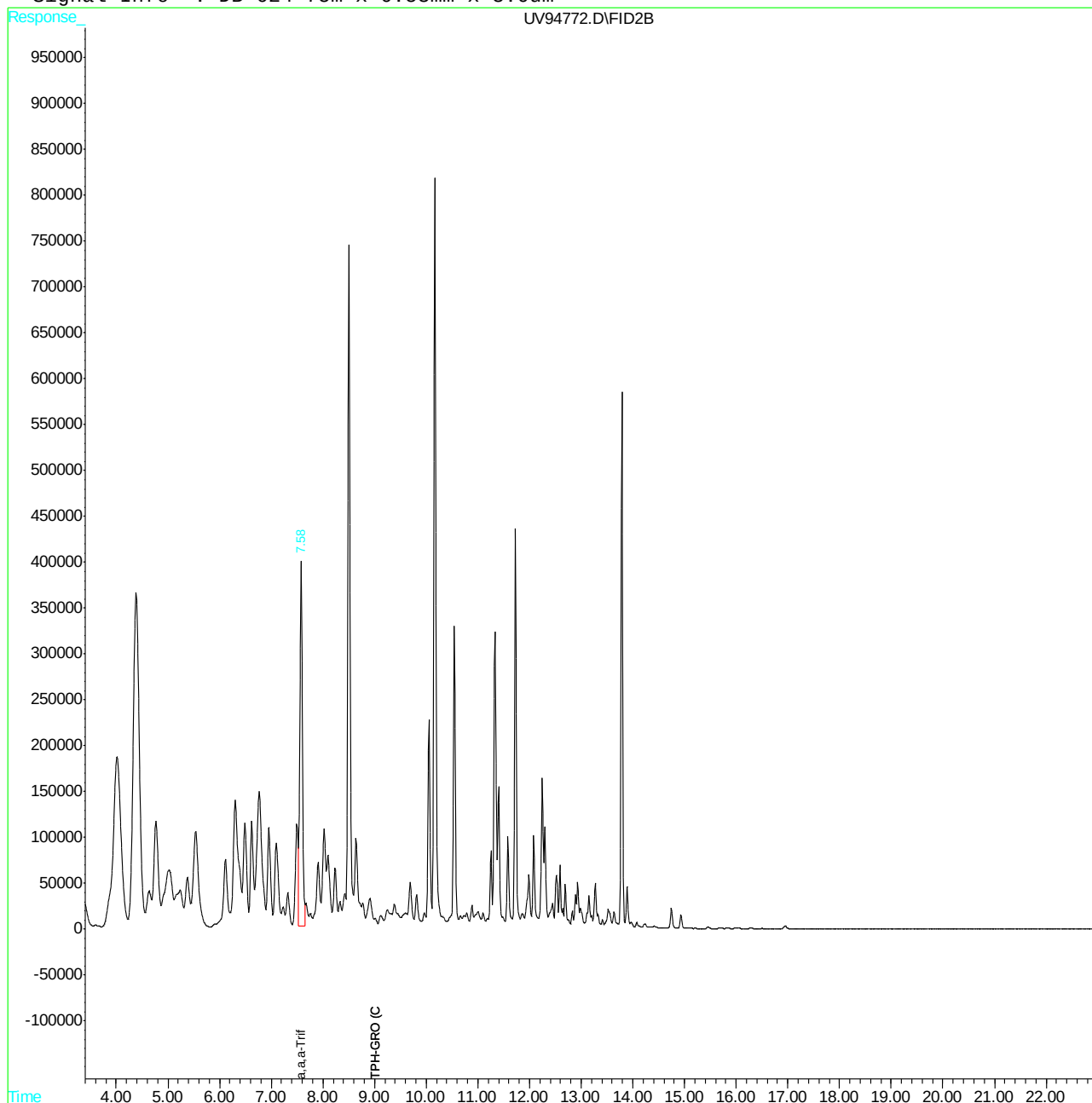
(f)=RT Delta > 1/2 Window (m)=manual int.
UV94772.D MUV3371.M Tue Jan 17 10:23:24 2012 GCUV

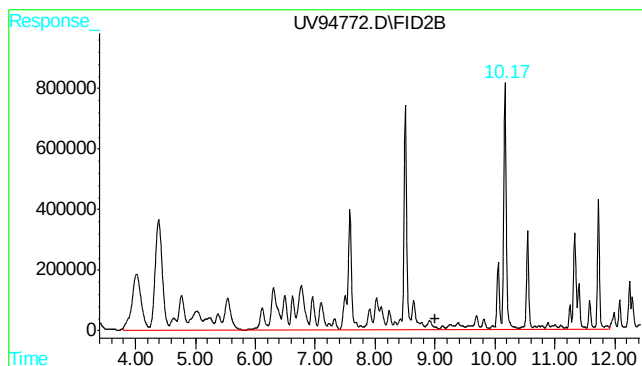
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94772.D Vial: 64
Acq On : 17 Jan 2012 1:48 am Operator: RICHAP
Sample : CC3371-8000 Inst : GCUV
Misc : GC38151,GUV3745,5.0,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 2:11 2012 Quant Results File: MUV3371.RES

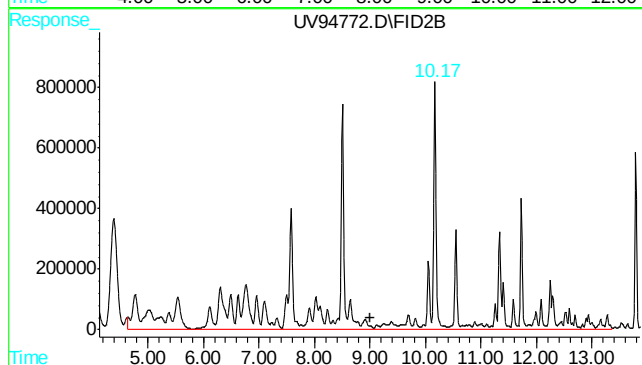
Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)
 R.T.: 9.000 min
 Delta R.T.: 0.000 min
 Response: 251827236
 Conc: 8311.77 ug/l m



#2 TPH-GR0 (C6-C12)
 R.T.: 9.000 min
 Delta R.T.: 0.000 min
 Response: 232485660
 Conc: 8273.90 ug/l m

10.6.9
 10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94785.D Vial: 4
Acq On : 17 Jan 2012 10:46 am Operator: RICHAP
Sample : CC3371-4000 Inst : GCUV
Misc : GC38120,GUV3747,10.0,100,10,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 11:09 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	12011798	270.270 ug/l
Spiked Amount 300.000		Recovery	= 90.09%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	111867283	3692.275 ug/l
2) H TPH-GRO (C6-C12)	9.00	102252159	3639.039 ug/l

