FIBERS SITE GROUP

August 10, 2018

Via Email Electronic Copy

Adalberto Bosque, PhD, MBA, REM, CEA
Response and Remediation Branch
U.S Environmental Protection Agency
City View Plaza II - Suite 7000
48 RD, 165 Km. 1.2
Guaynabo, PR 00968-8069

Subject: RD/RA Monthly Report – July 2018
Fibers Public Supply Wells Site
Guayama, Puerto Rico

Dear Mr. Bosque:

On behalf of the Fibers Public Supply Wells Site Settling Defendants, we are submitting the attached RD/RA Monthly Report prepared pursuant to the Consent Decree (Civil Action No. 92-2486) in the matter of *Unites States v. Anaquest Caribe, Inc. et al*, Section IX, Paragraph 30, Reporting Requirements.

Please feel free to contact Mr. James Kirschner of ARCADIS at (602) 797-4519 or me at (724) 544-4874 if you have any questions or comments regarding this submittal.

Sincerely,

Joe Biss
Fibers Site Group Project Coordinator
EHS Support LLC

Copies:

Chief, New York/Caribbean Superfund Branch, Attn. Teresita Rodriguez - via email only
Ms. Margo Ludmer, Assistant Regional Counsel – via email only
Chief, Environmental Enforcement Division, U.S. Department of Justice (DOJ #90-11-2-768)
Amarilis Rodriguez Mendez, State Remedial Project Manager, Puerto Rico Environmental Quality Board - via email only
Ms. Katherine Mishkin, Hydrogeologist, USEPA Superfund Technical Support Section – via email only
Ms. Enid Diaz, Departmento de Recursos Naturales y Ambientales
Mr. Jorge Morales, PRIDCO - via email only
Mr. Joel Melendez Rodriguez, PRIDCO - via email only
Ms. Ana Palou Balsa, PRIDCO – via email only
Mr. Dan Vineyard, Jackson Walker- via email only
James Kirschner, Arcadis - via email only

RD/RA Monthly Report – July 2018
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

(a) Description of actions which have been taken toward achieving compliance with this Decree.

Fibers Air Stripping System

The Fibers groundwater extraction and treatment system (GWETS) was operational for approximately 99% of the time during July 2018. The GWETS had three shut downs due to equipment issues, three shut downs due to GWETS maintenance, and four automated shut downs due to power outages. The GWETS was restarted no later than the next business day in each instance. Recovery well RW-5 shut down and restarted several times. The recovery well control panel RWCP-5 will be evaluated.

A summary of the daily treatment system operating records is presented in Table 1. The GWETS average flow rates are depicted on Figure 1. The GWETS operated at an average flow rate of 304 gallons per minute (gpm) and treated approximately 13.57 million gallons of water. To date (since May 1999), approximately 3.24 billion gallons of water have been treated at the Fibers Site. The influent flow meter appears to be faulty as the data indicated an average flow rate of 243 gpm versus 304 gpm when the sum of the individual readings for RW-2, RW-4 and RW-5 were totaled (see Table 1). Accordingly, the GWETS average influent flow rate was calculated using the summation of the average groundwater extraction rates from the three recovery wells (RW-2, RW-4, and RW-5). This calculated flow rate is consistent with previous measured flow rates. The influent flow meter will be evaluated for replacement.

(b) Summary of all sampling results and tests, and all other data received or generated by Settling Defendants.

Arcadis U.S., Inc. (Arcadis) collected split groundwater influent and effluent samples on July 3, 2018. The samples were submitted and analyzed by Pace Analytical Services, Inc. (Pace) in St. Rose, Louisiana and Environmental Quality Laboratories, Inc. (EQLAB) in Bayamon, Puerto Rico. A summary of the July 3, 2018 GWETS Laboratory Analytical Results is provided in Table 2. A summary of GWETS influent groundwater concentrations of tetrachloroethene (PCE) and total haloethers, as reported by Pace, is depicted on Figures 2 and 3, respectively.

Arcadis performed a data quality assessment (validation) of the laboratory analytical results reported by Pace. Results are summarized in the Data Review Report #30168R and provided as Attachment 1. A copy of the chain of custody and annotated sample analysis data sheets are provided as an attachment to the Data Review Report. A copy of the complete Pace Laboratory Analytical Report #2079810 is provided as Attachment 2.

Arcadis performed a data quality assessment (validation) of the laboratory analytical results reported by EQLAB. Results are summarized in the Data Review Report #30267R and provided as Attachment 3. A copy of the chain of custody and annotated sample analysis data sheets are provided as an attachment to the Data Review Report. A copy of the complete EQLAB Laboratory Analytical Report #256578 (WO 655-04-26) is provided as Attachment 4.

A copy of the GWETS Sampling and Monitoring Field Form, documenting sample collection information, individual flow rates at the three groundwater extraction wells and treatment system parameters is provided as Attachment 5.

(c) List of all work plans, plans and other deliverables completed and submitted.

None for this reporting period.

(d) Description of all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next six weeks.

The Fibers Group anticipates the completion and submittal of an updated Quality Assurance Project Plan (QAPP) to the United States Environmental Protection Agency (USEPA) within the next six weeks.

The second semi-annual groundwater monitoring and sampling report of 2017 is anticipated to be submitted to the USEPA in the next six weeks.

(e) Information regarding the percentage completion, unresolved delays encountered or anticipated.

Supplemental Subsurface Soil Investigations – In progress
Construction Activities – 100% complete.
System Start-Up – 100% complete.
Start-Up Performance Monitoring – 100% complete.
Long-Term Operation & Maintenance Period – In progress.

(f) List of any modification to work plans or other schedules the Settling Defendants have proposed.

None.

(g) Description of activities undertaken in support of the Community Relations Plan.

No support activities have been requested for the next planning period.

(h) Actions undertaken to address outside parties concerns.

No concerns from outside parties were encountered during this reporting period.

Tables

Table 1
Summary of Daily Treatment System Operating Records - July 2018
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Recording Date	Influent Flow (gpm) [1]	Effluent Flow (gpm) [2]	RW-2 (gpm) [3]	RW-4 (gpm) [4]	RW-5 (gpm) [5]	pH [6]	Comments
7/1/2018	260	343	100	145	80	8.2	
7/2/2018	185	243	72	103	57	8.2	GWETS maintenance; GWETS restarted.
7/3/2018	277	365	109	153	80	8.3	GWETS maintenance.
7/4/2018	285	376	115	155	80	8.2	GWETS maintenance.
7/5/2018	285	376	115	155	80	8.2	
7/6/2018	285	376	115	155	80	8.2	GWETS maintenance.
7/7/2018	286	376	115	155	80	8.2	Power outage. GWETS autorestarted. GWETS maintenance.
7/8/2018	286	377	115	155	80	8.2	
7/9/2018	179	238	73	98	51	8.4	GWETS down due to equipment issues.
7/10/2018	184	243	78	104	47	8.3	GWETS restarted. GWETS maintenance.
7/11/2018	287	378	115	155	80	8.1	Power outage. GWETS autorestarted. GWETS maintenance.
7/12/2018	263	347	106	142	74	8.1	GWETS shut down due to equipment issues. GWETS restarted. GWETS maintenance.
7/13/2018	287	380	115	155	80	8.1	
7/14/2018	287	379	115	155	80	8.1	Power outage. GWETS autorestarted.
7/15/2018	287	380	115	155	80	8.1	
7/16/2018	213	281	87	117	60	8.3	GWETS maintenance. GWETS restarted
7/17/2018	261	345	115	155	55	8.3	GWETS maintenance. RW-5 down.
7/18/2018	252	330	115	155	44	8.3	GWETS maintenance. RW-5 restarted.
7/19/2018	227	305	115	155	19	8.1	RW-5 down. Power outage. GWETS autorestarted.
7/20/2018	226	302	115	155	31	8.1	RW-5 down. RW-5 restarted.
7/21/2018	210	279	115	155	-	8.1	RW-5 down.
7/22/2018	210	280	115	155	-	8.1	RW-5 down.
7/23/2018	247	331	111	149	41	8.2	GWETS shut down due to equipment issues. GWETS restarted. RW-5 restarted.
7/24/2018	244	328	110	149	41	8.1	RW-5 down. RW-5 restarted.
7/25/2018	211	279	115	155	-	8.1	RW-5 down.
7/26/2018	241	319	115	155	31	8.1	RW-5 restarted.
7/27/2018	238	316	115	155	31	8.1	RW-5 down.
7/28/2018	211	281	115	155	13	8.1	RW-5 down.
7/29/2018	211	281	115	155	-	8.1	RW-5 down. GWETS maintenance.
7/30/2018	174	230	88	117	20	8.3	RW-5 down. GWETS maintenance. GWETS restarted.
7/31/2018	241	324	115	155	37	8.1	RW-5 restarted. GWETS maintenance.
Monthly Average	243	322	108	146	50	8.2	

Notes:

Flow rates are 24-hour daily average.

gpm = gallons per minute.

[1] = Recorded from instrument FIT-101.

[2] = Recorded from instrument FIT-301.

[3] = Recorded from instrument RW2 FIT.

[4] = Recorded from instrument RW4 FIT.

[5] = Recorded from instrument RW5 FIT.

[6] = Recorded from instrument pHIT-201A.

Table 2
Summary of Treatment System Laboratory Analytical Results – Split Samples
Collected at the Treatment System Compound July 3, 2018
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Fibers Groundwater Extraction and Treatment System

Laboratory analytical results (split samples) for water samples collected at the influent and effluent sample tap locations from the Fibers Groundwater Extraction and Treatment System on July 3, 2018 are presented below. Split samples were submitted to Pace Analytical Services, Inc. (PACE) in St. Rose, Louisiana and to Environmental Quality Laboratories, Inc. (EQLAB) in Bayamon, Puerto Rico. Analytical results from both laboratories are presented below. The treatment system average influent flow rate at the time the samples were collected was 270 gallons per minute (gpm). Laboratory analytical reports from PACE and EQLAB did not vary significantly. Acetone was not detected at or above the laboratory reporting limit in the split samples collected and analyzed. Bromoform was detected above the laboratory reporting limit in the effluent and effluent duplicate samples collected and analyzed. Bromoform was not detected in the influent or trip blank samples, so are likely due to laboratory cross contamination (compound typically used as laboratory reagent). A copy of the PACE and EQLAB Analytical Reports are included in this report as Attachment 2 and Attachment 4, respectively.

	VOC (µg/L)							
	Sample ID							
Compound	EFF-20180703		EFFDUP-20180703		INF-20180703		TB-20180703	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
Tetrachloroethene	ND	ND	ND	ND	6.8	3.80	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	NA	R	NA	ND	NA	ND	NA	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NA	ND	NA	ND	NA	ND	NA	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	1.1	19.1 J	1.1	11.1 J	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	BDL	ND	3.40	ND	ND	ND	ND
Epichlorohydrin	NA	ND	NA	ND	NA	ND	NA	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NA	ND	NA	ND	NA	ND	NA	ND
Iodomethane	NA	15.0 UJ	NA	ND	NA	ND	NA	ND

	VOC (µg/L)							
	Sample ID							
Compound	EFF-20180703		EFFDUP-20180703		INF-20180703		TB-20180703	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
Isopropylbenzene	NA	ND	NA	ND	NA	ND	NA	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	NA	ND	NA	ND	NA	ND	NA	ND
n-Propylbenzene	NA	ND	NA	ND	NA	ND	NA	ND
o-Dichlorobenzene	NA	ND	NA	ND	NA	ND	NA	ND
sec-Butylbenzene	NA	ND	NA	ND	NA	ND	NA	ND
tert-Butylbenzene	NA	ND	NA	ND	NA	ND	NA	ND
Trans-1,3-dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,4-Dichloro-2-butene	NA	ND	NA	ND	NA	ND	NA	ND
Styrene	R	R	ND	ND	ND	ND	ND	ND
Tetrahydrofuran	NA	ND	NA	ND	NA	ND	NA	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NA	R	NA	R	NA	R	NA	R
Naphthalene	NA	ND	NA	ND	NA	ND	NA	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	NA	ND	NA	ND	NA	ND	NA	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	NA	ND	NA	ND	NA	ND	NA	ND
1,2,3-Trichlorobenzene	NA	ND	NA	ND	NA	ND	NA	ND
1,2,3-Trichlororopane	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NA	ND	NA	ND	NA	ND	NA	ND
1,2,4-Trimethylbenzene	NA	ND	NA	ND	NA	ND	NA	ND
1,2-Dibromo-3-chloropropane	NA	ND	NA	ND	NA	ND	NA	ND
1,2-Dibromoethane	NA	ND	NA	ND	NA	ND	NA	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	NA	R	NA	ND	NA	ND	NA	ND
1,3-Dichlorobenzene	NA	ND	NA	ND	NA	ND	NA	ND
1,3-Dichloropropane	NA	ND	NA	ND	NA	ND	NA	ND
1,4-Dichlorobenzene	NA	ND	NA	ND	NA	ND	NA	ND
1-Chlorohexane	NA	ND	NA	ND	NA	ND	NA	ND
2-Chlorotoluene	NA	ND	NA	ND	NA	ND	NA	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	NA	ND	NA	ND	NA	ND	NA	ND
4-Isopropyltoluene	NA	ND	NA	ND	NA	ND	NA	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND
Enflurane	ND	NA	ND	NA	1.1	NA	ND	NA
Haloether 229	ND	NA	ND	NA	15.6	NA	ND	NA

	VOC (µg/L)							
	Sample ID							
Compound	EFF-20180703		EFFDUP-20180703		INF-20180703		TB-20180703	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
Haloether 406	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 421	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 427	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 428	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 508	ND	NA	ND	NA	25.5	NA	ND	NA
Haloether 528	ND	NA	ND	NA	1.5	NA	ND	NA
Halomar	ND	NA	ND	NA	ND	NA	ND	NA
Isoflurane	ND	NA	ND	NA	61.7	NA	ND	NA
Methoxyflurane	ND	NA	ND	NA	ND	NA	ND	NA
Total Haloethers	ND	NA	ND	NA	105	NA	ND	NA
Other VOC	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
VOC = volatile organic compounds.
µg/L = micrograms per liter.
EFF = effluent sample.
EFFDUP = effluent duplicate sample.
INF = influent sample.
TB = trip blank.
ND = not detected at or above laboratory reporting limit.
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.
UJ = The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
R = rejected.
NA = not analyzed.
BDL = below detection limit

Figures

Figure 1
Fibers Public Supply Wells Superfund Site
Summary of Treatment System Flow Rates

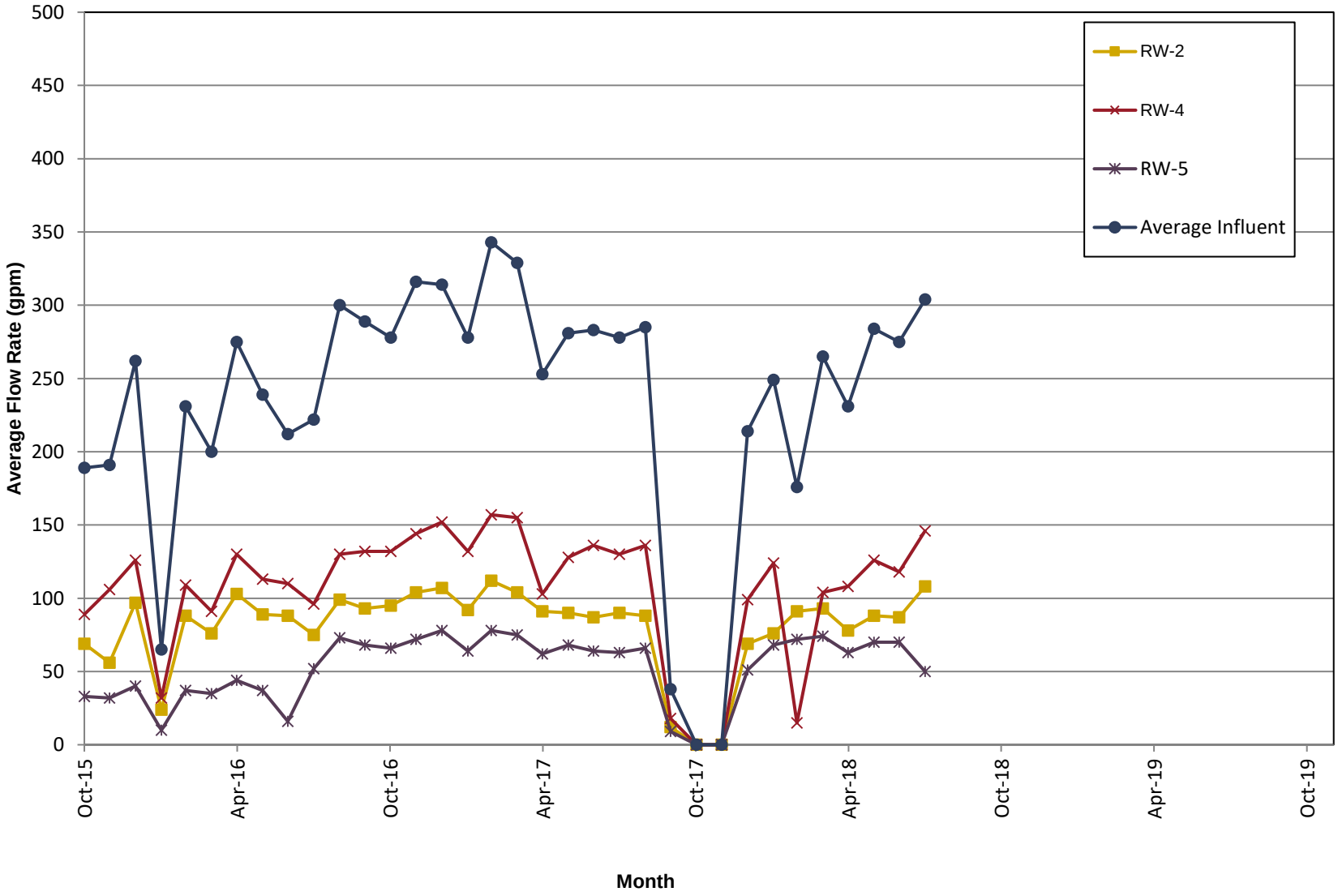


Figure 2
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Tetrachloroethene (PCE) Concentrations

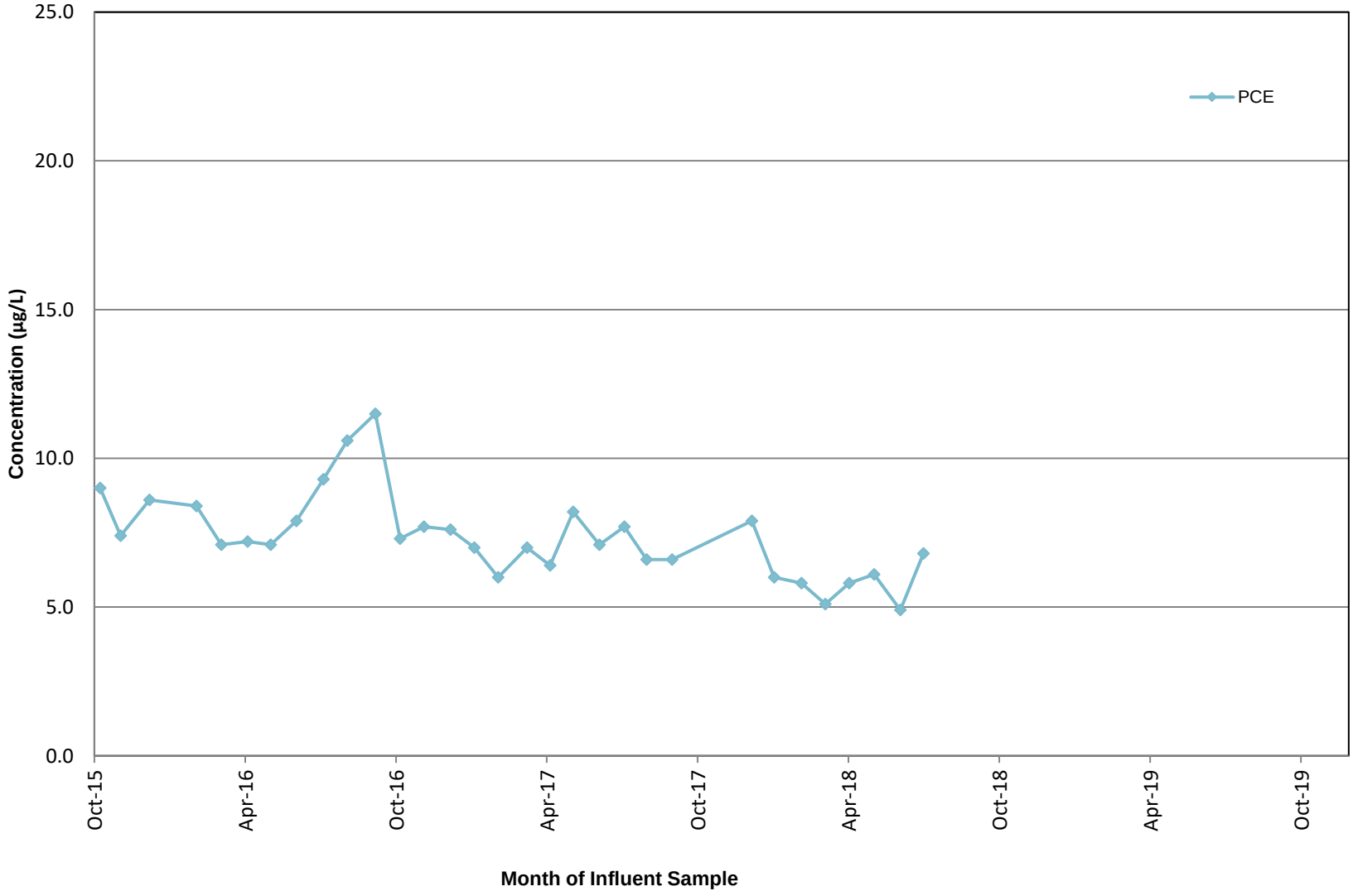
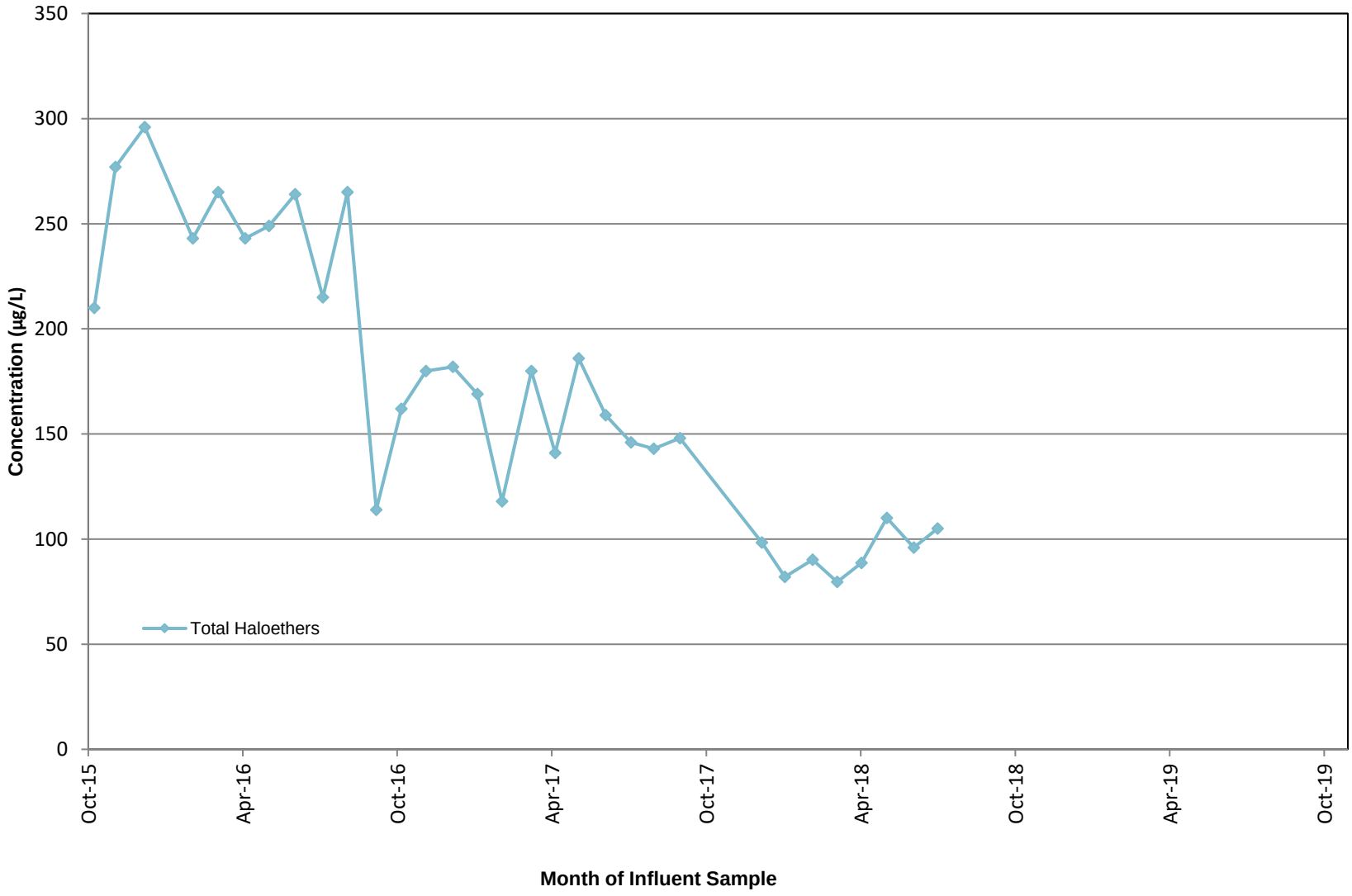


Figure 3
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Total Haloethers Concentrations



Attachment 1
Data Review Report #30168R

ARCADIS Design & Consultancy for natural and built assets

Fibers Group

DATA REVIEW

GUAYAMA, PUERTO RICO

Volatile Analyses

SDG #2079810

Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report #30168R
Review Level: Tier II
Project: CO001911.0007.1805A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2079810 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
TB-20180703	2079810001	Water	07/03/2018		X				
INF-20180703	2079810002	Water	07/03/2018		X				
EFF-20180703	2079810003	Water	07/03/2018		X				
EFFDUP-20180703	2079810004	Water	07/03/2018	EFF-20180605	X				

Notes:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location EFF-20180703 for VOCs.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)	X				
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:
QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the RL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
EFF-20180703	Chloromethane	>UL	>UL
	Haloether 427		
	Tetrachloroethene	>UL	AC
	Styrene	<10%	<10%

Note:
AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

5. Laboratory Control Sample

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
EFF-20180703/EFFDUP-20180703	Bromoform	1.1	1.1	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: Joseph C. Houser

DATE: July 17, 2018

PEER REVIEW: Dennis Capria

DATE: July 19, 2018

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
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St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: TB-20180703 **Lab ID: 2079810001** Collected: 07/03/18 00:00 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		07/09/18 20:30	67-64-1	
Acrolein	ND	ug/L	8.0	1		07/09/18 20:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		07/09/18 20:30	107-13-1	
Benzene	ND	ug/L	1.0	1		07/09/18 20:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		07/09/18 20:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/09/18 20:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/09/18 20:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		07/09/18 20:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		07/09/18 20:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/09/18 20:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/09/18 20:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/09/18 20:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/09/18 20:30	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/09/18 20:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		07/09/18 20:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		07/09/18 20:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/09/18 20:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:30	10061-02-6	
Enflurane	ND	ug/L	1.0	1		07/09/18 20:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		07/09/18 20:30	100-41-4	
Haloether 229	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 406	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 421	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 427	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 428	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 508	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 528	ND	ug/L	1.0	1		07/09/18 20:30		
Halomar	ND	ug/L	1.0	1		07/09/18 20:30		
2-Hexanone	ND	ug/L	2.0	1		07/09/18 20:30	591-78-6	
Isoflurane	ND	ug/L	1.0	1		07/09/18 20:30		
Methoxyflurane	ND	ug/L	1.0	1		07/09/18 20:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		07/09/18 20:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		07/09/18 20:30	108-10-1	
Styrene	ND	ug/L	1.0	1		07/09/18 20:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/09/18 20:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/09/18 20:30	127-18-4	
Toluene	ND	ug/L	1.0	1		07/09/18 20:30	108-88-3	
Total Haloether	ND	ug/L	1.0	1		07/09/18 20:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/09/18 20:30	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: TB-20180703 **Lab ID: 2079810001** Collected: 07/03/18 00:00 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		07/09/18 20:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/09/18 20:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/09/18 20:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		07/09/18 20:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		07/09/18 20:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/09/18 20:30	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		07/09/18 20:30	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	68-124	1		07/09/18 20:30	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		07/09/18 20:30	1868-53-7	

Sample: INF-20180703 **Lab ID: 2079810002** Collected: 07/03/18 08:38 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		07/09/18 21:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		07/09/18 21:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		07/09/18 21:07	107-13-1	
Benzene	ND	ug/L	1.0	1		07/09/18 21:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		07/09/18 21:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/09/18 21:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/09/18 21:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		07/09/18 21:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		07/09/18 21:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/09/18 21:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/09/18 21:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/09/18 21:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/09/18 21:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/09/18 21:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		07/09/18 21:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		07/09/18 21:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/09/18 21:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/09/18 21:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/09/18 21:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 21:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 21:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/09/18 21:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 21:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 21:07	10061-02-6	
Enflurane	**1.1**	ug/L	1.0	1		07/09/18 21:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		07/09/18 21:07	100-41-4	
Haloether 229	**15.6**	ug/L	1.0	1		07/09/18 21:07		
Haloether 406	ND	ug/L	1.0	1		07/09/18 21:07		
Haloether 421	ND	ug/L	1.0	1		07/09/18 21:07		
Haloether 427	ND	ug/L	1.0	1		07/09/18 21:07		

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: INF-20180703 **Lab ID: 2079810002** Collected: 07/03/18 08:38 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		07/09/18 21:07		
Haloether 508	**25.5**	ug/L	1.0	1		07/09/18 21:07		
Haloether 528	**1.5**	ug/L	1.0	1		07/09/18 21:07		
Halomar	ND	ug/L	1.0	1		07/09/18 21:07		
2-Hexanone	ND	ug/L	2.0	1		07/09/18 21:07	591-78-6	
Isoflurane	**61.7**	ug/L	1.0	1		07/09/18 21:07		
Methoxyflurane	ND	ug/L	1.0	1		07/09/18 21:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		07/09/18 21:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		07/09/18 21:07	108-10-1	
Styrene	ND	ug/L	1.0	1		07/09/18 21:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/09/18 21:07	79-34-5	
Tetrachloroethene	**6.8**	ug/L	1.0	1		07/09/18 21:07	127-18-4	
Toluene	ND	ug/L	1.0	1		07/09/18 21:07	108-88-3	
Total Haloether	**105**	ug/L	1.0	1		07/09/18 21:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/09/18 21:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/09/18 21:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/09/18 21:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/09/18 21:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/09/18 21:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/09/18 21:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		07/09/18 21:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		07/09/18 21:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/09/18 21:07	95-47-6	
Surrogates								
Toluene-d8 (S)	93	%.	79-119	1		07/09/18 21:07	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		07/09/18 21:07	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		07/09/18 21:07	1868-53-7	

Sample: EFF-20180703 **Lab ID: 2079810003** Collected: 07/03/18 08:59 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		07/09/18 20:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		07/09/18 20:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		07/09/18 20:12	107-13-1	
Benzene	ND	ug/L	1.0	1		07/09/18 20:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		07/09/18 20:12	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		07/09/18 20:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/09/18 20:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		07/09/18 20:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		07/09/18 20:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/09/18 20:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/09/18 20:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/09/18 20:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/09/18 20:12	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: EFF-20180703 **Lab ID: 2079810003** Collected: 07/03/18 08:59 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		07/09/18 20:12	74-87-3	~~M1~~
Dibromochloromethane	ND	ug/L	1.0	1		07/09/18 20:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		07/09/18 20:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/09/18 20:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		07/09/18 20:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		07/09/18 20:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 406	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 421	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 427	ND	ug/L	1.0	1		07/09/18 20:12		~~M1~~
Haloether 428	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 508	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 528	ND	ug/L	1.0	1		07/09/18 20:12		
Halomar	ND	ug/L	1.0	1		07/09/18 20:12		
2-Hexanone	ND	ug/L	2.0	1		07/09/18 20:12	591-78-6	
Isoflurane	ND	ug/L	1.0	1		07/09/18 20:12		
Methoxyflurane	ND	ug/L	1.0	1		07/09/18 20:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		07/09/18 20:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		07/09/18 20:12	108-10-1	
Styrene	~~ND~~	~~ug/L~~	~~1.0~~	~~1~~		~~07/09/18 20:12~~	~~100-42-5~~	~~M1~~ R
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/09/18 20:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/09/18 20:12	127-18-4	~~M1~~
Toluene	ND	ug/L	1.0	1		07/09/18 20:12	108-88-3	
Total Haloether	ND	ug/L	1.0	1		07/09/18 20:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/09/18 20:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/09/18 20:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/09/18 20:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/09/18 20:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		07/09/18 20:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		07/09/18 20:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/09/18 20:12	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		07/09/18 20:12	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		07/09/18 20:12	460-00-4	
Dibromofluoromethane (S)	91	%.	72-126	1		07/09/18 20:12	1868-53-7	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: EFFDUP-20180703 **Lab ID: 2079810004** Collected: 07/03/18 08:59 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		07/09/18 20:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		07/09/18 20:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		07/09/18 20:48	107-13-1	
Benzene	ND	ug/L	1.0	1		07/09/18 20:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		07/09/18 20:48	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		07/09/18 20:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/09/18 20:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		07/09/18 20:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		07/09/18 20:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/09/18 20:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/09/18 20:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/09/18 20:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/09/18 20:48	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/09/18 20:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		07/09/18 20:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		07/09/18 20:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/09/18 20:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:48	10061-02-6	
Enflurane	ND	ug/L	1.0	1		07/09/18 20:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		07/09/18 20:48	100-41-4	
Haloether 229	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 406	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 421	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 427	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 428	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 508	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 528	ND	ug/L	1.0	1		07/09/18 20:48		
Halomar	ND	ug/L	1.0	1		07/09/18 20:48		
2-Hexanone	ND	ug/L	2.0	1		07/09/18 20:48	591-78-6	
Isoflurane	ND	ug/L	1.0	1		07/09/18 20:48		
Methoxyflurane	ND	ug/L	1.0	1		07/09/18 20:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		07/09/18 20:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		07/09/18 20:48	108-10-1	
Styrene	ND	ug/L	1.0	1		07/09/18 20:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/09/18 20:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/09/18 20:48	127-18-4	
Toluene	ND	ug/L	1.0	1		07/09/18 20:48	108-88-3	
Total Haloether	ND	ug/L	1.0	1		07/09/18 20:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/09/18 20:48	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: EFFDUP-20180703 **Lab ID: 2079810004** Collected: 07/03/18 08:59 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		07/09/18 20:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/09/18 20:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/09/18 20:48	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		07/09/18 20:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		07/09/18 20:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/09/18 20:48	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		07/09/18 20:48	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		07/09/18 20:48	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		07/09/18 20:48	1868-53-7	

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CHAIN-OF-CUSTODY / Analytical Re

The Chain-of-Custody is a LEGAL DOCUMENT. All relev

WO# : 2079810

2079810

1

A	Section B	Section C
ed Client Information:	Required Project Information:	Invoice Information:
ny: Arcadis	Report To: Elvin Varela	Attention:
s: #48 City View Plaza 1 Suite 401	Copy To:	Company Name:
KM 1.2, Guaynabo, PR 00968		Address:
	Purchase Order #:	Pace Quote:
Fax:	Project Name: Fibers Public Supply Well (PO#CO001911.000	Pace Project Manager: craig.mccollum@pacelabs.com,
ted Due Date:	Project #:	Pace Profile #: 1037 L1

Regulatory Agency
State / Location
PR

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Residual Chlorine (Y/N)
TB-20180703	WT	G	—	—	7/3/18	LAR		2				X							X	
INF-20180703	WT	G	—	—	7/3/18	0838		3				X						X		
EFF-20180703	WT	G	—	—	7/3/18	0859		3				X						X		
EFFDUP-20180703	WT	G	—	—	7/3/18	0859		3				X						X		
EFFMS-20180703	WT	G	—	—	7/3/18	0859		3				X						X		
EFFMSD-20180703	WT	G	—	—	7/3/18	0859		3				X						X		

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	ARCADIS	7/3/18	1440	PACE	7/3/18	1440	3.5	Y	N	Y
	PACE	7/5/18	1700	FEDEX	7/5/18	1700				
	FedEx	7/6/18	0830	[illegible]	7/6/18	0830	2.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Elvin Varela

SIGNATURE of SAMPLER: [signature]

DATE Signed: 7/3/18

Attachment 2
Pace Laboratory Analytical Report #2079810

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

July 10, 2018

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: Fibers Public Supply Well
Pace Project No.: 2079810

Dear David Howard:

Enclosed are the analytical results for sample(s) received by the laboratory on July 06, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project:	Fibers Public Supply Well
Pace Project No.:	2079810

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2079810001	**TB-20180703**	Water	07/03/18 00:00	07/06/18 08:30
2079810002	**INF-20180703**	Water	07/03/18 08:38	07/06/18 08:30
2079810003	**EFF-20180703**	Water	07/03/18 08:59	07/06/18 08:30
2079810004	**EFFDUP-20180703**	Water	07/03/18 08:59	07/06/18 08:30

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SAMPLE ANALYTE COUNT

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2079810001	**TB-20180703**	EPA 5030B/8260	GEM	56	PASI-N
2079810002	**INF-20180703**	EPA 5030B/8260	GEM	56	PASI-N
2079810003	**EFF-20180703**	EPA 5030B/8260	GEM	56	PASI-N
2079810004	**EFFDUP-20180703**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: July 10, 2018

General Information:
4 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 114373

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2079810003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 493079)
  - Chloromethane
  - Haloether 427
  - Styrene
  - Tetrachloroethene
- MSD (Lab ID: 493080)
  - Chloromethane
  - Haloether 427
  - Styrene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: TB-20180703 **Lab ID: 2079810001** Collected: 07/03/18 00:00 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		07/09/18 20:30	67-64-1	
Acrolein	ND	ug/L	8.0	1		07/09/18 20:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		07/09/18 20:30	107-13-1	
Benzene	ND	ug/L	1.0	1		07/09/18 20:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		07/09/18 20:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/09/18 20:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/09/18 20:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		07/09/18 20:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		07/09/18 20:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/09/18 20:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/09/18 20:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/09/18 20:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/09/18 20:30	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/09/18 20:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		07/09/18 20:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		07/09/18 20:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/09/18 20:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:30	10061-02-6	
Enflurane	ND	ug/L	1.0	1		07/09/18 20:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		07/09/18 20:30	100-41-4	
Haloether 229	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 406	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 421	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 427	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 428	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 508	ND	ug/L	1.0	1		07/09/18 20:30		
Haloether 528	ND	ug/L	1.0	1		07/09/18 20:30		
Halomar	ND	ug/L	1.0	1		07/09/18 20:30		
2-Hexanone	ND	ug/L	2.0	1		07/09/18 20:30	591-78-6	
Isoflurane	ND	ug/L	1.0	1		07/09/18 20:30		
Methoxyflurane	ND	ug/L	1.0	1		07/09/18 20:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		07/09/18 20:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		07/09/18 20:30	108-10-1	
Styrene	ND	ug/L	1.0	1		07/09/18 20:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/09/18 20:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/09/18 20:30	127-18-4	
Toluene	ND	ug/L	1.0	1		07/09/18 20:30	108-88-3	
Total Haloether	ND	ug/L	1.0	1		07/09/18 20:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/09/18 20:30	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: TB-20180703 **Lab ID: 2079810001** Collected: 07/03/18 00:00 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		07/09/18 20:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/09/18 20:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/09/18 20:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		07/09/18 20:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		07/09/18 20:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/09/18 20:30	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		07/09/18 20:30	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	68-124	1		07/09/18 20:30	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		07/09/18 20:30	1868-53-7	

Sample: INF-20180703 **Lab ID: 2079810002** Collected: 07/03/18 08:38 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		07/09/18 21:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		07/09/18 21:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		07/09/18 21:07	107-13-1	
Benzene	ND	ug/L	1.0	1		07/09/18 21:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		07/09/18 21:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		07/09/18 21:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/09/18 21:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		07/09/18 21:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		07/09/18 21:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/09/18 21:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/09/18 21:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/09/18 21:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/09/18 21:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/09/18 21:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		07/09/18 21:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		07/09/18 21:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/09/18 21:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/09/18 21:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/09/18 21:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 21:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 21:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/09/18 21:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 21:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 21:07	10061-02-6	
Enflurane	**1.1**	ug/L	1.0	1		07/09/18 21:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		07/09/18 21:07	100-41-4	
Haloether 229	**15.6**	ug/L	1.0	1		07/09/18 21:07		
Haloether 406	ND	ug/L	1.0	1		07/09/18 21:07		
Haloether 421	ND	ug/L	1.0	1		07/09/18 21:07		
Haloether 427	ND	ug/L	1.0	1		07/09/18 21:07		

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: INF-20180703 **Lab ID: 2079810002** Collected: 07/03/18 08:38 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		07/09/18 21:07		
Haloether 508	**25.5**	ug/L	1.0	1		07/09/18 21:07		
Haloether 528	**1.5**	ug/L	1.0	1		07/09/18 21:07		
Halomar	ND	ug/L	1.0	1		07/09/18 21:07		
2-Hexanone	ND	ug/L	2.0	1		07/09/18 21:07	591-78-6	
Isoflurane	**61.7**	ug/L	1.0	1		07/09/18 21:07		
Methoxyflurane	ND	ug/L	1.0	1		07/09/18 21:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		07/09/18 21:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		07/09/18 21:07	108-10-1	
Styrene	ND	ug/L	1.0	1		07/09/18 21:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/09/18 21:07	79-34-5	
Tetrachloroethene	**6.8**	ug/L	1.0	1		07/09/18 21:07	127-18-4	
Toluene	ND	ug/L	1.0	1		07/09/18 21:07	108-88-3	
Total Haloether	**105**	ug/L	1.0	1		07/09/18 21:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/09/18 21:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/09/18 21:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/09/18 21:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/09/18 21:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/09/18 21:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/09/18 21:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		07/09/18 21:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		07/09/18 21:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/09/18 21:07	95-47-6	
Surrogates								
Toluene-d8 (S)	93	%.	79-119	1		07/09/18 21:07	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		07/09/18 21:07	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		07/09/18 21:07	1868-53-7	

Sample: EFF-20180703 **Lab ID: 2079810003** Collected: 07/03/18 08:59 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		07/09/18 20:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		07/09/18 20:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		07/09/18 20:12	107-13-1	
Benzene	ND	ug/L	1.0	1		07/09/18 20:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		07/09/18 20:12	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		07/09/18 20:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/09/18 20:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		07/09/18 20:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		07/09/18 20:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/09/18 20:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/09/18 20:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/09/18 20:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/09/18 20:12	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: EFF-20180703 **Lab ID: 2079810003** Collected: 07/03/18 08:59 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		07/09/18 20:12	74-87-3	M1
Dibromochloromethane	ND	ug/L	1.0	1		07/09/18 20:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		07/09/18 20:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/09/18 20:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		07/09/18 20:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		07/09/18 20:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 406	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 421	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 427	ND	ug/L	1.0	1		07/09/18 20:12		M1
Haloether 428	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 508	ND	ug/L	1.0	1		07/09/18 20:12		
Haloether 528	ND	ug/L	1.0	1		07/09/18 20:12		
Halomar	ND	ug/L	1.0	1		07/09/18 20:12		
2-Hexanone	ND	ug/L	2.0	1		07/09/18 20:12	591-78-6	
Isoflurane	ND	ug/L	1.0	1		07/09/18 20:12		
Methoxyflurane	ND	ug/L	1.0	1		07/09/18 20:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		07/09/18 20:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		07/09/18 20:12	108-10-1	
Styrene	ND	ug/L	1.0	1		07/09/18 20:12	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/09/18 20:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/09/18 20:12	127-18-4	M1
Toluene	ND	ug/L	1.0	1		07/09/18 20:12	108-88-3	
Total Haloether	ND	ug/L	1.0	1		07/09/18 20:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/09/18 20:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		07/09/18 20:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/09/18 20:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/09/18 20:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		07/09/18 20:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		07/09/18 20:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/09/18 20:12	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		07/09/18 20:12	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		07/09/18 20:12	460-00-4	
Dibromofluoromethane (S)	91	%.	72-126	1		07/09/18 20:12	1868-53-7	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: EFFDUP-20180703 **Lab ID: 2079810004** Collected: 07/03/18 08:59 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		07/09/18 20:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		07/09/18 20:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		07/09/18 20:48	107-13-1	
Benzene	ND	ug/L	1.0	1		07/09/18 20:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		07/09/18 20:48	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		07/09/18 20:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		07/09/18 20:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		07/09/18 20:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		07/09/18 20:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/09/18 20:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/09/18 20:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/09/18 20:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/09/18 20:48	67-66-3	
Chloromethane	ND	ug/L	1.0	1		07/09/18 20:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		07/09/18 20:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		07/09/18 20:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/09/18 20:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/09/18 20:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/09/18 20:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		07/09/18 20:48	10061-02-6	
Enflurane	ND	ug/L	1.0	1		07/09/18 20:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		07/09/18 20:48	100-41-4	
Haloether 229	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 406	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 421	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 427	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 428	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 508	ND	ug/L	1.0	1		07/09/18 20:48		
Haloether 528	ND	ug/L	1.0	1		07/09/18 20:48		
Halomar	ND	ug/L	1.0	1		07/09/18 20:48		
2-Hexanone	ND	ug/L	2.0	1		07/09/18 20:48	591-78-6	
Isoflurane	ND	ug/L	1.0	1		07/09/18 20:48		
Methoxyflurane	ND	ug/L	1.0	1		07/09/18 20:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		07/09/18 20:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		07/09/18 20:48	108-10-1	
Styrene	ND	ug/L	1.0	1		07/09/18 20:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/09/18 20:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/09/18 20:48	127-18-4	
Toluene	ND	ug/L	1.0	1		07/09/18 20:48	108-88-3	
Total Haloether	ND	ug/L	1.0	1		07/09/18 20:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		07/09/18 20:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/09/18 20:48	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Sample: EFFDUP-20180703 **Lab ID: 2079810004** Collected: 07/03/18 08:59 Received: 07/06/18 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		07/09/18 20:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/09/18 20:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/09/18 20:48	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		07/09/18 20:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		07/09/18 20:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		07/09/18 20:48	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		07/09/18 20:48	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		07/09/18 20:48	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		07/09/18 20:48	1868-53-7	

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QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2079810

QC Batch: 114373 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2079810001, 2079810002, 2079810003, 2079810004

METHOD BLANK: 493077 | Matrix: Water
Associated Lab Samples: 2079810001, 2079810002, 2079810003, 2079810004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	07/09/18 18:41	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/09/18 18:41	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/09/18 18:41	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	07/09/18 18:41	
1,1-Dichloroethane	ug/L	ND	1.0	07/09/18 18:41	
1,1-Dichloroethene	ug/L	ND	1.0	07/09/18 18:41	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/09/18 18:41	
1,2-Dichloroethane	ug/L	ND	1.0	07/09/18 18:41	
1,2-Dichloropropane	ug/L	ND	1.0	07/09/18 18:41	
2-Butanone (MEK)	ug/L	ND	2.0	07/09/18 18:41	
2-Hexanone	ug/L	ND	2.0	07/09/18 18:41	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	07/09/18 18:41	
Acetone	ug/L	ND	4.0	07/09/18 18:41	
Acrolein	ug/L	ND	8.0	07/09/18 18:41	
Acrylonitrile	ug/L	ND	4.0	07/09/18 18:41	
Benzene	ug/L	ND	1.0	07/09/18 18:41	
Bromodichloromethane	ug/L	ND	1.0	07/09/18 18:41	
Bromoform	ug/L	ND	1.0	07/09/18 18:41	
Bromomethane	ug/L	ND	1.0	07/09/18 18:41	
Carbon disulfide	ug/L	ND	1.0	07/09/18 18:41	
Carbon tetrachloride	ug/L	ND	1.0	07/09/18 18:41	
Chlorobenzene	ug/L	ND	1.0	07/09/18 18:41	
Chloroethane	ug/L	ND	1.0	07/09/18 18:41	
Chloroform	ug/L	ND	1.0	07/09/18 18:41	
Chloromethane	ug/L	ND	1.0	07/09/18 18:41	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/09/18 18:41	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/09/18 18:41	
Dibromochloromethane	ug/L	ND	1.0	07/09/18 18:41	
Dibromomethane	ug/L	ND	1.0	07/09/18 18:41	
Enflurane	ug/L	ND	1.0	07/09/18 18:41	
Ethylbenzene	ug/L	ND	1.0	07/09/18 18:41	
Haloether 229	ug/L	ND	1.0	07/09/18 18:41	
Haloether 406	ug/L	ND	1.0	07/09/18 18:41	
Haloether 421	ug/L	ND	1.0	07/09/18 18:41	
Haloether 427	ug/L	ND	1.0	07/09/18 18:41	
Haloether 428	ug/L	ND	1.0	07/09/18 18:41	
Haloether 508	ug/L	ND	1.0	07/09/18 18:41	
Haloether 528	ug/L	ND	1.0	07/09/18 18:41	
Halomar	ug/L	ND	1.0	07/09/18 18:41	
Isoflurane	ug/L	ND	1.0	07/09/18 18:41	
m&p-Xylene	ug/L	ND	2.0	07/09/18 18:41	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2079810

METHOD BLANK: 493077 Matrix: Water
Associated Lab Samples: 2079810001, 2079810002, 2079810003, 2079810004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methoxyflurane	ug/L	ND	1.0	07/09/18 18:41	
Methylene Chloride	ug/L	ND	5.0	07/09/18 18:41	
o-Xylene	ug/L	ND	1.0	07/09/18 18:41	
Styrene	ug/L	ND	1.0	07/09/18 18:41	
Tetrachloroethene	ug/L	ND	1.0	07/09/18 18:41	
Toluene	ug/L	ND	1.0	07/09/18 18:41	
Total Haloether	ug/L	ND	1.0	07/09/18 18:41	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/09/18 18:41	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/09/18 18:41	
Trichloroethene	ug/L	ND	1.0	07/09/18 18:41	
Trichlorofluoromethane	ug/L	ND	1.0	07/09/18 18:41	
Vinyl chloride	ug/L	ND	1.0	07/09/18 18:41	
4-Bromofluorobenzene (S)	%.	102	68-124	07/09/18 18:41	
Dibromofluoromethane (S)	%.	98	72-126	07/09/18 18:41	
Toluene-d8 (S)	%.	98	79-119	07/09/18 18:41	

LABORATORY CONTROL SAMPLE: 493078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.4	111	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	36.7	73	15-179	
1,1,2-Trichloroethane	ug/L	50	48.2	96	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	50.7	101	38-121	
1,1-Dichloroethane	ug/L	50	47.9	96	63-129	
1,1-Dichloroethene	ug/L	50	46.6	93	51-139	
1,2,3-Trichloropropane	ug/L	50	48.3	97	13-187	
1,2-Dichloroethane	ug/L	50	63.3	127	57-148	
1,2-Dichloropropane	ug/L	50	48.8	98	66-128	
2-Butanone (MEK)	ug/L	50	62.4	125	32-183	
2-Hexanone	ug/L	50	70.2	140	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	84.5	169	26-171	
Acetone	ug/L	50	63.6	127	22-165	
Acrolein	ug/L	50	64.1	128	10-131	
Acrylonitrile	ug/L	50	65.6	131	18-149	
Benzene	ug/L	50	43.5	87	62-131	
Bromodichloromethane	ug/L	50	51.2	102	69-132	
Bromoform	ug/L	50	61.5	123	35-166	
Bromomethane	ug/L	50	51.2	102	34-158	
Carbon disulfide	ug/L	50	48.6	97	31-128	
Carbon tetrachloride	ug/L	50	66.2	132	54-144	
Chlorobenzene	ug/L	50	55.7	111	70-127	
Chloroethane	ug/L	50	51.0	102	17-195	
Chloroform	ug/L	50	45.3	91	73-134	
Chloromethane	ug/L	50	69.1	138	17-153	

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REPORT OF LABORATORY ANALYSIS

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St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2079810

LABORATORY CONTROL SAMPLE: 493078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	41.6	83	68-129	
cis-1,3-Dichloropropene	ug/L	50	45.5	91	72-138	
Dibromochloromethane	ug/L	50	55.4	111	49-146	
Dibromomethane	ug/L	50	53.7	107	56-145	
Enflurane	ug/L	50	45.6	91	56-135	
Ethylbenzene	ug/L	50	49.6	99	66-126	
Haloether 229	ug/L	50	54.2	108	62-123	
Haloether 406	ug/L	50	42.5	85	62-134	
Haloether 421	ug/L	50	48.1	96	70-128	
Haloether 427	ug/L	50	58.5	117	69-153	
Haloether 428	ug/L	50	53.7	107	70-134	
Haloether 508	ug/L	50	42.4	85	52-139	
Haloether 528	ug/L	50	33.5	67	48-157	
Halomar	ug/L	50	41.7	83	62-128	
Isoflurane	ug/L	50	50.2	100	61-132	
m&p-Xylene	ug/L	100	109	109	65-129	
Methoxyflurane	ug/L	50	46.2	92	72-124	
Methylene Chloride	ug/L	50	43.0	86	46-168	
o-Xylene	ug/L	50	54.8	110	65-124	
Styrene	ug/L	50	55.7	111	72-133	
Tetrachloroethene	ug/L	50	66.8	134	46-157	
Toluene	ug/L	50	44.3	89	69-126	
Total Haloether	ug/L		517			
trans-1,2-Dichloroethene	ug/L	50	41.1	82	60-129	
trans-1,3-Dichloropropene	ug/L	50	47.8	96	59-149	
Trichloroethene	ug/L	50	53.9	108	67-132	
Trichlorofluoromethane	ug/L	50	69.2	138	39-171	
Vinyl chloride	ug/L	50	47.0	94	27-149	
4-Bromofluorobenzene (S)	%.			94	68-124	
Dibromofluoromethane (S)	%.			92	72-126	
Toluene-d8 (S)	%.			95	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 493079 493080

Parameter	Units	2079810003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	58.8	56.9	118	114	54-137	3	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	41.3	38.6	83	77	15-187	7	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	50.3	47.5	101	95	59-148	6	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	53.1	51.1	106	102	40-117	4	20	
1,1-Dichloroethane	ug/L	ND	50	50	48.9	47.9	98	96	59-133	2	20	
1,1-Dichloroethene	ug/L	ND	50	50	51.3	49.5	103	99	44-146	3	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	50.0	49.6	100	99	14-199	1	20	
1,2-Dichloroethane	ug/L	ND	50	50	66.8	65.0	134	130	56-154	3	20	
1,2-Dichloropropane	ug/L	ND	50	50	51.0	51.5	102	103	62-135	1	20	

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QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2079810

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 493079 493080

Parameter	Units	2079810003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Butanone (MEK)	ug/L	ND	50	50	66.4	65.4	133	131	20-205	1	20	
2-Hexanone	ug/L	ND	50	50	69.8	70.2	140	140	25-189	1	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	85.2	82.9	170	166	23-184	3	20	
Acetone	ug/L	ND	50	50	69.0	73.4	132	141	11-217	6	20	
Acrolein	ug/L	ND	50	50	58.7	59.3	117	119	10-142	1	20	
Acrylonitrile	ug/L	ND	50	50	67.8	63.4	136	127	20-164	7	20	
Benzene	ug/L	ND	50	50	47.1	44.4	94	89	52-141	6	20	
Bromodichloromethane	ug/L	ND	50	50	54.5	53.1	109	106	70-134	3	20	
Bromoform	ug/L	1.1	50	50	62.7	61.0	123	120	37-171	3	20	
Bromomethane	ug/L	ND	50	50	54.6	50.5	109	101	34-155	8	20	
Carbon disulfide	ug/L	ND	50	50	54.5	50.2	109	100	28-130	8	20	
Carbon tetrachloride	ug/L	ND	50	50	70.2	67.3	140	135	48-146	4	20	
Chlorobenzene	ug/L	ND	50	50	58.0	55.0	116	110	67-129	5	20	
Chloroethane	ug/L	ND	50	50	53.5	49.4	107	99	12-192	8	20	
Chloroform	ug/L	ND	50	50	48.4	48.4	97	97	66-143	0	20	
Chloromethane	ug/L	ND	50	50	84.5	79.1	169	158	14-155	7	20	M1
cis-1,2-Dichloroethene	ug/L	ND	50	50	42.6	43.8	85	88	56-141	3	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	46.1	44.5	92	89	70-139	4	20	
Dibromochloromethane	ug/L	ND	50	50	58.7	56.0	117	112	50-150	5	20	
Dibromomethane	ug/L	ND	50	50	54.8	55.4	110	111	58-153	1	20	
Enflurane	ug/L	ND	50	50	49.4	46.5	99	93	63-126	6	20	
Ethylbenzene	ug/L	ND	50	50	52.4	49.4	105	99	57-135	6	20	
Haloether 229	ug/L	ND	50	50	61.8	57.4	124	115	56-127	7	20	
Haloether 406	ug/L	ND	50	50	46.7	43.2	93	86	68-128	8	20	
Haloether 421	ug/L	ND	50	50	51.8	48.3	104	97	74-120	7	20	
Haloether 427	ug/L	ND	50	50	64.4	60.8	129	122	78-120	6	20	M1
Haloether 428	ug/L	ND	50	50	60.6	55.3	121	111	74-125	9	20	
Haloether 508	ug/L	ND	50	50	45.3	45.6	91	91	28-156	1	20	
Haloether 528	ug/L	ND	50	50	33.1	34.8	66	70	45-142	5	20	
Halomar	ug/L	ND	50	50	43.7	41.0	87	82	67-123	6	20	
Isoflurane	ug/L	ND	50	50	52.7	49.5	105	99	45-140	6	20	
m&p-Xylene	ug/L	ND	100	100	109	103	109	103	56-136	6	20	
Methoxyflurane	ug/L	ND	50	50	49.2	46.6	98	93	75-119	5	20	
Methylene Chloride	ug/L	ND	50	50	43.6	43.4	87	87	45-166	1	20	
o-Xylene	ug/L	ND	50	50	56.7	52.9	113	106	57-133	7	20	
Styrene	ug/L	ND	50	50	ND	ND	0	0	58-144		20	M1
Tetrachloroethene	ug/L	ND	50	50	72.5	66.9	145	134	48-143	8	20	M1
Toluene	ug/L	ND	50	50	47.1	44.0	94	88	59-136	7	20	
Total Haloether	ug/L	ND			559	529				5		
trans-1,2-Dichloroethene	ug/L	ND	50	50	45.7	43.6	91	87	57-132	5	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	50.7	49.3	101	99	59-154	3	20	
Trichloroethene	ug/L	ND	50	50	56.8	54.3	114	109	58-140	4	20	
Trichlorofluoromethane	ug/L	ND	50	50	74.5	69.3	149	139	24-175	7	20	
Vinyl chloride	ug/L	ND	50	50	51.2	48.8	102	98	21-150	5	20	
4-Bromofluorobenzene (S)	%.						97	100	68-124			

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St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2079810

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 493079 493080

Parameter	Units	2079810003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						92	96	72-126			
Toluene-d8 (S)	%.						94	93	79-119			

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QUALIFIERS

Project: Fibers Public Supply Well
Pace Project No.: 2079810

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fibers Public Supply Well
Pace Project No.: 2079810

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2079810001	**TB-20180703**	EPA 5030B/8260	114373		
2079810002	**INF-20180703**	EPA 5030B/8260	114373		
2079810003	**EFF-20180703**	EPA 5030B/8260	114373		
2079810004	**EFFDUP-20180703**	EPA 5030B/8260	114373		

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CHAIN-OF-CUSTODY / Analytical Re

The Chain-of-Custody is a LEGAL DOCUMENT. All relev

WO# : 2079810

2079810

1

A	Section B	Section C
ed Client Information:	Required Project Information:	Invoice Information:
ny: Arcadis	Report To: Elvin Varela	Attention:
s: #48 City View Plaza 1 Suite 401	Copy To:	Company Name:
KM 1.2, Guaynabo, PR 00968		Address:
	Purchase Order #:	Pace Quote:
Fax:	Project Name: Fibers Public Supply Well (PO#CO001911.000	Pace Project Manager: craig.mccollum@pacelabs.com,
ted Due Date:	Project #:	Pace Profile #: 1037 L1

Regulatory Agency
State / Location
PR

SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Residual Chlorine (Y/N)
TB-20180703	WT	G	—	—	7/3/18	LAR		2				X							X	
INF-20180703	WT	G	—	—	7/3/18	0838		3				X						X		
EFF-20180703	WT	G	—	—	7/3/18	0859		3				X						X		
EFFDUP-20180703	WT	G	—	—	7/3/18	0859		3				X						X		
EFFMS-20180703	WT	G	—	—	7/3/18	0859		3				X						X		
EFFMSD-20180703	WT	G	—	—	7/3/18	0859		3				X						X		

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	ARCADIS	7/3/18	1440	PACE	7/3/18	1440	3.5	Y	N	Y
	PACE	7/5/18	1700	FEDEX	7/5/18	1700				
	FedEx	7/6/18	0830	[illegible]	7/6/18	0830	2.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Elvin Varela

SIGNATURE of SAMPLER: [signature]

DATE Signed: 7/3/18

Pace Analytical

Urb. Jardines de Guaynabo
Calle Marginal Blq A-10
Guaynabo, PR 00969

Sample Condition Upon Receipt

Fibers Project

Project #: 20 Fibers Public Supply Well

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☑ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☐Yes ☐No

Therometer Used: ☑ Therm Fisher IR 4 ☐ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 7/3/18 PAPPALE

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☑Yes	☐No	☐N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon

WO#: 2079810

Pr

PM: CJM **Due Date: 07/20/18**
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ ... er

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑ Yes ☐ No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 7/7/18 JMB

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☐ Yes	☐ No	☑ N/A	1	
Chain of Custody Present:	☑ Yes	☐ No	☐ N/A	2	
Chain of Custody Complete:	☑ Yes	☐ No	☐ N/A	3	
Chain of Custody Relinquished:	☑ Yes	☐ No	☐ N/A	4	
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	5	
Samples Arrived within Hold Time:	☑ Yes	☐ No	☐ N/A	6	
Sufficient Volume:	☑ Yes	☐ No	☐ N/A	7	
Correct Containers Used:	☑ Yes	☐ No	☐ N/A	8	
Filtered vol. Rec. for Diss. tests	☐ Yes	☐ No	☑ N/A	9	
Sample Labels match COC:	☑ Yes	☐ No	☐ N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☑ Yes	☐ No	☐ N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐ Yes	☐ No	☑ N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐ Yes	☐ No	☑ N/A	13	If No, was preserative added? ☐ Yes ☐ No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	14	
Trip Blank Present:	☑ Yes	☐ No		15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Attachment 3
Data Review Report #30267R

ARCADIS Design & Consultancy for natural and built assets

Fibers Group

DATA REVIEW

GUAYAMA, PUERTO RICO

Volatile Analyses

SDG #256578 (WO 655-04-26)

Analyses Performed By:
eqlab - Environmental Quality Laboratories, Inc.
San Juan, Puerto Rico

Report #30267R
Review Level: Tier II
Project: CO001911.0007.1805A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #256578 (WO 655-04-26) for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
EFFLUENT	2892611	Water	07/03/2018		X				
EFFLUENT – DUPLICATE	2892612	Water	07/03/2018	EFFLUENT	X				
INFLUENT	2892615	Water	07/03/2018		X				
TRIP BLANK	2892616	Water	07/03/2018		X				

Notes:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location EFFLUENT for VOCs.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:
QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
EFFLUENT	Bromoform	< LL but > 10%	< LL but > 10%
	Iodomethane		
	1,3,5-Trimethylbenzene	<10%	<10%
	Vinyl Acetate		
	Styrene		

Note:
AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

5. Laboratory Control Sample

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
EFFLUENT/EFFLUENT – DUPLICATE	Bromoform	19.1	11.1	NC
	Dibromochloromethane	3.0 U	3.4	AC

Notes:

AC Acceptable

The compound Bromoform associated with sample locations EFFLUENT and EFFLUENT – DUPLICATE exhibited a field duplicate RPD greater than the control limit. The associated sample results from sample locations for the listed analyte were qualified as estimated.

7. System Performance and Overall Assessment

Note: 2-Chloroethyl vinyl ether degrades in the presence of acid. Since the samples were preserved with acid to a pH of less than 2, the not detected results for 2-chloroethyl vinyl ether were rejected for all samples within this SDG.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X	X		
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:

DATE: July 26, 2018

PEER REVIEW: Dennis Capria

DATE: August 2, 2018

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip.	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
* = Parameter is not accredited under EQLab's NELAP Certification

ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

ENVIRONMENTAL QUALITY LABORATORIES, INC.
60 E STREET, MINILLAS INDUSTRIAL PARK, BAYAMÓN, PR 00959
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To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: EFFLUENT
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	R ~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~07/11/2018~~	~~07:06~~	~~NIVA~~	~~07/09/2018~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac
The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87785 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	19.1	µg/L	J --	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	BDL	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac

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Refer to eqlab certification number E87783 at www.eqlab.com

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EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U J	8.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Styrene	R ~~EPA 8260B~~	~~ND~~	~~µg/L~~	~~U~~	~~1.2~~	~~3.0~~	~~--~~	~~07/11/2018~~	~~07:06~~	~~NIVA~~	~~07/09/2018~~	~~--~~	~~EPA 5030B~~
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Vinyl Acetate	R ~~EPA 8260B~~	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~07/11/2018~~	~~07:06~~	~~NIVA~~	~~07/09/2018~~	~~--~~	~~EPA 5030B~~
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac

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Refer to eqlab certification number E87785 at www.eqlab.com

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 4538

Certified by Laboratory Director

PRDOH Certified
EPA ID PR00014

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
-- = Parameter is not accredited under EQLab's NELAP Certification

ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: EFFLUENT-DUPLICATE
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac
The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-DUPLICATE**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	R ~~EPA 8260B~~	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~07/11/2018~~	~~07:32~~	~~NIVA~~	~~07/09/2018~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac
The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-DUPLICATE GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	11.1	µg/L	~~Q~~ J	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	3.40	µg/L	--	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

ENVIRONMENTAL QUALITY LABORATORIES, INC.
60 E STREET, MINILLAS INDUSTRIAL PARK, BAYAMÓN, PR 00959
PO BOX 11458 SANTURCE, PR 00910-1458 TEL. (787) 288-6420 FAX (787) 288-6465 www.eqlab.com

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-DUPLICATE GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
	Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
	Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-DUPLICATE**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ · Químico Licenciado · Estado Libre Asociado de Puerto Rico · LICENCIA NUM. 2538

Certified by Laboratory Director

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PRDOH Certified
EPA ID PR00014

ACCREDITED IN ACCORDANCE WITH nelac

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Refer to eqlab certification number E87785 at www.eqlab.com.

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **INFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018** 08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87785 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

ENVIRONMENTAL QUALITY LABORATORIES, INC.
60 E STREET, MINILLAS INDUSTRIAL PARK, BAYAMÓN, PR 00959
PO BOX 11458 SANTURCE, PR 00910-1458 TEL. (787) 288-6420 FAX (787) 288-6465 www.eqlab.com

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **INFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018** 08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	R ~~EPA 8260B~~	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~07/11/2018~~	~~04:55~~	~~NIVA~~	~~07/09/2018~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87782 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

ENVIRONMENTAL QUALITY LABORATORIES, INC.
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To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: INFLUENT
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018** 08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac

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Refer to eqlab certification number E87783 at www.eqlab.com

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **INFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018** 08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	3.80	µg/L	--	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: INFLUENT
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018** 08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 4

Certified by Laboratory Director

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
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To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87785 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

ENVIRONMENTAL QUALITY LABORATORIES, INC.
60 E STREET, MINILLAS INDUSTRIAL PARK, BAYAMÓN, PR 00959
PO BOX 11458 SANTURCE, PR 00910-1458 TEL. (787) 288-6420 FAX (787) 288-6465 www.eqlab.com

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	R ~~EPA 8260B~~	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~07/11/2018~~	~~03:11~~	~~NIVA~~	~~07/09/2018~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac
The results presented herein meet all NELAC requirements
Refer to eqlab certification number E87785 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

	Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
	Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

Certified by Laboratory Director

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
+ = Parameter is not accredited under EQLab's NELAP Certification

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PRDOH Certified
EPA ID PR00014

2018-11237

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

PO BOX 11458, SAN JUAN, PR 00910-1458 • TEL. (787) 288-6420, FAX (787) 288-6465, e-mail: info@eqlab.com

CLIENT NAME: ARCADIS CARIBE, PSC | CLIENT ID: 655-04 | W.O. #: 26 | SITE: GUAYAMA, PR | CLIENT REP: MR. ELVIN VARELA

P.O. #: 507 | PWSID #: | FOLDER #: 256578 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2892611-1 MATRIX: GROUND WATER SOURCE: EFFLUENT, GUAYAMA, PR EFF-20180703	DATE: 07/03/18 TIME: 0905 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2892612-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-DUPLICATE, GUAYAMA, PR DUP EFFDUP-20180703	DATE: 07/03/18 TIME: 0905 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2892613-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-MS, GUAYAMA, PR MS EFFMS-20180703	DATE: 07/03/18 TIME: 0905 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2892614-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-MSD., GUAYAMA, PR MSD EFFMSD-20180703	DATE: 07/03/18 TIME: 0905 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Elvin Varela	07/03/18	0905
Fixed in field by:		07/03/18	0905
Authorized by:	N/A	N/A	
Received by EQLF:			
Released to EQLL by:		07/03/18	1415
Received by EQLL:	Hugo Colón	07/03/18	1415

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QC Level II Report for July 23, 2018

*EQLF = Eqlab's Field Personnel.
*EQLL = Eqlab's Log-in Personnel.

Arrival Temperature: 3.0°C Signature: HR

Eqlab's general terms and conditions on reverse side of this document.

2018-11237

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

PO BOX 11458, SAN JUAN, PR 00910-1458 • TEL. (787) 288-6420, FAX (787) 288-6465, e-mail: info@eqlab.com

CLIENT NAME: ARCADIS CARIBE, PSC | CLIENT ID: 655-04 | W.O. #: 26 | SITE: GUAYAMA, PR | CLIENT REP: MR. ELVIN VARELA

P.O. #: 507 | PWSID #: | FOLDER #: 256578 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING	ANALYSIS REQUESTED
SAMPLE #: 2892615-1 MATRIX: GROUND WATER SOURCE: INFLUENT, GUAYAMA, PR INF-20180703	DATE: 07/03/18 TIME: 0839 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC
SAMPLE #: 2892616-1 MATRIX: DI WATER SOURCE: TRIP BLANK, GUAYAMA, PR	DATE: 07/03/18 TIME: LAB TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE		
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE		

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:		07/03/18	0839
Fixed in field by:		07/03/18	0839
Authorized by:			
Received by EQLF:			
Released to EQLL by:		07/03/18	1415
Received by EQLL:		07/03/18	1415

SPECIAL INSTRUCTIONS / COMMENTS:
QA/QC Report Level II
for July 23, 2018

*EQLF = Eqlab's Field Personnel.
*EQLL = Eqlab's Log-in Personnel.

Arrival Temperature: 3.0°C Signature:

Eqlab's general terms and conditions on reverse side of this document.

Attachment 4
EQLAB Laboratory Analytical Report #256578 (WO 655-04-26)

Quality Assurance Report

Prepared for:
ARCADIS CARIBE, PSC

Facility:
GUAYAMA PROJECT

Project
INTERNO

Samples Received:
June 03, 2018

Folder Number:
256578

W.O. #:
655-04-26

ENVIRONMENTAL QUALITY LABORATORIES, INC.

July 26, 2018

ARCADIS CARIBE, PSC.
#48 CITY VIEW PLAZA1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: Mr. ELVIN VARELA

Re: Quality Assurance Report for the samples received on July 03, 2018

Dear Mr. Varela

Enclosed you will find the Quality Assurance Report for the samples received on July 03, 2018 for the INTERNO Project. The QC data submitted reflects the precision and accuracy of the analyzed samples.

Please feel free to contact us if you require any further information.

Cordially,

Environmental Quality Laboratories, Inc.

Janet Gómez Rosario

Lic. Janet Gómez-Rosario
QA/QC Supervisor

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Section	Description
1	Quality Assurance Narrative
2	Laboratory Test Report
3	Analytical Test Results Quality Assurance Report

List of Appendices

Appendix	Description
A	Chain of Custody Documentation
B	Raw Data Worksheets

SECTION 1
QUALITY ASSURANCE NARRATIVE

QUALITY ASSURANCE NARRATIVE

OVERVIEW

On July 03, 2018 Environmental Quality Laboratories, Inc. received from ARCADIS CARIBE, PSC, five Ground Water and one DI Water samples. The samples were collected at the Guayama facility July 03, 2018, for the Interno Project. The samples were analyzed for EPA 8260B VOC. The samples were received in good condition (3° C) and stored at 4 °C ± 2 °C in the refrigerator until the time of analysis. The following table shows the sample sources and the EQLAB sample number assigned to your sample upon receipt:

SAMPLE #	SOURCE	MATRIX
2892611	EFFLUENT	GROUND WATER
2892612	EFFLUENT – DUPLICATE	GROUND WATER
2892613	EFFLUENT – MS	GROUND WATER
2892614	EFFLUENT – MSD	GROUND WATER
2892615	INFLUENT	GROUND WATER
2892616	TRIP BLANK	DI WATER

In the Appendices you will find copies of the supporting documentation of your samples. Appendix A contains the Chain of Custody Documentation and Appendix B contains the Raw Data Worksheets. Appendix C contains the Proficiency Test Result.

Quality Control Remarks

The QC data has been released after being subjected to a series of inspections. General deviations are summarized below. Specific QC issues associated with your samples are:

Sample Collection: All samples were collected by the client personnel. EQLab personnel did not find any deviations about of this item.

Sample Management: EQ Lab did not find any deviation about this item.

Sample Preparation: EQ Lab did not find any deviation about this item.

.

Laboratory Test Report: EQ Lab did not find any deviation about this item.

Sample Analysis: **VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/ MASS SPECTROMETRY (GC/MS) EPA 8260B VOC Rev. 2, December 1996**

Run # 200908

Analysis Date: July 11, 2018

Sample	Analyte	Deviation	Recovery %	Range %
2898531/ICV	Acrolein	OOS	70.1	80-120

Explanation: Acrolein has an acceptable recovery in the **2898540**/LFB. See the following table.

Analysis Date: July 11, 2018

Sample	Analyte	Recovery %	Range %
2898540/LFB	Acrolein	73.7	40-153

Analysis Date: July 11, 2018

Sample	Analyte	Deviation	Recovery %	Range
2892612/DUP	Bromoform	OORPD	53.0	0-20

Explanation: For Bromoform there is possible matrix spike interference affecting the recoveries. Analyte has an acceptable recovery in the MS/MSD. See the following table.

Run # 200908

Analysis Date: July 11, 2018

Sample	Analyte	Deviation	Recovery %	Range %
2892613/MS	1,3,5-Trimethylbenzene	OOS	4.00	61-125
	2-Chloroethyl vinyl ether	OOS	3.80	10-178
	Bromoform	OOS	38.00	61-132
	Iodomethane	OOS	30.90	45-148
	Styrene	OOS	3.45	65-123
	Vinyl Acetate	OOS	0.82	52-141
2892614/MSD	1,3,5-Trimethylbenzene	OOS	1.50	61-125
	2-Chloroethyl vinyl ether	OOS	4.00	10-178
	Bromoform	OOS	30.50	61-132
	Iodomethane	OOS	21.10	45-148
	Styrene	OOS	3.40	65-123
	Vinyl Acetate	OOS	0.30	52-141

Explanation: For the above samples (2892613/MS) and (2892614/MSD) the analytes 00S due to possible Matrix Spike Interference since the analytes have acceptable recoveries in the 2898540/LFB. See the following table.

Analysis Date: July 11, 2018

Sample	Analyte	Recovery %	Range %
2898540/LFB	1,3,5-Trimethylbenzene	90.00	68-123
	2-Chloroethyl vinyl ether	80.00	47-143
	Bromoform	110.00	61-130
	Iodomethane	108.00	54-143
	Styrene	83.50	65-127
	Vinyl Acetate	119.00	53-144

General Comments

The analysis was performed in accordance with the latest Environmental Protection Agency and Standard Method for the Examination of Water and Wastewater Approved Methodology. All the results associated with quality control samples were found within acceptable criteria established for these parameters. After reviewing the documentation mentioned above we conclude that the data presented herein is valid and acceptable.

Formulas:

1. RPD = Relative Percent Difference

All Duplicates (DUP, MSD and LFBD) are calculated as follow:

$$RPD = \left\{ \frac{(\text{Final Result QC}) - (\text{Final Result Ref})}{\frac{(\text{Final Result QC}) + (\text{Final Result Ref})}{2}} \right\} \times 100$$

RPD is reported N.C. when the (value of Final Result) < 10X (value of MDL)

RPD General Acceptance criteria is (≤ 20%) for all matrices except Solid / Soil (≤ 40%)

$RPD_{Micro} = (Log_{10}$ Final Result QC) – (Log_{10} Final Result Ref) which is expressed as Precision.

2. The % of Recovery is calculated as follow:

$$\% \text{ Rec} = \left\{ \frac{\text{(Final Result QC)}}{\text{Amount Added of QC}} \right\} \text{ X } 100$$

3. The % of Recovery for MS and MSD is calculated as follow:

$$\% \text{ Rec} = \left\{ \frac{\text{(Final Result QC) – (Final Result Ref)}}{\text{Amount Added of QC}} \right\} \text{ X } 100$$

Marcelino Benitez — July 26, 2018

Prepared By: — Date

Lcdo. Marcelino Benítez

QA/QC Coordinador Licensed

Janet Gómez Rosario — July 26, 2018

Checked by: — Date

Lcda. Janet Gómez

QA/QC Supervisor

SECTION 2
LABORATORY TEST REPORT

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

July 13, 2018

MR. ELVIN VARELA

ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1 SUITE 401
ROAD 165 KM 1.2
GUAYNABO PR 00968

I hereby certify that the results reported for EQ Lab Samples 2892611 to 2892616 have been reviewed by me and are correct as presented herein.

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 4538
A 1678389

Lcda. Sonia Pichardo Rodriguez
Certified by Laboratory Director

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
+ = Parameter is not accredited under EQLab's NELAP Certification

ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	19.1	µg/L	--	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	BDL	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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PRDOH Certified
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To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892611**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:06	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ · Químico Licenciado · Estado Libre Asociado de Puerto Rico · LICENCIA NUM. 4538

Certified by Laboratory Director

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ACCREDITED IN ACCORDANCE WITH nelac
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Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-DUPLICATE GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018**	09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018	14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	256578				Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits			Analysis			Prep Method		
					MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-DUPLICATE GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-DUPLICATE GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	11.1	µg/L	Q	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	3.40	µg/L	--	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

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ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-DUPLICATE GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

	Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
	Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

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Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892612**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	07:32	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ · Químico Licenciado · Estado Libre Asociado de Puerto Rico · LICENCIA NUM. 538

Certified by Laboratory Director

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Source: **EFFLUENT-MS GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892613**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	104	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	123	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	95.9	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	100	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	96.5	%	--	2.0	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	103	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	105	%	--	1.4	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	80.9	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	100	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	69.0	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	97.2	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	82.6	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	98.3	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	109	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	101	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	4.00	%	Q	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MS**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892613**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	94.1	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	97.4	%	--	2.0	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	93.0	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	128	%	--	1.5	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	59.2	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	91.2	%	--	6.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	3.80	%	Q	6.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	79.8	%	--	1.4	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	101	%	--	6.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	89.0	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	89.2	%	--	1.4	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	109	%	--	6.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	104	%	--	6.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	47.8	%	--	25.0	75.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	91.5	%	--	6.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	103	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MS**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892613**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	100	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	99.5	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	114	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	38.0	%	Q	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	106	%	--	2.0	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	112	%	--	7.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	122	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	99.5	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	110	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	88.0	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	122	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	117	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	98.4	%	--	1.5	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	124	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	91.2	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	85.2	%	--	30.0	75.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MS**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892613**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	100	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	87.3	%	--	1.4	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Iodomethane	EPA 8260B	30.9	%	Q	8.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	74.0	%	--	2.0	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Naphthalene	EPA 8260B	68.3	%	--	2.0	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Styrene	EPA 8260B	3.45	%	Q	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	103	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	58.8	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Toluene	EPA 8260B	103	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	104	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	109	%	--	1.5	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	0.820	%	Q	6.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	107	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	67.6	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	64.8	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	100	%	--	1.8	6.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MS**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892613**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	84.3	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	96.1	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	95.1	%	--	1.0	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	89.8	%	--	2.3	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	91.7	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	98.9	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	101	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	115	%	--	1.2	3.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	83.1	%	--	6.0	15.0	--	07/11/2018	07:58	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 8

Certified by Laboratory Director

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To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MSD GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892614**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	103	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	123	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	96.6	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	99.5	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	101	%	--	2.0	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	113	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	107	%	--	1.4	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	84.3	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	101	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	73.2	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	94.8	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	85.4	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	99.4	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	109	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	102	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	1.50	%	Q	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B

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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MSD**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892614**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	95.5	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	96.0	%	--	2.0	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	95.8	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	131	%	--	1.5	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	61.7	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	92.2	%	--	6.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	4.00	%	Q	6.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	79.3	%	--	1.4	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	102	%	--	6.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	90.3	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	91.1	%	--	1.4	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	109	%	--	6.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	106	%	--	6.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	51.2	%	--	25.0	75.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	96.1	%	--	6.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	104	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac
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Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MSD**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892614**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	102	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	104	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	114	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	30.5	%	Q	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	111	%	--	2.0	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	119	%	--	7.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	123	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	97.7	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	111	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	90.4	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	115	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	113	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	98.2	%	--	1.5	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	123	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	94.8	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	85.3	%	--	30.0	75.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MSD**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892614**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	100	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	94.0	%	--	1.4	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Iodomethane	EPA 8260B	21.1	%	Q	8.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	74.0	%	--	2.0	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Naphthalene	EPA 8260B	72.6	%	--	2.0	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Styrene	EPA 8260B	3.40	%	Q	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	106	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	58.7	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Toluene	EPA 8260B	104	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	104	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	118	%	--	1.5	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	0.300	%	Q	6.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	118	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	71.1	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	64.1	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	99.0	%	--	1.8	6.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-MSD GUAYAMA, PR**

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892614**	Collected Date & Time:	**07/03/2018** 09:05	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	87.9	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	96.5	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	96.7	%	--	1.0	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	89.4	%	--	2.3	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	92.8	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	100	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	105	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	115	%	--	1.2	3.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	82.6	%	--	6.0	15.0	--	07/11/2018	08:24	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 4...

