FIBERS SITE GROUP

July 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 – June 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 – June 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 96% of the time during June 2018. The GWETS had one shut down due to equipment issues, five shut downs due to GWETS maintenance, one shut down due to communication loss, and seven automated shut downs due to power outages. The GWETS was restarted no later than the next business day in each instance.

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 275 gallons per minute (gpm) and treated approximately 11.88 million gallons of water. To date (since May 1999), approximately 3.22 billion gallons of water have been treated at the Fibers Site. 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 appears to be faulty (data indicating an average flow rate of 215 gpm, versus 275 gpm when the sum of the individual readings for RW-2, RW-4 and RW-5 are totaled, see Table 1). 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 June 5, 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 June 5, 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 #29949R 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 #2078022 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 #29950R 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 #254324 (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 - June 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
6/1/2018	257	336	100	145	80	8.2	
6/2/2018	257	335	100	145	80	8.2	
6/3/2018	257	336	100	145	80	8.2	
6/4/2018	137	206	54	78	43	8.0	
6/5/2018	196	262	80	108	64	8.5	GWETS maintenance; power outage; GWETS restarted.
6/6/2018	211	268	89	113	72	8.4	Power outage; GWETS restarted.
6/7/2018	192	268	84	102	66	8.4	Power outage; GWETS restarted.
6/8/2018	218	276	95	115	75	8.3	
6/9/2018	209	276	91	110	72	8.3	Power outage; GWETS restarted.
6/10/2018	175	258	85	92	60	8.3	Power outage; GWETS restarted.
6/11/2018	113	152	53	64	38	8.5	GWETS shut down due to equipment issues.
6/12/2018	83	108	41	41	32	8.8	GWETS restarted.
6/13/2018	193	262	91	94	72	8.3	Power outage; GWETS restarted.
6/14/2018	149	202	72	72	57	8.3	GWETS maintenance; GWETS restarted.
6/15/2018	201	262	86	106	68	8.2	GWETS maintenance; GWETS restarted.
6/16/2018	258	338	100	145	80	8.2	
6/17/2018	258	339	100	145	80	8.2	
6/18/2018	204	268	80	115	64	8.3	GWETS maintenance; GWETS restarted.
6/19/2018	249	329	96	139	77	8.2	GWETS maintenance; GWETS restarted.
6/20/2018	259	341	100	145	80	8.2	
6/21/2018	248	326	96	139	77	8.2	Power outage; GWETS restarted.
6/22/2018	248	326	96	139	77	8.2	
6/23/2018	262	344	100	145	80	8.3	
6/24/2018	255	344	100	145	80	8.2	
6/25/2018	260	344	100	145	80	8.2	
6/26/2018	279	334	100	145	80	8.2	
6/27/2018	128	163	51	72	40	7.8	Installation of new wireless modem; GWETS restarted.
6/28/2018	184	242	71	102	80	8.4	GWETS down due to communication loss; GWETS restarted.
6/29/2018	261	342	100	145	80	8.2	
6/30/2018	261	342	100	145	80	8.2	
Monthly Average	215	284	87	118	70	8.3	

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 June 5, 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 June 5, 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 255 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 except for the EQLAB influent sample. Benzene was detected above the laboratory reporting limit in the EQLAB influent sample. 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-20180605		EFFDUP-20180605		INF-20180605		TB-20180605	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
Tetrachloroethene	ND	ND	ND	ND	4.9	3.60	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	15.0 UJ	NA	ND	NA	ND	NA	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	6.30 J	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	16.6	ND	ND
Bromobenzene	NA	ND	NA	ND	NA	ND	NA	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	1.3 J	ND	1.6 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	BDL	ND	ND
Chloromethane	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	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	R	NA	ND	NA	ND	NA	ND
Isopropylbenzene	NA	ND	NA	ND	NA	ND	NA	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND

	VOC (µg/L)							
	Sample ID							
Compound	EFF-20180605		EFFDUP-20180605		INF-20180605		TB-20180605	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
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	2.0 UJ	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	3.0 UJ	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	1.3	NA	ND	NA
Haloether 229	ND	NA	ND	NA	12.2	NA	ND	NA
Haloether 406	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 421	ND	NA	ND	NA	ND	NA	ND	NA

	VOC (µg/L)							
	Sample ID							
Compound	EFF-20180605		EFFDUP-20180605		INF-20180605		TB-20180605	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
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	25.7	NA	ND	NA
Haloether 528	ND	NA	ND	NA	1.3	NA	ND	NA
Halomar	ND	NA	ND	NA	ND	NA	ND	NA
Isoflurane	ND	NA	ND	NA	55.4	NA	ND	NA
Methoxyflurane	ND	NA	ND	NA	ND	NA	ND	NA
Total Haloethers	ND	NA	ND	NA	96.0	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

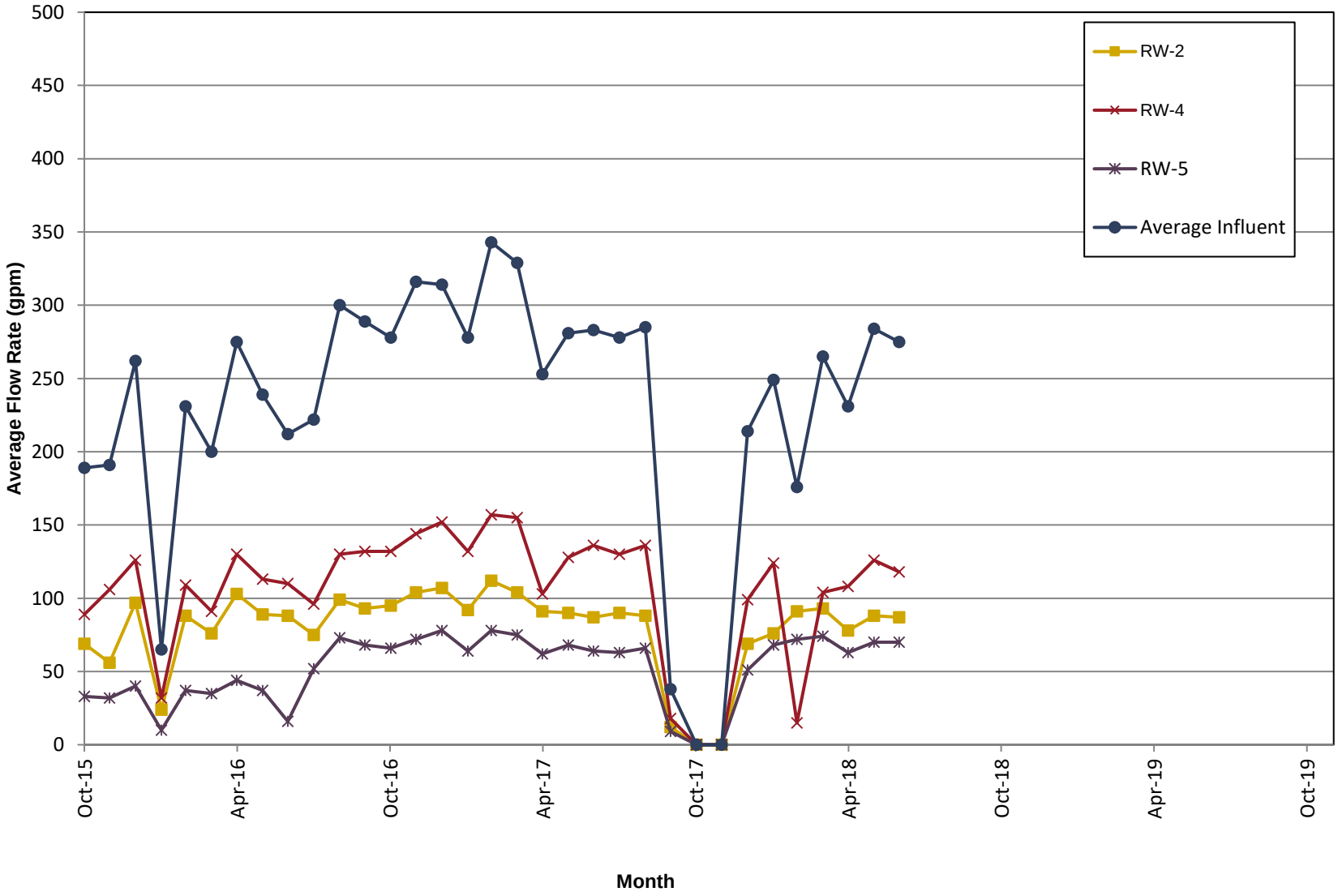


Figure 2
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Tetrachloroethene (PCE) Concentrations

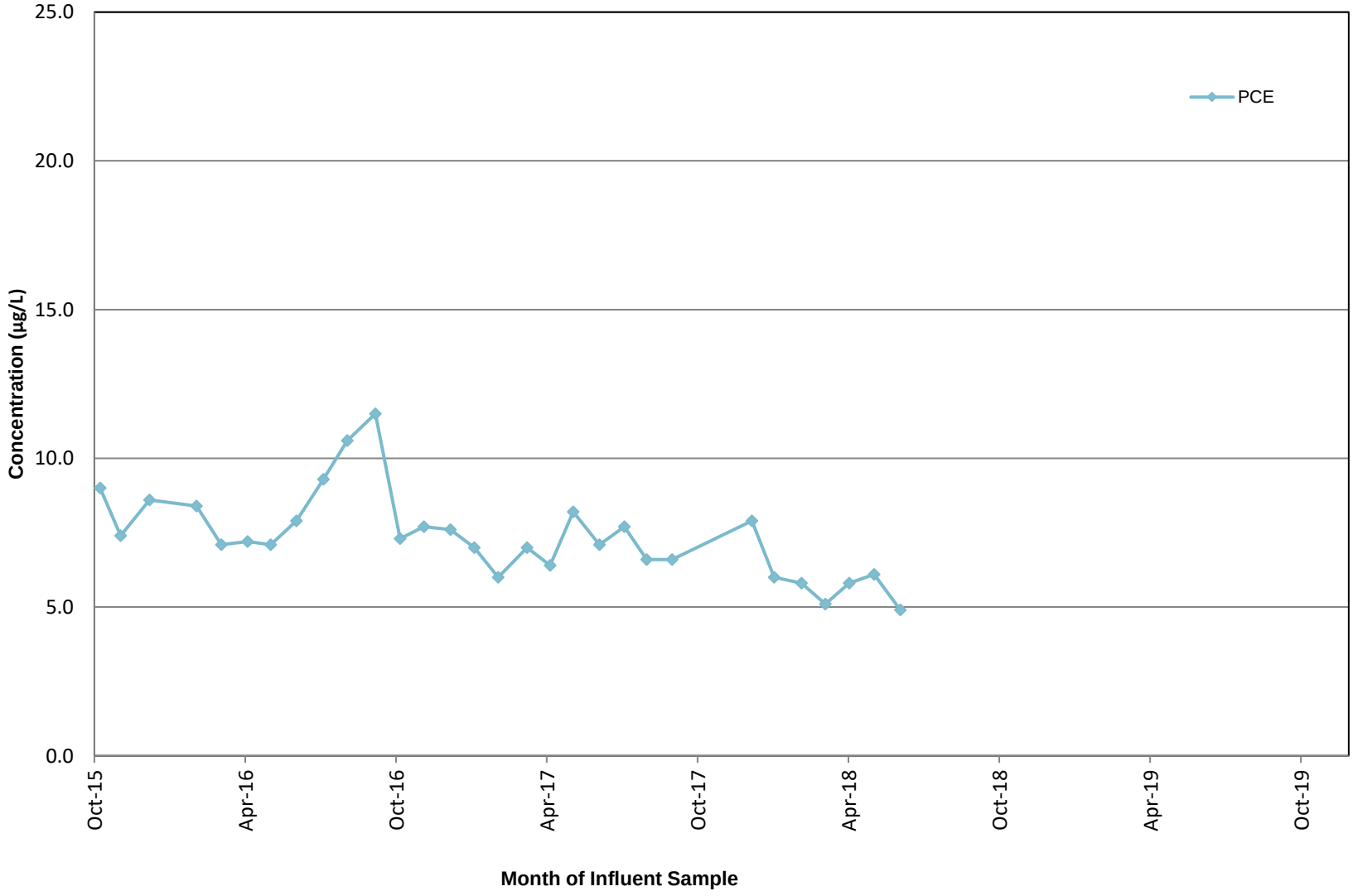
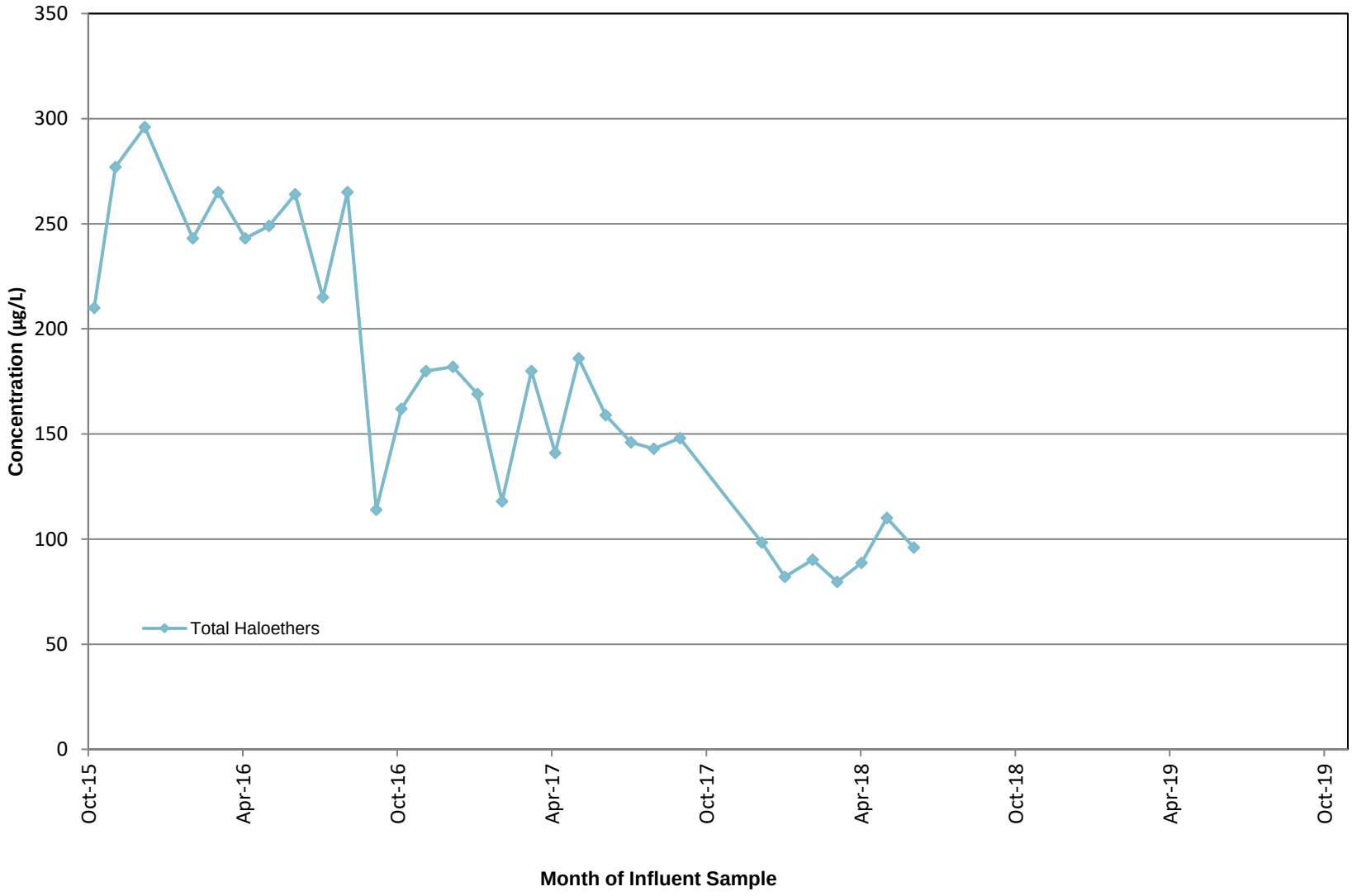


Figure 3
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Total Haloethers Concentrations



Attachment 1
Data Review Report #29949R

ARCADIS Design & Consultancy for natural and built assets

Fibers Group

DATA REVIEW

GUAYAMA, PUERTO RICO

Volatile Analyses

SDG #2078022

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

Report #29949R
Review Level: Tier II
Project: CO001911.0007.1805A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2078022 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-20180605	2078022001	Water	06/05/2018		X				
INF-20180605	2078022002	Water	06/05/2018		X				
EFF-20180605	2078022003	Water	06/05/2018		X				
EFFDUP-20180605	2078022004	Water	06/05/2018	EFF-20180605	X				

Notes:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location EFF-20180605 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-20180605	m&p-Xylene	AC	<LL but >10%
	Haloether 229	>UL	AC
	Haloether 421		
	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-20180605/EFFDUP-20180605	All compounds	U	U	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:

DATE: June 18, 2018

PEER REVIEW: Jeffrey L. Davin

DATE: June 21, 2018

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: TB-20180605 **Lab ID: 2078022001** Collected: 06/05/18 00:00 Received: 06/07/18 08:35 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		06/12/18 11:33	67-64-1	
Acrolein	ND	ug/L	8.0	1		06/12/18 11:33	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		06/12/18 11:33	107-13-1	
Benzene	ND	ug/L	1.0	1		06/12/18 11:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		06/12/18 11:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/12/18 11:33	75-25-2	
Bromomethane	ND	ug/L	1.0	1		06/12/18 11:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		06/12/18 11:33	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		06/12/18 11:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/12/18 11:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/12/18 11:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/12/18 11:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		06/12/18 11:33	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/12/18 11:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		06/12/18 11:33	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		06/12/18 11:33	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/12/18 11:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/12/18 11:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/12/18 11:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 11:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 11:33	10061-02-6	
Enflurane	ND	ug/L	1.0	1		06/12/18 11:33	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		06/12/18 11:33	100-41-4	
Haloether 229	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 406	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 421	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 427	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 428	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 508	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 528	ND	ug/L	1.0	1		06/12/18 11:33		
Halomar	ND	ug/L	1.0	1		06/12/18 11:33		
2-Hexanone	ND	ug/L	2.0	1		06/12/18 11:33	591-78-6	
Isoflurane	ND	ug/L	1.0	1		06/12/18 11:33		
Methoxyflurane	ND	ug/L	1.0	1		06/12/18 11:33	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		06/12/18 11:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		06/12/18 11:33	108-10-1	
Styrene	ND	ug/L	1.0	1		06/12/18 11:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/12/18 11:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		06/12/18 11:33	127-18-4	
Toluene	ND	ug/L	1.0	1		06/12/18 11:33	108-88-3	
Total Haloether	ND	ug/L	1.0	1		06/12/18 11:33		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/12/18 11:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/12/18 11:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/12/18 11:33	79-01-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: TB-20180605 **Lab ID: 2078022001** Collected: 06/05/18 00:00 Received: 06/07/18 08:35 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		06/12/18 11:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/12/18 11:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/12/18 11:33	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		06/12/18 11:33	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		06/12/18 11:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/12/18 11:33	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		06/12/18 11:33	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		06/12/18 11:33	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		06/12/18 11:33	1868-53-7	

Sample: INF-20180605 **Lab ID: 2078022002** Collected: 06/05/18 11:07 Received: 06/07/18 08:35 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		06/12/18 12:27	67-64-1	
Acrolein	ND	ug/L	8.0	1		06/12/18 12:27	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		06/12/18 12:27	107-13-1	
Benzene	ND	ug/L	1.0	1		06/12/18 12:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		06/12/18 12:27	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/12/18 12:27	75-25-2	
Bromomethane	ND	ug/L	1.0	1		06/12/18 12:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		06/12/18 12:27	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		06/12/18 12:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/12/18 12:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/12/18 12:27	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/12/18 12:27	75-00-3	
Chloroform	ND	ug/L	1.0	1		06/12/18 12:27	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/12/18 12:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		06/12/18 12:27	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		06/12/18 12:27	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/12/18 12:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/12/18 12:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/12/18 12:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 12:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 12:27	10061-02-6	
Enflurane	**1.3**	ug/L	1.0	1		06/12/18 12:27	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		06/12/18 12:27	100-41-4	
Haloether 229	**12.2**	ug/L	1.0	1		06/12/18 12:27		
Haloether 406	ND	ug/L	1.0	1		06/12/18 12:27		
Haloether 421	ND	ug/L	1.0	1		06/12/18 12:27		
Haloether 427	ND	ug/L	1.0	1		06/12/18 12:27		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: INF-20180605 **Lab ID: 2078022002** Collected: 06/05/18 11:07 Received: 06/07/18 08:35 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		06/12/18 12:27		
Haloether 508	**25.7**	ug/L	1.0	1		06/12/18 12:27		
Haloether 528	**1.3**	ug/L	1.0	1		06/12/18 12:27		
Halomar	ND	ug/L	1.0	1		06/12/18 12:27		
2-Hexanone	ND	ug/L	2.0	1		06/12/18 12:27	591-78-6	
Isoflurane	**55.4**	ug/L	1.0	1		06/12/18 12:27		
Methoxyflurane	ND	ug/L	1.0	1		06/12/18 12:27	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		06/12/18 12:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		06/12/18 12:27	108-10-1	
Styrene	ND	ug/L	1.0	1		06/12/18 12:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/12/18 12:27	79-34-5	
Tetrachloroethene	**4.9**	ug/L	1.0	1		06/12/18 12:27	127-18-4	
Toluene	ND	ug/L	1.0	1		06/12/18 12:27	108-88-3	
Total Haloether	**96.0**	ug/L	1.0	1		06/12/18 12:27		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/12/18 12:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/12/18 12:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/12/18 12:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		06/12/18 12:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/12/18 12:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/12/18 12:27	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		06/12/18 12:27	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		06/12/18 12:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/12/18 12:27	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		06/12/18 12:27	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		06/12/18 12:27	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		06/12/18 12:27	1868-53-7	

Sample: EFF-20180605 **Lab ID: 2078022003** Collected: 06/05/18 11:39 Received: 06/07/18 08:35 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		06/12/18 11:51	67-64-1	
Acrolein	ND	ug/L	8.0	1		06/12/18 11:51	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		06/12/18 11:51	107-13-1	
Benzene	ND	ug/L	1.0	1		06/12/18 11:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		06/12/18 11:51	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/12/18 11:51	75-25-2	
Bromomethane	ND	ug/L	1.0	1		06/12/18 11:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		06/12/18 11:51	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		06/12/18 11:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/12/18 11:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/12/18 11:51	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/12/18 11:51	75-00-3	
Chloroform	ND	ug/L	1.0	1		06/12/18 11:51	67-66-3	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: EFF-20180605 **Lab ID: 2078022003** Collected: 06/05/18 11:39 Received: 06/07/18 08:35 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		06/12/18 11:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		06/12/18 11:51	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		06/12/18 11:51	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/12/18 11:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/12/18 11:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/12/18 11:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 11:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 11:51	10061-02-6	
Enflurane	ND	ug/L	1.0	1		06/12/18 11:51	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		06/12/18 11:51	100-41-4	
Haloether 229	ND	ug/L	1.0	1		06/12/18 11:51		~~M1~~
Haloether 406	ND	ug/L	1.0	1		06/12/18 11:51		
Haloether 421	ND	ug/L	1.0	1		06/12/18 11:51		~~M1~~
Haloether 427	ND	ug/L	1.0	1		06/12/18 11:51		
Haloether 428	ND	ug/L	1.0	1		06/12/18 11:51		
Haloether 508	ND	ug/L	1.0	1		06/12/18 11:51		
Haloether 528	ND	ug/L	1.0	1		06/12/18 11:51		
Halomar	ND	ug/L	1.0	1		06/12/18 11:51		
2-Hexanone	ND	ug/L	2.0	1		06/12/18 11:51	591-78-6	
Isoflurane	ND	ug/L	1.0	1		06/12/18 11:51		
Methoxyflurane	ND	ug/L	1.0	1		06/12/18 11:51	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		06/12/18 11:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		06/12/18 11:51	108-10-1	
Styrene	~~ND~~	~~ug/L~~	~~1.0~~	~~1~~		~~06/12/18 11:51~~	~~100-42-5~~	~~M1~~ R
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/12/18 11:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		06/12/18 11:51	127-18-4	
Toluene	ND	ug/L	1.0	1		06/12/18 11:51	108-88-3	
Total Haloether	ND	ug/L	1.0	1		06/12/18 11:51		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/12/18 11:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/12/18 11:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/12/18 11:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		06/12/18 11:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/12/18 11:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/12/18 11:51	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		06/12/18 11:51	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		06/12/18 11:51	179601-23-1	~~M1~~ UJ
o-Xylene	ND	ug/L	1.0	1		06/12/18 11:51	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		06/12/18 11:51	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		06/12/18 11:51	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		06/12/18 11:51	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: EFFDUP-20180605 **Lab ID: 2078022004** Collected: 06/05/18 11:39 Received: 06/07/18 08:35 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		06/12/18 12:09	67-64-1	
Acrolein	ND	ug/L	8.0	1		06/12/18 12:09	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		06/12/18 12:09	107-13-1	
Benzene	ND	ug/L	1.0	1		06/12/18 12:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		06/12/18 12:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/12/18 12:09	75-25-2	
Bromomethane	ND	ug/L	1.0	1		06/12/18 12:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		06/12/18 12:09	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		06/12/18 12:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/12/18 12:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/12/18 12:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/12/18 12:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		06/12/18 12:09	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/12/18 12:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		06/12/18 12:09	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		06/12/18 12:09	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/12/18 12:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/12/18 12:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/12/18 12:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 12:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 12:09	10061-02-6	
Enflurane	ND	ug/L	1.0	1		06/12/18 12:09	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		06/12/18 12:09	100-41-4	
Haloether 229	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 406	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 421	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 427	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 428	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 508	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 528	ND	ug/L	1.0	1		06/12/18 12:09		
Halomar	ND	ug/L	1.0	1		06/12/18 12:09		
2-Hexanone	ND	ug/L	2.0	1		06/12/18 12:09	591-78-6	
Isoflurane	ND	ug/L	1.0	1		06/12/18 12:09		
Methoxyflurane	ND	ug/L	1.0	1		06/12/18 12:09	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		06/12/18 12:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		06/12/18 12:09	108-10-1	
Styrene	ND	ug/L	1.0	1		06/12/18 12:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/12/18 12:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		06/12/18 12:09	127-18-4	
Toluene	ND	ug/L	1.0	1		06/12/18 12:09	108-88-3	
Total Haloether	ND	ug/L	1.0	1		06/12/18 12:09		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/12/18 12:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/12/18 12:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/12/18 12:09	79-01-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: EFFDUP-20180605 **Lab ID: 2078022004** Collected: 06/05/18 11:39 Received: 06/07/18 08:35 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		06/12/18 12:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/12/18 12:09	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/12/18 12:09	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		06/12/18 12:09	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		06/12/18 12:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/12/18 12:09	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		06/12/18 12:09	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		06/12/18 12:09	460-00-4	
Dibromofluoromethane (S)	109	%.	72-126	1		06/12/18 12:09	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 2078022

2078022

1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Arcadis	Report To:	Elvin Varela	Attention:	
Address:	#48 City View Plaza 1 Suite 401	Copy To:		Company Name:	
Rd 165 KM 1.2, Guaynabo, PR 00968				Address:	
Email:	elvin.varela@arcadis.com	Purchase Order #:		Pace Quote:	
Phone:	787-777-4000 Fax:	Project Name:	Fibers Public Supply Well(PO#CO001911.0007	Pace Project Manager:	craig.mccollum@pacelabs.com,
Requested Due Date:	Std	Project #:	CO001911.0007 18054	Pace Profile #:	1037 L1

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	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	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)
1	TB-20180605	WT			Lab				2											Y	
2	INF-20180605		G			6-5-18	1107		3				X						Y		
3	EFF-20180605		G			6-5-18	1139		3				X						Y		
4	EFFDUP-20180605		G			6-5-18	1139		3				X						Y		
5	EFFMS-20180605		G			6-5-18	1139		3				X						Y		
6	EFFMSD-20180605		G			6-5-18	1139		3				X						Y		
7																					
8																					
9																					
10																					
11																					
12																					

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	6-5-18	1510	[signature] PACE	6/5/18	1510	3.9	y	N	y
	[signature] PACE	6/5/18	1700	FEDEX	6/5/18	1700				
	FedEx	6/7/18	0835	[signature] Pace	6/7/18	0835	1.1	y	y	y
							5.8			

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: E. Delgado

SIGNATURE of SAMPLER: [signature]

DATE Signed: June 5, 2018

Attachment 2
Pace Laboratory Analytical Report #2078022

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

June 15, 2018

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

RE: Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on June 07, 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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project:	Fibers Public Supply Wells
Pace Project No.:	2078022

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2078022001	**TB-20180605**	Water	06/05/18 00:00	06/07/18 08:35
2078022002	**INF-20180605**	Water	06/05/18 11:07	06/07/18 08:35
2078022003	**EFF-20180605**	Water	06/05/18 11:39	06/07/18 08:35
2078022004	**EFFDUP-20180605**	Water	06/05/18 11:39	06/07/18 08:35

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2078022001	**TB-20180605**	EPA 5030B/8260	GEM	56	PASI-N
2078022002	**INF-20180605**	EPA 5030B/8260	GEM	56	PASI-N
2078022003	**EFF-20180605**	EPA 5030B/8260	GEM	56	PASI-N
2078022004	**EFFDUP-20180605**	EPA 5030B/8260	GEM	56	PASI-N

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

PROJECT NARRATIVE

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: June 15, 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: 112029

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2078022003

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

- MS (Lab ID: 482555)
  - Haloether 229
  - Haloether 421
  - Styrene
- MSD (Lab ID: 482556)
  - Styrene
  - m&p-Xylene

Additional Comments:

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: TB-20180605 **Lab ID: 2078022001** Collected: 06/05/18 00:00 Received: 06/07/18 08:35 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		06/12/18 11:33	67-64-1	
Acrolein	ND	ug/L	8.0	1		06/12/18 11:33	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		06/12/18 11:33	107-13-1	
Benzene	ND	ug/L	1.0	1		06/12/18 11:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		06/12/18 11:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/12/18 11:33	75-25-2	
Bromomethane	ND	ug/L	1.0	1		06/12/18 11:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		06/12/18 11:33	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		06/12/18 11:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/12/18 11:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/12/18 11:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/12/18 11:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		06/12/18 11:33	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/12/18 11:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		06/12/18 11:33	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		06/12/18 11:33	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/12/18 11:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/12/18 11:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/12/18 11:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 11:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 11:33	10061-02-6	
Enflurane	ND	ug/L	1.0	1		06/12/18 11:33	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		06/12/18 11:33	100-41-4	
Haloether 229	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 406	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 421	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 427	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 428	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 508	ND	ug/L	1.0	1		06/12/18 11:33		
Haloether 528	ND	ug/L	1.0	1		06/12/18 11:33		
Halomar	ND	ug/L	1.0	1		06/12/18 11:33		
2-Hexanone	ND	ug/L	2.0	1		06/12/18 11:33	591-78-6	
Isoflurane	ND	ug/L	1.0	1		06/12/18 11:33		
Methoxyflurane	ND	ug/L	1.0	1		06/12/18 11:33	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		06/12/18 11:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		06/12/18 11:33	108-10-1	
Styrene	ND	ug/L	1.0	1		06/12/18 11:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/12/18 11:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		06/12/18 11:33	127-18-4	
Toluene	ND	ug/L	1.0	1		06/12/18 11:33	108-88-3	
Total Haloether	ND	ug/L	1.0	1		06/12/18 11:33		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/12/18 11:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/12/18 11:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/12/18 11:33	79-01-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: TB-20180605 **Lab ID: 2078022001** Collected: 06/05/18 00:00 Received: 06/07/18 08:35 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		06/12/18 11:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/12/18 11:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/12/18 11:33	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		06/12/18 11:33	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		06/12/18 11:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/12/18 11:33	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		06/12/18 11:33	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		06/12/18 11:33	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		06/12/18 11:33	1868-53-7	

Sample: INF-20180605 **Lab ID: 2078022002** Collected: 06/05/18 11:07 Received: 06/07/18 08:35 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		06/12/18 12:27	67-64-1	
Acrolein	ND	ug/L	8.0	1		06/12/18 12:27	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		06/12/18 12:27	107-13-1	
Benzene	ND	ug/L	1.0	1		06/12/18 12:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		06/12/18 12:27	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/12/18 12:27	75-25-2	
Bromomethane	ND	ug/L	1.0	1		06/12/18 12:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		06/12/18 12:27	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		06/12/18 12:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/12/18 12:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/12/18 12:27	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/12/18 12:27	75-00-3	
Chloroform	ND	ug/L	1.0	1		06/12/18 12:27	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/12/18 12:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		06/12/18 12:27	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		06/12/18 12:27	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/12/18 12:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/12/18 12:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/12/18 12:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 12:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 12:27	10061-02-6	
Enflurane	**1.3**	ug/L	1.0	1		06/12/18 12:27	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		06/12/18 12:27	100-41-4	
Haloether 229	**12.2**	ug/L	1.0	1		06/12/18 12:27		
Haloether 406	ND	ug/L	1.0	1		06/12/18 12:27		
Haloether 421	ND	ug/L	1.0	1		06/12/18 12:27		
Haloether 427	ND	ug/L	1.0	1		06/12/18 12:27		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: INF-20180605 **Lab ID: 2078022002** Collected: 06/05/18 11:07 Received: 06/07/18 08:35 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		06/12/18 12:27		
Haloether 508	**25.7**	ug/L	1.0	1		06/12/18 12:27		
Haloether 528	**1.3**	ug/L	1.0	1		06/12/18 12:27		
Halomar	ND	ug/L	1.0	1		06/12/18 12:27		
2-Hexanone	ND	ug/L	2.0	1		06/12/18 12:27	591-78-6	
Isoflurane	**55.4**	ug/L	1.0	1		06/12/18 12:27		
Methoxyflurane	ND	ug/L	1.0	1		06/12/18 12:27	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		06/12/18 12:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		06/12/18 12:27	108-10-1	
Styrene	ND	ug/L	1.0	1		06/12/18 12:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/12/18 12:27	79-34-5	
Tetrachloroethene	**4.9**	ug/L	1.0	1		06/12/18 12:27	127-18-4	
Toluene	ND	ug/L	1.0	1		06/12/18 12:27	108-88-3	
Total Haloether	**96.0**	ug/L	1.0	1		06/12/18 12:27		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/12/18 12:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/12/18 12:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/12/18 12:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		06/12/18 12:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/12/18 12:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/12/18 12:27	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		06/12/18 12:27	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		06/12/18 12:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/12/18 12:27	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		06/12/18 12:27	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		06/12/18 12:27	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		06/12/18 12:27	1868-53-7	

Sample: EFF-20180605 **Lab ID: 2078022003** Collected: 06/05/18 11:39 Received: 06/07/18 08:35 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		06/12/18 11:51	67-64-1	
Acrolein	ND	ug/L	8.0	1		06/12/18 11:51	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		06/12/18 11:51	107-13-1	
Benzene	ND	ug/L	1.0	1		06/12/18 11:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		06/12/18 11:51	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/12/18 11:51	75-25-2	
Bromomethane	ND	ug/L	1.0	1		06/12/18 11:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		06/12/18 11:51	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		06/12/18 11:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/12/18 11:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/12/18 11:51	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/12/18 11:51	75-00-3	
Chloroform	ND	ug/L	1.0	1		06/12/18 11:51	67-66-3	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: EFF-20180605 **Lab ID: 2078022003** Collected: 06/05/18 11:39 Received: 06/07/18 08:35 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		06/12/18 11:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		06/12/18 11:51	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		06/12/18 11:51	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/12/18 11:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/12/18 11:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 11:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/12/18 11:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 11:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 11:51	10061-02-6	
Enflurane	ND	ug/L	1.0	1		06/12/18 11:51	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		06/12/18 11:51	100-41-4	
Haloether 229	ND	ug/L	1.0	1		06/12/18 11:51		M1
Haloether 406	ND	ug/L	1.0	1		06/12/18 11:51		
Haloether 421	ND	ug/L	1.0	1		06/12/18 11:51		M1
Haloether 427	ND	ug/L	1.0	1		06/12/18 11:51		
Haloether 428	ND	ug/L	1.0	1		06/12/18 11:51		
Haloether 508	ND	ug/L	1.0	1		06/12/18 11:51		
Haloether 528	ND	ug/L	1.0	1		06/12/18 11:51		
Halomar	ND	ug/L	1.0	1		06/12/18 11:51		
2-Hexanone	ND	ug/L	2.0	1		06/12/18 11:51	591-78-6	
Isoflurane	ND	ug/L	1.0	1		06/12/18 11:51		
Methoxyflurane	ND	ug/L	1.0	1		06/12/18 11:51	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		06/12/18 11:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		06/12/18 11:51	108-10-1	
Styrene	ND	ug/L	1.0	1		06/12/18 11:51	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/12/18 11:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		06/12/18 11:51	127-18-4	
Toluene	ND	ug/L	1.0	1		06/12/18 11:51	108-88-3	
Total Haloether	ND	ug/L	1.0	1		06/12/18 11:51		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/12/18 11:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/12/18 11:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/12/18 11:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		06/12/18 11:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/12/18 11:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/12/18 11:51	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		06/12/18 11:51	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		06/12/18 11:51	179601-23-1	M1
o-Xylene	ND	ug/L	1.0	1		06/12/18 11:51	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		06/12/18 11:51	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		06/12/18 11:51	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		06/12/18 11:51	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: EFFDUP-20180605 **Lab ID: 2078022004** Collected: 06/05/18 11:39 Received: 06/07/18 08:35 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		06/12/18 12:09	67-64-1	
Acrolein	ND	ug/L	8.0	1		06/12/18 12:09	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		06/12/18 12:09	107-13-1	
Benzene	ND	ug/L	1.0	1		06/12/18 12:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		06/12/18 12:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/12/18 12:09	75-25-2	
Bromomethane	ND	ug/L	1.0	1		06/12/18 12:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		06/12/18 12:09	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		06/12/18 12:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/12/18 12:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/12/18 12:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/12/18 12:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		06/12/18 12:09	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/12/18 12:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		06/12/18 12:09	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		06/12/18 12:09	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/12/18 12:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/12/18 12:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/12/18 12:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/12/18 12:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 12:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/12/18 12:09	10061-02-6	
Enflurane	ND	ug/L	1.0	1		06/12/18 12:09	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		06/12/18 12:09	100-41-4	
Haloether 229	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 406	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 421	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 427	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 428	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 508	ND	ug/L	1.0	1		06/12/18 12:09		
Haloether 528	ND	ug/L	1.0	1		06/12/18 12:09		
Halomar	ND	ug/L	1.0	1		06/12/18 12:09		
2-Hexanone	ND	ug/L	2.0	1		06/12/18 12:09	591-78-6	
Isoflurane	ND	ug/L	1.0	1		06/12/18 12:09		
Methoxyflurane	ND	ug/L	1.0	1		06/12/18 12:09	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		06/12/18 12:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		06/12/18 12:09	108-10-1	
Styrene	ND	ug/L	1.0	1		06/12/18 12:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/12/18 12:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		06/12/18 12:09	127-18-4	
Toluene	ND	ug/L	1.0	1		06/12/18 12:09	108-88-3	
Total Haloether	ND	ug/L	1.0	1		06/12/18 12:09		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/12/18 12:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/12/18 12:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/12/18 12:09	79-01-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Sample: EFFDUP-20180605 **Lab ID: 2078022004** Collected: 06/05/18 11:39 Received: 06/07/18 08:35 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		06/12/18 12:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/12/18 12:09	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/12/18 12:09	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		06/12/18 12:09	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		06/12/18 12:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/12/18 12:09	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		06/12/18 12:09	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		06/12/18 12:09	460-00-4	
Dibromofluoromethane (S)	109	%.	72-126	1		06/12/18 12:09	1868-53-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

QC Batch: 112029 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2078022001, 2078022002, 2078022003, 2078022004

METHOD BLANK: 482553 | Matrix: Water
Associated Lab Samples: 2078022001, 2078022002, 2078022003, 2078022004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	06/12/18 10:01	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	06/12/18 10:01	
1,1,2-Trichloroethane	ug/L	ND	1.0	06/12/18 10:01	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	06/12/18 10:01	
1,1-Dichloroethane	ug/L	ND	1.0	06/12/18 10:01	
1,1-Dichloroethene	ug/L	ND	1.0	06/12/18 10:01	
1,2,3-Trichloropropane	ug/L	ND	1.0	06/12/18 10:01	
1,2-Dichloroethane	ug/L	ND	1.0	06/12/18 10:01	
1,2-Dichloropropane	ug/L	ND	1.0	06/12/18 10:01	
2-Butanone (MEK)	ug/L	ND	2.0	06/12/18 10:01	
2-Hexanone	ug/L	ND	2.0	06/12/18 10:01	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	06/12/18 10:01	
Acetone	ug/L	ND	4.0	06/12/18 10:01	
Acrolein	ug/L	ND	8.0	06/12/18 10:01	
Acrylonitrile	ug/L	ND	4.0	06/12/18 10:01	
Benzene	ug/L	ND	1.0	06/12/18 10:01	
Bromodichloromethane	ug/L	ND	1.0	06/12/18 10:01	
Bromoform	ug/L	ND	1.0	06/12/18 10:01	
Bromomethane	ug/L	ND	1.0	06/12/18 10:01	
Carbon disulfide	ug/L	ND	1.0	06/12/18 10:01	
Carbon tetrachloride	ug/L	ND	1.0	06/12/18 10:01	
Chlorobenzene	ug/L	ND	1.0	06/12/18 10:01	
Chloroethane	ug/L	ND	1.0	06/12/18 10:01	
Chloroform	ug/L	ND	1.0	06/12/18 10:01	
Chloromethane	ug/L	ND	1.0	06/12/18 10:01	
cis-1,2-Dichloroethene	ug/L	ND	1.0	06/12/18 10:01	
cis-1,3-Dichloropropene	ug/L	ND	1.0	06/12/18 10:01	
Dibromochloromethane	ug/L	ND	1.0	06/12/18 10:01	
Dibromomethane	ug/L	ND	1.0	06/12/18 10:01	
Enflurane	ug/L	ND	1.0	06/12/18 10:01	
Ethylbenzene	ug/L	ND	1.0	06/12/18 10:01	
Haloether 229	ug/L	ND	1.0	06/12/18 10:01	
Haloether 406	ug/L	ND	1.0	06/12/18 10:01	
Haloether 421	ug/L	ND	1.0	06/12/18 10:01	
Haloether 427	ug/L	ND	1.0	06/12/18 10:01	
Haloether 428	ug/L	ND	1.0	06/12/18 10:01	
Haloether 508	ug/L	ND	1.0	06/12/18 10:01	
Haloether 528	ug/L	ND	1.0	06/12/18 10:01	
Halomar	ug/L	ND	1.0	06/12/18 10:01	
Isoflurane	ug/L	ND	1.0	06/12/18 10:01	
m&p-Xylene	ug/L	ND	2.0	06/12/18 10:01	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

METHOD BLANK: 482553 Matrix: Water
Associated Lab Samples: 2078022001, 2078022002, 2078022003, 2078022004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methoxyflurane	ug/L	ND	1.0	06/12/18 10:01	
Methylene Chloride	ug/L	ND	5.0	06/12/18 10:01	
o-Xylene	ug/L	ND	1.0	06/12/18 10:01	
Styrene	ug/L	ND	1.0	06/12/18 10:01	
Tetrachloroethene	ug/L	ND	1.0	06/12/18 10:01	
Toluene	ug/L	ND	1.0	06/12/18 10:01	
Total Haloether	ug/L	ND	1.0	06/12/18 10:01	
trans-1,2-Dichloroethene	ug/L	ND	1.0	06/12/18 10:01	
trans-1,3-Dichloropropene	ug/L	ND	1.0	06/12/18 10:01	
Trichloroethene	ug/L	ND	1.0	06/12/18 10:01	
Trichlorofluoromethane	ug/L	ND	1.0	06/12/18 10:01	
Vinyl chloride	ug/L	ND	1.0	06/12/18 10:01	
4-Bromofluorobenzene (S)	%.	102	68-124	06/12/18 10:01	
Dibromofluoromethane (S)	%.	102	72-126	06/12/18 10:01	
Toluene-d8 (S)	%.	102	79-119	06/12/18 10:01	

LABORATORY CONTROL SAMPLE: 482554

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.1	106	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	45.0	90	15-179	
1,1,2-Trichloroethane	ug/L	50	48.1	96	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	51.1	102	38-121	
1,1-Dichloroethane	ug/L	50	54.4	109	63-129	
1,1-Dichloroethene	ug/L	50	47.8	96	51-139	
1,2,3-Trichloropropane	ug/L	50	46.0	92	13-187	
1,2-Dichloroethane	ug/L	50	50.4	101	57-148	
1,2-Dichloropropane	ug/L	50	52.8	106	66-128	
2-Butanone (MEK)	ug/L	50	58.9	118	32-183	
2-Hexanone	ug/L	50	50.8	102	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	57.9	116	26-171	
Acetone	ug/L	50	63.2	126	22-165	
Acrolein	ug/L	50	51.6	103	10-131	
Acrylonitrile	ug/L	50	59.6	119	18-149	
Benzene	ug/L	50	48.9	98	62-131	
Bromodichloromethane	ug/L	50	50.5	101	69-132	
Bromoform	ug/L	50	45.5	91	35-166	
Bromomethane	ug/L	50	51.7	103	34-158	
Carbon disulfide	ug/L	50	53.0	106	31-128	
Carbon tetrachloride	ug/L	50	51.0	102	54-144	
Chlorobenzene	ug/L	50	49.8	100	70-127	
Chloroethane	ug/L	50	50.3	101	17-195	
Chloroform	ug/L	50	51.3	103	73-134	
Chloromethane	ug/L	50	52.8	106	17-153	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

LABORATORY CONTROL SAMPLE: 482554

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	50.0	100	68-129	
cis-1,3-Dichloropropene	ug/L	50	50.0	100	72-138	
Dibromochloromethane	ug/L	50	45.4	91	49-146	
Dibromomethane	ug/L	50	53.1	106	56-145	
Enflurane	ug/L	50	50.5	101	56-135	
Ethylbenzene	ug/L	50	46.3	93	66-126	
Haloether 229	ug/L	50	53.0	106	62-123	
Haloether 406	ug/L	50	53.4	107	62-134	
Haloether 421	ug/L	50	52.9	106	70-128	
Haloether 427	ug/L	50	52.0	104	69-153	
Haloether 428	ug/L	50	50.9	102	70-134	
Haloether 508	ug/L	50	53.6	107	52-139	
Haloether 528	ug/L	50	47.0	94	48-157	
Halomar	ug/L	50	52.7	105	62-128	
Isoflurane	ug/L	50	50.6	101	61-132	
m&p-Xylene	ug/L	100	93.6	94	65-129	
Methoxyflurane	ug/L	50	51.4	103	72-124	
Methylene Chloride	ug/L	50	53.4	107	46-168	
o-Xylene	ug/L	50	47.0	94	65-124	
Styrene	ug/L	50	48.5	97	72-133	
Tetrachloroethene	ug/L	50	52.3	105	46-157	
Toluene	ug/L	50	45.8	92	69-126	
Total Haloether	ug/L		568			
trans-1,2-Dichloroethene	ug/L	50	49.8	100	60-129	
trans-1,3-Dichloropropene	ug/L	50	47.3	95	59-149	
Trichloroethene	ug/L	50	50.0	100	67-132	
Trichlorofluoromethane	ug/L	50	52.5	105	39-171	
Vinyl chloride	ug/L	50	49.2	98	27-149	
4-Bromofluorobenzene (S)	%.			95	68-124	
Dibromofluoromethane (S)	%.			103	72-126	
Toluene-d8 (S)	%.			100	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 482555 482556

Parameter	Units	2078022003 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	61.8	55.2	124	110	54-137	11	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	49.3	47.2	99	94	15-187	4	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	53.7	50.0	107	100	59-148	7	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	53.6	52.8	107	106	40-117	2	20	
1,1-Dichloroethane	ug/L	ND	50	50	63.8	57.7	128	115	59-133	10	20	
1,1-Dichloroethene	ug/L	ND	50	50	54.0	52.3	108	105	44-146	3	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	48.6	46.7	97	93	14-199	4	20	
1,2-Dichloroethane	ug/L	ND	50	50	57.9	53.3	115	106	56-154	8	20	
1,2-Dichloropropane	ug/L	ND	50	50	60.2	54.4	120	109	62-135	10	20	

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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 482555 482556

Parameter	Units	2078022003 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	58.3	58.1	117	116	20-205	0	20	
2-Hexanone	ug/L	ND	50	50	52.2	47.1	104	94	25-189	10	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	64.1	57.3	128	115	23-184	11	20	
Acetone	ug/L	ND	50	50	60.6	54.6	120	108	11-217	10	20	
Acrolein	ug/L	ND	50	50	42.0	37.6	84	75	10-142	11	20	
Acrylonitrile	ug/L	ND	50	50	63.1	58.8	126	118	20-164	7	20	
Benzene	ug/L	ND	50	50	55.3	49.7	111	99	52-141	11	20	
Bromodichloromethane	ug/L	ND	50	50	57.0	51.3	114	103	70-134	11	20	
Bromoform	ug/L	ND	50	50	49.2	45.2	97	89	37-171	8	20	
Bromomethane	ug/L	ND	50	50	63.2	56.7	126	113	34-155	11	20	
Carbon disulfide	ug/L	ND	50	50	61.4	57.1	123	114	28-130	7	20	
Carbon tetrachloride	ug/L	ND	50	50	60.0	52.2	120	104	48-146	14	20	
Chlorobenzene	ug/L	ND	50	50	55.3	50.9	111	102	67-129	8	20	
Chloroethane	ug/L	ND	50	50	61.2	54.2	122	108	12-192	12	20	
Chloroform	ug/L	ND	50	50	57.3	54.1	115	108	66-143	6	20	
Chloromethane	ug/L	ND	50	50	73.7	66.2	147	132	14-155	11	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	55.6	52.9	111	106	56-141	5	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	54.6	49.3	109	99	70-139	10	20	
Dibromochloromethane	ug/L	ND	50	50	51.4	47.0	103	94	50-150	9	20	
Dibromomethane	ug/L	ND	50	50	59.0	53.3	118	107	58-153	10	20	
Enflurane	ug/L	ND	50	50	60.3	55.0	121	110	63-126	9	20	
Ethylbenzene	ug/L	ND	50	50	52.5	46.7	105	93	57-135	12	20	
Haloether 229	ug/L	ND	50	50	64.4	56.8	129	114	56-127	13	20	M1
Haloether 406	ug/L	ND	50	50	62.1	55.9	124	112	68-128	11	20	
Haloether 421	ug/L	ND	50	50	61.6	52.5	123	105	74-120	16	20	M1
Haloether 427	ug/L	ND	50	50	59.6	53.9	119	108	78-120	10	20	
Haloether 428	ug/L	ND	50	50	59.1	52.2	118	104	74-125	12	20	
Haloether 508	ug/L	ND	50	50	60.7	55.0	121	110	28-156	10	20	
Haloether 528	ug/L	ND	50	50	54.3	48.9	109	98	45-142	10	20	
Halomar	ug/L	ND	50	50	59.4	54.5	119	109	67-123	9	20	
Isoflurane	ug/L	ND	50	50	61.4	54.0	123	108	45-140	13	20	
m&p-Xylene	ug/L	ND	100	100	57.3	51.2	57	51	56-136	11	20	M1
Methoxyflurane	ug/L	ND	50	50	59.3	51.2	119	102	75-119	15	20	
Methylene Chloride	ug/L	ND	50	50	61.4	56.3	123	113	45-166	9	20	
o-Xylene	ug/L	ND	50	50	49.7	45.3	99	91	57-133	9	20	
Styrene	ug/L	ND	50	50	ND	ND	0	0	58-144		20	M1
Tetrachloroethene	ug/L	ND	50	50	58.2	53.1	116	106	48-143	9	20	
Toluene	ug/L	ND	50	50	52.8	45.6	106	91	59-136	15	20	
Total Haloether	ug/L	ND			662	590				12		
trans-1,2-Dichloroethene	ug/L	ND	50	50	59.4	53.7	119	107	57-132	10	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	53.9	50.1	108	100	59-154	7	20	
Trichloroethene	ug/L	ND	50	50	57.5	50.7	115	101	58-140	13	20	
Trichlorofluoromethane	ug/L	ND	50	50	64.8	56.2	130	112	24-175	14	20	
Vinyl chloride	ug/L	ND	50	50	57.4	52.0	115	104	21-150	10	20	
4-Bromofluorobenzene (S)	%.						96	97	68-124			

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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 482555 482556

Parameter	Units	2078022003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						105	109	72-126			
Toluene-d8 (S)	%.						101	99	79-119			

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fibers Public Supply Wells
Pace Project No.: 2078022

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2078022001	**TB-20180605**	EPA 5030B/8260	112029		
2078022002	**INF-20180605**	EPA 5030B/8260	112029		
2078022003	**EFF-20180605**	EPA 5030B/8260	112029		
2078022004	**EFFDUP-20180605**	EPA 5030B/8260	112029		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

WO# : 2078022

2078022

1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Arcadis	Report To:	Elvin Varela	Attention:	
Address:	#48 City View Plaza 1 Suite 401	Copy To:		Company Name:	
Rd 165 KM 1.2, Guaynabo, PR 00968				Address:	
Email:	elvin.varela@arcadis.com	Purchase Order #:		Pace Quote:	
Phone:	787-777-4000 Fax:	Project Name:	Fibers Public Supply Well(PO#CO001911.0007	Pace Project Manager:	craig.mccollum@pacelabs.com,
Requested Due Date:	Std	Project #:	CO001911.0007 18054	Pace Profile #:	1037 L1

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	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	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)
1	TB-20180605	WT			Lab				2											Y	
2	INF-20180605		G			6-5-18	1107		3				X						Y		
3	EFF-20180605		G			6-5-18	1139		3				X						Y		
4	EFFDUP-20180605		G			6-5-18	1139		3				X						Y		
5	EFFMS-20180605		G			6-5-18	1139		3				X						Y		
6	EFFMSD-20180605		G			6-5-18	1139		3				X						Y		
7																					
8																					
9																					
10																					
11																					
12																					

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	6-5-18	1510	[signature] PACE	6/5/18	1510	3.9	y	N	y
	[signature] PACE	6/5/18	1700	FEDEX	6/5/18	1700				
	FedEx	6/7/18	0835	[signature] Pace	6/7/18	0835	1.1	y	y	y
							5.8			

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: E. Delgado

SIGNATURE of SAMPLER: [signature]

DATE Signed: June 5, 2018

Pace Analytical

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

Sample Condition Upon Receipt

WO#: 2078022

PM: CJM Due Date: 06/21/18

CLIENT: 20-CHEV-ARC

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

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: 6/8/18 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 2 VOA vials > 6mm

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Attachment 3
Data Review Report #29950R

ARCADIS Design & Consultancy for natural and built assets

Fibers Group

DATA REVIEW

GUAYAMA, PUERTO RICO

Volatile Analyses

SDG #254324 (WO 655-04-26)

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

Report #29950R
Review Level: Tier II
Project: CO001911.0007.1805A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #254324 (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	2869045	Water	06/05/2018		X				
EFFLUENT – DUPLICATE	2869046	Water	06/05/2018	EFFLUENT	X				
INFLUENT	2869049	Water	06/05/2018		X				
TRIP BLANK	2869050	Water	06/05/2018		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	1,1-Dichloropropene	>UL	>UL
	1,3,5-Trimethylbenzene	< LL but > 10%	< LL but > 10%
	Vinyl Acetate		
	Styrene	<10%	<10%
	Chloromethane	AC	>UL
	Iodomethane	AC	<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	

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than the control limit are presented in the following table.

Sample Locations	Compound
EFFLUENT	Chloromethane
	Iodomethane

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

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

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	1.3 J	1.6 J	AC

Notes:

AC Acceptable

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

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: June 19, 2018

PEER REVIEW: Jeffrey L. Davin

DATE: June 21, 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:	**2869045**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	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

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**
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:	**2869045**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
~~2-Chloroethyl vinyl ether~~	~~EPA 8260B~~	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~06/07/2018~~	~~00:07~~	~~NIVA~~	~~06/06/2018~~	~~--~~	~~EPA 5030B~~ R
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	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

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**
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:	**2869045**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits			Analysis			Prep Method		
					MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	1.30	µg/L	J	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	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

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**
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:	**2869045**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	~~ND~~	~~µg/L~~	~~U~~	~~8.0~~	~~15.0~~	~~--~~	~~06/07/2018~~	~~00:07~~	~~NIVA~~	~~06/06/2018~~	~~--~~	~~EPA 5030B~~ R
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Styrene	EPA 8260B	~~ND~~	~~µg/L~~	~~U~~	~~1.2~~	~~3.0~~	~~--~~	~~06/07/2018~~	~~00:07~~	~~NIVA~~	~~06/06/2018~~	~~--~~	~~EPA 5030B~~ R
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U J	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	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.

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

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:	**2869045**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Colegiado Libre Asociado de Puerto Rico LICENCIA NUM. 4330

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

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

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC

Laboratory Test Report

Sample Number:	**2869046**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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 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: **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:	**2869046**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~06/07/2018~~	~~00:33~~	~~NIVA~~	~~06/06/2018~~	~~--~~	~~EPA 5030B~~ R
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869046**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	1.60	µg/L	J	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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: **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:	**2869046**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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: **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:	**2869046**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Colegiado Lic. 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 E87782 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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869049**	Collected Date & Time:	**06/05/2018**	11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	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 E87785 at www.eqlab.com

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

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:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	--	~~06/06/2018~~	~~23:41~~	~~NIVA~~	~~06/06/2018~~	--	~~EPA 5030B~~ R
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	6.30	µg/L	J	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	16.6	µg/L	--	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	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: **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:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	BDL	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	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 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: **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:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	3.60	µg/L	--	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	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

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

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:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 4138

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

PRDOH Certified
EPA ID PR00014

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

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:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	~~ND~~	µg/L	U	~~6.0~~	~~15.0~~	~~--~~	~~06/06/2018~~	~~20:12~~	~~NIVA~~	~~06/06/2018~~		~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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 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:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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

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

2018-09288

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 #: 254324 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2869045-1 MATRIX: GROUND WATER SOURCE: EFFLUENT, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1143 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2869046-1 MATRIX: GROUND WATER DUP SOURCE: EFFLUENT-DUPLICATE, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1143 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2869047-1 MATRIX: GROUND WATER MS SOURCE: EFFLUENT-MS, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1143 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2869048-1 MATRIX: GROUND WATER MSD SOURCE: EFFLUENT-MSD, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1143 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:	[signature]	June 5, 18	1143
Fixed in field by:	[signature]	June 5, 18	1143
Authorized by:	N/A	N/A	N/A
Received by EQLF:			
Released to EQLL by:	[signature]	June 5, 18	1445
Received by EQLL:	[signature]	06/05/18	1445

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QC Report for June 25, 2018
Level II

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

P/HR

Arrival Temperature: 25°C Signature: [signature]

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

2018-09288

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 #: 254324 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2869049-1 MATRIX: GROUND WATER SOURCE: INFLUENT, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1109 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2, Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2869050-1 MATRIX: DI WATER SOURCE: TRIP BLANK, GUAYAMA, PR	DATE: June 5, 2018 TIME: (00) 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	N		
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE	A		

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	E.G.M.	June 5, 18	1109
Fixed in field by:	E.G.M.	June 5, 18	1109
Authorized by:	N	N	N
Received by EQLF:	A	A	A
Released to EQLL by:	E.G.M.	June 5, 18	1445
Received by EQLL:	[illegible]	06/05/18	1445

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QC Report for June 25, 2018
Level II

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

Arrival Temperature: 25 °C Signature: [illegible]

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

Attachment 4
EQLAB Laboratory Analytical Report #254324 (WO 655-04-26)

Quality Assurance Report

Prepared for:
ARCADIS CARIBE, PSC

Facility:
GUAYAMA PROJECT

Project
INTERNO

Samples Received:
June 05, 2018

Folder Number:
254324

W.O. #:
655-04-26

ENVIRONMENTAL QUALITY LABORATORIES, INC.

June 14, 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 June 05, 2018

Dear Mr. Varela

Enclosed you will find the Quality Assurance Report for the samples received on June 05, 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

TABLE OF CONTENTS

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 June 05, 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 June 05, 2018, for the Interno Project. The samples were analyzed for EPA 8260B VOC. The samples were received in good condition (2.5° 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
2869045	EFFLUENT	GROUND WATER
2869046	EFFLUENT – DUPLICATE	GROUND WATER
2869047	EFFLUENT – MS	GROUND WATER
2869048	EFFLUENT – MSD	GROUND WATER
2869049	INFLUENT	GROUND WATER
2869050	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 # 199899

Analysis Date: June 06 & 07, 2018

Sample	Analyte	Deviation	Recovery %	Range %
2869047/MS	1,1-Dichloropropene	00S	115.0	83-110
	1,3,5-Trimethylbenzene	00S	58.4	61-125
	Styrene	00S	3.55	65-123
	Vinyl Acetate	00S	48.9	52-141
2869048/MSD	1,1-Dichloropropene	00S	112.0	83-110
	1,3,5-Trimethylbenzene	00S	60.0	61-125
	Styrene	00S	3.35	65-123
	Vinyl Acetate	00S	49.4	52-141
	Chloromethane	00S	140.0	49-139
	Iodomethane	00S	3.76	45-148

Explanation: For the above samples (2869047/MS) and (2869048/MSD) the analytes 00S due to possible Matrix Spike Interference since the analytes have acceptable recoveries in the 2825927/LFB. See the following table.

Analysis Date: June 06 & 07, 2018

Sample	Analyte	Recovery %	Range %
2879664 /LFB	1,1-Dichloropropene	106.0	67-121
	1,3,5-Trimethylbenzene	101.0	68-123
	Styrene	80.1	65-127
	Vinyl Acetate	83.3	53-144
	Chloromethane	84.5	43-142
	Iodomethane	99.6	54-143

Run # 199899

Analysis Date: June 06 & 07, 2018

Sample	Analyte	Deviation	Recovery %	Range
2869048/MSD	Chloromethane	00RPD	44.8	0-20
	Iodomethane	00RPD	187	

Explanation: For Chloromethane and Iodomethane there is possible matrix spike interference affecting the recoveries.

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%)

$RPD_{Micro} = (\text{Log}_{10}\ \text{Final Result QC}) - (\text{Log}_{10}\ \text{Final Result Ref})$ 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 Benítez

Prepared By:
Lcdo. Marcelino Benítez
QA/QC Coordinador Licensed

June 14, 2018
Date

Janet Gómez Rosario

Checked by:
Lcda. Janet Gómez
QA/QC Supervisor

June 14, 2018
Date

SECTION 2
LABORATORY TEST REPORT

June 11, 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 2869045 to 2869050 have been reviewed by me and are correct as presented herein.

Leila 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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869045**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	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

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**
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:	**2869045**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	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: **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:	**2869045**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	1.30	µg/L	J	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	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: **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:	**2869045**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	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: **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:	**2869045**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:07	NIVA	06/06/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 4238

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

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:	**2869046**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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: **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:	**2869046**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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: **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:	**2869046**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	1.60	µg/L	J	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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: **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:	**2869046**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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: **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:	**2869046**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/07/2018	00:33	NIVA	06/06/2018	--	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

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-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:	**2869047**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	98.9	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	123	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	94.2	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	101	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	115	%	--	2.0	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	116	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	115	%	Q	1.4	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	87.9	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	97.5	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	76.9	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	106	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	75.9	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	96.5	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	109	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	110	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	58.4	%	Q	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	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: **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:	**2869047**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	102	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	97.4	%	--	2.0	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	98.5	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	113	%	--	1.5	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	90.8	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	113	%	--	6.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	47.6	%	--	6.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	96.4	%	--	1.4	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	91.4	%	--	6.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	101	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	96.2	%	--	1.4	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	96.2	%	--	6.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	109	%	--	6.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	102	%	--	25.0	75.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	108	%	--	6.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	120	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	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: **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:	**2869047**	Collected Date & Time:	**06/05/2018**	11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	104	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	114	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	113	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	91.3	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	117	%	--	2.0	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	120	%	--	7.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	116	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	102	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	101	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	119	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	88.9	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	100	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	102	%	--	1.5	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	115	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	109	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	73.5	%	--	30.0	75.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	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: **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:	**2869047**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	105	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	96.1	%	--	1.4	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Iodomethane	EPA 8260B	114	%	--	8.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	80.9	%	--	2.0	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Naphthalene	EPA 8260B	72.2	%	--	2.0	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Styrene	EPA 8260B	3.55	%	Q	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	110	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	81.6	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Toluene	EPA 8260B	108	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	112	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	132	%	--	1.5	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	48.9	%	Q	6.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	111	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	99.5	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	71.7	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	104	%	--	1.8	6.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	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: **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:	**2869047**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	89.8	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	104	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	101	%	--	1.0	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	96.0	%	--	2.3	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	105	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	111	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	119	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	111	%	--	1.2	3.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	84.7	%	--	6.0	15.0	--	06/07/2018	00:59	NIVA	06/06/2018	--	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
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-MSD 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:	**2869048**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	100	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	123	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	96.0	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	105	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	105	%	--	2.0	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	111	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	112	%	Q	1.4	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	91.4	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	98.1	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	83.3	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	91.9	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	77.7	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	103	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	109	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	106	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	60.0	%	Q	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	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 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-MSD 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:	**2869048**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	102	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	102	%	--	2.0	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	99.2	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	113	%	--	1.5	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	80.3	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	114	%	--	6.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	47.8	%	--	6.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	87.6	%	--	1.4	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	95.7	%	--	6.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	101	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	94.5	%	--	1.4	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	100	%	--	6.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	102	%	--	6.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	89.2	%	--	25.0	75.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	100	%	--	6.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	116	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	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: **EFFLUENT-MSD 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:	**2869048**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	103	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	119	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	111	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	91.9	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	113	%	--	2.0	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	110	%	--	7.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	115	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	103	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	108	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	105	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	140	%	Q	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	107	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	101	%	--	1.5	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	116	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	99.9	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	73.9	%	--	30.0	75.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	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: **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:	**2869048**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	104	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	101	%	--	1.4	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Iodomethane	EPA 8260B	3.76	%	Q	8.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	81.1	%	--	2.0	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Naphthalene	EPA 8260B	71.0	%	--	2.0	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Styrene	EPA 8260B	3.35	%	Q	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	116	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	88.7	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Toluene	EPA 8260B	111	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	111	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	133	%	--	1.5	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	49.4	%	Q	6.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	114	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	91.8	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	77.8	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	95.2	%	--	1.8	6.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	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: **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:	**2869048**	Collected Date & Time:	**06/05/2018** 11:43	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	90.7	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	104	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	101	%	--	1.0	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	93.9	%	--	2.3	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	104	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	110	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	108	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	117	%	--	1.2	3.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	90.6	%	--	6.0	15.0	--	06/07/2018	01:25	NIVA	06/06/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 5638

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

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:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	6.30	µg/L	J	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	16.6	µg/L	--	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	BDL	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	3.60	µg/L	--	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	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

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

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869049**	Collected Date & Time:	**06/05/2018** 11:09	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits			Analysis			Prep Method		
					MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	23:41	NIVA	06/06/2018	--	EPA 5030B

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

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

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:	**2869050**	Collected Date & Time:	**06/05/2018**	09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018	14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	254324				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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	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

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:	**2869050**	Collected Date & Time:	**06/05/2018** 09:00	Date of Report:	06/11/2018
Work Order:	655-04-26	Received Date & Time:	06/05/2018 14:45	Collected By:	CLIENT
Delivery Slip:	2018-09288	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	254324			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	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	06/06/2018	20:12	NIVA	06/06/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Colegiado Líbre 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

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

SECTION 3
ANALYTICAL TEST RESULTS
QUALITY ASSURANCE REPORT

Analytical Test Results Quality Assurance Report

W. O. # 655-04-26 Date: June 14, 2018

1.0 Samples Analyzed:

EQL SAMPLE #	DATE COLLECTED	DATE RECEIVED
2869045 to 2869050	June 05, 2018	June 05, 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	June 06 & 07, 2018	N. Villanueva

Marcelino Benítez

Lcdo Marcelino Benítez
QA/Q/C Coordinador Licensed

QUALITY CONTROL SUMMARY

EPA 8260B VOC - Run #199899

2879654 - LRB
Reference Sample Number is: 2869045

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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	NIVA
4-Bromofluorobenzene-SURR	18.6	18.1	--	µg/L	N/A	N/A	20.0	90.6	79	121	N/A	N/A	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	NIVA
Bromoform	1.3	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	NIVA
Dibromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	06/06/18	11:51	NIVA
Dibromofluoromethane-SURR	21.2	21.8	--	µg/L	N/A	N/A	20.0	109	83	120	N/A	N/A	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	NIVA
Toluene-d8-SURR	20.0	19.8	--	µg/L	N/A	N/A	20.0	98.9	80	116	N/A	N/A	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	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	06/06/18	11:51	NIVA

2879655 - ICV
Reference Sample Number is: 2869045

							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	18.8	--	µg/L	1.2	3.0	20.0	94.0	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,1,1-Trichloroethane	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,1,2,2-Tetrachloroethane	N.D	19.1	--	µg/L	1.2	3.0	20.0	95.4	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,1,2-Trichloroethane	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,1-Dichloroethane	N.D	19.4	--	µg/L	2.0	3.0	20.0	96.9	80	120	N/A	N/A	06/06/18	18:53	NIVA

QUALITY CONTROL SUMMARY

1,1-Dichloroethene	N.D	18.9	--	µg/L	1.2	3.0	20.0	94.4	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,1-Dichloropropene	N.D	19.4	--	µg/L	1.4	3.0	20.0	97.2	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,2,3-Trichlorobenzene	N.D	16.8	--	µg/L	1.2	3.0	20.0	84.2	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,2,3-Trichloropropane	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,2,4-Trichlorobenzene	N.D	16.3	--	µg/L	1.2	3.0	20.0	81.5	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,2,4-Trimethylbenzene	N.D	20.5	--	µg/L	1.2	3.0	20.0	103	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,2-Dibromo-3-chloropropane	N.D	16.9	--	µg/L	1.2	3.0	20.0	84.7	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,2-Dibromoethane	N.D	20.9	--	µg/L	1.2	3.0	20.0	104	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,2-Dichloroethane	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,2-Dichloropropane	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,3,5-Trimethylbenzene	N.D	19.5	--	µg/L	1.2	3.0	20.0	97.7	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,3-Dichlorobenzene	N.D	22.6	--	µg/L	1.2	3.0	20.0	113	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,3-Dichloropropane	N.D	20.8	--	µg/L	2.0	3.0	20.0	104	80	120	N/A	N/A	06/06/18	18:53	NIVA
1,4-Dichlorobenzene	N.D	18.8	--	µg/L	1.2	3.0	20.0	93.8	80	120	N/A	N/A	06/06/18	18:53	NIVA
1-Chlorohexane	N.D	19.6	--	µg/L	1.5	3.0	20.0	98.0	80	120	N/A	N/A	06/06/18	18:53	NIVA
2,2-Dichloropropane	N.D	18.0	--	µg/L	1.2	3.0	20.0	90.1	80	120	N/A	N/A	06/06/18	18:53	NIVA
2-Butanone	N.D	101.5	--	µg/L	6.0	15.0	100	101	80	120	N/A	N/A	06/06/18	18:53	NIVA
2-Chloroethyl vinyl ether	N.D	111.2	--	µg/L	6.0	15.0	100	111	80	120	N/A	N/A	06/06/18	18:53	NIVA
2-Chlorotoluene	N.D	19.1	--	µg/L	1.4	3.0	20.0	95.7	80	120	N/A	N/A	06/06/18	18:53	NIVA
2-Hexanone	N.D	107.5	--	µg/L	6.0	15.0	100	107	80	120	N/A	N/A	06/06/18	18:53	NIVA
4-Bromofluorobenzene-SURR	18.6	20.0	--	µg/L	N/A	N/A	20.0	99.8	79	121	N/A	N/A	06/06/18	18:53	NIVA
4-Chlorotoluene	N.D	19.1	--	µg/L	1.2	3.0	20.0	95.5	80	120	N/A	N/A	06/06/18	18:53	NIVA
4-Isopropyltoluene	N.D	17.2	--	µg/L	1.4	3.0	20.0	85.8	80	120	N/A	N/A	06/06/18	18:53	NIVA
4-Methyl-2-pentanone	N.D	111.1	--	µg/L	6.0	15.0	100	111	80	120	N/A	N/A	06/06/18	18:53	NIVA
Acetone	N.D	111.5	--	µg/L	6.0	15.0	100	112	80	120	N/A	N/A	06/06/18	18:53	NIVA
Acrolein	N.D	454.0	--	µg/L	25.0	75.0	500	90.8	80	120	N/A	N/A	06/06/18	18:53	NIVA
Acrylonitrile	N.D	102.7	--	µg/L	6.0	15.0	100	103	80	120	N/A	N/A	06/06/18	18:53	NIVA
Benzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.4	80	120	N/A	N/A	06/06/18	18:53	NIVA
Bromobenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.6	80	120	N/A	N/A	06/06/18	18:53	NIVA
Bromochloromethane	N.D	22.4	--	µg/L	1.2	3.0	20.0	112	80	120	N/A	N/A	06/06/18	18:53	NIVA
Bromodichloromethane	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	80	120	N/A	N/A	06/06/18	18:53	NIVA

QUALITY CONTROL SUMMARY

Bromoform	1.3	19.3	--	µg/L	1.2	3.0	20.0	96.7	80	120	N/A	N/A	06/06/18	18:53	NIVA
Bromomethane	N.D	16.5	--	µg/L	2.0	3.0	20.0	82.7	80	120	N/A	N/A	06/06/18	18:53	NIVA
Carbon disulfide	N.D	93.8	--	µg/L	7.0	15.0	100	93.8	80	120	N/A	N/A	06/06/18	18:53	NIVA
Carbon tetrachloride	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	80	120	N/A	N/A	06/06/18	18:53	NIVA
Chlorobenzene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.5	80	120	N/A	N/A	06/06/18	18:53	NIVA
Chloroethane	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	80	120	N/A	N/A	06/06/18	18:53	NIVA
Chloroform	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	06/06/18	18:53	NIVA
Chloromethane	N.D	16.0	--	µg/L	1.2	3.0	20.0	80.0	80	120	N/A	N/A	06/06/18	18:53	NIVA
Dibromochloromethane	N.D	20.5	--	µg/L	1.2	3.0	20.0	102	80	120	N/A	N/A	06/06/18	18:53	NIVA
Dibromofluoromethane-SURR	21.2	21.1	--	µg/L	N/A	N/A	20.0	106	83	120	N/A	N/A	06/06/18	18:53	NIVA
Dibromomethane	N.D	20.8	--	µg/L	1.5	3.0	20.0	104	80	120	N/A	N/A	06/06/18	18:53	NIVA
Dichlorodifluoromethane	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	80	120	N/A	N/A	06/06/18	18:53	NIVA
Dichloromethane	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.1	80	120	N/A	N/A	06/06/18	18:53	NIVA
Epichlorohydrin	N.D	580.1	--	µg/L	30.0	75.0	500	116	80	120	N/A	N/A	06/06/18	18:53	NIVA
Ethylbenzene	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.2	80	120	N/A	N/A	06/06/18	18:53	NIVA
Hexachlorobutadiene	N.D	17.4	--	µg/L	1.4	3.0	20.0	87.2	80	120	N/A	N/A	06/06/18	18:53	NIVA
Iodomethane	N.D	97.6	--	µg/L	8.0	15.0	100	97.6	80	120	N/A	N/A	06/06/18	18:53	NIVA
Isopropylbenzene	N.D	19.0	--	µg/L	2.0	3.0	20.0	94.9	80	120	N/A	N/A	06/06/18	18:53	NIVA
Naphthalene	N.D	18.6	--	µg/L	2.0	3.0	20.0	93.0	80	120	N/A	N/A	06/06/18	18:53	NIVA
Styrene	N.D	16.2	--	µg/L	1.2	3.0	20.0	80.8	80	120	N/A	N/A	06/06/18	18:53	NIVA
Tetrachloroethene	N.D	21.1	--	µg/L	1.2	3.0	20.0	105	80	120	N/A	N/A	06/06/18	18:53	NIVA
Tetrahydrofuran	N.D	18.7	--	µg/L	1.2	3.0	20.0	93.3	80	120	N/A	N/A	06/06/18	18:53	NIVA
Toluene	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	80	120	N/A	N/A	06/06/18	18:53	NIVA
Toluene-d8-SURR	20.0	21.3	--	µg/L	N/A	N/A	20.0	106	80	116	N/A	N/A	06/06/18	18:53	NIVA
Trichloroethene	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	80	120	N/A	N/A	06/06/18	18:53	NIVA
Trichlorofluoromethane	N.D	21.9	--	µg/L	1.5	3.0	20.0	109	80	120	N/A	N/A	06/06/18	18:53	NIVA
Vinyl Acetate	N.D	86.0	--	µg/L	6.0	15.0	100	86.0	80	120	N/A	N/A	06/06/18	18:53	NIVA
Vinyl chloride	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.7	80	120	N/A	N/A	06/06/18	18:53	NIVA
cis-1,2-Dichloroethene	N.D	17.7	--	µg/L	1.2	3.0	20.0	88.4	80	120	N/A	N/A	06/06/18	18:53	NIVA
cis-1,3-Dichloropropene	N.D	18.0	--	µg/L	1.2	3.0	20.0	89.8	80	120	N/A	N/A	06/06/18	18:53	NIVA
m,p-Xylene	N.D	38.0	--	µg/L	1.8	6.0	40.0	95.1	80	120	N/A	N/A	06/06/18	18:53	NIVA

QUALITY CONTROL SUMMARY

n-Butylbenzene	N.D	21.6	--	µg/L	1.2	3.0	20.0	108	80	120	N/A	N/A	06/06/18	18:53	NIVA
n-Propylbenzene	N.D	18.8	--	µg/L	1.2	3.0	20.0	93.9	80	120	N/A	N/A	06/06/18	18:53	NIVA
o-Dichlorobenzene	N.D	19.1	--	µg/L	1.0	3.0	20.0	95.6	80	120	N/A	N/A	06/06/18	18:53	NIVA
o-Xylene	N.D	17.7	--	µg/L	2.3	3.0	20.0	88.7	80	120	N/A	N/A	06/06/18	18:53	NIVA
sec-Butylbenzene	N.D	18.5	--	µg/L	1.2	3.0	20.0	92.6	80	120	N/A	N/A	06/06/18	18:53	NIVA
tert-Butylbenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.0	80	120	N/A	N/A	06/06/18	18:53	NIVA
trans-1,2-Dichloroethene	N.D	19.4	--	µg/L	1.2	3.0	20.0	96.8	80	120	N/A	N/A	06/06/18	18:53	NIVA
trans-1,3-Dichloropropene	N.D	23.8	--	µg/L	1.2	3.0	20.0	119	80	120	N/A	N/A	06/06/18	18:53	NIVA
trans-1,4-Dichloro-2-butene	N.D	102.6	--	µg/L	6.0	15.0	100	103	80	120	N/A	N/A	06/06/18	18:53	NIVA

2869046 - DUP
Reference Sample Number is: 2869045

							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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	NIVA
4-Bromofluorobenzene-SURR	18.6	18.5	--	µg/L	N/A	N/A	20.00	92.4	71	125	N/A	N/A	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	NIVA
Acetone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Acrolein	N.D	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Acrylonitrile	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Benzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Bromobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Bromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Bromodichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Bromoform	1.3	1.6	J	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Bromomethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	NIVA
Chlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Chloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Chloroform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Chloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Dibromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Dibromofluoromethane-SURR	21.2	21.5	--	µg/L	N/A	N/A	20.00	107	76	123	N/A	N/A	06/07/18	00:33	NIVA
Dibromomethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Dichlorodifluoromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	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	06/07/18	00:33	NIVA
Epichlorohydrin	N.D	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Ethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Hexachlorobutadiene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Iodomethane	N.D	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Isopropylbenzene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Naphthalene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Styrene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Tetrachloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Tetrahydrofuran	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Toluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Toluene-d8-SURR	20.0	20.2	--	µg/L	N/A	N/A	20.00	101	77	122	N/A	N/A	06/07/18	00:33	NIVA
Trichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	NIVA
Trichlorofluoromethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	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	06/07/18	00:33	NIVA

QUALITY CONTROL SUMMARY

2869047 - MS
Reference Sample Number is: 2869045

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	19.8	--	µg/L	1.2	3.0	20.0	98.9	67	124	N/A	N/A	06/07/18	00:59	NIVA
1,1,1-Trichloroethane	N.D	24.5	--	µg/L	1.2	3.0	20.0	123	69	140	N/A	N/A	06/07/18	00:59	NIVA
1,1,2,2-Tetrachloroethane	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.2	64	122	N/A	N/A	06/07/18	00:59	NIVA
1,1,2-Trichloroethane	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	78	125	N/A	N/A	06/07/18	00:59	NIVA
1,1-Dichloroethane	N.D	23.0	--	µg/L	2.0	3.0	20.0	115	56	141	N/A	N/A	06/07/18	00:59	NIVA
1,1-Dichloroethene	N.D	23.1	--	µg/L	1.2	3.0	20.0	116	44	155	N/A	N/A	06/07/18	00:59	NIVA
1,1-Dichloropropene	N.D	23.1	Q	µg/L	1.4	3.0	20.0	115	83	110	N/A	N/A	06/07/18	00:59	NIVA
1,2,3-Trichlorobenzene	N.D	17.6	--	µg/L	1.2	3.0	20.0	87.9	71	119	N/A	N/A	06/07/18	00:59	NIVA
1,2,3-Trichloropropane	N.D	19.5	--	µg/L	1.2	3.0	20.0	97.5	47	131	N/A	N/A	06/07/18	00:59	NIVA
1,2,4-Trichlorobenzene	N.D	15.4	--	µg/L	1.2	3.0	20.0	76.9	53	139	N/A	N/A	06/07/18	00:59	NIVA
1,2,4-Trimethylbenzene	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	52	141	N/A	N/A	06/07/18	00:59	NIVA
1,2-Dibromo-3-chloropropane	N.D	15.2	--	µg/L	1.2	3.0	20.0	75.9	67	140	N/A	N/A	06/07/18	00:59	NIVA
1,2-Dibromoethane	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.5	66	140	N/A	N/A	06/07/18	00:59	NIVA
1,2-Dichloroethane	N.D	21.8	--	µg/L	1.2	3.0	20.0	109	60	139	N/A	N/A	06/07/18	00:59	NIVA
1,2-Dichloropropane	N.D	21.9	--	µg/L	1.2	3.0	20.0	110	71	121	N/A	N/A	06/07/18	00:59	NIVA
1,3,5-Trimethylbenzene	N.D	11.7	Q	µg/L	1.2	3.0	20.0	58.4	61	125	N/A	N/A	06/07/18	00:59	NIVA
1,3-Dichlorobenzene	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	61	129	N/A	N/A	06/07/18	00:59	NIVA
1,3-Dichloropropane	N.D	19.5	--	µg/L	2.0	3.0	20.0	97.4	69	124	N/A	N/A	06/07/18	00:59	NIVA
1,4-Dichlorobenzene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.5	73	122	N/A	N/A	06/07/18	00:59	NIVA
1-Chlorohexane	N.D	22.7	--	µg/L	1.5	3.0	20.0	113	48	136	N/A	N/A	06/07/18	00:59	NIVA
2,2-Dichloropropane	N.D	18.2	--	µg/L	1.2	3.0	20.0	90.8	13	157	N/A	N/A	06/07/18	00:59	NIVA
2-Butanone	N.D	113.5	--	µg/L	6.0	15.0	100	113	43	151	N/A	N/A	06/07/18	00:59	NIVA
2-Chloroethyl vinyl ether	N.D	47.6	--	µg/L	6.0	15.0	100	47.6	10	178	N/A	N/A	06/07/18	00:59	NIVA
2-Chlorotoluene	N.D	19.3	--	µg/L	1.4	3.0	20.0	96.4	64	139	N/A	N/A	06/07/18	00:59	NIVA
2-Hexanone	N.D	91.4	--	µg/L	6.0	15.0	100	91.4	53	147	N/A	N/A	06/07/18	00:59	NIVA
4-Bromofluorobenzene-SURR	18.6	19.0	--	µg/L	N/A	N/A	20.00	95.2	71	125	N/A	N/A	06/07/18	00:59	NIVA
4-Chlorotoluene	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	64	128	N/A	N/A	06/07/18	00:59	NIVA

QUALITY CONTROL SUMMARY

4-Isopropyltoluene	N.D	19.2	--	µg/L	1.4	3.0	20.0	96.2	66	129	N/A	N/A	06/07/18	00:59	NIVA
4-Methyl-2-pentanone	N.D	96.2	--	µg/L	6.0	15.0	100	96.2	57	143	N/A	N/A	06/07/18	00:59	NIVA
Acetone	N.D	108.8	--	µg/L	6.0	15.0	100	109	33	154	N/A	N/A	06/07/18	00:59	NIVA
Acrolein	N.D	509.7	--	µg/L	25.0	75.0	500	102	47	157	N/A	N/A	06/07/18	00:59	NIVA
Acrylonitrile	N.D	107.8	--	µg/L	6.0	15.0	100	108	34	160	N/A	N/A	06/07/18	00:59	NIVA
Benzene	N.D	24.0	--	µg/L	1.2	3.0	20.0	120	65	139	N/A	N/A	06/07/18	00:59	NIVA
Bromobenzene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	64	120	N/A	N/A	06/07/18	00:59	NIVA
Bromochloromethane	N.D	22.8	--	µg/L	1.2	3.0	20.0	114	49	150	N/A	N/A	06/07/18	00:59	NIVA
Bromodichloromethane	N.D	22.6	--	µg/L	1.2	3.0	20.0	113	64	141	N/A	N/A	06/07/18	00:59	NIVA
Bromoform	1.3	19.6	--	µg/L	1.2	3.0	20.0	91.3	61	132	N/A	N/A	06/07/18	00:59	NIVA
Bromomethane	N.D	23.4	--	µg/L	2.0	3.0	20.0	117	35	163	N/A	N/A	06/07/18	00:59	NIVA
Carbon disulfide	N.D	119.9	--	µg/L	7.0	15.0	100	120	48	158	N/A	N/A	06/07/18	00:59	NIVA
Carbon tetrachloride	N.D	23.2	--	µg/L	1.2	3.0	20.0	116	73	137	N/A	N/A	06/07/18	00:59	NIVA
Chlorobenzene	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	68	121	N/A	N/A	06/07/18	00:59	NIVA
Chloroethane	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	50	142	N/A	N/A	06/07/18	00:59	NIVA
Chloroform	N.D	23.9	--	µg/L	1.2	3.0	20.0	119	59	140	N/A	N/A	06/07/18	00:59	NIVA
Chloromethane	N.D	17.8	--	µg/L	1.2	3.0	20.0	88.9	42	139	N/A	N/A	06/07/18	00:59	NIVA
Dibromochloromethane	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	67	137	N/A	N/A	06/07/18	00:59	NIVA
Dibromofluoromethane-SURR	21.2	21.0	--	µg/L	N/A	N/A	20.00	105	76	123	N/A	N/A	06/07/18	00:59	NIVA
Dibromomethane	N.D	20.4	--	µg/L	1.5	3.0	20.0	102	72	139	N/A	N/A	06/07/18	00:59	NIVA
Dichlorodifluoromethane	N.D	23.0	--	µg/L	1.2	3.0	20.0	115	42	157	N/A	N/A	06/07/18	00:59	NIVA
Dichloromethane	N.D	21.7	--	µg/L	1.2	3.0	20.0	109	56	135	N/A	N/A	06/07/18	00:59	NIVA
Epichlorohydrin	N.D	367.5	--	µg/L	30.0	75.0	500	73.5	37	129	N/A	N/A	06/07/18	00:59	NIVA
Ethylbenzene	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	58	136	N/A	N/A	06/07/18	00:59	NIVA
Hexachlorobutadiene	N.D	19.2	--	µg/L	1.4	3.0	20.0	96.1	62	124	N/A	N/A	06/07/18	00:59	NIVA
Iodomethane	N.D	113.9	--	µg/L	8.0	15.0	100	114	45	148	N/A	N/A	06/07/18	00:59	NIVA
Isopropylbenzene	N.D	16.2	--	µg/L	2.0	3.0	20.0	80.9	64	122	N/A	N/A	06/07/18	00:59	NIVA
Naphthalene	N.D	14.4	--	µg/L	2.0	3.0	20.0	72.2	66	135	N/A	N/A	06/07/18	00:59	NIVA
Styrene	N.D	BDL	Q	µg/L	1.2	3.0	20.0	3.55	65	123	N/A	N/A	06/07/18	00:59	NIVA
Tetrachloroethene	N.D	22.1	--	µg/L	1.2	3.0	20.0	110	64	138	N/A	N/A	06/07/18	00:59	NIVA
Tetrahydrofuran	N.D	16.3	--	µg/L	1.2	3.0	20.0	81.6	51	147	N/A	N/A	06/07/18	00:59	NIVA

QUALITY CONTROL SUMMARY

Toluene	N.D	21.5	--	µg/L	1.2	3.0	20.0	108	65	140	N/A	N/A	06/07/18	00:59	NIVA
Toluene-d8-SURR	20.0	19.8	--	µg/L	N/A	N/A	20.00	98.9	77	122	N/A	N/A	06/07/18	00:59	NIVA
Trichloroethene	N.D	22.3	--	µg/L	1.2	3.0	20.0	112	76	126	N/A	N/A	06/07/18	00:59	NIVA
Trichlorofluoromethane	N.D	26.4	--	µg/L	1.5	3.0	20.0	132	60	144	N/A	N/A	06/07/18	00:59	NIVA
Vinyl Acetate	N.D	48.9	Q	µg/L	6.0	15.0	100	48.9	52	141	N/A	N/A	06/07/18	00:59	NIVA
Vinyl chloride	N.D	22.1	--	µg/L	1.2	3.0	20.0	111	39	151	N/A	N/A	06/07/18	00:59	NIVA
cis-1,2-Dichloroethene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	66	127	N/A	N/A	06/07/18	00:59	NIVA
cis-1,3-Dichloropropene	N.D	14.3	--	µg/L	1.2	3.0	20.0	71.7	57	131	N/A	N/A	06/07/18	00:59	NIVA
m,p-Xylene	N.D	41.8	--	µg/L	1.8	6.0	40.0	104	56	145	N/A	N/A	06/07/18	00:59	NIVA
n-Butylbenzene	N.D	18.0	--	µg/L	1.2	3.0	20.0	89.8	72	114	N/A	N/A	06/07/18	00:59	NIVA
n-Propylbenzene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	61	123	N/A	N/A	06/07/18	00:59	NIVA
o-Dichlorobenzene	N.D	20.2	--	µg/L	1.0	3.0	20.0	101	73	124	N/A	N/A	06/07/18	00:59	NIVA
o-Xylene	N.D	19.2	--	µg/L	2.3	3.0	20.0	96.0	54	143	N/A	N/A	06/07/18	00:59	NIVA
sec-Butylbenzene	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	64	114	N/A	N/A	06/07/18	00:59	NIVA
tert-Butylbenzene	N.D	22.3	--	µg/L	1.2	3.0	20.0	111	68	113	N/A	N/A	06/07/18	00:59	NIVA
trans-1,2-Dichloroethene	N.D	23.8	--	µg/L	1.2	3.0	20.0	119	56	146	N/A	N/A	06/07/18	00:59	NIVA
trans-1,3-Dichloropropene	N.D	22.1	--	µg/L	1.2	3.0	20.0	111	59	130	N/A	N/A	06/07/18	00:59	NIVA
trans-1,4-Dichloro-2-butene	N.D	84.7	--	µg/L	6.0	15.0	100	84.7	47	129	N/A	N/A	06/07/18	00:59	NIVA

2869048 - MSD
Reference Sample Number is: 2869045

							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	20.0	--	µg/L	1.2	3.0	20.0	100	67	124	1.26	20	06/07/18	01:25	NIVA
1,1,1-Trichloroethane	N.D	24.5	--	µg/L	1.2	3.0	20.0	123	69	140	0.122	20	06/07/18	01:25	NIVA
1,1,2,2-Tetrachloroethane	N.D	19.2	--	µg/L	1.2	3.0	20.0	96.0	64	122	1.89	20	06/07/18	01:25	NIVA
1,1,2-Trichloroethane	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	78	125	4.04	20	06/07/18	01:25	NIVA
1,1-Dichloroethane	N.D	20.9	--	µg/L	2.0	3.0	20.0	105	56	141	9.38	20	06/07/18	01:25	NIVA
1,1-Dichloroethene	N.D	22.1	--	µg/L	1.2	3.0	20.0	111	44	155	4.24	20	06/07/18	01:25	NIVA
1,1-Dichloropropene	N.D	22.3	Q	µg/L	1.4	3.0	20.0	112	83	110	3.22	20	06/07/18	01:25	NIVA
1,2,3-Trichlorobenzene	N.D	18.3	--	µg/L	1.2	3.0	20.0	91.4	71	119	3.90	20	06/07/18	01:25	NIVA