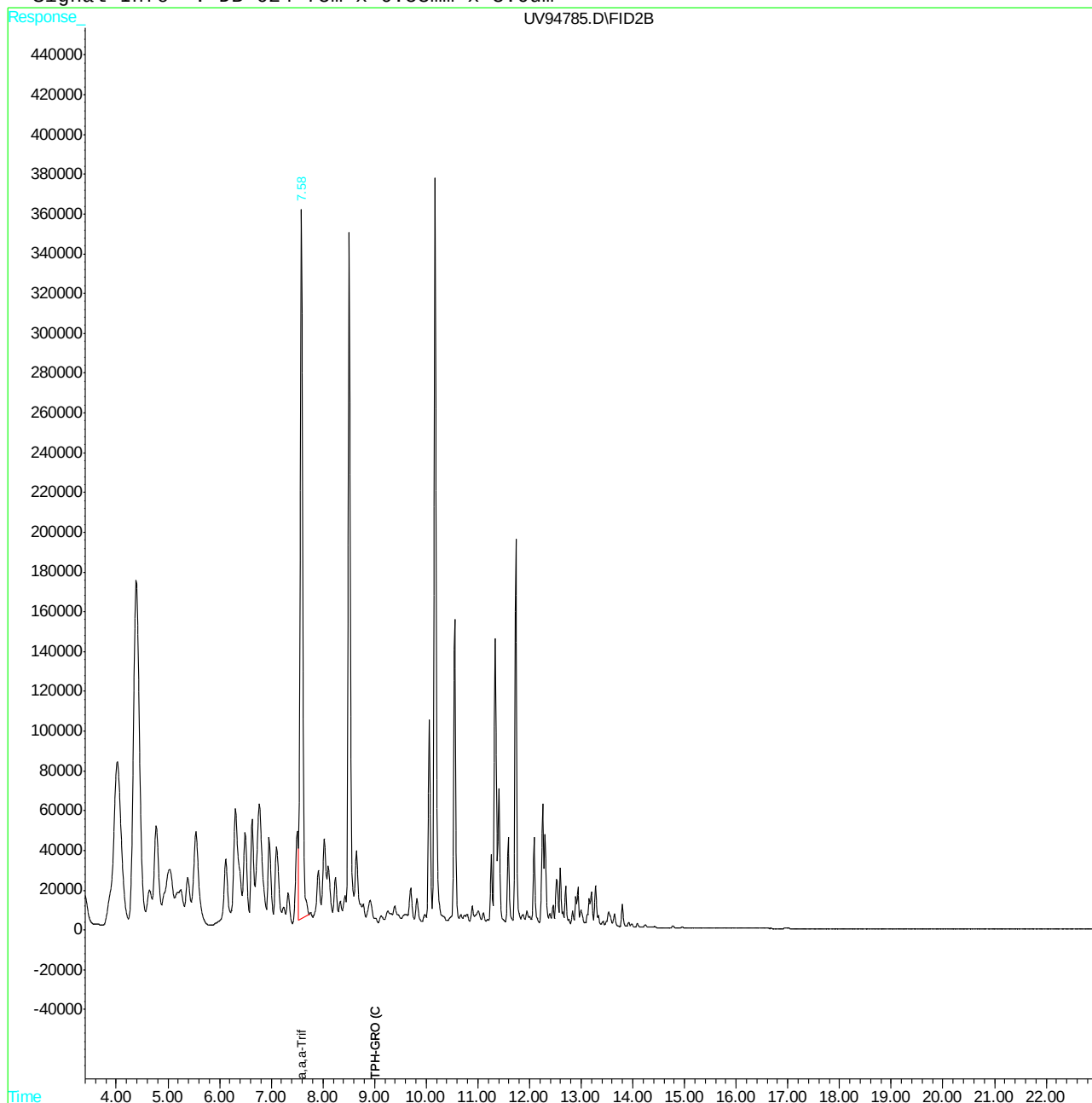
10.6.10
10

Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94785.D Vial: 4
Acq On : 17 Jan 2012 10:46 am Operator: RICHAP
Sample : CC3371-4000 Inst : GCUV
Misc : GC38120, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 11:09 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94794.D Vial: 13
Acq On : 17 Jan 2012 3:30 pm Operator: RICHAP
Sample : CC3371-8000 Inst : GCUV
Misc : GC38102, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 15:53 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	14243858	320.492 ug/l
Spiked Amount 300.000		Recovery	= 106.83%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	236992867	7822.151 ug/l
2) H TPH-GRO (C6-C12)	9.00	214056668	7618.036 ug/l