Certified by Laboratory Director

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **INFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018**	08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018	14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	256578				Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

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To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **INFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018** 08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

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Attn: MR. ELVIN VARELA
Source: **INFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018** 08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **INFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018** 08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	3.80	µg/L	--	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **INFLUENT**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: GROUND WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892615**	Collected Date & Time:	**07/03/2018**	08:39	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018	14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	256578				Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	04:55	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 4538

Certified by Laboratory Director

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ACCREDITED IN ACCORDANCE WITH nelac
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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018**	07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018	14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	256578				Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac
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Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

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To: ARCADIS CARIBE, PSC
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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
+ = Parameter is not accredited under EQLab's NELAP Certification

ACCREDITED IN ACCORDANCE WITH nelac
The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
#48 CITY VIEW PLAZA 1, SUITE 401
ROAD 165, KM 1.2
GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **TRIP BLANK**
GUAYAMA, PR

Project Name: INTERNO
Facility: GUAYAMA PROJECT
Description: DI WATER - Grab
Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2892616**	Collected Date & Time:	**07/03/2018** 07:00	Date of Report:	07/16/2018
Work Order:	655-04-26	Received Date & Time:	07/03/2018 14:15	Collected By:	EVARELA
Delivery Slip:	2018-11237	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	256578			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	07/11/2018	03:11	NIVA	07/09/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 4538

Certified by Laboratory Director

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
+ = Parameter is not accredited under EQLab's NELAP Certification

ACCREDITED IN ACCORDANCE WITH nelac

The results presented herein meet all NELAC requirements.
Refer to eqlab certification number E87783 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

SECTION 3
ANALYTICAL TEST RESULTS
QUALITY ASSURANCE REPORT

Analytical Test Results Quality Assurance Report

W. O. # 655-04-26 Date: July 26, 2018

1.0 Samples Analyzed:

EQL SAMPLE #	DATE COLLECTED	DATE RECEIVED
2892611, 2892612, 2892613, 2892614, 2892615, 2892616	July 03, 2018	July 03, 2018

2.0 Instrumentation:

Parameter	Instrumentation Used
EPA 8260B VOC	V7 – AG7890MS Gas Chromatograph with a Mass Selective Detector

3.0 Methodology:

Parameter	Method	Date Analyzed	Analyst
EPA 8260B VOC	EPA 8260B VOC	July 11, 2018	N. Villanueva

Marcelino Benitez

Lcdo Marcelino Benítez
QA/Q/C Coordinador Licensed

QUALITY CONTROL SUMMARY

EPA 8260B VOC - Run #200908

2898530 - LRB
Reference Sample Number is: 2892611

Analyte Name	Reference Result	QC Result	DQ	Units	MDL	MRL	Accuracy A/A	Accuracy Rec. %	Acceptance Criteria Low Limit	Acceptance Criteria High Limit	Precision RPD	Acceptance Criteria High Limit	Analysis Date	Analysis Time	Analysis By
1,1,1,2-Tetrachloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,1,1-Trichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,1,2,2-Tetrachloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,1,2-Trichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,1-Dichloroethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,1-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,1-Dichloropropene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,2,3-Trichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,2,3-Trichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,2,4-Trichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,2,4-Trimethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,2-Dibromo-3-chloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,2-Dibromoethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,2-Dichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,2-Dichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,3,5-Trimethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,3-Dichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,3-Dichloropropane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1,4-Dichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
1-Chlorohexane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
2,2-Dichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
2-Butanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
2-Chloroethyl vinyl ether	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
2-Chlorotoluene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA

QUALITY CONTROL SUMMARY

2-Hexanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
4-Bromofluorobenzene-SURR	18.9	18.8	--	µg/L	N/A	N/A	20.0	93.9	79	121	N/A	N/A	07/11/18	01:53	NIVA
4-Chlorotoluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
4-Isopropyltoluene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
4-Methyl-2-pentanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Acetone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Acrolein	N.D	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Acrylonitrile	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Benzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Bromobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Bromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Bromodichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Bromoform	19.1	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Bromomethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Carbon disulfide	N.D	N.D	U	µg/L	7.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Carbon tetrachloride	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Chlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Chloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Chloroform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Chloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Dibromochloromethane	BDL	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Dibromofluoromethane-SURR	22.7	23.0	--	µg/L	N/A	N/A	20.0	115	83	120	N/A	N/A	07/11/18	01:53	NIVA
Dibromomethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Dichlorodifluoromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Dichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Epichlorohydrin	N.D	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Ethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Hexachlorobutadiene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Iodomethane	N.D	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Isopropylbenzene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Naphthalene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA

QUALITY CONTROL SUMMARY

Styrene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Tetrachloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Tetrahydrofuran	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Toluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Toluene-d8-SURR	20.0	19.8	--	µg/L	N/A	N/A	20.0	99.0	80	116	N/A	N/A	07/11/18	01:53	NIVA
Trichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Trichlorofluoromethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Vinyl Acetate	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
Vinyl chloride	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
cis-1,2-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
cis-1,3-Dichloropropene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
m,p-Xylene	N.D	N.D	U	µg/L	1.8	6.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
n-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
n-Propylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
o-Dichlorobenzene	N.D	N.D	U	µg/L	1.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
o-Xylene	N.D	N.D	U	µg/L	2.3	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
sec-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
tert-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
trans-1,2-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
trans-1,3-Dichloropropene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA
trans-1,4-Dichloro-2-butene	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	07/11/18	01:53	NIVA

2898531 - ICV
Reference Sample Number is: 2892611

							Accuracy				Precision		Analysis		
									Acceptance Criteria			Acceptance Criteria			
Analyte Name	**Reference Result**	**QC Result**	**DQ**	**Units**	**MDL**	**MRL**	**A/A**	**Rec. %**	**Low Limit**	**High Limit**	**RPD**	**High Limit**	**Date**	**Time**	**By**
1,1,1,2-Tetrachloroethane	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,1,1-Trichloroethane	N.D	22.5	--	µg/L	1.2	3.0	20.0	112	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,1,2,2-Tetrachloroethane	N.D	19.4	--	µg/L	1.2	3.0	20.0	96.9	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,1,2-Trichloroethane	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,1-Dichloroethane	N.D	21.3	--	µg/L	2.0	3.0	20.0	107	80	120	N/A	N/A	07/11/18	02:19	NIVA

QUALITY CONTROL SUMMARY

1,1-Dichloroethene	N.D	22.2	--	µg/L	1.2	3.0	20.0	111	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,1-Dichloropropene	N.D	18.4	--	µg/L	1.4	3.0	20.0	91.9	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,2,3-Trichlorobenzene	N.D	16.8	--	µg/L	1.2	3.0	20.0	84.0	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,2,3-Trichloropropane	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,2,4-Trichlorobenzene	N.D	17.7	--	µg/L	1.2	3.0	20.0	88.5	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,2,4-Trimethylbenzene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.6	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,2-Dibromo-3-chloropropane	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.6	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,2-Dibromoethane	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.7	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,2-Dichloroethane	N.D	21.8	--	µg/L	1.2	3.0	20.0	109	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,2-Dichloropropane	N.D	19.6	--	µg/L	1.2	3.0	20.0	97.9	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,3,5-Trimethylbenzene	N.D	18.5	--	µg/L	1.2	3.0	20.0	92.5	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,3-Dichlorobenzene	N.D	18.5	--	µg/L	1.2	3.0	20.0	92.4	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,3-Dichloropropane	N.D	19.1	--	µg/L	2.0	3.0	20.0	95.6	80	120	N/A	N/A	07/11/18	02:19	NIVA
1,4-Dichlorobenzene	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.7	80	120	N/A	N/A	07/11/18	02:19	NIVA
1-Chlorohexane	N.D	21.6	--	µg/L	1.5	3.0	20.0	108	80	120	N/A	N/A	07/11/18	02:19	NIVA
2,2-Dichloropropane	N.D	16.4	--	µg/L	1.2	3.0	20.0	82.0	80	120	N/A	N/A	07/11/18	02:19	NIVA
2-Butanone	N.D	109.3	--	µg/L	6.0	15.0	100	109	80	120	N/A	N/A	07/11/18	02:19	NIVA
2-Chloroethyl vinyl ether	N.D	115.8	--	µg/L	6.0	15.0	100	116	80	120	N/A	N/A	07/11/18	02:19	NIVA
2-Chlorotoluene	N.D	16.7	--	µg/L	1.4	3.0	20.0	83.5	80	120	N/A	N/A	07/11/18	02:19	NIVA
2-Hexanone	N.D	101.7	--	µg/L	6.0	15.0	100	102	80	120	N/A	N/A	07/11/18	02:19	NIVA
4-Bromofluorobenzene-SURR	18.9	19.6	--	µg/L	N/A	N/A	20.0	97.9	79	121	N/A	N/A	07/11/18	02:19	NIVA
4-Chlorotoluene	N.D	16.7	--	µg/L	1.2	3.0	20.0	83.7	80	120	N/A	N/A	07/11/18	02:19	NIVA
4-Isopropyltoluene	N.D	16.2	--	µg/L	1.4	3.0	20.0	81.2	80	120	N/A	N/A	07/11/18	02:19	NIVA
4-Methyl-2-pentanone	N.D	110.3	--	µg/L	6.0	15.0	100	110	80	120	N/A	N/A	07/11/18	02:19	NIVA
Acetone	N.D	114.9	--	µg/L	6.0	15.0	100	115	80	120	N/A	N/A	07/11/18	02:19	NIVA
Acrolein	N.D	350.7	Q	µg/L	25.0	75.0	500	70.1	80	120	N/A	N/A	07/11/18	02:19	NIVA
Acrylonitrile	N.D	109.9	--	µg/L	6.0	15.0	100	110	80	120	N/A	N/A	07/11/18	02:19	NIVA
Benzene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.3	80	120	N/A	N/A	07/11/18	02:19	NIVA
Bromobenzene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.4	80	120	N/A	N/A	07/11/18	02:19	NIVA
Bromochloromethane	N.D	23.7	--	µg/L	1.2	3.0	20.0	118	80	120	N/A	N/A	07/11/18	02:19	NIVA
Bromodichloromethane	N.D	22.4	--	µg/L	1.2	3.0	20.0	112	80	120	N/A	N/A	07/11/18	02:19	NIVA

QUALITY CONTROL SUMMARY

Bromoform	19.1	21.7	--	µg/L	1.2	3.0	20.0	108	80	120	N/A	N/A	07/11/18	02:19	NIVA
Bromomethane	N.D	20.1	--	µg/L	2.0	3.0	20.0	100	80	120	N/A	N/A	07/11/18	02:19	NIVA
Carbon disulfide	N.D	119.0	--	µg/L	7.0	15.0	100	119	80	120	N/A	N/A	07/11/18	02:19	NIVA
Carbon tetrachloride	N.D	22.0	--	µg/L	1.2	3.0	20.0	110	80	120	N/A	N/A	07/11/18	02:19	NIVA
Chlorobenzene	N.D	19.0	--	µg/L	1.2	3.0	20.0	95.0	80	120	N/A	N/A	07/11/18	02:19	NIVA
Chloroethane	N.D	20.5	--	µg/L	1.2	3.0	20.0	103	80	120	N/A	N/A	07/11/18	02:19	NIVA
Chloroform	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	07/11/18	02:19	NIVA
Chloromethane	N.D	23.8	--	µg/L	1.2	3.0	20.0	119	80	120	N/A	N/A	07/11/18	02:19	NIVA
Dibromochloromethane	BDL	21.5	--	µg/L	1.2	3.0	20.0	107	80	120	N/A	N/A	07/11/18	02:19	NIVA
Dibromofluoromethane-SURR	22.7	22.9	--	µg/L	N/A	N/A	20.0	114	83	120	N/A	N/A	07/11/18	02:19	NIVA
Dibromomethane	N.D	20.4	--	µg/L	1.5	3.0	20.0	102	80	120	N/A	N/A	07/11/18	02:19	NIVA
Dichlorodifluoromethane	N.D	23.2	--	µg/L	1.2	3.0	20.0	116	80	120	N/A	N/A	07/11/18	02:19	NIVA
Dichloromethane	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	80	120	N/A	N/A	07/11/18	02:19	NIVA
Epichlorohydrin	N.D	444.5	--	µg/L	30.0	75.0	500	88.9	80	120	N/A	N/A	07/11/18	02:19	NIVA
Ethylbenzene	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.5	80	120	N/A	N/A	07/11/18	02:19	NIVA
Hexachlorobutadiene	N.D	16.1	--	µg/L	1.4	3.0	20.0	80.5	80	120	N/A	N/A	07/11/18	02:19	NIVA
Iodomethane	N.D	108.7	--	µg/L	8.0	15.0	100	109	80	120	N/A	N/A	07/11/18	02:19	NIVA
Isopropylbenzene	N.D	17.1	--	µg/L	2.0	3.0	20.0	85.7	80	120	N/A	N/A	07/11/18	02:19	NIVA
Naphthalene	N.D	17.6	--	µg/L	2.0	3.0	20.0	87.8	80	120	N/A	N/A	07/11/18	02:19	NIVA
Styrene	N.D	16.1	--	µg/L	1.2	3.0	20.0	80.7	80	120	N/A	N/A	07/11/18	02:19	NIVA
Tetrachloroethene	N.D	19.0	--	µg/L	1.2	3.0	20.0	95.2	80	120	N/A	N/A	07/11/18	02:19	NIVA
Tetrahydrofuran	N.D	17.1	--	µg/L	1.2	3.0	20.0	85.7	80	120	N/A	N/A	07/11/18	02:19	NIVA
Toluene	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.1	80	120	N/A	N/A	07/11/18	02:19	NIVA
Toluene-d8-SURR	20.0	21.2	--	µg/L	N/A	N/A	20.0	106	80	116	N/A	N/A	07/11/18	02:19	NIVA
Trichloroethene	N.D	19.2	--	µg/L	1.2	3.0	20.0	95.8	80	120	N/A	N/A	07/11/18	02:19	NIVA
Trichlorofluoromethane	N.D	18.5	--	µg/L	1.5	3.0	20.0	92.3	80	120	N/A	N/A	07/11/18	02:19	NIVA
Vinyl Acetate	N.D	115.0	--	µg/L	6.0	15.0	100	115	80	120	N/A	N/A	07/11/18	02:19	NIVA
Vinyl chloride	N.D	23.1	--	µg/L	1.2	3.0	20.0	115	80	120	N/A	N/A	07/11/18	02:19	NIVA
cis-1,2-Dichloroethene	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.4	80	120	N/A	N/A	07/11/18	02:19	NIVA
cis-1,3-Dichloropropene	N.D	17.4	--	µg/L	1.2	3.0	20.0	86.8	80	120	N/A	N/A	07/11/18	02:19	NIVA
m,p-Xylene	N.D	36.5	--	µg/L	1.8	6.0	40.0	91.3	80	120	N/A	N/A	07/11/18	02:19	NIVA

QUALITY CONTROL SUMMARY

n-Butylbenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	80	120	N/A	N/A	07/11/18	02:19	NIVA
n-Propylbenzene	N.D	17.4	--	µg/L	1.2	3.0	20.0	87.1	80	120	N/A	N/A	07/11/18	02:19	NIVA
o-Dichlorobenzene	N.D	18.6	--	µg/L	1.0	3.0	20.0	92.9	80	120	N/A	N/A	07/11/18	02:19	NIVA
o-Xylene	N.D	16.4	--	µg/L	2.3	3.0	20.0	82.1	80	120	N/A	N/A	07/11/18	02:19	NIVA
sec-Butylbenzene	N.D	16.0	--	µg/L	1.2	3.0	20.0	80.2	80	120	N/A	N/A	07/11/18	02:19	NIVA
tert-Butylbenzene	N.D	17.8	--	µg/L	1.2	3.0	20.0	88.8	80	120	N/A	N/A	07/11/18	02:19	NIVA
trans-1,2-Dichloroethene	N.D	21.5	--	µg/L	1.2	3.0	20.0	107	80	120	N/A	N/A	07/11/18	02:19	NIVA
trans-1,3-Dichloropropene	N.D	23.7	--	µg/L	1.2	3.0	20.0	119	80	120	N/A	N/A	07/11/18	02:19	NIVA
trans-1,4-Dichloro-2-butene	N.D	91.6	--	µg/L	6.0	15.0	100	91.6	80	120	N/A	N/A	07/11/18	02:19	NIVA

2892612 - DUP
Reference Sample Number is: 2892611

							Accuracy				Precision				
									Acceptance Criteria			Acceptance Criteria	Analysis		
Analyte Name	**Reference Result**	**QC Result**	**DQ**	**Units**	**MDL**	**MRL**	**A/A**	**Rec. %**	**Low Limit**	**High Limit**	**RPD**	**High Limit**	**Date**	**Time**	**By**
1,1,1,2-Tetrachloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,1,1-Trichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,1,2,2-Tetrachloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,1,2-Trichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,1-Dichloroethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,1-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,1-Dichloropropene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,2,3-Trichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,2,3-Trichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,2,4-Trichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,2,4-Trimethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,2-Dibromo-3-chloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,2-Dibromoethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,2-Dichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,2-Dichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,3,5-Trimethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,3-Dichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA

QUALITY CONTROL SUMMARY

1,3-Dichloropropane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1,4-Dichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
1-Chlorohexane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
2,2-Dichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
2-Butanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
2-Chloroethyl vinyl ether	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
2-Chlorotoluene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
2-Hexanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
4-Bromofluorobenzene-SURR	18.9	19.0	--	µg/L	N/A	N/A	20.0	94.8	71	125	N/A	N/A	07/11/18	07:32	NIVA
4-Chlorotoluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
4-Isopropyltoluene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
4-Methyl-2-pentanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Acetone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Acrolein	N.D	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Acrylonitrile	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Benzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Bromobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Bromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Bromodichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Bromoform	19.1	11.1	Q	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	53.0	20	07/11/18	07:32	NIVA
Bromomethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Carbon disulfide	N.D	N.D	U	µg/L	7.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Carbon tetrachloride	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Chlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Chloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Chloroform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Chloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Dibromochloromethane	BDL	3.4	--	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Dibromofluoromethane-SURR	22.7	24.2	--	µg/L	N/A	N/A	20.0	121	76	123	N/A	N/A	07/11/18	07:32	NIVA
Dibromomethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Dichlorodifluoromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA

QUALITY CONTROL SUMMARY

Dichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Epichlorohydrin	N.D	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Ethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Hexachlorobutadiene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Iodomethane	N.D	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Isopropylbenzene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Naphthalene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Styrene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Tetrachloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Tetrahydrofuran	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Toluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Toluene-d8-SURR	20.0	19.1	--	µg/L	N/A	N/A	20.0	95.3	77	122	N/A	N/A	07/11/18	07:32	NIVA
Trichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Trichlorofluoromethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Vinyl Acetate	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
Vinyl chloride	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
cis-1,2-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
cis-1,3-Dichloropropene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
m,p-Xylene	N.D	N.D	U	µg/L	1.8	6.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
n-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
n-Propylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
o-Dichlorobenzene	N.D	N.D	U	µg/L	1.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
o-Xylene	N.D	N.D	U	µg/L	2.3	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
sec-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
tert-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
trans-1,2-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
trans-1,3-Dichloropropene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA
trans-1,4-Dichloro-2-butene	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	07/11/18	07:32	NIVA

QUALITY CONTROL SUMMARY

2892613 - MS
Reference Sample Number is: 2892611

Analyte Name	Reference Result	QC Result	DQ	Units	MDL	MRL	Accuracy A/A	Accuracy Rec. %	Acceptance Criteria Low Limit	Acceptance Criteria High Limit	Precision RPD	Acceptance Criteria High Limit	Analysis Date	Analysis Time	Analysis By
1,1,1,2-Tetrachloroethane	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	67	124	N/A	N/A	07/11/18	07:58	NIVA
1,1,1-Trichloroethane	N.D	24.5	--	µg/L	1.2	3.0	20.0	123	69	140	N/A	N/A	07/11/18	07:58	NIVA
1,1,2,2-Tetrachloroethane	N.D	19.2	--	µg/L	1.2	3.0	20.0	95.9	64	122	N/A	N/A	07/11/18	07:58	NIVA
1,1,2-Trichloroethane	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	78	125	N/A	N/A	07/11/18	07:58	NIVA
1,1-Dichloroethane	N.D	19.3	--	µg/L	2.0	3.0	20.0	96.5	56	141	N/A	N/A	07/11/18	07:58	NIVA
1,1-Dichloroethene	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	44	155	N/A	N/A	07/11/18	07:58	NIVA
1,1-Dichloropropene	N.D	20.9	--	µg/L	1.4	3.0	20.0	105	83	110	N/A	N/A	07/11/18	07:58	NIVA
1,2,3-Trichlorobenzene	N.D	16.2	--	µg/L	1.2	3.0	20.0	80.9	71	119	N/A	N/A	07/11/18	07:58	NIVA
1,2,3-Trichloropropane	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	47	131	N/A	N/A	07/11/18	07:58	NIVA
1,2,4-Trichlorobenzene	N.D	13.8	--	µg/L	1.2	3.0	20.0	69.0	53	139	N/A	N/A	07/11/18	07:58	NIVA
1,2,4-Trimethylbenzene	N.D	19.4	--	µg/L	1.2	3.0	20.0	97.2	52	141	N/A	N/A	07/11/18	07:58	NIVA
1,2-Dibromo-3-chloropropane	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.6	67	140	N/A	N/A	07/11/18	07:58	NIVA
1,2-Dibromoethane	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.3	66	140	N/A	N/A	07/11/18	07:58	NIVA
1,2-Dichloroethane	N.D	21.8	--	µg/L	1.2	3.0	20.0	109	60	139	N/A	N/A	07/11/18	07:58	NIVA
1,2-Dichloropropane	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	71	121	N/A	N/A	07/11/18	07:58	NIVA
1,3,5-Trimethylbenzene	N.D	BDL	Q	µg/L	1.2	3.0	20.0	4.00	61	125	N/A	N/A	07/11/18	07:58	NIVA
1,3-Dichlorobenzene	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.1	61	129	N/A	N/A	07/11/18	07:58	NIVA
1,3-Dichloropropane	N.D	19.5	--	µg/L	2.0	3.0	20.0	97.4	69	124	N/A	N/A	07/11/18	07:58	NIVA
1,4-Dichlorobenzene	N.D	18.6	--	µg/L	1.2	3.0	20.0	93.0	73	122	N/A	N/A	07/11/18	07:58	NIVA
1-Chlorohexane	N.D	25.6	--	µg/L	1.5	3.0	20.0	128	48	136	N/A	N/A	07/11/18	07:58	NIVA
2,2-Dichloropropane	N.D	11.8	--	µg/L	1.2	3.0	20.0	59.2	13	157	N/A	N/A	07/11/18	07:58	NIVA
2-Butanone	N.D	91.2	--	µg/L	6.0	15.0	100	91.2	43	151	N/A	N/A	07/11/18	07:58	NIVA
2-Chloroethyl vinyl ether	N.D	BDL	Q	µg/L	6.0	15.0	100	3.80	10	178	N/A	N/A	07/11/18	07:58	NIVA
2-Chlorotoluene	N.D	16.0	--	µg/L	1.4	3.0	20.0	79.8	64	139	N/A	N/A	07/11/18	07:58	NIVA
2-Hexanone	N.D	101.0	--	µg/L	6.0	15.0	100	101	53	147	N/A	N/A	07/11/18	07:58	NIVA
4-Bromofluorobenzene-SURR	18.9	19.3	--	µg/L	N/A	N/A	20.0	96.6	71	125	N/A	N/A	07/11/18	07:58	NIVA
4-Chlorotoluene	N.D	17.8	--	µg/L	1.2	3.0	20.0	89.0	64	128	N/A	N/A	07/11/18	07:58	NIVA

QUALITY CONTROL SUMMARY

4-Isopropyltoluene	N.D	17.8	--	µg/L	1.4	3.0	20.0	89.2	66	129	N/A	N/A	07/11/18	07:58	NIVA
4-Methyl-2-pentanone	N.D	108.6	--	µg/L	6.0	15.0	100	109	57	143	N/A	N/A	07/11/18	07:58	NIVA
Acetone	N.D	104.2	--	µg/L	6.0	15.0	100	104	33	154	N/A	N/A	07/11/18	07:58	NIVA
Acrolein	N.D	238.8	--	µg/L	25.0	75.0	500	47.8	47	157	N/A	N/A	07/11/18	07:58	NIVA
Acrylonitrile	N.D	91.5	--	µg/L	6.0	15.0	100	91.5	34	160	N/A	N/A	07/11/18	07:58	NIVA
Benzene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	65	139	N/A	N/A	07/11/18	07:58	NIVA
Bromobenzene	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	64	120	N/A	N/A	07/11/18	07:58	NIVA
Bromochloromethane	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	49	150	N/A	N/A	07/11/18	07:58	NIVA
Bromodichloromethane	N.D	22.8	--	µg/L	1.2	3.0	20.0	114	64	141	N/A	N/A	07/11/18	07:58	NIVA
Bromoform	19.1	26.7	Q	µg/L	1.2	3.0	20.0	38.0	61	132	N/A	N/A	07/11/18	07:58	NIVA
Bromomethane	N.D	21.2	--	µg/L	2.0	3.0	20.0	106	35	163	N/A	N/A	07/11/18	07:58	NIVA
Carbon disulfide	N.D	111.9	--	µg/L	7.0	15.0	100	112	48	158	N/A	N/A	07/11/18	07:58	NIVA
Carbon tetrachloride	N.D	24.5	--	µg/L	1.2	3.0	20.0	122	73	137	N/A	N/A	07/11/18	07:58	NIVA
Chlorobenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	68	121	N/A	N/A	07/11/18	07:58	NIVA
Chloroethane	N.D	21.9	--	µg/L	1.2	3.0	20.0	110	50	142	N/A	N/A	07/11/18	07:58	NIVA
Chloroform	N.D	17.6	--	µg/L	1.2	3.0	20.0	88.0	59	140	N/A	N/A	07/11/18	07:58	NIVA
Chloromethane	N.D	24.4	--	µg/L	1.2	3.0	20.0	122	42	139	N/A	N/A	07/11/18	07:58	NIVA
Dibromochloromethane	BDL	23.3	--	µg/L	1.2	3.0	20.0	117	67	137	N/A	N/A	07/11/18	07:58	NIVA
Dibromofluoromethane-SURR	22.7	22.2	--	µg/L	N/A	N/A	20.0	111	76	123	N/A	N/A	07/11/18	07:58	NIVA
Dibromomethane	N.D	19.7	--	µg/L	1.5	3.0	20.0	98.4	72	139	N/A	N/A	07/11/18	07:58	NIVA
Dichlorodifluoromethane	N.D	24.7	--	µg/L	1.2	3.0	20.0	124	42	157	N/A	N/A	07/11/18	07:58	NIVA
Dichloromethane	N.D	18.2	--	µg/L	1.2	3.0	20.0	91.2	56	135	N/A	N/A	07/11/18	07:58	NIVA
Epichlorohydrin	N.D	426.0	--	µg/L	30.0	75.0	500	85.2	37	129	N/A	N/A	07/11/18	07:58	NIVA
Ethylbenzene	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	58	136	N/A	N/A	07/11/18	07:58	NIVA
Hexachlorobutadiene	N.D	17.5	--	µg/L	1.4	3.0	20.0	87.3	62	124	N/A	N/A	07/11/18	07:58	NIVA
Iodomethane	N.D	30.9	Q	µg/L	8.0	15.0	100	30.9	45	148	N/A	N/A	07/11/18	07:58	NIVA
Isopropylbenzene	N.D	14.8	--	µg/L	2.0	3.0	20.0	74.0	64	122	N/A	N/A	07/11/18	07:58	NIVA
Naphthalene	N.D	13.7	--	µg/L	2.0	3.0	20.0	68.3	66	135	N/A	N/A	07/11/18	07:58	NIVA
Styrene	N.D	BDL	Q	µg/L	1.2	3.0	20.0	3.45	65	123	N/A	N/A	07/11/18	07:58	NIVA
Tetrachloroethene	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	64	138	N/A	N/A	07/11/18	07:58	NIVA
Tetrahydrofuran	N.D	11.8	--	µg/L	1.2	3.0	20.0	58.8	51	147	N/A	N/A	07/11/18	07:58	NIVA

QUALITY CONTROL SUMMARY

Toluene	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	65	140	N/A	N/A	07/11/18	07:58	NIVA
Toluene-d8-SURR	20.0	20.4	--	µg/L	N/A	N/A	20.0	102	77	122	N/A	N/A	07/11/18	07:58	NIVA
Trichloroethene	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	76	126	N/A	N/A	07/11/18	07:58	NIVA
Trichlorofluoromethane	N.D	21.7	--	µg/L	1.5	3.0	20.0	109	60	144	N/A	N/A	07/11/18	07:58	NIVA
Vinyl Acetate	N.D	BDL	Q	µg/L	6.0	15.0	100	0.820	52	141	N/A	N/A	07/11/18	07:58	NIVA
Vinyl chloride	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	39	151	N/A	N/A	07/11/18	07:58	NIVA
cis-1,2-Dichloroethene	N.D	13.5	--	µg/L	1.2	3.0	20.0	67.6	66	127	N/A	N/A	07/11/18	07:58	NIVA
cis-1,3-Dichloropropene	N.D	13.0	--	µg/L	1.2	3.0	20.0	64.8	57	131	N/A	N/A	07/11/18	07:58	NIVA
m,p-Xylene	N.D	40.0	--	µg/L	1.8	6.0	40.0	100	56	145	N/A	N/A	07/11/18	07:58	NIVA
n-Butylbenzene	N.D	16.9	--	µg/L	1.2	3.0	20.0	84.3	72	114	N/A	N/A	07/11/18	07:58	NIVA
n-Propylbenzene	N.D	19.2	--	µg/L	1.2	3.0	20.0	96.1	61	123	N/A	N/A	07/11/18	07:58	NIVA
o-Dichlorobenzene	N.D	19.0	--	µg/L	1.0	3.0	20.0	95.1	73	124	N/A	N/A	07/11/18	07:58	NIVA
o-Xylene	N.D	18.0	--	µg/L	2.3	3.0	20.0	89.8	54	143	N/A	N/A	07/11/18	07:58	NIVA
sec-Butylbenzene	N.D	18.3	--	µg/L	1.2	3.0	20.0	91.7	64	114	N/A	N/A	07/11/18	07:58	NIVA
tert-Butylbenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	98.9	68	113	N/A	N/A	07/11/18	07:58	NIVA
trans-1,2-Dichloroethene	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	56	146	N/A	N/A	07/11/18	07:58	NIVA
trans-1,3-Dichloropropene	N.D	23.0	--	µg/L	1.2	3.0	20.0	115	59	130	N/A	N/A	07/11/18	07:58	NIVA
trans-1,4-Dichloro-2-butene	N.D	83.1	--	µg/L	6.0	15.0	100	83.1	47	129	N/A	N/A	07/11/18	07:58	NIVA

2892614 - MSD
Reference Sample Number is: 2892611

							Accuracy				Precision		Analysis		
									Acceptance Criteria			Acceptance Criteria			
Analyte Name	**Reference Result**	**QC Result**	**DQ**	**Units**	**MDL**	**MRL**	**A/A**	**Rec. %**	**Low Limit**	**High Limit**	**RPD**	**High Limit**	**Date**	**Time**	**By**
1,1,1,2-Tetrachloroethane	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	67	124	0.485	20	07/11/18	08:24	NIVA
1,1,1-Trichloroethane	N.D	24.7	--	µg/L	1.2	3.0	20.0	123	69	140	0.815	20	07/11/18	08:24	NIVA
1,1,2,2-Tetrachloroethane	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.6	64	122	0.727	20	07/11/18	08:24	NIVA
1,1,2-Trichloroethane	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	78	125	0.701	20	07/11/18	08:24	NIVA
1,1-Dichloroethane	N.D	20.2	--	µg/L	2.0	3.0	20.0	101	56	141	N.C.	20	07/11/18	08:24	NIVA
1,1-Dichloroethene	N.D	22.5	--	µg/L	1.2	3.0	20.0	113	44	155	8.66	20	07/11/18	08:24	NIVA
1,1-Dichloropropene	N.D	21.3	--	µg/L	1.4	3.0	20.0	107	83	110	1.85	20	07/11/18	08:24	NIVA
1,2,3-Trichlorobenzene	N.D	16.9	--	µg/L	1.2	3.0	20.0	84.3	71	119	4.12	20	07/11/18	08:24	NIVA

QUALITY CONTROL SUMMARY

1,2,3-Trichloropropane	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	47	131	0.597	20	07/11/18	08:24	NIVA
1,2,4-Trichlorobenzene	N.D	14.6	--	µg/L	1.2	3.0	20.0	73.2	53	139	5.98	20	07/11/18	08:24	NIVA
1,2,4-Trimethylbenzene	N.D	19.0	--	µg/L	1.2	3.0	20.0	94.8	52	141	2.50	20	07/11/18	08:24	NIVA
1,2-Dibromo-3-chloropropane	N.D	17.1	--	µg/L	1.2	3.0	20.0	85.4	67	140	3.39	20	07/11/18	08:24	NIVA
1,2-Dibromoethane	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.4	66	140	1.11	20	07/11/18	08:24	NIVA
1,2-Dichloroethane	N.D	21.9	--	µg/L	1.2	3.0	20.0	109	60	139	0.275	20	07/11/18	08:24	NIVA
1,2-Dichloropropane	N.D	20.5	--	µg/L	1.2	3.0	20.0	102	71	121	1.33	20	07/11/18	08:24	NIVA
1,3,5-Trimethylbenzene	N.D	BDL	Q	µg/L	1.2	3.0	20.0	1.50	61	125	N.C.	20	07/11/18	08:24	NIVA
1,3-Dichlorobenzene	N.D	19.1	--	µg/L	1.2	3.0	20.0	95.5	61	129	1.48	20	07/11/18	08:24	NIVA
1,3-Dichloropropane	N.D	19.2	--	µg/L	2.0	3.0	20.0	96.0	69	124	N.C.	20	07/11/18	08:24	NIVA
1,4-Dichlorobenzene	N.D	19.2	--	µg/L	1.2	3.0	20.0	95.8	73	122	2.97	20	07/11/18	08:24	NIVA
1-Chlorohexane	N.D	26.2	--	µg/L	1.5	3.0	20.0	131	48	136	2.55	20	07/11/18	08:24	NIVA
2,2-Dichloropropane	N.D	12.3	--	µg/L	1.2	3.0	20.0	61.7	13	157	N.C.	20	07/11/18	08:24	NIVA
2-Butanone	N.D	92.2	--	µg/L	6.0	15.0	100	92.2	43	151	1.08	20	07/11/18	08:24	NIVA
2-Chloroethyl vinyl ether	N.D	BDL	Q	µg/L	6.0	15.0	100	4.00	10	178	N.C.	20	07/11/18	08:24	NIVA
2-Chlorotoluene	N.D	15.9	--	µg/L	1.4	3.0	20.0	79.3	64	139	0.629	20	07/11/18	08:24	NIVA
2-Hexanone	N.D	101.7	--	µg/L	6.0	15.0	100	102	53	147	0.730	20	07/11/18	08:24	NIVA
4-Bromofluorobenzene-SURR	18.9	19.3	--	µg/L	N/A	N/A	20.0	96.7	71	125	N/A	N/A	07/11/18	08:24	NIVA
4-Chlorotoluene	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.3	64	128	1.40	20	07/11/18	08:24	NIVA
4-Isopropyltoluene	N.D	18.2	--	µg/L	1.4	3.0	20.0	91.1	66	129	2.11	20	07/11/18	08:24	NIVA
4-Methyl-2-pentanone	N.D	109.4	--	µg/L	6.0	15.0	100	109	57	143	0.725	20	07/11/18	08:24	NIVA
Acetone	N.D	106.0	--	µg/L	6.0	15.0	100	106	33	154	1.69	20	07/11/18	08:24	NIVA
Acrolein	N.D	256.2	--	µg/L	25.0	75.0	500	51.2	47	157	N.C.	20	07/11/18	08:24	NIVA
Acrylonitrile	N.D	96.1	--	µg/L	6.0	15.0	100	96.1	34	160	4.87	20	07/11/18	08:24	NIVA
Benzene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	65	139	1.11	20	07/11/18	08:24	NIVA
Bromobenzene	N.D	20.3	--	µg/L	1.2	3.0	20.0	102	64	120	1.64	20	07/11/18	08:24	NIVA
Bromochloromethane	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	49	150	4.04	20	07/11/18	08:24	NIVA
Bromodichloromethane	N.D	22.9	--	µg/L	1.2	3.0	20.0	114	64	141	0.394	20	07/11/18	08:24	NIVA
Bromoform	19.1	25.2	Q	µg/L	1.2	3.0	20.0	30.5	61	132	5.78	20	07/11/18	08:24	NIVA
Bromomethane	N.D	22.2	--	µg/L	2.0	3.0	20.0	111	35	163	4.61	20	07/11/18	08:24	NIVA
Carbon disulfide	N.D	118.7	--	µg/L	7.0	15.0	100	119	48	158	5.90	20	07/11/18	08:24	NIVA

QUALITY CONTROL SUMMARY

Carbon tetrachloride	N.D	24.5	--	µg/L	1.2	3.0	20.0	123	73	137	0.204	20	07/11/18	08:24	NIVA
Chlorobenzene	N.D	19.5	--	µg/L	1.2	3.0	20.0	97.7	68	121	1.83	20	07/11/18	08:24	NIVA
Chloroethane	N.D	22.2	--	µg/L	1.2	3.0	20.0	111	50	142	1.18	20	07/11/18	08:24	NIVA
Chloroform	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.4	59	140	2.75	20	07/11/18	08:24	NIVA
Chloromethane	N.D	23.1	--	µg/L	1.2	3.0	20.0	115	42	139	5.73	20	07/11/18	08:24	NIVA
Dibromochloromethane	BDL	22.6	--	µg/L	1.2	3.0	20.0	113	67	137	3.31	20	07/11/18	08:24	NIVA
Dibromofluoromethane-SURR	22.7	22.2	--	µg/L	N/A	N/A	20.0	111	76	123	N/A	N/A	07/11/18	08:24	NIVA
Dibromomethane	N.D	19.6	--	µg/L	1.5	3.0	20.0	98.2	72	139	0.254	20	07/11/18	08:24	NIVA
Dichlorodifluoromethane	N.D	24.6	--	µg/L	1.2	3.0	20.0	123	42	157	0.690	20	07/11/18	08:24	NIVA
Dichloromethane	N.D	19.0	--	µg/L	1.2	3.0	20.0	94.8	56	135	3.82	20	07/11/18	08:24	NIVA
Epichlorohydrin	N.D	426.3	--	µg/L	30.0	75.0	500	85.3	37	129	0.0750	20	07/11/18	08:24	NIVA
Ethylbenzene	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	58	136	0.300	20	07/11/18	08:24	NIVA
Hexachlorobutadiene	N.D	18.8	--	µg/L	1.4	3.0	20.0	94.0	62	124	7.45	20	07/11/18	08:24	NIVA
Iodomethane	N.D	21.1	Q	µg/L	8.0	15.0	100	21.1	45	148	N.C.	20	07/11/18	08:24	NIVA
Isopropylbenzene	N.D	14.8	--	µg/L	2.0	3.0	20.0	74.0	64	122	N.C.	20	07/11/18	08:24	NIVA
Naphthalene	N.D	14.5	--	µg/L	2.0	3.0	20.0	72.6	66	135	N.C.	20	07/11/18	08:24	NIVA
Styrene	N.D	BDL	Q	µg/L	1.2	3.0	20.0	3.40	65	123	N.C.	20	07/11/18	08:24	NIVA
Tetrachloroethene	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	64	138	2.53	20	07/11/18	08:24	NIVA
Tetrahydrofuran	N.D	11.7	--	µg/L	1.2	3.0	20.0	58.7	51	147	N.C.	20	07/11/18	08:24	NIVA
Toluene	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	65	140	0.0970	20	07/11/18	08:24	NIVA
Toluene-d8-SURR	20.0	20.4	--	µg/L	N/A	N/A	20.0	102	77	122	N/A	N/A	07/11/18	08:24	NIVA
Trichloroethene	N.D	20.9	--	µg/L	1.2	3.0	20.0	104	76	126	0.865	20	07/11/18	08:24	NIVA
Trichlorofluoromethane	N.D	23.6	--	µg/L	1.5	3.0	20.0	118	60	144	8.47	20	07/11/18	08:24	NIVA
Vinyl Acetate	N.D	BDL	Q	µg/L	6.0	15.0	100	0.300	52	141	N.C.	20	07/11/18	08:24	NIVA
Vinyl chloride	N.D	23.6	--	µg/L	1.2	3.0	20.0	118	39	151	9.96	20	07/11/18	08:24	NIVA
cis-1,2-Dichloroethene	N.D	14.2	--	µg/L	1.2	3.0	20.0	71.1	66	127	5.05	20	07/11/18	08:24	NIVA
cis-1,3-Dichloropropene	N.D	12.8	--	µg/L	1.2	3.0	20.0	64.1	57	131	1.09	20	07/11/18	08:24	NIVA
m,p-Xylene	N.D	39.6	--	µg/L	1.8	6.0	40.0	99.0	56	145	1.06	20	07/11/18	08:24	NIVA
n-Butylbenzene	N.D	17.6	--	µg/L	1.2	3.0	20.0	87.9	72	114	4.12	20	07/11/18	08:24	NIVA
n-Propylbenzene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.5	61	123	0.416	20	07/11/18	08:24	NIVA
o-Dichlorobenzene	N.D	19.3	--	µg/L	1.0	3.0	20.0	96.7	73	124	1.62	20	07/11/18	08:24	NIVA

QUALITY CONTROL SUMMARY

o-Xylene	N.D	17.9	--	µg/L	2.3	3.0	20.0	89.4	54	143	N.C.	20	07/11/18	08:24	NIVA
sec-Butylbenzene	N.D	18.6	--	µg/L	1.2	3.0	20.0	92.8	64	114	1.19	20	07/11/18	08:24	NIVA
tert-Butylbenzene	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	68	113	1.11	20	07/11/18	08:24	NIVA
trans-1,2-Dichloroethene	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	56	146	4.09	20	07/11/18	08:24	NIVA
trans-1,3-Dichloropropene	N.D	23.0	--	µg/L	1.2	3.0	20.0	115	59	130	0.0870	20	07/11/18	08:24	NIVA
trans-1,4-Dichloro-2-butene	N.D	82.6	--	µg/L	6.0	15.0	100	82.6	47	129	0.616	20	07/11/18	08:24	NIVA

2898540 - LFB
Reference Sample Number is: 2892611

							Accuracy				Precision				
									Acceptance Criteria			Acceptance Criteria	Analysis		
Analyte Name	**Reference Result**	**QC Result**	**DQ**	**Units**	**MDL**	**MRL**	**A/A**	**Rec. %**	**Low Limit**	**High Limit**	**RPD**	**High Limit**	**Date**	**Time**	**By**
1,1,1,2-Tetrachloroethane	N.D	20.3	--	µg/L	1.2	3.0	20.0	102	67	126	N/A	N/A	07/11/18	08:50	NIVA
1,1,1-Trichloroethane	N.D	22.3	--	µg/L	1.2	3.0	20.0	112	64	139	N/A	N/A	07/11/18	08:50	NIVA
1,1,2,2-Tetrachloroethane	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	60	131	N/A	N/A	07/11/18	08:50	NIVA
1,1,2-Trichloroethane	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	70	129	N/A	N/A	07/11/18	08:50	NIVA
1,1-Dichloroethane	N.D	19.1	--	µg/L	2.0	3.0	20.0	95.5	63	133	N/A	N/A	07/11/18	08:50	NIVA
1,1-Dichloroethene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.5	55	139	N/A	N/A	07/11/18	08:50	NIVA
1,1-Dichloropropene	N.D	18.2	--	µg/L	1.4	3.0	20.0	91.0	67	131	N/A	N/A	07/11/18	08:50	NIVA
1,2,3-Trichlorobenzene	N.D	16.6	--	µg/L	1.2	3.0	20.0	83.0	68	131	N/A	N/A	07/11/18	08:50	NIVA
1,2,3-Trichloropropane	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	52	131	N/A	N/A	07/11/18	08:50	NIVA
1,2,4-Trichlorobenzene	N.D	15.5	--	µg/L	1.2	3.0	20.0	77.5	51	132	N/A	N/A	07/11/18	08:50	NIVA
1,2,4-Trimethylbenzene	N.D	19.1	--	µg/L	1.2	3.0	20.0	95.5	63	129	N/A	N/A	07/11/18	08:50	NIVA
1,2-Dibromo-3-chloropropane	N.D	17.5	--	µg/L	1.2	3.0	20.0	87.5	66	139	N/A	N/A	07/11/18	08:50	NIVA
1,2-Dibromoethane	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	76	126	N/A	N/A	07/11/18	08:50	NIVA
1,2-Dichloroethane	N.D	22.0	--	µg/L	1.2	3.0	20.0	110	60	136	N/A	N/A	07/11/18	08:50	NIVA
1,2-Dichloropropane	N.D	19.5	--	µg/L	1.2	3.0	20.0	97.5	70	124	N/A	N/A	07/11/18	08:50	NIVA
1,3,5-Trimethylbenzene	N.D	18.0	--	µg/L	1.2	3.0	20.0	90.0	68	123	N/A	N/A	07/11/18	08:50	NIVA
1,3-Dichlorobenzene	N.D	18.5	--	µg/L	1.2	3.0	20.0	92.5	62	127	N/A	N/A	07/11/18	08:50	NIVA
1,3-Dichloropropane	N.D	19.4	--	µg/L	2.0	3.0	20.0	97.0	74	124	N/A	N/A	07/11/18	08:50	NIVA
1,4-Dichlorobenzene	N.D	18.3	--	µg/L	1.2	3.0	20.0	91.5	73	123	N/A	N/A	07/11/18	08:50	NIVA
1-Chlorohexane	N.D	21.5	--	µg/L	1.5	3.0	20.0	108	56	139	N/A	N/A	07/11/18	08:50	NIVA

QUALITY CONTROL SUMMARY

2,2-Dichloropropane	N.D	19.4	--	µg/L	1.2	3.0	20.0	97.0	37	148	N/A	N/A	07/11/18	08:50	NIVA
2-Butanone	N.D	98.0	--	µg/L	6.0	15.0	100	98.0	57	136	N/A	N/A	07/11/18	08:50	NIVA
2-Chloroethyl vinyl ether	N.D	80.0	--	µg/L	6.0	15.0	100	80.0	47	143	N/A	N/A	07/11/18	08:50	NIVA
2-Chlorotoluene	N.D	16.7	--	µg/L	1.4	3.0	20.0	83.5	66	127	N/A	N/A	07/11/18	08:50	NIVA
2-Hexanone	N.D	108.4	--	µg/L	6.0	15.0	100	108	62	136	N/A	N/A	07/11/18	08:50	NIVA
4-Bromofluorobenzene-SURR	18.9	19.6	--	µg/L	N/A	N/A	20.0	97.9	79	121	N/A	N/A	07/11/18	08:50	NIVA
4-Chlorotoluene	N.D	17.0	--	µg/L	1.2	3.0	20.0	85.0	63	125	N/A	N/A	07/11/18	08:50	NIVA
4-Isopropyltoluene	N.D	15.8	--	µg/L	1.4	3.0	20.0	79.0	68	131	N/A	N/A	07/11/18	08:50	NIVA
4-Methyl-2-pentanone	N.D	116.2	--	µg/L	6.0	15.0	100	116	62	135	N/A	N/A	07/11/18	08:50	NIVA
Acetone	N.D	107.9	--	µg/L	6.0	15.0	100	108	46	142	N/A	N/A	07/11/18	08:50	NIVA
Acrolein	N.D	368.3	--	µg/L	25.0	75.0	500	73.7	40	153	N/A	N/A	07/11/18	08:50	NIVA
Acrylonitrile	N.D	101.9	--	µg/L	6.0	15.0	100	102	53	141	N/A	N/A	07/11/18	08:50	NIVA
Benzene	N.D	19.5	--	µg/L	1.2	3.0	20.0	97.5	66	131	N/A	N/A	07/11/18	08:50	NIVA
Bromobenzene	N.D	19.5	--	µg/L	1.2	3.0	20.0	97.5	61	126	N/A	N/A	07/11/18	08:50	NIVA
Bromochloromethane	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	60	133	N/A	N/A	07/11/18	08:50	NIVA
Bromodichloromethane	N.D	22.1	--	µg/L	1.2	3.0	20.0	111	72	129	N/A	N/A	07/11/18	08:50	NIVA
Bromoform	19.1	21.9	--	µg/L	1.2	3.0	20.0	110	61	130	N/A	N/A	07/11/18	08:50	NIVA
Bromomethane	N.D	24.4	--	µg/L	2.0	3.0	20.0	122	47	151	N/A	N/A	07/11/18	08:50	NIVA
Carbon disulfide	N.D	105.4	--	µg/L	7.0	15.0	100	105	58	140	N/A	N/A	07/11/18	08:50	NIVA
Carbon tetrachloride	N.D	21.6	--	µg/L	1.2	3.0	20.0	108	69	134	N/A	N/A	07/11/18	08:50	NIVA
Chlorobenzene	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.0	67	122	N/A	N/A	07/11/18	08:50	NIVA
Chloroethane	N.D	22.0	--	µg/L	1.2	3.0	20.0	110	47	144	N/A	N/A	07/11/18	08:50	NIVA
Chloroform	N.D	17.1	--	µg/L	1.2	3.0	20.0	85.5	61	134	N/A	N/A	07/11/18	08:50	NIVA
Chloromethane	N.D	21.6	--	µg/L	1.2	3.0	20.0	108	43	142	N/A	N/A	07/11/18	08:50	NIVA
Dibromochloromethane	BDL	21.5	--	µg/L	1.2	3.0	20.0	108	69	134	N/A	N/A	07/11/18	08:50	NIVA
Dibromofluoromethane-SURR	22.7	23.4	--	µg/L	N/A	N/A	20.0	117	83	120	N/A	N/A	07/11/18	08:50	NIVA
Dibromomethane	N.D	20.0	--	µg/L	1.5	3.0	20.0	100	76	131	N/A	N/A	07/11/18	08:50	NIVA
Dichlorodifluoromethane	N.D	21.6	--	µg/L	1.2	3.0	20.0	108	49	145	N/A	N/A	07/11/18	08:50	NIVA
Dichloromethane	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.0	62	129	N/A	N/A	07/11/18	08:50	NIVA
Epichlorohydrin	N.D	458.4	--	µg/L	30.0	75.0	500	91.7	52	134	N/A	N/A	07/11/18	08:50	NIVA
Ethylbenzene	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.5	69	131	N/A	N/A	07/11/18	08:50	NIVA

QUALITY CONTROL SUMMARY

Hexachlorobutadiene	N.D	16.0	--	µg/L	1.4	3.0	20.0	80.0	51	139	N/A	N/A	07/11/18	08:50	NIVA
Iodomethane	N.D	108.4	--	µg/L	8.0	15.0	100	108	54	143	N/A	N/A	07/11/18	08:50	NIVA
Isopropylbenzene	N.D	16.7	--	µg/L	2.0	3.0	20.0	83.5	69	121	N/A	N/A	07/11/18	08:50	NIVA
Naphthalene	N.D	18.6	--	µg/L	2.0	3.0	20.0	93.0	71	134	N/A	N/A	07/11/18	08:50	NIVA
Styrene	N.D	16.7	--	µg/L	1.2	3.0	20.0	83.5	65	127	N/A	N/A	07/11/18	08:50	NIVA
Tetrachloroethene	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.0	62	135	N/A	N/A	07/11/18	08:50	NIVA
Tetrahydrofuran	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.5	67	134	N/A	N/A	07/11/18	08:50	NIVA
Toluene	N.D	19.4	--	µg/L	1.2	3.0	20.0	97.0	59	143	N/A	N/A	07/11/18	08:50	NIVA
Toluene-d8-SURR	20.0	21.0	--	µg/L	N/A	N/A	20.0	105	80	116	N/A	N/A	07/11/18	08:50	NIVA
Trichloroethene	N.D	18.7	--	µg/L	1.2	3.0	20.0	93.5	67	138	N/A	N/A	07/11/18	08:50	NIVA
Trichlorofluoromethane	N.D	26.0	--	µg/L	1.5	3.0	20.0	130	45	157	N/A	N/A	07/11/18	08:50	NIVA
Vinyl Acetate	N.D	118.5	--	µg/L	6.0	15.0	100	119	53	144	N/A	N/A	07/11/18	08:50	NIVA
Vinyl chloride	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	52	140	N/A	N/A	07/11/18	08:50	NIVA
cis-1,2-Dichloroethene	N.D	17.2	--	µg/L	1.2	3.0	20.0	86.0	71	128	N/A	N/A	07/11/18	08:50	NIVA
cis-1,3-Dichloropropene	N.D	16.7	--	µg/L	1.2	3.0	20.0	83.5	63	125	N/A	N/A	07/11/18	08:50	NIVA
m,p-Xylene	N.D	36.4	--	µg/L	1.8	6.0	40.0	91.0	63	130	N/A	N/A	07/11/18	08:50	NIVA
n-Butylbenzene	N.D	20.5	--	µg/L	1.2	3.0	20.0	103	67	127	N/A	N/A	07/11/18	08:50	NIVA
n-Propylbenzene	N.D	17.2	--	µg/L	1.2	3.0	20.0	86.0	64	124	N/A	N/A	07/11/18	08:50	NIVA
o-Dichlorobenzene	N.D	18.8	--	µg/L	1.0	3.0	20.0	94.0	75	121	N/A	N/A	07/11/18	08:50	NIVA
o-Xylene	N.D	16.1	--	µg/L	2.3	3.0	20.0	80.5	66	124	N/A	N/A	07/11/18	08:50	NIVA
sec-Butylbenzene	N.D	16.0	--	µg/L	1.2	3.0	20.0	80.0	66	122	N/A	N/A	07/11/18	08:50	NIVA
tert-Butylbenzene	N.D	17.4	--	µg/L	1.2	3.0	20.0	87.0	65	126	N/A	N/A	07/11/18	08:50	NIVA
trans-1,2-Dichloroethene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.5	66	129	N/A	N/A	07/11/18	08:50	NIVA
trans-1,3-Dichloropropene	N.D	22.7	--	µg/L	1.2	3.0	20.0	114	60	131	N/A	N/A	07/11/18	08:50	NIVA
trans-1,4-Dichloro-2-butene	N.D	87.3	--	µg/L	6.0	15.0	100	87.3	53	123	N/A	N/A	07/11/18	08:50	NIVA

Footnotes:

Data Qualifiers (DQ) to be used by EQLab are listed below:

B – Analyte was detected in the blank.

D – Diluted Sample.

J – The reported result is an estimated value (e.g., matrix interference was observed or the analyte was detected at a concentration outside the quantitation range and/or final result was found between MDL and MRL).

N – Non-target analyte.

P – Does not meet preservation criteria (e.g. does not meet arrival temperature criteria or acid/base preservation criteria or incorrect container, among others).

Q – One or more quality control criteria failed (e.g., fails in Holding Time, LFB/LCS recovery, surrogate (SURR) spike recovery, matrix spike recovery or CCV recovery, out of RPD acceptance criteria among other).

R – Recognition Level. ND Results are reported "<PTRL" – Pattern Recognition Level (applicable for EPA 508 (PCB) mixtures (Aroclors), Toxaphene, and Chlordane only).

T –Thomas Formula (applicable for Microbiology testing only). The combination of positives tubes did not appear in Table 9221.IV. SM 9221C "Estimation of Bacterial Density"

U – Analyte was not detected and is reported as less than the MDL or as defined by the client. The MDL has been adjusted for any dilution or concentration of the sample.

Definitions:

A / A – Amount Added
ASTM – American Society for Testing and Materials
BDL – Below Detection Limit
CCB – Continues Calibration Blank
CCV – Continues Calibration Verification
DNI – Does not Ignite
DQ – Data Qualifiers
DUP – Duplicate
LRB – Laboratory Reagent Blank
MB – Method Blank
MCL – Maximum Contaminant Level
MDL – Method Detection Limit
MO – Monitoring Only
MRL – Minimum Reporting Limit
MS – Matrix Spike

EB/ ERB – Equipment Blank / Equipment Reagent Blank
EPA – Environmental Protection Agency
EQLab – Environmental Quality Laboratories, Inc.
FB – Field Blank
FD – Field Duplicate
FRB – Field Reagent Blank
ICB – Initial Calibration Blank
ICV – Initial Calibration Verification
LCS – Laboratory Control Sample
LFB – Laboratory Fortified Blank
LFBD – Laboratory Fortified Blank Duplicate
MSD – Matrix Spike Duplicate
N/A – Not Applicable
N.D. – Not Detected
NELAC – National Environmental Laboratory Accreditation Conference
PRDOH – Puerto Rico Department of Health
PTRL – Pattern Recognition Level
TB – Trip Blank
Rec. – Recovery
RPD – Relative Percent Difference
SM – Standard Method
SURR – Surrogate

Formulas:

1. The Relative Percent Difference (RPD) is calculated as follows:

RPD = { [/QC Final Result – Reference Final Result /] / [(QC Final Result + Reference Final Result) / 2] } X 100

RPD Micro = (log_10 QC Final Result) - (log_10 Reference Final Result) (Expressed as Precision)

The RPD applies to the following Quality Controls: DUP, MSD, LFBD. The RPD is reported N.C. when the QC Final Result is less than ten times the value of MDL. The RPD general acceptance criteria is as close to zero as possible; no more than 20% for all matrices except Solid / Soil which is < or = 40%.

2. The Recovery Percentage (% Rec) is calculated as follows:

%Rec = [(QC Final Result) / (QC Fortified Concentration)] X 100

3. For the MS and MSD Quality Controls, the Recovery Percentage (% Rec) is calculated as follows:

%Rec = [(QC Final Result - Reference Final Result) / (QC Fortified Concentration)] X 100

APPENDIX A
CHAIN OF CUSTODY DOCUMENTATION

2018-11237

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

PO BOX 11458, SAN JUAN, PR 00910-1458 • TEL. (787) 288-6420, FAX (787) 288-6465, e-mail: info@eqlab.com

CLIENT NAME: ARCADIS CARIBE, PSC | CLIENT ID: 655-04 | W.O. #: 26 | SITE: GUAYAMA, PR | CLIENT REP: MR. ELVIN VARELA

P.O. #: 507 | PWSID #: | FOLDER #: 256578 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING	ANALYSIS REQUESTED
SAMPLE #: 2892611-1 MATRIX: GROUND WATER SOURCE: EFFLUENT, GUAYAMA, PR EFF-20180703	DATE: 07/03/18 TIME: 0905 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC
SAMPLE #: 2892612-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-DUPLICATE, GUAYAMA, PR DUP EFFDUP-20180703	DATE: 07/03/18 TIME: 0905 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC
SAMPLE #: 2892613-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-MS, GUAYAMA, PR MS EFFms-20180703	DATE: 07/03/18 TIME: 0905 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC
SAMPLE #: 2892614-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-MSD., GUAYAMA, PR MSD EFFmSD-20180703	DATE: 07/03/18 TIME: 0905 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Elvin Varela	07/03/18	0905
Fixed in field by:		07/03/18	0905
Authorized by:	N/A	N/A	
Received by EQLF:			
Released to EQLL by:		07/03/18	1415
Received by EQLL:	Hugo Ocasio	07/03/18	1415

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QC Level II Report for July 23, 2018

*EQLF = Eqlab's Field Personnel.
*EQLL = Eqlab's Log-in Personnel.

PNA02

Arrival Temperature: 3.0°C Signature: HR

Eqlab's general terms and conditions on reverse side of this document.

2018-11237

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

PO BOX 11458, SAN JUAN, PR 00910-1458 • TEL. (787) 288-6420, FAX (787) 288-6465, e-mail: info@eqlab.com

CLIENT NAME: ARCADIS CARIBE, PSC | CLIENT ID: 655-04 | W.O. #: 26 | SITE: GUAYAMA, PR | CLIENT REP: MR. ELVIN VARELA

P.O. #: 507 | PWSID #: | FOLDER #: 256578 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2892615-1 MATRIX: GROUND WATER SOURCE: INFLUENT, GUAYAMA, PR INF-2018 0703	DATE: 07/03/18 TIME: 0839 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2892616-1 MATRIX: DI WATER SOURCE: TRIP BLANK, GUAYAMA, PR	DATE: 07/03/18 TIME: LAB TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE			
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE			

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:		07/03/18	0839
Fixed in field by:		07/03/18	0839
Authorized by:			
Received by EQLF:			
Released to EQLL by:		07/03/18	1415
Received by EQLL:		07/03/18	1415

SPECIAL INSTRUCTIONS / COMMENTS:
QA/QC Report Level II
for July 23, 2018

*EQLF = Eqlab's Field Personnel.
*EQLL = Eqlab's Log-in Personnel.

Arrival Temperature: 3.0°C Signature:

Eqlab's general terms and conditions on reverse side of this document.

APPENDIX B
RAW DATA WORKSHEETS

ORGANICS DEPARTMENT
RAW DATA PACKAGE CHECKLIST

RUN NUMBER: 200903-08-15

☑ 1. Run Cover Sheet general information check.

☑ 2. Check if the reagents and / or support equipment information are on the Pre-Run Worksheet.

☑ 3. Check if the Pre-Run Worksheet and the Run Cover Sheet are signed.

☑ 4. Check for the presence of:

Present	Not Applicable	
☐	☑	a. Markers
☐	☑	b. Pesticides Degradation
☐	☑	c. Calculated LPC
☑	☐	d. BFB
☐	☑	e. Tailing Factor
☐	☑	f. Height of Valley
☑	☐	g. Bromoform Degradation
☑	☐	h. %RFD
☐	☑	i. DFTPP
☐	☑	j. Other: N/A

☑ 5. Check for the attachment of the LIMS Run Worksheet.

☑ 6. Check for the attachment of the Initial Calibration and its RSD or Lineal Correlation calculation, if applicable.

Prepared by: N/A (Analyst) Date: N/A

Checked by: [signature] (Laboratory Group Leader) Date: 07-13-18

Approved by: [signature] (Supervisor) Date: 07-13-18

ORGANICS DEPARTMENT
RUN COVER SHEET

eqlab

General Information

Method Number	Run Number	Sequence Number	Sample prep by	Sample Setup by	Sample Evaluated by	Run Approved by
8260B VOC & EXT	200903-08	200903-08-15CCEXT	NVILLANUEVA	NVILLANUEVA	NVILLANUEVA	NVILLANUEVA
624VOC	200915		PR62861-862			

Calibration Curve Reference

Calib. Curve Name	NBK Reference
8260VOC-JUNE-LIQ-18	NBK 090 Pg. 034
ETHANOL-ACETONIT-MTBE-JULY18	NBK 090 Pg. 044

Instrument Information

Description / Identification Number: V7-AG7890MS

PM Expiration Date: 10/2018

Run Controls Information

[X] LRB [X] BFB / LPC [ ] DFTPP / Degradation [X] ICV / CCS [ ] QCS [X] CCV / CCS [ ] PT

Amount µL	Solution Name	NBK Reference	Expiration Date	Solution Concentration ppm	Dilution Volume mL	Analyte Concentration µg/L
N/A	Agua para VOC	NBK 090 Pg. 043	N/A	N/A	N/A	N/A
2	p-Bromofluorobenzene	NBK 090 Pg. 037	9/13/2018	20	50	8
10	Mix 8260 & 624 VOC	NBK 090 Pg. 032	11/23/2018	100	50	20
10	MIX 8260 GASES	NBK 090 Pg. 036	7/18/2018	100	50	20
10	MTBE/ACETONITRILE/ETHANOL	NBK 090 Pg. 044	7/18/2018	100	50	20
5	SIM VOC	NBK 090 Pg. 037	9/13/2018	20	5	20

Preparation Controls Information [N/A]

[ ] MB [X] MDL [ ] MRL [X] MS / LFM [X] MSD / LFMD [X] LFB [ ] LFBD

Amount µL	Solution Name	NBK Reference	Expiration Date	Solution Concentration ppm	Dilution Volume mL	Analyte Concentration µg/L
N/A	Agua para VOC	NBK 090 Pg. 043	N/A	N/A	N/A	N/A
0.5	Mix 8260 & 624 VOC	NBK 090 Pg. 032	11/23/2018	100	50	1
0.5	MIX 8260 GASES	NBK 090 Pg. 036	7/18/2018	100	50	1
0.5	MTBE/ACETONITRILE/ETHANOL	NBK 090 Pg. 044	7/18/2018	100	50	1
10	Mix 8260 & 624 VOC	NBK 090 Pg. 032	11/23/2018	100	50	20
10	MIX 8260 GASES	NBK 090 Pg. 036	7/18/2018	100	50	20
10	MTBE/ACETONITRILE/ETHANOL	NBK 090 Pg. 044	7/18/2018	100	50	20

RUN STATUS [✓] Run in Control [ ] OOMCL [ ] OORPD [ ] OOS [ ] HSOCC

SOP-QC-004 Accepted Exemption: [ ] # 1 [ ] # 2 [ ] # 3 [ ] # 4 [ ] # 5 [ ] # 6 [ ] # 7 [ ] # 8 [ ] # 9 [ ] # 10 [ ] # 11 [ ] # 12 [ ] # 13 [ ] # 14

QUALIFIERS [X] D [ ] U [ ] J [ ] P [ ] B [ ] N [ ] Q

Analysis and Reviewed by / Date:

Run and Preparation Controls are within acceptance criteria for method. Manual integrations were preformed according to QC-014 / Rev. 01.

Discarded levels in Calibration Curve exceeded acceptance criteria for Initial Calibration according to QC-002 / Rev. 17. RFD of discarted levels were > 15%.

2ND SOURCE DATA FILE: DATA\199829CC\982904.D NBK REF: 090 Pg. 029 & 032

Manual integration reasons legend:

1- Poor integration by the computer data System.

2- Over-integration of peak due to noisy baseline.

3- Abnormal peak shapes that were not integrated completely.

4- Due to (RT) retention time variation.

Supervisor Review and Approval / Date: 07-13-18 07-13-18

QA/QC Review and Approval / Date:

ENVIRONMENTAL QUALITY LABORATORIES, INC
P.O. Box 11458 San Juan, P.R. 00910-1458

Run Worksheet

For: Tuesday, July 10, 2018

Run #: 200903

Template Name: EPA 8260B VOC BY GC/MS

Analyst: VILLANUEVA

Cup#	TYPE	ORDER#	METHOD	QC LINK	MATRIX	TEST NAME	PRE RUN	VOLUME	FINALVOL	WEIGHT
1	LRB	LRB/2898474-1		2894475	GROUND WATER	EPA 8260B VOC	--	--	--	0
2	LRB	LRB/2898474-1		2894475	GROUND WATER	EPA 8260B EXT	--	--	--	0
3	MDL	MDL/2898476-1		2894475	GROUND WATER	EPA 8260B EXT	--	--	--	0
4	MDL	MDL/2898476-1		2894475	GROUND WATER	EPA 8260B VOC	--	--	--	0
5	ICV	ICV/2898475-1		2894475	GROUND WATER	EPA 8260B EXT	--	--	--	--
6	ICV	ICV/2898475-1		2894475	GROUND WATER	EPA 8260B VOC	--	--	--	0
8		2894475-1	EPA 8260B		GROUND WATER	EPA 8260B EXT	PR62861	5	5	N/A
9		2894476-3	EPA 8260B		GROUND WATER	EPA 8260B EXT	PR62861	5	5	N/A
10		2894477-1	EPA 8260B		GROUND WATER	EPA 8260B EXT	PR62861	5	5	N/A
11		2894478-2	EPA 8260B		GROUND WATER	EPA 8260B EXT	PR62861	5	5	N/A
12		2894479-1	EPA 8260B		GROUND WATER	EPA 8260B EXT	PR62861	5	5	N/A
13		2894480-1	EPA 8260B		GROUND WATER	EPA 8260B EXT	PR62861	5	5	N/A
14		2894481-1	EPA 8260B		GROUND WATER	EPA 8260B EXT	PR62861	5	5	N/A
18	DUP	DUP/2898515-1		2894481	GROUND WATER	EPA 8260B EXT	--	5	5	N/A
19	MS	MS/2898523-1		2894481	GROUND WATER	EPA 8260B EXT	--	5	5	N/A
20	LFB	LFB/2898524-1		2894481	GROUND WATER	EPA 8260B EXT	--	5	5	N/A

Printed Date: 7/13/2018
11:48 am

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62861

TEMPLATE NAME: **EPA 8260B VOC BY GC/MS**

ORDNO	CUP NO	STATUS	MATRIX	METHOD	TESTS	PREP DATE	PREP BY	PREP TIME	COLLEC DATE	VOL. (mL)	FINAL VOLUME (mL)	WEIGHT (g)	pH init / final
2894478-2	4	Done	GROUND WATER	EPA 5030B	EPA 8260B EXT	7/9/2018	VILLANUEV	17:40	6/28/2018	5	5	N/A	<2
2894476-3	5	Done	GROUND WATER	EPA 5030B	EPA 8260B EXT	7/9/2018	VILLANUEV	17:40	6/28/2018	5	5	N/A	<2
2894477-1	6	Done	GROUND WATER	EPA 5030B	EPA 8260B EXT	7/9/2018	VILLANUEV	17:40	6/28/2018	5	5	N/A	<2
2894481-1	7	Done	GROUND WATER	EPA 5030B	EPA 8260B EXT	7/9/2018	VILLANUEV	17:40	6/28/2018	5	5	N/A	<2
2894480-1	8	Done	GROUND WATER	EPA 5030B	EPA 8260B EXT	7/9/2018	VILLANUEV	17:40	6/28/2018	5	5	N/A	<2
2894475-1	9	Done	GROUND WATER	EPA 5030B	EPA 8260B EXT	7/9/2018	VILLANUEV	17:40	6/28/2018	5	5	N/A	<2
2894479-1	10	Done	GROUND WATER	EPA 5030B	EPA 8260B EXT	7/9/2018	VILLANUEV	17:40	6/28/2018	5	5	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62861

TEMPLATE NAME: **EPA 8260B VOC BY GC/MS**

Solution Name: Lot #: N/A Refer. Notebook: N/A Amount Added: N/A Exp. Date: N/A

Prepered Sample(s) Transfered by / Date: [illegible] / 07-02-18

Prepared Sample(s) Received by / Date: N/A / N/A

Comments:

Run Worksheet

For: Tuesday, July 10, 2018

Run #: 200908

Template Name: EPA 8260B VOC BY GC/MS

Analyst: VILLANUEVA

Cup#	TYPE	ORDER#	METHOD	QC LINK	MATRIX	TEST NAME	PRE RUN	VOLUME	FINALVOL	WEIGHT
2	LRB	LRB/2898530-1		2892611	GROUND WATER	EPA 8260B VOC	--	--	--	--
3	MDL	MDL/2898532-1		2892611	GROUND WATER	EPA 8260B VOC	--	--	--	--
5	ICV	ICV/2898531-1		2892611	GROUND WATER	EPA 8260B VOC	--	--	--	--
8	TRIP BL	TRIP BLK/2892616-1			DI WATER	EPA 8260B VOC	PR62862	5	5	N/A
9		2896631-1	EPA 8260B		LIQUID	EPA 8260B VOC	PR62862	5	5	N/A
10		2892615-1	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
14		2895262-2	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
15		2895263-1	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
16		2895264-4	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
17		2895265-6	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
18		2892611-1	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
19	DUP	DUP/2892612-1		2892611	GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
20	MS	MS/2892613-1		2892611	GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
21	MSD	MSD/2892614-1		2892611	GROUND WATER	EPA 8260B VOC	PR62862	5	5	N/A
24	LFB	LFB/2898540-1		2892611	GROUND WATER	EPA 8260B VOC	--	--	--	--

Printed Date: 7/10/2018
11:01 am

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62862

TEMPLATE NAME: **EPA 8260B VOC BY GC/MS**

ORDNO	CUP NO	STATUS	MATRIX	METHOD	TESTS	PREP DATE	PREP BY	PREP TIME	COLLEC DATE	VOL. (mL)	FINAL VOLUME (mL)	WEIGHT (g)	pH init / final
2892616-1	4	Done	DI WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/3/2018	5	5	N/A	<2
2895264-4	5	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/6/2018	5	5	N/A	<2
2896631-1	6	Done	LIQUID	EPA 3585	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	6/28/2018	5	5	N/A	<2
2892611-1	7	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/3/2018	5	5	N/A	<2
2892612-1/DUP Linked to 2892611	8	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/3/2018	5	5	N/A	<2
2892613-1/MS Linked to 2892611	9	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/3/2018	5	5	N/A	<2
2892614-1/MSD Linked to 2892611	10	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/3/2018	5	5	N/A	<2
2892615-1	11	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/3/2018	5	5	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62862

TEMPLATE NAME: **EPA 8260B VOC BY GC/MS**

2895263-1	12	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/6/2018	5	5	N/A	<2
2895262-2	13	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/6/2018	5	5	N/A	<2
2895265-6	14	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	7/9/2018	VILLANUEV	17:55	7/6/2018	5	5	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62862

TEMPLATE NAME: **EPA 8260B VOC BY GC/MS**

Solution Name: Lot #: N/A Refer. Notebook: N/A Amount Added: N/A Exp. Date: N/A

Prepered Sample(s) Transfered by / Date: [illegible] / 07-07-18

Prepared Sample(s) Received by / Date: N/A / N/A

Comments:

Run Worksheet

For: Tuesday, July 10, 2018

[redacted]

Analyst: VILLANUEVA

Cup#	TYPE	ORDER#	METHOD	QC LINK	MATRIX	TEST NAME	PRE RUN	VOLUME	FINALVOL	WEIGHT
1	LRB	LRB/2898624-1				EPA 624 VOC	--	--	--	--
2	MDL	MDL/2898626-1				EPA 624 VOC	--	--	--	--
3	ICV	ICV/2898625-1				EPA 624 VOC	--	--	--	--
4		2893354-1	EPA 624		WASTEWATER	EPA 624 VOC	--	--	--	--
5		2893355-2	EPA 624		WASTEWATER	EPA 624 VOC	--	--	--	--
6	LFB	LFB/2898628-1				EPA 624 VOC	--	--	--	--

Printed Date: 7/10/2018
2:19 pm

Calibration Status Report V7-AG7890MS

Method Path : C:\msdchem\1\METHODS\
Method File : 8260VOC-JUNE-LIQ-18.M
Title : Analysis of VOC'S by EPA 8260B
Last Update : Tue Jun 05 15:30:24 2018
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	3	20	C:\msdchem\1\DATA\199829CC\8260CC01.D
2	2	5	20	C:\msdchem\1\DATA\199829CC\8260CC02.D
3	3	10	20	C:\msdchem\1\DATA\199829CC\8260CC03.D
4	4	20	20	C:\msdchem\1\DATA\199829CC\8260CC04.D
5	5	50	20	C:\msdchem\1\DATA\199829CC\8260CC05.D
6	6	100	20	C:\msdchem\1\DATA\199829CC\8260CC06.D
7	7	200	20	C:\msdchem\1\DATA\199829CC\8260CC07.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jun 05 14:23 2018	Jun 05 14:23 2018	
2	2	Jun 05 14:22 2018	Jun 05 14:21 2018	
3	3	Jun 05 14:27 2018	Jun 05 14:27 2018	
4	4	Jun 05 14:29 2018	Jun 05 14:28 2018	
5	5	Jun 05 14:30 2018	Jun 05 14:29 2018	
6	6	Jun 05 14:31 2018	Jun 05 14:31 2018	
7	7	Jun 05 14:34 2018	Jun 05 14:33 2018	

8260VOC-JUNE-LIQ-18.M Wed Jul 11 14:22:34 2018

Response Factor Report V7-AG7890MS

Method Path : C:\msdchem\1\METHODS\
Method File : 8260VOC-JUNE-LIQ-18.M
Title : Analysis of VOC'S by EPA 8260B
Last Update : Tue Jun 05 15:30:24 2018
Response Via : Initial Calibration

Calibration Files
1 =8260CC01.D 2 =8260CC02.D 3 =8260CC03.D 4 =8260CC04.D 5 =8260CC05.D 6 =8260CC06.D 7 =8260CC07.D

		Compound	1	2	3	4	5	6	7	Avg	%RSD
1)	I	IPENTAFLUOROBENZENE	----------ISTD----------								
2)	M	DICLDIFLUOROME...	0.084	0.105	0.129	0.125	0.104	0.113	0.111	0.110	13.55
3)	P,T	CHLOROMETHANE	0.263	0.231	0.220	0.195	0.210	0.201	0.175	0.214	13.28
4)	C,T	VINYL CHLORIDE	0.133	0.166	0.202	0.205	0.179	0.195	0.198	0.183	14.18
5)	T	BROMOMETHANE	0.189	0.190	0.198	0.169	0.142	0.151		0.173	13.21
6)	T	CHLOROETHANE	0.120	0.127	0.172	0.150	0.141	0.125		0.139	14.06
7)	T	TRICLFLUOROMET...	0.367	0.446	0.562	0.539	0.451	0.481	0.437	0.469	13.99
8)	T	ACROLEIN	0.058	0.065	0.067	0.066	0.058	0.056	0.045	0.059#	12.74
9)	T	ACETONE	0.083	0.084	0.084	0.080	0.071	0.072	0.062	0.077#	10.96
10)	C,T	11-DICHLOROETHENE	0.284	0.323	0.315	0.338	0.268	0.310	0.277	0.302	8.62
11)	T	IODOMETHANE	0.245	0.304	0.337	0.366	0.321	0.355	0.305	0.319	12.61
12)	T	CARBON DISULFIDE	0.469	0.530	0.532	0.545	0.424	0.462	0.401	0.480	11.81
13)	T	ACRYLONITRILE	0.085	0.093	0.096	0.097	0.089	0.092	0.080	0.090#	6.61
14)	T	DICHLOROMETHANE	0.306	0.306	0.296	0.278	0.239	0.244	0.215	0.269	13.61
15)	T	TRANS12DICLETHENE	0.225	0.250	0.251	0.259	0.212	0.237	0.215	0.236	7.87
16)	P,T	11-DICHLOROETHANE	0.416	0.468	0.466	0.471	0.397	0.426	0.379	0.432	8.62
17)		VINYL ACETATE	0.323	0.379	0.416	0.447	0.423	0.435	0.361	0.398	11.30
18)		2-BUTANONE	0.096	0.114	0.122	0.134	0.132	0.139	0.125	0.123	11.85
19)	T	CIS12DICHLOROE...	0.245	0.287	0.283	0.288	0.259	0.287	0.260	0.273	6.42
20)	T	22-DICHLOROPRO...	0.238	0.333	0.327	0.352	0.302	0.361	0.341	0.322	12.98
21)	C,T	CHLOROFORM	0.591	0.636	0.627	0.621	0.537	0.566	0.507	0.584	8.40
22)	T	BROMOCHLOROMET...	0.223	0.247	0.256	0.254	0.227	0.223	0.208	0.234	7.78
23)	I	I14-DIFLUOROBENZENE	----------ISTD----------								
24)	S	SDIBRFLUOROMET...	0.471	0.457	0.464	0.467	0.455	0.427	0.400	0.449	5.71
25)	T	TETRAHYDROFURAN	0.048	0.035		0.040	0.044	0.049	0.047	0.044#	12.36
26)	T	111-TRICHLOROE...	0.299	0.349	0.345	0.387	0.312	0.355	0.324	0.339	8.70
27)	T	11-DICHLOROPRO...	0.165	0.194	0.192	0.235	0.199	0.240	0.227	0.208	13.09
28)	T	12-DICHLOROETHANE	0.304	0.331	0.325	0.342	0.313	0.320	0.292	0.318	5.29
29)	T	CARBONTETRACHL...	0.310	0.345	0.332	0.373	0.295	0.340	0.314	0.330	7.90
30)	T	BENZENE	0.638	0.704	0.690	0.742	0.634	0.679	0.630	0.674	6.25
31)	T	TRICHLOROETHENE	0.183	0.200	0.199	0.208	0.174	0.196	0.185	0.192	6.23
32)	C,T	12-DICHLOROPRO...	0.131	0.158	0.154	0.179	0.171	0.186	0.174	0.165	11.16
33)	T	DIBROMOMETHANE	0.141	0.159	0.148	0.160	0.151	0.161	0.155	0.154	4.61
34)	T	BROMODICLMETHANE	0.262	0.299	0.302	0.337	0.306	0.321	0.297	0.303	7.60
35)	T	2-CLETHYLVINYL...		0.035	0.048	0.038	0.039	0.038		0.039#	13.13
36)	T	EPICHLOROHYDRIN	0.014	0.016	0.017	0.019	0.019	0.020	0.018	0.018#	12.38
37)	T	4METHYL-2-PENT...		0.178	0.205	0.238	0.228	0.229	0.197	0.213	10.80
38)	T	CIS13DICLPROPENE			0.227	0.287	0.303	0.342	0.317	0.295	14.54
39)	S	STOLUENE-D8	1.281	1.242	1.257	1.309	1.275	1.231	1.200	1.256	2.86
40)	C,T	TOLUENE	0.663	0.738	0.771	0.857	0.741	0.795	0.724	0.756	8.07
41)	T	TRANS13DICLPRO...	0.177	0.210	0.232	0.233	0.257			0.222	13.49

Method Path : C:\msdchem\1\METHODS\
Method File : 8260VOC-JUNE-LIQ-18.M

42)	T	112-TRICHLOROE...	0.186	0.200	0.204	0.219	0.202	0.208	0.193	0.202	5.27
43)		2-HEXANONE		0.142	0.132	0.165	0.167	0.174	0.154	0.156	10.31
44)	T	13-DICHLOROPRO...	0.290	0.251	0.275	0.329	0.336	0.357	0.335	0.310	12.42
45)	T	DIBRCHLOROMETHANE	0.202	0.222	0.229	0.262	0.259	0.282	0.274	0.247	12.07
46)	T	TETRACHLOROETHENE	0.202	0.228	0.230	0.257	0.207	0.236	0.221	0.226	8.15
47)	T	12-DIBROMOETHANE	0.148	0.162	0.175	0.197	0.196	0.216	0.211	0.186	13.53
48)	I	CHLOROBENZEN-d5-IS	----------ISTD----------								
49)	P,T	CHLOROBENZENE	0.490	0.539	0.519	0.545	0.500	0.546	0.521	0.523	4.20
50)		1-CHLOROHEXANE	0.066	0.076	0.084	0.124	0.122	0.169		0.107	36.34
51)	T	1112-TETRACLET...	0.200	0.222	0.214	0.228	0.265	0.229	0.223	0.226	8.68
52)	C,T	ETHYLBENZENE	0.726	0.820	0.815	0.891	0.796	0.909	0.868	0.832	7.55
53)	T	MP-XYLENE		0.530	0.582	0.684	0.632	0.719	0.685	0.639	11.27
54)	T	STYRENE		0.612	0.496	0.487	0.502	0.569	0.568	0.539	9.50
55)	T	O-XYLENE	0.650	0.588	0.633	0.583	0.627			0.616	4.74
56)	P,T	BROMOFORM	0.145	0.162	0.166	0.176	0.180	0.200	0.203	0.176	11.65
57)	P,T	1122-TETRACLET...	0.302	0.336	0.326	0.327	0.308	0.320	0.307	0.318	4.00
58)	T	ISOPROPYL BENZENE		0.838	0.950	0.753	0.723	0.876	0.864	0.834	10.04
59)	S	S4BRFLUOROBENZENE	0.496	0.501	0.494	0.501	0.514	0.526	0.556	0.513	4.35
60)	T	123-TRICLPROPANE	0.094	0.109	0.106	0.106	0.100	0.103	0.099	0.102	4.76
61)	T	TRANS14DICL2BU...	0.038	0.047	0.051	0.054	0.051	0.052	0.049	0.049#	10.45
62)	T	BROMOBENZENE	0.379	0.430	0.439	0.465	0.437	0.468	0.444	0.437	6.73
63)	T	N-PROPYLBENZENE		0.837	0.912	1.078	0.973	1.136	1.099	1.006	11.70
64)	T	2-CHLOROTOLUENE		0.577	0.637	0.756	0.721	0.805	0.790	0.714	12.59
65)	T	4-CHLOROTOLUENE		0.515	0.578	0.691	0.668	0.746	0.741	0.657	14.08
66)	T	135TRIMETHYLBE...		0.614	0.710	0.826	0.748	0.842	0.833	0.762	11.75
67)	T	TERT-BUTYLBENZENE		0.455	0.533	0.674	0.617	0.662	0.620	0.594	14.12
68)	T	124TRIMETHYLBE...		0.614	0.711	0.856	0.811	0.799	0.755	0.758	11.32
69)	T	SEC-BUTYLBENZENE		0.786	0.786	0.976	0.866	1.033	1.058	0.918	13.26
70)	T	13-DICHLOROBEN...	0.339	0.419	0.444	0.492	0.475	0.521	0.544	0.462	14.91
71)	I	I14-DICLBENZENE-D4	----------ISTD----------								
72)	T	4-ISOPROPYLTOL...			0.996	1.265	1.183	1.392	1.337	1.235	12.54
73)	T	14-DICHLOROBEN...	0.729	0.784	0.769	0.793	0.759	0.811	0.796	0.777	3.54
74)	T	12-DICHLOROBEN...	0.629	0.702	0.747	0.806	0.796	0.860	0.837	0.768	10.56
75)	T	N-BUTYLBENZENE			0.970	1.085	1.033	1.262	1.212	1.112	10.96
76)	T	12-DIBR-3CLPRO...			0.119	0.103	0.111	0.133	0.138	0.121	12.20
77)		124-TRICLBENZENE			0.566	0.458	0.507	0.602	0.610	0.549	11.80
78)	T	NAPHTHALENE			1.283	1.164	1.347	1.599	1.601	1.399	13.93
79)	T	HEXACHLOROBUTA...	0.213	0.235	0.225	0.240	0.207	0.261	0.263	0.235	9.26
80)		123-TRICLBENZENE			0.399	0.469	0.495	0.575	0.574	0.502	14.85

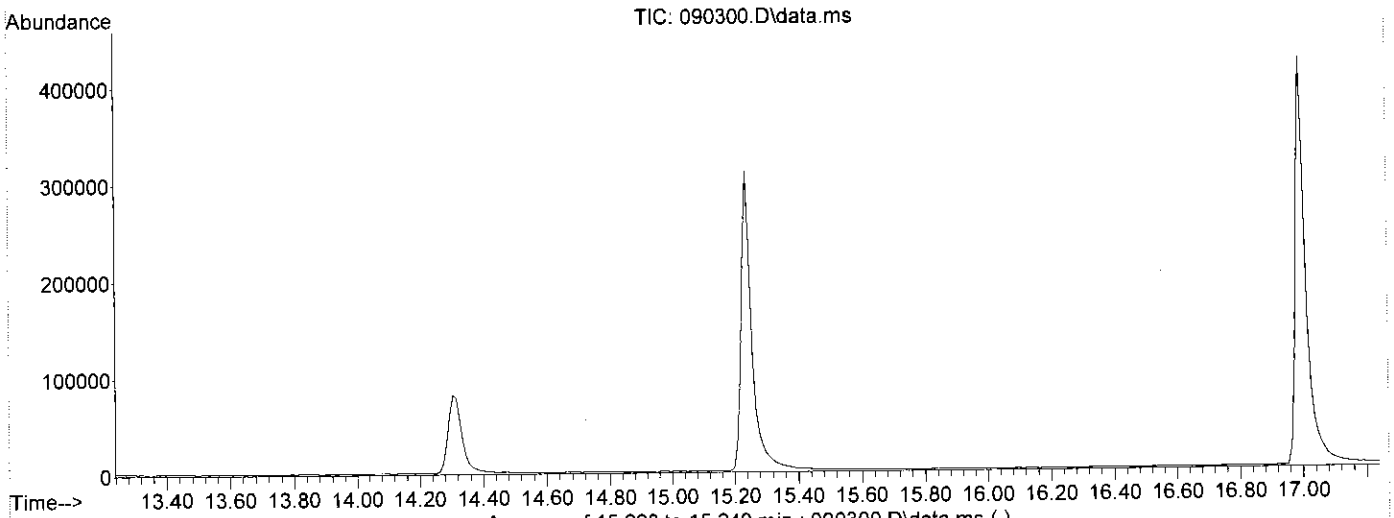
(#) = Out of Range

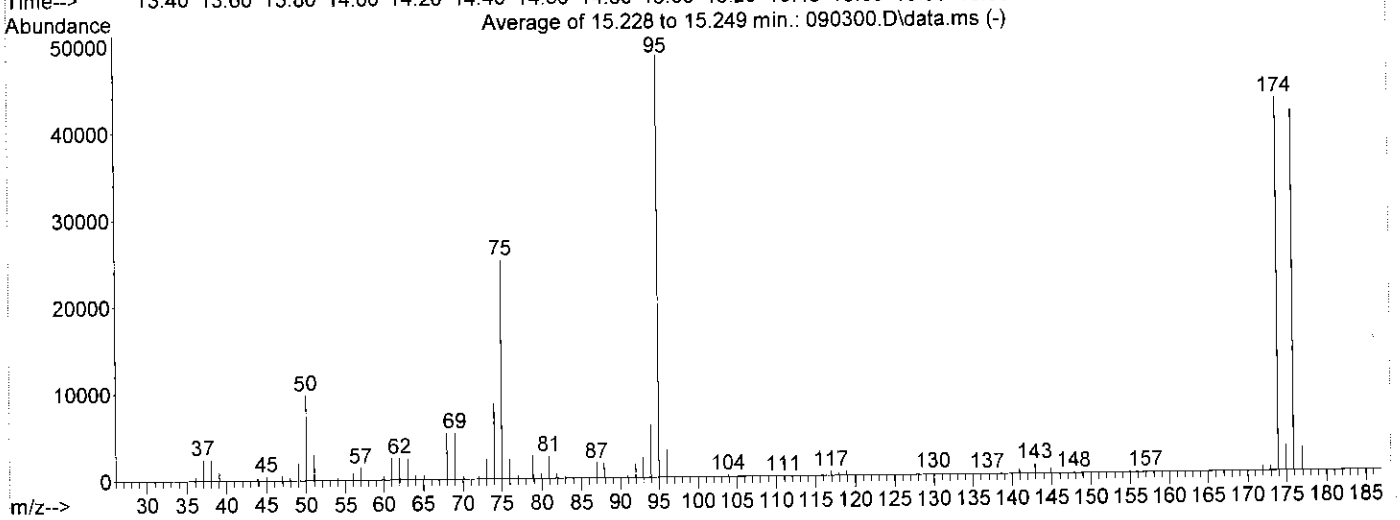
Method VOC

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090300.D
Acq On : 10 Jul 2018 6:54 pm
Operator : NIVA
Sample : BFB/DEGRADATION
Misc : RUN200903
ALS Vial : 9 Sample Multiplier: 1

Integration File: VOC.P

Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Title : Analysis of VOC'S by EPA 8260B
Last Update : Tue Jun 05 15:30:24 2018
InstName : V7-AG7890MS





AutoFind: Scans 1393, 1394, 1395; Background Corrected with Scan 1387

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	9783	PASS
75	95	30	60	51.8	25251	PASS
95	95	100	100	100.0	48736	PASS
96	95	5	9	6.6	3220	PASS
173	174	0.00	2	1.2	515	PASS
174	95	50	150	88.3	43019	PASS
175	174	5	9	6.9	2949	PASS
176	174	95	101	96.7	41608	PASS
177	176	5	9	6.5	2701	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090300.D
Acq On : 10 Jul 2018 6:54 pm
Operator : NIVA
Sample : BFB/DEGRADATION
Misc : RUN200903
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 11 14:24:22 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	214694	20.00	µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	324561	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.975	117	293370	20.00	µg/L	0.03
71) I14-DICLBENZENE-D4	16.995	152	157426	20.00	µg/L	-0.13
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.026	111	167618	23.02	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.10%			
39) STOLUENE-D8	10.305	98	402609	19.75	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.75%			
59) S4BRFLUOROBENZENE	15.239	95	141966	18.88	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.40%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.		
3) CHLOROMETHANE	0.000		0	N.D.	d	
4) VINYL CHLORIDE	0.000		0	N.D.		
5) BROMOMETHANE	3.615	94	294	N.D.		
6) CHLOROETHANE	3.990	64	506	N.D.		
7) TRICLFLUOROMETHANE	0.000		0	N.D.		
8) ACROLEIN	0.000		0	N.D.		
9) ACETONE	0.000		0	N.D.	d	
10) 11-DICHLOROETHENE	0.000		0	N.D.		
11) IODOMETHANE	0.000		0	N.D.		
12) CARBON DISULFIDE	4.549	76	434	N.D.		
13) ACRYLONITRILE	0.000		0	N.D.		
14) DICHLOROMETHANE	0.000		0	N.D.	d	
15) TRANS12DICLETHENE	5.168	96	76	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	0.000		0	N.D.		
18) 2-BUTANONE	7.533	43	400	N.D.		
19) CIS12DICHLOROETHENE	0.000		0	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	6.802	83	454	N.D.		
22) BROMOCHLOROMETHANE	6.802	49	140	N.D.		
25) TETRAHYDROFURAN	0.000		0	N.D.		
26) 111-TRICHLOROETHANE	0.000		0	N.D.		
27) 11-DICHLOROPROPENE	0.000		0	N.D.		
28) 12-DICHLOROETHANE	0.000		0	N.D.		
29) CARBONTETRACHLORIDE	6.944	117	520	N.D.		
30) BENZENE	0.000		0	N.D.		
31) TRICHLOROETHENE	0.000		0	N.D.		
32) 12-DICHLOROPROPANE	0.000		0	N.D.		
33) DIBROMOMETHANE	0.000		0	N.D.		
34) BROMODICLMETHANE	0.000		0	N.D.		
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.		
36) EPICHLOROHYDRIN	0.000		0	N.D.	d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.		
38) CIS13DICLPROPENE	0.000		0	N.D.		
40) TOLUENE	10.386	91	674	N.D.		
41) TRANS13DICLPROPENE	0.000		0	N.D.		
42) 112-TRICHLOROETHANE	0.000		0	N.D.		
43) 2-HEXANONE	0.000		0	N.D.		
44) 13-DICHLOROPROPANE	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090300.D
Acq On : 10 Jul 2018 6:54 pm
Operator : NIVA
Sample : BFB/DEGRADATION
Misc : RUN200903
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 11 14:24:22 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

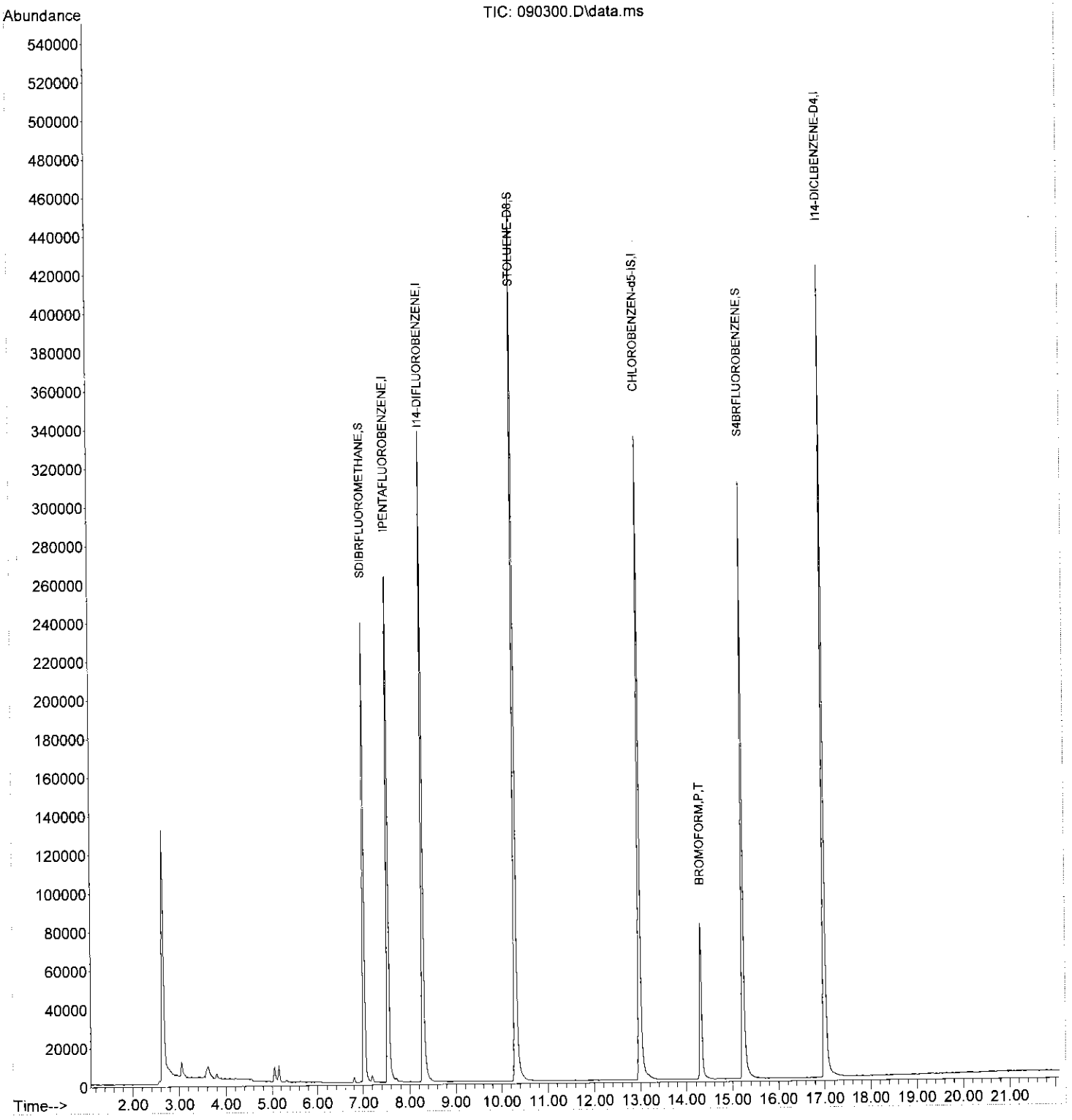
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.975	91	471	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.975	91	543	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	14.315	173	64470	24.97 µg/L	99
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.239	77	739	N.D.	
63) N-PROPYLBENZENE	15.239	91	416	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090300.D
Acq On : 10 Jul 2018 6:54 pm
Operator : NIVA
Sample : BFB/DEGRADATION
Misc : RUN200903
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 11 14:24:22 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090301.D
Acq On : 10 Jul 2018 7:20 pm
Operator : NIVA
Sample : LRB/2898474
Misc : RUN200903
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 11 14:25:05 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	207084	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	8.284	114	319237	20.00 µg/L	0.02
48) CHLOROBENZEN-d5-IS	12.974	117	288090	20.00 µg/L	0.03
71) I14-DICLBENZENE-D4	16.995	152	157999	20.00 µg/L	-0.13
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.026	111	163585	22.84 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.20%		
39) STOLUENE-D8	10.294	98	397799	19.83 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.15%		
59) S4BRFLUOROBENZENE	15.238	95	138930	18.81 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.05%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.604	94	139	N.D.	
6) CHLOROETHANE	3.980	64	711	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	0.000		0	N.D.	
12) CARBON DISULFIDE	4.548	76	461	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.076	84	986	N.D.	
15) TRANS12DICLETHENE	0.000		0	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.543	43	352	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.802	83	311	N.D.	
22) BROMOCHLOROMETHANE	6.802	49	132	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.954	117	447	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.386	91	722	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090301.D
Acq On : 10 Jul 2018 7:20 pm
Operator : NIVA
Sample : LRB/2898474
Misc : RUN200903
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 11 14:25:05 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

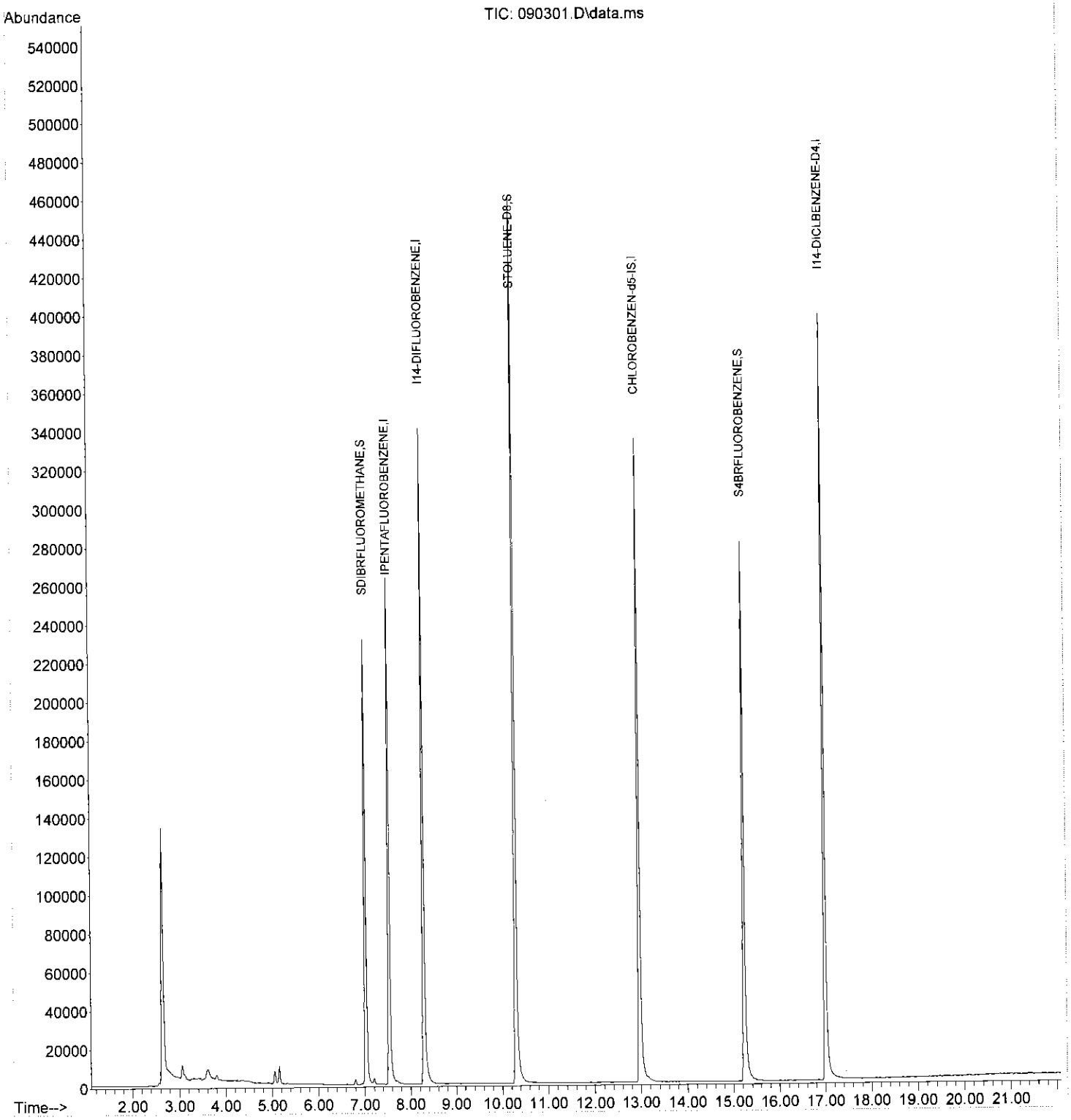
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.964	91	417	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.964	91	417	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.279	77	69	N.D.	
63) N-PROPYLBENZENE	15.238	91	381	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090301.D
Acq On : 10 Jul 2018 7:20 pm
Operator : NIVA
Sample : LRB/2898474
Misc : RUN200903
ALS Vial : 10 Sample Multiplier: 1