QUALITY CONTROL SUMMARY

1,2,3-Trichloropropane	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.1	47	131	0.563	20	06/07/18	01:25	NIVA
1,2,4-Trichlorobenzene	N.D	16.7	--	µg/L	1.2	3.0	20.0	83.3	53	139	7.93	20	06/07/18	01:25	NIVA
1,2,4-Trimethylbenzene	N.D	18.4	--	µg/L	1.2	3.0	20.0	91.9	52	141	14.2	20	06/07/18	01:25	NIVA
1,2-Dibromo-3-chloropropane	N.D	15.5	--	µg/L	1.2	3.0	20.0	77.7	67	140	2.34	20	06/07/18	01:25	NIVA
1,2-Dibromoethane	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	66	140	6.33	20	06/07/18	01:25	NIVA
1,2-Dichloroethane	N.D	21.8	--	µg/L	1.2	3.0	20.0	109	60	139	0.183	20	06/07/18	01:25	NIVA
1,2-Dichloropropane	N.D	21.3	--	µg/L	1.2	3.0	20.0	106	71	121	2.96	20	06/07/18	01:25	NIVA
1,3,5-Trimethylbenzene	N.D	12.0	Q	µg/L	1.2	3.0	20.0	60.0	61	125	N.C.	20	06/07/18	01:25	NIVA
1,3-Dichlorobenzene	N.D	20.5	--	µg/L	1.2	3.0	20.0	102	61	129	0.196	20	06/07/18	01:25	NIVA
1,3-Dichloropropane	N.D	20.4	--	µg/L	2.0	3.0	20.0	102	69	124	N.C.	20	06/07/18	01:25	NIVA
1,4-Dichlorobenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.2	73	122	0.708	20	06/07/18	01:25	NIVA
1-Chlorohexane	N.D	22.5	--	µg/L	1.5	3.0	20.0	113	48	136	0.664	20	06/07/18	01:25	NIVA
2,2-Dichloropropane	N.D	16.1	--	µg/L	1.2	3.0	20.0	80.3	13	157	12.3	20	06/07/18	01:25	NIVA
2-Butanone	N.D	113.8	--	µg/L	6.0	15.0	100	114	43	151	0.343	20	06/07/18	01:25	NIVA
2-Chloroethyl vinyl ether	N.D	47.8	--	µg/L	6.0	15.0	100	47.8	10	178	N.C.	20	06/07/18	01:25	NIVA
2-Chlorotoluene	N.D	17.5	--	µg/L	1.4	3.0	20.0	87.6	64	139	9.62	20	06/07/18	01:25	NIVA
2-Hexanone	N.D	95.7	--	µg/L	6.0	15.0	100	95.7	53	147	4.59	20	06/07/18	01:25	NIVA
4-Bromofluorobenzene-SURR	18.6	19.2	--	µg/L	N/A	N/A	20.00	96.0	71	125	N/A	N/A	06/07/18	01:25	NIVA
4-Chlorotoluene	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	64	128	0.00	20	06/07/18	01:25	NIVA
4-Isopropyltoluene	N.D	18.9	--	µg/L	1.4	3.0	20.0	94.5	66	129	1.84	20	06/07/18	01:25	NIVA
4-Methyl-2-pentanone	N.D	100.5	--	µg/L	6.0	15.0	100	100	57	143	4.31	20	06/07/18	01:25	NIVA
Acetone	N.D	102.3	--	µg/L	6.0	15.0	100	102	33	154	6.09	20	06/07/18	01:25	NIVA
Acrolein	N.D	446.1	--	µg/L	25.0	75.0	500	89.2	47	157	13.3	20	06/07/18	01:25	NIVA
Acrylonitrile	N.D	100.4	--	µg/L	6.0	15.0	100	100	34	160	7.11	20	06/07/18	01:25	NIVA
Benzene	N.D	23.2	--	µg/L	1.2	3.0	20.0	116	65	139	3.14	20	06/07/18	01:25	NIVA
Bromobenzene	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	64	120	0.626	20	06/07/18	01:25	NIVA
Bromochloromethane	N.D	23.8	--	µg/L	1.2	3.0	20.0	119	49	150	4.08	20	06/07/18	01:25	NIVA
Bromodichloromethane	N.D	22.2	--	µg/L	1.2	3.0	20.0	111	64	141	1.92	20	06/07/18	01:25	NIVA
Bromoform	1.3	19.7	--	µg/L	1.2	3.0	20.0	91.9	61	132	0.611	20	06/07/18	01:25	NIVA
Bromomethane	N.D	22.7	--	µg/L	2.0	3.0	20.0	113	35	163	3.13	20	06/07/18	01:25	NIVA
Carbon disulfide	N.D	110.3	--	µg/L	7.0	15.0	100	110	48	158	8.27	20	06/07/18	01:25	NIVA

QUALITY CONTROL SUMMARY

Carbon tetrachloride	N.D	23.0	--	µg/L	1.2	3.0	20.0	115	73	137	0.649	20	06/07/18	01:25	NIVA
Chlorobenzene	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	68	121	1.27	20	06/07/18	01:25	NIVA
Chloroethane	N.D	21.5	--	µg/L	1.2	3.0	20.0	108	50	142	6.28	20	06/07/18	01:25	NIVA
Chloroform	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	59	140	12.9	20	06/07/18	01:25	NIVA
Chloromethane	N.D	28.0	Q	µg/L	1.2	3.0	20.0	140	42	139	44.8	20	06/07/18	01:25	NIVA
Dibromochloromethane	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	67	137	6.65	20	06/07/18	01:25	NIVA
Dibromofluoromethane-SURR	21.2	21.3	--	µg/L	N/A	N/A	20.00	107	76	123	N/A	N/A	06/07/18	01:25	NIVA
Dibromomethane	N.D	20.2	--	µg/L	1.5	3.0	20.0	101	72	139	0.788	20	06/07/18	01:25	NIVA
Dichlorodifluoromethane	N.D	23.2	--	µg/L	1.2	3.0	20.0	116	42	157	0.780	20	06/07/18	01:25	NIVA
Dichloromethane	N.D	20.0	--	µg/L	1.2	3.0	20.0	99.9	56	135	8.25	20	06/07/18	01:25	NIVA
Epichlorohydrin	N.D	369.5	--	µg/L	30.0	75.0	500	73.9	37	129	0.559	20	06/07/18	01:25	NIVA
Ethylbenzene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	58	136	0.383	20	06/07/18	01:25	NIVA
Hexachlorobutadiene	N.D	20.2	--	µg/L	1.4	3.0	20.0	101	62	124	5.07	20	06/07/18	01:25	NIVA
Iodomethane	N.D	BDL	Q	µg/L	8.0	15.0	100	3.76	45	148	187	20	06/07/18	01:25	NIVA
Isopropylbenzene	N.D	16.2	--	µg/L	2.0	3.0	20.0	81.1	64	122	N.C.	20	06/07/18	01:25	NIVA
Naphthalene	N.D	14.2	--	µg/L	2.0	3.0	20.0	71.0	66	135	N.C.	20	06/07/18	01:25	NIVA
Styrene	N.D	BDL	Q	µg/L	1.2	3.0	20.0	3.35	65	123	N.C.	20	06/07/18	01:25	NIVA
Tetrachloroethene	N.D	23.1	--	µg/L	1.2	3.0	20.0	116	64	138	4.69	20	06/07/18	01:25	NIVA
Tetrahydrofuran	N.D	17.7	--	µg/L	1.2	3.0	20.0	88.7	51	147	8.40	20	06/07/18	01:25	NIVA
Toluene	N.D	22.2	--	µg/L	1.2	3.0	20.0	111	65	140	3.34	20	06/07/18	01:25	NIVA
Toluene-d8-SURR	20.0	20.5	--	µg/L	N/A	N/A	20.00	103	77	122	N/A	N/A	06/07/18	01:25	NIVA
Trichloroethene	N.D	22.3	--	µg/L	1.2	3.0	20.0	111	76	126	0.224	20	06/07/18	01:25	NIVA
Trichlorofluoromethane	N.D	26.7	--	µg/L	1.5	3.0	20.0	133	60	144	1.13	20	06/07/18	01:25	NIVA
Vinyl Acetate	N.D	49.4	Q	µg/L	6.0	15.0	100	49.4	52	141	N.C.	20	06/07/18	01:25	NIVA
Vinyl chloride	N.D	22.7	--	µg/L	1.2	3.0	20.0	114	39	151	2.77	20	06/07/18	01:25	NIVA
cis-1,2-Dichloroethene	N.D	18.4	--	µg/L	1.2	3.0	20.0	91.8	66	127	8.05	20	06/07/18	01:25	NIVA
cis-1,3-Dichloropropene	N.D	15.6	--	µg/L	1.2	3.0	20.0	77.8	57	131	8.10	20	06/07/18	01:25	NIVA
m,p-Xylene	N.D	38.1	--	µg/L	1.8	6.0	40.0	95.2	56	145	9.27	20	06/07/18	01:25	NIVA
n-Butylbenzene	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.7	72	114	1.05	20	06/07/18	01:25	NIVA
n-Propylbenzene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	61	123	0.144	20	06/07/18	01:25	NIVA
o-Dichlorobenzene	N.D	20.2	--	µg/L	1.0	3.0	20.0	101	73	124	0.00	20	06/07/18	01:25	NIVA

QUALITY CONTROL SUMMARY

o-Xylene	N.D	18.8	--	µg/L	2.3	3.0	20.0	93.9	54	143	N.C.	20	06/07/18	01:25	NIVA
sec-Butylbenzene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	64	114	0.624	20	06/07/18	01:25	NIVA
tert-Butylbenzene	N.D	22.0	--	µg/L	1.2	3.0	20.0	110	68	113	1.40	20	06/07/18	01:25	NIVA
trans-1,2-Dichloroethene	N.D	21.6	--	µg/L	1.2	3.0	20.0	108	56	146	9.91	20	06/07/18	01:25	NIVA
trans-1,3-Dichloropropene	N.D	23.4	--	µg/L	1.2	3.0	20.0	117	59	130	5.41	20	06/07/18	01:25	NIVA
trans-1,4-Dichloro-2-butene	N.D	90.6	--	µg/L	6.0	15.0	100	90.6	47	129	6.72	20	06/07/18	01:25	NIVA

2879664 - LFB
Reference Sample Number is: 2869045

							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	18.6	--	µg/L	1.2	3.0	20.0	93.1	67	126	N/A	N/A	06/07/18	02:43	NIVA
1,1,1-Trichloroethane	N.D	22.8	--	µg/L	1.2	3.0	20.0	114	64	139	N/A	N/A	06/07/18	02:43	NIVA
1,1,2,2-Tetrachloroethane	N.D	18.0	--	µg/L	1.2	3.0	20.0	90.0	60	131	N/A	N/A	06/07/18	02:43	NIVA
1,1,2-Trichloroethane	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	70	129	N/A	N/A	06/07/18	02:43	NIVA
1,1-Dichloroethane	N.D	21.3	--	µg/L	2.0	3.0	20.0	106	63	133	N/A	N/A	06/07/18	02:43	NIVA
1,1-Dichloroethene	N.D	21.1	--	µg/L	1.2	3.0	20.0	106	55	139	N/A	N/A	06/07/18	02:43	NIVA
1,1-Dichloropropene	N.D	21.2	--	µg/L	1.4	3.0	20.0	106	67	131	N/A	N/A	06/07/18	02:43	NIVA
1,2,3-Trichlorobenzene	N.D	16.0	--	µg/L	1.2	3.0	20.0	80.1	68	131	N/A	N/A	06/07/18	02:43	NIVA
1,2,3-Trichloropropane	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.0	52	131	N/A	N/A	06/07/18	02:43	NIVA
1,2,4-Trichlorobenzene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.3	51	132	N/A	N/A	06/07/18	02:43	NIVA
1,2,4-Trimethylbenzene	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	63	129	N/A	N/A	06/07/18	02:43	NIVA
1,2-Dibromo-3-chloropropane	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	66	139	N/A	N/A	06/07/18	02:43	NIVA
1,2-Dibromoethane	N.D	20.3	--	µg/L	1.2	3.0	20.0	102	76	126	N/A	N/A	06/07/18	02:43	NIVA
1,2-Dichloroethane	N.D	21.5	--	µg/L	1.2	3.0	20.0	108	60	136	N/A	N/A	06/07/18	02:43	NIVA
1,2-Dichloropropane	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	70	124	N/A	N/A	06/07/18	02:43	NIVA
1,3,5-Trimethylbenzene	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	68	123	N/A	N/A	06/07/18	02:43	NIVA
1,3-Dichlorobenzene	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	62	127	N/A	N/A	06/07/18	02:43	NIVA
1,3-Dichloropropane	N.D	20.6	--	µg/L	2.0	3.0	20.0	103	74	124	N/A	N/A	06/07/18	02:43	NIVA
1,4-Dichlorobenzene	N.D	18.6	--	µg/L	1.2	3.0	20.0	93.0	73	123	N/A	N/A	06/07/18	02:43	NIVA
1-Chlorohexane	N.D	21.3	--	µg/L	1.5	3.0	20.0	106	56	139	N/A	N/A	06/07/18	02:43	NIVA

QUALITY CONTROL SUMMARY

2,2-Dichloropropane	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	37	148	N/A	N/A	06/07/18	02:43	NIVA
2-Butanone	N.D	115.0	--	µg/L	6.0	15.0	100	115	57	136	N/A	N/A	06/07/18	02:43	NIVA
2-Chloroethyl vinyl ether	N.D	122.3	--	µg/L	6.0	15.0	100	122	47	143	N/A	N/A	06/07/18	02:43	NIVA
2-Chlorotoluene	N.D	19.7	--	µg/L	1.4	3.0	20.0	98.4	66	127	N/A	N/A	06/07/18	02:43	NIVA
2-Hexanone	N.D	99.7	--	µg/L	6.0	15.0	100	99.7	62	136	N/A	N/A	06/07/18	02:43	NIVA
4-Bromofluorobenzene-SURR	18.6	19.9	--	µg/L	N/A	N/A	20.0	99.5	79	121	N/A	N/A	06/07/18	02:43	NIVA
4-Chlorotoluene	N.D	19.2	--	µg/L	1.2	3.0	20.0	96.2	63	125	N/A	N/A	06/07/18	02:43	NIVA
4-Isopropyltoluene	N.D	17.1	--	µg/L	1.4	3.0	20.0	85.3	68	131	N/A	N/A	06/07/18	02:43	NIVA
4-Methyl-2-pentanone	N.D	106.1	--	µg/L	6.0	15.0	100	106	62	135	N/A	N/A	06/07/18	02:43	NIVA
Acetone	N.D	109.0	--	µg/L	6.0	15.0	100	109	46	142	N/A	N/A	06/07/18	02:43	NIVA
Acrolein	N.D	414.3	--	µg/L	25.0	75.0	500	82.9	40	153	N/A	N/A	06/07/18	02:43	NIVA
Acrylonitrile	N.D	101.0	--	µg/L	6.0	15.0	100	101	53	141	N/A	N/A	06/07/18	02:43	NIVA
Benzene	N.D	21.7	--	µg/L	1.2	3.0	20.0	109	66	131	N/A	N/A	06/07/18	02:43	NIVA
Bromobenzene	N.D	20.3	--	µg/L	1.2	3.0	20.0	102	61	126	N/A	N/A	06/07/18	02:43	NIVA
Bromochloromethane	N.D	22.5	--	µg/L	1.2	3.0	20.0	112	60	133	N/A	N/A	06/07/18	02:43	NIVA
Bromodichloromethane	N.D	21.5	--	µg/L	1.2	3.0	20.0	107	72	129	N/A	N/A	06/07/18	02:43	NIVA
Bromoform	1.3	18.2	--	µg/L	1.2	3.0	20.0	90.8	61	130	N/A	N/A	06/07/18	02:43	NIVA
Bromomethane	N.D	17.2	--	µg/L	2.0	3.0	20.0	86.0	47	151	N/A	N/A	06/07/18	02:43	NIVA
Carbon disulfide	N.D	105.2	--	µg/L	7.0	15.0	100	105	58	140	N/A	N/A	06/07/18	02:43	NIVA
Carbon tetrachloride	N.D	21.7	--	µg/L	1.2	3.0	20.0	108	69	134	N/A	N/A	06/07/18	02:43	NIVA
Chlorobenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.2	67	122	N/A	N/A	06/07/18	02:43	NIVA
Chloroethane	N.D	21.9	--	µg/L	1.2	3.0	20.0	110	47	144	N/A	N/A	06/07/18	02:43	NIVA
Chloroform	N.D	22.7	--	µg/L	1.2	3.0	20.0	114	61	134	N/A	N/A	06/07/18	02:43	NIVA
Chloromethane	N.D	16.9	--	µg/L	1.2	3.0	20.0	84.5	43	142	N/A	N/A	06/07/18	02:43	NIVA
Dibromochloromethane	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	69	134	N/A	N/A	06/07/18	02:43	NIVA
Dibromofluoromethane-SURR	21.2	21.5	--	µg/L	N/A	N/A	20.0	108	83	120	N/A	N/A	06/07/18	02:43	NIVA
Dibromomethane	N.D	20.4	--	µg/L	1.5	3.0	20.0	102	76	131	N/A	N/A	06/07/18	02:43	NIVA
Dichlorodifluoromethane	N.D	20.5	--	µg/L	1.2	3.0	20.0	102	49	145	N/A	N/A	06/07/18	02:43	NIVA
Dichloromethane	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	62	129	N/A	N/A	06/07/18	02:43	NIVA
Epichlorohydrin	N.D	508.1	--	µg/L	30.0	75.0	500	102	52	134	N/A	N/A	06/07/18	02:43	NIVA
Ethylbenzene	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.1	69	131	N/A	N/A	06/07/18	02:43	NIVA

QUALITY CONTROL SUMMARY

Hexachlorobutadiene	N.D	17.1	--	µg/L	1.4	3.0	20.0	85.5	51	139	N/A	N/A	06/07/18	02:43	NIVA
Iodomethane	N.D	99.6	--	µg/L	8.0	15.0	100	99.6	54	143	N/A	N/A	06/07/18	02:43	NIVA
Isopropylbenzene	N.D	19.6	--	µg/L	2.0	3.0	20.0	98.0	69	121	N/A	N/A	06/07/18	02:43	NIVA
Naphthalene	N.D	16.5	--	µg/L	2.0	3.0	20.0	82.4	71	134	N/A	N/A	06/07/18	02:43	NIVA
Styrene	N.D	16.0	--	µg/L	1.2	3.0	20.0	80.1	65	127	N/A	N/A	06/07/18	02:43	NIVA
Tetrachloroethene	N.D	21.7	--	µg/L	1.2	3.0	20.0	109	62	135	N/A	N/A	06/07/18	02:43	NIVA
Tetrahydrofuran	N.D	17.3	--	µg/L	1.2	3.0	20.0	86.3	67	134	N/A	N/A	06/07/18	02:43	NIVA
Toluene	N.D	21.7	--	µg/L	1.2	3.0	20.0	109	59	143	N/A	N/A	06/07/18	02:43	NIVA
Toluene-d8-SURR	20.0	21.3	--	µg/L	N/A	N/A	20.0	107	80	116	N/A	N/A	06/07/18	02:43	NIVA
Trichloroethene	N.D	21.8	--	µg/L	1.2	3.0	20.0	109	67	138	N/A	N/A	06/07/18	02:43	NIVA
Trichlorofluoromethane	N.D	21.9	--	µg/L	1.5	3.0	20.0	110	45	157	N/A	N/A	06/07/18	02:43	NIVA
Vinyl Acetate	N.D	83.3	--	µg/L	6.0	15.0	100	83.3	53	144	N/A	N/A	06/07/18	02:43	NIVA
Vinyl chloride	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.2	52	140	N/A	N/A	06/07/18	02:43	NIVA
cis-1,2-Dichloroethene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.7	71	128	N/A	N/A	06/07/18	02:43	NIVA
cis-1,3-Dichloropropene	N.D	17.5	--	µg/L	1.2	3.0	20.0	87.5	63	125	N/A	N/A	06/07/18	02:43	NIVA
m,p-Xylene	N.D	39.4	--	µg/L	1.8	6.0	40.0	98.4	63	130	N/A	N/A	06/07/18	02:43	NIVA
n-Butylbenzene	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	67	127	N/A	N/A	06/07/18	02:43	NIVA
n-Propylbenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	98.9	64	124	N/A	N/A	06/07/18	02:43	NIVA
o-Dichlorobenzene	N.D	18.5	--	µg/L	1.0	3.0	20.0	92.3	75	121	N/A	N/A	06/07/18	02:43	NIVA
o-Xylene	N.D	18.0	--	µg/L	2.3	3.0	20.0	89.9	66	124	N/A	N/A	06/07/18	02:43	NIVA
sec-Butylbenzene	N.D	19.6	--	µg/L	1.2	3.0	20.0	97.8	66	122	N/A	N/A	06/07/18	02:43	NIVA
tert-Butylbenzene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	65	126	N/A	N/A	06/07/18	02:43	NIVA
trans-1,2-Dichloroethene	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	66	129	N/A	N/A	06/07/18	02:43	NIVA
trans-1,3-Dichloropropene	N.D	22.8	--	µg/L	1.2	3.0	20.0	114	60	131	N/A	N/A	06/07/18	02:43	NIVA
trans-1,4-Dichloro-2-butene	N.D	86.5	--	µg/L	6.0	15.0	100	86.5	53	123	N/A	N/A	06/07/18	02:43	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

2018-09288

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 #: 254324 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING	ANALYSIS REQUESTED
SAMPLE #: 2869045-1 MATRIX: GROUND WATER SOURCE: EFFLUENT, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1143 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC
SAMPLE #: 2869046-1 MATRIX: GROUND WATER DUP SOURCE: EFFLUENT-DUPLICATE, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1143 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC
SAMPLE #: 2869047-1 MATRIX: GROUND WATER MS SOURCE: EFFLUENT-MS, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1143 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C		EPA 8260B VOC
SAMPLE #: 2869048-1 MATRIX: GROUND WATER MSD SOURCE: EFFLUENT-MSD, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1143 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:	[signature]	June 5, 18	1143
Fixed in field by:	[signature]	June 5, 18	1143
Authorized by:	N/A	N/A	N/A
Received by EQLF:			
Released to EQLL by:	[signature]	June 5, 18	1445
Received by EQLL:	[signature]	06/05/18	1445

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QC Report for June 25, 2018
Level II

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

P/HR

Arrival Temperature: 2.5°C Signature: [signature]

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

+++

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

2018-09288

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 #: 254324 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2869049-1 MATRIX: GROUND WATER SOURCE: INFLUENT, GUAYAMA, PR	DATE: June 5, 2018 TIME: 1109 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2869050-1 MATRIX: DI WATER SOURCE: TRIP BLANK, GUAYAMA, PR	DATE: June 5, 2018 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	N		
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE	A		

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	[illegible]	June 5, 18	1109
Fixed in field by:	[illegible]	June 5, 18	1109
Authorized by:	N/A	N/A	N/A
Received by EQLF:	[illegible]	June 5, 18	1445
Released to EQLL by:	[illegible]	06/05/18	1445
Received by EQLL:	[illegible]		

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QC Report for June 25, 2018
Level II

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

Arrival Temperature: 25°C Signature: [illegible]

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: 179898-99-900

☑ 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: NA

☑ 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: NA (Analyst) Date: NA

Checked by: [signature] (Laboratory Group Leader) Date: 06-08-18

Approved by: [signature] (Supervisor) Date: 06/08/18

ORGANICS DEPARTMENT
RUN COVER SHEET

eglab

General Information

Method Number	Run Number	Sequence Number	Sample prep by	Sample Setup by	Sample Evaluated by	Run Approved by
EPA 8260B VOC	199898-99	199898-899-900	NVILLANUEVA	NVILLANUEVA	NVILLANUEVA	NVILLANUEVA
624VOC	199900		PR62451/PR62508			

Calibration Curve Reference

Calib. Curve Name	NBK Reference
8260VOC-JUNE-LIQ-18	NBK 090 Pg. 034

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. 033	N/A	N/A	N/A	N/A
2	p-Bromofluorobenzene	NBK 090 Pg. 016	6/23/2018	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. 029	6/7/2018	100	50	20
5	SIM VOC	NBK 090 Pg. 016	6/23/2018	20	5	20

Preparation Controls Information

[ ] MB [X] MDL [ ] MRL [X] MS / LFM [ ] 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. 033	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. 029	6/7/2018	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. 029	6/7/2018	100	50	20

RUN STATUS

[ ] Run in Control [ ] OOMCL [ ] OOHBD [X] OOS [ ] HBOOC

SOP-QC-004 Accepted Exemption:

[ ] # 1 [ ] # 2 [ ] # 3 [ ] # 4 [ ] # 5
[ ] # 6 [X] # 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: S Pichardo 06/08/18 06-08-18

QA/QC Review and Approval / Date:

Run Worksheet

For: **Wednesday, June 6, 2018**

Run #: 199898

Template Name: EPA 8260B BTEX VOC

Analyst: VILLANUEVA

Cup#	TYPE	ORDER#	METHOD	QC LINK	MATRIX	TEST NAME	PRE RUN	VOLUME	FINALVOL	WEIGHT
1	LRB	LRB/2879642-1		2863847	GROUND WATER	EPA 8260B BTEX VOC	--	--	--	--
2	MDL	MDL/2879641-1		2863847	GROUND WATER	EPA 8260B BTEX VOC	--	--	--	--
3	ICV	ICV/2879643-1		2863847	GROUND WATER	EPA 8260B BTEX VOC	--	--	--	--
4	TRIP BL	TRIP BLK/2863861-1			DI WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
5	FIELD BL	FIELD BLK/2863846-2			DI WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
6		2863847-2	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
7		2863848-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
8		2863849-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
9		2863850-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
10		2863851-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
11		2863852-2	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
12		2863853-2	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
14		2863859-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
15	DUP	DUP/2863844-1		2863859	GROUND WATER	EPA 8260B BTEX VOC	--	--	--	--
16	LRB	LRB/2879644-1		2863847	GROUND WATER	EPA 8260B BTEX VOC	--	--	--	--
17	CCV	CCV/2879645-1		2863847	GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
18		2863854-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
19		2863855-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
20		2863856-2	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
21		2863857-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
22		2863858-2	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
23		2863860-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR62451	5	5	N/A
25	LFB	LFB/2879650-1		2863847	GROUND WATER	EPA 8260B BTEX VOC	--	--	--	--

Printed Date: 6/6/2018
11:21 am

Run Worksheet

(B)

For: Wednesday, June 6, 2018

Run #: 199899

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/2879654-1		2869045	GROUND WATER	EPA 8260B VOC	--	--	--	--
4	MDL	MDL/2879656-1		2869045	GROUND WATER	EPA 8260B VOC	--	--	--	--
5	ICV	ICV/2879655-1		2869045	GROUND WATER	EPA 8260B VOC	--	--	--	--
8	TRIP BL	TRIP BLK/2869050-1			DI WATER	EPA 8260B VOC	PR62508	5.0	5.0	N/A
9		2875940-1	EPA 8260B		WASTEWATER	EPA 8260B VOC	PR62453	5	5	N/A
10		2869049-1	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR62508	5.0	5.0	N/A
11		2869045-1	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR62508	5.0	5.0	N/A
12	DUP	DUP/2869046-1		2869045	GROUND WATER	EPA 8260B VOC	PR62508	5.0	5.0	N/A
13	MS	MS/2869047-1		2869045	GROUND WATER	EPA 8260B VOC	PR62508	5.0	5.0	N/A
14	MSD	MSD/2869048-1		2869045	GROUND WATER	EPA 8260B VOC	PR62508	5.0	5.0	N/A
20	LFB	LFB/2879664-1		2869045	GROUND WATER	EPA 8260B VOC	--	--	--	--

Printed Date: 6/6/2018
10:50 am

Run Worksheet

(C)

For: **Wednesday, June 6, 2018**

Run #: 199900

Template Name: EPA 624 VOC

Analyst: VILLANUEVA

Cup#	TYPE	ORDER#	METHOD	QC LINK	MATRIX	TEST NAME	PRE RUN	VOLUME	FINALVOL	WEIGHT
1	LRB	LRB/2879677-1				EPA 624 VOC	--	--	--	--
2	MDL	MDL/2879679-1				EPA 624 VOC	--	--	--	--
3	ICV	ICV/2879678-1				EPA 624 VOC	--	--	--	--
4		2872297-7	EPA 624		WASTEWATER	TTO 624 VOC	--	--	--	--
5		2875446-3	EPA 624		WASTEWATER	PP / EPA 624 VOC	--	--	--	--
6		2875447-8	EPA 624		WASTEWATER	PP / EPA 624 VOC	--	--	--	--
7		2875448-9	EPA 624		WASTEWATER	PP / EPA 624 VOC	--	--	--	--
8		2875449-1	EPA 624		WASTEWATER	PP / EPA 624 VOC	--	--	--	--
9		2875450-9	EPA 624		WASTEWATER	PP / EPA 624 VOC	--	--	--	--
10		2875451-2	EPA 624		WASTEWATER	PP / EPA 624 VOC	--	--	--	--
11		2877532-5	EPA 624		WASTEWATER	PP / EPA 624 VOC	--	--	--	--
12		2877533-4	EPA 624		WASTEWATER	PP / EPA 624 VOC	--	--	--	--
13	DUP	DUP/2879680-1		2877532	WASTEWATER	EPA 624 VOC	--	--	--	--
14	MS	MS/2879682-1		2877533	WASTEWATER	EPA 624 VOC	--	--	--	--
15	LFB	LFB/2879681-1				EPA 624 VOC	--	--	--	--

Printed Date: 6/6/2018
10:55 am

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62451

TEMPLATE NAME: **EPA 8260B BTEX VOC**

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
2863861-1	4	Logged	DI WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863846-2	5	Logged	DI WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863848-1	6	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863860-1	7	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863858-2	8	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2876790-1	9	Logged	WASTEWATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	6/4/2018	5	5	N/A	<2
2863854-1	10	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863847-2	11	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62451

TEMPLATE NAME: **EPA 8260B BTEX VOC**

2863849-1	12	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863850-1	13	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863853-2	17	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863856-2	18	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863851-1	19	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863855-1	20	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863852-2	21	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863857-1	22	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62451

TEMPLATE NAME: **EPA 8260B BTEX VOC**

2863859-1	23	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2
2863844-1/DUP Linked to 2863859	24	Logged	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	6/4/2018	VILLANUEV	09:20	5/30/2018	5	5	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62451

TEMPLATE NAME: **EPA 8260B BTEX VOC**

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

Prepered Sample(s) Transfered by / Date: [illegible] / 06-04-18

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

Comments:

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62508

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
2869050-1	4	Logged	DI WATER	EPA 5030B	EPA 8260B VOC	6/6/2018	VILLANUEV	09:40	6/5/2018	5.0	5.0	N/A	<2
2869049-1	5	Logged	GROUND WATER	EPA 5030B	EPA 8260B VOC	6/6/2018	VILLANUEV	09:40	6/5/2018	5.0	5.0	N/A	<2
2869045-1	6	Logged	GROUND WATER	EPA 5030B	EPA 8260B VOC	6/6/2018	VILLANUEV	09:40	6/5/2018	5.0	5.0	N/A	<2
2869046-1/DUP Linked to 2869045	7	Logged	GROUND WATER	EPA 5030B	EPA 8260B VOC	6/6/2018	VILLANUEV	09:40	6/5/2018	5.0	5.0	N/A	<2
2869047-1/MS Linked to 2869045	8	Logged	GROUND WATER	EPA 5030B	EPA 8260B VOC	6/6/2018	VILLANUEV	09:40	6/5/2018	5.0	5.0	N/A	<2
2869048-1/MSD Linked to 2869045	9	Logged	GROUND WATER	EPA 5030B	EPA 8260B VOC	6/6/2018	VILLANUEV	09:40	6/5/2018	5.0	5.0	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 62508

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] / 06-06-18

Prepared Sample(s) Received by / Date: NA / NA

Comments:

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 Fri Jun 08 09:50:55 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

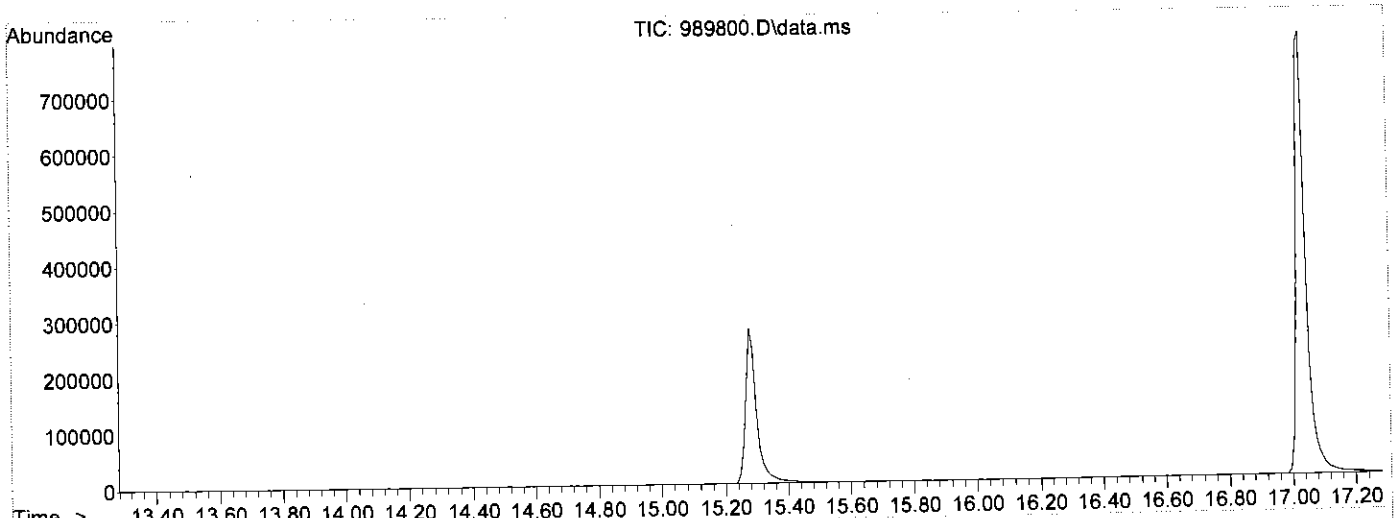
(#) = Out of Range

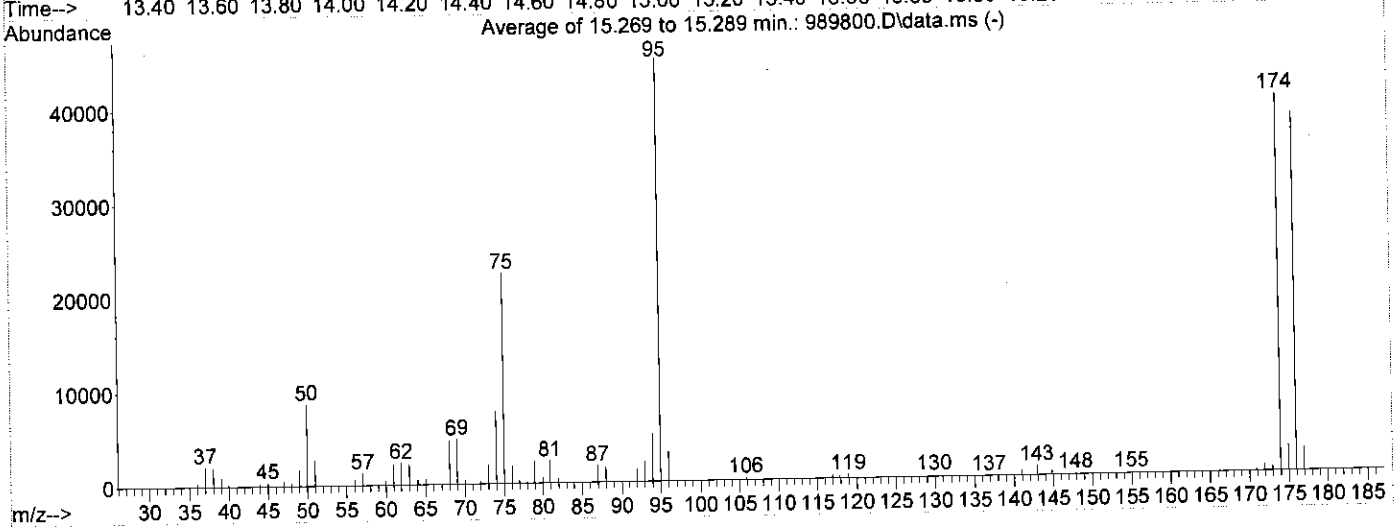
Method VOC

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989800.D
Acq On : 6 Jun 2018 11:25 am
Operator : NIVA
Sample : BFB
Misc : RUN199898
ALS Vial : 1 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 1397, 1398, 1399; Background Corrected with Scan 1391

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	8686	PASS
75	95	30	60	49.6	22360	PASS
95	95	100	100	100.0	45101	PASS
96	95	5	9	6.9	3109	PASS
173	174	0.00	2	1.3	527	PASS
174	95	50	150	89.0	40131	PASS
175	174	5	9	6.9	2774	PASS
176	174	95	101	95.2	38195	PASS
177	176	5	9	6.6	2511	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989801.D
Acq On : 6 Jun 2018 11:51 am
Operator : NIVA
Sample : LRB/2879642
Misc : RUN199898
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 11:06:06 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	245040	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.305	114	353696	20.00 µg/L	0.04
48) CHLOROBENZEN-d5-IS	12.995	117	341560	20.00 µg/L	0.05
71) I14-DICLBENZENE-D4	17.005	152	197376	20.00 µg/L	-0.12
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.046	111	172581	21.75 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 108.75%		
39) STOLUENE-D8	10.315	98	439269	19.77 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.85%		
59) S4BRFLUOROBENZENE	15.249	95	158674	18.12 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 90.60%		

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	3.635	94	341	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	65	N.D.
12) CARBON DISULFIDE	4.559	76	1143	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	0.000		0	N.D. d
15) TRANS12DICLETHENE	5.178	96	811	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	6.914	43	82	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.823	83	1720	N.D.
22) BROMOCHLOROMETHANE	6.802	49	1143	N.D.
25) TETRAHYDROFURAN	7.005	42	69	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	469	N.D.
30) BENZENE	7.564	78	225	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	10.924	43	62	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.
40) TOLUENE	10.396	91	442	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\199898-899-900\
Data File : 989801.D
Acq On : 6 Jun 2018 11:51 am
Operator : NIVA
Sample : LRB/2879642
Misc : RUN199898
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 11:06:06 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

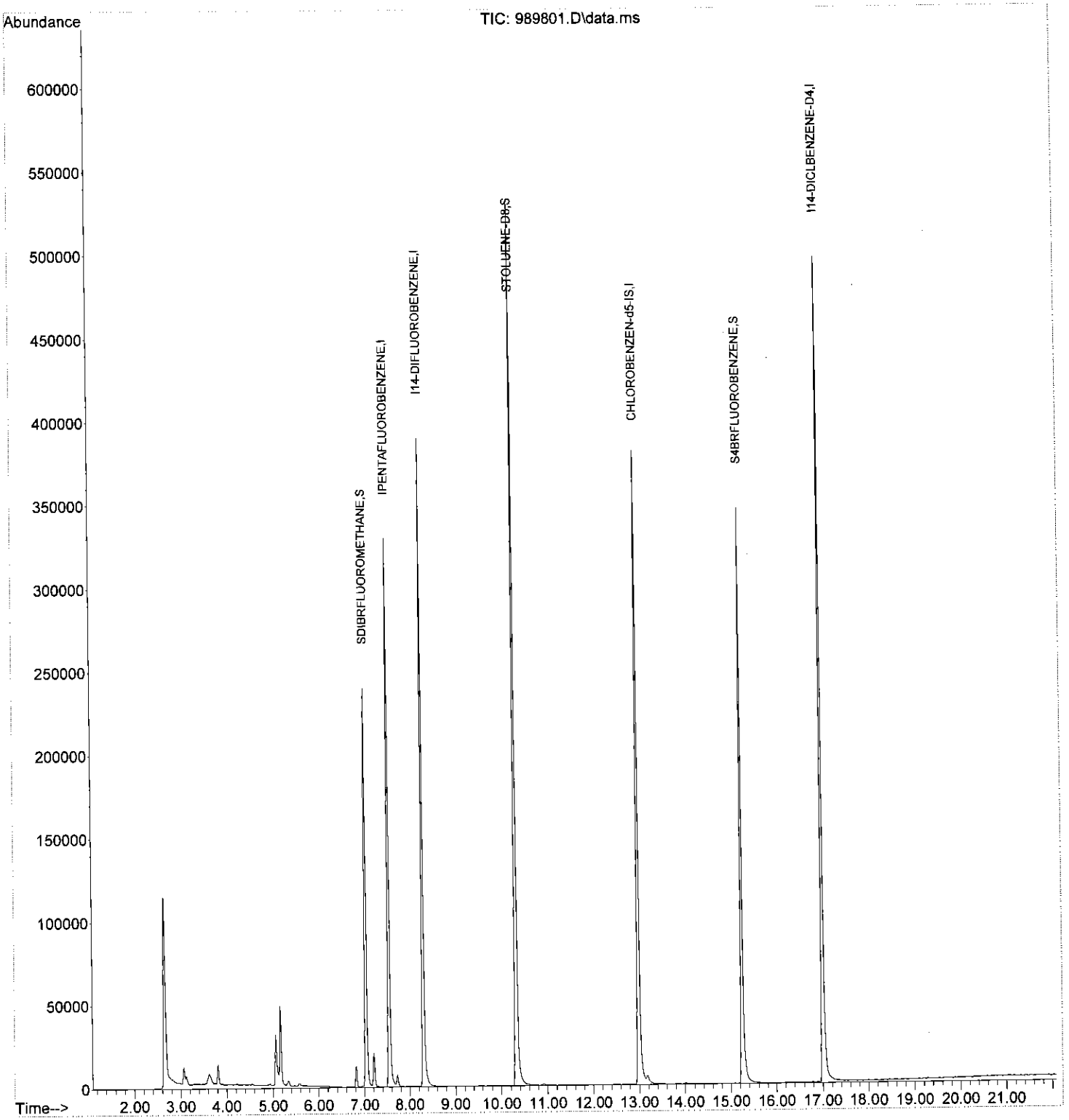
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	13.025	112	63	N.D.	
50) 1-CHLOROHEXANE	12.995	91	588	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.995	91	660	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	15.431	77	61	N.D.	
63) N-PROPYLBENZENE	15.442	91	68	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	679	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.370	91	138	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	19.624	225	62	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\199898-899-900\
Data File : 989801.D
Acq On : 6 Jun 2018 11:51 am
Operator : NIVA
Sample : LRB/2879642
Misc : RUN199898
ALS Vial : 2 Sample Multiplier: 1

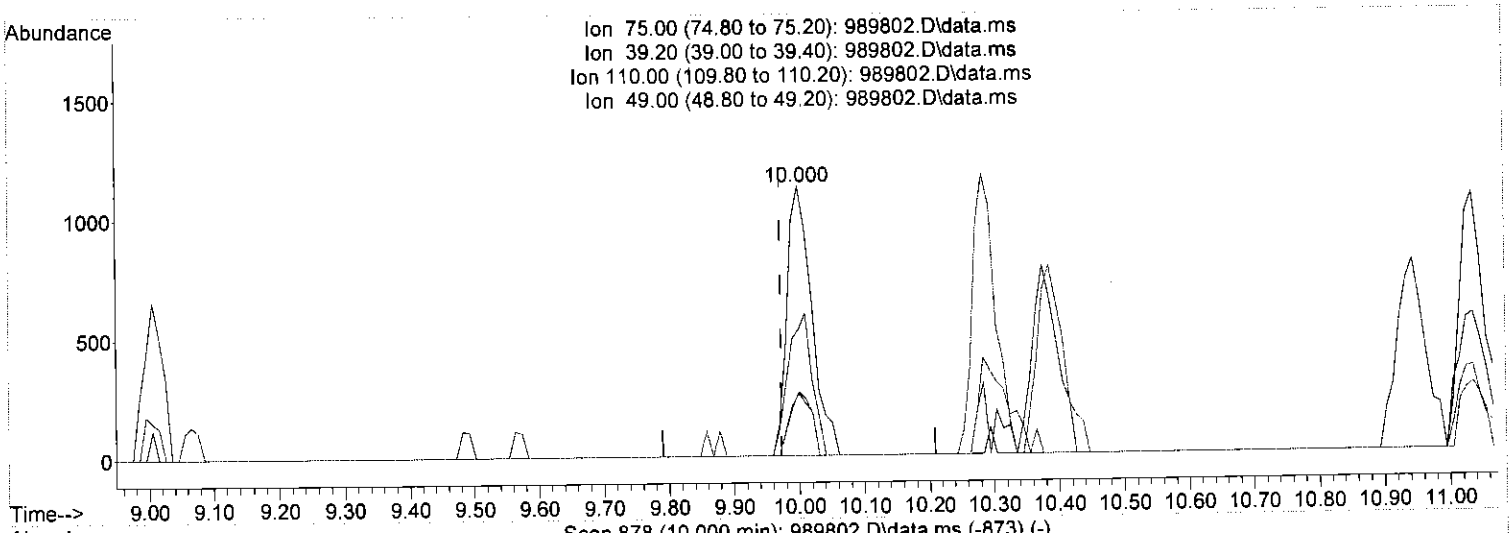
Quant Time: Jun 08 11:06:06 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

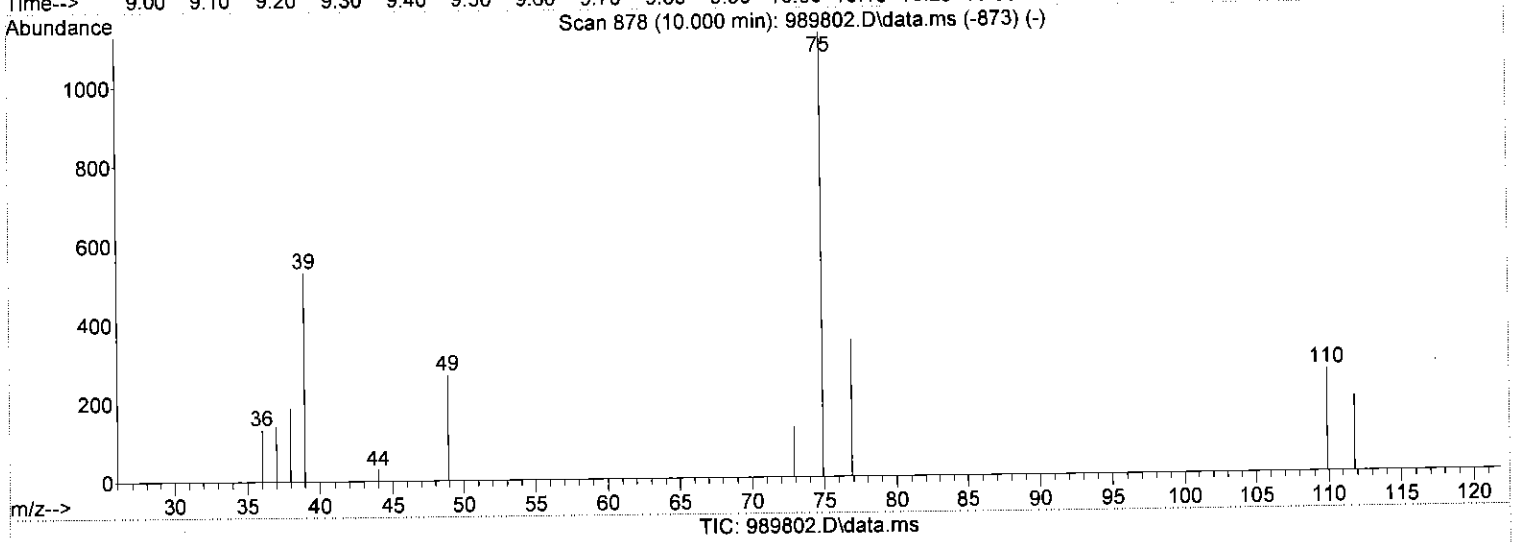


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

10.000min (+0.028) 0.47 µg/L

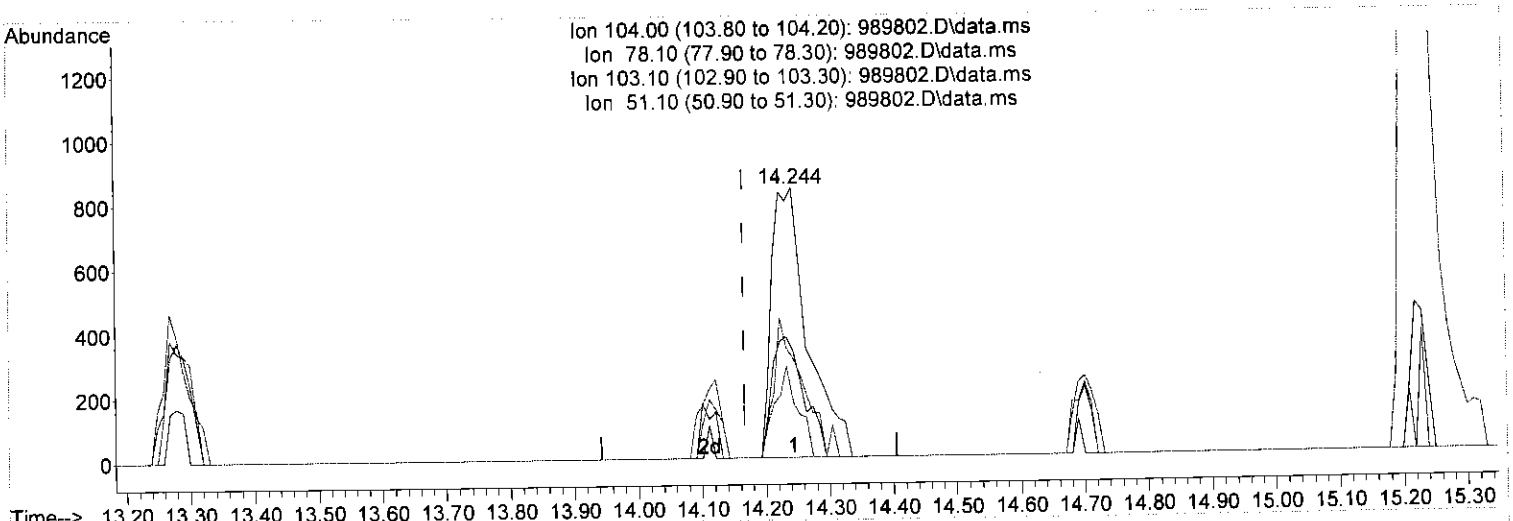
response 2974

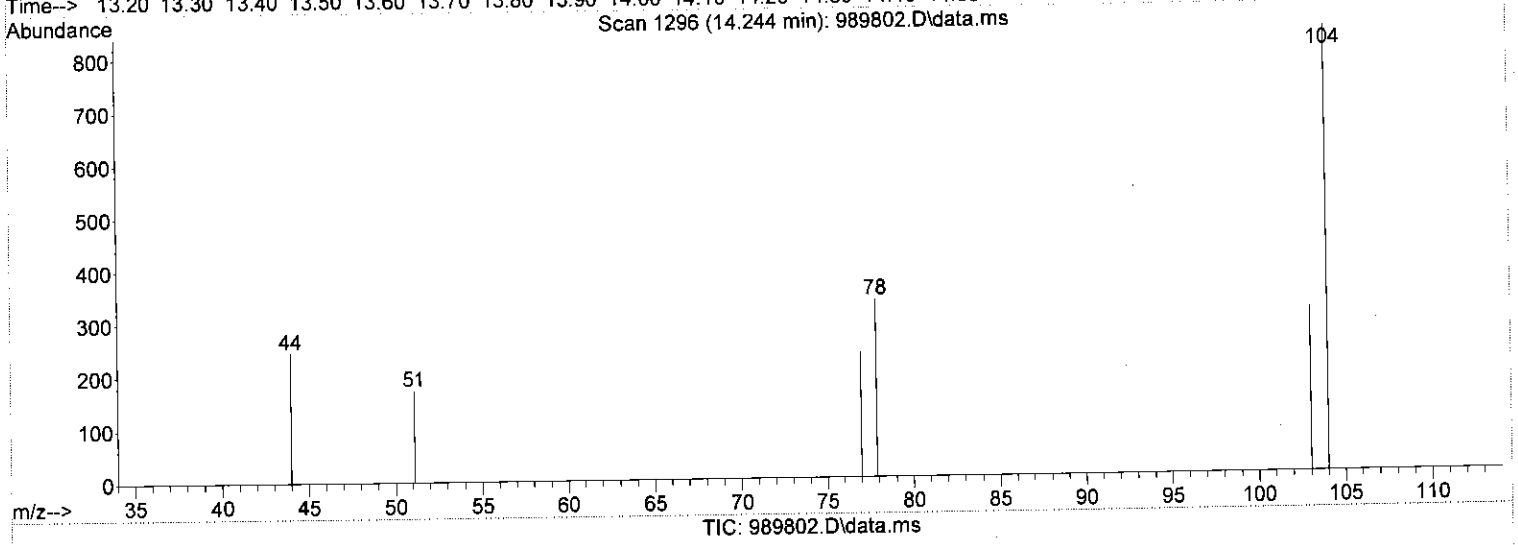
Ion	Exp%	Act%
75.00	100	100
39.20	51.70	46.94
110.00	23.30	23.07
49.00	19.00	23.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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 (+0.077) 0.27 µg/L

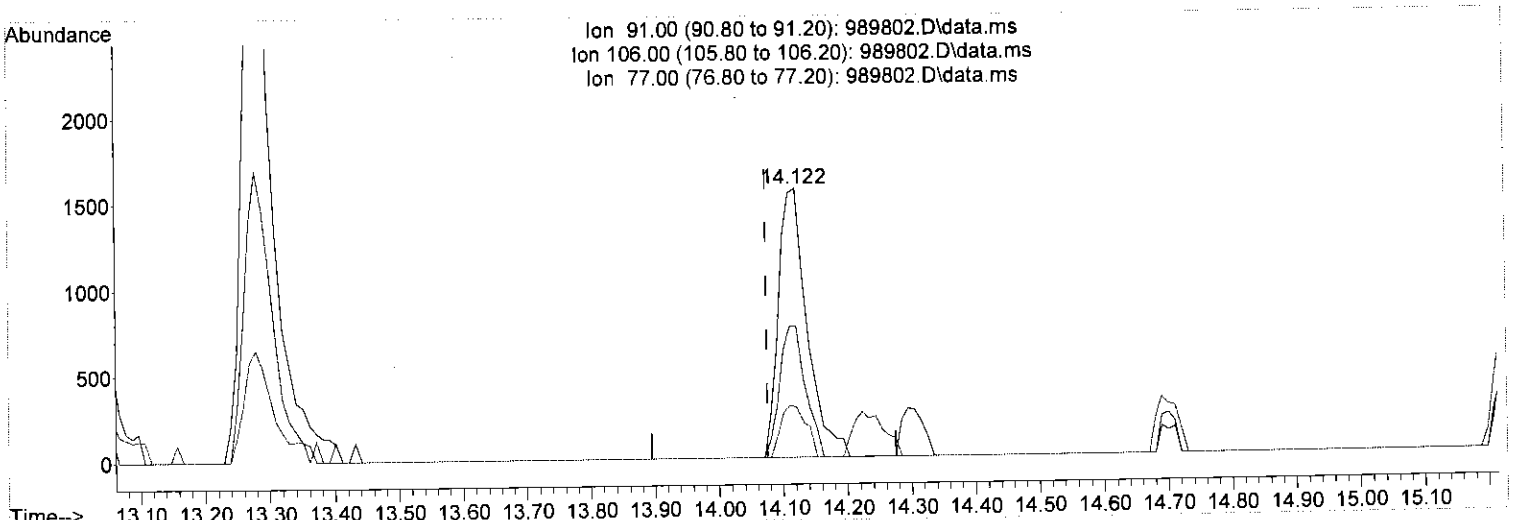
response 3286

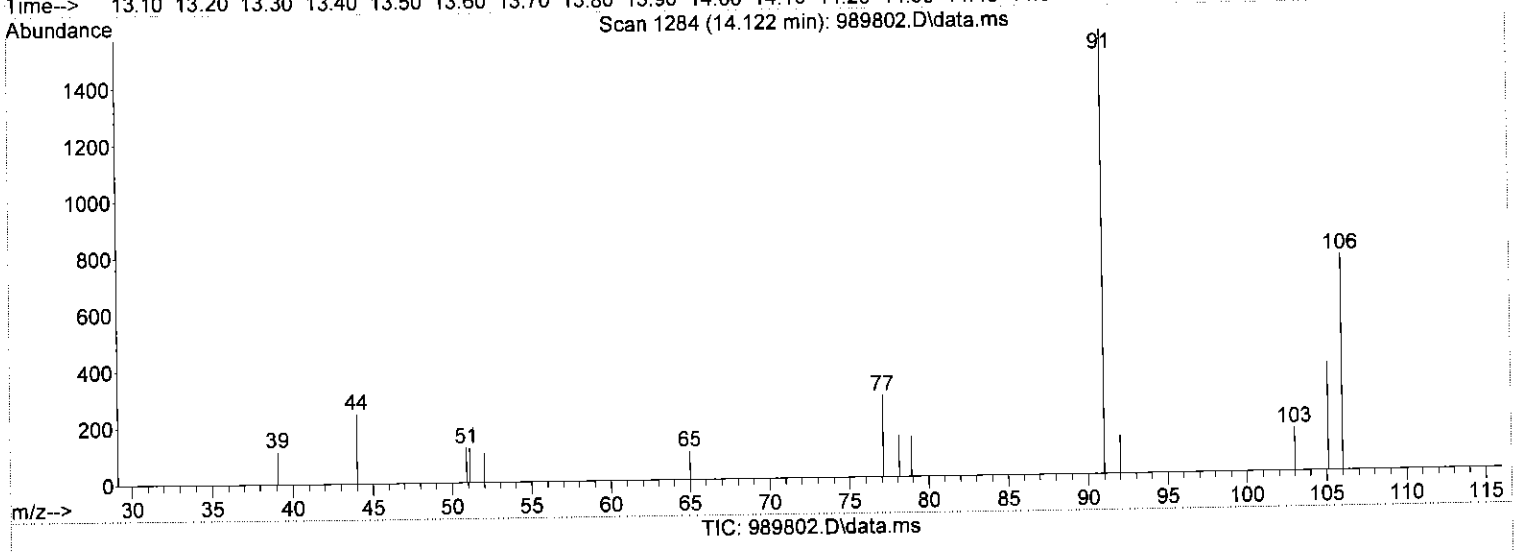
Ion	Exp%	Act%
104.00	100	100
78.10	43.10	39.87
103.10	46.90	41.57
51.10	24.70	21.94

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

14.122min (+0.046) 0.34 µg/L

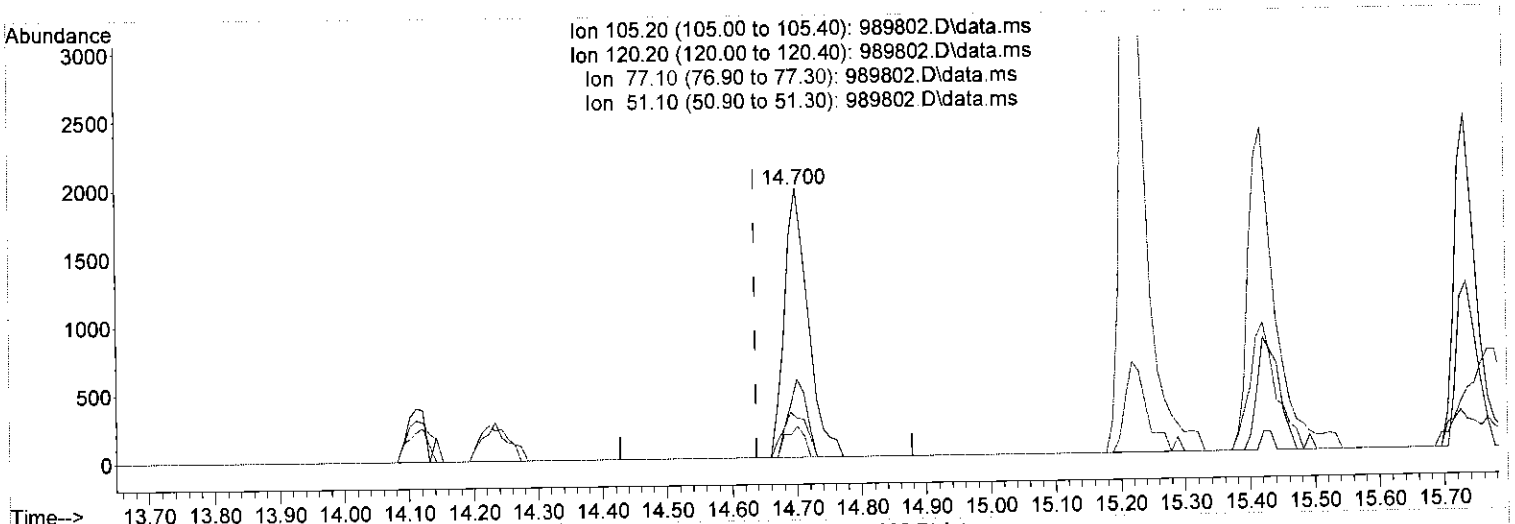
response 4808

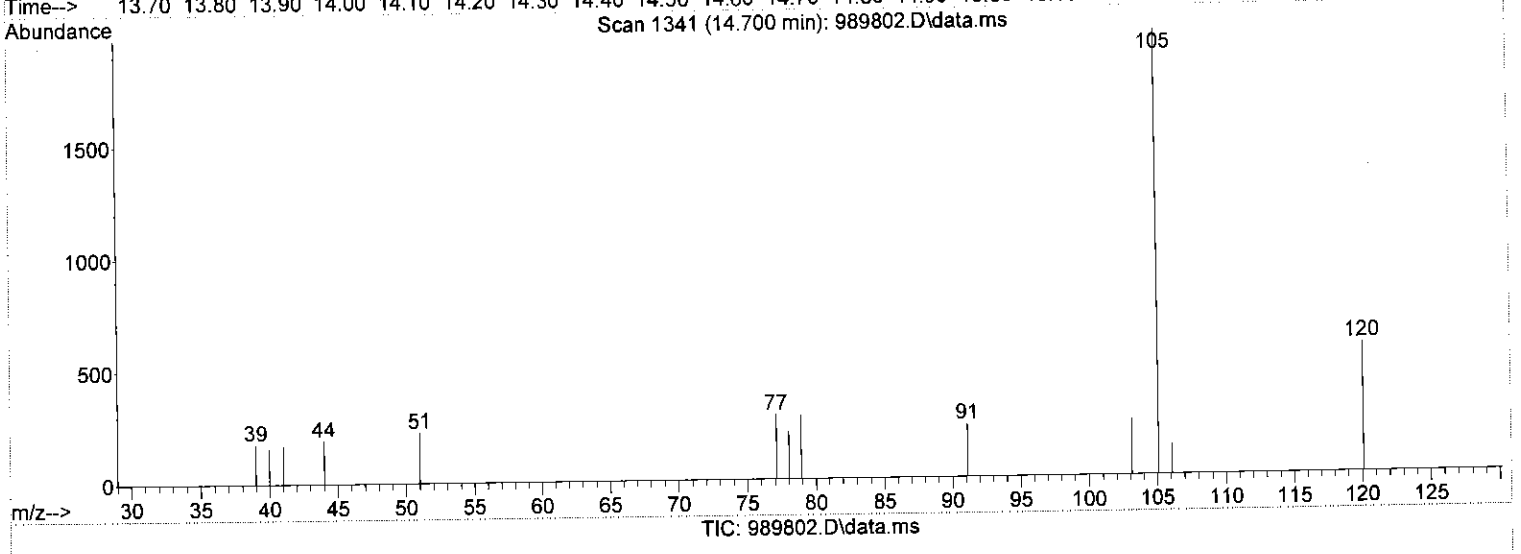
Ion	Exp%	Act%
91.00	100	100
106.00	48.20	43.82
77.00	12.60	17.08
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

14.700min (+0.063) 0.26 µg/L

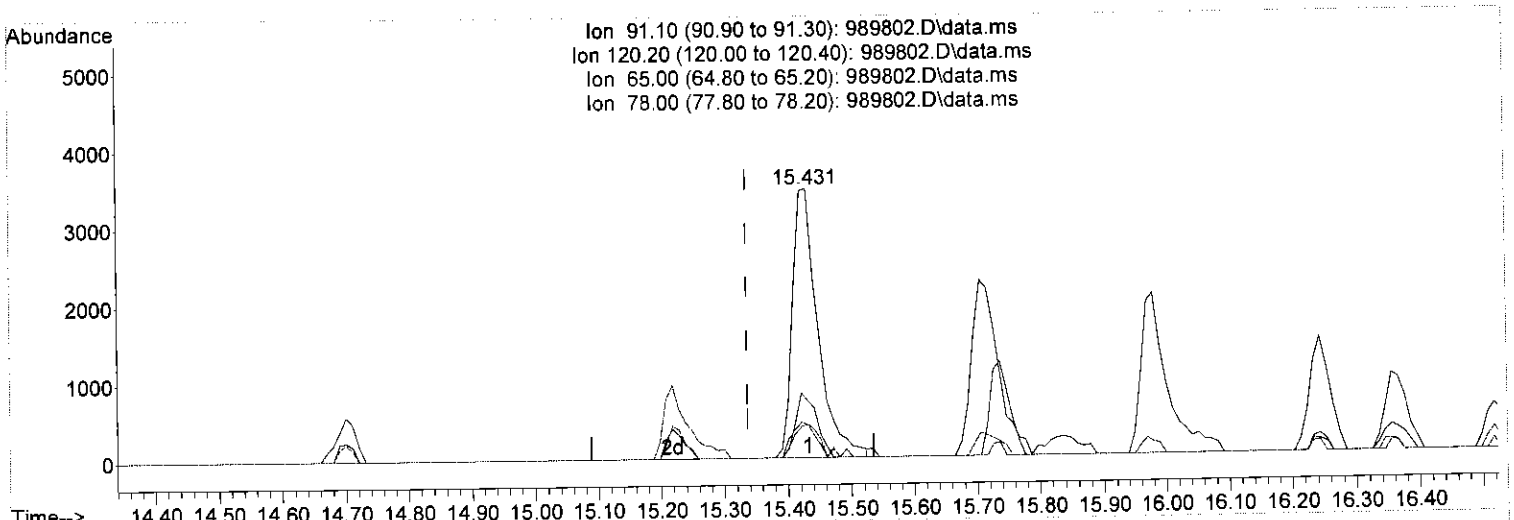
response 4979

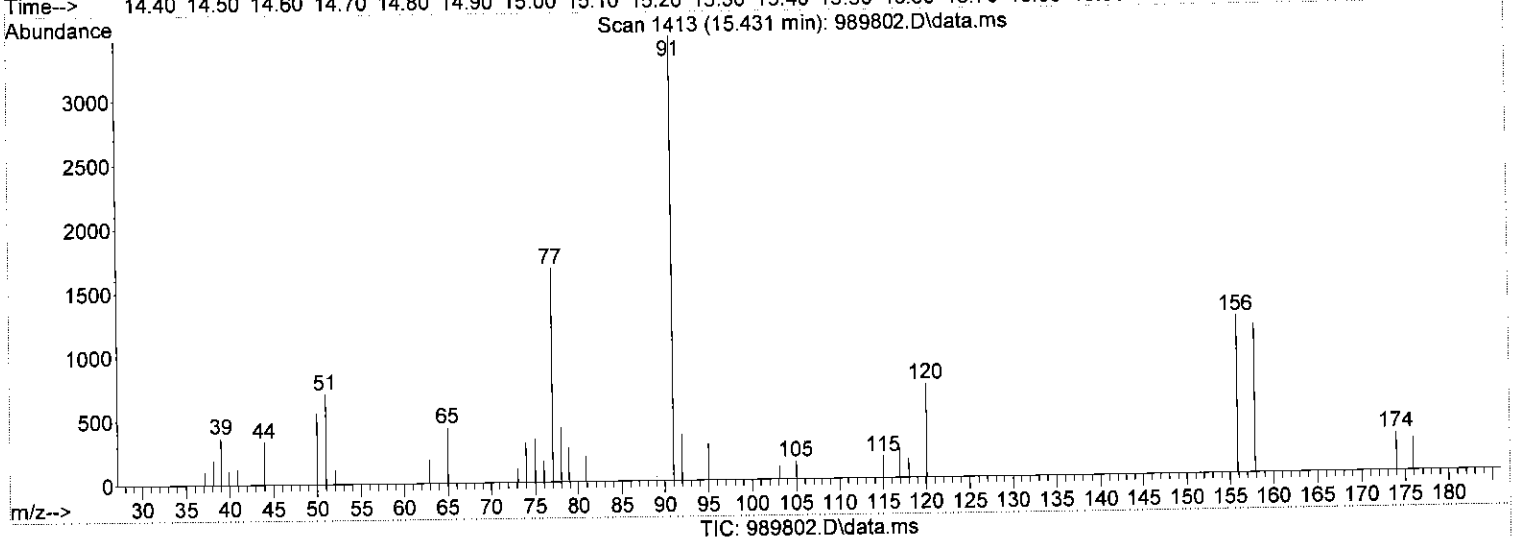
Ion	Exp%	Act%
105.20	100	100
120.20	27.80	23.84
77.10	15.50	15.24
51.10	9.10	8.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

15.431min (+0.094) 0.42 µg/L

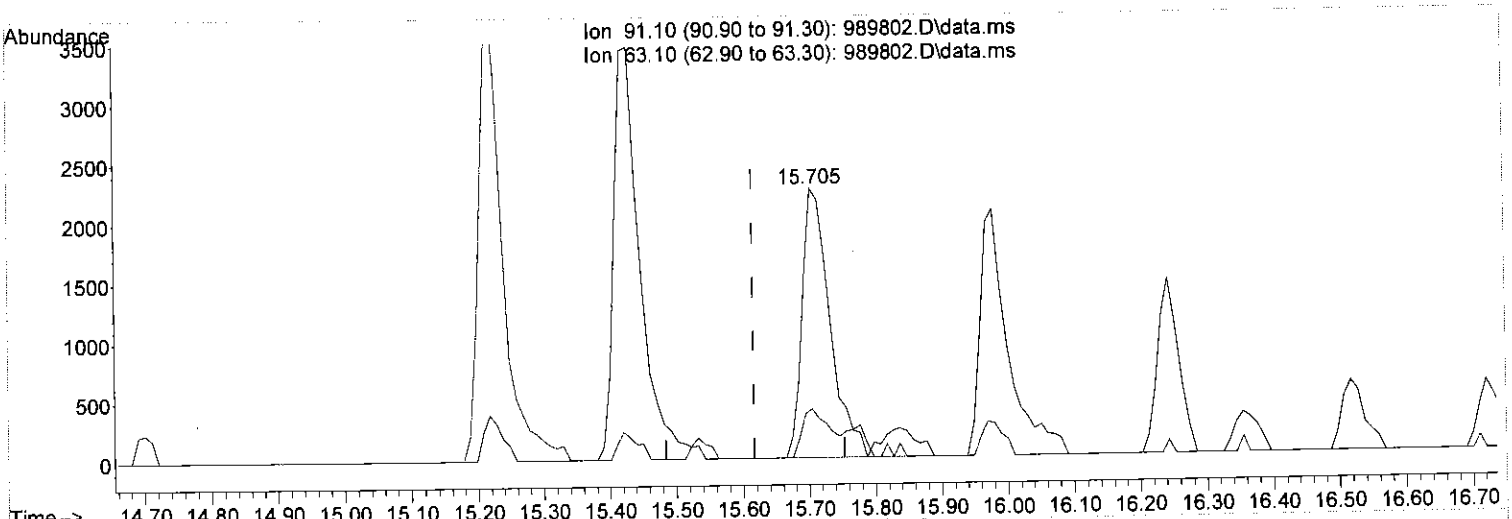
response 9660

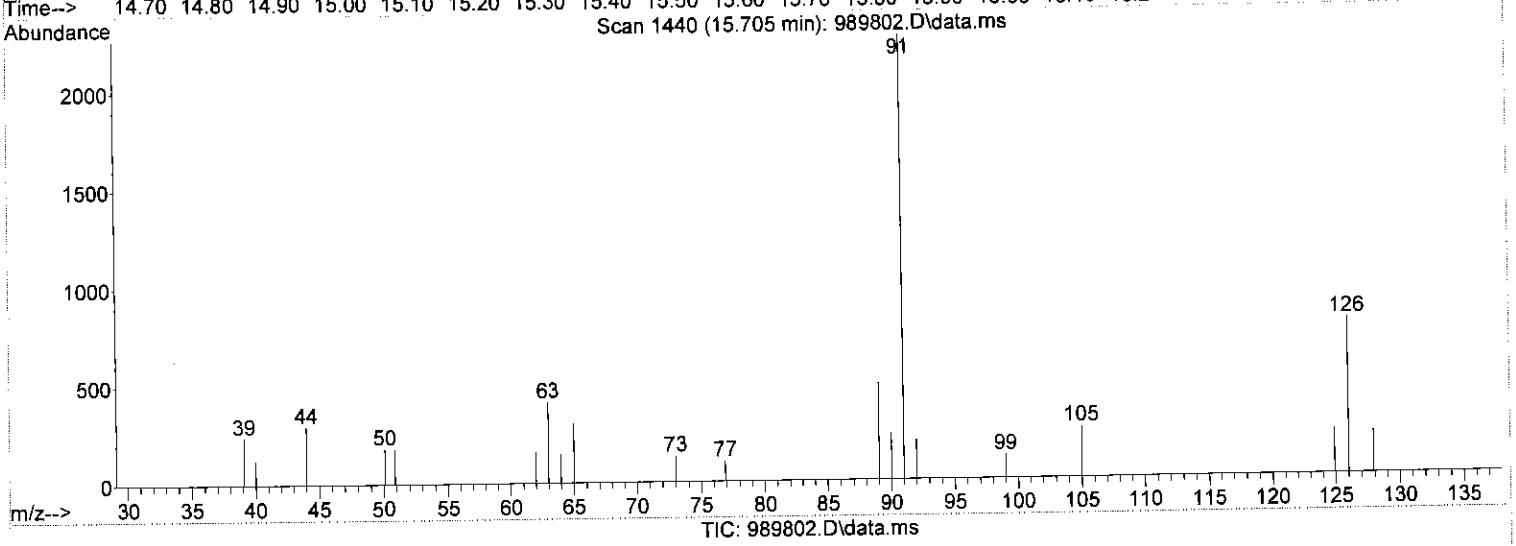
Ion	Exp%	Act%
91.10	100	100
120.20	25.70	20.04
65.00	10.00	12.49
78.00	9.20	12.20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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





(64) 2-CHLOROTOLUENE (T)

15.705min (+0.088) 0.47 µg/L m

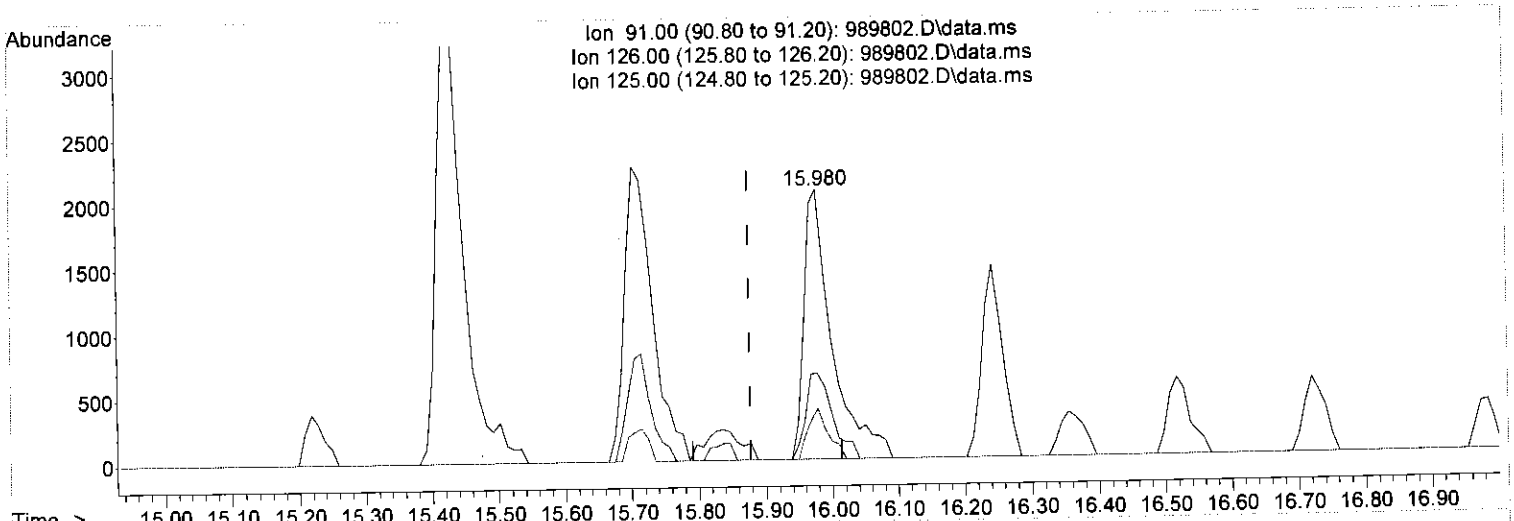
response 7568

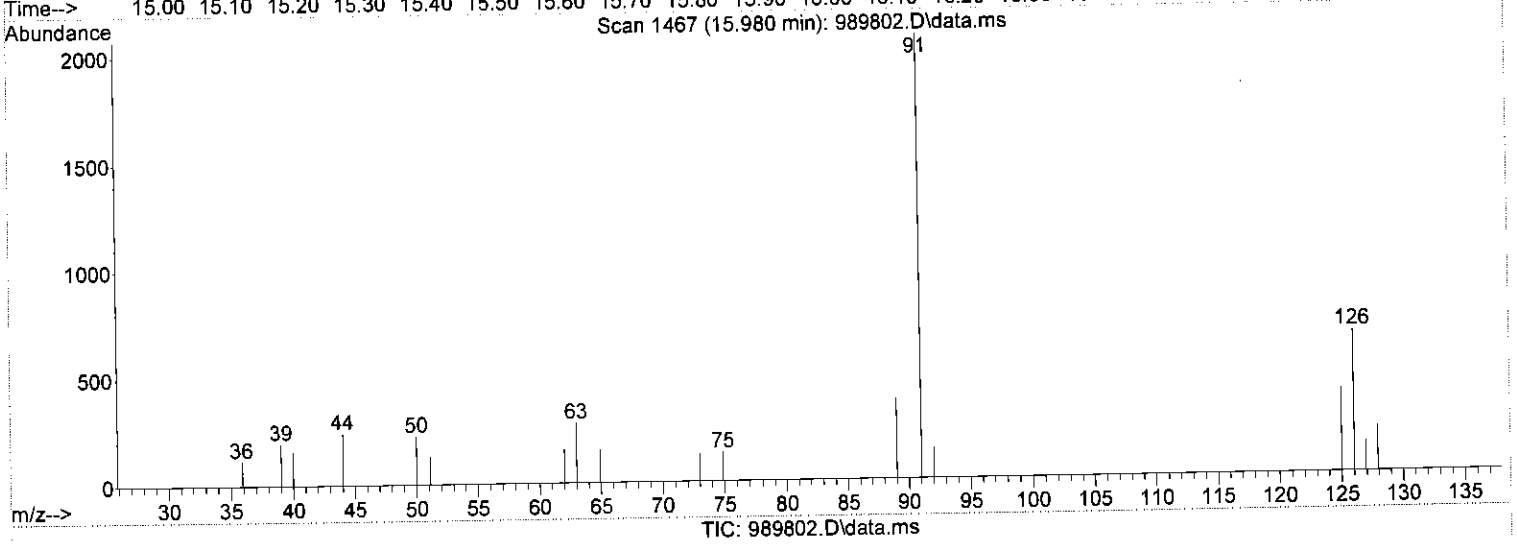
Ion	Exp%	Act%
91.10	100	100
63.10	14.40	14.35
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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





(65) 4-CHLOROTOLUENE (T)

15.980min (+0.101) 0.41 µg/L m

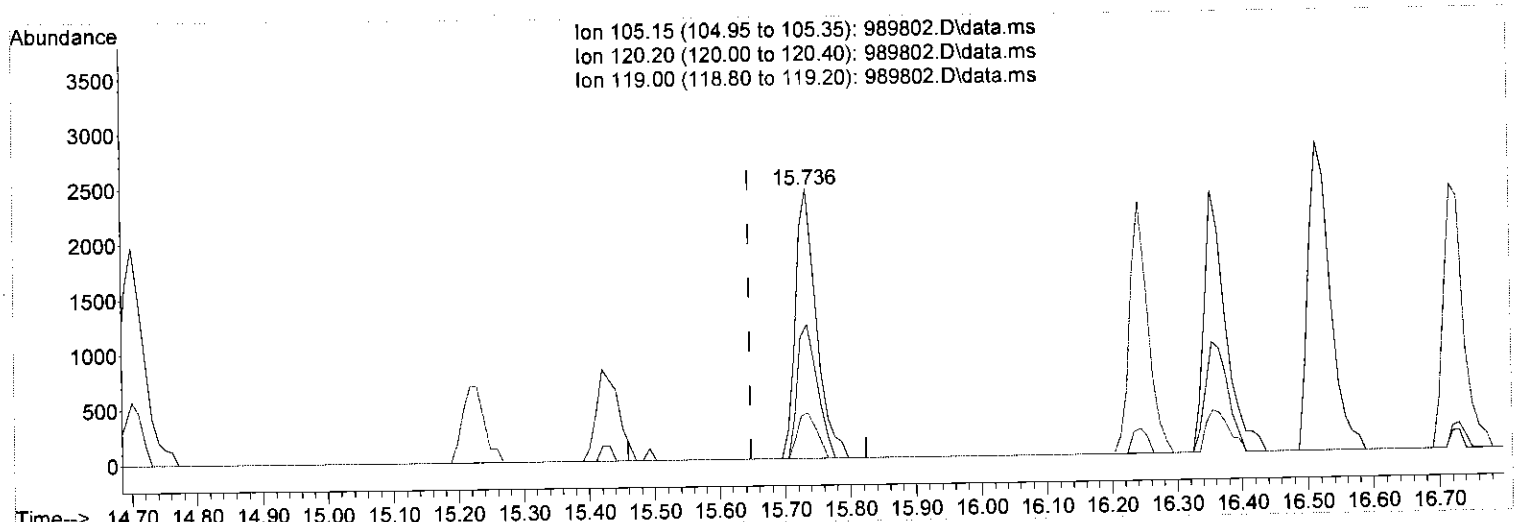
response 6079

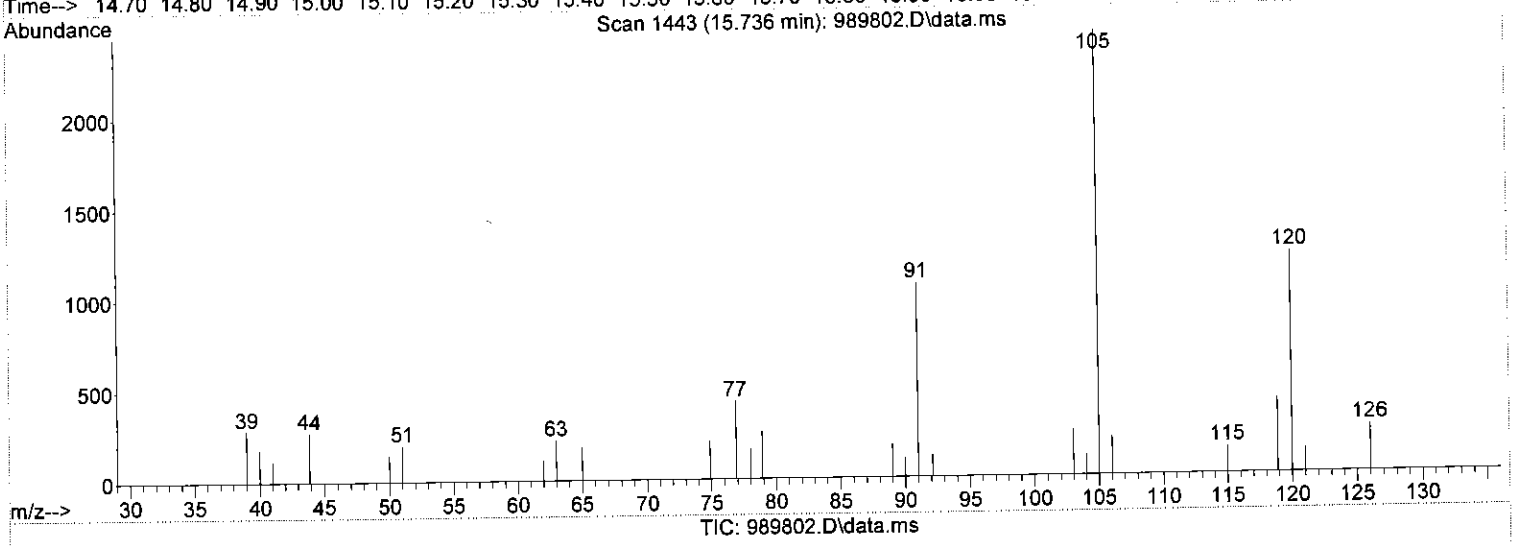
Ion	Exp%	Act%
91.00	100	100
126.00	38.20	31.68
125.00	14.60	18.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

15.736min (+0.088) 0.31 µg/L

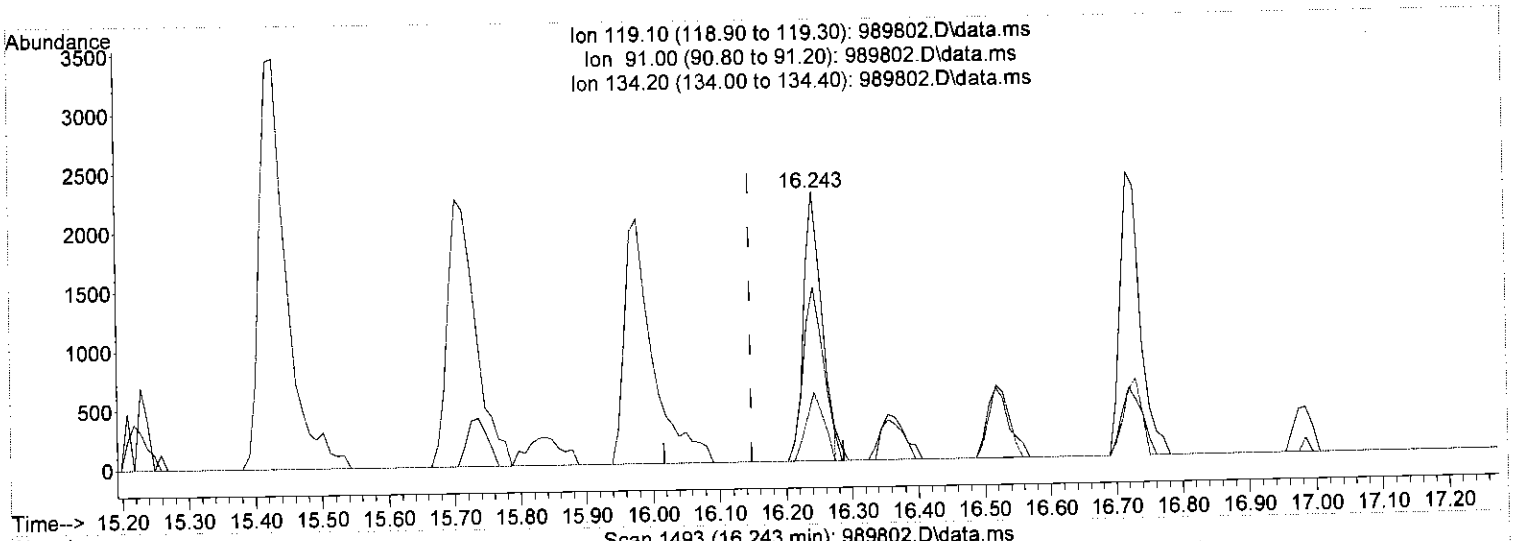
response 5437

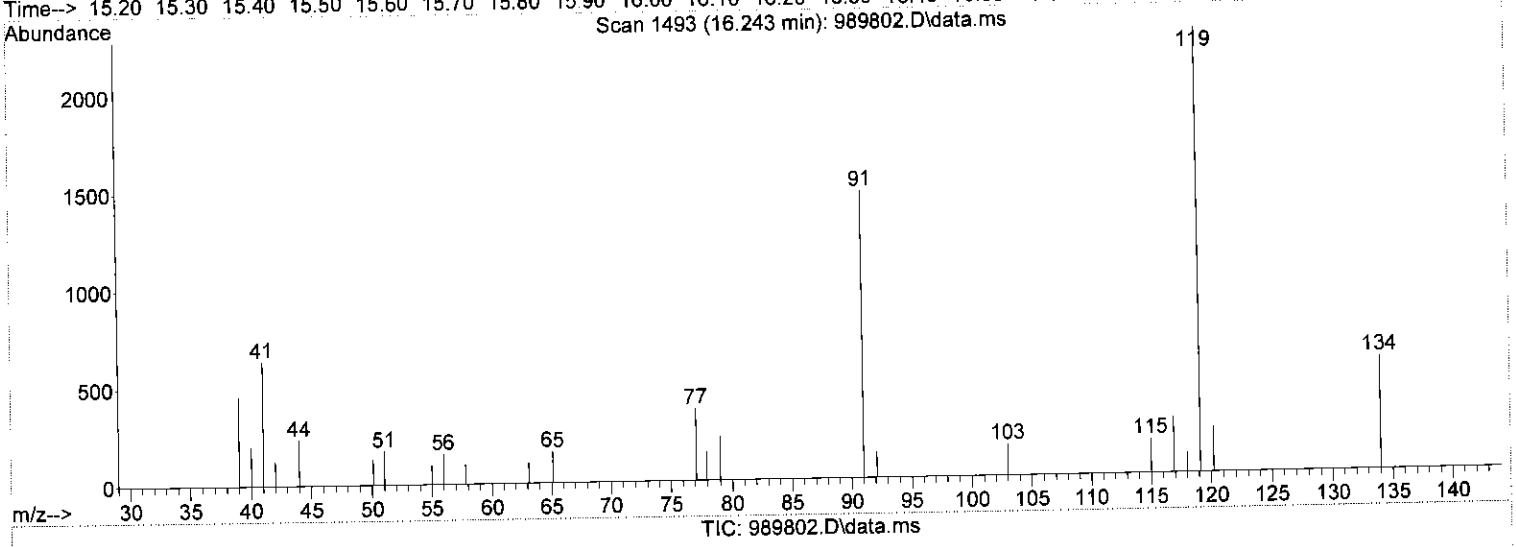
Ion	Exp%	Act%
105.15	100	100
120.20	52.10	47.60
119.00	12.60	15.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

16.243min (+0.096) 0.32 µg/L

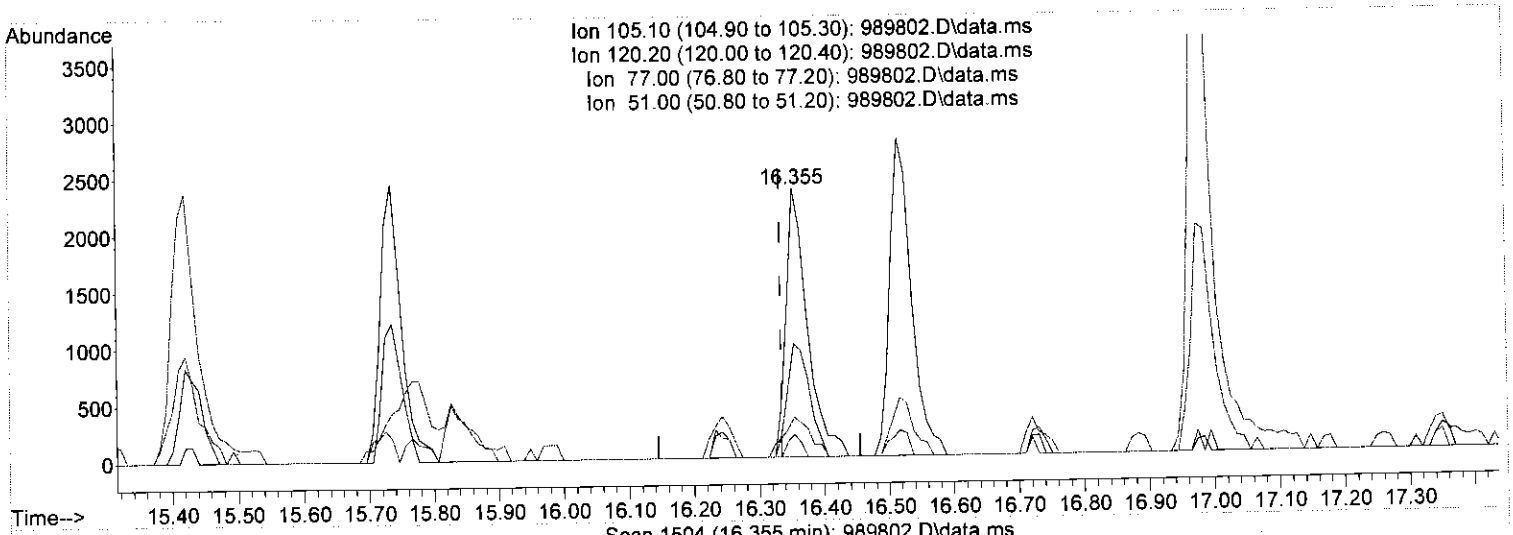
response 4388

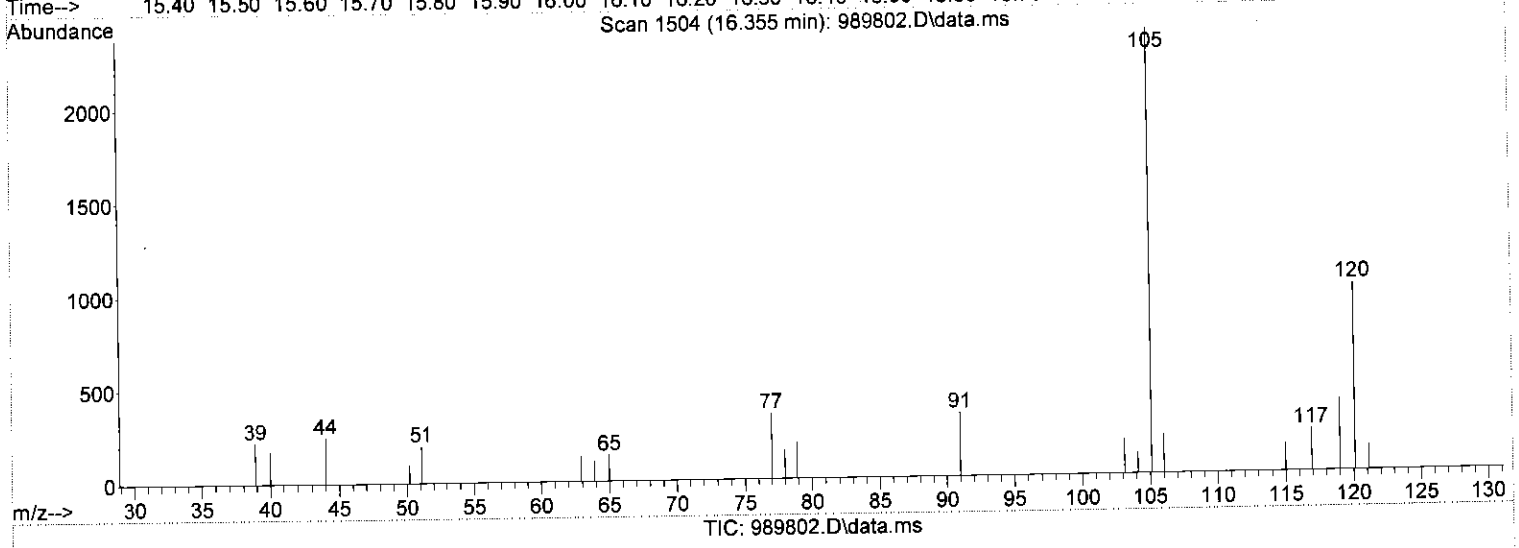
Ion	Exp%	Act%
119.10	100	100
91.00	64.70	72.84
134.20	26.00	24.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