10.6.11
10

(f)=RT Delta > 1/2 Window
UV94794.D MUV3371.M Wed Jan 18 10:05:22 2012

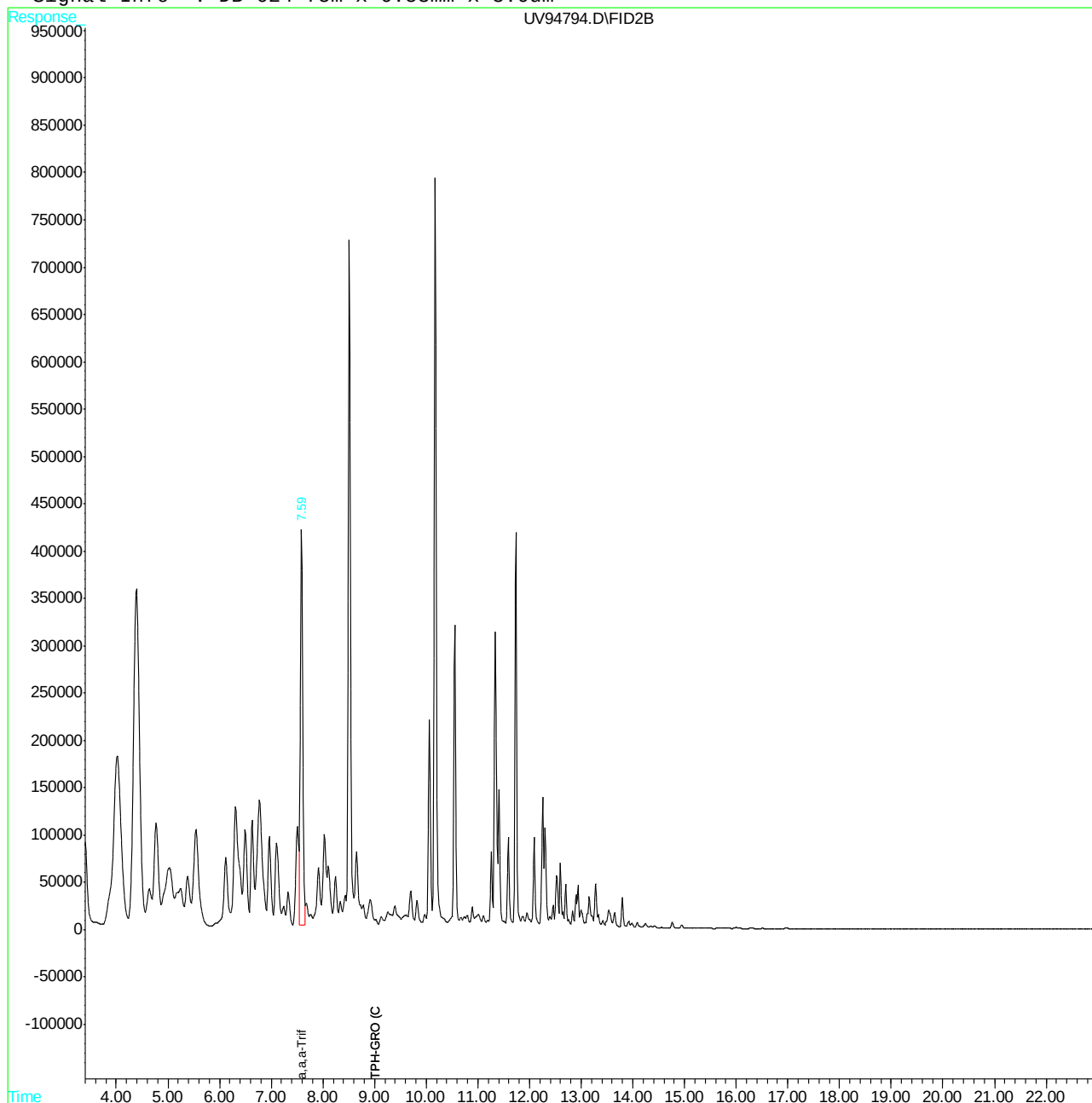
(m)=manual int.
GCUV

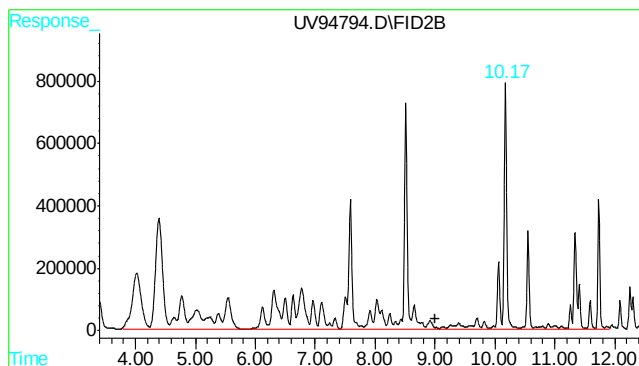
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94794.D Vial: 13
Acq On : 17 Jan 2012 3:30 pm Operator: RICHAP
Sample : CC3371-8000 Inst : GCUV
Misc : GC38102, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 15:53 2012 Quant Results File: MUV3371.RES

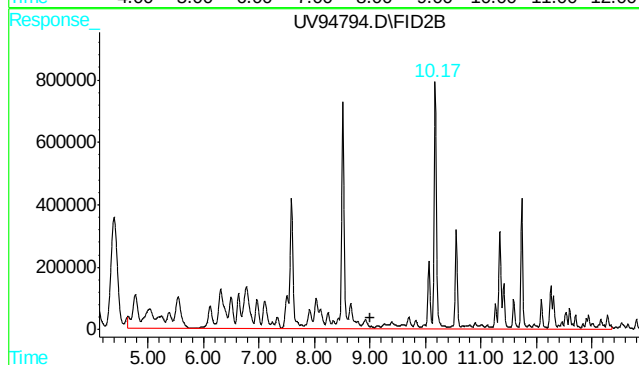
Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)
 R.T.: 9.000 min
 Delta R.T.: 0.000 min
 Response: 236992867
 Conc: 7822.15 ug/l m



#2 TPH-GR0 (C6-C12)
 R.T.: 9.000 min
 Delta R.T.: 0.000 min
 Response: 214056668
 Conc: 7618.04 ug/l m

10.6.11
 10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94805.D Vial: 24
Acq On : 17 Jan 2012 9:11 pm Operator: RICHAP
Sample : CC3371-4000 Inst : GCUV
Misc : GC38170, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 21:34 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.59	13643938	306.993 ug/l
Spiked Amount 300.000		Recovery	= 102.33%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	123305066	4069.789 ug/l
2) H TPH-GRO (C6-C12)	9.00	116150299	4133.659 ug/l

(f)=RT Delta > 1/2 Window
UV94805.D MUV3371.M Wed Jan 18 10:17:13 2012

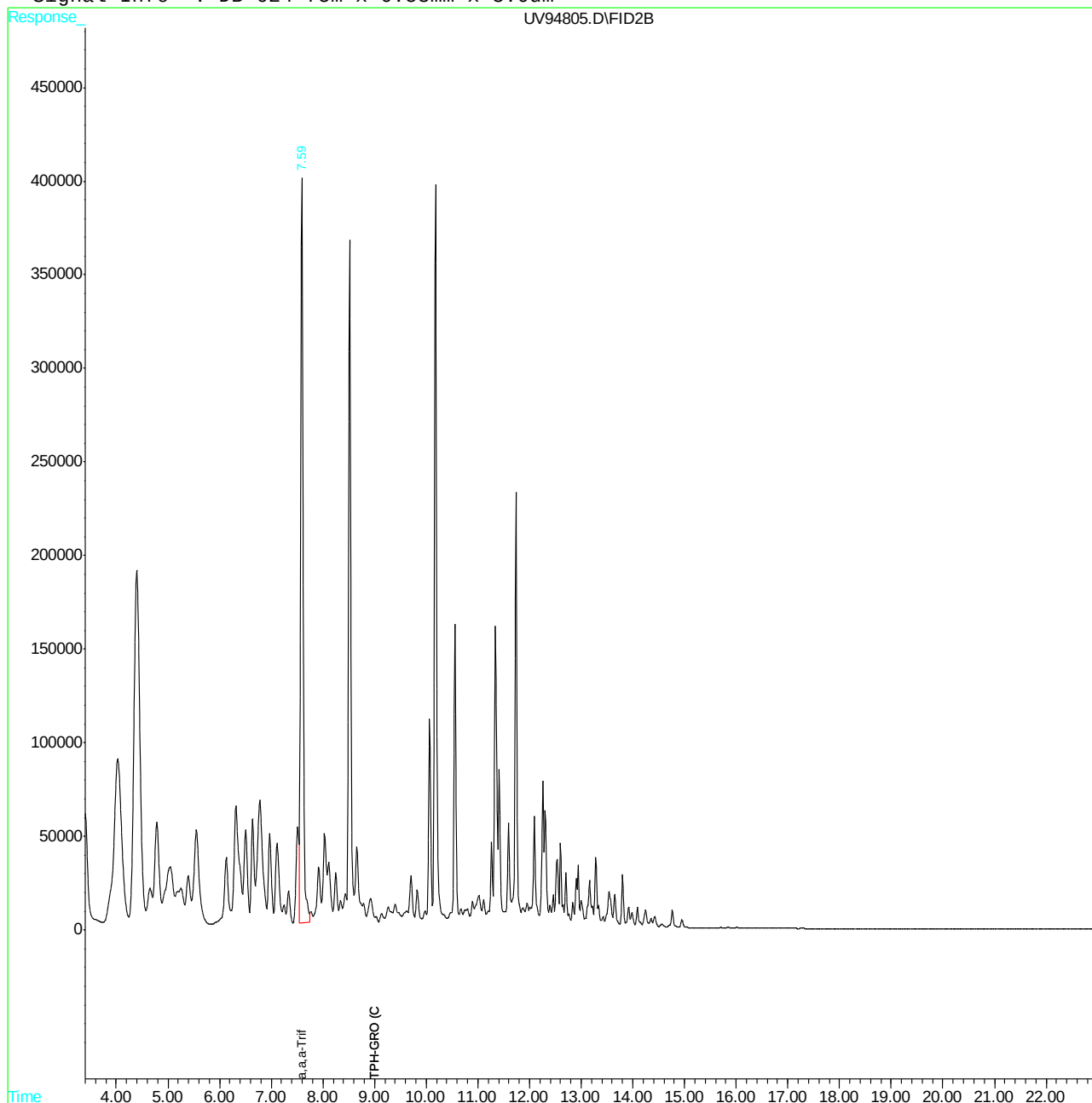
(m)=manual int.
GCUV

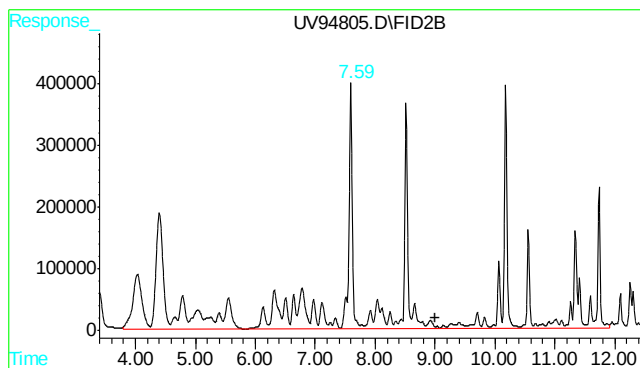
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94805.D Vial: 24
Acq On : 17 Jan 2012 9:11 pm Operator: RICHAP
Sample : CC3371-4000 Inst : GCUV
Misc : GC38170, GUV3747, 10.0, 100, 10, , 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 17 21:34 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