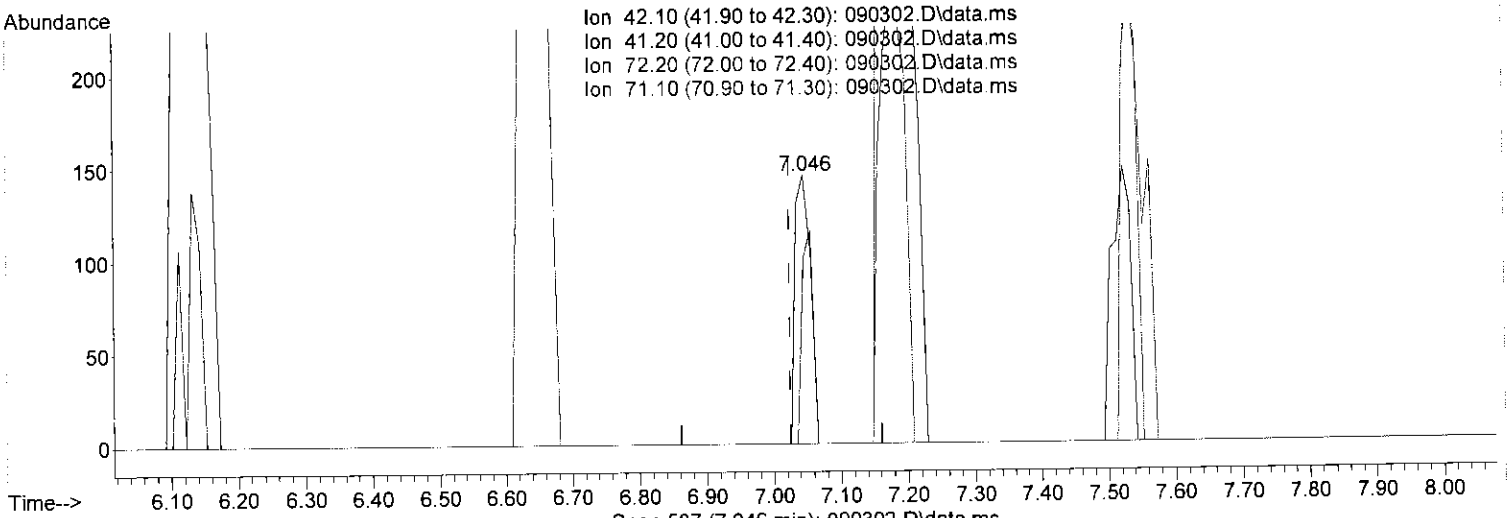
Quant Time: Jul 11 14:25:05 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

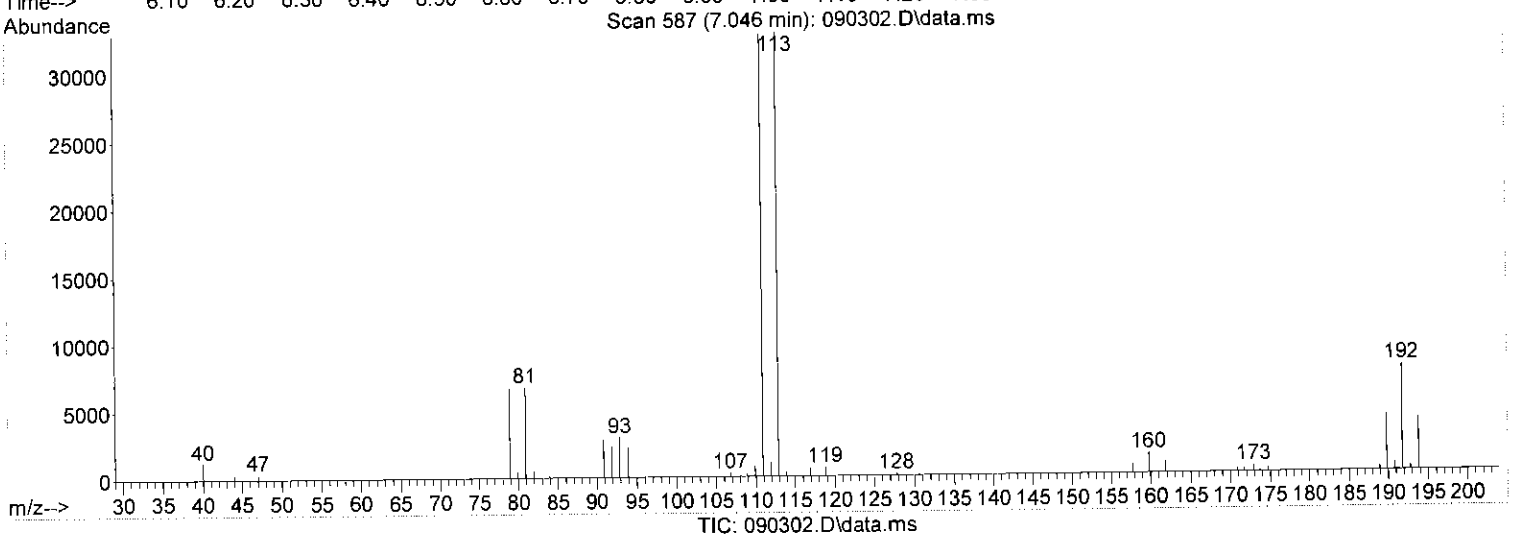


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(25) TETRAHYDROFURAN (T)

7.046min (+0.021) 0.32 µg/L

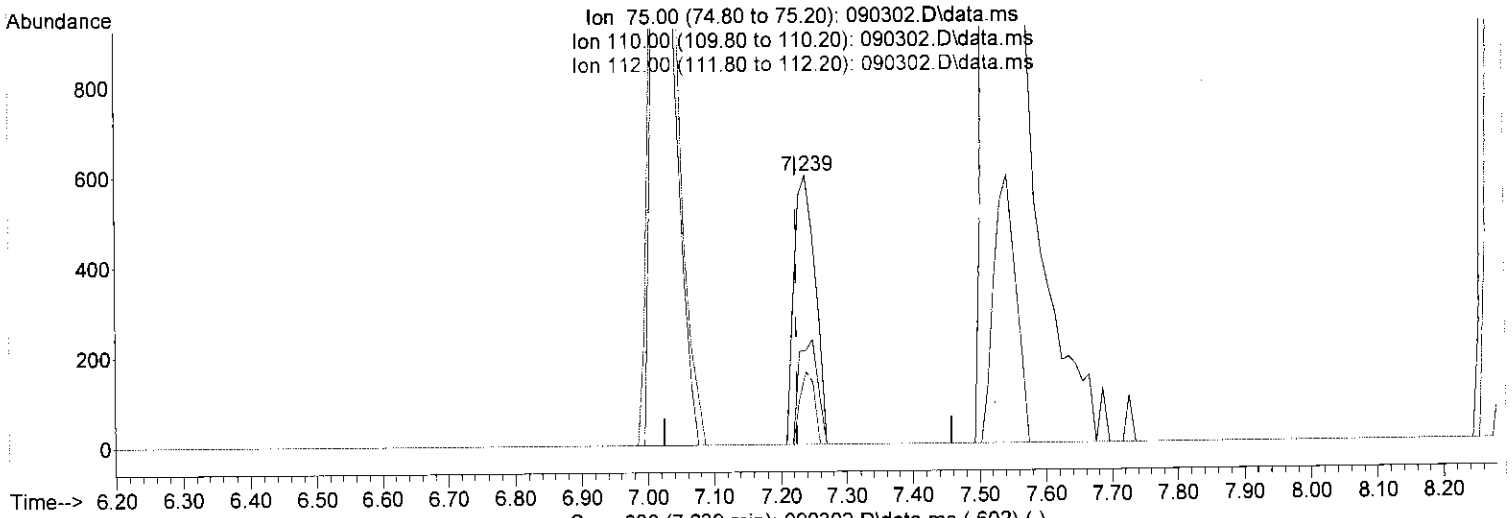
response 231

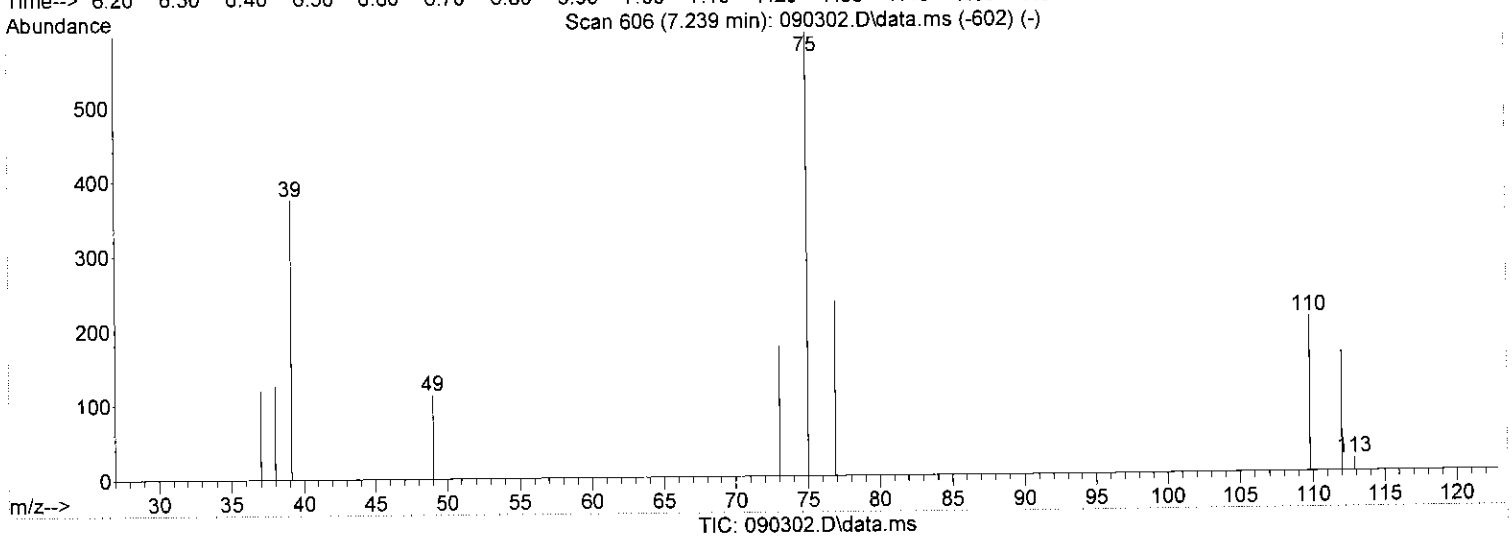
Ion	Exp%	Act%
42.10	100	100
41.20	55.50	57.14
72.20	44.30	0.00#
71.10	40.30	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(27) 11-DICHLOROPROPENE (T)

7.239min (+0.015) 0.39 µg/L

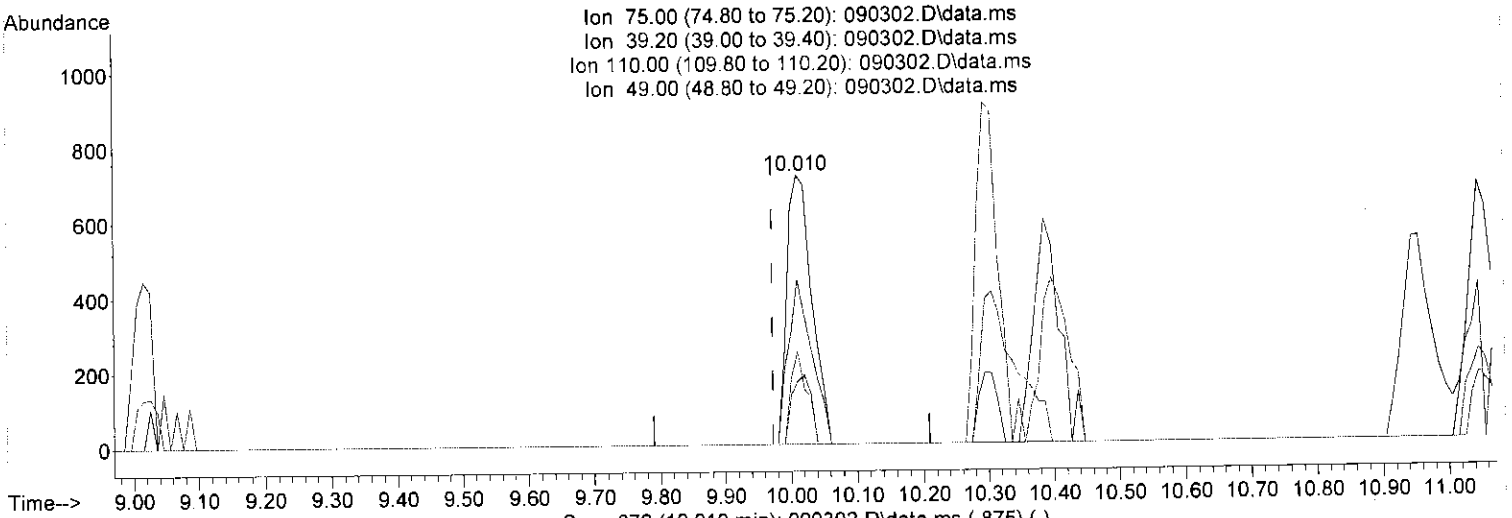
response 1333

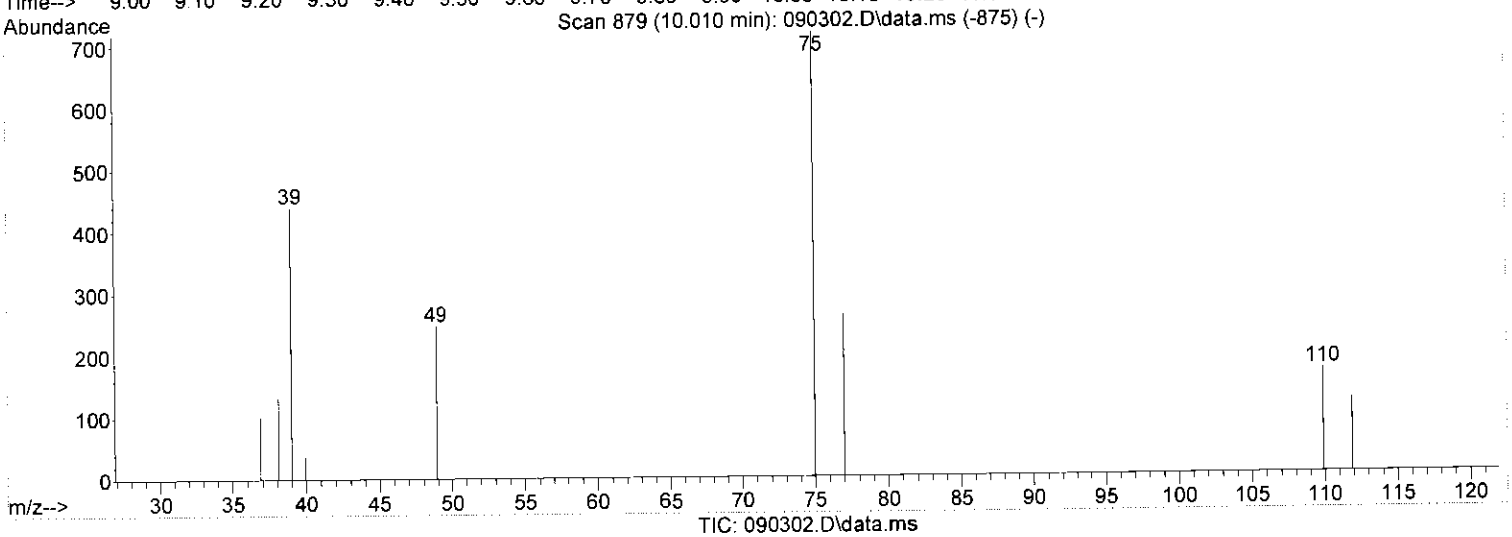
Ion	Exp%	Act%
75.00	100	100
110.00	38.60	34.90
112.00	24.80	27.01
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(38) CIS13DICLPROPENE (T)

10.010min (+0.038) 0.39 µg/L

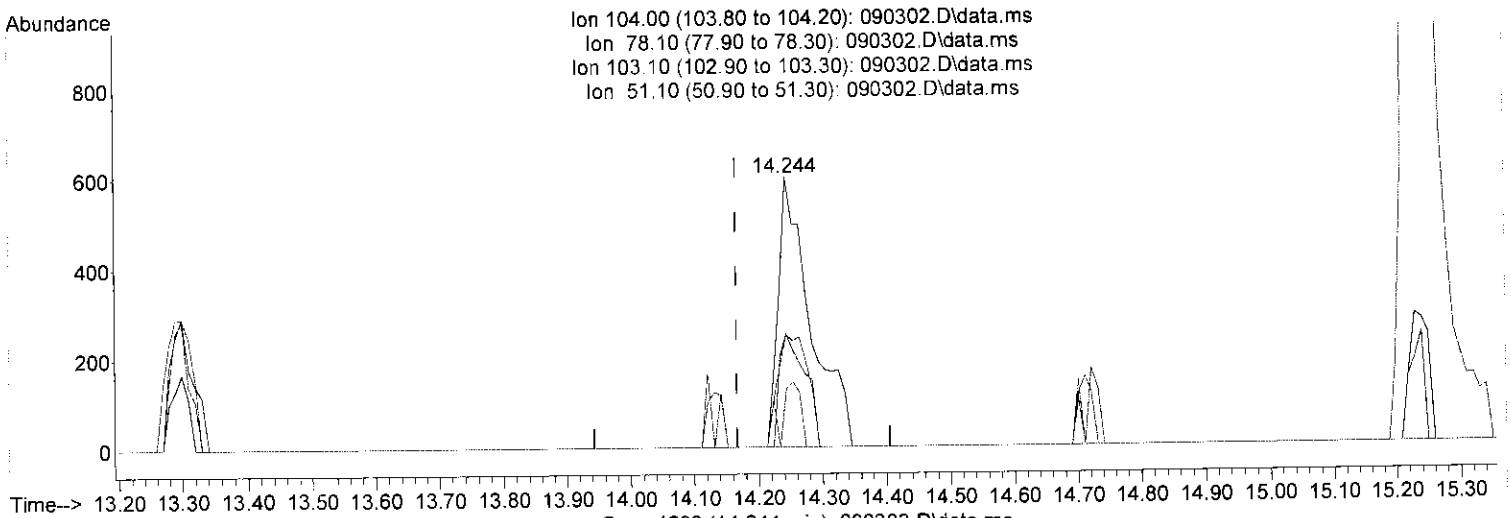
response 1903

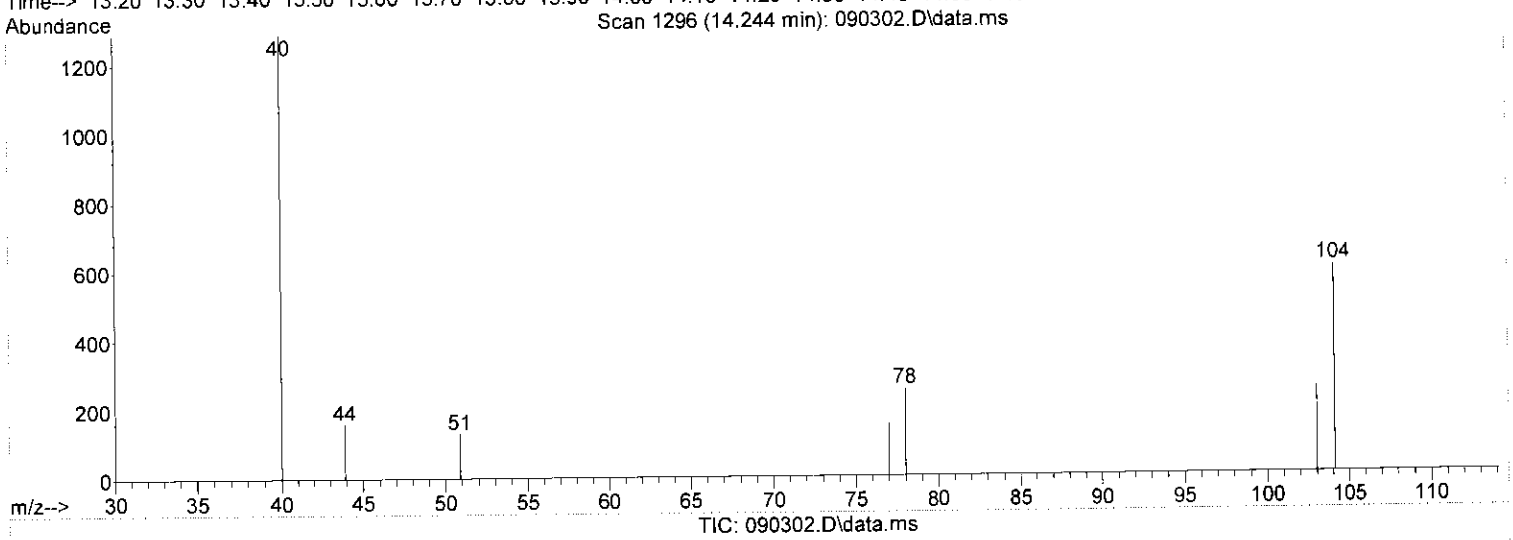
Ion	Exp%	Act%
75.00	100	100
39.20	51.70	61.14
110.00	23.30	23.26
49.00	19.00	34.40

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(54) STYRENE (T)

14.244min (+0.078) 0.25 µg/L

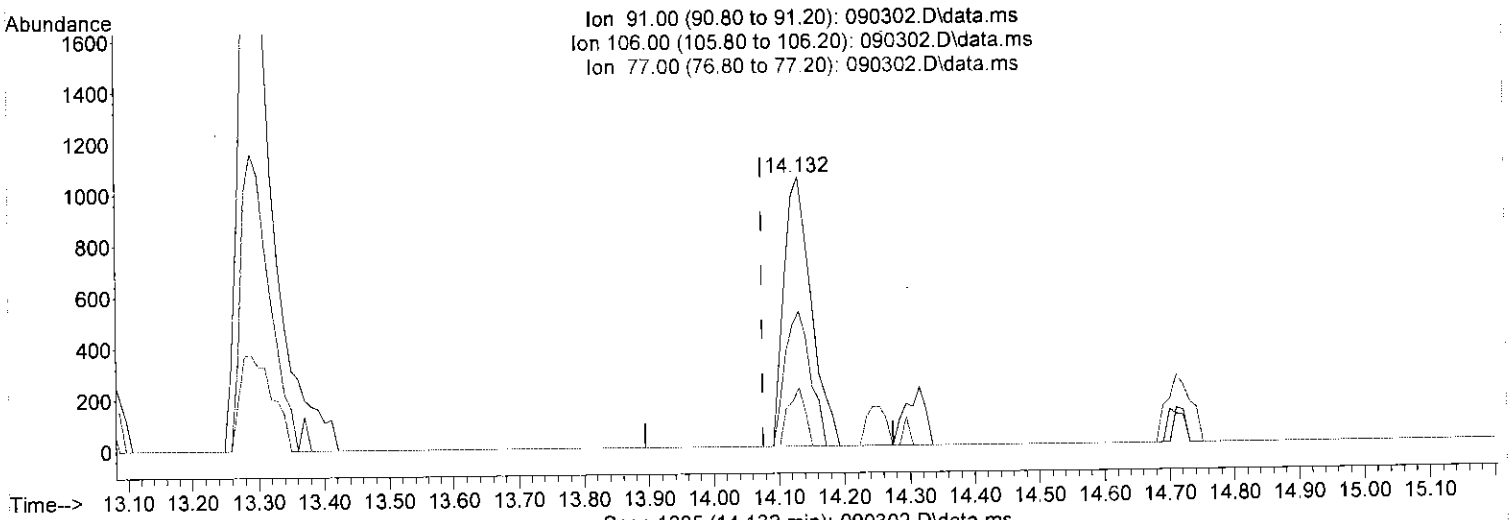
response 2121

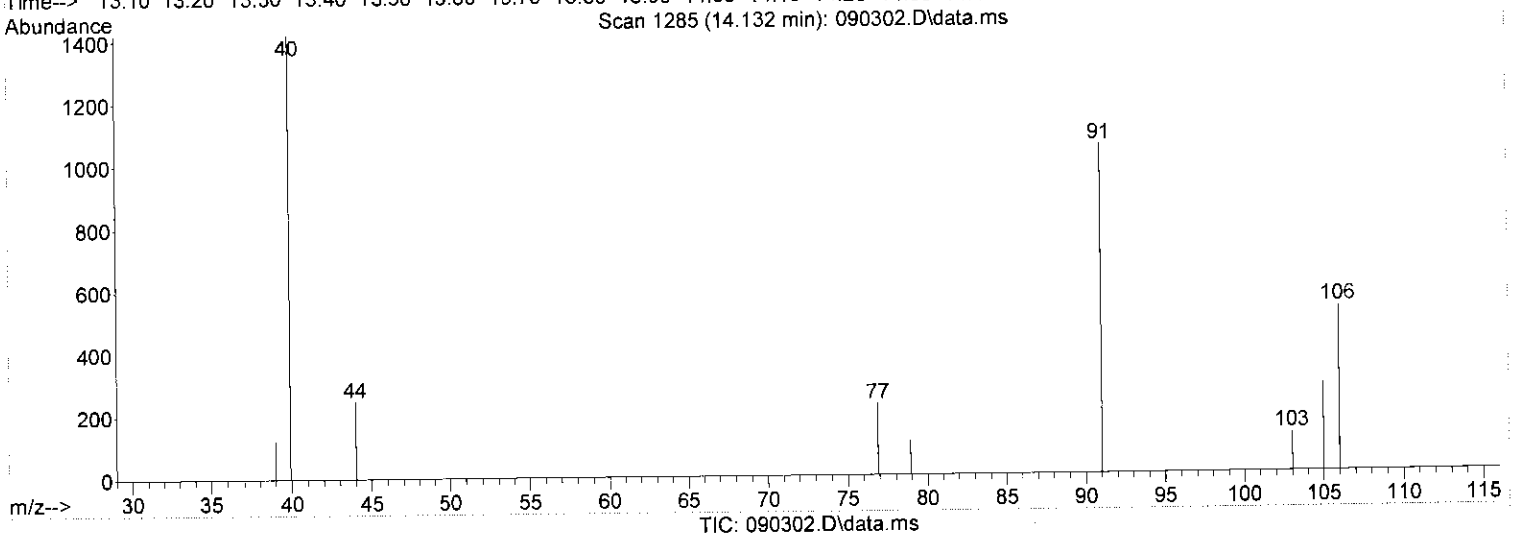
Ion	Exp%	Act%
104.00	100	100
78.10	43.10	33.43
103.10	46.90	38.38
51.10	24.70	14.43

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(55) O-XYLENE (T)

14.132min (+0.056) 0.36 µg/L m

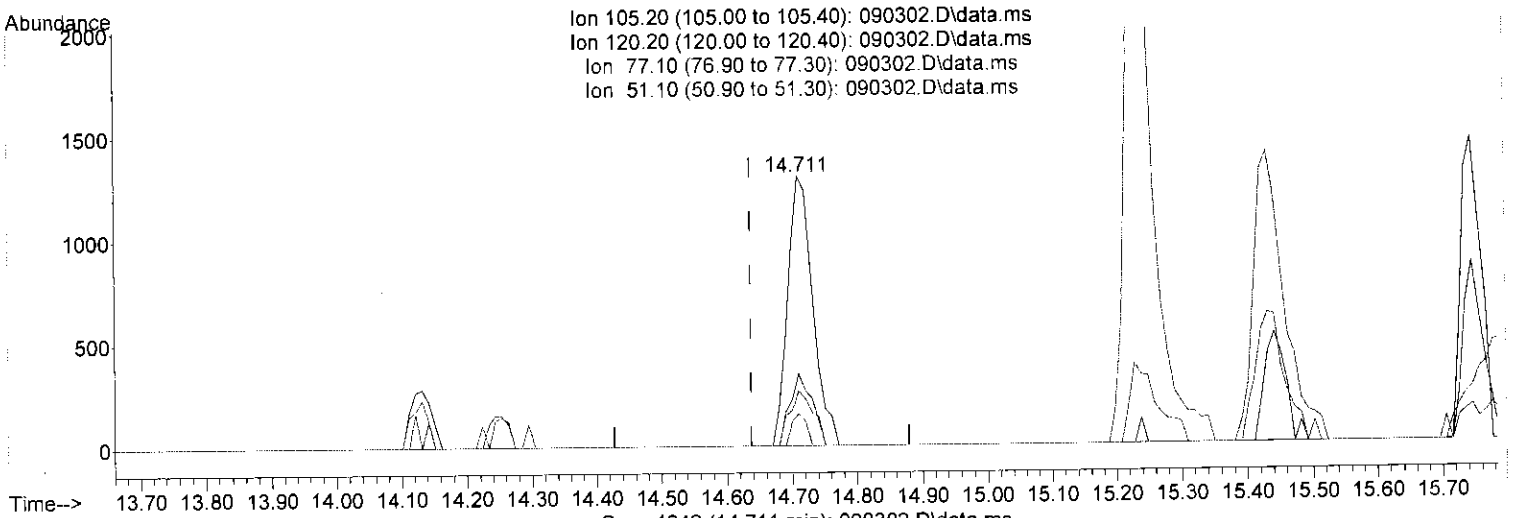
response 3564

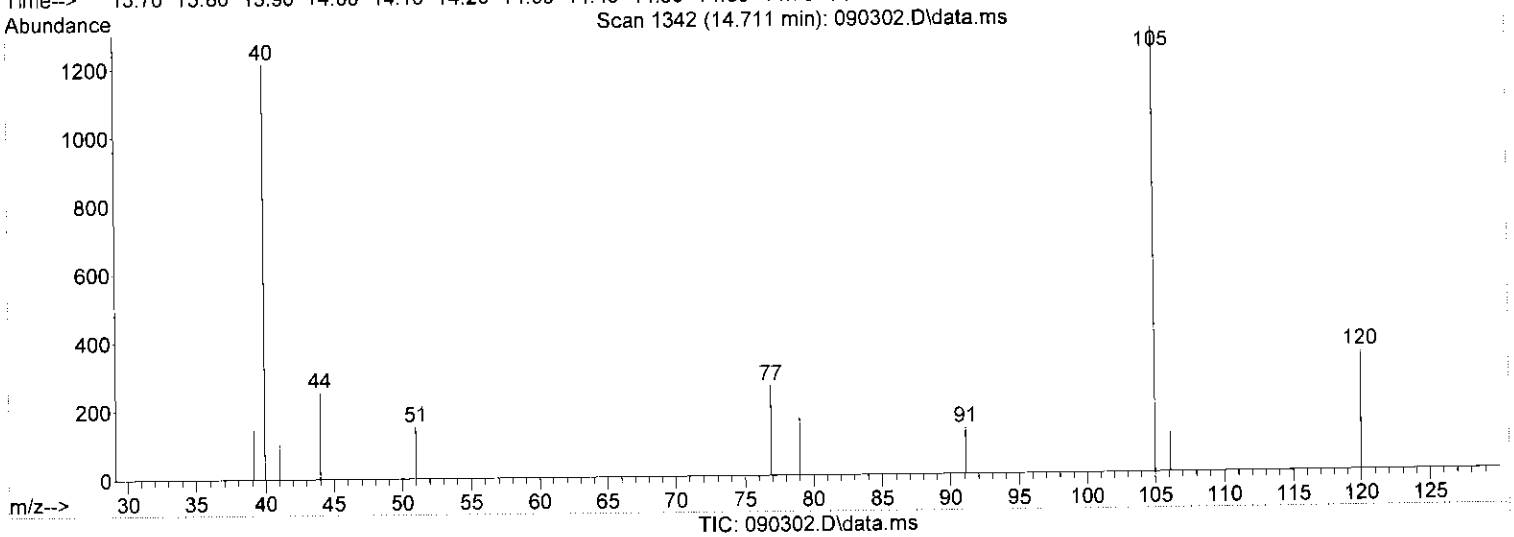
Ion	Exp%	Act%
91.00	100	100
106.00	48.20	40.40
77.00	12.60	11.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(58) ISOPROPYL BENZENE (T)

14.711min (+0.073) 0.26 µg/L

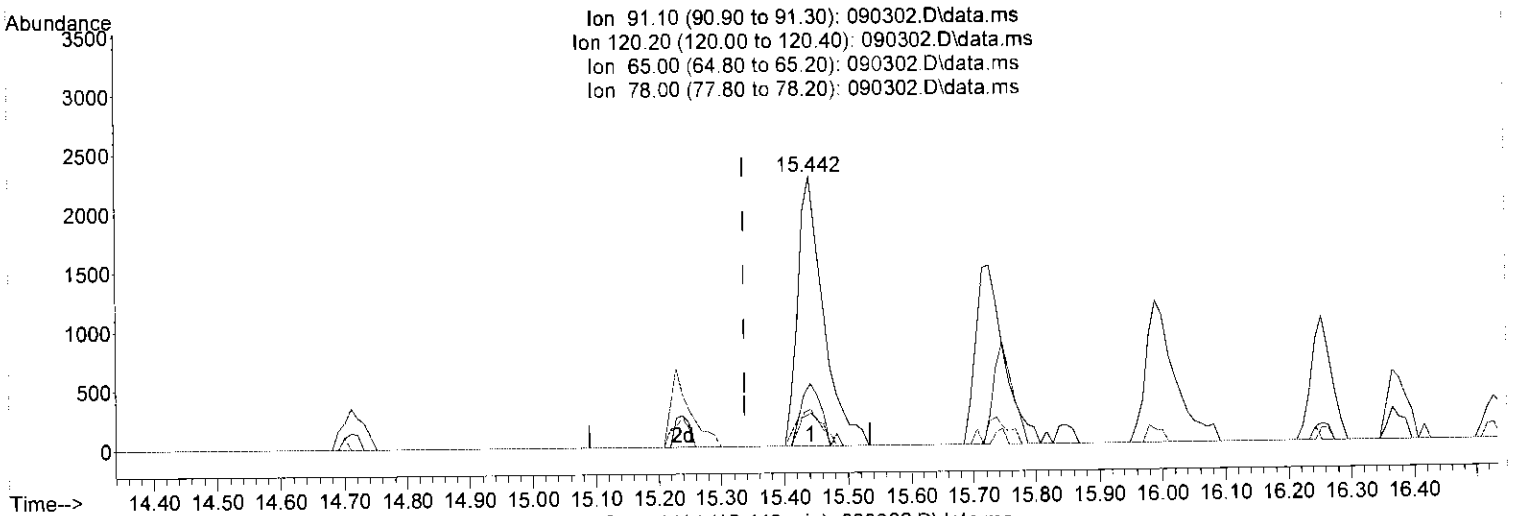
response 3480

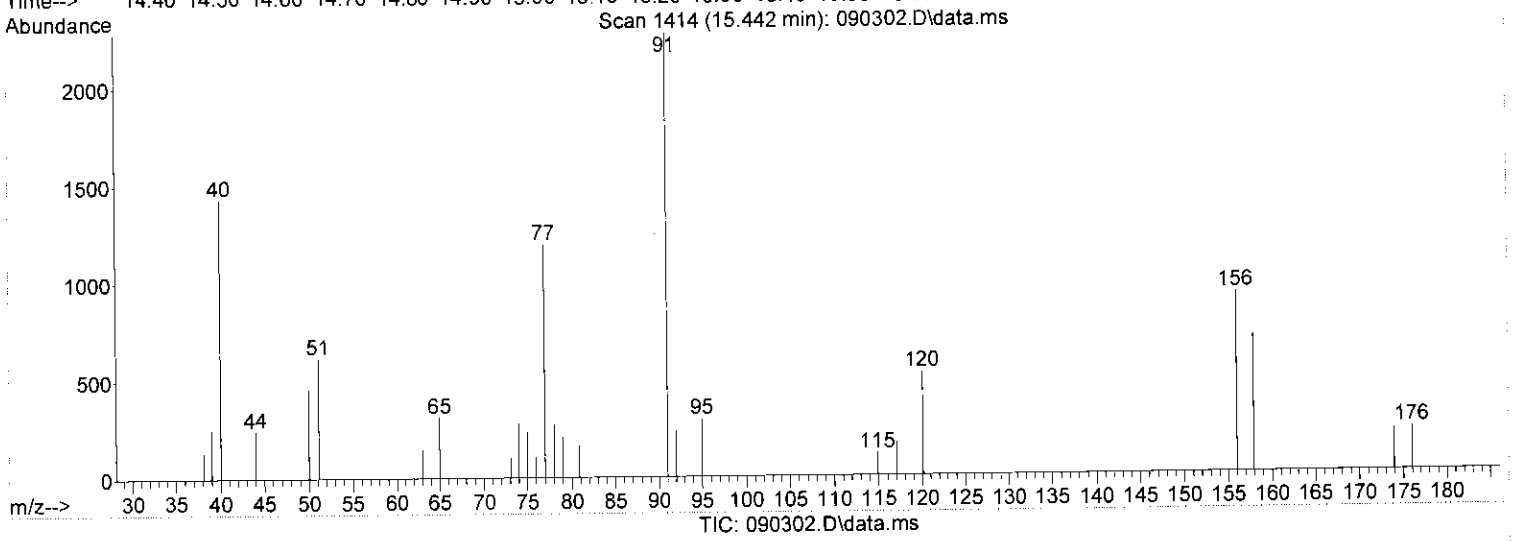
Ion	Exp%	Act%
105.20	100	100
120.20	27.80	23.53
77.10	15.50	19.28
51.10	9.10	6.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(63) N-PROPYLBENZENE (T)

15.442min (+0.105) 0.40 µg/L

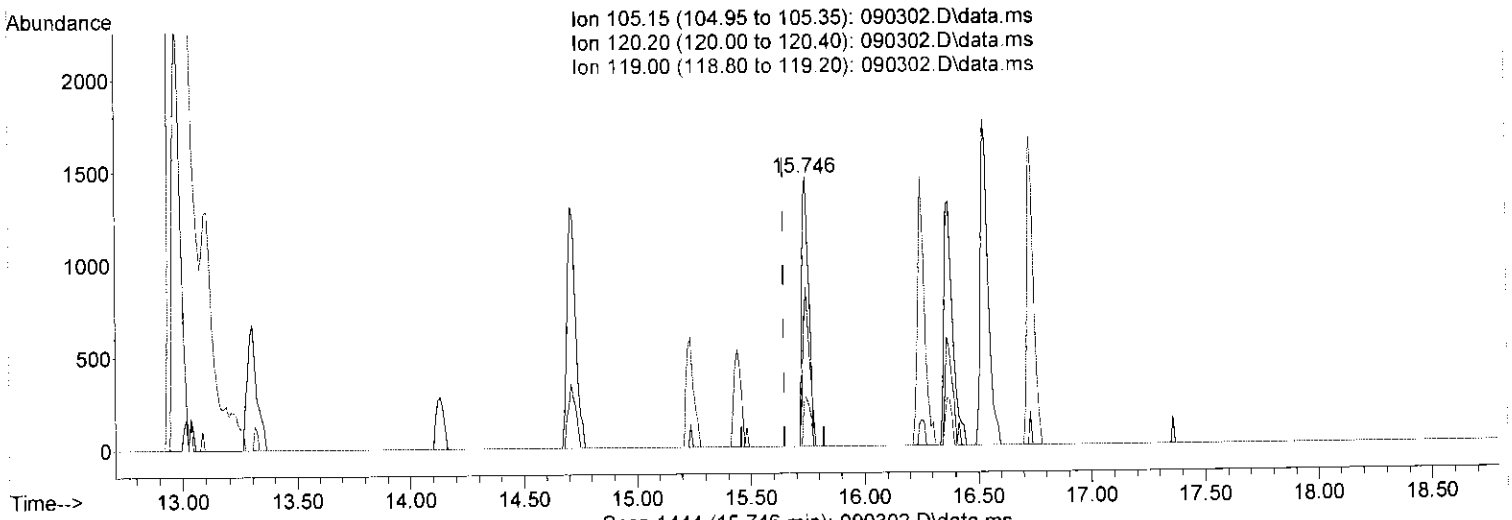
response 6389

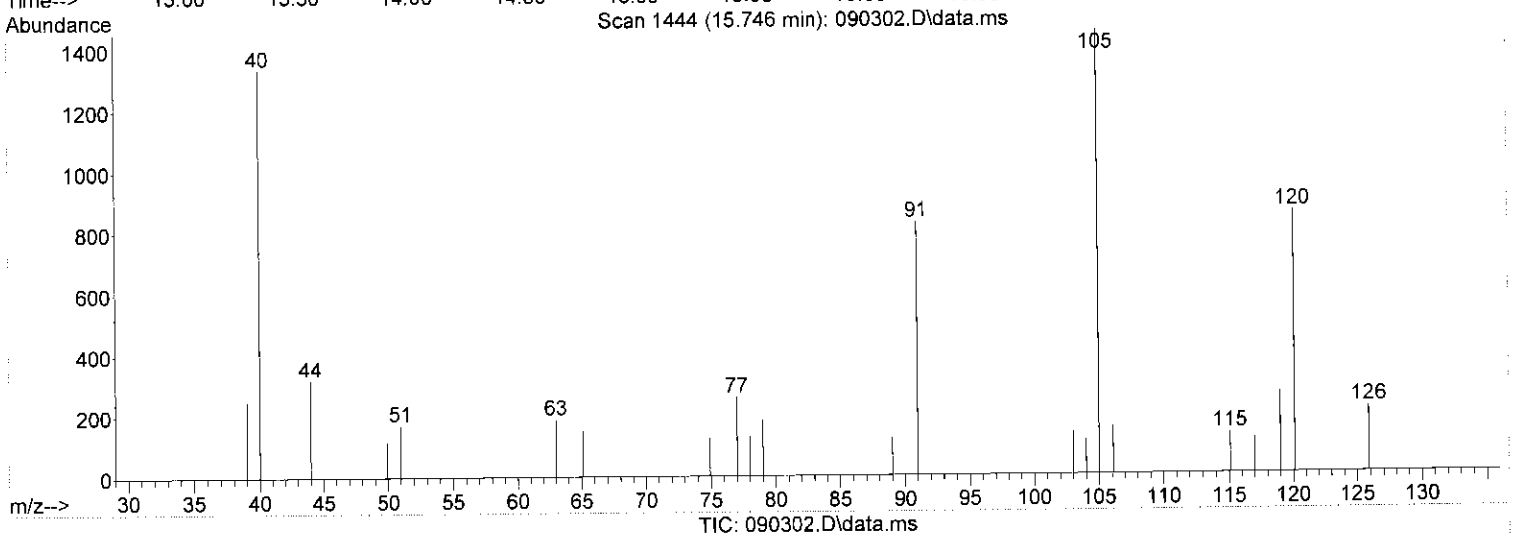
Ion	Exp%	Act%
91.10	100	100
120.20	25.70	18.77
65.00	10.00	10.58
78.00	9.20	12.52

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(66) 135TRIMETHYLBENZENE (T)

15.746min (+0.098) 0.25 µg/L

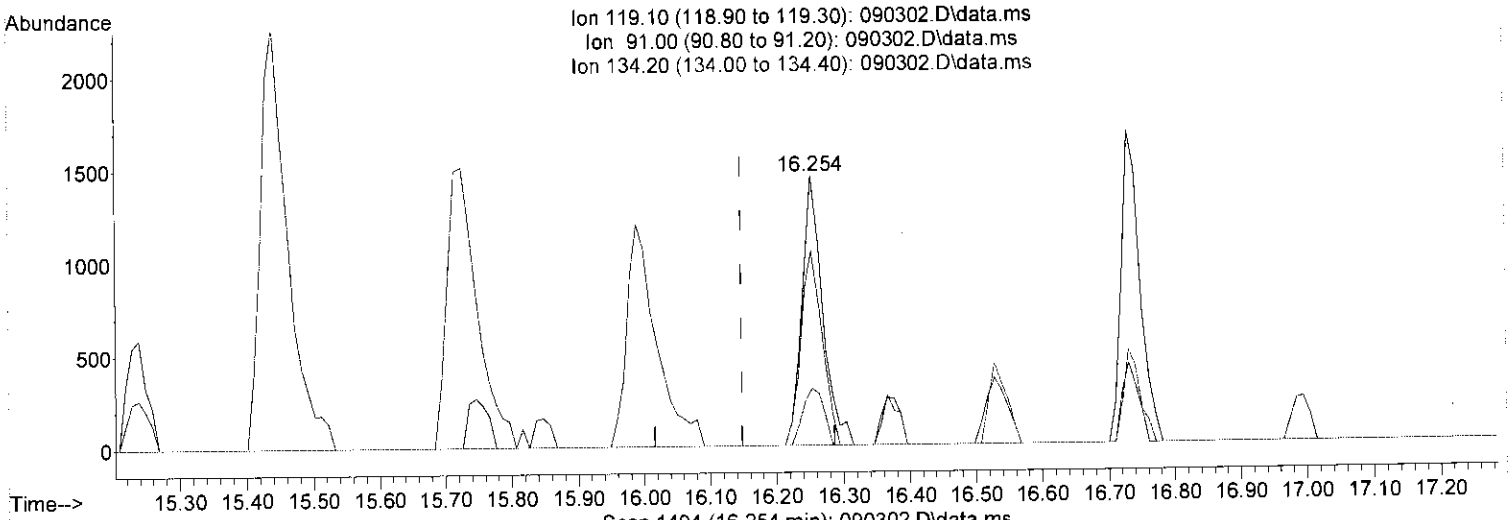
response 3056

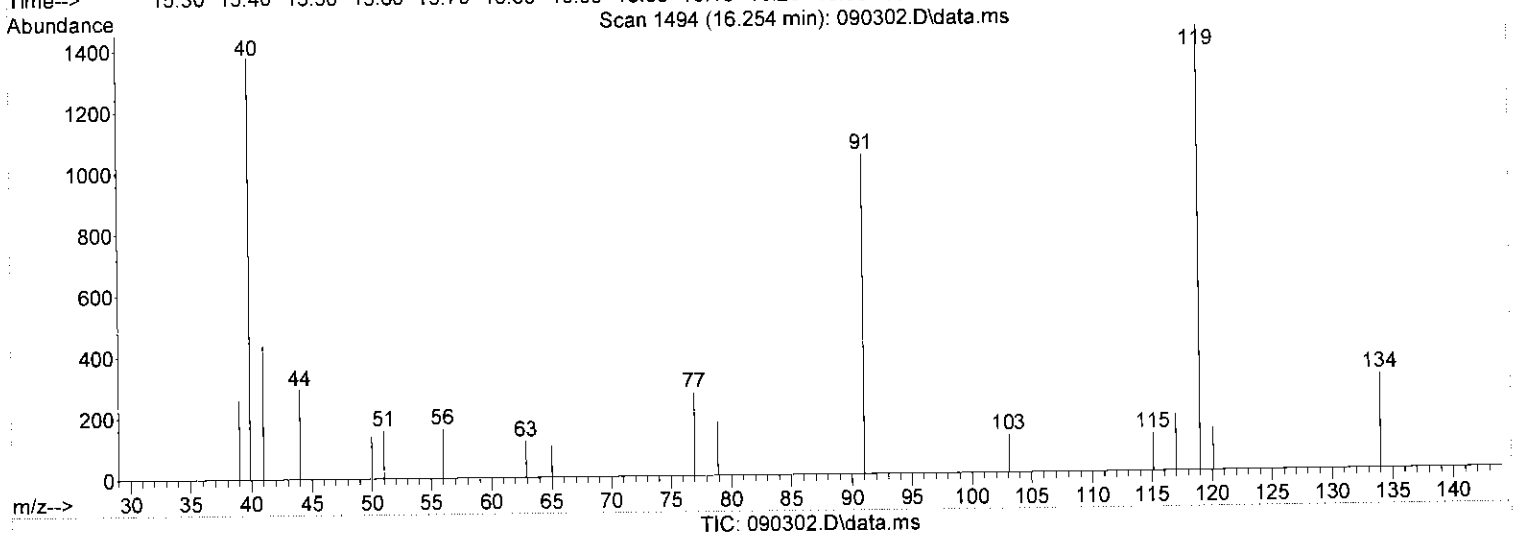
Ion	Exp%	Act%
105.15	100	100
120.20	52.10	58.51
119.00	12.60	17.96
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(67) TERT-BUTYLBENZENE (T)

16.254min (+0.106) 0.38 µg/L m

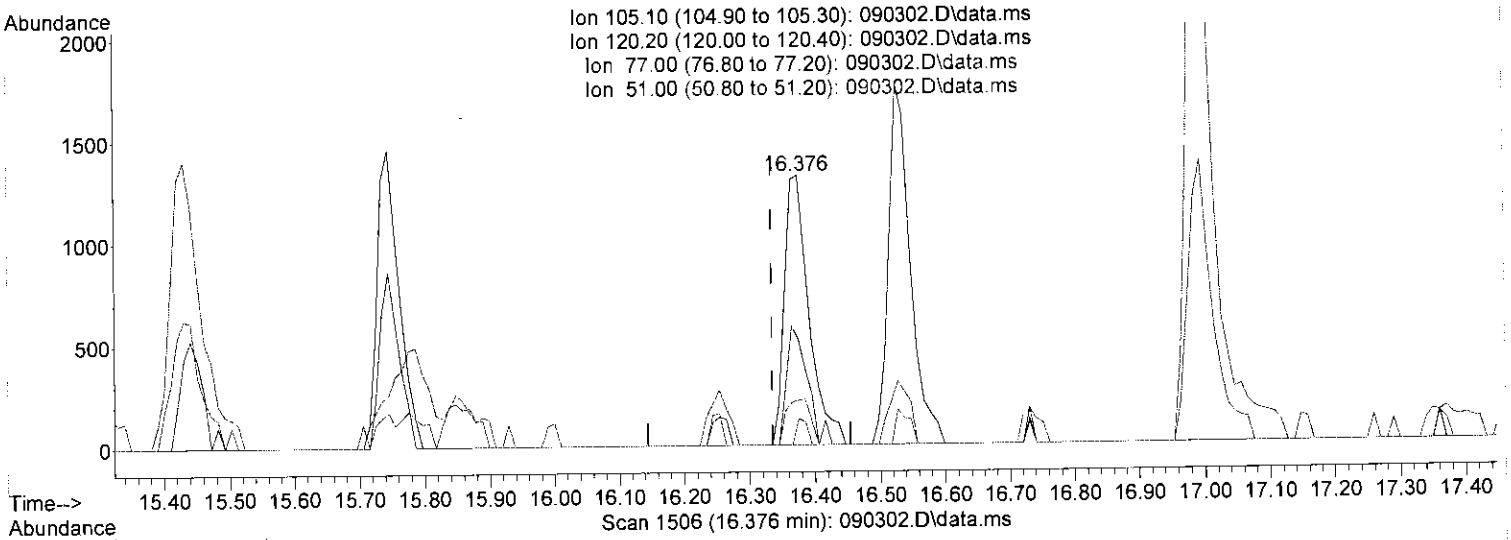
response 3587

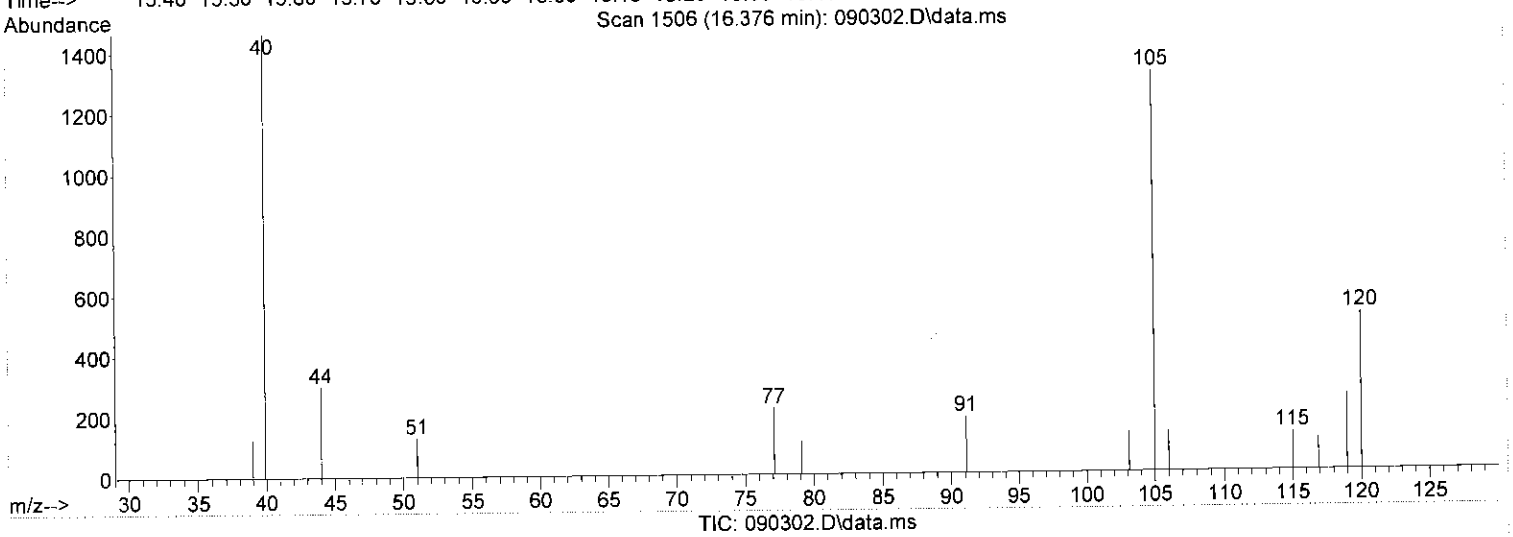
Ion	Exp%	Act%
119.10	100	100
91.00	64.70	63.73
134.20	26.00	18.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(68) 124TRIMETHYLBENZENE (T)

16.376min (+0.041) 0.29 µg/L

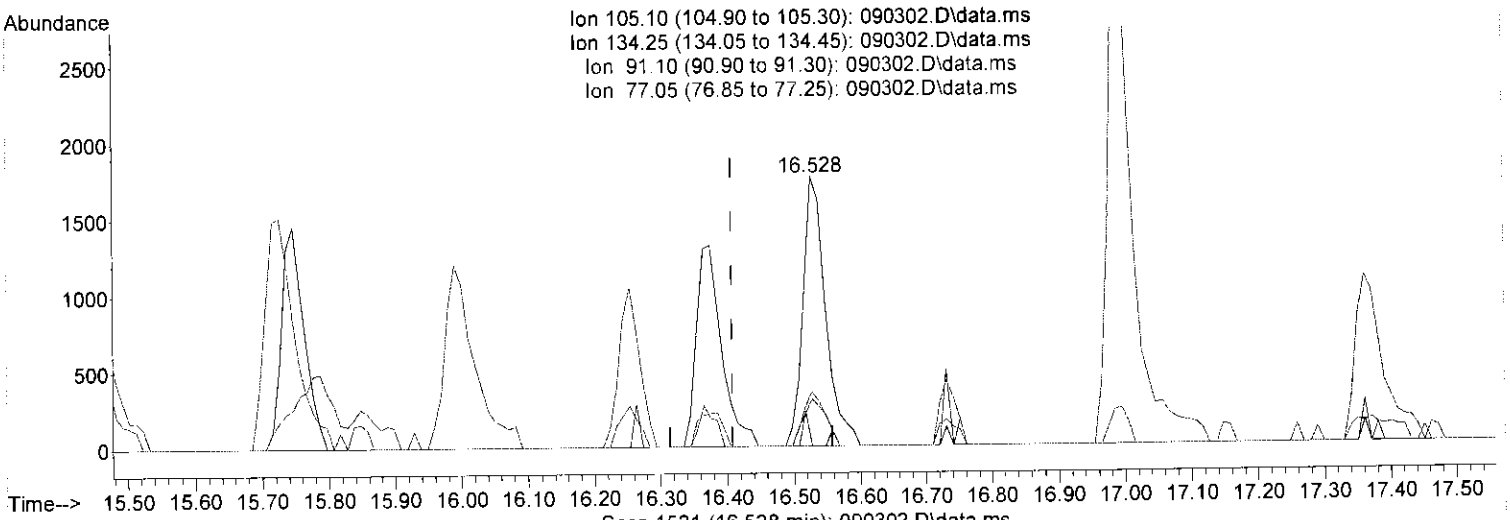
response 3455

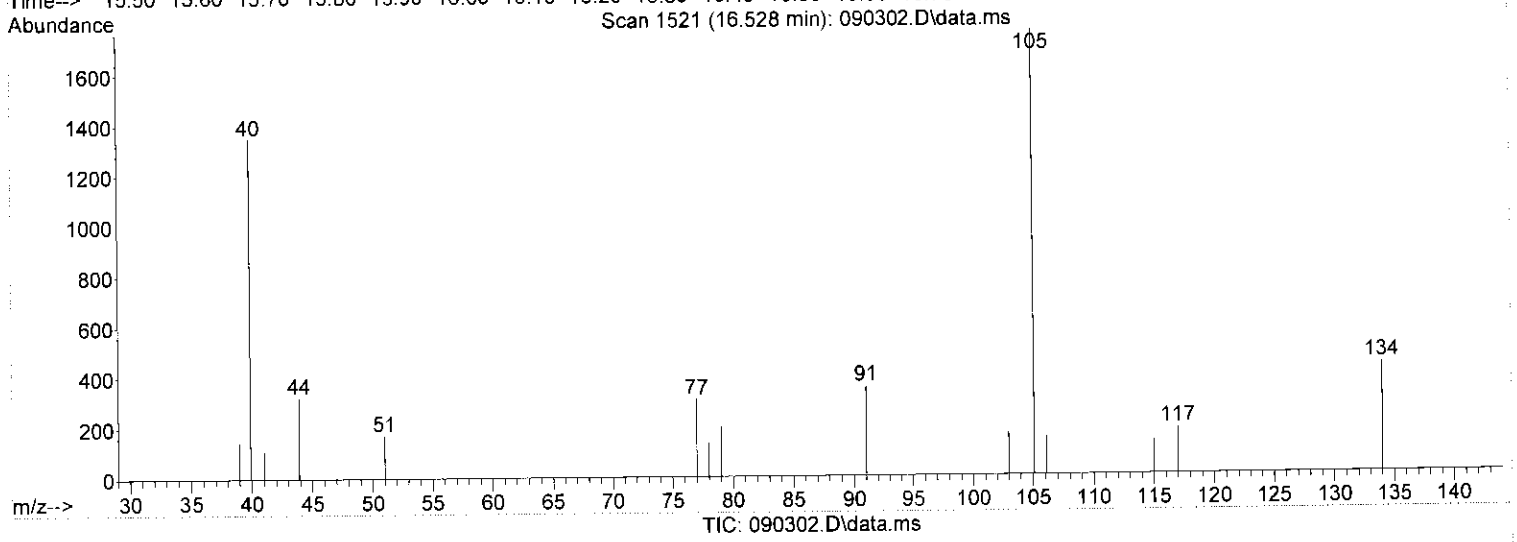
Ion	Exp%	Act%
105.10	100	100
120.20	44.90	37.34
77.00	13.60	16.35
51.00	6.40	4.23

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(69) SEC-BUTYLBENZENE (T)

16.528min (+0.120) 0.29 µg/L m

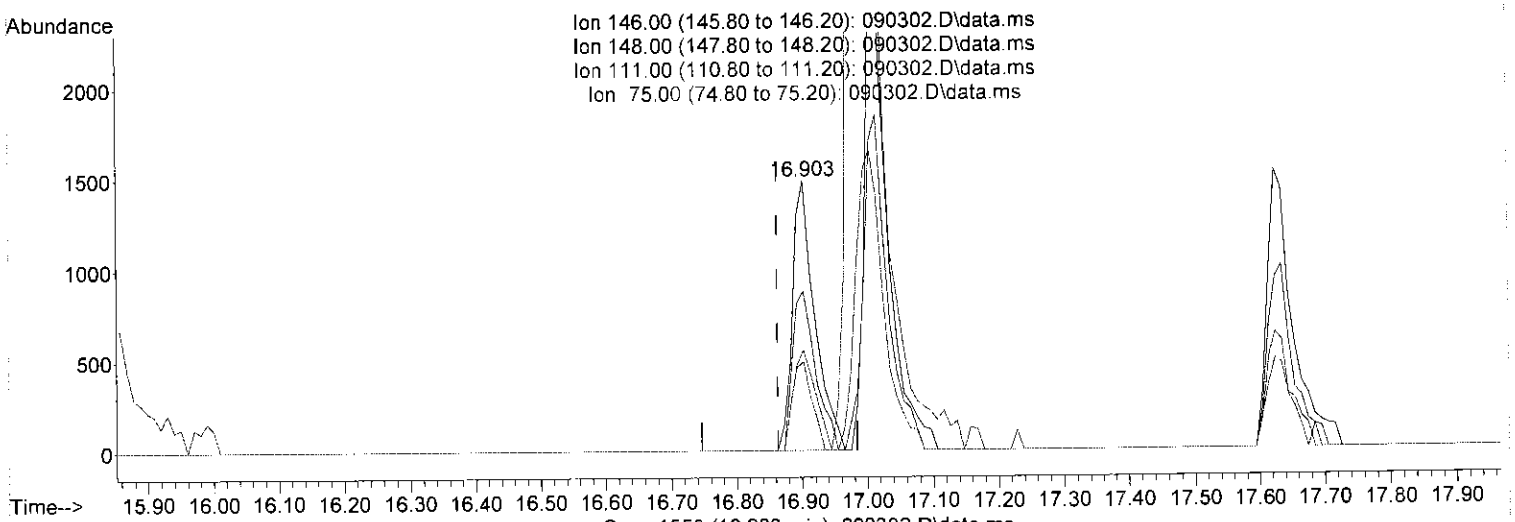
response 4205

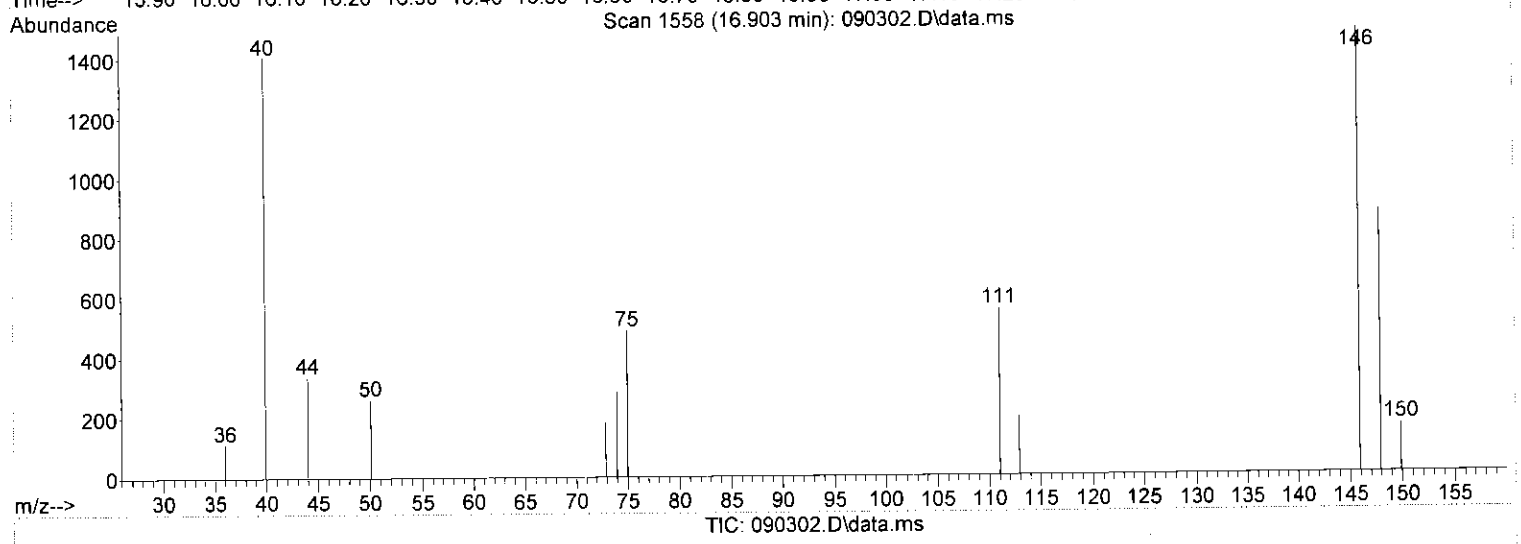
Ion	Exp%	Act%
105.10	100	100
134.25	20.00	24.52
91.10	16.50	20.20
77.05	13.00	17.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(70) 13-DICHLOROBENZENE (T)

16.903min (+0.041) 0.47 µg/L

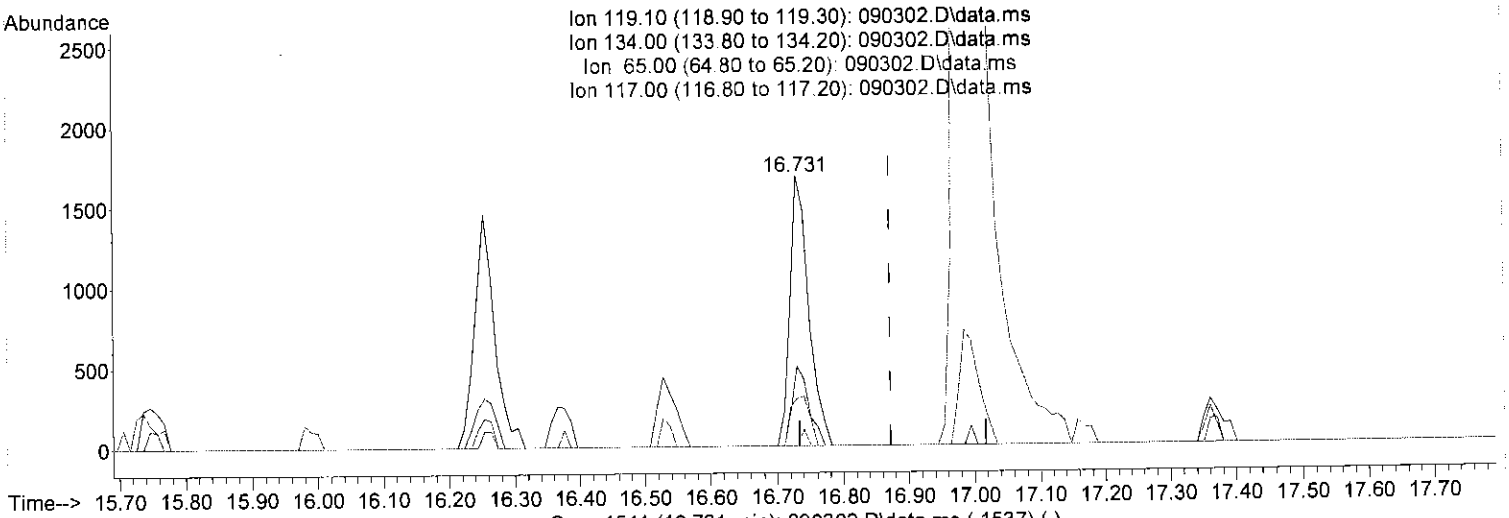
response 3469

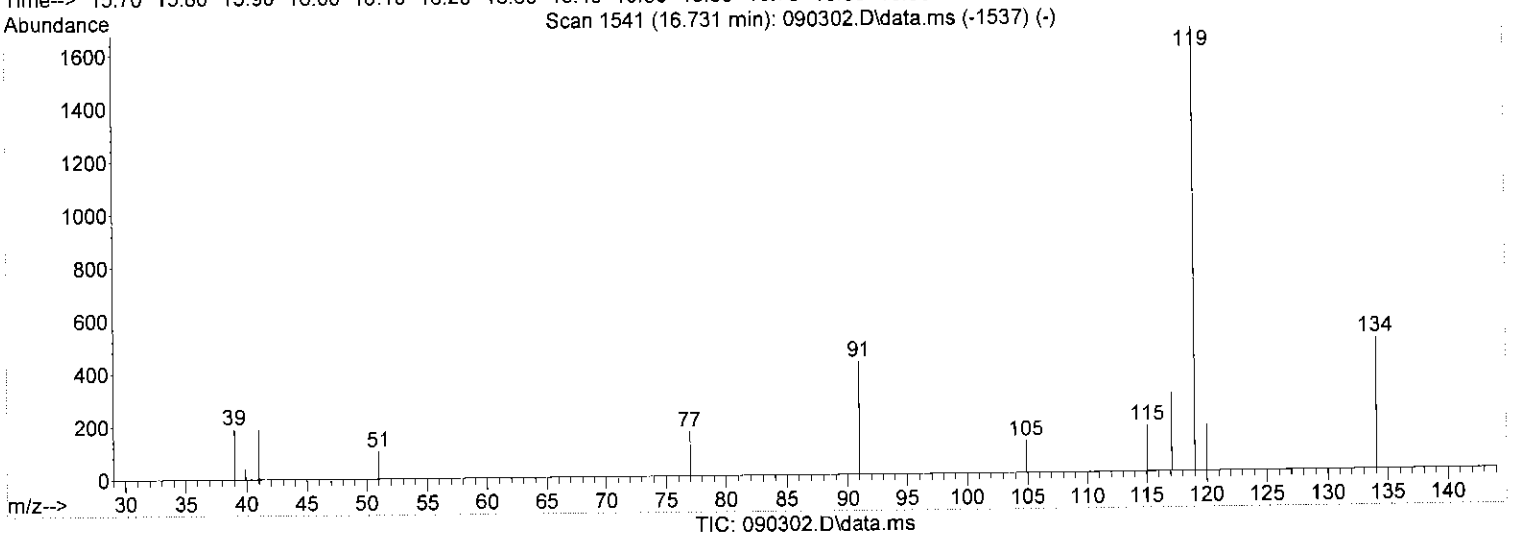
Ion	Exp%	Act%
146.00	100	100
148.00	64.60	61.26
111.00	39.20	36.90
75.00	28.90	29.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(72) 4-ISOPROPYLTOLUENE (T)

16.731min (-0.142) 0.30 µg/L

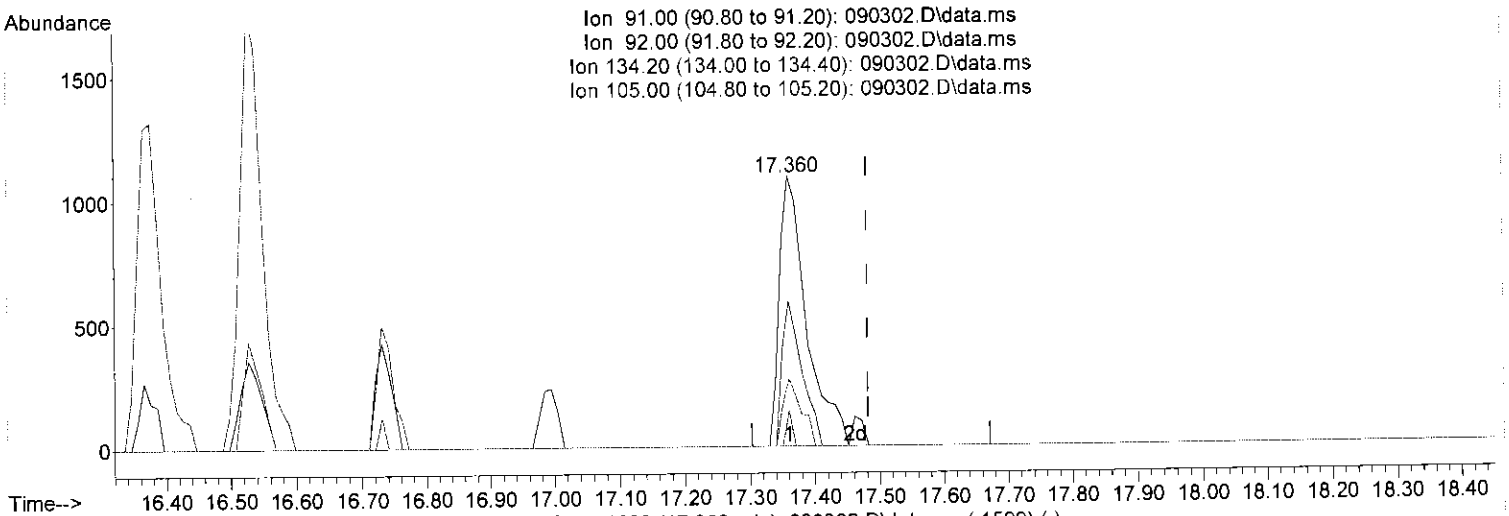
response 3313

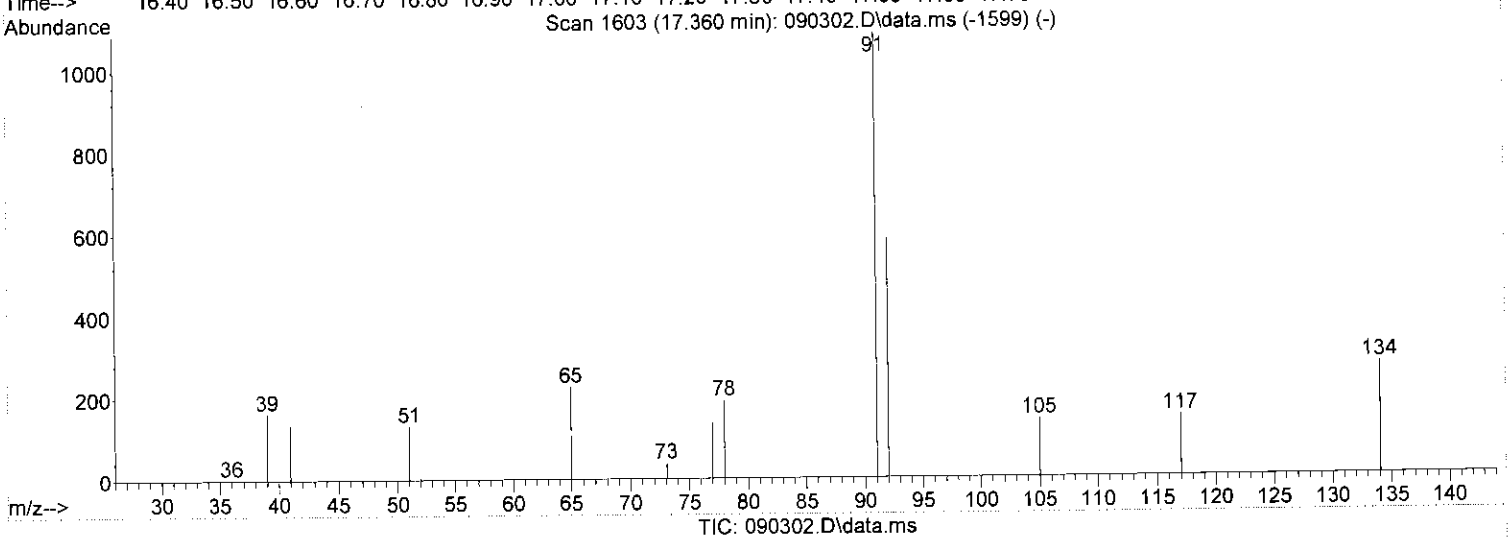
Ion	Exp%	Act%
119.10	100	100
134.00	27.20	29.64
65.00	6.90	0.00
117.00	19.50	17.59

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(75) N-BUTYLBENZENE (T)

17.360min (-0.122) 0.32 µg/L

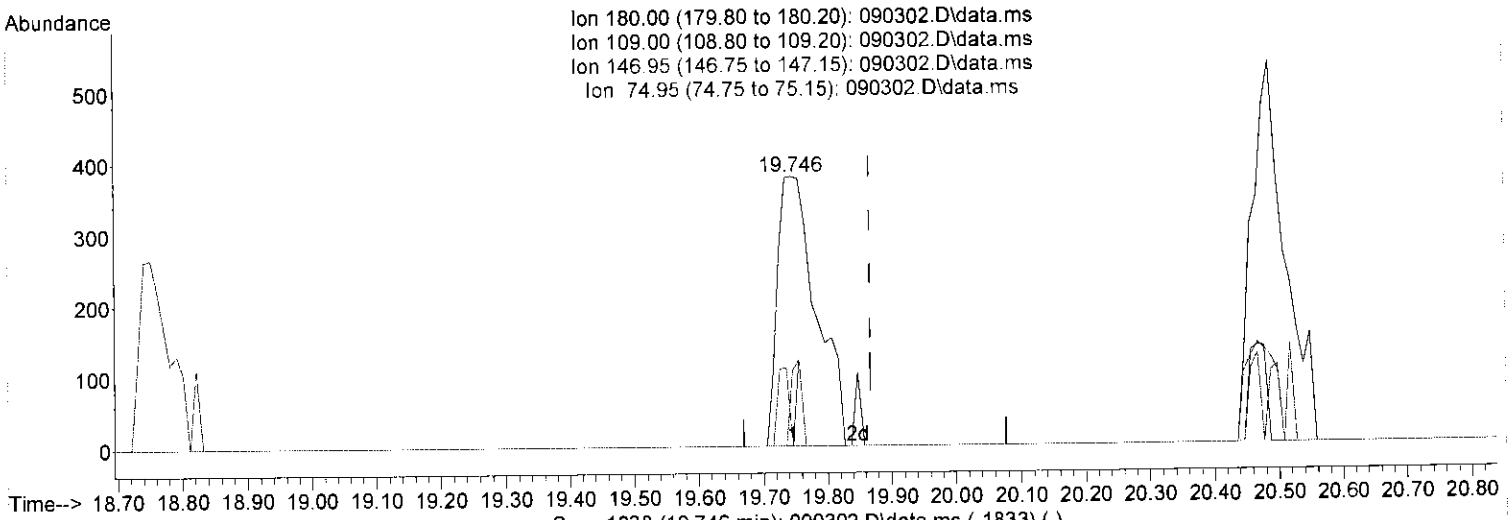
response 3197

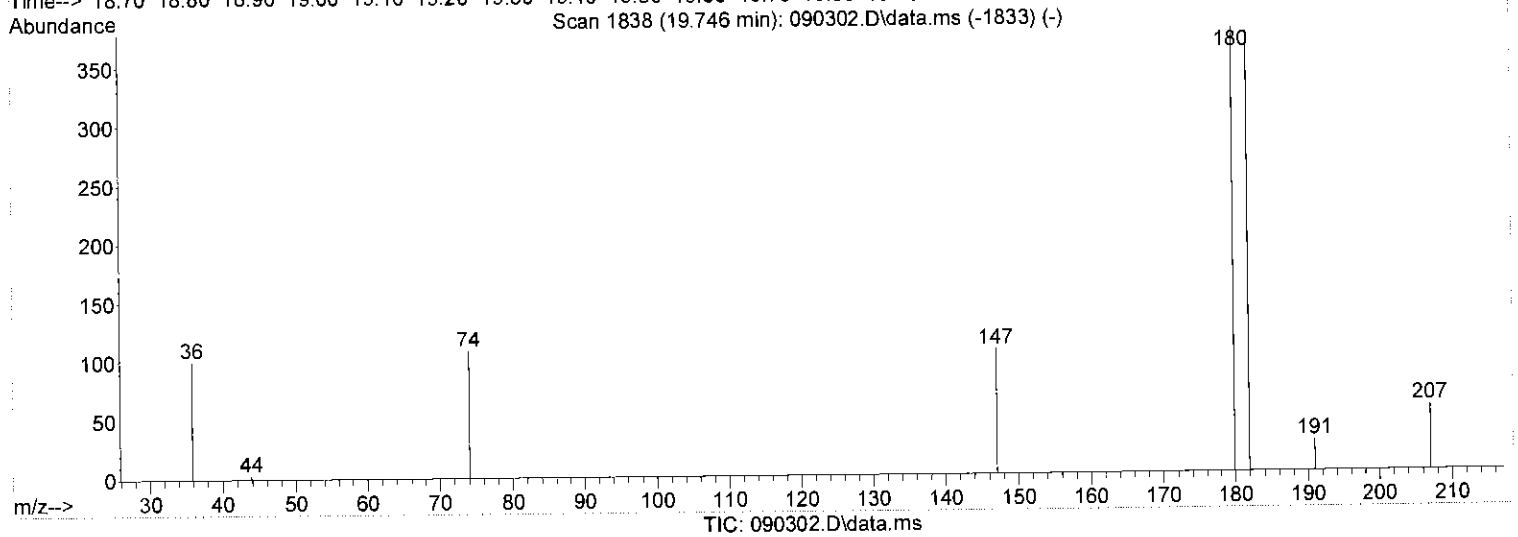
Ion	Exp%	Act%
91.00	100	100
92.00	51.10	53.82
134.20	22.90	25.02
105.00	8.30	12.97

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(77) 124-TRICLBENZENE

19.746min (-0.122) 0.32 µg/L

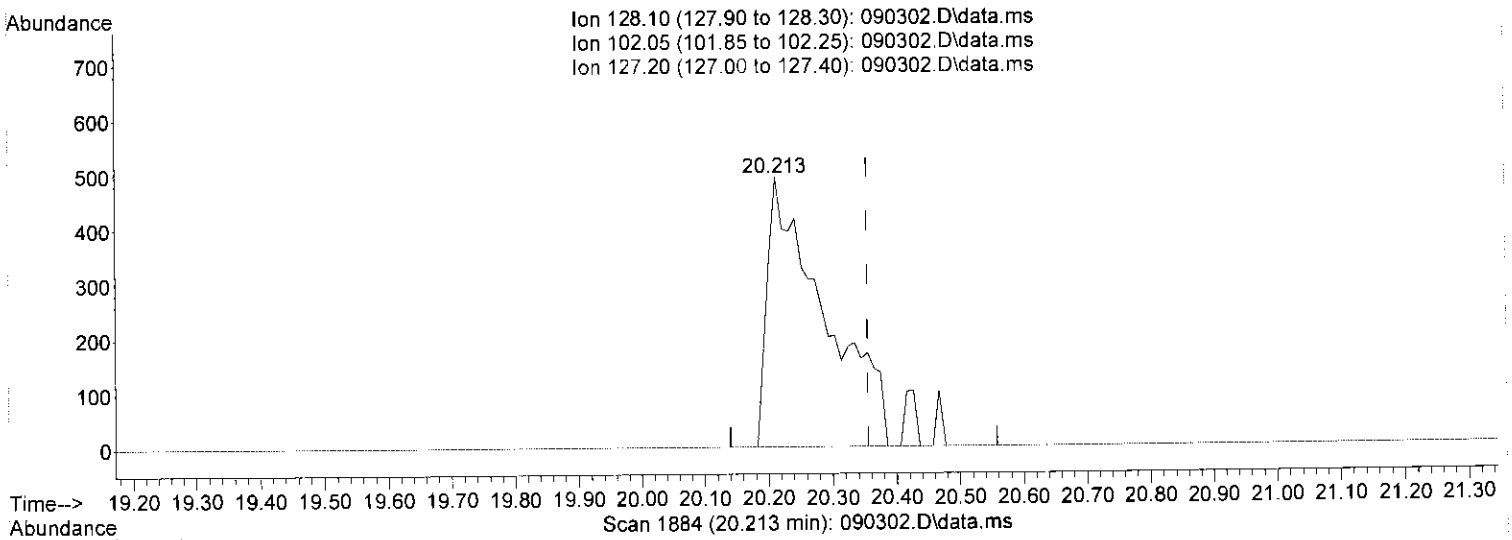
response 1589

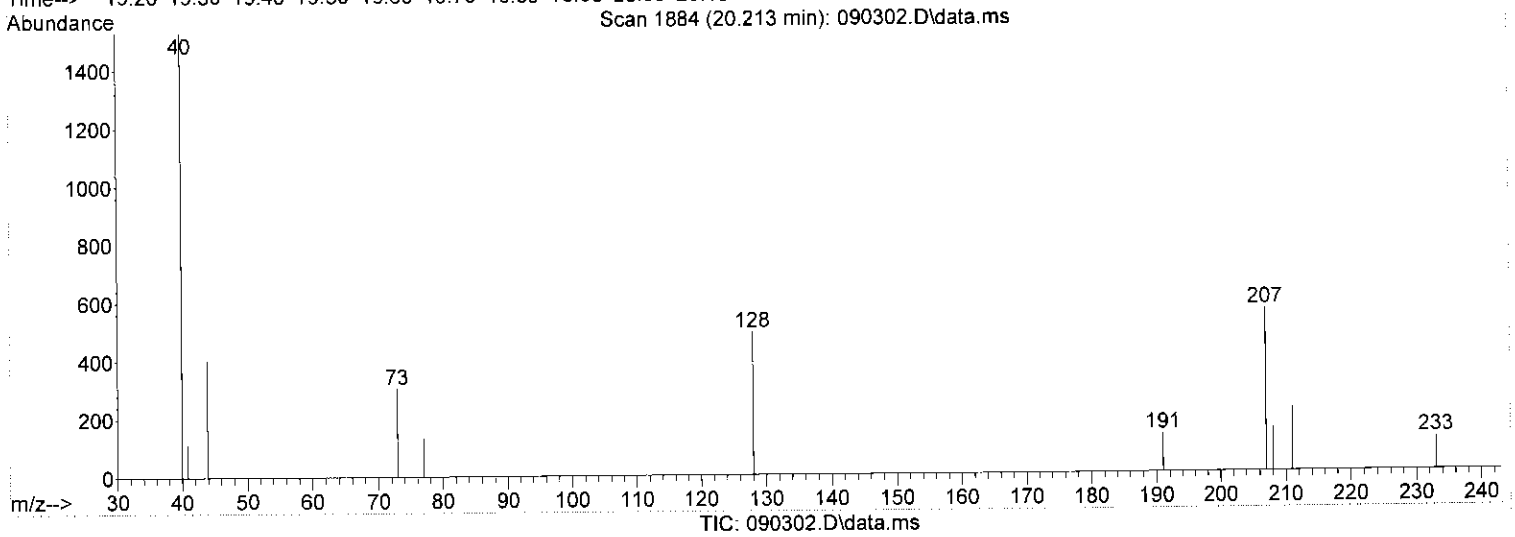
Ion	Exp%	Act%
180.00	100	100
109.00	24.20	0.00#
146.95	19.20	28.04#
74.95	14.80	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(78) NAPHTHALENE (T)

20.213min (-0.142) 0.26 µg/L m

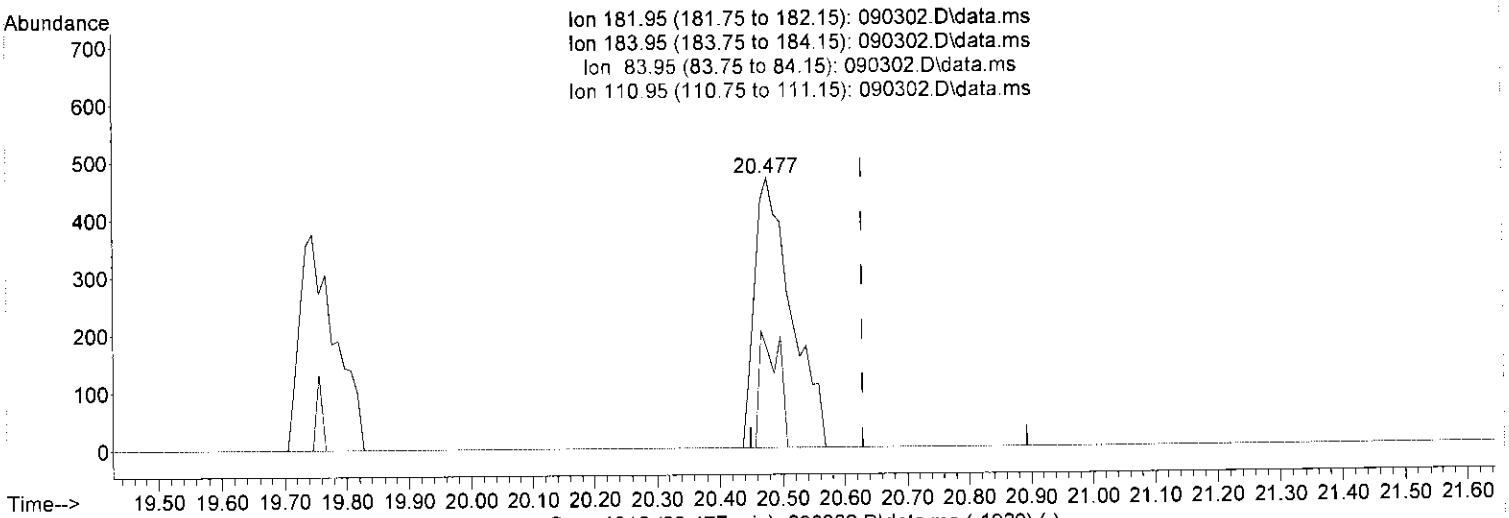
response 3200

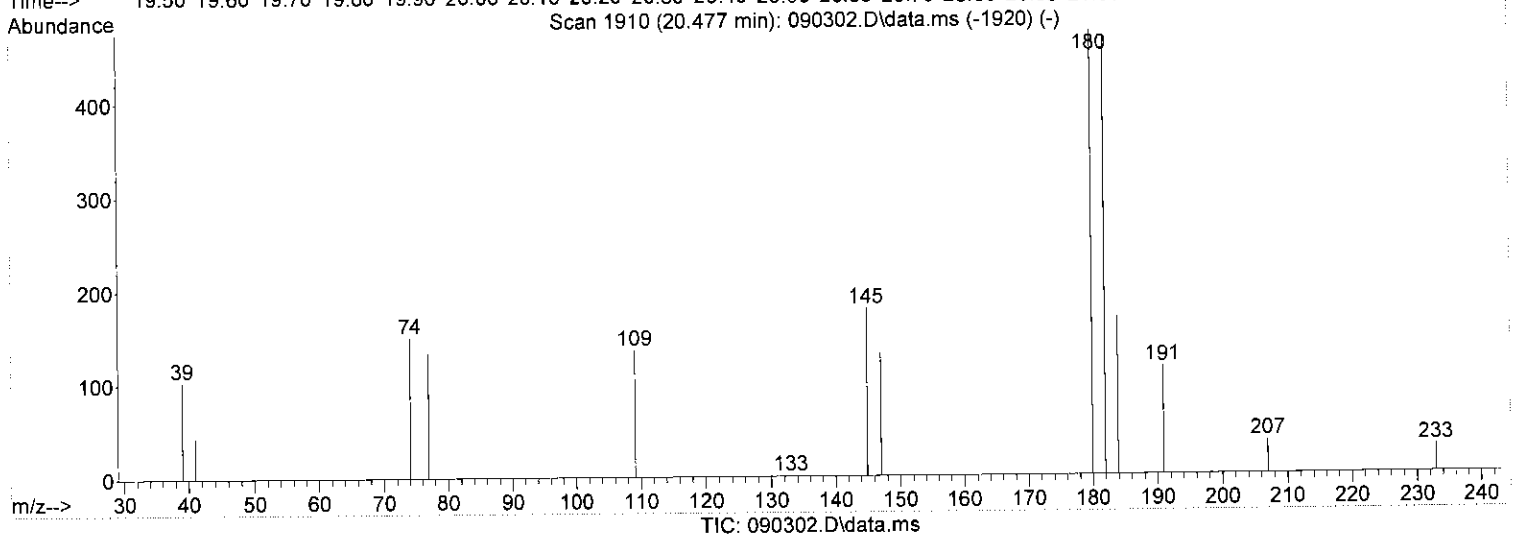
Ion	Exp%	Act%
128.10	100	100
102.05	8.60	0.00
127.20	14.10	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 14:25:32 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(80) 123-TRICLBENZENE