16.355min (+0.020) 0.32 µg/L

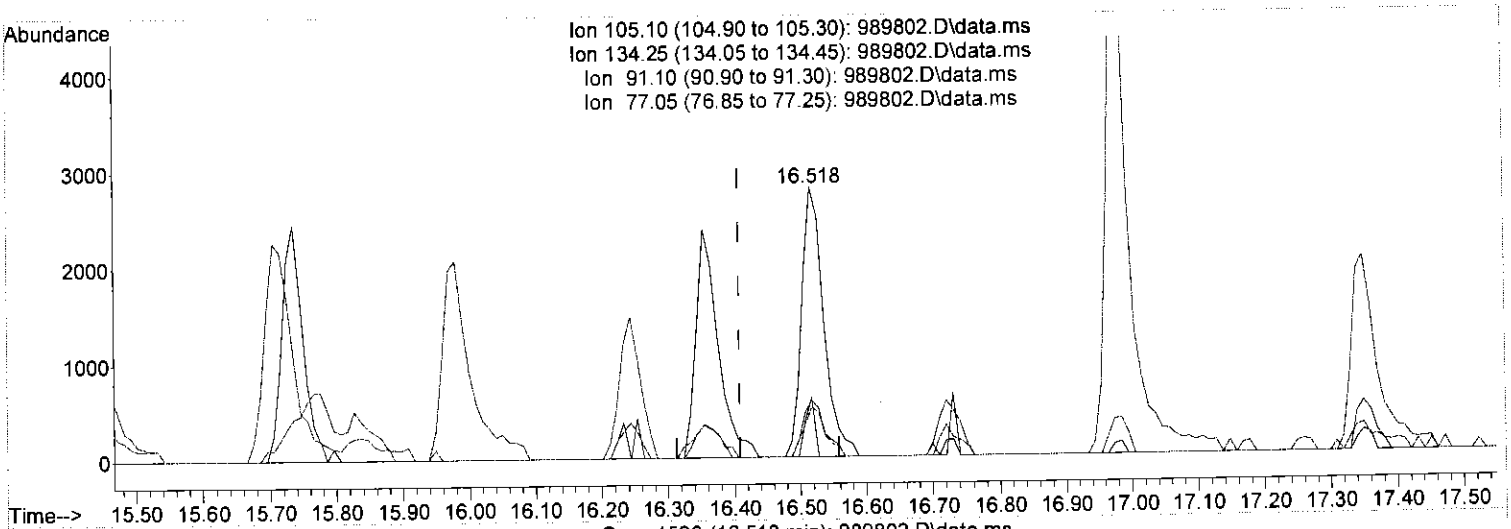
response 5454

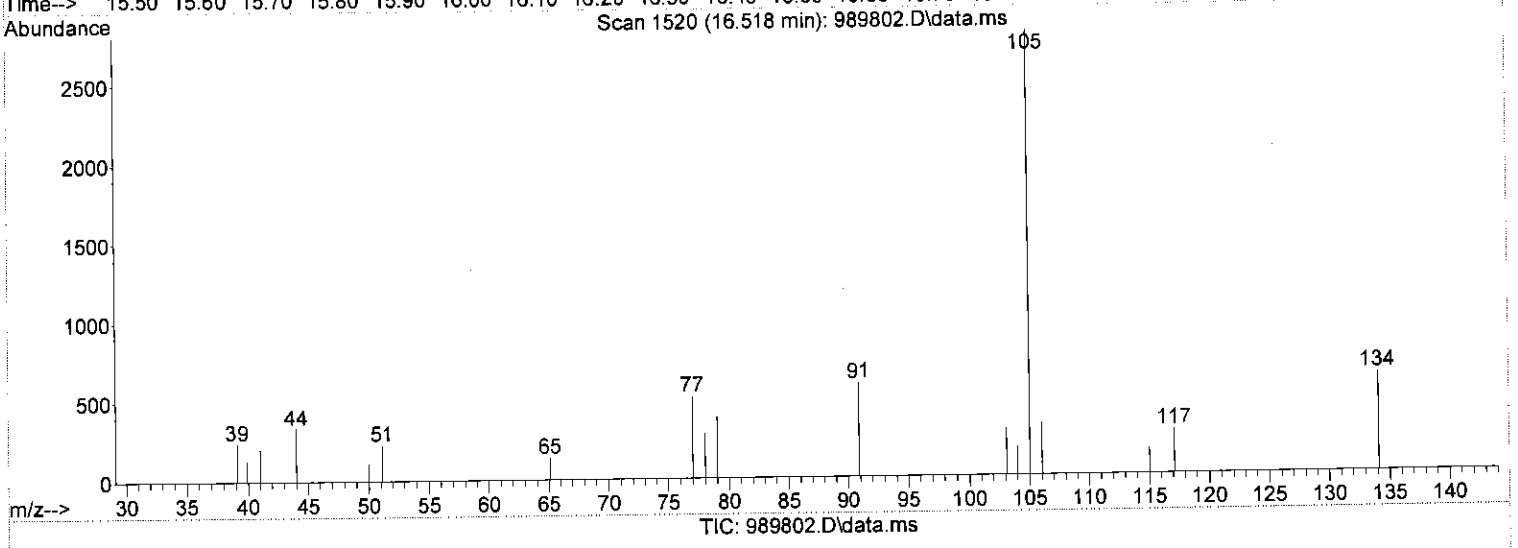
Ion	Exp%	Act%
105.10	100	100
120.20	44.90	44.04
77.00	13.60	18.35
51.00	6.40	5.15

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

16.518min (+0.109) 0.31 µg/L m

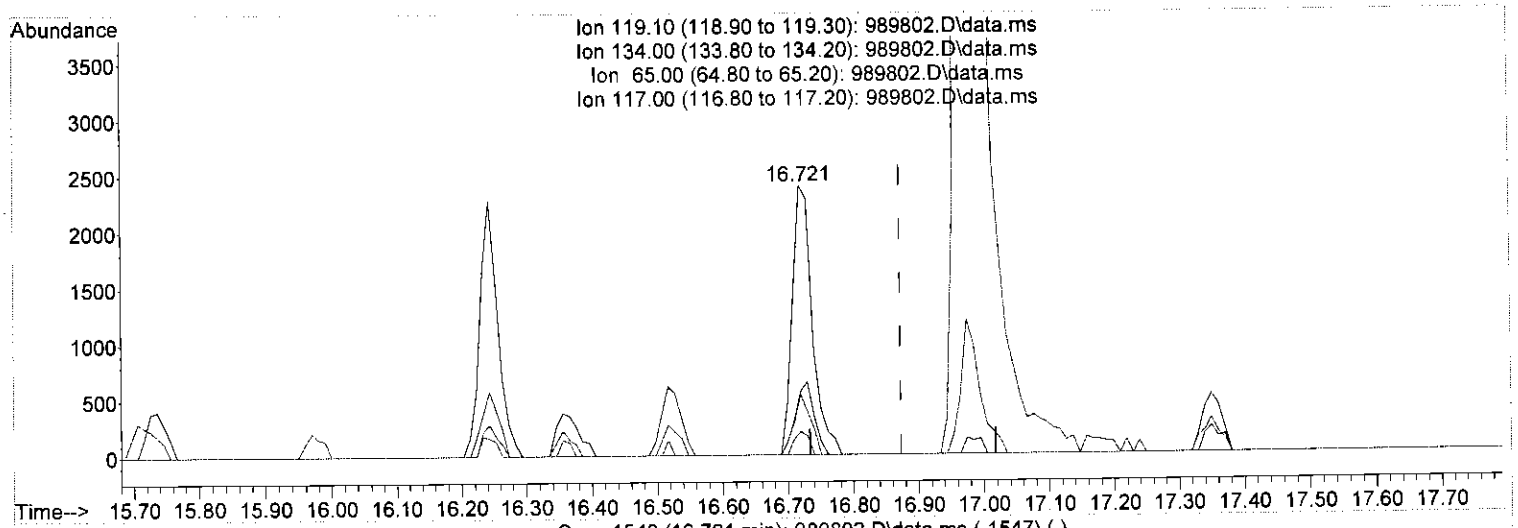
response 6558

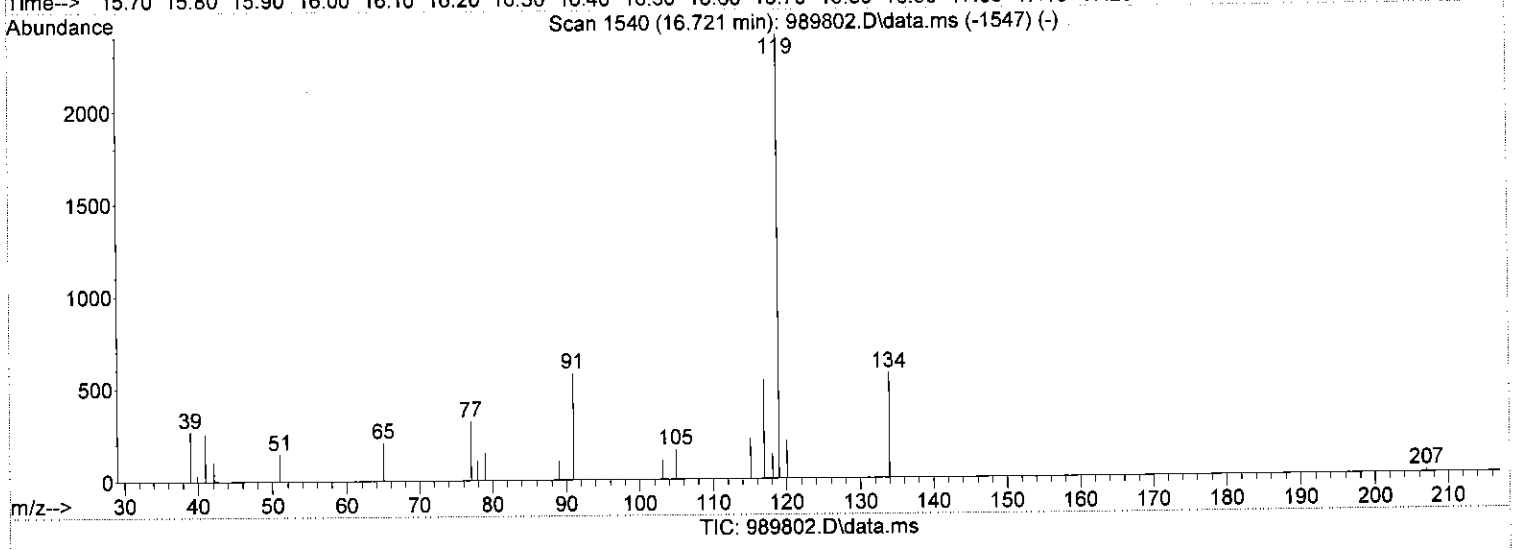
Ion	Exp%	Act%
105.10	100	100
134.25	20.00	22.01
91.10	16.50	21.05
77.05	13.00	18.34

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

16.721min (-0.152) 0.30 µg/L

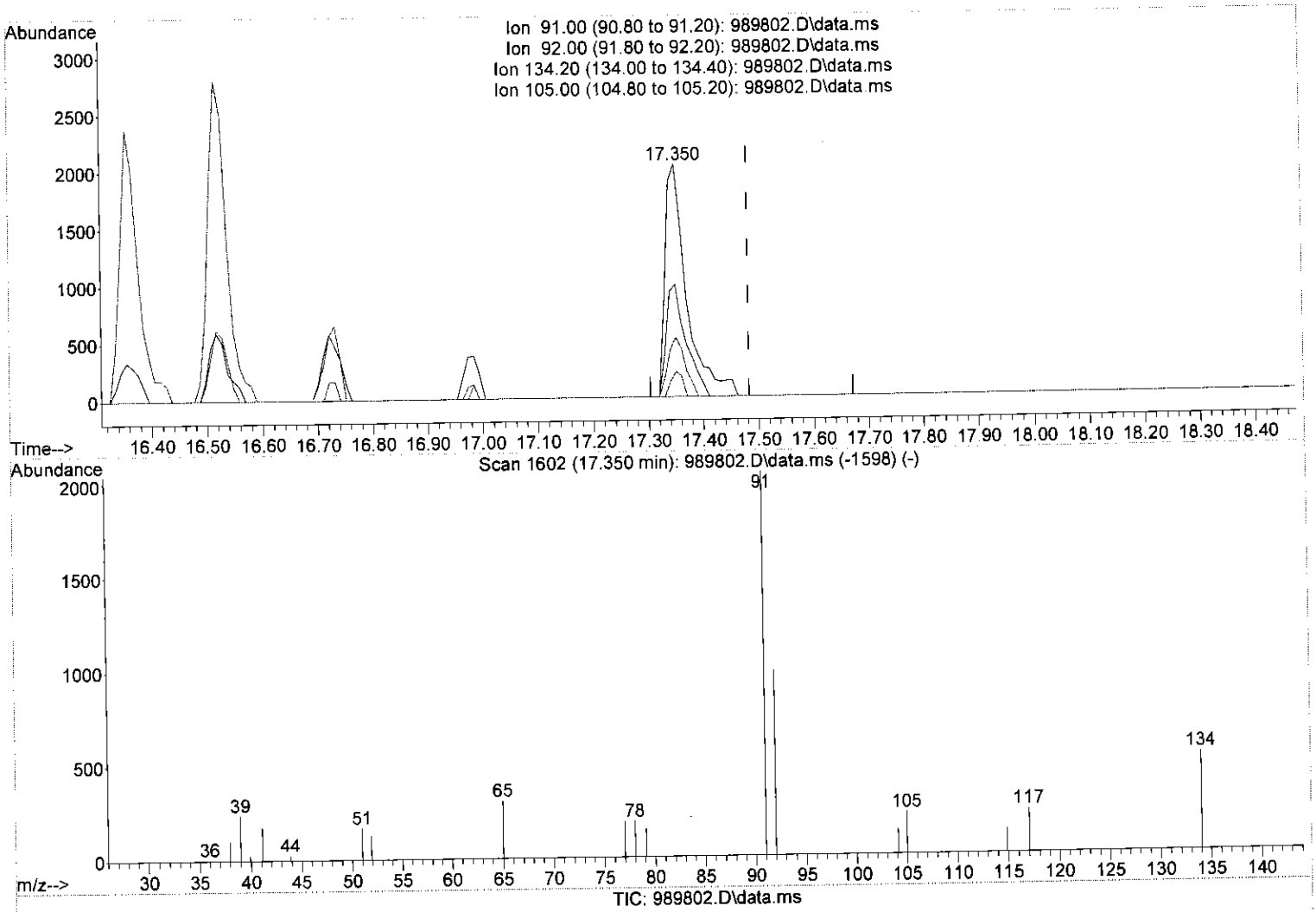
response 5059

Ion	Exp%	Act%
119.10	100	100
134.00	27.20	23.61
65.00	6.90	8.53
117.00	19.50	22.31

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

17.350min (-0.132) 0.36 µg/L

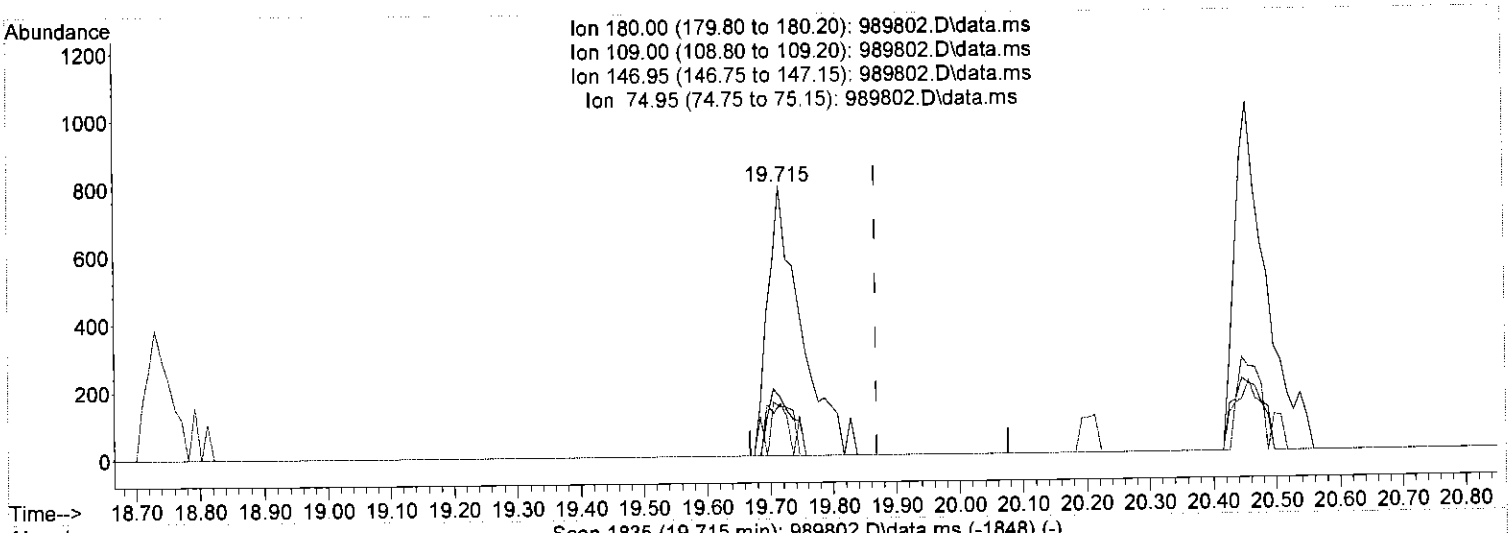
response 5535

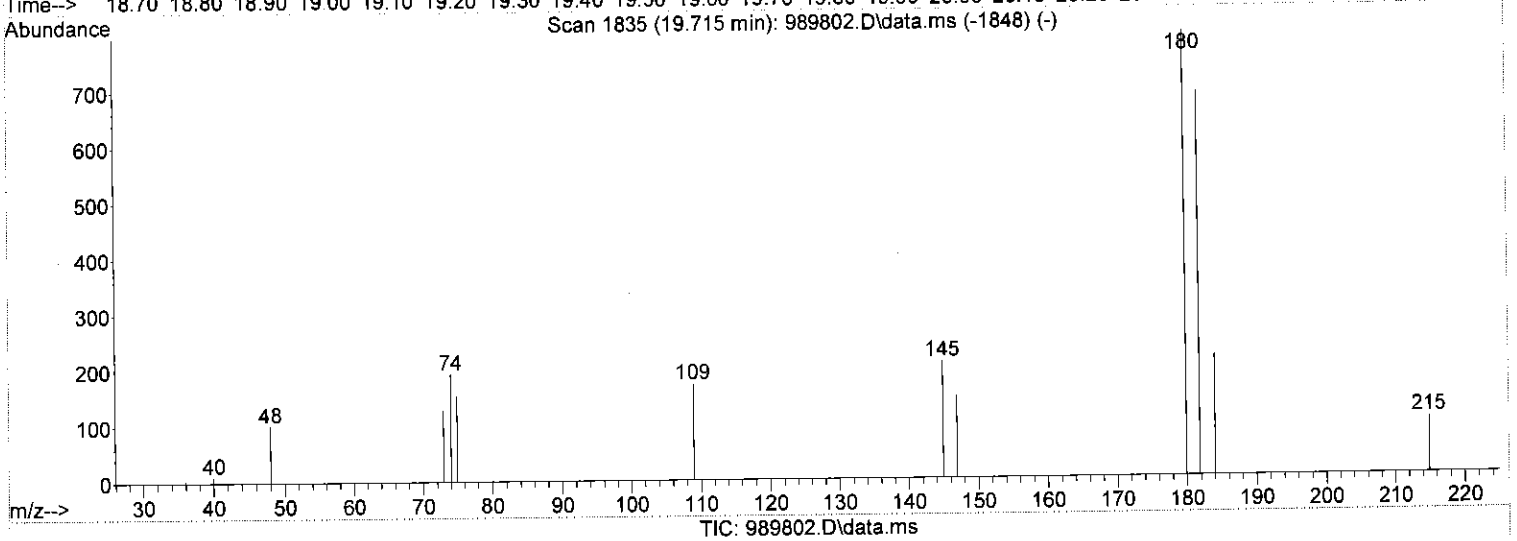
Ion	Exp%	Act%
91.00	100	100
92.00	51.10	48.21
134.20	22.90	25.53
105.00	8.30	10.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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

19.715min (-0.153) 0.38 µg/L

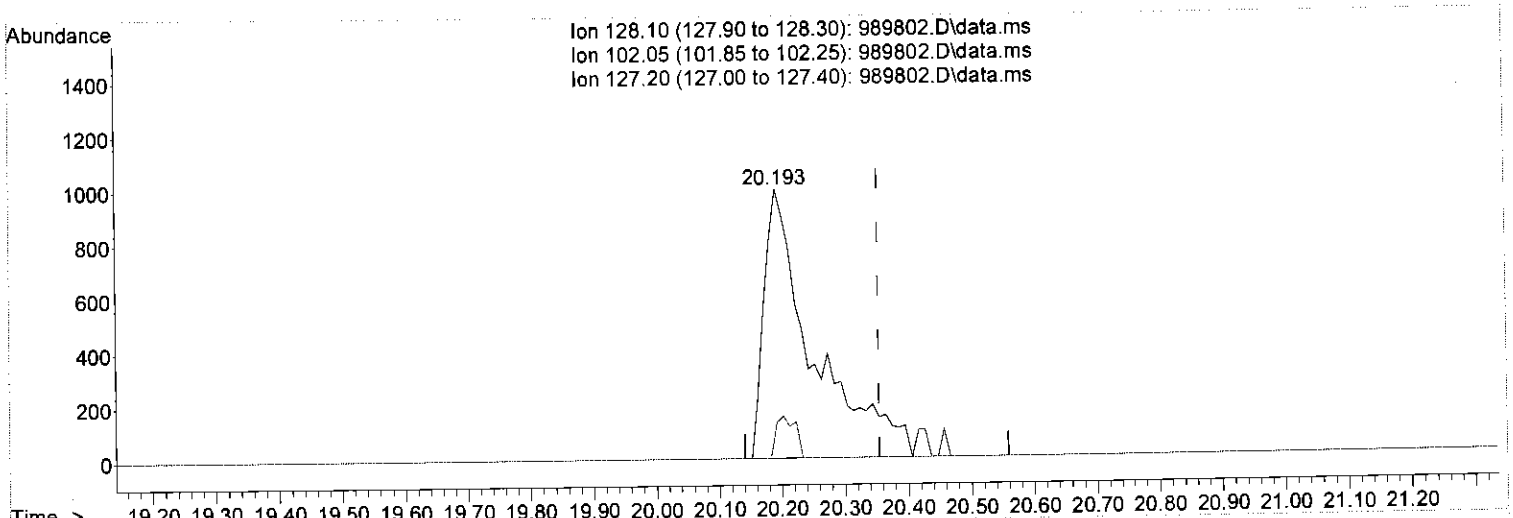
response 2902

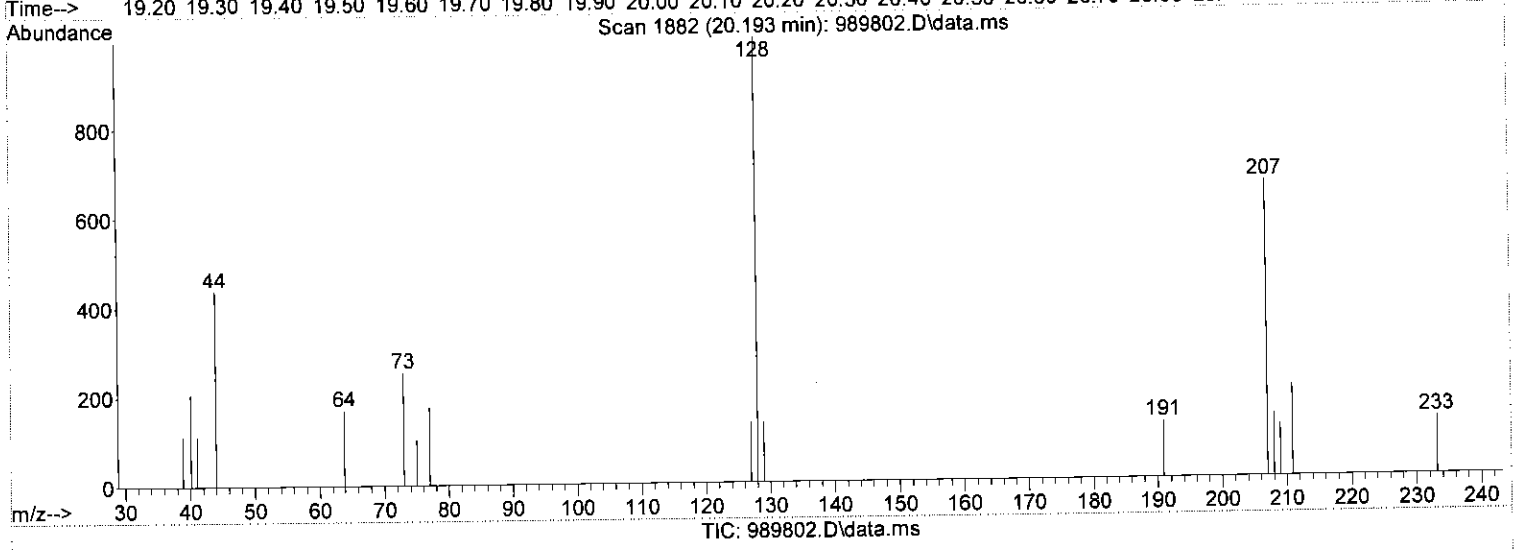
Ion	Exp%	Act%
180.00	100	100
109.00	24.20	21.58
146.95	19.20	18.32
74.95	14.80	19.32#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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)

20.193min (-0.162) 0.29 µg/L m

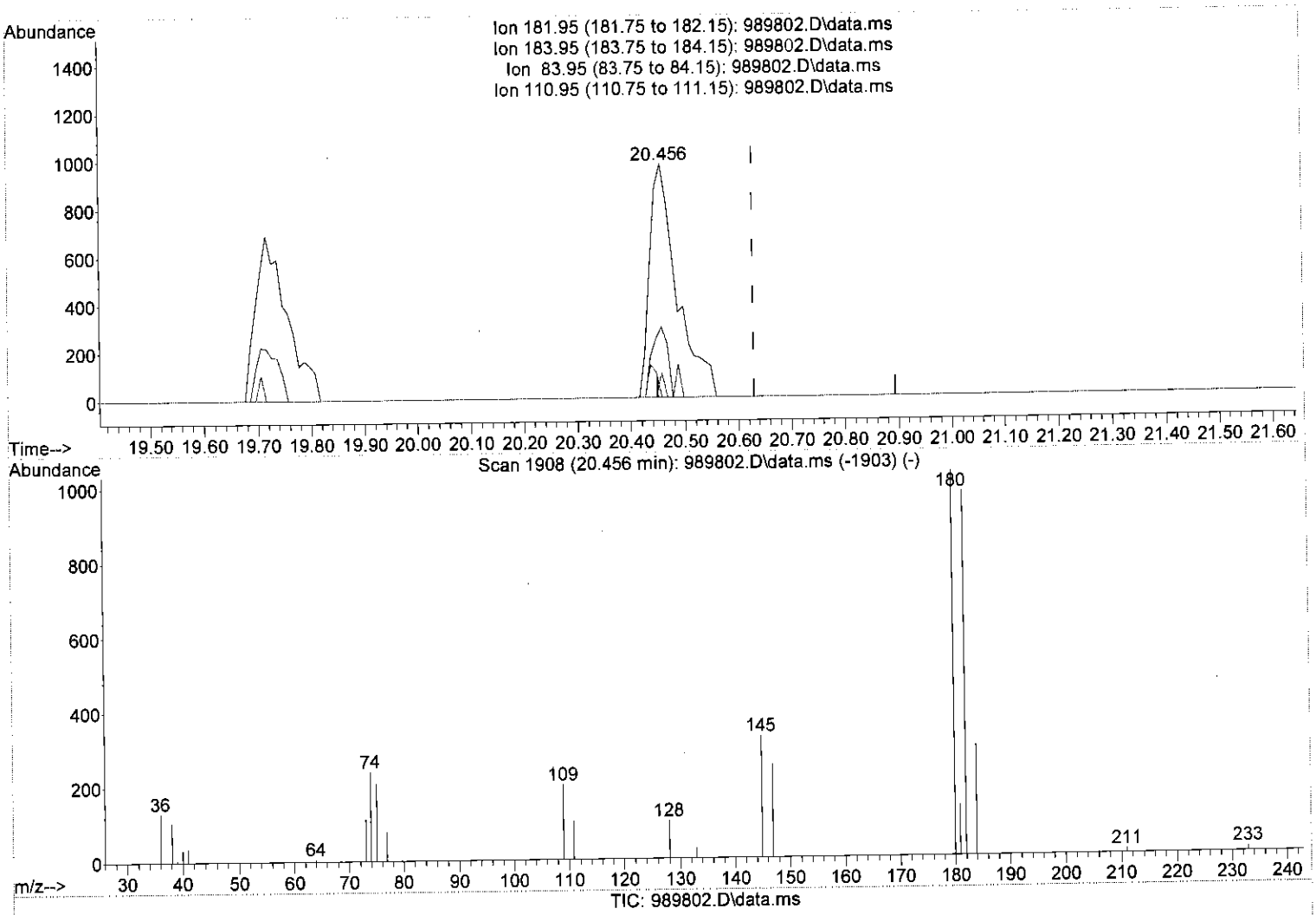
response 5520

Ion	Exp%	Act%
128.10	100	100
102.05	8.60	0.00
127.20	14.10	13.45
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:07:09 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

20.456min (-0.173) 0.49 µg/L

response 3398

Ion	Exp%	Act%
181.95	100	100
183.95	30.50	30.23
83.95	12.80	0.00
110.95	8.10	10.55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:21:30 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	7.533	168	304841	20.00 µg/L	0.02
23) I14-DIFLUOROBENZENE	8.274	114	432875	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	12.964	117	455472	20.00 µg/L	0.02
71) I14-DICLBENZENE-D4	16.985	152	276026	20.00 µg/L	-0.14
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.015	111	202355	20.84 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.20%		
39) STOLUENE-D8	10.284	98	551480	20.28 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.40%		
59) S4BRFLUOROBENZENE	15.218	95	219549	18.80 µg/L	0.07
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.00%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.843	85	1780	1.06 µg/L #	85
3) CHLOROMETHANE	3.107	50	2969m	0.91 µg/L	
4) VINYL CHLORIDE	3.216	62	2516	0.90 µg/L #	77
5) BROMOMETHANE	3.594	94	3314	1.26 µg/L #	86
6) CHLOROETHANE	3.716	64	1776m	0.84 µg/L	
7) TRICLFLUOROMETHANE	3.868	101	7604	1.06 µg/L #	96
8) ACROLEIN	4.802	56	20491	22.66 µg/L #	95
9) ACETONE	5.107	43	6011m	5.15 µg/L	
10) 11-DICHLOROETHENE	4.447	61	3391	0.74 µg/L	93
11) IODOMETHANE	4.640	142	14996	3.09 µg/L	98
12) CARBON DISULFIDE	4.528	76	26884	3.67 µg/L #	84
13) ACRYLONITRILE	5.960	53	6247	4.54 µg/L	98
14) DICHLOROMETHANE	5.056	84	4892	1.19 µg/L #	1
15) TRANS12DICLETHENE	5.239	96	3020	0.84 µg/L	90
16) 11-DICHLOROETHANE	5.899	63	5560	0.84 µg/L	95
17) VINYL ACETATE	6.122	43	19435	3.21 µg/L #	91
18) 2-BUTANONE	7.168	43	9920m	5.28 µg/L	
19) CIS12DICHLOROETHENE	6.508	96	2523	0.61 µg/L	91
20) 22-DICHLOROPROPANE	6.630	77	3992	0.81 µg/L	98
21) CHLOROFORM	6.802	83	10773	1.21 µg/L	99
22) BROMOCHLOROMETHANE	6.741	49	3145m	0.88 µg/L	
25) TETRAHYDROFURAN	7.046	42	1047	1.11 µg/L #	75
26) 111-TRICHLOROETHANE	7.087	97	5900	0.80 µg/L	91
27) 11-DICHLOROPROPENE	7.229	75	2785	0.62 µg/L	96
28) 12-DICHLOROETHANE	7.787	62	6039	0.88 µg/L #	97
29) CARBONTETRACHLORIDE	7.015	117	4951	0.69 µg/L #	82
30) BENZENE	7.543	78	12442	0.85 µg/L #	81
31) TRICHLOROETHENE	8.284	132	3426	0.82 µg/L #	68
32) 12-DICHLOROPROPANE	9.005	63	2255	0.63 µg/L #	85
33) DIBROMOMETHANE	8.894	174	3016	0.91 µg/L	96
34) BROMODICLMETHANE	9.066	83	5019	0.76 µg/L	96
35) 2-CLETHYLVINYLETHER	9.858	63	3529m	4.13 µg/L	
36) EPICHLOROHYDRIN	10.386	57	7688	20.19 µg/L	94
37) 4METHYL-2-PENTANONE	10.934	43	13002	2.83 µg/L #	87
38) CIS13DICLPROPENE	10.000	75	2974	N.D.	
40) TOLUENE	10.376	91	11158	0.68 µg/L	92
41) TRANS13DICLPROPENE	11.036	75	3120	0.65 µg/L	86
42) 112-TRICHLOROETHANE	11.300	97	3855	0.88 µg/L	94
43) 2-HEXANONE	12.386	43	6993	2.08 µg/L #	90
44) 13-DICHLOROPROPANE	11.787	76	3926	0.58 µg/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:21:30 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

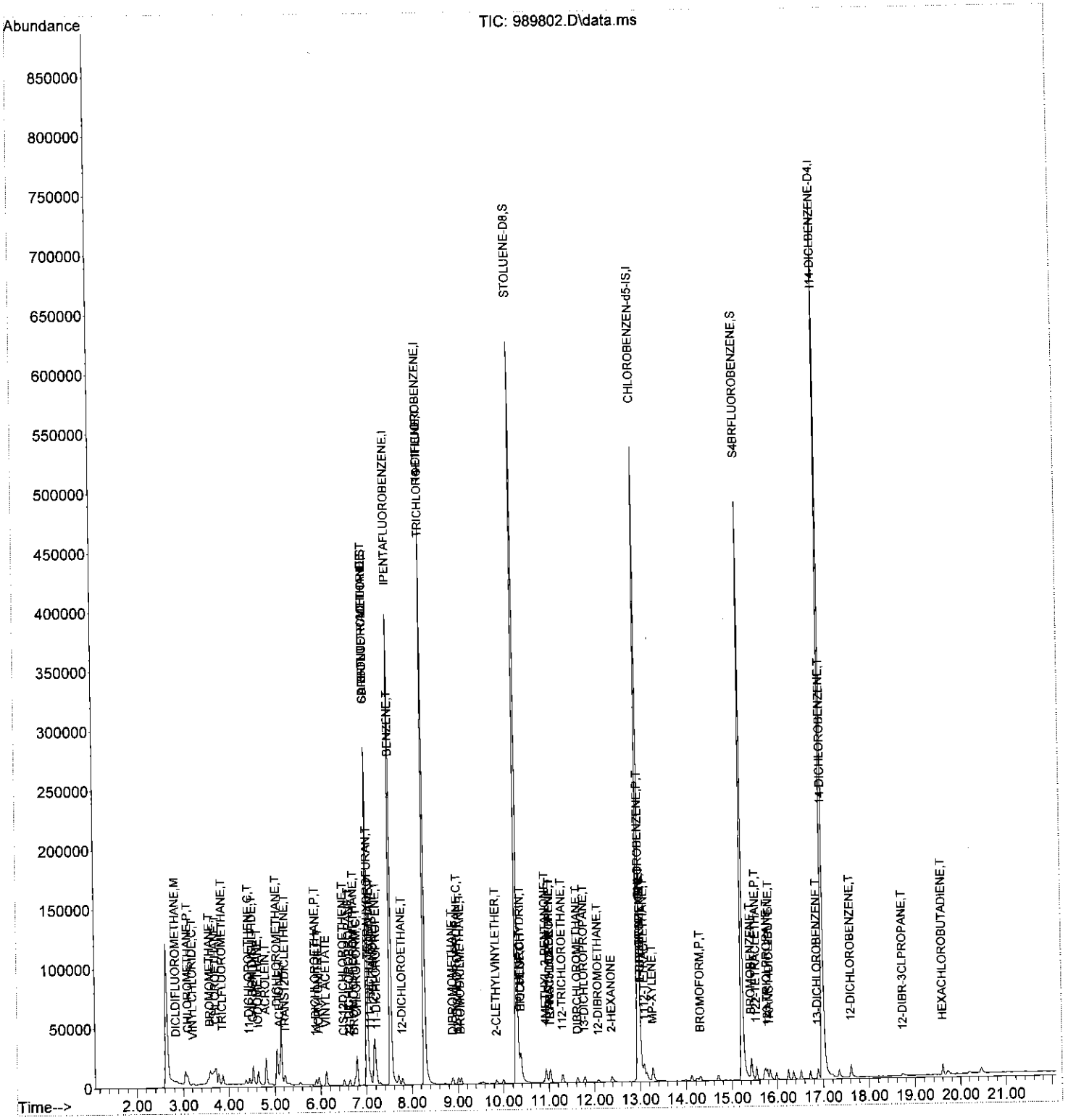
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.635	129	3837	0.72 µg/L	96
46) TETRACHLOROETHENE	11.036	166	3258	0.67 µg/L	89
47) 12-DIBROMOETHANE	12.091	107	2926	0.73 µg/L #	97
49) CHLOROBENZENE	12.995	112	9834	0.83 µg/L #	44
50) 1-CHLOROHEXANE	13.015	91	14052m	6.85 µg/L	
51) 1112-TETRACLETHANE	13.096	131	4180	0.81 µg/L #	46
52) ETHYLBENZENE	13.015	91	13132	0.69 µg/L	82
53) MP-XYLENE	13.279	91	11434	0.79 µg/L	91
54) STYRENE	14.244	104	3286	N.D.	
55) O-XYLENE	14.122	91	4808	N.D.	
56) BROMOFORM	14.304	173	2992	0.75 µg/L	96
57) 1122-TETRACLETHANE	15.533	83	6549	0.90 µg/L	97
58) ISOPROPYL BENZENE	14.700	105	4979	N.D.	
60) 123-TRICLPROPANE	15.776	110	1788	0.77 µg/L	91
61) TRANS14DICL2BUTENE	15.827	53	3142	2.82 µg/L #	80
62) BROMOBENZENE	15.421	77	6108	0.61 µg/L	91
63) N-PROPYLBENZENE	15.431	91	9660	N.D.	
64) 2-CHLOROTOLUENE	15.705	91	7568	N.D.	
65) 4-CHLOROTOLUENE	15.980	91	6079	N.D.	
66) 135TRIMETHYLBENZENE	15.736	105	5437	N.D.	
67) TERT-BUTYLBENZENE	16.243	119	4388	N.D.	
68) 124TRIMETHYLBENZENE	16.355	105	5454	N.D.	
69) SEC-BUTYLBENZENE	16.518	105	6558	N.D.	
70) 13-DICHLOROBENZENE	16.883	146	5433	0.52 µg/L	96
72) 4-ISOPROPYLTOLUENE	16.721	119	5059	N.D.	
73) 14-DICHLOROBENZENE	17.005	146	10855	1.01 µg/L #	1
74) 12-DICHLOROBENZENE	17.614	146	6529	0.62 µg/L	97
75) N-BUTYLBENZENE	17.350	91	5535	N.D.	
76) 12-DIBR-3CLPROPANE	18.741	157	855	0.51 µg/L	93
77) 124-TRICLBENZENE	19.715	180	2902	N.D.	
78) NAPHTHALENE	20.193	128	5520	N.D.	
79) HEXACHLOROBUTADIENE	19.604	225	2651	0.82 µg/L	94
80) 123-TRICLBENZENE	20.456	182	3398	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989802.D
Acq On : 6 Jun 2018 12:17 pm
Operator : NIVA
Sample : MDL/2879641
Misc : RUN199898
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 08 11:21:30 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



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989803.D
Acq On : 6 Jun 2018 12:44 pm
Operator : NIVA
Sample : ICV/2879643
Misc : RUN199898
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 11:26:11 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Fri Jun 08 09:52:34 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	96	0.00
2	M	DICLDIFLUOROMETHANE	0.110	0.110	0.0	85	0.07
3	P,T	CHLOROMETHANE	0.214	0.182	15.0	90	0.07
4	C,T	VINYL CHLORIDE	0.183	0.174	4.9	82	0.07
5	T	BROMOMETHANE	0.173	0.141	18.5	80	0.07
6	T	CHLOROETHANE	0.139	0.117	15.8	75	0.06
7	T	TRICLFLUOROMETHANE	0.469	0.464	1.1	83	0.10
8	T	ACROLEIN	0.059	0.064#	-8.5	92	0.08
9	T	ACETONE	0.077	0.081#	-5.2	98	0.00
10	C,T	11-DICHLOROETHENE	0.302	0.275	8.9	78	0.08
11	T	IODOMETHANE	0.319	0.333	-4.4	88	0.07
12	T	CARBON DISULFIDE	0.480	0.451	6.0	80	0.07
13	T	ACRYLONITRILE	0.090	0.096#	-6.7	96	0.00
14	T	DICHLOROMETHANE	0.269	0.234	13.0	81	0.08
15	T	TRANS12DICLETHENE	0.236	0.220	6.8	82	0.08
16	P,T	11-DICHLOROETHANE	0.432	0.399	7.6	82	-0.03
17		VINYL ACETATE	0.398	0.437	-9.8	94	-0.01
18		2-BUTANONE	0.123	0.152	-23.6#	109	0.12
19	T	CIS12DICHLOROETHENE	0.273	0.221	19.0	74	0.11
20	T	22-DICHLOROPROPANE	0.322	0.348	-8.1	95	0.10
21	C,T	CHLOROFORM	0.584	0.558	4.5	86	0.11
22	T	BROMOCHLOROMETHANE	0.234	0.243	-3.8	92	0.00
23	I	I14-DIFLUOROBENZENE	1.000	1.000	0.0	96	0.00
24	S	SDIBRFLUOROMETHANE	0.449	0.456	-1.6	94	0.00
25	T	TETRAHYDROFURAN	0.044	0.041#	6.8	97	0.00
26	T	111-TRICHLOROETHANE	0.339	0.348	-2.7	86	-0.02
27	T	11-DICHLOROPROPENE	0.208	0.198	4.8	81	-0.02
28	T	12-DICHLOROETHANE	0.318	0.322	-1.3	90	0.00
29	T	CARBONTETRACHLORIDE	0.330	0.316	4.2	81	-0.02
30	T	BENZENE	0.674	0.639	5.2	83	-0.01
31	T	TRICHLOROETHENE	0.192	0.189	1.6	87	0.00
32	C,T	12-DICHLOROPROPANE	0.165	0.156	5.5	84	0.00
33	T	DIBROMOMETHANE	0.154	0.157	-1.9	94	0.00
34	T	BROMODICLMETHANE	0.303	0.303	0.0	86	0.00
35	T	2-CLETHYLVINYLETHER	0.039	0.049#	-25.6#	125	0.00
36	T	EPICHLOROHYDRIN	0.018	0.020#	-11.1	101	0.00
37	T	4METHYL-2-PENTANONE	0.213	0.236	-10.8	95	0.00
38	T	CIS13DICLPROPENE	0.295	0.268	9.2	89	0.00
39	S	STOLUENE-D8	1.256	1.303	-3.7	95	0.00
40	C,T	TOLUENE	0.756	0.756	0.0	85	0.00
41	T	TRANS13DICLPROPENE	0.222	0.248	-11.7	102	0.01
42	T	112-TRICHLOROETHANE	0.202	0.207	-2.5	90	0.02
43		2-HEXANONE	0.156	0.169	-8.3	98	0.06
44	T	13-DICHLOROPROPANE	0.310	0.305	1.6	89	0.01

45	T	DIBRCHLOROMETHANE	0.247	0.248	-0.4	91	0.01
46	T	TETRACHLOROETHENE	0.226	0.232	-2.7	86	0.00
47	T	12-DIBROMOETHANE	0.186	0.191	-2.7	93	0.03
48	I	CHLOROBENZEN-d5-IS	1.000	1.000	0.0	97	0.00
49	P,T	CHLOROBENZENE	0.523	0.498	4.8	89	0.00
50		1-CHLOROHEXANE	0.107	0.101	5.6	80	-0.02
51	T	1112-TETRACLETHANE	0.226	0.209	7.5	90	0.00
52	C,T	ETHYLBENZENE	0.832	0.771	7.3	84	0.00
53	T	MP-XYLENE	0.639	0.607	5.0	86	0.00
54	T	STYRENE	0.539	0.432	19.9	86	0.03
55	T	O-XYLENE	0.616	0.551	10.6	92	0.02
56	P,T	BROMOFORM	0.176	0.174	1.1	96	0.02
57	P,T	1122-TETRACLETHANE	0.318	0.312	1.9	93	0.07
58	T	ISOPROPYL BENZENE	0.834	0.689	17.4	89	0.04
59	S	S4BRFLUOROBENZENE	0.513	0.511	0.4	99	0.05
60	T	123-TRICLPROPANE	0.102	0.107	-4.9	99	0.07
61	T	TRANS14DICL2BUTENE	0.049	0.055#	-12.2	99	0.07
62	T	BROMOBENZENE	0.437	0.423	3.2	88	0.06
63	T	N-PROPYLBENZENE	1.006	0.941	6.5	85	0.06
64	T	2-CHLOROTOLUENE	0.714	0.685	4.1	88	0.07
65	T	4-CHLOROTOLUENE	0.657	0.579	11.9	82	0.07
66	T	135TRIMETHYLBENZENE	0.762	0.742	2.6	88	0.07
67	T	TERT-BUTYLBENZENE	0.594	0.563	5.2	81	0.08
68	T	124TRIMETHYLBENZENE	0.758	0.778	-2.6	89	0.00
69	T	SEC-BUTYLBENZENE	0.918	0.867	5.6	86	0.09
70	T	13-DICHLOROBENZENE	0.462	0.469	-1.5	93	0.00
71	I	I14-DICLBENZENE-D4	1.000	1.000	0.0	101	-0.16
72	T	4-ISOPROPYLTOLUENE	1.235	1.083	12.3	87	-0.16
73	T	14-DICHLOROBENZENE	0.777	0.729	6.2	93	-0.16
74	T	12-DICHLOROBENZENE	0.768	0.746	2.9	94	-0.17
75	T	N-BUTYLBENZENE	1.112	0.949	14.7	88	-0.16
76	T	12-DIBR-3CLPROPANE	0.121	0.108	10.7	106	-0.18
77		124-TRICLBENZENE	0.549	0.441	19.7	97	-0.20
78	T	NAPHTHALENE	1.399	1.277	8.7	111	-0.21
79	T	HEXACHLOROBUTADIENE	0.235	0.222	5.5	94	-0.18
80		123-TRICLBENZENE	0.502	0.442	12.0	95	-0.21

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

8260VOC-JUNE-LIQ-18.M Fri Jun 08 15:32:57 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989803.D
Acq On : 6 Jun 2018 12:44 pm
Operator : NIVA
Sample : ICV/2879643
Misc : RUN199898
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 11:26:11 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Fri Jun 08 09:52:34 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.513	168	321231	20.00	µg/L	0.00
23) I14-DIFLUOROBENZENE	8.264	114	448021	20.00	µg/L	0.00
48) CHLOROBENZEN-d5-IS	12.944	117	529850	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.964	152	358708	20.00	µg/L	-0.16
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.005	111	204085	20.30	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.50%			
39) STOLUENE-D8	10.274	98	583892	20.74	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.70%			
59) S4BRFLUOROBENZENE	15.198	95	270792	19.94	µg/L	0.05
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.70%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.843	85	35439	20.00	µg/L	99
3) CHLOROMETHANE	3.097	50	58476m	17.05	µg/L	
4) VINYL CHLORIDE	3.211	62	56054	19.10	µg/L	98
5) BROMOMETHANE	3.584	94	45149m	16.23	µg/L	
6) CHLOROETHANE	3.706	64	37579m	16.84	µg/L	
7) TRICLFLUOROMETHANE	3.858	101	149131	19.80	µg/L	99
8) ACROLEIN	4.792	56	510853	536.05	µg/L	99
9) ACETONE	5.097	43	130732	106.26	µg/L #	93
10) 11-DICHLOROETHENE	4.437	61	88333	18.20	µg/L	100
11) IODOMETHANE	4.620	142	534279	104.31	µg/L	98
12) CARBON DISULFIDE	4.518	76	724368	93.88	µg/L	99
13) ACRYLONITRILE	5.939	53	154601	106.51	µg/L	97
14) DICHLOROMETHANE	5.046	84	75084	17.37	µg/L #	86
15) TRANS12DICLETHENE	5.219	96	70790	18.70	µg/L	93
16) 11-DICHLOROETHANE	5.879	63	128110	18.47	µg/L	96
17) VINYL ACETATE	6.102	43	702544	110.04	µg/L	97
18) 2-BUTANONE	7.137	43	244463m	123.47	µg/L	
19) CIS12DICHLOROETHENE	6.498	96	70843	16.18	µg/L	94
20) 22-DICHLOROPROPANE	6.620	77	111812	21.62	µg/L	98
21) CHLOROFORM	6.782	83	179197	19.11	µg/L	100
22) BROMOCHLOROMETHANE	6.731	49	77929	20.75	µg/L	85
25) TETRAHYDROFURAN	7.026	42	18294	18.68	µg/L #	91
26) 111-TRICHLOROETHANE	7.066	97	155791	20.54	µg/L	99
27) 11-DICHLOROPROPENE	7.208	75	88880	19.12	µg/L	94
28) 12-DICHLOROETHANE	7.767	62	144048	20.21	µg/L	99
29) CARBONTETRACHLORIDE	6.995	117	141389	19.14	µg/L #	94
30) BENZENE	7.523	78	286456	18.98	µg/L	97
31) TRICHLOROETHENE	8.264	132	84461	19.61	µg/L #	95
32) 12-DICHLOROPROPANE	8.985	63	69801	18.92	µg/L #	89
33) DIBROMOMETHANE	8.863	174	70503	20.49	µg/L	99
34) BROMODICLMETHANE	9.046	83	135638	19.96	µg/L	100
35) 2-CLETHYLVINYLETHER	9.828	63	110372	124.77	µg/L	92
36) EPICHLOROHYDRIN	10.355	57	226837m	575.65	µg/L	
37) 4METHYL-2-PENTANONE	10.904	43	527736	110.79	µg/L	94
38) CIS13DICLPROPENE	9.980	75	119935	18.14	µg/L	99
40) TOLUENE	10.355	91	338884	20.02	µg/L	98
41) TRANS13DICLPROPENE	11.005	75	111279m	22.39	µg/L	
42) 112-TRICHLOROETHANE	11.279	97	92617	20.49	µg/L	93
43) 2-HEXANONE	12.345	43	379196	108.81	µg/L	94
44) 13-DICHLOROPROPANE	11.756	76	136602	19.66	µg/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989803.D
Acq On : 6 Jun 2018 12:44 pm
Operator : NIVA
Sample : ICV/2879643
Misc : RUN199898
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 11:26:11 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Fri Jun 08 09:52:34 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

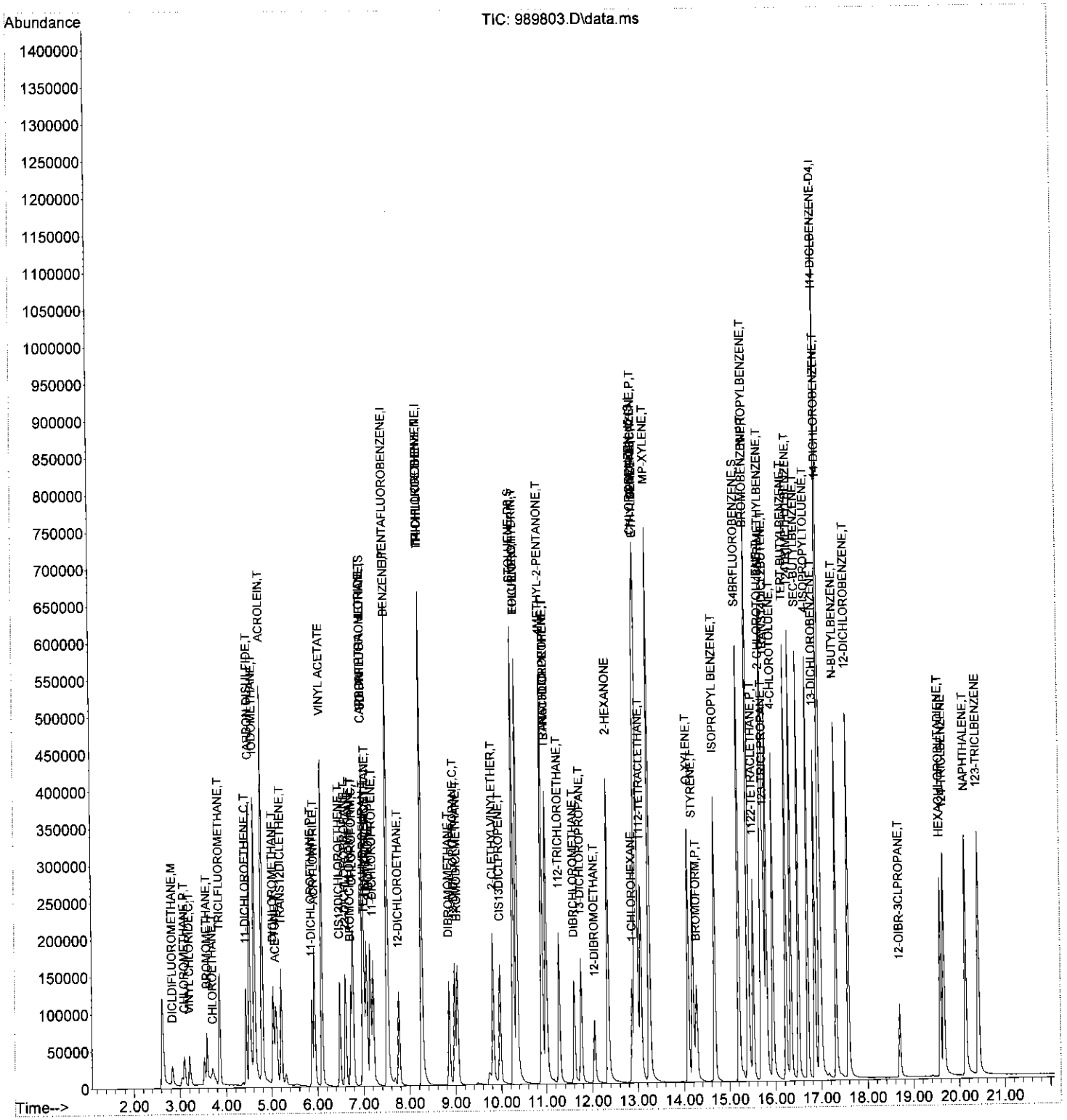
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.604	129	110986	20.06 µg/L	99
46) TETRACHLOROETHENE	11.005	166	103805	20.51 µg/L	93
47) 12-DIBROMOETHANE	12.061	107	85525	20.48 µg/L	99
49) CHLOROBENZENE	12.975	112	263977	19.06 µg/L	85
50) 1-CHLOROHEXANE	12.883	91	53705	20.04 µg/L #	53
51) 1112-TETRACLETHANE	13.066	131	110959	18.54 µg/L	96
52) ETHYLBENZENE	12.985	91	408716	18.54 µg/L	98
53) MP-XYLENE	13.249	91	642801	37.99 µg/L	94
54) STYRENE	14.193	104	229065	16.05 µg/L	96
55) O-XYLENE	14.091	91	291934	17.89 µg/L	95
56) BROMOFORM	14.274	173	92449	19.82 µg/L	99
57) 1122-TETRACLETHANE	15.513	83	165450	19.63 µg/L	98
58) ISOPROPYL BENZENE	14.680	105	365229m	16.53 µg/L	
60) 123-TRICLPROPANE	15.746	110	56940	21.01 µg/L	96
61) TRANS14DICL2BUTENE	15.797	53	144388	111.22 µg/L	85
62) BROMOBENZENE	15.391	77	223928	19.32 µg/L	88
63) N-PROPYLBENZENE	15.401	91	498848	18.72 µg/L	94
64) 2-CHLOROTOLUENE	15.685	91	362908m	19.17 µg/L	
65) 4-CHLOROTOLUENE	15.949	91	306616	17.63 µg/L	94
66) 135TRIMETHYLBENZENE	15.716	105	393333	19.48 µg/L	95
67) TERT-BUTYLBENZENE	16.223	119	298494	18.98 µg/L	92
68) 124TRIMETHYLBENZENE	16.335	105	412119	20.53 µg/L	99
69) SEC-BUTYLBENZENE	16.497	105	459375m	18.90 µg/L	
70) 13-DICHLOROBENZENE	16.863	146	248358	20.29 µg/L	99
72) 4-ISOPROPYLTOLUENE	16.711	119	388654	17.55 µg/L	95
73) 14-DICHLOROBENZENE	16.985	146	261345	18.75 µg/L	85
74) 12-DICHLOROBENZENE	17.584	146	267656	19.42 µg/L	98
75) N-BUTYLBENZENE	17.320	91	340447	17.06 µg/L	98
76) 12-DIBR-3CLPROPANE	18.700	157	38666	17.83 µg/L	98
77) 124-TRICLBENZENE	19.665	180	158201m	16.08 µg/L	
78) NAPHTHALENE	20.142	128	458098m	18.26 µg/L	
79) HEXACHLOROBUTADIENE	19.594	225	79729	18.92 µg/L	98
80) 123-TRICLBENZENE	20.416	182	158451	17.58 µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989803.D
Acq On : 6 Jun 2018 12:44 pm
Operator : NIVA
Sample : ICV/2879643
Misc : RUN199898
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 11:26:11 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Fri Jun 08 09:52:34 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989804.D
Acq On : 6 Jun 2018 1:10 pm
Operator : NIVA
Sample : 2863861
Misc : RUN199898
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 11:27:33 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	7.513	168	296751	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.264	114	420521	20.00 µg/L	0.00
48) CHLOROBENZEN-d5-IS	12.944	117	408495	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	16.974	152	238806	20.00 µg/L	-0.15
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.005	111	209831	22.24 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.20%		
39) STOLUENE-D8	10.274	98	511962	19.38 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.90%		
59) S4BRFLUOROBENZENE	15.208	95	195362	18.66 µg/L	0.06
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.30%		
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	3.594	94	824	N.D.	
6) CHLOROETHANE	3.493	64	574	N.D.	
7) TRICLFLUOROMETHANE	3.889	101	367	N.D.	
8) ACROLEIN	0.000		0	N.D. d	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	4.447	61	72	N.D.	
11) IODOMETHANE	4.630	142	1082	N.D.	
12) CARBON DISULFIDE	0.000		0	N.D. d	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.046	84	1590	N.D.	
15) TRANS12DICLETHENE	5.127	96	476	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.112	43	68	N.D.	
18) 2-BUTANONE	7.168	43	419	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	6.528	77	66	N.D.	
21) CHLOROFORM	6.782	83	1446	N.D.	
22) BROMOCHLOROMETHANE	6.782	49	1499	N.D.	
25) TETRAHYDROFURAN	6.965	42	242	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	7.198	75	130	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	7.005	117	144	N.D.	
30) BENZENE	7.533	78	609	N.D.	
31) TRICHLOROETHENE	8.264	132	136	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	10.873	43	146	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.355	91	1269	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	12.406	43	392	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989804.D
Acq On : 6 Jun 2018 1:10 pm
Operator : NIVA
Sample : 2863861
Misc : RUN199898
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 11:27:33 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

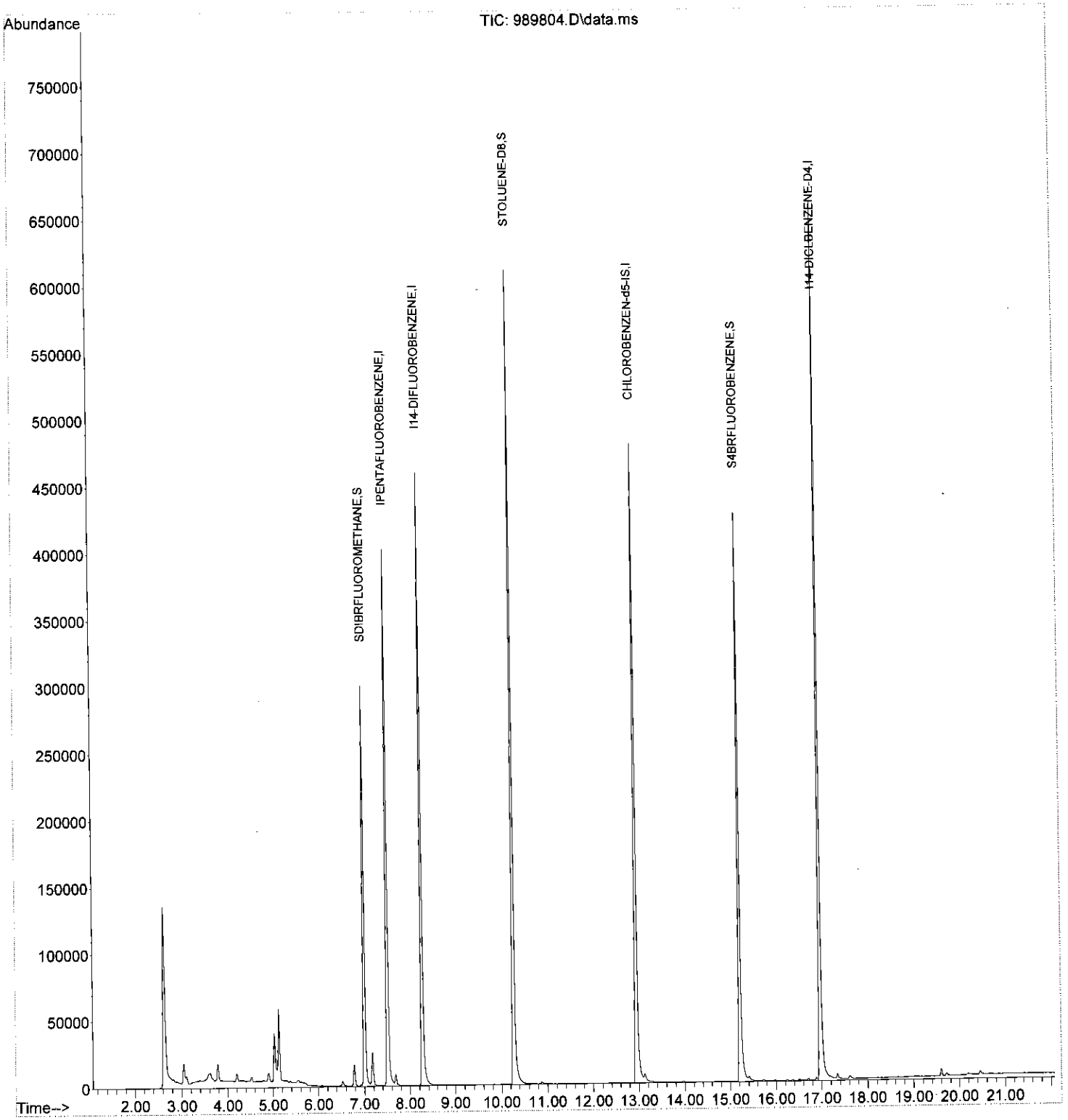
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.
46) TETRACHLOROETHENE	11.015	166	300	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	12.974	112	353	N.D.
50) 1-CHLOROHEXANE	0.000		0	N.D.
51) 1112-TETRACLETHANE	0.000		0	N.D.
52) ETHYLBENZENE	12.964	91	1095	N.D.
53) MP-XYLENE	13.269	91	1128	N.D.
54) STYRENE	14.233	104	61	N.D.
55) O-XYLENE	14.091	91	252	N.D.
56) BROMOFORM	0.000		0	N.D.
57) 1122-TETRACLETHANE	15.523	83	77	N.D.
58) ISOPROPYL BENZENE	14.690	105	434	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	0.000		0	N.D.
62) BROMOBENZENE	15.411	77	984	N.D.
63) N-PROPYLBENZENE	15.421	91	2220	N.D.
64) 2-CHLOROTOLUENE	15.705	91	698	N.D.
65) 4-CHLOROTOLUENE	0.000		0	N.D.
66) 135TRIMETHYLBENZENE	15.736	105	807	N.D.
67) TERT-BUTYLBENZENE	16.233	119	421	N.D.
68) 124TRIMETHYLBENZENE	16.355	105	1111	N.D.
69) SEC-BUTYLBENZENE	16.355	105	1015	N.D.
70) 13-DICHLOROBENZENE	16.883	146	1575	N.D.
72) 4-ISOPROPYLTOLUENE	16.710	119	1372	N.D.
73) 14-DICHLOROBENZENE	16.995	146	3974	N.D.
74) 12-DICHLOROBENZENE	17.614	146	1552	N.D.
75) N-BUTYLBENZENE	17.340	91	3190	N.D.
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.
77) 124-TRICLBENZENE	19.705	180	583	N.D.
78) NAPHTHALENE	20.203	128	3340	N.D.
79) HEXACHLOROBUTADIENE	0.000		0	N.D. d
80) 123-TRICLBENZENE	20.456	182	2155	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989804.D
Acq On : 6 Jun 2018 1:10 pm
Operator : NIVA
Sample : 2863861
Misc : RUN199898
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 08 11:27:33 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\199898-899-900\
Data File : 989805.D
Acq On : 6 Jun 2018 1:37 pm
Operator : NIVA
Sample : 2863846
Misc : RUN199898
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 11:28:14 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	7.513	168	278796	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.264	114	406916	20.00 µg/L	0.00
48) CHLOROBENZEN-d5-IS	12.944	117	396609	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	16.964	152	228844	20.00 µg/L	-0.16
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.005	111	188663	20.67 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.35%		
39) STOLUENE-D8	10.274	98	504000	19.72 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.60%		
59) S4BRFLUOROBENZENE	15.208	95	189259	18.61 µg/L	0.06
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.05%		
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	3.594	94	468	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	3.889	101	139	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	4.630	142	571	N.D.	
12) CARBON DISULFIDE	4.528	76	2379	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.046	84	1293	N.D.	
15) TRANS12DICLETHENE	5.137	96	981	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	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	6.782	83	1076	N.D.	
22) BROMOCHLOROMETHANE	6.782	49	1173	N.D.	
25) TETRAHYDROFURAN	6.975	42	72	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	6.924	117	456	N.D.	
30) BENZENE	7.513	78	63	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	10.356	91	818	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\199898-899-900\
Data File : 989805.D
Acq On : 6 Jun 2018 1:37 pm
Operator : NIVA
Sample : 2863846
Misc : RUN199898
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 11:28:14 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

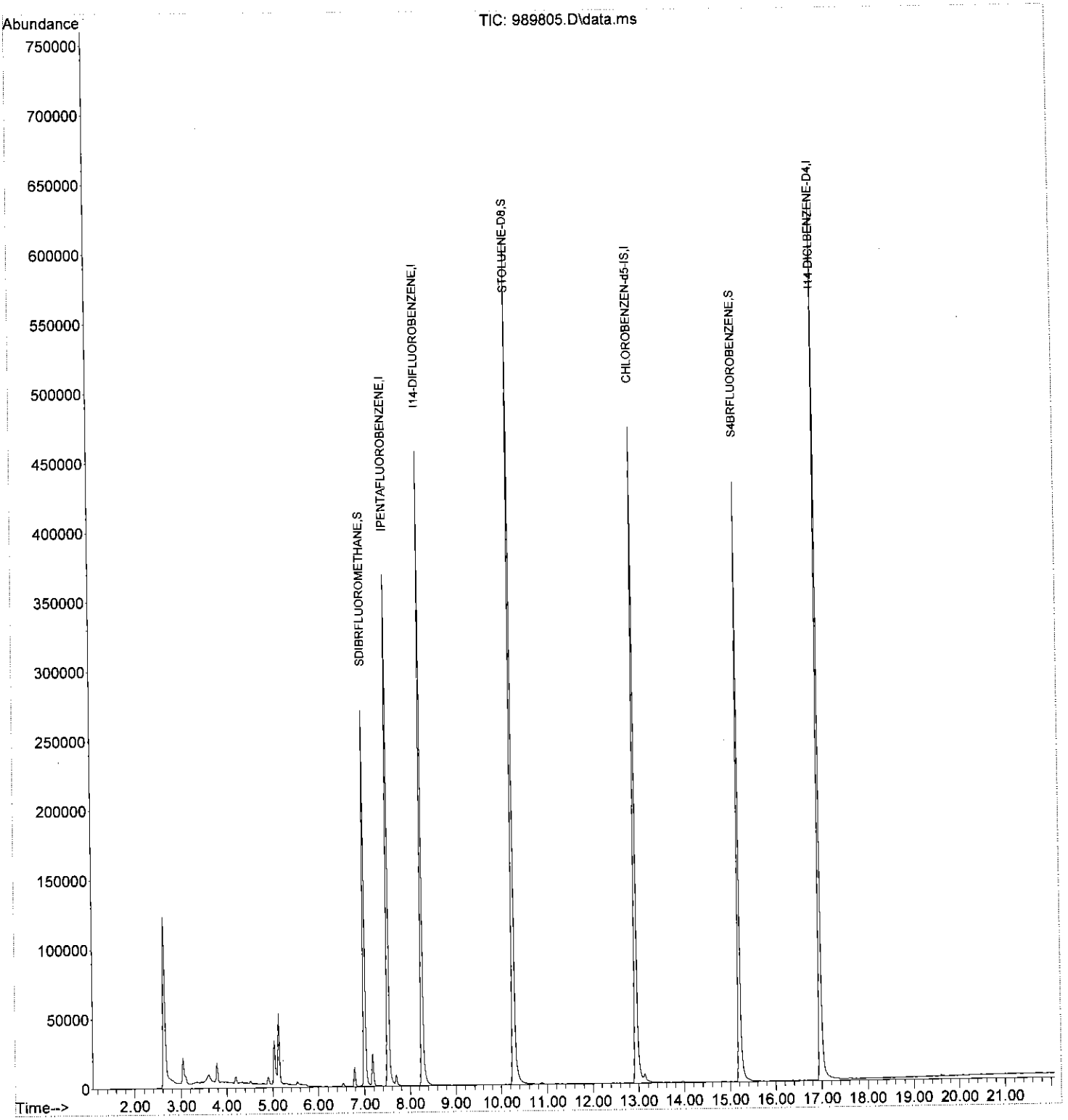
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	12.985	112	245	N.D.	
50) 1-CHLOROHEXANE	12.944	91	642	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.944	91	1076	N.D.	
53) MP-XYLENE	13.269	91	240	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	15.218	77	839	N.D.	
63) N-PROPYLBENZENE	15.421	91	652	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	15.726	105	62	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	16.355	105	152	N.D.	
69) SEC-BUTYLBENZENE	16.355	105	152	N.D.	
70) 13-DICHLOROBENZENE	16.883	146	200	N.D.	
72) 4-ISOPROPYLTOLUENE	16.711	119	306	N.D.	
73) 14-DICHLOROBENZENE	16.985	146	1097	N.D.	
74) 12-DICHLOROBENZENE	17.604	146	153	N.D.	
75) N-BUTYLBENZENE	17.340	91	592	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	20.254	128	134	N.D.	
79) HEXACHLOROBUTADIENE	19.594	225	440	N.D.	
80) 123-TRICLBENZENE	20.457	182	137	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989805.D
Acq On : 6 Jun 2018 1:37 pm
Operator : NIVA
Sample : 2863846
Misc : RUN199898
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 08 11:28:14 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\199898-899-900\
Data File : 989806.D
Acq On : 6 Jun 2018 2:04 pm
Operator : NIVA
Sample : 2863847
Misc : RUN199898
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 11:28:57 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	7.503	168	267191	20.00 µg/L	-0.01
23) I14-DIFLUOROBENZENE	8.254	114	393165	20.00 µg/L	-0.01
48) CHLOROBENZEN-d5-IS	12.934	117	387701	20.00 µg/L	-0.01
71) I14-DICLBENZENE-D4	16.964	152	228358	20.00 µg/L	-0.16
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	6.995	111	183574	20.81 µg/L	-0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.05%		
39) STOLUENE-D8	10.264	98	489720	19.83 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.15%		
59) S4BRFLUOROBENZENE	15.198	95	186550	18.77 µg/L	0.05
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	3.584	94	355	N.D.	
6) CHLOROETHANE	3.757	64	872	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	4.630	142	264	N.D.	
12) CARBON DISULFIDE	4.518	76	1575	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.046	84	341	N.D.	
15) TRANS12DICLETHENE	5.127	96	501	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.503	43	431	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.772	83	833	N.D.	
22) BROMOCHLOROMETHANE	6.772	49	1181	N.D.	
25) TETRAHYDROFURAN	6.954	42	82	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	6.904	117	501	N.D.	
30) BENZENE	7.513	78	242	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	10.903	43	193	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.355	91	714	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	12.376	43	67	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989806.D
Acq On : 6 Jun 2018 2:04 pm
Operator : NIVA
Sample : 2863847
Misc : RUN199898
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 11:28:57 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

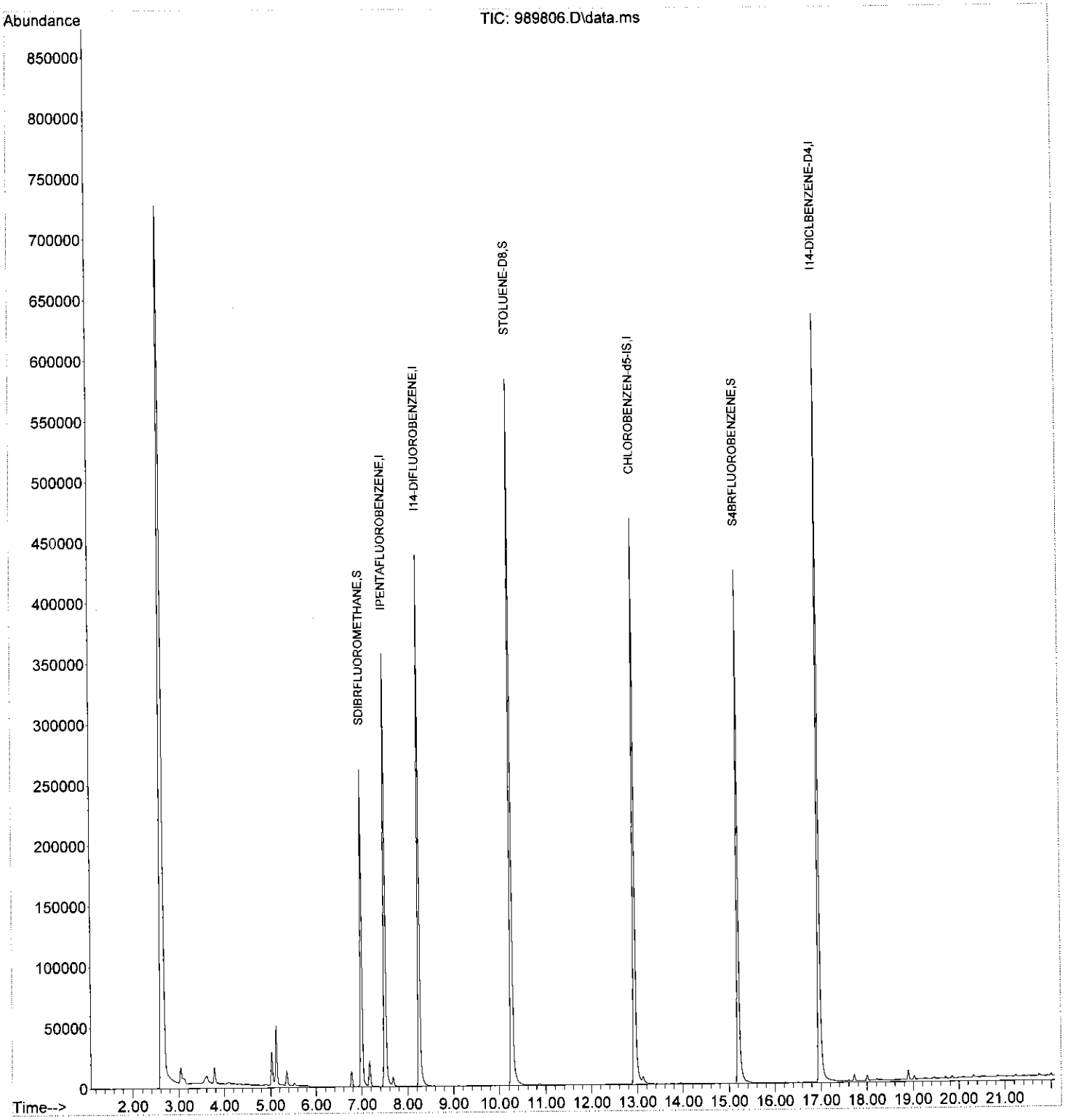
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.934	91	746	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.934	91	1148	N.D.	
53) MP-XYLENE	13.269	91	62	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	15.198	77	813	N.D.	
63) N-PROPYLBENZENE	15.411	91	328	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	16.223	119	276	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	16.710	119	146	N.D.	
73) 14-DICHLOROBENZENE	16.984	146	658	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.340	91	252	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	20.081	128	62	N.D.	
79) HEXACHLOROBUTADIENE	19.593	225	284	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\199898-899-900\
Data File : 989806.D
Acq On : 6 Jun 2018 2:04 pm
Operator : NIVA
Sample : 2863847
Misc : RUN199898
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 11:28:57 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\199898-899-900\
Data File : 989807.D
Acq On : 6 Jun 2018 2:30 pm
Operator : NIVA
Sample : 2863848
Misc : RUN199898
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 11:29:36 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	7.513	168	298540	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.264	114	417219	20.00 µg/L	0.00
48) CHLOROBENZEN-d5-IS	12.944	117	412279	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	16.964	152	248578	20.00 µg/L	-0.16
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.005	111	205103	21.91 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.55%		
39) STOLUENE-D8	10.264	98	518697	19.79 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.95%		
59) S4BRFLUOROBENZENE	15.208	95	204674	19.37 µg/L	0.06
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.85%		

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	3.594	94	379	N.D.
6) CHLOROETHANE	3.411	64	379	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	4.630	142	406	N.D.
12) CARBON DISULFIDE	4.528	76	1510	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	5.046	84	269	N.D.
15) TRANS12DICLETHENE	5.137	96	1233	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	7.168	43	64	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.772	83	797	N.D.
22) BROMOCHLOROMETHANE	6.772	49	1324	N.D.
25) TETRAHYDROFURAN	6.965	42	222	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	6.914	117	501	N.D.
30) BENZENE	7.523	78	480	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	10.863	43	74	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.
40) TOLUENE	10.355	91	829	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\199898-899-900\
Data File : 989807.D
Acq On : 6 Jun 2018 2:30 pm
Operator : NIVA
Sample : 2863848
Misc : RUN199898
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 11:29:36 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

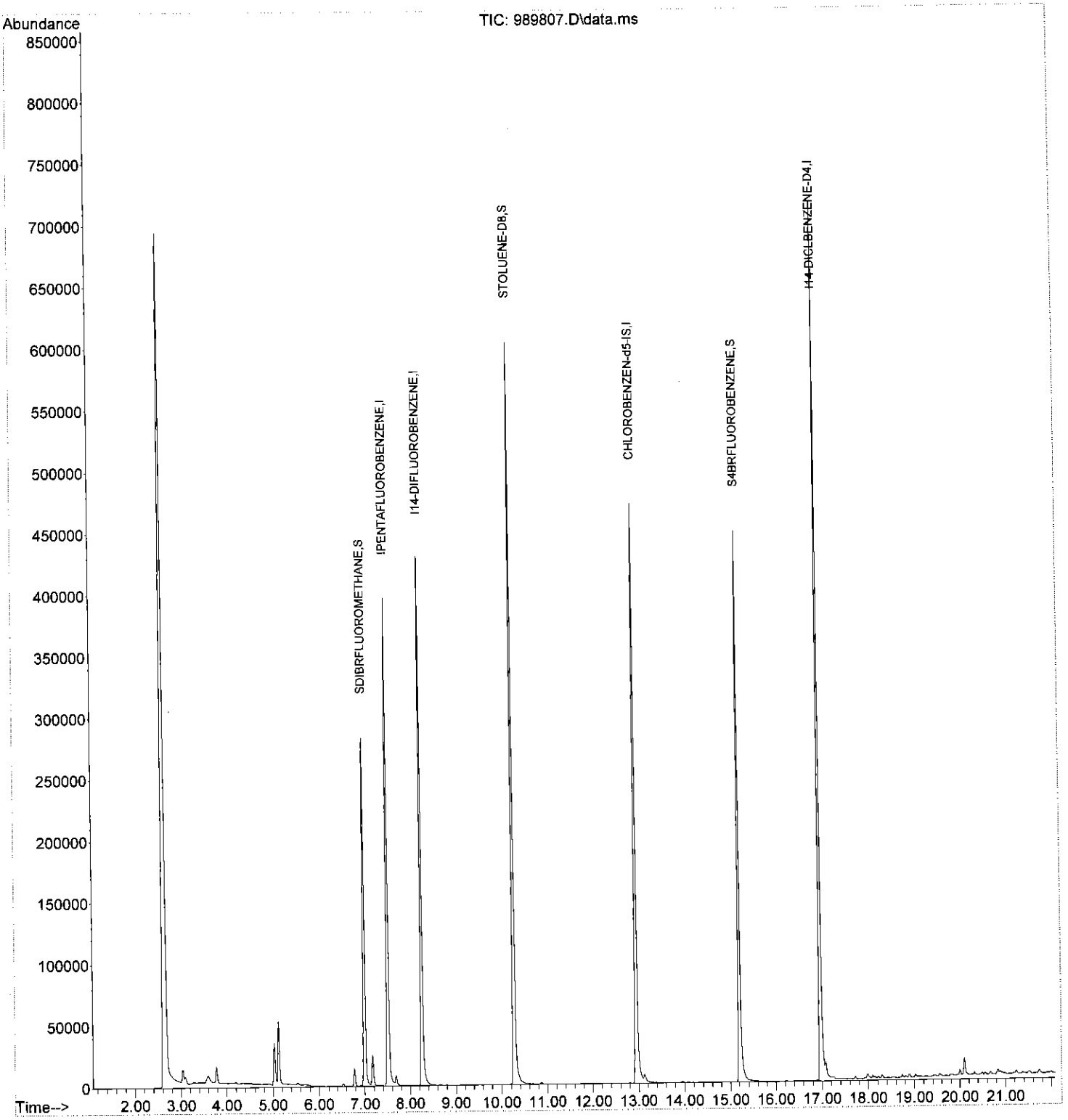
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.944	91	839	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.944	91	1054	N.D.	
53) MP-XYLENE	13.269	91	78	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	88	N.D.	
63) N-PROPYLBENZENE	15.421	91	219	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	16.223	119	273	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	16.710	119	202	N.D.	
73) 14-DICHLOROBENZENE	16.985	146	588	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.340	91	354	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	20.101	128	1883	N.D.	
79) HEXACHLOROBUTADIENE	19.583	225	203	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\199898-899-900\
Data File : 989807.D
Acq On : 6 Jun 2018 2:30 pm
Operator : NIVA
Sample : 2863848
Misc : RUN199898
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 11:29:36 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\199898-899-900\
Data File : 989808.D
Acq On : 6 Jun 2018 2:57 pm
Operator : NIVA
Sample : 2863849
Misc : RUN199898
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 11:30:16 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	7.503	168	270826	20.00 µg/L	-0.01
23) I14-DIFLUOROBENZENE	8.254	114	394426	20.00 µg/L	-0.01
48) CHLOROBENZEN-d5-IS	12.944	117	388286	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	16.974	152	236845	20.00 µg/L	-0.15
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	6.995	111	180798	20.43 µg/L	-0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.15%		
39) STOLUENE-D8	10.264	98	488891	19.73 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.65%		
59) S4BRFLUOROBENZENE	15.208	95	188810	18.97 µg/L	0.06
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.85%		
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	3.584	94	507	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	4.630	142	161	N.D.	
12) CARBON DISULFIDE	4.518	76	1267	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.026	84	267	N.D.	
15) TRANS12DICLETHENE	5.137	96	455	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.148	43	211	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.762	83	716	N.D.	
22) BROMOCHLOROMETHANE	6.772	49	1164	N.D.	
25) TETRAHYDROFURAN	6.965	42	157	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	6.914	117	447	N.D.	
30) BENZENE	7.513	78	502	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	10.853	43	66	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.355	91	897	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\199898-899-900\
Data File : 989808.D
Acq On : 6 Jun 2018 2:57 pm
Operator : NIVA
Sample : 2863849
Misc : RUN199898
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 11:30:16 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

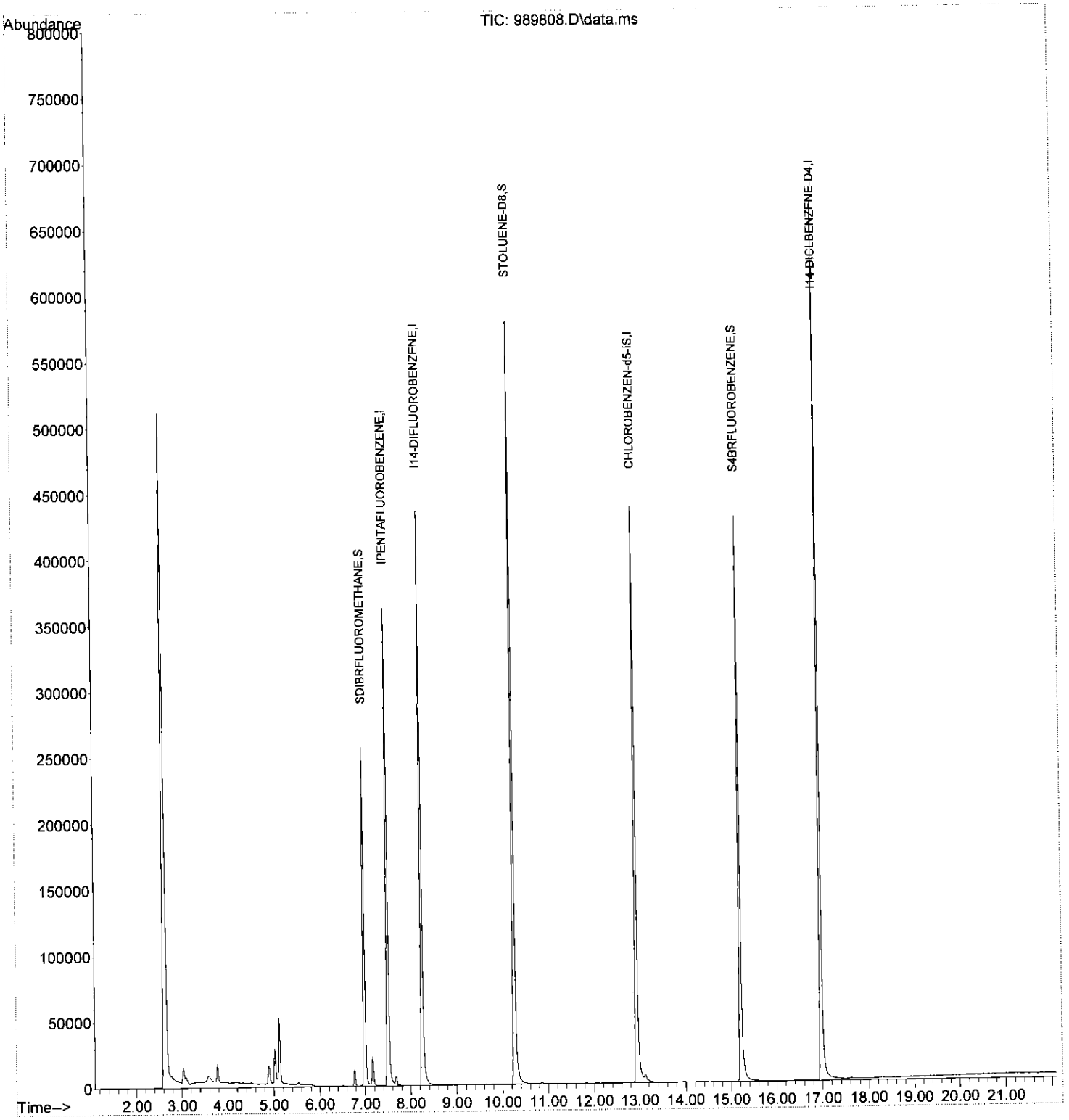
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.934	91	740	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.934	91	1186	N.D.	
53) MP-XYLENE	13.269	91	536	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	15.218	77	558	N.D.	
63) N-PROPYLBENZENE	15.411	91	227	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	16.711	119	66	N.D.	
73) 14-DICHLOROBENZENE	16.995	146	418	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.350	91	83	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	19.624	225	133	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

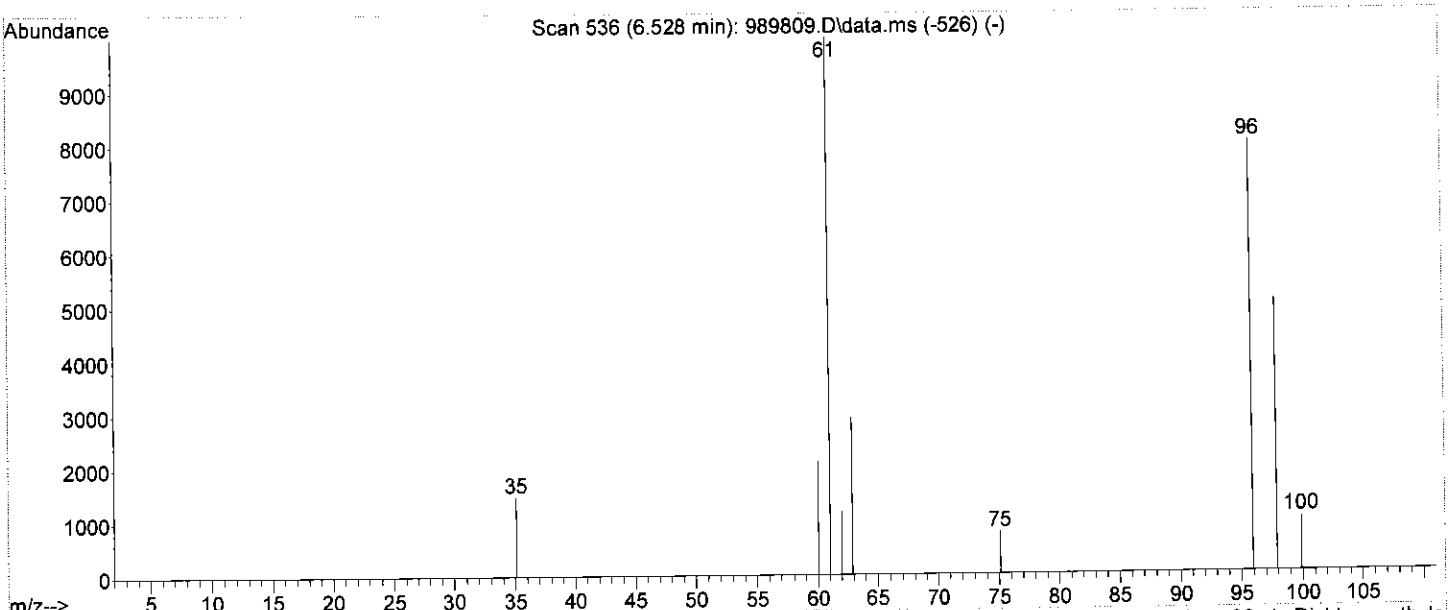
Quantitation Report (QT Reviewed)

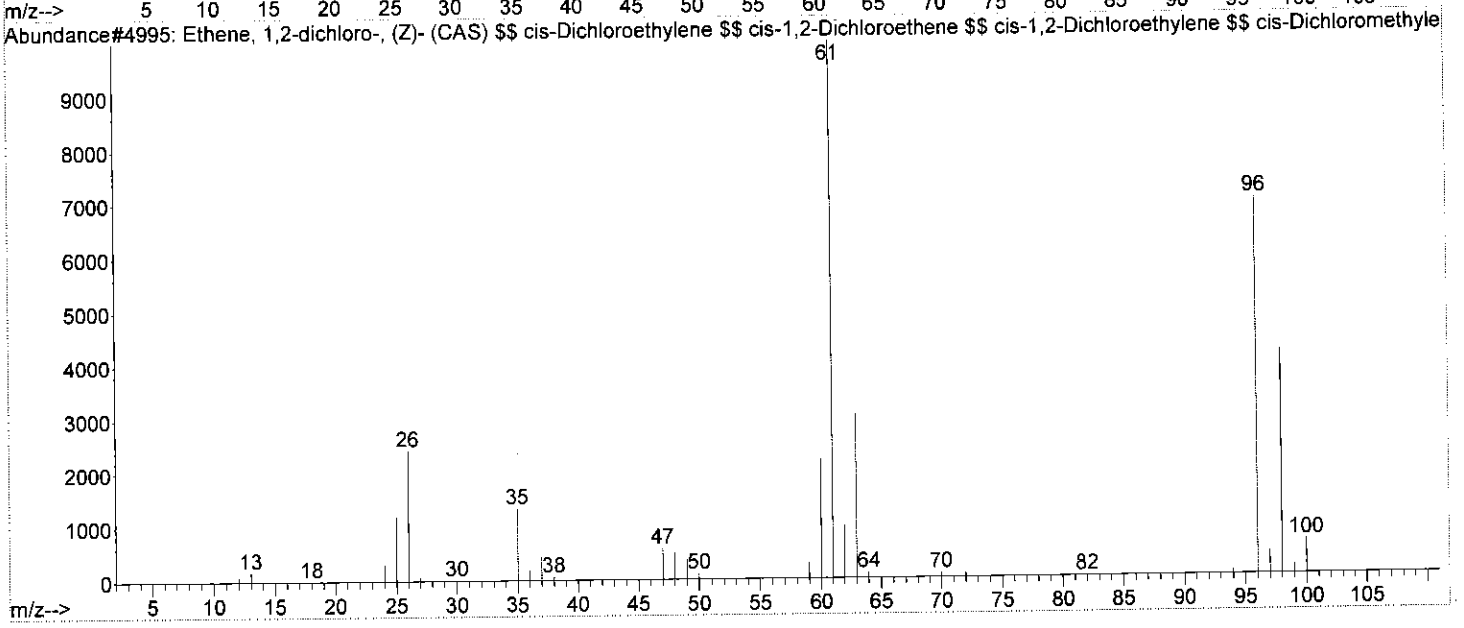
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989808.D
Acq On : 6 Jun 2018 2:57 pm
Operator : NIVA
Sample : 2863849
Misc : RUN199898
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 11:30:16 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