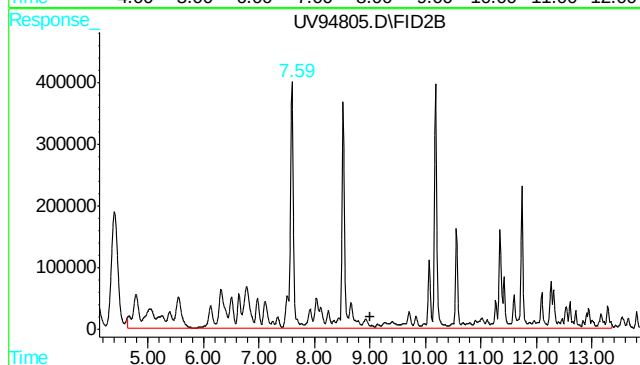
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GRO (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 123305066
Conc: 4069.79 ug/l m



#2 TPH-GRO (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 116150299
Conc: 4133.66 ug/l m

10.6.12
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94872.D Vial: 49
 Acq On : 20 Jan 2012 2:35 am Operator: RICHAP
 Sample : CC3371-4000 Inst : GCUV
 Misc : GC38159,GUV3750,5,,,1 Multiplr: 1.00
 IntFile : autoint1.e
 Quant Time: Jan 20 2:58 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
 Title : Method SW846 8015B (GRO)
 Last Update : Mon Oct 31 10:51:27 2011
 Response via : Initial Calibration
 DataAcq Meth : MUV3371.M

Volume Inj. :
 Signal Phase : crossbond phenylmethyl polysiloxane
 Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	12873081	289.649 ug/l
Spiked Amount 300.000		Recovery	= 96.55%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	126470142	4174.255 ug/l
2) H TPH-GRO (C6-C12)	9.00	116435613	4143.813 ug/l

 (f)=RT Delta > 1/2 Window

UV94872.D MUV3371.M

Fri Jan 20 17:50:23 2012

(m)=manual int.

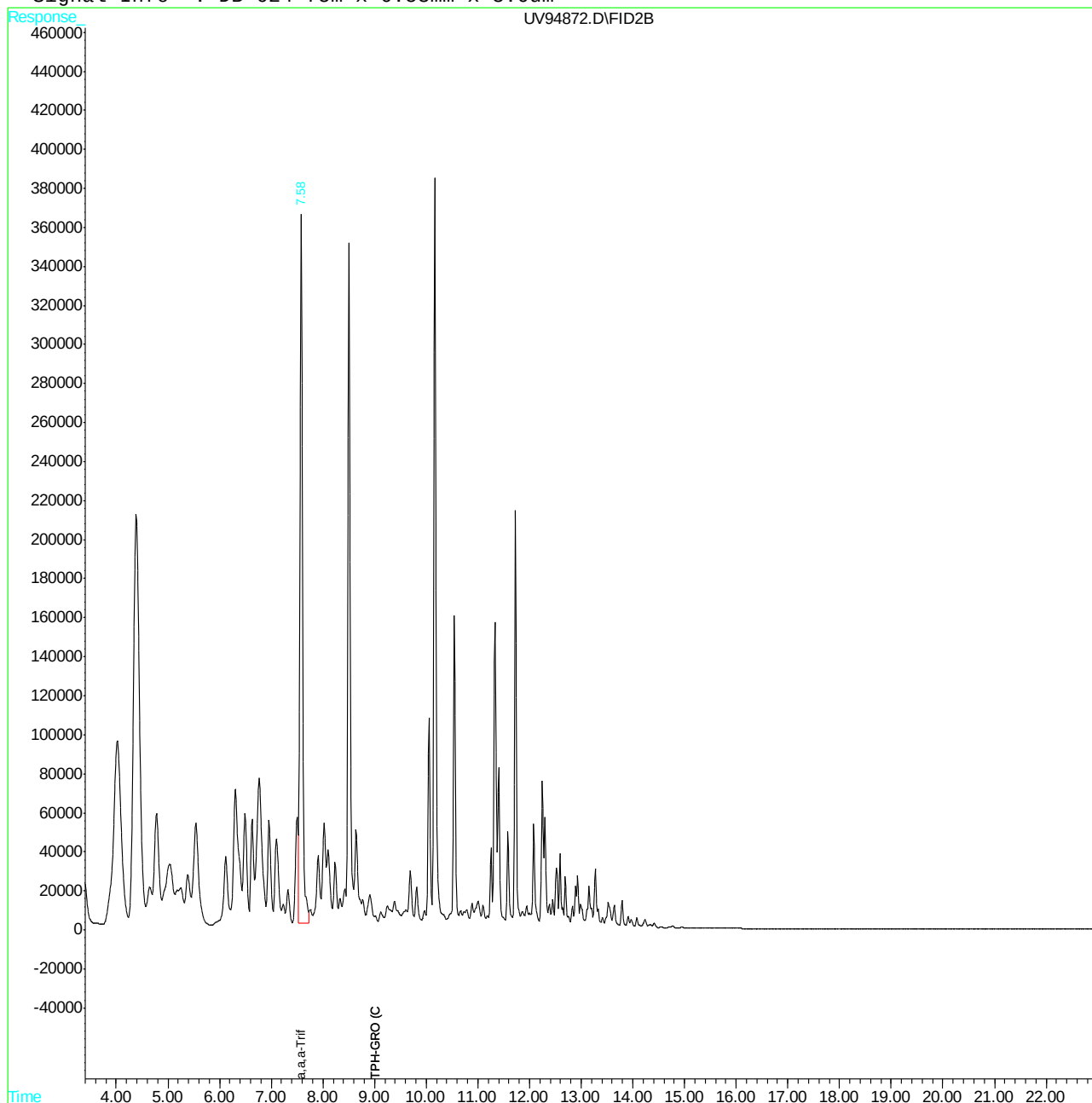
GCUV

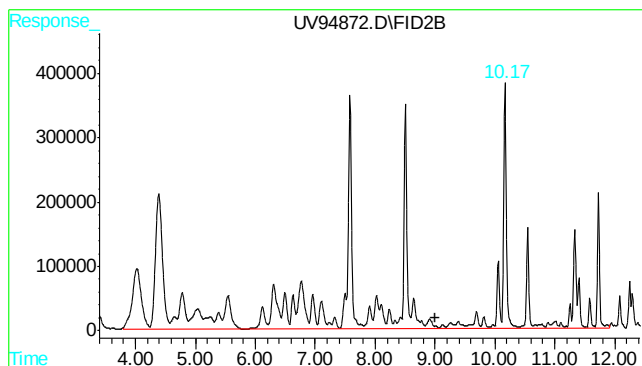
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94872.D Vial: 49
Acq On : 20 Jan 2012 2:35 am Operator: RICHAP
Sample : CC3371-4000 Inst : GCUV
Misc : GC38159, GUV3750,5,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 2:58 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