20.477min (-0.152) 0.42 µg/L

response 1903

Ion	Exp%	Act%
181.95	100	100
183.95	30.50	35.90
83.95	12.80	0.00
110.95	8.10	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 15:41:15 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.543	168	217183	20.00	µg/L		0.03
23) I14-DIFLUOROBENZENE	8.295	114	327081	20.00	µg/L		0.03
48) CHLOROBENZEN-d5-IS	12.975	117	319268	20.00	µg/L		0.03
71) I14-DICLBENZENE-D4	16.995	152	179400	20.00	µg/L		-0.13
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.026	111	162473	22.14	µg/L		0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 110.70%				
39) STOLUENE-D8	10.305	98	417013	20.29	µg/L		0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.45%				
59) S4BRFLUOROBENZENE	15.239	95	151544	18.52	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.60%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.853	85	1489m	1.24	µg/L		
3) CHLOROMETHANE	3.107	50	2395m	1.03	µg/L		
4) VINYL CHLORIDE	3.219	62	3167	1.60	µg/L	#	62
5) BROMOMETHANE	3.605	94	1624m	0.86	µg/L		
6) CHLOROETHANE	3.747	64	1647m	1.09	µg/L		
7) TRICLFLUOROMETHANE	3.899	101	8552	1.68	µg/L	#	98
8) ACROLEIN	4.813	56	9983	15.49	µg/L	#	98
9) ACETONE	5.107	43	5169m	6.21	µg/L		
10) 11-DICHLOROETHENE	4.467	61	3191	0.97	µg/L		99
11) IODOMETHANE	4.650	142	13965	4.03	µg/L		93
12) CARBON DISULFIDE	4.549	76	28730	5.51	µg/L	#	74
13) ACRYLONITRILE	5.960	53	5199	5.30	µg/L		99
14) DICHLOROMETHANE	5.066	84	4864	1.66	µg/L	#	72
15) TRANS12DICLETHENE	5.249	96	2887	1.13	µg/L		89
16) 11-DICHLOROETHANE	5.909	63	4825	1.03	µg/L		95
17) VINYL ACETATE	6.122	43	14949	3.46	µg/L	#	94
18) 2-BUTANONE	7.168	43	4589	3.43	µg/L	#	89
19) CIS12DICHLOROETHENE	6.518	96	1791	0.60	µg/L		98
20) 22-DICHLOROPROPANE	6.640	77	2806	0.80	µg/L	#	94
21) CHLOROFORM	6.802	83	6526	1.03	µg/L	#	99
22) BROMOCHLOROMETHANE	6.752	49	2977	1.17	µg/L	#	74
25) TETRAHYDROFURAN	7.046	42	231	N.D.			
26) 111-TRICHLOROETHANE	7.097	97	4907	0.89	µg/L		98
27) 11-DICHLOROPROPENE	7.239	75	1333	N.D.			
28) 12-DICHLOROETHANE	7.807	62	4753	0.91	µg/L	#	95
29) CARBONTETRACHLORIDE	7.016	117	4279	0.79	µg/L	#	82
30) BENZENE	7.554	78	8869	0.80	µg/L	#	77
31) TRICHLOROETHENE	8.295	132	2545	0.81	µg/L	#	65
32) 12-DICHLOROPROPANE	9.026	63	1800	0.67	µg/L	#	85
33) DIBROMOMETHANE	8.904	174	2097	0.83	µg/L		91
34) BROMODICLMETHANE	9.076	83	4349	0.88	µg/L		93
35) 2-CLETHYLVINYLETHER	9.868	63	576	0.89	µg/L	#	44
36) EPICHLOROHYDRIN	10.396	57	4835	16.81	µg/L		86
37) 4METHYL-2-PENTANONE	10.944	43	16217m	4.66	µg/L		
38) CIS13DICLPROPENE	10.010	75	1903	N.D.			
40) TOLUENE	10.386	91	10110	0.82	µg/L		100
41) TRANS13DICLPROPENE	11.046	75	2159	0.60	µg/L		83
42) 112-TRICHLOROETHANE	11.320	97	2484	0.75	µg/L		89
43) 2-HEXANONE	12.396	43	4961	1.95	µg/L	#	80
44) 13-DICHLOROPROPANE	11.797	76	2809	0.55	µg/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 15:41:15 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

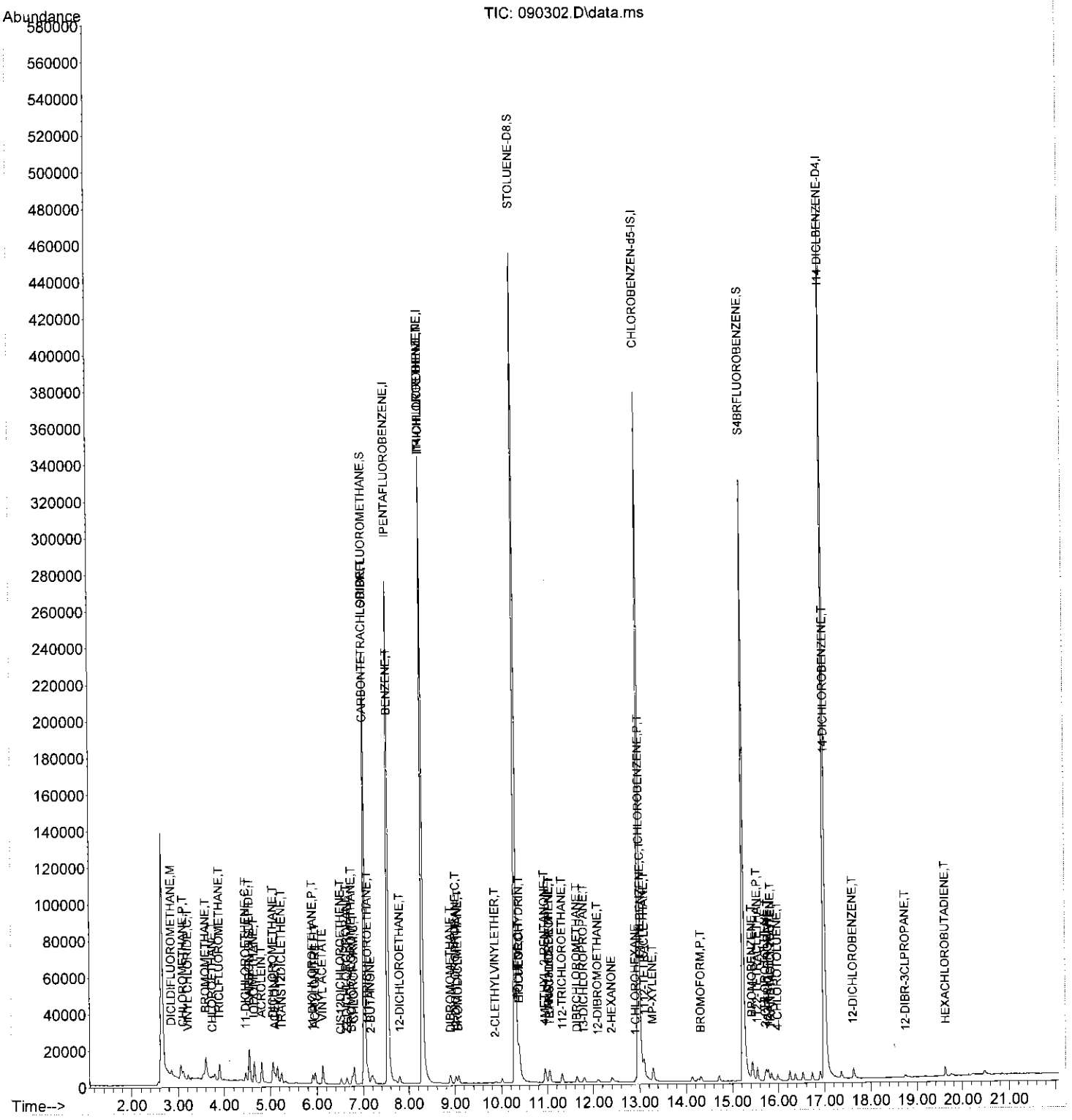
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	3117	0.77 µg/L	94
46) TETRACHLOROETHENE	11.046	166	2016	0.55 µg/L	90
47) 12-DIBROMOETHANE	12.102	107	1944	0.64 µg/L #	92
49) CHLOROBENZENE	13.005	112	6196	0.74 µg/L #	30
50) 1-CHLOROHEXANE	12.914	91	710	0.53 µg/L #	53
51) 1112-TETRACLETHANE	13.107	131	3271	0.91 µg/L #	38
52) ETHYLBENZENE	13.025	91	9178	0.69 µg/L	93
53) MP-XYLENE	13.289	91	7869	0.77 µg/L	92
54) STYRENE	14.244	104	2121	N.D.	
55) O-XYLENE	14.132	91	3564	N.D.	
56) BROMOFORM	14.315	173	2298	0.82 µg/L	88
57) 1122-TETRACLETHANE	15.543	83	4593	0.90 µg/L	95
58) ISOPROPYL BENZENE	14.711	105	3480	N.D.	
60) 123-TRICLPROPANE	15.787	110	1240	0.76 µg/L	90
61) TRANS14DICL2BUTENE	15.848	53	1905	2.44 µg/L	88
62) BROMOBENZENE	15.431	77	4387	0.63 µg/L	85
63) N-PROPYLBENZENE	15.442	91	6389	N.D.	
64) 2-CHLOROTOLUENE	15.726	91	8789m	0.77 µg/L	
65) 4-CHLOROTOLUENE	15.990	91	6503m	0.62 µg/L	
66) 135TRIMETHYLBENZENE	15.746	105	3056	N.D.	
67) TERT-BUTYLBENZENE	16.254	119	3587	N.D.	
68) 124TRIMETHYLBENZENE	16.376	105	3455	N.D.	
69) SEC-BUTYLBENZENE	16.528	105	4205	N.D.	
70) 13-DICHLOROBENZENE	16.903	146	3469	N.D.	
72) 4-ISOPROPYLTOLUENE	16.731	119	3313	N.D.	
73) 14-DICHLOROBENZENE	17.015	146	6485	0.93 µg/L #	1
74) 12-DICHLOROBENZENE	17.624	146	4210	0.61 µg/L	98
75) N-BUTYLBENZENE	17.360	91	3197	N.D.	
76) 12-DIBR-3CLPROPANE	18.761	157	563	0.52 µg/L	80
77) 124-TRICLBENZENE	19.746	180	1589	N.D.	
78) NAPHTHALENE	20.213	128	3200	N.D.	
79) HEXACHLOROBUTADIENE	19.624	225	1659	0.79 µg/L	87
80) 123-TRICLBENZENE	20.477	182	1903	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090302.D
Acq On : 10 Jul 2018 7:47 pm
Operator : NIVA
Sample : MDL/2898476
Misc : RUN200903
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 11 15:41:15 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090304.D
Acq On : 10 Jul 2018 8:39 pm
Operator : NIVA
Sample : ICV/2898475
Misc : RUN200903
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 11 15:56:35 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IPENTAFLUOROBENZENE	1.000	1.000	0.0	66	0.03
2	M	DICLDIFLUOROMETHANE	0.110	0.113	-2.7	59	0.08
3	P,T	CHLOROMETHANE	0.214	0.254	-18.7	86	0.08
4	C,T	VINYL CHLORIDE	0.183	0.176	3.8	56	0.08
5	T	BROMOMETHANE	0.173	0.198	-14.5	77	0.09
6	T	CHLOROETHANE	0.139	0.153	-10.1	67	0.10
7	T	TRICLFLUOROMETHANE	0.469	0.543	-15.8	66	0.14
8	T	ACROLEIN	0.059	0.051#	13.6	51	0.10
9	T	ACETONE	0.077	0.088#	-14.3	72	0.02
10	C,T	11-DICHLOROETHENE	0.302	0.332	-9.9	65	0.11
11	T	IODOMETHANE	0.319	0.347	-8.8	62	0.10
12	T	CARBON DISULFIDE	0.480	0.520	-8.3	63	0.10
13	T	ACRYLONITRILE	0.090	0.107	-18.9	73	0.03
14	T	DICHLOROMETHANE	0.269	0.298	-10.8	70	0.10
15	T	TRANS12DICLETHENE	0.236	0.270	-14.4	69	0.11
16	P,T	11-DICHLOROETHANE	0.432	0.502	-16.2	70	0.00
17		VINYL ACETATE	0.398	0.447	-12.3	66	0.00
18		2-BUTANONE	0.123	0.140	-13.8	68	0.14
19	T	CIS12DICHLOROETHENE	0.273	0.233	14.7	53	0.13
20	T	22-DICHLOROPROPANE	0.322	0.362	-12.4	68	0.12
21	C,T	CHLOROFORM	0.584	0.619	-6.0	65	0.13
22	T	BROMOCHLOROMETHANE	0.234	0.243	-3.8	63	0.01
23	I	I14-DIFLUOROBENZENE	1.000	1.000	0.0	67	0.02
24	S	SDIBRFLUOROMETHANE	0.449	0.509	-13.4	73	0.01
25	T	TETRAHYDROFURAN	0.044	0.037#	15.9	62	0.02
26	T	111-TRICHLOROETHANE	0.339	0.398	-17.4	69	0.01
27	T	11-DICHLOROPROPENE	0.208	0.204	1.9	58	0.01
28	T	12-DICHLOROETHANE	0.318	0.345	-8.5	68	0.02
29	T	CARBONTETRACHLORIDE	0.330	0.380	-15.2	68	0.01
30	T	BENZENE	0.674	0.670	0.6	61	0.00
31	T	TRICHLOROETHENE	0.192	0.193	-0.5	62	0.02
32	C,T	12-DICHLOROPROPANE	0.165	0.160	3.0	60	0.02
33	T	DIBROMOMETHANE	0.154	0.155	-0.6	65	0.03
34	T	BROMODICLMETHANE	0.303	0.335	-10.6	67	0.02
35	T	2-CLETHYLVINYLETHER	0.039	0.032#	17.9	57	0.02
36	T	EPICHLOROHYDRIN	0.018	0.017#	5.6	60	0.02
37	T	4METHYL-2-PENTANONE	0.213	0.233	-9.4	66	0.03
38	T	CIS13DICLPROPENE	0.295	0.256	13.2	60	0.03
39	S	STOLUENE-D8	1.256	1.323	-5.3	68	0.02
40	C,T	TOLUENE	0.756	0.760	-0.5	60	0.03
41	T	TRANS13DICLPROPENE	0.222	0.257	-15.8	74	0.03
42	T	112-TRICHLOROETHANE	0.202	0.203	-0.5	62	0.05
43		2-HEXANONE	0.156	0.158	-1.3	64	0.09
44	T	13-DICHLOROPROPANE	0.310	0.292	5.8	60	0.04

45	T	DIBRCHLOROMETHANE	0.247	0.257	-4.0	66	0.04
46	T	TETRACHLOROETHENE	0.226	0.234	-3.5	61	0.03
47	T	12-DIBROMOETHANE	0.186	0.180	3.2	61	0.06
48	I	CHLOROBENZEN-d5-IS	1.000	1.000	0.0	66	0.03
49	P,T	CHLOROBENZENE	0.523	0.477	8.8	57	0.03
50		1-CHLOROHEXANE	0.107	0.123	-15.0	65	0.00
51	T	1112-TETRACLETHANE	0.226	0.224	0.9	64	0.03
52	C,T	ETHYLBENZENE	0.832	0.781	6.1	57	0.03
53	T	MP-XYLENE	0.639	0.606	5.2	58	0.03
54	T	STYRENE	0.539	0.453	16.0	61	0.06
55	T	O-XYLENE	0.616	0.504	18.2	57	0.05
56	P,T	BROMOFORM	0.176	0.186	-5.7	69	0.05
57	P,T	1122-TETRACLETHANE	0.318	0.304	4.4	61	0.10
58	T	ISOPROPYL BENZENE	0.834	0.744	10.8	65	0.07
59	S	S4BRFLUOROBENZENE	0.513	0.503	1.9	66	0.08
60	T	123-TRICLPROPANE	0.102	0.107	-4.9	66	0.10
61	T	TRANS14DICL2BUTENE	0.049	0.011#	77.6#	14#	0.00
62	T	BROMOBENZENE	0.437	0.414	5.3	58	0.09
63	T	N-PROPYLBENZENE	1.006	0.918	8.7	56	0.09
64	T	2-CHLOROTOLUENE	0.714	0.615	13.9	53	0.10
65	T	4-CHLOROTOLUENE	0.657	0.557	15.2	53	0.10
66	T	135TRIMETHYLBENZENE	0.762	0.721	5.4	57	0.09
67	T	TERT-BUTYLBENZENE	0.594	0.560	5.7	54	0.11
68	T	124TRIMETHYLBENZENE	0.758	0.743	2.0	57	0.03
69	T	SEC-BUTYLBENZENE	0.918	0.799	13.0	54	0.12
70	T	13-DICHLOROBENZENE	0.462	0.425	8.0	57	0.03
71	I	I14-DICLBENZENE-D4	1.000	1.000	0.0	65	-0.13
72	T	4-ISOPROPYLTOLUENE	1.235	1.052	14.8	54	-0.14
73	T	14-DICHLOROBENZENE	0.777	0.708	8.9	58	-0.13
74	T	12-DICHLOROBENZENE	0.768	0.707	7.9	57	-0.14
75	T	N-BUTYLBENZENE	1.112	0.882	20.7#	53	-0.13
76	T	12-DIBR-3CLPROPANE	0.121	0.101	16.5	64	-0.15
77		124-TRICLBENZENE	0.549	0.516	6.0	73	-0.17
78	T	NAPHTHALENE	1.399	1.217	13.0	68	-0.18
79	T	HEXACHLOROBUTADIENE	0.235	0.204	13.2	55	-0.15
80		123-TRICLBENZENE	0.502	0.435	13.3	60	-0.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8260VOC-JUNE-LIQ-18.M Fri Jul 13 09:40:05 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090304.D
Acq On : 10 Jul 2018 8:39 pm
Operator : NIVA
Sample : ICV/2898475
Misc : RUN200903
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 11 15:56:35 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.543	168	219145	20.00	µg/L		0.03
23) I14-DIFLUOROBENZENE	8.284	114	313721	20.00	µg/L		0.02
48) CHLOROBENZEN-d5-IS	12.975	117	356894	20.00	µg/L		0.03
71) I14-DICLBENZENE-D4	16.995	152	230923	20.00	µg/L		-0.13
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.026	111	159664	22.68	µg/L		0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.40%				
39) STOLUENE-D8	10.294	98	415087	21.06	µg/L		0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.30%				
59) S4BRFLUOROBENZENE	15.228	95	179454	19.61	µg/L		0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.05%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.853	85	24675m	20.41	µg/L		
3) CHLOROMETHANE	3.107	50	55698	23.81	µg/L	#	98
4) VINYL CHLORIDE	3.219	62	38575m	19.27	µg/L		
5) BROMOMETHANE	3.604	94	43497m	22.92	µg/L		
6) CHLOROETHANE	3.746	64	33560m	22.05	µg/L		
7) TRICLFLUOROMETHANE	3.899	101	119085m	23.17	µg/L		
8) ACROLEIN	4.812	56	279738m	430.28	µg/L		
9) ACETONE	5.107	43	96436m	114.90	µg/L		
10) 11-DICHLOROETHENE	4.467	61	72814m	21.99	µg/L		
11) IODOMETHANE	4.650	142	379884m	108.72	µg/L		
12) CARBON DISULFIDE	4.548	76	570307m	108.34	µg/L		
13) ACRYLONITRILE	5.960	53	117293	118.45	µg/L		99
14) DICHLOROMETHANE	5.066	84	65222	22.12	µg/L		92
15) TRANS12DICLETHENE	5.249	96	59260	22.95	µg/L		98
16) 11-DICHLOROETHANE	5.909	63	109988	23.24	µg/L		97
17) VINYL ACETATE	6.122	43	489729m	112.43	µg/L		
18) 2-BUTANONE	7.157	43	153062	113.32	µg/L		96
19) CIS12DICHLOROETHENE	6.518	96	51058	17.09	µg/L		92
20) 22-DICHLOROPROPANE	6.640	77	79369	22.49	µg/L		96
21) CHLOROFORM	6.802	83	135642	21.21	µg/L		100
22) BROMOCHLOROMETHANE	6.751	49	53328m	20.81	µg/L		
25) TETRAHYDROFURAN	7.046	42	11581m	16.89	µg/L		
26) 111-TRICHLOROETHANE	7.097	97	124939	23.52	µg/L		99
27) 11-DICHLOROPROPENE	7.239	75	64079	19.68	µg/L		95
28) 12-DICHLOROETHANE	7.797	62	108088	21.65	µg/L	#	99
29) CARBONTETRACHLORIDE	7.026	117	119363	23.07	µg/L	#	95
30) BENZENE	7.543	78	210177	19.88	µg/L	#	96
31) TRICHLOROETHENE	8.294	132	60576	20.09	µg/L	#	94
32) 12-DICHLOROPROPANE	9.015	63	50040	19.37	µg/L	#	88
33) DIBROMOMETHANE	8.893	174	48604	20.18	µg/L		98
34) BROMODICLMETHANE	9.076	83	105067	22.08	µg/L		100
35) 2-CLETHYLVINYLETHER	9.848	63	49997m	80.72	µg/L		
36) EPICHLOROHYDRIN	10.376	57	133302	483.10	µg/L		93
37) 4METHYL-2-PENTANONE	10.934	43	366180	109.78	µg/L	#	92
38) CIS13DICLPROPENE	10.000	75	80228	17.32	µg/L		95
40) TOLUENE	10.386	91	238519	20.13	µg/L		98
41) TRANS13DICLPROPENE	11.025	75	80525	23.14	µg/L		86
42) 112-TRICHLOROETHANE	11.310	97	63707	20.12	µg/L		90
43) 2-HEXANONE	12.376	43	248151	101.69	µg/L		97
44) 13-DICHLOROPROPANE	11.787	76	91733	18.85	µg/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090304.D
Acq On : 10 Jul 2018 8:39 pm
Operator : NIVA
Sample : ICV/2898475
Misc : RUN200903
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 11 15:56:35 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

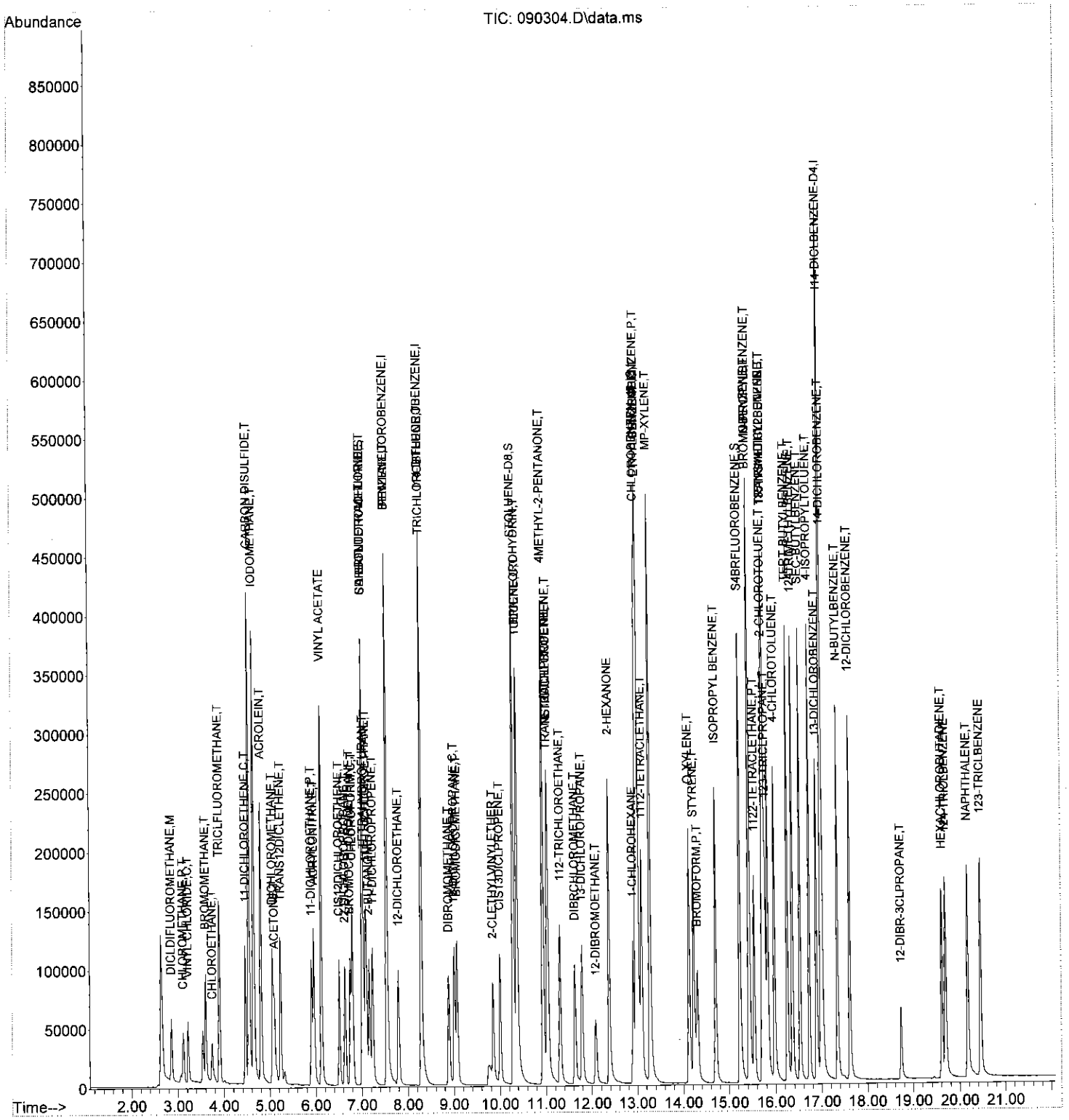
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.634	129	80621	20.81 µg/L	99
46) TETRACHLOROETHENE	11.036	166	73520	20.74 µg/L	91
47) 12-DIBROMOETHANE	12.091	107	56464	19.31 µg/L	99
49) CHLOROBENZENE	13.005	112	170090	18.23 µg/L	80
50) 1-CHLOROHEXANE	12.903	91	43783	23.56 µg/L #	61
51) 1112-TETRACLETHANE	13.106	131	79822	19.81 µg/L	95
52) ETHYLBENZENE	13.015	91	278639	18.77 µg/L	97
53) MP-XYLENE	13.279	91	432793	37.98 µg/L	94
54) STYRENE	14.223	104	161787m	16.83 µg/L	
55) O-XYLENE	14.122	91	179841	16.36 µg/L	96
56) BROMOFORM	14.304	173	66460	21.16 µg/L	99
57) 1122-TETRACLETHANE	15.543	83	108584	19.13 µg/L	99
58) ISOPROPYL BENZENE	14.710	105	265402m	17.84 µg/L	
60) 123-TRICLPROPANE	15.776	110	38058	20.85 µg/L	97
61) TRANS14DICL2BUTENE	15.736	53	19959m	22.82 µg/L	
62) BROMOBENZENE	15.421	77	147792	18.93 µg/L	85
63) N-PROPYLBENZENE	15.431	91	327568	18.25 µg/L	93
64) 2-CHLOROTOLUENE	15.716	91	219431	17.21 µg/L	89
65) 4-CHLOROTOLUENE	15.979	91	198941	16.98 µg/L	94
66) 135TRIMETHYLBENZENE	15.736	105	257454	18.93 µg/L	94
67) TERT-BUTYLBENZENE	16.254	119	199759	18.86 µg/L	90
68) 124TRIMETHYLBENZENE	16.365	105	265075	19.61 µg/L	99
69) SEC-BUTYLBENZENE	16.528	105	285308	17.43 µg/L	97
70) 13-DICHLOROBENZENE	16.893	146	151787	18.41 µg/L	98
72) 4-ISOPROPYLTOLUENE	16.731	119	243018	17.05 µg/L	95
73) 14-DICHLOROBENZENE	17.015	146	163390	18.20 µg/L	86
74) 12-DICHLOROBENZENE	17.614	146	163250	18.40 µg/L	97
75) N-BUTYLBENZENE	17.350	91	203668	15.86 µg/L	98
76) 12-DIBR-3CLPROPANE	18.731	157	23334	16.72 µg/L	94
77) 124-TRICLBENZENE	19.695	180	119060m	18.80 µg/L	
78) NAPHTHALENE	20.172	128	280938m	17.39 µg/L	
79) HEXACHLOROBUTADIENE	19.624	225	47145	17.38 µg/L	99
80) 123-TRICLBENZENE	20.456	182	100413m	17.31 µg/L	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090304.D
Acq On : 10 Jul 2018 8:39 pm
Operator : NIVA
Sample : ICV/2898475
Misc : RUN200903
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 11 15:56:35 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090306.D
Acq On : 10 Jul 2018 9:31 pm
Operator : NIVA
Sample : 2894475
Misc : RUN200903
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 11 15:57:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	211034	20.00	µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	323163	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	295111	20.00	µg/L	0.04
71) I14-DICLBENZENE-D4	16.995	152	162713	20.00	µg/L	-0.13
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.026	111	162728	22.44	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.20%			
39) STOLUENE-D8	10.305	98	409499	20.17	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.85%			
59) S4BRFLUOROBENZENE	15.238	95	142825	18.88	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.40%			

Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.604	94	373	N.D.	
6) CHLOROETHANE	3.574	64	418	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.650	142	182	N.D.	
12) CARBON DISULFIDE	0.000		0	N.D. d	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	
15) TRANS12DICLETHENE	5.168	96	164	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.188	43	175	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	0.000		0	N.D. d	
22) BROMOCHLOROMETHANE	6.802	49	567	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.955	117	372	N.D.	
30) BENZENE	7.564	78	204	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	9.086	83	493	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	10.965	43	203	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.396	91	591	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090306.D
Acq On : 10 Jul 2018 9:31 pm
Operator : NIVA
Sample : 2894475
Misc : RUN200903
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 11 15:57:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

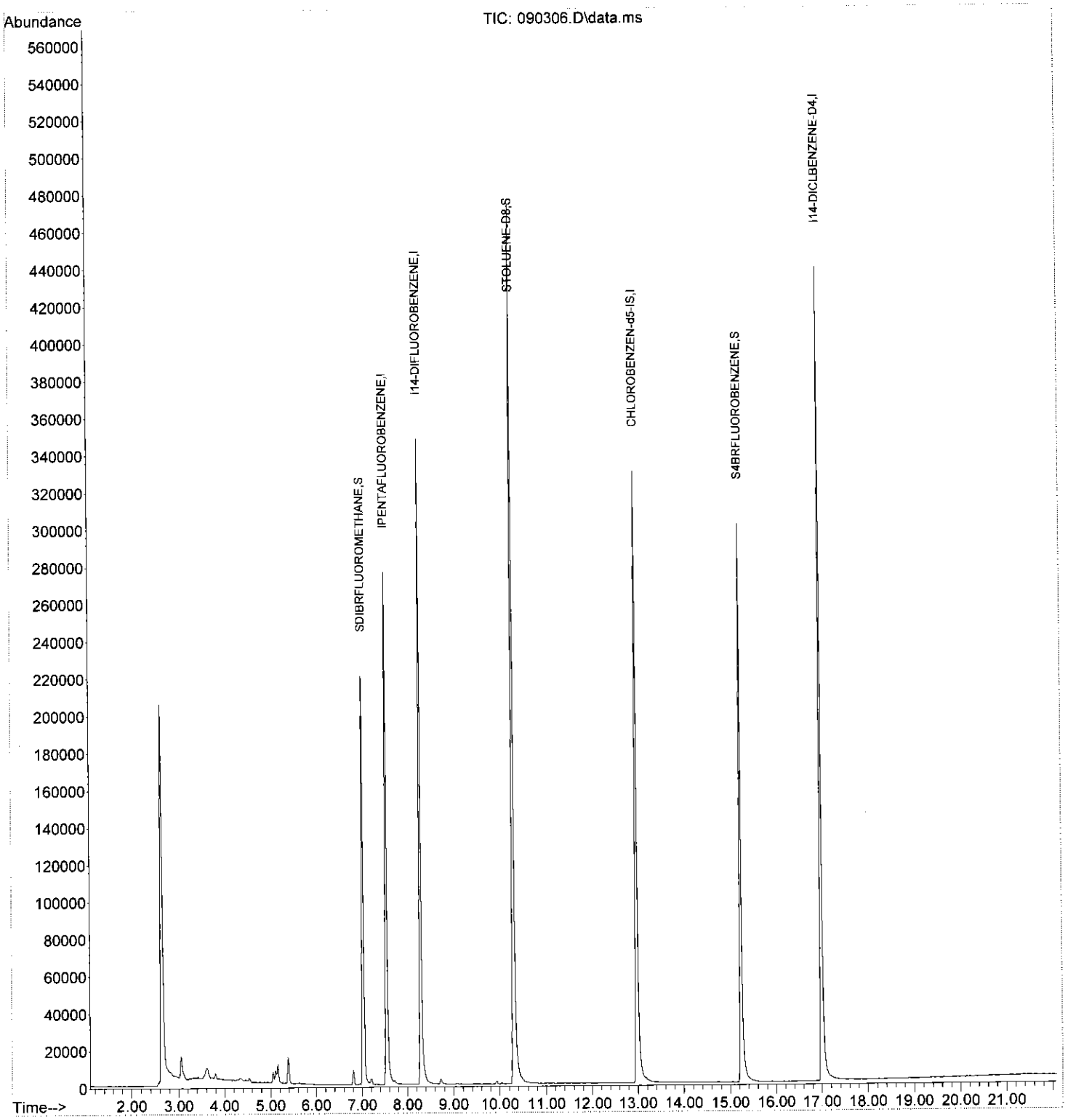
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	582	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	818	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.238	77	614	N.D.	
63) N-PROPYLBENZENE	15.452	91	180	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	16.548	105	68	N.D.	
70) 13-DICHLOROBENZENE	16.914	146	74	N.D.	
72) 4-ISOPROPYLTOLUENE	16.741	119	146	N.D.	
73) 14-DICHLOROBENZENE	17.015	146	439	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.391	91	284	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	19.634	225	234	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090306.D
Acq On : 10 Jul 2018 9:31 pm
Operator : NIVA
Sample : 2894475
Misc : RUN200903
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 11 15:57:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090307.D
Acq On : 10 Jul 2018 9:58 pm
Operator : NIVA
Sample : 2894476
Misc : RUN200903
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 11 16:19:58 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	220180	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	315441	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.975	117	289295	20.00 µg/L	0.03
71) I14-DICLBENZENE-D4	16.995	152	161639	20.00 µg/L	-0.13
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.026	111	167920	23.73 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 118.65%		
39) STOLUENE-D8	10.305	98	404476	20.41 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.05%		
59) S4BRFLUOROBENZENE	15.239	95	140329	18.92 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.60%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.604	94	507	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.650	142	1595	N.D.	
12) CARBON DISULFIDE	4.549	76	1567	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	
15) TRANS12DICLETHENE	5.148	96	206	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.533	43	339	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	0.000		0	N.D.	
22) BROMOCHLOROMETHANE	6.802	49	159	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.944	117	453	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.386	91	231	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090307.D
Acq On : 10 Jul 2018 9:58 pm
Operator : NIVA
Sample : 2894476
Misc : RUN200903
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 11 16:19:58 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

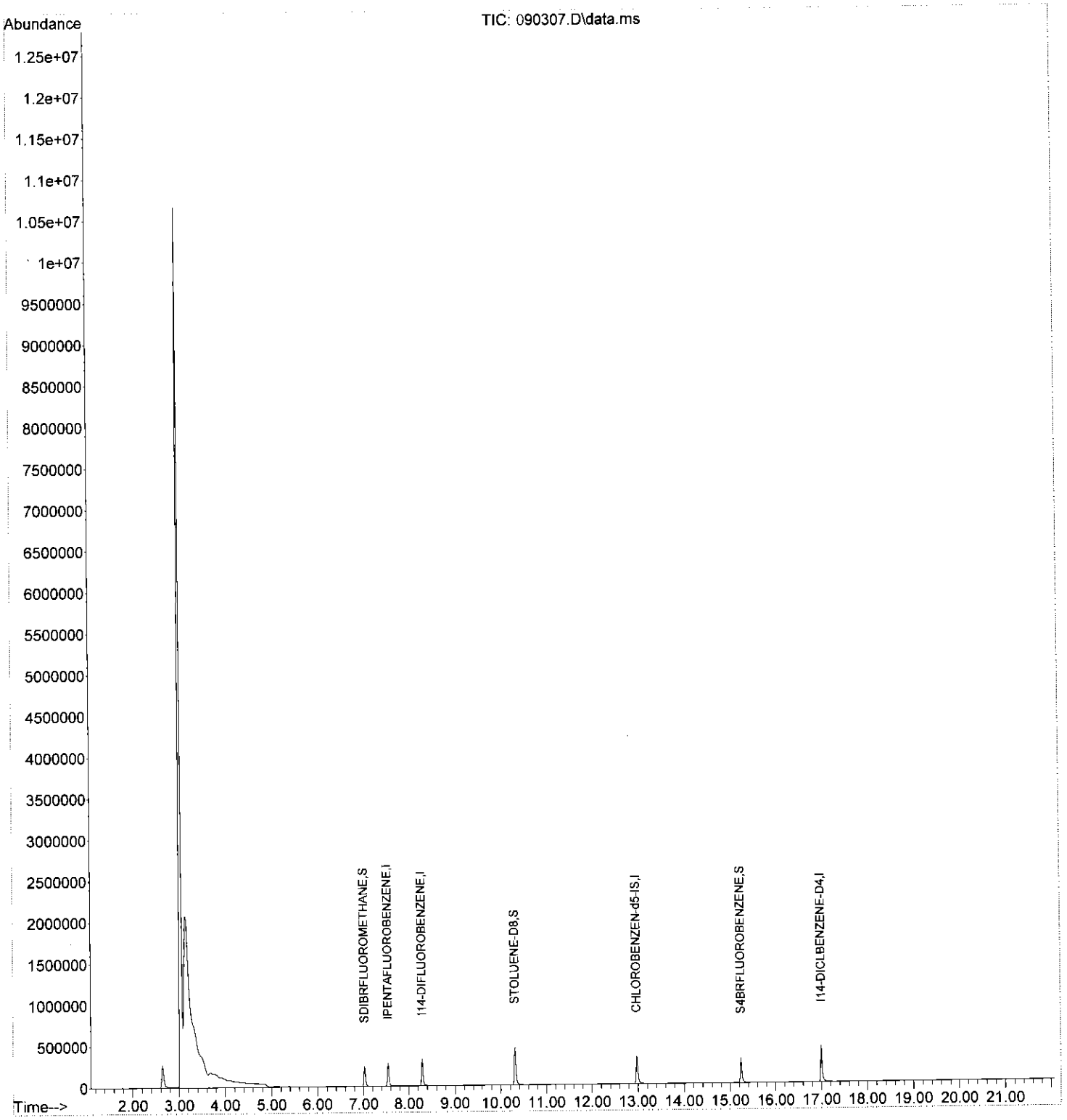
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	442	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	504	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.239	77	568	N.D.	
63) N-PROPYLBENZENE	15.239	91	363	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.015	146	174	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090307.D
Acq On : 10 Jul 2018 9:58 pm
Operator : NIVA
Sample : 2894476
Misc : RUN200903
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 11 16:19:58 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090308.D
Acq On : 10 Jul 2018 10:24 pm
Operator : NIVA
Sample : 2894477
Misc : RUN200903
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 11 16:25:33 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	202370	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	311229	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.975	117	286400	20.00 µg/L	0.03
71) I14-DICLBENZENE-D4	16.995	152	157218	20.00 µg/L	-0.13
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.026	111	160966	23.05 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.25%		
39) STOLUENE-D8	10.305	98	389264	19.91 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.55%		
59) S4BRFLUOROBENZENE	15.238	95	137468	18.72 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.60%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.604	94	346	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	4.467	61	14104	4.61 µg/L	97
11) IODOMETHANE	4.650	142	261	N.D.	
12) CARBON DISULFIDE	4.549	76	1143	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.066	84	82	N.D.	
15) TRANS12DICLETHENE	5.158	96	152	N.D.	
16) 11-DICHLOROETHANE	5.909	63	2960	0.68 µg/L	97
17) VINYL ACETATE	6.000	43	68	N.D.	
18) 2-BUTANONE	7.178	43	65	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.802	83	30199	5.11 µg/L #	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	7.807	62	382	N.D.	
29) CARBONTETRACHLORIDE	6.944	117	311	N.D.	
30) BENZENE	7.553	78	177	N.D.	
31) TRICHLOROETHENE	8.305	132	704	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.386	91	136	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	11.320	97	561	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090308.D
Acq On : 10 Jul 2018 10:24 pm
Operator : NIVA
Sample : 2894477
Misc : RUN200903
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 11 16:25:33 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

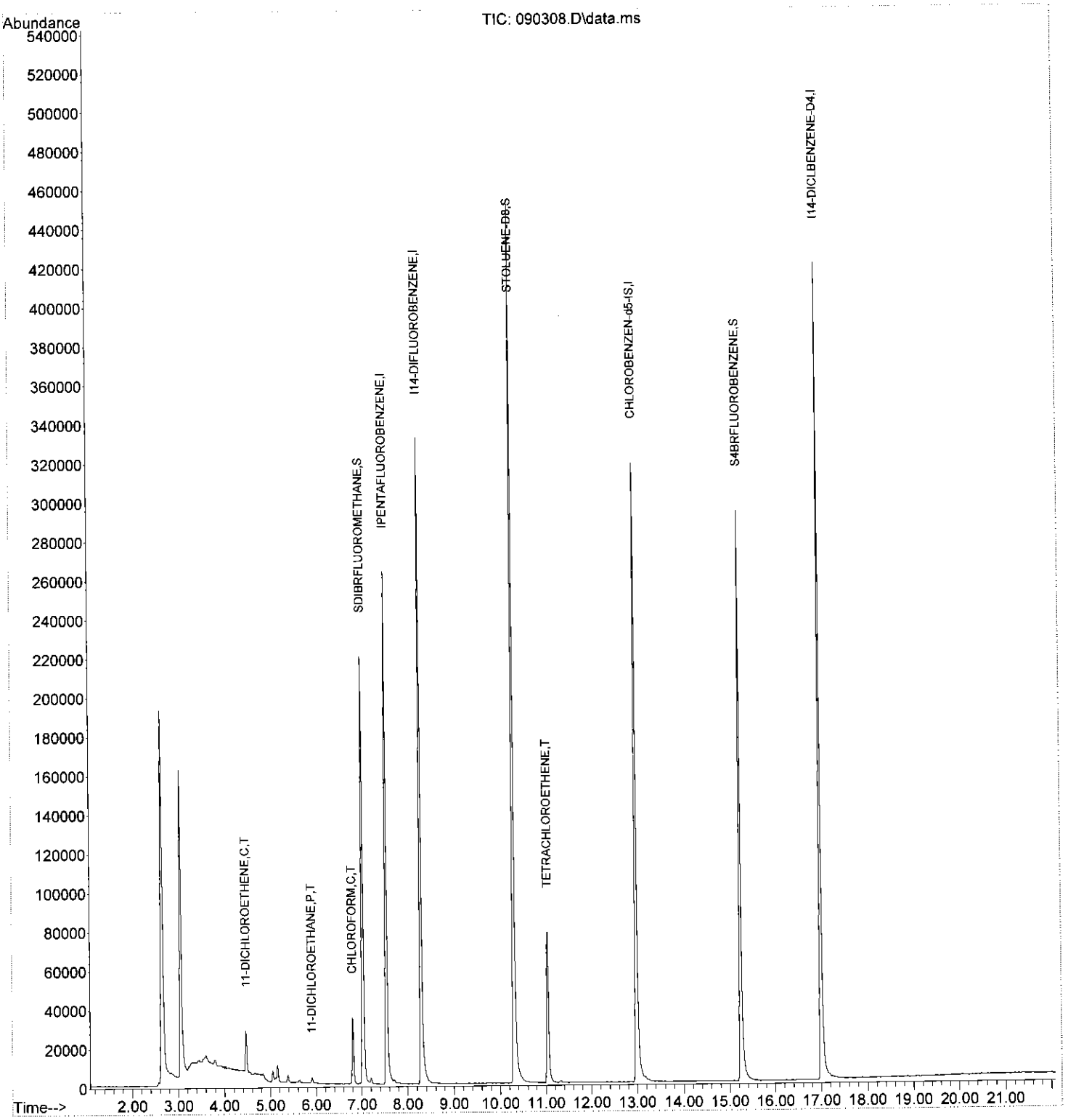
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	11.046	166	35457	10.08 µg/L	89
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	463	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	532	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	15.289	83	61	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.238	77	587	N.D.	
63) N-PROPYLBENZENE	15.238	91	296	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090308.D
Acq On : 10 Jul 2018 10:24 pm
Operator : NIVA
Sample : 2894477
Misc : RUN200903
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 11 16:25:33 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090309.D
Acq On : 10 Jul 2018 10:50 pm
Operator : NIVA
Sample : 2894478
Misc : RUN200903
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 11 16:26:43 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	192917	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	298621	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	270056	20.00 µg/L	0.04
71) I14-DICLBENZENE-D4	16.995	152	146824	20.00 µg/L	-0.13
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	154625	23.08 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.40%		
39) STOLUENE-D8	10.305	98	372923	19.88 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.40%		
59) S4BRFLUOROBENZENE	15.238	95	129779	18.75 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.75%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.625	94	239	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	4.467	61	1654	0.57 µg/L	94
11) IODOMETHANE	4.660	142	157	N.D.	
12) CARBON DISULFIDE	4.549	76	940	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.076	84	129	N.D.	
15) TRANS12DICLETHENE	5.178	96	132	N.D.	
16) 11-DICHLOROETHANE	5.909	63	243	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.543	43	136	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.802	83	42189	7.49 µg/L #	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	7.797	62	138	N.D.	
29) CARBONTETRACHLORIDE	6.955	117	419	N.D.	
30) BENZENE	7.553	78	66	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.406	91	129	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090309.D
Acq On : 10 Jul 2018 10:50 pm
Operator : NIVA
Sample : 2894478
Misc : RUN200903
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 11 16:26:43 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

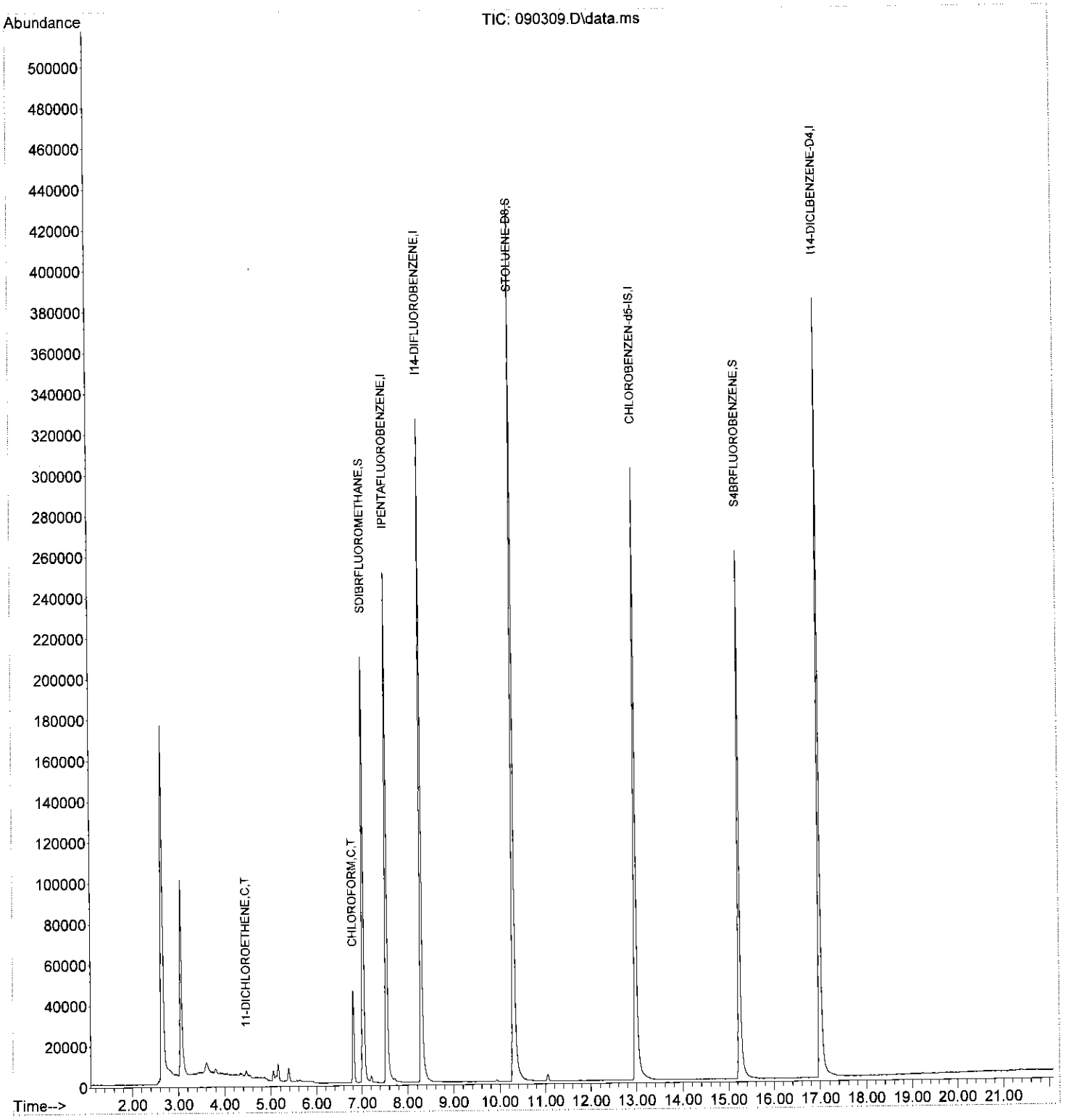
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	11.056	166	1500	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.975	91	507	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.975	91	507	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	625	N.D.	
63) N-PROPYLBENZENE	15.238	91	303	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090309.D
Acq On : 10 Jul 2018 10:50 pm
Operator : NIVA
Sample : 2894478
Misc : RUN200903
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 11 16:26:43 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090310.D
Acq On : 10 Jul 2018 11:16 pm
Operator : NIVA
Sample : 2894479
Misc : RUN200903
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 11 16:27:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	184416	20.00	µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	279585	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	253131	20.00	µg/L	0.04
71) I14-DICLBENZENE-D4	16.995	152	136775	20.00	µg/L	-0.13
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.026	111	152674	24.34	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 121.70%#			
39) STOLUENE-D8	10.305	98	351028	19.99	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.95%			
59) S4BRFLUOROBENZENE	15.238	95	119160	18.36	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 91.80%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.		
3) CHLOROMETHANE	0.000		0	N.D.	d	
4) VINYL CHLORIDE	0.000		0	N.D.		
5) BROMOMETHANE	3.604	94	227	N.D.		
6) CHLOROETHANE	0.000		0	N.D.	d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.		
8) ACROLEIN	0.000		0	N.D.		
9) ACETONE	0.000		0	N.D.	d	
10) 11-DICHLOROETHENE	0.000		0	N.D.		
11) IODOMETHANE	0.000		0	N.D.		
12) CARBON DISULFIDE	4.549	76	688	N.D.		
13) ACRYLONITRILE	0.000		0	N.D.		
14) DICHLOROMETHANE	0.000		0	N.D.		
15) TRANS12DICLETHENE	5.158	96	233	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	6.000	43	63	N.D.		
18) 2-BUTANONE	7.543	43	366	N.D.		
19) CIS12DICHLOROETHENE	0.000		0	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	0.000		0	N.D.		
22) BROMOCHLOROMETHANE	6.792	49	77	N.D.		
25) TETRAHYDROFURAN	0.000		0	N.D.		
26) 111-TRICHLOROETHANE	0.000		0	N.D.		
27) 11-DICHLOROPROPENE	0.000		0	N.D.		
28) 12-DICHLOROETHANE	0.000		0	N.D.		
29) CARBONTETRACHLORIDE	6.955	117	227	N.D.		
30) BENZENE	0.000		0	N.D.		
31) TRICHLOROETHENE	0.000		0	N.D.		
32) 12-DICHLOROPROPANE	0.000		0	N.D.		
33) DIBROMOMETHANE	0.000		0	N.D.		
34) BROMODICLMETHANE	0.000		0	N.D.		
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.		
36) EPICHLOROHYDRIN	0.000		0	N.D.	d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.		
38) CIS13DICLPROPENE	0.000		0	N.D.		
40) TOLUENE	10.396	91	73	N.D.		
41) TRANS13DICLPROPENE	0.000		0	N.D.		
42) 112-TRICHLOROETHANE	0.000		0	N.D.		
43) 2-HEXANONE	0.000		0	N.D.		
44) 13-DICHLOROPROPANE	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090310.D
Acq On : 10 Jul 2018 11:16 pm
Operator : NIVA
Sample : 2894479
Misc : RUN200903
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 11 16:27:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

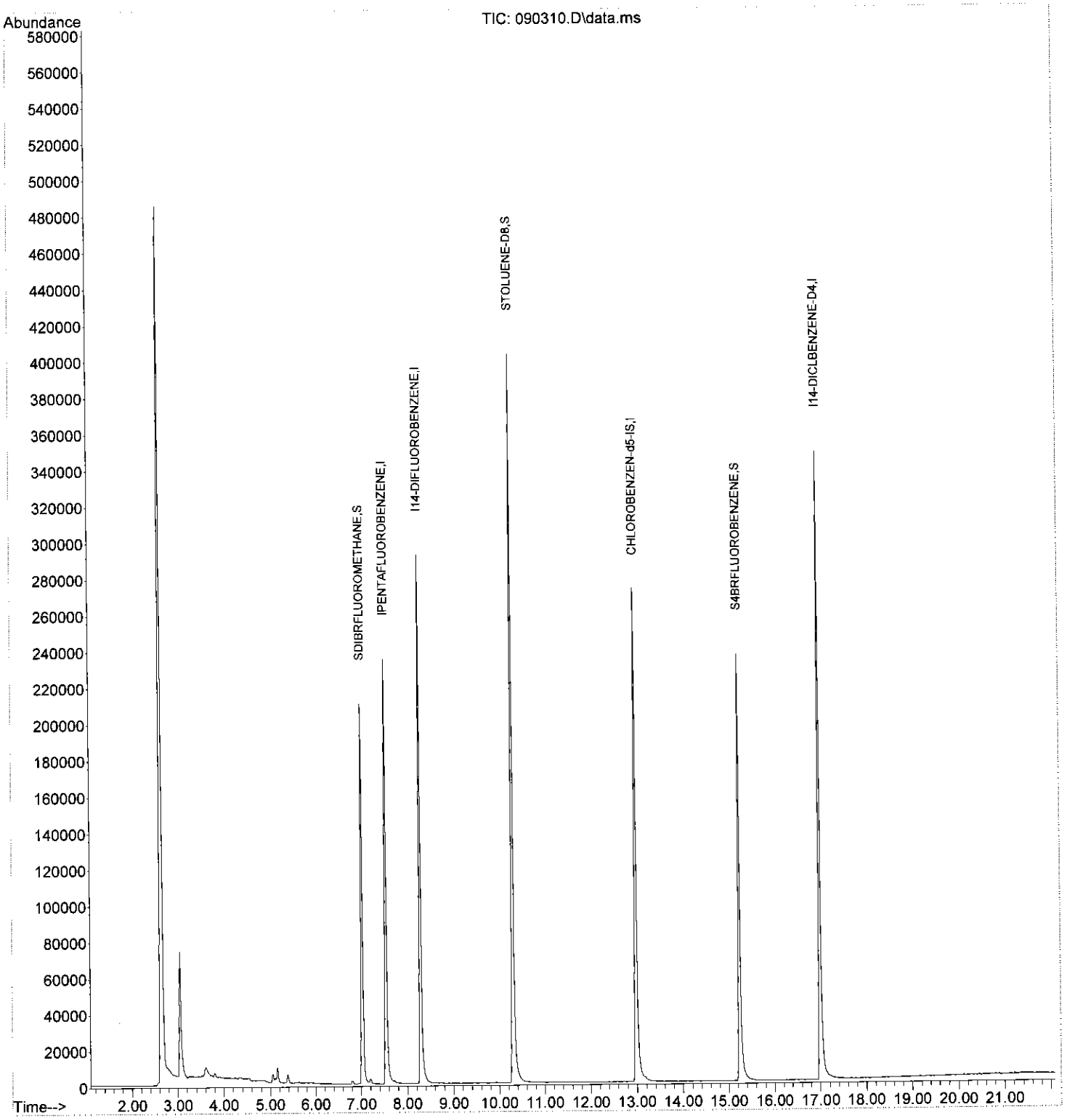
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.975	91	365	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.975	91	365	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.238	77	605	N.D.	
63) N-PROPYLBENZENE	15.238	91	287	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090310.D
Acq On : 10 Jul 2018 11:16 pm
Operator : NIVA
Sample : 2894479
Misc : RUN200903
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 11 16:27:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090311.D
Acq On : 10 Jul 2018 11:42 pm
Operator : NIVA
Sample : 2894480
Misc : RUN200903
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 11 16:28:27 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	200253	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	307529	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	282801	20.00 µg/L	0.04
71) I14-DICLBENZENE-D4	16.995	152	159419	20.00 µg/L	-0.13
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.026	111	158393	22.96 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.80%		
39) STOLUENE-D8	10.305	98	393264	20.36 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.80%		
59) S4BRFLUOROBENZENE	15.239	95	137650	18.99 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.95%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.615	94	361	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.670	142	1345	N.D.	
12) CARBON DISULFIDE	4.549	76	859	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	
15) TRANS12DICLETHENE	5.158	96	134	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.188	43	298	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.812	83	498	N.D.	
22) BROMOCHLOROMETHANE	6.802	49	221	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.955	117	322	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	10.975	43	190	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.396	91	214	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090311.D
Acq On : 10 Jul 2018 11:42 pm
Operator : NIVA
Sample : 2894480
Misc : RUN200903
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 11 16:28:27 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

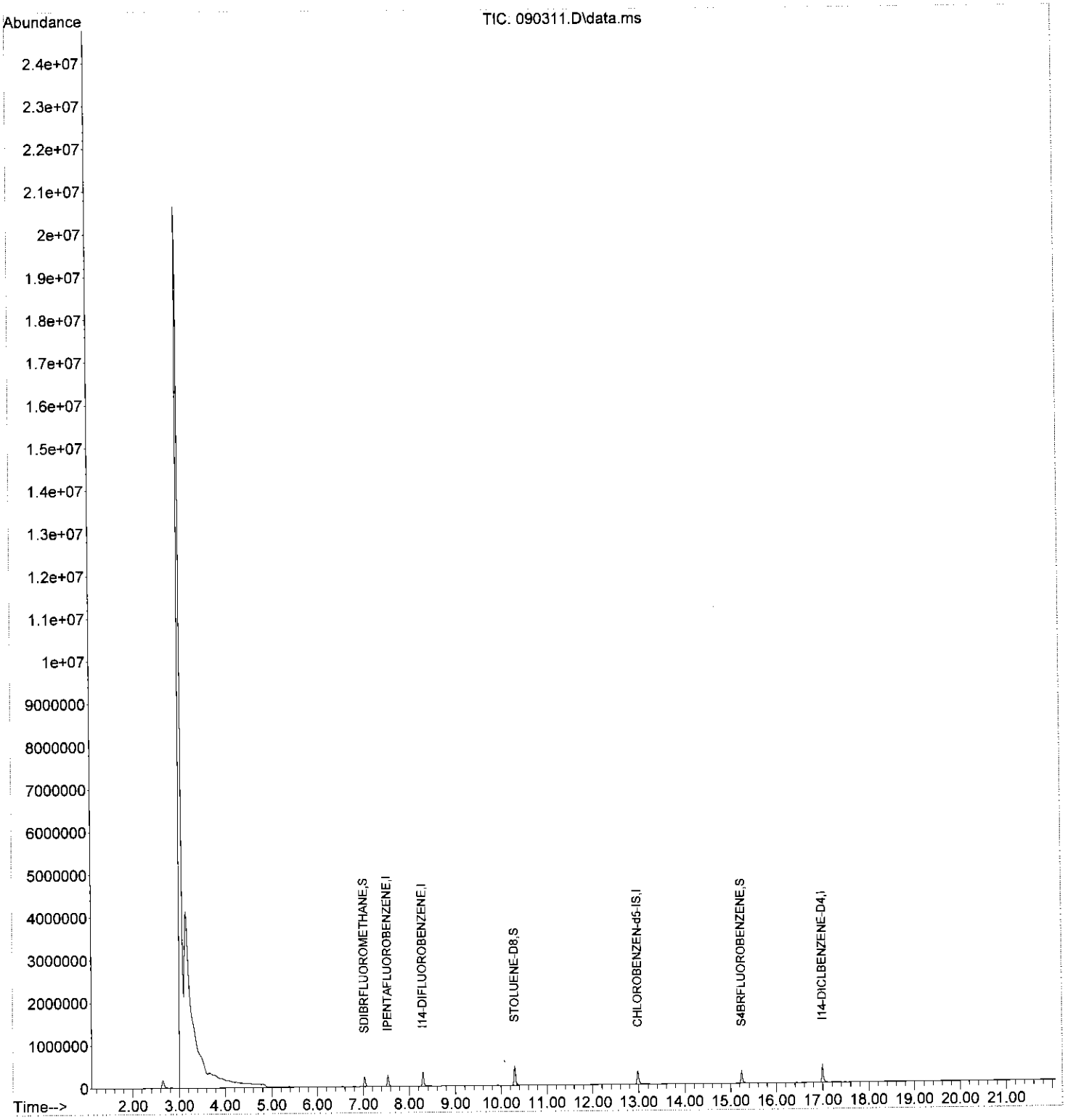
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.975	91	484	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.975	91	484	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	350	N.D.	
63) N-PROPYLBENZENE	15.249	91	108	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090311.D
Acq On : 10 Jul 2018 11:42 pm
Operator : NIVA
Sample : 2894480
Misc : RUN200903
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 11 16:28:27 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090312.D
Acq On : 11 Jul 2018 12:08 am
Operator : NIVA
Sample : 2894481
Misc : RUN200903
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 11 16:29:57 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	196578	20.00	µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	301839	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	272887	20.00	µg/L	0.04
71) I14-DICLBENZENE-D4	16.995	152	151829	20.00	µg/L	-0.13
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.036	111	155309	22.93	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.65%			
39) STOLUENE-D8	10.305	98	378660	19.97	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.85%			
59) S4BRFLUOROBENZENE	15.239	95	132347	18.92	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.60%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.		
3) CHLOROMETHANE	0.000		0	N.D.	d	
4) VINYL CHLORIDE	0.000		0	N.D.		
5) BROMOMETHANE	3.615	94	228	N.D.		
6) CHLOROETHANE	0.000		0	N.D.	d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.		
8) ACROLEIN	0.000		0	N.D.		
9) ACETONE	0.000		0	N.D.	d	
10) 11-DICHLOROETHENE	0.000		0	N.D.		
11) IODOMETHANE	4.650	142	284	N.D.		
12) CARBON DISULFIDE	4.549	76	601	N.D.		
13) ACRYLONITRILE	0.000		0	N.D.		
14) DICHLOROMETHANE	0.000		0	N.D.		
15) TRANS12DICLETHENE	5.168	96	66	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	6.000	43	125	N.D.		
18) 2-BUTANONE	7.543	43	287	N.D.		
19) CIS12DICHLOROETHENE	0.000		0	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	6.812	83	65	N.D.		
22) BROMOCHLOROMETHANE	6.802	49	155	N.D.		
25) TETRAHYDROFURAN	0.000		0	N.D.		
26) 111-TRICHLOROETHANE	0.000		0	N.D.		
27) 11-DICHLOROPROPENE	0.000		0	N.D.		
28) 12-DICHLOROETHANE	0.000		0	N.D.		
29) CARBONTETRACHLORIDE	6.955	117	369	N.D.		
30) BENZENE	0.000		0	N.D.		
31) TRICHLOROETHENE	0.000		0	N.D.		
32) 12-DICHLOROPROPANE	0.000		0	N.D.		
33) DIBROMOMETHANE	0.000		0	N.D.		
34) BROMODICLMETHANE	0.000		0	N.D.		
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.		
36) EPICHLOROHYDRIN	0.000		0	N.D.	d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.		
38) CIS13DICLPROPENE	0.000		0	N.D.		
40) TOLUENE	10.386	91	239	N.D.		
41) TRANS13DICLPROPENE	0.000		0	N.D.		
42) 112-TRICHLOROETHANE	0.000		0	N.D.		
43) 2-HEXANONE	0.000		0	N.D.		
44) 13-DICHLOROPROPANE	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090312.D
Acq On : 11 Jul 2018 12:08 am
Operator : NIVA
Sample : 2894481
Misc : RUN200903
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 11 16:29:57 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

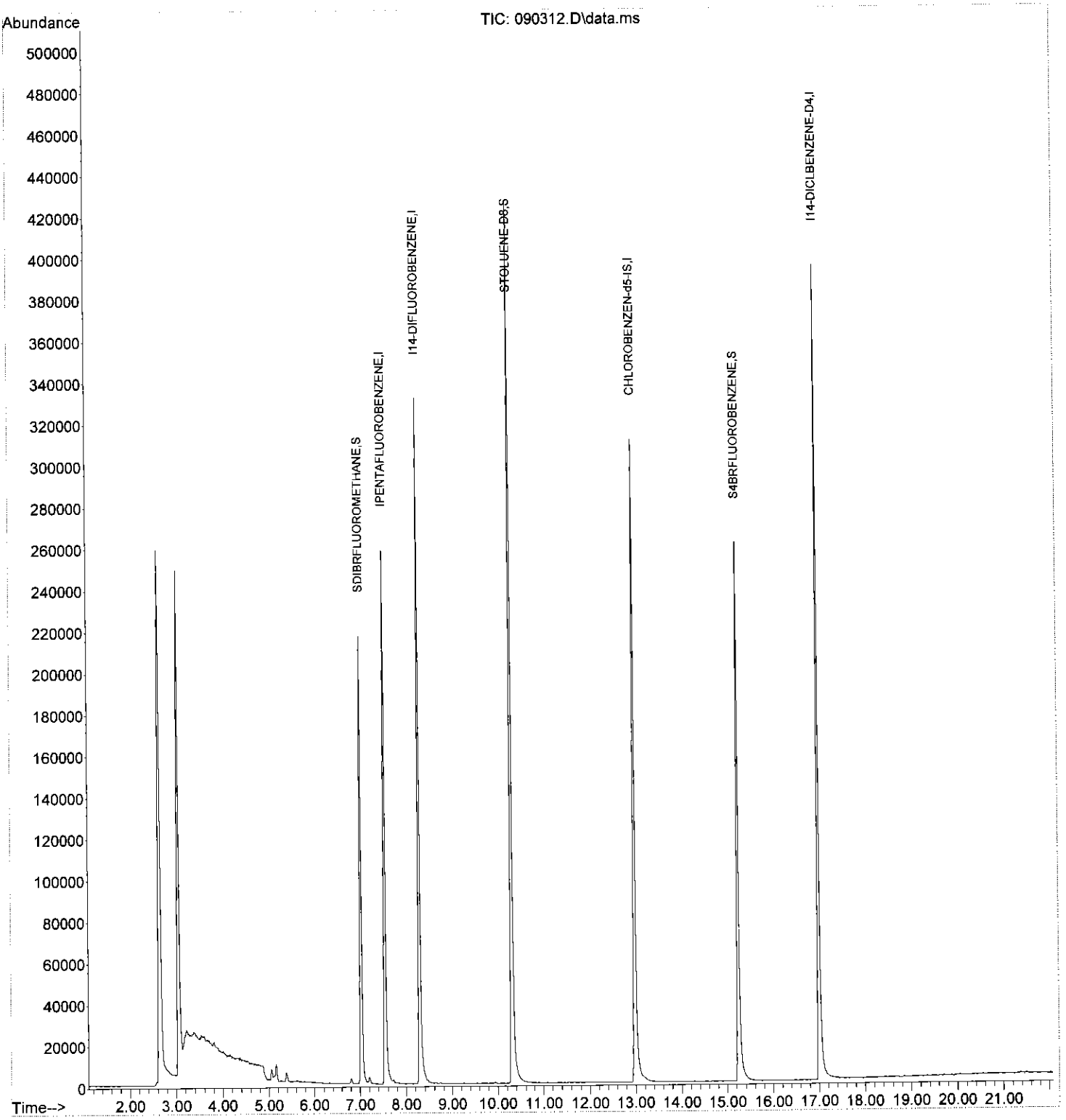
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	493	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	493	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	483	N.D.	
63) N-PROPYLBENZENE	15.249	91	424	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090312.D
Acq On : 11 Jul 2018 12:08 am
Operator : NIVA
Sample : 2894481
Misc : RUN200903
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 11 16:29:57 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090313.D
Acq On : 11 Jul 2018 12:34 am
Operator : NIVA
Sample : 2894481DUP/2899515
Misc : RUN200903
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 11 16:30:31 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	199029	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	8.294	114	301921	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	274249	20.00 µg/L	0.04
71) I14-DICLBENZENE-D4	16.995	152	152438	20.00 µg/L	-0.13
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	161104	23.78 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 118.90%		
39) STOLUENE-D8	10.305	98	380294	20.05 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.25%		
59) S4BRFLUOROBENZENE	15.238	95	131310	18.68 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.40%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D.	d
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.604	94	274	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.650	142	215	N.D.	
12) CARBON DISULFIDE	4.548	76	453	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	
15) TRANS12DICLETHENE	5.168	96	82	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.000	43	71	N.D.	
18) 2-BUTANONE	7.533	43	304	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	0.000		0	N.D.	
22) BROMOCHLOROMETHANE	6.802	49	83	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.954	117	422	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D.	d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.396	91	70	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090313.D
Acq On : 11 Jul 2018 12:34 am
Operator : NIVA
Sample : 2894481DUP/2899515
Misc : RUN200903
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 11 16:30:31 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

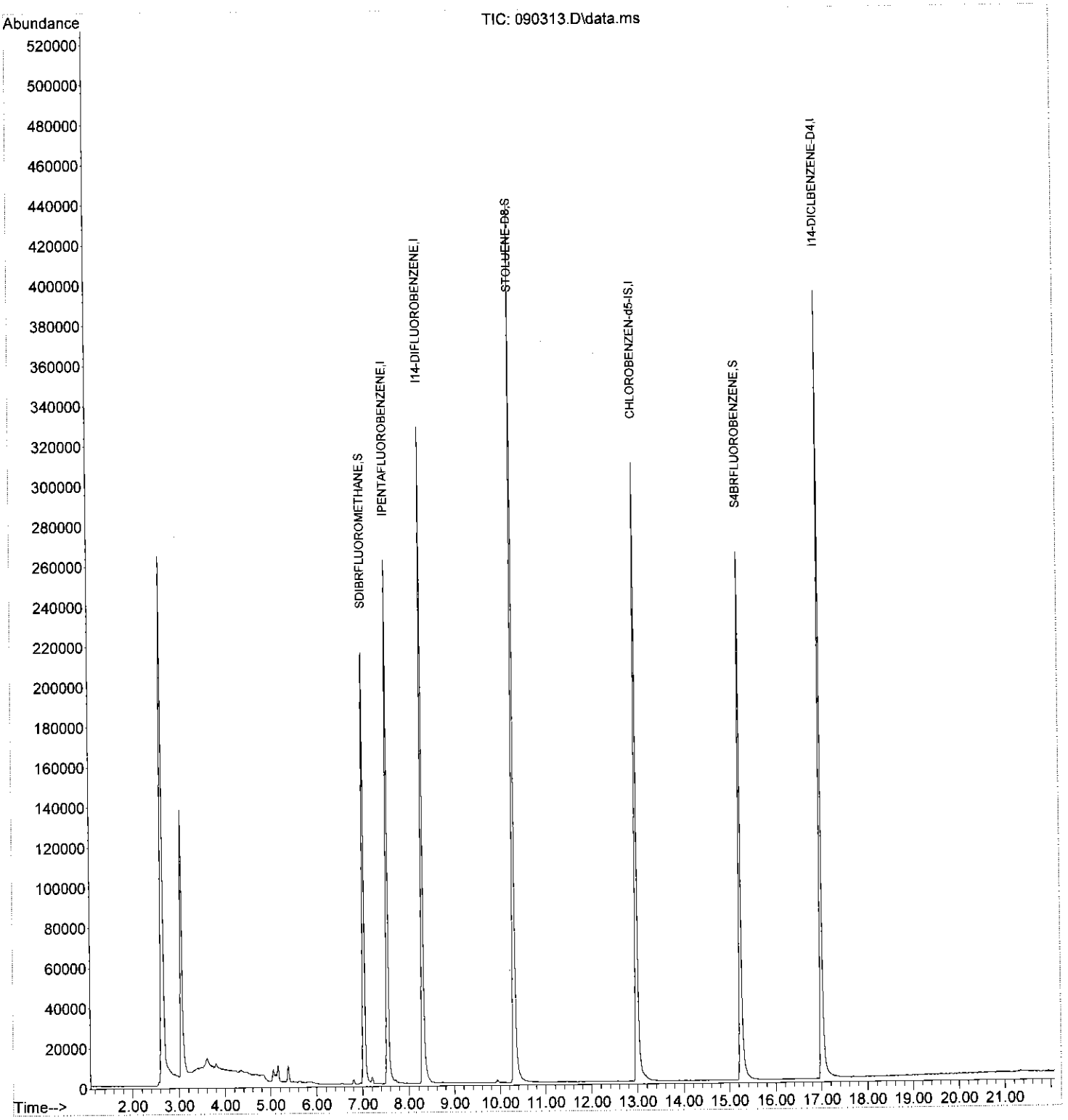
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	492	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	492	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	626	N.D.	
63) N-PROPYLBENZENE	15.238	91	395	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090313.D
Acq On : 11 Jul 2018 12:34 am
Operator : NIVA
Sample : 2894481DUP/2899515
Misc : RUN200903
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 11 16:30:31 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090314.D
Acq On : 11 Jul 2018 1:00 am
Operator : NIVA
Sample : 2894481MS/2898523
Misc : RUN200903
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 11 16:33:43 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.543	168	246633	20.00	µg/L		0.03
23) I14-DIFLUOROBENZENE	8.294	114	351005	20.00	µg/L		0.03
48) CHLOROBENZEN-d5-IS	12.974	117	395207	20.00	µg/L		0.03
71) I14-DICLBENZENE-D4	16.995	152	252718	20.00	µg/L		-0.13
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.026	111	174927	22.21	µg/L		0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.05%				
39) STOLUENE-D8	10.305	98	448297	20.33	µg/L		0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.65%				
59) S4BRFLUOROBENZENE	15.238	95	198989	19.64	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.20%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.853	85	32142m	23.63	µg/L		
3) CHLOROMETHANE	3.117	50	65493	24.88	µg/L	#	95
4) VINYL CHLORIDE	3.219	62	55286m	24.54	µg/L		
5) BROMOMETHANE	3.604	94	52213m	24.45	µg/L		
6) CHLOROETHANE	3.746	64	33290m	19.43	µg/L		
7) TRICLFLUOROMETHANE	3.909	101	128829m	22.27	µg/L		
8) ACROLEIN	4.812	56	292047m	399.14	µg/L		
9) ACETONE	5.107	43	111651	118.21	µg/L	#	96
10) 11-DICHLOROETHENE	4.467	61	90284	24.23	µg/L		97
11) IODOMETHANE	4.650	142	395554m	100.58	µg/L		
12) CARBON DISULFIDE	4.548	76	698737m	117.95	µg/L		
13) ACRYLONITRILE	5.960	53	126053	113.11	µg/L		98
14) DICHLOROMETHANE	5.076	84	69510	20.95	µg/L		91
15) TRANS12DICLETHENE	5.249	96	66044	22.72	µg/L		98
16) 11-DICHLOROETHANE	5.909	63	117853	22.12	µg/L		97
17) VINYL ACETATE	6.122	43	510558	104.15	µg/L		97
18) 2-BUTANONE	7.168	43	160435	105.54	µg/L		96
19) CIS12DICHLOROETHENE	6.518	96	59093m	17.58	µg/L		
20) 22-DICHLOROPROPANE	6.650	77	73463	18.50	µg/L		97
21) CHLOROFORM	6.802	83	146785	20.39	µg/L		99
22) BROMOCHLOROMETHANE	6.762	49	66614	23.10	µg/L	#	83
25) TETRAHYDROFURAN	7.046	42	12576m	16.39	µg/L		
26) 111-TRICHLOROETHANE	7.097	97	138096	23.23	µg/L		99
27) 11-DICHLOROPROPENE	7.239	75	72673	19.95	µg/L		93
28) 12-DICHLOROETHANE	7.797	62	115993	20.77	µg/L	#	99
29) CARBONTETRACHLORIDE	7.026	117	136217	23.53	µg/L	#	95
30) BENZENE	7.553	78	231753	19.60	µg/L	#	96
31) TRICHLOROETHENE	8.294	132	66689	19.77	µg/L	#	90
32) 12-DICHLOROPROPANE	9.015	63	55358	19.15	µg/L	#	88
33) DIBROMOMETHANE	8.893	174	51206	19.00	µg/L		96
34) BROMODICLMETHANE	9.076	83	115389	21.67	µg/L		100
35) 2-CLETHYLVINYLETHER	10.010	63	506m	0.73	µg/L		
36) EPICHLOROHYDRIN	10.386	57	151326m	490.16	µg/L		
37) 4METHYL-2-PENTANONE	10.934	43	384688	103.08	µg/L	#	91
38) CIS13DICLPROPENE	10.010	75	96007m	18.53	µg/L		
40) TOLUENE	10.386	91	255620	19.28	µg/L		98
41) TRANS13DICLPROPENE	11.035	75	89362	22.95	µg/L		86
42) 112-TRICHLOROETHANE	11.310	97	67456	19.05	µg/L		90
43) 2-HEXANONE	12.376	43	260185	95.29	µg/L		97
44) 13-DICHLOROPROPANE	11.797	76	100761	18.51	µg/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090314.D
Acq On : 11 Jul 2018 1:00 am
Operator : NIVA
Sample : 2894481MS/2898523
Misc : RUN200903
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 11 16:33:43 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

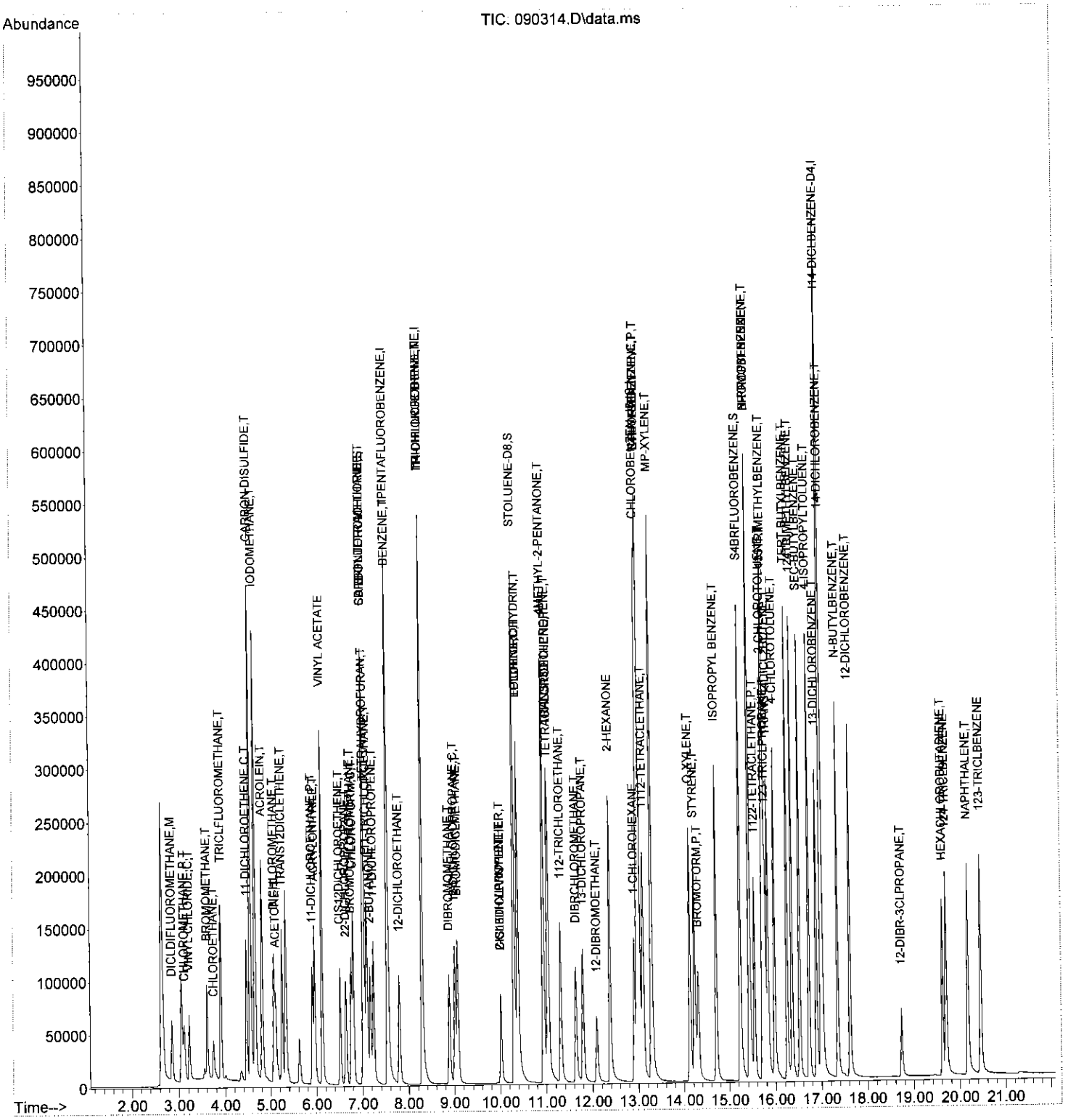
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	88861	20.50 µg/L	99
46) TETRACHLOROETHENE	11.046	166	81280	20.50 µg/L	90
47) 12-DIBROMOETHANE	12.091	107	62142	19.00 µg/L	99
49) CHLOROBENZENE	13.015	112	196168	18.99 µg/L	84
50) 1-CHLOROHEXANE	12.914	91	50134	24.23 µg/L #	53
51) 1112-TETRACLETHANE	13.106	131	87278	19.56 µg/L	96
52) ETHYLBENZENE	13.015	91	309082	18.80 µg/L	97
53) MP-XYLENE	13.289	91	479479	37.99 µg/L	93
54) STYRENE	14.223	104	180458m	16.95 µg/L	
55) O-XYLENE	14.122	91	204710	16.82 µg/L	95
56) BROMOFORM	14.304	173	70990	20.41 µg/L	99
57) 1122-TETRACLETHANE	15.543	83	113338	18.03 µg/L	100
58) ISOPROPYL BENZENE	14.710	105	300899m	18.26 µg/L	
60) 123-TRICLPROPANE	15.776	110	38957	19.27 µg/L	98
61) TRANS14DICL2BUTENE	15.827	53	86262m	89.08 µg/L	
62) BROMOBENZENE	15.431	77	163300	18.89 µg/L	84
63) N-PROPYLBENZENE	15.431	91	363309	18.28 µg/L	93
64) 2-CHLOROTOLUENE	15.715	91	239964	17.00 µg/L	90
65) 4-CHLOROTOLUENE	15.979	91	218857	16.87 µg/L	92
66) 135TRIMETHYLBENZENE	15.746	105	285924	18.98 µg/L	94
67) TERT-BUTYLBENZENE	16.254	119	222368	18.96 µg/L	89
68) 124TRIMETHYLBENZENE	16.365	105	292400	19.53 µg/L	99
69) SEC-BUTYLBENZENE	16.528	105	314569	17.35 µg/L	97
70) 13-DICHLOROBENZENE	16.893	146	165137	18.08 µg/L	98
72) 4-ISOPROPYLTOLUENE	16.731	119	268935	17.24 µg/L	93
73) 14-DICHLOROBENZENE	17.015	146	175924	17.91 µg/L	87
74) 12-DICHLOROBENZENE	17.614	146	177668	18.30 µg/L	97
75) N-BUTYLBENZENE	17.350	91	225544	16.05 µg/L	99
76) 12-DIBR-3CLPROPANE	18.731	157	26576m	17.40 µg/L	
77) 124-TRICLBENZENE	19.695	180	131832m	19.02 µg/L	
78) NAPHTHALENE	20.172	128	298997m	16.92 µg/L	
79) HEXACHLOROBUTADIENE	19.624	225	49166	16.56 µg/L	99
80) 123-TRICLBENZENE	20.456	182	98708	15.55 µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090314.D
Acq On : 11 Jul 2018 1:00 am
Operator : NIVA
Sample : 2894481MS/2898523
Misc : RUN200903
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 11 16:33:43 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

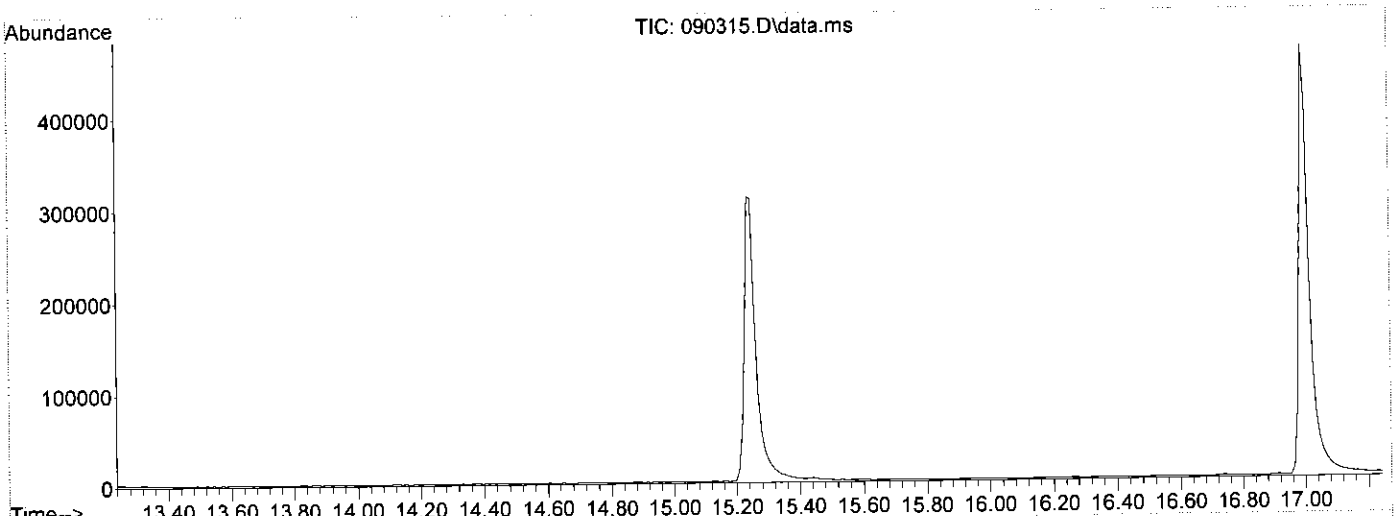


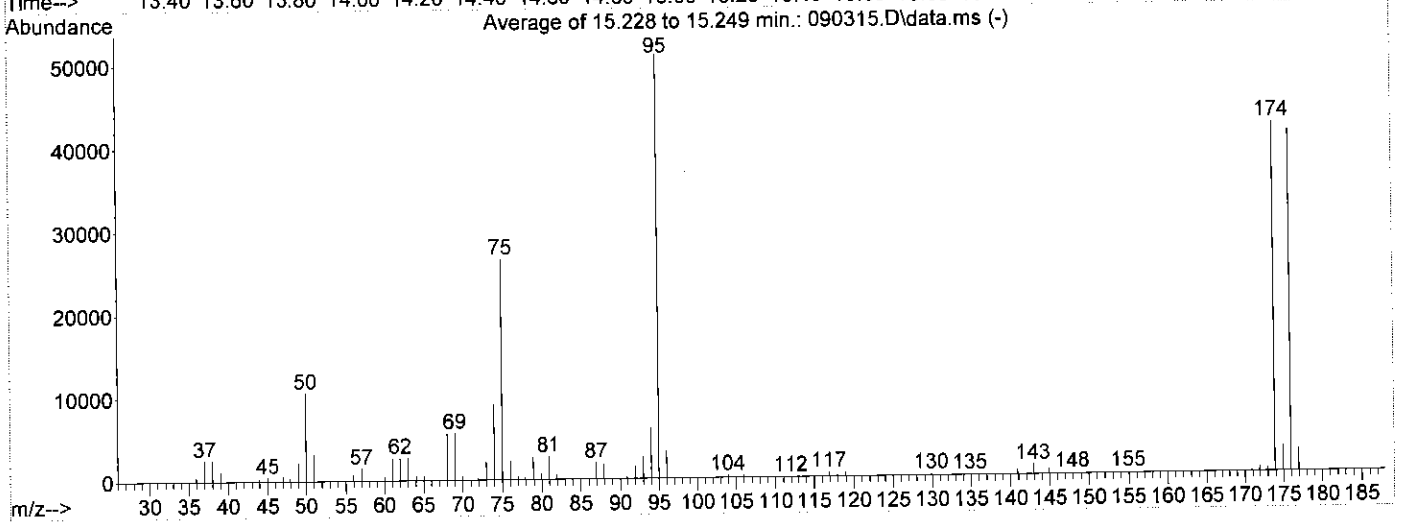
Method VOC

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090315.D
Acq On : 11 Jul 2018 1:27 am
Operator : NIVA
Sample : BFB
Misc : RUN200903
ALS Vial : 99 Sample Multiplier: 1

Integration File: VOC.P

Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Title : Analysis of VOC'S by EPA 8260B
Last Update : Tue Jun 05 15:30:24 2018
InstName : V7-AG7890MS





AutoFind: Scans 1393, 1394, 1395; Background Corrected with Scan 1387

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	10593	PASS
75	95	30	60	52.0	26547	PASS
95	95	100	100	100.0	51016	PASS
96	95	5	9	6.4	3278	PASS
173	174	0.00	2	1.2	519	PASS
174	95	50	150	82.5	42101	PASS
175	174	5	9	7.3	3075	PASS
176	174	95	101	97.6	41099	PASS
177	176	5	9	6.4	2648	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090316.D
Acq On : 11 Jul 2018 1:53 am
Operator : NIVA
Sample : LRB/2898530
Misc : RUN200908
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jul 11 16:34:46 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	203555	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	311050	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	283071	20.00 µg/L	0.04
71) I14-DICLBENZENE-D4	17.005	152	156074	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	160512	23.00 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.00%		
39) STOLUENE-D8	10.305	98	386697	19.79 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.95%		
59) S4BRFLUOROBENZENE	15.239	95	136181	18.77 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.85%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D.	d
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.615	94	261	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.650	142	208	N.D.	
12) CARBON DISULFIDE	4.549	76	2292	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.066	84	1088	N.D.	
15) TRANS12DICLETHENE	5.158	96	227	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.543	43	342	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.802	83	493	N.D.	
22) BROMOCHLOROMETHANE	6.802	49	140	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.945	117	311	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D.	d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.386	91	691	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090316.D
Acq On : 11 Jul 2018 1:53 am
Operator : NIVA
Sample : LRB/2898530
Misc : RUN200908
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jul 11 16:34:46 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