Library Searched : C:\Database\WILEY275.L
Quality : 91
ID : Ethene, 1,2-dichloro-, (Z)- (CAS) $$ cis-Dichloroethylene $$ cis-1,2-Dichloroethene $$ cis-1,2-Dichloroethylene $$ cis-Dichloromethylene $$ (Z)-1,2-Dichloroethylene $$ 1,2-cis-Dichloroethylene $$ cis-Di-1,2-Chloroethylene $$ Ethylene, 1,2-dichloro-, (Z)-





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989809.D
Acq On : 6 Jun 2018 3:23 pm
Operator : NIVA
Sample : 2863850
Misc : RUN199898
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 11:31:44 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	277925	20.00 µg/L	0.04
23) I14-DIFLUOROBENZENE	8.305	114	410558	20.00 µg/L	0.04
48) CHLOROBENZEN-d5-IS	12.995	117	400098	20.00 µg/L	0.05
71) I14-DICLBENZENE-D4	17.015	152	238951	20.00 µg/L	-0.11
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.036	111	191566	20.80 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.00%		
39) STOLUENE-D8	10.315	98	508684	19.72 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.60%		
59) S4BRFLUOROBENZENE	15.259	95	194167	18.93 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.65%		
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	404	N.D.	
6) CHLOROETHANE	4.000	64	599	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	4.467	61	258	N.D.	
11) IODOMETHANE	4.670	142	63	N.D.	
12) CARBON DISULFIDE	4.559	76	1056	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.066	84	398	N.D.	
15) TRANS12DICLETHENE	5.158	96	442	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.005	43	62	N.D.	
19) CIS12DICHLOROETHENE	6.528	96	2976	0.79 µg/L	94
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.802	83	568	N.D.	
22) BROMOCHLOROMETHANE	6.802	49	1251	N.D.	
25) TETRAHYDROFURAN	6.995	42	236	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	360	N.D.	
30) BENZENE	7.553	78	323	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D. 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	10.924	43	71	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.406	91	668	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\199898-899-900\
Data File : 989809.D
Acq On : 6 Jun 2018 3:23 pm
Operator : NIVA
Sample : 2863850
Misc : RUN199898
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 11:31:44 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

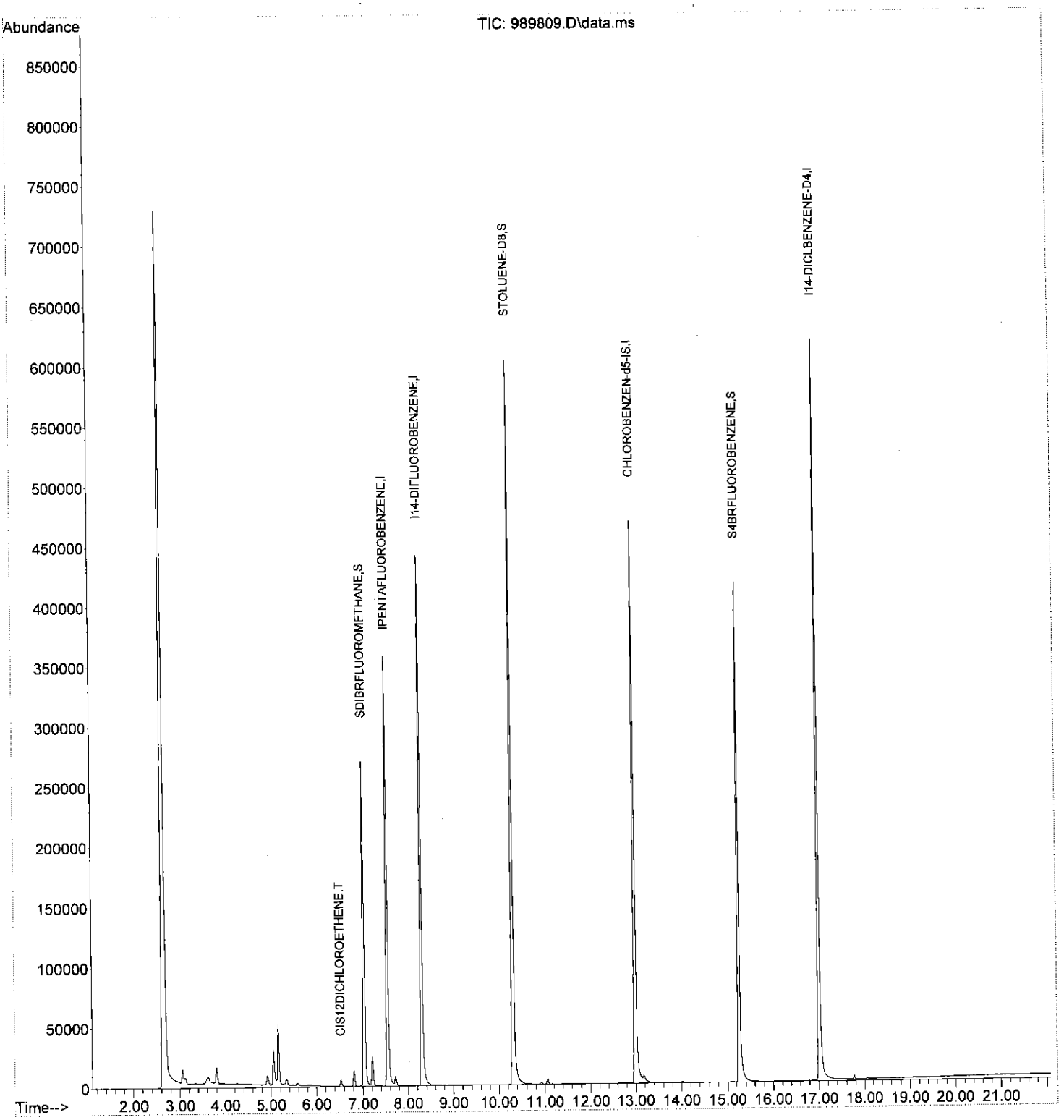
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	11.056	166	1883	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	12.985	91	742	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	12.985	91	815	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	15.259	77	946	N.D.	
63) N-PROPYLBENZENE	15.472	91	127	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	16.934	146	64	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.025	146	478	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\199898-899-900\
Data File : 989809.D
Acq On : 6 Jun 2018 3:23 pm
Operator : NIVA
Sample : 2863850
Misc : RUN199898
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 11:31:44 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\199898-899-900\
Data File : 989810.D
Acq On : 6 Jun 2018 3:49 pm
Operator : NIVA
Sample : 2863851
Misc : RUN199898
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 08 11:32:26 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	7.564	168	262295	20.00 µg/L	0.05
23) I14-DIFLUOROBENZENE	8.315	114	390436	20.00 µg/L	0.05
48) CHLOROBENZEN-d5-IS	13.015	117	384911	20.00 µg/L	0.07
71) I14-DICLBENZENE-D4	17.025	152	240125	20.00 µg/L	-0.10
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.056	111	184671	21.08 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.40%		
39) STOLUENE-D8	10.335	98	486486	19.83 µg/L	0.06
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.15%		
59) S4BRFLUOROBENZENE	15.269	95	190302	19.29 µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.45%		
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	3.625	94	459	N.D.	
6) CHLOROETHANE	3.889	64	452	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	4.569	76	1138	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.087	84	309	N.D.	
15) TRANS12DICLETHENE	5.178	96	795	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.021	43	128	N.D.	
18) 2-BUTANONE	7.564	43	358	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.823	83	737	N.D.	
22) BROMOCHLOROMETHANE	6.833	49	1155	N.D.	
25) TETRAHYDROFURAN	7.015	42	213	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	688	N.D.	
30) BENZENE	7.574	78	347	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	10.944	43	68	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.426	91	496	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\199898-899-900\
Data File : 989810.D
Acq On : 6 Jun 2018 3:49 pm
Operator : NIVA
Sample : 2863851
Misc : RUN199898
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 08 11:32:26 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

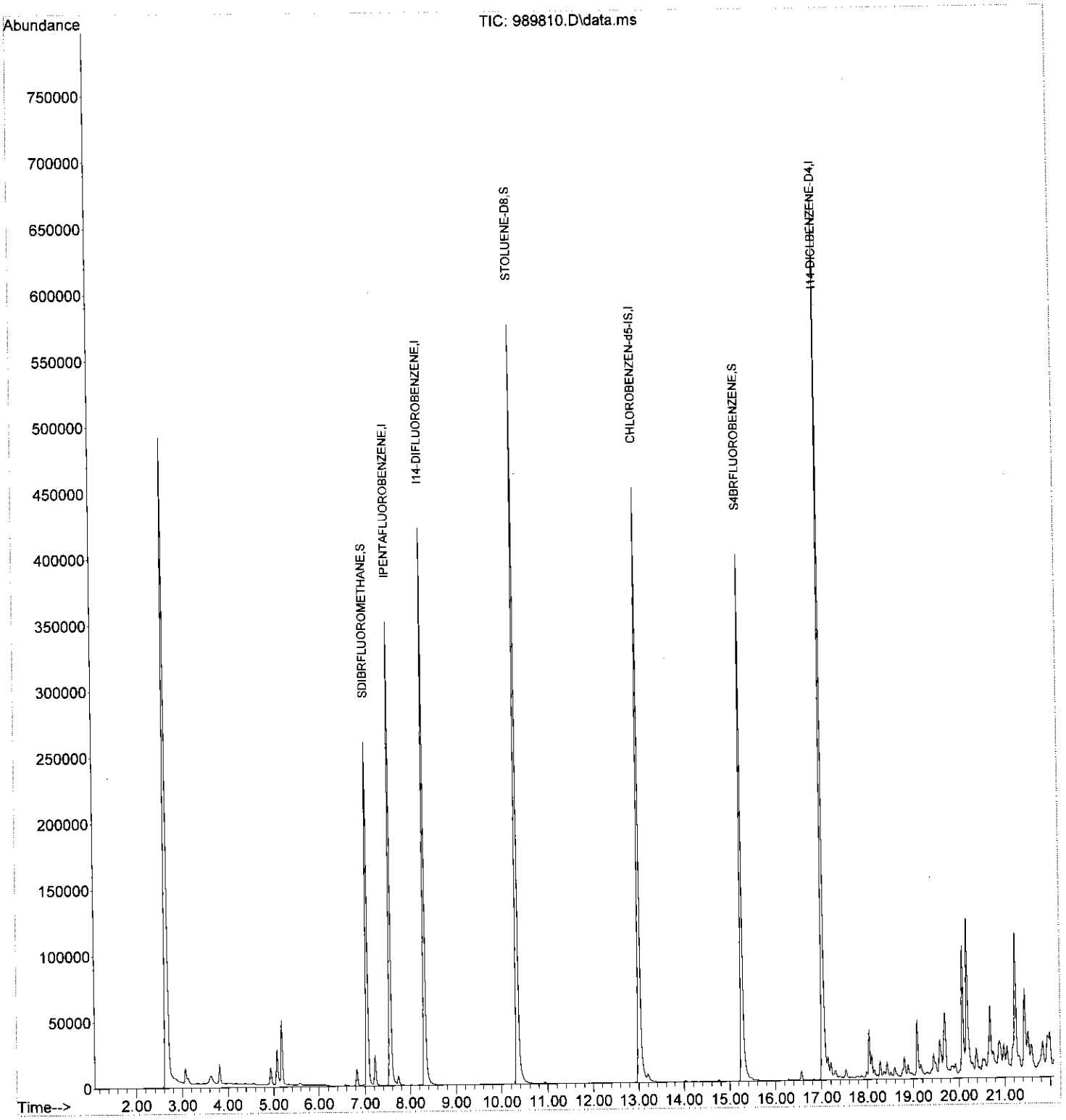
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.
46) TETRACHLOROETHENE	0.000		0	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	0.000		0	N.D.
50) 1-CHLOROHEXANE	13.015	91	758	N.D.
51) 1112-TETRACLETHANE	0.000		0	N.D.
52) ETHYLBENZENE	13.015	91	1111	N.D.
53) MP-XYLENE	13.340	91	227	N.D.
54) STYRENE	0.000		0	N.D.
55) O-XYLENE	14.162	91	361	N.D.
56) BROMOFORM	0.000		0	N.D.
57) 1122-TETRACLETHANE	15.320	83	62	N.D.
58) ISOPROPYL BENZENE	14.751	105	1798	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	0.000		0	N.D.
62) BROMOBENZENE	15.269	77	1220	N.D.
63) N-PROPYLBENZENE	15.482	91	1967	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	16.284	119	356	N.D.
68) 124TRIMETHYLBENZENE	0.000		0	N.D.
69) SEC-BUTYLBENZENE	16.568	105	4856	N.D.
70) 13-DICHLOROBENZENE	0.000		0	N.D.
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.
73) 14-DICHLOROBENZENE	17.045	146	327	N.D.
74) 12-DICHLOROBENZENE	0.000		0	N.D.
75) N-BUTYLBENZENE	17.299	91	1146	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. d
79) HEXACHLOROBUTADIENE	19.675	225	63	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\199898-899-900\
Data File : 989810.D
Acq On : 6 Jun 2018 3:49 pm
Operator : NIVA
Sample : 2863851
Misc : RUN199898
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 08 11:32:26 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\199898-899-900\
Data File : 989811.D
Acq On : 6 Jun 2018 4:16 pm
Operator : NIVA
Sample : 2863852
Misc : RUN199898
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 08 11:32:57 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	7.584	168	270368	20.00 µg/L	0.07
23) I14-DIFLUOROBENZENE	8.335	114	398183	20.00 µg/L	0.07
48) CHLOROBENZEN-d5-IS	13.036	117	396532	20.00 µg/L	0.09
71) I14-DICLBENZENE-D4	17.035	152	250738	20.00 µg/L	-0.09
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.066	111	191137	21.40 µg/L	0.05
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.00%		
39) STOLUENE-D8	10.355	98	488742	19.54 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.70%		
59) S4BRFLUOROBENZENE	15.289	95	195958	19.28 µg/L	0.14
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.40%		
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	3.635	94	311	N.D.	
6) CHLOROETHANE	3.584	64	778	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	4.691	142	244	N.D.	
12) CARBON DISULFIDE	4.579	76	998	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.087	84	365	N.D.	
15) TRANS12DICLETHENE	5.198	96	1157	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.026	43	63	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.843	83	731	N.D.	
22) BROMOCHLOROMETHANE	6.843	49	1112	N.D.	
25) TETRAHYDROFURAN	7.026	42	243	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	6.985	117	788	N.D.	
30) BENZENE	7.564	78	297	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	10.934	43	128	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.437	91	468	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\199898-899-900\
Data File : 989811.D
Acq On : 6 Jun 2018 4:16 pm
Operator : NIVA
Sample : 2863852
Misc : RUN199898
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 08 11:32:57 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

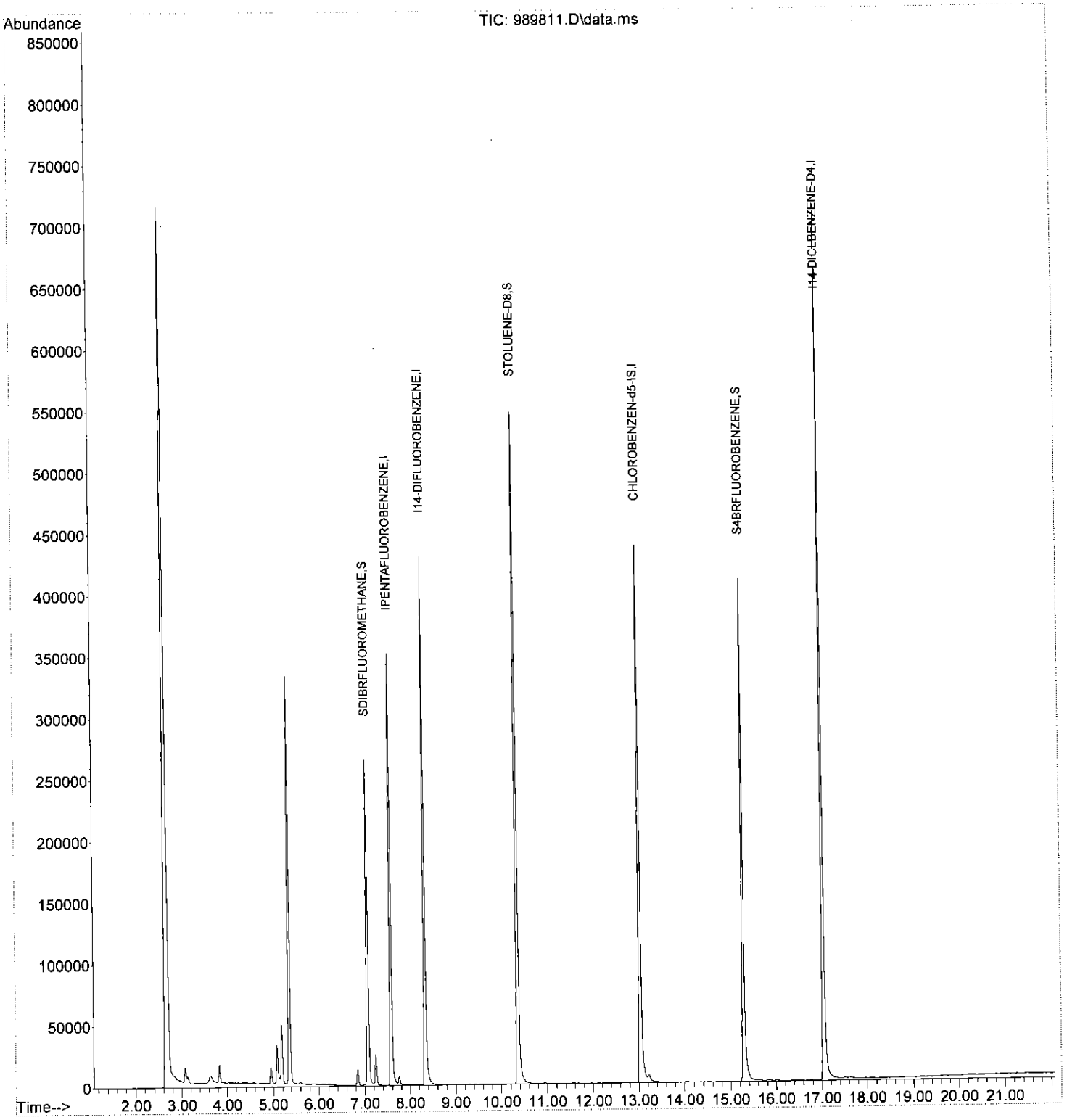
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.025	91	746	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.025	91	925	N.D.	
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	15.340	77	130	N.D.	
63) N-PROPYLBENZENE	15.492	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	16.578	105	63	N.D.	
70) 13-DICHLOROBENZENE	16.954	146	62	N.D.	
72) 4-ISOPROPYLTOLUENE	16.782	119	65	N.D.	
73) 14-DICHLOROBENZENE	17.056	146	306	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.411	91	106	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	20.213	128	69	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\199898-899-900\
Data File : 989811.D
Acq On : 6 Jun 2018 4:16 pm
Operator : NIVA
Sample : 2863852
Misc : RUN199898
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 08 11:32:57 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\199898-899-900\
Data File : 989812.D
Acq On : 6 Jun 2018 4:42 pm
Operator : NIVA
Sample : 2863853
Misc : RUN199898
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 08 11:33:33 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	7.584	168	270826	20.00 µg/L	0.07
23) I14-DIFLUOROBENZENE	8.345	114	395206	20.00 µg/L	0.08
48) CHLOROBENZEN-d5-IS	13.046	117	381427	20.00 µg/L	0.10
71) I14-DICLBENZENE-D4	17.045	152	231089	20.00 µg/L	-0.08
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.076	111	186498	21.03 µg/L	0.06
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.15%		
39) STOLUENE-D8	10.355	98	488971	19.69 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.45%		
59) S4BRFLUOROBENZENE	15.289	95	185049	18.92 µg/L	0.14
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	3.645	94	370	N.D.	
6) CHLOROETHANE	3.980	64	389	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	4.579	76	827	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.087	84	334	N.D.	
15) TRANS12DICLETHENE	5.178	96	124	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.574	43	322	N.D.	
19) CIS12DICHLOROETHENE	6.559	96	82	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.843	83	675	N.D.	
22) BROMOCHLOROMETHANE	6.843	49	1181	N.D.	
25) TETRAHYDROFURAN	7.046	42	219	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	6.995	117	545	N.D.	
30) BENZENE	7.604	78	434	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	10.447	91	515	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\199898-899-900\
Data File : 989812.D
Acq On : 6 Jun 2018 4:42 pm
Operator : NIVA
Sample : 2863853
Misc : RUN199898
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 08 11:33:33 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

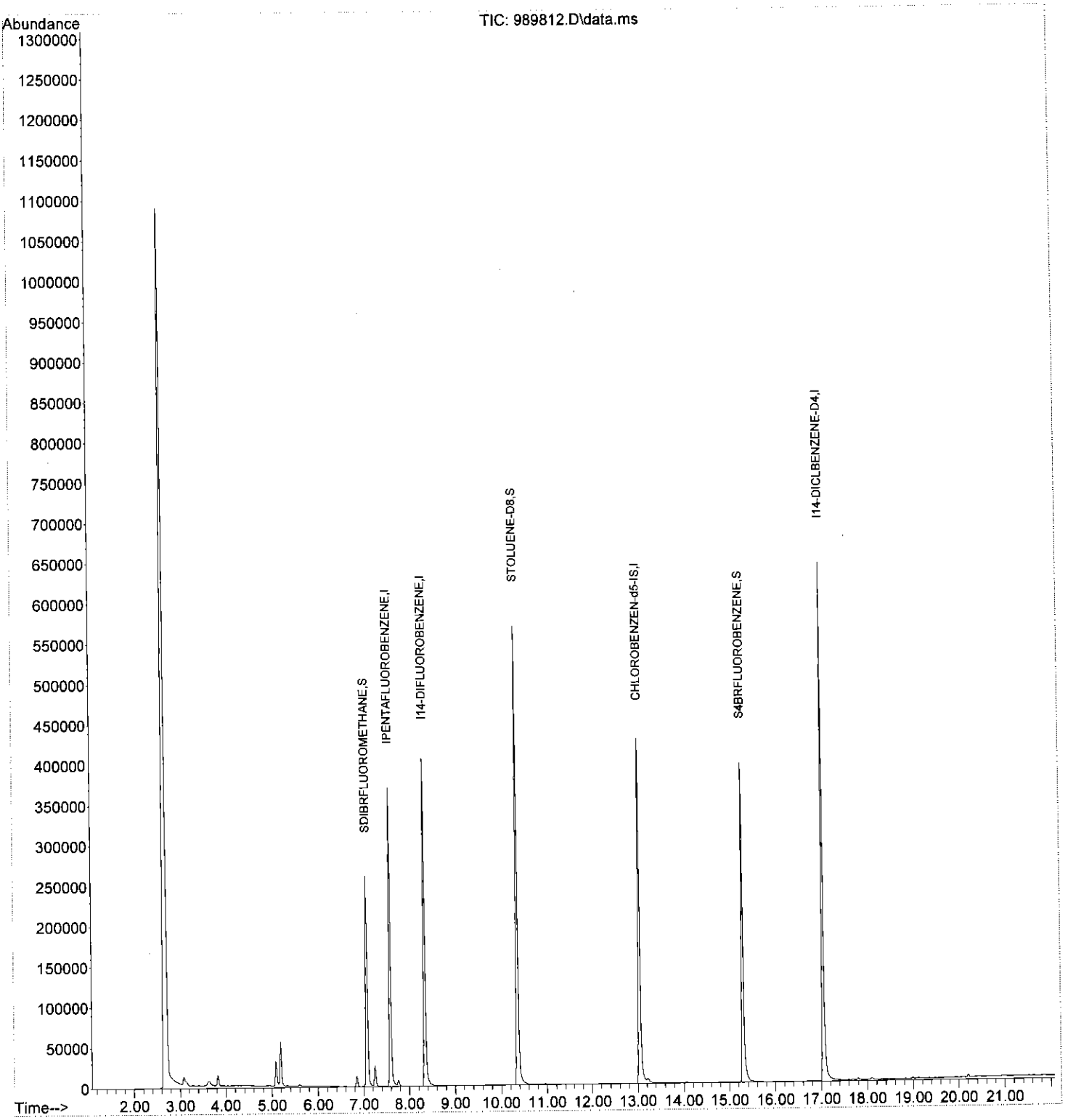
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	13.066	112	646	N.D.	
50) 1-CHLOROHEXANE	13.035	91	738	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.035	91	1023	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	15.309	77	373	N.D.	
63) N-PROPYLBENZENE	15.299	91	544	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	17.066	146	683	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.066	146	798	N.D.	
74) 12-DICHLOROBENZENE	17.685	146	65	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	20.203	128	451	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

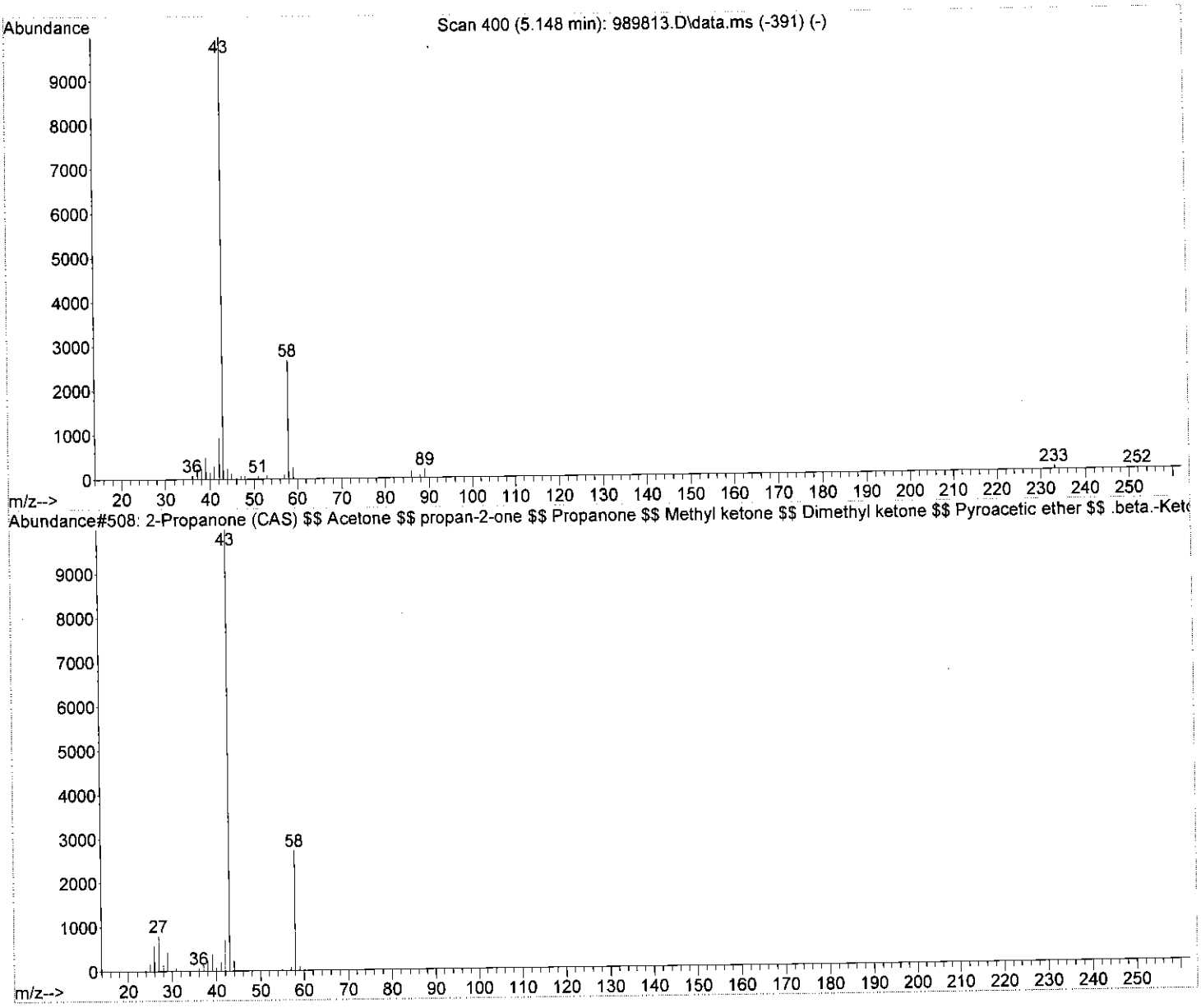
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989812.D
Acq On : 6 Jun 2018 4:42 pm
Operator : NIVA
Sample : 2863853
Misc : RUN199898
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 08 11:33:33 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



Library Searched : C:\Database\WILEY275.L
Quality : 64
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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989813.D
Acq On : 6 Jun 2018 5:08 pm
Operator : NIVA
Sample : 2863859
Misc : RUN199898
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 08 11:34:16 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	7.594	168	259364	20.00 µg/L	0.08
23) I14-DIFLUOROBENZENE	8.345	114	398210	20.00 µg/L	0.08
48) CHLOROBENZEN-d5-IS	13.046	117	388719	20.00 µg/L	0.10
71) I14-DICLBENZENE-D4	17.045	152	228793	20.00 µg/L	-0.08
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.076	111	187174	20.95 µg/L	0.06
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.75%		
39) STOLUENE-D8	10.366	98	499653	19.97 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.85%		
59) S4BRFLUOROBENZENE	15.299	95	179034	17.97 µg/L	0.15
Spiked Amount 20.000	Range 80 - 120		Recovery = 89.85%		
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	3.645	94	325	N.D.	
6) CHLOROETHANE	3.929	64	858	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.148	43	41382	41.66 µg/L #	95
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	0.000		0	N.D.	
12) CARBON DISULFIDE	4.579	76	1098	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.107	84	286	N.D.	
15) TRANS12DICLETHENE	5.198	96	1035	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.229	43	704	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	6.589	77	244	N.D.	
21) CHLOROFORM	6.853	83	766	N.D.	
22) BROMOCHLOROMETHANE	6.853	49	1263	N.D.	
25) TETRAHYDROFURAN	7.036	42	136	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	6.995	117	404	N.D.	
30) BENZENE	7.604	78	441	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	10.964	43	140	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.457	91	537	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\199898-899-900\
Data File : 989813.D
Acq On : 6 Jun 2018 5:08 pm
Operator : NIVA
Sample : 2863859
Misc : RUN199898
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 08 11:34:16 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

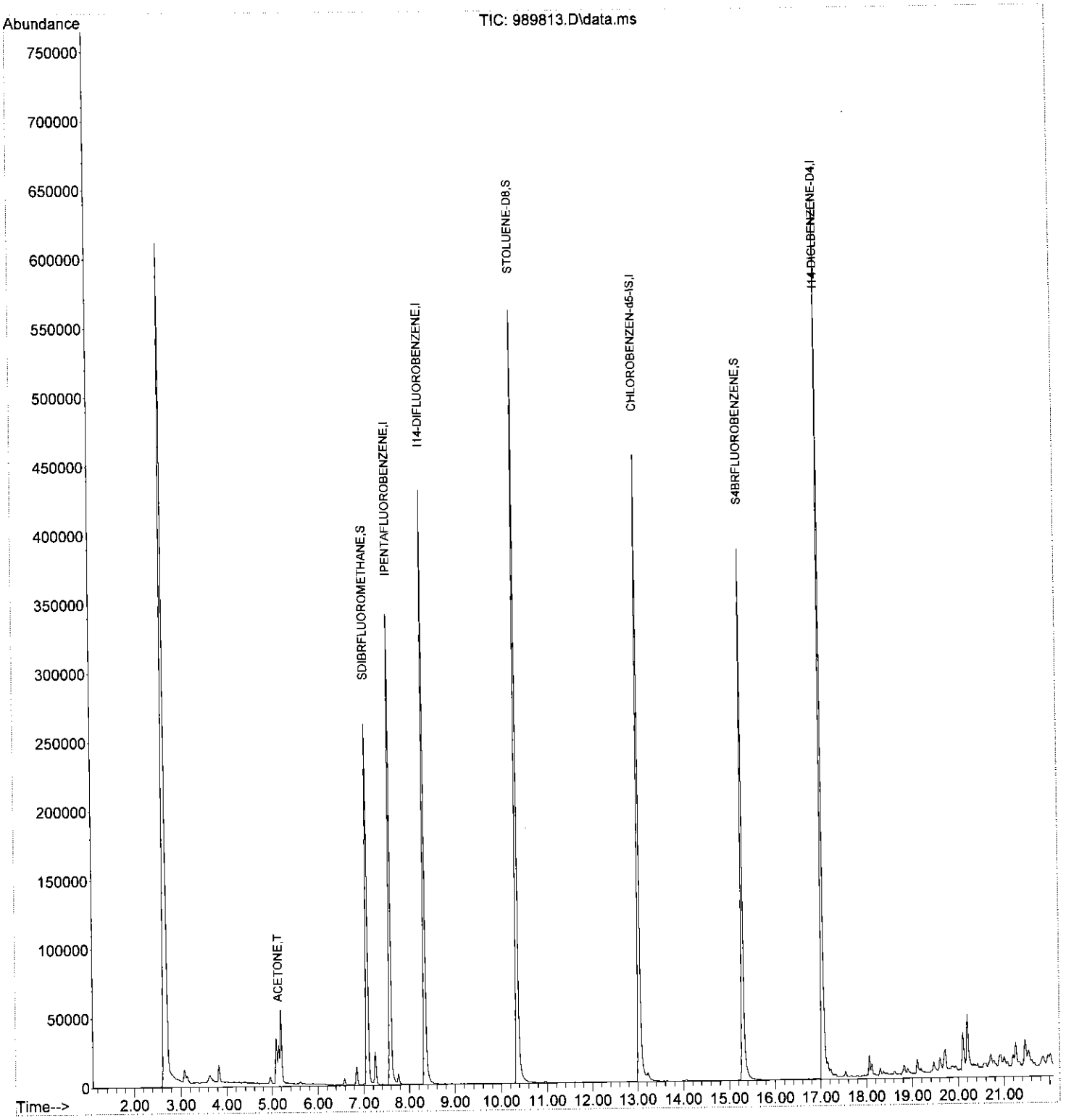
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.046	91	803	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.046	91	874	N.D.	
53) MP-XYLENE	13.360	91	71	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	14.213	91	181	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	15.330	77	209	N.D.	
63) N-PROPYLBENZENE	15.289	91	499	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	16.304	119	62	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	17.066	146	144	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.066	146	144	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.320	91	224	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	20.203	128	5664	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\199898-899-900\
Data File : 989813.D
Acq On : 6 Jun 2018 5:08 pm
Operator : NIVA
Sample : 2863859
Misc : RUN199898
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 08 11:34:16 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\199898-899-900\
Data File : 989814.D
Acq On : 6 Jun 2018 5:35 pm
Operator : NIVA
Sample : 3863859DUP/2863844
Misc : RUN199898
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 08 11:34:50 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	7.594	168	281282	20.00 µg/L	0.08
23) I14-DIFLUOROBENZENE	8.345	114	400701	20.00 µg/L	0.08
48) CHLOROBENZEN-d5-IS	13.056	117	397823	20.00 µg/L	0.11
71) I14-DICLBENZENE-D4	17.056	152	259886	20.00 µg/L	-0.07
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.087	111	189152	21.04 µg/L	0.07
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.20%		
39) STOLUENE-D8	10.366	98	493571	19.61 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.05%		
59) S4BRFLUOROBENZENE	15.299	95	201459	19.75 µg/L	0.15
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.75%		
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	3.645	94	437	N.D.	
6) CHLOROETHANE	3.544	64	724	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	4.701	142	72	N.D.	
12) CARBON DISULFIDE	4.589	76	932	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.097	84	313	N.D.	
15) TRANS12DICLETHENE	5.198	96	716	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.213	43	62	N.D.	
18) 2-BUTANONE	7.249	43	65	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.853	83	805	N.D.	
22) BROMOCHLOROMETHANE	6.853	49	1083	N.D.	
25) TETRAHYDROFURAN	7.046	42	221	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	7.005	117	613	N.D.	
30) BENZENE	7.604	78	396	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	10.965	43	134	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.457	91	531	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\199898-899-900\
Data File : 989814.D
Acq On : 6 Jun 2018 5:35 pm
Operator : NIVA
Sample : 3863859DUP/2863844
Misc : RUN199898
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 08 11:34:50 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

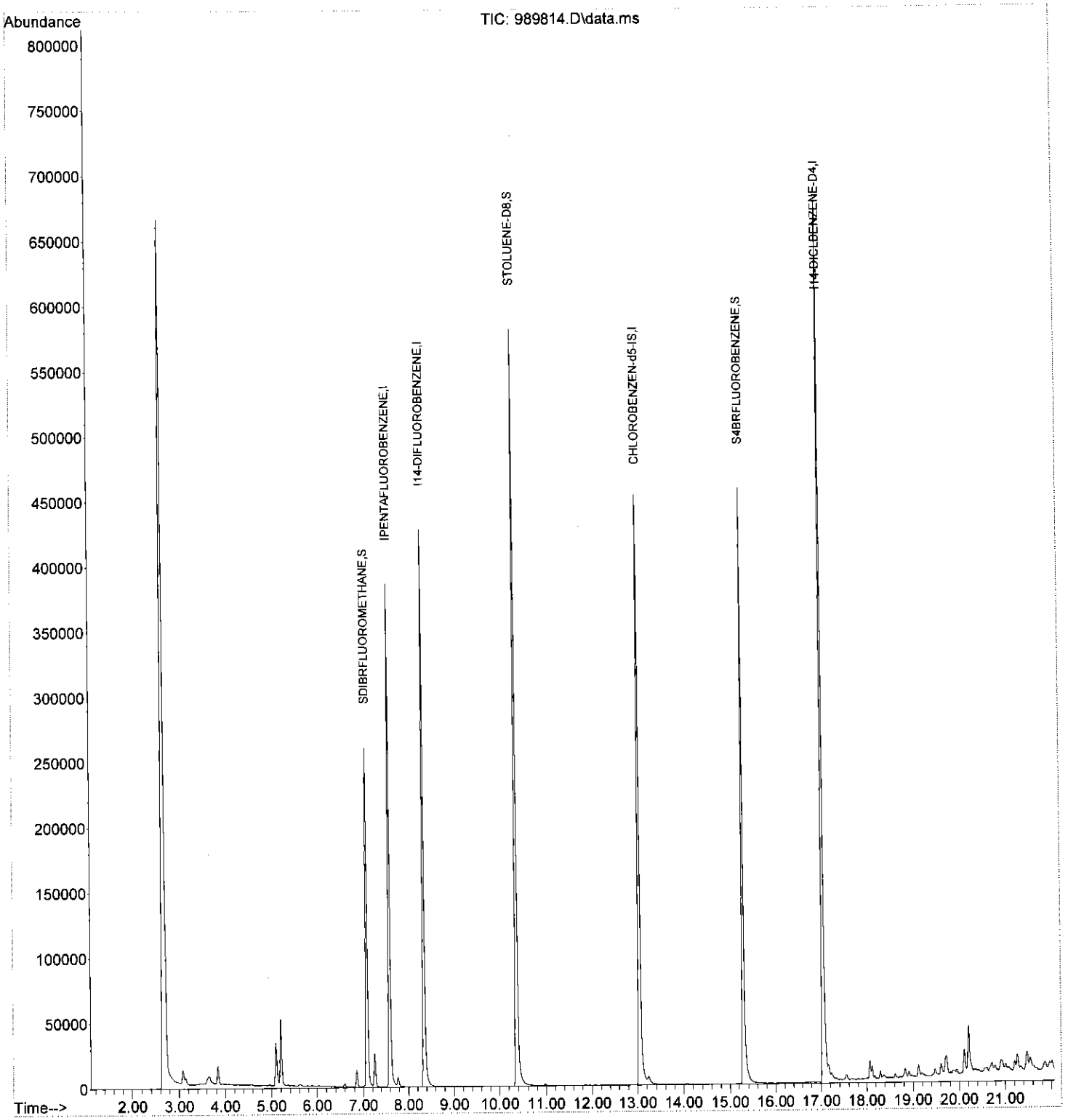
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.056	91	827	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.056	91	907	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	14.203	91	213	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	15.381	77	85	N.D.	
63) N-PROPYLBENZENE	15.502	91	88	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	17.076	146	320	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.076	146	320	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.320	91	432	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	20.203	128	4006	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\199898-899-900\
Data File : 989814.D
Acq On : 6 Jun 2018 5:35 pm
Operator : NIVA
Sample : 3863859DUP/2863844
Misc : RUN199898
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 08 11:34:50 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

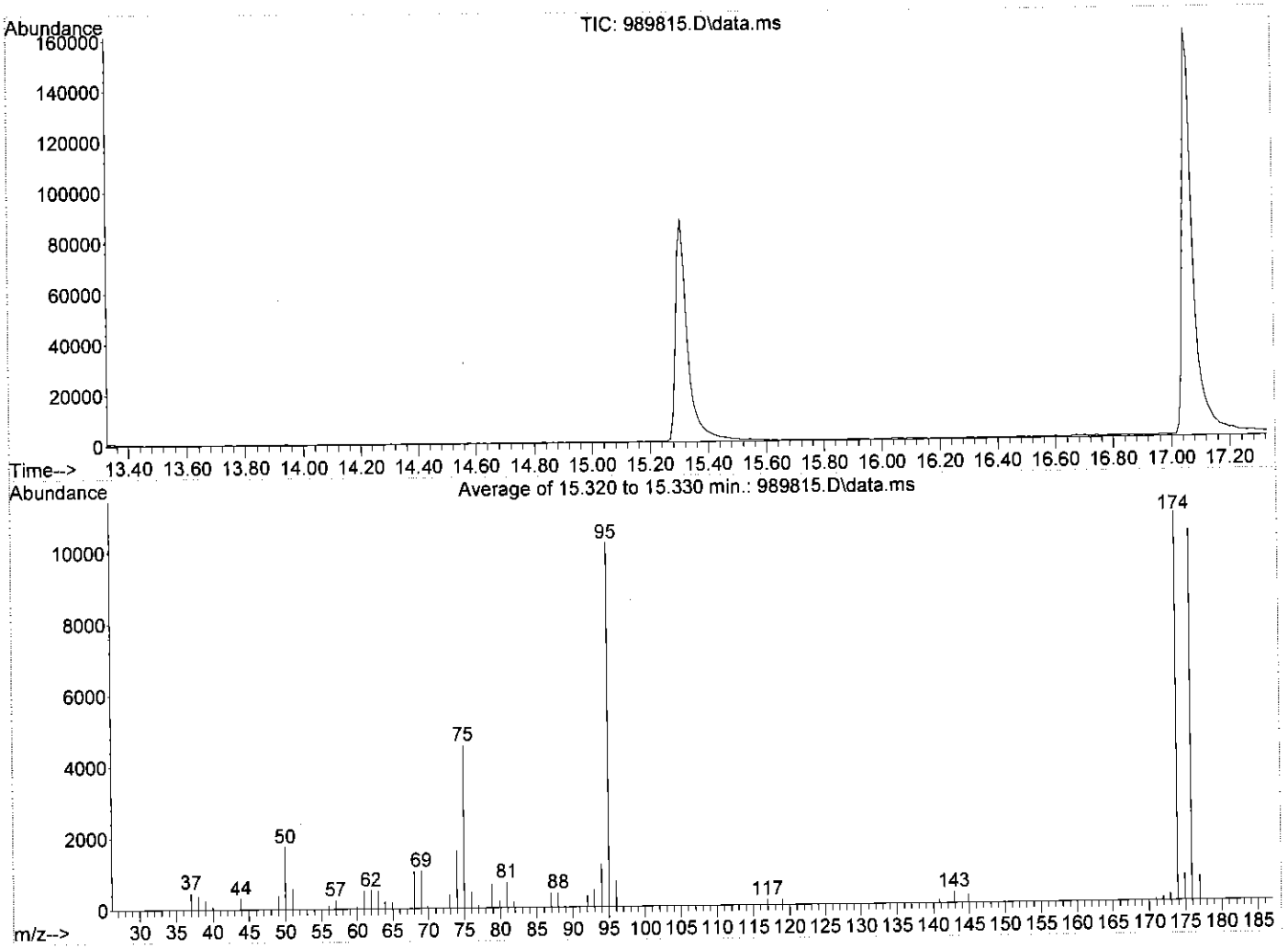


Method VOC

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989815.D
Acq On : 6 Jun 2018 6:01 pm
Operator : NIVA
Sample : BFB
Misc : RUN199898
ALS Vial : 16 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



Spectrum Information: Average of 15.320 to 15.330 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.2	1750	PASS
75	95	30	60	44.8	4562	PASS
95	95	100	100	100.0	10188	PASS
96	95	5	9	7.0	716	PASS
173	174	0.00	2	1.8	193	PASS
174	95	50	150	106.7	10873	PASS
175	174	5	9	6.8	739	PASS
176	174	95	101	95.5	10382	PASS
177	176	5	9	6.5	672	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989816.D
Acq On : 6 Jun 2018 6:27 pm
Operator : NIVA
Sample : LRB/2879644
Misc : RUN199898
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 08 11:36:07 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	7.604	168	284620	20.00 µg/L	0.09
23) I14-DIFLUOROBENZENE	8.356	114	415069	20.00 µg/L	0.09
48) CHLOROBENZEN-d5-IS	13.056	117	369100	20.00 µg/L	0.11
71) I14-DICLBENZENE-D4	17.066	152	219299	20.00 µg/L	-0.06
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.087	111	188752	20.27 µg/L	0.07
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.35%		
39) STOLUENE-D8	10.376	98	474005	18.18 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 90.90%		
59) S4BRFLUOROBENZENE	15.310	95	177601	18.77 µg/L	0.16
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	3.655	94	273	N.D.
6) CHLOROETHANE	3.777	64	525	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	4.599	76	658	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	0.000		0	N.D. d
15) TRANS12DICLETHENE	5.209	96	672	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	7.249	43	63	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.863	83	2004	N.D.
22) BROMOCHLOROMETHANE	6.863	49	1268	N.D.
25) TETRAHYDROFURAN	7.046	42	144	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	7.005	117	601	N.D.
30) BENZENE	7.604	78	124	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	10.457	91	353	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\199898-899-900\
Data File : 989816.D
Acq On : 6 Jun 2018 6:27 pm
Operator : NIVA
Sample : LRB/2879644
Misc : RUN199898
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 08 11:36:07 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

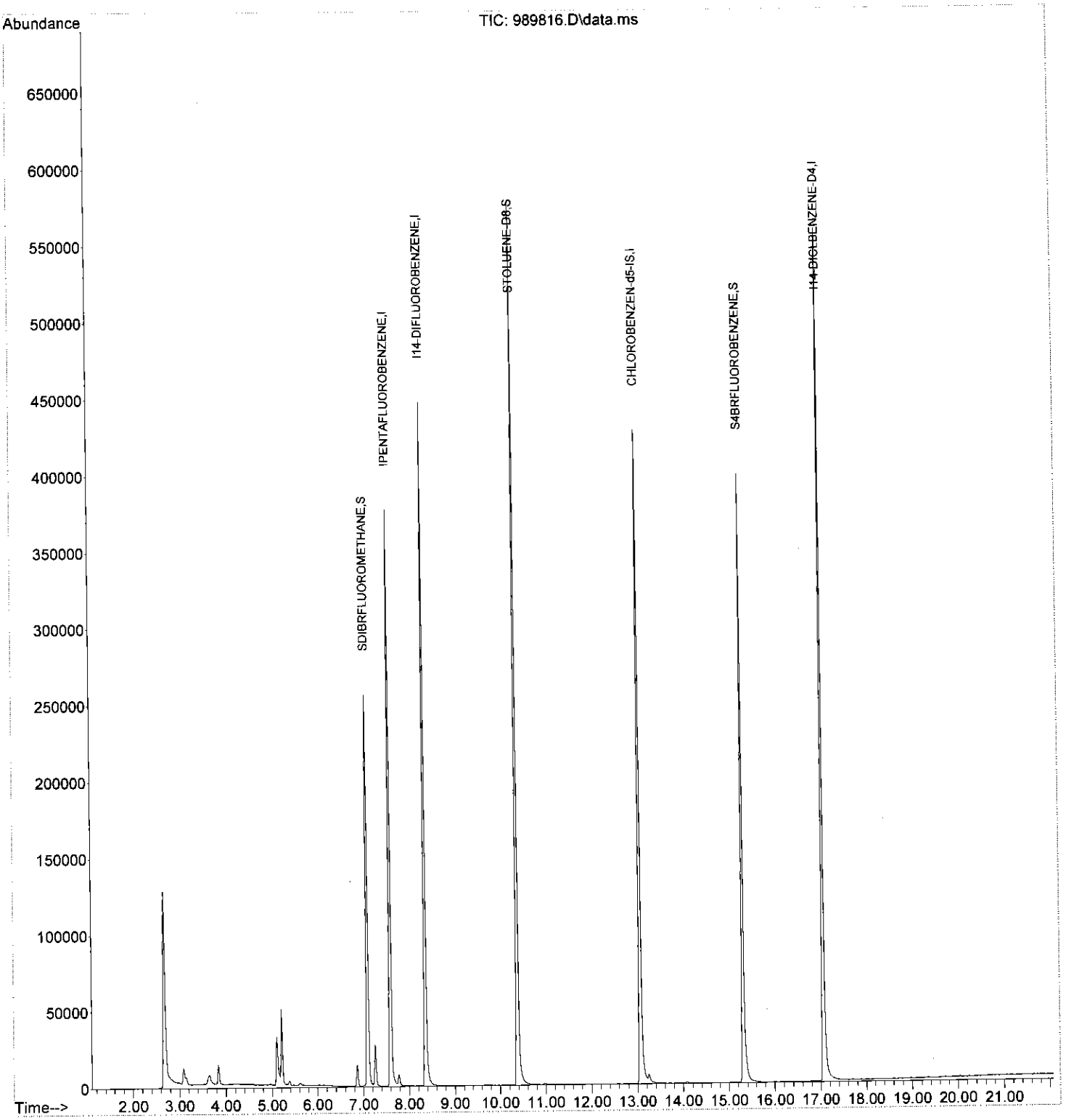
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.056	91	574	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.056	91	643	N.D.	
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	15.310	77	772	N.D.	
63) N-PROPYLBENZENE	15.310	91	463	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	17.076	146	141	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.076	146	141	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\199898-899-900\
Data File : 989816.D
Acq On : 6 Jun 2018 6:27 pm
Operator : NIVA
Sample : LRB/2879644
Misc : RUN199898
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 08 11:36:07 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



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989817.D
Acq On : 6 Jun 2018 6:53 pm
Operator : NIVA
Sample : CCV/2879645
Misc : RUN199898
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 08 11:38:08 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

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	89	0.09
2	M	DICLDIFLUOROMETHANE	0.110	0.115	-4.5	82	0.11
3	P,T	CHLOROMETHANE	0.214	0.171	20.1#	78	0.12
4	C,T	VINYL CHLORIDE	0.183	0.180	1.6	78	0.12
5	T	BROMOMETHANE	0.173	0.143	17.3	75	0.12
6	T	CHLOROETHANE	0.139	0.145	-4.3	86	0.95#
7	T	TRICLFLUOROMETHANE	0.469	0.513	-9.4	85	0.16
8	T	ACROLEIN	0.059	0.054#	8.5	72	0.15
9	T	ACETONE	0.077	0.085#	-10.4	95	0.08
10	C,T	11-DICHLOROETHENE	0.302	0.285	5.6	75	0.15
11	T	IODOMETHANE	0.319	0.311	2.5	76	0.15
12	T	CARBON DISULFIDE	0.480	0.451	6.0	74	0.14
13	T	ACRYLONITRILE	0.090	0.093#	-3.3	85	0.09
14	T	DICHLOROMETHANE	0.269	0.253	5.9	81	0.16
15	T	TRANS12DICLETHENE	0.236	0.228	3.4	78	0.17
16	P,T	11-DICHLOROETHANE	0.432	0.418	3.2	79	0.06
17		VINYL ACETATE	0.398	0.342	14.1	68	0.07
18		2-BUTANONE	0.123	0.125	-1.6	83	0.21
19	T	CIS12DICHLOROETHENE	0.273	0.241	11.7	74	0.19
20	T	22-DICHLOROPROPANE	0.322	0.290	9.9	73	0.19
21	C,T	CHLOROFORM	0.584	0.589	-0.9	84	0.21
22	T	BROMOCHLOROMETHANE	0.234	0.262	-12.0	92	0.08
23	I	I14-DIFLUOROBENZENE	1.000	1.000	0.0	89	0.10
24	S	SDIBRFLUOROMETHANE	0.449	0.474	-5.6	91	0.08
25	T	TETRAHYDROFURAN	0.044	0.041#	6.8	91	0.08
26	T	111-TRICHLOROETHANE	0.339	0.363	-7.1	84	0.08
27	T	11-DICHLOROPROPENE	0.208	0.202	2.9	77	0.08
28	T	12-DICHLOROETHANE	0.318	0.341	-7.2	89	0.09
29	T	CARBONTETRACHLORIDE	0.330	0.328	0.6	79	0.07
30	T	BENZENE	0.674	0.670	0.6	81	0.08
31	T	TRICHLOROETHENE	0.192	0.196	-2.1	84	0.09
32	C,T	12-DICHLOROPROPANE	0.165	0.164	0.6	82	0.09
33	T	DIBROMOMETHANE	0.154	0.160	-3.9	89	0.10
34	T	BROMODICLMETHANE	0.303	0.316	-4.3	84	0.09
35	T	2-CLETHYLVINYLETHER	0.039	0.044#	-12.8	104	0.11
36	T	EPICHLOROHYDRIN	0.018	0.020#	-11.1	95	0.11
37	T	4METHYL-2-PENTANONE	0.213	0.236	-10.8	89	0.11
38	T	CIS13DICLPROPENE	0.295	0.265	10.2	83	0.11
39	S	STOLUENE-D8	1.256	1.335	-6.3	91	0.11
40	C,T	TOLUENE	0.756	0.792	-4.8	83	0.11
41	T	TRANS13DICLPROPENE	0.222	0.264	-18.9	101	0.12
42	T	112-TRICHLOROETHANE	0.202	0.212	-5.0	87	0.13
43		2-HEXANONE	0.156	0.167	-7.1	91	0.17
44	T	13-DICHLOROPROPANE	0.310	0.323	-4.2	88	0.14

45	T	DIBRCHLOROMETHANE	0.247	0.253	-2.4	86	0.13
46	T	TETRACHLOROETHENE	0.226	0.238	-5.3	83	0.12
47	T	12-DIBROMOETHANE	0.186	0.195	-4.8	88	0.14
48	I	CHLOROBENZEN-d5-IS	1.000	1.000	0.0	94	0.12
49	P,T	CHLOROBENZENE	0.523	0.505	3.4	87	0.12
50		1-CHLOROHEXANE	0.107	0.099#	7.5	75	0.09
51	T	1112-TETRACLETHANE	0.226	0.212	6.2	88	0.11
52	C,T	ETHYLBENZENE	0.832	0.784	5.8	83	0.12
53	T	MP-XYLENE	0.639	0.607	5.0	83	0.13
54	T	STYRENE	0.539	0.435	19.3	84	0.15
55	T	O-XYLENE	0.616	0.546	11.4	88	0.14
56	P,T	BROMOFORM	0.176	0.170	3.4	91	0.14
57	P,T	1122-TETRACLETHANE	0.318	0.303	4.7	87	0.17
58	T	ISOPROPYL BENZENE	0.834	0.791	5.2	99	0.15
59	S	S4BRFLUOROBENZENE	0.513	0.512	0.2	96	0.16
60	T	123-TRICLPROPANE	0.102	0.106	-3.9	95	0.17
61	T	TRANS14DICL2BUTENE	0.049	0.050#	-2.0	88	0.17
62	T	BROMOBENZENE	0.437	0.436	0.2	88	0.17
63	T	N-PROPYLBENZENE	1.006	0.944	6.2	82	0.17
64	T	2-CHLOROTOLUENE	0.714	0.684	4.2	85	0.17
65	T	4-CHLOROTOLUENE	0.657	0.626	4.7	85	0.17
66	T	135TRIMETHYLBENZENE	0.762	0.744	2.4	85	0.17
67	T	TERT-BUTYLBENZENE	0.594	0.588	1.0	82	0.18
68	T	124TRIMETHYLBENZENE	0.758	0.777	-2.5	85	0.10
69	T	SEC-BUTYLBENZENE	0.918	0.850	7.4	82	0.19
70	T	13-DICHLOROBENZENE	0.462	0.522	-13.0	100	0.22
71	I	I14-DICLBENZENE-D4	1.000	1.000	0.0	99	-0.06
72	T	4-ISOPROPYLTOLUENE	1.235	1.059	14.3	82	-0.07
73	T	14-DICHLOROBENZENE	0.777	0.729	6.2	91	-0.06
74	T	12-DICHLOROBENZENE	0.768	0.734	4.4	90	-0.07
75	T	N-BUTYLBENZENE	1.112	1.200	-7.9	109	-0.06
76	T	12-DIBR-3CLPROPANE	0.121	0.102	15.7	98	-0.07
77		124-TRICLBENZENE	0.549	0.447	18.6	96	-0.09
78	T	NAPHTHALENE	1.399	1.301	7.0	110	-0.10
79	T	HEXACHLOROBUTADIENE	0.235	0.205	12.8	84	-0.07
80		123-TRICLBENZENE	0.502	0.423	15.7	89	-0.08

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

8260VOC-JUNE-LIQ-18.M Fri Jun 08 15:33:09 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989817.D
Acq On : 6 Jun 2018 6:53 pm
Operator : NIVA
Sample : CCV/2879645
Misc : RUN199898
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 08 11:38:08 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	7.604	168	296604	20.00	µg/L	0.09
23) I14-DIFLUOROBENZENE	8.366	114	417798	20.00	µg/L	0.10
48) CHLOROBENZEN-d5-IS	13.066	117	511703	20.00	µg/L	0.12
71) I14-DICLBENZENE-D4	17.066	152	349692	20.00	µg/L	-0.06
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.097	111	198094	21.13	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.65%			
39) STOLUENE-D8	10.386	98	557922	21.26	µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.30%			
59) S4BRFLUOROBENZENE	15.309	95	261833	19.96	µg/L	0.16
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.80%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.884	85	34236	20.93	µg/L	97
3) CHLOROMETHANE	3.148	50	50674	16.00	µg/L #	98
4) VINYL CHLORIDE	3.262	62	53470	19.73	µg/L	100
5) BROMOMETHANE	3.635	94	42474	16.54	µg/L	99
6) CHLOROETHANE	4.589	64	43085m	20.91	µg/L	
7) TRICLFLUOROMETHANE	3.919	101	152060	21.86	µg/L	98
8) ACROLEIN	4.863	56	399478	453.99	µg/L	99
9) ACETONE	5.168	43	126658	111.50	µg/L #	93
10) 11-DICHLOROETHENE	4.508	61	84540	18.87	µg/L	96
11) IODOMETHANE	4.701	142	461578	97.60	µg/L	96
12) CARBON DISULFIDE	4.589	76	668336	93.81	µg/L	99
13) ACRYLONITRILE	6.021	53	137691	102.74	µg/L	99
14) DICHLOROMETHANE	5.127	84	75069	18.81	µg/L #	84
15) TRANS12DICLETHENE	5.300	96	67630	19.35	µg/L	97
16) 11-DICHLOROETHANE	5.970	63	124086	19.37	µg/L	97
17) VINYL ACETATE	6.183	43	507101	86.02	µg/L	99
18) 2-BUTANONE	7.229	43	185492m	101.46	µg/L	
19) CIS12DICHLOROETHENE	6.579	96	71437	17.67	µg/L	95
20) 22-DICHLOROPROPANE	6.711	77	86067	18.02	µg/L	97
21) CHLOROFORM	6.873	83	174652	20.18	µg/L	99
22) BROMOCHLOROMETHANE	6.823	49	77732	22.41	µg/L	87
25) TETRAHYDROFURAN	7.107	42	17032	18.65	µg/L #	90
26) 111-TRICHLOROETHANE	7.168	97	151541	21.42	µg/L	99
27) 11-DICHLOROPROPENE	7.300	75	84221	19.43	µg/L	94
28) 12-DICHLOROETHANE	7.868	62	142407	21.42	µg/L #	98
29) CARBONTETRACHLORIDE	7.086	117	137030	19.89	µg/L #	95
30) BENZENE	7.614	78	279847	19.88	µg/L	97
31) TRICHLOROETHENE	8.366	132	82081	20.44	µg/L #	94
32) 12-DICHLOROPROPANE	9.086	63	68429	19.89	µg/L #	89
33) DIBROMOMETHANE	8.965	174	66779	20.81	µg/L	99
34) BROMODICLMETHANE	9.147	83	131955	20.82	µg/L	100
35) 2-CLETHYLVINYLETHER	9.929	63	91731m	111.20	µg/L	
36) EPICHLOROHYDRIN	10.467	57	213183	580.13	µg/L	97
37) 4METHYL-2-PENTANONE	11.015	43	493315	111.06	µg/L	94
38) CIS13DICLPROPENE	10.081	75	110674	17.95	µg/L	98
40) TOLUENE	10.467	91	331014	20.97	µg/L	99
41) TRANS13DICLPROPENE	11.117	75	110391	23.82	µg/L	91
42) 112-TRICHLOROETHANE	11.391	97	88662	21.03	µg/L	93
43) 2-HEXANONE	12.457	43	349275	107.47	µg/L	94
44) 13-DICHLOROPROPANE	11.878	76	135042	20.84	µg/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989817.D
Acq On : 6 Jun 2018 6:53 pm
Operator : NIVA
Sample : CCV/2879645
Misc : RUN199898
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 08 11:38:08 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

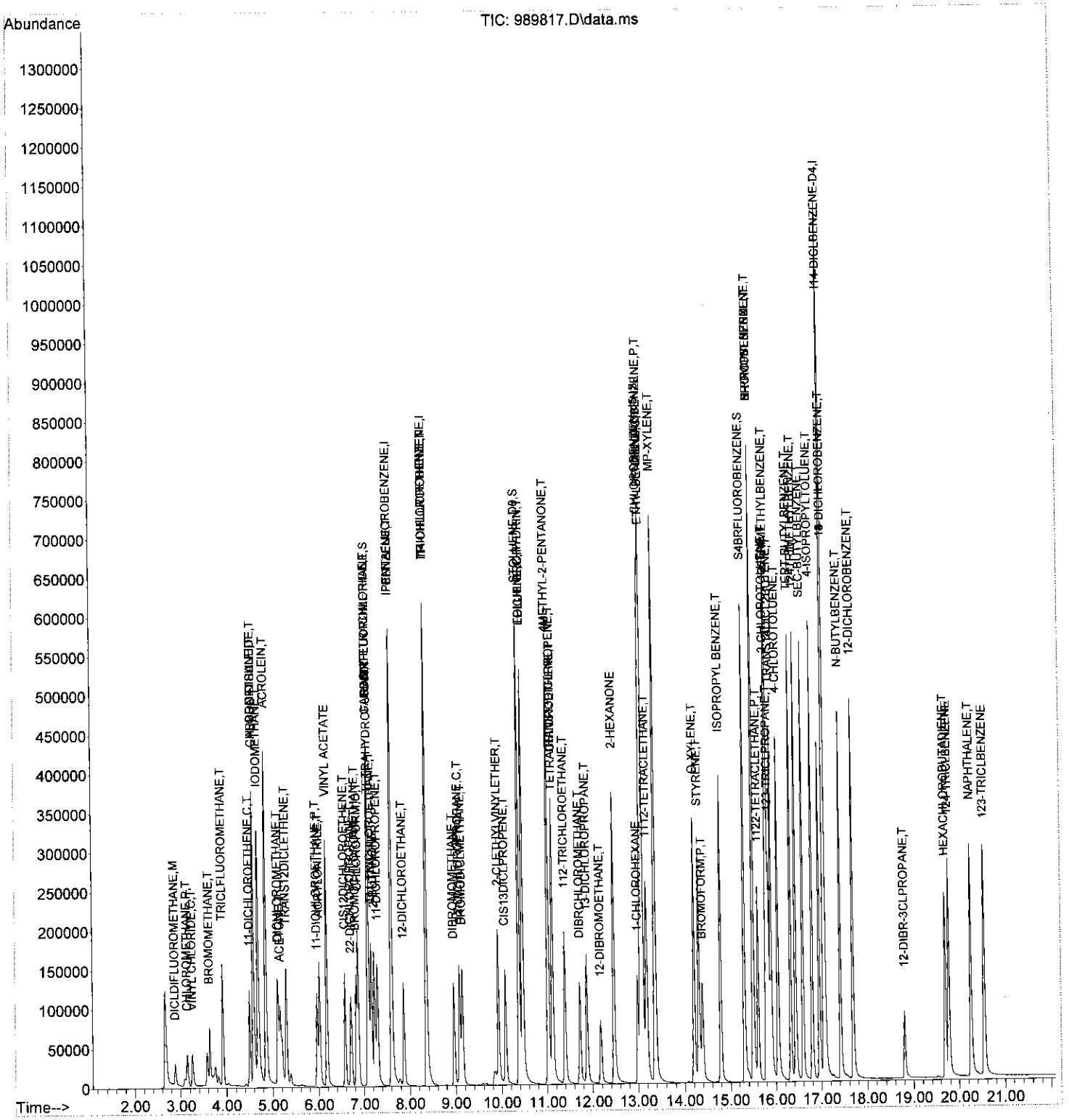
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.726	129	105569	20.46 µg/L	99
46) TETRACHLOROETHENE	11.127	166	99550	21.09 µg/L	92
47) 12-DIBROMOETHANE	12.173	107	81316	20.88 µg/L	99
49) CHLOROBENZENE	13.096	112	258191	19.30 µg/L	86
50) 1-CHLOROHEXANE	12.995	91	50525	19.59 µg/L #	60
51) 1112-TETRACLETHANE	13.188	131	108666	18.80 µg/L	98
52) ETHYLBENZENE	13.107	91	401041	18.84 µg/L	97
53) MP-XYLENE	13.370	91	621488	38.03 µg/L	95
54) STYRENE	14.315	104	222603	16.15 µg/L	96
55) O-XYLENE	14.213	91	279414	17.73 µg/L	96
56) BROMOFORM	14.396	173	87078	19.34 µg/L	99
57) 1122-TETRACLETHANE	15.614	83	155218	19.07 µg/L	100
58) ISOPROPYL BENZENE	14.792	105	404799m	18.97 µg/L	
60) 123-TRICLPROPANE	15.848	110	54449	20.80 µg/L	98
61) TRANS14DICL2BUTENE	15.898	53	128617	102.58 µg/L	87
62) BROMOBENZENE	15.502	77	222853	19.91 µg/L	87
63) N-PROPYLBENZENE	15.502	91	483283	18.78 µg/L	94
64) 2-CHLOROTOLUENE	15.787	91	349888	19.14 µg/L	86
65) 4-CHLOROTOLUENE	16.051	91	320568	19.09 µg/L	94
66) 135TRIMETHYLBENZENE	15.817	105	380811	19.53 µg/L	95
67) TERT-BUTYLBENZENE	16.325	119	300696	19.80 µg/L	92
68) 124TRIMETHYLBENZENE	16.436	105	397434	20.50 µg/L	100
69) SEC-BUTYLBENZENE	16.599	105	434753	18.52 µg/L	99
70) 13-DICHLOROBENZENE	17.086	146	267255m	22.60 µg/L	
72) 4-ISOPROPYLTOLUENE	16.802	119	370361	17.16 µg/L	95
73) 14-DICHLOROBENZENE	17.086	146	254936	18.76 µg/L	85
74) 12-DICHLOROBENZENE	17.685	146	256701	19.11 µg/L	99
75) N-BUTYLBENZENE	17.421	91	419575m	21.57 µg/L	
76) 12-DIBR-3CLPROPANE	18.812	157	35784	16.93 µg/L	94
77) 124-TRICLBENZENE	19.776	180	156277m	16.29 µg/L	
78) NAPHTHALENE	20.253	128	454917m	18.60 µg/L	
79) HEXACHLOROBUTADIENE	19.705	225	71656	17.44 µg/L	99
80) 123-TRICLBENZENE	20.548	182	147841	16.83 µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989817.D
Acq On : 6 Jun 2018 6:53 pm
Operator : NIVA
Sample : CCV/2879645
Misc : RUN199898
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 08 11:38:08 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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989820.D
Acq On : 6 Jun 2018 8:12 pm
Operator : NIVA
Sample : 2869050
Misc : RUN199898
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 08 11:38:45 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	7.614	168	255729	20.00 µg/L	0.10
23) I14-DIFLUOROBENZENE	8.366	114	365779	20.00 µg/L	0.10
48) CHLOROBENZEN-d5-IS	13.066	117	355247	20.00 µg/L	0.12
71) I14-DICLBENZENE-D4	17.066	152	208147	20.00 µg/L	-0.06
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.097	111	195109	23.78 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 118.90%		
39) STOLUENE-D8	10.386	98	456343	19.86 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.30%		
59) S4BRFLUOROBENZENE	15.320	95	169050	18.56 µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.80%		

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	3.655	94	454	N.D.
6) CHLOROETHANE	3.625	64	292	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	4.711	142	343	N.D.
12) CARBON DISULFIDE	4.599	76	1798	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	5.117	84	719	N.D.
15) TRANS12DICLETHENE	5.219	96	1056	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	6.051	43	62	N.D.
18) 2-BUTANONE	7.614	43	376	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.873	83	835	N.D.
22) BROMOCHLOROMETHANE	6.863	49	1215	N.D.
25) TETRAHYDROFURAN	7.056	42	69	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	7.015	117	453	N.D.
30) BENZENE	7.625	78	74	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	10.467	91	329	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\199898-899-900\
Data File : 989820.D
Acq On : 6 Jun 2018 8:12 pm
Operator : NIVA
Sample : 2869050
Misc : RUN199898
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 08 11:38:45 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

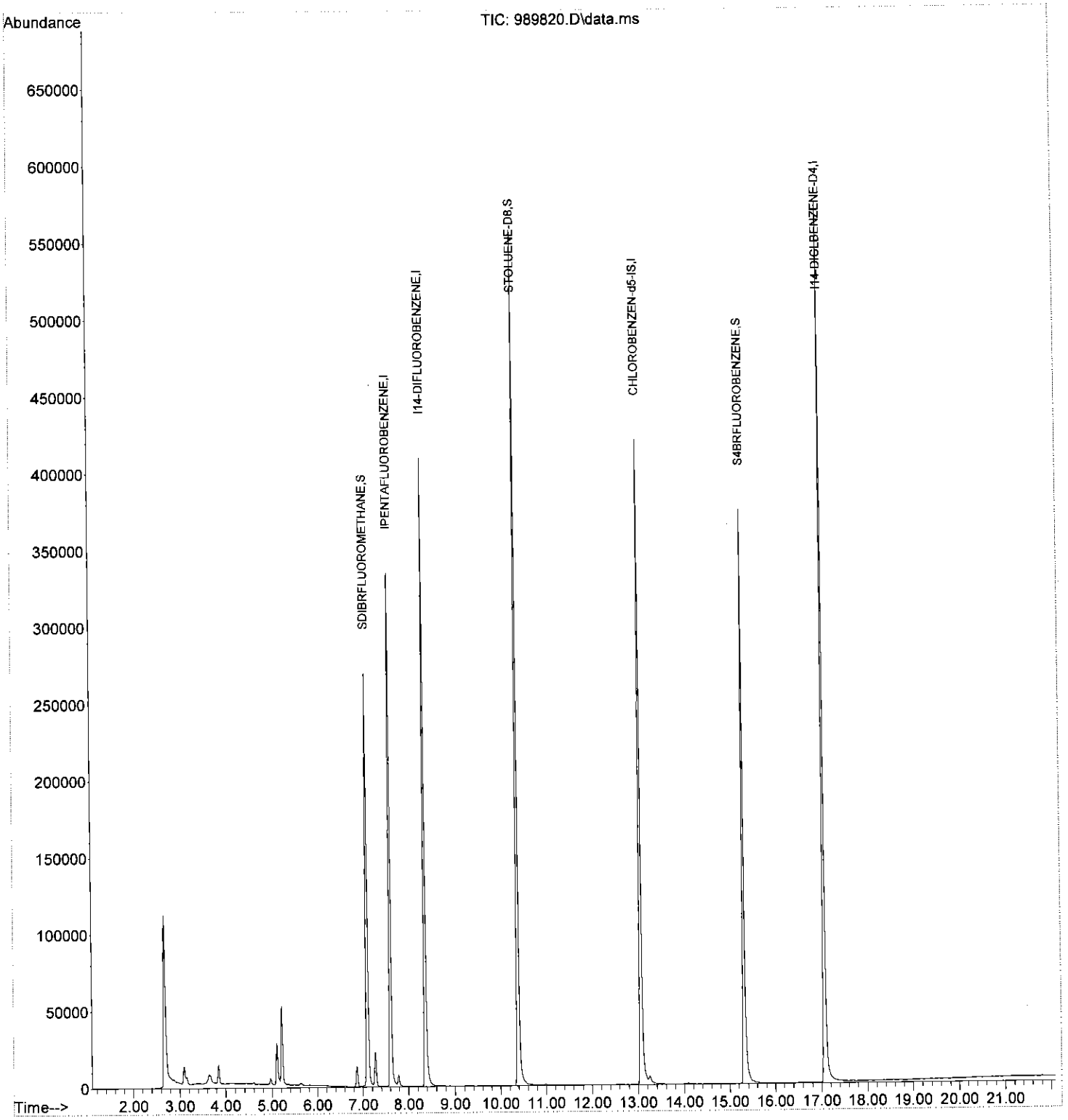
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.066	91	582	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.066	91	738	N.D.	
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	15.513	77	70	N.D.	
63) N-PROPYLBENZENE	15.523	91	397	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	16.609	105	216	N.D.	
70) 13-DICHLOROBENZENE	16.985	146	71	N.D.	
72) 4-ISOPROPYLTOLUENE	16.812	119	151	N.D.	
73) 14-DICHLOROBENZENE	17.096	146	573	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.452	91	324	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	19.715	225	193	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\199898-899-900\
Data File : 989820.D
Acq On : 6 Jun 2018 8:12 pm
Operator : NIVA
Sample : 2869050
Misc : RUN199898
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 08 11:38:45 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\199898-899-900\
Data File : 989821.D
Acq On : 6 Jun 2018 8:38 pm
Operator : NIVA
Sample : 2863854
Misc : RUN199898
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 08 11:39:21 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	7.614	168	249411	20.00 µg/L	0.10
23) I14-DIFLUOROBENZENE	8.366	114	375701	20.00 µg/L	0.10
48) CHLOROBENZEN-d5-IS	13.066	117	365519	20.00 µg/L	0.12
71) I14-DICLBENZENE-D4	17.066	152	221777	20.00 µg/L	-0.06
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.097	111	183932	21.82 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.10%		
39) STOLUENE-D8	10.386	98	470890	19.95 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.75%		
59) S4BRFLUOROBENZENE	15.320	95	180509	19.26 µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.30%		
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	3.655	94	299	N.D.	
6) CHLOROETHANE	3.909	64	457	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	4.711	142	352	N.D.	
12) CARBON DISULFIDE	4.599	76	1461	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.127	84	233	N.D.	
15) TRANS12DICLETHENE	5.219	96	730	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.051	43	357	N.D.	
18) 2-BUTANONE	7.046	43	336	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	6.609	77	217	N.D.	
21) CHLOROFORM	6.873	83	681	N.D.	
22) BROMOCHLOROMETHANE	6.873	49	1109	N.D.	
25) TETRAHYDROFURAN	7.056	42	213	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	535	N.D.	
30) BENZENE	7.625	78	734	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	11.015	43	129	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.477	91	276	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\199898-899-900\
Data File : 989821.D
Acq On : 6 Jun 2018 8:38 pm
Operator : NIVA
Sample : 2863854
Misc : RUN199898
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 08 11:39:21 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

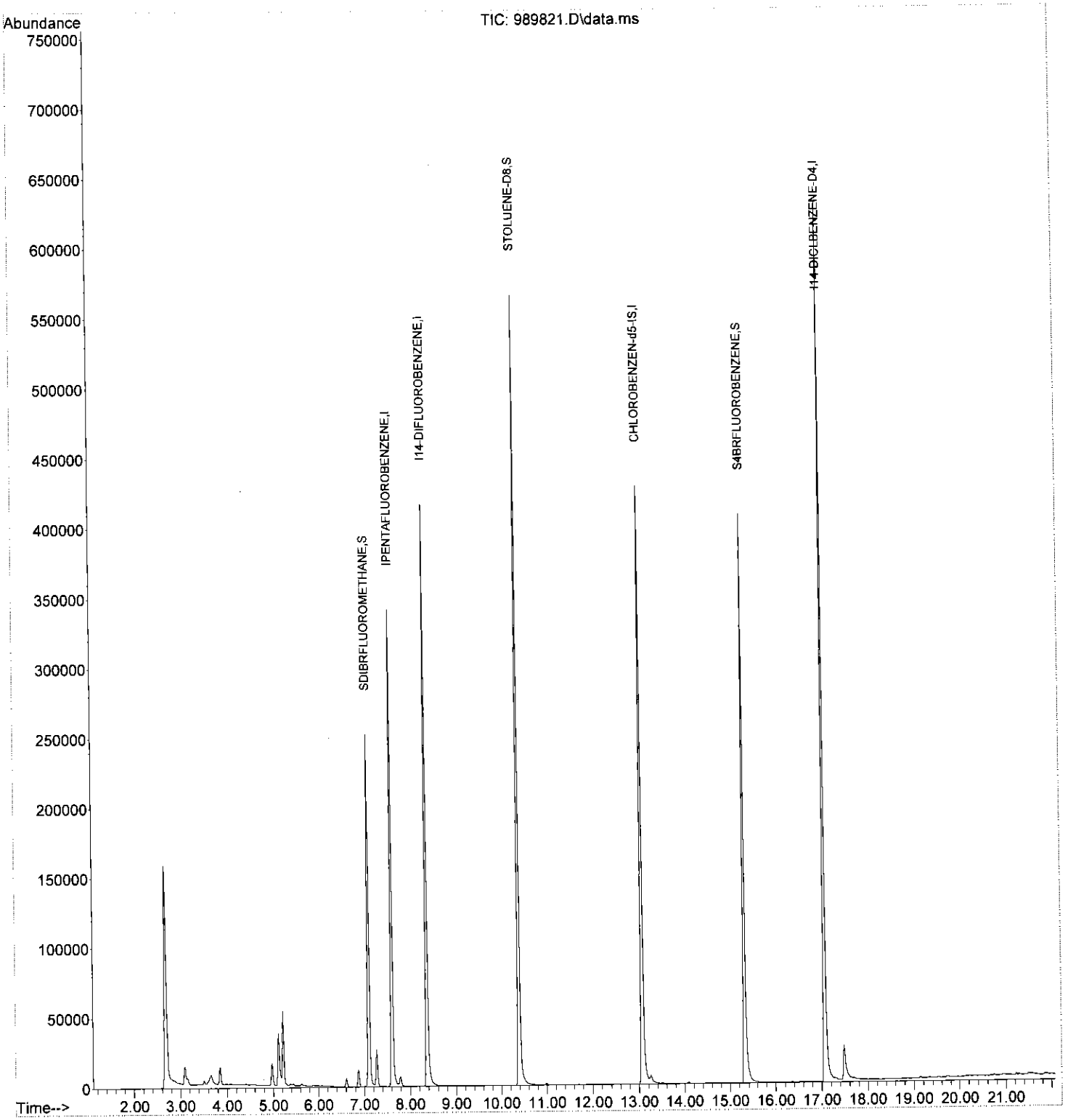
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.066	91	628	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.066	91	884	N.D.	
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	15.523	77	62	N.D.	
63) N-PROPYLBENZENE	15.512	91	325	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	17.096	146	381	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.096	146	381	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.492	91	756	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	20.324	128	197	N.D.	
79) HEXACHLOROBUTADIENE	19.705	225	78	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

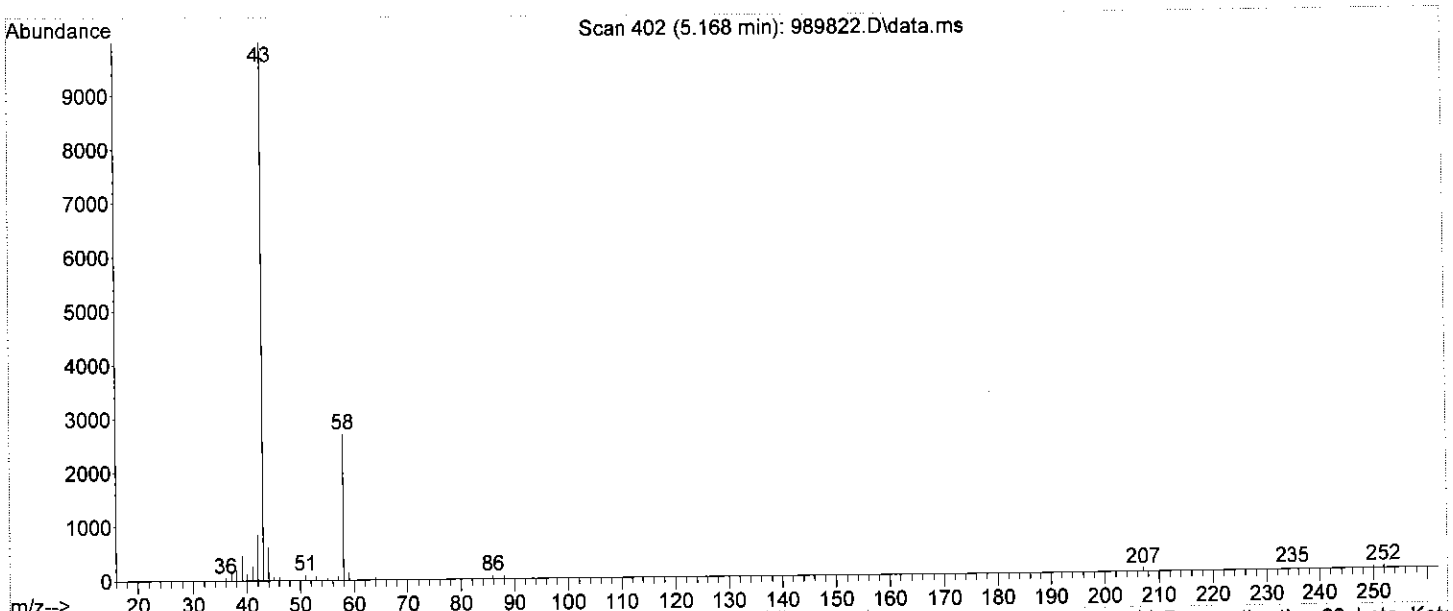
Quantitation Report (QT Reviewed)

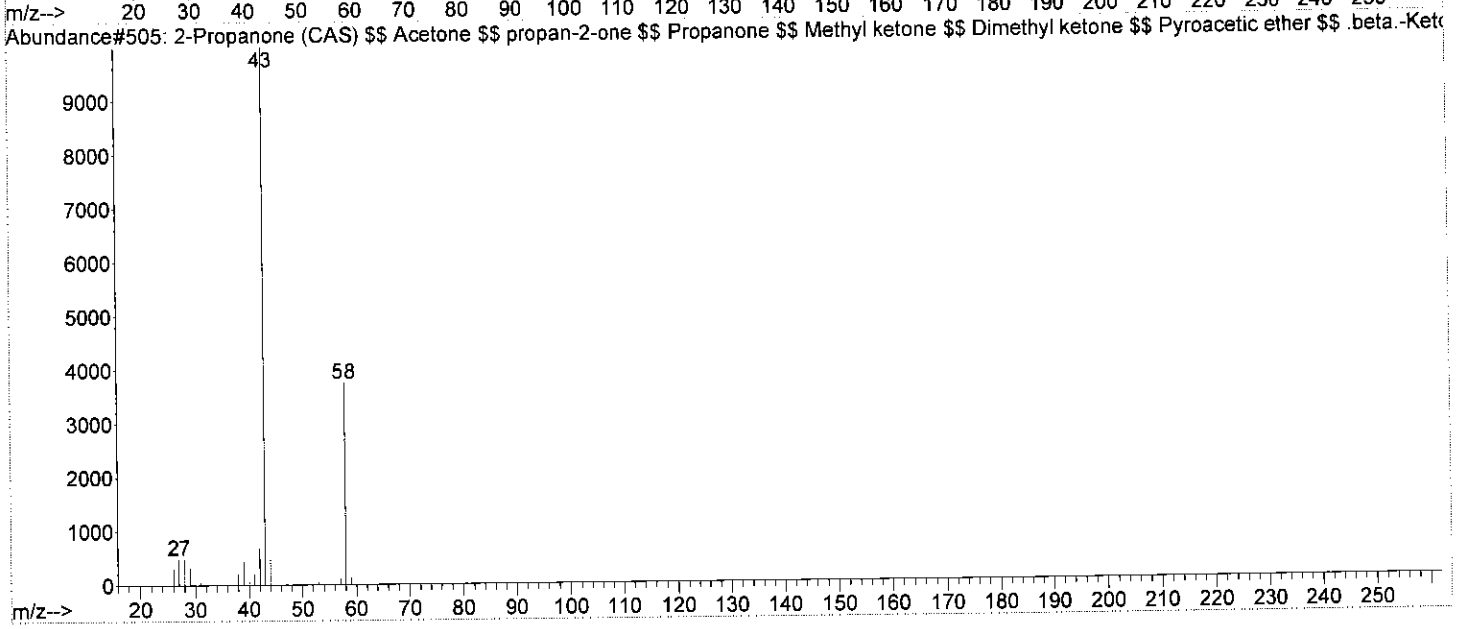
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989821.D
Acq On : 6 Jun 2018 8:38 pm
Operator : NIVA
Sample : 2863854
Misc : RUN199898
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 08 11:39:21 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



Library Searched : C:\Database\WILEY275.L
Quality : 72
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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989822.D
Acq On : 6 Jun 2018 9:04 pm
Operator : NIVA
Sample : 2863855
Misc : RUN199898
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 08 11:40:05 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	7.614	168	229844	20.00 µg/L	0.10
23) I14-DIFLUOROBENZENE	8.366	114	350190	20.00 µg/L	0.10
48) CHLOROBENZEN-d5-IS	13.076	117	347048	20.00 µg/L	0.13
71) I14-DICLBENZENE-D4	17.066	152	211426	20.00 µg/L	-0.06
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.097	111	166864	21.24 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.20%		
39) STOLUENE-D8	10.386	98	441773	20.08 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.40%		
59) S4BRFLUOROBENZENE	15.320	95	170494	19.16 µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.80%		
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	3.655	94	351	N.D.	
6) CHLOROETHANE	3.767	64	456	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.168	43	76569	86.99 µg/L	99
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.721	142	133	N.D.	
12) CARBON DISULFIDE	4.609	76	964	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.117	84	148	N.D.	
15) TRANS12DICLETHENE	5.208	96	359	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.269	43	64	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.873	83	676	N.D.	
22) BROMOCHLOROMETHANE	6.863	49	957	N.D.	
25) TETRAHYDROFURAN	7.066	42	139	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	7.015	117	484	N.D.	
30) BENZENE	7.625	78	308	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	10.985	43	73	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.477	91	656	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\199898-899-900\
Data File : 989822.D
Acq On : 6 Jun 2018 9:04 pm
Operator : NIVA
Sample : 2863855
Misc : RUN199898
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 08 11:40:05 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

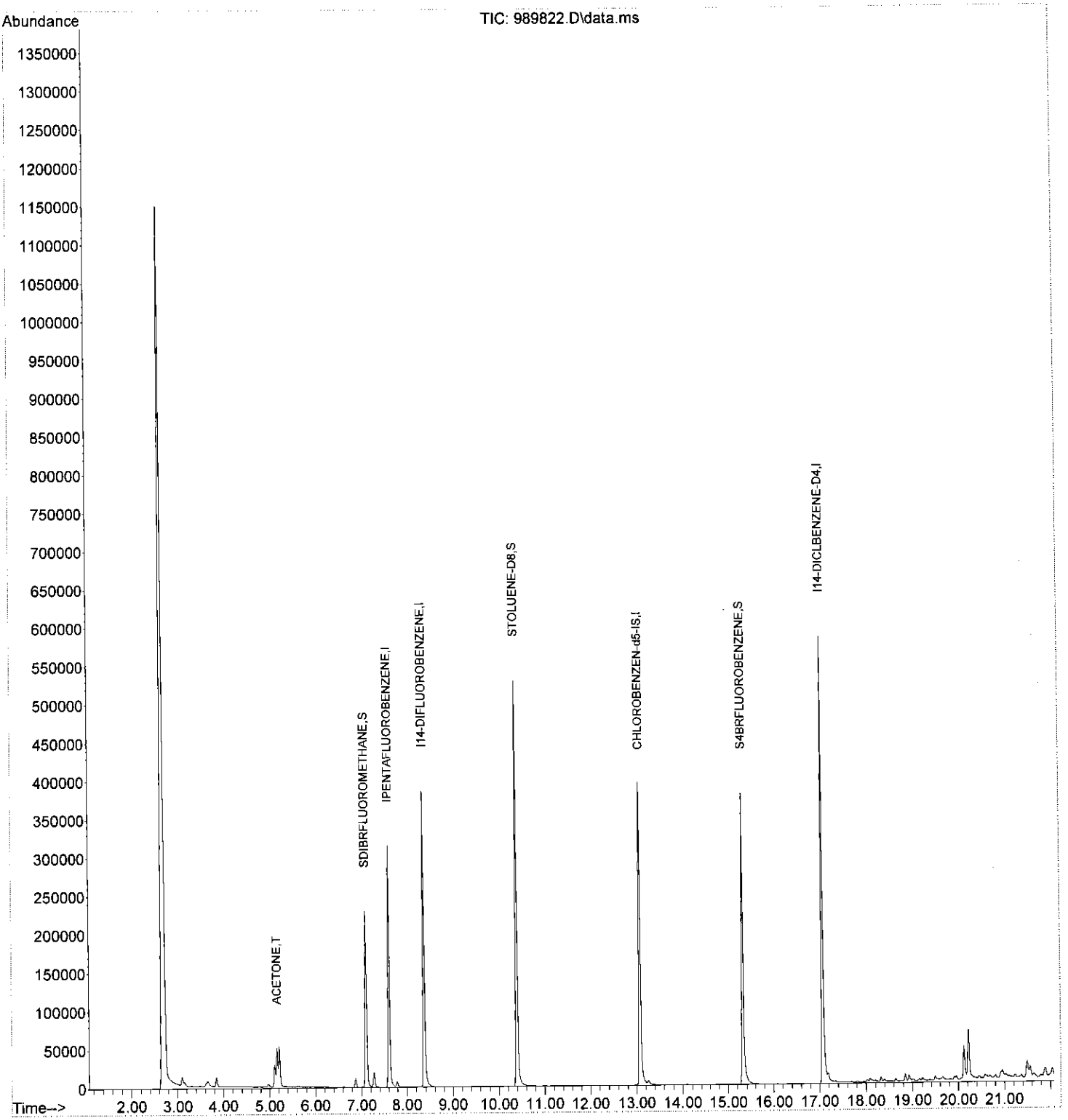
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	0.000		0	N.D.	d
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.076	91	905	N.D.	
53) MP-XYLENE	13.391	91	619	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	15.320	77	1168	N.D.	
63) N-PROPYLBENZENE	15.523	91	71	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	16.335	119	251	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	16.599	105	197	N.D.	
70) 13-DICHLOROBENZENE	17.086	146	310	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.086	146	310	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.441	91	209	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	20.223	128	6210	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

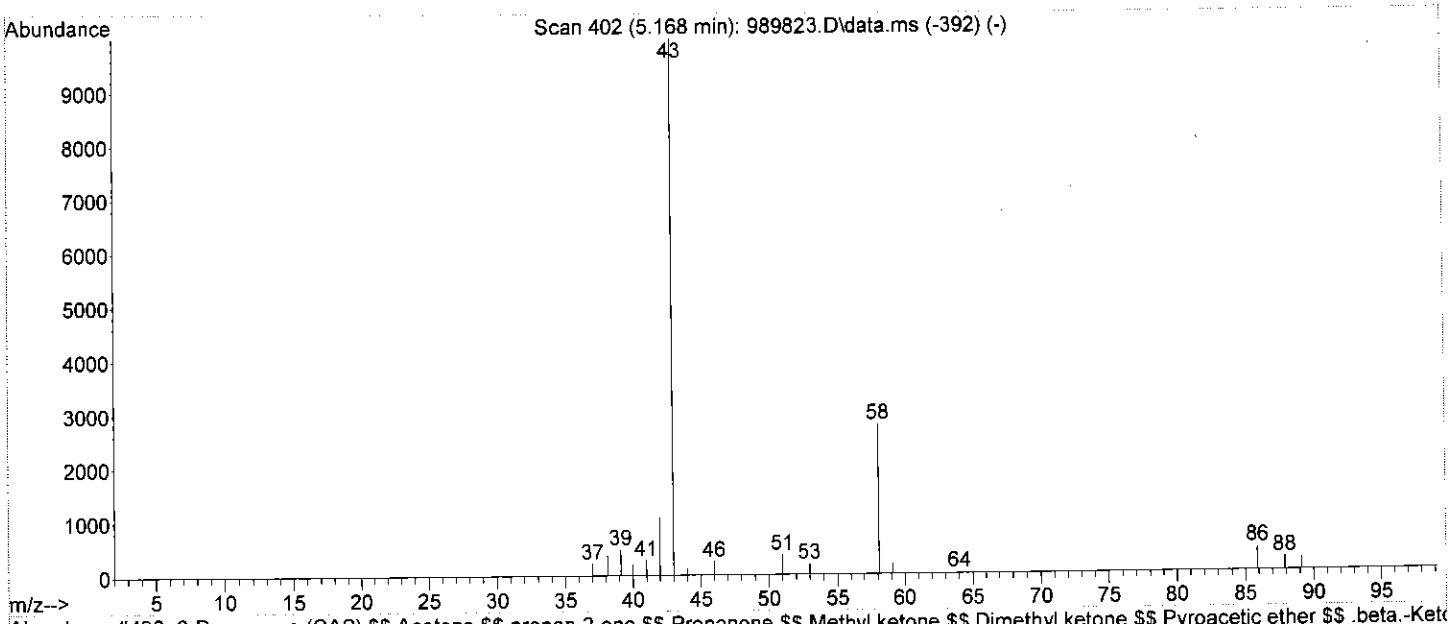
Quantitation Report (QT Reviewed)