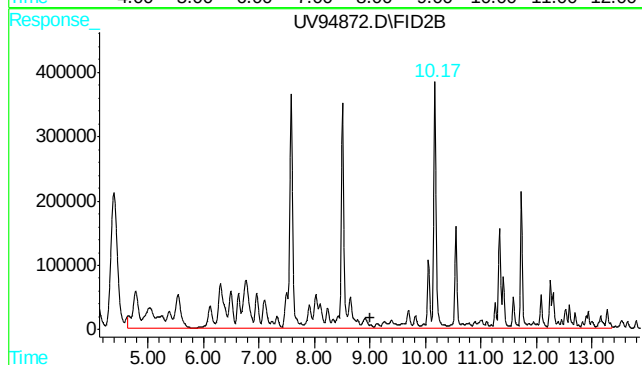
#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min

Delta R.T.: 0.000 min

Response: 126470142

Conc: 4174.25 ug/l m



#2 TPH-GR0 (C6-C12)

R.T.: 9.000 min

Delta R.T.: 0.000 min

Response: 116435613

Conc: 4143.81 ug/l m

10.6.13
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94875.D Vial: 52
Acq On : 20 Jan 2012 5:04 am Operator: RICHAP
Sample : CC3371-4000 Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 5:27 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	13088568	294.497 ug/l
Spiked Amount 300.000		Recovery	= 98.17%
Target Compounds			
1) H TPH-GRO (C6-C10)	9.00	136462200	4504.051 ug/l
2) H TPH-GRO (C6-C12)	9.00	124357402	4425.740 ug/l

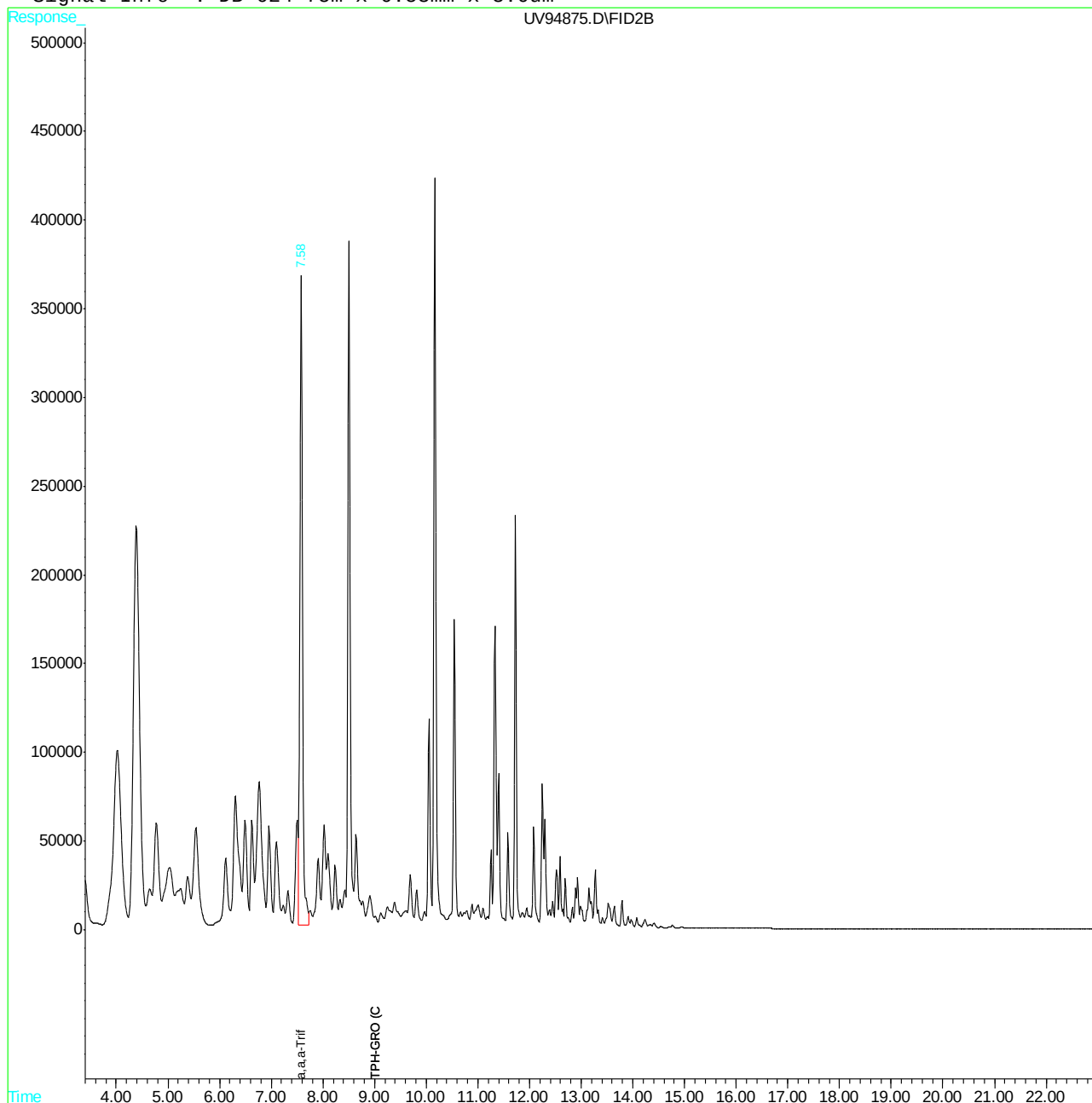
10.6.14
10

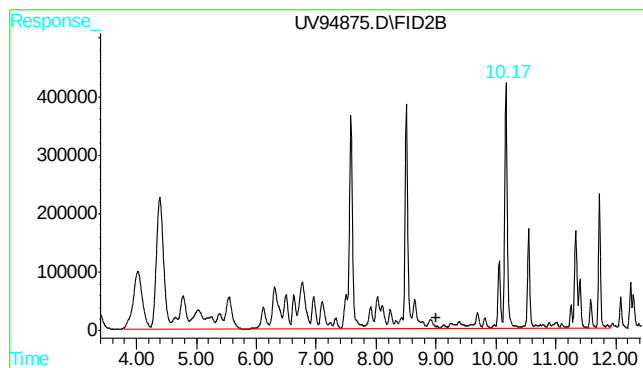
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94875.D Vial: 52
Acq On : 20 Jan 2012 5:04 am Operator: RICHAP
Sample : CC3371-4000 Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 5:27 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

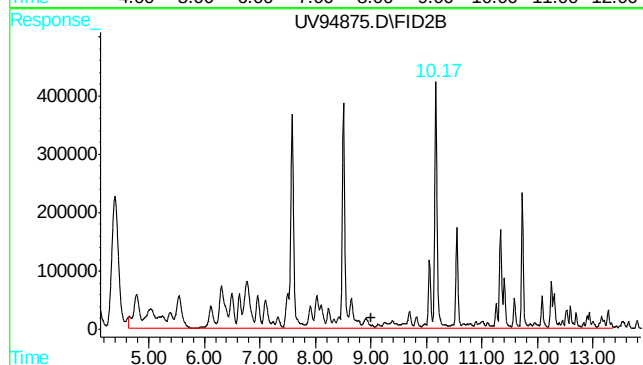
Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 136462200
Conc: 4504.05 ug/l m



#2 TPH-GR0 (C6-C12)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 124357402
Conc: 4425.74 ug/l m

10.6.14
10

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV94886.D Vial: 63
Acq On : 20 Jan 2012 11:30 am Operator: RICHAP
Sample : CC3371-8000 Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 11:54 2012 Quant Results File: MUV3371.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GR0)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Initial Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	7.58	13116534	295.127 ug/l
Spiked Amount 300.000		Recovery =	98.38%
Target Compounds			
1) H TPH-GR0 (C6-C10)	9.00	261321513	8625.139 ug/l
2) H TPH-GR0 (C6-C12)	9.00	237575746	8455.054 ug/l

(f)=RT Delta > 1/2 Window

UV94886.D MUV3371.M

Fri Jan 20 17:04:56 2012

(m)=manual int.