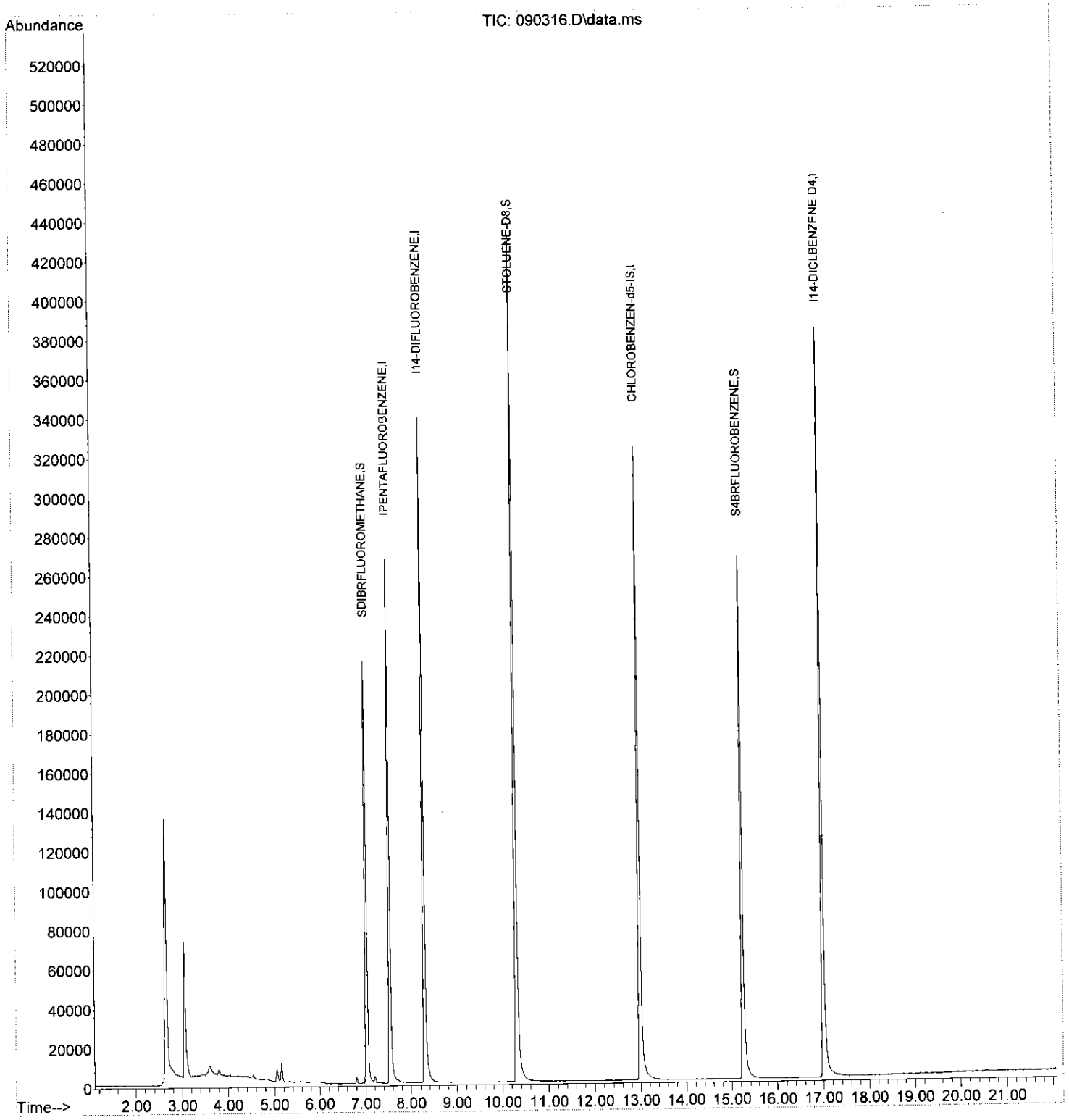
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.995	91	353	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.995	91	488	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.300	77	78	N.D.	
63) N-PROPYLBENZENE	15.452	91	130	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	16.924	146	62	N.D.	
72) 4-ISOPROPYLTOLUENE	16.741	119	161	N.D.	
73) 14-DICHLOROBENZENE	17.025	146	483	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.381	91	65	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	19.634	225	148	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090316.D
Acq On : 11 Jul 2018 1:53 am
Operator : NIVA
Sample : LRB/2898530
Misc : RUN200908
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jul 11 16:34:46 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090317.D
Acq On : 11 Jul 2018 2:19 am
Operator : NIVA
Sample : CCV/2898524
Misc : RUN200903
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 11 16:37:16 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IPENTAFLUOROBENZENE	1.000	1.000	0.0	73	0.03
2	M	DICLDIFLUOROMETHANE	0.110	0.128	-16.4	75	0.08
3	P,T	CHLOROMETHANE	0.214	0.254	-18.7	96	0.09
4	C,T	VINYL CHLORIDE	0.183	0.211	-15.3	75	0.08
5	T	BROMOMETHANE	0.173	0.174	-0.6	75	0.09
6	T	CHLOROETHANE	0.139	0.143	-2.9	70	0.10
7	T	TRICLFLUOROMETHANE	0.469	0.433	7.7	59	0.15
8	T	ACROLEIN	0.059	0.042#	28.8#	46#	0.10
9	T	ACETONE	0.077	0.088#	-14.3	80	0.02
10	C,T	11-DICHLOROETHENE	0.302	0.336	-11.3	73	0.11
11	T	IODOMETHANE	0.319	0.346	-8.5	69	0.10
12	T	CARBON DISULFIDE	0.480	0.572	-19.2	77	0.10
13	T	ACRYLONITRILE	0.090	0.099#	-10.0	75	0.03
14	T	DICHLOROMETHANE	0.269	0.285	-5.9	75	0.11
15	T	TRANS12DICLETHENE	0.236	0.253	-7.2	71	0.11
16	P,T	11-DICHLOROETHANE	0.432	0.461	-6.7	72	0.00
17		VINYL ACETATE	0.398	0.457	-14.8	75	0.00
18		2-BUTANONE	0.123	0.135	-9.8	73	0.15
19	T	CIS12DICHLOROETHENE	0.273	0.224	17.9	57	0.14
20	T	22-DICHLOROPROPANE	0.322	0.264	18.0	55	0.13
21	C,T	CHLOROFORM	0.584	0.588	-0.7	69	0.14
22	T	BROMOCHLOROMETHANE	0.234	0.277	-18.4	80	0.02
23	I	I14-DIFLUOROBENZENE	1.000	1.000	0.0	72	0.03
24	S	SDIBRFLUOROMETHANE	0.449	0.514	-14.5	79	0.02
25	T	TETRAHYDROFURAN	0.044	0.037#	15.9	67	0.02
26	T	111-TRICHLOROETHANE	0.339	0.381	-12.4	71	0.01
27	T	11-DICHLOROPROPENE	0.208	0.191	8.2	59	0.01
28	T	12-DICHLOROETHANE	0.318	0.346	-8.8	73	0.02
29	T	CARBONTETRACHLORIDE	0.330	0.363	-10.0	70	0.01
30	T	BENZENE	0.674	0.662	1.8	64	0.02
31	T	TRICHLOROETHENE	0.192	0.184	4.2	64	0.02
32	C,T	12-DICHLOROPROPANE	0.165	0.161	2.4	65	0.02
33	T	DIBROMOMETHANE	0.154	0.156	-1.3	70	0.03
34	T	BROMODICLMETHANE	0.303	0.339	-11.9	73	0.02
35	T	2-CLETHYLVINYLETHER	0.039	0.046#	-17.9	87	0.03
36	T	EPICHLOROHYDRIN	0.018	0.016#	11.1	59	0.03
37	T	4METHYL-2-PENTANONE	0.213	0.234	-9.9	71	0.04
38	T	CIS13DICLPROPENE	0.295	0.256	13.2	64	0.04
39	S	STOLUENE-D8	1.256	1.329	-5.8	73	0.03
40	C,T	TOLUENE	0.756	0.741	2.0	62	0.03
41	T	TRANS13DICLPROPENE	0.222	0.263	-18.5	81	0.04
42	T	112-TRICHLOROETHANE	0.202	0.204	-1.0	67	0.05
43		2-HEXANONE	0.156	0.158	-1.3	69	0.09
44	T	13-DICHLOROPROPANE	0.310	0.297	4.2	65	0.05

45	T	DIBRCHLOROMETHANE	0.247	0.265	-7.3	73	0.05
46	T	TETRACHLOROETHENE	0.226	0.215	4.9	60	0.04
47	T	12-DIBROMOETHANE	0.186	0.184	1.1	67	0.06
48	I	CHLOROBENZEN-d5-IS	1.000	1.000	0.0	70	0.03
49	P,T	CHLOROBENZENE	0.523	0.497	5.0	64	0.04
50		1-CHLOROHEXANE	0.107	0.111	-3.7	63	0.00
51	T	1112-TETRACLETHANE	0.226	0.226	0.0	70	0.03
52	C,T	ETHYLBENZENE	0.832	0.752	9.6	60	0.04
53	T	MP-XYLENE	0.639	0.583	8.8	60	0.04
54	T	STYRENE	0.539	0.434	19.5	63	0.07
55	T	O-XYLENE	0.616	0.505	18.0	61	0.06
56	P,T	BROMOFORM	0.176	0.191	-8.5	76	0.06
57	P,T	1122-TETRACLETHANE	0.318	0.308	3.1	66	0.10
58	T	ISOPROPYL BENZENE	0.834	0.714	14.4	67	0.07
59	S	S4BRFLUOROBENZENE	0.513	0.502	2.1	71	0.09
60	T	123-TRICLPROPANE	0.102	0.107	-4.9	71	0.10
61	T	TRANS14DICL2BUTENE	0.049	0.045#	8.2	59	0.10
62	T	BROMOBENZENE	0.437	0.421	3.7	64	0.10
63	T	N-PROPYLBENZENE	1.006	0.875	13.0	57	0.09
64	T	2-CHLOROTOLUENE	0.714	0.596	16.5	56	0.10
65	T	4-CHLOROTOLUENE	0.657	0.549	16.4	56	0.10
66	T	135TRIMETHYLBENZENE	0.762	0.705	7.5	60	0.10
67	T	TERT-BUTYLBENZENE	0.594	0.527	11.3	55	0.11
68	T	124TRIMETHYLBENZENE	0.758	0.732	3.4	60	0.03
69	T	SEC-BUTYLBENZENE	0.918	0.736	19.8	53	0.12
70	T	13-DICHLOROBENZENE	0.462	0.427	7.6	61	0.03
71	I	I14-DICLBENZENE-D4	1.000	1.000	0.0	70	-0.13
72	T	4-ISOPROPYLTOLUENE	1.235	1.002	18.9	56	-0.14
73	T	14-DICHLOROBENZENE	0.777	0.705	9.3	62	-0.13
74	T	12-DICHLOROBENZENE	0.768	0.714	7.0	62	-0.14
75	T	N-BUTYLBENZENE	1.112	1.107	0.4	72	-0.13
76	T	12-DIBR-3CLPROPANE	0.121	0.100#	17.4	68	-0.14
77		124-TRICLBENZENE	0.549	0.485	11.7	74	-0.17
78	T	NAPHTHALENE	1.399	1.228	12.2	74	-0.17
79	T	HEXACHLOROBUTADIENE	0.235	0.189	19.6	55	-0.15
80		123-TRICLBENZENE	0.502	0.422	15.9	63	-0.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8260VOC-JUNE-LIQ-18.M Fri Jul 13 09:55:59 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090317.D
Acq On : 11 Jul 2018 2:19 am
Operator : NIVA
Sample : CCV/2898524
Misc : RUN200903
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 11 16:37:16 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.543	168	243887	20.00	µg/L		0.03
23) I14-DIFLUOROBENZENE	8.295	114	336632	20.00	µg/L		0.03
48) CHLOROBENZEN-d5-IS	12.975	117	383591	20.00	µg/L		0.03
71) I14-DICLBENZENE-D4	16.995	152	249283	20.00	µg/L		-0.13
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.036	111	172880	22.89	µg/L		0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.45%				
39) STOLUENE-D8	10.305	98	447247	21.15	µg/L		0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.75%				
59) S4BRFLUOROBENZENE	15.238	95	192530	19.58	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.90%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.853	85	31226m	23.21	µg/L		
3) CHLOROMETHANE	3.117	50	62065	23.84	µg/L	#	97
4) VINYL CHLORIDE	3.219	62	51356m	23.05	µg/L		
5) BROMOMETHANE	3.604	94	42372m	20.07	µg/L		
6) CHLOROETHANE	3.747	64	34776m	20.53	µg/L		
7) TRICLFLUOROMETHANE	3.909	101	105583m	18.46	µg/L		
8) ACROLEIN	4.813	56	253714m	350.66	µg/L		
9) ACETONE	5.107	43	107327	114.91	µg/L	#	96
10) 11-DICHLOROETHENE	4.467	61	81904	22.23	µg/L		94
11) IODOMETHANE	4.650	142	422514m	108.65	µg/L		
12) CARBON DISULFIDE	4.549	76	697161	119.01	µg/L		97
13) ACRYLONITRILE	5.960	53	121115	109.91	µg/L		99
14) DICHLOROMETHANE	5.077	84	69470	21.17	µg/L		90
15) TRANS12DICLETHENE	5.249	96	61763	21.49	µg/L		97
16) 11-DICHLOROETHANE	5.909	63	112412	21.34	µg/L		97
17) VINYL ACETATE	6.122	43	557369m	114.98	µg/L		
18) 2-BUTANONE	7.168	43	164279	109.28	µg/L		95
19) CIS12DICHLOROETHENE	6.528	96	54747	16.47	µg/L		91
20) 22-DICHLOROPROPANE	6.650	77	64373	16.39	µg/L		97
21) CHLOROFORM	6.812	83	143368	20.14	µg/L		99
22) BROMOCHLOROMETHANE	6.762	49	67549	23.69	µg/L	#	83
25) TETRAHYDROFURAN	7.046	42	12606m	17.13	µg/L		
26) 111-TRICHLOROETHANE	7.097	97	128211	22.49	µg/L		98
27) 11-DICHLOROPROPENE	7.239	75	64219	18.38	µg/L		93
28) 12-DICHLOROETHANE	7.797	62	116522	21.75	µg/L	#	99
29) CARBONTETRACHLORIDE	7.026	117	122210	22.02	µg/L	#	95
30) BENZENE	7.554	78	222874	19.65	µg/L	#	95
31) TRICHLOROETHENE	8.295	132	61975	19.15	µg/L	#	92
32) 12-DICHLOROPROPANE	9.015	63	54297	19.58	µg/L	#	87
33) DIBROMOMETHANE	8.894	174	52607	20.35	µg/L		97
34) BROMODICLMETHANE	9.076	83	114234	22.37	µg/L		99
35) 2-CLETHYLVINYLETHER	9.858	63	76953m	115.78	µg/L		
36) EPICHLOROHYDRIN	10.386	57	131617	444.53	µg/L		92
37) 4METHYL-2-PENTANONE	10.944	43	394653	110.27	µg/L	#	92
38) CIS13DICLPROPENE	10.010	75	86279	17.36	µg/L		95
40) TOLUENE	10.386	91	249344	19.61	µg/L		98
41) TRANS13DICLPROPENE	11.036	75	88626	23.73	µg/L		87
42) 112-TRICHLOROETHANE	11.310	97	68512	20.17	µg/L		92
43) 2-HEXANONE	12.376	43	266353	101.72	µg/L		97
44) 13-DICHLOROPROPANE	11.797	76	99812	19.12	µg/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090317.D
Acq On : 11 Jul 2018 2:19 am
Operator : NIVA
Sample : CCV/2898524
Misc : RUN200903
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 11 16:37:16 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

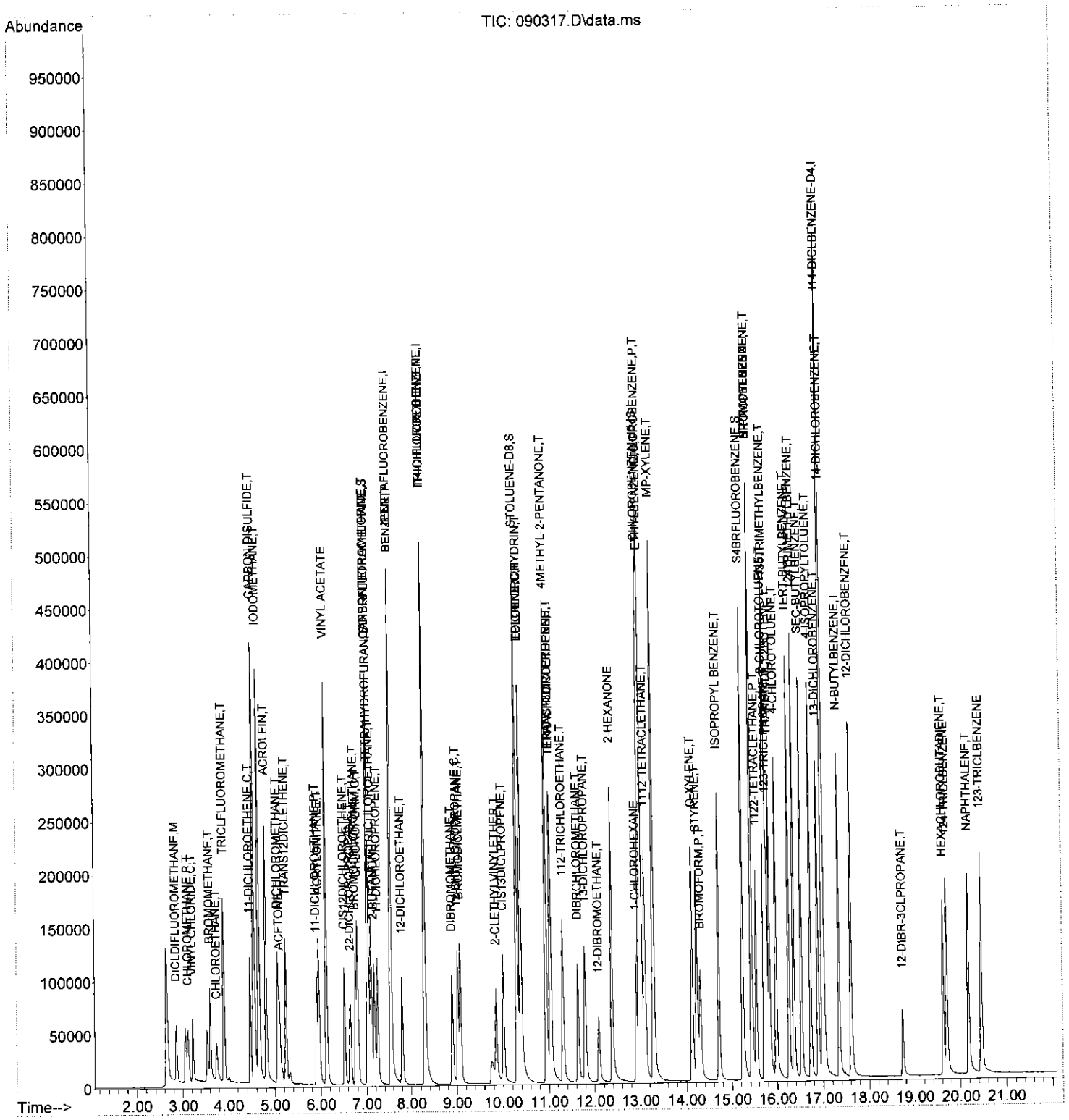
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	89217	21.46 µg/L	99
46) TETRACHLOROETHENE	11.046	166	72420	19.04 µg/L	90
47) 12-DIBROMOETHANE	12.091	107	61901	19.73 µg/L	100
49) CHLOROBENZENE	13.015	112	190554	19.00 µg/L	84
50) 1-CHLOROHEXANE	12.914	91	42534	21.63 µg/L #	52
51) 1112-TETRACLETHANE	13.107	131	86729	20.02 µg/L	97
52) ETHYLBENZENE	13.025	91	288608	18.09 µg/L	97
53) MP-XYLENE	13.289	91	447518	36.53 µg/L	94
54) STYRENE	14.233	104	166669m	16.13 µg/L	
55) O-XYLENE	14.132	91	193845	16.41 µg/L	95
56) BROMOFORM	14.315	173	73101	21.65 µg/L	99
57) 1122-TETRACLETHANE	15.543	83	118187	19.37 µg/L	100
58) ISOPROPYL BENZENE	14.711	105	273904m	17.13 µg/L	
60) 123-TRICLPROPANE	15.777	110	40882	20.84 µg/L	96
61) TRANS14DICL2BUTENE	15.827	53	86119	91.63 µg/L	84
62) BROMOBENZENE	15.431	77	161664	19.27 µg/L	84
63) N-PROPYLBENZENE	15.431	91	335766	17.41 µg/L	93
64) 2-CHLOROTOLUENE	15.716	91	228699	16.69 µg/L	90
65) 4-CHLOROTOLUENE	15.980	91	210617	16.73 µg/L	92
66) 135TRIMETHYLBENZENE	15.746	105	270467	18.50 µg/L	93
67) TERT-BUTYLBENZENE	16.254	119	202213	17.76 µg/L	89
68) 124TRIMETHYLBENZENE	16.365	105	280747	19.32 µg/L	98
69) SEC-BUTYLBENZENE	16.528	105	282139	16.03 µg/L	97
70) 13-DICHLOROBENZENE	16.893	146	163754	18.48 µg/L	98
72) 4-ISOPROPYLTOLUENE	16.731	119	249792m	16.23 µg/L	
73) 14-DICHLOROBENZENE	17.015	146	175634	18.13 µg/L	86
74) 12-DICHLOROBENZENE	17.614	146	177871	18.57 µg/L	97
75) N-BUTYLBENZENE	17.350	91	275858m	19.89 µg/L	
76) 12-DIBR-3CLPROPANE	18.741	157	24898	16.52 µg/L	94
77) 124-TRICLBENZENE	19.695	180	121013m	17.70 µg/L	
78) NAPHTHALENE	20.182	128	306036m	17.55 µg/L	
79) HEXACHLOROBUTADIENE	19.624	225	47116m	16.09 µg/L	
80) 123-TRICLBENZENE	20.457	182	105224m	16.80 µg/L	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090317.D
Acq On : 11 Jul 2018 2:19 am
Operator : NIVA
Sample : CCV/2898524
Misc : RUN200903
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 11 16:37:16 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090319.D
Acq On : 11 Jul 2018 3:11 am
Operator : NIVA
Sample : 2892616
Misc : RUN200908
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jul 11 16:38:01 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	204755	20.00	µg/L	0.03
23) I14-DIFLUOROBENZENE	8.294	114	312815	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	283552	20.00	µg/L	0.04
71) I14-DICLBENZENE-D4	17.005	152	159426	20.00	µg/L	-0.12
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.036	111	163625	23.31	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 116.55%			
39) STOLUENE-D8	10.315	98	388795	19.78	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.90%			
59) S4BRFLUOROBENZENE	15.248	95	138547	19.06	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.30%			

Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.614	94	320	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.660	142	267	N.D.	
12) CARBON DISULFIDE	0.000		0	N.D. d	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D. d	
15) TRANS12DICLETHENE	5.168	96	187	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.533	43	281	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.812	83	601	N.D.	
22) BROMOCHLOROMETHANE	6.812	49	164	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.954	117	437	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.396	91	646	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090319.D
Acq On : 11 Jul 2018 3:11 am
Operator : NIVA
Sample : 2892616
Misc : RUN200908
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jul 11 16:38:01 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

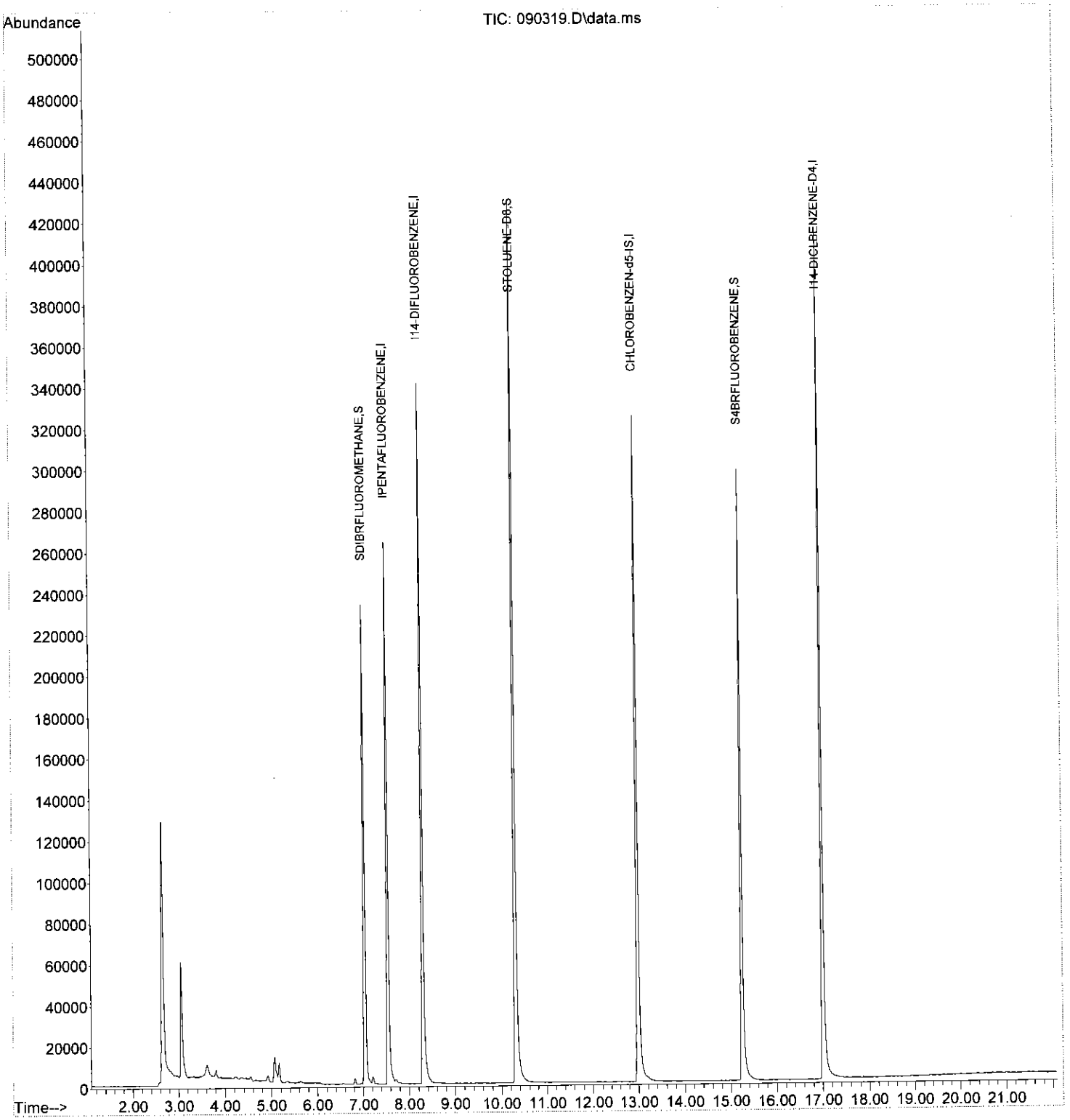
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	0.000		0	N.D.	d
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.974	91	836	N.D.	
53) MP-XYLENE	13.330	91	68	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.452	77	71	N.D.	
63) N-PROPYLBENZENE	15.462	91	165	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	16.548	105	68	N.D.	
70) 13-DICHLOROBENZENE	16.924	146	154	N.D.	
72) 4-ISOPROPYLTOLUENE	16.751	119	166	N.D.	
73) 14-DICHLOROBENZENE	17.015	146	570	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.380	91	191	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	19.644	225	267	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

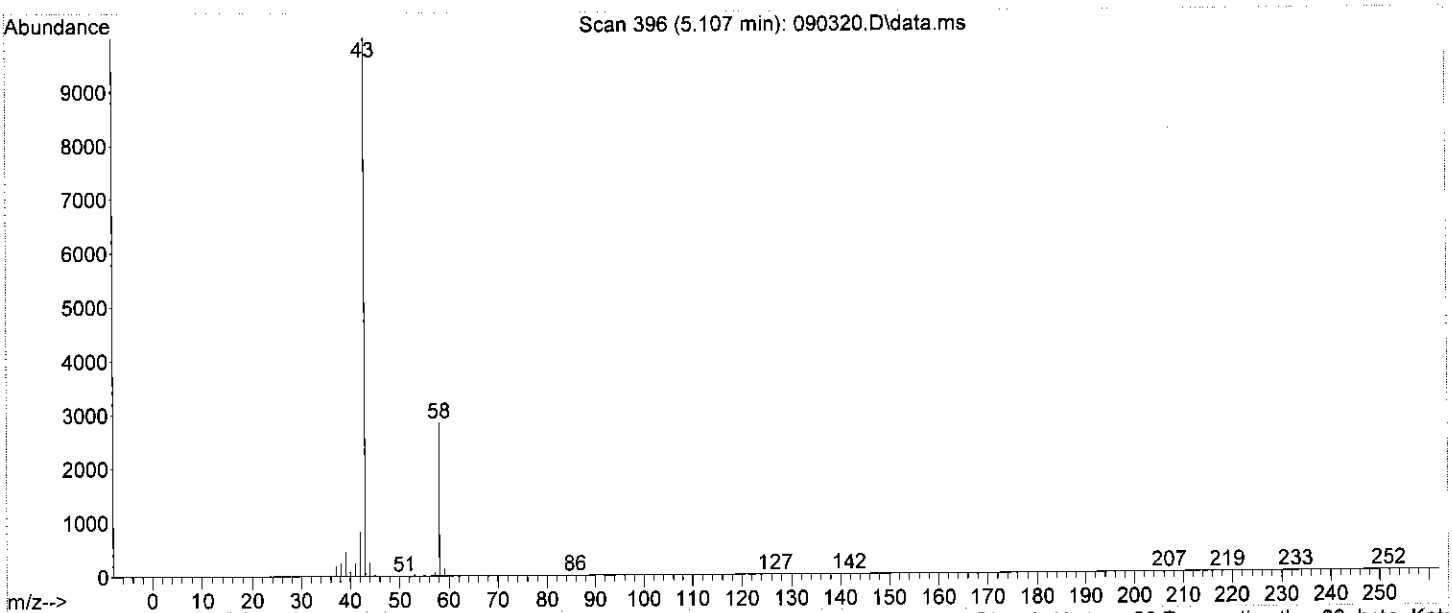
Quantitation Report (QT Reviewed)

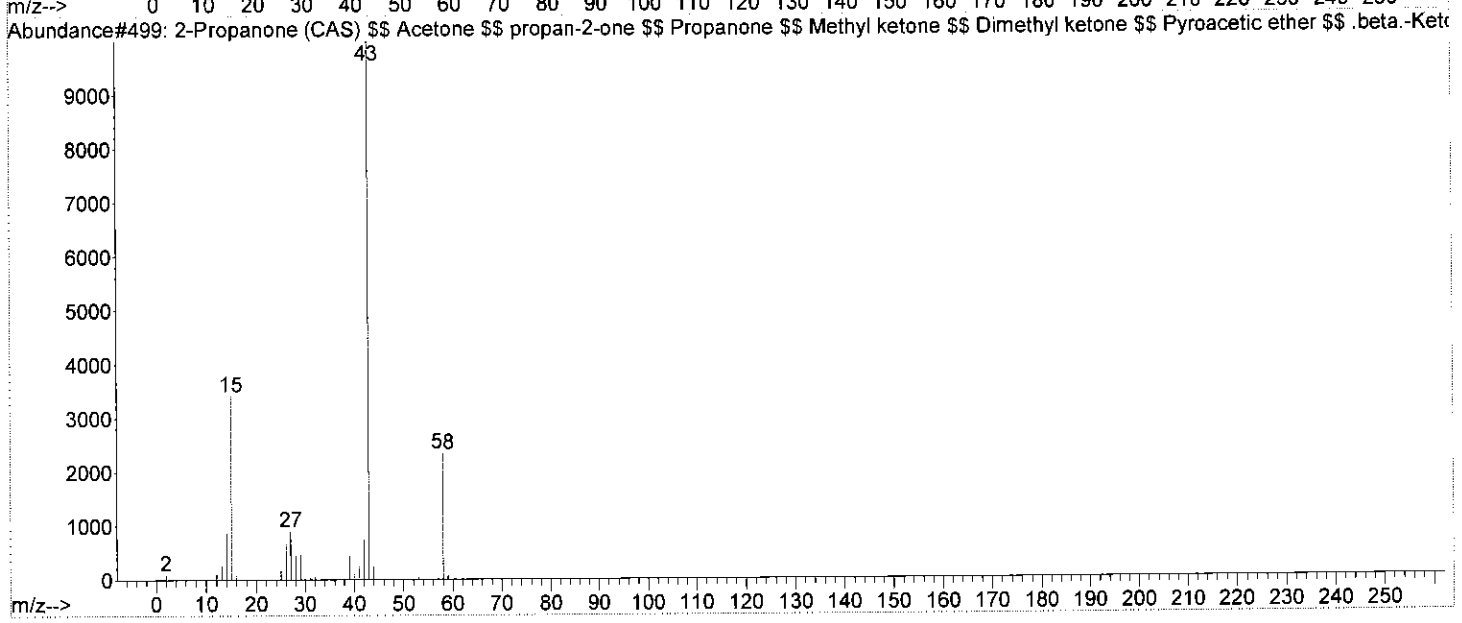
Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090319.D
Acq On : 11 Jul 2018 3:11 am
Operator : NIVA
Sample : 2892616
Misc : RUN200908
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jul 11 16:38:01 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

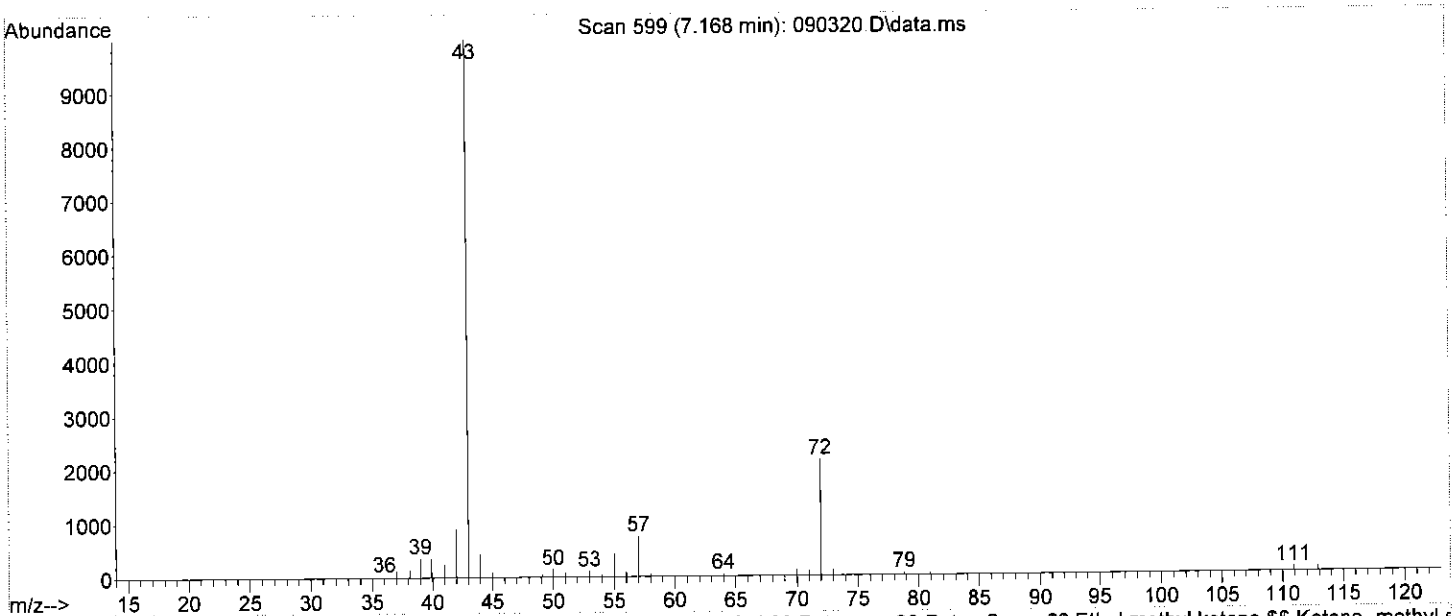


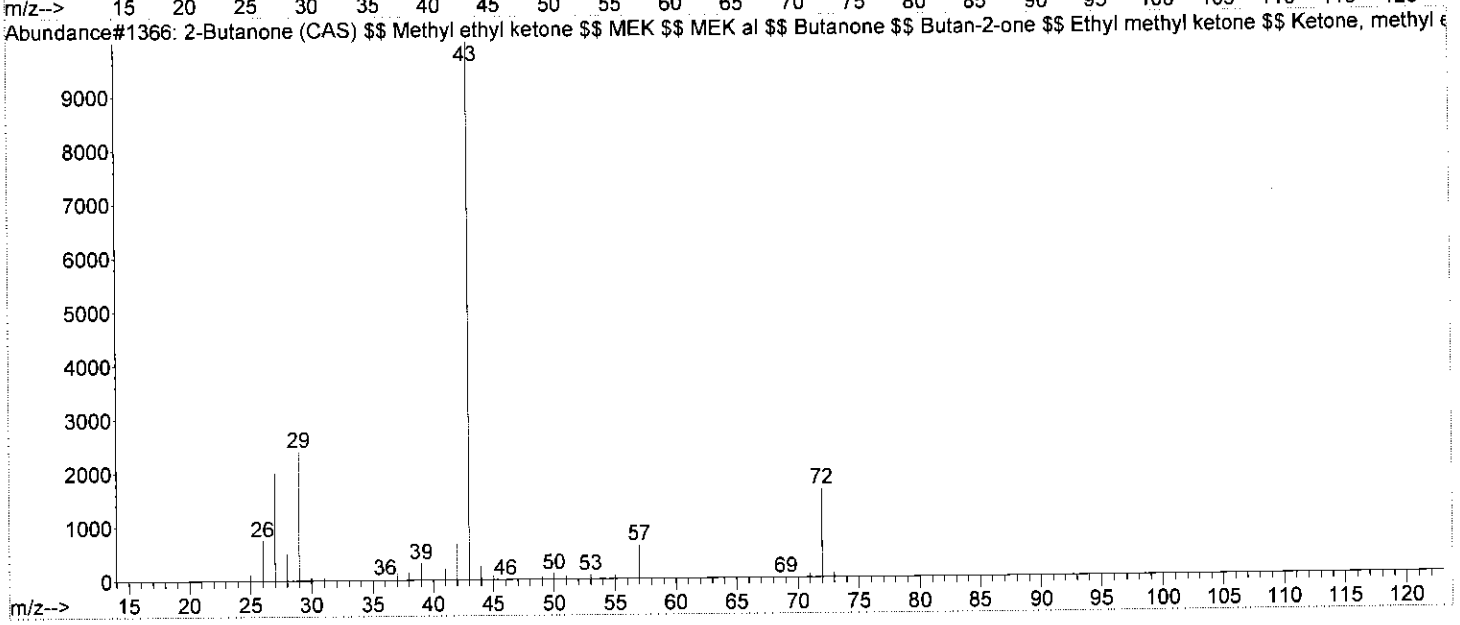
Library Searched : C:\Database\WILEY275.L
Quality : 80
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



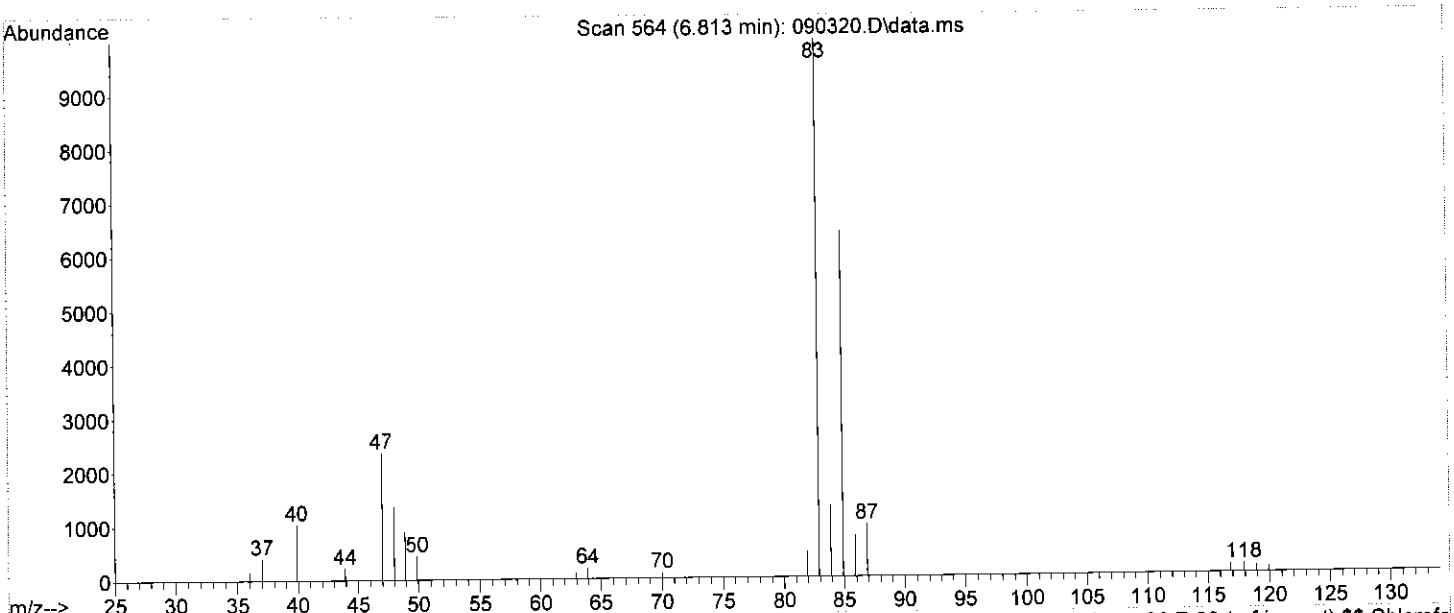


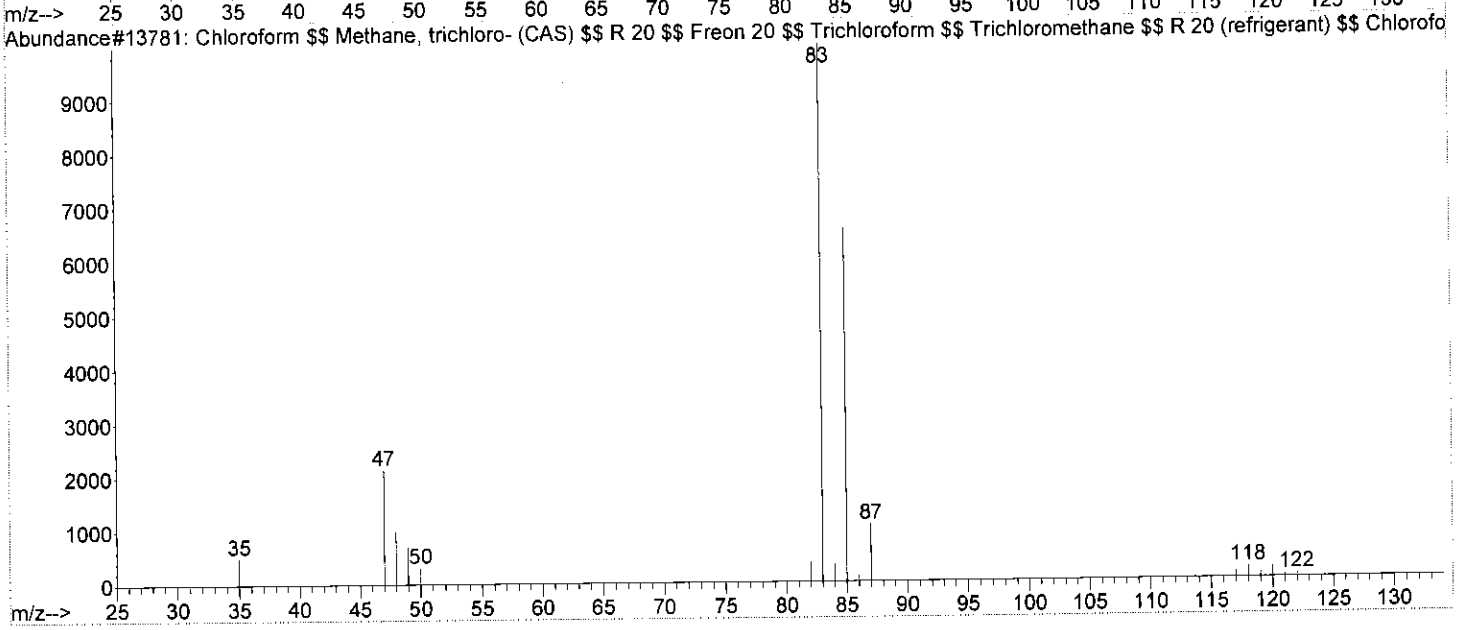
Library Searched : C:\Database\WILEY275.L
Quality : 86
ID : 2-Butanone (CAS) $$ Methyl ethyl ketone $$ MEK $$ MEK al $$ Butanone $$ Butan-2-one $$ Ethyl methyl ketone $$ Ketone, methyl ethyl $$ 3-Butanone $$ 2-BUTANONE (METHYL ETHYL KETONE) $$ C2H5COCH3 $$ Acetone, methyl- $$ Aethylmethylketon $$ Butanone 2 $$ Eth



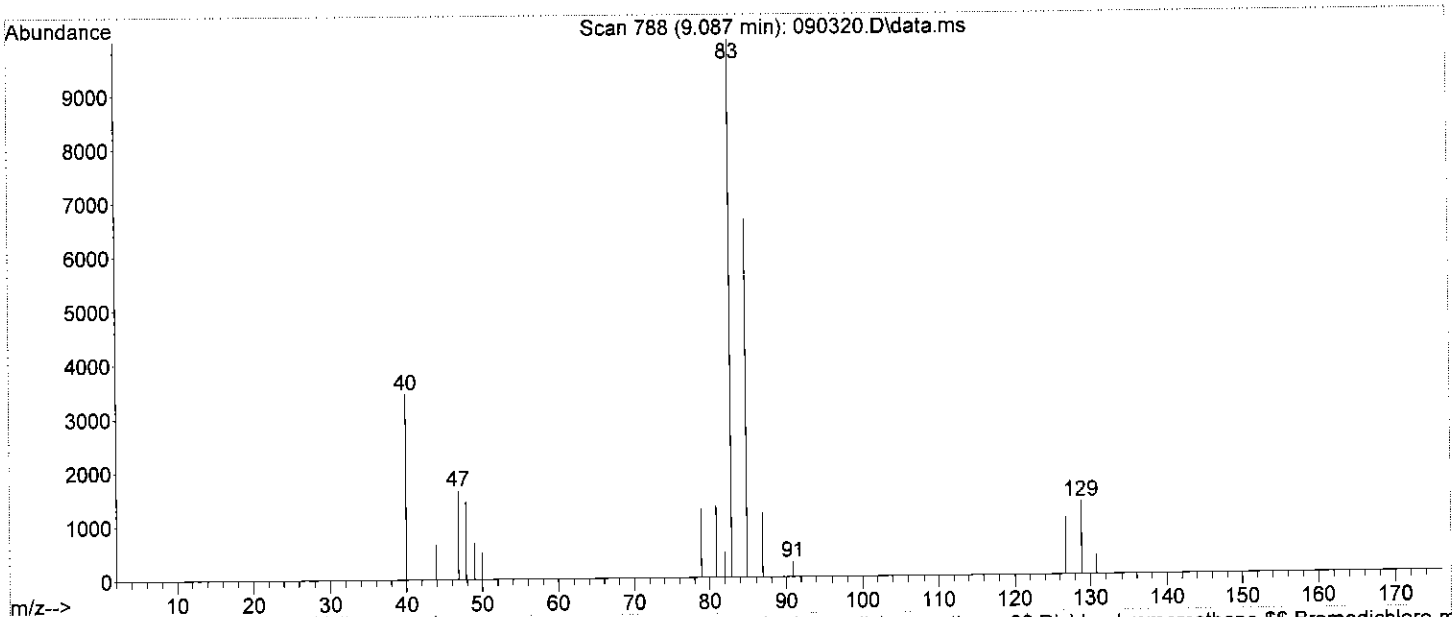


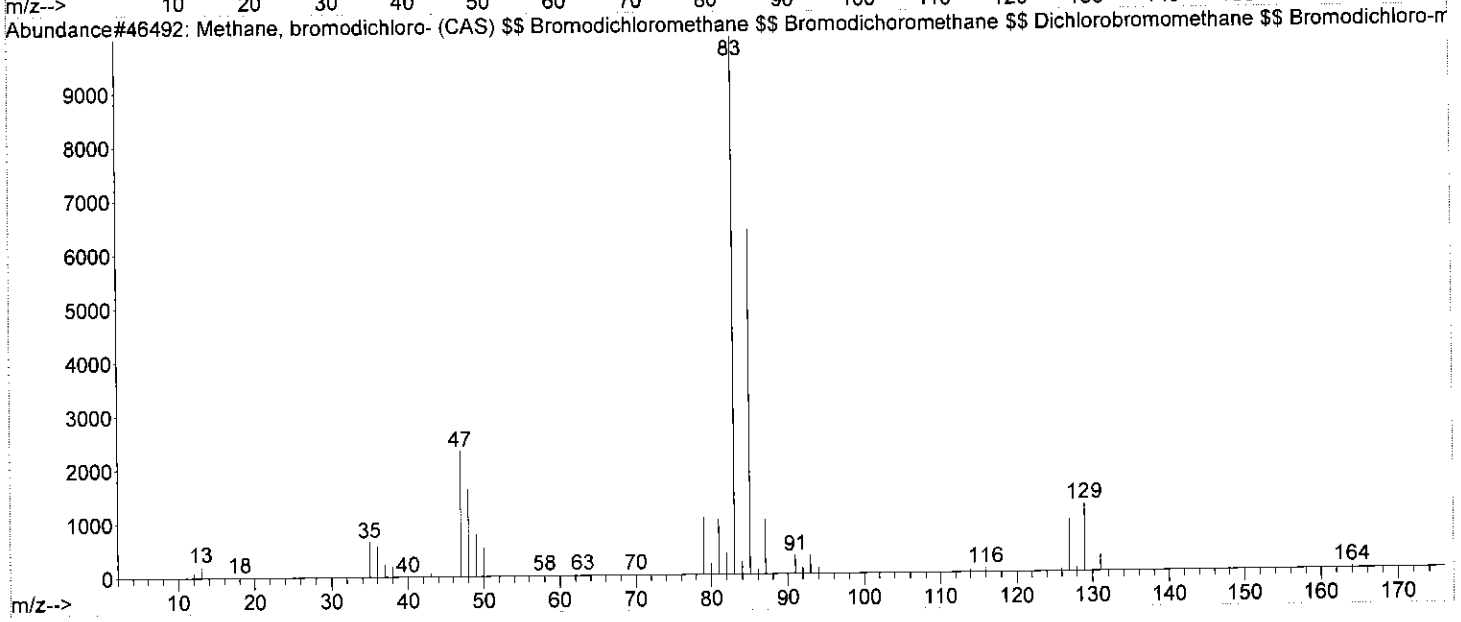
Library Searched : C:\Database\WILEY275.L
Quality : 78
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



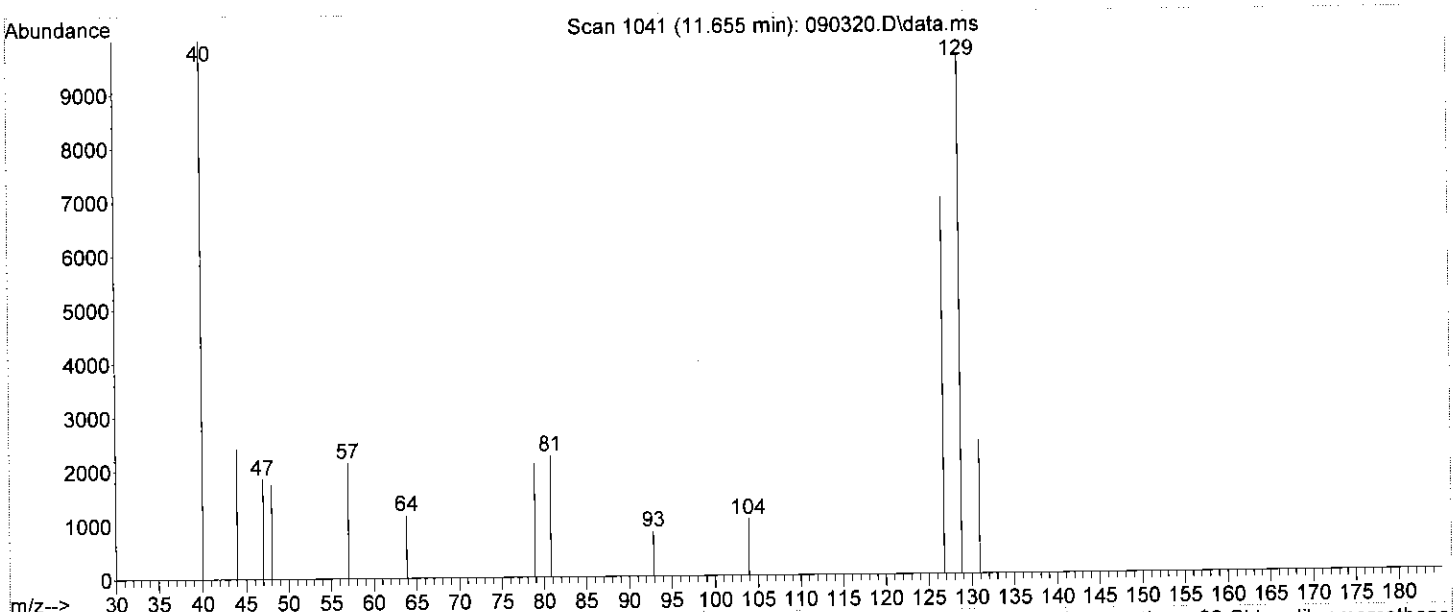


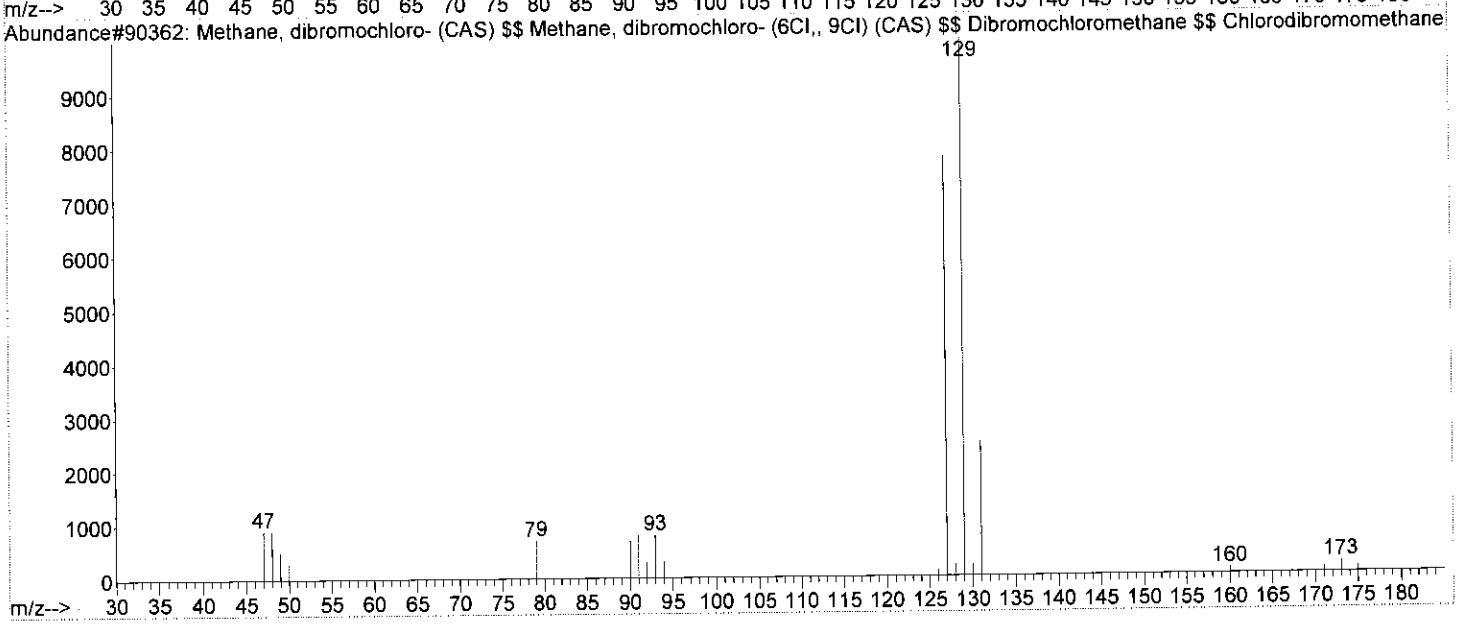
Library Searched : C:\Database\WILEY275.L
Quality : 90
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichlorobromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobromomethane $$ Monobromodichloromethane



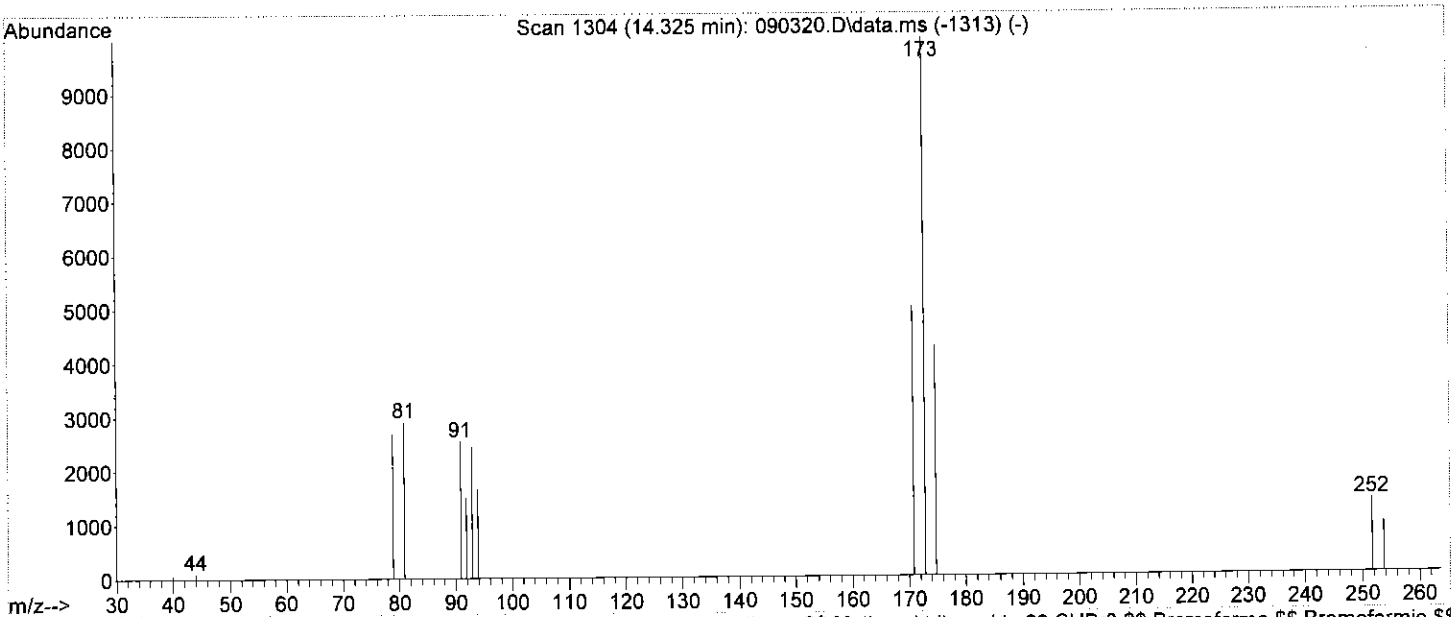


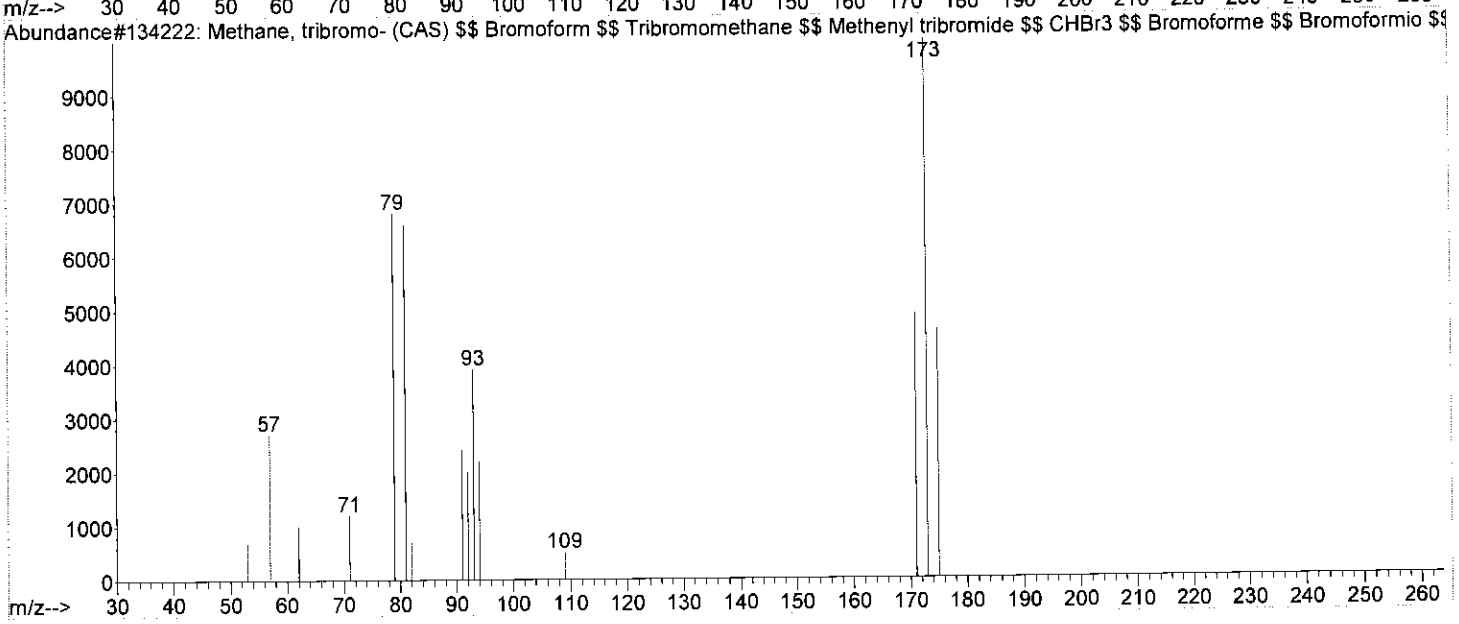
Library Searched : C:\Database\WILEY275.L
Quality : 50
ID : Methane, dibromochloro- (CAS) $$ Methane, dibromochloro- (6CI,, 9CI) (CAS) $$ Dibromochloromethane $$ Chlorodibromomethane $$ Monochlorodibromomethane $$ Dibromomonochloromethane $$ CHClBr2 $$ Methane, chlorodibromo- $$ Cdbm $$ NCI-C55254





Library Searched : C:\Database\WILEY275.L
Quality : 64
ID : Methane, tribromo- (CAS) $$ Bromoform $$ Tribromomethane $$ Methenyl tribromide $$ CHBr3 $$ Bromoforme $$ Bromoformio $$ NCI-C55130 $$ Tribrommethaan $$ Tribrommethan $$ Tribromometan $$ Rcra waste number U225 $$ UN 2515





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090320.D
Acq On : 11 Jul 2018 3:37 am
Operator : NIVA
Sample : 2893354
Misc : RUN200915
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 11 16:39:05 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.554	168	209060	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.295	114	306509	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	281540	20.00 µg/L	0.04
71) I14-DICLBENZENE-D4	17.005	152	169669	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	162788	23.67 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 118.35%		
39) STOLUENE-D8	10.305	98	390169	20.26 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.30%		
59) S4BRFLUOROBENZENE	15.249	95	146420	20.29 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.45%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.615	94	392	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.107	43	3067746	3831.54 µg/L	98
10) 11-DICHLOROETHENE	4.691	61	269	N.D.	
11) IODOMETHANE	4.671	142	1036	N.D.	
12) CARBON DISULFIDE	0.000		0	N.D. d	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.077	84	1029	N.D.	
15) TRANS12DICLETHENE	5.158	96	231	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.132	43	1437	N.D.	
18) 2-BUTANONE	7.168	43	100727	78.17 µg/L	95
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.813	83	24949	4.09 µg/L #	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	6.965	42	127	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.955	117	421	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	9.107	63	66	N.D.	
33) DIBROMOMETHANE	8.904	174	72	N.D.	
34) BROMODICLMETHANE	9.087	83	9575	2.06 µg/L	98
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.396	91	4513	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090320.D
Acq On : 11 Jul 2018 3:37 am
Operator : NIVA
Sample : 2893354
Misc : RUN200915
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 11 16:39:05 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

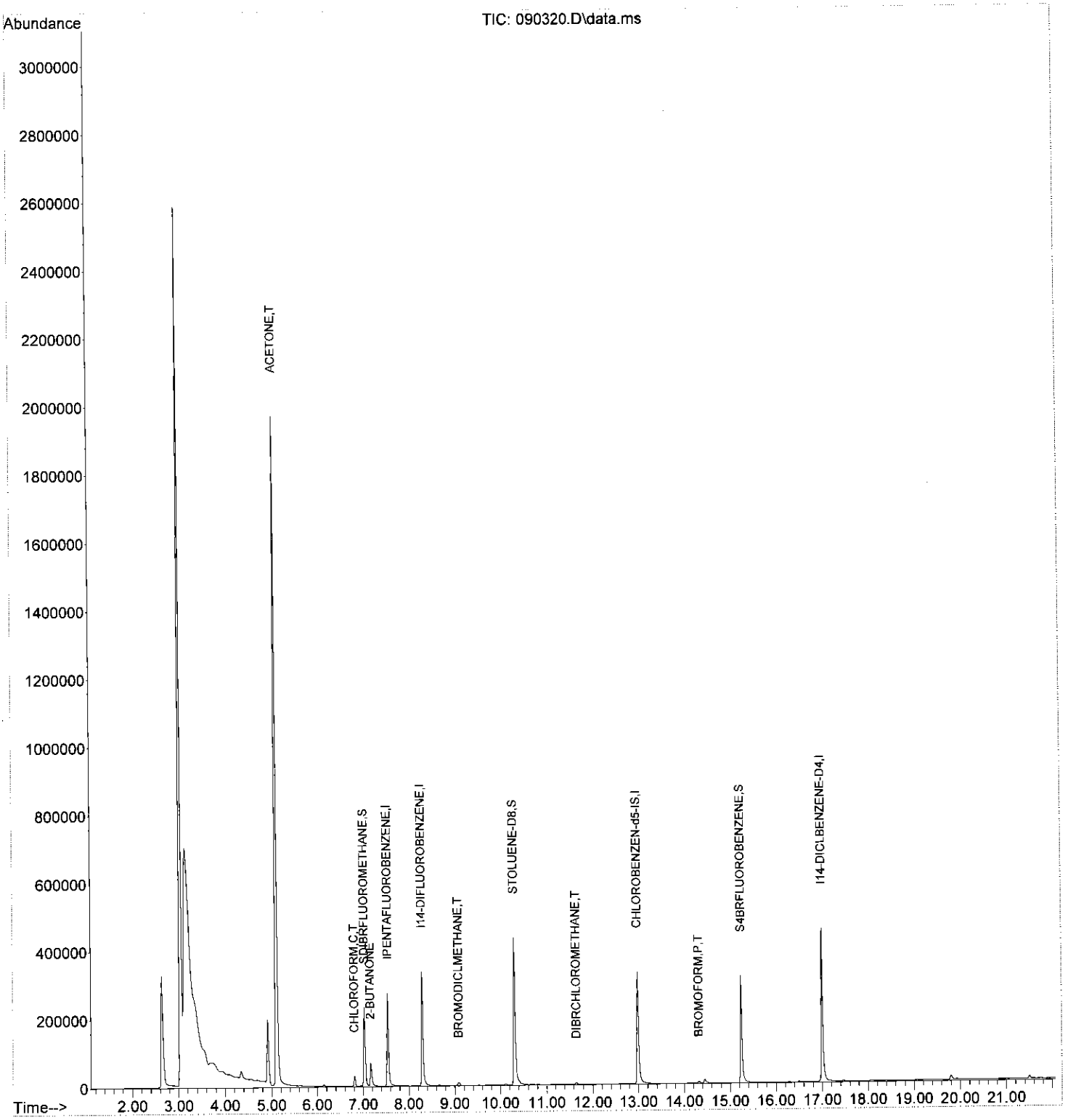
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.655	129	3364	0.89 µg/L	96
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	491	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	491	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	14.325	173	5531	2.23 µg/L	95
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.279	77	140	N.D.	
63) N-PROPYLBENZENE	15.462	91	146	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	16.751	119	359	N.D.	
73) 14-DICHLOROBENZENE	17.025	146	388	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.370	91	279	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

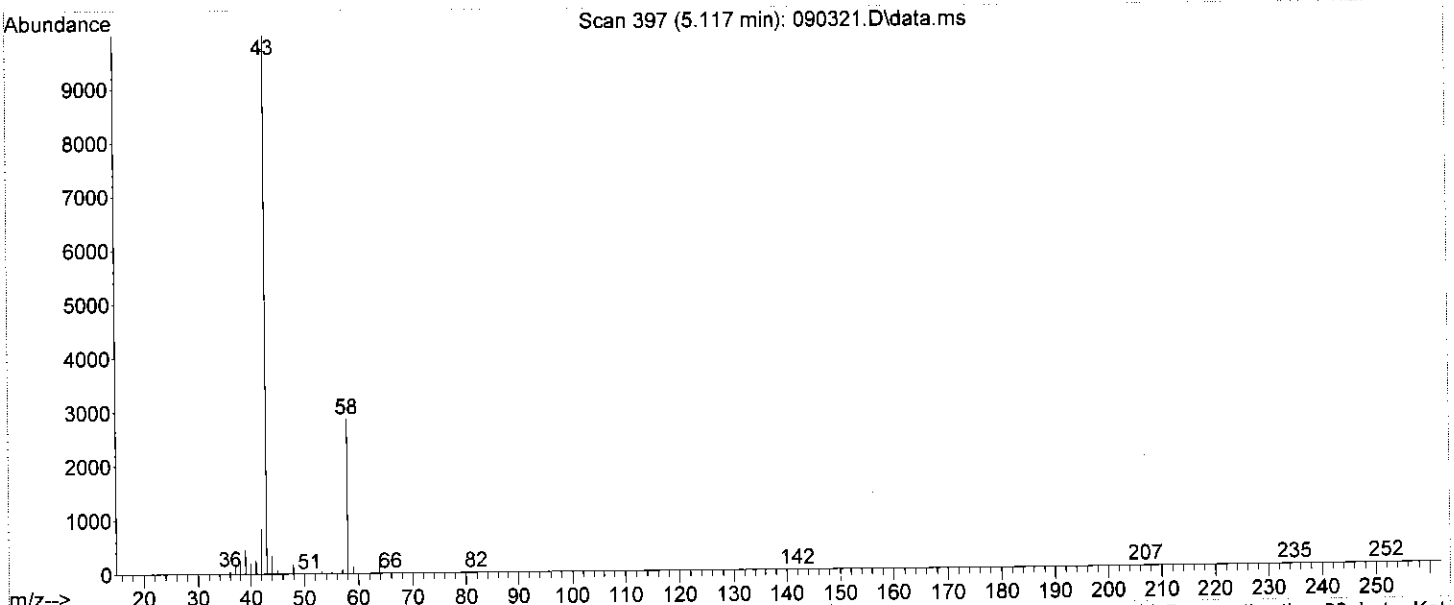
Quantitation Report (QT Reviewed)

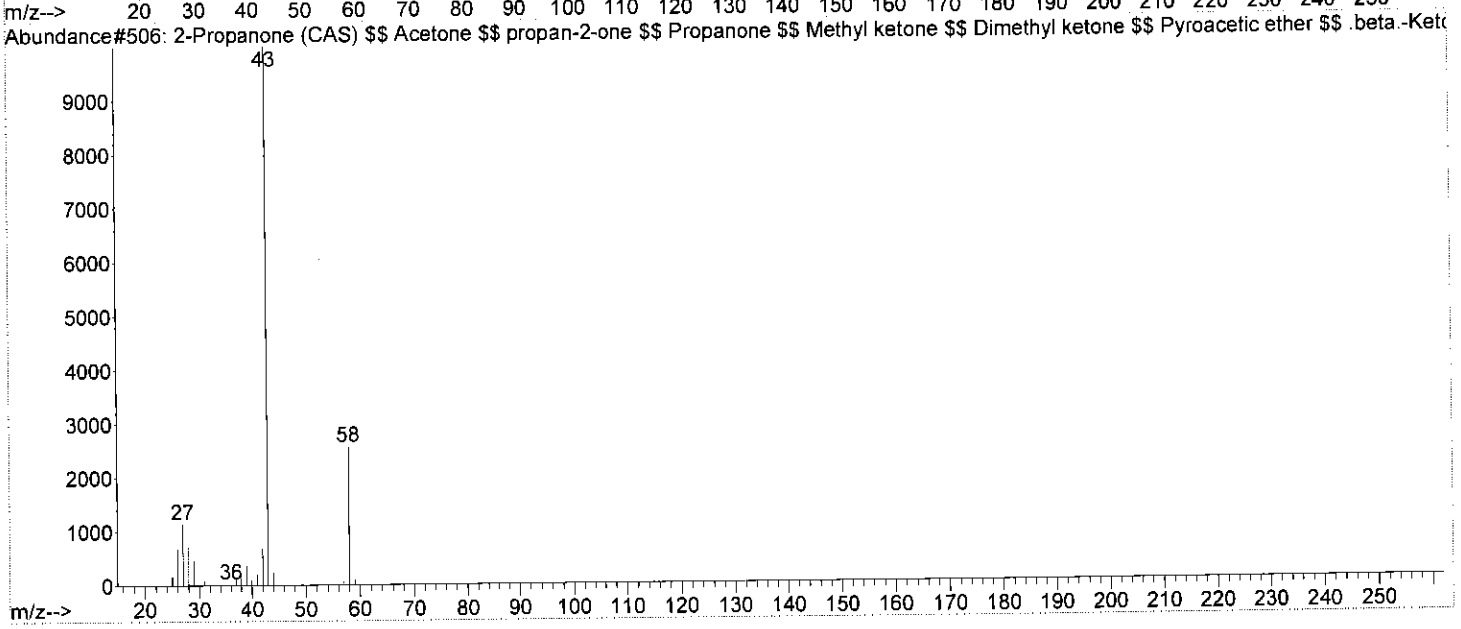
Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090320.D
Acq On : 11 Jul 2018 3:37 am
Operator : NIVA
Sample : 2893354
Misc : RUN200915
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 11 16:39:05 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

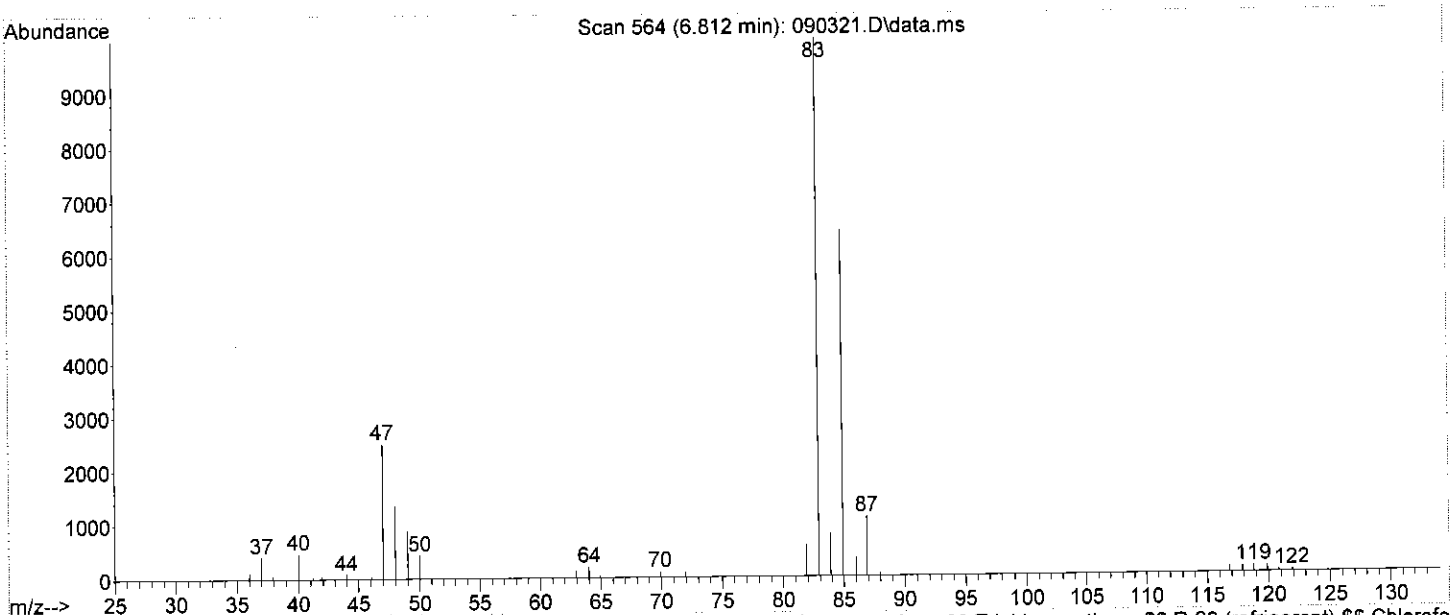


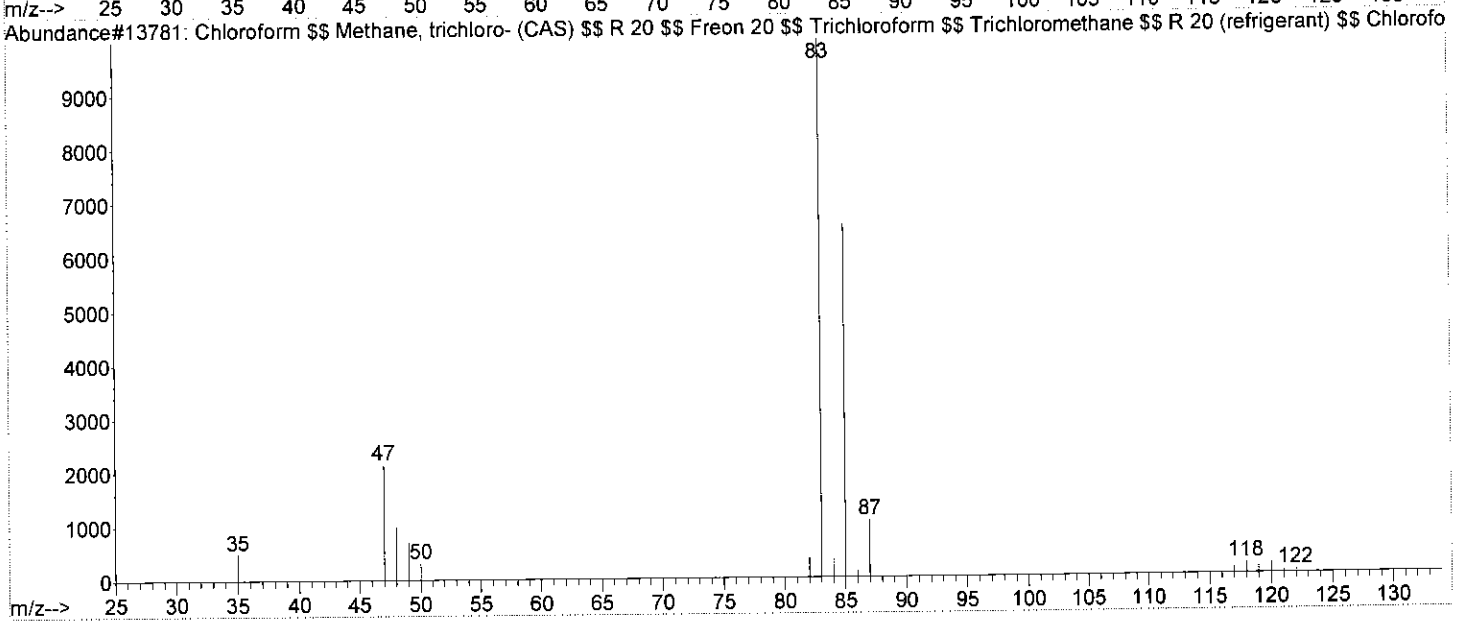
Library Searched : C:\Database\WILEY275.L
Quality : 80
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



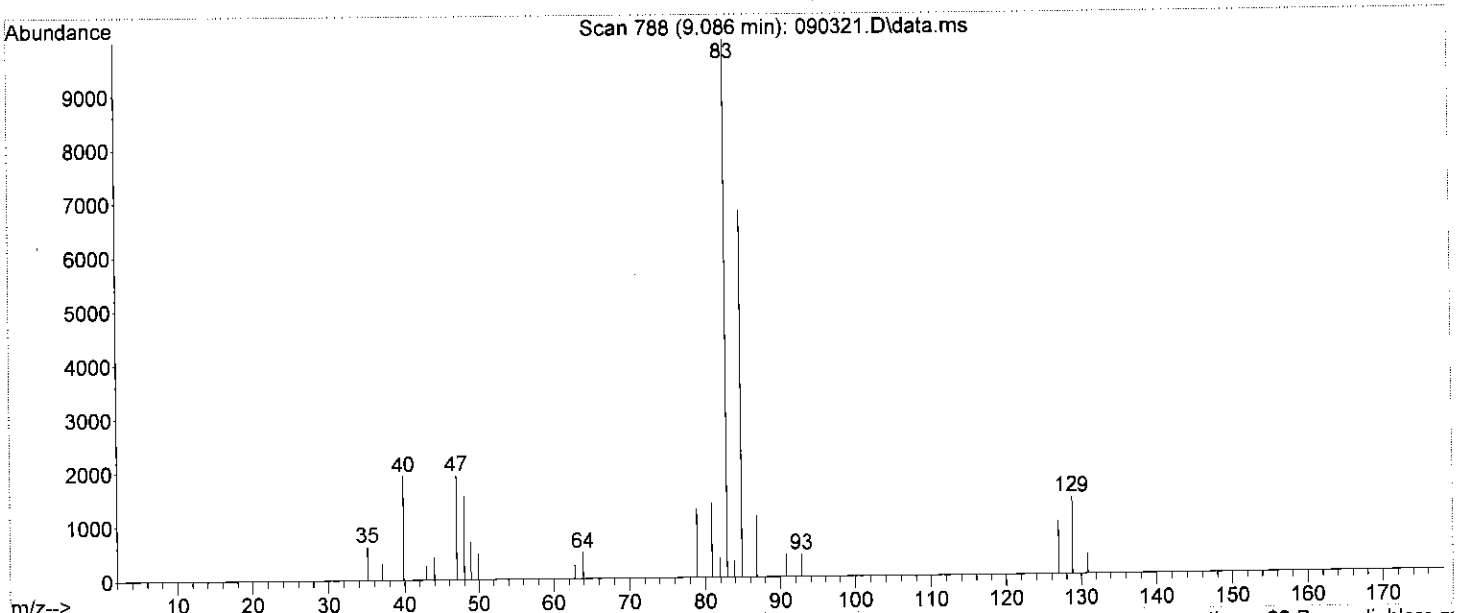


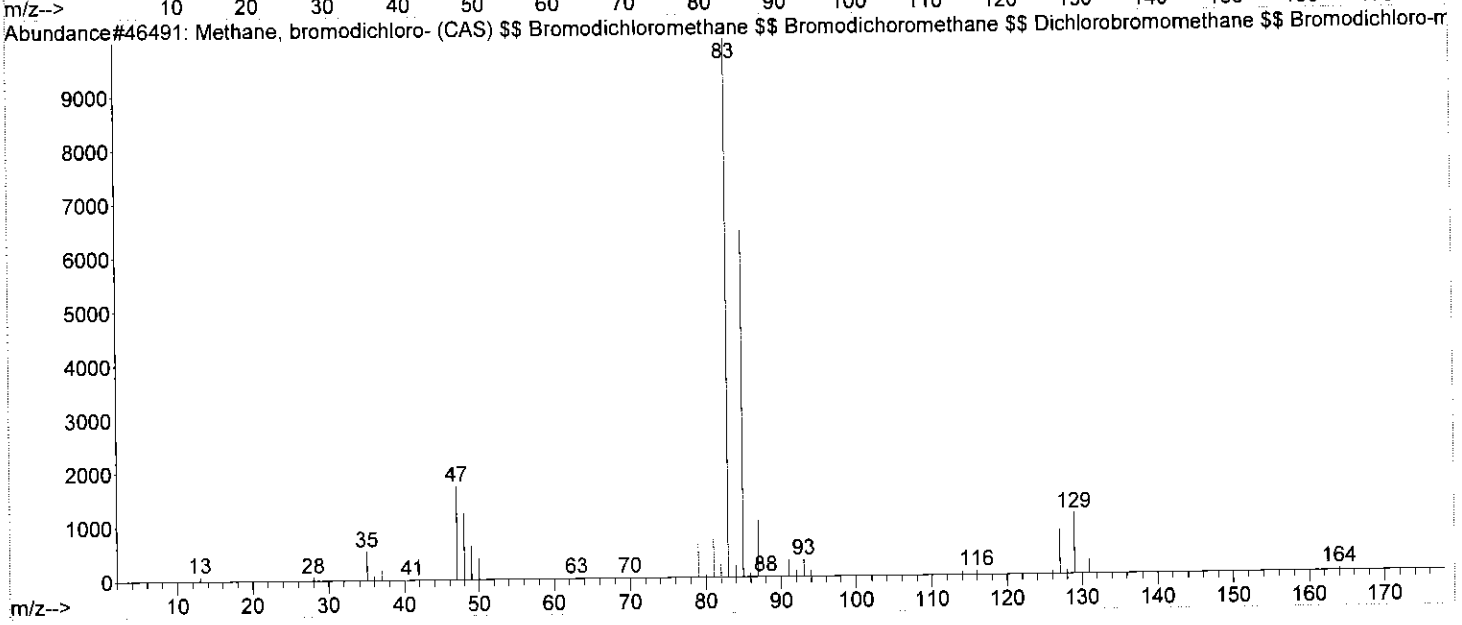
Library Searched : C:\Database\WILEY275.L
Quality : 83
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



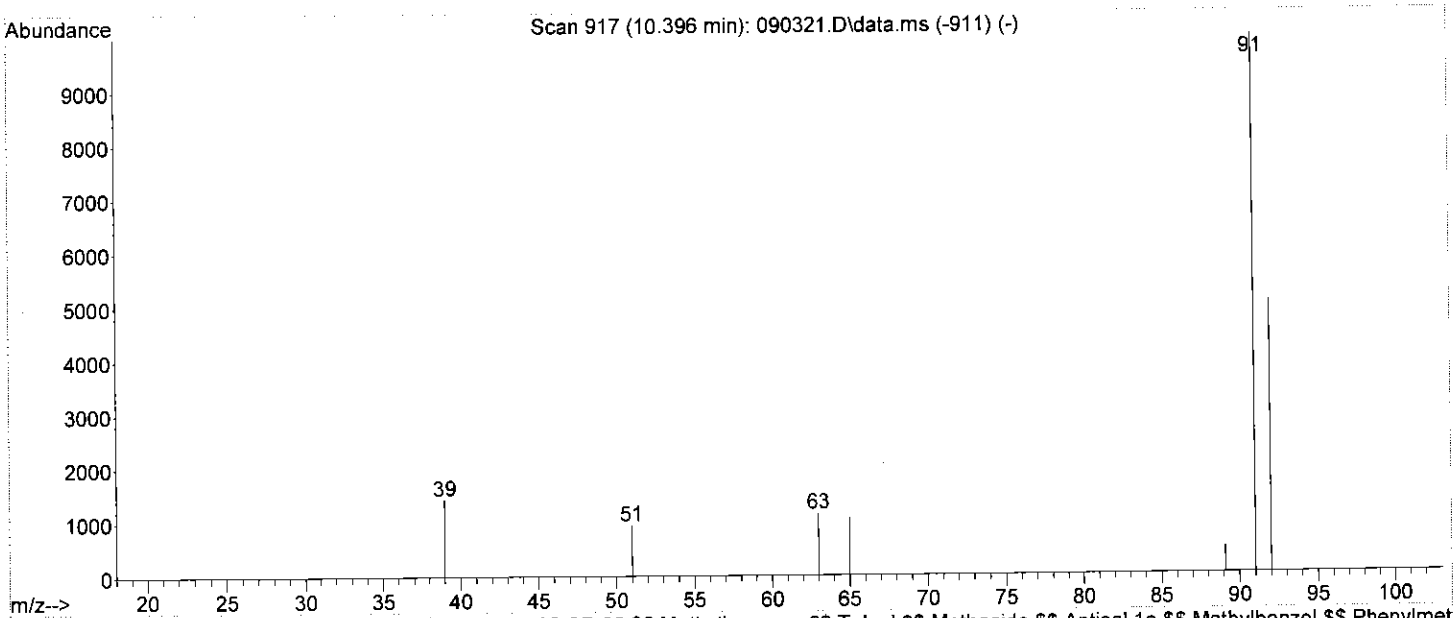


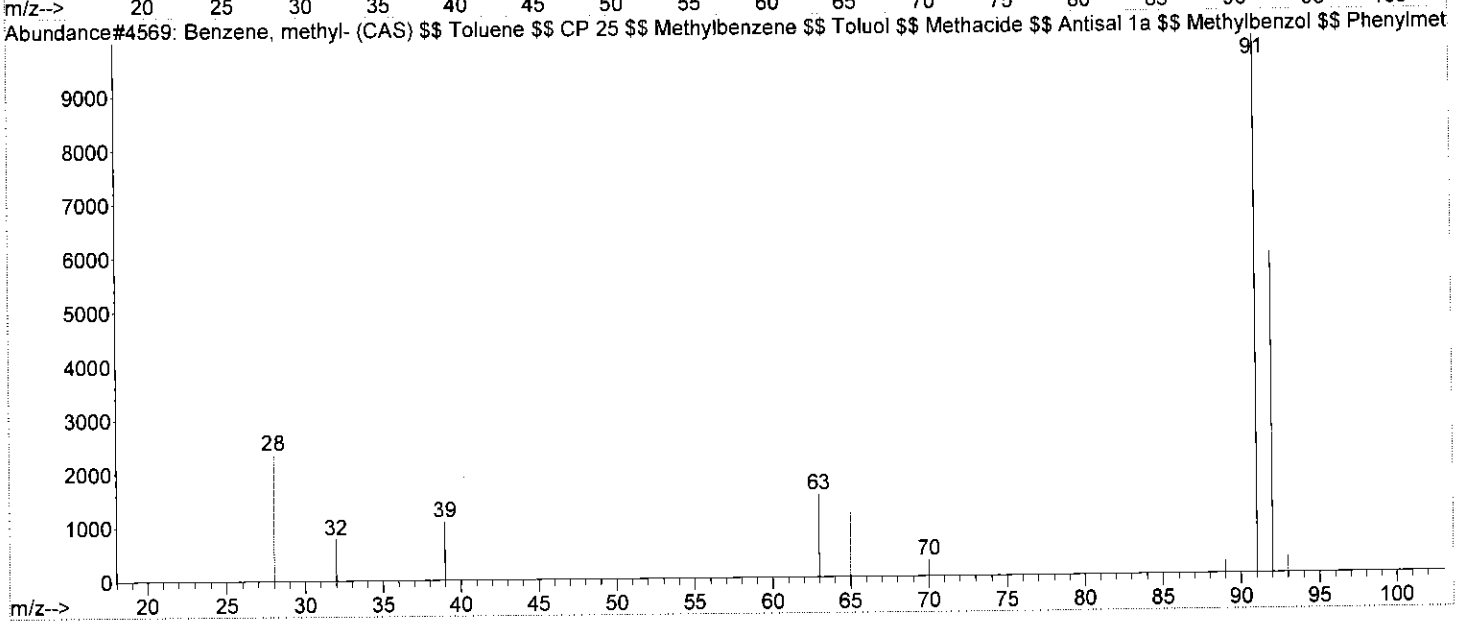
Library Searched : C:\Database\WILEY275.L
Quality : 90
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichlorobromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobromomethane $$ Monobromodichloromethane



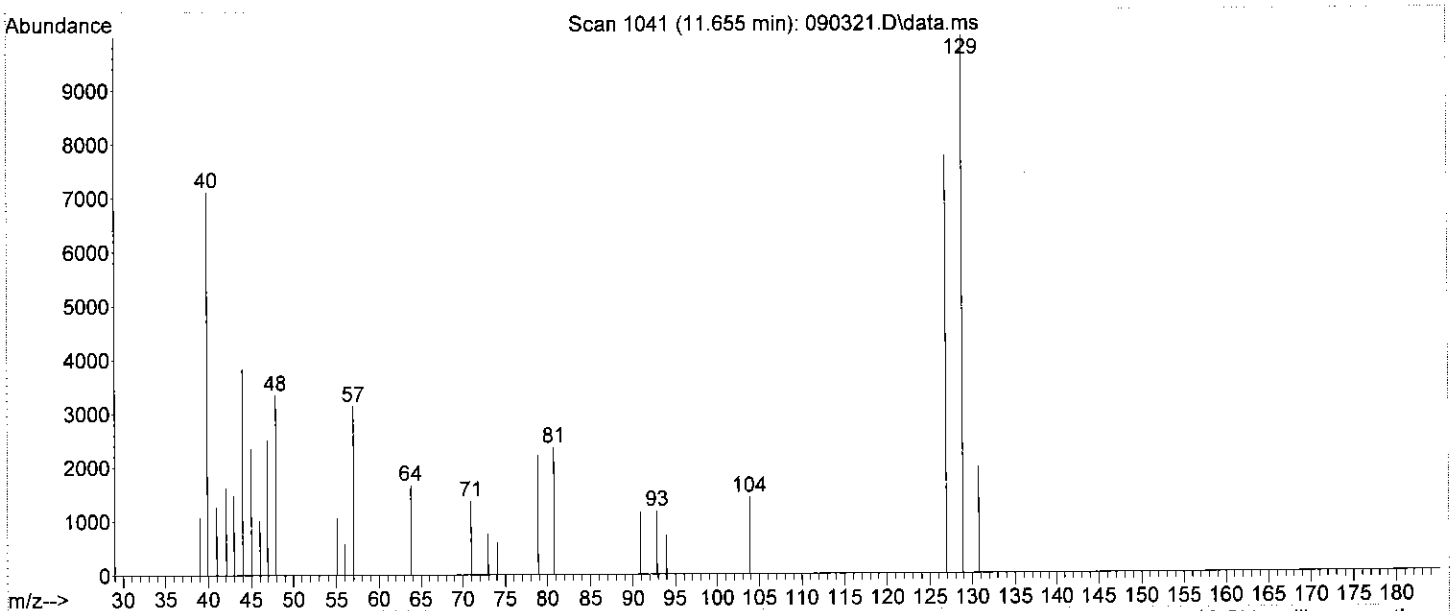


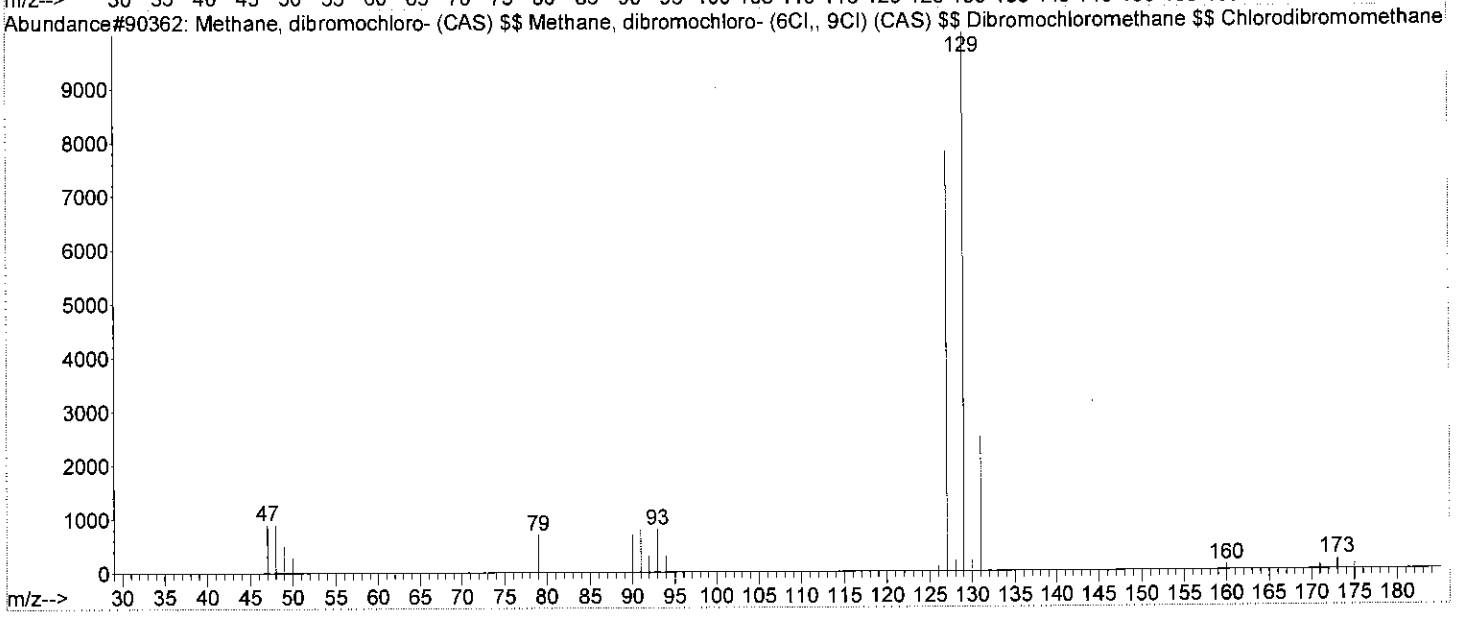
Library Searched : C:\Database\WILEY275.L
Quality : 74
ID : Benzene, methyl- (CAS) $$ Toluene $$ CP 25 $$ Methylbenzene $$ Toluol $$ Methacide $$ Antisal 1a $$ Methylbenzol $$ Phenylmethane $$ METHYLBENZENE(TOLUENE) $$ Benzene, methyl $$ Methane, phenyl- $$ NCI-C07272 $$ Tolueen $$ Toluen $$ Toluolo $$ Rcra waste