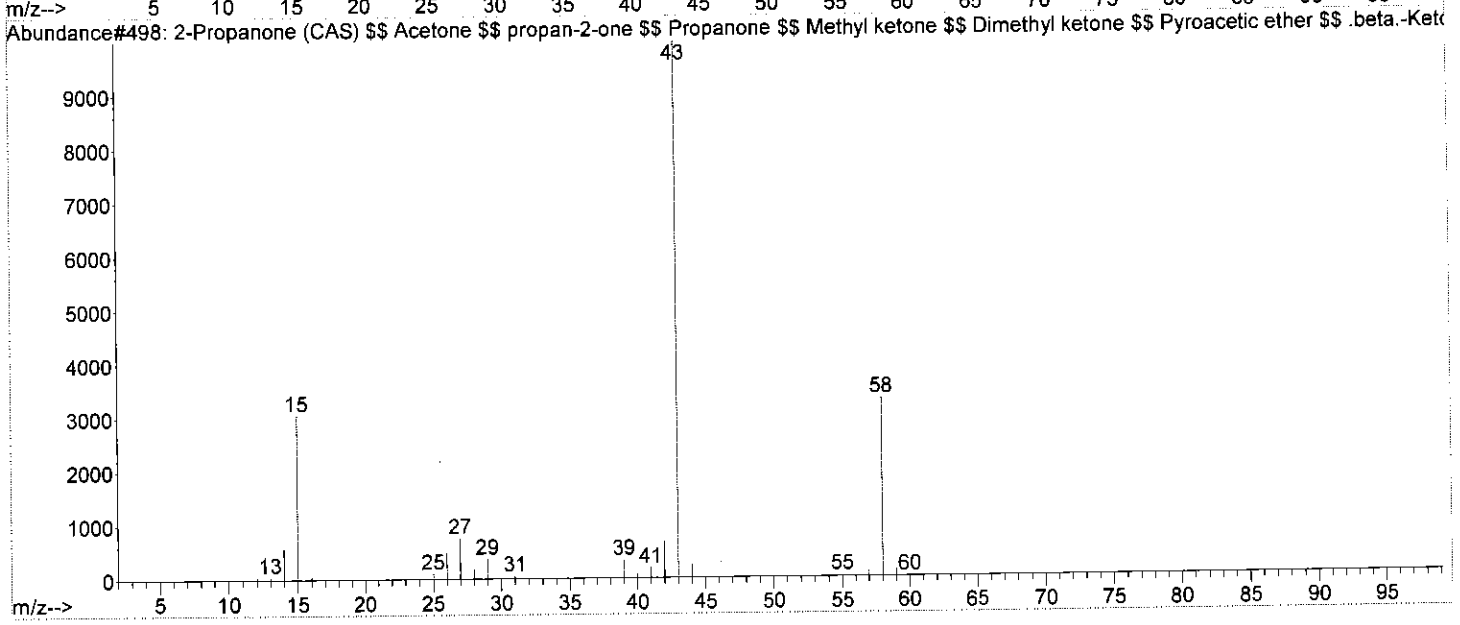
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989822.D
Acq On : 6 Jun 2018 9:04 pm
Operator : NIVA
Sample : 2863855
Misc : RUN199898
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 08 11:40:05 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 : 42
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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989823.D
Acq On : 6 Jun 2018 9:30 pm
Operator : NIVA
Sample : 2863856
Misc : RUN199898
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 08 11:41:44 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	7.615	168	264109	20.00 µg/L	0.10
23) I14-DIFLUOROBENZENE	8.366	114	400762	20.00 µg/L	0.10
48) CHLOROBENZEN-d5-IS	13.066	117	395845	20.00 µg/L	0.12
71) I14-DICLBENZENE-D4	17.066	152	241598	20.00 µg/L	-0.06
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.097	111	183047	20.36 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.80%		
39) STOLUENE-D8	10.386	98	497195	19.75 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.75%		
59) S4BRFLUOROBENZENE	15.320	95	196413	19.36 µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.80%		
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	3.655	94	454	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	5.168	43	18099	17.89 µg/L	92
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.711	142	242	N.D.	
12) CARBON DISULFIDE	4.599	76	1054	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.117	84	418	N.D.	
15) TRANS12DICLETHENE	5.219	96	771	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.594	43	326	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.873	83	720	N.D.	
22) BROMOCHLOROMETHANE	6.863	49	1242	N.D.	
25) TETRAHYDROFURAN	7.066	42	148	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	7.036	117	98	N.D.	
30) BENZENE	7.604	78	140	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	10.995	43	61	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.477	91	261	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\199898-899-900\
Data File : 989823.D
Acq On : 6 Jun 2018 9:30 pm
Operator : NIVA
Sample : 2863856
Misc : RUN199898
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 08 11:41:44 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

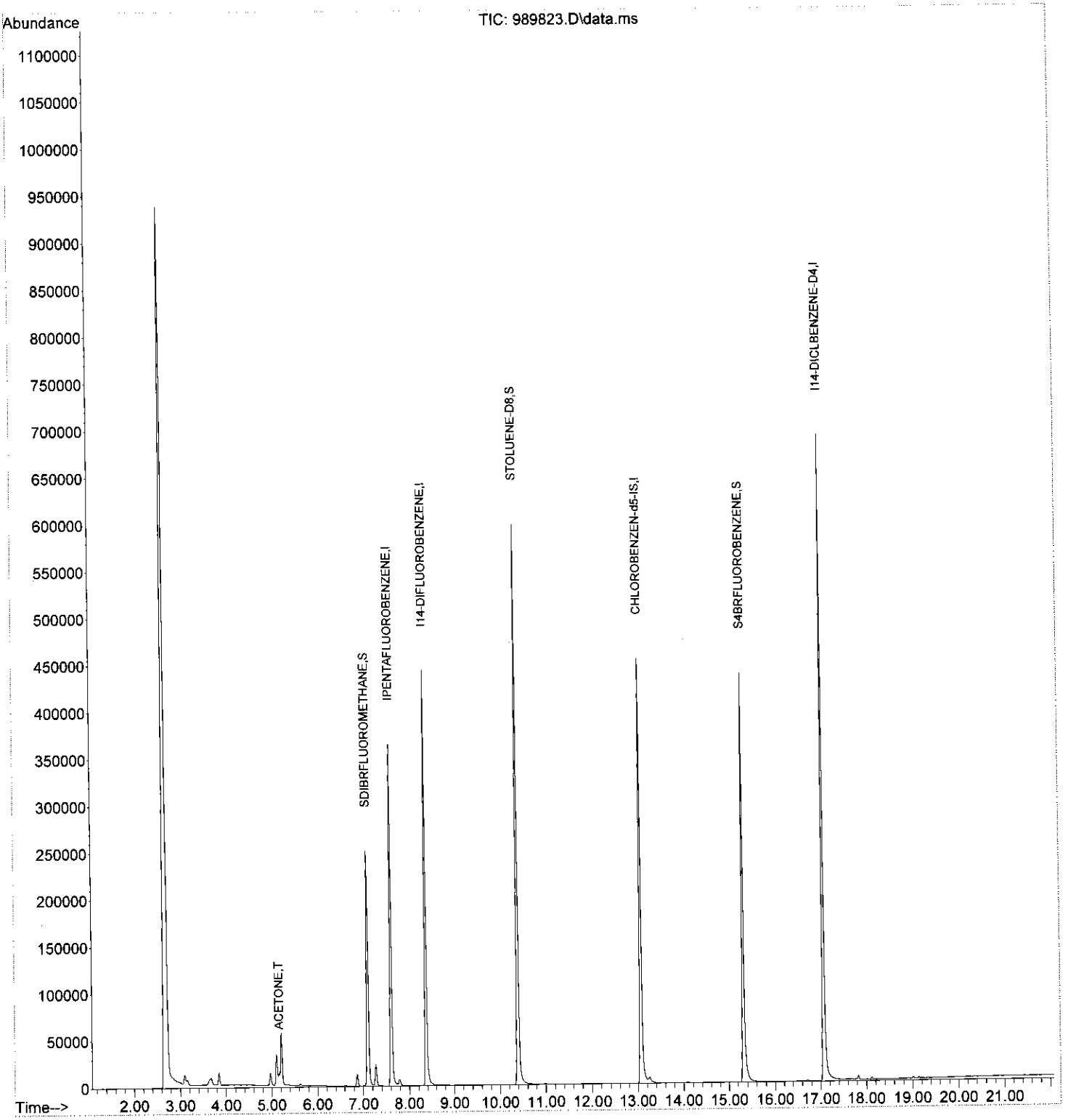
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.
46) TETRACHLOROETHENE	0.000		0	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	0.000		0	N.D.
50) 1-CHLOROHEXANE	13.076	91	634	N.D.
51) 1112-TETRACLETHANE	0.000		0	N.D.
52) ETHYLBENZENE	13.076	91	738	N.D.
53) 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	15.360	77	145	N.D.
63) N-PROPYLBENZENE	15.320	91	372	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	17.086	146	237	N.D.
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.
73) 14-DICHLOROBENZENE	17.086	146	237	N.D.
74) 12-DICHLOROBENZENE	0.000		0	N.D.
75) N-BUTYLBENZENE	17.452	91	76	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

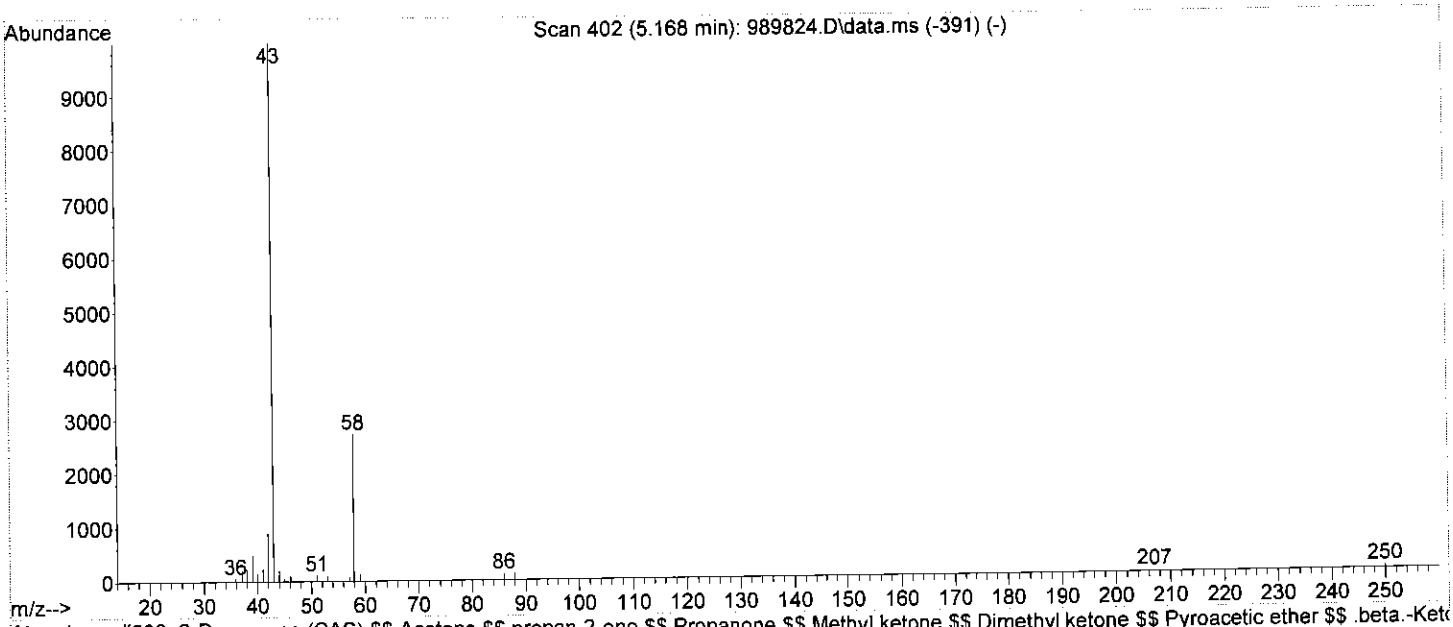
Quantitation Report (QT Reviewed)

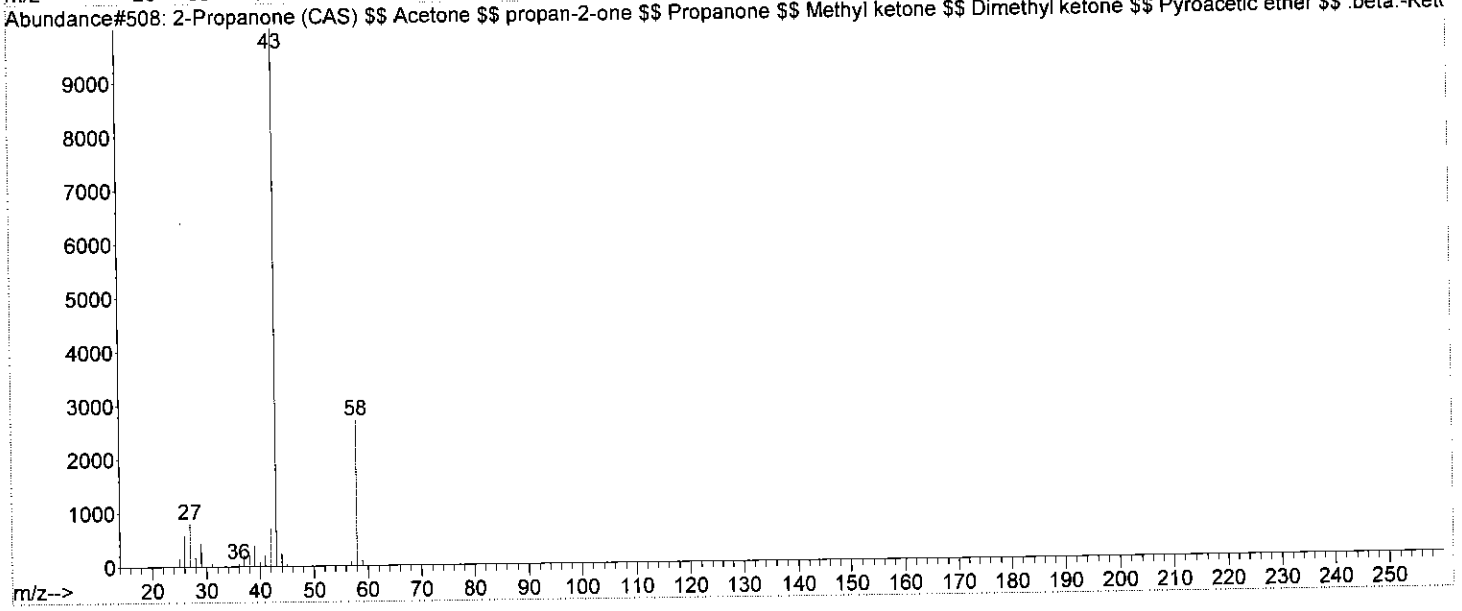
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989823.D
Acq On : 6 Jun 2018 9:30 pm
Operator : NIVA
Sample : 2863856
Misc : RUN199898
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 08 11:41:44 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 : 64
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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989824.D
Acq On : 6 Jun 2018 9:56 pm
Operator : NIVA
Sample : 2863857
Misc : RUN199898
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 08 11:42:28 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	7.615	168	267904	20.00 µg/L	0.10
23) I14-DIFLUOROBENZENE	8.366	114	387837	20.00 µg/L	0.10
48) CHLOROBENZEN-d5-IS	13.076	117	379477	20.00 µg/L	0.13
71) I14-DICLBENZENE-D4	17.066	152	228869	20.00 µg/L	-0.06
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.097	111	194159	22.31 µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.55%		
39) STOLUENE-D8	10.386	98	486331	19.96 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.80%		
59) S4BRFLUOROBENZENE	15.320	95	182741	18.78 µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.90%		
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	3.645	94	476	N.D.	
6) CHLOROETHANE	4.173	64	644	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.168	43	44357	43.23 µg/L #	96
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.721	142	132	N.D.	
12) CARBON DISULFIDE	4.599	76	817	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.117	84	274	N.D.	
15) TRANS12DICLETHENE	5.229	96	890	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.163	43	65	N.D.	
18) 2-BUTANONE	7.249	43	554	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.873	83	783	N.D.	
22) BROMOCHLOROMETHANE	6.873	49	1238	N.D.	
25) TETRAHYDROFURAN	7.066	42	182	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	7.016	117	585	N.D.	
30) BENZENE	7.635	78	404	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	10.985	43	196	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.477	91	339	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\199898-899-900\
Data File : 989824.D
Acq On : 6 Jun 2018 9:56 pm
Operator : NIVA
Sample : 2863857
Misc : RUN199898
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 08 11:42:28 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

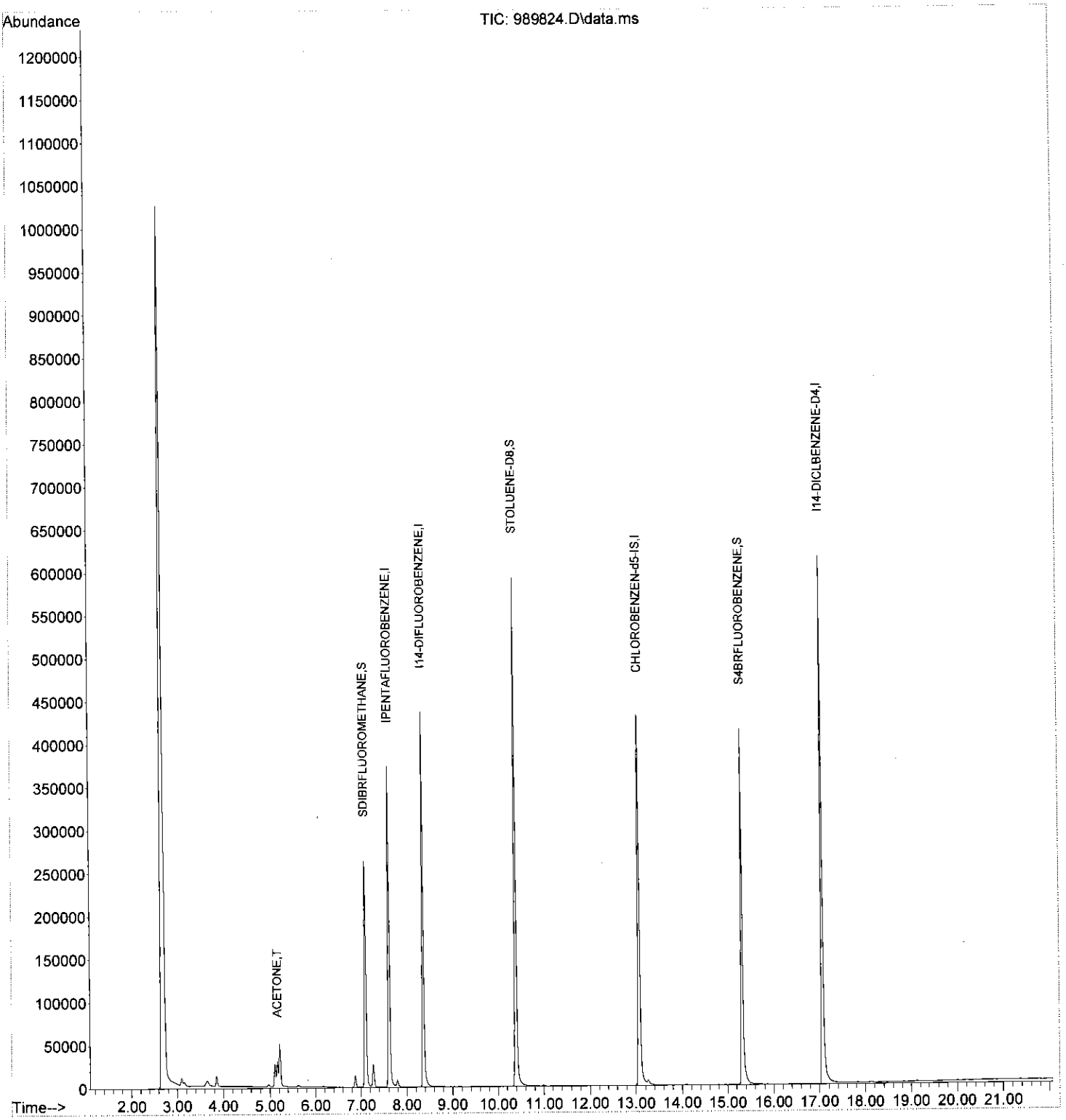
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.066	91	651	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.066	91	651	N.D.	
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	15.320	77	1155	N.D.	
63) N-PROPYLBENZENE	15.320	91	615	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	17.096	146	222	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.096	146	222	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

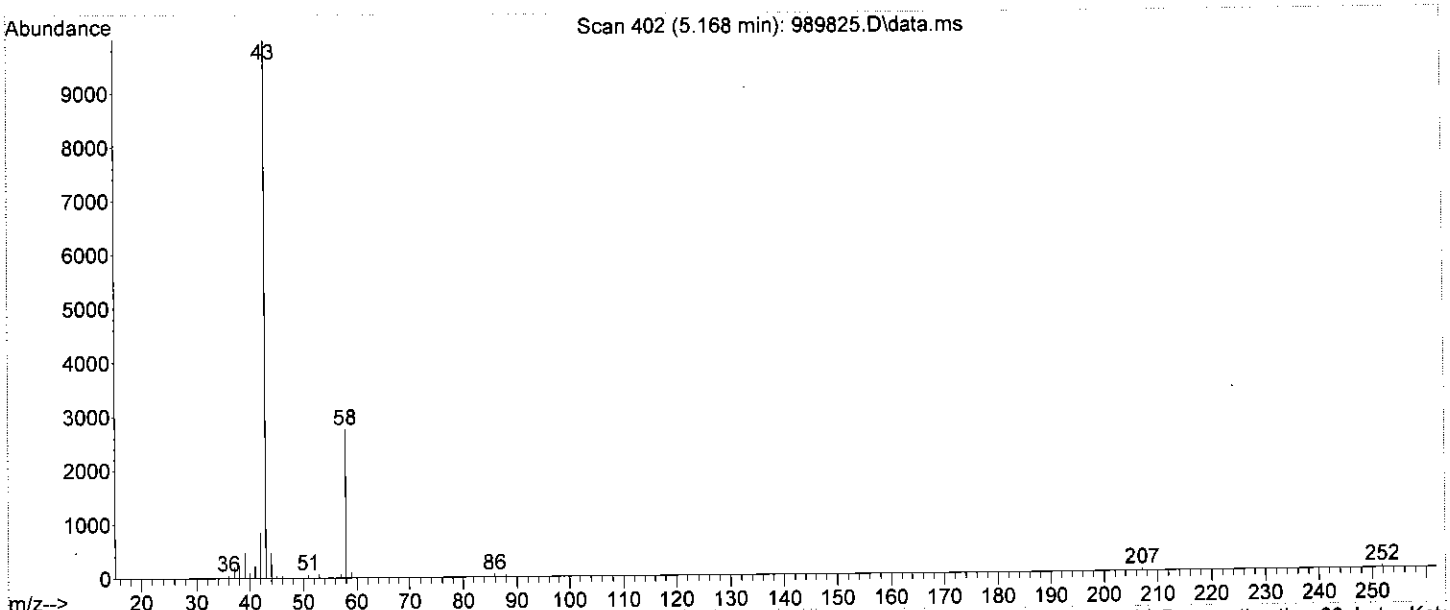
Quantitation Report (QT Reviewed)

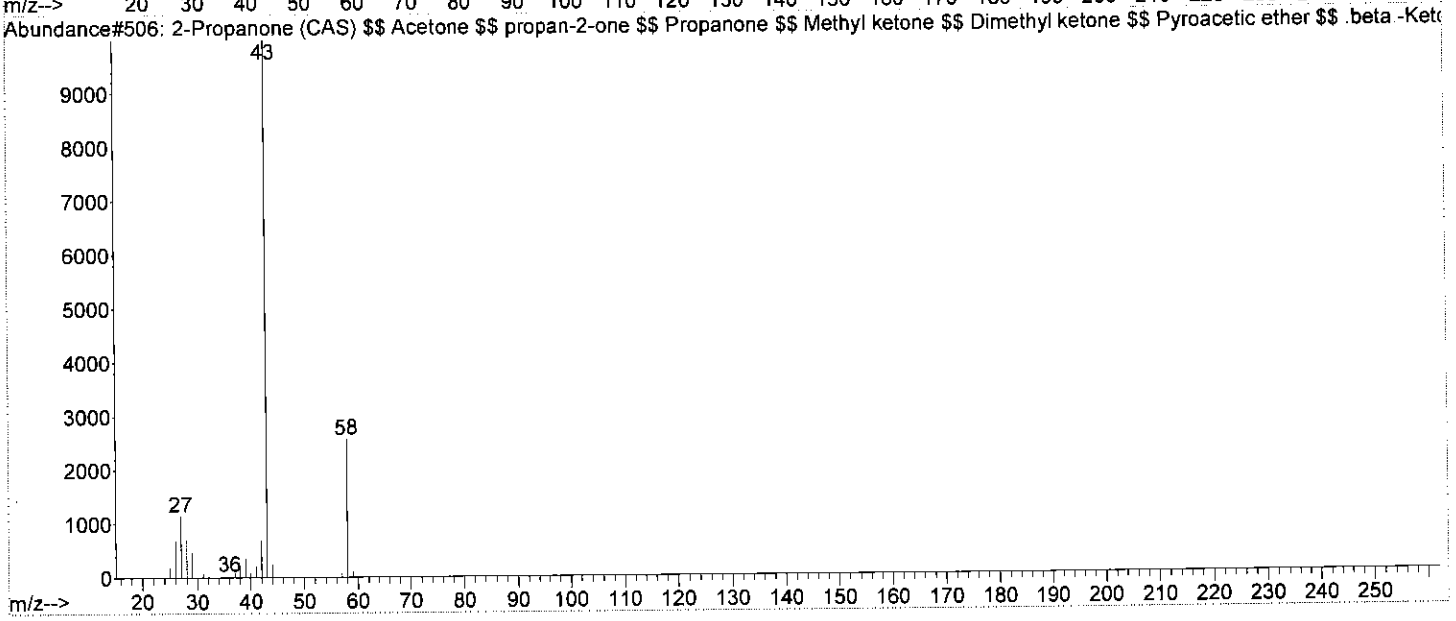
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989824.D
Acq On : 6 Jun 2018 9:56 pm
Operator : NIVA
Sample : 2863857
Misc : RUN199898
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 08 11:42:28 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 : 64
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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989825.D
Acq On : 6 Jun 2018 10:22 pm
Operator : NIVA
Sample : 2863858
Misc : RUN199898
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 08 11:43:38 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	7.614	168	240286	20.00 µg/L	0.10
23) I14-DIFLUOROBENZENE	8.366	114	366714	20.00 µg/L	0.10
48) CHLOROBENZEN-d5-IS	13.076	117	358495	20.00 µg/L	0.13
71) I14-DICLBENZENE-D4	17.076	152	214700	20.00 µg/L	-0.05
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.107	111	174827	21.25 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.25%		
39) STOLUENE-D8	10.386	98	458638	19.91 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.55%		
59) S4BRFLUOROBENZENE	15.320	95	171916	18.71 µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.55%		
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	3.655	94	341	N.D.	
6) CHLOROETHANE	4.092	64	644	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.168	43	105440	114.58 µg/L	98
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	0.000		0	N.D.	
12) CARBON DISULFIDE	4.610	76	704	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.127	84	266	N.D.	
15) TRANS12DICLETHENE	5.219	96	737	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.259	43	263	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.873	83	722	N.D.	
22) BROMOCHLOROMETHANE	6.873	49	1138	N.D.	
25) TETRAHYDROFURAN	7.056	42	84	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	421	N.D.	
30) BENZENE	7.604	78	65	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	10.467	91	424	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\199898-899-900\
Data File : 989825.D
Acq On : 6 Jun 2018 10:22 pm
Operator : NIVA
Sample : 2863858
Misc : RUN199898
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 08 11:43:38 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

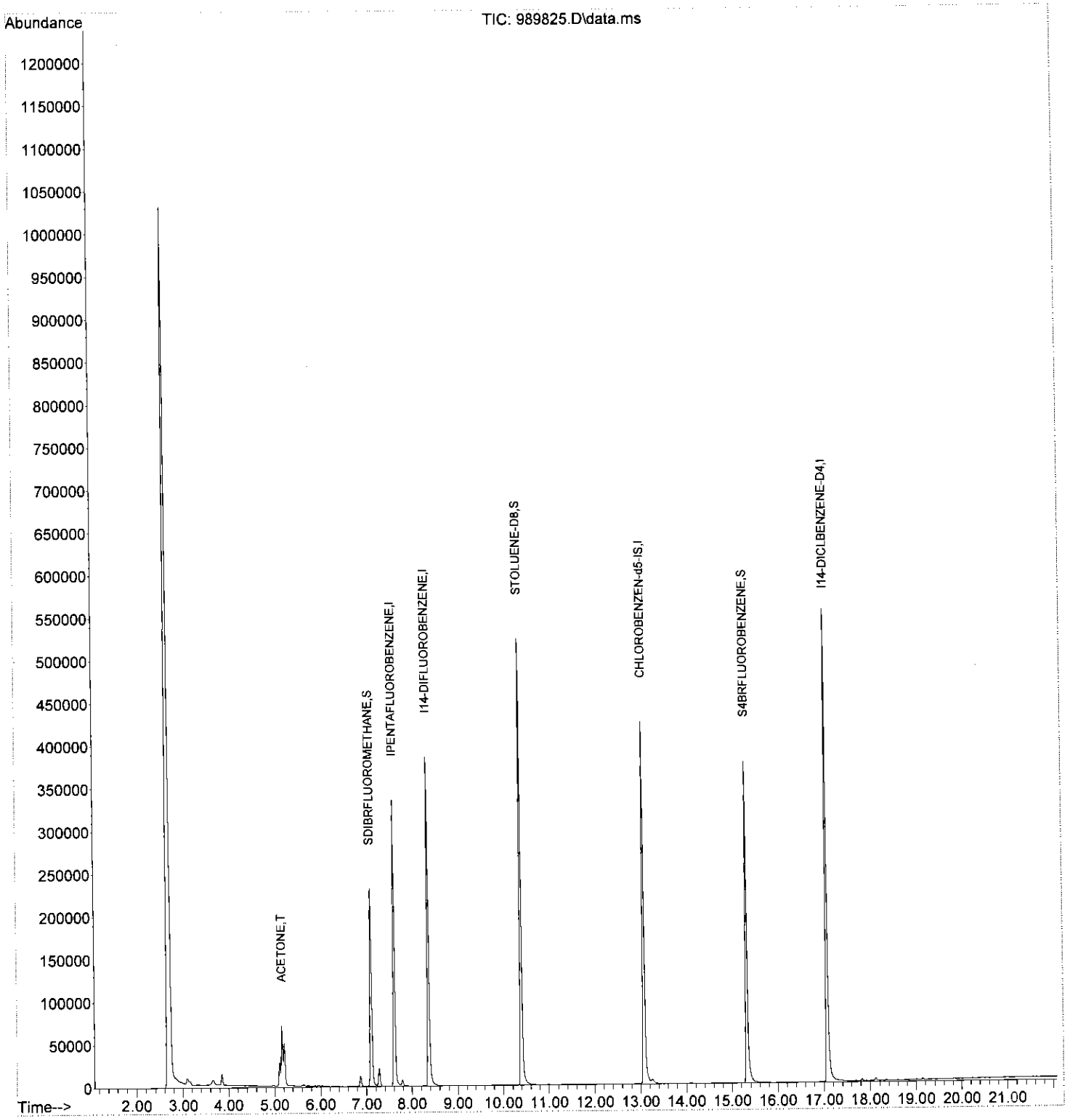
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.076	91	692	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.076	91	779	N.D.	
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	15.320	77	1000	N.D.	
63) N-PROPYLBENZENE	15.320	91	562	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	17.086	146	155	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.086	146	155	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

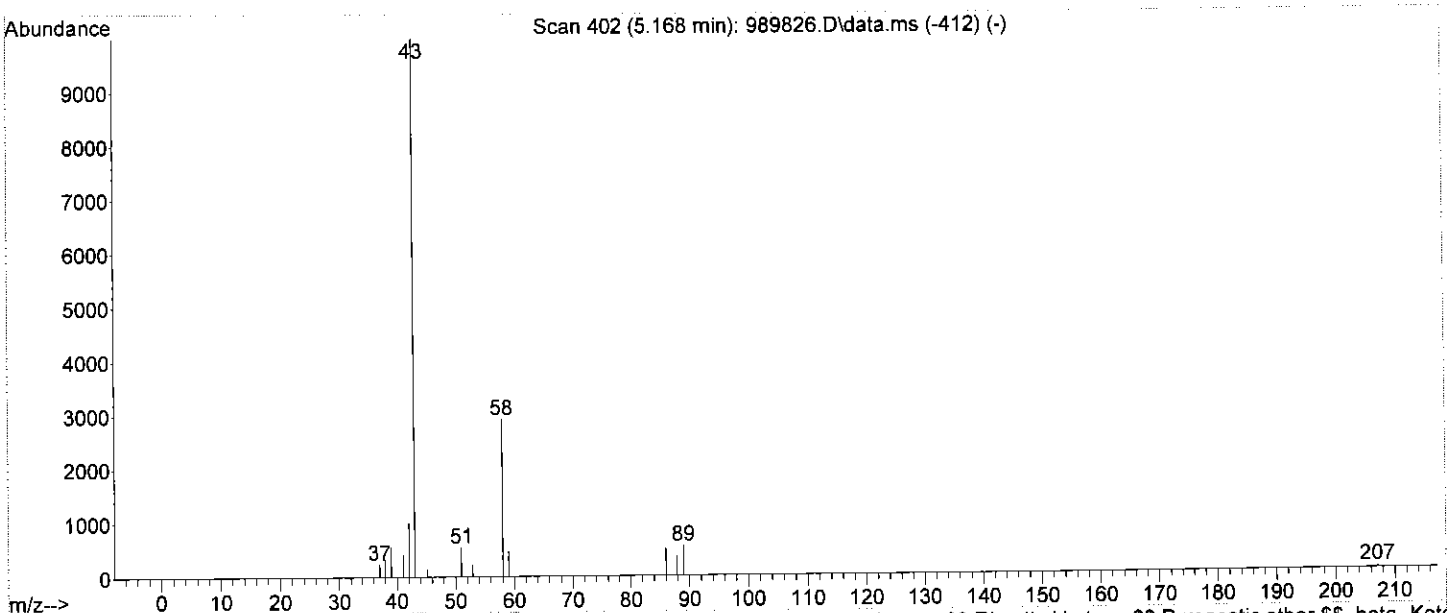
Quantitation Report (QT Reviewed)

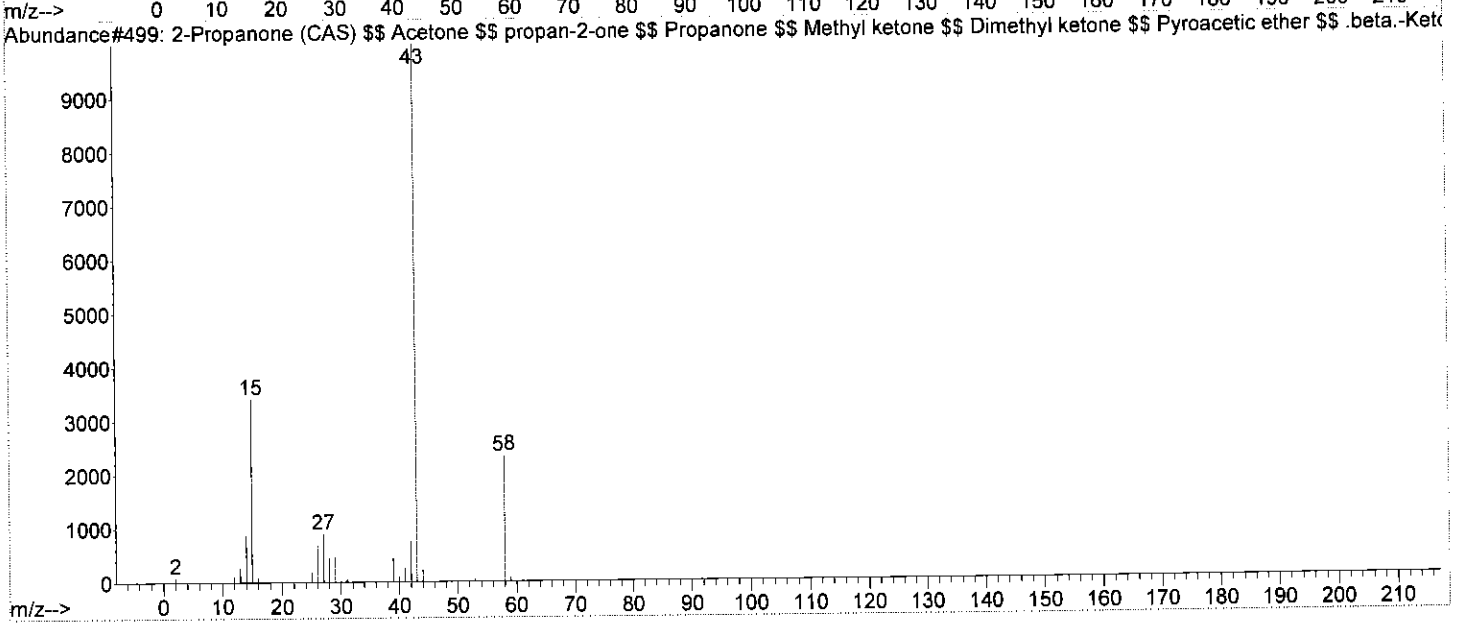
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989825.D
Acq On : 6 Jun 2018 10:22 pm
Operator : NIVA
Sample : 2863858
Misc : RUN199898
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 08 11:43:38 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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989826.D
Acq On : 6 Jun 2018 10:49 pm
Operator : NIVA
Sample : 2863860
Misc : RUN199898
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 08 11:44:39 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	7.614	168	237927	20.00 µg/L	0.10
23) I14-DIFLUOROBENZENE	8.376	114	357283	20.00 µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.076	117	349031	20.00 µg/L	0.13
71) I14-DICLBENZENE-D4	17.076	152	208909	20.00 µg/L	-0.05
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.107	111	170114	21.22 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.10%		
39) STOLUENE-D8	10.396	98	447046	19.92 µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.60%		
59) S4BRFLUOROBENZENE	15.330	95	166379	18.59 µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.95%		
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	3.665	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	5.168	43	15077	16.55 µg/L #	61
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	0.000		0	N.D.	
12) CARBON DISULFIDE	4.599	76	648	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.117	84	309	N.D.	
15) TRANS12DICLETHENE	5.219	96	992	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.290	43	130	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.873	83	1152	N.D.	
22) BROMOCHLOROMETHANE	6.873	49	1200	N.D.	
25) TETRAHYDROFURAN	7.056	42	87	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	526	N.D.	
30) BENZENE	7.604	78	150	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	10.487	91	151	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\199898-899-900\
Data File : 989826.D
Acq On : 6 Jun 2018 10:49 pm
Operator : NIVA
Sample : 2863860
Misc : RUN199898
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 08 11:44:39 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

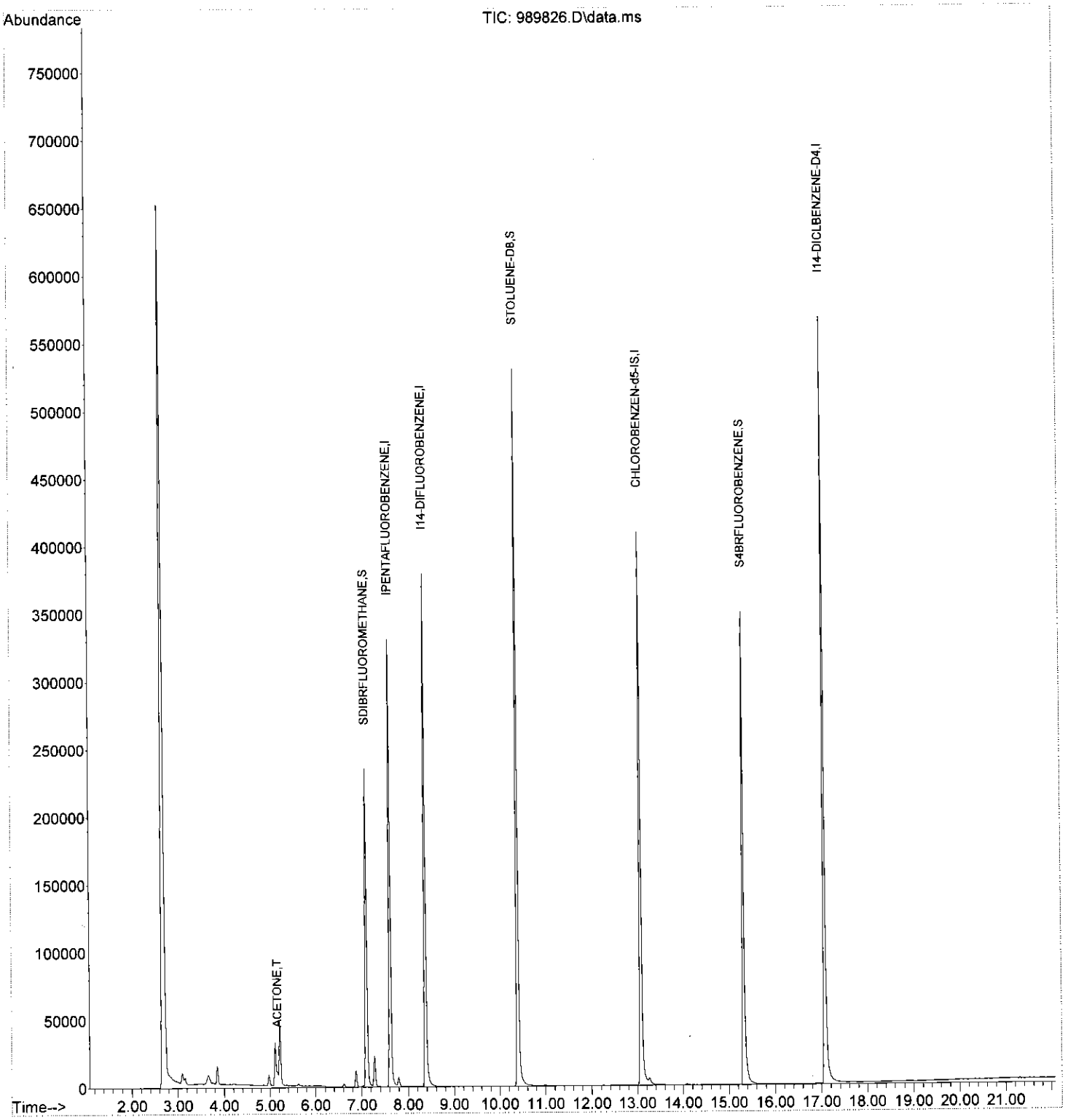
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.076	91	641	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.076	91	710	N.D.	
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	15.330	77	451	N.D.	
63) N-PROPYLBENZENE	15.330	91	378	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	17.096	146	82	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.096	146	82	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

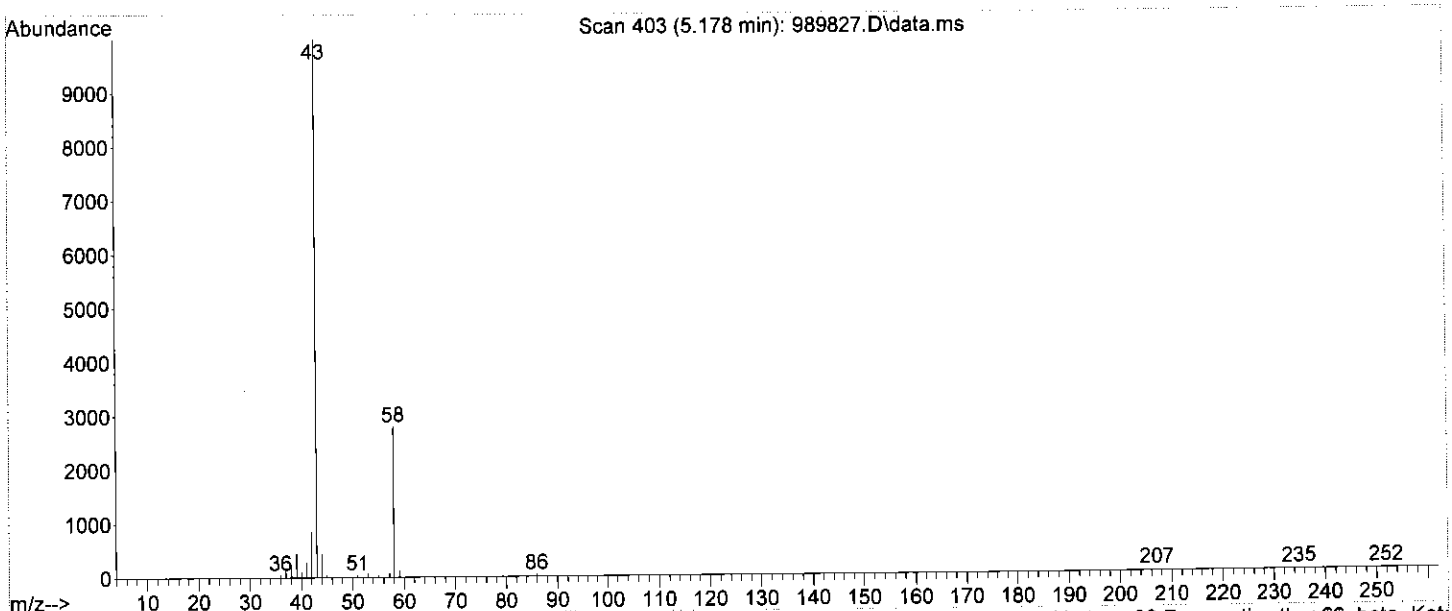
Quantitation Report (QT Reviewed)

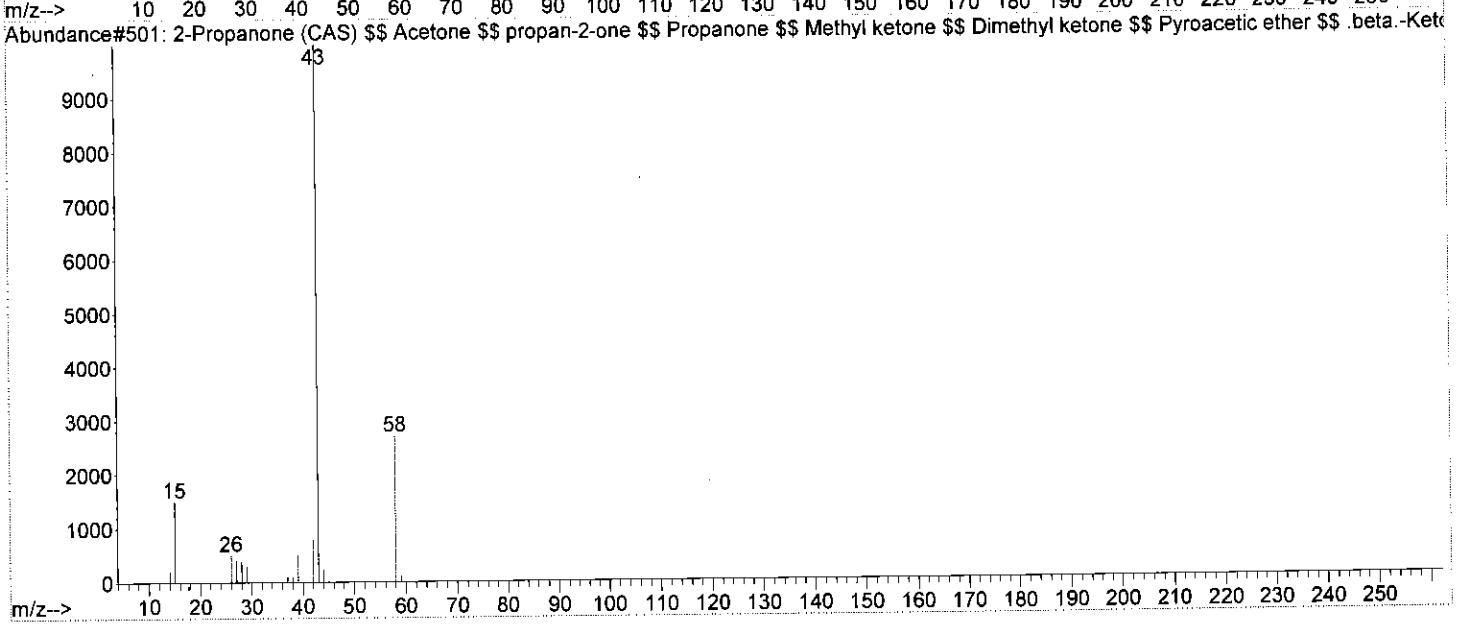
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989826.D
Acq On : 6 Jun 2018 10:49 pm
Operator : NIVA
Sample : 2863860
Misc : RUN199898
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jun 08 11:44:39 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

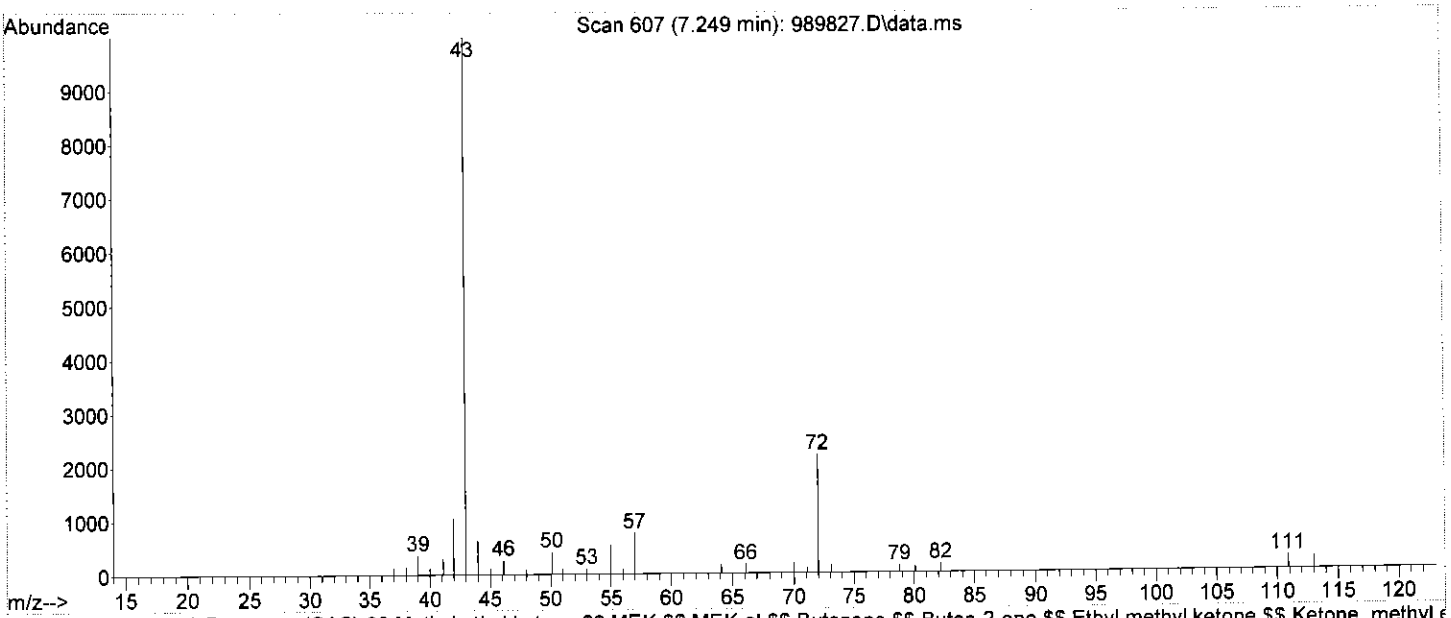


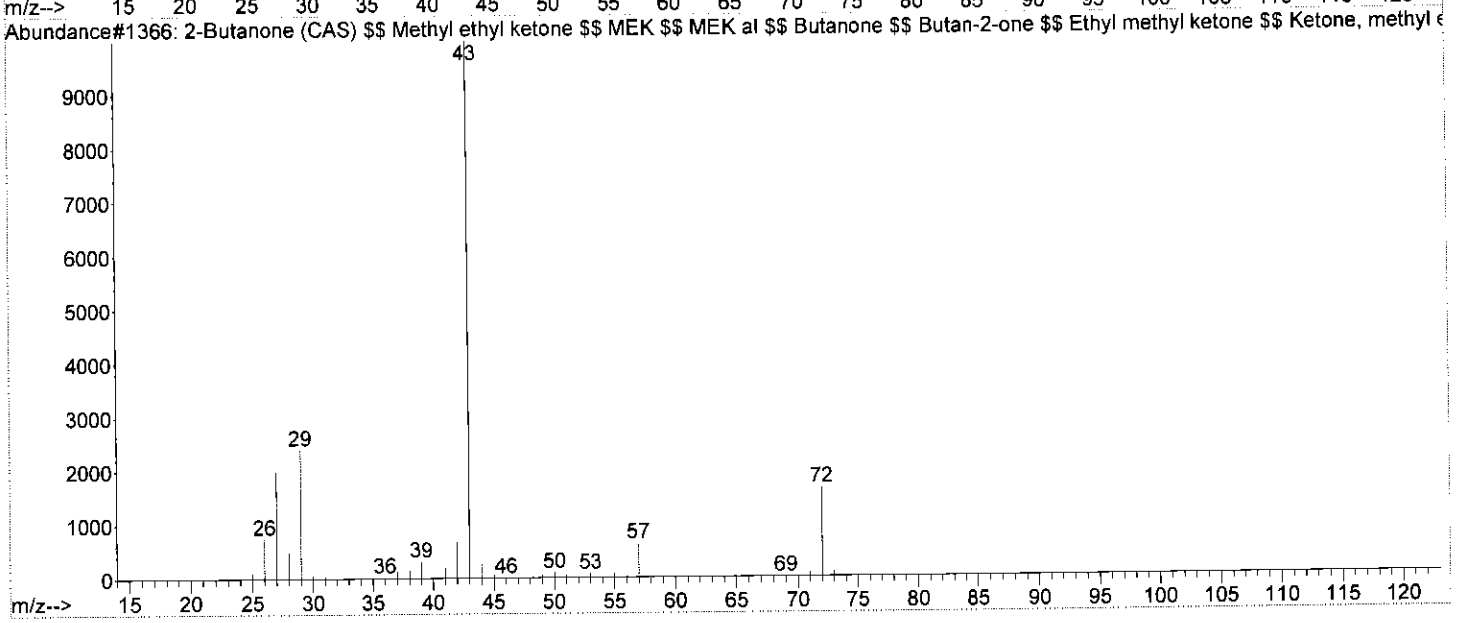
Library Searched : C:\Database\WILEY275.L
Quality : 72
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



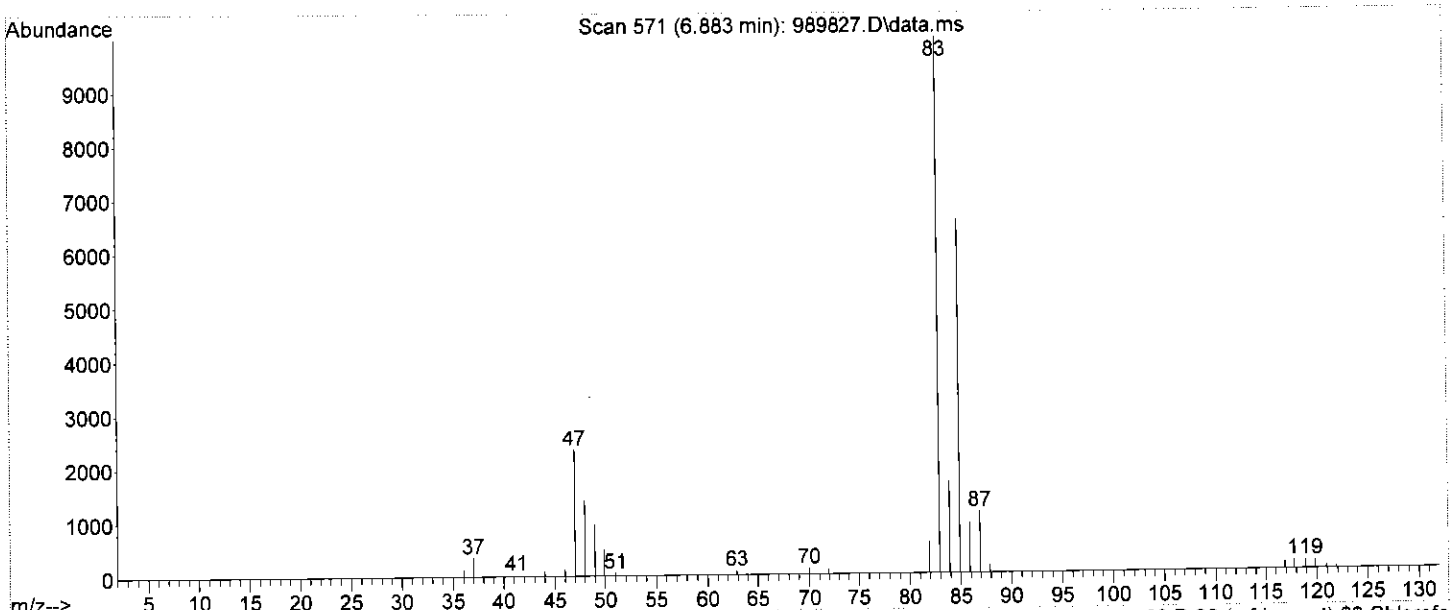


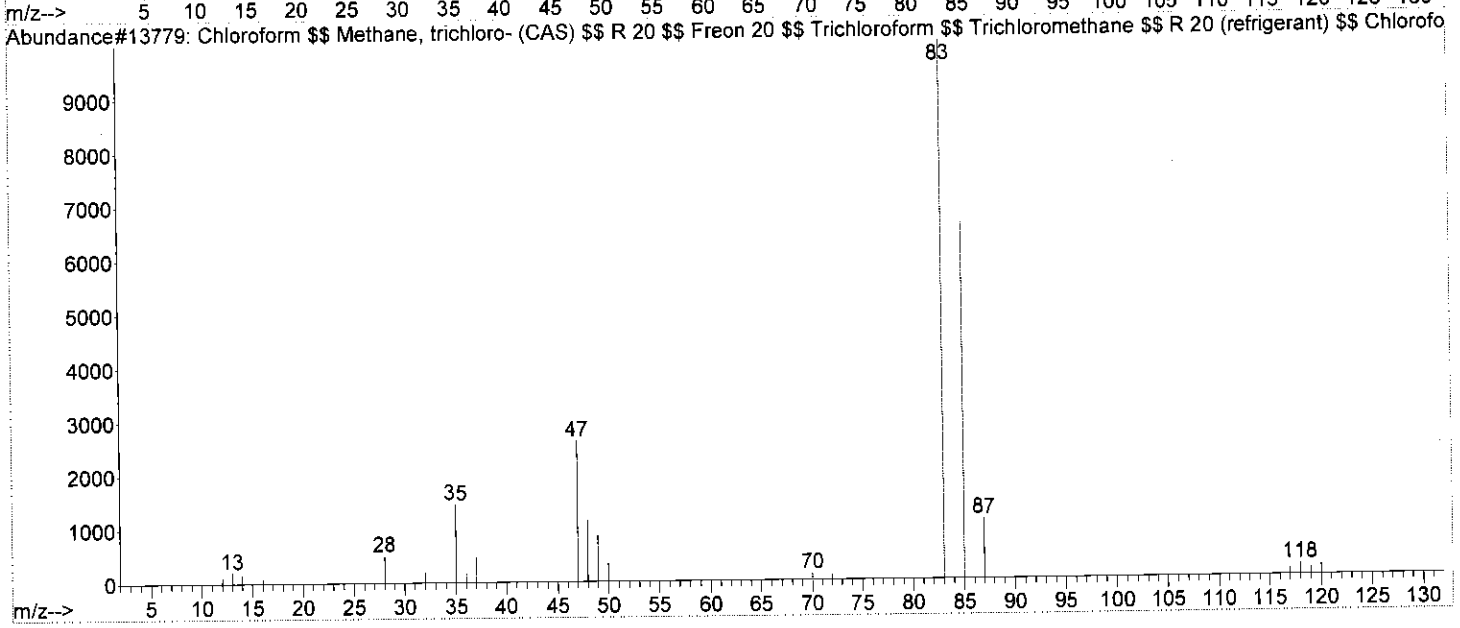
Library Searched : C:\Database\WILEY275.L
Quality : 64
ID : 2-Butanone (CAS) $$ Methyl ethyl ketone $$ MEK $$ MEK al $$ Butanone $$ Butan-2-one $$ Ethyl methyl ketone $$ Ketone, methyl ethyl $$ 3-Butanone $$ 2-BUTANONE (METHYL ETHYL KETONE) $$ C2H5COCH3 $$ Acetone, methyl- $$ Aethylmethylketon $$ Butanone 2 $$ Eth



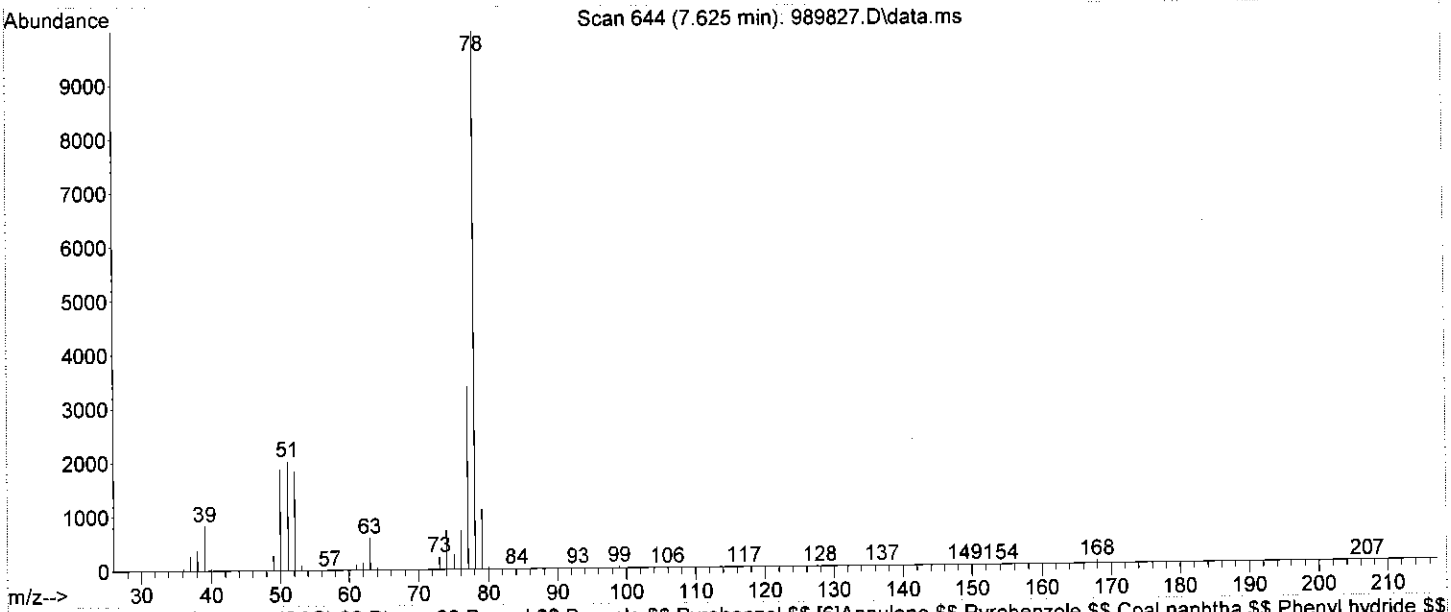


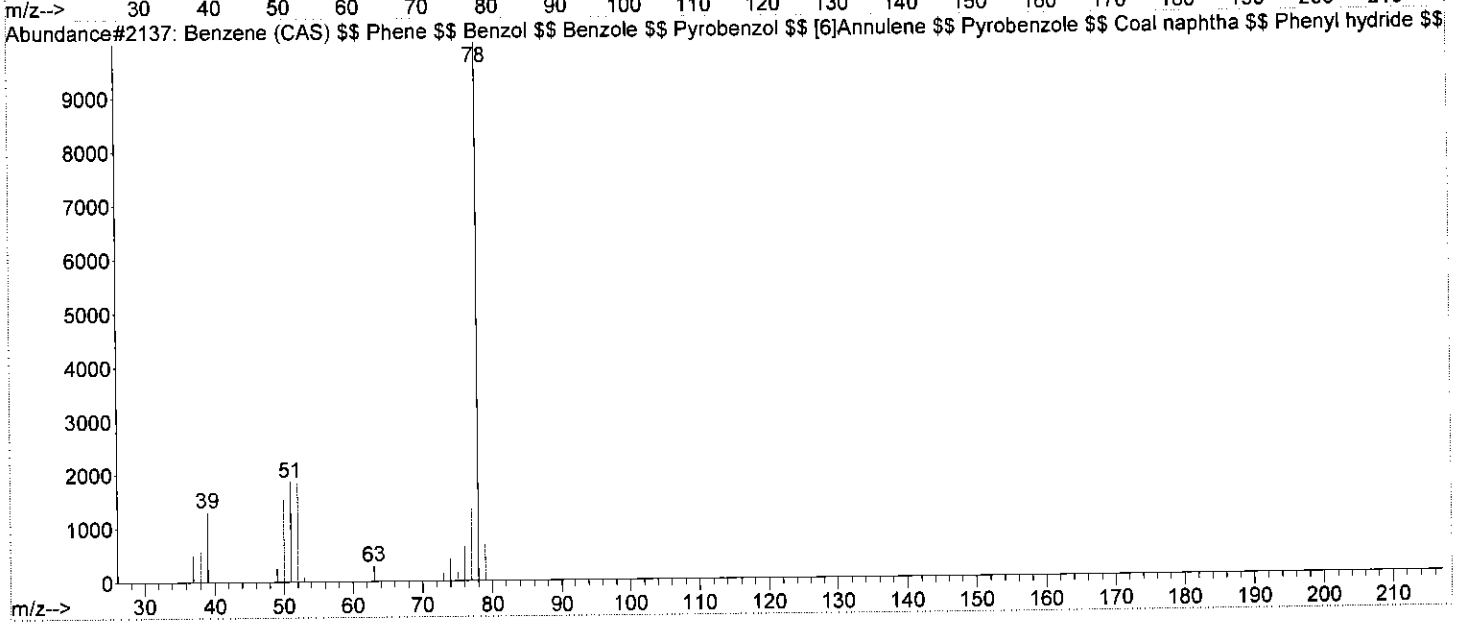
Library Searched : C:\Database\WILEY275.L
Quality : 95
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



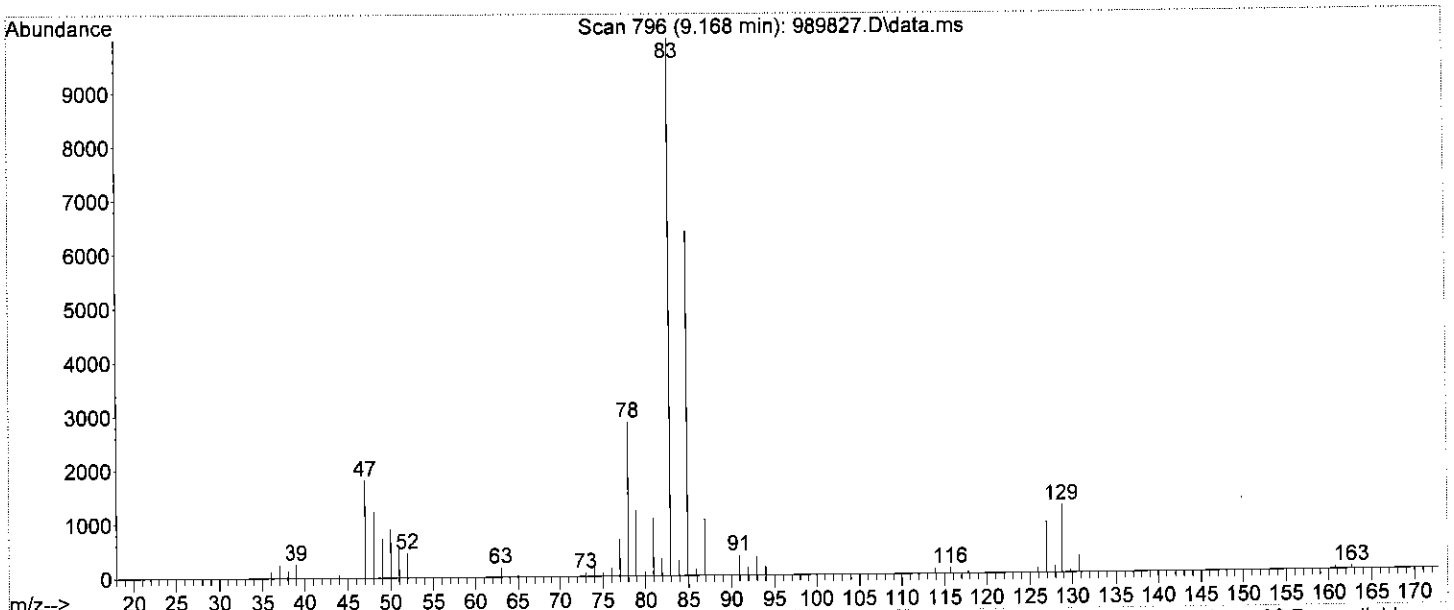


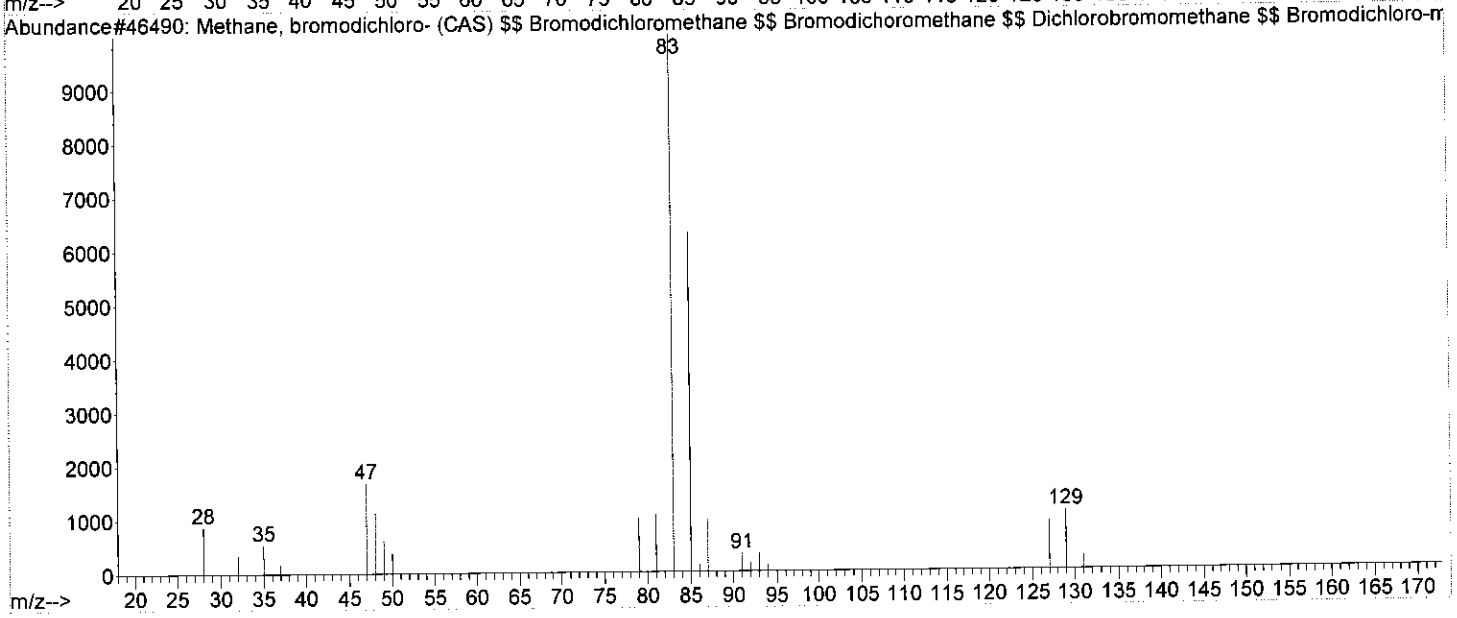
Library Searched : C:\Database\WILEY275.L
Quality : 94
ID : Benzene (CAS) $$ Phene $$ Benzol $$ Benzole $$ Pyrobenzol $$ [6]Annulene $$ Pyrobenzole $$ Coal naphtha $$ Phenyl hydride $$ Cyclohexatriene $$ Benzolene $$ Bicarburet of hydrogen $$ Carbon oil $$ Mineral naphtha $$ Motor benzol $$ Benzeen $$ Benzen $$ Be



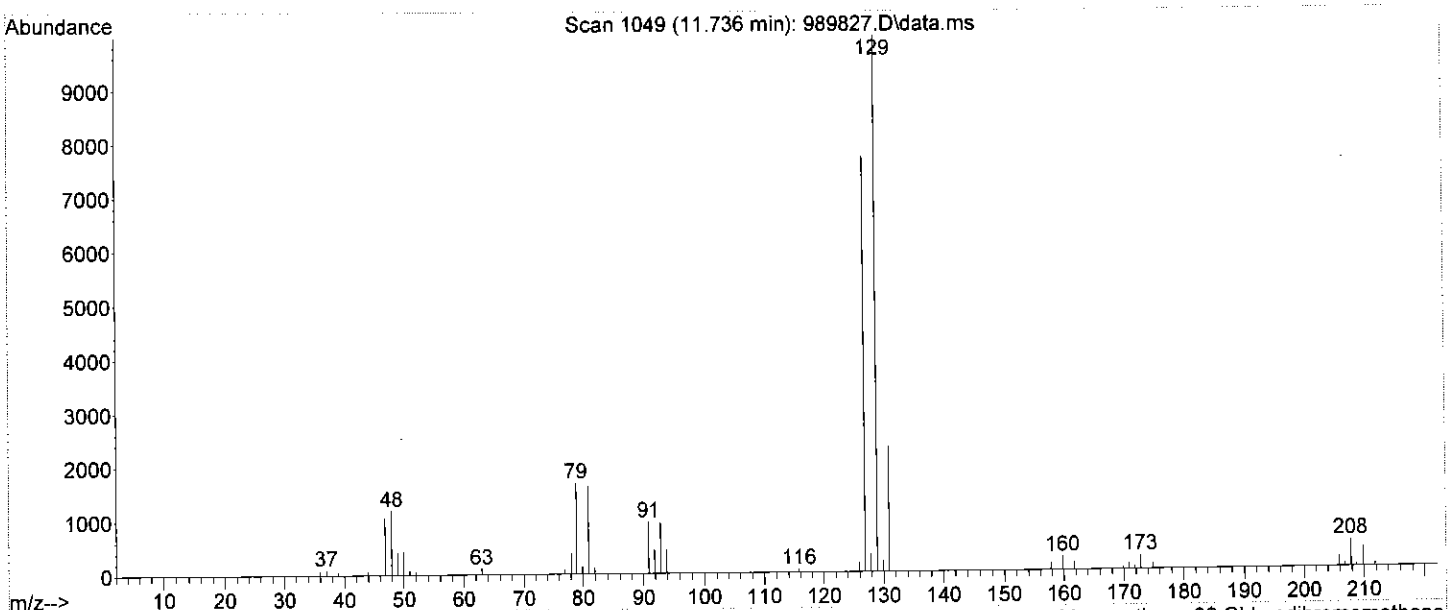


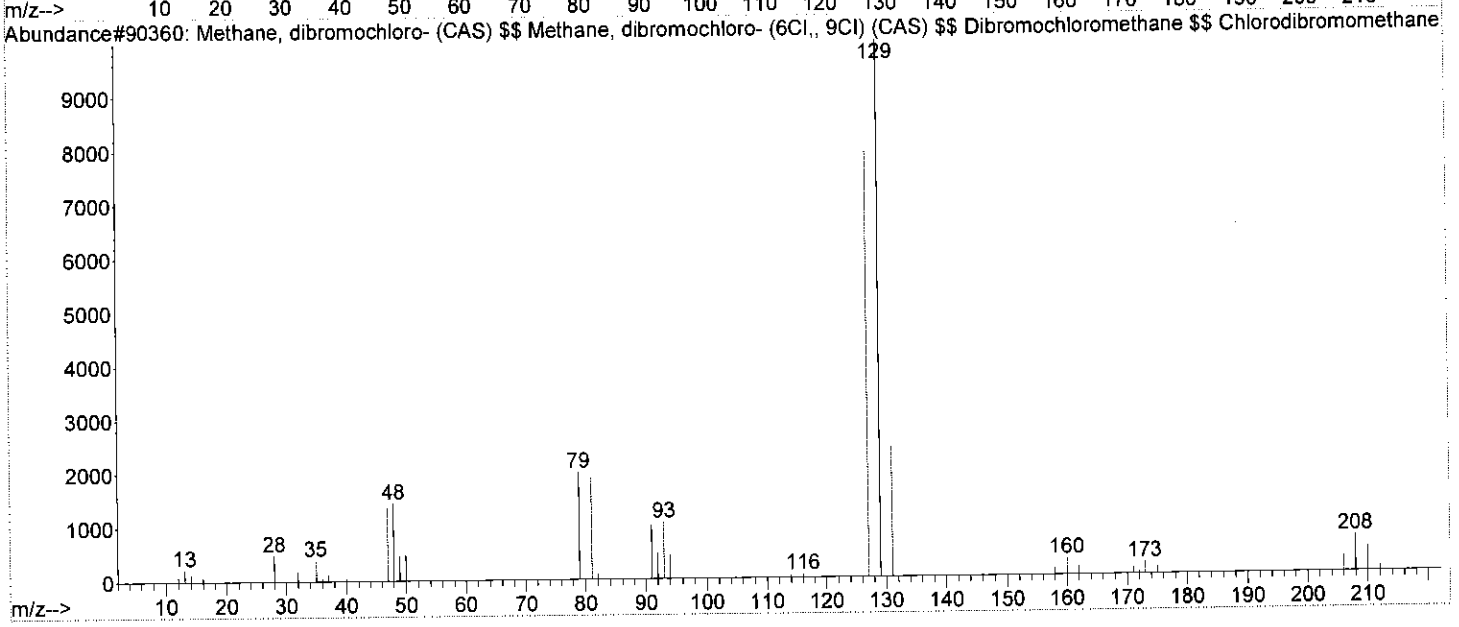
Library Searched : C:\Database\WILEY275.L
Quality : 87
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichlorobromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobromomethane $$ Monobromodichloromethane



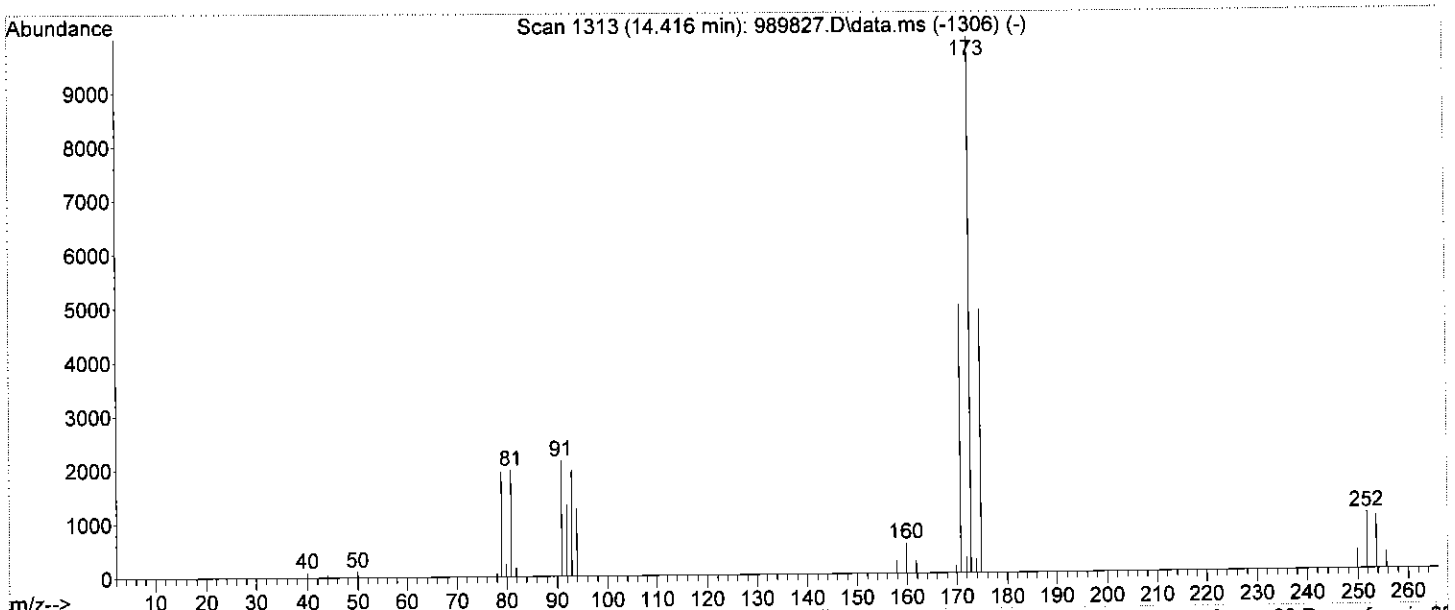


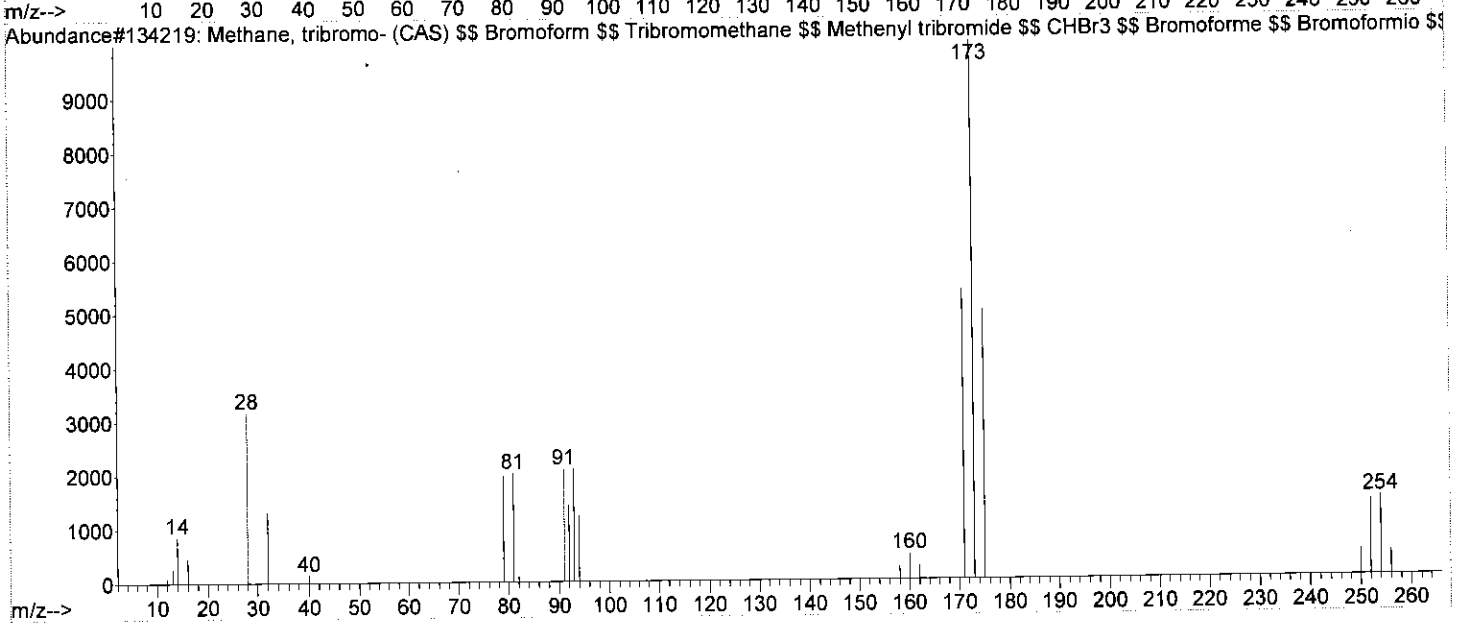
Library Searched : C:\Database\WILEY275.L
Quality : 99
ID : Methane, dibromochloro- (CAS) $$ Methane, dibromochloro- (6CI,, 9CI) (CAS) $$ Dibromochloromethane $$ Chlorodibromomethane $$ Monochlorodibromomethane $$ Dibromomonochloromethane $$ CHClBr2 $$ Methane, chlorodibromo- $$ Cdbm $$ NCI-C5 5254





Library Searched : C:\Database\WILEY275.L
Quality : 98
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\199898-899-900\
Data File : 989827.D
Acq On : 6 Jun 2018 11:15 pm
Operator : NIVA
Sample : 2875940
Misc : RUN199898
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 08 11:47:48 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	7.635	168	185135	20.00 µg/L	# 0.12
23) I14-DIFLUOROBENZENE	8.376	114	505445	20.00 µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.076	117	473525	20.00 µg/L	0.13
71) I14-DICLBENZENE-D4	17.076	152	278252	20.00 µg/L	-0.05
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.107	111	188389	16.61 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 83.05%		
39) STOLUENE-D8	10.396	98	598114	18.84 µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.20%		
59) S4BRFLUOROBENZENE	15.320	95	235610	19.41 µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.05%		
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	3.665	94	432	N.D.	
6) CHLOROETHANE	4.183	64	350	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.178	43	129658	182.87 µg/L	99
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.711	142	270	N.D.	
12) CARBON DISULFIDE	4.599	76	727	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.127	84	603	N.D.	
15) TRANS12DICLETHENE	5.229	96	1061	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.249	43	37123	32.53 µg/L	95
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.883	83	96716	17.90 µg/L	100
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	7.056	42	198	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	7.960	62	1896	N.D.	
29) CARBONTETRACHLORIDE	7.036	117	593	N.D.	
30) BENZENE	7.625	78	51123285	3002.10 µg/L #	77
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	9.097	63	144	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	9.168	83	79176	10.33 µg/L	99
35) 2-CLETHYLVINYLETHER	9.929	63	149	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	10.995	43	140	N.D.	
38) CIS13DICLPROPENE	10.102	75	61	N.D.	
40) TOLUENE	10.477	91	2789	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	11.777	76	64	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989827.D
Acq On : 6 Jun 2018 11:15 pm
Operator : NIVA
Sample : 2875940
Misc : RUN199898
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 08 11:47:48 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

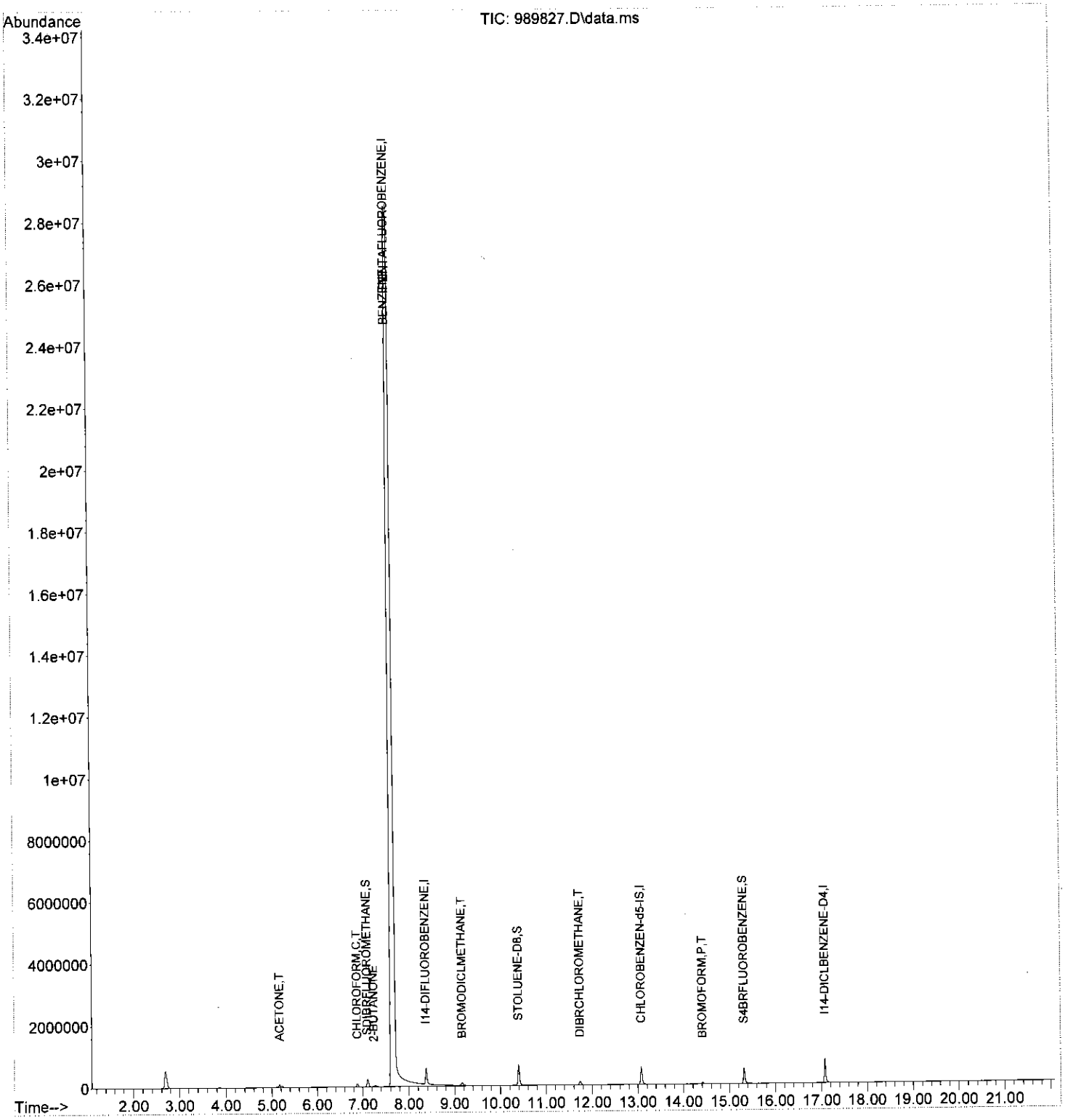
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.736	129	90794	14.54 µg/L	99
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.076	91	947	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.076	91	1378	N.D.	
53) MP-XYLENE	13.401	91	423	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	14.416	173	37743	9.06 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	15.512	77	499	N.D.	
63) N-PROPYLBENZENE	15.320	91	456	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	17.096	146	552	N.D.	
72) 4-ISOPROPYLTOLUENE	16.812	119	83	N.D.	
73) 14-DICHLOROBENZENE	17.096	146	552	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

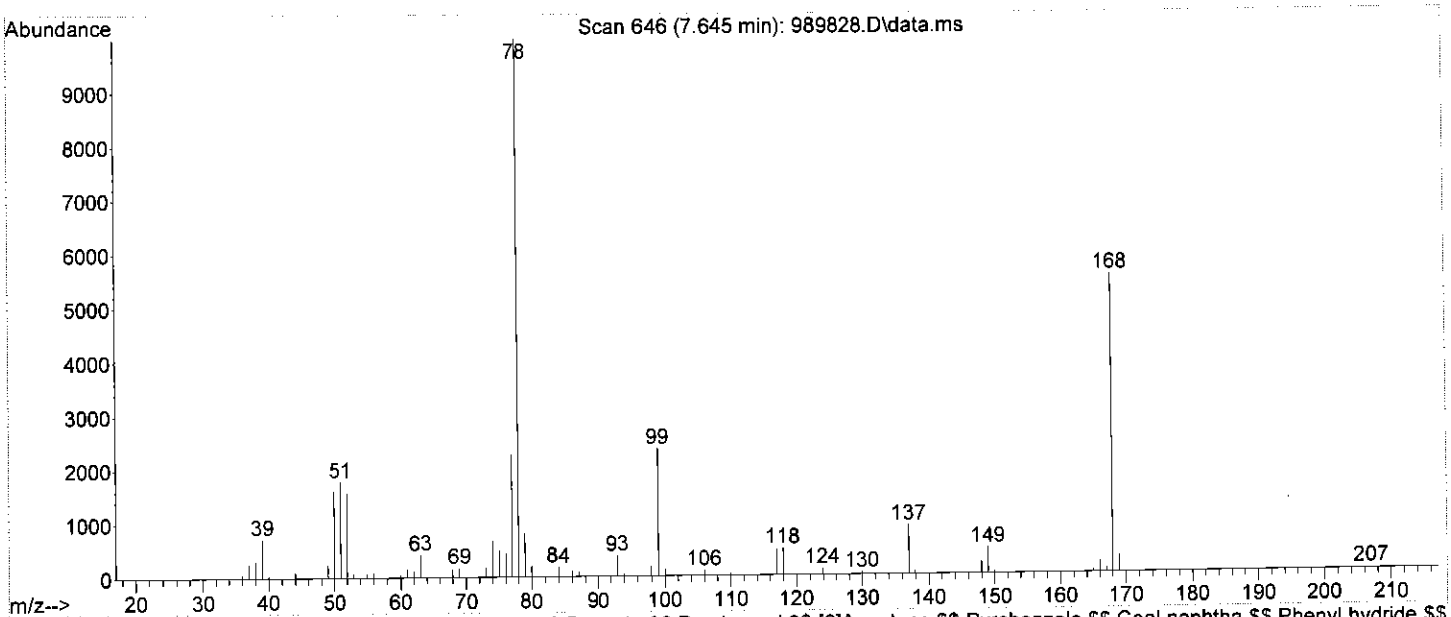
Quantitation Report (QT Reviewed)