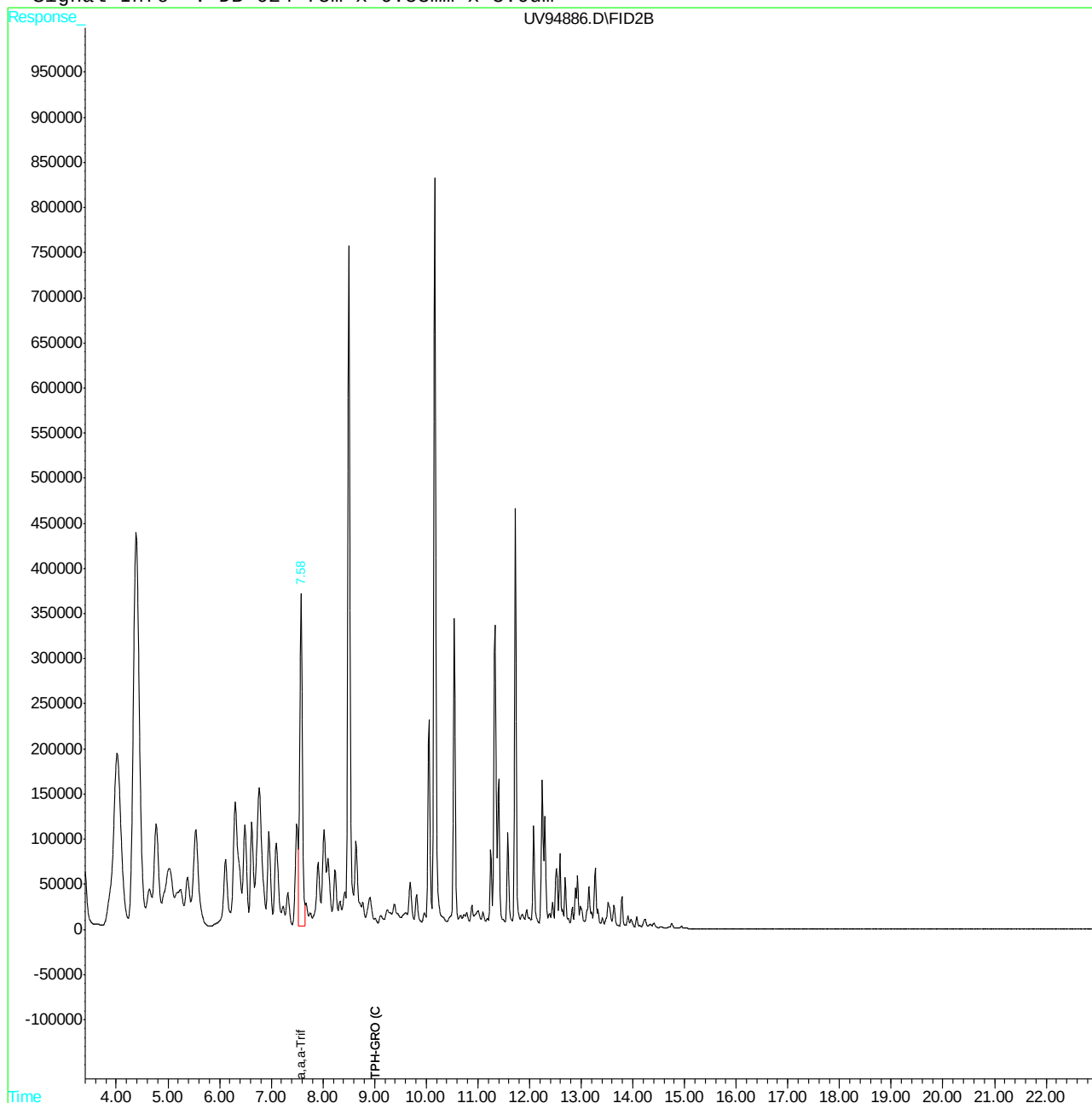
GCUV

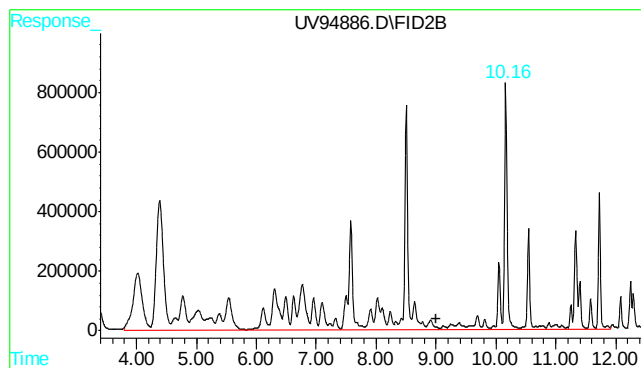
Quantitation Report

Data File : C:\HPCHEM\1\DATA\UV94886.D Vial: 63
Acq On : 20 Jan 2012 11:30 am Operator: RICHAP
Sample : CC3371-8000 Inst : GCUV
Misc : GC38118, GUV3751, 10.0, , 100, 10, 1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 20 11:54 2012 Quant Results File: MUV3371.RES

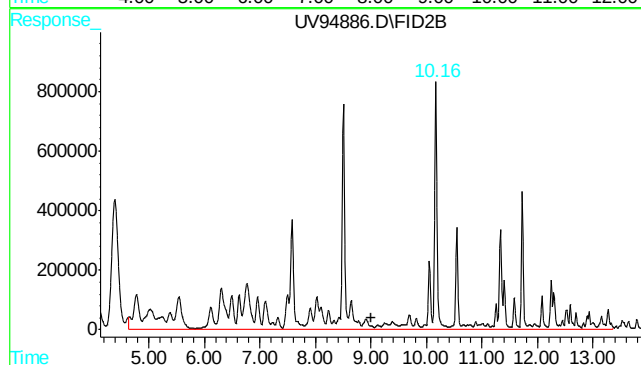
Quant Method : C:\HPCHEM\1\METHODS\MUV3371.M (Chemstation Integrator)
Title : Method SW846 8015B (GRO)
Last Update : Mon Oct 31 10:51:27 2011
Response via : Multiple Level Calibration
DataAcq Meth : MUV3371.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : DB-624 75m x 0.53mm x 3.0um





#1 TPH-GR0 (C6-C10)
R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 261321513
Conc: 8625.14 ug/l m



#2 TPH-GR0 (C6-C12)
R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 237575746
Conc: 8455.05 ug/l m

10.6.15
10

Date: 12/2/10

 Print Analyst Name: NIKITA TRIVEDI

 Analyst Signature: LL
Standard Data

Lot #	Description	Conc.
1010748	130 GRO STDZ	5000ppm

Standard Data

Lot #	Description	Conc.
1010748	104 GLO STD	20,000ppm
1010748	142 GLO STDZ	↓
	142 GLO SURR	2,000ppm
	109 GLO Marker	
	DI 91 MARKER	

 Columns: DB6024/75mm x 53mm x 3um

 Method V201536RO

 Initial Cal. Method MUV 3371

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

 Supervisor Signature: [Signature]