Library Searched : C:\Database\WILEY275.L
Quality : 50
ID : Methane, dibromochloro- (CAS) $$ Methane, dibromochloro- (6CI,, 9CI) (CAS) $$ Dibromochloromethane $$ Chlorodibromomethane $$ Monochlorodibromomethane $$ Dibromomonochloromethane $$ CHClBr2 $$ Methane, chlorodibromo- $$ Cdbm $$ NCI-C55254





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090321.D
Acq On : 11 Jul 2018 4:03 am
Operator : NIVA
Sample : 2893355
Misc : RUN200915
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jul 11 16:40:51 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.553	168	216259	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.305	114	316395	20.00 µg/L	0.04
48) CHLOROBENZEN-d5-IS	12.985	117	313496	20.00 µg/L	0.04
71) I14-DICLBENZENE-D4	16.995	152	194498	20.00 µg/L	-0.13
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	177401	24.99 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 124.95%#		
39) STOLUENE-D8	10.305	98	444886	22.38 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.90%		
59) S4BRFLUOROBENZENE	15.238	95	179596	22.35 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.75%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.615	94	631	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.117	43	225577	272.36 µg/L	97
10) 11-DICHLOROETHENE	4.691	61	1222	N.D.	
11) IODOMETHANE	0.000		0	N.D. d	
12) CARBON DISULFIDE	0.000		0	N.D. d	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D. d	
15) TRANS12DICLETHENE	5.178	96	203	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D. d	
18) 2-BUTANONE	0.000		0	N.D. d	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.812	83	67790	10.74 µg/L #	100
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.975	117	174	N.D.	
30) BENZENE	7.564	78	65	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	9.086	63	232	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	9.086	83	15537	3.24 µg/L	99
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	10.964	43	1609	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.396	91	8097	0.68 µg/L	87
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D. d	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT R

a Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
a File : 090321.D
On : 11 Jul 2018 4:03 am
rator : NIVA
ple : 2893355
c : RUN200915
Vial : 29 Sample Multiplier: 1

nt Time: Jul 11 16:40:51 2018
nt Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
nt Title : Analysis of VOC'S by EPA 8260B
st Update : Tue Jun 05 15:30:24 2018
ponse via : Initial Calibration
tName : V7-AG7890MS

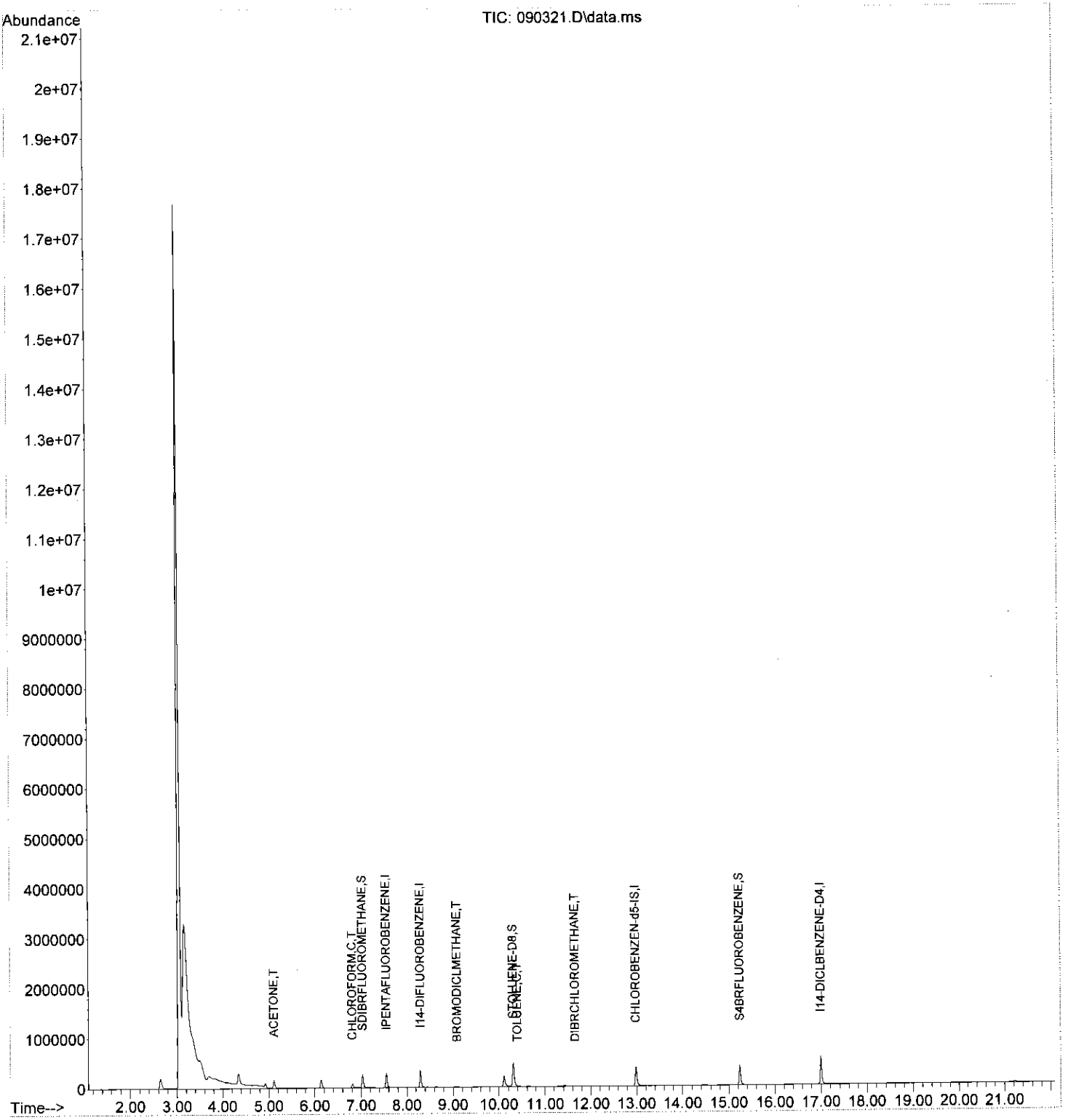
Compound	R.T.	QIon	Response	Conc U	Dev(Min)
45) DIBRCHLOROMETHANE	11.655	129	4835	1.24	97
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.995	91	633	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.995	91	786	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	14.325	173	133	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	633	N.D.	
63) N-PROPYLBENZENE	15.238	91	457	N.D.	
64) 2-CHLOROTOLUENE	15.736	91	67	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	16.741	119	495	N.D.	
73) 14-DICHLOROBENZENE	17.005	146	133	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.441	91	252	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	19.634	225	125	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

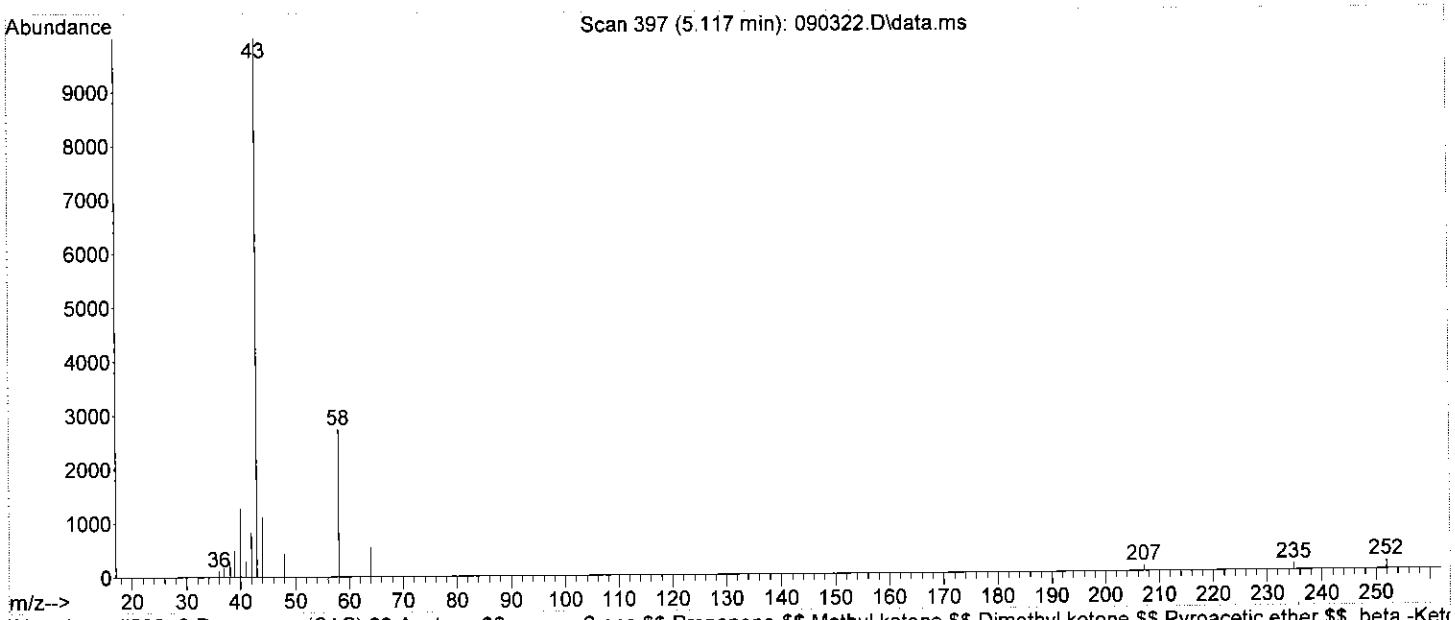
Quantitation Report (QT Reviewed)

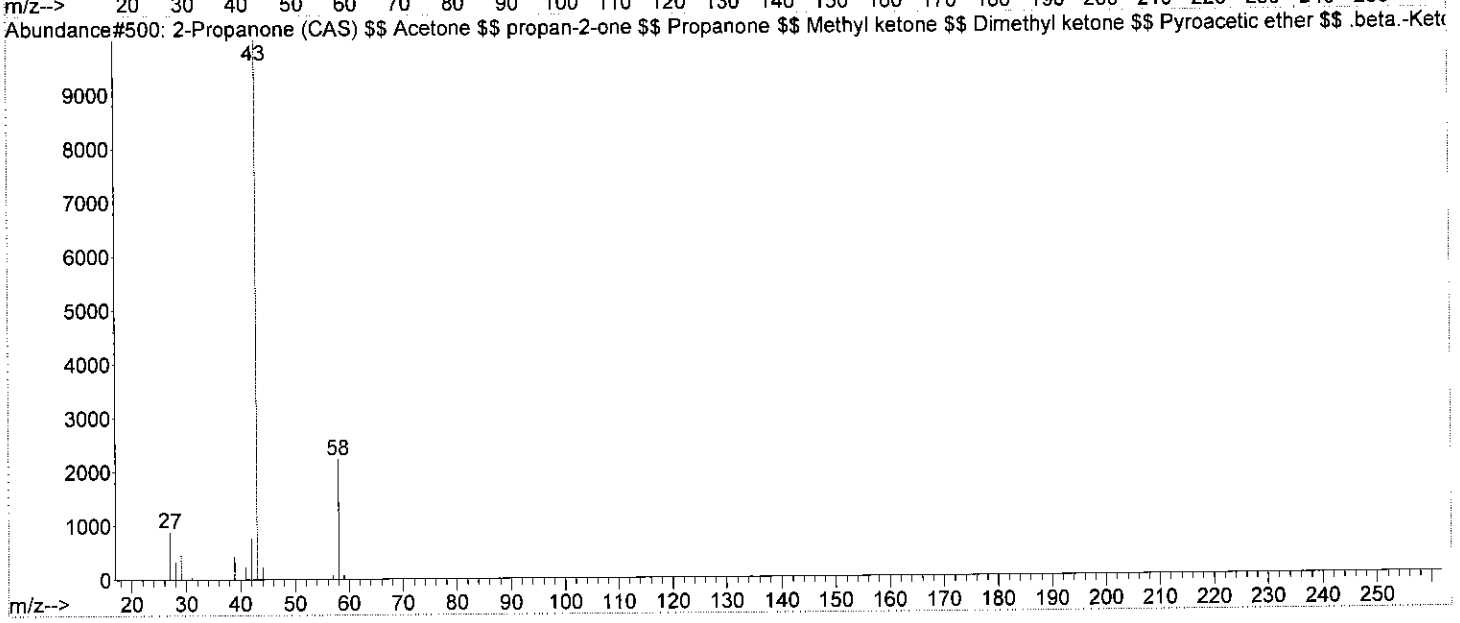
Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090321.D
Acq On : 11 Jul 2018 4:03 am
Operator : NIVA
Sample : 2893355
Misc : RUN200915
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jul 11 16:40:51 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

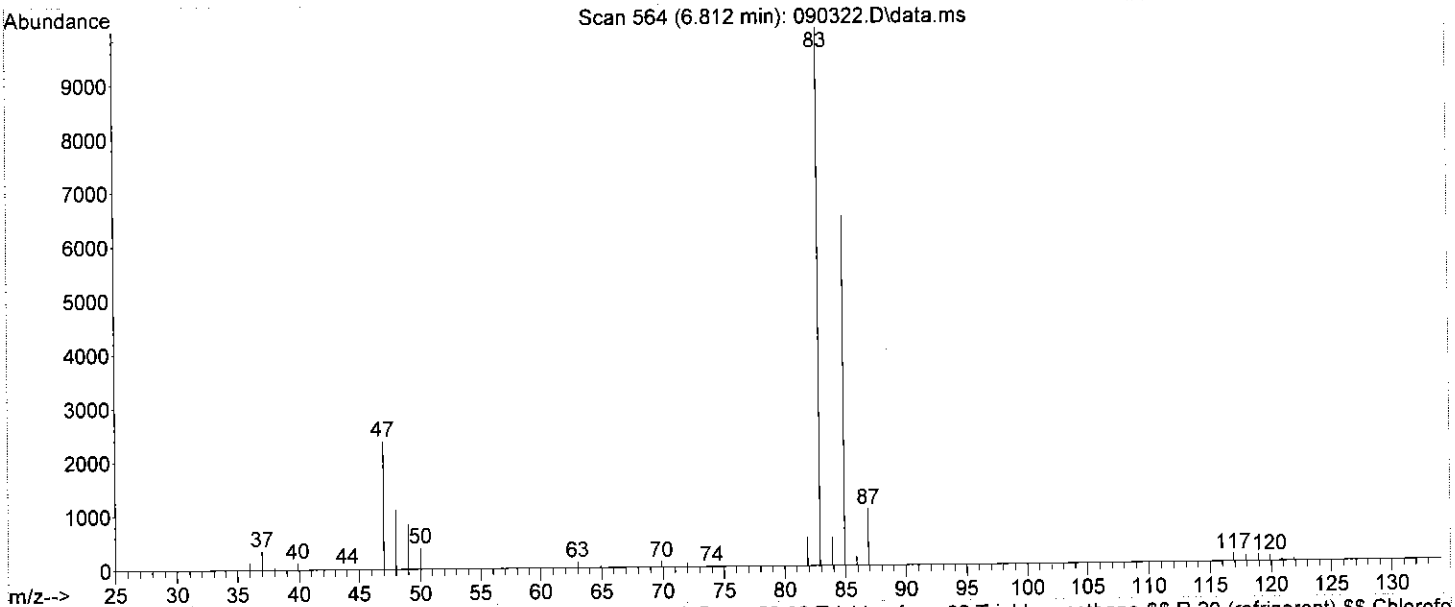


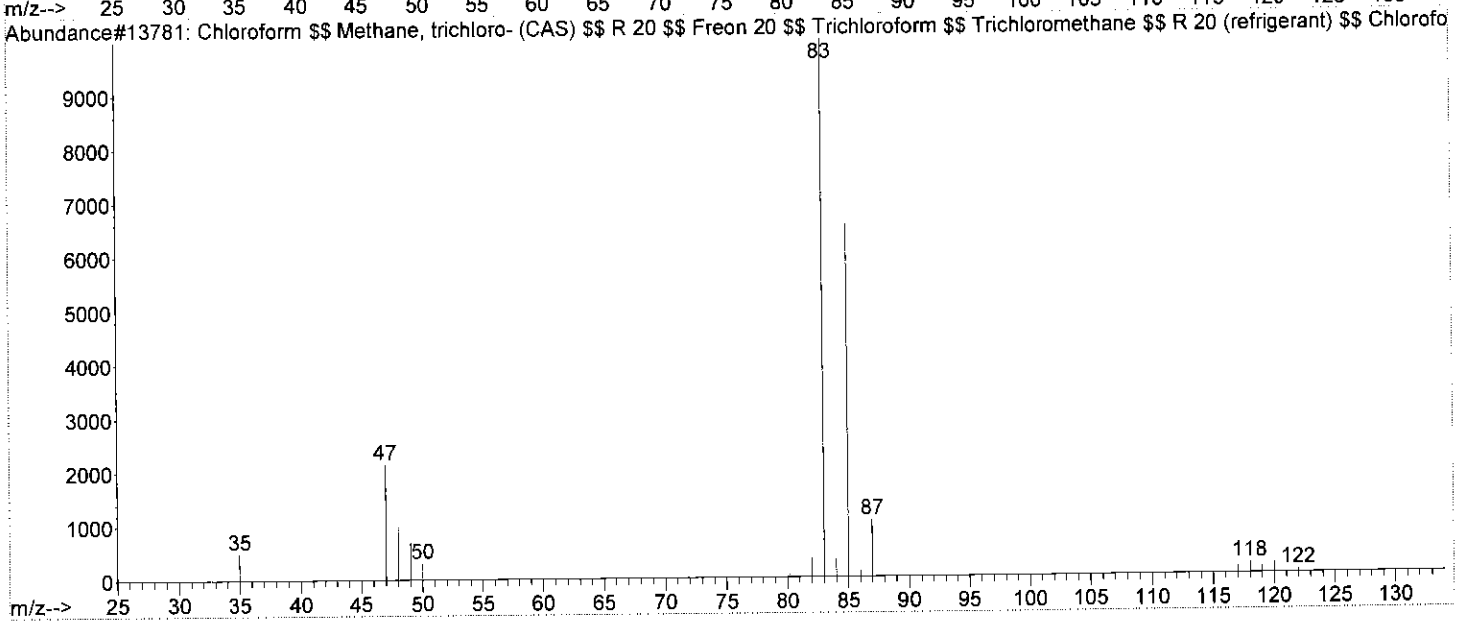
Library Searched : C:\Database\WILEY275.L
Quality : 9
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



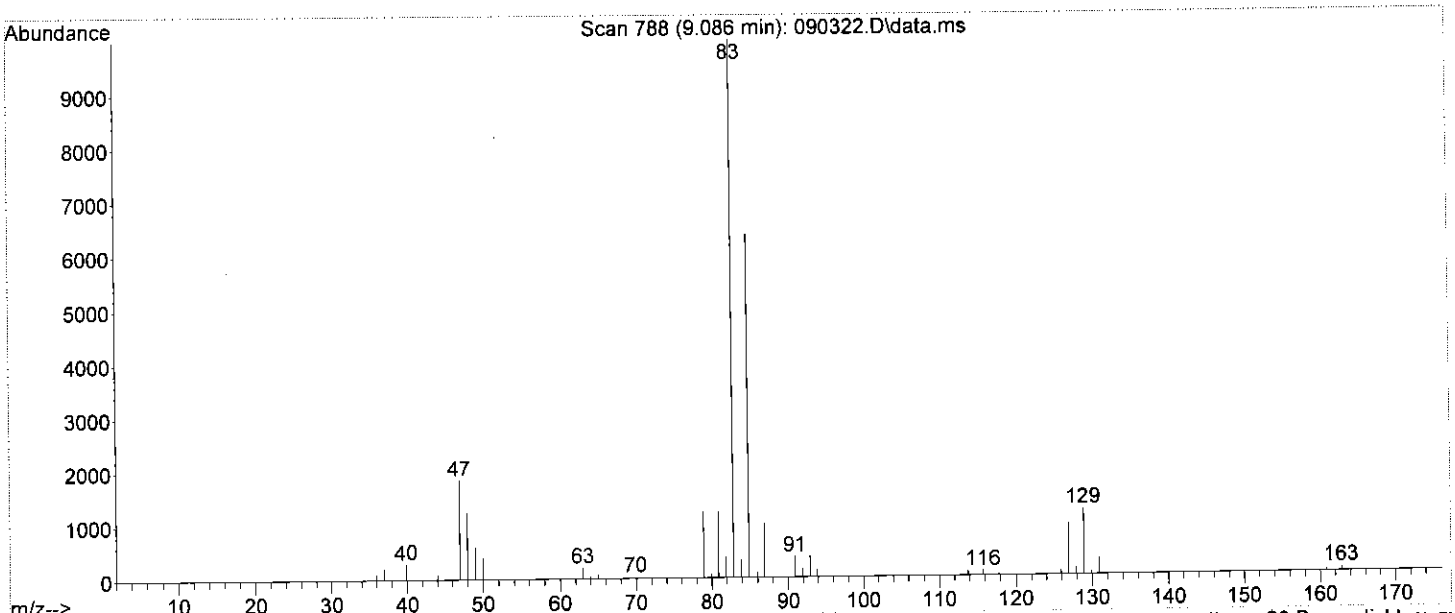


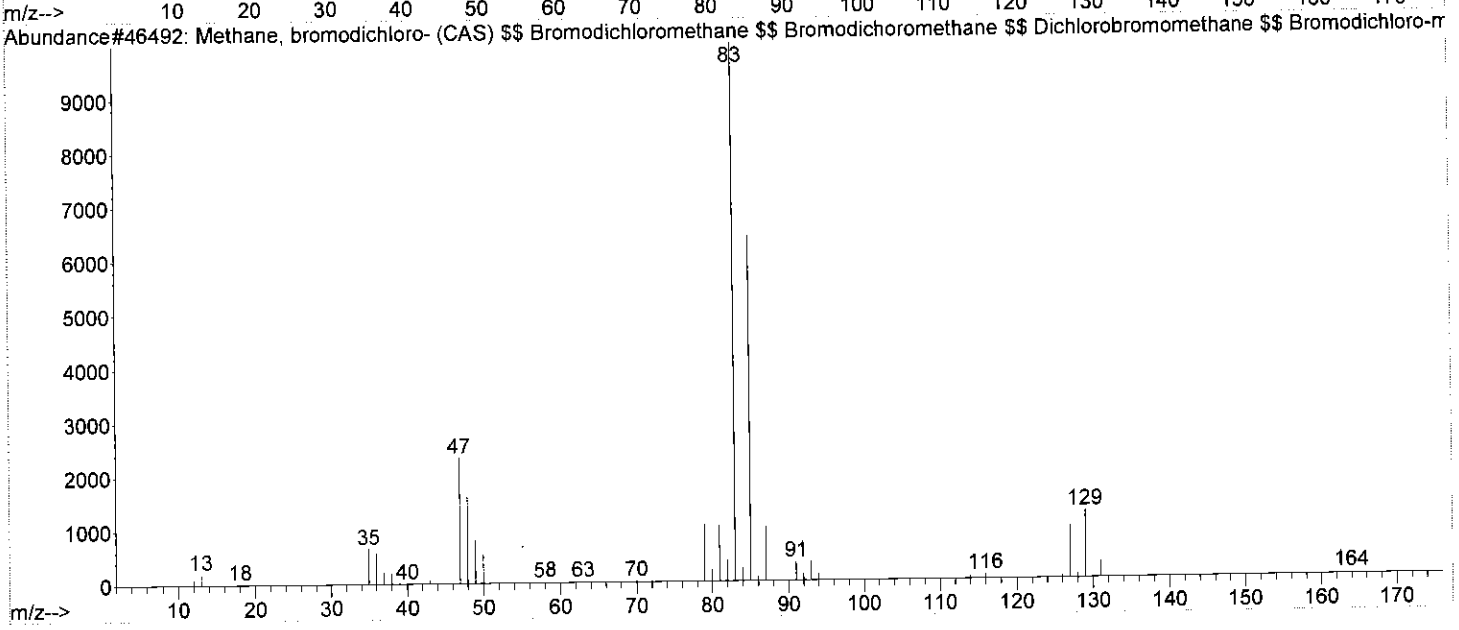
Library Searched : C:\Database\WILEY275.L
Quality : 90
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



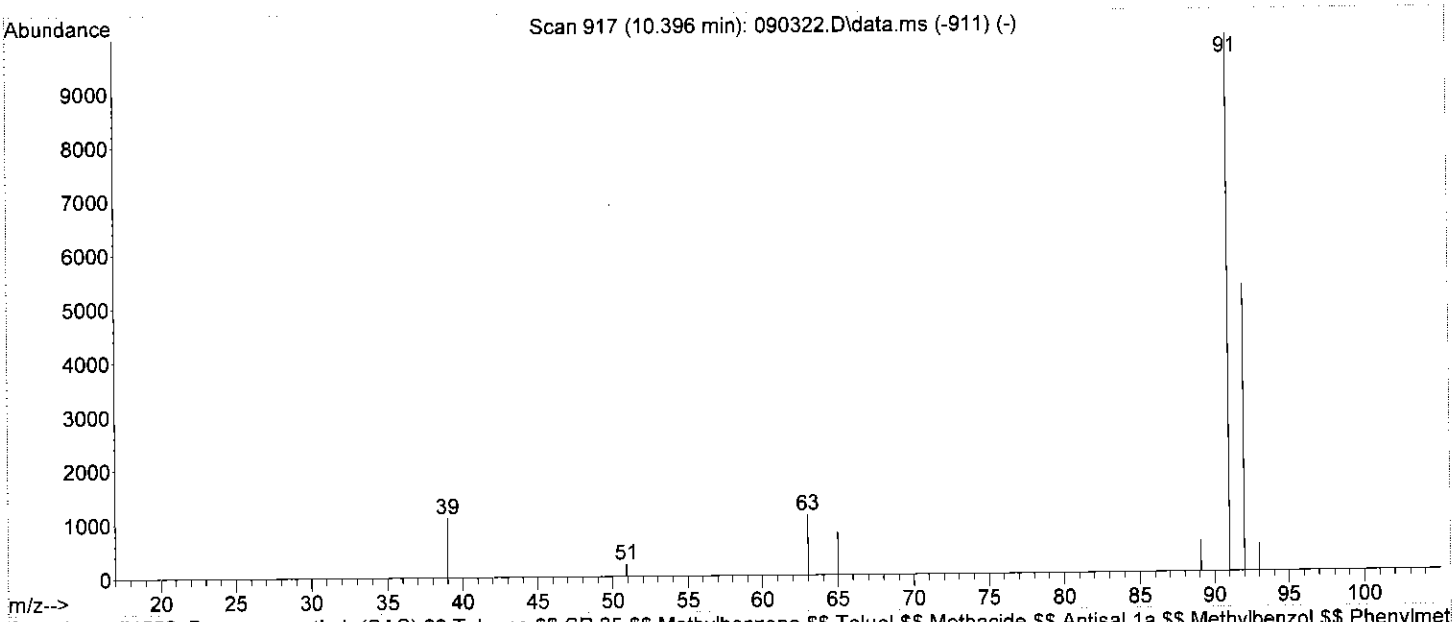


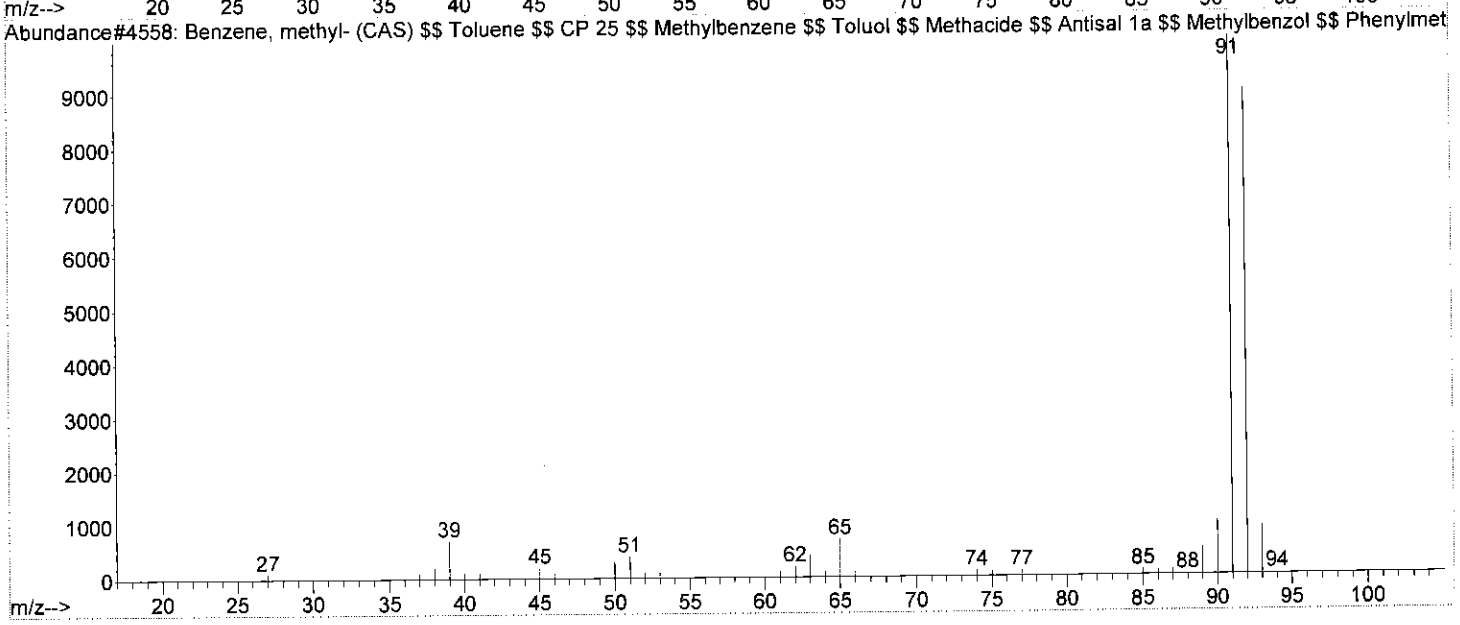
Library Searched : C:\Database\WILEY275.L
Quality : 91
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichlorobromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobromomethane $$ Monobromodichloromethane





Library Searched : C:\Database\WILEY275.L
Quality : 83
ID : Benzene, methyl- (CAS) $$ Toluene $$ CP 25 $$ Methylbenzene $$ Toluol $$ Metha cide $$ Antisal la $$ Methylbenzol $$ Phenylmethane $$ METHYLBENZENE(TOLUENE) $$ Benzene, methyl $$ Methane, phenyl- $$ NCI-C07272 $$ Tolueen $$ Toluen $$ T oluolo $$ Rcra waste





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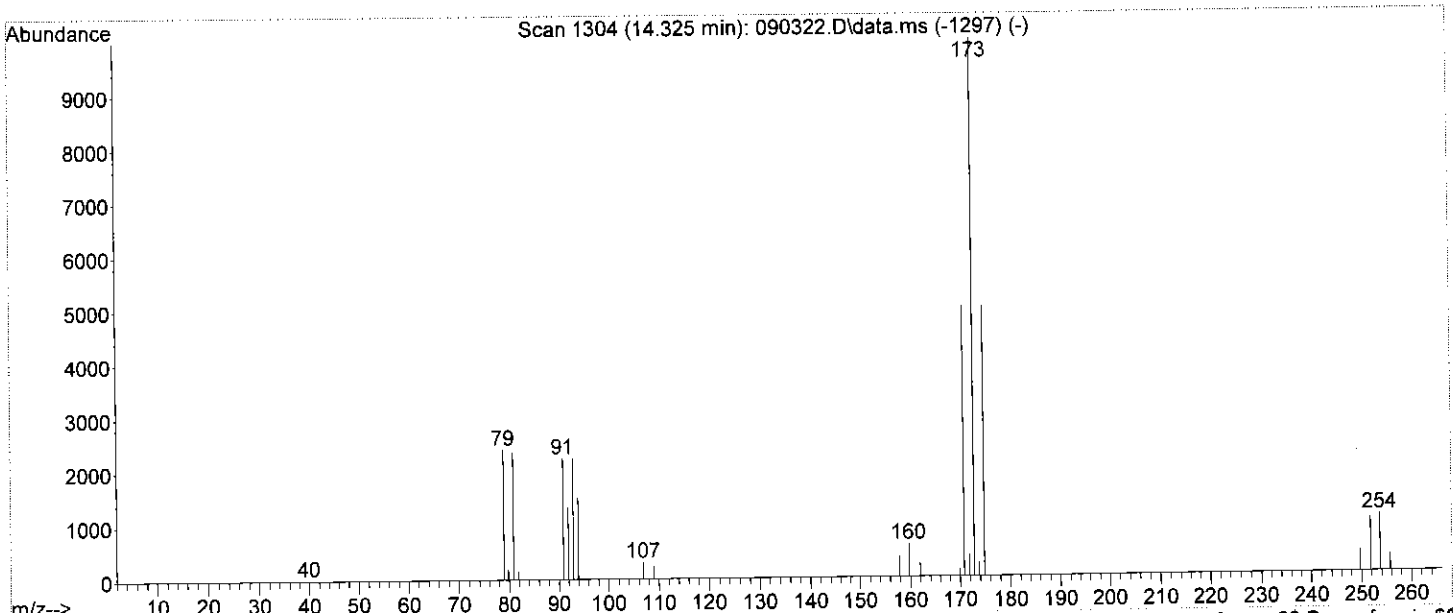
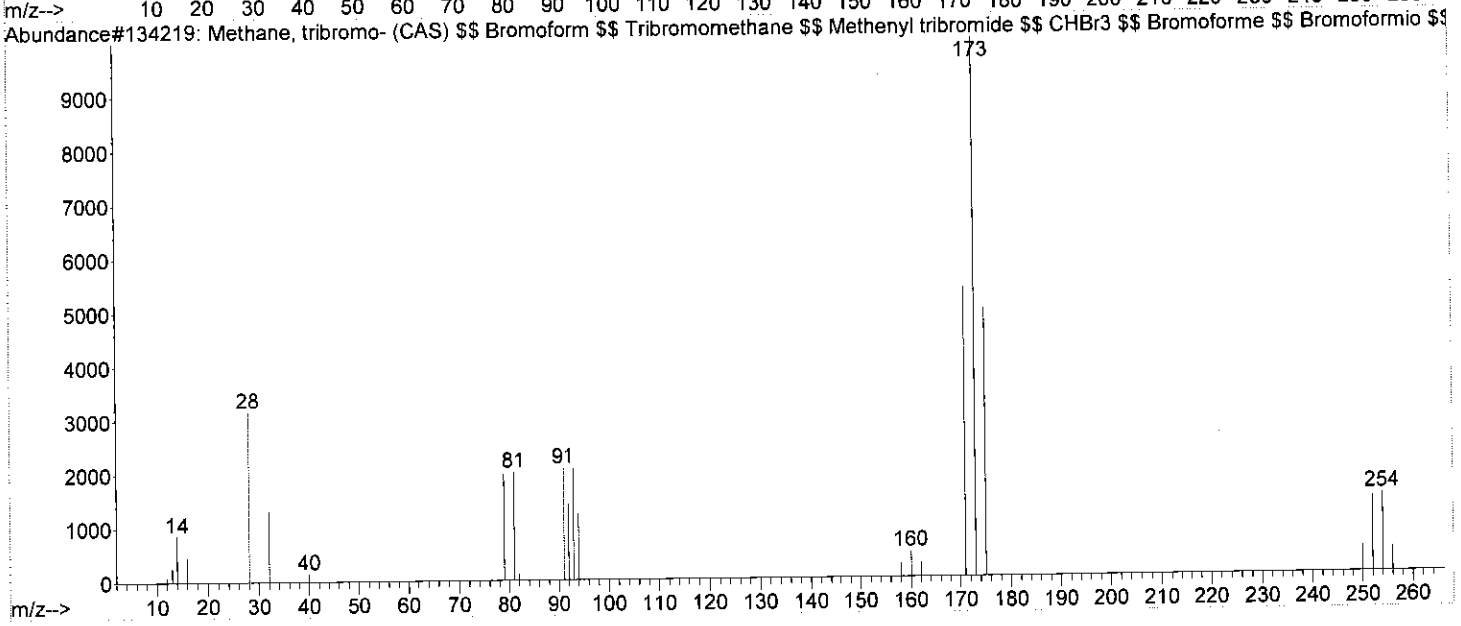
Quality : 96
ID : Methane, tribromo- (CAS) $$ Bromoform $$ Tribromomethane $$ Methenyl tribromide $$ CHBr3 $$ Bromoforme $$ Bromoformio $$ NCI-C55130 $$ Tribrommethaan $$ Tribrommethan $$ Tribromometan $$ Rcra waste number U225 $$ UN 2515





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090322.D
Acq On : 11 Jul 2018 4:29 am
Operator : NIVA
Sample : 2896631
Misc : RUN200908
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jul 11 16:43:04 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	197518	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	8.295	114	298639	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	281436	20.00 µg/L	0.04
71) I14-DICLBENZENE-D4	17.005	152	165589	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	161236	24.06 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 120.30%#		
39) STOLUENE-D8	10.315	98	375047	19.99 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.95%		
59) S4BRFLUOROBENZENE	15.249	95	144311	20.00 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.00%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.615	94	258	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.117	43	24903	32.92 µg/L	97
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.650	142	252	N.D.	
12) CARBON DISULFIDE	4.548	76	2111	N.D.	
13) ACRYLONITRILE	5.960	53	268	N.D.	
14) DICHLOROMETHANE	5.076	84	737	N.D.	
15) TRANS12DICLETHENE	0.000		0	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	0.000		0	N.D. d	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.812	83	221463	38.42 µg/L	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	7.026	117	63	N.D.	
30) BENZENE	7.553	78	547	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D. d	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	9.086	83	108745	24.01 µg/L	100
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.396	91	6181	0.55 µg/L	91
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090322.D
Acq On : 11 Jul 2018 4:29 am
Operator : NIVA
Sample : 2896631
Misc : RUN200908
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jul 11 16:43:04 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

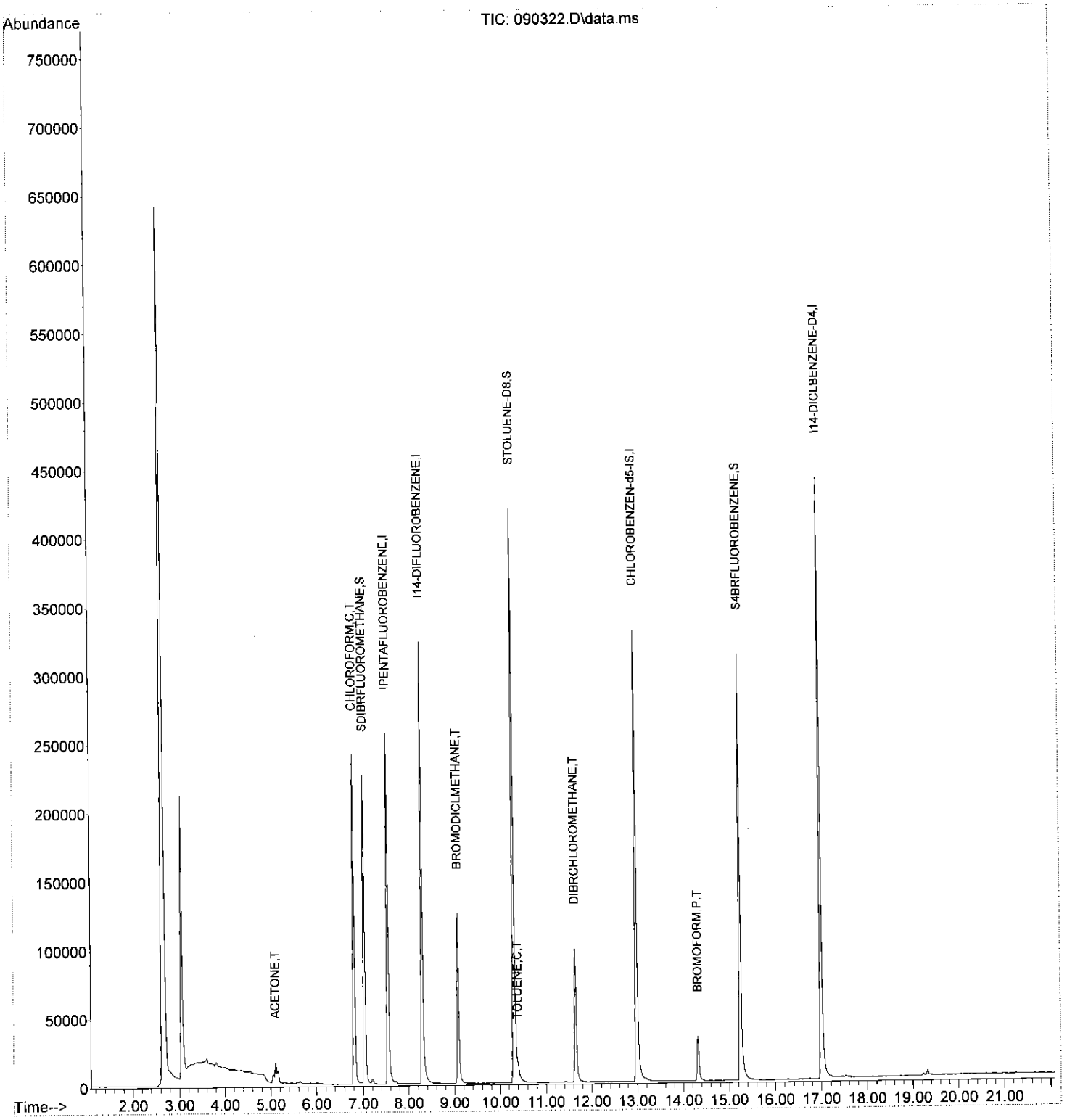
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	80210	21.75 µg/L	99
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	512	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	512	N.D.	
53) MP-XYLENE	13.320	91	73	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	14.325	173	27017	10.91 µg/L	98
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	727	N.D.	
63) N-PROPYLBENZENE	15.249	91	299	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	16.741	119	772	N.D.	
73) 14-DICHLOROBENZENE	17.025	146	85	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.360	91	618	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

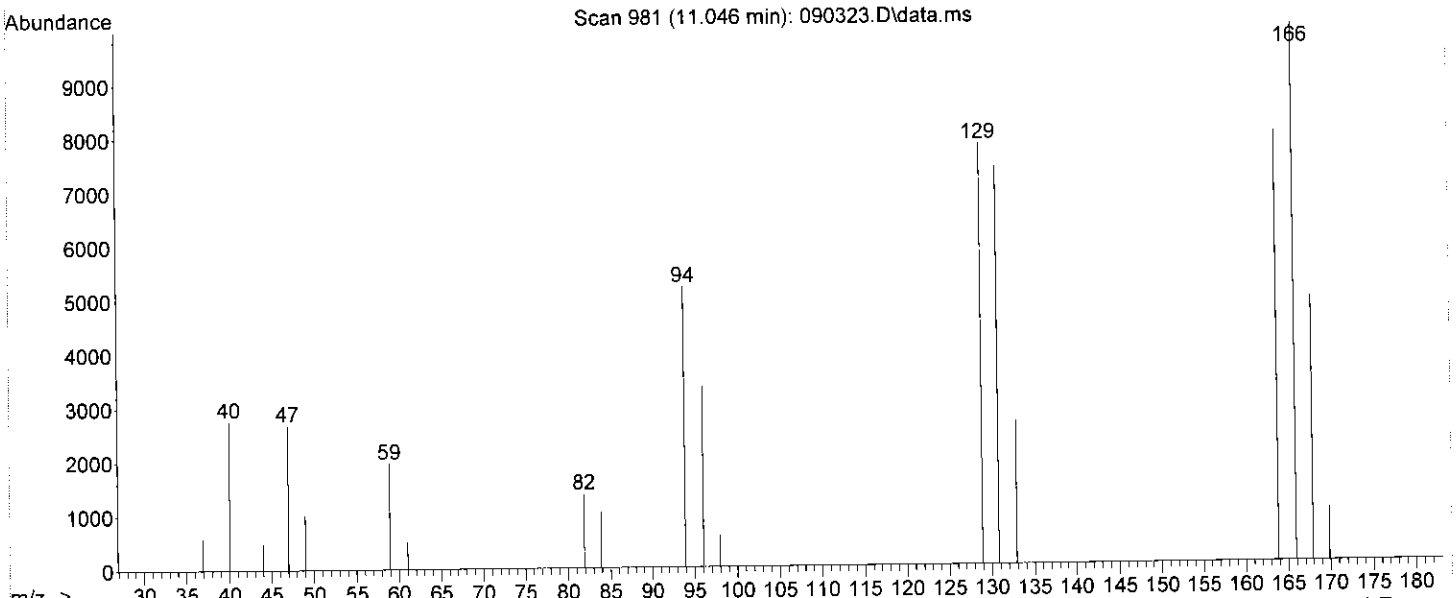
Quantitation Report (QT Reviewed)

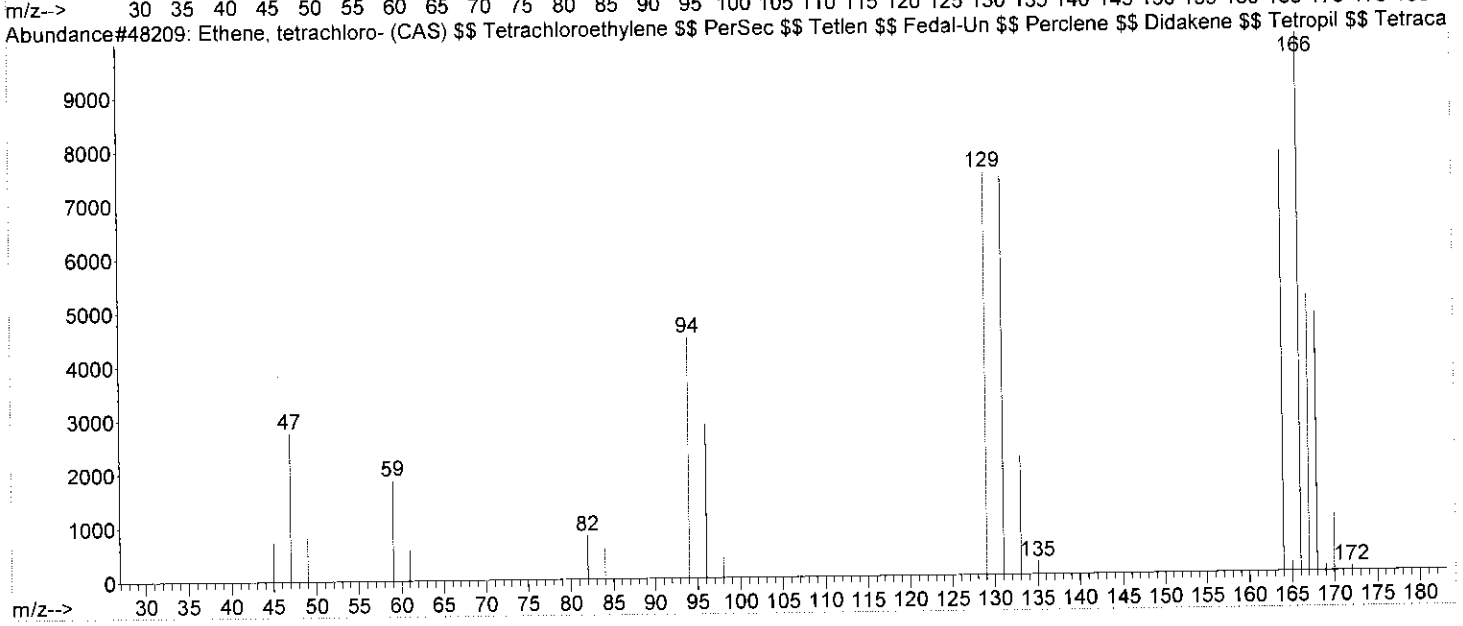
Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090322.D
Acq On : 11 Jul 2018 4:29 am
Operator : NIVA
Sample : 2896631
Misc : RUN200908
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jul 11 16:43:04 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Library Searched : C:\Database\WILEY275.L
Quality : 99
ID : Ethene, tetrachloro- (CAS) $$ Tetrachloroethylene $$ PerSec $$ Tetlen $$ Fedal -Un $$ Perclene $$ Didakene $$ Tetropil $$ Tetracap $$ Antisal 1 $$ Tetraguer $$ Tetraleno $$ Ankilostin $$ Perchlorethylene $$ Perchloroethylene $$ Tetrach loroethene $$ Tetrach





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090323.D
Acq On : 11 Jul 2018 4:55 am
Operator : NIVA
Sample : 2892615
Misc : RUN200908
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jul 13 09:58:30 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.554	168	195251	20.00	µg/L	0.04
23) I14-DIFLUOROBENZENE	8.295	114	300043	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	278303	20.00	µg/L	0.04
71) I14-DICLBENZENE-D4	17.005	152	158699	20.00	µg/L	-0.12
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.036	111	156358	23.23	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 116.15%			
39) STOLUENE-D8	10.305	98	381186	20.22	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.10%			
59) S4BRFLUOROBENZENE	15.249	95	137122	19.22	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.10%			

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	0.000		0	N.D. d
4) VINYL CHLORIDE	0.000		0	N.D.
5) BROMOMETHANE	3.605	94	144	N.D.
6) CHLOROETHANE	0.000		0	N.D. d
7) TRICLFLUOROMETHANE	0.000		0	N.D. d
8) ACROLEIN	0.000		0	N.D.
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	4.366	61	142	N.D.
11) IODOMETHANE	0.000		0	N.D.
12) CARBON DISULFIDE	4.549	76	1082	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	5.077	84	62	N.D.
15) TRANS12DICLETHENE	5.168	96	66	N.D.
16) 11-DICHLOROETHANE	6.041	63	334	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	7.543	43	274	N.D.
19) CIS12DICHLOROETHENE	6.528	96	951	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	0.000		0	N.D. d
22) BROMOCHLOROMETHANE	6.813	49	434	N.D.
25) TETRAHYDROFURAN	0.000		0	N.D.
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D.
28) 12-DICHLOROETHANE	0.000		0	N.D.
29) CARBONTETRACHLORIDE	7.026	117	688	N.D.
30) BENZENE	0.000		0	N.D.
31) TRICHLOROETHENE	8.305	132	1083	N.D.
32) 12-DICHLOROPROPANE	0.000		0	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	0.000		0	N.D.
35) 2-CLETHYLVINYLETHER	0.000		0	N.D. d
36) EPICHLOROHYDRIN	0.000		0	N.D. d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.
38) CIS13DICLPROPENE	9.960	75	244	N.D.
40) TOLUENE	10.396	91	362	N.D.
41) TRANS13DICLPROPENE	0.000		0	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	0.000		0	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090323.D
Acq On : 11 Jul 2018 4:55 am
Operator : NIVA
Sample : 2892615
Misc : RUN200908
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jul 13 09:58:30 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

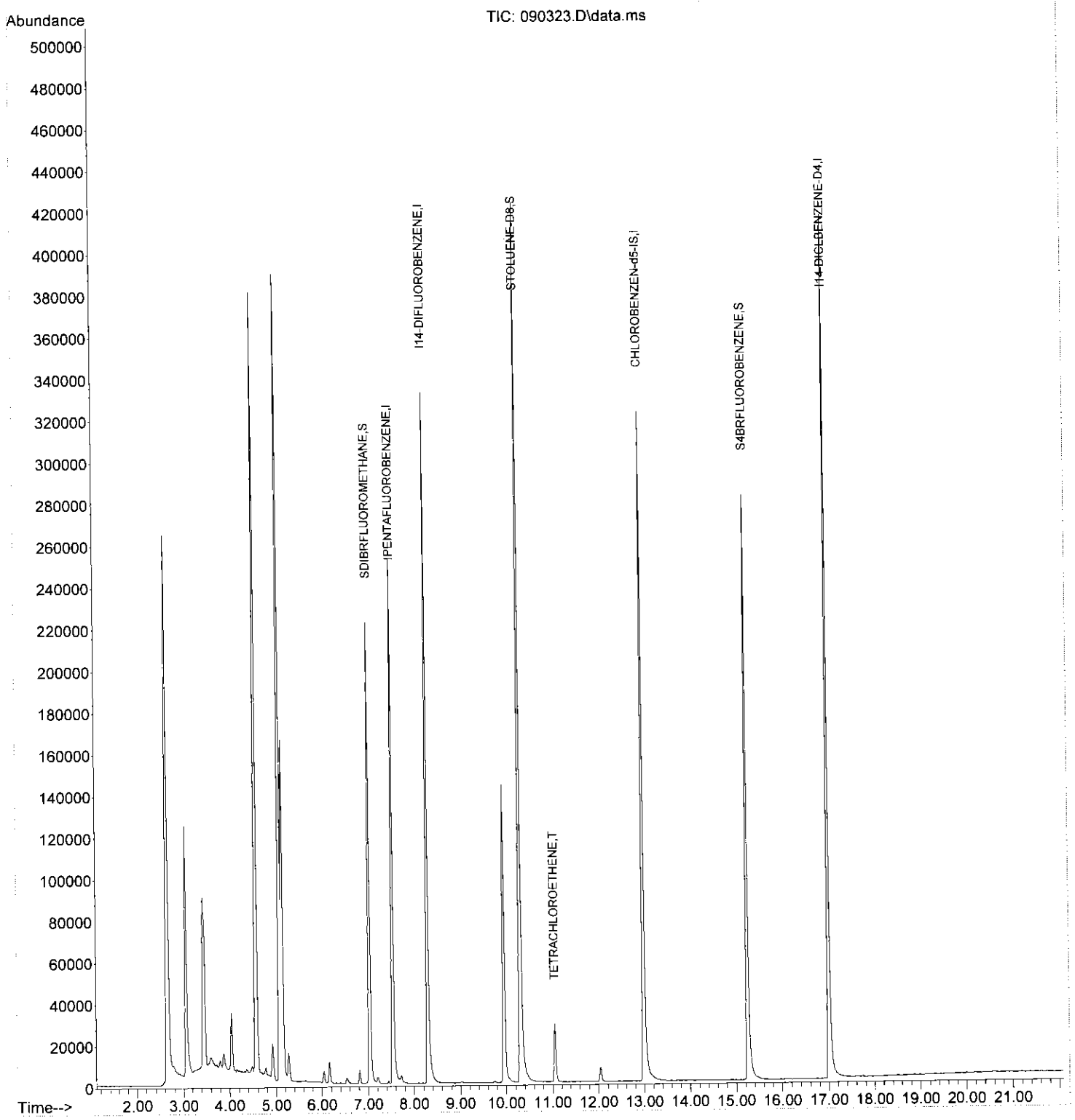
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	11.046	166	12826	3.78 µg/L	93
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.995	91	447	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.995	91	447	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.239	77	551	N.D.	
63) N-PROPYLBENZENE	15.239	91	331	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.015	146	71	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090323.D
Acq On : 11 Jul 2018 4:55 am
Operator : NIVA
Sample : 2892615
Misc : RUN200908
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jul 13 09:58:30 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090324.D
Acq On : 11 Jul 2018 5:21 am
Operator : NIVA
Sample : 2895262
Misc : RUN200908
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jul 13 09:59:18 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.554	168	215545	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.295	114	314112	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	287181	20.00 µg/L	0.04
71) I14-DICLBENZENE-D4	17.005	152	162329	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	166690	23.65 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 118.25%		
39) STOLUENE-D8	10.315	98	393257	19.93 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.65%		
59) S4BRFLUOROBENZENE	15.249	95	143310	19.47 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.35%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D.	d
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.615	94	239	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.660	142	93	N.D.	
12) CARBON DISULFIDE	4.559	76	814	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.077	84	561	N.D.	
15) TRANS12DICLETHENE	0.000		0	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.543	43	298	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.813	83	3035	N.D.	
22) BROMOCHLOROMETHANE	6.813	49	369	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.955	117	436	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D.	d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	0.000		0	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090324.D
Acq On : 11 Jul 2018 5:21 am
Operator : NIVA
Sample : 2895262
Misc : RUN200908
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jul 13 09:59:18 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

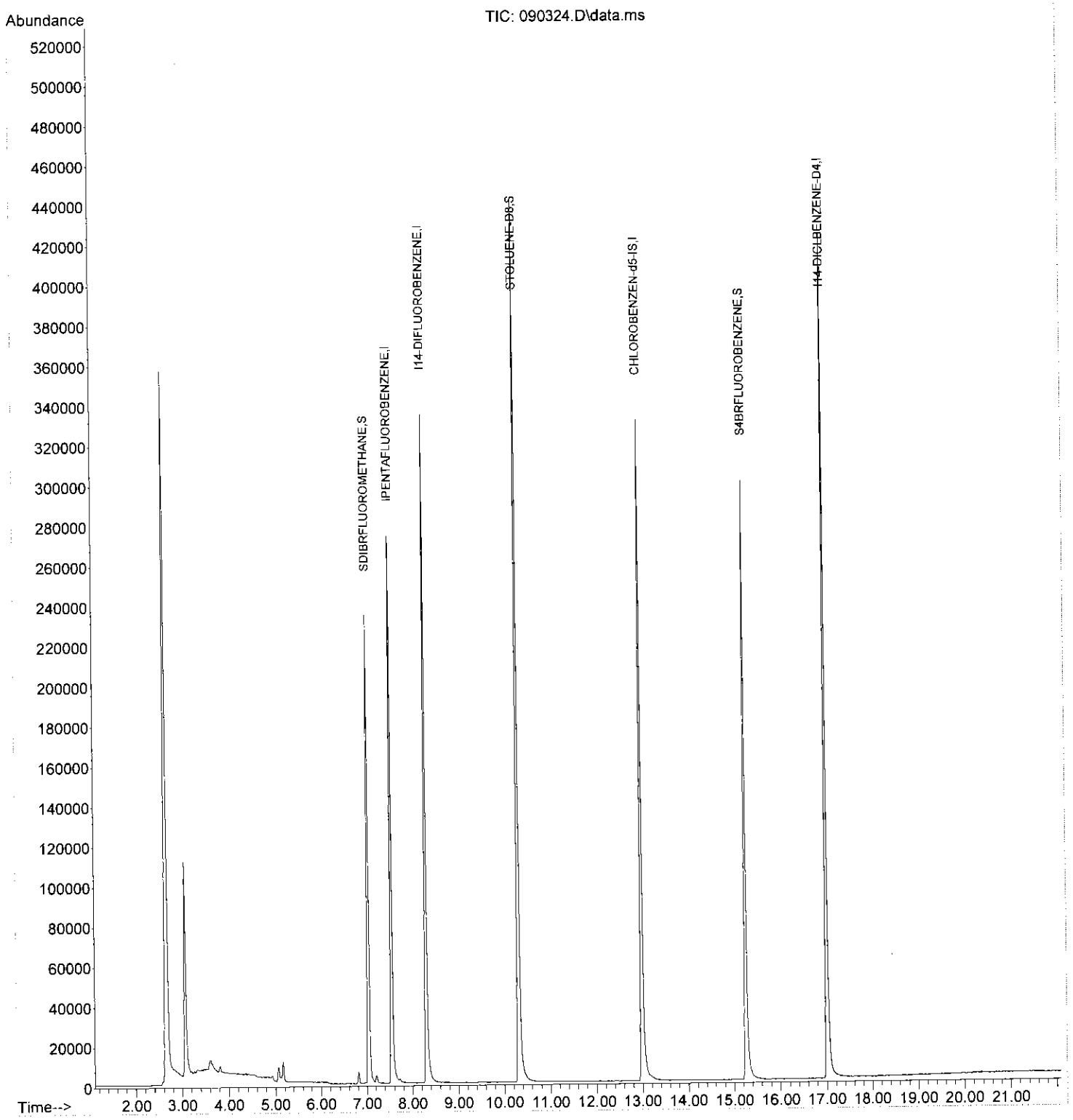
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.995	91	529	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.995	91	529	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	666	N.D.	
63) N-PROPYLBENZENE	15.249	91	286	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090324.D
Acq On : 11 Jul 2018 5:21 am
Operator : NIVA
Sample : 2895262
Misc : RUN200908
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jul 13 09:59:18 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090325.D
Acq On : 11 Jul 2018 5:47 am
Operator : NIVA
Sample : 2895263
Misc : RUN200908
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jul 13 10:00:08 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.554	168	194997	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.305	114	299986	20.00 µg/L	0.04
48) CHLOROBENZEN-d5-IS	12.995	117	272027	20.00 µg/L	0.05
71) I14-DICLBENZENE-D4	17.005	152	154047	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	155707	23.14 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.70%		
39) STOLUENE-D8	10.315	98	372520	19.77 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.85%		
59) S4BRFLUOROBENZENE	15.249	95	132954	19.07 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.35%		

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	0.000		0	N.D. d
4) VINYL CHLORIDE	0.000		0	N.D.
5) BROMOMETHANE	3.615	94	144	N.D.
6) CHLOROETHANE	0.000		0	N.D. d
7) TRICLFLUOROMETHANE	0.000		0	N.D.
8) ACROLEIN	0.000		0	N.D.
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	0.000		0	N.D.
11) IODOMETHANE	0.000		0	N.D.
12) CARBON DISULFIDE	4.559	76	618	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	5.087	84	557	N.D.
15) TRANS12DICLETHENE	5.168	96	153	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	7.543	43	349	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.812	83	850	N.D.
22) BROMOCHLOROMETHANE	6.812	49	72	N.D.
25) TETRAHYDROFURAN	0.000		0	N.D.
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D.
28) 12-DICHLOROETHANE	0.000		0	N.D.
29) CARBONTETRACHLORIDE	6.955	117	349	N.D.
30) BENZENE	0.000		0	N.D.
31) TRICHLOROETHENE	0.000		0	N.D.
32) 12-DICHLOROPROPANE	0.000		0	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	0.000		0	N.D.
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.
36) EPICHLOROHYDRIN	0.000		0	N.D. d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.
40) TOLUENE	0.000		0	N.D.
41) TRANS13DICLPROPENE	0.000		0	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	0.000		0	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090325.D
Acq On : 11 Jul 2018 5:47 am
Operator : NIVA
Sample : 2895263
Misc : RUN200908
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jul 13 10:00:08 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

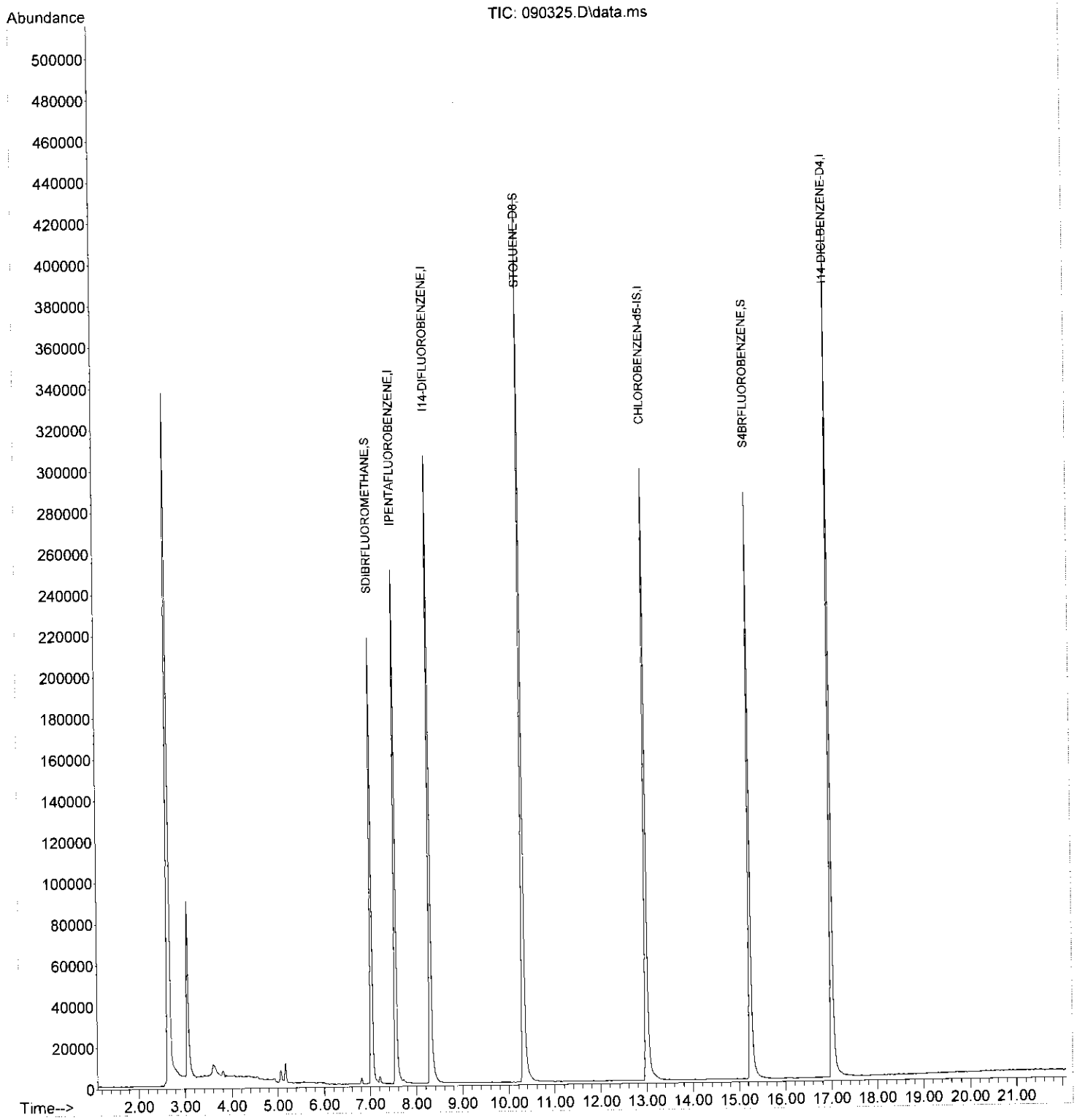
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	455	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	455	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	749	N.D.	
63) N-PROPYLBENZENE	15.249	91	403	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

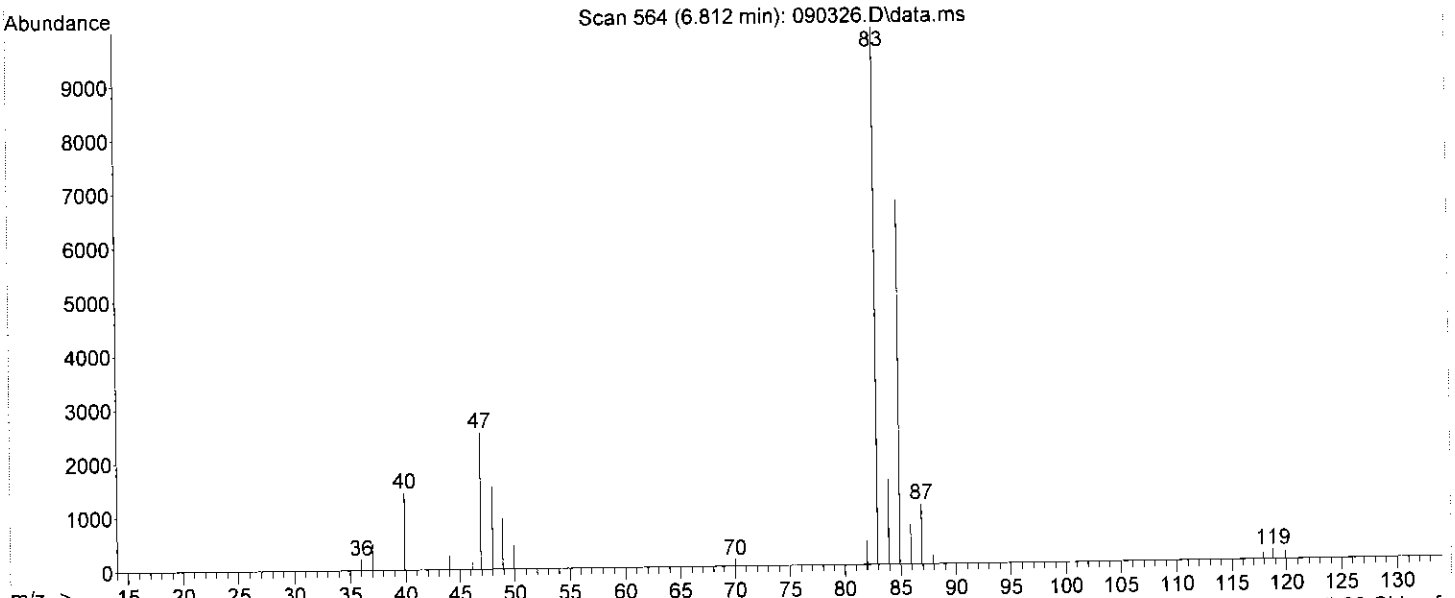
Quantitation Report (QT Reviewed)

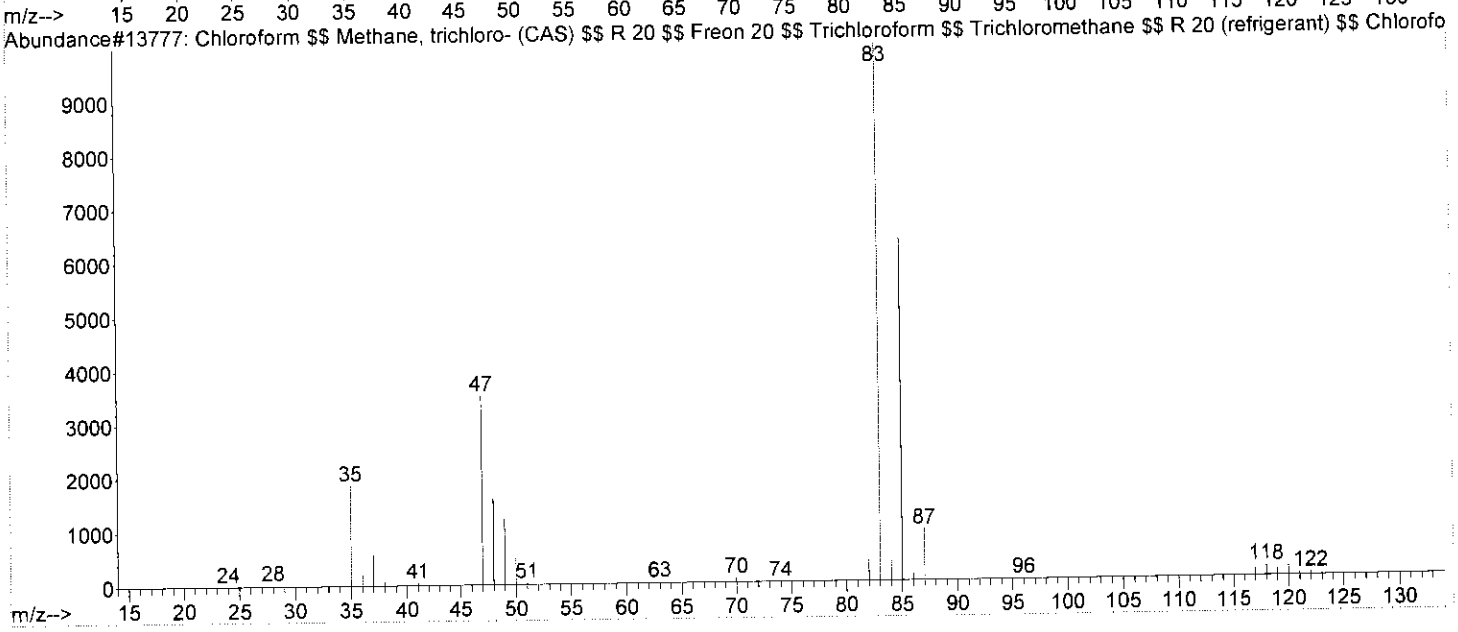
Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090325.D
Acq On : 11 Jul 2018 5:47 am
Operator : NIVA
Sample : 2895263
Misc : RUN200908
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jul 13 10:00:08 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Library Searched : C:\Database\WILEY275.L
Quality : 90
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090326.D
Acq On : 11 Jul 2018 6:13 am
Operator : NIVA
Sample : 2895264
Misc : RUN200908
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jul 13 10:01:17 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.553	168	175847	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.305	114	269335	20.00 µg/L	0.04
48) CHLOROBENZEN-d5-IS	12.995	117	242896	20.00 µg/L	0.05
71) I14-DICLBENZENE-D4	17.005	152	131795	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	143905	23.82 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 119.10%		
39) STOLUENE-D8	10.315	98	337633	19.95 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.75%		
59) S4BRFLUOROBENZENE	15.249	95	115787	18.60 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.00%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.635	94	216	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.660	142	81	N.D.	
12) CARBON DISULFIDE	4.559	76	686	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.076	84	810	N.D.	
15) TRANS12DICLETHENE	5.168	96	216	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.543	43	287	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.812	83	20589	4.01 µg/L #	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.965	117	365	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	0.000		0	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090326.D
Acq On : 11 Jul 2018 6:13 am
Operator : NIVA
Sample : 2895264
Misc : RUN200908
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jul 13 10:01:17 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

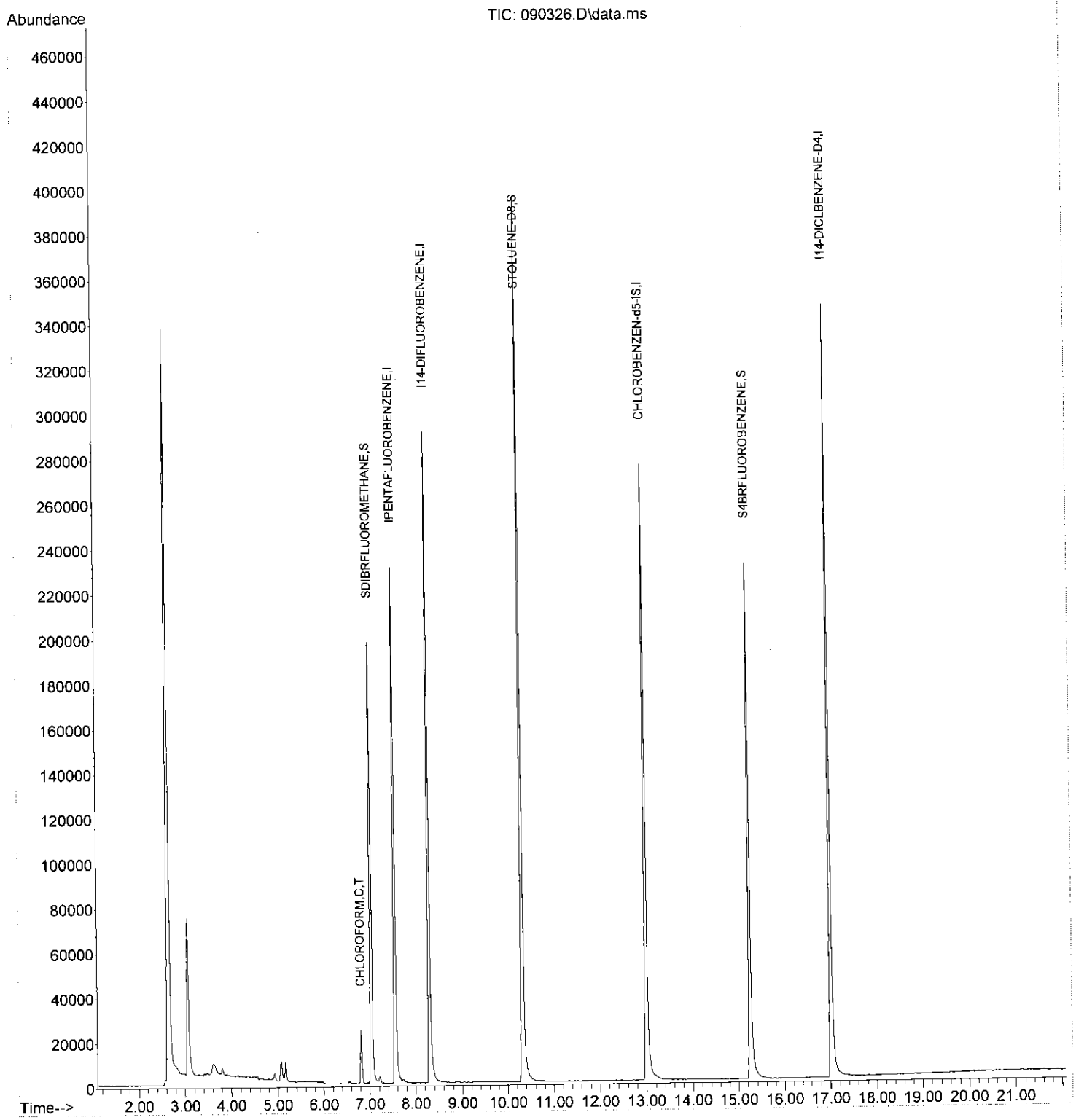
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	328	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	328	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	531	N.D.	
63) N-PROPYLBENZENE	15.259	91	152	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090326.D
Acq On : 11 Jul 2018 6:13 am
Operator : NIVA
Sample : 2895264
Misc : RUN200908
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jul 13 10:01:17 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090327.D
Acq On : 11 Jul 2018 6:40 am
Operator : NIVA
Sample : 2895265
Misc : RUN200908
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jul 13 10:02:11 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.554	168	204059	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.305	114	312262	20.00 µg/L	0.04
48) CHLOROBENZEN-d5-IS	12.995	117	285797	20.00 µg/L	0.05
71) I14-DICLBENZENE-D4	17.005	152	159248	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	159378	22.75 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.75%		
39) STOLUENE-D8	10.315	98	390643	19.91 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.55%		
59) S4BRFLUOROBENZENE	15.249	95	139986	19.11 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.55%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.615	94	99	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	0.000		0	N.D.	
12) CARBON DISULFIDE	4.559	76	510	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.077	84	523	N.D.	
15) TRANS12DICLETHENE	5.168	96	169	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.554	43	336	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.823	83	362	N.D.	
22) BROMOCHLOROMETHANE	6.823	49	163	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.965	117	350	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	0.000		0	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090327.D
Acq On : 11 Jul 2018 6:40 am
Operator : NIVA
Sample : 2895265
Misc : RUN200908
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jul 13 10:02:11 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

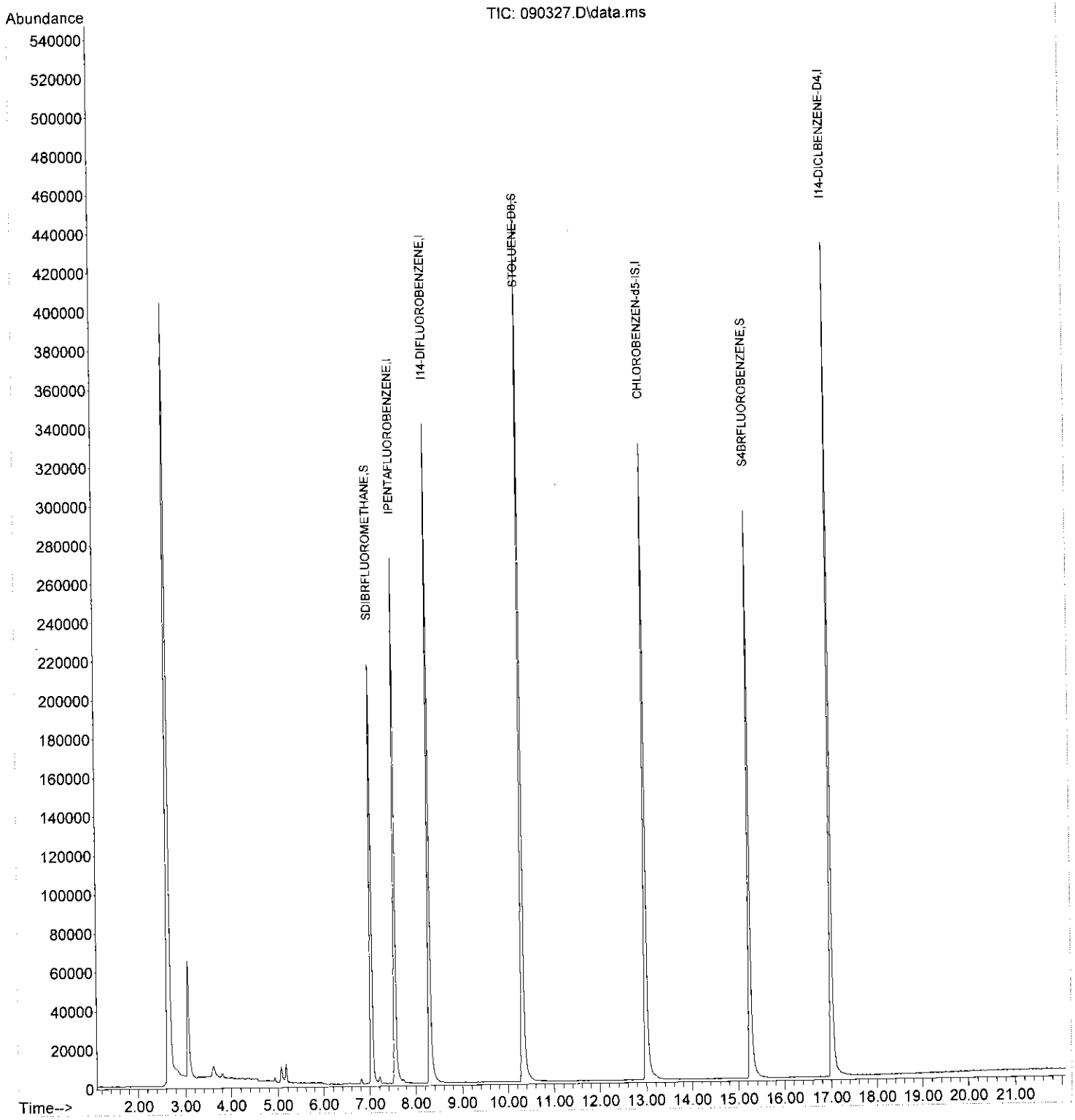
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.995	91	536	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.995	91	606	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.249	77	926	N.D.	
63) N-PROPYLBENZENE	15.249	91	308	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

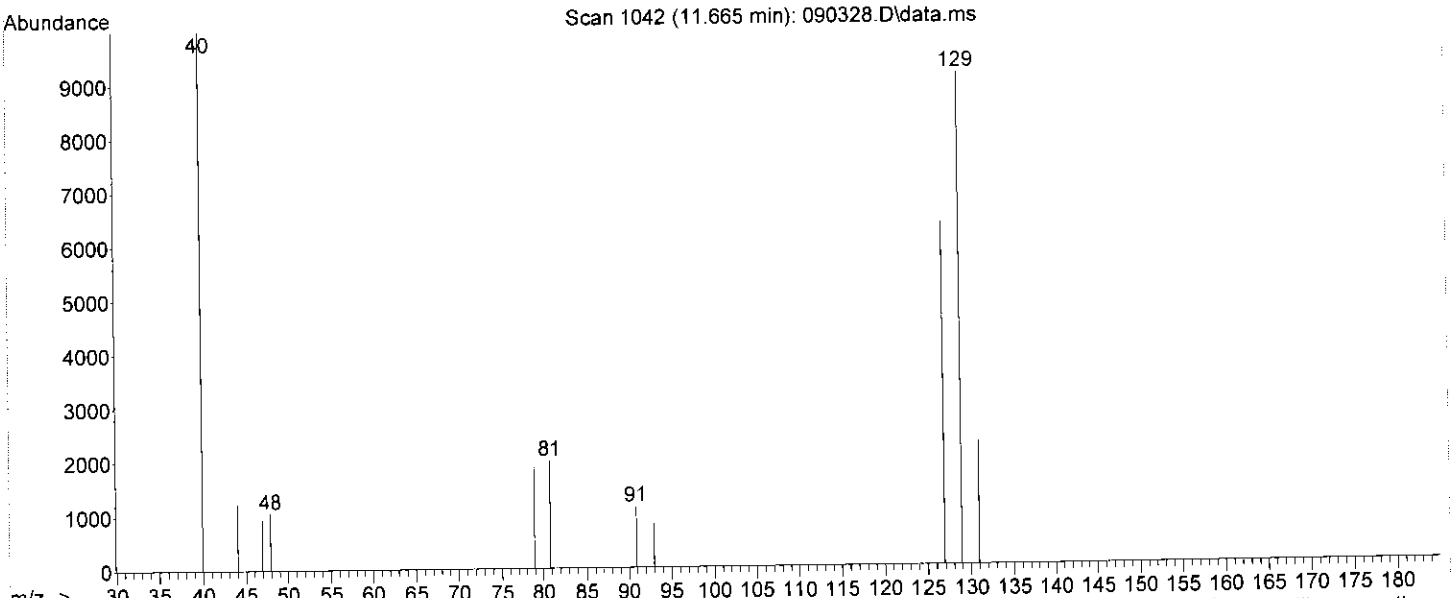
Quantitation Report (QT Reviewed)

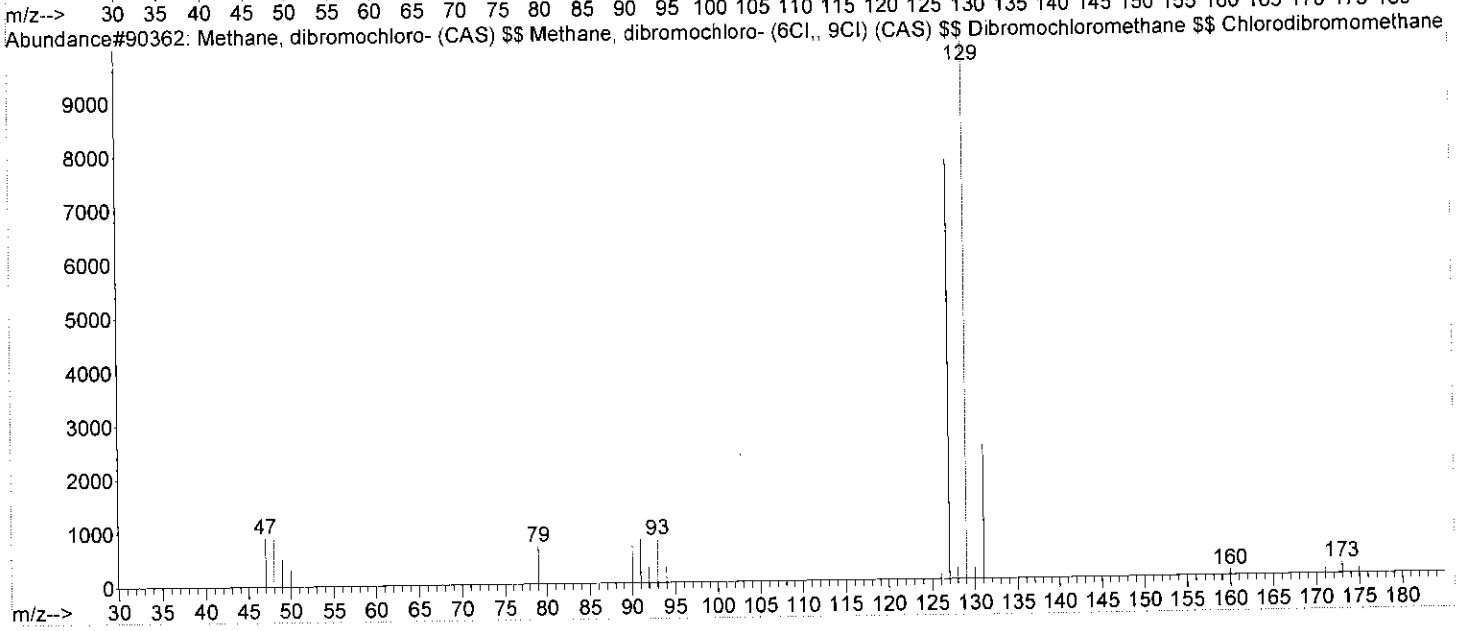
Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090327.D
Acq On : 11 Jul 2018 6:40 am
Operator : NIVA
Sample : 2895265
Misc : RUN200908
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jul 13 10:02:11 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