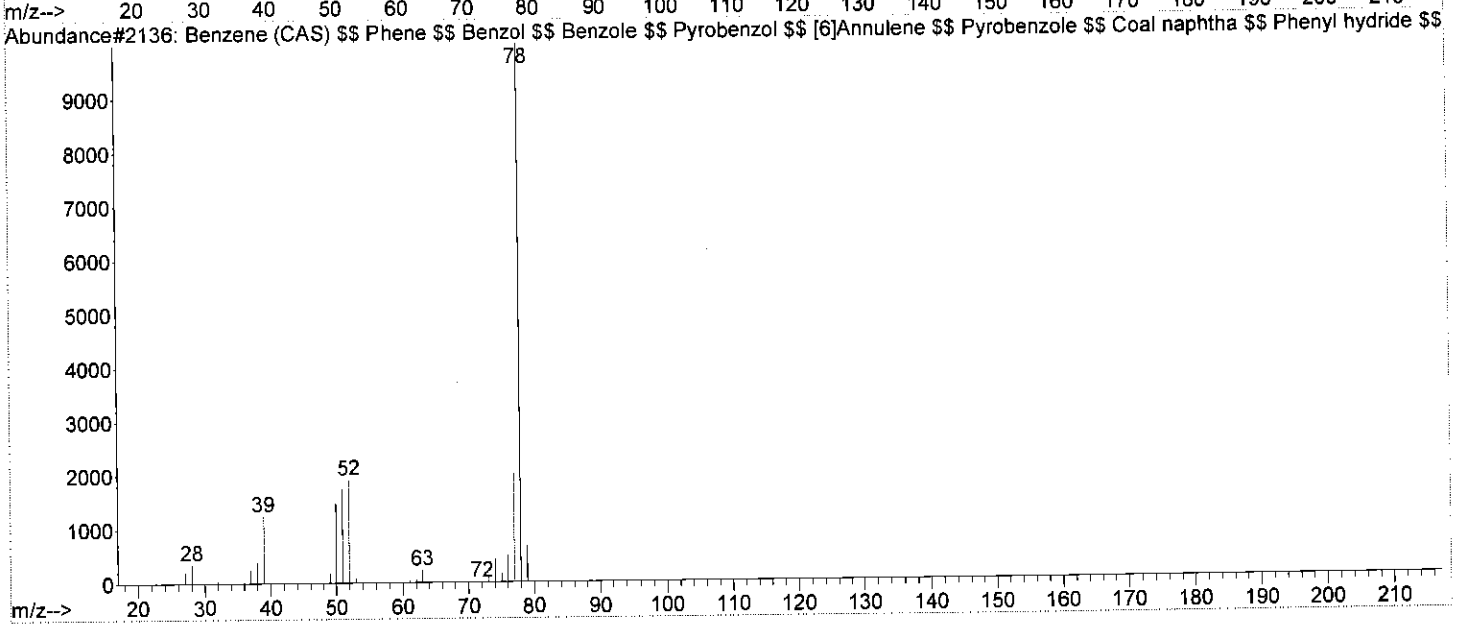
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989827.D
Acq On : 6 Jun 2018 11:15 pm
Operator : NIVA
Sample : 2875940
Misc : RUN199898
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 08 11:47:48 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 : 93
ID : Benzene (CAS) $$ Phene $$ Benzol $$ Benzole $$ Pyrobenzol $$ [6]Annulene $$ Pyrobenzole $$ Coal naphtha $$ Phenyl hydride $$ Cyclohexatriene $$ Benzolene $$ Bicarburet of hydrogen $$ Carbon oil $$ Mineral naphtha $$ Motor benzol $$ Benzeen $$ Benzen $$ Be





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989828.D
Acq On : 6 Jun 2018 11:41 pm
Operator : NIVA
Sample : 2869049
Misc : RUN199898
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 08 11:49:09 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	7.624	168	281299	20.00 µg/L	0.11
23) I14-DIFLUOROBENZENE	8.376	114	395796	20.00 µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.076	117	372172	20.00 µg/L	0.13
71) I14-DICLBENZENE-D4	17.076	152	211214	20.00 µg/L	-0.05
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.107	111	187196	21.08 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.40%		
39) STOLUENE-D8	10.396	98	482903	19.42 µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.10%		
59) S4BRFLUOROBENZENE	15.330	95	176565	18.51 µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.55%		
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	3.493	94	131	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	5.178	43	6815	6.33 µg/L #	11
10) 11-DICHLOROETHENE	0.000		0	N.D. d	
11) IODOMETHANE	4.731	142	70	N.D.	
12) CARBON DISULFIDE	4.609	76	665	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	5.117	84	294	N.D.	
15) TRANS12DICLETHENE	5.229	96	1365	N.D.	
16) 11-DICHLOROETHANE	6.112	63	367	N.D.	
17) VINYL ACETATE	6.203	43	429	N.D.	
18) 2-BUTANONE	7.259	43	122	N.D.	
19) CIS12DICHLOROETHENE	6.599	96	1349	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.883	83	4195	0.51 µg/L #	99
22) BROMOCHLOROMETHANE	6.873	49	1466	N.D.	
25) TETRAHYDROFURAN	7.066	42	234	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	7.097	117	713	N.D.	
30) BENZENE	7.635	78	221559	16.61 µg/L	97
31) TRICHLOROETHENE	8.376	132	1354	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	10.030	75	349	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\199898-899-900\
Data File : 989828.D
Acq On : 6 Jun 2018 11:41 pm
Operator : NIVA
Sample : 2869049
Misc : RUN199898
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 08 11:49:09 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

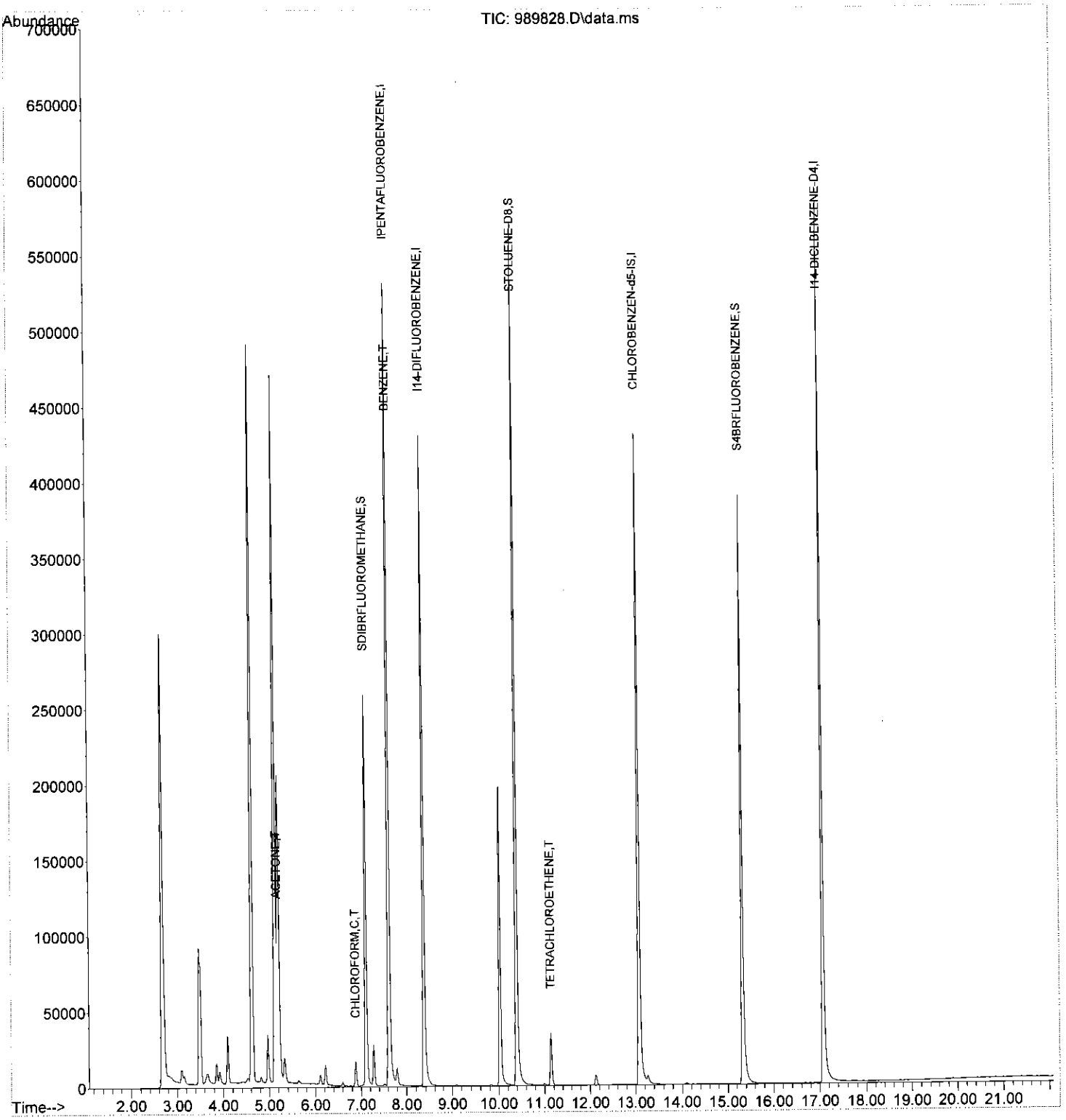
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	11.137	166	16068	3.59 µg/L	93
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.076	91	626	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.076	91	767	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	15.380	77	73	N.D.	
63) N-PROPYLBENZENE	15.330	91	579	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	17.096	146	71	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.096	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

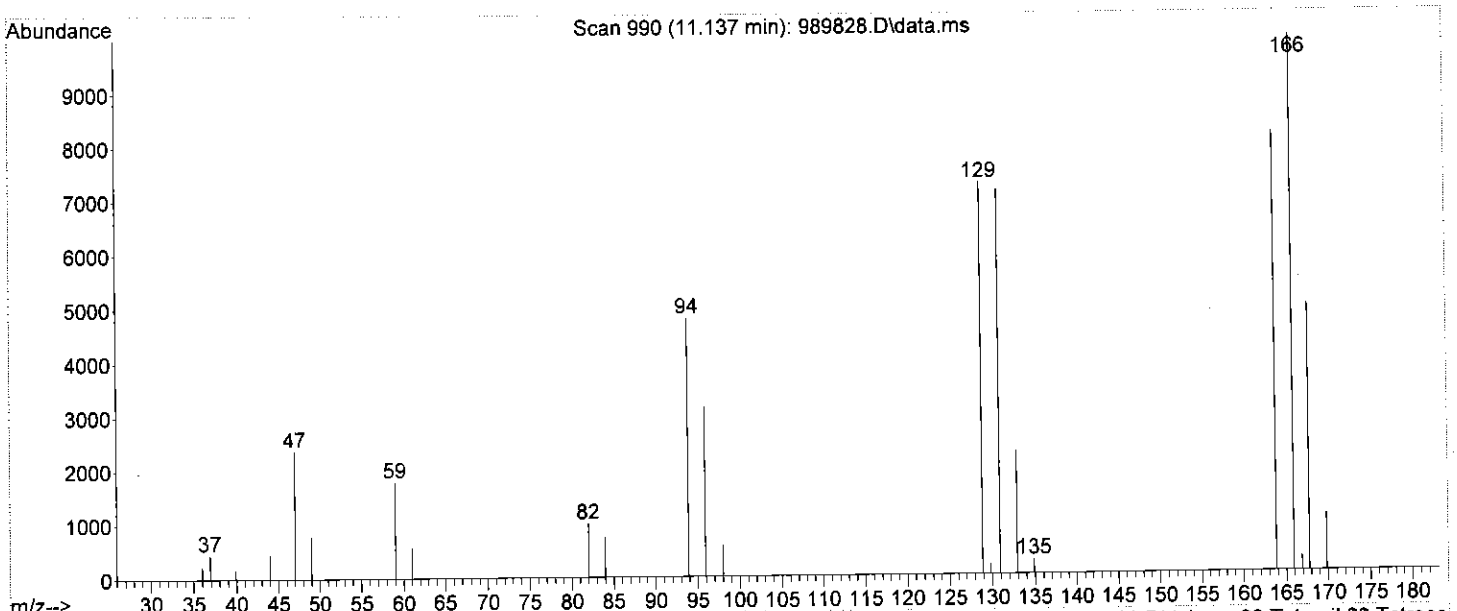
Quantitation Report (QT Reviewed)

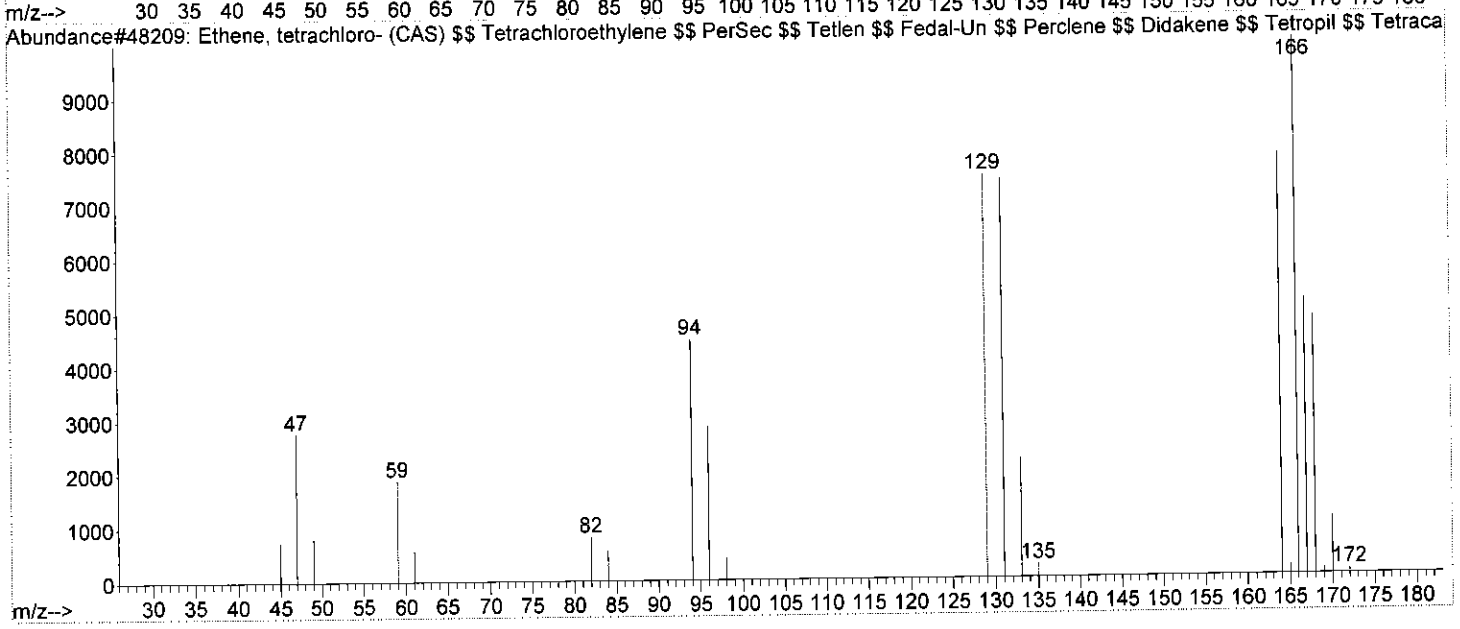
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989828.D
Acq On : 6 Jun 2018 11:41 pm
Operator : NIVA
Sample : 2869049
Misc : RUN199898
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 08 11:49:09 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\199898-899-900\
Data File : 989828.D
Acq On : 6 Jun 2018 11:41 pm
Operator : NIVA
Sample : 2869049
Misc : RUN199898
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 08 11:50:26 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	7.624	168	281299	20.00	µg/L	0.11
23) I14-DIFLUOROBENZENE	8.376	114	395796	20.00	µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.076	117	372172	20.00	µg/L	0.13
71) I14-DICLBENZENE-D4	17.076	152	211214	20.00	µg/L	-0.05
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.107	111	187196	21.08	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.40%			
39) STOLUENE-D8	10.396	98	482903	19.42	µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.10%			
59) S4BRFLUOROBENZENE	15.330	95	176565	18.51	µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.55%			
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	3.493	94	131	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	0.000		0	N.D.	d	
11) IODOMETHANE	4.731	142	70	N.D.		
12) CARBON DISULFIDE	4.609	76	665	N.D.		
13) ACRYLONITRILE	0.000		0	N.D.		
14) DICHLOROMETHANE	5.117	84	294	N.D.		
15) TRANS12DICLETHENE	5.229	96	1365	N.D.		
16) 11-DICHLOROETHANE	6.112	63	367	N.D.		
17) VINYL ACETATE	6.203	43	429	N.D.		
18) 2-BUTANONE	7.259	43	122	N.D.		
19) CIS12DICHLOROETHENE	6.599	96	1349	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	0.000		0	N.D.	d	
22) BROMOCHLOROMETHANE	6.873	49	1466	N.D.		
25) TETRAHYDROFURAN	7.066	42	234	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	7.097	117	713	N.D.		
30) BENZENE	0.000		0	N.D.	d	
31) TRICHLOROETHENE	8.376	132	1354	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	10.030	75	349	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\199898-899-900\
Data File : 989828.D
Acq On : 6 Jun 2018 11:41 pm
Operator : NIVA
Sample : 2869049
Misc : RUN199898
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 08 11:50:26 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

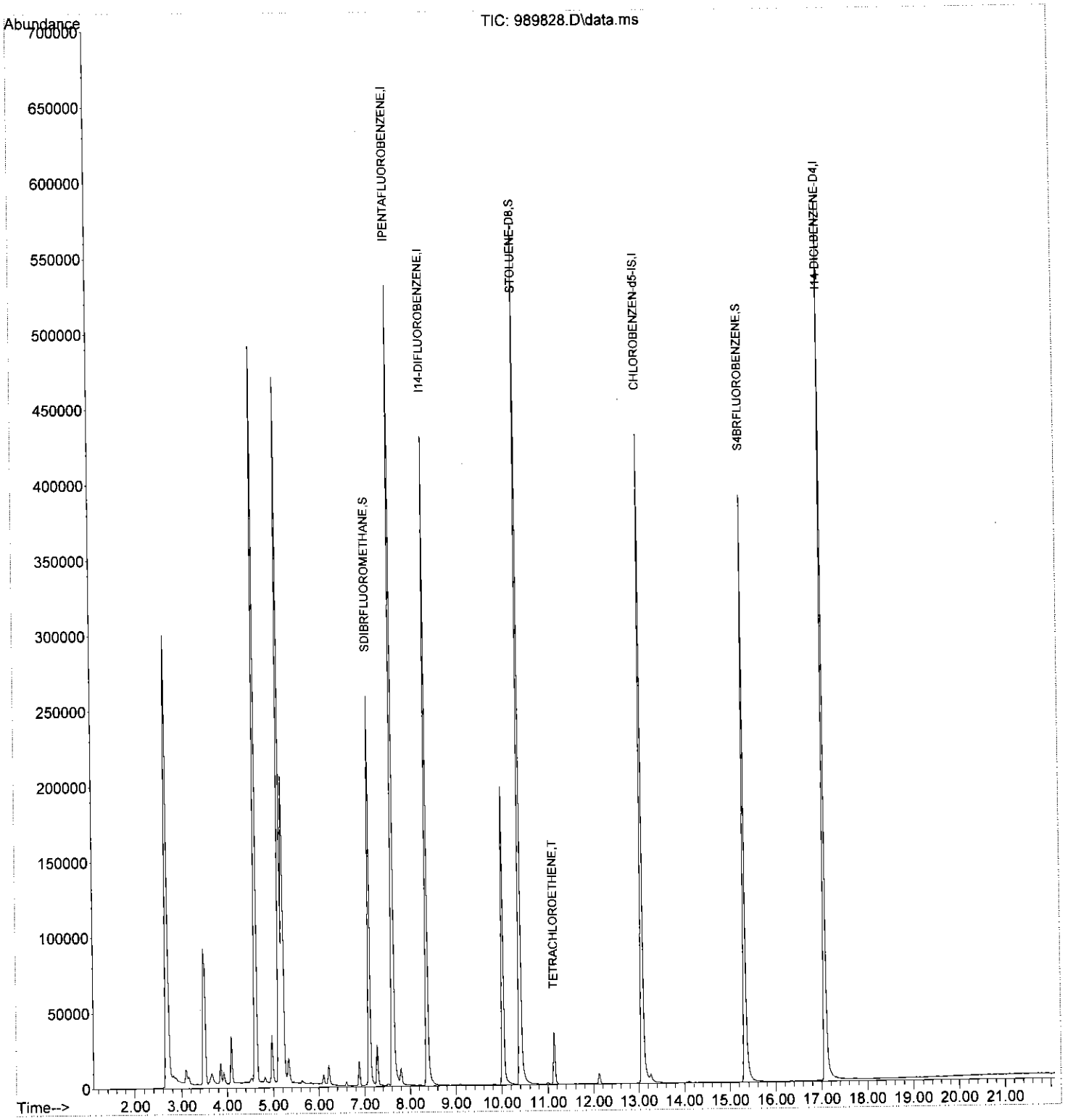
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	11.137	166	16068	3.59 µg/L	93
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.076	91	626	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.076	91	767	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	15.380	77	73	N.D.	
63) N-PROPYLBENZENE	15.330	91	579	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	17.096	146	71	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.096	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

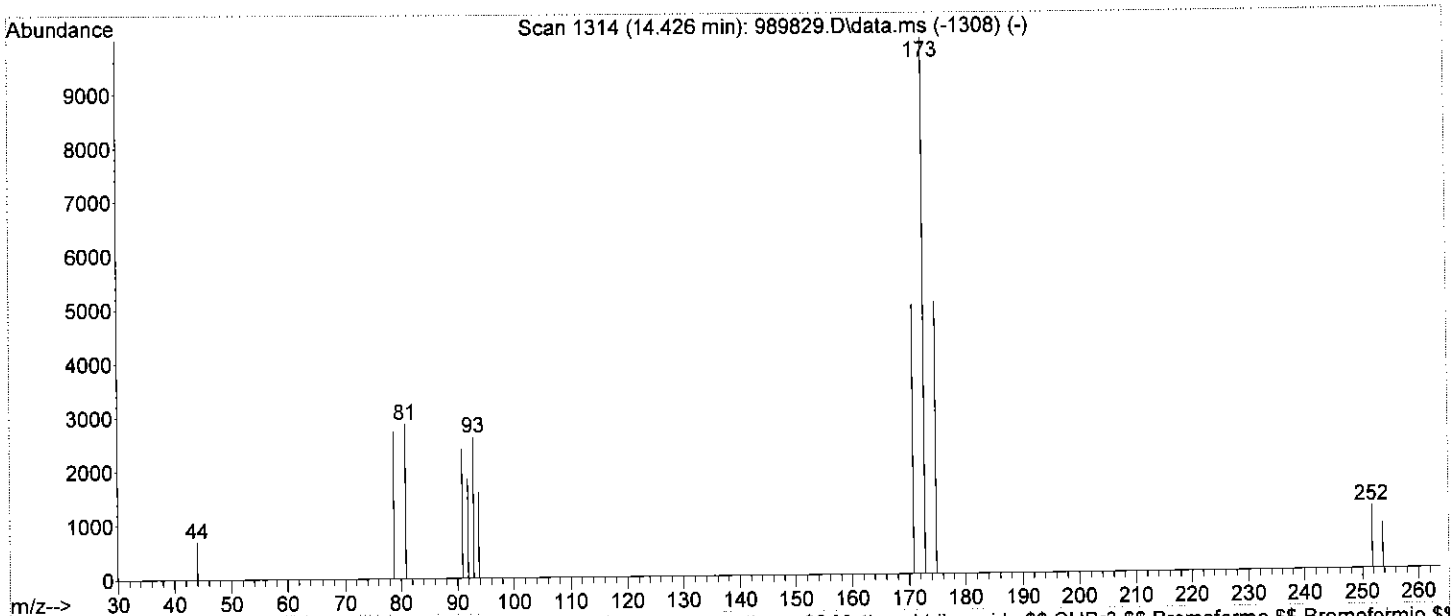
Quantitation Report (QT Reviewed)

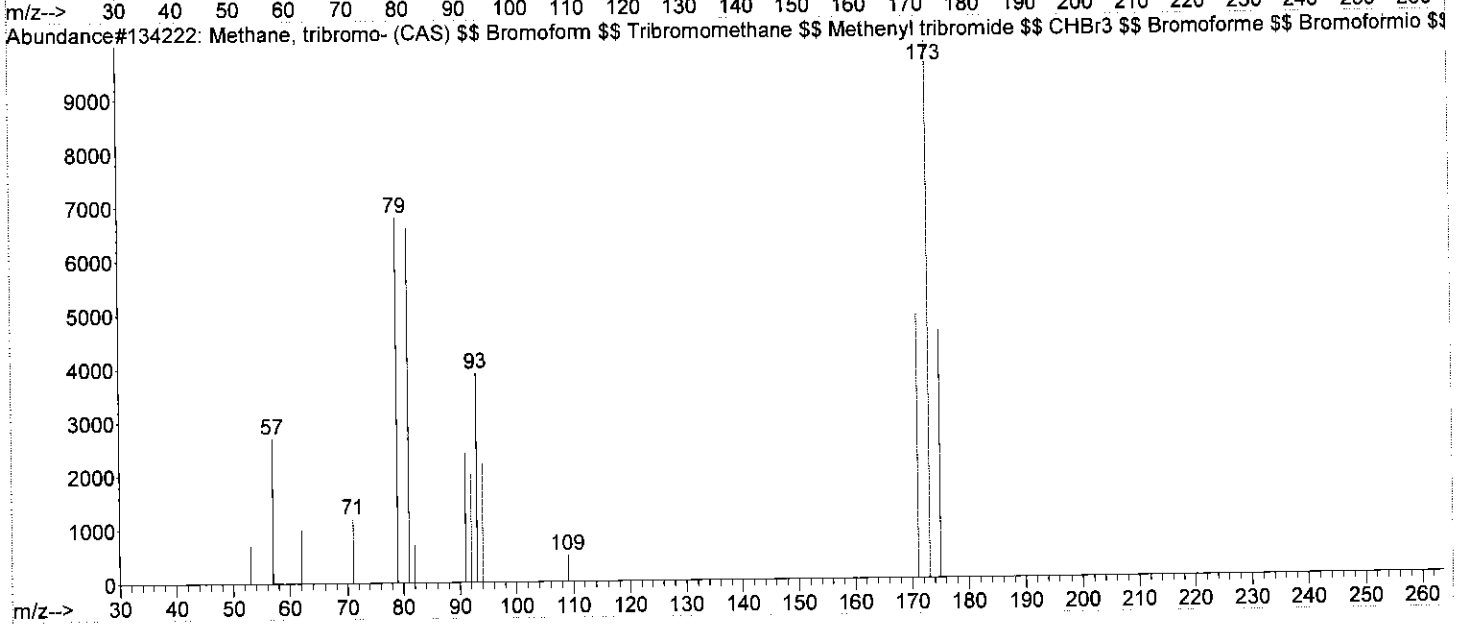
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989828.D
Acq On : 6 Jun 2018 11:41 pm
Operator : NIVA
Sample : 2869049
Misc : RUN199898
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 08 11:50:26 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 : 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\199898-899-900\
Data File : 989829.D
Acq On : 7 Jun 2018 12:07 am
Operator : NIVA
Sample : 2869045
Misc : RUN199898
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jun 08 12:50:57 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	7.625	168	242138	20.00	µg/L	0.11
23) I14-DIFLUOROBENZENE	8.376	114	369674	20.00	µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.086	117	356065	20.00	µg/L	0.14
71) I14-DICLBENZENE-D4	17.076	152	203118	20.00	µg/L	-0.05
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.107	111	175596	21.17	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.85%			
39) STOLUENE-D8	10.396	98	464647	20.01	µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.05%			
59) S4BRFLUOROBENZENE	15.330	95	169634	18.58	µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.90%			
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	3.665	94	492	N.D.		
6) CHLOROETHANE	3.797	64	427	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	4.609	76	568	N.D.		
13) ACRYLONITRILE	0.000		0	N.D.		
14) DICHLOROMETHANE	5.117	84	241	N.D.		
15) TRANS12DICLETHENE	5.229	96	775	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	6.071	43	69	N.D.		
18) 2-BUTANONE	7.625	43	474	N.D.		
19) CIS12DICHLOROETHENE	0.000		0	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	6.873	83	655	N.D.		
22) BROMOCHLOROMETHANE	6.873	49	1161	N.D.		
25) TETRAHYDROFURAN	7.066	42	244	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	7.036	117	566	N.D.		
30) BENZENE	0.000		0	N.D.	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	10.031	75	164	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\199898-899-900\
Data File : 989829.D
Acq On : 7 Jun 2018 12:07 am
Operator : NIVA
Sample : 2869045
Misc : RUN199898
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jun 08 12:50:57 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

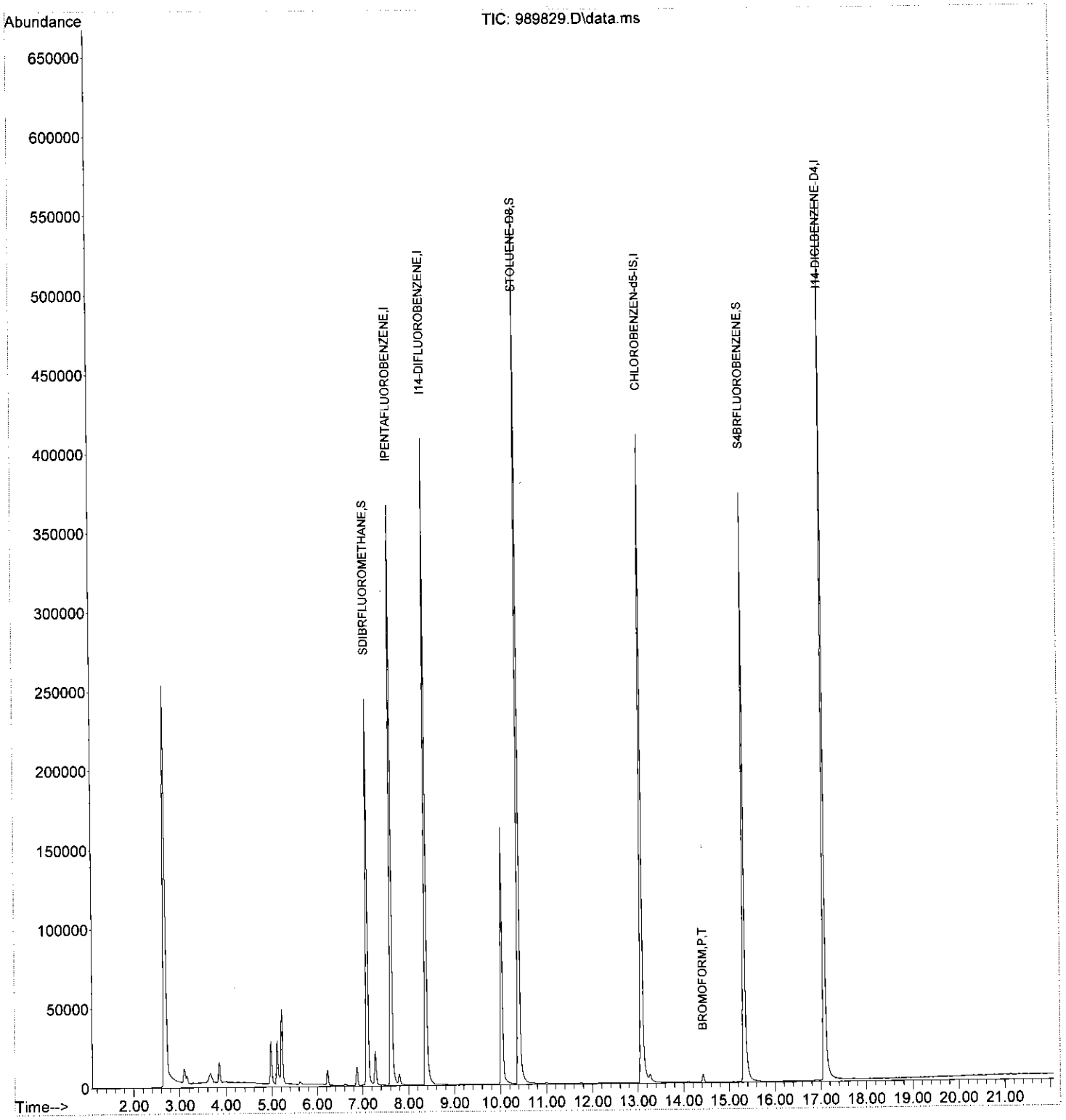
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.746	129	531	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.086	91	632	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.086	91	632	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	14.426	173	4140	1.32 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	15.533	77	68	N.D.	
63) N-PROPYLBENZENE	15.330	91	488	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

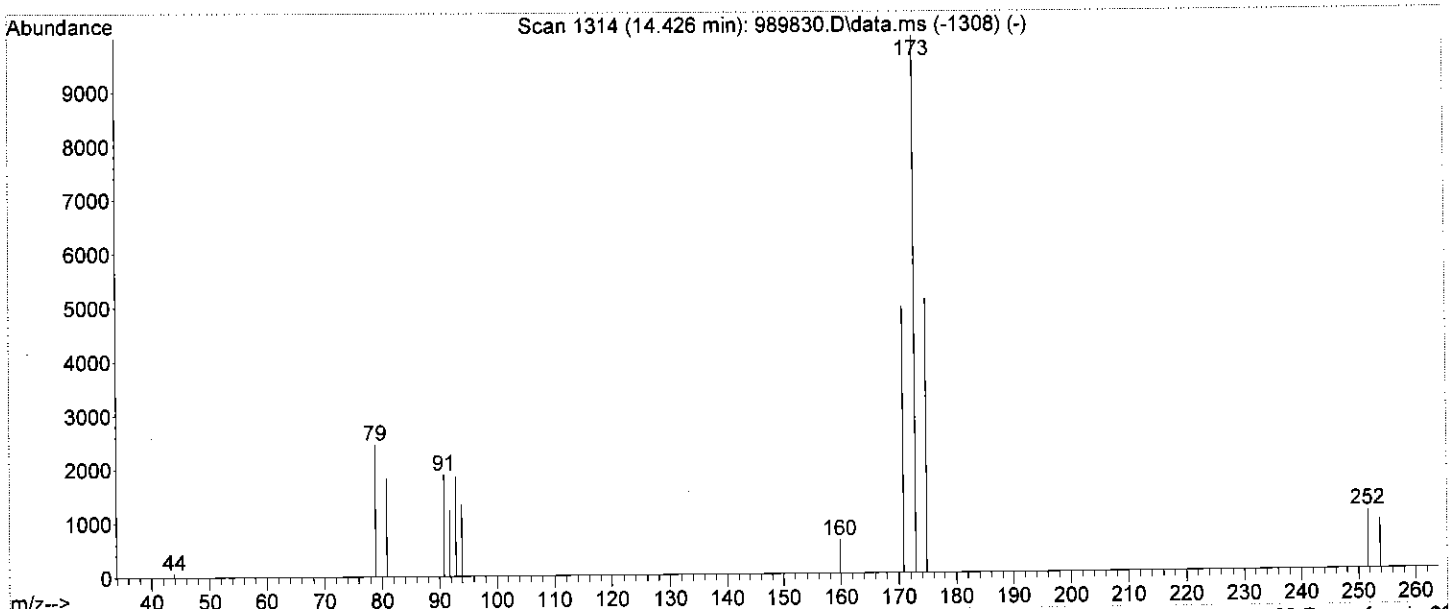
Quantitation Report (QT Reviewed)

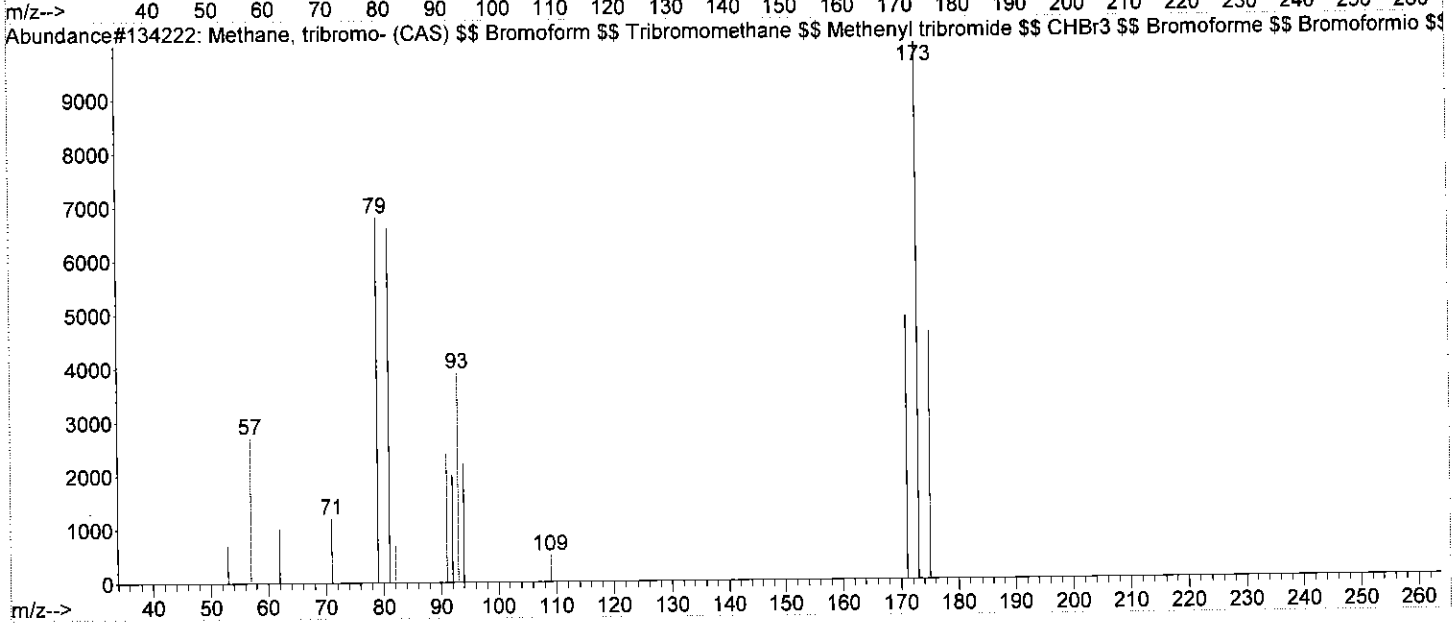
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989829.D
Acq On : 7 Jun 2018 12:07 am
Operator : NIVA
Sample : 2869045
Misc : RUN199898
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jun 08 12:50:57 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



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\199898-899-900\
Data File : 989830.D
Acq On : 7 Jun 2018 12:33 am
Operator : NIVA
Sample : 2869045DUP/2869046
Misc : RUN199898
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jun 08 12:55:48 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	7.625	168	252939	20.00 µg/L	0.11
23) I14-DIFLUOROBENZENE	8.376	114	367665	20.00 µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.086	117	359425	20.00 µg/L	0.14
71) I14-DICLBENZENE-D4	17.076	152	206885	20.00 µg/L	-0.05
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.107	111	177201	21.48 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.40%		
39) STOLUENE-D8	10.396	98	465828	20.17 µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.85%		
59) S4BRFLUOROBENZENE	15.330	95	170147	18.47 µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.35%		

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	3.655	94	453	N.D.
6) CHLOROETHANE	4.072	64	420	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	4.610	76	453	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	5.117	84	247	N.D.
15) TRANS12DICLETHENE	5.229	96	553	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	6.071	43	73	N.D.
18) 2-BUTANONE	7.279	43	209	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.873	83	721	N.D.
22) BROMOCHLOROMETHANE	6.873	49	1112	N.D.
25) TETRAHYDROFURAN	7.066	42	133	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	470	N.D.
30) BENZENE	0.000		0	N.D. 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	10.031	75	250	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\199898-899-900\
Data File : 989830.D
Acq On : 7 Jun 2018 12:33 am
Operator : NIVA
Sample : 2869045DUP/2869046
Misc : RUN199898
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jun 08 12:55:48 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

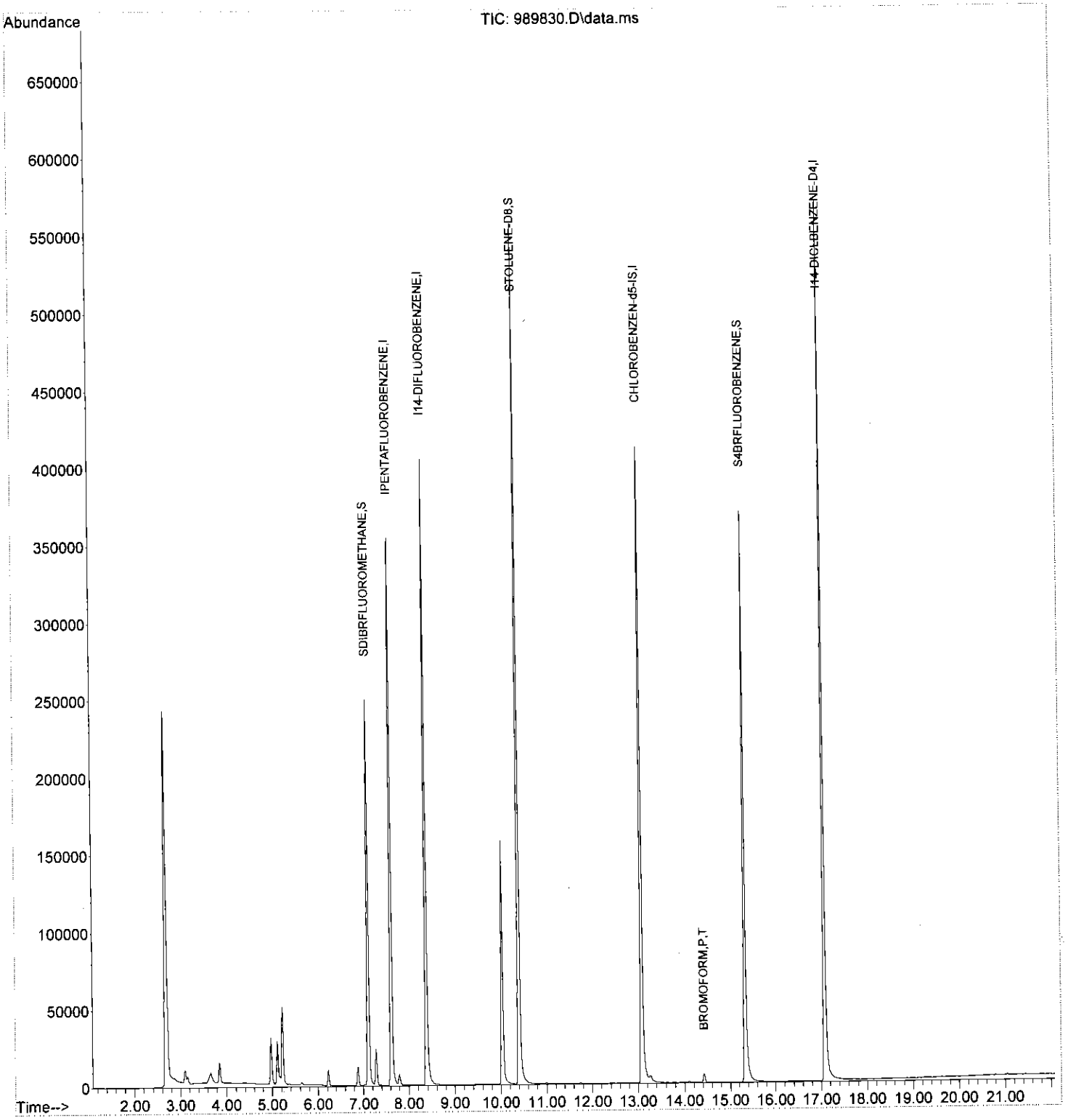
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.746	129	594	N.D.	
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.086	91	643	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.086	91	643	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	14.426	173	4898	1.55 µg/L	97
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	15.330	77	523	N.D.	
63) N-PROPYLBENZENE	15.330	91	513	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\199898-899-900\
Data File : 989830.D
Acq On : 7 Jun 2018 12:33 am
Operator : NIVA
Sample : 2869045DUP/2869046
Misc : RUN199898
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jun 08 12:55:48 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\199898-899-900\
Data File : 989831.D
Acq On : 7 Jun 2018 12:59 am
Operator : NIVA
Sample : 2869045MS/2869047
Misc : RUN199898
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jun 08 13:05:06 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	7.625	168	279551	20.00	µg/L	0.11
23) I14-DIFLUOROBENZENE	8.376	114	421619	20.00	µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.076	117	488169	20.00	µg/L	0.13
71) I14-DICLBENZENE-D4	17.076	152	328012	20.00	µg/L	-0.05
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.107	111	198697	21.01	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.05%			
39) STOLUENE-D8	10.396	98	523552	19.77	µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.85%			
59) S4BRFLUOROBENZENE	15.320	95	238169	19.03	µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.15%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.894	85	35453	22.99	µg/L	98
3) CHLOROMETHANE	3.158	50	53023	17.77	µg/L #	97
4) VINYL CHLORIDE	3.268	62	56473	22.11	µg/L	98
5) BROMOMETHANE	3.655	94	56587	23.38	µg/L	99
6) CHLOROETHANE	3.797	64	39204	20.19	µg/L	99
7) TRICLFLUOROMETHANE	3.960	101	172820	26.36	µg/L	100
8) ACROLEIN	4.874	56	422747	509.74	µg/L	99
9) ACETONE	5.178	43	116454	108.77	µg/L #	96
10) 11-DICHLOROETHENE	4.528	61	97567	23.10	µg/L	97
11) IODOMETHANE	4.711	142	507786	113.92	µg/L	95
12) CARBON DISULFIDE	4.610	76	804818	119.86	µg/L	99
13) ACRYLONITRILE	6.031	53	136103	107.75	µg/L	99
14) DICHLOROMETHANE	5.137	84	81609	21.70	µg/L #	86
15) TRANS12DICLETHENE	5.310	96	78465	23.82	µg/L	95
16) 11-DICHLOROETHANE	5.980	63	138824	22.99	µg/L	97
17) VINYL ACETATE	6.193	43	271779	48.91	µg/L	98
18) 2-BUTANONE	7.239	43	195477	113.45	µg/L	96
19) CIS12DICHLOROETHENE	6.599	96	75788	19.89	µg/L	93
20) 22-DICHLOROPROPANE	6.721	77	81734	18.16	µg/L	97
21) CHLOROFORM	6.884	83	194884	23.89	µg/L	99
22) BROMOCHLOROMETHANE	6.833	49	74548m	22.81	µg/L	
25) TETRAHYDROFURAN	7.127	42	15030	16.31	µg/L #	89
26) 111-TRICHLOROETHANE	7.178	97	174885	24.50	µg/L	99
27) 11-DICHLOROPROPENE	7.320	75	100949	23.07	µg/L	94
28) 12-DICHLOROETHANE	7.878	62	146526	21.84	µg/L #	99
29) CARBONTETRACHLORIDE	7.107	117	161109	23.17	µg/L #	95
30) BENZENE	7.635	78	340145	23.95	µg/L	97
31) TRICHLOROETHENE	8.376	132	90444	22.32	µg/L #	93
32) 12-DICHLOROPROPANE	9.107	63	76150	21.93	µg/L #	90
33) DIBROMOMETHANE	8.985	174	66015	20.39	µg/L	97
34) BROMODICLMETHANE	9.168	83	144537	22.60	µg/L	100
35) 2-CLETHYLVINYLETHER	10.477	63	39593m	47.56	µg/L	
36) EPICHLOROHYDRIN	10.477	57	136273	367.48	µg/L	88
37) 4METHYL-2-PENTANONE	11.026	43	431325	96.22	µg/L	93
38) CIS13DICLPROPENE	10.102	75	89259m	14.34	µg/L	
40) TOLUENE	10.477	91	342556	21.51	µg/L	98
41) TRANS13DICLPROPENE	11.127	75	103446	22.12	µg/L	91
42) 112-TRICHLOROETHANE	11.401	97	85680	20.14	µg/L	93
43) 2-HEXANONE	12.467	43	299626	91.36	µg/L	95
44) 13-DICHLOROPROPANE	11.888	76	127323	19.47	µg/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989831.D
Acq On : 7 Jun 2018 12:59 am
Operator : NIVA
Sample : 2869045MS/2869047
Misc : RUN199898
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jun 08 13:05:06 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

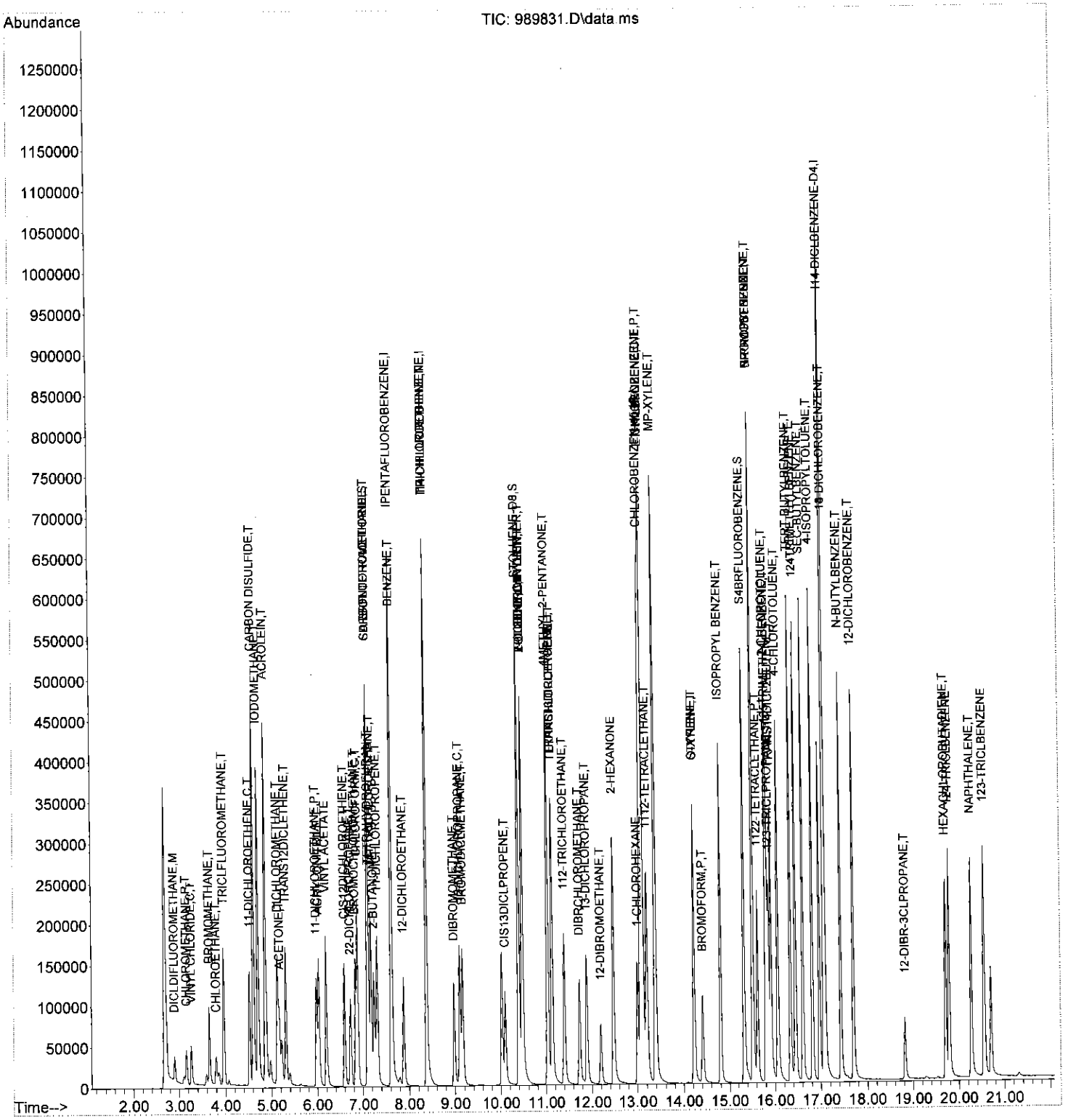
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.736	129	104441	20.06 µg/L	99
46) TETRACHLOROETHENE	11.137	166	105146	22.07 µg/L	92
47) 12-DIBROMOETHANE	12.193	107	75784	19.29 µg/L	100
49) CHLOROBENZENE	13.107	112	260495	20.41 µg/L	85
50) 1-CHLOROHEXANE	13.015	91	57256	22.68 µg/L #	55
51) 1112-TETRACLETHANE	13.208	131	108974	19.77 µg/L	97
52) ETHYLBENZENE	13.117	91	424590	20.91 µg/L	98
53) MP-XYLENE	13.381	91	651226	41.78 µg/L	94
54) STYRENE	14.223	104	9339m	0.71 µg/L	
55) O-XYLENE	14.223	91	288511	19.19 µg/L	95
56) BROMOFORM	14.416	173	84124	19.58 µg/L	99
57) 1122-TETRACLETHANE	15.624	83	146227	18.83 µg/L	99
58) ISOPROPYL BENZENE	14.802	105	329366	16.18 µg/L	96
60) 123-TRICLPROPANE	15.868	110	48702	19.50 µg/L	93
61) TRANS14DICL2BUTENE	15.909	53	101259	84.66 µg/L #	83
62) BROMOBENZENE	15.513	77	222315	20.82 µg/L	86
63) N-PROPYLBENZENE	15.513	91	510312	20.79 µg/L	94
64) 2-CHLOROTOLUENE	15.797	91	336125	19.28 µg/L	93
65) 4-CHLOROTOLUENE	16.061	91	323358	20.18 µg/L	93
66) 135TRIMETHYLBENZENE	15.827	105	217307	11.68 µg/L	94
67) TERT-BUTYLBENZENE	16.335	119	322607	22.27 µg/L	92
68) 124TRIMETHYLBENZENE	16.447	105	391728	21.18 µg/L	99
69) SEC-BUTYLBENZENE	16.609	105	468025	20.90 µg/L	99
70) 13-DICHLOROBENZENE	17.096	146	230581	20.44 µg/L	93
72) 4-ISOPROPYLTOLUENE	16.812	119	389521	19.24 µg/L	95
73) 14-DICHLOROBENZENE	17.096	146	251166	19.70 µg/L	84
74) 12-DICHLOROBENZENE	17.695	146	254181	20.17 µg/L	98
75) N-BUTYLBENZENE	17.431	91	327512	17.95 µg/L	96
76) 12-DIBR-3CLPROPANE	18.822	157	30095	15.18 µg/L	96
77) 124-TRICLBENZENE	19.787	180	138328	15.38 µg/L	99
78) NAPHTHALENE	20.274	128	331152	14.43 µg/L	98
79) HEXACHLOROBUTADIENE	19.716	225	74015	19.21 µg/L	98
80) 123-TRICLBENZENE	20.558	182	144851	17.58 µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989831.D
Acq On : 7 Jun 2018 12:59 am
Operator : NIVA
Sample : 2869045MS/2869047
Misc : RUN199898
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jun 08 13:05:06 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\199898-899-900\
Data File : 989832.D
Acq On : 7 Jun 2018 1:25 am
Operator : NIVA
Sample : 2869045MSD/2869048
Misc : RUN199898
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jun 08 13:22:59 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	7.625	168	298917m	20.00	µg/L		0.11
23) I14-DIFLUOROBENZENE	8.376	114	402878	20.00	µg/L		0.11
48) CHLOROBENZEN-d5-IS	13.076	117	483955	20.00	µg/L		0.13
71) I14-DICLBENZENE-D4	17.076	152	326452	20.00	µg/L		-0.05
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.107	111	192926	21.34	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.70%				
39) STOLUENE-D8	10.396	98	519439	20.52	µg/L		0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.60%				
59) S4BRFLUOROBENZENE	15.320	95	238128	19.19	µg/L		0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.95%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.894	85	38207	23.17	µg/L		99
3) CHLOROMETHANE	3.158	50	89491	28.04	µg/L	#	99
4) VINYL CHLORIDE	3.269	62	62077	22.73	µg/L		98
5) BROMOMETHANE	3.655	94	58652m	22.66	µg/L		
6) CHLOROETHANE	3.797	64	44638	21.50	µg/L		99
7) TRICLFLUOROMETHANE	3.960	101	186851m	26.66	µg/L		
8) ACROLEIN	4.873	56	395552m	446.05	µg/L		
9) ACETONE	5.178	43	117153	102.34	µg/L		96
10) 11-DICHLOROETHENE	4.528	61	99981	22.14	µg/L		96
11) IODOMETHANE	4.721	142	17917m	3.76	µg/L		
12) CARBON DISULFIDE	4.609	76	792245	110.34	µg/L		99
13) ACRYLONITRILE	6.031	53	135537m	100.35	µg/L		
14) DICHLOROMETHANE	5.137	84	80362	19.98	µg/L	#	86
15) TRANS12DICLETHENE	5.320	96	75965	21.57	µg/L		97
16) 11-DICHLOROETHANE	5.980	63	135134	20.93	µg/L		97
17) VINYL ACETATE	7.239	43	293197m	49.35	µg/L		
18) 2-BUTANONE	7.239	43	209747m	113.84	µg/L		
19) CIS12DICHLOROETHENE	6.599	96	74781	18.35	µg/L		93
20) 22-DICHLOROPROPANE	6.721	77	77240	16.05	µg/L		97
21) CHLOROFORM	6.883	83	183183	21.00	µg/L		99
22) BROMOCHLOROMETHANE	6.833	49	83056	23.76	µg/L		86
25) TETRAHYDROFURAN	7.127	42	15621	17.74	µg/L	#	90
26) 111-TRICHLOROETHANE	7.178	97	167378	24.53	µg/L		99
27) 11-DICHLOROPROPENE	7.320	75	93402	22.34	µg/L		96
28) 12-DICHLOROETHANE	7.878	62	139755	21.80	µg/L		98
29) CARBONTETRACHLORIDE	7.107	117	152957	23.02	µg/L	#	94
30) BENZENE	7.635	78	315018	23.21	µg/L		97
31) TRICHLOROETHENE	8.376	132	86236	22.27	µg/L	#	94
32) 12-DICHLOROPROPANE	9.107	63	70625	21.29	µg/L	#	89
33) DIBROMOMETHANE	8.985	174	62576	20.23	µg/L		98
34) BROMODICLMETHANE	9.168	83	135449	22.17	µg/L		99
35) 2-CLETHYLVINYLETHER	10.477	63	38040m	47.82	µg/L		
36) EPICHLOROHYDRIN	10.477	57	130946m	369.54	µg/L		
37) 4METHYL-2-PENTANONE	11.036	43	430316	100.46	µg/L		93
38) CIS13DICLPROPENE	10.102	75	92460m	15.55	µg/L		
40) TOLUENE	10.477	91	338451	22.24	µg/L		98
41) TRANS13DICLPROPENE	11.127	75	104359	23.35	µg/L		90
42) 112-TRICHLOROETHANE	11.401	97	85248	20.97	µg/L		92
43) 2-HEXANONE	12.477	43	299765	95.65	µg/L		95
44) 13-DICHLOROPROPANE	11.888	76	127537	20.41	µg/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989832.D
Acq On : 7 Jun 2018 1:25 am
Operator : NIVA
Sample : 2869045MSD/2869048
Misc : RUN199898
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jun 08 13:22:59 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

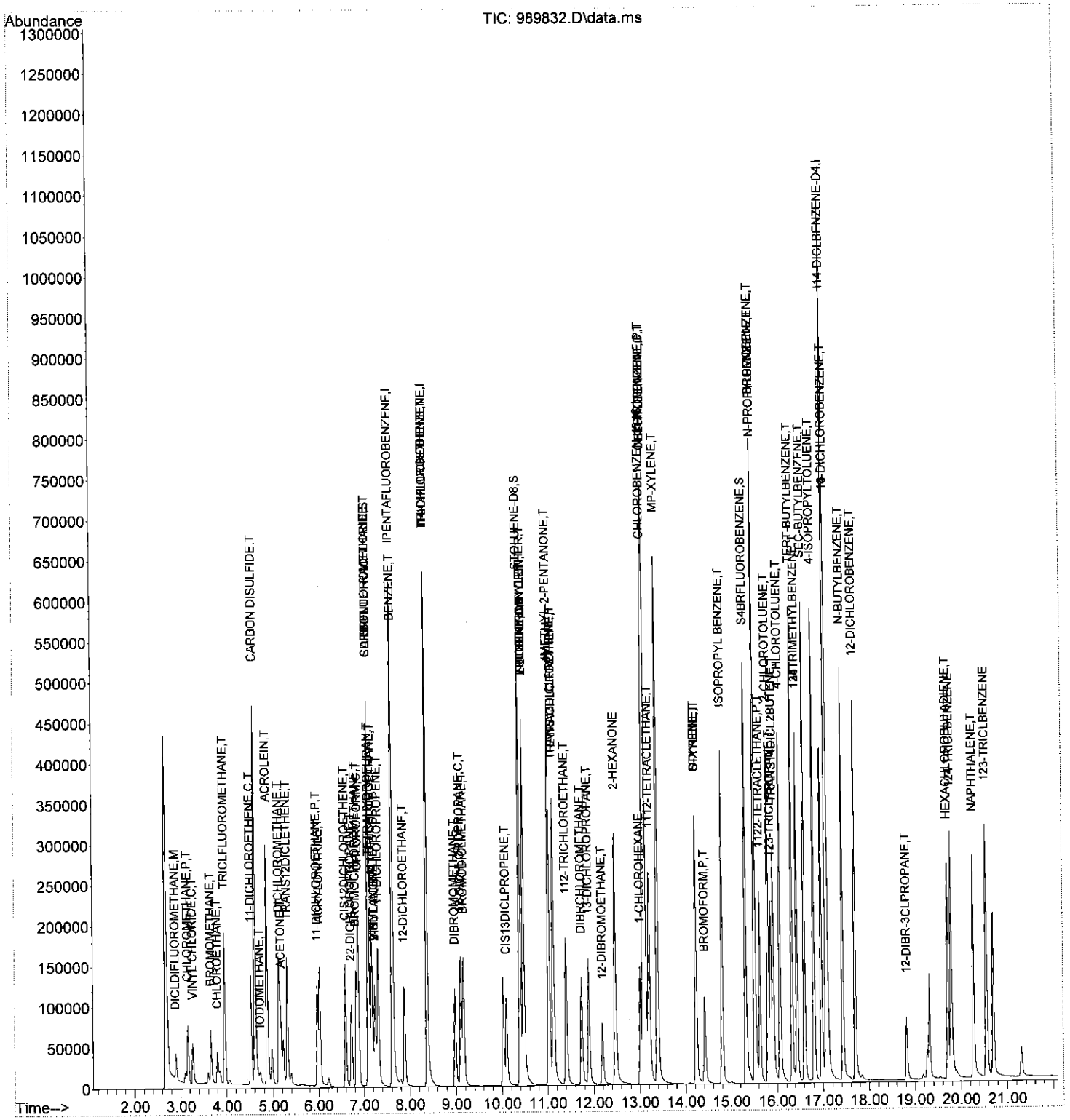
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.736	129	106692	21.44 µg/L	100
46) TETRACHLOROETHENE	11.137	166	105290	23.13 µg/L	92
47) 12-DIBROMOETHANE	12.193	107	77161	20.55 µg/L	100
49) CHLOROBENZENE	13.107	112	261514	20.67 µg/L	85
50) 1-CHLOROHEXANE	13.015	91	56309	22.53 µg/L #	53
51) 1112-TETRACLETHANE	13.208	131	109409	20.02 µg/L	97
52) ETHYLBENZENE	13.117	91	419277	20.83 µg/L	97
53) MP-XYLENE	13.391	91	588540	38.08 µg/L	94
54) STYRENE	14.223	104	8755m	0.67 µg/L	
55) O-XYLENE	14.223	91	279957	18.78 µg/L	94
56) BROMOFORM	14.416	173	83903	19.70 µg/L	97
57) 1122-TETRACLETHANE	15.624	83	147711	19.19 µg/L	99
58) ISOPROPYL BENZENE	14.802	105	327266	16.22 µg/L	95
60) 123-TRICLPROPANE	15.868	110	48541	19.61 µg/L	91
61) TRANS14DICL2BUTENE	15.919	53	107371m	90.55 µg/L	
62) BROMOBENZENE	15.513	77	219053	20.69 µg/L	86
63) N-PROPYLBENZENE	15.523	91	505331	20.76 µg/L	94
64) 2-CHLOROTOLUENE	15.797	91	302726	17.51 µg/L	98
65) 4-CHLOROTOLUENE	16.061	91	320568	20.18 µg/L	92
66) 135TRIMETHYLBENZENE	16.447	105	221423m	12.00 µg/L	
67) TERT-BUTYLBENZENE	16.335	119	315419	21.96 µg/L	92
68) 124TRIMETHYLBENZENE	16.447	105	336767m	18.37 µg/L	
69) SEC-BUTYLBENZENE	16.609	105	461053	20.77 µg/L	98
70) 13-DICHLOROBENZENE	17.096	146	228968	20.48 µg/L	92
72) 4-ISOPROPYLTOLUENE	16.812	119	380623	18.89 µg/L	94
73) 14-DICHLOROBENZENE	17.096	146	251775	19.84 µg/L	84
74) 12-DICHLOROBENZENE	17.695	146	252969	20.17 µg/L	98
75) N-BUTYLBENZENE	17.431	91	329429	18.14 µg/L	96
76) 12-DIBR-3CLPROPANE	18.822	157	30663m	15.54 µg/L	
77) 124-TRICLBENZENE	19.786	180	149113	16.65 µg/L	99
78) NAPHTHALENE	20.274	128	324240	14.20 µg/L	97
79) HEXACHLOROBUTADIENE	19.715	225	77528	20.21 µg/L	98
80) 123-TRICLBENZENE	20.558	182	149929	18.28 µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989832.D
Acq On : 7 Jun 2018 1:25 am
Operator : NIVA
Sample : 2869045MSD/2869048
Misc : RUN199898
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jun 08 13:22:59 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

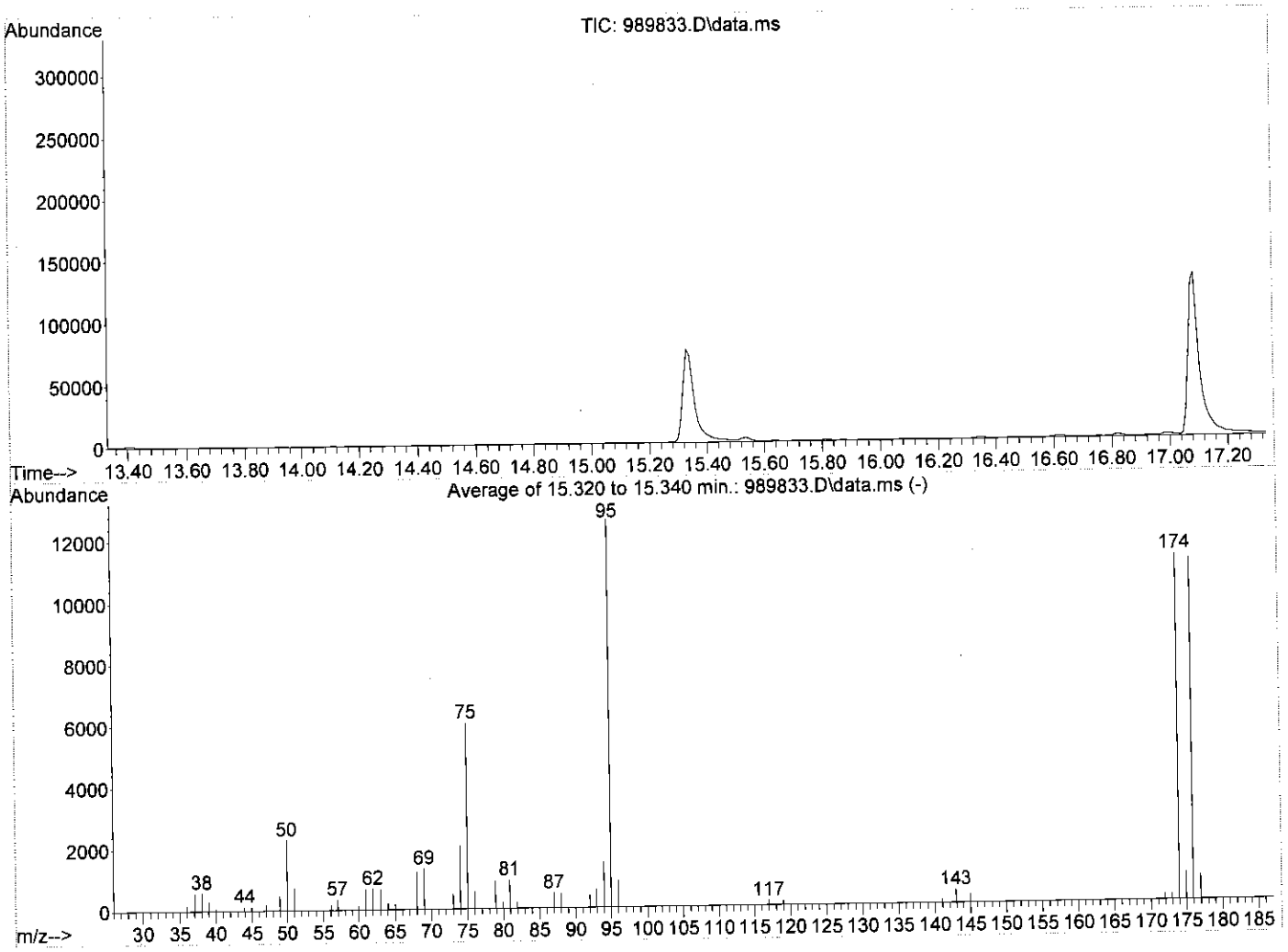


Method VOC

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989833.D
Acq On : 7 Jun 2018 1:51 am
Operator : NIVA
Sample : BFB
Misc : RUN199898
ALS Vial : 32 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 1402, 1403, 1404; Background Corrected with Scan 1396

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	2295	PASS
75	95	30	60	47.9	6047	PASS
95	95	100	100	100.0	12612	PASS
96	95	5	9	6.7	851	PASS
173	174	0.00	2	1.7	192	PASS
174	95	50	150	89.1	11231	PASS
175	174	5	9	7.8	880	PASS
176	174	95	101	98.7	11088	PASS
177	176	5	9	7.3	810	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989834.D
Acq On : 7 Jun 2018 2:17 am
Operator : NIVA
Sample : LRB/2879677
Misc : RUN199900
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jun 08 13:24:52 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	7.625	168	246808	20.00	µg/L	0.11
23) I14-DIFLUOROBENZENE	8.376	114	377055	20.00	µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.086	117	367258	20.00	µg/L	0.14
71) I14-DICLBENZENE-D4	17.086	152	219954	20.00	µg/L	-0.04
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.107	111	181055	21.40	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.00%			
39) STOLUENE-D8	10.396	98	471322	19.90	µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.50%			
59) S4BRFLUOROBENZENE	15.330	95	176547	18.75	µg/L	0.18
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	3.666	94	662	N.D.		
6) CHLOROETHANE	0.000		0	N.D.	d	
7) TRICLFLUOROMETHANE	3.960	101	214	N.D.		
8) ACROLEIN	4.884	56	85	N.D.		
9) ACETONE	0.000		0	N.D.	d	
10) 11-DICHLOROETHENE	0.000		0	N.D.		
11) IODOMETHANE	4.721	142	63	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	5.219	96	210	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	0.000		0	N.D.		
18) 2-BUTANONE	6.975	43	141	N.D.		
19) CIS12DICHLOROETHENE	0.000		0	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	6.884	83	2056	N.D.		
22) BROMOCHLOROMETHANE	6.884	49	1386	N.D.		
25) TETRAHYDROFURAN	7.066	42	61	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	540	N.D.		
30) BENZENE	0.000		0	N.D.	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	10.488	91	631	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\199898-899-900\
Data File : 989834.D
Acq On : 7 Jun 2018 2:17 am
Operator : NIVA
Sample : LRB/2879677
Misc : RUN199900
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jun 08 13:24:52 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

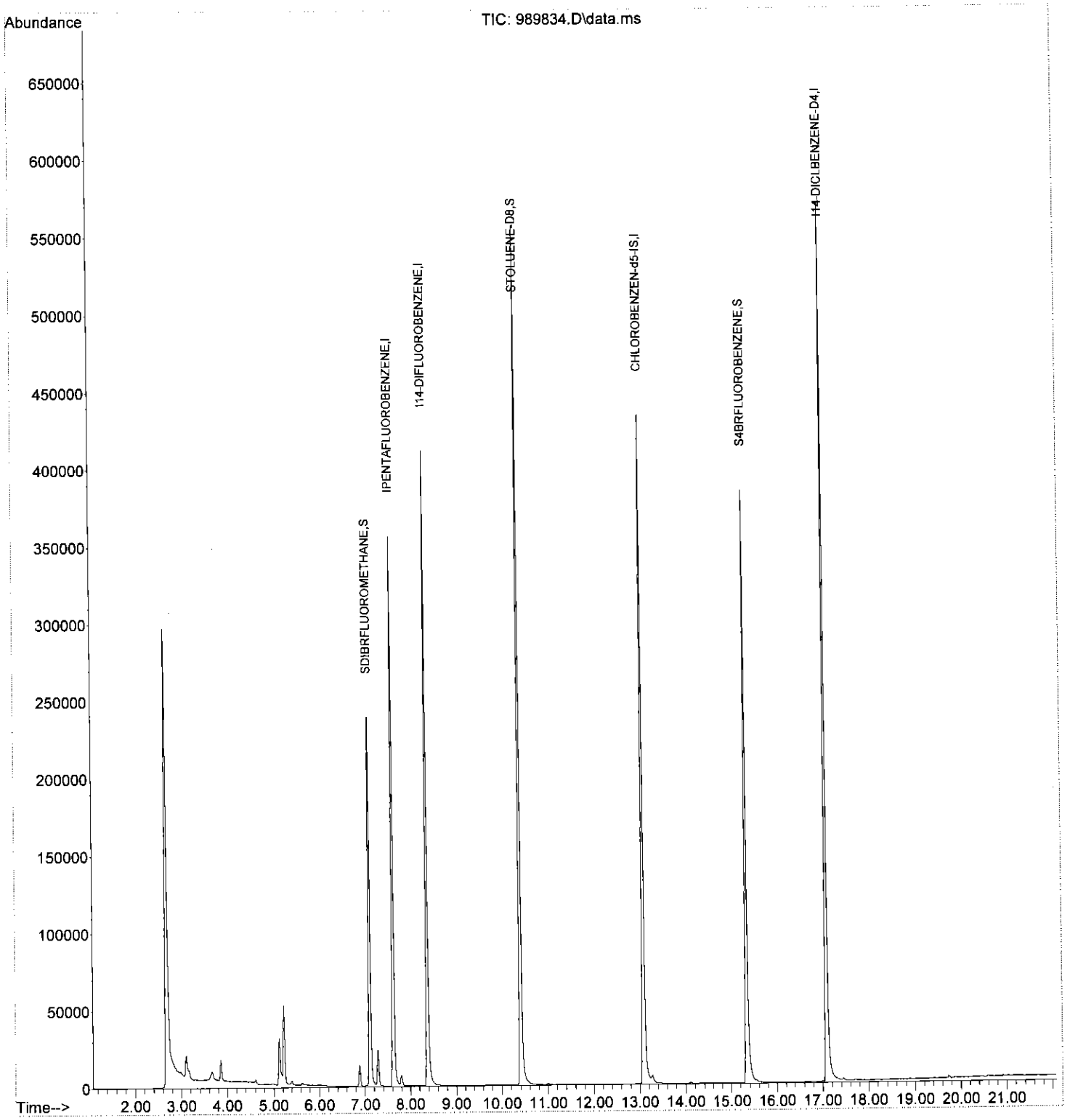
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	11.137	166	65	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	13.117	112	327	N.D.	
50) 1-CHLOROHEXANE	13.086	91	704	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.086	91	1183	N.D.	
53) MP-XYLENE	13.411	91	412	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	14.812	105	74	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.533	77	277	N.D.	
63) N-PROPYLBENZENE	15.533	91	769	N.D.	
64) 2-CHLOROTOLUENE	15.817	91	166	N.D.	
65) 4-CHLOROTOLUENE	16.091	91	155	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	16.355	119	61	N.D.	
68) 124TRIMETHYLBENZENE	16.477	105	231	N.D.	
69) SEC-BUTYLBENZENE	16.619	105	438	N.D.	
70) 13-DICHLOROBENZENE	16.995	146	543	N.D.	
72) 4-ISOPROPYLTOLUENE	16.822	119	428	N.D.	
73) 14-DICHLOROBENZENE	17.107	146	1471	N.D.	
74) 12-DICHLOROBENZENE	17.716	146	409	N.D.	
75) N-BUTYLBENZENE	17.452	91	911	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	19.848	180	227	N.D.	
78) NAPHTHALENE	20.375	128	279	N.D.	
79) HEXACHLOROBUTADIENE	19.726	225	677	N.D.	
80) 123-TRICLBENZENE	20.599	182	684	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989834.D
Acq On : 7 Jun 2018 2:17 am
Operator : NIVA
Sample : LRB/2879677
Misc : RUN199900
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jun 08 13:24:52 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\199898-899-900\
Data File : 989835.D
Acq On : 7 Jun 2018 2:43 am
Operator : NIVA
Sample : CCV/2879664
Misc : RUN199899
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jun 08 13:27:36 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	86	0.11
2	M	DICLDIFLUOROMETHANE	0.110	0.113	-2.7	77	0.12
3	P,T	CHLOROMETHANE	0.214	0.180	15.9	79	0.13
4	C,T	VINYL CHLORIDE	0.183	0.181	1.1	76	0.13
5	T	BROMOMETHANE	0.173	0.149	13.9	75	0.14
6	T	CHLOROETHANE	0.139	0.152	-9.4	87	0.96#
7	T	TRICLFLUOROMETHANE	0.469	0.514	-9.6	82	0.17
8	T	ACROLEIN	0.059	0.049#	16.9	63	0.16
9	T	ACETONE	0.077	0.084#	-9.1	89	0.09
10	C,T	11-DICHLOROETHENE	0.302	0.319	-5.6	81	0.16
11	T	IODOMETHANE	0.319	0.318	0.3	74	0.16
12	T	CARBON DISULFIDE	0.480	0.506	-5.4	79	0.15
13	T	ACRYLONITRILE	0.090	0.091#	-1.1	81	0.11
14	T	DICHLOROMETHANE	0.269	0.275	-2.2	85	0.17
15	T	TRANS12DICLETHENE	0.236	0.250	-5.9	83	0.18
16	P,T	11-DICHLOROETHANE	0.432	0.460	-6.5	84	0.08
17		VINYL ACETATE	0.398	0.331	16.8	63	0.08
18		2-BUTANONE	0.123	0.142	-15.4	90	0.23
19	T	CIS12DICHLOROETHENE	0.273	0.264	3.3	79	0.21
20	T	22-DICHLOROPROPANE	0.322	0.344	-6.8	84	0.21
21	C,T	CHLOROFORM	0.584	0.663	-13.5	91	0.22
22	T	BROMOCHLOROMETHANE	0.234	0.263	-12.4	89	0.09
23	I	I14-DIFLUOROBENZENE	1.000	1.000	0.0	91	0.11
24	S	SDIBRFLUOROMETHANE	0.449	0.483	-7.6	94	0.09
25	T	TETRAHYDROFURAN	0.044	0.038#	13.6	85	0.10
26	T	111-TRICHLOROETHANE	0.339	0.386	-13.9	90	0.09
27	T	11-DICHLOROPROPENE	0.208	0.220	-5.8	85	0.10
28	T	12-DICHLOROETHANE	0.318	0.343	-7.9	91	0.11
29	T	CARBONTETRACHLORIDE	0.330	0.357	-8.2	87	0.09
30	T	BENZENE	0.674	0.732	-8.6	89	0.10
31	T	TRICHLOROETHENE	0.192	0.210	-9.4	91	0.11
32	C,T	12-DICHLOROPROPANE	0.165	0.176	-6.7	89	0.11
33	T	DIBROMOMETHANE	0.154	0.157	-1.9	89	0.12
34	T	BROMODICLMETHANE	0.303	0.326	-7.6	88	0.11
35	T	2-CLETHYLVINYLETHER	0.039	0.048#	-23.1#	116	0.13
36	T	EPICHLOROHYDRIN	0.018	0.018#	0.0	85	0.13
37	T	4METHYL-2-PENTANONE	0.213	0.226	-6.1	86	0.13
38	T	CIS13DICLPROPENE	0.295	0.258	12.5	82	0.13
39	S	STOLUENE-D8	1.256	1.338	-6.5	93	0.12
40	C,T	TOLUENE	0.756	0.820	-8.5	87	0.14
41	T	TRANS13DICLPROPENE	0.222	0.253	-14.0	98	0.13
42	T	112-TRICHLOROETHANE	0.202	0.214	-5.9	88	0.15
43		2-HEXANONE	0.156	0.155	0.6	85	0.19
44	T	13-DICHLOROPROPANE	0.310	0.319	-2.9	88	0.16

45	T	DIBRCHLOROMETHANE	0.247	0.248	-0.4	86	0.15
46	T	TETRACHLOROETHENE	0.226	0.246	-8.8	87	0.13
47	T	12-DIBROMOETHANE	0.186	0.189	-1.6	87	0.16
48	I	CHLOROBENZEN-d5-IS	1.000	1.000	0.0	95	0.13
49	P,T	CHLOROBENZENE	0.523	0.518	1.0	90	0.14
50		1-CHLOROHEXANE	0.107	0.109	-1.9	84	0.11
51	T	1112-TETRACLETHANE	0.226	0.210	7.1	88	0.13
52	C,T	ETHYLBENZENE	0.832	0.816	1.9	87	0.13
53	T	MP-XYLENE	0.639	0.629	1.6	87	0.15
54	T	STYRENE	0.539	0.431	20.0#	84	0.17
55	T	O-XYLENE	0.616	0.554	10.1	90	0.16
56	P,T	BROMOFORM	0.176	0.160	9.1	86	0.16
57	P,T	1122-TETRACLETHANE	0.318	0.286#	10.1	83	0.18
58	T	ISOPROPYL BENZENE	0.834	0.817	2.0	103	0.16
59	S	S4BRFLUOROBENZENE	0.513	0.510	0.6	97	0.18
60	T	123-TRICLPROPANE	0.102	0.100	2.0	90	0.19
61	T	TRANS14DICL2BUTENE	0.049	0.042#	14.3	75	0.19
62	T	BROMOBENZENE	0.437	0.444	-1.6	91	0.18
63	T	N-PROPYLBENZENE	1.006	0.994	1.2	88	0.19
64	T	2-CHLOROTOLUENE	0.714	0.703	1.5	88	0.19
65	T	4-CHLOROTOLUENE	0.657	0.631	4.0	87	0.18
66	T	135TRIMETHYLBENZENE	0.762	0.766	-0.5	88	0.18
67	T	TERT-BUTYLBENZENE	0.594	0.612	-3.0	86	0.19
68	T	124TRIMETHYLBENZENE	0.758	0.793	-4.6	88	0.11
69	T	SEC-BUTYLBENZENE	0.918	0.897	2.3	87	0.20
70	T	13-DICHLOROBENZENE	0.462	0.478	-3.5	92	0.11
71	I	I14-DICLBENZENE-D4	1.000	1.000	0.0	103	-0.05
72	T	4-ISOPROPYLTOLUENE	1.235	1.052	14.8	85	-0.06
73	T	14-DICHLOROBENZENE	0.777	0.723	6.9	94	-0.05
74	T	12-DICHLOROBENZENE	0.768	0.709	7.7	90	-0.06
75	T	N-BUTYLBENZENE	1.112	1.191	-7.1	113	-0.05
76	T	12-DIBR-3CLPROPANE	0.121	0.121	0.0	121	-0.06
77		124-TRICLBENZENE	0.549	0.528	3.8	118	-0.08
78	T	NAPHTHALENE	1.399	1.152	17.7	102	-0.08
79	T	HEXACHLOROBUTADIENE	0.235	0.201	14.5	86	-0.06
80		123-TRICLBENZENE	0.502	0.402	19.9	88	-0.07

(#) = Out of Range SPCC's out = 1 CCC's out = 0

8260VOC-JUNE-LIQ-18.M Fri Jun 08 15:33:26 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989835.D
Acq On : 7 Jun 2018 2:43 am
Operator : NIVA
Sample : CCV/2879664
Misc : RUN199899
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jun 08 13:27:36 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	7.625	168	285838	20.00	µg/L		0.11
23) I14-DIFLUOROBENZENE	8.376	114	423894	20.00	µg/L		0.11
48) CHLOROBENZEN-d5-IS	13.076	117	517483	20.00	µg/L		0.13
71) I14-DICLBENZENE-D4	17.076	152	364520	20.00	µg/L		-0.05
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.107	111	204558	21.51	µg/L		0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.55%				
39) STOLUENE-D8	10.396	98	567178	21.30	µg/L		0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.50%				
59) S4BRFLUOROBENZENE	15.330	95	263976	19.90	µg/L		0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.50%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.894	85	32296	20.48	µg/L		98
3) CHLOROMETHANE	3.158	50	51564	16.90	µg/L	#	98
4) VINYL CHLORIDE	3.272	62	51771	19.83	µg/L		96
5) BROMOMETHANE	3.655	94	42569	17.20	µg/L		100
6) CHLOROETHANE	4.599	64	43536m	21.93	µg/L		
7) TRICLFLUOROMETHANE	3.929	101	146937	21.92	µg/L		99
8) ACROLEIN	4.874	56	351285	414.25	µg/L		99
9) ACETONE	5.178	43	119353	109.03	µg/L	#	92
10) 11-DICHLOROETHENE	4.518	61	91096	21.10	µg/L		95
11) IODOMETHANE	4.711	142	454096	99.63	µg/L		95
12) CARBON DISULFIDE	4.599	76	722466	105.23	µg/L	#	99
13) ACRYLONITRILE	6.041	53	130450	101.00	µg/L		99
14) DICHLOROMETHANE	5.137	84	78473	20.40	µg/L	#	83
15) TRANS12DICLETHENE	5.310	96	71357	21.18	µg/L		99
16) 11-DICHLOROETHANE	5.980	63	131446	21.29	µg/L		97
17) VINYL ACETATE	6.193	43	473056	83.27	µg/L		97
18) 2-BUTANONE	7.249	43	202521m	114.95	µg/L		
19) CIS12DICHLOROETHENE	6.599	96	75362	19.34	µg/L		92
20) 22-DICHLOROPROPANE	6.731	77	98323m	21.36	µg/L		
21) CHLOROFORM	6.884	83	189384	22.70	µg/L		100
22) BROMOCHLOROMETHANE	6.833	49	75153m	22.49	µg/L		
25) TETRAHYDROFURAN	7.127	42	15994	17.26	µg/L	#	88
26) 111-TRICHLOROETHANE	7.178	97	163463	22.77	µg/L		98
27) 11-DICHLOROPROPENE	7.320	75	93274	21.20	µg/L		95
28) 12-DICHLOROETHANE	7.889	62	145285	21.54	µg/L		99
29) CARBONTETRACHLORIDE	7.107	117	151410	21.66	µg/L	#	95
30) BENZENE	7.635	78	310278	21.73	µg/L		97
31) TRICHLOROETHENE	8.386	132	88855	21.81	µg/L	#	96
32) 12-DICHLOROPROPANE	9.107	63	74508	21.34	µg/L	#	90
33) DIBROMOMETHANE	8.985	174	66456	20.42	µg/L		98
34) BROMODICLMETHANE	9.168	83	138104	21.48	µg/L		100
35) 2-CLETHYLVINYLETHER	9.949	63	102327	122.26	µg/L		91
36) EPICHLOROHYDRIN	10.477	57	189448	508.13	µg/L		94
37) 4METHYL-2-PENTANONE	11.036	43	478129	106.09	µg/L	#	92
38) CIS13DICLPROPENE	10.102	75	109417	17.49	µg/L		98
40) TOLUENE	10.488	91	347687	21.71	µg/L		98
41) TRANS13DICLPROPENE	11.127	75	107362	22.83	µg/L		89
42) 112-TRICHLOROETHANE	11.411	97	90508	21.16	µg/L		92
43) 2-HEXANONE	12.477	43	328657	99.67	µg/L		97
44) 13-DICHLOROPROPANE	11.899	76	135308	20.58	µg/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989835.D
Acq On : 7 Jun 2018 2:43 am
Operator : NIVA
Sample : CCV/2879664
Misc : RUN199899
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jun 08 13:27:36 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

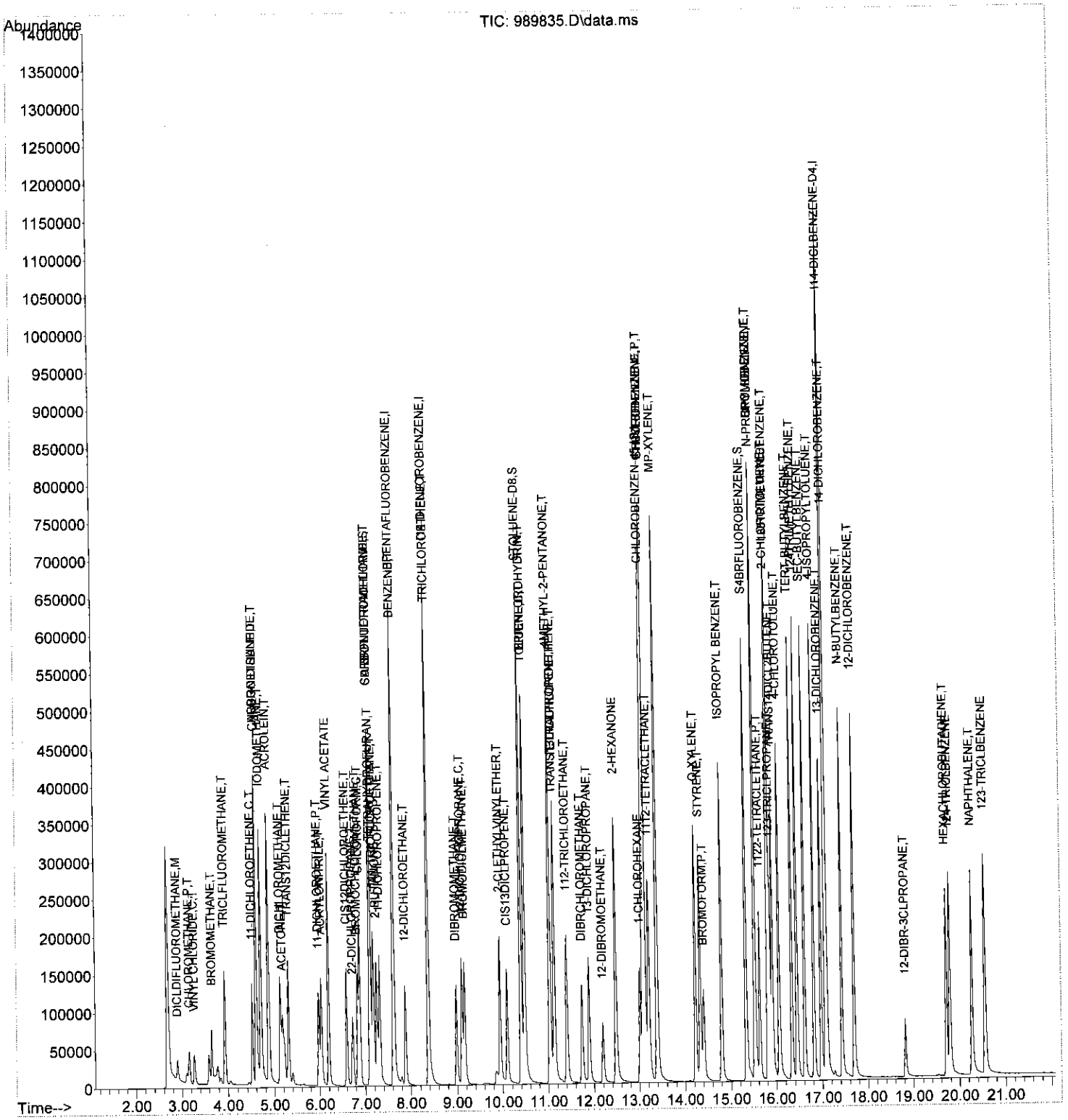
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.746	129	104955	20.05 µg/L	99
46) TETRACHLOROETHENE	11.137	166	104125	21.74 µg/L	91
47) 12-DIBROMOETHANE	12.193	107	80189	20.30 µg/L	99
49) CHLOROBENZENE	13.117	112	268269	19.83 µg/L	85
50) 1-CHLOROHEXANE	13.015	91	56323	21.29 µg/L #	53
51) 1112-TETRACLETHANE	13.208	131	108809	18.62 µg/L	98
52) ETHYLBENZENE	13.117	91	422129	19.61 µg/L	97
53) MP-XYLENE	13.391	91	650606	39.37 µg/L	95
54) STYRENE	14.335	104	223234	16.01 µg/L	96
55) O-XYLENE	14.234	91	286513	17.98 µg/L	95
56) BROMOFORM	14.416	173	82728	18.16 µg/L	100
57) 1122-TETRACLETHANE	15.624	83	148083	17.99 µg/L	100
58) ISOPROPYL BENZENE	14.802	105	422589m	19.59 µg/L	
60) 123-TRICLPROPANE	15.868	110	51856	19.59 µg/L	96
61) TRANS14DICL2BUTENE	15.919	53	109635	86.47 µg/L	91
62) BROMOBENZENE	15.513	77	229916	20.31 µg/L	87
63) N-PROPYLBENZENE	15.523	91	514562	19.77 µg/L	94
64) 2-CHLOROTOLUENE	15.807	91	363722	19.68 µg/L	85
65) 4-CHLOROTOLUENE	16.061	91	326637	19.23 µg/L	93
66) 135TRIMETHYLBENZENE	15.827	105	396482	20.10 µg/L	95
67) TERT-BUTYLBENZENE	16.335	119	316786	20.63 µg/L	93
68) 124TRIMETHYLBENZENE	16.447	105	410356	20.93 µg/L	99
69) SEC-BUTYLBENZENE	16.609	105	464326	19.56 µg/L	99
70) 13-DICHLOROBENZENE	16.975	146	247178m	20.67 µg/L	
72) 4-ISOPROPYLTOLUENE	16.812	119	383598	17.05 µg/L	95
73) 14-DICHLOROBENZENE	17.096	146	263517	18.60 µg/L	84
74) 12-DICHLOROBENZENE	17.695	146	258452	18.46 µg/L	99
75) N-BUTYLBENZENE	17.431	91	434283m	21.42 µg/L	
76) 12-DIBR-3CLPROPANE	18.822	157	44178m	20.05 µg/L	
77) 124-TRICLBENZENE	19.787	180	192491m	19.25 µg/L	
78) NAPHTHALENE	20.274	128	419992m	16.47 µg/L	
79) HEXACHLOROBUTADIENE	19.716	225	73252	17.10 µg/L	96
80) 123-TRICLBENZENE	20.558	182	146615	16.01 µg/L	99