 Date: 12/1/10

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	SU	Status (Data)	Comments	pH* < 2
	85375	IB											—		
	85376	IB											OK		
	85377	RT											OK	PHO MARKER 10ul 1010748109/100MLDW	
	85378	RT											OK	20ul 1010748109/100MLDW	
	85379	IB											—		
	85380	103371-200	GRO 8015										OK	10ul 1010748109 + 10ul 1010748109/100MLDW	
	85381	103371-800											OK	1ul + 5ul/100ML	
	85382	103371-4000											OK	5ul + 5ul/50ML	
	85383	103371-8000											OK	10ul + 7.5ul/50ML	
	85384	103371-20,000											OK	20ul + 7.5ul/50ML	
	85385	103371-30,000											OK	50ul + 10ul/50ML	
	85386	103371-40,000	↓										OK	75ul + 12.5ul/50ML	
	85387	IB											—		
	85388	103371-8000	GRO 8015										OK	20ul 1010748140 + 7.5ul 1010748142/50MLDW	
	85389	103371-8000	↓										OK	80ul 1010748140 + 7.5ul 1010748142/50MLDW	
	85390	IB													

12/2/10

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

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**ACCUTEST.****VOLATILE ANALYSIS LOG**Batch ID: GUV 3745Date: 1/16/2012Print Analyst Name: Pricha PatelAnalyst Signature: Pr

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
V011-1030	131 GRO STD (3%)	20,000ppm
	132 STD (2)	5,000ppm
	140 SURR (7/2)	1500ppm
	126 marker (5/1)	250ppm

Columns: DB624Method 8015 GROInitial Cal. Method MUV3371

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]Date: 1/18/12

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH* < 2
	UV94741	1B										N/A	>100ppb	
	94742	1B										OK		
	94743	RT										OK	10ul GRO marker / some DHA	
	94744	CC3371-4000										OK	1ul GRO STD / some D1/1/20	
	94745	MB1										OK		
	94746	BS										OK	80ul GRO STD (2) / some DHA	
	94747	Ja96945-1	38155 GRO		14		S		1x			OK	unpreserved sample	8 3216
	94748	Ja96945-2			14		S		1x			OK		8 6913
	94749	Ja96945-3			14		S		1x			OK		8 13037
	94750	Ja96945-4	IMS GRO		14/13		S		1x			OK		8
	94751	Ja96945-5	IMS GRO		14/13		S		1x			OK		8
	94752	CC3371-8000										OK	20ul GRO STD / some DHA	
	94753	MB2										OK		
	94754	Ja96945-8	38155 GRO		2		S		1x			OK	unpreserved sample	4 8 11/14/12
	94755	Ja96945-9			14		S		1x			OK		4 8 11/14/12
	94756	Ja96945-7			2		S		1x			OK		8 11/30
	94757	Ja96945-4			14		S		1x			RR	0/0?	8 207

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

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Date: 1/16/2012
 Standard Data

 Print Analyst Name: Richa Patel
 Analyst Signature: RP

Standard Data

Lot #	Description	Conc.

Lot #	Description	Conc.
	- See p. 179 -	

 Columns: DB624

 Method 8015 GRO

 Initial Cal. Method MUV 3371

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

 Supervisor Signature:

 Date: 1/17/12

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH < 2
	1W94758	Ja96834-12	38151 GRO	W	15		S		1x			OK	unpreserved sample	8
	94759	Ja96834-10			15		S		1x			OK		6
	94760	Ja96834-4			15		S		1x			OK		8
	94761	Ja96834-5			15		S		1x			OK		8
	94762	Ja96834-6			15		S		1x			OK		7
	94763	CC3371-4000										OK		
	94764	MB3										OK		
	94765	Ja96834-13	38151 GRO	W	15		S		1x			OK	unpreserved sample	4
	94766	Ja96834-7			15		S		1x			OK		6
	94767	Ja96834-1			15		S		1x			OK		8
	94768	Ja96834-5	38151 GRO		14		S		1x			OK		8
	94769	Ja96834-3	38151 GRO		15		S		1x			OK		8
	94770	Ja96834-2			15		S		1x			OK		8
	94771	Ja96834-11			15		S		1x			OK		8
	94772	CC3371-8000										OK		
	94773	IB										not need		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
 Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

 Form: OR001-9
 Rev. Date: 2/14/2007

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Date: 1/17/2012

 Print Analyst Name: Richa Patel

 Analyst Signature: BP
Standard Data
Standard Data

Lot #	Description	Conc.

Lot #	Description	Conc.
VOL-1035	131 GRS STD (2%)	2000ppm
	132 STD(2)	500ppm
	140 SUR (1/2)	1500ppm
	126 marker (5)	250ppm

 Columns: DB624

 Method 8015 GRC

 Initial Cal. Method MON 3371

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

 Supervisor Signature: [Signature]

 Date: 1/18/12

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Sample Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L	I	S	U	Status (Data)	Comments	pH* <2
	W94782	1B												N/A		
	94783	1B												OK		
	94784	BT												OK		
	94785	CC3371-4000												OK	10ul GRS marker / send D1420	
	94786	MB1												OK	10ul GRS STD / send D1420	
	94787	BS												OK	80ul GRS STD (2) / send D1420	
	94788	Ja96435-1	38120 GRC	S	1		10.0% / 16	100						OK		451
	94789	Ja96446-8A	↓	S	4		10.1% / 16	100						OK		1249
	94790	Ja96446-15A	↓	S	2		10.3% / 16	10	10x					OK	turbidity	998
R	94791	Ja96374-18A	38102 GRC	S	5		10.4% / 10	100						OK	UV94735	307
	94792	Ja96374-18AMS	↓	S	5		10.4% / 10	100						OK	20ul GRS STD / send sample	
	94793	Ja96374-18AMB	↓	S	5		10.4% / 10	100						OK	↓	
	94794	CC3371-8000												OK	20ul GRS STD / send D1420	
	94795	MB2												OK		
	94796	Ja97020-2	38163 GRC	S	2		10.4% / 10	100						OK		
	94797	Ja97020-3	↓	S	2		10.9% / 10	100						OK		472
	94798	Ja97020-4	↓	S	2		10.1% / 10	100						OK		500

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

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Batch ID: G1113747

Print Analyst Name: Richa Patel

Analyst Signature: BP

Standard Data

Standard Data

Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
VCH 163	137 + April 11, 2012	
	- See p. 187 -	

Columns: DB624

Method SGIS GRO

Initial Cal. Method MUR 3371

Supervisor Signature:

Date: 4/18/20

Date: 9/10/12														
R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH* <2
	W94799	Ja97021-3	38163 GRO	S C	1		10.0 /10	100				✓ OK		
	94800	Ja97021-4		↓	1		10.0 /10	100				✓ OK		
	94801	Ja96881-1	38154 GRO	S M E	3		10.0 /10	100				✓ OK		
	94802	Ja96919-1	38157 GRO	S C	2		10.3 /10	100				✓ OK		
	94803	Ja96854-R	38170 GRO	S C	1		10.0 /10	100				✓ OK		
	94804	Ja96854-2R	↓	↓	1		10.0 /10	100	1/20	OK		✓ OK		
	94805	CC3371-4000										✓ OK	10ul GRO STD / some dilute	
	94806	MB3										✓ OK		
R	94807	Ja96374-38	38102 GRO	S E D	3		10.2 /10	100				✓ OK	UV94736	
R	94808	Ja96374-5			3		10.4 /10	50 100	2x			✓ OK	UV94739 Turbidity	
R	94809	Ja96374-35			3		10.2 /10	100	2x			✓ OK	UV94735	
R	94810	Ja96374-26			3		10.0 /10	100				✓ OK	UV94736	
R	94811	Ja96374-48A			5		10.0 /10	100				✓ OK	UV94728	
R	94812	Ja96374-30A			4		10.0 /10	100				✓ OK	UV94739	
	94813	CC3371-8000										✓ OK	20ul GRO STD / some dilute	
Replotted 2012														