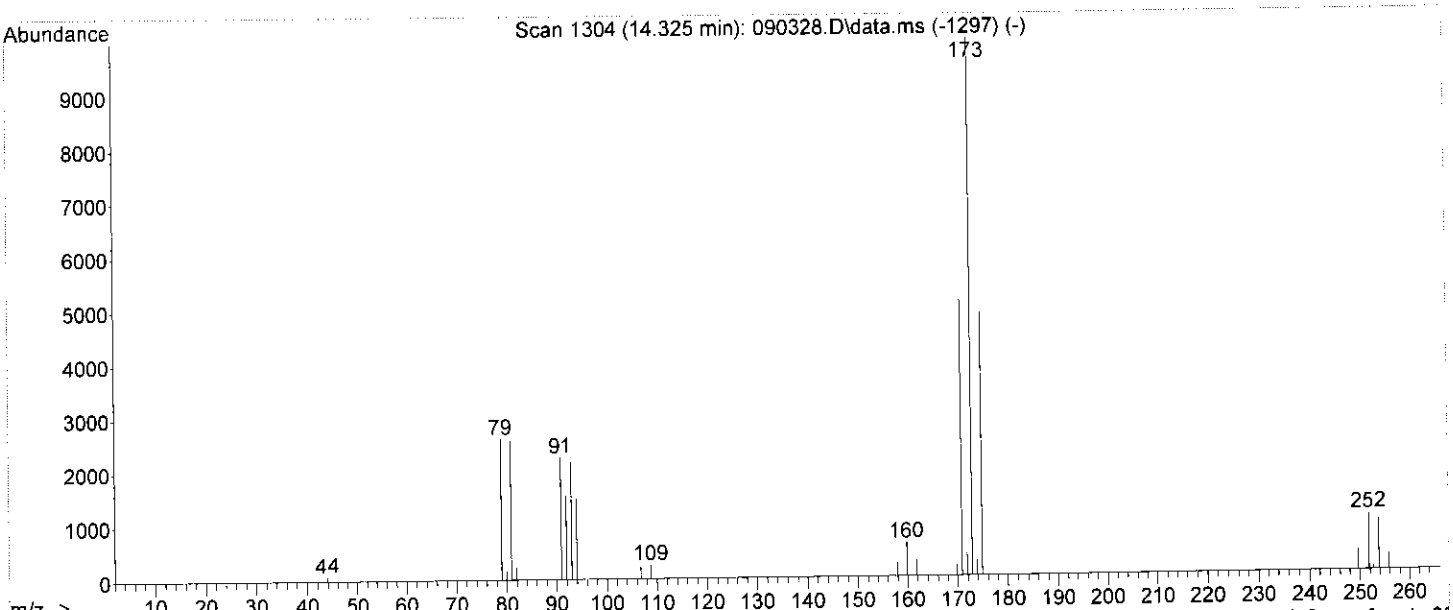


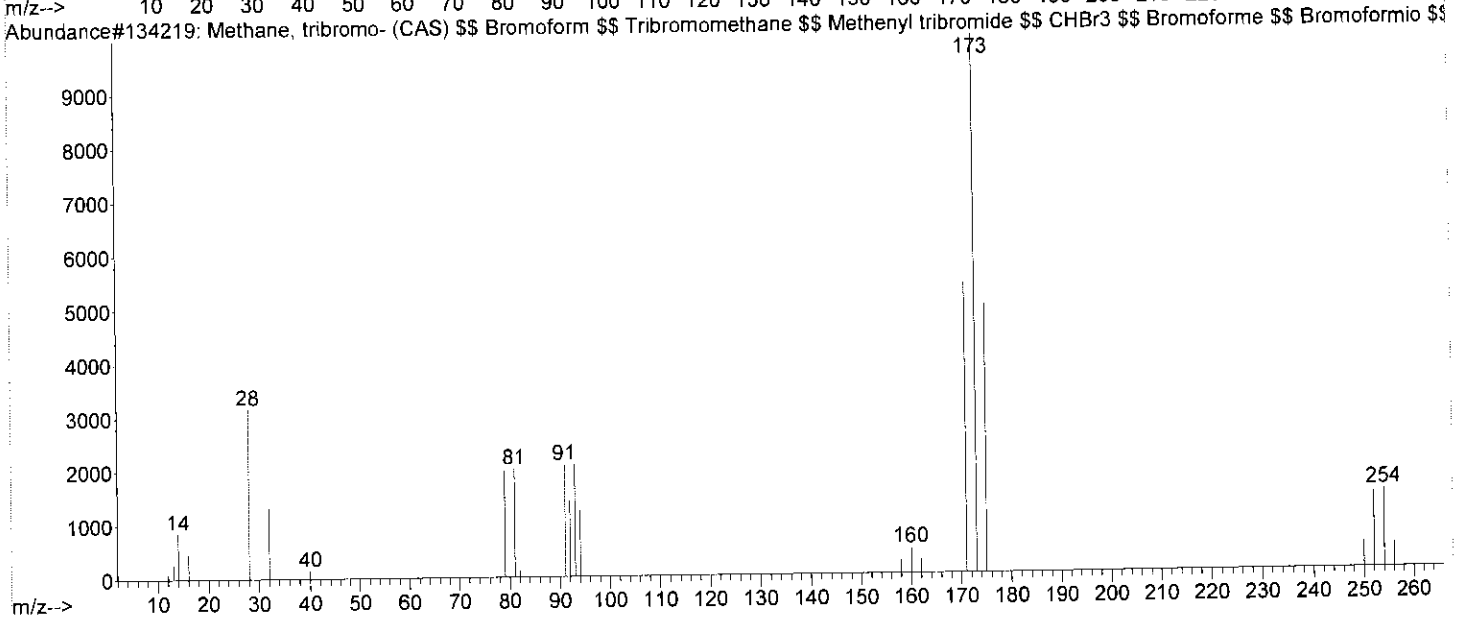
Library Searched : C:\Database\WILEY275.L
Quality : 78
ID : Methane, dibromochloro- (CAS) $$ Methane, dibromochloro- (6CI,, 9CI) (CAS) $$ Dibromochloromethane $$ Chlorodibromomethane $$ Monochlorodibromomethane $$ Dibromomonochloromethane $$ CHClBr2 $$ Methane, chlorodibromo- $$ Cdbm $$ NCI-C5 5254





Library Searched : C:\Database\WILEY275.L
Quality : 96
ID : Methane, tribromo- (CAS) $$ Bromoform $$ Tribromomethane $$ Methenyl tribromide $$ CHBr3 $$ Bromoforme $$ Bromoformio $$ NCI-C55130 $$ Tribrommethaan $$ Tribrommethan $$ Tribromometan $$ Rcra waste number U225 $$ UN 2515





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090328.D
Acq On : 11 Jul 2018 7:06 am
Operator : NIVA
Sample : 2892611
Misc : RUN200908
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 13 10:02:59 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.554	168	185804	20.00	µg/L	0.04
23) I14-DIFLUOROBENZENE	8.305	114	287374	20.00	µg/L	0.04
48) CHLOROBENZEN-d5-IS	12.995	117	261190	20.00	µg/L	0.05
71) I14-DICLBENZENE-D4	17.005	152	141848	20.00	µg/L	-0.12
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.036	111	146507	22.72	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.60%			
39) STOLUENE-D8	10.315	98	361070	20.00	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.00%			
59) S4BRFLUOROBENZENE	15.249	95	126794	18.94	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.70%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.		
3) CHLOROMETHANE	0.000		0	N.D.	d	
4) VINYL CHLORIDE	0.000		0	N.D.		
5) BROMOMETHANE	0.000		0	N.D.		
6) CHLOROETHANE	0.000		0	N.D.	d	
7) TRICLFLUOROMETHANE	0.000		0	N.D.		
8) ACROLEIN	0.000		0	N.D.		
9) ACETONE	0.000		0	N.D.	d	
10) 11-DICHLOROETHENE	0.000		0	N.D.		
11) IODOMETHANE	0.000		0	N.D.		
12) CARBON DISULFIDE	4.549	76	479	N.D.		
13) ACRYLONITRILE	0.000		0	N.D.		
14) DICHLOROMETHANE	0.000		0	N.D.		
15) TRANS12DICLETHENE	5.158	96	223	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	0.000		0	N.D.		
18) 2-BUTANONE	7.554	43	267	N.D.		
19) CIS12DICHLOROETHENE	0.000		0	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	0.000		0	N.D.		
22) BROMOCHLOROMETHANE	0.000		0	N.D.		
25) TETRAHYDROFURAN	0.000		0	N.D.		
26) 111-TRICHLOROETHANE	0.000		0	N.D.		
27) 11-DICHLOROPROPENE	0.000		0	N.D.		
28) 12-DICHLOROETHANE	0.000		0	N.D.		
29) CARBONTETRACHLORIDE	6.975	117	301	N.D.		
30) BENZENE	0.000		0	N.D.		
31) TRICHLOROETHENE	0.000		0	N.D.		
32) 12-DICHLOROPROPANE	0.000		0	N.D.		
33) DIBROMOMETHANE	0.000		0	N.D.		
34) BROMODICLMETHANE	0.000		0	N.D.		
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	d	
36) EPICHLOROHYDRIN	0.000		0	N.D.	d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.		
38) CIS13DICLPROPENE	9.949	75	214	N.D.		
40) TOLUENE	10.406	91	293	N.D.		
41) TRANS13DICLPROPENE	0.000		0	N.D.		
42) 112-TRICHLOROETHANE	0.000		0	N.D.		
43) 2-HEXANONE	0.000		0	N.D.		
44) 13-DICHLOROPROPANE	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090328.D
Acq On : 11 Jul 2018 7:06 am
Operator : NIVA
Sample : 2892611
Misc : RUN200908
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 13 10:02:59 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

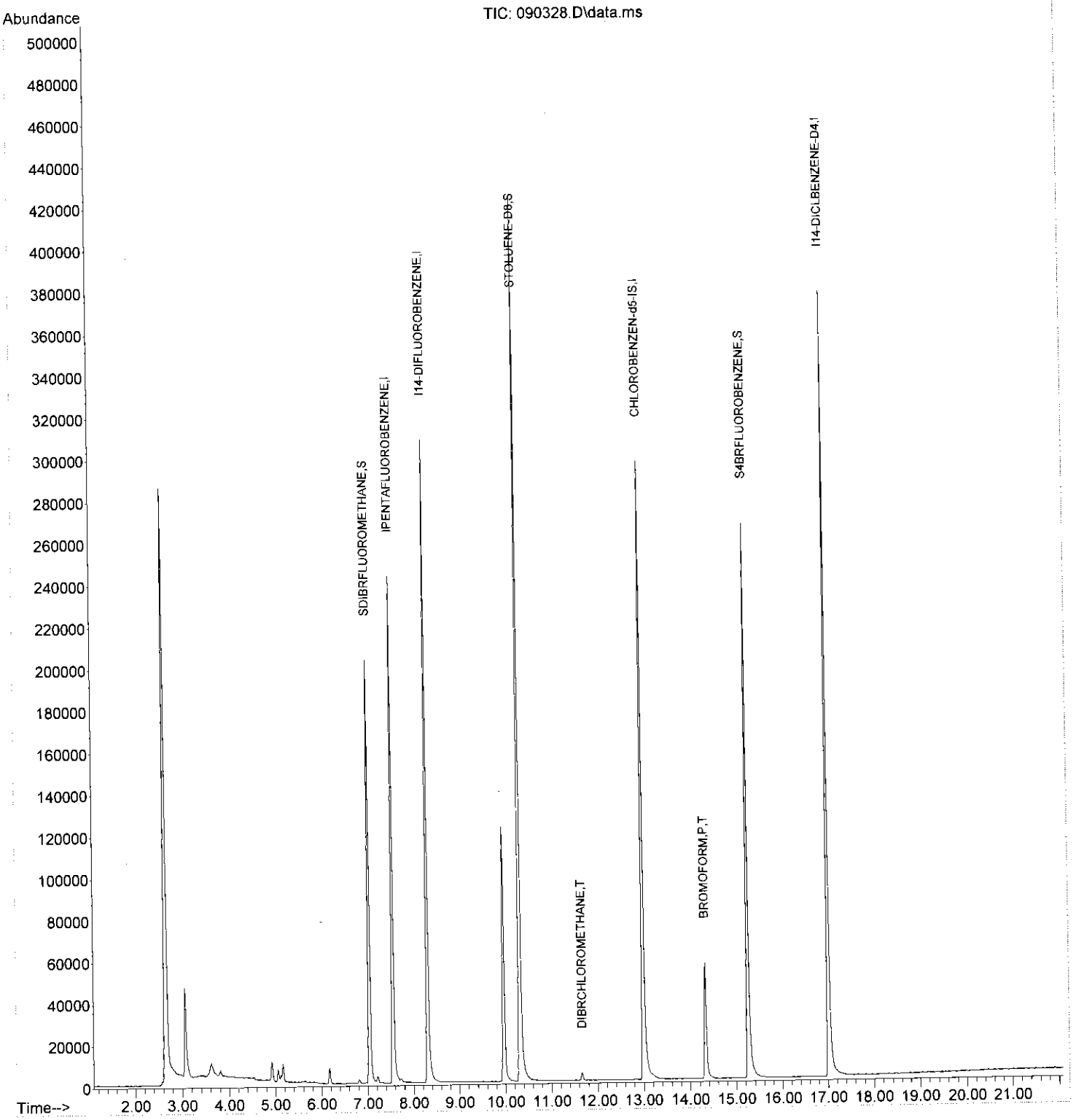
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.665	129	3758	1.06 µg/L	91
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.995	91	404	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.995	91	404	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	14.325	173	43806	19.06 µg/L	100
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.269	77	128	N.D.	
63) N-PROPYLBENZENE	15.259	91	281	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090328.D
Acq On : 11 Jul 2018 7:06 am
Operator : NIVA
Sample : 2892611
Misc : RUN200908
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 13 10:02:59 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090329.D
Acq On : 11 Jul 2018 7:32 am
Operator : NIVA
Sample : 2892611DUP/2892612
Misc : RUN200908
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 13 10:38:07 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.554	168	193084	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.305	114	300515	20.00 µg/L	0.04
48) CHLOROBENZEN-d5-IS	12.995	117	258577	20.00 µg/L	0.05
71) I14-DICLBENZENE-D4	17.005	152	143119	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	163169	24.20 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 121.00%#		
39) STOLUENE-D8	10.315	98	359703	19.05 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.25%		
59) S4BRFLUOROBENZENE	15.249	95	125696	18.96 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.80%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D.	d
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.605	94	127	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	0.000		0	N.D.	
12) CARBON DISULFIDE	4.549	76	504	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	
15) TRANS12DICLETHENE	5.178	96	81	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.554	43	383	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.813	83	155	N.D.	
22) BROMOCHLOROMETHANE	6.802	49	140	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	6.965	117	414	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	d
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	d
36) EPICHLOROHYDRIN	0.000		0	N.D.	d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	9.970	75	129	N.D.	
40) TOLUENE	10.396	91	361	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090329.D
Acq On : 11 Jul 2018 7:32 am
Operator : NIVA
Sample : 2892611DUP/2892612
Misc : RUN200908
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 13 10:38:07 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

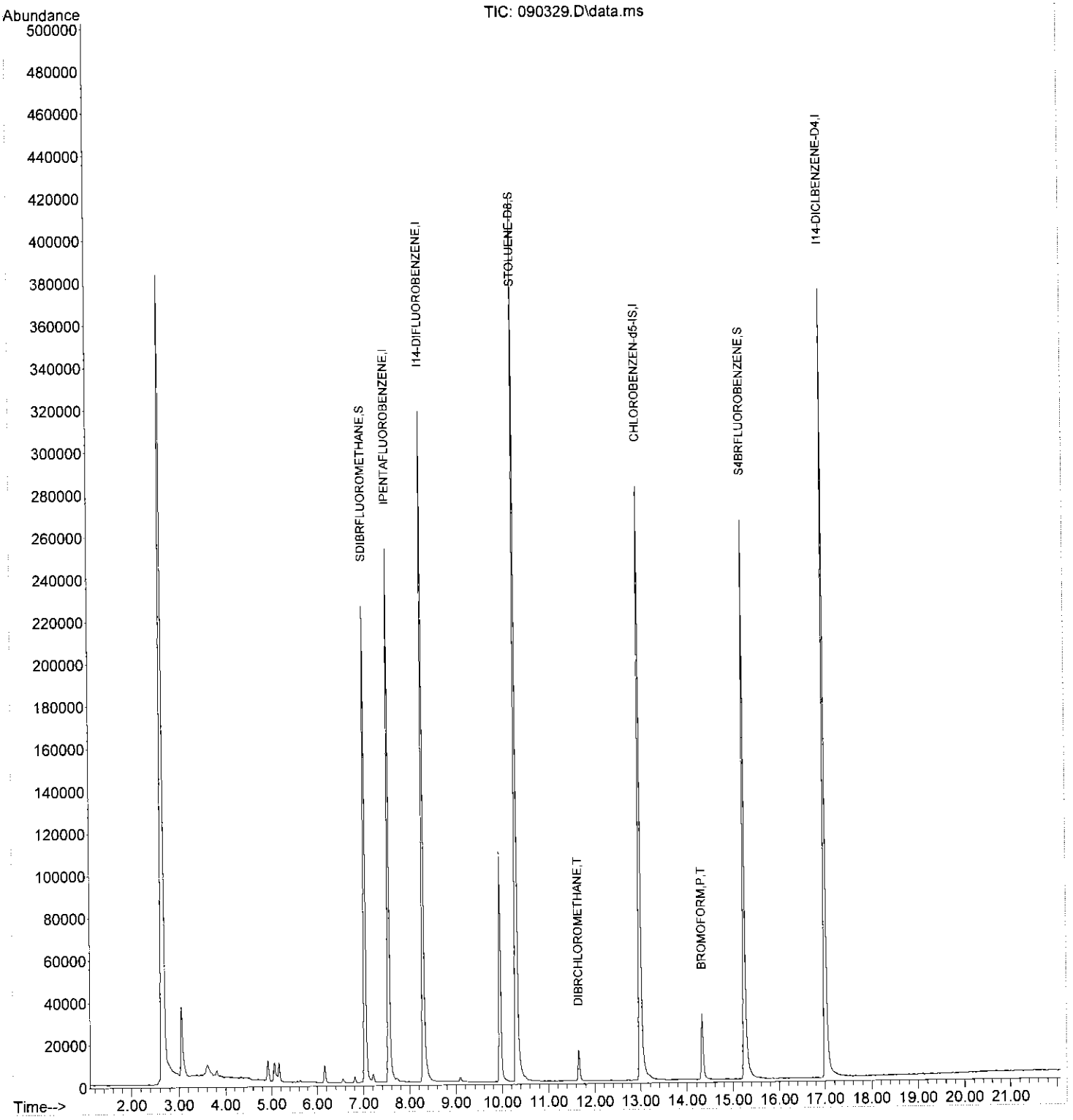
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.655	129	12613	3.40 µg/L	98
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.995	91	464	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.995	91	464	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	14.325	173	25199	11.07 µg/L	98
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.239	77	352	N.D.	
63) N-PROPYLBENZENE	15.249	91	333	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090329.D
Acq On : 11 Jul 2018 7:32 am
Operator : NIVA
Sample : 2892611DUP/2892612
Misc : RUN200908
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 13 10:38:07 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 13 10:38:27 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.553	168	233922	20.00	µg/L	0.04
23) I14-DIFLUOROBENZENE	8.295	114	335300	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	12.985	117	375606	20.00	µg/L	0.04
71) I14-DICLBENZENE-D4	16.995	152	241834	20.00	µg/L	-0.13
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.036	111	167063	22.21	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.05%			
39) STOLUENE-D8	10.315	98	429749	20.40	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.00%			
59) S4BRFLUOROBENZENE	15.238	95	186053	19.32	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.60%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.863	85	70289	54.47	µg/L	99
3) CHLOROMETHANE	3.117	50	74843	29.97	µg/L #	97
4) VINYL CHLORIDE	3.227	62	70876	33.17	µg/L	100
5) BROMOMETHANE	3.615	94	52699	26.02	µg/L	97
6) CHLOROETHANE	3.747	64	43647	26.86	µg/L	97
7) TRICLFLUOROMETHANE	3.909	101	178338	32.51	µg/L	99
8) ACROLEIN	4.812	56	203316	292.97	µg/L	98
9) ACETONE	5.117	43	114515	127.83	µg/L #	95
10) 11-DICHLOROETHENE	4.467	61	89566	25.34	µg/L	97
11) IODOMETHANE	4.660	142	141211	37.86	µg/L	91
12) CARBON DISULFIDE	4.549	76	771597	137.32	µg/L #	98
13) ACRYLONITRILE	5.970	53	118698	112.30	µg/L	99
14) DICHLOROMETHANE	5.076	84	70424	22.37	µg/L	91
15) TRANS12DICLETHENE	5.249	96	68089	24.70	µg/L	96
16) 11-DICHLOROETHANE	5.919	63	119611	23.67	µg/L	97
17) VINYL ACETATE	6.132	43	4698	1.01	µg/L #	86
18) 2-BUTANONE	7.168	43	161282	111.86	µg/L	95
19) CIS12DICHLOROETHENE	6.528	96	52890	16.59	µg/L	92
20) 22-DICHLOROPROPANE	6.650	77	54679	14.52	µg/L	97
21) CHLOROFORM	6.812	83	147313	21.58	µg/L #	100
22) BROMOCHLOROMETHANE	6.762	49	66818	24.43	µg/L #	82
25) TETRAHYDROFURAN	7.056	42	8618	11.76	µg/L #	86
26) 111-TRICHLOROETHANE	7.107	97	138840	24.45	µg/L	99
27) 11-DICHLOROPROPENE	7.249	75	72828	20.93	µg/L	96
28) 12-DICHLOROETHANE	7.807	62	116408	21.82	µg/L #	99
29) CARBONTETRACHLORIDE	7.036	117	135167	24.45	µg/L #	95
30) BENZENE	7.553	78	232636	20.59	µg/L #	95
31) TRICHLOROETHENE	8.305	132	66754	20.71	µg/L #	94
32) 12-DICHLOROPROPANE	9.025	63	55831	20.22	µg/L #	88
33) DIBROMOMETHANE	8.904	174	50681	19.68	µg/L	95
34) BROMODICLMETHANE	9.086	83	115825	22.77	µg/L	99
35) 2-CLETHYLVINYLETHER	9.868	63	75	N.D.		
36) EPICHLOROHYDRIN	10.396	57	125633	426.00	µg/L	89
37) 4METHYL-2-PENTANONE	10.944	43	387073	108.58	µg/L #	91
38) CIS13DICLPROPENE	10.020	75	64097	12.95	µg/L	97
40) TOLUENE	10.396	91	262036	20.69	µg/L	97
41) TRANS13DICLPROPENE	11.046	75	85553	23.00	µg/L	84
42) 112-TRICHLOROETHANE	11.320	97	67819	20.04	µg/L	90
43) 2-HEXANONE	12.386	43	263357	100.97	µg/L	98
44) 13-DICHLOROPROPANE	11.797	76	101277	19.47	µg/L	96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 13 10:38:27 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

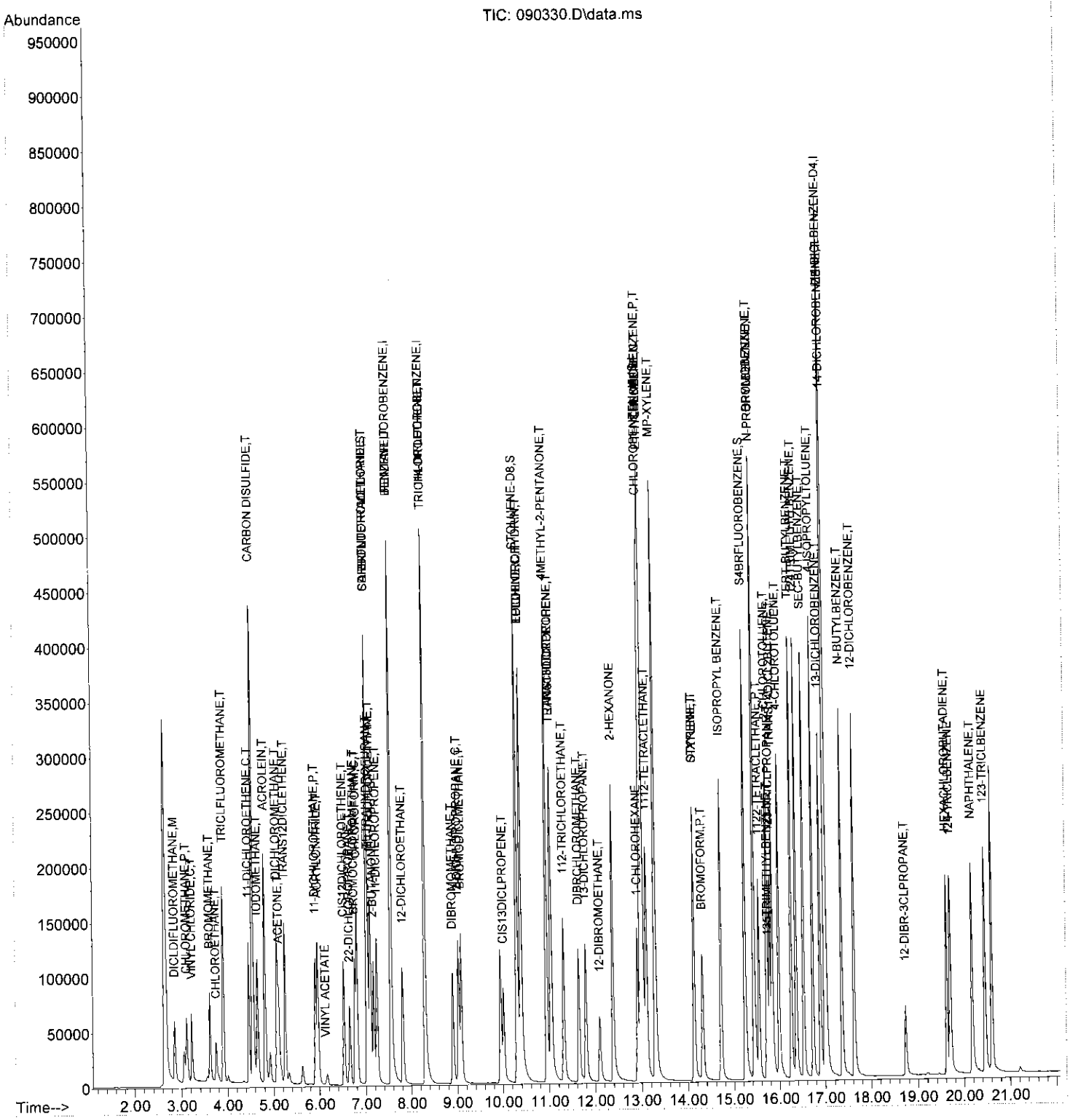
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	96648	23.34 µg/L	99
46) TETRACHLOROETHENE	11.046	166	78299	20.67 µg/L	89
47) 12-DIBROMOETHANE	12.102	107	61436	19.66 µg/L	100
49) CHLOROBENZENE	13.015	112	195304	19.89 µg/L	84
50) 1-CHLOROHEXANE	12.924	91	50776	25.55 µg/L #	50
51) 1112-TETRACLETHANE	13.117	131	87693	20.67 µg/L	96
52) ETHYLBENZENE	13.025	91	312502	20.00 µg/L	96
53) MP-XYLENE	13.289	91	480082	40.03 µg/L	93
54) STYRENE	14.132	104	6996	0.69 µg/L #	1
55) O-XYLENE	14.132	91	207612	17.95 µg/L	93
56) BROMOFORM	14.315	173	88257	26.70 µg/L	98
57) 1122-TETRACLETHANE	15.543	83	114592	19.18 µg/L	100
58) ISOPROPYL BENZENE	14.721	105	231730	14.80 µg/L	94
60) 123-TRICLPROPANE	15.787	110	38490	20.03 µg/L	95
61) TRANS14DICL2BUTENE	15.837	53	76450	83.07 µg/L	89
62) BROMOBENZENE	15.431	77	164174	19.98 µg/L	83
63) N-PROPYLBENZENE	15.441	91	362759	19.21 µg/L	93
64) 2-CHLOROTOLUENE	15.726	91	214125	15.96 µg/L	95
65) 4-CHLOROTOLUENE	15.980	91	219449	17.80 µg/L	90
66) 135TRIMETHYLBENZENE	15.746	105	11489	0.80 µg/L	94
67) TERT-BUTYLBENZENE	16.264	119	220492	19.78 µg/L	89
68) 124TRIMETHYLBENZENE	16.365	105	276520	19.43 µg/L	98
69) SEC-BUTYLBENZENE	16.538	105	316079	18.34 µg/L	99
70) 13-DICHLOROBENZENE	16.893	146	163297	18.82 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.741	119	266291	17.84 µg/L	95
73) 14-DICHLOROBENZENE	17.015	146	174768	18.59 µg/L	86
74) 12-DICHLOROBENZENE	17.624	146	176722	19.02 µg/L	96
75) N-BUTYLBENZENE	17.360	91	226742	16.86 µg/L	97
76) 12-DIBR-3CLPROPANE	18.741	157	24129	16.51 µg/L	94
77) 124-TRICLBENZENE	19.705	180	91491	13.79 µg/L	98
78) NAPHTHALENE	20.182	128	231033	13.66 µg/L	98
79) HEXACHLOROBUTADIENE	19.624	225	49576	17.45 µg/L	95
80) 123-TRICLBENZENE	20.456	182	98334	16.18 µg/L	95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 13 10:38:27 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 13 10:40:23 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.553	168	286970m	20.00	µg/L		0.04
23) I14-DIFLUOROBENZENE	8.295	114	335300	20.00	µg/L		0.03
48) CHLOROBENZEN-d5-IS	12.985	117	375606	20.00	µg/L		0.04
71) I14-DICLBENZENE-D4	16.995	152	241834	20.00	µg/L		-0.13
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.036	111	167063	22.21	µg/L		0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.05%				
39) STOLUENE-D8	10.315	98	429749	20.40	µg/L		0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.00%				
59) S4BRFLUOROBENZENE	15.238	95	186053	19.32	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.60%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.863	85	39150m	24.73	µg/L		
3) CHLOROMETHANE	3.117	50	74843	24.43	µg/L	#	97
4) VINYL CHLORIDE	3.219	62	56047m	21.38	µg/L		
5) BROMOMETHANE	3.615	94	52699	21.21	µg/L		97
6) CHLOROETHANE	3.747	64	43647	21.90	µg/L		97
7) TRICLFLUOROMETHANE	3.909	101	146045m	21.70	µg/L		
8) ACROLEIN	4.812	56	203316	238.81	µg/L		98
9) ACETONE	5.117	43	114515	104.20	µg/L	#	95
10) 11-DICHLOROETHENE	4.467	61	89566	20.66	µg/L		97
11) IODOMETHANE	4.660	142	141211	30.86	µg/L		91
12) CARBON DISULFIDE	4.549	76	771597	111.94	µg/L	#	98
13) ACRYLONITRILE	5.970	53	118698	91.54	µg/L		99
14) DICHLOROMETHANE	5.076	84	70424	18.24	µg/L		91
15) TRANS12DICLETHENE	5.249	96	68089	20.13	µg/L		96
16) 11-DICHLOROETHANE	5.919	63	119611	19.30	µg/L		97
17) VINYL ACETATE	6.132	43	4698	0.82	µg/L	#	86
18) 2-BUTANONE	7.168	43	161282	91.18	µg/L		95
19) CIS12DICHLOROETHENE	6.528	96	52890	13.52	µg/L		92
20) 22-DICHLOROPROPANE	6.650	77	54679	11.83	µg/L		97
21) CHLOROFORM	6.812	83	147313	17.59	µg/L	#	100
22) BROMOCHLOROMETHANE	6.762	49	66818	19.91	µg/L	#	82
25) TETRAHYDROFURAN	7.056	42	8618	11.76	µg/L	#	86
26) 111-TRICHLOROETHANE	7.107	97	138840	24.45	µg/L		99
27) 11-DICHLOROPROPENE	7.249	75	72828	20.93	µg/L		96
28) 12-DICHLOROETHANE	7.807	62	116408	21.82	µg/L	#	99
29) CARBONTETRACHLORIDE	7.036	117	135167	24.45	µg/L	#	95
30) BENZENE	7.553	78	232636	20.59	µg/L	#	95
31) TRICHLOROETHENE	8.305	132	66754	20.71	µg/L	#	94
32) 12-DICHLOROPROPANE	9.025	63	55831	20.22	µg/L	#	88
33) DIBROMOMETHANE	8.904	174	50681	19.68	µg/L		95
34) BROMODICLMETHANE	9.086	83	115825	22.77	µg/L		99
35) 2-CLETHYLVINYLETHER	9.868	63	75	N.D.			
36) EPICHLOROHYDRIN	10.396	57	125633	426.00	µg/L		89
37) 4METHYL-2-PENTANONE	10.944	43	387073	108.58	µg/L	#	91
38) CIS13DICLPROPENE	10.020	75	64097	12.95	µg/L		97
40) TOLUENE	10.396	91	262036	20.69	µg/L		97
41) TRANS13DICLPROPENE	11.046	75	85553	23.00	µg/L		84
42) 112-TRICHLOROETHANE	11.320	97	67819	20.04	µg/L		90
43) 2-HEXANONE	12.386	43	263357	100.97	µg/L		98
44) 13-DICHLOROPROPANE	11.797	76	101277	19.47	µg/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 13 10:40:23 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

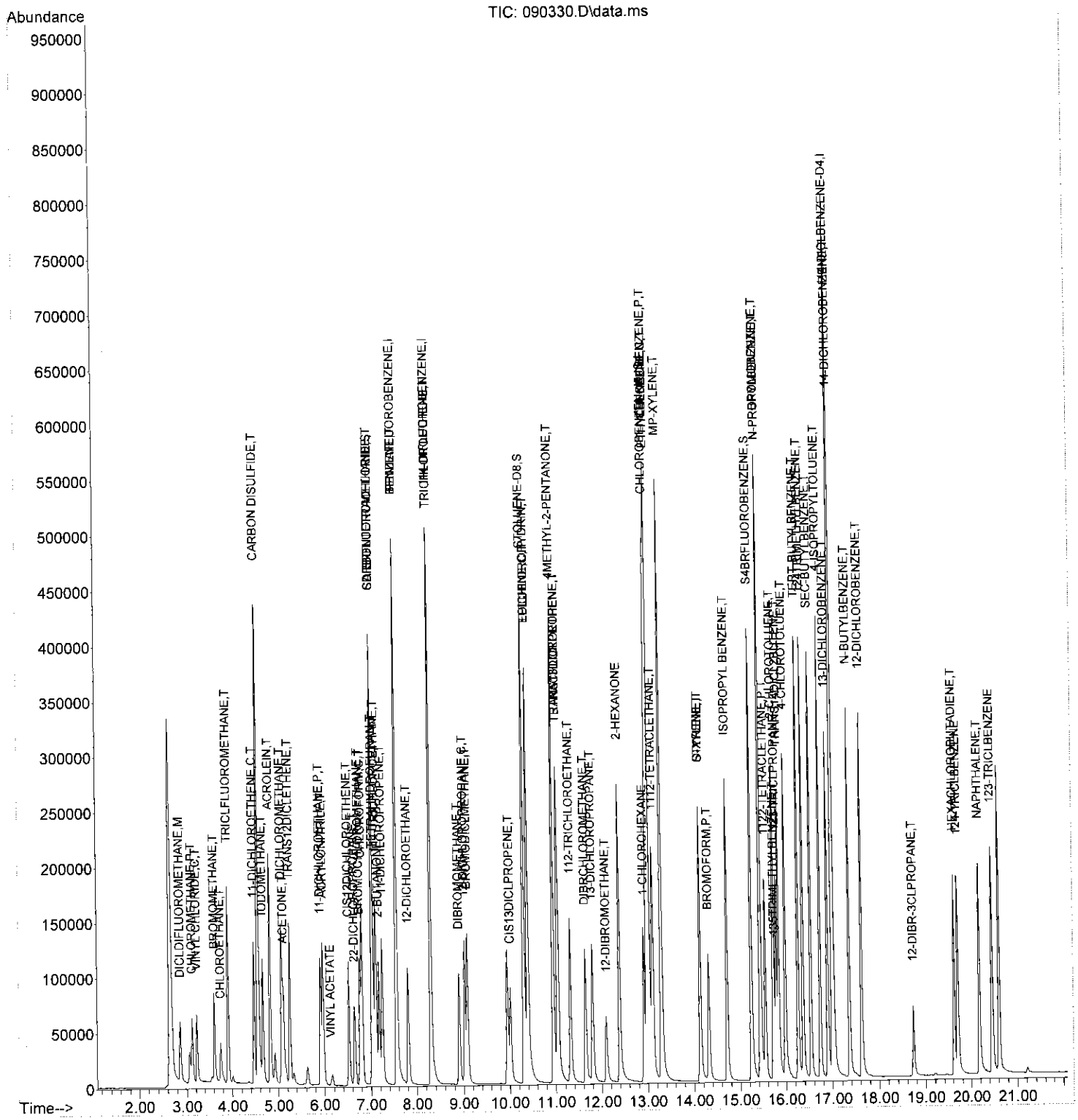
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	96648	23.34 µg/L	99
46) TETRACHLOROETHENE	11.046	166	78299	20.67 µg/L	89
47) 12-DIBROMOETHANE	12.102	107	61436	19.66 µg/L	100
49) CHLOROBENZENE	13.015	112	195304	19.89 µg/L	84
50) 1-CHLOROHEXANE	12.924	91	50776	25.55 µg/L #	50
51) 1112-TETRACLETHANE	13.117	131	87693	20.67 µg/L	96
52) ETHYLBENZENE	13.025	91	312502	20.00 µg/L	96
53) MP-XYLENE	13.289	91	480082	40.03 µg/L	93
54) STYRENE	14.132	104	6996	0.69 µg/L #	1
55) O-XYLENE	14.132	91	207612	17.95 µg/L	93
56) BROMOFORM	14.315	173	88257	26.70 µg/L	98
57) 1122-TETRACLETHANE	15.543	83	114592	19.18 µg/L	100
58) ISOPROPYL BENZENE	14.721	105	231730	14.80 µg/L	94
60) 123-TRICLPROPANE	15.787	110	38490	20.03 µg/L	95
61) TRANS14DICL2BUTENE	15.837	53	76450	83.07 µg/L	89
62) BROMOBENZENE	15.431	77	164174	19.98 µg/L	83
63) N-PROPYLBENZENE	15.441	91	362759	19.21 µg/L	93
64) 2-CHLOROTOLUENE	15.726	91	214125	15.96 µg/L	95
65) 4-CHLOROTOLUENE	15.980	91	219449	17.80 µg/L	90
66) 135TRIMETHYLBENZENE	15.746	105	11489	0.80 µg/L	94
67) TERT-BUTYLBENZENE	16.264	119	220492	19.78 µg/L	89
68) 124TRIMETHYLBENZENE	16.365	105	276520	19.43 µg/L	98
69) SEC-BUTYLBENZENE	16.538	105	316079	18.34 µg/L	99
70) 13-DICHLOROBENZENE	16.893	146	163297	18.82 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.741	119	266291	17.84 µg/L	95
73) 14-DICHLOROBENZENE	17.015	146	174768	18.59 µg/L	86
74) 12-DICHLOROBENZENE	17.624	146	176722	19.02 µg/L	96
75) N-BUTYLBENZENE	17.360	91	226742	16.86 µg/L	97
76) 12-DIBR-3CLPROPANE	18.741	157	24129	16.51 µg/L	94
77) 124-TRICLBENZENE	19.705	180	91491	13.79 µg/L	98
78) NAPHTHALENE	20.182	128	231033	13.66 µg/L	98
79) HEXACHLOROBUTADIENE	19.624	225	49576	17.45 µg/L	95
80) 123-TRICLBENZENE	20.456	182	98334	16.18 µg/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 13 10:40:23 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 13 10:45:35 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.553	168	286970m	20.00	µg/L		0.04
23) I14-DIFLUOROBENZENE	8.295	114	335300	20.00	µg/L		0.03
48) CHLOROBENZEN-d5-IS	12.985	117	375606	20.00	µg/L		0.04
71) I14-DICLBENZENE-D4	16.995	152	241834	20.00	µg/L		-0.13
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.036	111	167063	22.21	µg/L		0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.05%				
39) STOLUENE-D8	10.315	98	429749	20.40	µg/L		0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.00%				
59) S4BRFLUOROBENZENE	15.238	95	186053	19.32	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.60%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.863	85	39150m	24.73	µg/L		
3) CHLOROMETHANE	3.117	50	74843	24.43	µg/L	#	97
4) VINYL CHLORIDE	3.219	62	56047m	21.38	µg/L		
5) BROMOMETHANE	3.615	94	52699	21.21	µg/L		97
6) CHLOROETHANE	3.747	64	43647	21.90	µg/L		97
7) TRICLFLUOROMETHANE	3.909	101	146045m	21.70	µg/L		
8) ACROLEIN	4.812	56	203316	238.81	µg/L		98
9) ACETONE	5.117	43	114515	104.20	µg/L	#	95
10) 11-DICHLOROETHENE	4.467	61	89566	20.66	µg/L		97
11) IODOMETHANE	4.660	142	141211	30.86	µg/L		91
12) CARBON DISULFIDE	4.549	76	771597	111.94	µg/L	#	98
13) ACRYLONITRILE	5.970	53	118698	91.54	µg/L		99
14) DICHLOROMETHANE	5.076	84	70424	18.24	µg/L		91
15) TRANS12DICLETHENE	5.249	96	68089	20.13	µg/L		96
16) 11-DICHLOROETHANE	5.919	63	119611	19.30	µg/L		97
17) VINYL ACETATE	6.132	43	4698	0.82	µg/L	#	86
18) 2-BUTANONE	7.168	43	161282	91.18	µg/L		95
19) CIS12DICHLOROETHENE	6.528	96	52890	13.52	µg/L		92
20) 22-DICHLOROPROPANE	6.650	77	54679	11.83	µg/L		97
21) CHLOROFORM	6.812	83	147313	17.59	µg/L	#	100
22) BROMOCHLOROMETHANE	6.762	49	66818	19.91	µg/L	#	82
25) TETRAHYDROFURAN	7.056	42	8618	11.76	µg/L	#	86
26) 111-TRICHLOROETHANE	7.107	97	138840	24.45	µg/L		99
27) 11-DICHLOROPROPENE	7.249	75	72828	20.93	µg/L		96
28) 12-DICHLOROETHANE	7.807	62	116408	21.82	µg/L	#	99
29) CARBONTETRACHLORIDE	7.036	117	135167	24.45	µg/L	#	95
30) BENZENE	7.553	78	232636	20.59	µg/L	#	95
31) TRICHLOROETHENE	8.305	132	66754	20.71	µg/L	#	94
32) 12-DICHLOROPROPANE	9.025	63	55831	20.22	µg/L	#	88
33) DIBROMOMETHANE	8.904	174	50681	19.68	µg/L		95
34) BROMODICLMETHANE	9.086	83	115825	22.77	µg/L		99
35) 2-CLETHYLVINYLETHER	9.949	63	2481m	3.75	µg/L		
36) EPICHLOROHYDRIN	10.396	57	125633	426.00	µg/L		89
37) 4METHYL-2-PENTANONE	10.944	43	387073	108.58	µg/L	#	91
38) CIS13DICLPROPENE	10.020	75	64097	12.95	µg/L		97
40) TOLUENE	10.396	91	262036	20.69	µg/L		97
41) TRANS13DICLPROPENE	11.046	75	85553	23.00	µg/L		84
42) 112-TRICHLOROETHANE	11.320	97	67819	20.04	µg/L		90
43) 2-HEXANONE	12.386	43	263357	100.97	µg/L		98
44) 13-DICHLOROPROPANE	11.797	76	101277	19.47	µg/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 13 10:45:35 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

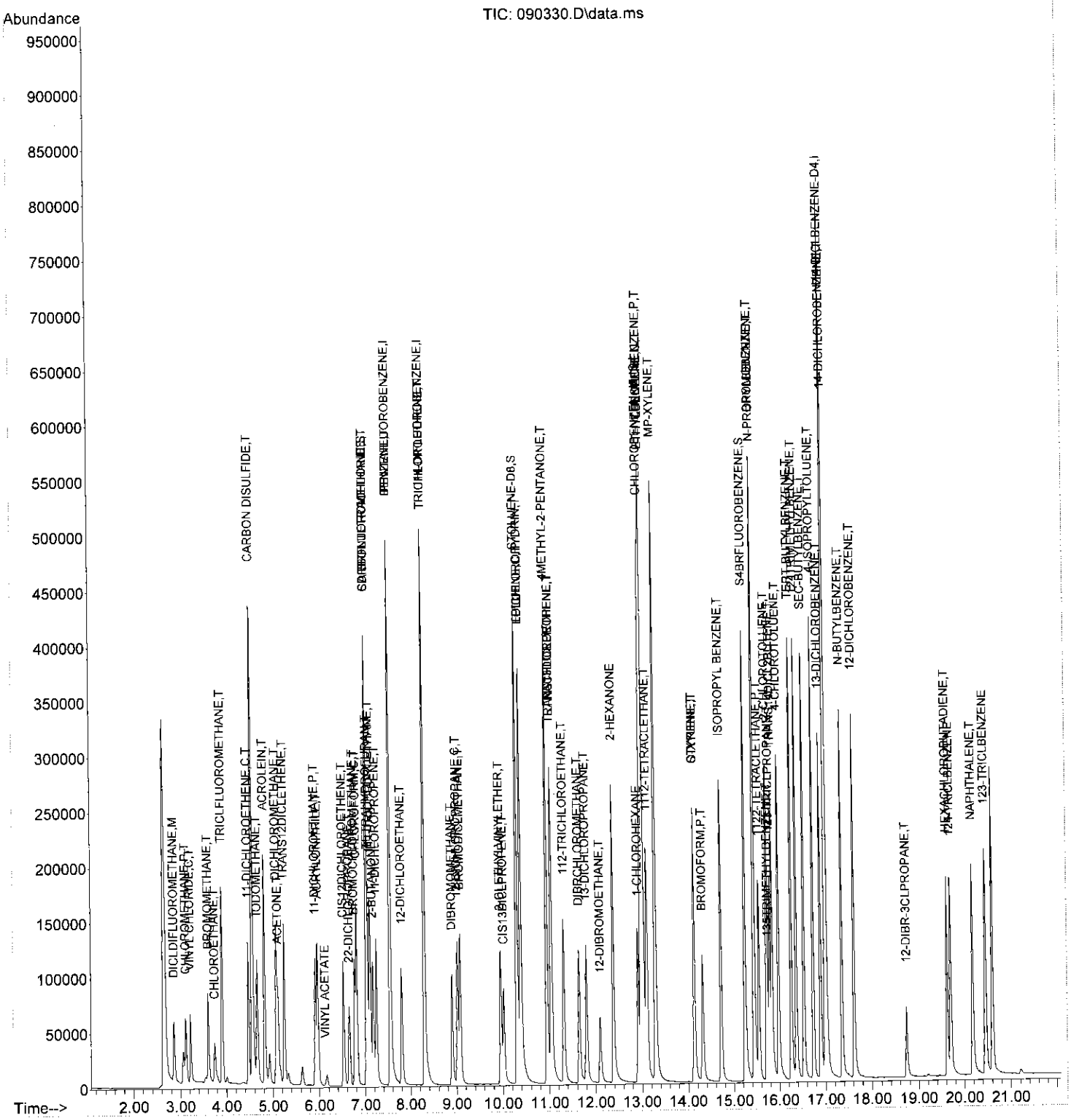
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	96648	23.34 µg/L	99
46) TETRACHLOROETHENE	11.046	166	78299	20.67 µg/L	89
47) 12-DIBROMOETHANE	12.102	107	61436	19.66 µg/L	100
49) CHLOROBENZENE	13.015	112	195304	19.89 µg/L	84
50) 1-CHLOROHEXANE	12.924	91	50776	25.55 µg/L #	50
51) 1112-TETRACLETHANE	13.117	131	87693	20.67 µg/L	96
52) ETHYLBENZENE	13.025	91	312502	20.00 µg/L	96
53) MP-XYLENE	13.289	91	480082	40.03 µg/L	93
54) STYRENE	14.132	104	6996	0.69 µg/L #	1
55) O-XYLENE	14.132	91	207612	17.95 µg/L	93
56) BROMOFORM	14.315	173	88257	26.70 µg/L	98
57) 1122-TETRACLETHANE	15.543	83	114592	19.18 µg/L	100
58) ISOPROPYL BENZENE	14.721	105	231730	14.80 µg/L	94
60) 123-TRICLPROPANE	15.787	110	38490	20.03 µg/L	95
61) TRANS14DICL2BUTENE	15.837	53	76450	83.07 µg/L	89
62) BROMOBENZENE	15.431	77	164174	19.98 µg/L	83
63) N-PROPYLBENZENE	15.441	91	362759	19.21 µg/L	93
64) 2-CHLOROTOLUENE	15.726	91	214125	15.96 µg/L	95
65) 4-CHLOROTOLUENE	15.980	91	219449	17.80 µg/L	90
66) 135TRIMETHYLBENZENE	15.746	105	11489	0.80 µg/L	94
67) TERT-BUTYLBENZENE	16.264	119	220492	19.78 µg/L	89
68) 124TRIMETHYLBENZENE	16.365	105	276520	19.43 µg/L	98
69) SEC-BUTYLBENZENE	16.538	105	316079	18.34 µg/L	99
70) 13-DICHLOROBENZENE	16.893	146	163297	18.82 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.741	119	266291	17.84 µg/L	95
73) 14-DICHLOROBENZENE	17.015	146	174768	18.59 µg/L	86
74) 12-DICHLOROBENZENE	17.624	146	176722	19.02 µg/L	96
75) N-BUTYLBENZENE	17.360	91	226742	16.86 µg/L	97
76) 12-DIBR-3CLPROPANE	18.741	157	24129	16.51 µg/L	94
77) 124-TRICLBENZENE	19.705	180	91491	13.79 µg/L	98
78) NAPHTHALENE	20.182	128	231033	13.66 µg/L	98
79) HEXACHLOROBUTADIENE	19.624	225	49576	17.45 µg/L	95
80) 123-TRICLBENZENE	20.456	182	98334	16.18 µg/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090330.D
Acq On : 11 Jul 2018 7:58 am
Operator : NIVA
Sample : 2892611MS/2892613
Misc : RUN200908
ALS Vial : 38 Sample Multiplier: 1

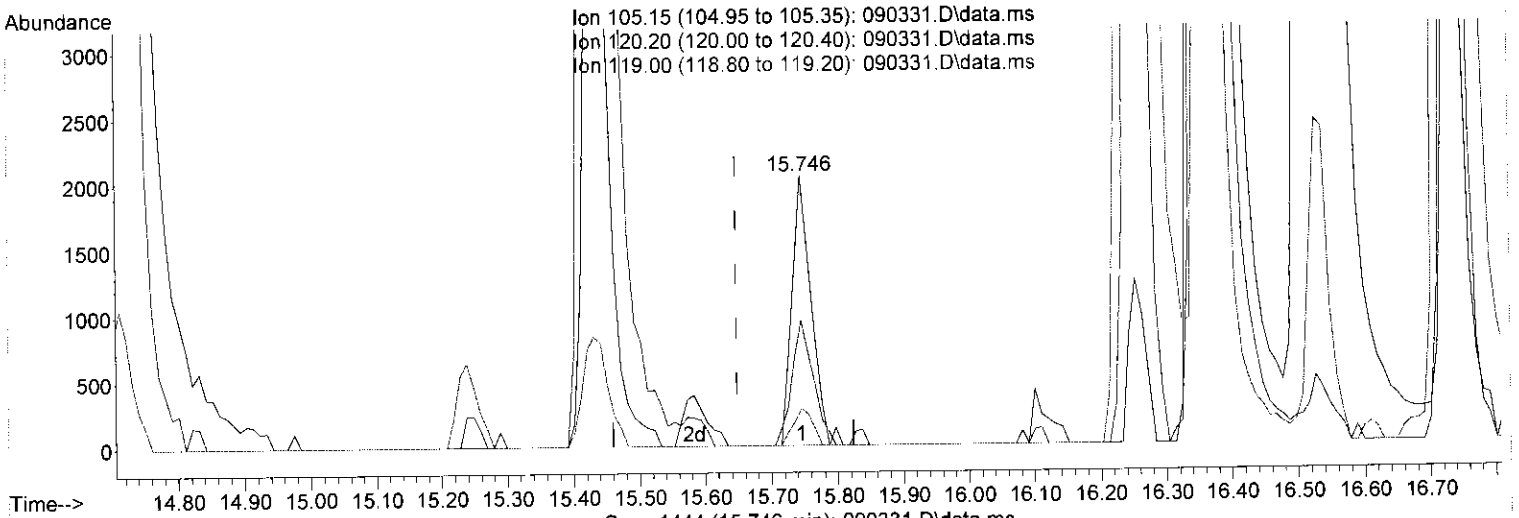
Quant Time: Jul 13 10:45:35 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

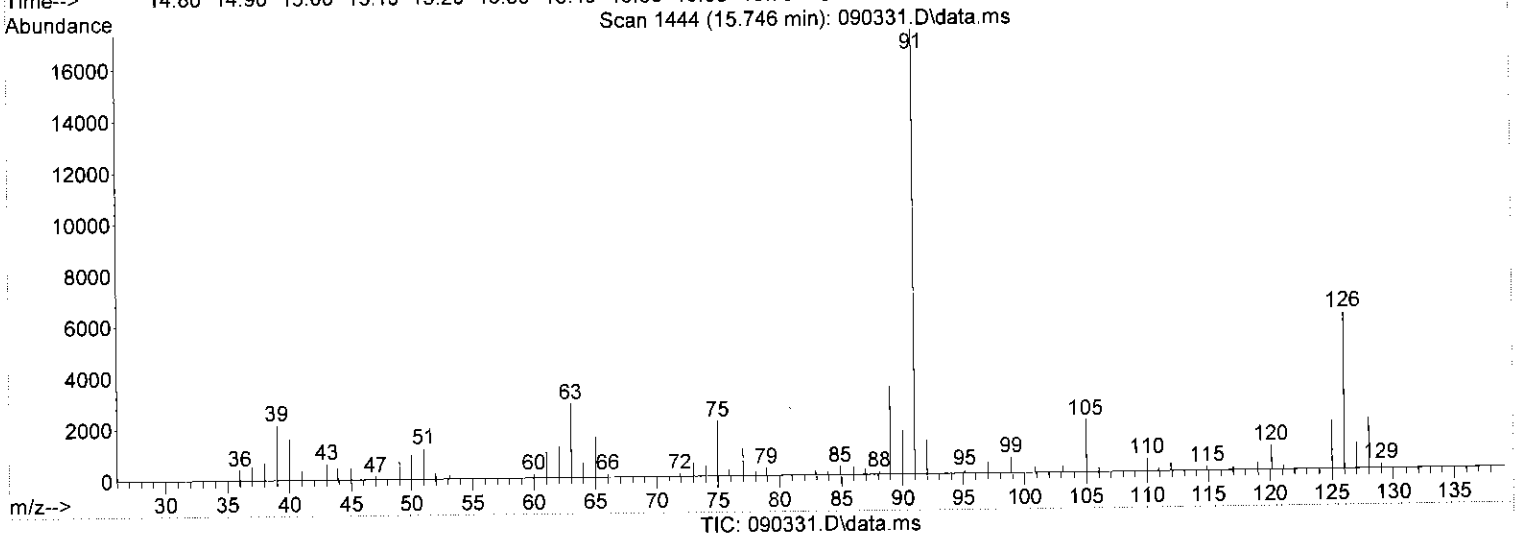


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090331.D
Acq On : 11 Jul 2018 8:24 am
Operator : NIVA
Sample : 2892611MSD/2892614
Misc : RUN200908
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 13 10:43:39 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(66) 135TRIMETHYLBENZENE (T)

15.746min (+0.098) 0.29 µg/L

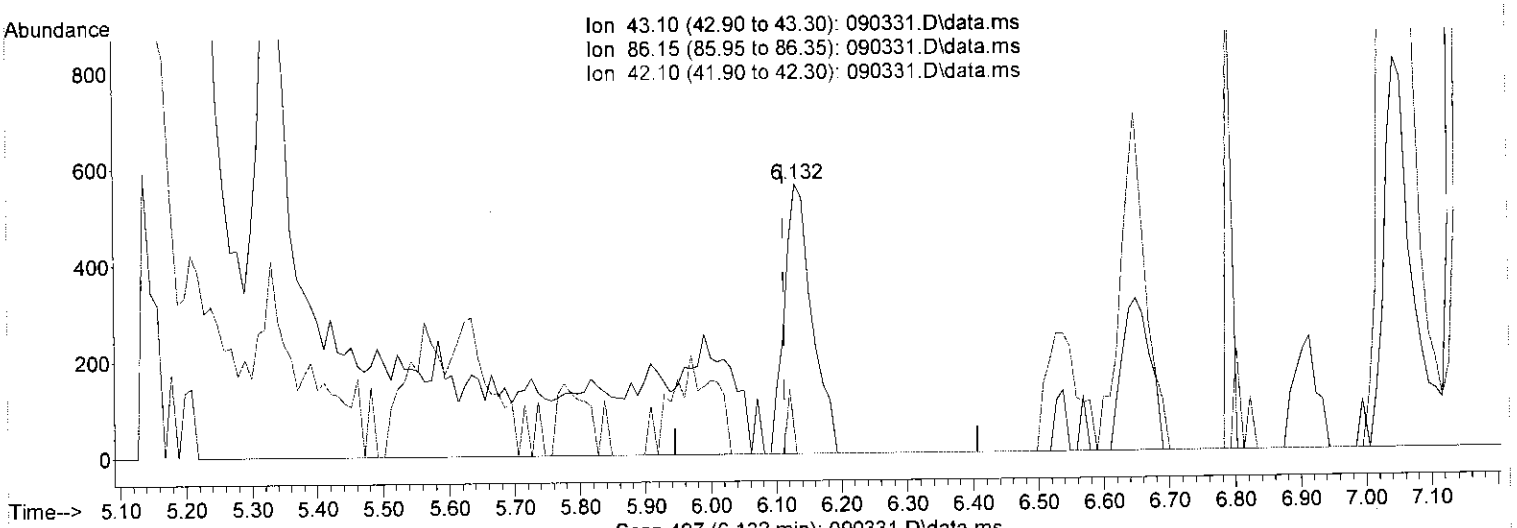
response 4117

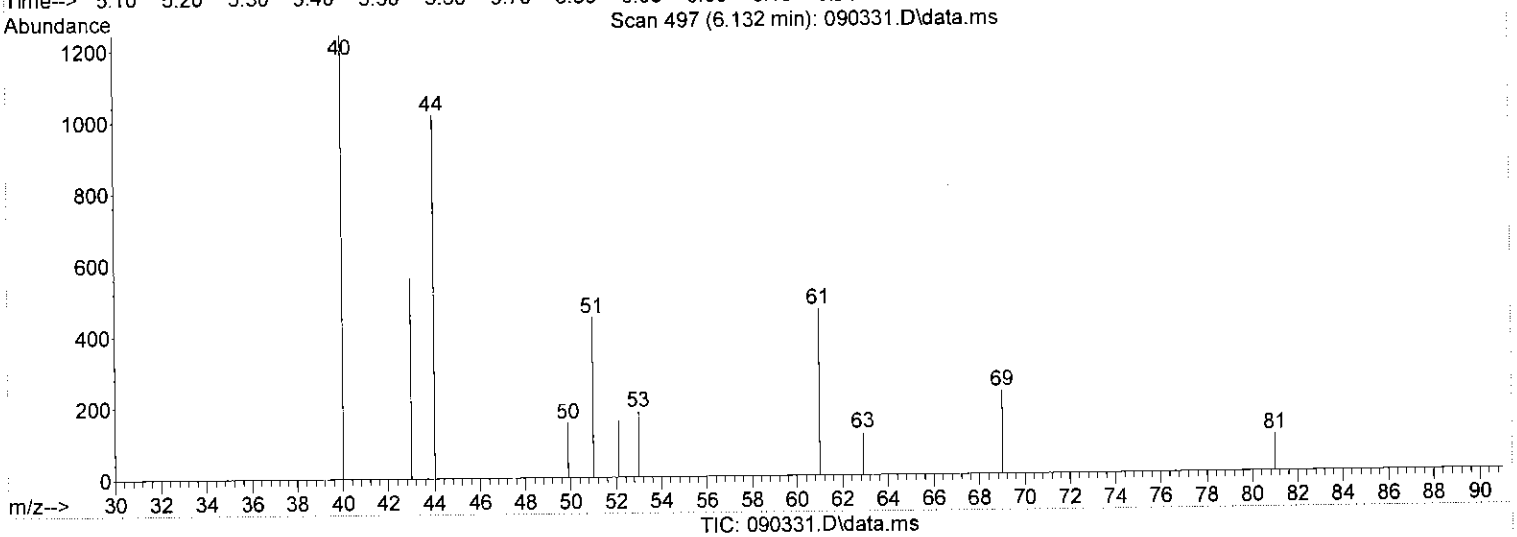
Ion	Exp%	Act%
105.15	100	100
120.20	52.10	51.79
119.00	12.60	13.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090331.D
Acq On : 11 Jul 2018 8:24 am
Operator : NIVA
Sample : 2892611MSD/2892614
Misc : RUN200908
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 13 10:43:39 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(17) VINYL ACETATE

6.132min (+0.019) 0.30 µg/L

response 1655

Ion	Exp%	Act%
43.10	100	100
86.15	9.70	0.00#
42.10	11.50	4.83#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090331.D
Acq On : 11 Jul 2018 8:24 am
Operator : NIVA
Sample : 2892611MSD/2892614
Misc : RUN200908
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 13 10:43:39 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.543	168	278553m	20.00	µg/L		0.03
23) I14-DIFLUOROBENZENE	8.295	114	331820	20.00	µg/L		0.03
48) CHLOROBENZEN-d5-IS	12.985	117	372864	20.00	µg/L		0.04
71) I14-DICLBENZENE-D4	16.995	152	237627	20.00	µg/L		-0.13
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.036	111	165434	22.22	µg/L		0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.10%				
39) STOLUENE-D8	10.305	98	425834	20.43	µg/L		0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.15%				
59) S4BRFLUOROBENZENE	15.238	95	184802	19.33	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.65%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.853	85	37741m	24.56	µg/L		
3) CHLOROMETHANE	3.117	50	68591m	23.07	µg/L		
4) VINYL CHLORIDE	3.219	62	60106m	23.62	µg/L		
5) BROMOMETHANE	3.604	94	53485	22.18	µg/L	#	29
6) CHLOROETHANE	3.746	64	42873	22.16	µg/L		99
7) TRICLFLUOROMETHANE	3.909	101	154307m	23.62	µg/L		
8) ACROLEIN	4.812	56	211717	256.20	µg/L		99
9) ACETONE	5.107	43	113058	105.98	µg/L	#	95
10) 11-DICHLOROETHENE	4.467	61	94832	22.53	µg/L		96
11) IODOMETHANE	4.650	142	93474	21.05	µg/L		94
12) CARBON DISULFIDE	4.548	76	794465	118.74	µg/L		98
13) ACRYLONITRILE	5.960	53	120962	96.11	µg/L		99
14) DICHLOROMETHANE	5.076	84	71021	18.95	µg/L		90
15) TRANS12DICLETHENE	5.249	96	68838	20.97	µg/L		98
16) 11-DICHLOROETHANE	5.909	63	121263	20.16	µg/L		97
17) VINYL ACETATE	6.132	43	1655	N.D.			
18) 2-BUTANONE	7.168	43	158250	92.17	µg/L		95
19) CIS12DICHLOROETHENE	6.518	96	54006	14.22	µg/L		90
20) 22-DICHLOROPROPANE	6.650	77	55334	12.34	µg/L		97
21) CHLOROFORM	6.812	83	147010	18.08	µg/L		99
22) BROMOCHLOROMETHANE	6.762	49	67523	20.73	µg/L	#	82
25) TETRAHYDROFURAN	7.046	42	8508	11.73	µg/L	#	87
26) 111-TRICHLOROETHANE	7.097	97	138494	24.65	µg/L		99
27) 11-DICHLOROPROPENE	7.239	75	73425	21.32	µg/L		91
28) 12-DICHLOROETHANE	7.797	62	115505	21.88	µg/L	#	99
29) CARBONTETRACHLORIDE	7.026	117	134042	24.50	µg/L	#	94
30) BENZENE	7.553	78	232768	20.82	µg/L	#	96
31) TRICHLOROETHENE	8.295	132	66615	20.89	µg/L	#	92
32) 12-DICHLOROPROPANE	9.015	63	56002	20.49	µg/L	#	88
33) DIBROMOMETHANE	8.893	174	50011	19.63	µg/L		96
34) BROMODICLMETHANE	9.076	83	115042	22.86	µg/L		100
35) 2-CLETHYLVINYLETHER	9.949	63	2598m	3.97	µg/L		
36) EPICHLOROHYDRIN	10.386	57	124423	426.32	µg/L		90
37) 4METHYL-2-PENTANONE	10.944	43	385846	109.37	µg/L	#	91
38) CIS13DICLPROPENE	10.010	75	62738	12.81	µg/L		96
40) TOLUENE	10.386	91	259584	20.71	µg/L		96
41) TRANS13DICLPROPENE	11.036	75	84589	22.98	µg/L		86
42) 112-TRICHLOROETHANE	11.310	97	66634	19.90	µg/L		91
43) 2-HEXANONE	12.376	43	262512	101.71	µg/L		98
44) 13-DICHLOROPROPANE	11.797	76	98792	19.19	µg/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090331.D
Acq On : 11 Jul 2018 8:24 am
Operator : NIVA
Sample : 2892611MSD/2892614
Misc : RUN200908
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 13 10:43:39 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

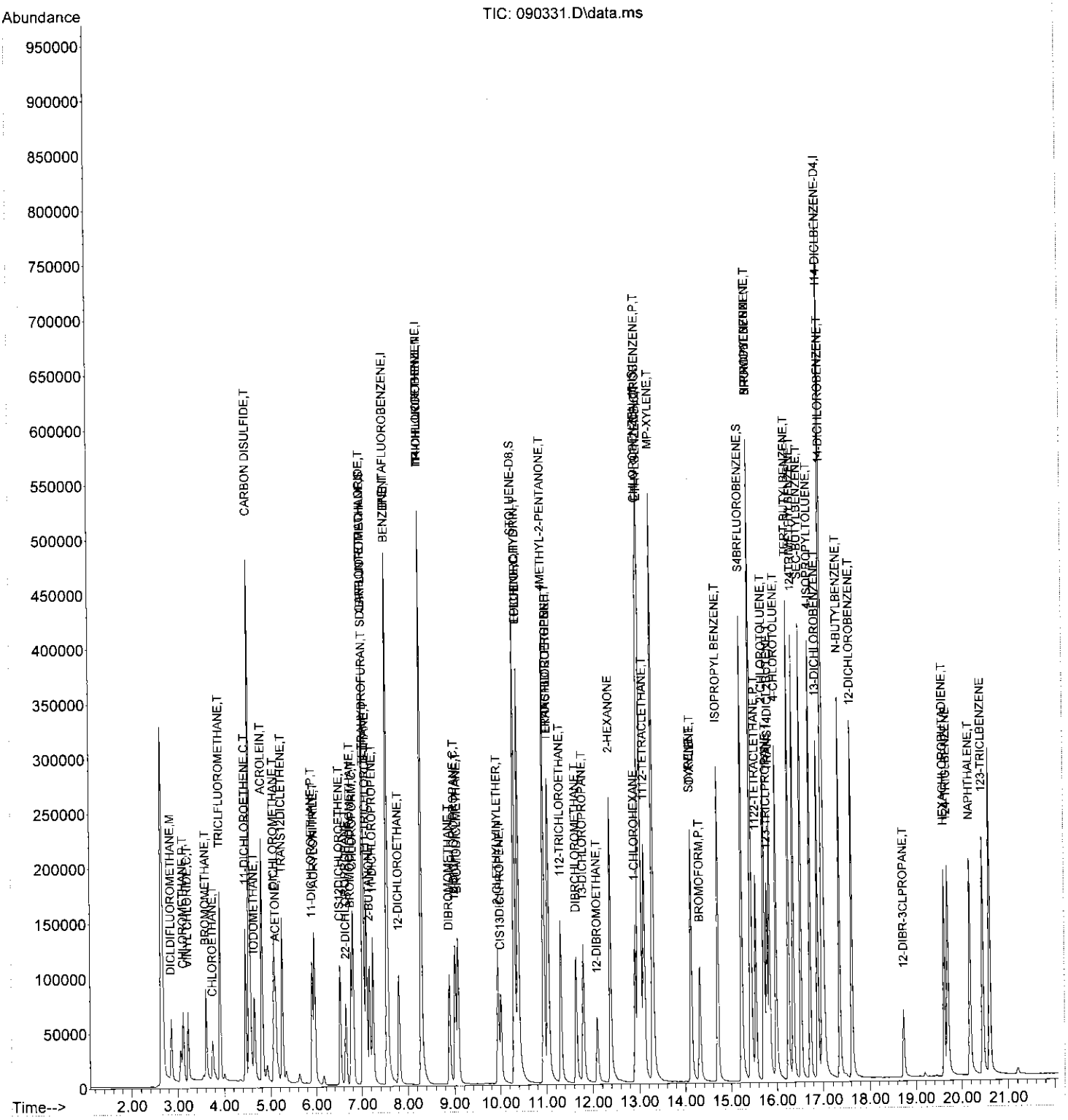
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	92554	22.58 µg/L	100
46) TETRACHLOROETHENE	11.046	166	79465	21.20 µg/L	90
47) 12-DIBROMOETHANE	12.091	107	61470	19.88 µg/L	100
49) CHLOROBENZENE	13.015	112	190312	19.53 µg/L	83
50) 1-CHLOROHEXANE	12.914	91	51994	26.21 µg/L #	53
51) 1112-TETRACLETHANE	13.106	131	86634	20.57 µg/L	97
52) ETHYLBENZENE	13.025	91	311172	20.06 µg/L	97
53) MP-XYLENE	13.289	91	471614	39.61 µg/L	93
54) STYRENE	14.122	104	6833	0.68 µg/L #	1
55) O-XYLENE	14.132	91	205159	17.87 µg/L	93
56) BROMOFORM	14.315	173	82839	25.24 µg/L	99
57) 1122-TETRACLETHANE	15.543	83	114584	19.32 µg/L	99
58) ISOPROPYL BENZENE	14.710	105	230005	14.79 µg/L	95
60) 123-TRICLPROPANE	15.787	110	38423	20.15 µg/L	95
61) TRANS14DICL2BUTENE	15.837	53	75422	82.56 µg/L	89
62) BROMOBENZENE	15.431	77	165623	20.31 µg/L	83
63) N-PROPYLBENZENE	15.431	91	361704	19.29 µg/L	93
64) 2-CHLOROTOLUENE	15.716	91	211304	15.86 µg/L	95
65) 4-CHLOROTOLUENE	15.979	91	220886	18.05 µg/L	91
66) 135TRIMETHYLBENZENE	15.746	105	4117	N.D.	
67) TERT-BUTYLBENZENE	16.254	119	221286	20.00 µg/L	89
68) 124TRIMETHYLBENZENE	16.365	105	267625	18.95 µg/L	99
69) SEC-BUTYLBENZENE	16.528	105	317521	18.56 µg/L	97
70) 13-DICHLOROBENZENE	16.893	146	164540	19.10 µg/L	98
72) 4-ISOPROPYLTOLUENE	16.741	119	267297	18.22 µg/L	96
73) 14-DICHLOROBENZENE	17.015	146	176896	19.15 µg/L	86
74) 12-DICHLOROBENZENE	17.624	146	176495	19.33 µg/L	96
75) N-BUTYLBENZENE	17.350	91	232274	17.57 µg/L	98
76) 12-DIBR-3CLPROPANE	18.741	157	24537	17.08 µg/L	93
77) 124-TRICLBENZENE	19.695	180	95390	14.64 µg/L	99
78) NAPHTHALENE	20.182	128	241183	14.51 µg/L	98
79) HEXACHLOROBUTADIENE	19.624	225	52500	18.80 µg/L	97
80) 123-TRICLBENZENE	20.456	182	100639	16.86 µg/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090331.D
Acq On : 11 Jul 2018 8:24 am
Operator : NIVA
Sample : 2892611MSD/2892614
Misc : RUN200908
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 13 10:43:39 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090332.D
Acq On : 11 Jul 2018 8:50 am
Operator : NIVA
Sample : LFB/2898540
Misc : RUN200908
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 13 11:04:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.543	168	260959m	20.00	µg/L		0.03
23) I14-DIFLUOROBENZENE	8.295	114	304192	20.00	µg/L		0.03
48) CHLOROBENZEN-d5-IS	12.975	117	343674	20.00	µg/L		0.03
71) I14-DICLBENZENE-D4	16.985	152	220621	20.00	µg/L		-0.14
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.026	111	159713	23.40	µg/L		0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 117.00%				
39) STOLUENE-D8	10.305	98	401883	21.03	µg/L		0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.15%				
59) S4BRFLUOROBENZENE	15.238	95	172510	19.58	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.90%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.853	85	31111m	21.61	µg/L		
3) CHLOROMETHANE	3.117	50	60065	21.56	µg/L	#	98
4) VINYL CHLORIDE	3.219	62	50417m	21.15	µg/L		
5) BROMOMETHANE	3.604	94	55115m	24.39	µg/L		
6) CHLOROETHANE	3.747	64	39849	21.98	µg/L		96
7) TRICLFLUOROMETHANE	3.909	101	158994	25.98	µg/L		99
8) ACROLEIN	4.812	56	285137m	368.31	µg/L		
9) ACETONE	5.107	43	107787	107.85	µg/L	#	97
10) 11-DICHLOROETHENE	4.467	61	77560	19.67	µg/L		96
11) IODOMETHANE	4.650	142	450880	108.36	µg/L		95
12) CARBON DISULFIDE	4.548	76	660456	105.36	µg/L	#	98
13) ACRYLONITRILE	5.960	53	120099	101.85	µg/L		99
14) DICHLOROMETHANE	5.076	84	66126	18.83	µg/L		90
15) TRANS12DICLETHENE	5.249	96	59393	19.31	µg/L		96
16) 11-DICHLOROETHANE	5.909	63	107835	19.13	µg/L		96
17) VINYL ACETATE	6.122	43	614633	118.50	µg/L	#	97
18) 2-BUTANONE	7.168	43	157690	98.04	µg/L		96
19) CIS12DICHLOROETHENE	6.518	96	61113m	17.18	µg/L		
20) 22-DICHLOROPROPANE	6.650	77	81334m	19.36	µg/L		
21) CHLOROFORM	6.802	83	130494	17.13	µg/L	#	99
22) BROMOCHLOROMETHANE	6.762	49	62365	20.44	µg/L	#	82
25) TETRAHYDROFURAN	7.046	42	12004m	18.05	µg/L		
26) 111-TRICHLOROETHANE	7.097	97	115095	22.34	µg/L		98
27) 11-DICHLOROPROPENE	7.239	75	57553	18.23	µg/L		93
28) 12-DICHLOROETHANE	7.797	62	106577	22.02	µg/L	#	98
29) CARBONTETRACHLORIDE	7.026	117	108405	21.61	µg/L	#	95
30) BENZENE	7.553	78	199524	19.47	µg/L	#	96
31) TRICHLOROETHENE	8.295	132	54581	18.67	µg/L	#	88
32) 12-DICHLOROPROPANE	9.015	63	48930	19.53	µg/L	#	89
33) DIBROMOMETHANE	8.893	174	46670	19.98	µg/L		95
34) BROMODICLMETHANE	9.076	83	101862	22.08	µg/L		99
35) 2-CLETHYLVINYLETHER	9.858	63	48073	80.04	µg/L	#	87
36) EPICHLOROHYDRIN	10.386	57	122647	458.40	µg/L		92
37) 4METHYL-2-PENTANONE	10.944	43	375904	116.23	µg/L	#	91
38) CIS13DICLPROPENE	10.010	75	75025	16.71	µg/L		96
40) TOLUENE	10.386	91	223175	19.42	µg/L		98
41) TRANS13DICLPROPENE	11.036	75	76413	22.65	µg/L		85
42) 112-TRICHLOROETHANE	11.310	97	62732	20.44	µg/L		91
43) 2-HEXANONE	12.376	43	256426	108.37	µg/L		97
44) 13-DICHLOROPROPANE	11.797	76	91412	19.37	µg/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090332.D
Acq On : 11 Jul 2018 8:50 am
Operator : NIVA
Sample : LFB/2898540
Misc : RUN200908
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 13 11:04:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

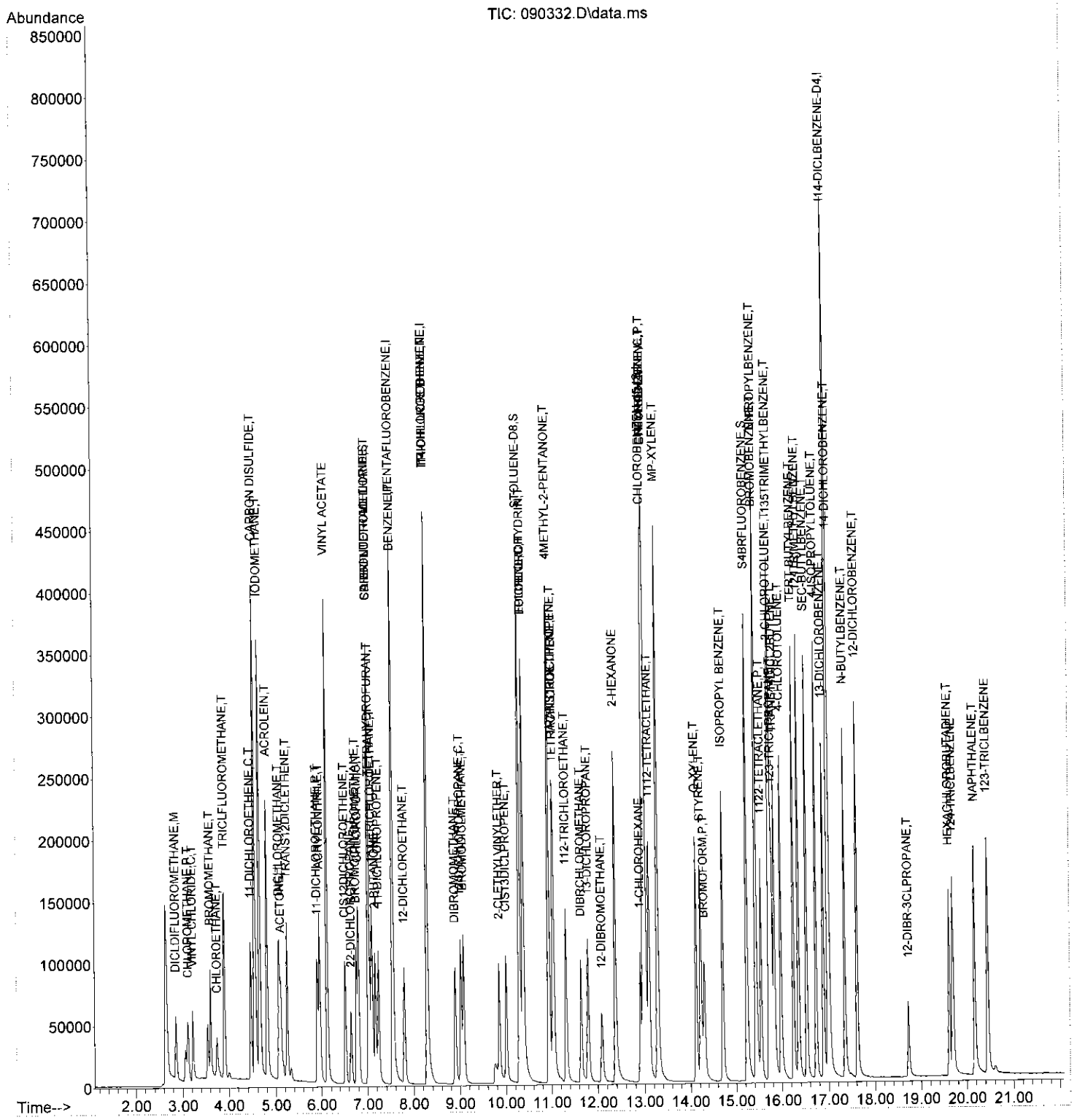
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.645	129	80776	21.50 µg/L	99
46) TETRACHLOROETHENE	11.046	166	64754	18.84 µg/L	89
47) 12-DIBROMOETHANE	12.091	107	56662	19.99 µg/L	99
49) CHLOROBENZENE	13.015	112	168553	18.76 µg/L	82
50) 1-CHLOROHEXANE	12.914	91	37742	21.45 µg/L #	48
51) 1112-TETRACLETHANE	13.106	131	78645	20.26 µg/L	96
52) ETHYLBENZENE	13.015	91	258466	18.08 µg/L	96
53) MP-XYLENE	13.289	91	399775	36.43 µg/L	93
54) STYRENE	14.223	104	154661m	16.70 µg/L	
55) O-XYLENE	14.122	91	170019	16.06 µg/L	95
56) BROMOFORM	14.304	173	66198	21.89 µg/L	99
57) 1122-TETRACLETHANE	15.543	83	108782	19.90 µg/L	99
58) ISOPROPYL BENZENE	14.710	105	239324m	16.70 µg/L	
60) 123-TRICLPROPANE	15.776	110	37611	21.39 µg/L	95
61) TRANS14DICL2BUTENE	15.827	53	73536m	87.33 µg/L	
62) BROMOBENZENE	15.421	77	146354	19.47 µg/L	84
63) N-PROPYLBENZENE	15.431	91	296653	17.16 µg/L	93
64) 2-CHLOROTOLUENE	15.716	91	204999	16.70 µg/L	89
65) 4-CHLOROTOLUENE	15.979	91	191492	16.97 µg/L	93
66) 135TRIMETHYLBENZENE	15.736	105	236196	18.03 µg/L	93
67) TERT-BUTYLBENZENE	16.254	119	177032	17.36 µg/L	89
68) 124TRIMETHYLBENZENE	16.365	105	247999	19.05 µg/L	99
69) SEC-BUTYLBENZENE	16.528	105	251825	15.97 µg/L	98
70) 13-DICHLOROBENZENE	16.883	146	146843	18.49 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.731	119	214900	15.78 µg/L	95
73) 14-DICHLOROBENZENE	17.015	146	156639	18.27 µg/L	87
74) 12-DICHLOROBENZENE	17.614	146	159369	18.80 µg/L	97
75) N-BUTYLBENZENE	17.350	91	252057m	20.54 µg/L	
76) 12-DIBR-3CLPROPANE	18.731	157	23305	17.48 µg/L	95
77) 124-TRICLBENZENE	19.695	180	93721m	15.49 µg/L	
78) NAPHTHALENE	20.172	128	286324m	18.56 µg/L	
79) HEXACHLOROBUTADIENE	19.614	225	41570	16.04 µg/L	94
80) 123-TRICLBENZENE	20.446	182	91744	16.55 µg/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090332.D
Acq On : 11 Jul 2018 8:50 am
Operator : NIVA
Sample : LFB/2898540
Misc : RUN200908
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 13 11:04:21 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Calibration Status Report V7-AG7890MS

Method Path : C:\msdchem\1\METHODS\
Method File : ETHANOL-ACETONIT-MTBE-JULY18.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Thu Jul 12 12:44:53 2018
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	75	20	C:\msdchem\1\DATA\200903-08-15CCEXT\CCEXTPLIQ1.D
2	2	125	20	C:\msdchem\1\DATA\200903-08-15CCEXT\CCEXTPLIQ2.D
3	3	250	20	C:\msdchem\1\DATA\200903-08-15CCEXT\CCEXTPLIQ3.D
4	4	500	20	C:\msdchem\1\DATA\200903-08-15CCEXT\CCEXTPLIQ4.D
5	5	1250	20	C:\msdchem\1\DATA\200903-08-15CCEXT\CCEXTPLIQ5.D
6	6	2500	20	C:\msdchem\1\DATA\200903-08-15CCEXT\CCEXTPLIQ6.D
7	7	5000	20	C:\msdchem\1\DATA\200903-08-15CCEXT\CCEXTPLIQ7.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jul 10 17:03 2018	Jul 10 17:03 2018	10 Jul 2018 3:50 pm
2	2	Jul 10 17:04 2018	Jul 10 17:03 2018	10 Jul 2018 4:17 pm
3	3	Jul 10 17:04 2018	Jul 10 17:04 2018	10 Jul 2018 4:43 pm
4	4	Jul 12 12:27 2018	Jul 12 12:26 2018	10 Jul 2018 5:09 pm
5	5	Jul 12 12:28 2018	Jul 12 12:28 2018	10 Jul 2018 5:36 pm
6	6	Jul 12 12:29 2018	Jul 12 12:29 2018	10 Jul 2018 6:02 pm
7	7	Jul 12 12:43 2018	Jul 12 12:30 2018	10 Jul 2018 6:28 pm

ETHANOL-ACE...TBE-JULY18.M Thu Jul 12 12:51:11 2018

Response Factor Report V7-AG7890MS

Method Path : C:\msdchem\1\METHODS\
Method File : ETHANOL-ACETONIT-MTBE-JULY18.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Thu Jul 12 12:44:53 2018
Response Via : Initial Calibration

Calibration Files
1 =CCEXTPLIQ1.D 2 =CCEXTPLIQ2.D 3 =CCEXTPLIQ3.D 4 =CCEXTPLIQ4.D 5 =CCEXTPLIQ5.D 6 =CCEXTPLIQ6.D 7 =CCEXTPLIQ7.D

		Compound	1	2	3	4	5	6	7	Avg	%RSD
1)	I	IPENTAFLUOROBENZENE	----------ISTD----------								
2)	T	ETHANOL	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.003#	12.75
3)	T	MTBE	0.795	0.728	0.867	0.800	0.962	1.029	0.971	0.879	12.63
4)	T	ACETONITRILE	0.044	0.041	0.059	0.044	0.045	0.043	0.041	0.045#	13.72
5)	I	I14-DIFLUOROBENZENE	----------ISTD----------								
6)	S	SDIBRFLUOROMET...	0.517	0.538	0.530	0.546	0.514	0.519	0.540	0.529	2.37
7)	S	STOLUENE-D8	1.154	1.248	1.253	1.157	1.239	1.253	1.256	1.223	3.79
8)	I	CHLOROBENZEN-d5-IS	----------ISTD----------								
9)	S	S4BRFLUOROBENZENE	0.474	0.474	0.467	0.473	0.470	0.468	0.476	0.472	0.71
10)	I	I14-DICLBENZENE-D4	----------ISTD----------								

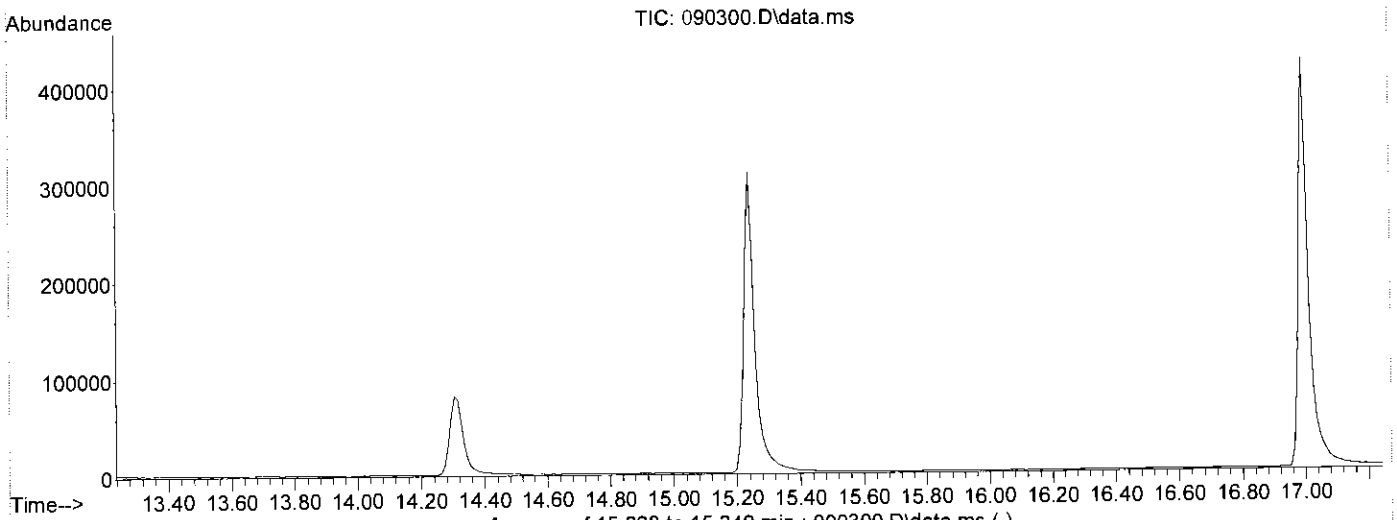
(#) = Out of Range

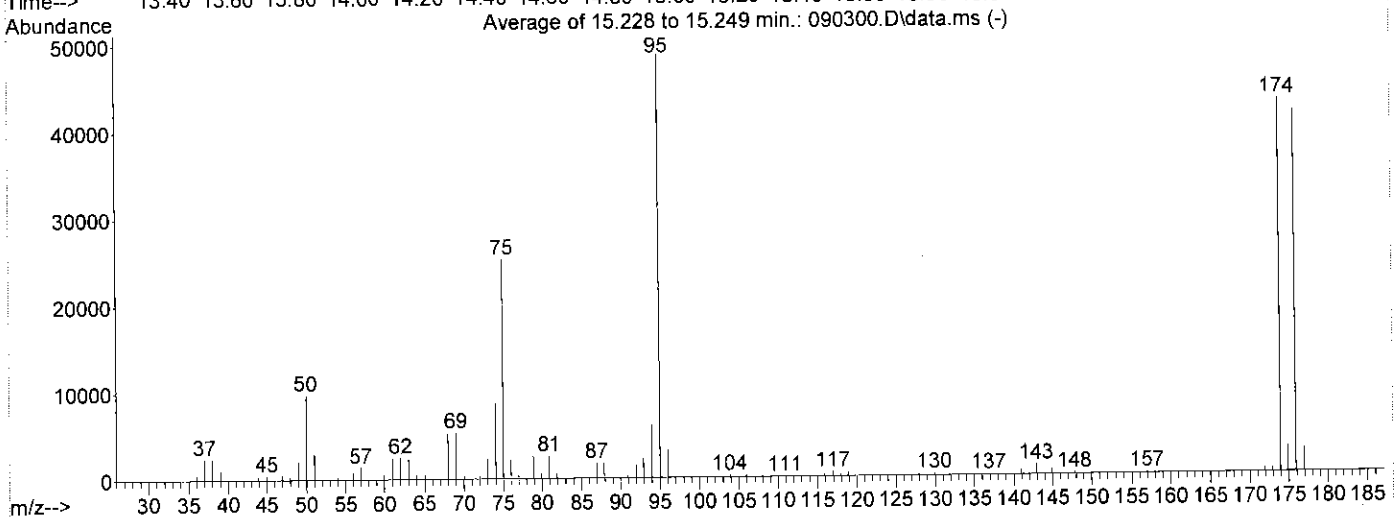
Method VOC

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090300.D
Acq On : 10 Jul 2018 6:54 pm
Operator : NIVA
Sample : BFB/DEGRADATION
Misc : RUN200903
ALS Vial : 9 Sample Multiplier: 1

Integration File: VOC.P

Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Thu Jul 12 12:44:53 2018
InstName : V7-AG7890MS





AutoFind: Scans 1393, 1394, 1395; Background Corrected with Scan 1387

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	9783	PASS
75	95	30	60	51.8	25251	PASS
95	95	100	100	100.0	48736	PASS
96	95	5	9	6.6	3220	PASS
173	174	0.00	2	1.2	515	PASS
174	95	50	150	88.3	43019	PASS
175	174	5	9	6.9	2949	PASS
176	174	95	101	96.7	41608	PASS
177	176	5	9	6.5	2701	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090301.D
Acq On : 10 Jul 2018 7:20 pm
Operator : NIVA
Sample : LRB/2898474
Misc : RUN200903
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 12 12:52:38 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:44:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

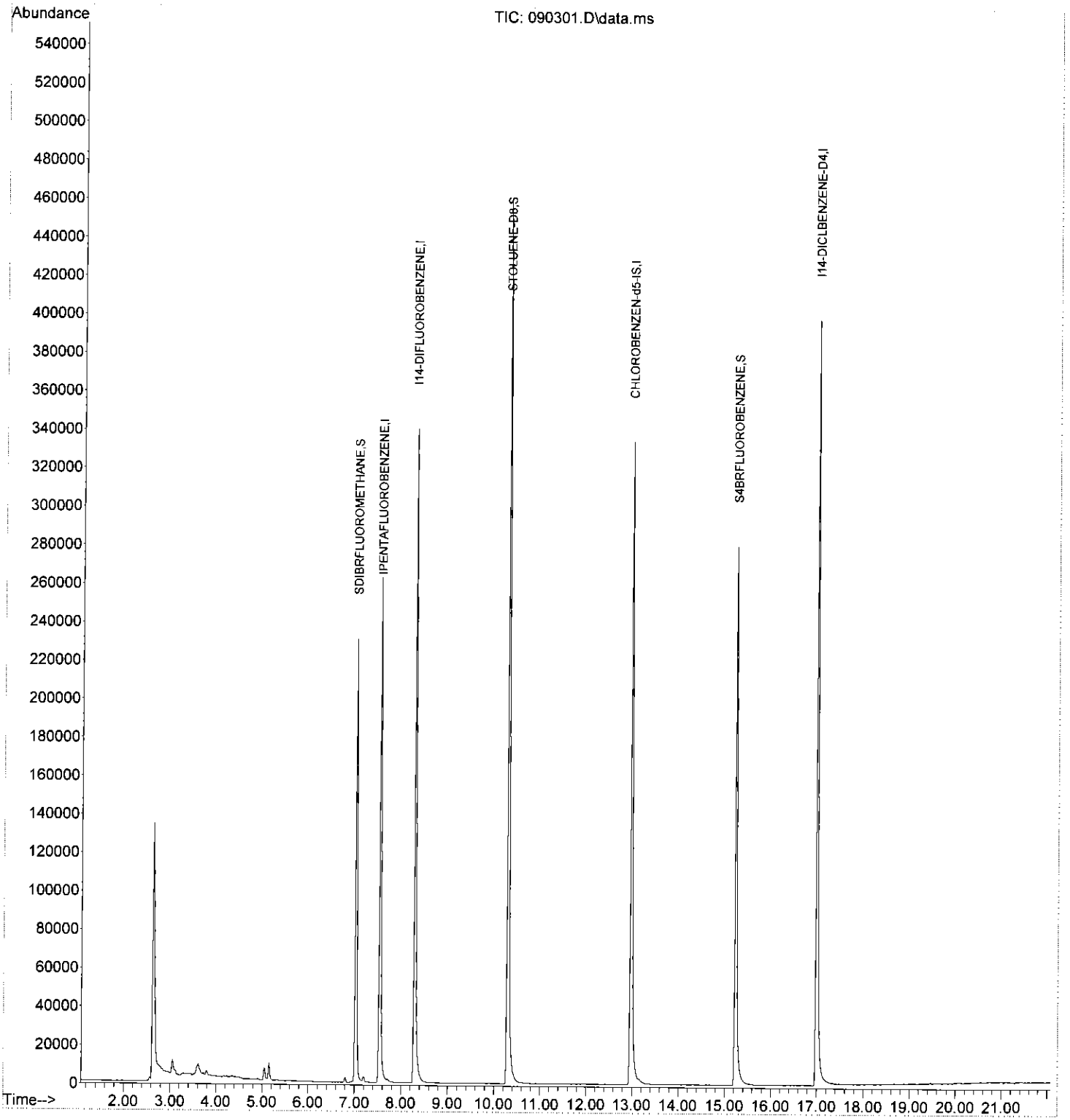
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	207519	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.284	114	319237	20.00 µg/L	0.01
8) CHLOROBENZEN-d5-IS	12.974	117	287676	20.00 µg/L	0.02
10) I14-DICLBENZENE-D4	16.995	152	157254	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.026	111	163585	19.37 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.85%		
7) STOLUENE-D8	10.294	98	397799	20.38 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.90%		
9) S4BRFLUOROBENZENE	15.238	95	138930	20.47 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.35%		
Target Compounds					Qvalue
2) ETHANOL	0.000		0	N.D. d	
3) MTBE	5.330	73	414	N.D.	
4) ACETONITRILE	0.000		0	N.D. d	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090301.D
Acq On : 10 Jul 2018 7:20 pm
Operator : NIVA
Sample : LRB/2898474
Misc : RUN200903
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 12 12:52:38 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:44:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090303.D
Acq On : 10 Jul 2018 8:13 pm
Operator : NIVA
Sample : MDLEXT/2898477
Misc : RUN200903
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 12 13:27:31 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