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

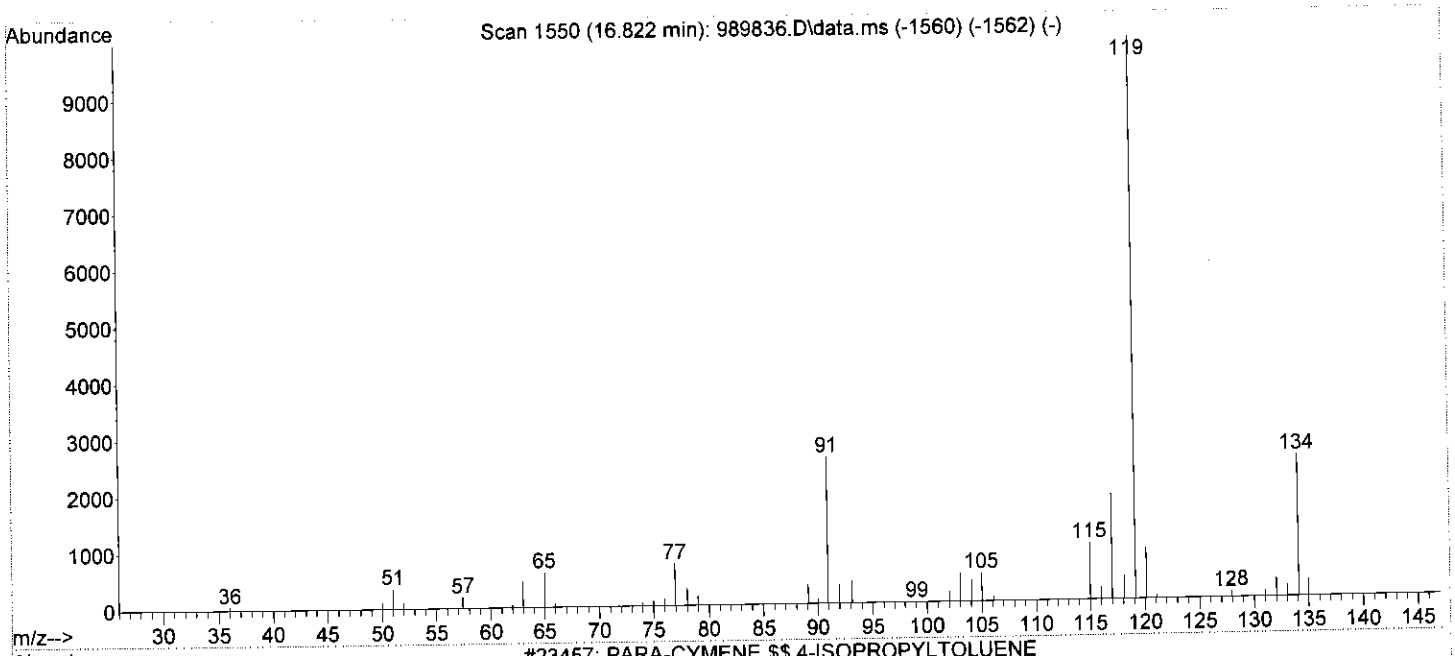
Quantitation Report (QT Reviewed)

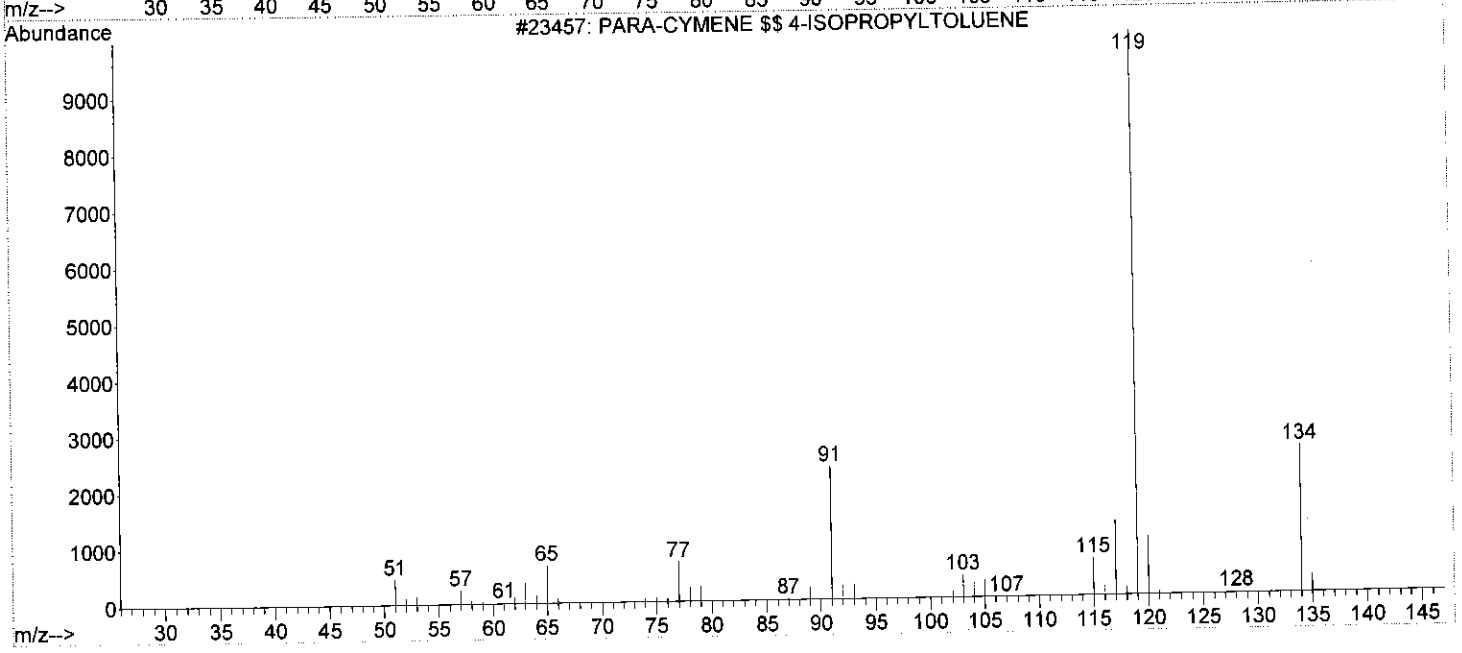
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989835.D
Acq On : 7 Jun 2018 2:43 am
Operator : NIVA
Sample : CCV/2879664
Misc : RUN199899
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jun 08 13:27:36 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 : 91
ID : PARA-CYMENE $$ 4-ISOPROPYLTOLUENE





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989836.D
Acq On : 7 Jun 2018 3:09 am
Operator : NIVA
Sample : 2872297
Misc : RUN199900
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jun 08 13:33:50 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

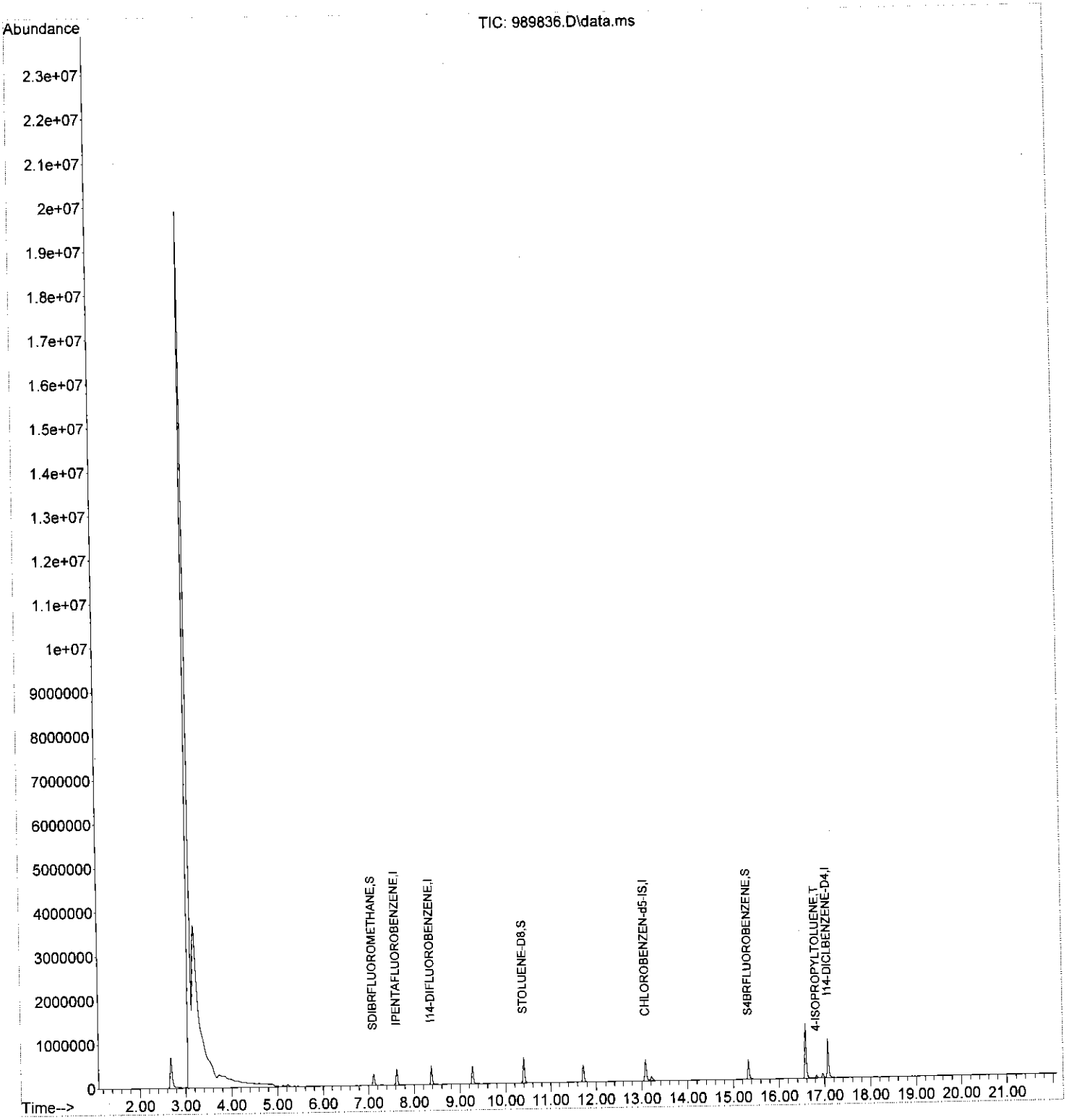
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.625	168	251027	20.00 µg/L	0.11
23) I14-DIFLUOROBENZENE	8.376	114	386068	20.00 µg/L	0.11
48) CHLOROBENZEN-d5-IS	13.086	117	403350	20.00 µg/L	0.14
71) I14-DICLBENZENE-D4	17.076	152	301359	20.00 µg/L	-0.05
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.107	111	189438	21.87 µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.35%		
39) STOLUENE-D8	10.396	98	498574	20.56 µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 102.80%		
59) S4BRFLUOROBENZENE	15.330	95	198438	19.19 µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.95%		

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	0.000		0	N.D. d
4) VINYL CHLORIDE	3.265	62	155	N.D.
5) BROMOMETHANE	0.000		0	N.D. d
6) CHLOROETHANE	0.000		0	N.D. d
7) TRICLFLUOROMETHANE	3.960	101	555	N.D.
8) ACROLEIN	0.000		0	N.D. d
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	4.528	61	285	N.D.
11) IODOMETHANE	0.000		0	N.D. d
12) CARBON DISULFIDE	0.000		0	N.D. d
13) ACRYLONITRILE	6.041	53	137	N.D.
14) DICHLOROMETHANE	5.127	84	545	N.D.
15) TRANS12DICLETHENE	5.229	96	1336	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	6.214	43	69	N.D.
18) 2-BUTANONE	7.127	43	140	N.D.
19) CIS12DICHLOROETHENE	6.610	96	71	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.884	83	1095	N.D.
22) BROMOCHLOROMETHANE	6.884	49	1415	N.D.
25) TETRAHYDROFURAN	0.000		0	N.D. d
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	7.320	75	221	N.D.
28) 12-DICHLOROETHANE	0.000		0	N.D.
29) CARBONTETRACHLORIDE	7.107	117	235	N.D.
30) BENZENE	0.000		0	N.D. d
31) TRICHLOROETHENE	8.386	132	328	N.D.
32) 12-DICHLOROPROPANE	0.000		0	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	9.269	83	1472	N.D.
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.
36) EPICHLOROHYDRIN	10.528	57	63	N.D.
37) 4METHYL-2-PENTANONE	11.046	43	408	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.
40) TOLUENE	10.488	91	3212	N.D.
41) TRANS13DICLPROPENE	0.000		0	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	12.518	43	324	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.

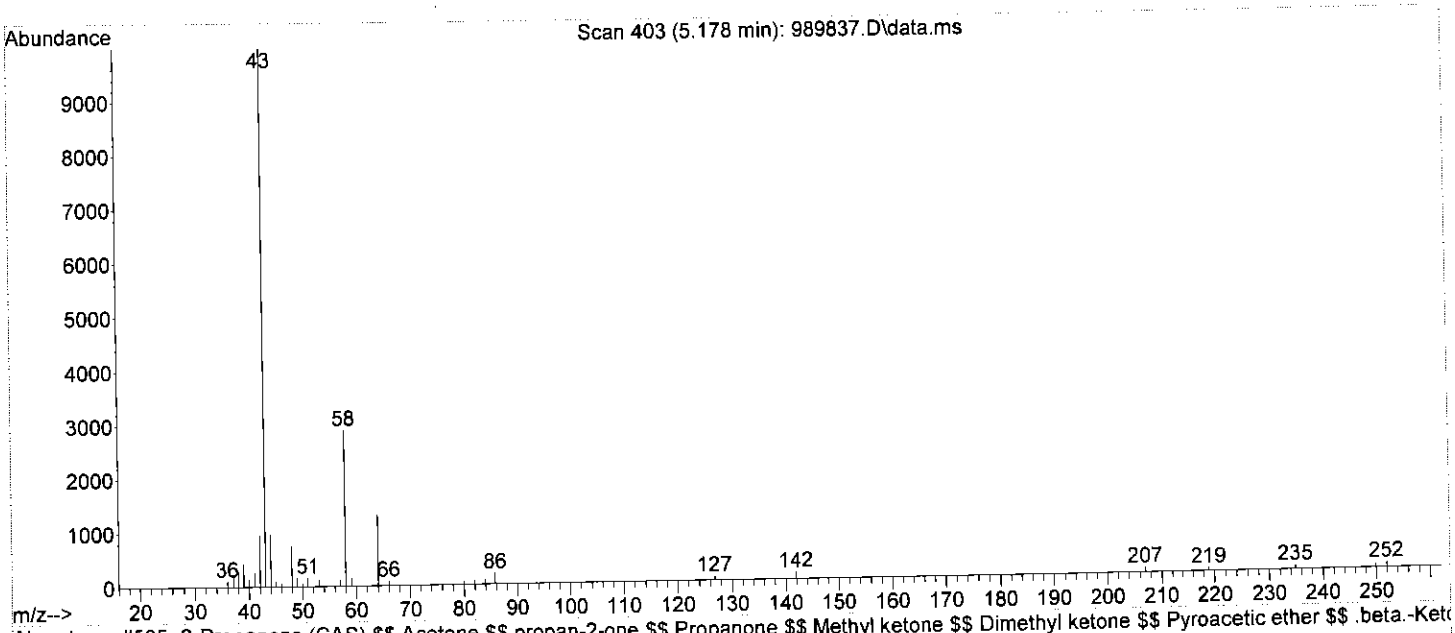
Quantitation Report (QT Reviewed)

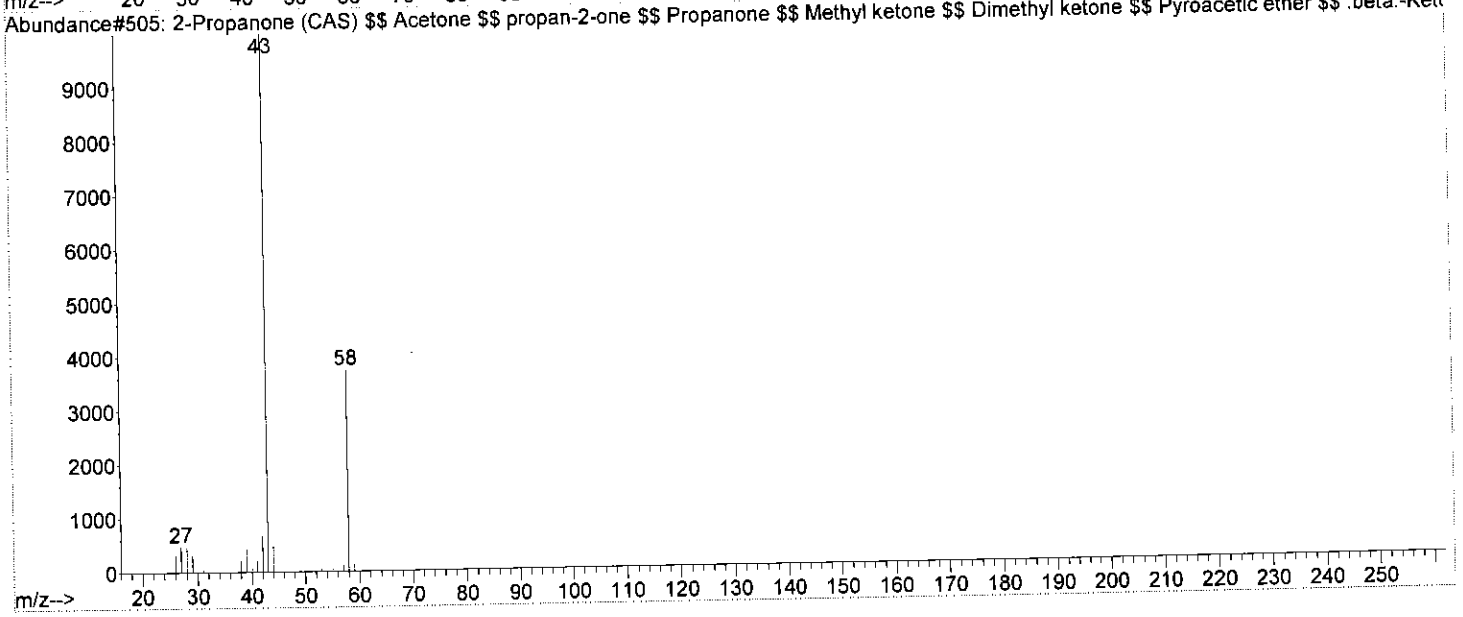
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989836.D
Acq On : 7 Jun 2018 3:09 am
Operator : NIVA
Sample : 2872297
Misc : RUN199900
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jun 08 13:33:50 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

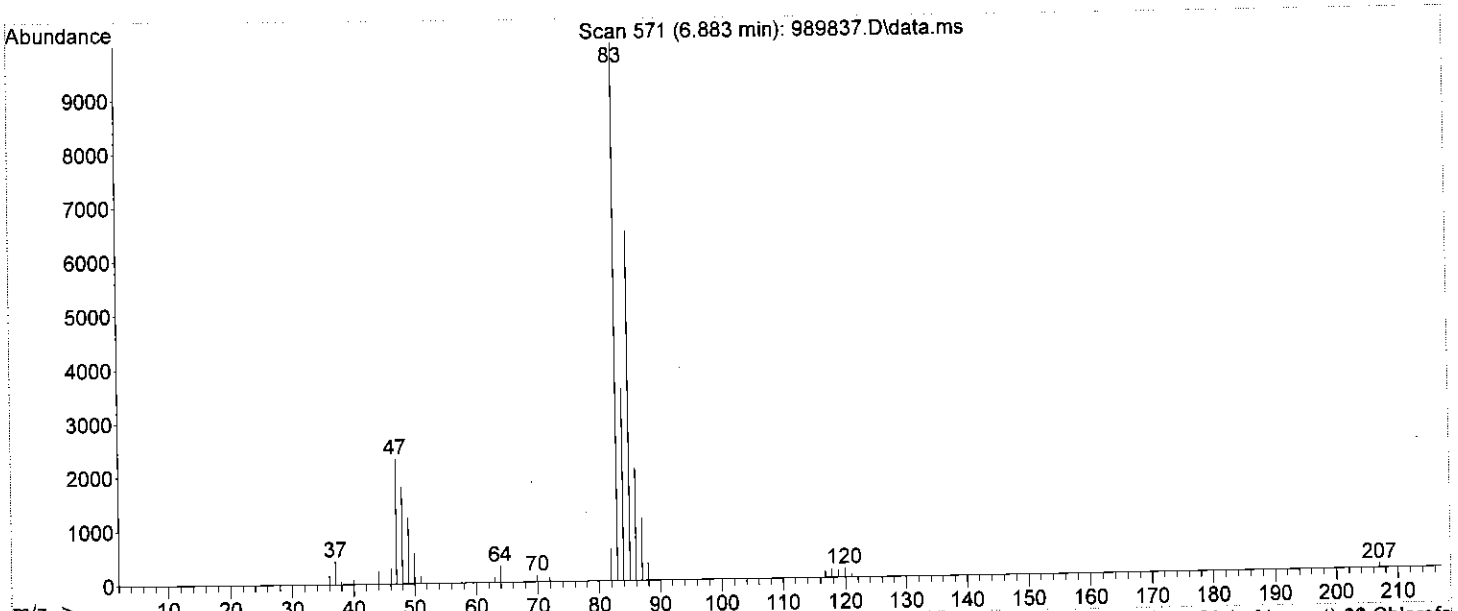


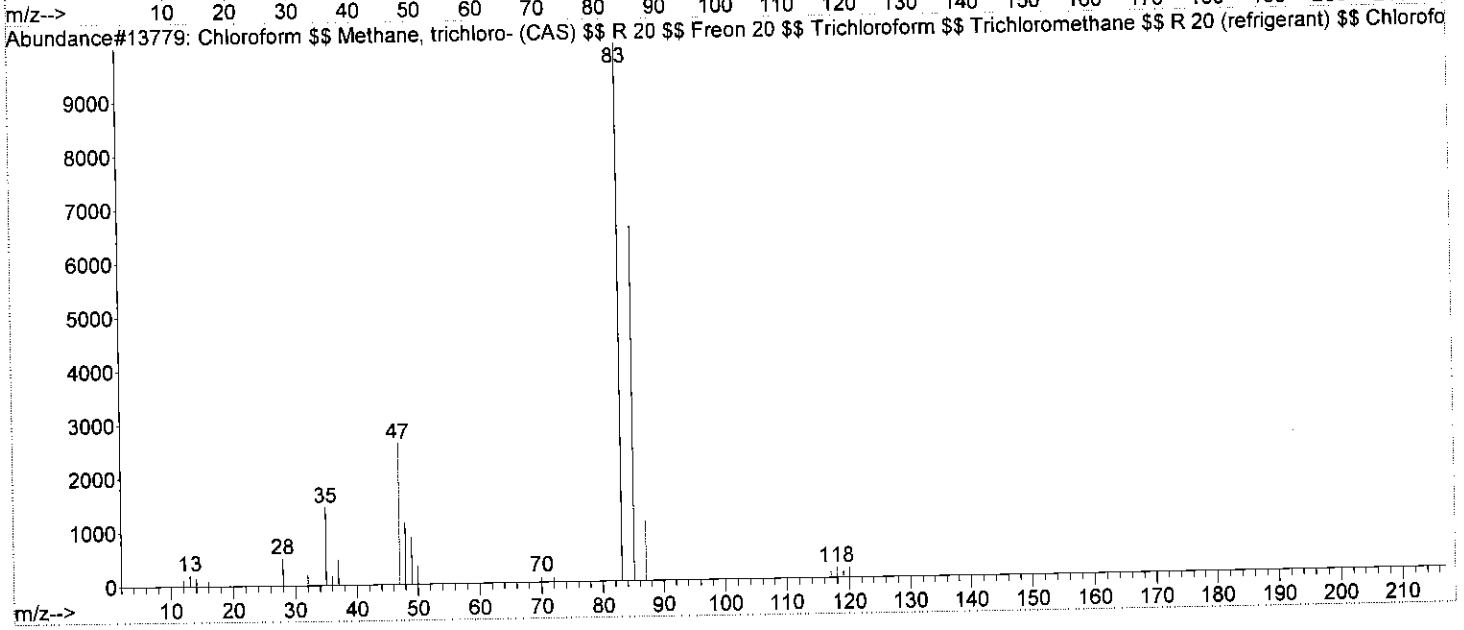
Library Searched : C:\Database\WILEY275.L
Quality : 50
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



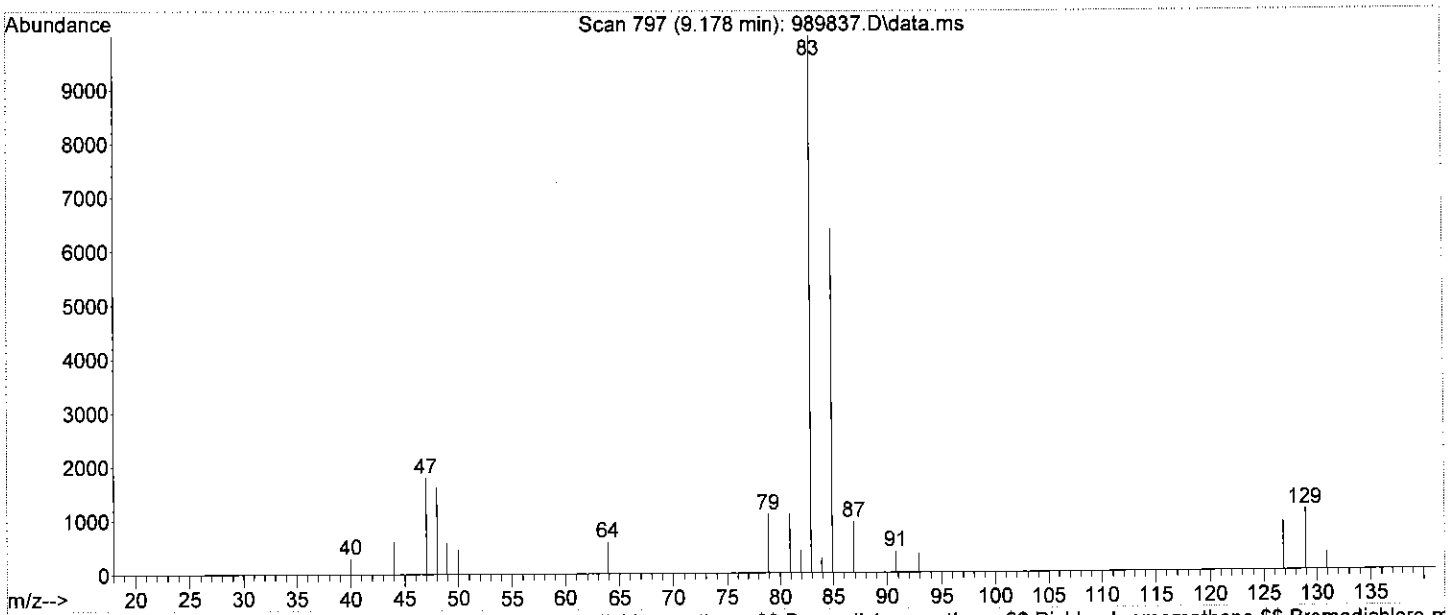


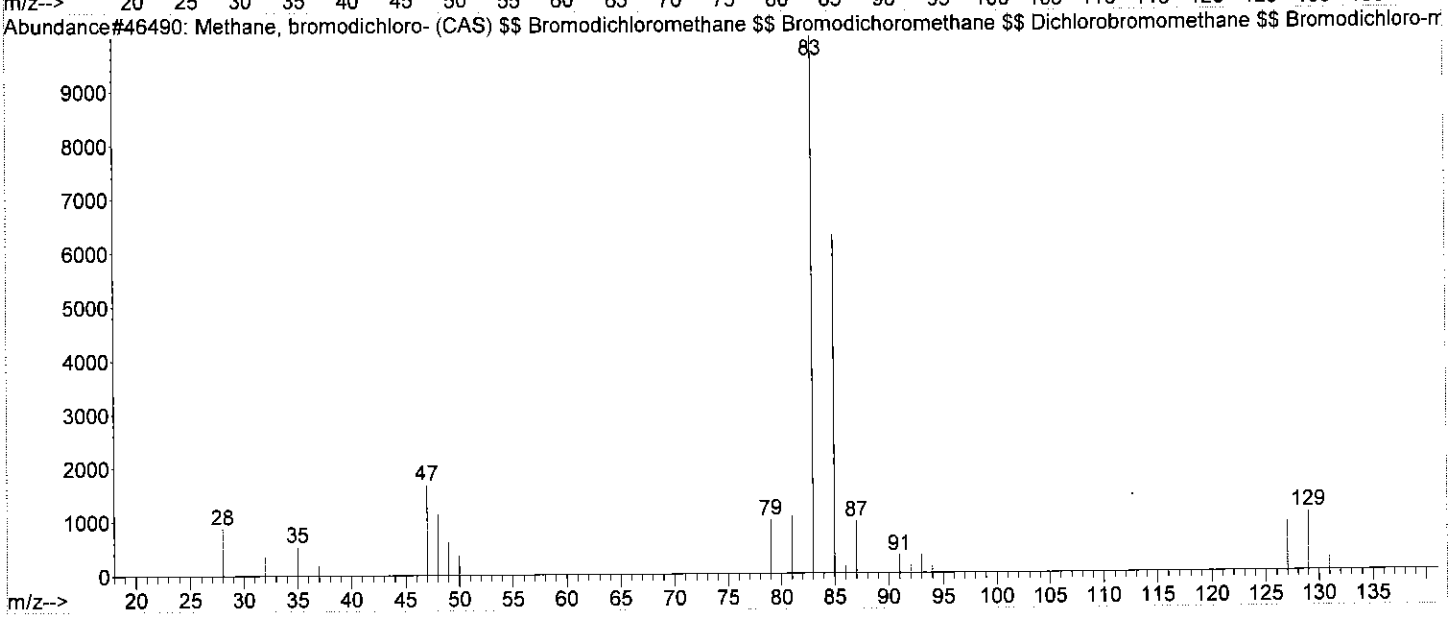
Library Searched : C:\Database\WILEY275.L
Quality : 93
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



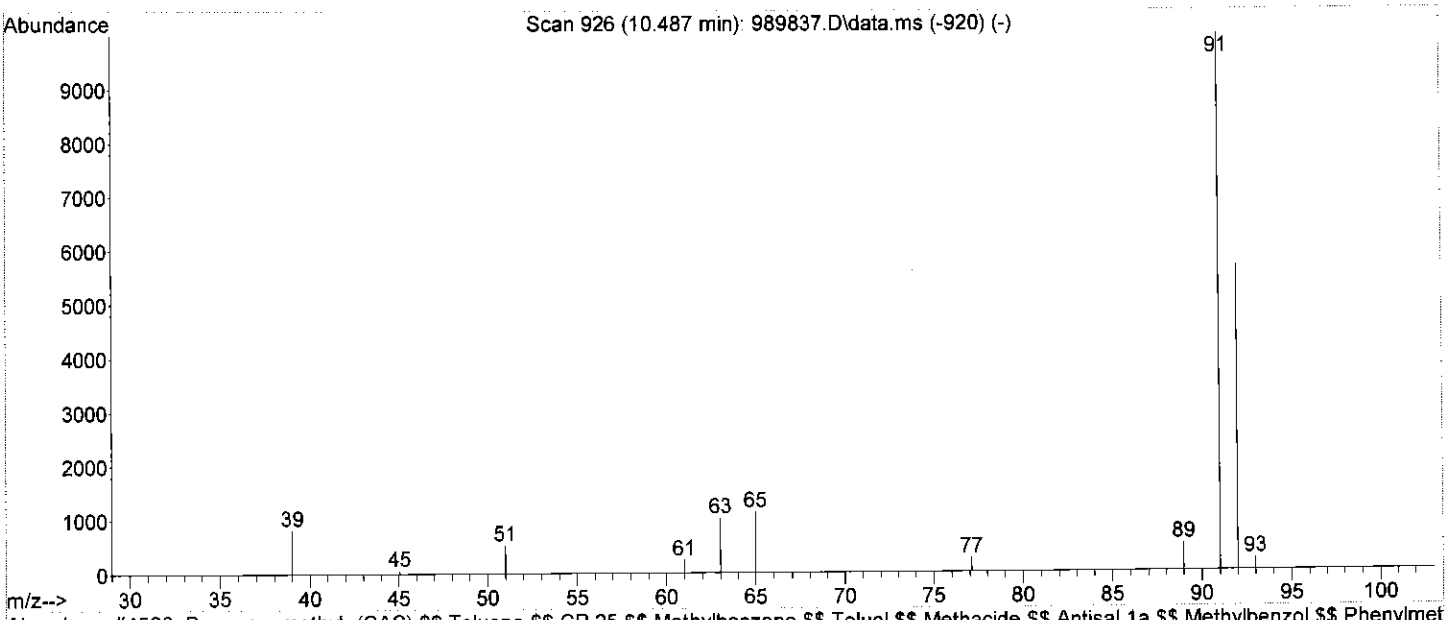


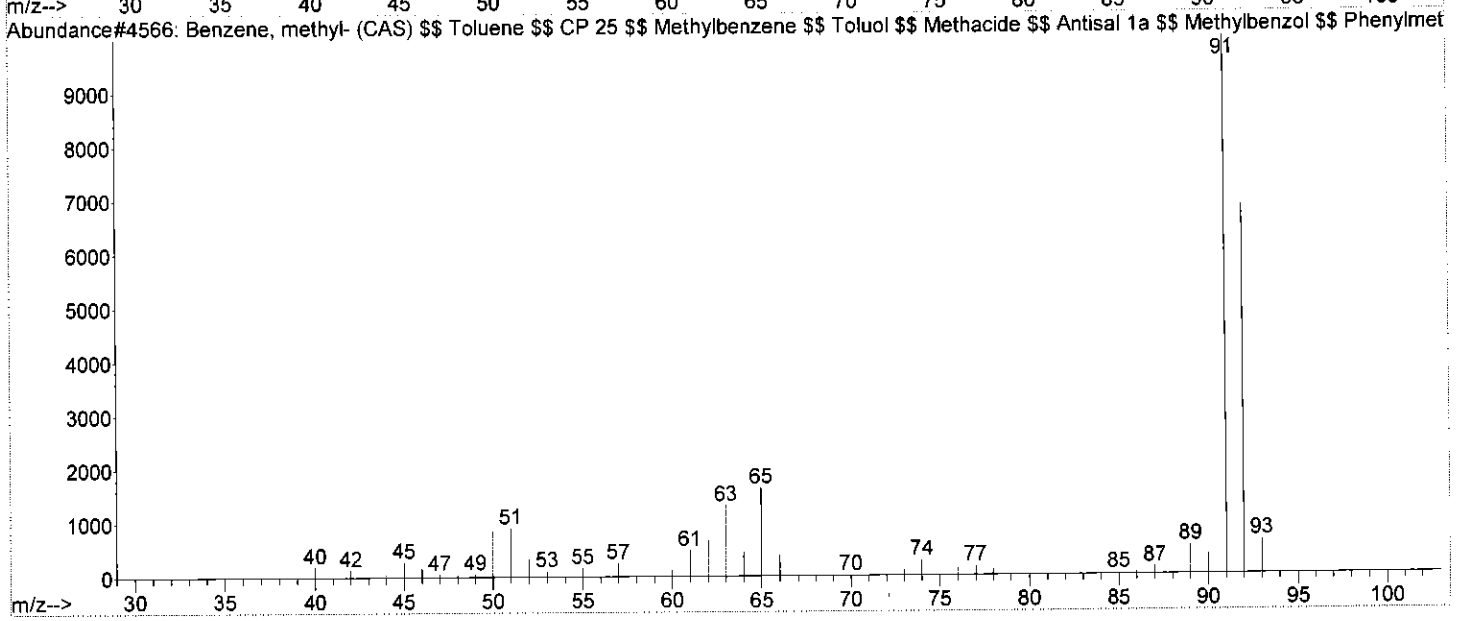
Library Searched : C:\Database\WILEY275.L
Quality : 90
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichlorobromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobromomethane $$ Monobromodichloromethane



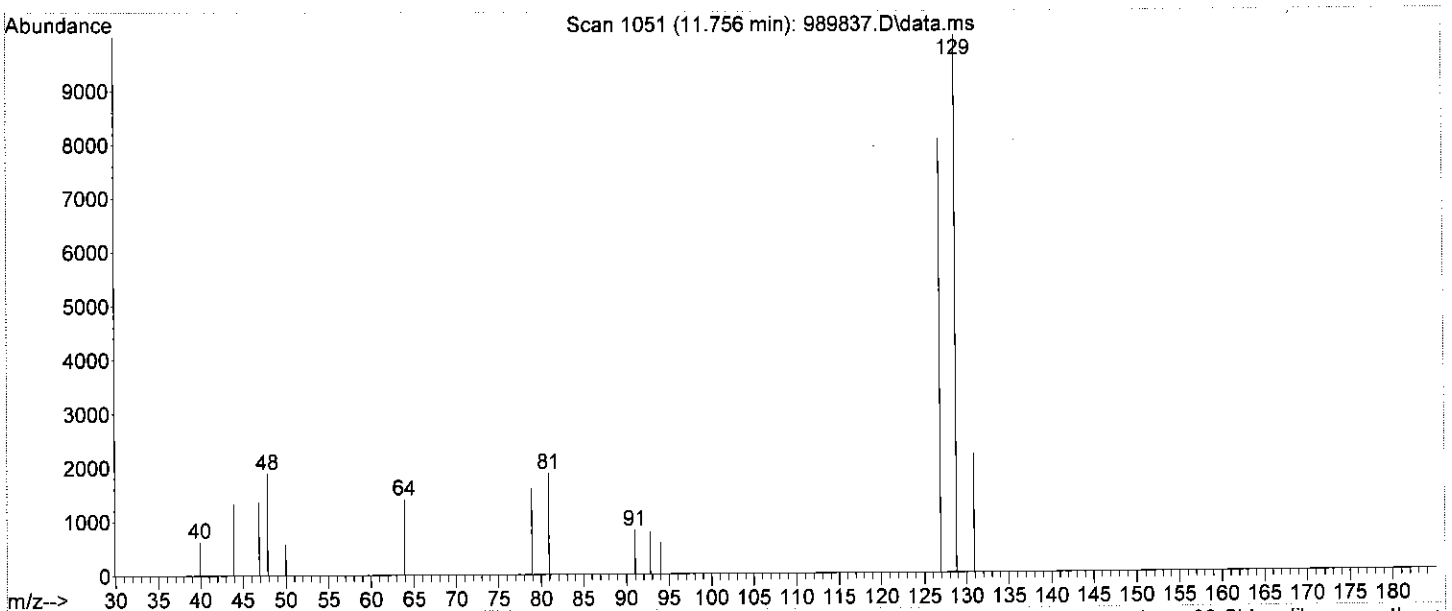


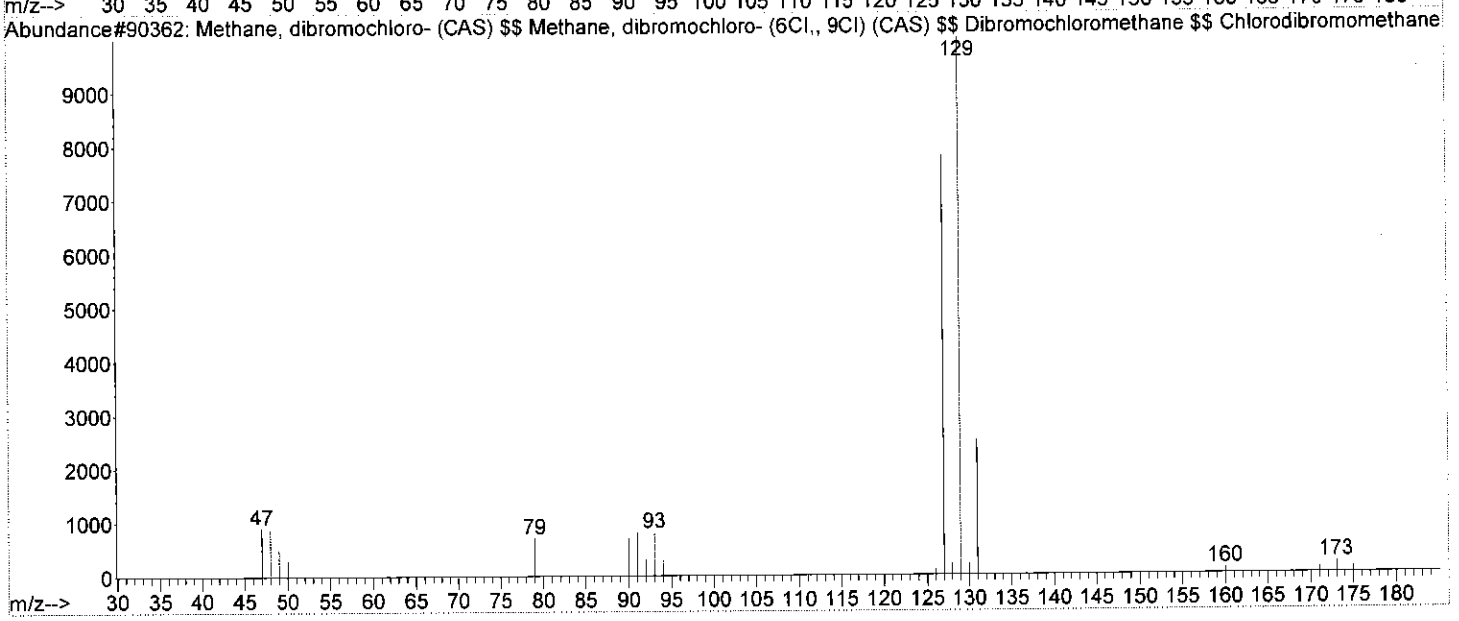
Library Searched : C:\Database\WILEY275.L
Quality : 83
ID : Benzene, methyl- (CAS) $$ Toluene $$ CP 25 $$ Methylbenzene $$ Toluol $$ Metha cide $$ Antisal 1a $$ Methylbenzol $$ Phenylmethane $$ METHYLBENZENE(TOLUENE) $$ Benzene, methyl $$ Methane, phenyl- $$ NCI-C07272 $$ Tolueen $$ Toluen $$ T oluolo $$ Rcra waste





Library Searched : C:\Database\WILEY275.L
Quality : 64
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\199898-899-900\
Data File : 989837.D
Acq On : 7 Jun 2018 3:35 am
Operator : NIVA
Sample : 2875446
Misc : RUN199900
ALS Vial : 36 Sample Multiplier: 1

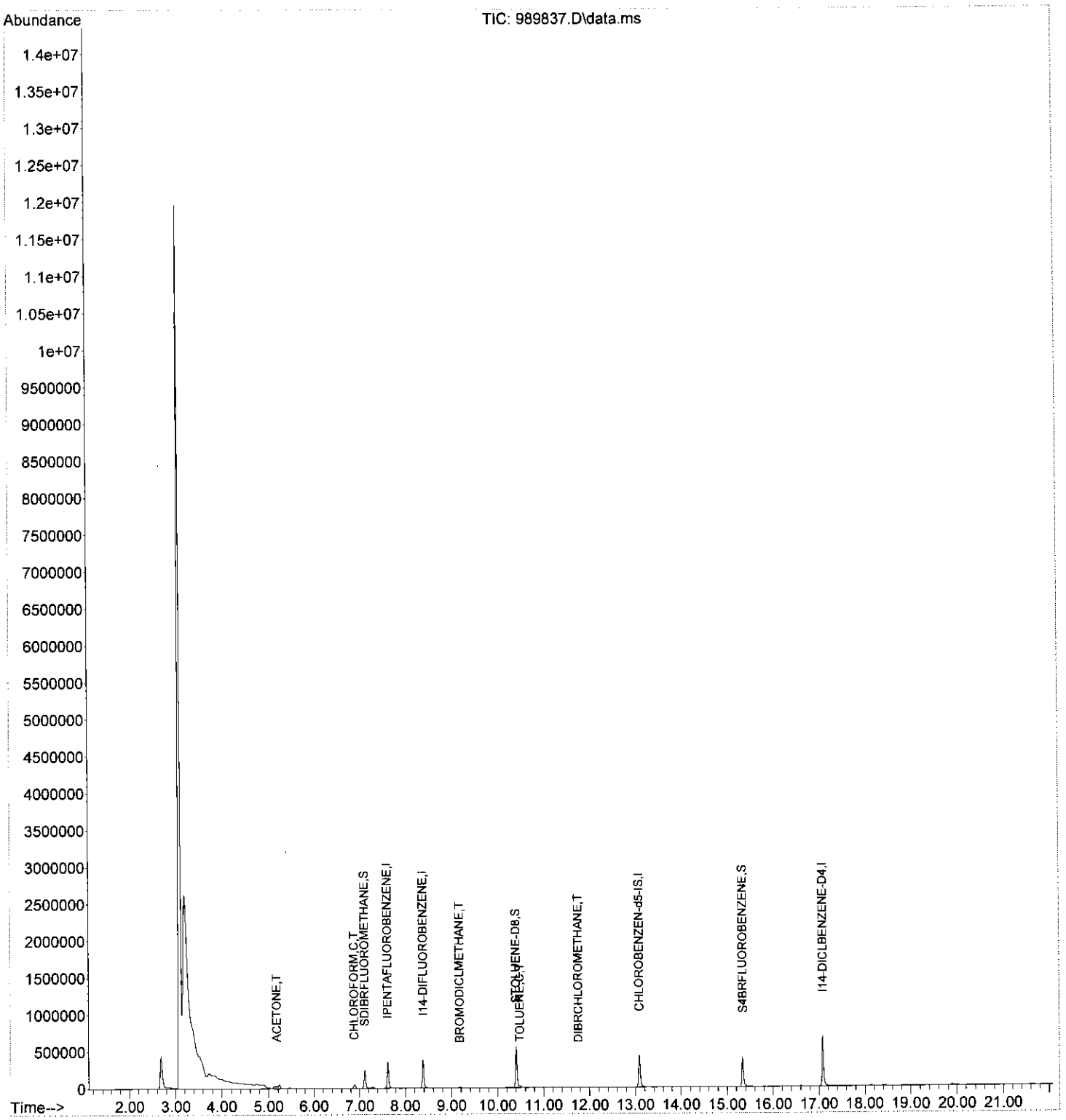
Quant Time: Jun 08 14:17:52 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.625	168	238909	20.00 µg/L	0.11
23) I14-DIFLUOROBENZENE	8.386	114	368501	20.00 µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.086	117	364744	20.00 µg/L	0.14
71) I14-DICLBENZENE-D4	17.086	152	246419	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.117	111	175747	21.26 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.30%		
39) STOLUENE-D8	10.406	98	481285	20.79 µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.95%		
59) S4BRFLUOROBENZENE	15.340	95	185755	19.87 µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.35%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	3.265	62	145	N.D.	
5) BROMOMETHANE	0.000		0	N.D. d	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	3.970	101	139	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.178	43	42121	46.04 µg/L	95
10) 11-DICHLOROETHENE	0.000		0	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	5.239	96	735	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	6.589	96	425	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.883	83	40022	5.74 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	7.036	117	476	N.D.	
30) BENZENE	7.645	78	5984	N.D.	
31) TRICHLOROETHENE	8.386	132	489	N.D.	
32) 12-DICHLOROPROPANE	9.198	63	79	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	9.178	83	10457	1.87 µg/L	99
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	11.066	43	200	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.487	91	16637	1.20 µg/L	95
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.	

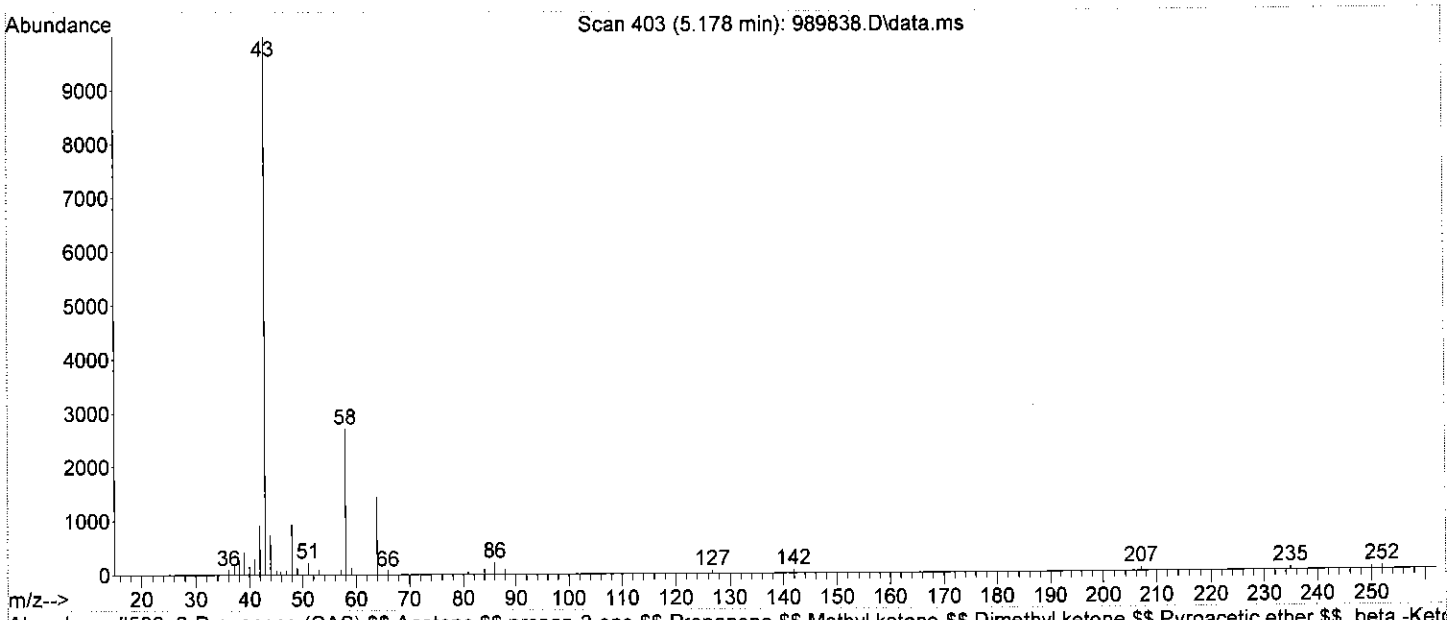
Quantitation Report (QT Reviewed)

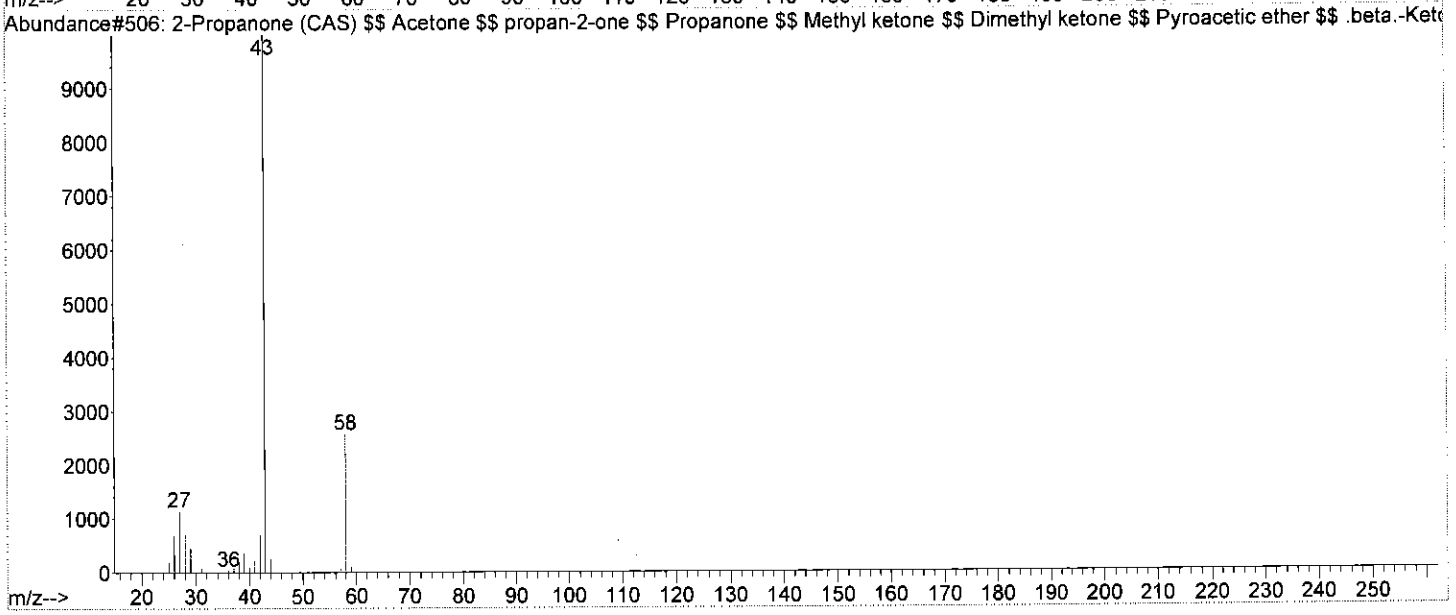
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989837.D
Acq On : 7 Jun 2018 3:35 am
Operator : NIVA
Sample : 2875446
Misc : RUN199900
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jun 08 14:17:52 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

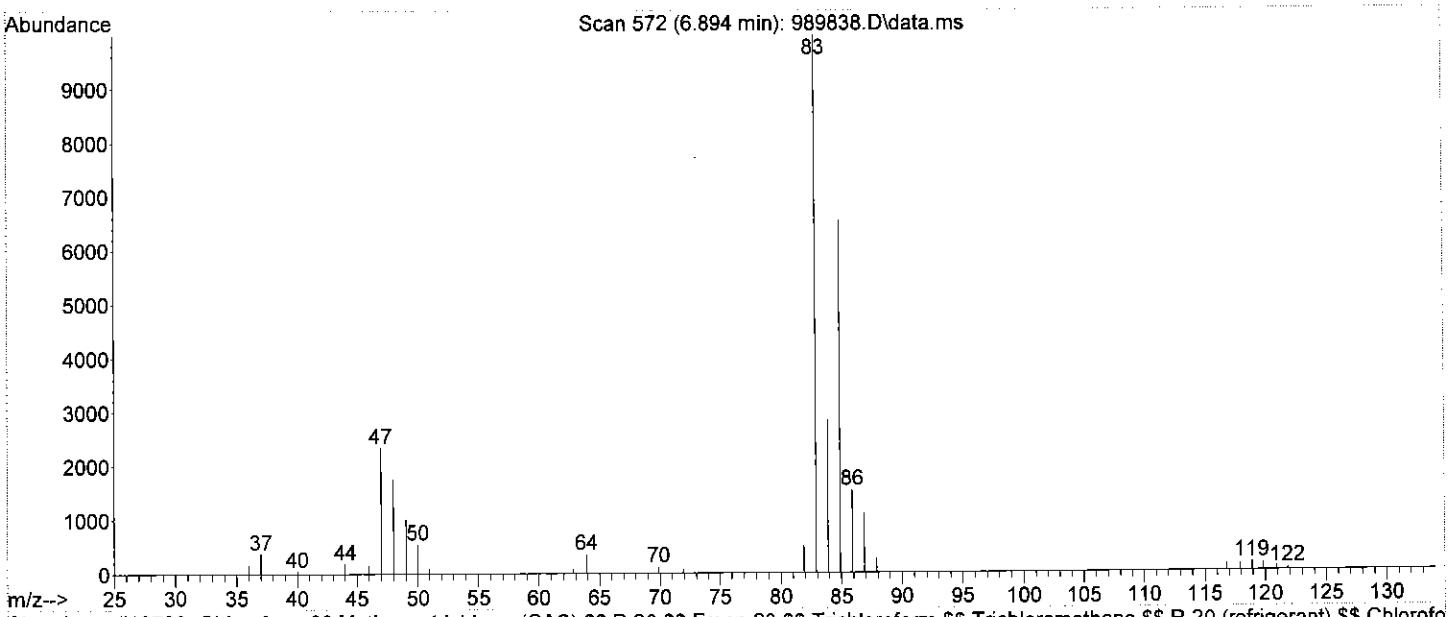


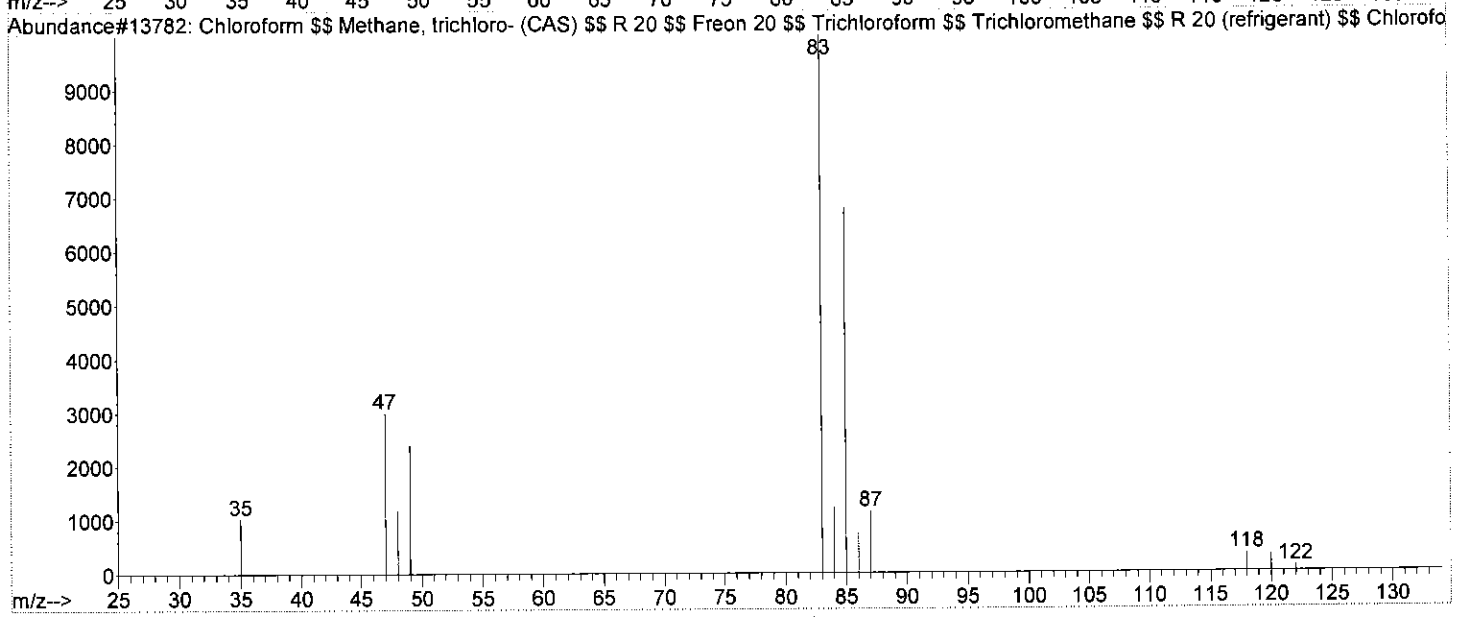
Library Searched : C:\Database\WILEY275.L
Quality : 49
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



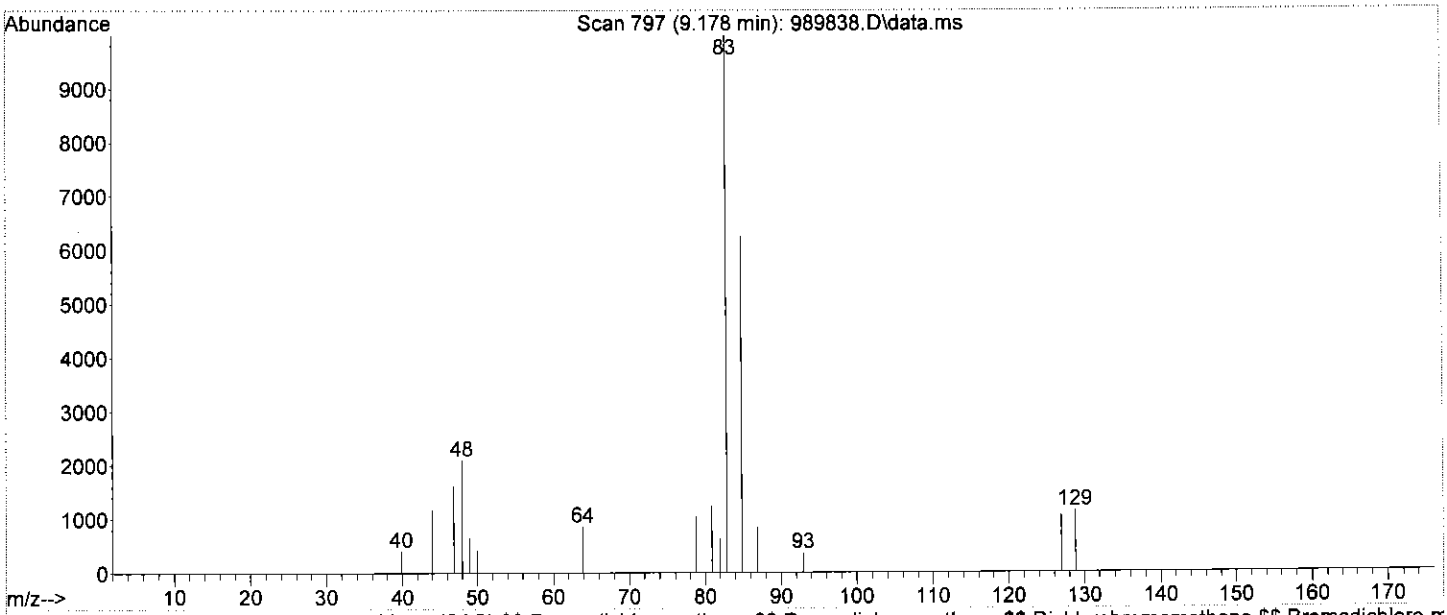


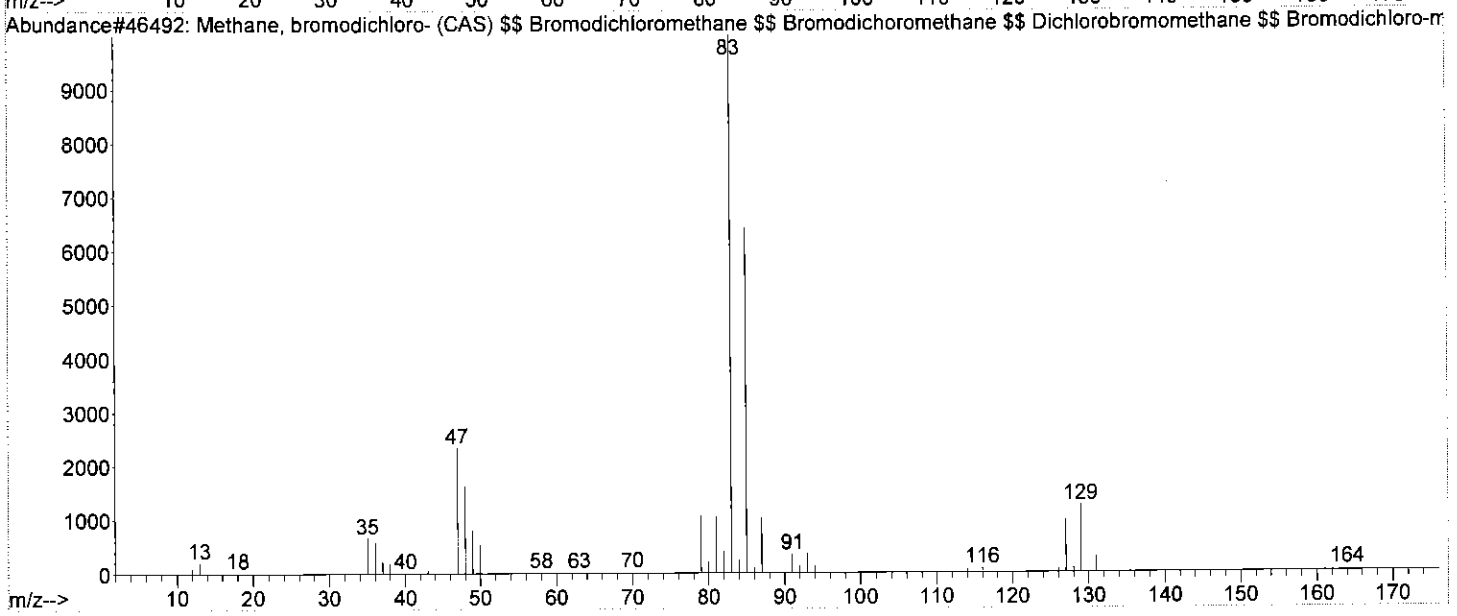
Library Searched : C:\Database\WILEY275.L
Quality : 72
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



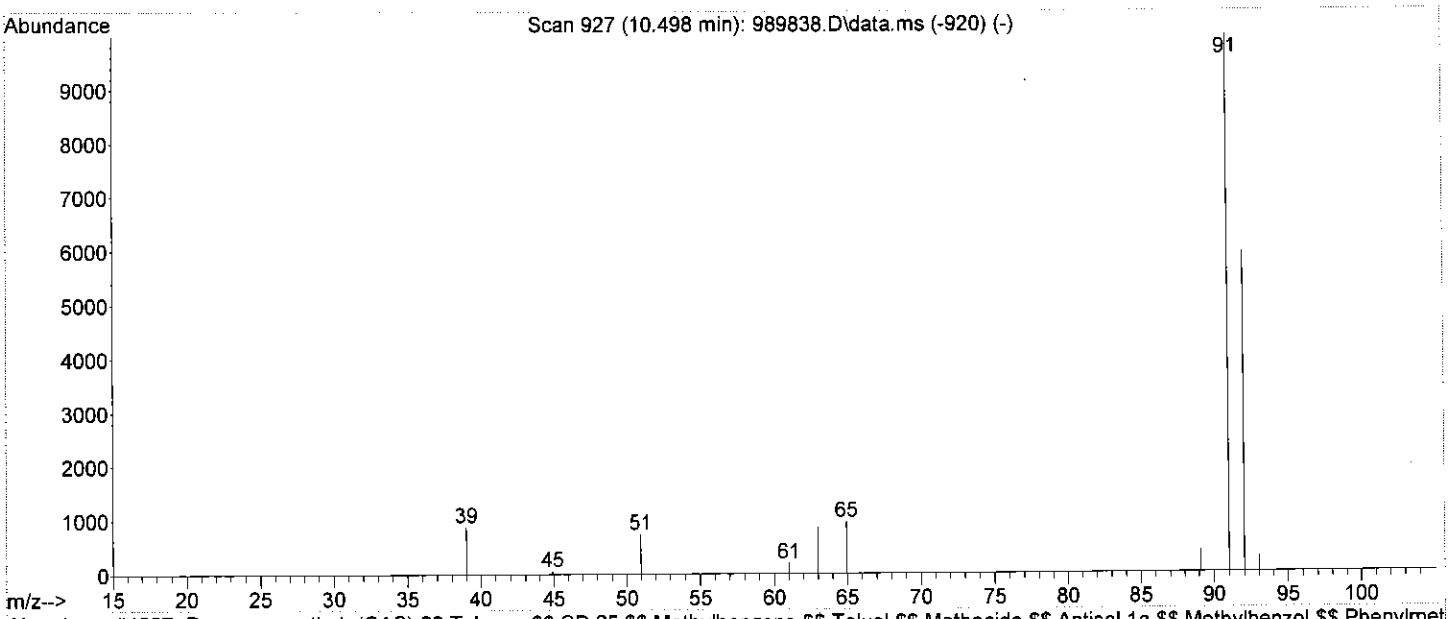


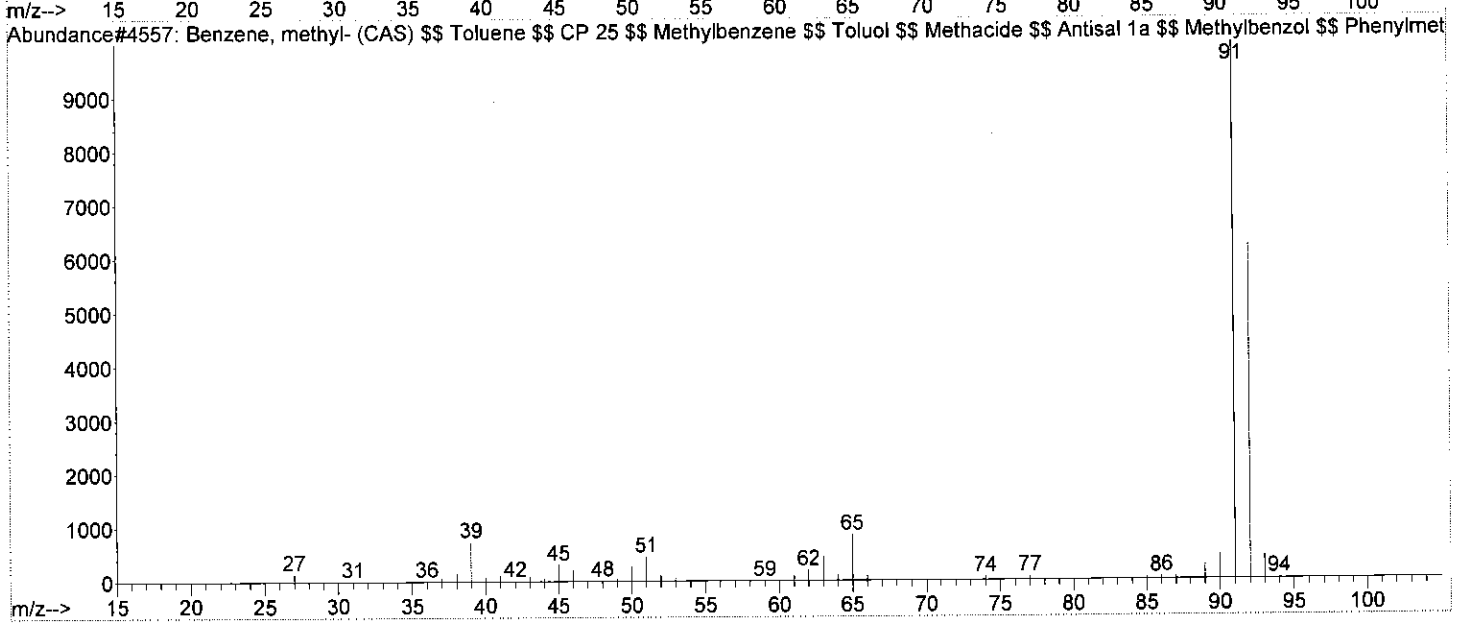
Library Searched : C:\Database\WILEY275.L
Quality : 83
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichlorobromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobromomethane $$ Monobromodichloromethane



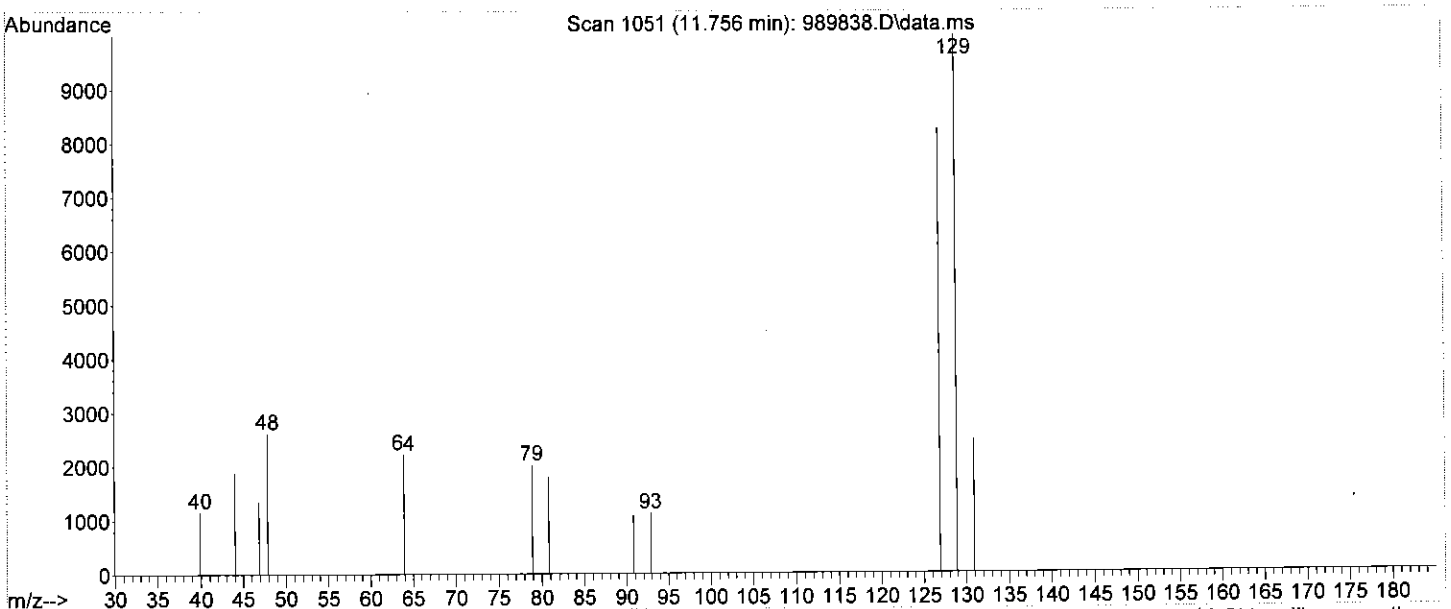


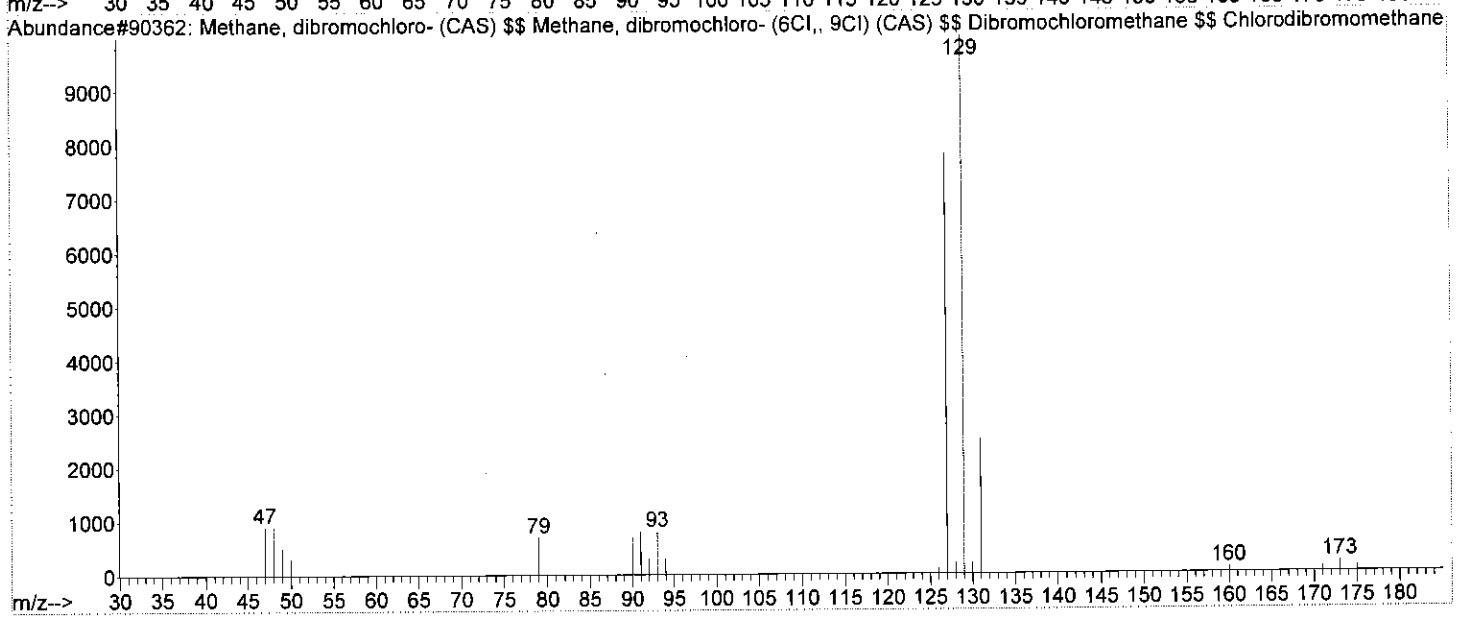
Library Searched : C:\Database\WILEY275.L
Quality : 83
ID : Benzene, methyl- (CAS) $$ Toluene $$ CP 25 $$ Methylbenzene $$ Toluol $$ Metha cide $$ Antisal 1a $$ Methylbenzol $$ Phenylmethane $$ METHYLBENZENE(TOLUENE) $$ Benzene, methyl $$ Methane, phenyl- $$ NCI-C07272 $$ Tolueen $$ Toluen $$ T oluolo $$ Rcra waste





Library Searched : C:\Database\WILEY275.L
Quality : 64
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\199898-899-900\
Data File : 989838.D
Acq On : 7 Jun 2018 4:01 am
Operator : NIVA
Sample : 2875447
Misc : RUN199900
ALS Vial : 37 Sample Multiplier: 1

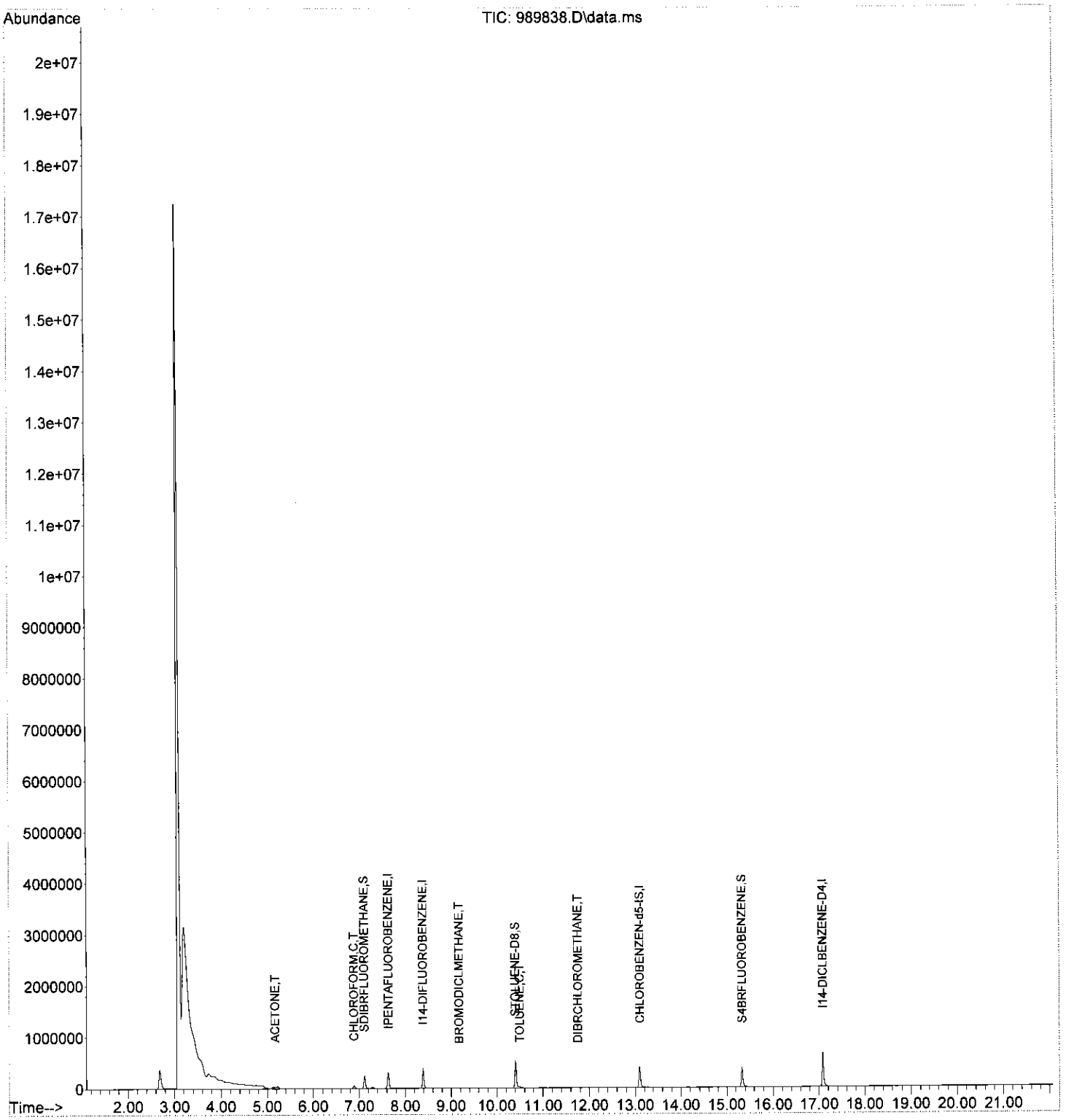
Quant Time: Jun 08 14:19:41 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.635	168	219541	20.00 µg/L	0.12
23) I14-DIFLUOROBENZENE	8.386	114	344834	20.00 µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.096	117	348678	20.00 µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	228945	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.117	111	173192	22.39 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.95%		
39) STOLUENE-D8	10.406	98	440793	20.35 µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.75%		
59) S4BRFLUOROBENZENE	15.340	95	174838	19.56 µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.80%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	3.269	62	71	N.D.	
5) BROMOMETHANE	0.000		0	N.D. 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	5.178	43	46819	55.68 µg/L	97
10) 11-DICHLOROETHENE	0.000		0	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	5.219	96	164	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.203	43	211	N.D.	
18) 2-BUTANONE	0.000		0	N.D. d	
19) CIS12DICHLOROETHENE	6.609	96	417	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.894	83	46238	7.22 µg/L	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	7.087	42	67	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	7.036	117	644	N.D.	
30) BENZENE	7.645	78	4638	N.D.	
31) TRICHLOROETHENE	8.396	132	370	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	8.995	174	70	N.D.	
34) BROMODICLMETHANE	9.178	83	7010	1.34 µg/L	96
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	11.046	43	283	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.498	91	18814	1.44 µg/L	99
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.	