Rev. Date: 2/14/2007

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Date: 1/19/2012

 Print Analyst Name: Bicha Patel
 Analyst Signature: BP

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
131	GRO STD (7/3)	20,000ppm
145	STD (2/3)	5,000ppm
140	SURR (7/2)	1,500ppm
126	Marker (9/1)	250ppm

 Columns: DB624

 Method 8015 GRO

 Initial Cal. Method MUV3371

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

 Supervisor Signature: [Signature]

 Date: 1/23/12

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L	I	S	Status (Data)	Comments	pH* <2
	UV94838	IB											not anal 1/19		
	94839	IB											OK		
	94840														
	94841	BT											OK	10ul front water / some DIH ₂ O	
	94841	CC3371-4000											OK	10ul GRO STD / some DIH ₂ O	
	94842	MB1											OK		
	94843	BS											OK	80ul GRO STD (2) / some DIH ₂ O	
	94844	Ja96855-1	38153 GRO	G	4		5		1x				OK		5
	94845	Ja97121-1	38164 GRO	G	11		5		1x				OK		1
R	94846	Ja96945-4	38155 GRO	G	14		5		1x				OK	UV94857	8
	94847	Ja96945-6		G	3		1.0 / 50		SOX				OK	sample dirty	10
	94848	Ja96855-1MS											OK	10ul GRO STD / some DIH ₂ O	
	94849	Ja96855-1RO											OK		
	94850	CC3371-8000											OK	20ul GRO STD / some DIH ₂ O	
	94851	MB2											OK		
	94852	Ja86878-3	38153 GRO	E	3		5		1x				OK		✓
	94853	Ja96945-6	38155 GRO	G	3		1.0 / 50		SOX				OK		10
	94854	CC3371-4000											OK	10ul GRO STD / some DIH ₂ O	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

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Date: 1/19/2012

 Print Analyst Name: Bpcha Patel
 Analyst Signature: BP

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.

 Columns: DB624

 Method 8015 GRC

 Initial Cal. Method MUV3371

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____

 Date: 1/24/12

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	S S	U U	Status (Data)	Comments	pH* < 2
	W94855	MB3											✓ OK		
	94856	Ja96855-2	38153 GRC	4			S		1x				✓ OK		33461
	94857	Ja96855-3			4		S		1x				✓ OK		1121
	94858	Ja96855-4			4		S		1x				✓ OK		1188
	94859	Ja96855-5	50F		4		S		1x				✓ OK	RX10	6892
	94860	Ja96855-6			4		S		1x				✓ OK		19624
	94861	Ja96855-7			4		S		1x				✓ OK		
	94862	Ja97126-2	38169 GRC	5			S		1x				✓ OK		
	94863	Ja97126-3			5		S		1x				✓ OK		
	94864	Ja97126-4			5		S		1x				✓ OK		
	94865	CC3371-800											✓ OK	20ul GRC 5m/5m/1m/1m	
	94866	MB4											✓ OK		
	94867	Ja972865	38181 GRC	1			S		1x				✓ OK		
	94868	Ja97126-1	38169 GRC	5			S		1x				✓ OK		
	94869	Ja97291-1	38184 GRC	8			S		1x				✓ OK		
	94870	Ja9444-1	38159 GRC	3			S		1x				✓ OK		
	94871	Ja96855-1			1		S		1x				✓ OK		

= Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
 Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

Strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
 computer miscalculation; 4 = analyst's correction error

 OR001-9
 Date: 2/14/2007

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Batch ID: GUV 3750

Print Analyst Name: Richa Patel

Analyst Signature: BP

Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	- See p. 197 -	

Columns: DB 624

Method 8015 GRC

Initial Cal. Method *msu 3371*

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date: 1/23/12

[illegible]

TX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * If pH > 2, comment on sample result.

Strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

OR001-9

✓ Date: 2/14/2007

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Date: 1/19/2002

Print Analyst Name: Richa Patel

Analyst Signature: RP

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
101-1030	131 GRC STD	20,000 ppb
	145 STD(2)	5000 ppb
	146 SURV	15000 ppb
	126 marker	2500 ppb

Columns: DB624

Method 8015 GRC

Initial Cal. Method MUV 3371

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 1/21/02

Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH* <2
1194873	IB										✓OK		
94874	RP										✓OK	10/14 GRC STD / sample	
94875	CC 3371-4000										✓OK	10/14 GRC STD / sample	
94876	MB1										✓OK		
94877	BS										✓OK	8015 GRC STD / sample	
94878	JA96480-23	38118 GRC		2		10.0/10	100				✓OK		
94879	JA96480-24			2		10.0/10	100				✓OK		
94880	JA96480-25			2		10.0/10	100				✓OK		
94881	JA96480-26			2		10.3/10	100				✓OK		
94882	JA96480-27			2		10.1/10	100				✓OK		
94883	JA96480-28			2		10.0/10	100				✓OK	20 µl STD / 10 ml sample	
94884	JA96480-29			1		10.0/10	50				✓OK	10/14 GRC STD / sample	
94885	JA96480-2345			2		10.0/10	100				✓OK	20 µl STD / 10 ml sample	
94886	CC 3371-8000										✓OK	20 µl GRC STD / sample	
94887	MB2												
94888	JA96538-2	38123 GRC		3		10.0/10	100				✓OK	1/20	
94889	JA96538-3			3		10.0/10	100					Re-sample	

Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.

Strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

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Date: 1/19/2012

 Print Analyst Name: Richa Patel

 Analyst Signature: RP
Standard Data
Standard Data

Lot #	Description	Conc.

Lot #	Description	Conc.
	- See p. 203 -	

 Columns: DB62U

 Method: 8015.6120

 Initial Cal. Method: MUV 3371

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____

Date: _____

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	SU	Status (Data)	Comments	pH* <2
	W94890	Ja96539-2	38123 GPO		3		10.0/16	100							
	94891	Ja96539-3			3		10.0/16	100							
	94892	Ja97161-2	38171 GPO		2		10.0/10	100							
	94893	Ja97161-3			2		10.2/10	100							
	94894	Ja97161-4			2		10.5/10	100							
	94895	Ja97161-5			2		10.5/10	100							
	94896	Ja97161-6			2		10.0/10	100							
	94897	CC3371-4100												10ml H2O/31D/sent	
	94898	MR3													
	94899	Ja97161-7	38171 GPO		2		10.0/10	100							
	94900	Ja97162-2			2		10.0/10	100							
	94901	Ja97162-3			2		10.0/10	100							
	94902	Ja97162-4			2		10.5/10	100							
	94903	Ja97162-5			2		10.5/10	100							
	94904	CC3371-8000												20ml H2O/31D/sent	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * If pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

Rev. Date: 2/14/2007

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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JA96854
Account: LANGAN Langan Engineering & Environmental
Project: 111 Washington Street, New York, NY

Sample: JA96854-1		Analyzed: 11-JAN-12 by WR		Method: ASTM 4643-00	
ClientID: SS-1 001					
Wet Weight (Total)	36.03	g			
Tare Weight	26.13	g			
Dry Weight (Total)	33.34	g			
Solids, Percent	72.8	%			
Sample: JA96854-2		Analyzed: 11-JAN-12 by WR		Method: ASTM 4643-00	
ClientID: SS-2 002					
Wet Weight (Total)	25.17	g			
Tare Weight	18.53	g			
Dry Weight (Total)	24.19	g			
Solids, Percent	85.2	%			