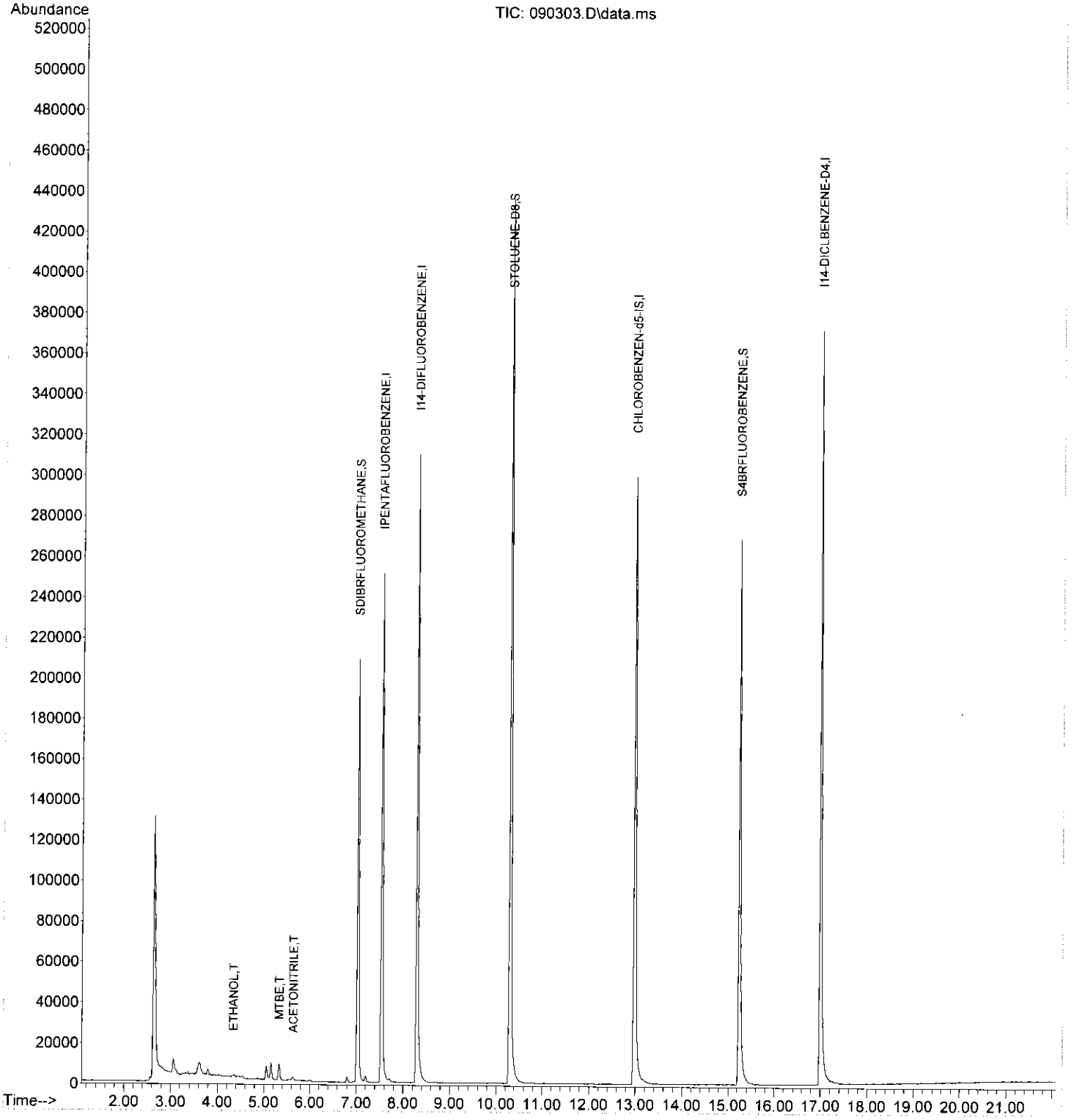
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	193419	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	295834	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	269814	20.00 µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	144564	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.026	111	150064	19.17 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.85%		
7) STOLUENE-D8	10.305	98	371270	20.52 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.60%		
9) S4BRFLUOROBENZENE	15.239	95	127277	19.99 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.95%		
Target Compounds					Qvalue
2) ETHANOL	4.346	45	748m	23.07 µg/L	
3) MTBE	5.330	73	8475	1.00 µg/L #	91
4) ACETONITRILE	5.635	41	2572	5.87 µg/L #	73

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090303.D
Acq On : 10 Jul 2018 8:13 pm
Operator : NIVA
Sample : MDLEXT/2898477
Misc : RUN200903
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 12 13:27:31 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090305.D
Acq On : 10 Jul 2018 9:05 pm
Operator : NIVA
Sample : ICVEXT/2898476
Misc : RUN200903
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 12 13:30:30 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IPENTAFLUOROBENZENE	1.000	1.000	0.0	93	0.02
2	T	ETHANOL	0.003	0.003#	0.0	91	0.03
3	T	MTBE	0.879	0.889	-1.1	104	0.03
4	T	ACETONITRILE	0.045	0.043#	4.4	92	0.02
5	I	I14-DIFLUOROBENZENE	1.000	1.000	0.0	101	0.02
6	S	SDIBRFLUOROMETHANE	0.529	0.501	5.3	93	0.00
7	S	STOLUENE-D8	1.223	1.237	-1.1	108	0.02
8	I	CHLOROBENZEN-d5-IS	1.000	1.000	0.0	109	0.02
9	S	S4BRFLUOROBENZENE	0.472	0.483	-2.3	111	0.08
10	I	I14-DICLBENZENE-D4	1.000	1.000	0.0	112	-0.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0

ETHANOL-ACE...TBE-JULY18.M Fri Jul 13 09:40:22 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090305.D
Acq On : 10 Jul 2018 9:05 pm
Operator : NIVA
Sample : ICVEXT/2898476
Misc : RUN200903
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 12 13:30:30 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

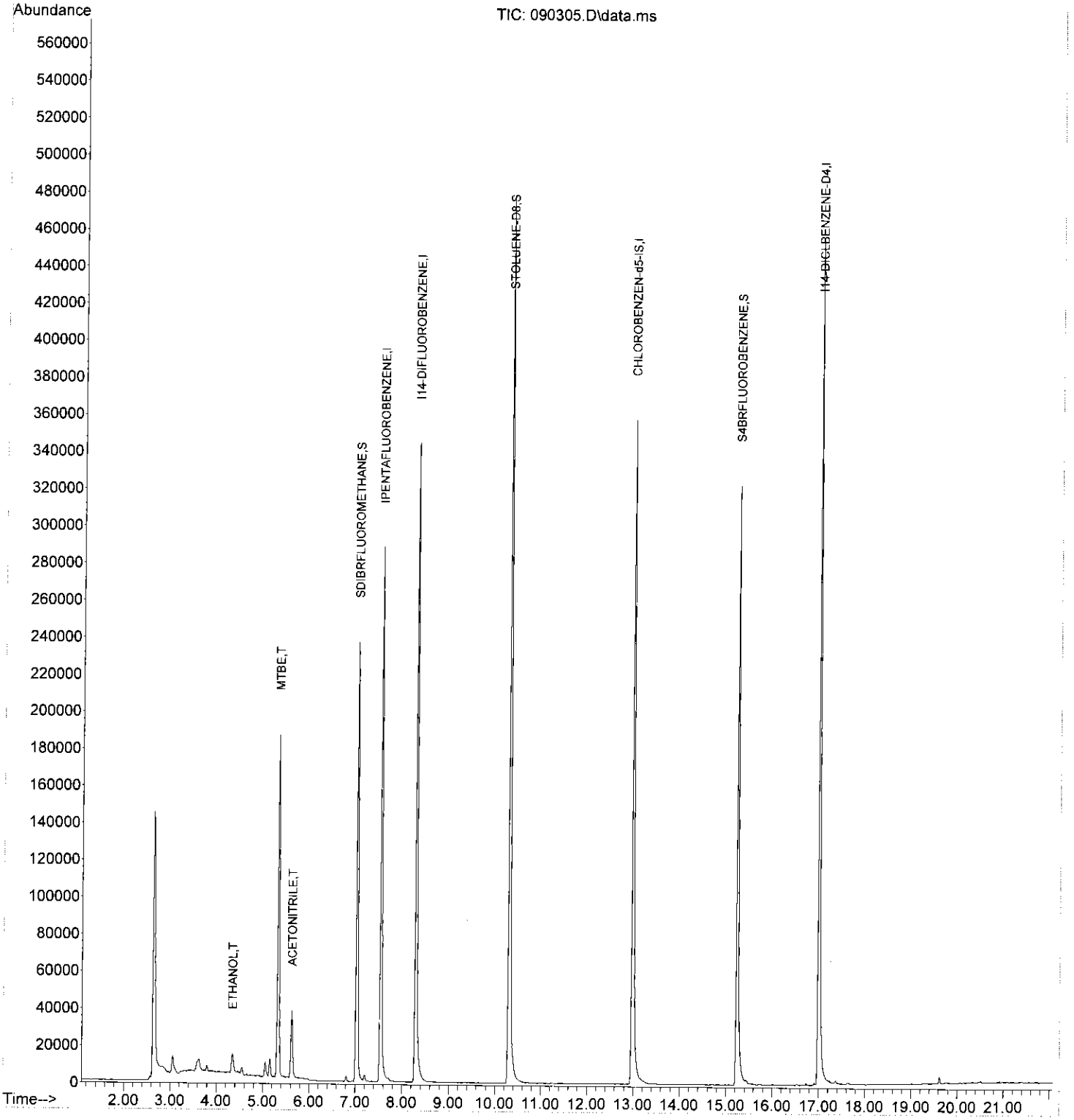
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	226462	20.00	µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	340369	20.00	µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.975	117	309515	20.00	µg/L	0.02
10) I14-DICLBENZENE-D4	16.995	152	169841	20.00	µg/L	-0.11
System Monitoring Compounds						
6) SDIBRFLUOROMETHANE	7.026	111	170678	18.95	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.75%			
7) STOLUENE-D8	10.305	98	421053	20.23	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.15%			
9) S4BRFLUOROBENZENE	15.239	95	149512	20.47	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.35%			
Target Compounds						Qvalue
2) ETHANOL	4.346	45	17384	457.90	µg/L #	95
3) MTBE	5.330	73	201305	20.23	µg/L #	94
4) ACETONITRILE	5.625	41	48960	95.48	µg/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090305.D
Acq On : 10 Jul 2018 9:05 pm
Operator : NIVA
Sample : ICVEXT/2898476
Misc : RUN200903
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 12 13:30:30 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090306.D
Acq On : 10 Jul 2018 9:31 pm
Operator : NIVA
Sample : 2894475
Misc : RUN200903
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 12 14:03:12 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

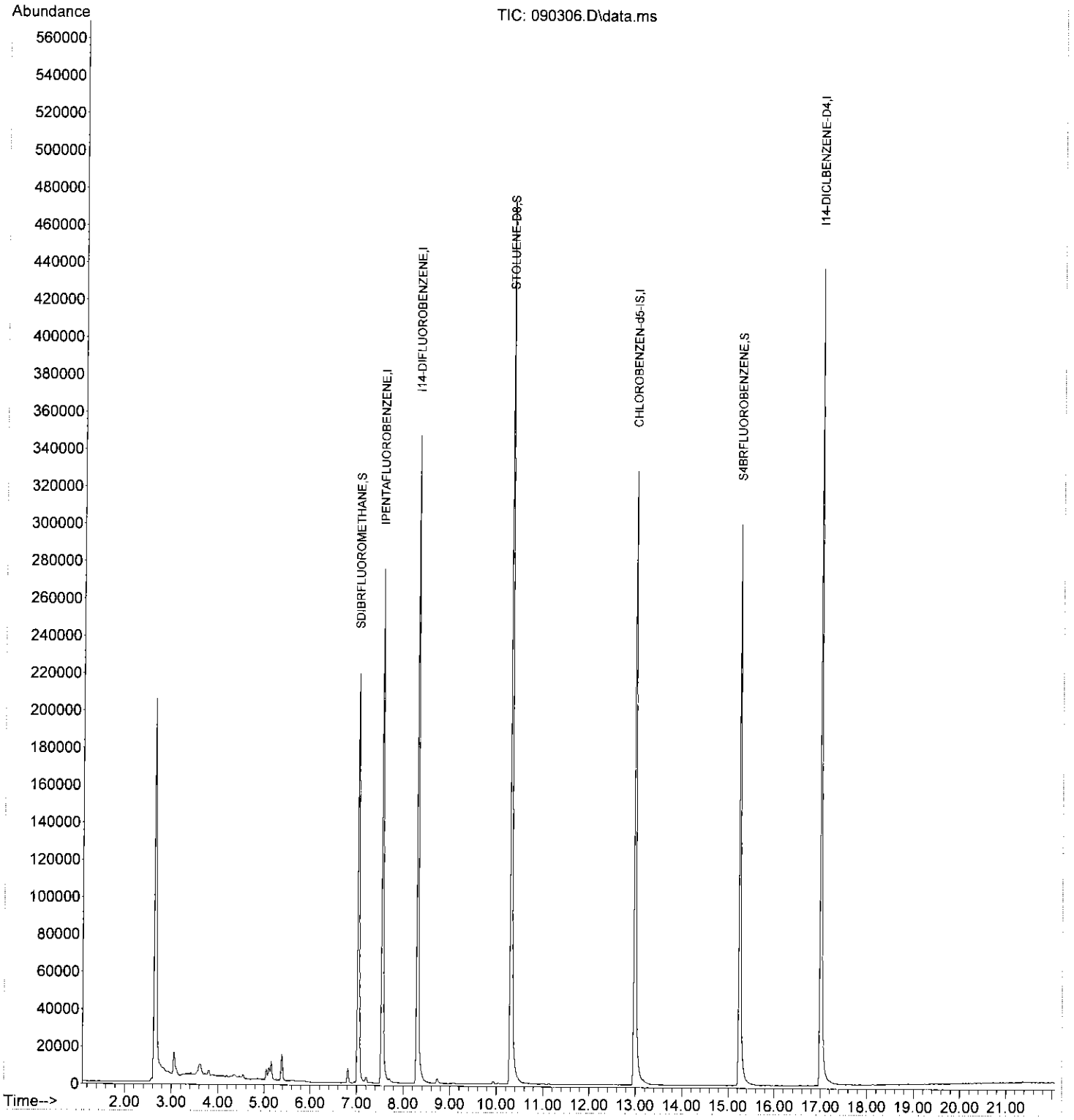
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	211542	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	323163	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	294702	20.00 µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	162713	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.026	111	162728	19.03 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.15%		
7) STOLUENE-D8	10.305	98	409499	20.72 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.60%		
9) S4BRFLUOROBENZENE	15.238	95	142825	20.54 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.70%		
Target Compounds					Qvalue
2) ETHANOL	0.000		0	N.D. d	
3) MTBE	0.000		0	N.D.	
4) ACETONITRILE	0.000		0	N.D. d	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090306.D
Acq On : 10 Jul 2018 9:31 pm
Operator : NIVA
Sample : 2894475
Misc : RUN200903
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 12 14:03:12 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090307.D
Acq On : 10 Jul 2018 9:58 pm
Operator : NIVA
Sample : 2894476
Misc : RUN200903
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 12 13:44:12 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:44:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

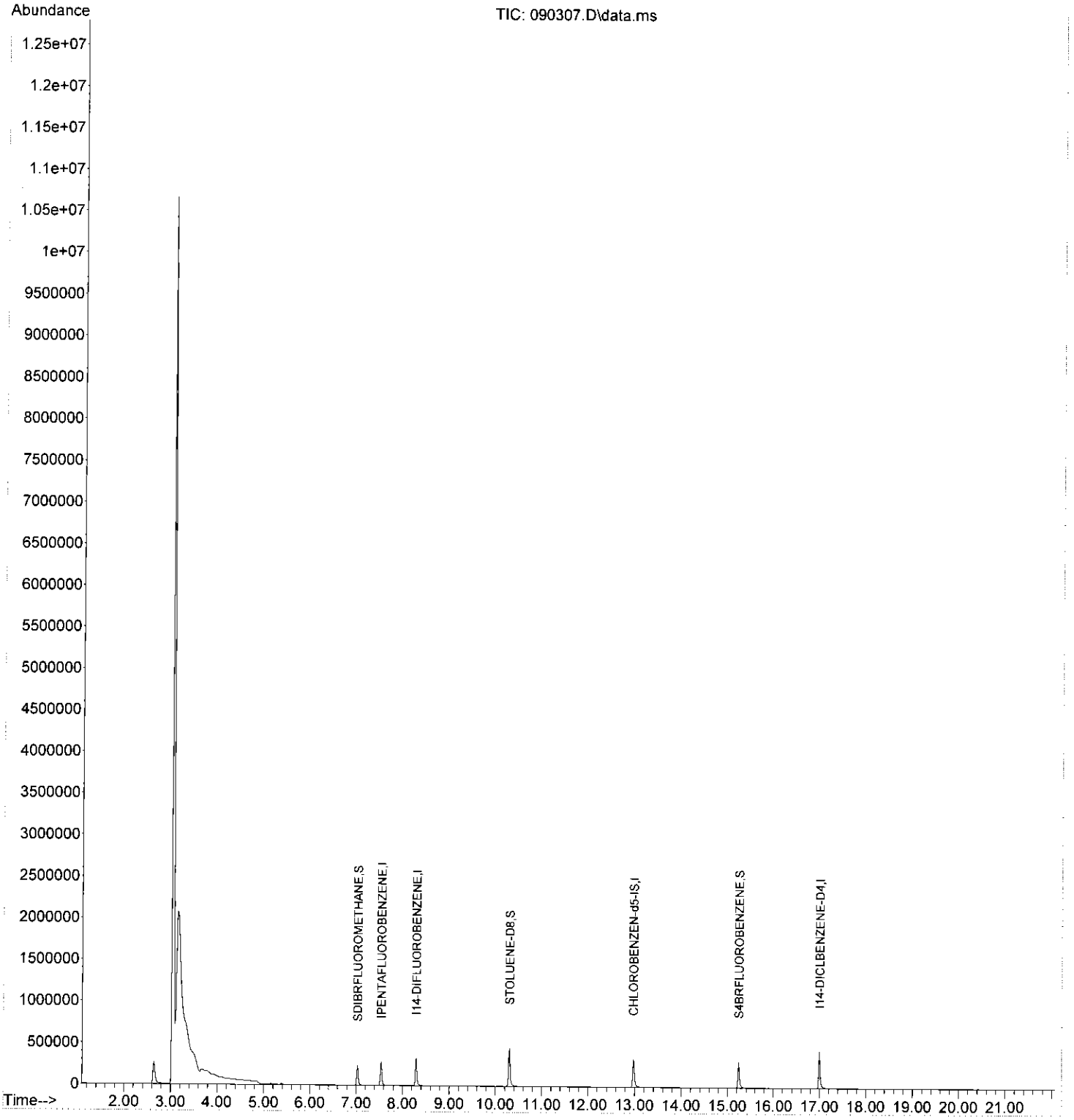
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	220704	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	315441	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.975	117	288925	20.00 µg/L	0.02
10) I14-DICLBENZENE-D4	16.995	152	160198	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.026	111	167920	20.12 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.60%		
7) STOLUENE-D8	10.305	98	404476	20.97 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.85%		
9) S4BRFLUOROBENZENE	15.239	95	140329	20.59 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.95%		
Target Compounds					Qvalue
2) ETHANOL	0.000		0	N.D. d	
3) MTBE	0.000		0	N.D.	
4) ACETONITRILE	0.000		0	N.D. d	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090307.D
Acq On : 10 Jul 2018 9:58 pm
Operator : NIVA
Sample : 2894476
Misc : RUN200903
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 12 13:44:12 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:44:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090308.D
Acq On : 10 Jul 2018 10:24 pm
Operator : NIVA
Sample : 2894477
Misc : RUN200903
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 12 14:10:38 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

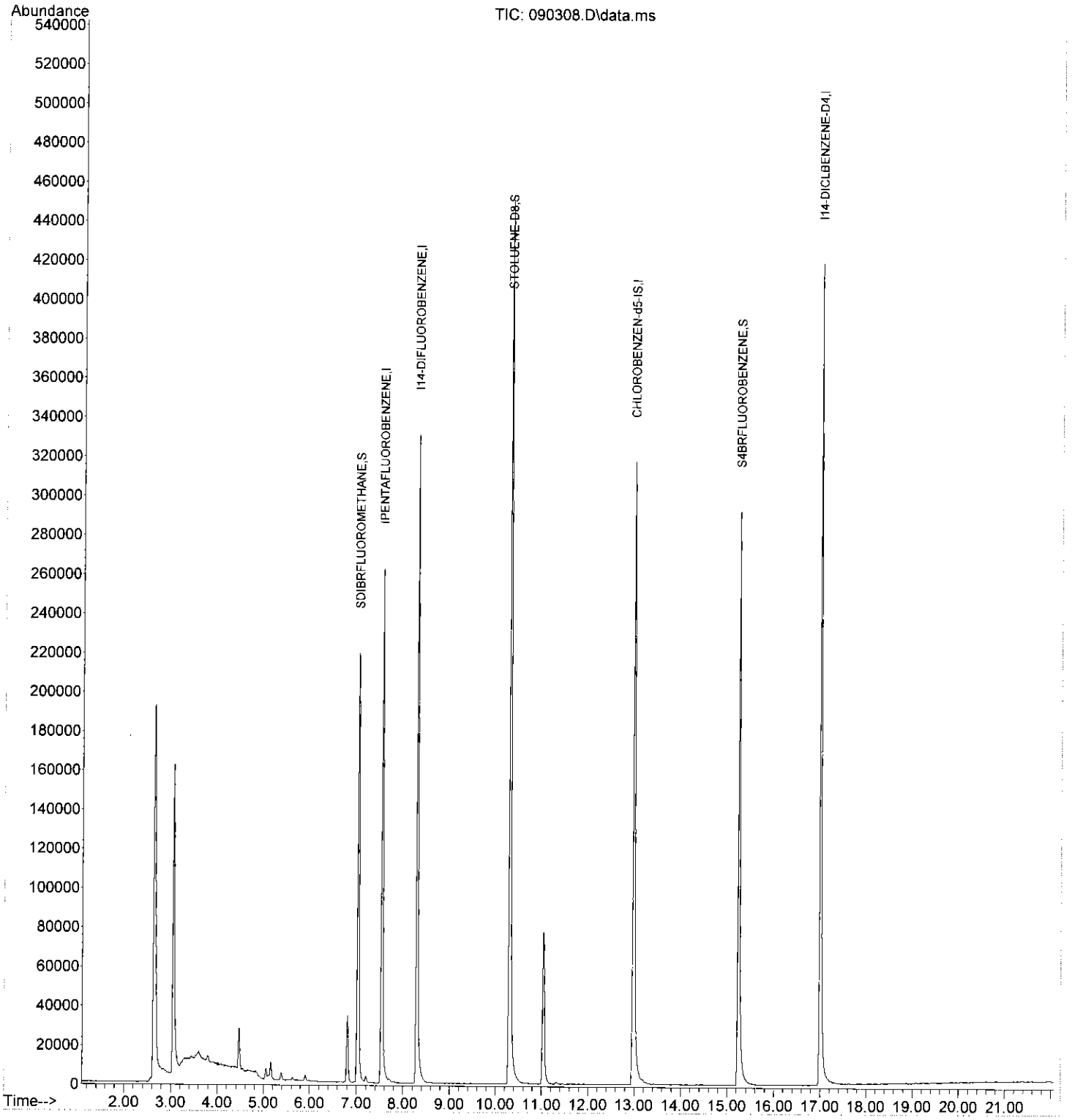
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	202936	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	311229	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.975	117	285952	20.00 µg/L	0.02
10) I14-DICLBENZENE-D4	16.995	152	157218	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.026	111	160966	19.55 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.75%		
7) STOLUENE-D8	10.305	98	389264	20.46 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.30%		
9) S4BRFLUOROBENZENE	15.238	95	137468	20.38 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.90%		
Target Compounds					Qvalue
2) ETHANOL	0.000		0	N.D. d	
3) MTBE	0.000		0	N.D.	
4) ACETONITRILE	0.000		0	N.D. d	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090308.D
Acq On : 10 Jul 2018 10:24 pm
Operator : NIVA
Sample : 2894477
Misc : RUN200903
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 12 14:10:38 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090309.D
Acq On : 10 Jul 2018 10:50 pm
Operator : NIVA
Sample : 2894478
Misc : RUN200903
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 12 14:11:03 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

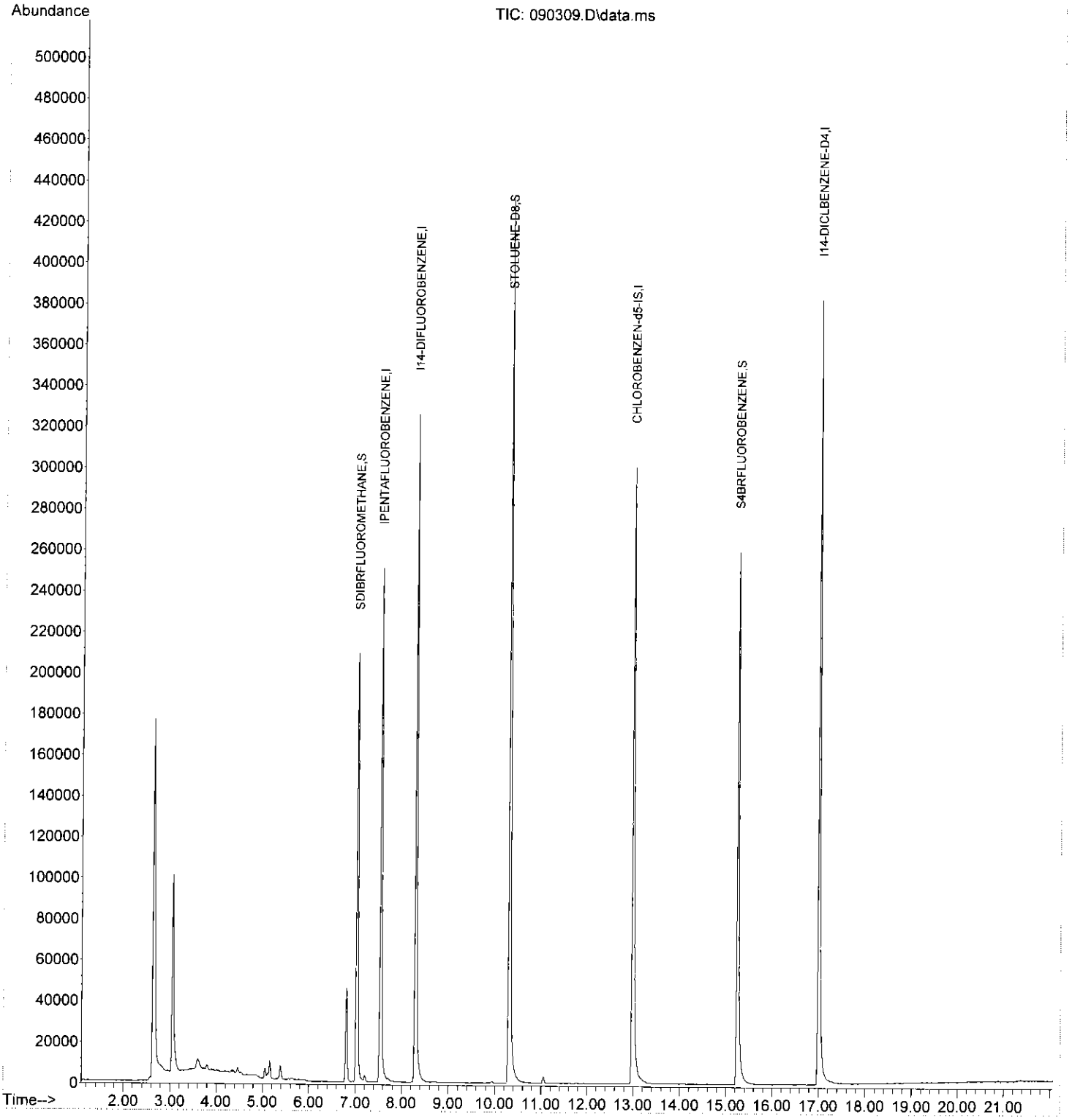
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	194066	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	298621	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	269610	20.00 µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	146824	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.036	111	154625	19.57 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.85%		
7) STOLUENE-D8	10.305	98	372923	20.42 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.10%		
9) S4BRFLUOROBENZENE	15.238	95	129779	20.40 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.00%		
Target Compounds					Qvalue
2) ETHANOL	0.000		0	N.D. d	
3) MTBE	5.330	73	381	N.D.	
4) ACETONITRILE	0.000		0	N.D. d	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090309.D
Acq On : 10 Jul 2018 10:50 pm
Operator : NIVA
Sample : 2894478
Misc : RUN200903
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 12 14:11:03 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090310.D
Acq On : 10 Jul 2018 11:16 pm
Operator : NIVA
Sample : 2894479
Misc : RUN200903
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 12 14:00:06 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

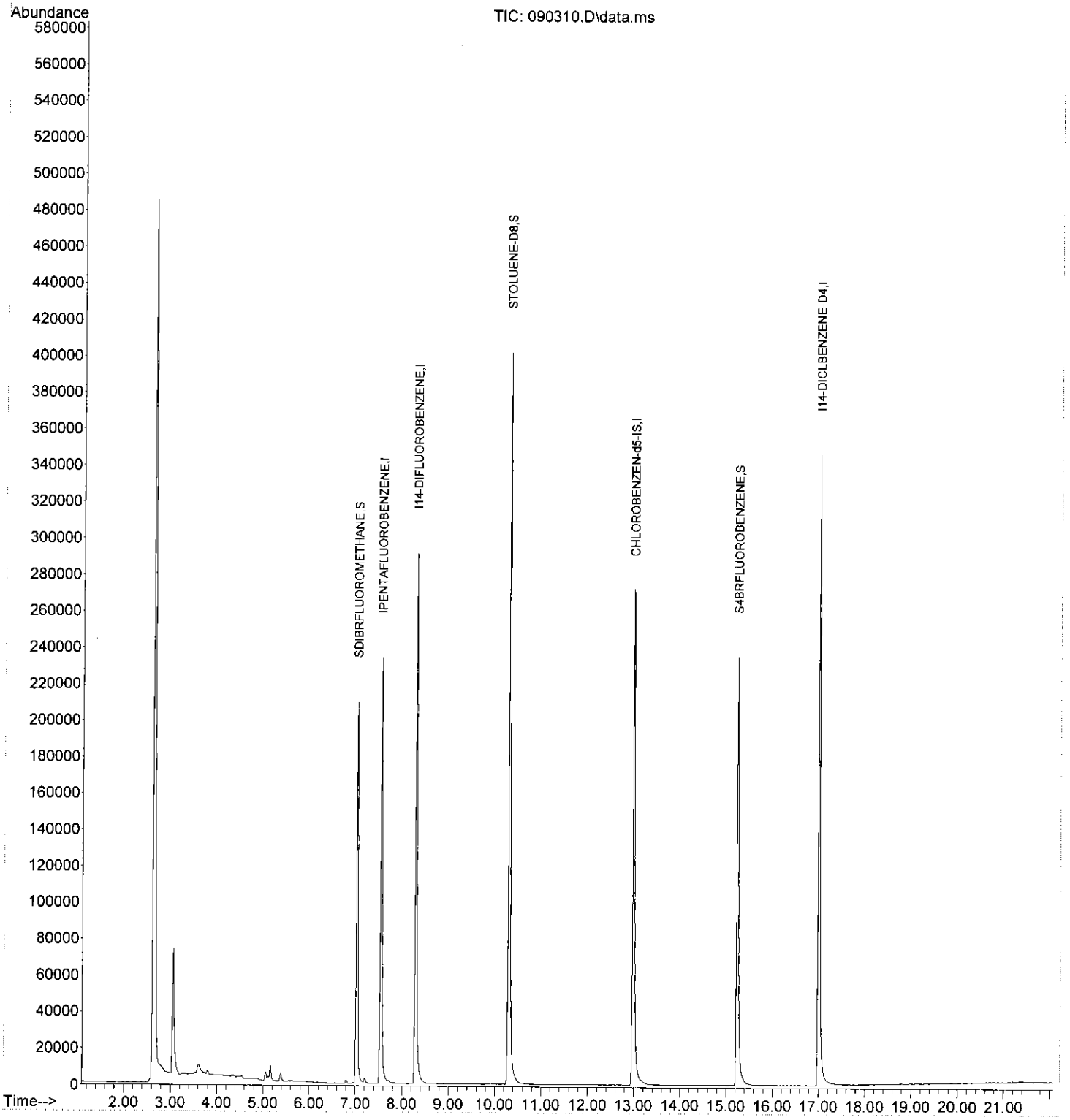
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	184416	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	279585	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	252735	20.00 µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	136775	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.026	111	152674	20.64 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.20%		
7) STOLUENE-D8	10.305	98	351028	20.53 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.65%		
9) S4BRFLUOROBENZENE	15.238	95	119160	19.98 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.90%		
Target Compounds					Qvalue
2) ETHANOL	0.000		0	N.D. d	
3) MTBE	0.000		0	N.D.	
4) ACETONITRILE	0.000		0	N.D. d	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090310.D
Acq On : 10 Jul 2018 11:16 pm
Operator : NIVA
Sample : 2894479
Misc : RUN200903
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 12 14:00:06 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090311.D
Acq On : 10 Jul 2018 11:42 pm
Operator : NIVA
Sample : 2894480
Misc : RUN200903
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 12 14:02:19 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

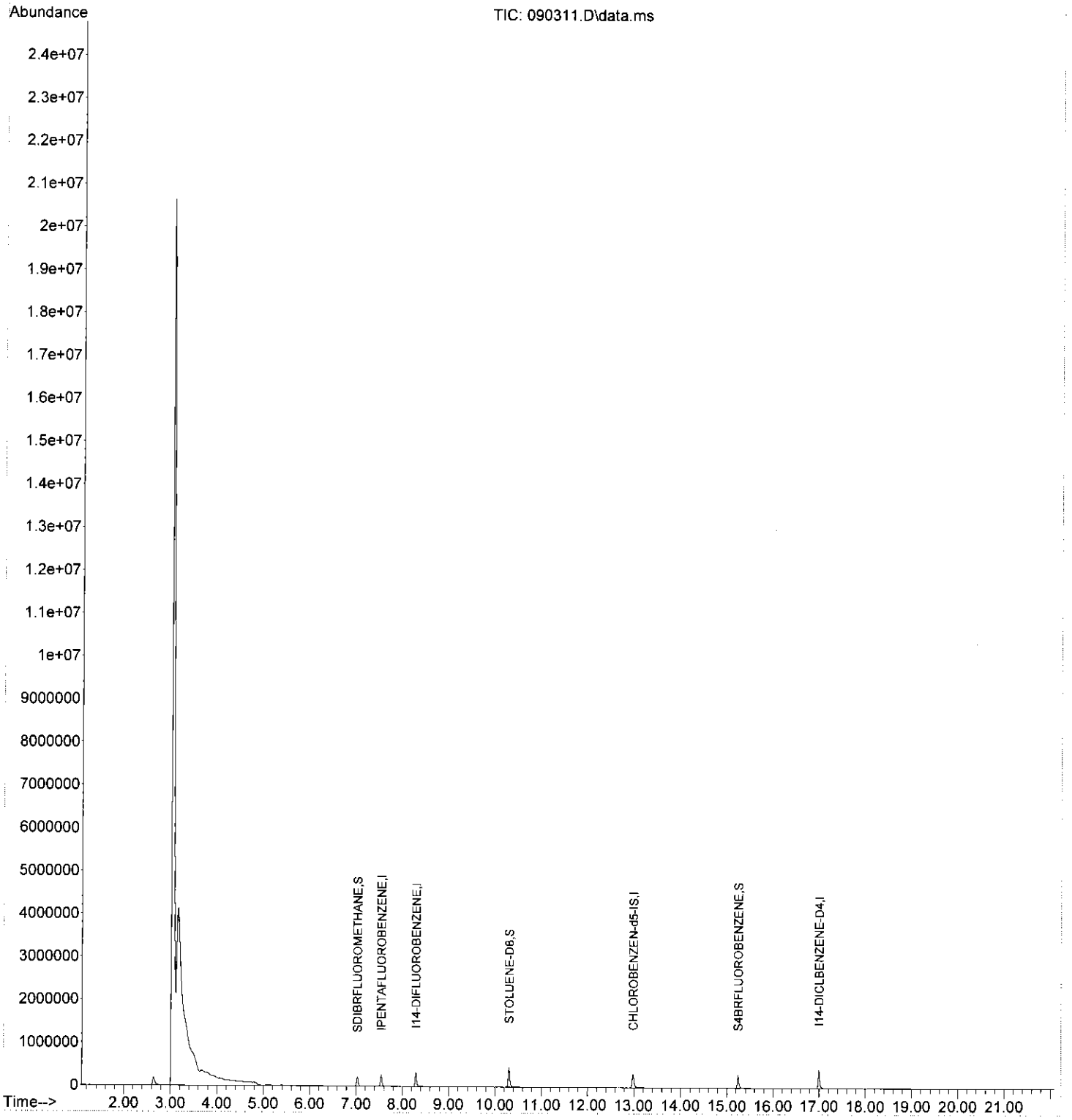
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	200738	20.00	µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	307529	20.00	µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	281813	20.00	µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	159419	20.00	µg/L	-0.11
System Monitoring Compounds						
6) SDIBRFLUOROMETHANE	7.026	111	158393	19.47	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.35%			
7) STOLUENE-D8	10.305	98	393264	20.91	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.55%			
9) S4BRFLUOROBENZENE	15.239	95	137650	20.70	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.50%			
Target Compounds						Qvalue
2) ETHANOL	0.000		0	N.D. d		
3) MTBE	0.000		0	N.D.		
4) ACETONITRILE	0.000		0	N.D. d		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090311.D
Acq On : 10 Jul 2018 11:42 pm
Operator : NIVA
Sample : 2894480
Misc : RUN200903
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 12 14:02:19 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090312.D
Acq On : 11 Jul 2018 12:08 am
Operator : NIVA
Sample : 2894481
Misc : RUN200903
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 12 14:13:04 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

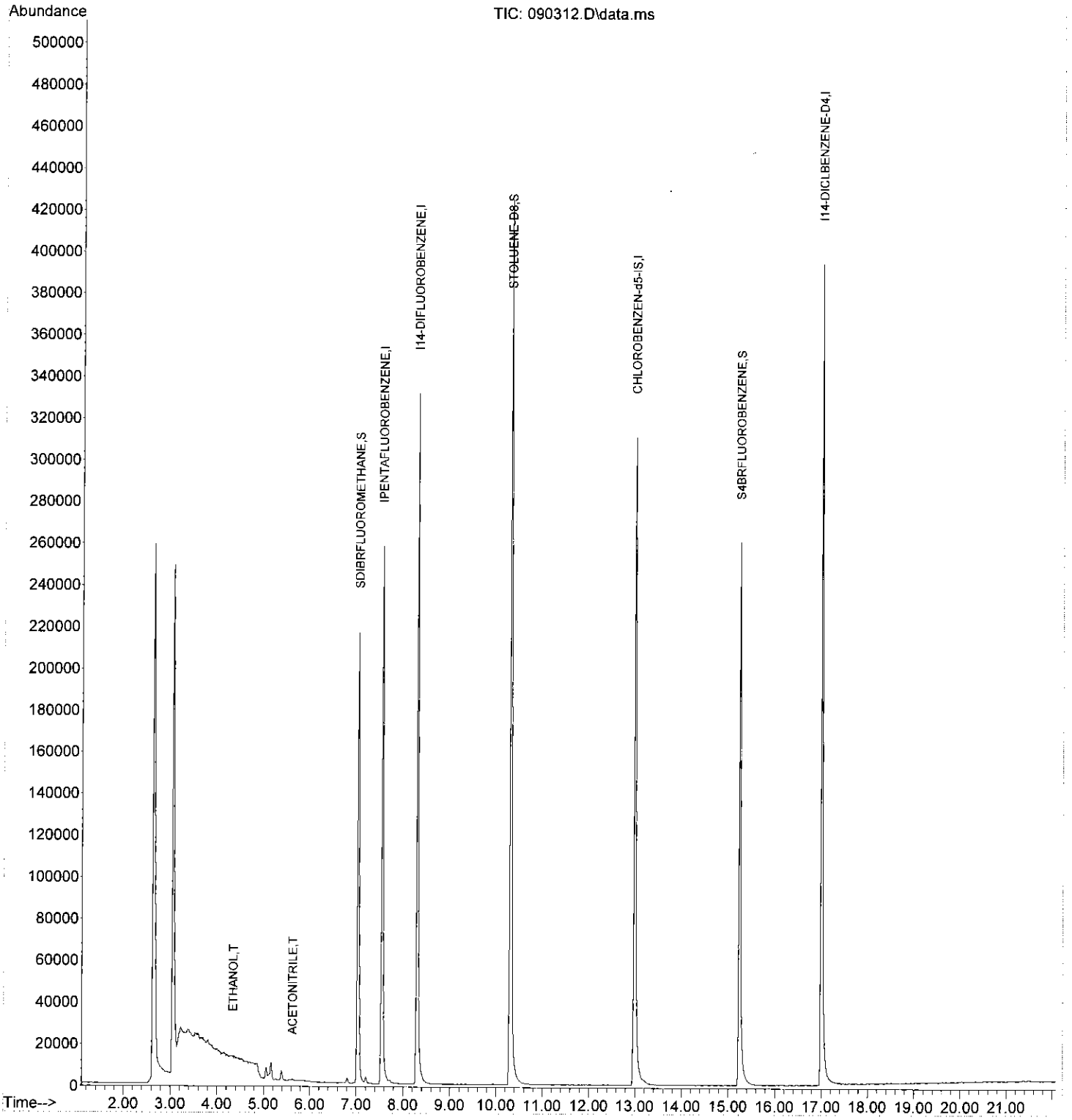
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	197080	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	301839	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	272508	20.00 µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	151829	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.036	111	155309	19.45 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.25%		
7) STOLUENE-D8	10.305	98	378660	20.52 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.60%		
9) S4BRFLUOROBENZENE	15.239	95	132347	20.59 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.95%		
Target Compounds					Qvalue
2) ETHANOL	4.346	45	1324	40.07 µg/L #	68
3) MTBE	0.000		0	N.D.	
4) ACETONITRILE	5.625	41	1061	2.38 µg/L #	32

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090312.D
Acq On : 11 Jul 2018 12:08 am
Operator : NIVA
Sample : 2894481
Misc : RUN200903
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 12 14:13:04 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090312.D
Acq On : 11 Jul 2018 12:08 am
Operator : NIVA
Sample : 2894481
Misc : RUN200903
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 12 14:13:16 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

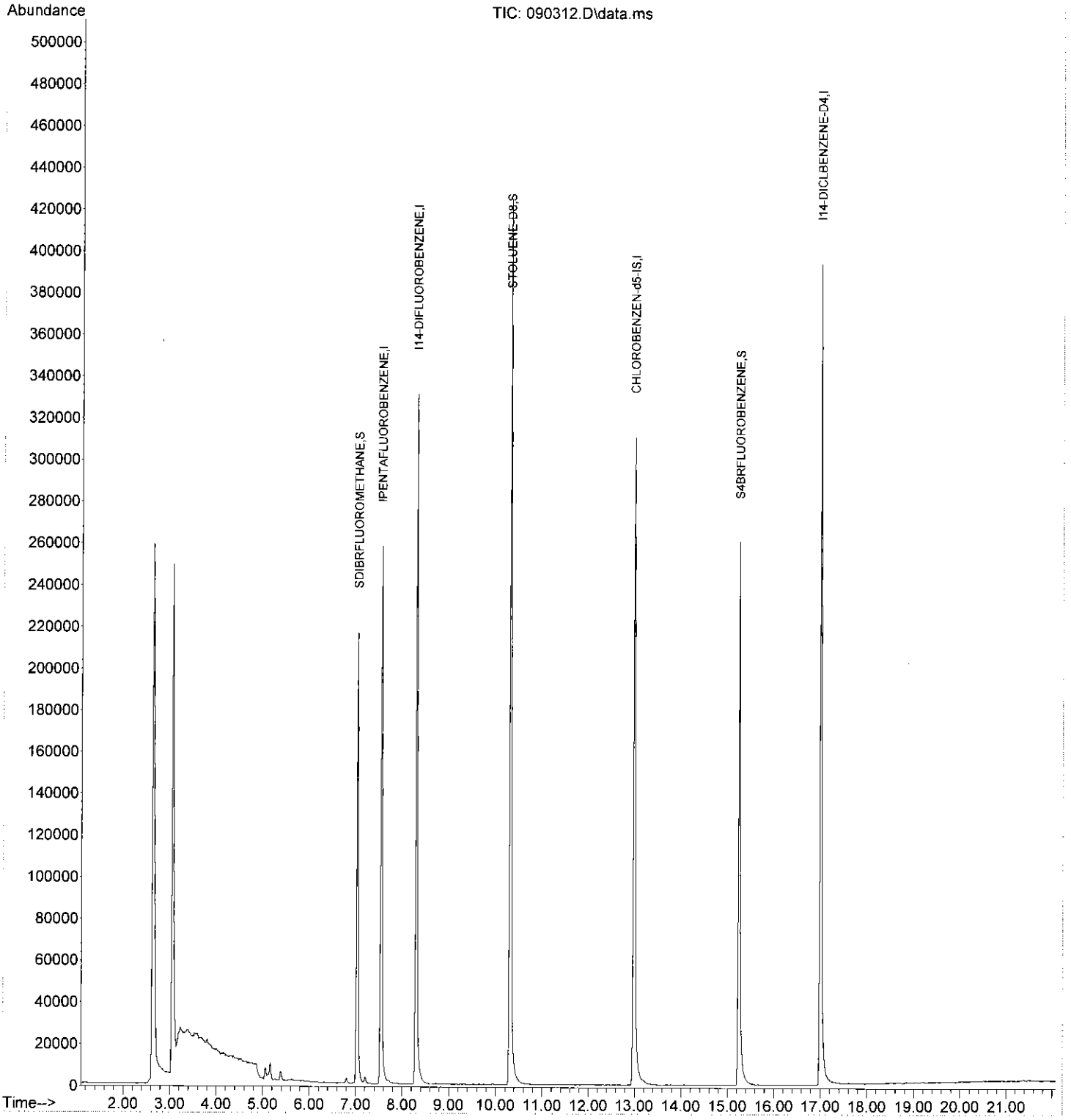
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	197080	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	301839	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	272508	20.00 µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	151829	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.036	111	155309	19.45 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.25%		
7) STOLUENE-D8	10.305	98	378660	20.52 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.60%		
9) S4BRFLUOROBENZENE	15.239	95	132347	20.59 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.95%		
Target Compounds					Qvalue
2) ETHANOL	0.000		0	N.D. d	
3) MTBE	0.000		0	N.D.	
4) ACETONITRILE	0.000		0	N.D. d	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090312.D
Acq On : 11 Jul 2018 12:08 am
Operator : NIVA
Sample : 2894481
Misc : RUN200903
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 12 14:13:16 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090313.D
Acq On : 11 Jul 2018 12:34 am
Operator : NIVA
Sample : 2894481DUP/2899515
Misc : RUN200903
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 12 14:13:48 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

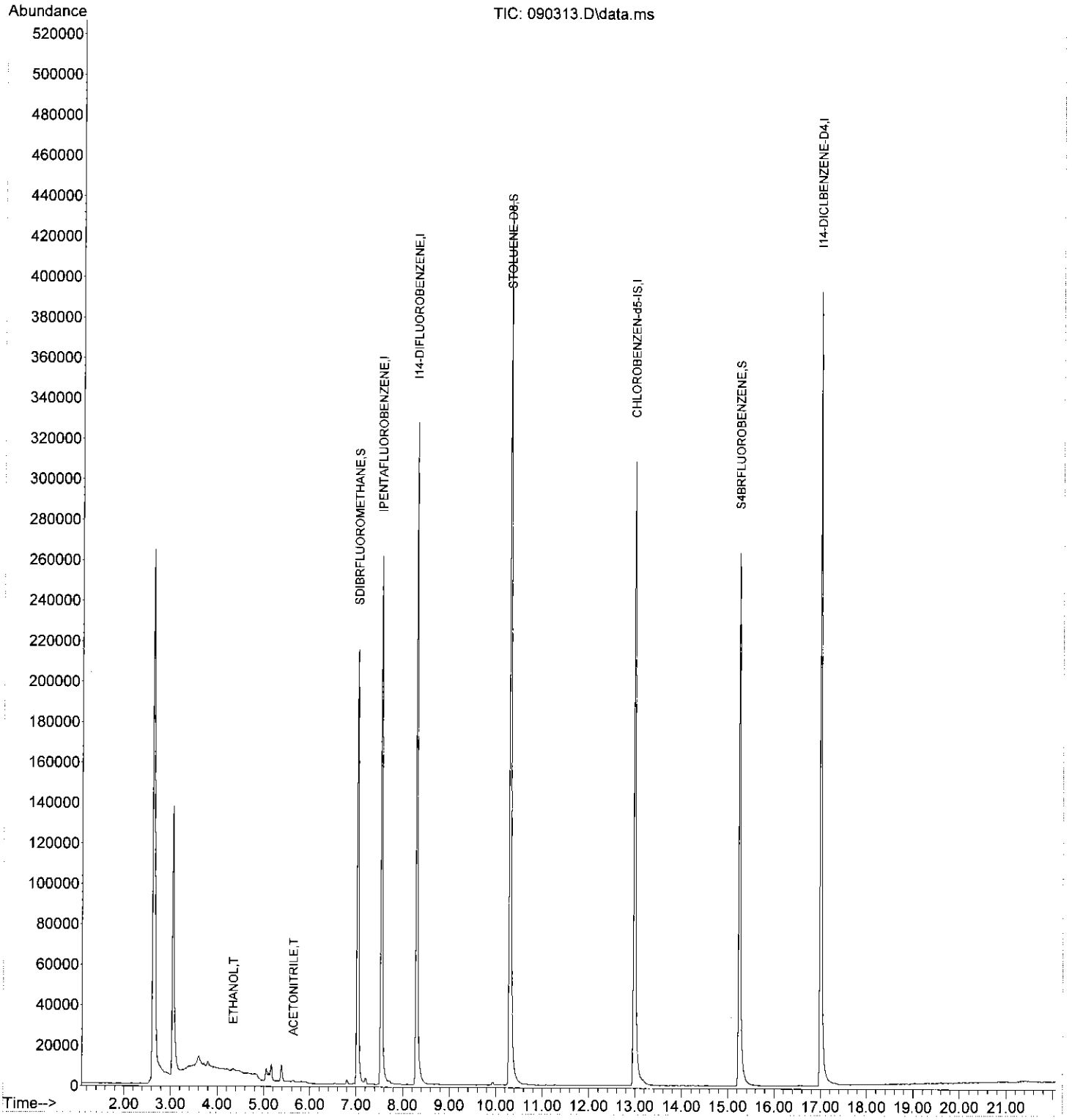
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	199461	20.00	µg/L	0.02
5) I14-DIFLUOROBENZENE	8.294	114	301921	20.00	µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	273268	20.00	µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	152438	20.00	µg/L	-0.11
System Monitoring Compounds						
6) SDIBRFLUOROMETHANE	7.036	111	161104	20.17	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.85%			
7) STOLUENE-D8	10.305	98	380294	20.60	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.00%			
9) S4BRFLUOROBENZENE	15.238	95	131310	20.37	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.85%			
Target Compounds						Qvalue
2) ETHANOL	4.345	45	1806	54.01	µg/L #	69
3) MTBE	0.000		0	N.D.		
4) ACETONITRILE	5.635	41	1010	2.24	µg/L #	48

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090313.D
Acq On : 11 Jul 2018 12:34 am
Operator : NIVA
Sample : 2894481DUP/2899515
Misc : RUN200903
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 12 14:13:48 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090313.D
Acq On : 11 Jul 2018 12:34 am
Operator : NIVA
Sample : 2894481DUP/2899515
Misc : RUN200903
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 12 14:14:08 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

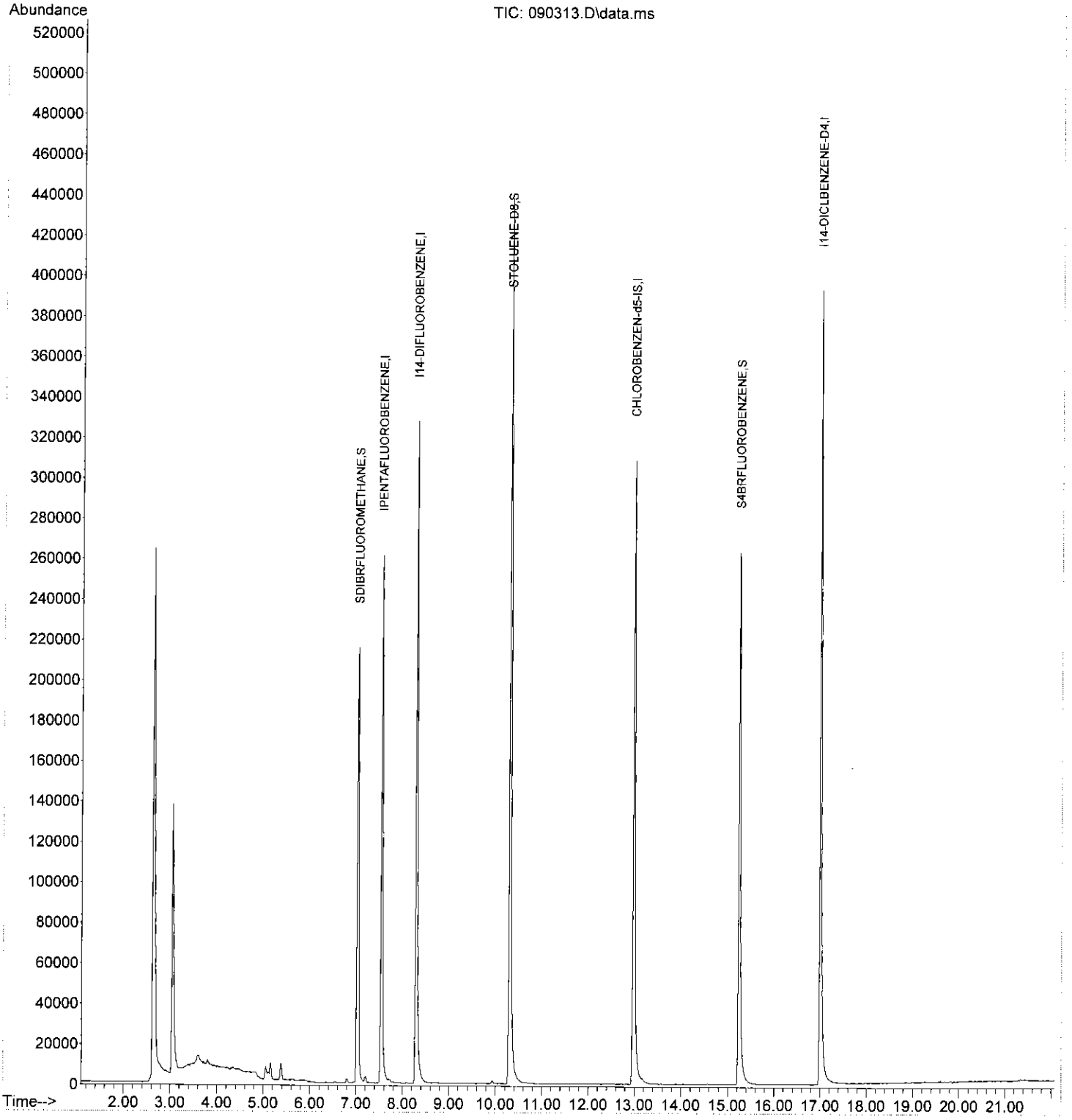
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	199461	20.00	µg/L	0.02
5) I14-DIFLUOROBENZENE	8.294	114	301921	20.00	µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	273268	20.00	µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	152438	20.00	µg/L	-0.11
System Monitoring Compounds						
6) SDIBRFLUOROMETHANE	7.036	111	161104	20.17	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.85%			
7) STOLUENE-D8	10.305	98	380294	20.60	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.00%			
9) S4BRFLUOROBENZENE	15.238	95	131310	20.37	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.85%			
Target Compounds						Qvalue
2) ETHANOL	0.000		0	N.D. d		
3) MTBE	0.000		0	N.D.		
4) ACETONITRILE	0.000		0	N.D. d		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090313.D
Acq On : 11 Jul 2018 12:34 am
Operator : NIVA
Sample : 2894481DUP/2899515
Misc : RUN200903
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 12 14:14:08 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090314.D
Acq On : 11 Jul 2018 1:00 am
Operator : NIVA
Sample : 2894481MS/2898523
Misc : RUN200903
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 12 14:14:39 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

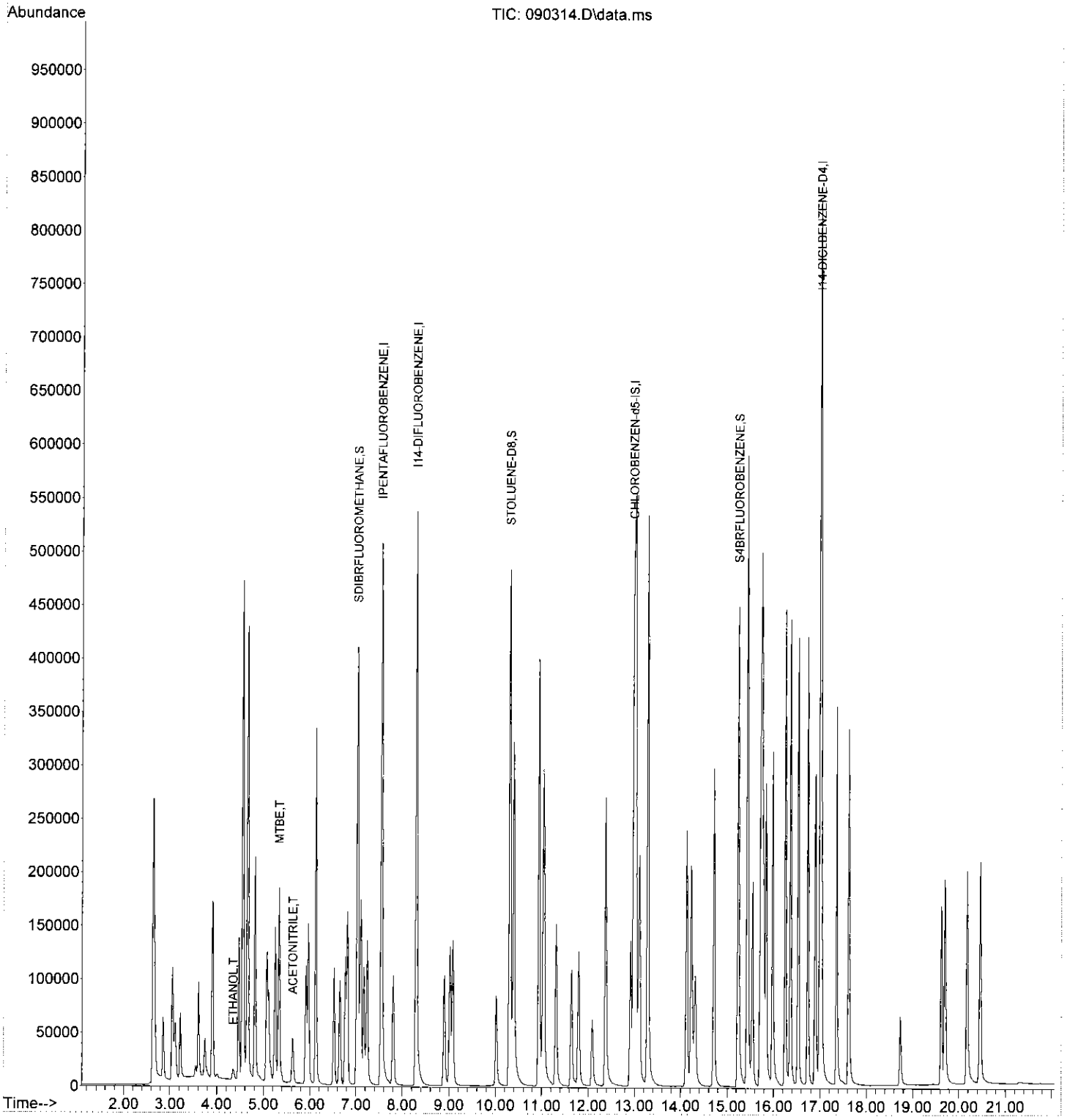
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	247478	20.00	µg/L	0.02
5) I14-DIFLUOROBENZENE	8.294	114	351005	20.00	µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.974	117	395207	20.00	µg/L	0.02
10) I14-DICLBENZENE-D4	16.995	152	251791	20.00	µg/L	-0.11
System Monitoring Compounds						
6) SDIBRFLUOROMETHANE	7.026	111	174927	18.84	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.20%			
7) STOLUENE-D8	10.305	98	448297	20.89	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.45%			
9) S4BRFLUOROBENZENE	15.238	95	198989	21.34	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.70%			
Target Compounds						Qvalue
2) ETHANOL	4.345	45	16297	392.81	µg/L	94
3) MTBE	5.330	73	189911	17.46	µg/L #	93
4) ACETONITRILE	5.625	41	53510	95.49	µg/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090314.D
Acq On : 11 Jul 2018 1:00 am
Operator : NIVA
Sample : 2894481MS/2898523
Misc : RUN200903
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 12 14:14:39 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090318.D
Acq On : 11 Jul 2018 2:45 am
Operator : NIVA
Sample : CCVEXT/2898524
Misc : RUN200903
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jul 12 14:19:11 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

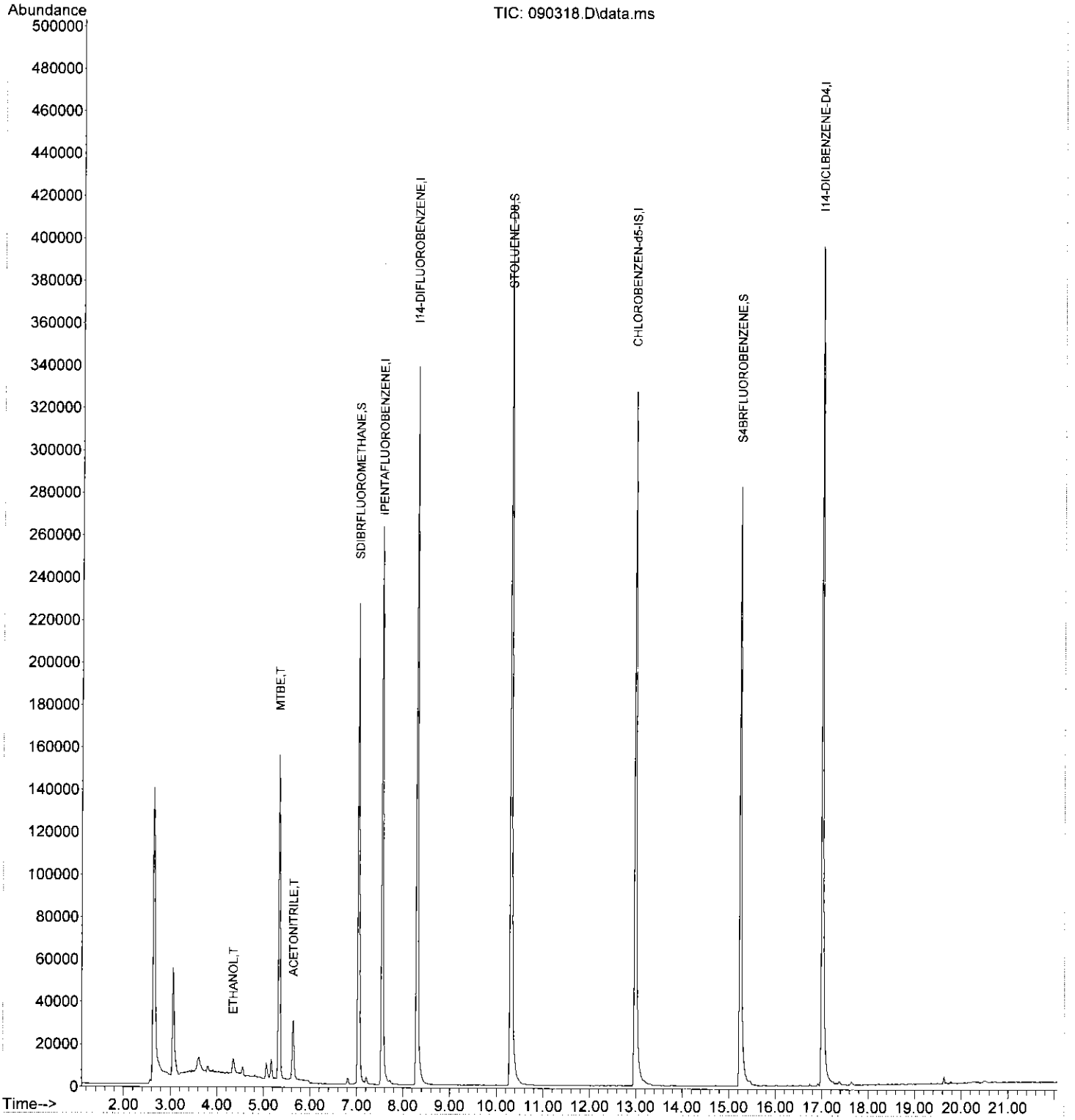
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.554	168	206964	20.00	µg/L	0.03
5) I14-DIFLUOROBENZENE	8.295	114	311842	20.00	µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	282669	20.00	µg/L	0.03
10) I14-DICLBENZENE-D4	17.005	152	157905	20.00	µg/L	-0.10
System Monitoring Compounds						
6) SDIBRFLUOROMETHANE	7.036	111	161744	19.60	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.00%			
7) STOLUENE-D8	10.315	98	386453	20.27	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.35%			
9) S4BRFLUOROBENZENE	15.249	95	136671	20.49	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.45%			
Target Compounds						Qvalue
2) ETHANOL	4.346	45	14002m	403.56	µg/L	
3) MTBE	5.330	73	166304	18.28	µg/L #	93
4) ACETONITRILE	5.635	41	39499	84.29	µg/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090318.D
Acq On : 11 Jul 2018 2:45 am
Operator : NIVA
Sample : CCVEXT/2898524
Misc : RUN200903
ALS Vial : 26 Sample Multiplier: 1

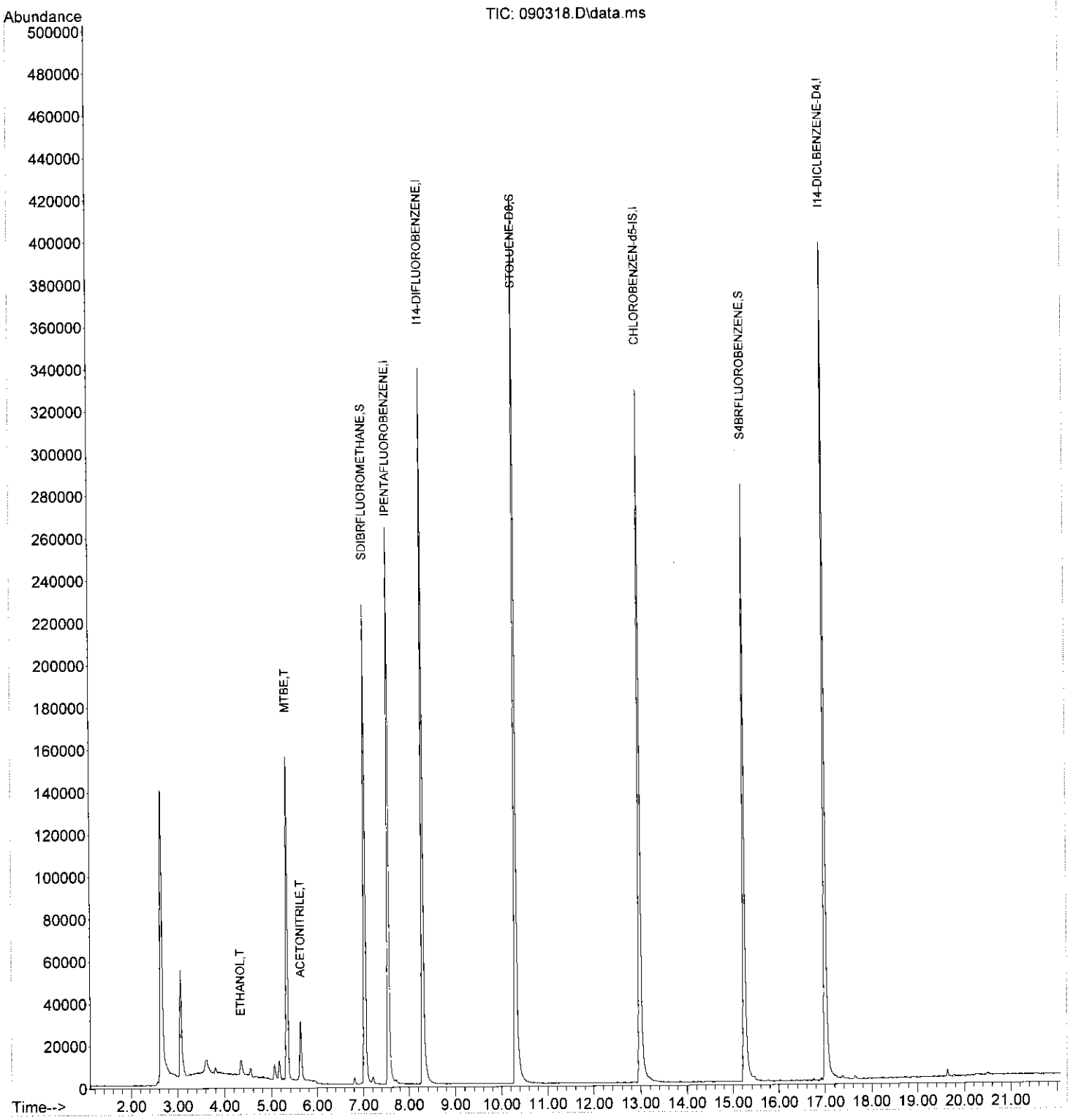
Quant Time: Jul 12 14:19:11 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090318.D
Acq On : 11 Jul 2018 2:45 am
Operator : NIVA
Sample : CCVEXT/2898524
Misc : RUN200903
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jul 12 14:18:24 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090318.D
Acq On : 11 Jul 2018 2:45 am
Operator : NIVA
Sample : CCVEXT/2898524
Misc : RUN200903
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jul 12 14:18:24 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

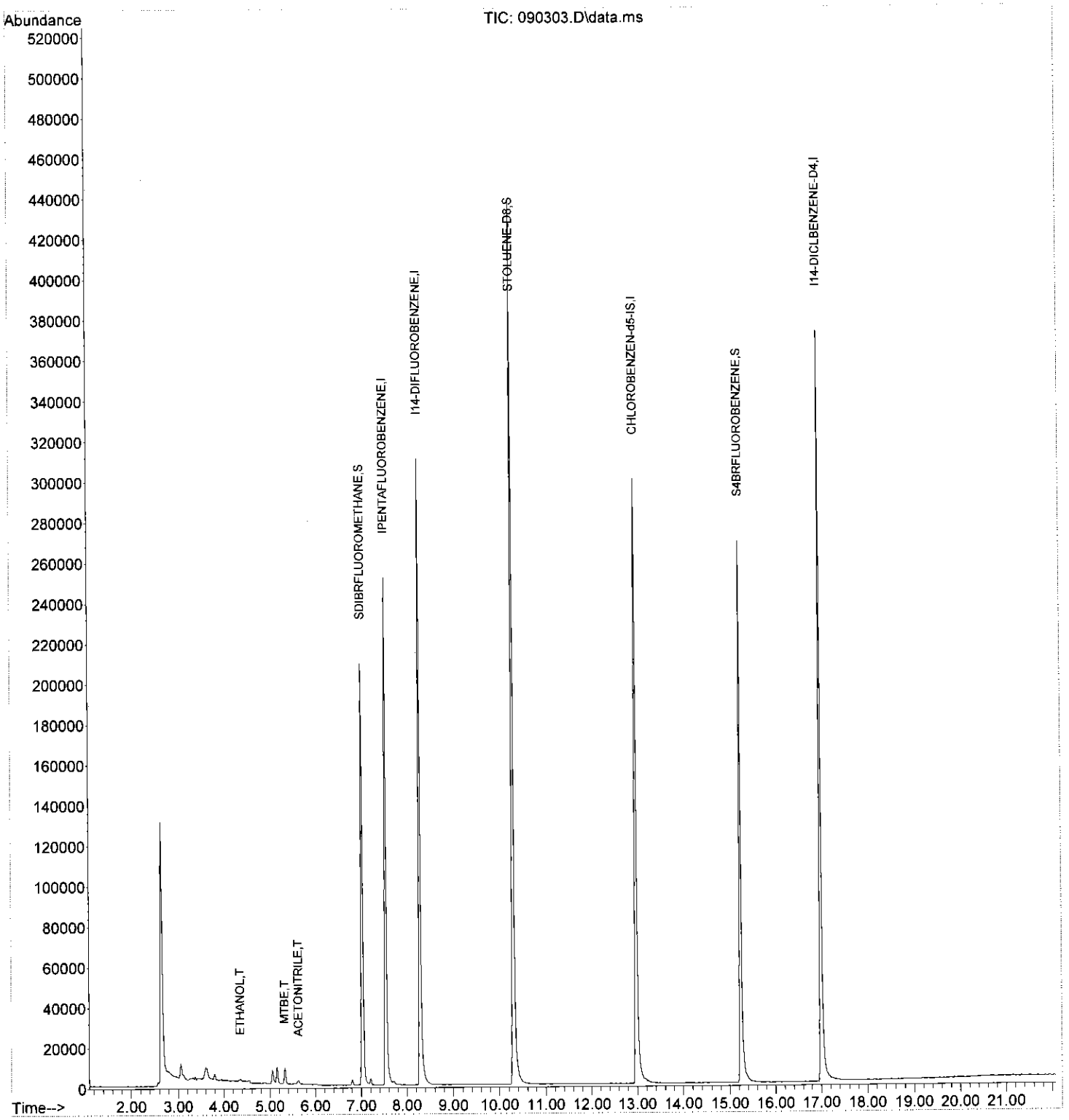
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.554	168	206964	20.00	µg/L	0.03
5) I14-DIFLUOROBENZENE	8.295	114	311842	20.00	µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	282669	20.00	µg/L	0.03
10) I14-DICLBENZENE-D4	17.005	152	157905	20.00	µg/L	-0.10
System Monitoring Compounds						
6) SDIBRFLUOROMETHANE	7.036	111	161744	19.60	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.00%			
7) STOLUENE-D8	10.315	98	386453	20.27	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.35%			
9) S4BRFLUOROBENZENE	15.249	95	136671	20.49	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.45%			
Target Compounds						Qvalue
2) ETHANOL	4.346	45	13805	397.88	µg/L #	89
3) MTBE	5.330	73	166304	18.28	µg/L #	93
4) ACETONITRILE	5.635	41	39499	84.29	µg/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090303.D
Acq On : 10 Jul 2018 8:13 pm
Operator : NIVA
Sample : MDLEXT/2898477
Misc : RUN200903
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 12 12:58:42 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\200903-08-15CCEXT\
Data File : 090303.D
Acq On : 10 Jul 2018 8:13 pm
Operator : NIVA
Sample : MDLEXT/2898477
Misc : RUN200903
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 12 12:58:42 2018
Quant Method : C:\msdchem\1\METHODS\ETHANOL-ACETONIT-MTBE-JULY18.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Thu Jul 12 12:43:53 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	193419	20.00 µg/L	0.02
5) I14-DIFLUOROBENZENE	8.295	114	295834	20.00 µg/L	0.02
8) CHLOROBENZEN-d5-IS	12.985	117	269814	20.00 µg/L	0.03
10) I14-DICLBENZENE-D4	16.995	152	144564	20.00 µg/L	-0.11
System Monitoring Compounds					
6) SDIBRFLUOROMETHANE	7.026	111	150064	19.17 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.85%		
7) STOLUENE-D8	10.305	98	371270	20.52 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.60%		
9) S4BRFLUOROBENZENE	15.239	95	127277	19.99 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.95%		
Target Compounds					Qvalue
2) ETHANOL	4.356	45	1553	47.89 µg/L #	69
3) MTBE	5.330	73	8475	1.00 µg/L #	91
4) ACETONITRILE	5.635	41	2572	5.87 µg/L #	73

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\201006\
Data File : 100632.D
Acq On : 13 Jul 2018 11:46 am
Operator : DARF
Sample : 2895462
Misc : RUN201006
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jul 13 13:50:50 2018
Quant Method : D:\MassHunter\GCMS\1\methods\524REG-JUNE-18.M
Quant Title : Analysis of VOC'S by 524.2 REV 4.1
QLast Update : Mon Jun 25 11:39:04 2018
Response via : Initial Calibration
InstName : V8-AG7890MS

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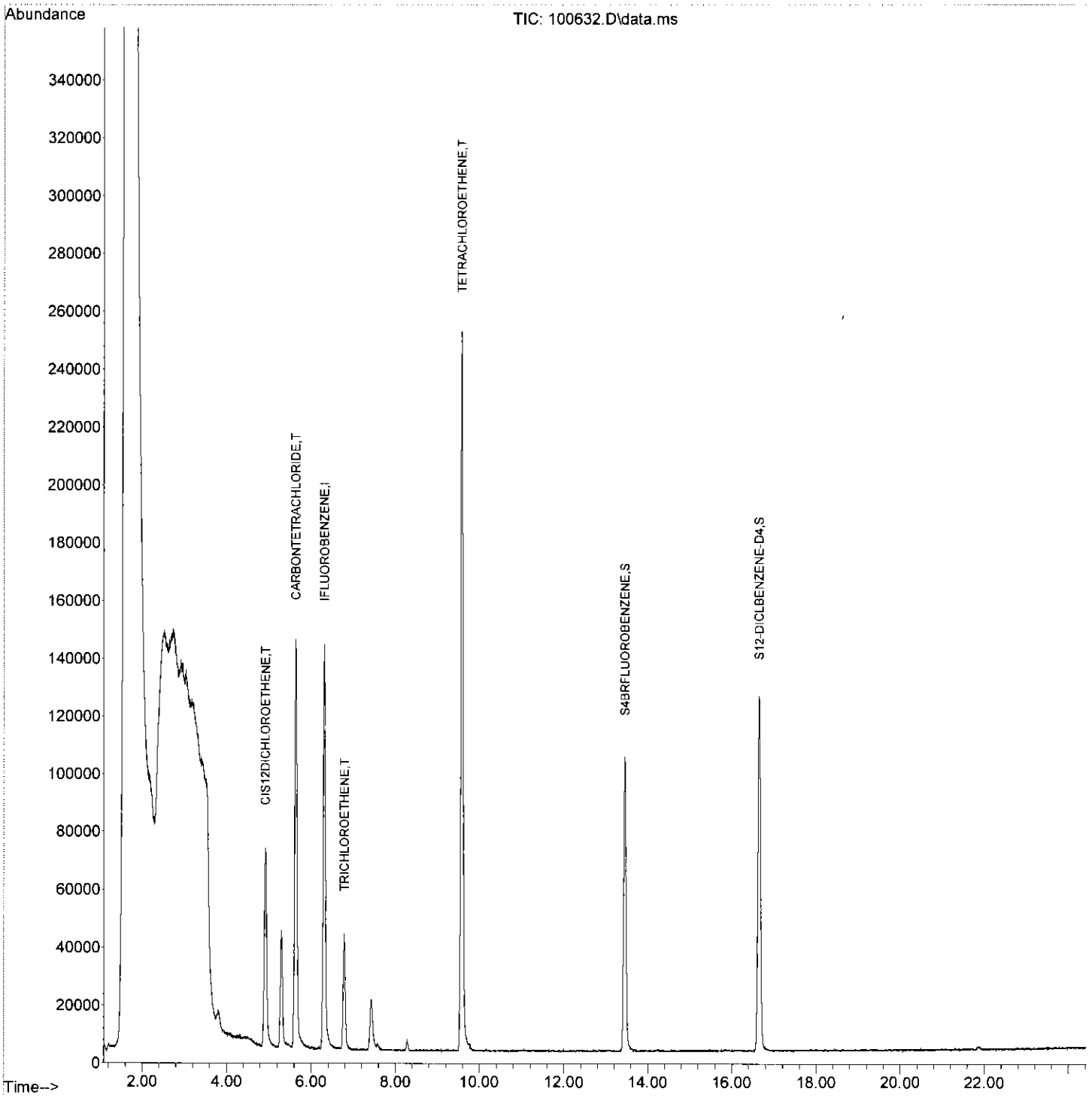
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IFLUOROBENZENE	6.305	96	247396	5.00 µg/L	0.00
System Monitoring Compounds					
22) S4BRFLUOROBENZENE	13.455	95	88542	4.27 µg/L	0.00
Spiked Amount 5.000	Range 80 - 120		Recovery	= 85.40%	
23) S12-DICLBENZENE-D4	16.651	152	89574	4.53 µg/L	0.00
Spiked Amount 5.000			Recovery	= 90.60%	
Target Compounds					Qvalue
2) VINYL CHLORIDE	2.033	62	30	N.D.	
3) 11-DICHLOROETHENE	3.084	61	833	N.D.	
4) DICHLOROMETHANE	3.597	84	1894	N.D.	
5) TRANS12DICLETHENE	3.817	61	30	N.D.	
6) CIS12DICHLOROETHENE	4.916	61	85139	4.13 µg/L #	34
7) 111-TRICHLOROETHANE	0.000		0	N.D.	
8) 12-DICHLOROETHANE	6.294	62	3122	N.D.	
9) CARBONTETRACHLORIDE	5.636	117	165503	10.75 µg/L	98
10) BENZENE	5.931	78	28	N.D.	
11) TRICHLOROETHENE	6.782	132	24157	1.84 µg/L	96
12) 12-DICHLOROPROPANE	0.000		0	N.D.	
13) EPICHLOROHYDRIN	0.000		0	N.D.	
14) TOLUENE	8.697	91	29	N.D.	
15) 112-TRICHLOROETHANE	9.587	97	329	N.D.	
16) TETRACHLOROETHENE	9.584	166	162312	11.49 µg/L	98
17) CHLOROBENZENE	0.000		0	N.D.	
18) ETHYLBENZENE	0.000		0	N.D.	
19) MP-XYLENE	0.000		0	N.D.	
20) STYRENE	0.000		0	N.D.	
21) O-XYLENE	0.000		0	N.D.	
24) 14-DICHLOROBENZENE	0.000		0	N.D.	
25) 12-DICHLOROBENZENE	0.000		0	N.D.	
26) 124-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\201006\
Data File : 100632.D
Acq On : 13 Jul 2018 11:46 am
Operator : DARF
Sample : 2895462
Misc : RUN201006
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jul 13 13:50:50 2018
Quant Method : D:\MassHunter\GCMS\1\methods\524REG-JUNE-18.M
Quant Title : Analysis of VOC'S by 524.2 REV 4.1
QLast Update : Mon Jun 25 11:39:04 2018
Response via : Initial Calibration
InstName : V8-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\201006\
Data File : 100633.D
Acq On : 13 Jul 2018 12:17 pm
Operator : DARF
Sample : LFB/VOC
Misc : RUN201006
AL5 Vial : 34 Sample Multiplier: 1

Quant Time: Jul 13 13:51:13 2018
Quant Method : D:\MassHunter\GCMS\1\methods\524REG-JUNE-18.M
Quant Title : Analysis of VOC'S by 524.2 REV 4.1
QLast Update : Mon Jun 25 11:39:04 2018
Response via : Initial Calibration
InstName : V8-AG7890MS

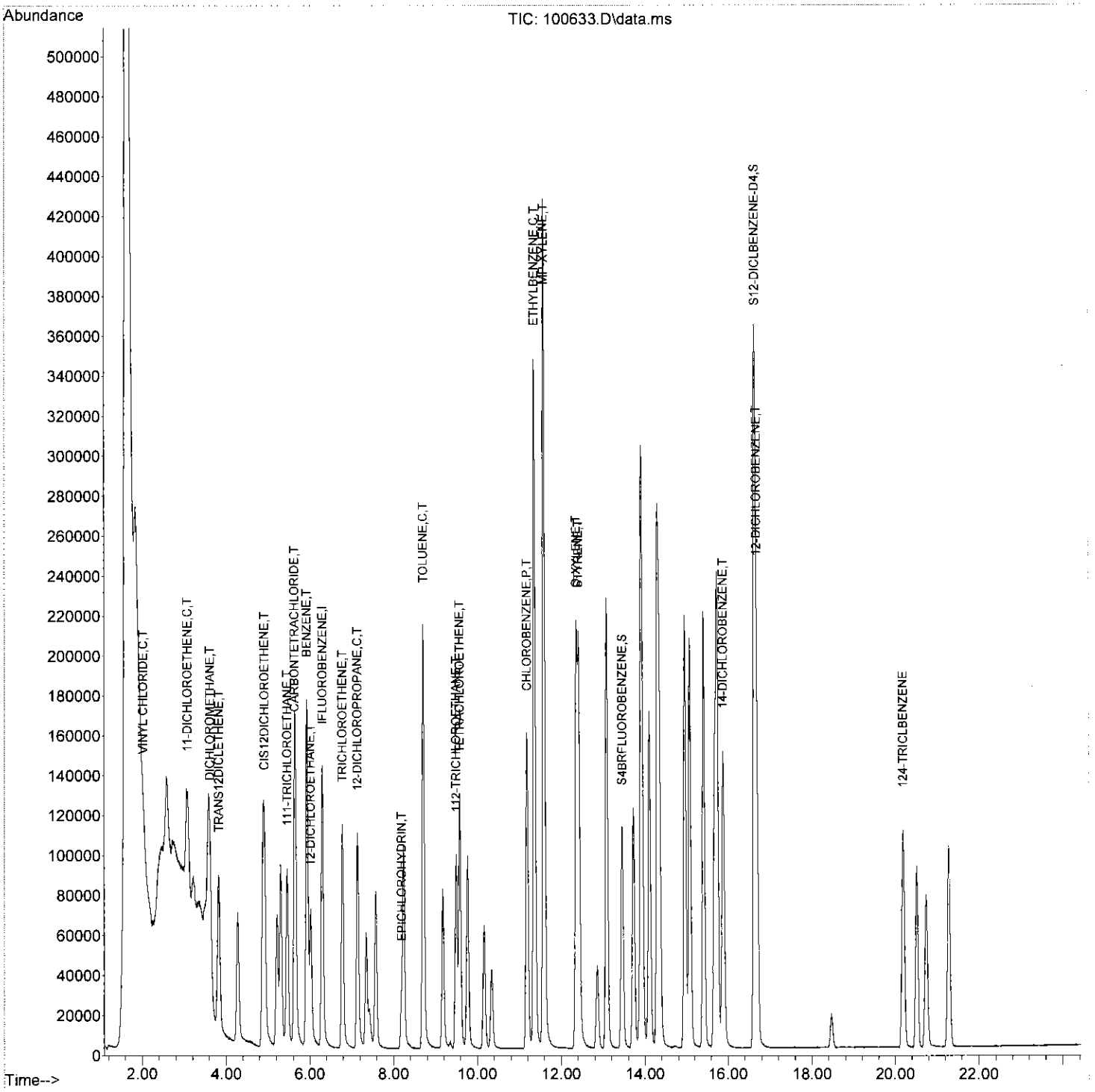
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IFLUOROBENZENE	6.305	96	251798	5.00	µg/L	0.00
System Monitoring Compounds						
22) S4BRFLUOROBENZENE	13.455	95	96966	4.60	µg/L	0.00
Spiked Amount 5.000	Range 80 - 120		Recovery = 92.00%			
23) S12-DICLBENZENE-D4	16.648	152	98827	4.91	µg/L	0.00
Spiked Amount 5.000			Recovery = 98.20%			
Target Compounds						Qvalue
2) VINYL CHLORIDE	2.022	62	53026	6.32	µg/L #	48
3) 11-DICHLOROETHENE	3.073	61	88638	6.27	µg/L #	84
4) DICHLOROMETHANE	3.611	84	85730m	6.19	µg/L	
5) TRANS12DICLETHENE	3.820	61	93471m	6.13	µg/L	
6) CIS12DICHLOROETHENE	4.916	61	122602	5.84	µg/L #	33
7) 111-TRICHLOROETHANE	5.457	97	110555	5.69	µg/L	97
8) 12-DICHLOROETHANE	6.020	62	99433	5.83	µg/L	98
9) CARBONTETRACHLORIDE	5.633	117	96103	6.13	µg/L	94
10) BENZENE	5.928	78	317484	6.00	µg/L	98
11) TRICHLOROETHENE	6.782	132	72123	5.41	µg/L	98
12) 12-DICHLOROPROPANE	7.139	63	82339	5.86	µg/L	98
13) EPICHLOROHYDRIN	8.190	57	40643	44.75	µg/L	95
14) TOLUENE	8.706	91	319919	5.63	µg/L	92
15) 112-TRICHLOROETHANE	9.495	97	67201	5.54	µg/L #	41
16) TETRACHLOROETHENE	9.581	166	79039	5.50	µg/L	97
17) CHLOROBENZENE	11.188	112	199323	5.41	µg/L	98
18) ETHYLBENZENE	11.366	91	363714	5.75	µg/L	96
19) MP-XYLENE	11.589	91	573909	11.69	µg/L	96
20) STYRENE	12.418	104	228726	5.62	µg/L	97
21) O-XYLENE	12.362	91	284994	5.57	µg/L	95
24) 14-DICHLOROBENZENE	15.887	146	156542	5.38	µg/L	98
25) 12-DICHLOROBENZENE	16.681	146	157486	5.52	µg/L	95
26) 124-TRICLBENZENE	20.190	180	96591	4.86	µg/L	97

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\201006\
Data File : 100633.D
Acq On : 13 Jul 2018 12:17 pm
Operator : DARF
Sample : LFB/VOC
Misc : RUN201006
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jul 13 13:51:13 2018
Quant Method : D:\MassHunter\GCMS\1\methods\524REG-JUNE-18.M
Quant Title : Analysis of VOC'S by 524.2 REV 4.1
QLast Update : Mon Jun 25 11:39:04 2018
Response via : Initial Calibration
InstName : V8-AG7890MS



Attachment 5
Sampling and Monitoring Field Form

ARCADIS Design & Consultancy for natural and built assets

Groundwater Extraction and Treatment System (GWETS) Sampling and Monitoring Field Form
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Collection Date	Sample ID	Collection Time		Sampler's Initials
		Pace	Eqlab	
07/03/18	TB-20180703	LAB	LAB	LAB
07/03/18	INF-20180703	0838	0839	EWB
07/03/18	EFF-20180703	0859	0905	EWB
07/03/18	EFFDUP-20180703	0859	0905	EWB
07/03/18	EFFMS-20180703	0859	0905	EWB
07/03/18	EFFMSD-20180703	0859	0905	EWB

GWETS Operational Data at Sample Collection

Extraction Wells

RW-2	104.7	gpm
RW-4	149.4	gpm
RW-5	79.8	gpm

Compound Treatment System

Influent Flow Rate (FIT-101)	270.1	gpm
Effluent Flow Rate (FIT-301)	356.5	gpm
Blower (FIT-201A)	2363	scfm
Influent Flow Pressure (PIT-101)	2.6	psi
Effluent Flow Pressure (PIT-301)	21.9	psi
pH (pHIT-201A)	8.3	

Notes:
gpm = gallons per minute
scfm = standard cubic feet per minute
psi = pounds per square inch