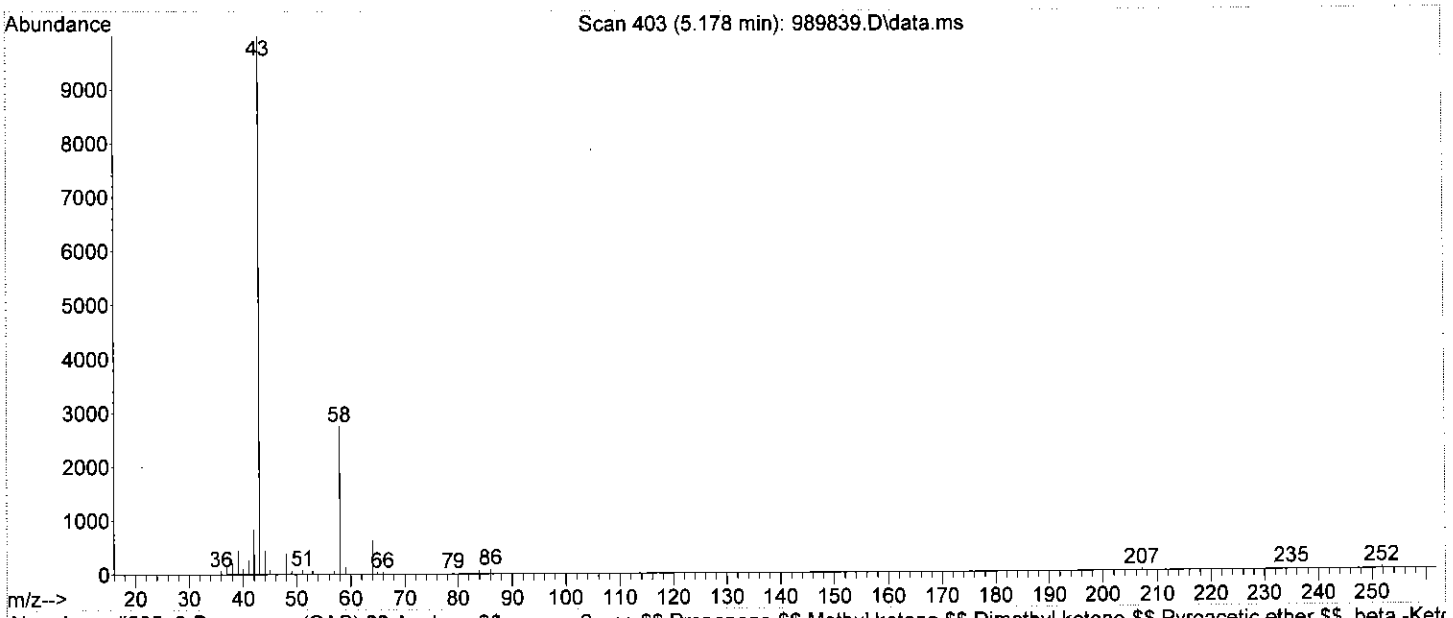
Quantitation Report (QT Reviewed)

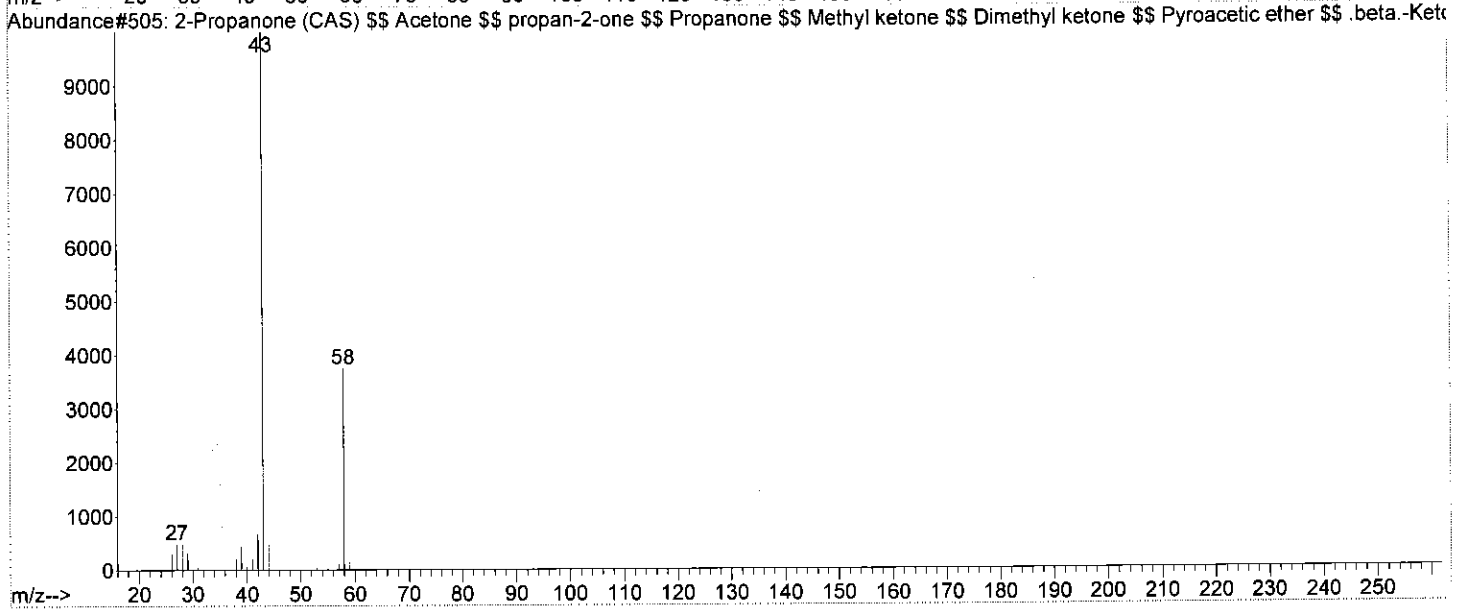
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989838.D
Acq On : 7 Jun 2018 4:01 am
Operator : NIVA
Sample : 2875447
Misc : RUN199900
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jun 08 14:19:41 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

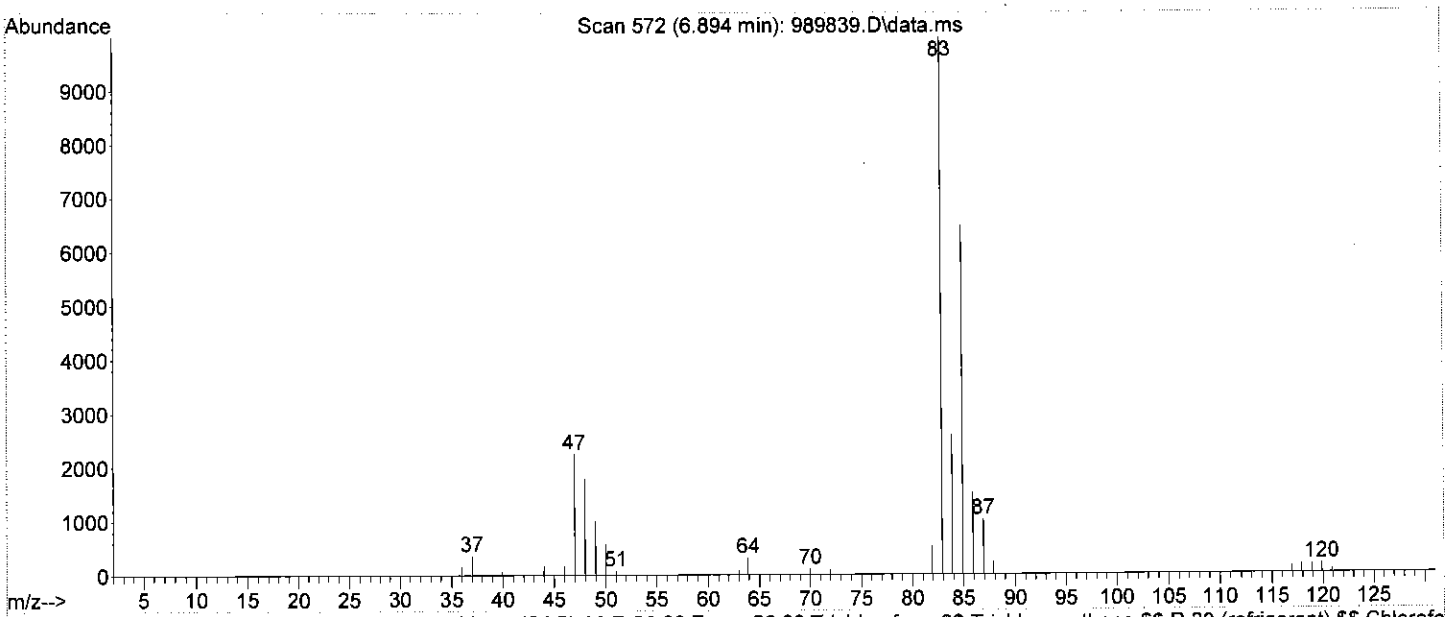


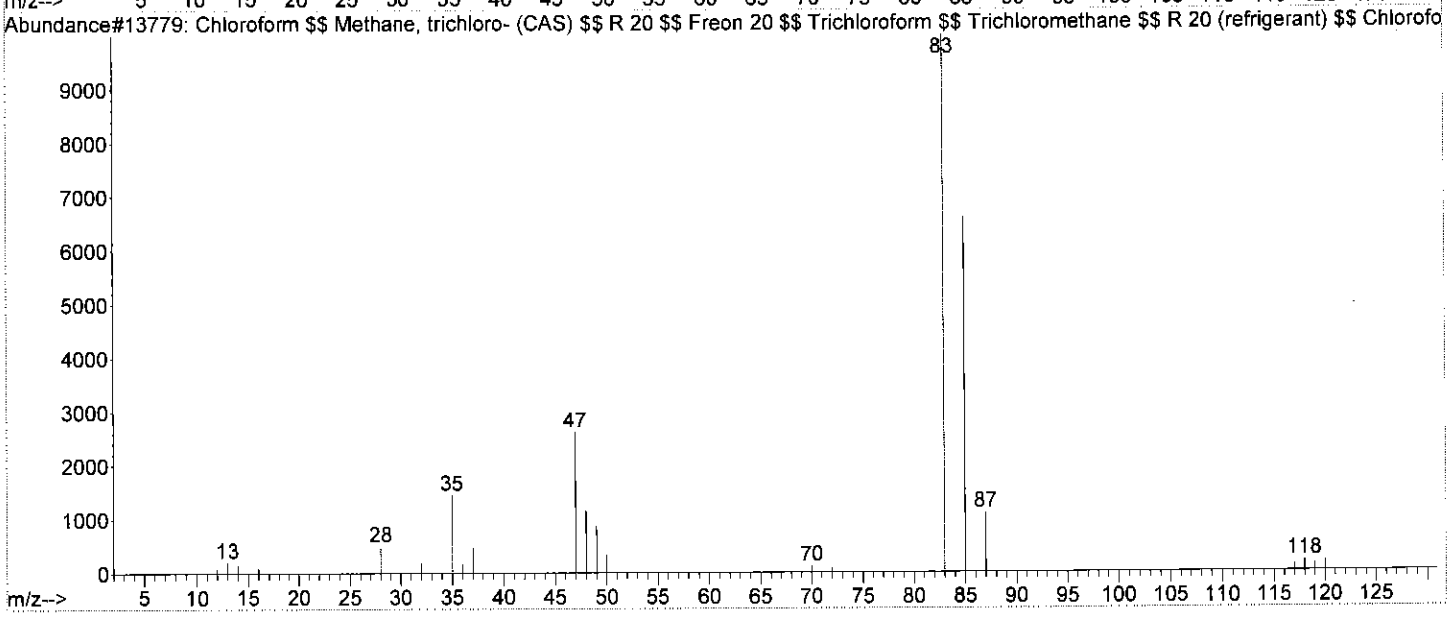
Library Searched : C:\Database\WILEY275.L
Quality : 52
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



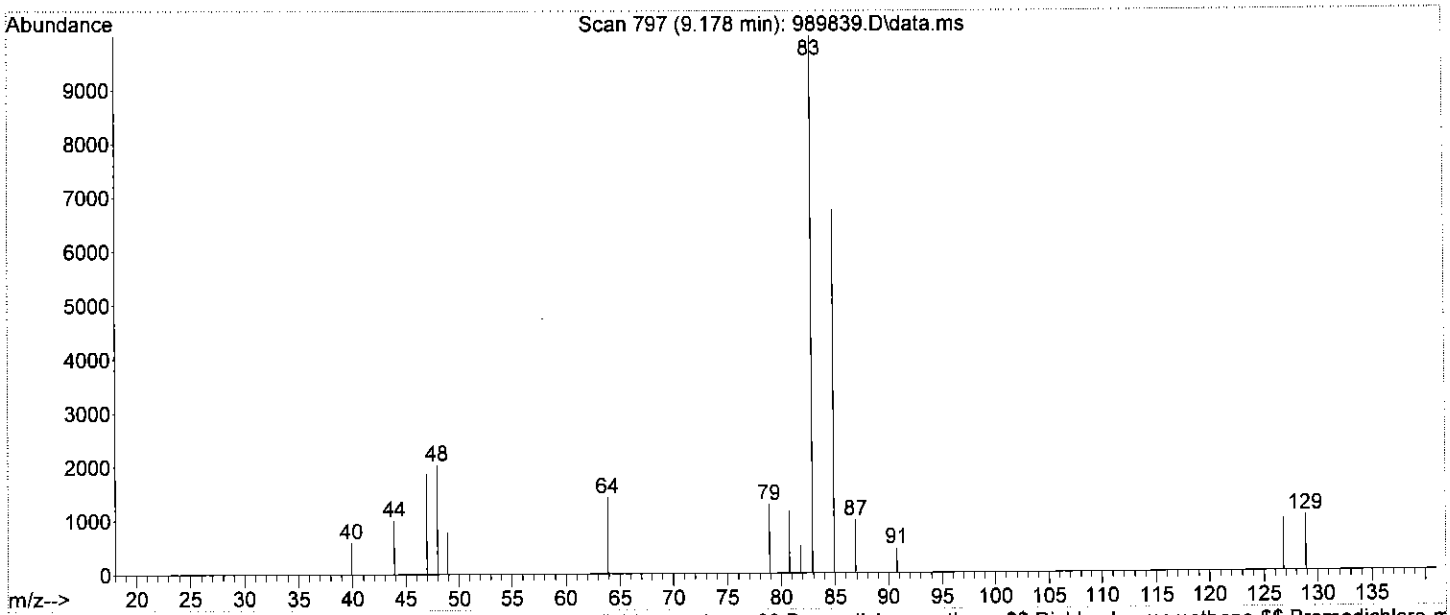


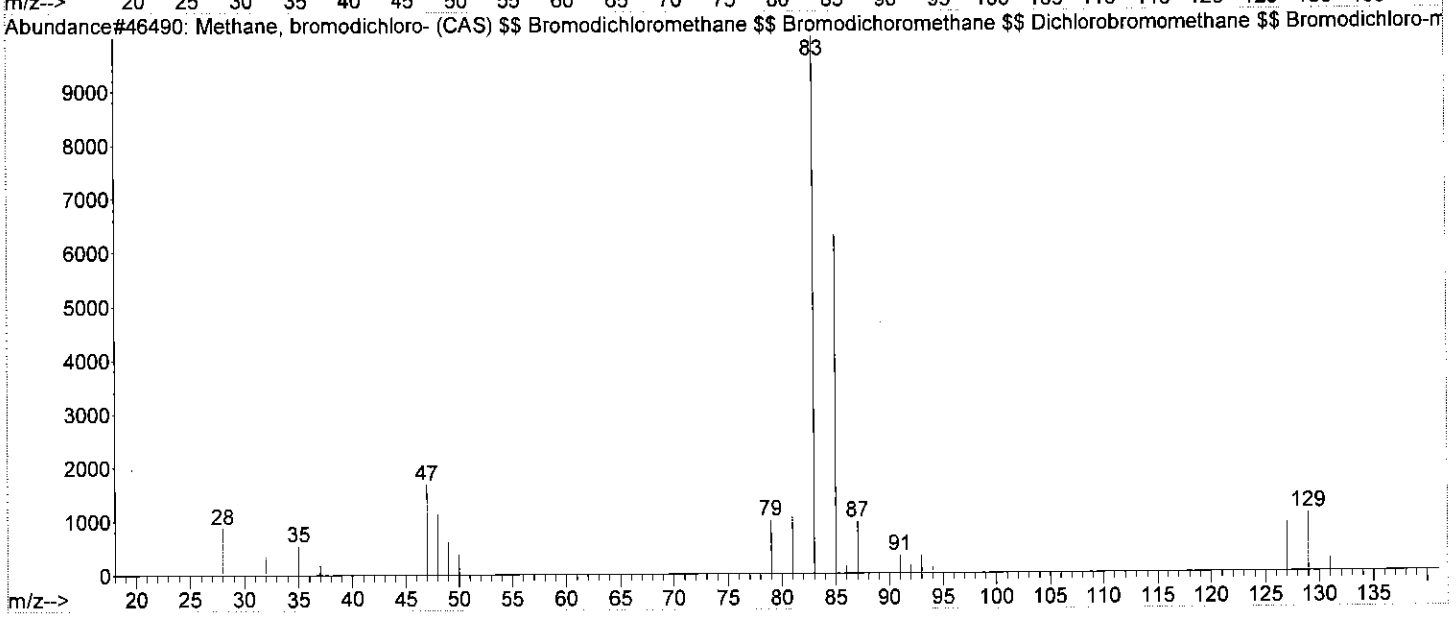
Library Searched : C:\Database\WILEY275.L
Quality : 94
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



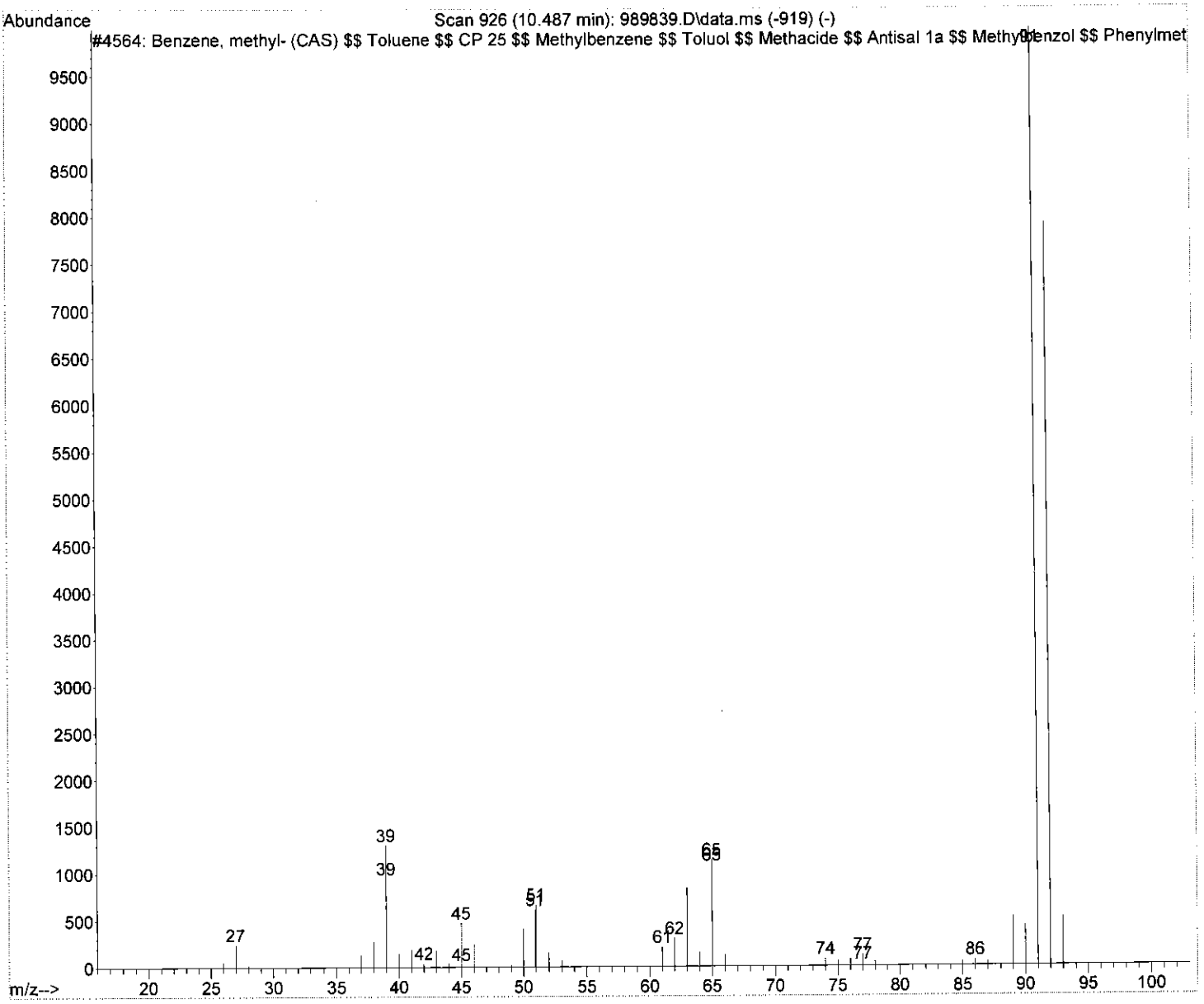


Library Searched : C:\Database\WILEY275.L
Quality : 78
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichlorobromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobromomethane $$ Monobromodichloromethane





Library Searched : C:\Database\WILEY275.L
Quality : 90
ID : Benzene, methyl- (CAS) $$ Toluene $$ CP 25 $$ Methylbenzene $$ Toluol $$ Methacide $$ Antisal 1a $$ Methylbenzol $$ Phenylmethane $$ METHYLBENZENE(TOLUENE) $$ Benzene, methyl $$ Methane, phenyl- $$ NCI-C07272 $$ Toluen $$ Toluen $$ Toluolo $$ Rcra waste



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989839.D
Acq On : 7 Jun 2018 4:27 am
Operator : NIVA
Sample : 2875448
Misc : RUN199900
ALS Vial : 38 Sample Multiplier: 1

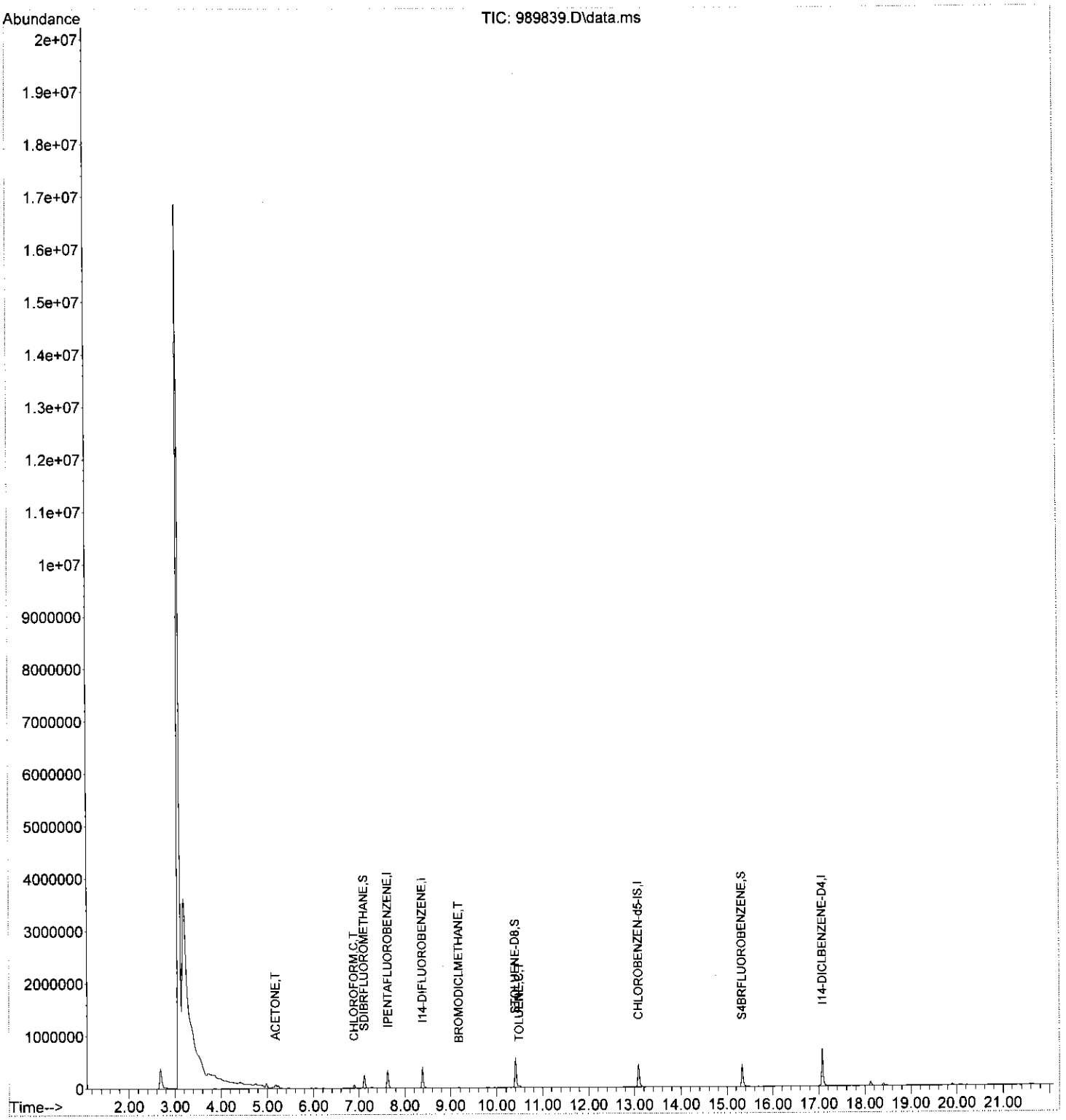
Quant Time: Jun 08 14:27:46 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.635	168	236730	20.00 µg/L	0.12
23) I14-DIFLUOROBENZENE	8.386	114	360577	20.00 µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.086	117	368930	20.00 µg/L	0.14
71) I14-DICLBENZENE-D4	17.086	152	260001	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.117	111	177553	21.95 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.75%		
39) STOLUENE-D8	10.406	98	490902	21.67 µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 108.35%		
59) S4BRFLUOROBENZENE	15.330	95	195468	20.67 µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.35%		
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	3.665	94	775	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	5.178	43	113900	125.63 µg/L	98
10) 11-DICHLOROETHENE	0.000		0	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	5.229	96	547	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.214	43	369	N.D.	
18) 2-BUTANONE	7.076	43	76	N.D.	
19) CIS12DICHLOROETHENE	6.609	96	404	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.894	83	48586	7.03 µg/L	100
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	7.127	42	358	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	7.036	117	496	N.D.	
30) BENZENE	7.645	78	3850	N.D.	
31) TRICHLOROETHENE	8.386	132	521	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	9.178	83	6443	1.18 µg/L	99
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	11.066	43	1201	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.487	91	32069	2.35 µg/L	98
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.	

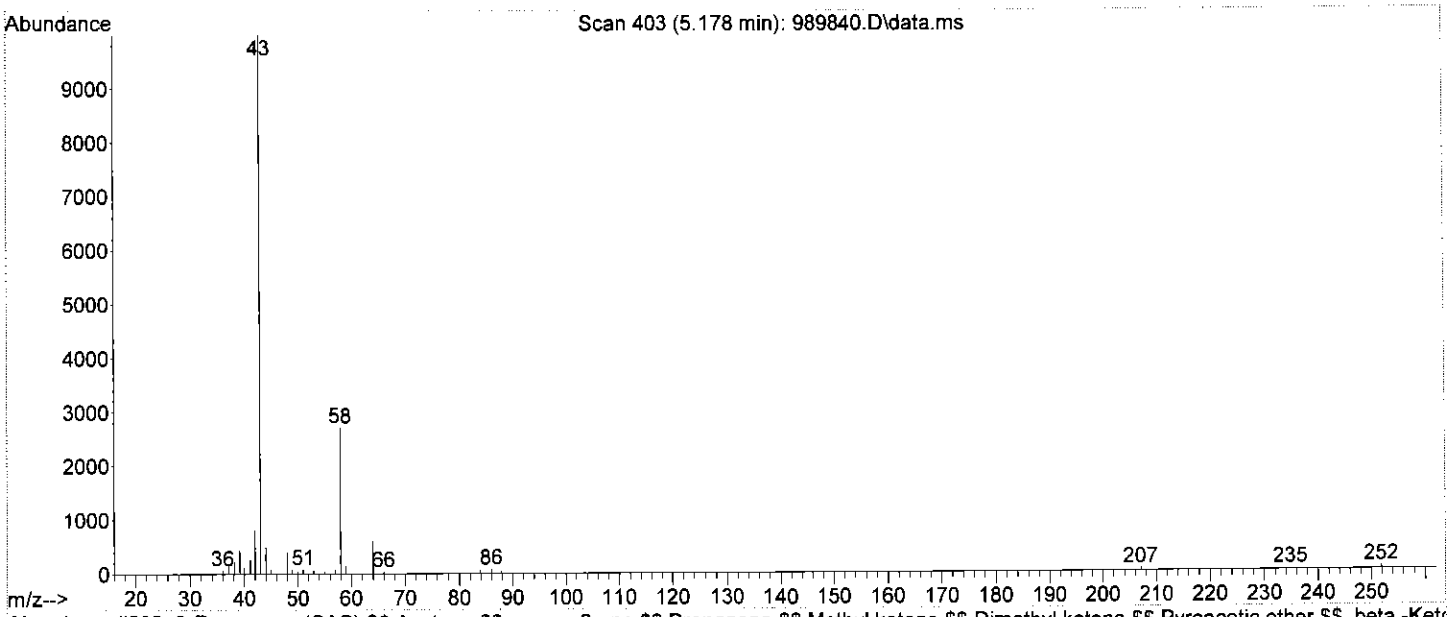
Quantitation Report (QT Reviewed)

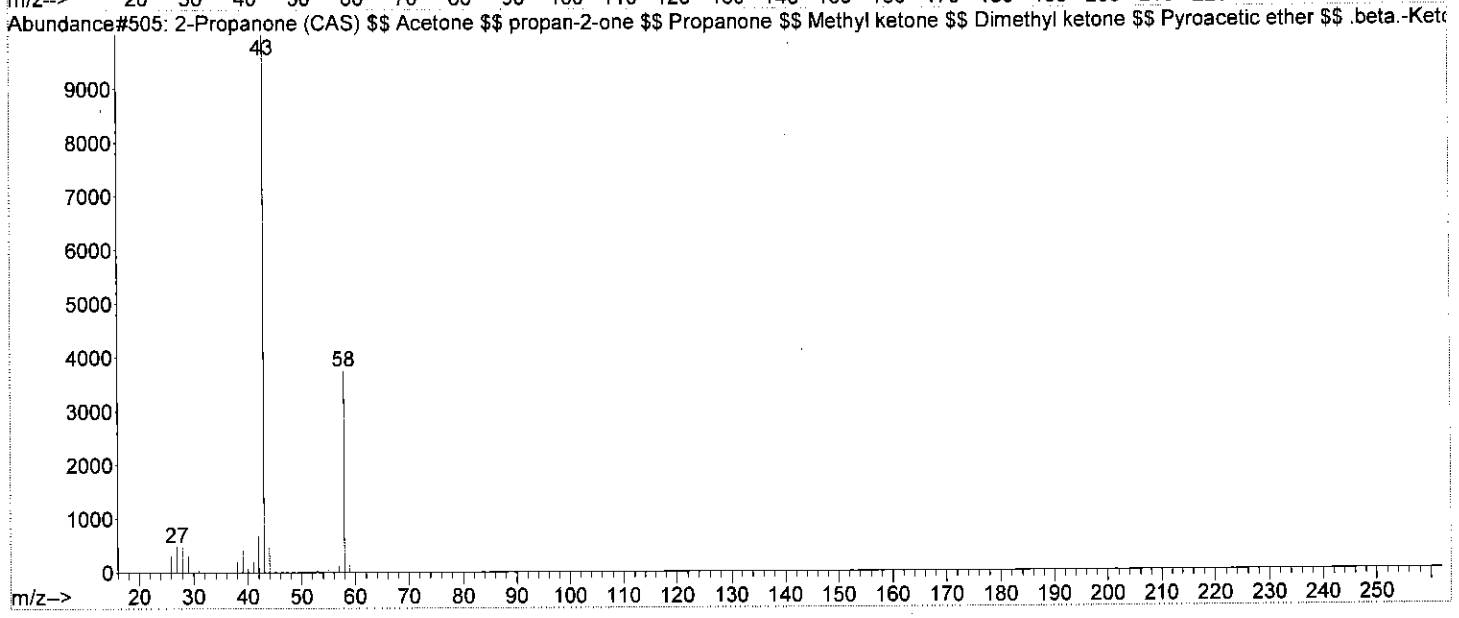
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989839.D
Acq On : 7 Jun 2018 4:27 am
Operator : NIVA
Sample : 2875448
Misc : RUN199900
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jun 08 14:27:46 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

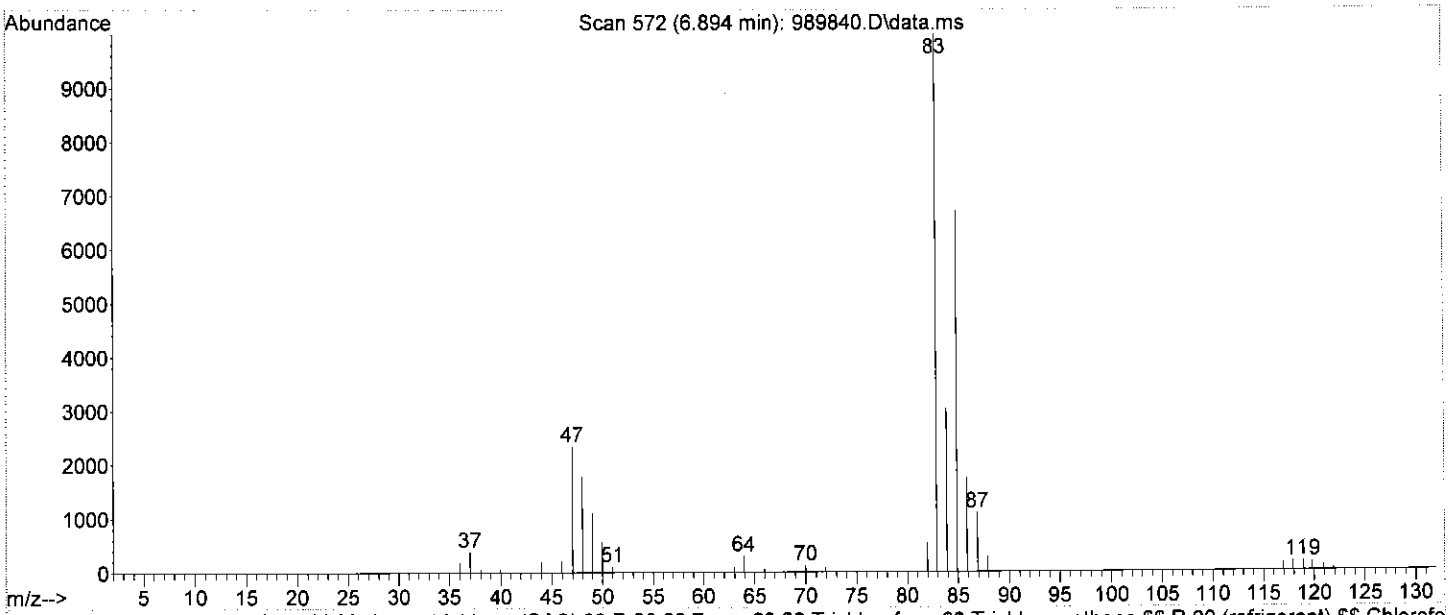


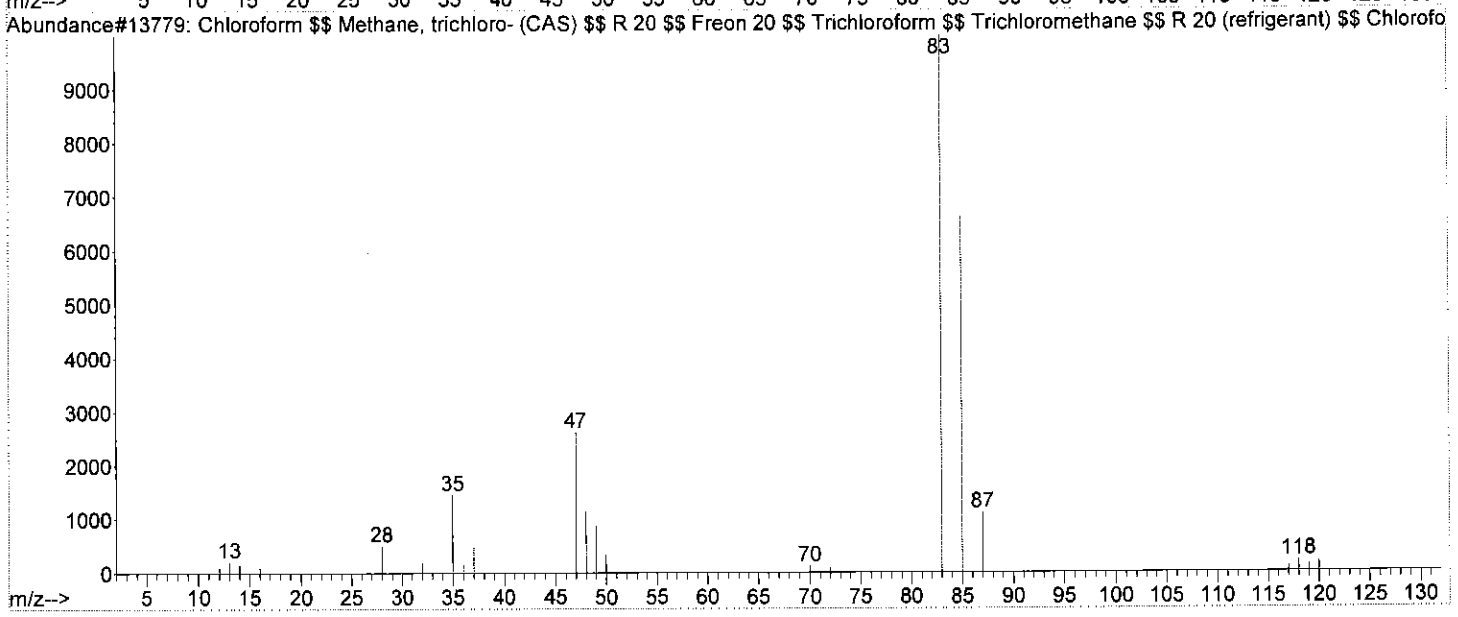
Library Searched : C:\Database\WILEY275.L
Quality : 52
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



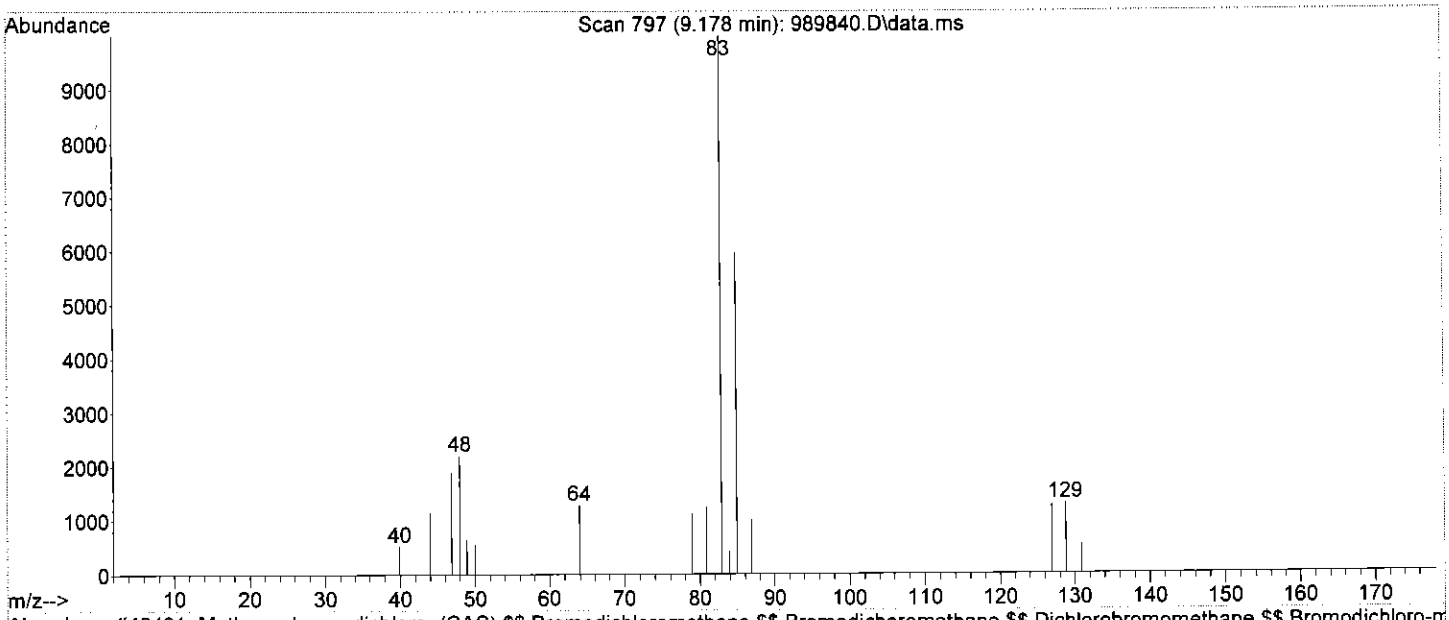


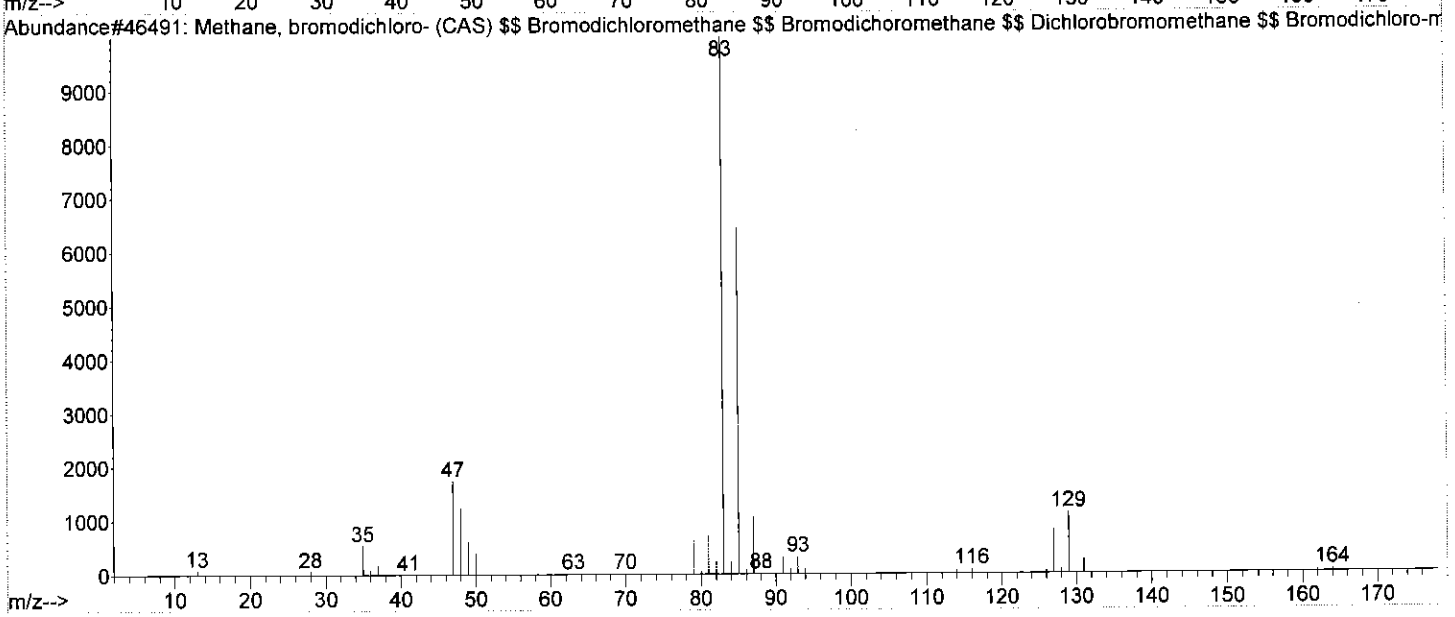
Library Searched : C:\Database\WILEY275.L
Quality : 93
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



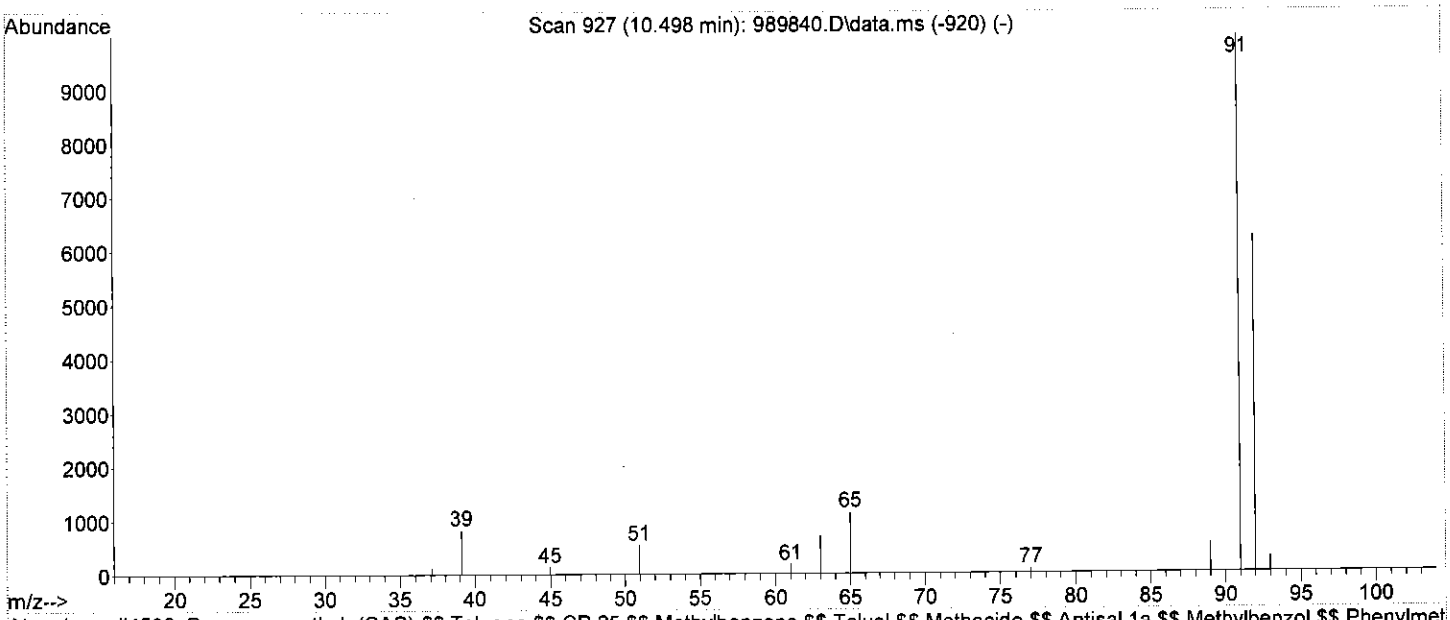


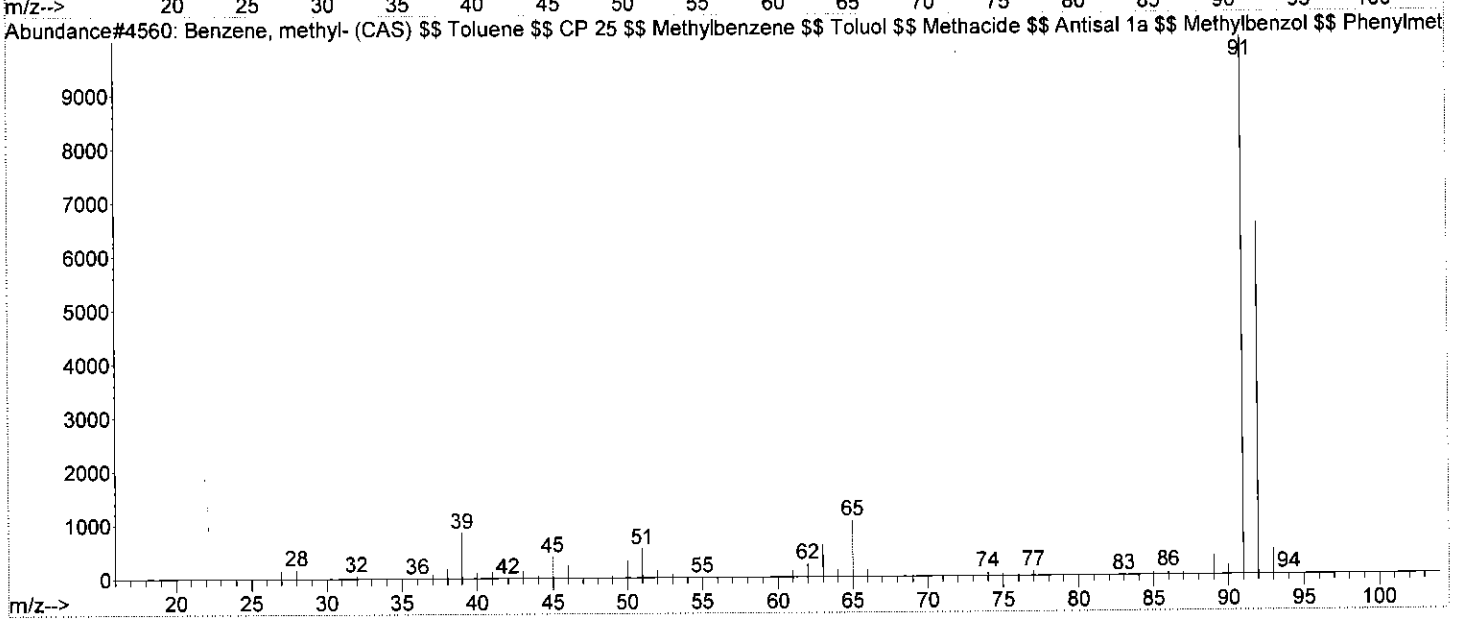
Library Searched : C:\Database\WILEY275.L
Quality : 78
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichlorobromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobromomethane $$ Monobromodichloromethane





Library Searched : C:\Database\WILEY275.L
Quality : 90
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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989840.D
Acq On : 7 Jun 2018 4:53 am
Operator : NIVA
Sample : 2875449
Misc : RUN199900
ALS Vial : 39 Sample Multiplier: 1

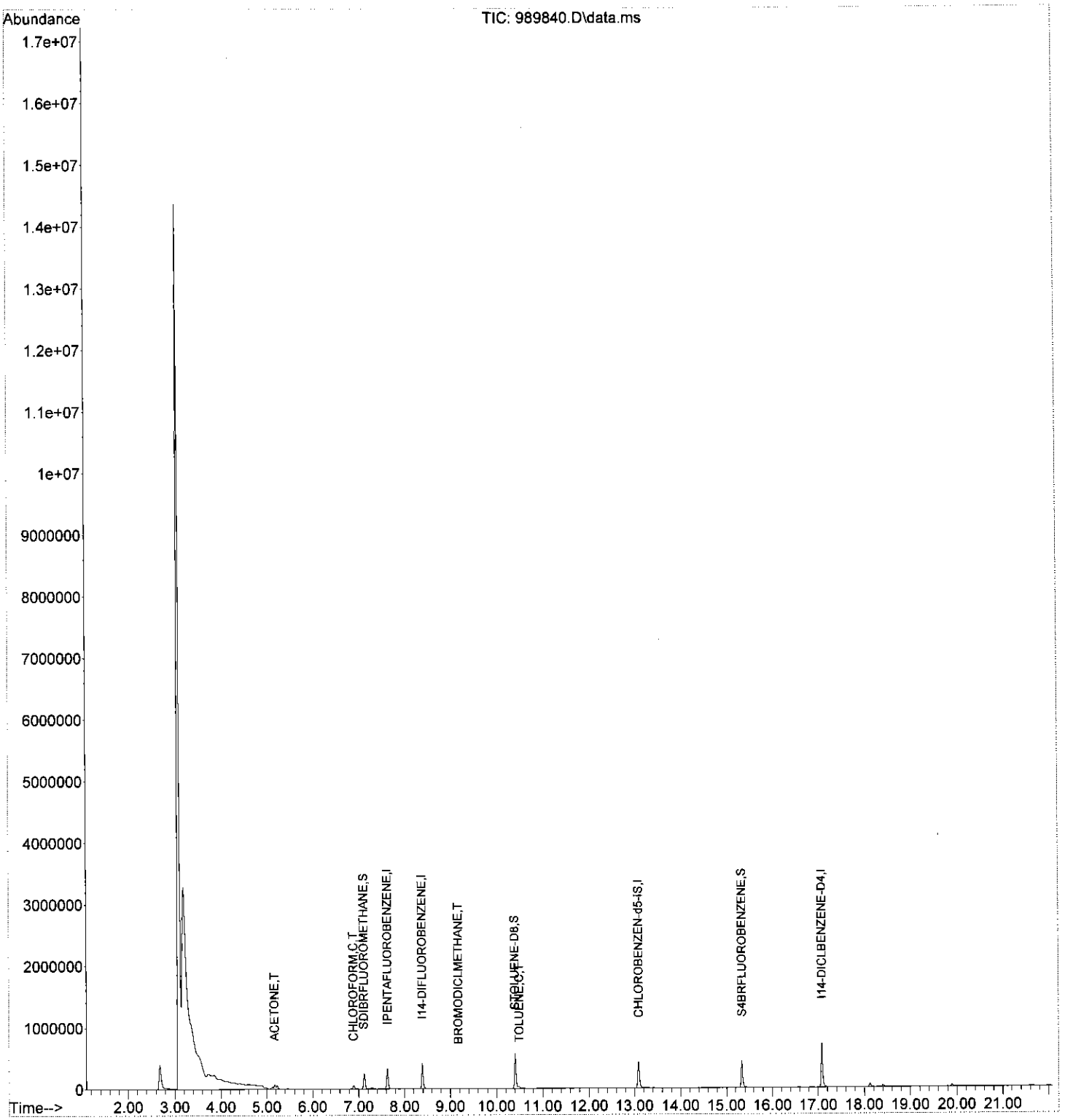
Quant Time: Jun 08 14:31:31 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.635	168	232102	20.00	µg/L	0.12
23) I14-DIFLUOROBENZENE	8.386	114	366651	20.00	µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.097	117	371605	20.00	µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	259075	20.00	µg/L	-0.04
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.117	111	179891	21.87	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.35%			
39) STOLUENE-D8	10.406	98	465074	20.19	µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.95%			
59) S4BRFLUOROBENZENE	15.340	95	194111	20.38	µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.90%			
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	3.665	94	527	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	5.178	43	98397	110.70	µg/L	98
10) 11-DICHLOROETHENE	0.000		0	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	5.229	96	815	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	6.214	43	222	N.D.		
18) 2-BUTANONE	7.137	43	62	N.D.		
19) CIS12DICHLOROETHENE	6.599	96	382	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	6.894	83	45017	6.65	µg/L	98
22) BROMOCHLOROMETHANE	0.000		0	N.D. d		
25) TETRAHYDROFURAN	0.000		0	N.D. 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	7.117	117	397	N.D.		
30) BENZENE	7.645	78	3401	N.D.		
31) TRICHLOROETHENE	8.386	132	350	N.D.		
32) 12-DICHLOROPROPANE	0.000		0	N.D.		
33) DIBROMOMETHANE	0.000		0	N.D.		
34) BROMODICLMETHANE	9.178	83	6082	1.09	µg/L	99
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.		
36) EPICHLOROHYDRIN	0.000		0	N.D. d		
37) 4METHYL-2-PENTANONE	11.056	43	924	N.D.		
38) CIS13DICLPROPENE	0.000		0	N.D.		
40) TOLUENE	10.498	91	27680	2.00	µg/L	97
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.		

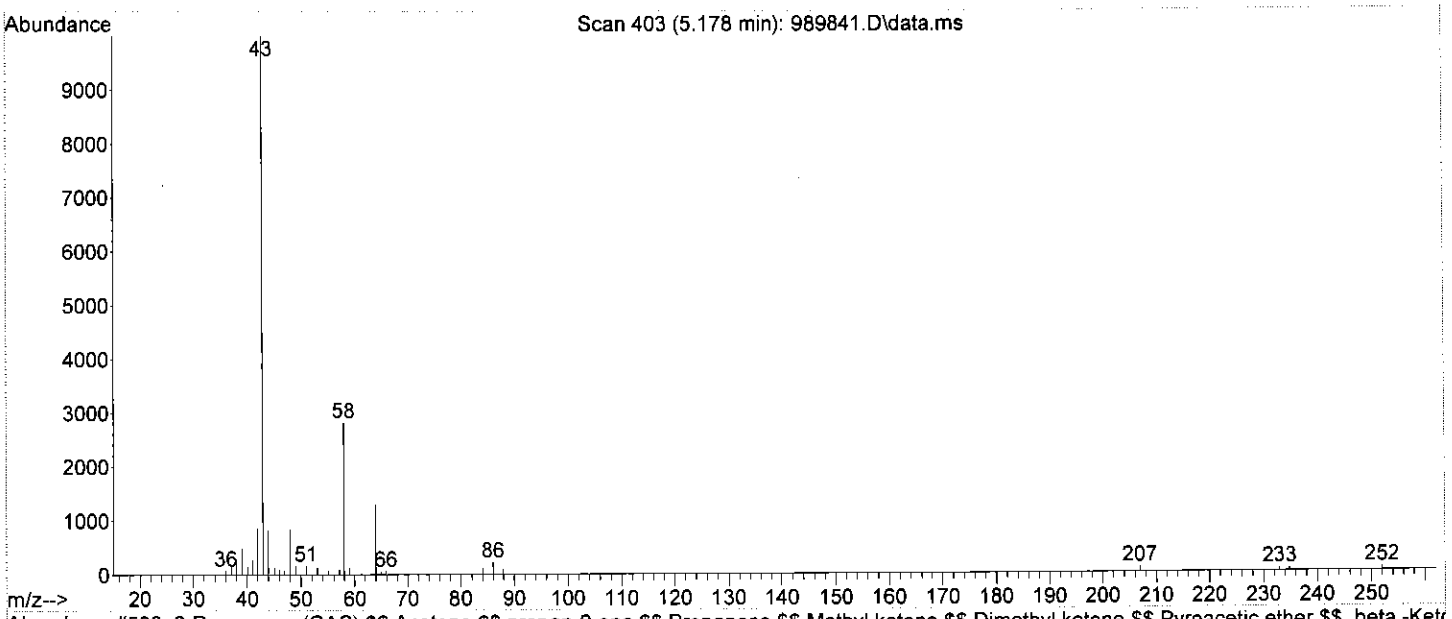
Quantitation Report (QT Reviewed)

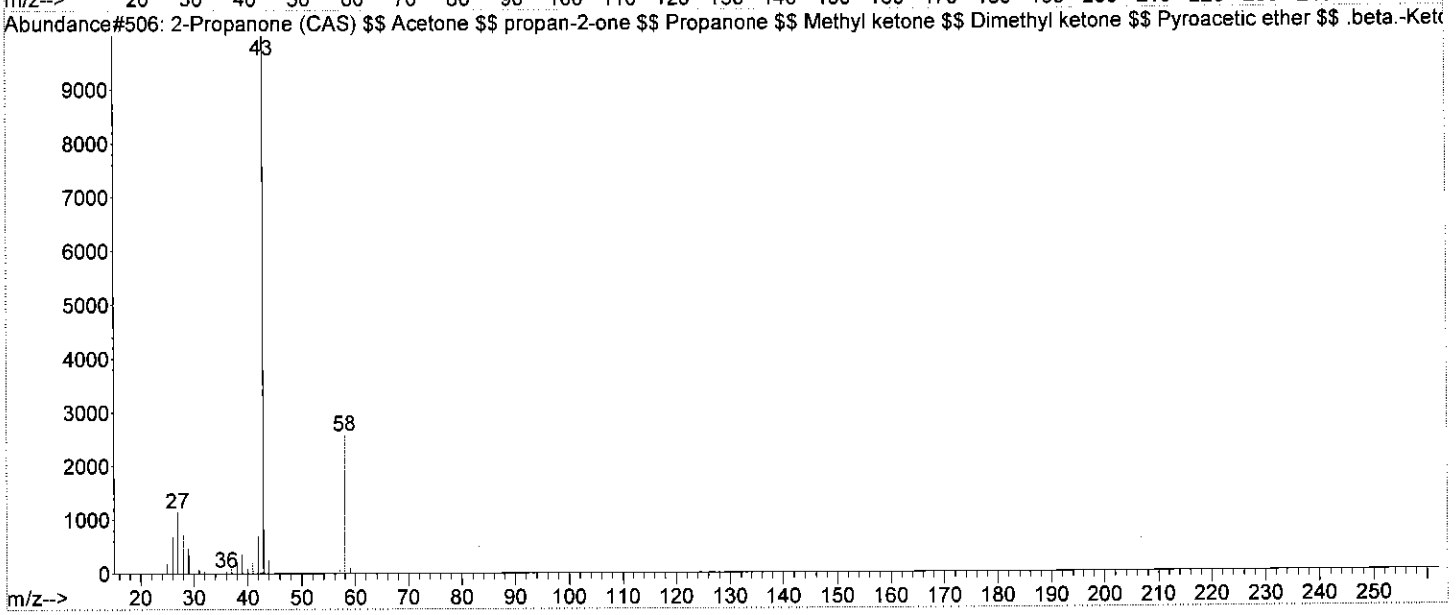
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989840.D
Acq On : 7 Jun 2018 4:53 am
Operator : NIVA
Sample : 2875449
Misc : RUN199900
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jun 08 14:31:31 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

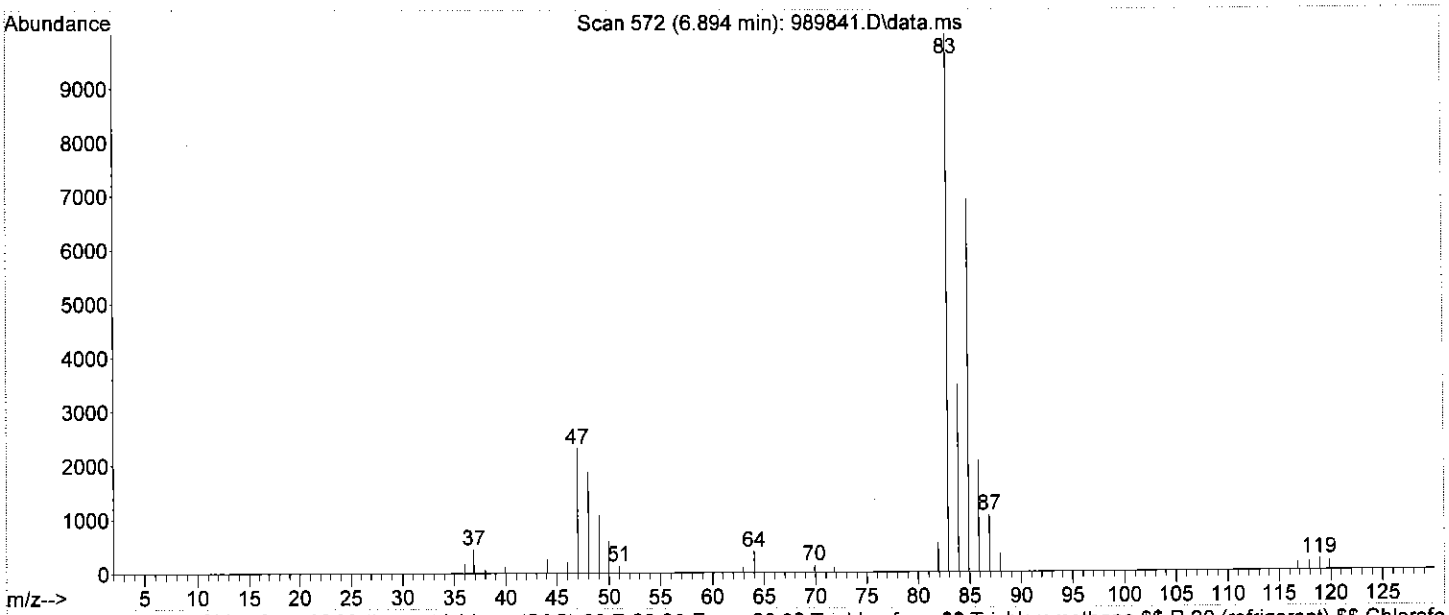


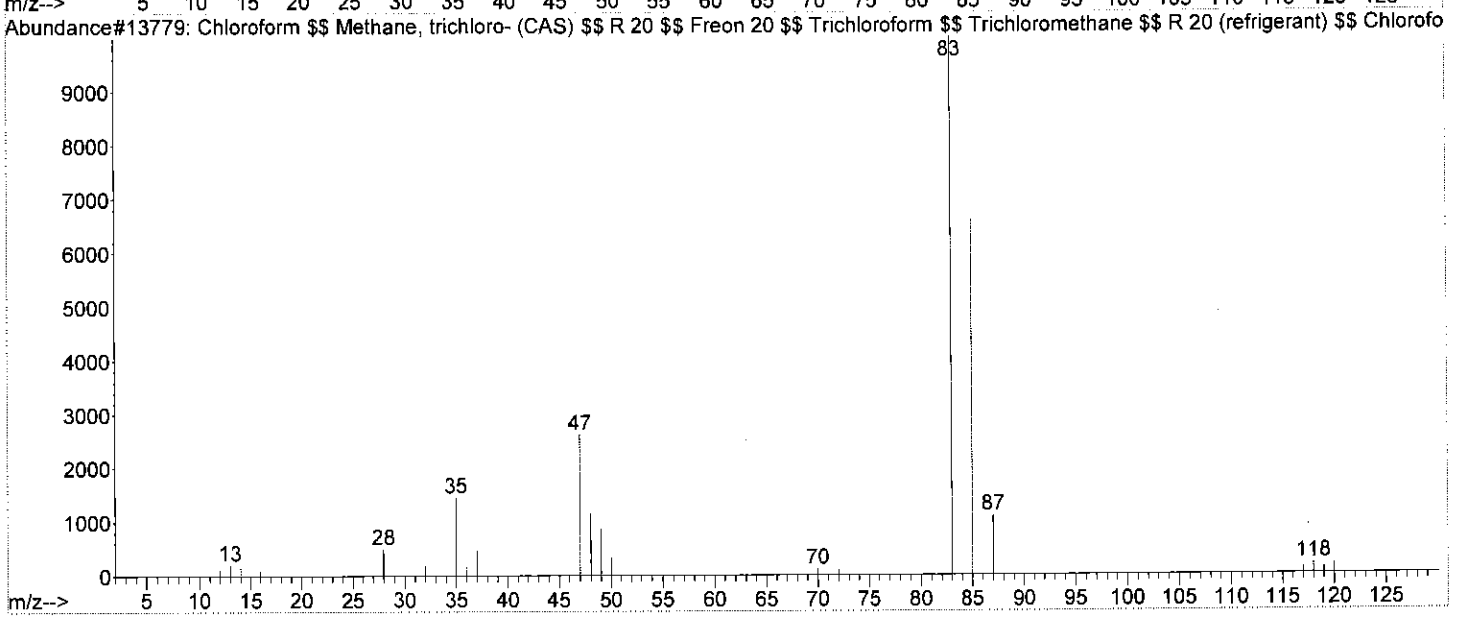
Library Searched : C:\Database\WILEY275.L
Quality : 46
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K





Library Searched : C:\Database\WILEY275.L
Quality : 76
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\199898-899-900\
Data File : 989841.D
Acq On : 7 Jun 2018 5:19 am
Operator : NIVA
Sample : 2875450
Misc : RUN199900
ALS Vial : 40 Sample Multiplier: 1

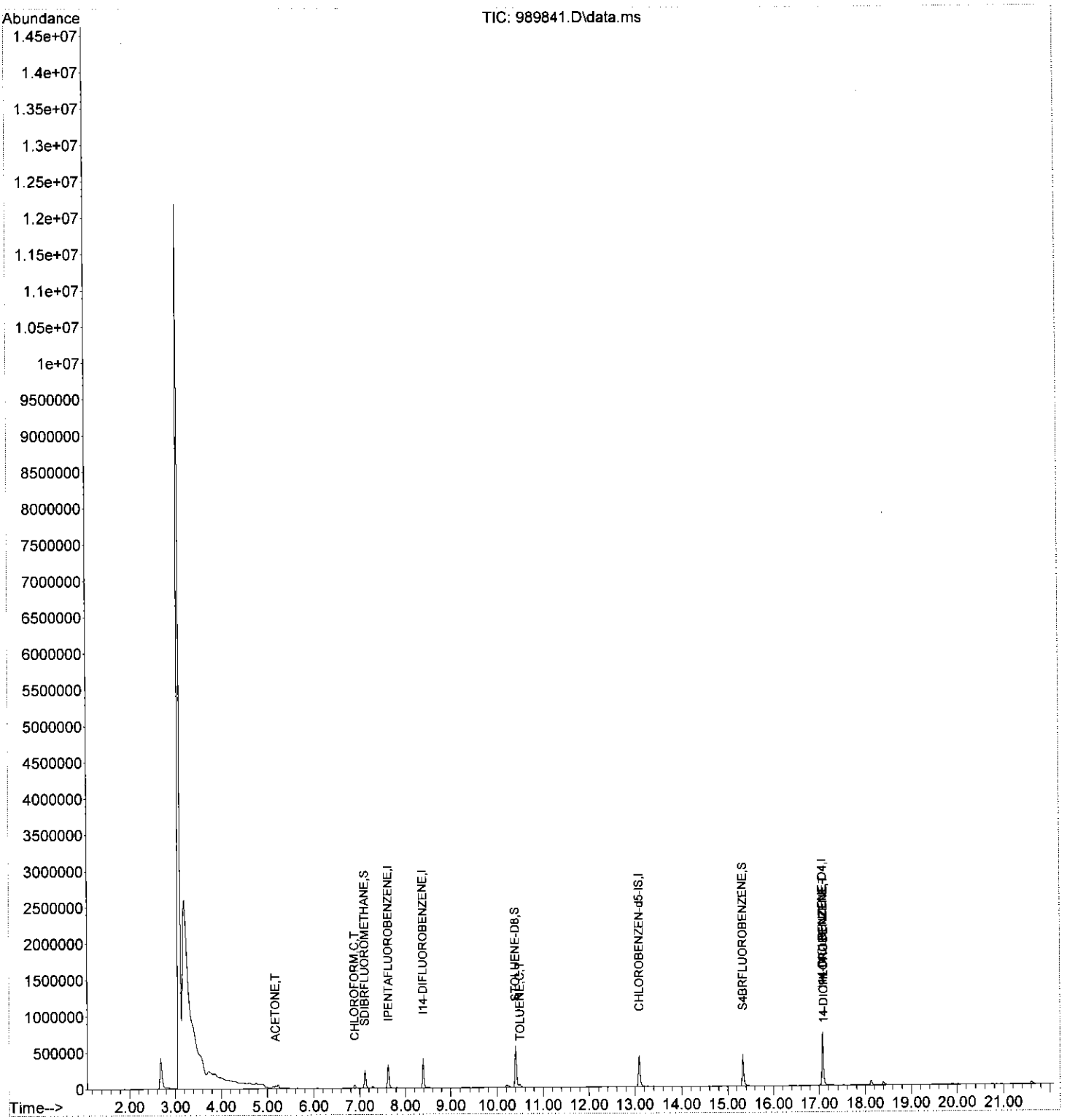
Quant Time: Jun 08 14:33:25 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.635	168	230249	20.00 µg/L	0.12
23) I14-DIFLUOROBENZENE	8.386	114	359566	20.00 µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.097	117	366322	20.00 µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	258028	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.117	111	177840	22.05 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 110.25%		
39) STOLUENE-D8	10.406	98	507538	22.47 µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.35%		
59) S4BRFLUOROBENZENE	15.340	95	194069	20.67 µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.35%		
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	3.665	94	546	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	5.178	43	50173	56.90 µg/L #	97
10) 11-DICHLOROETHENE	0.000		0	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	5.229	96	841	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	6.894	83	35435	5.27 µg/L #	98
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	7.148	42	61	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	7.046	117	436	N.D.	
30) BENZENE	7.645	78	3141	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	9.178	83	160	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	11.056	43	529	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.498	91	33340	2.45 µg/L	96
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.	

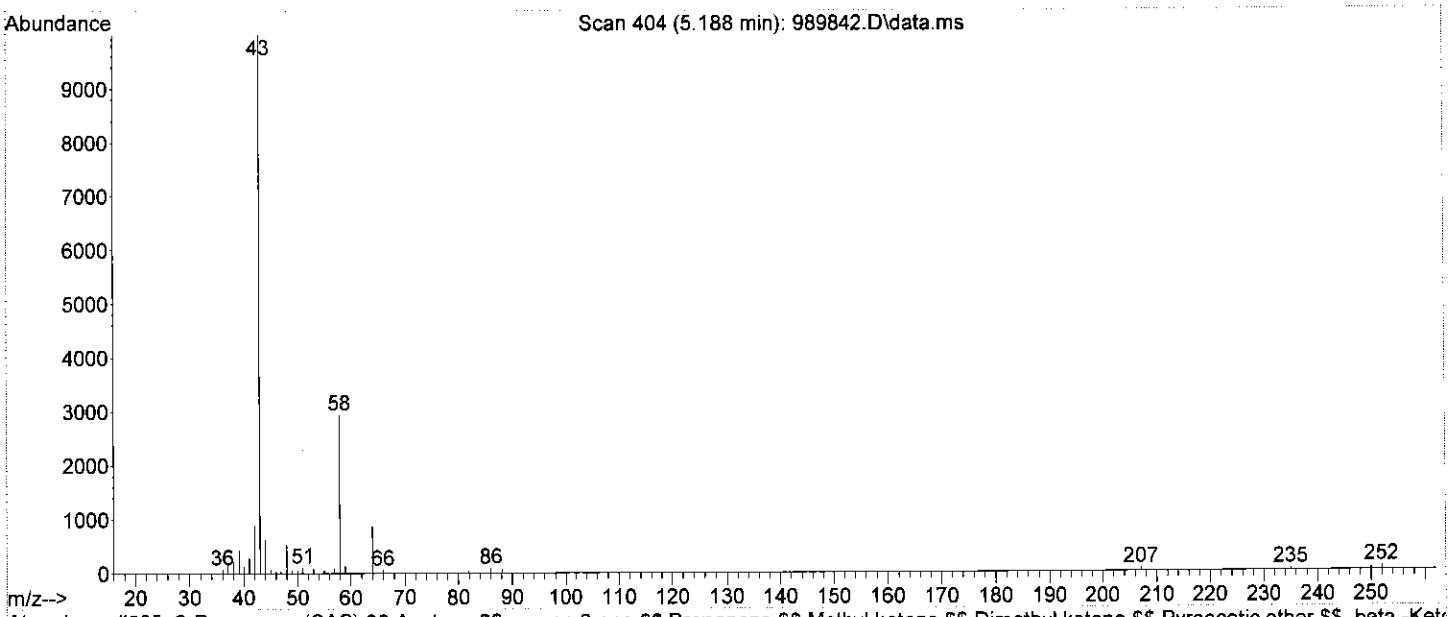
Quantitation Report (QT Reviewed)

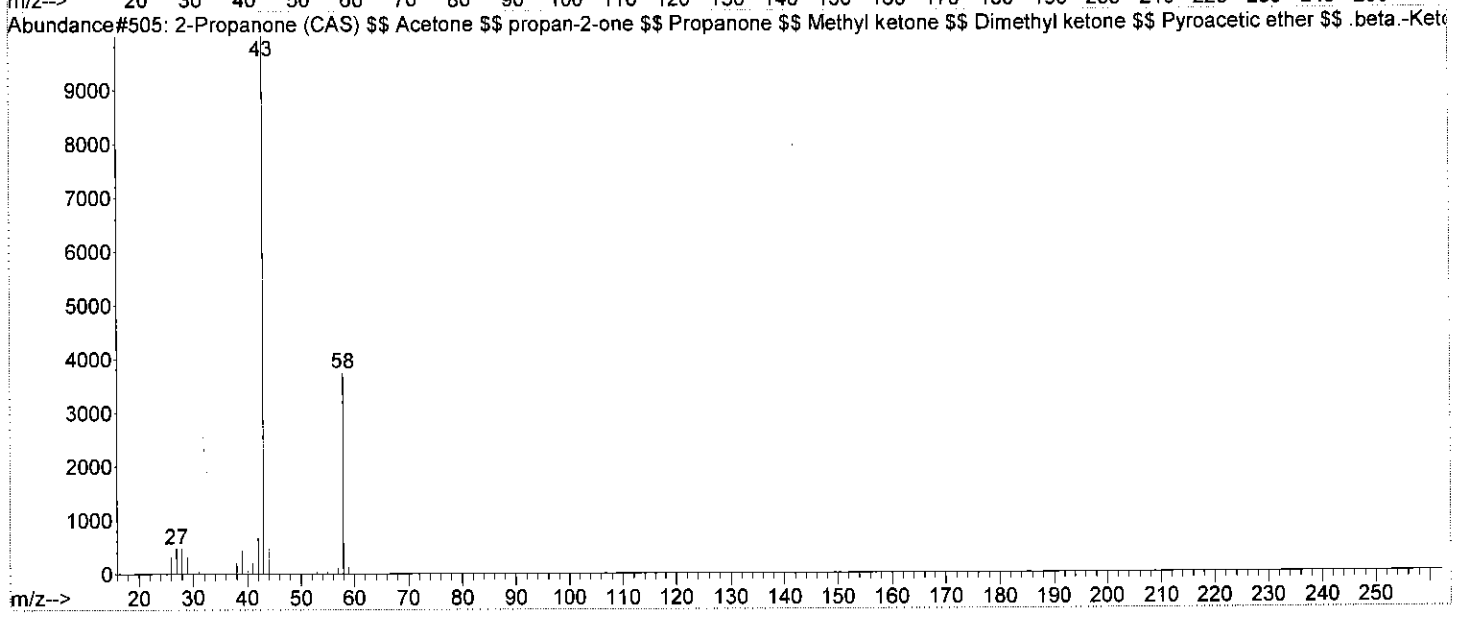
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989841.D
Acq On : 7 Jun 2018 5:19 am
Operator : NIVA
Sample : 2875450
Misc : RUN199900
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jun 08 14:33:25 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

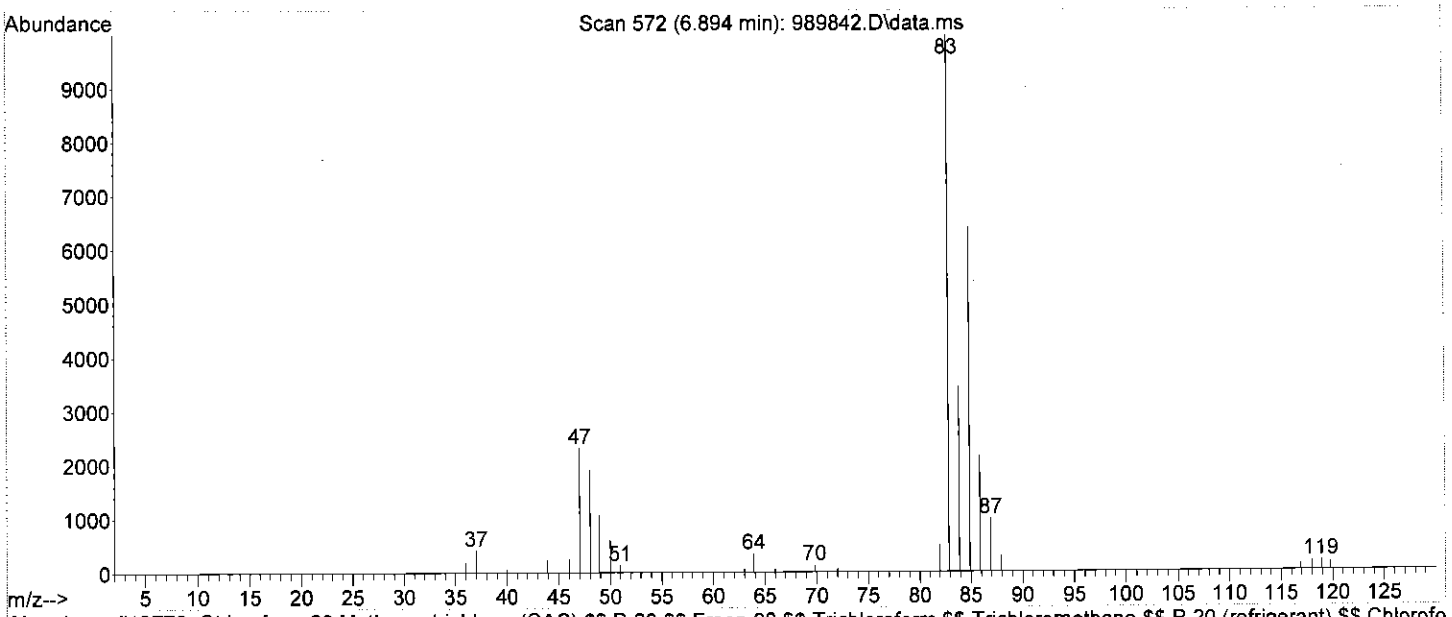


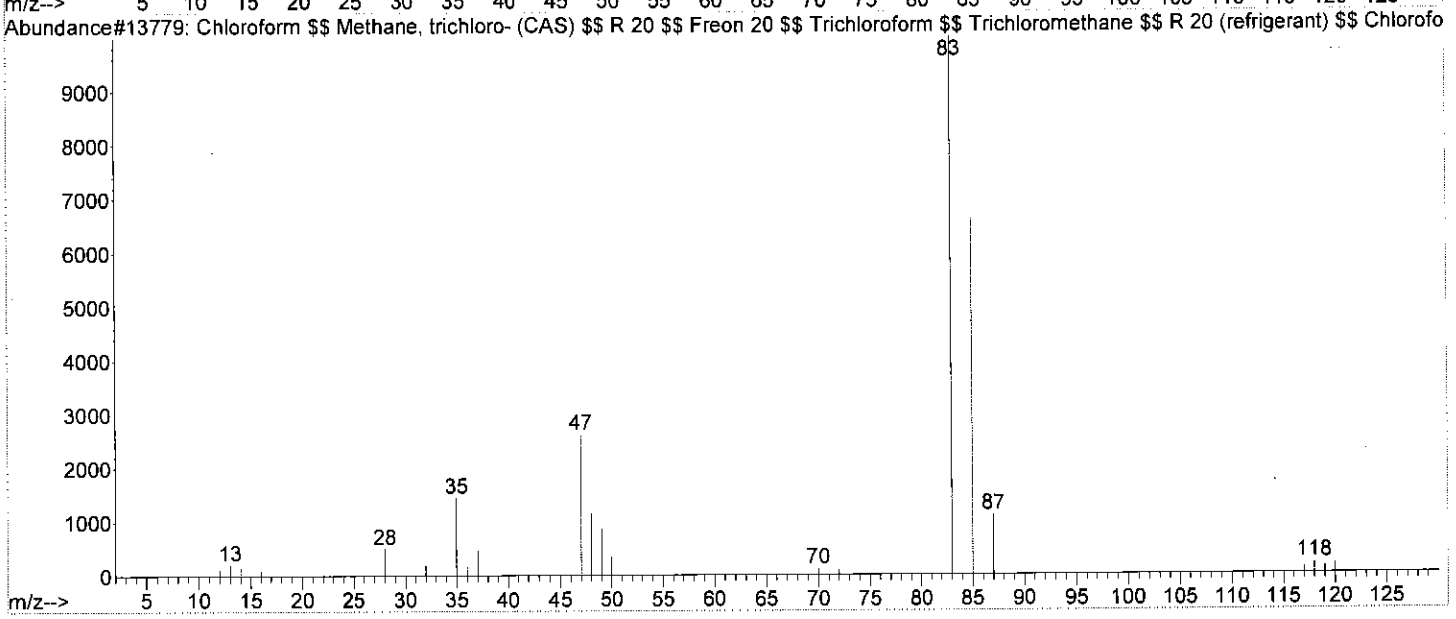
Library Searched : C:\Database\WILEY275.L
Quality : 52
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



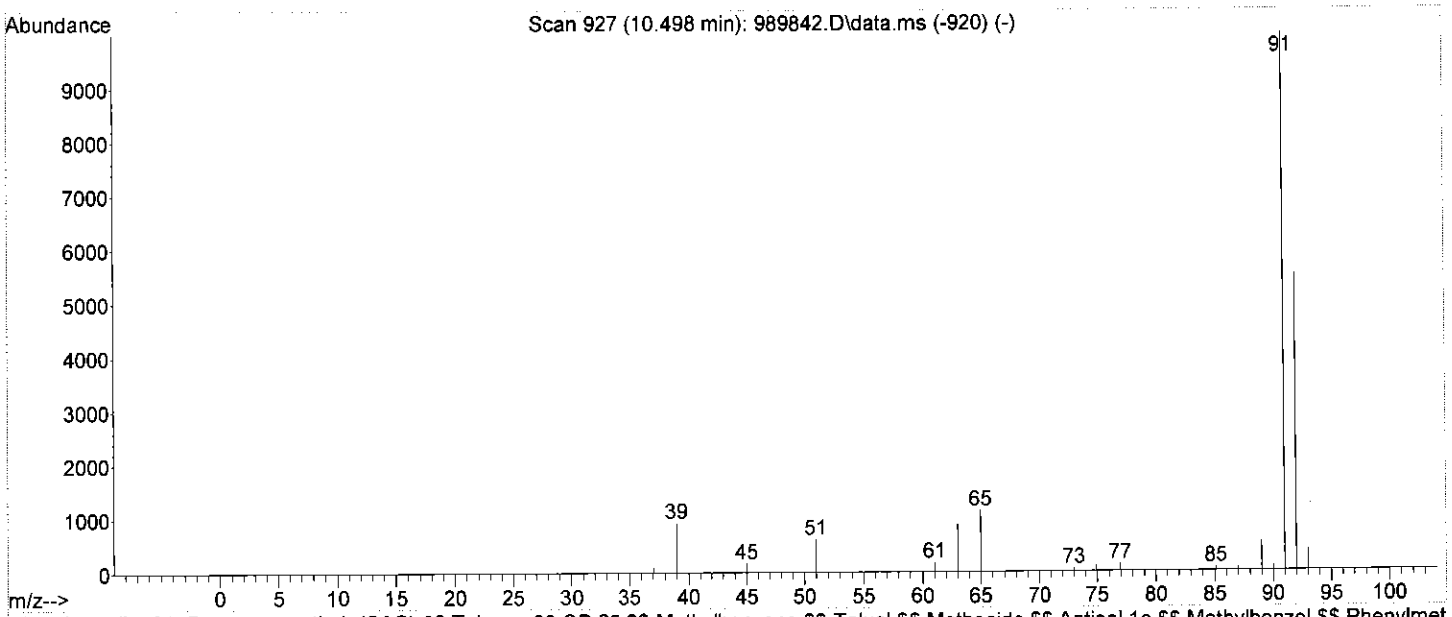


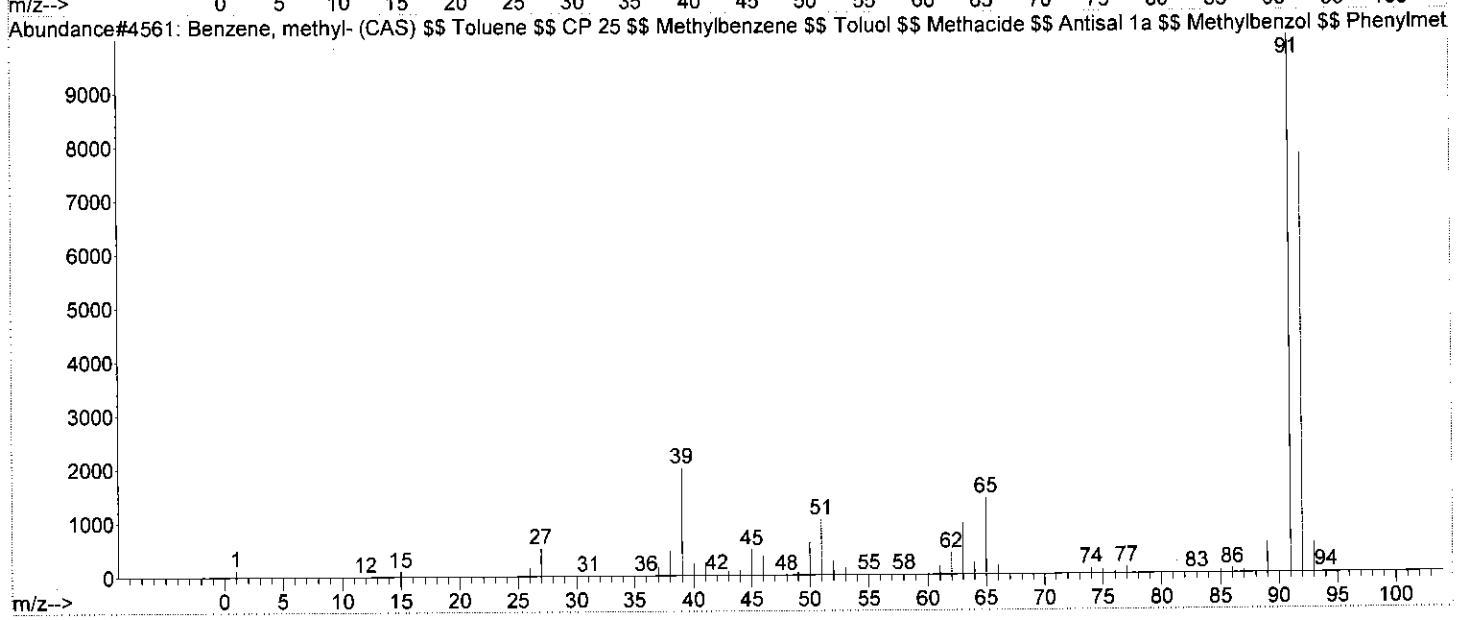
Library Searched : C:\Database\WILEY275.L
Quality : 76
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



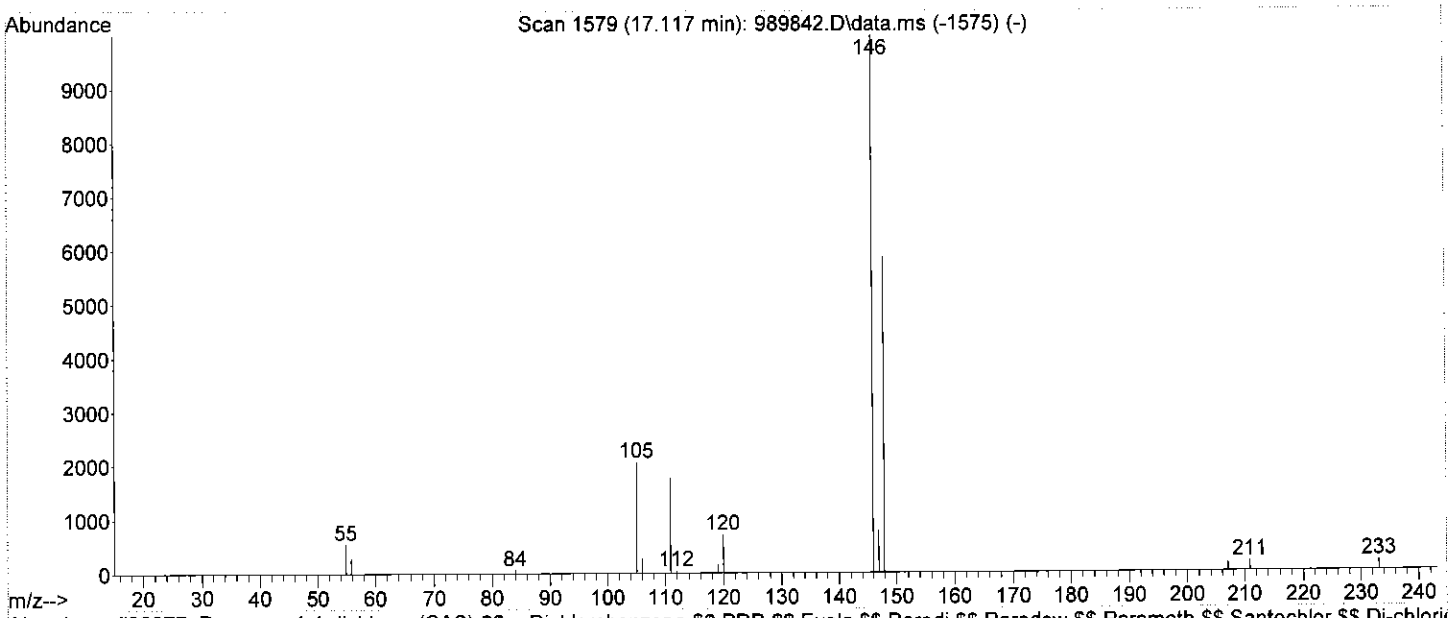


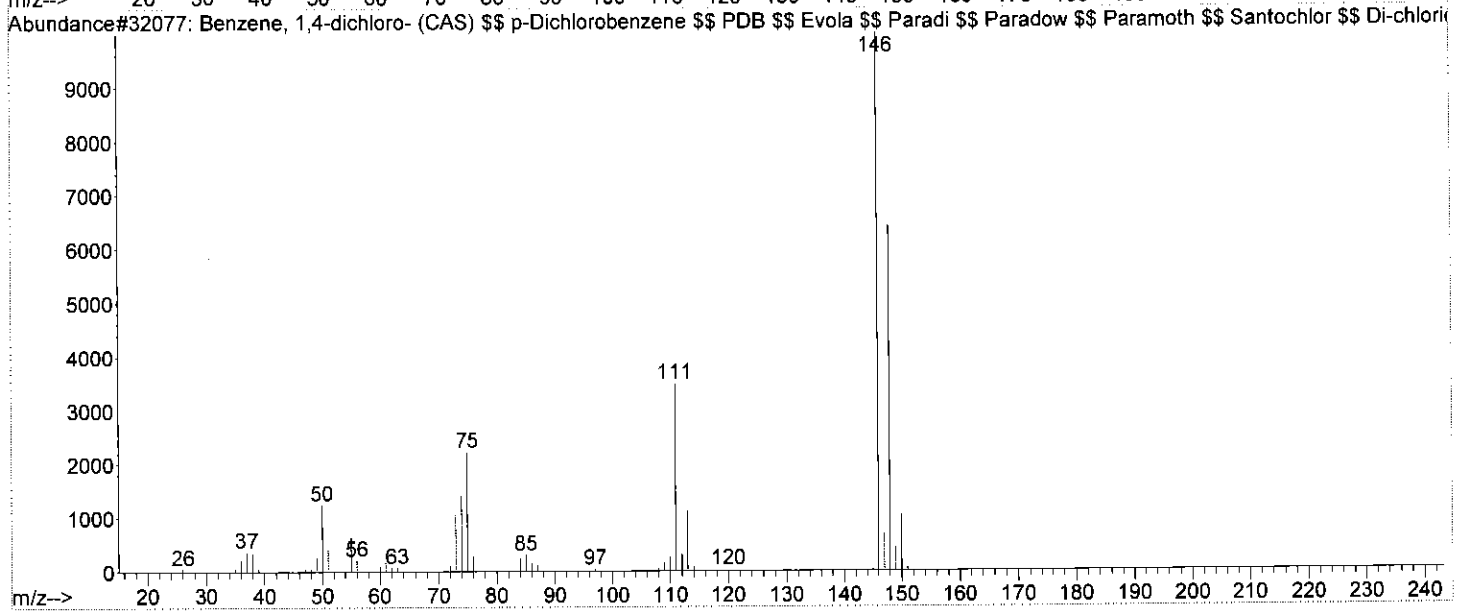
Library Searched : C:\Database\WILEY275.L
Quality : 83
ID : Benzene, methyl- (CAS) $$ Toluene $$ CP 25 $$ Methylbenzene $$ Toluol $$ Methacide $$ Antisal 1a $$ Methylbenzol $$ Phenylmethane $$ METHYLBENZENE(TOLUENE) $$ Benzene, methyl $$ Methane, phenyl- $$ NCI-C07272 $$ Tolueen $$ Toluen $$ Toluolo $$ Rcra waste





Library Searched : C:\Database\WILEY275.L
Quality : 9
ID : Benzene, 1,4-dichloro- (CAS) $$ p-Dichlorobenzene $$ PDB $$ Evola $$ Paradi $$ Paradow $$ Paramoth $$ Santochlor $$ Di-chloricide $$ Persia-Perazol $$ 1,4-Dichlorobenzene $$ Benzene, p-dichloro- $$ p-Chlorophenyl chloride $$ Paradichlorobenzene $$ Di-Chor





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989842.D
Acq On : 7 Jun 2018 5:45 am
Operator : NIVA
Sample : 2875451
Misc : RUN199900
ALS Vial : 41 Sample Multiplier: 1

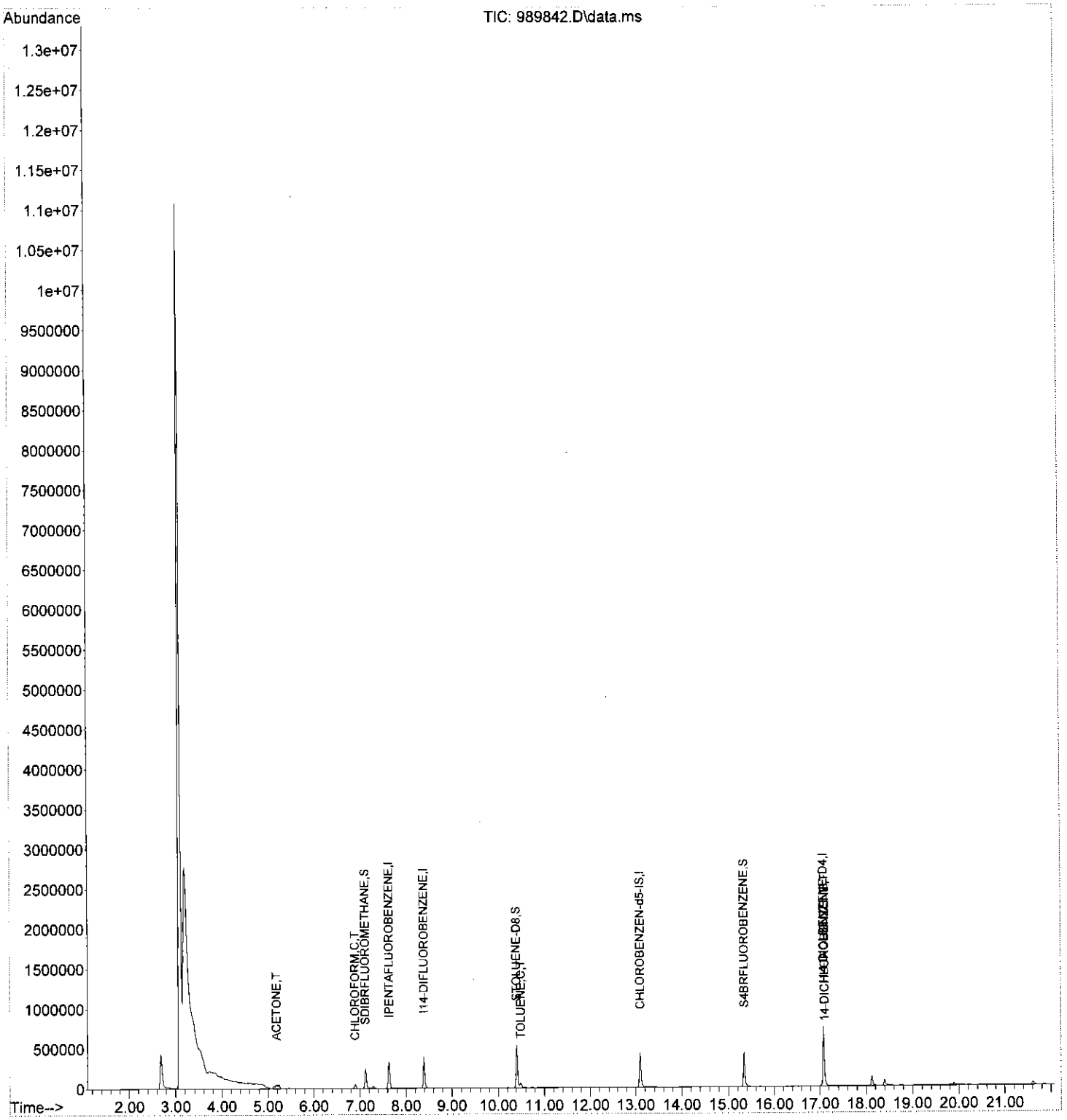
Quant Time: Jun 08 14:36:59 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.635	168	238093	20.00 µg/L	0.12
23) I14-DIFLUOROBENZENE	8.386	114	344375	20.00 µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.096	117	358369	20.00 µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	256282	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.117	111	175518	22.72 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.60%		
39) STOLUENE-D8	10.406	98	450628	20.83 µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.15%		
59) S4BRFLUOROBENZENE	15.340	95	191902	20.89 µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.45%		
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	3.665	94	439	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	5.188	43	71221	78.11 µg/L #	96
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.731	142	1857	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	5.239	96	1087	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.071	43	65	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	6.894	83	35674	5.13 µg/L	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	7.137	42	297	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	7.107	117	217	N.D.	
30) BENZENE	7.645	78	3527	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	9.178	83	442	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	11.056	43	638	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.498	91	58126	4.47 µg/L	93
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.	

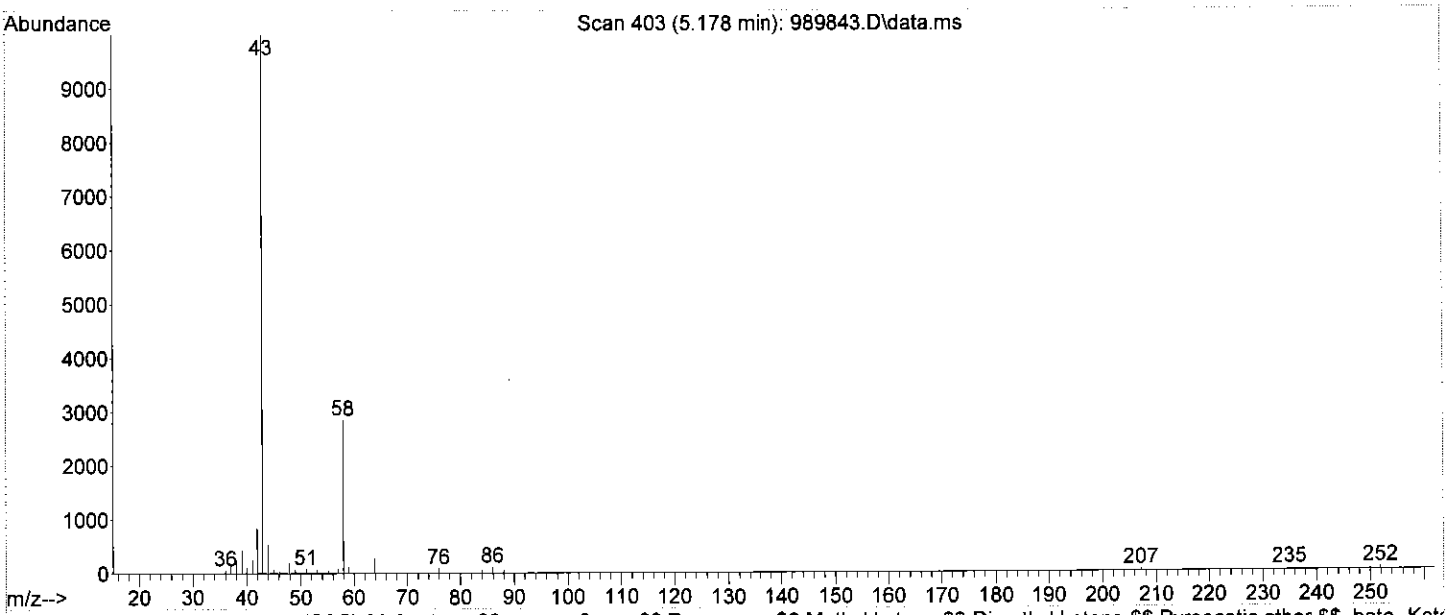
Quantitation Report (QT Reviewed)

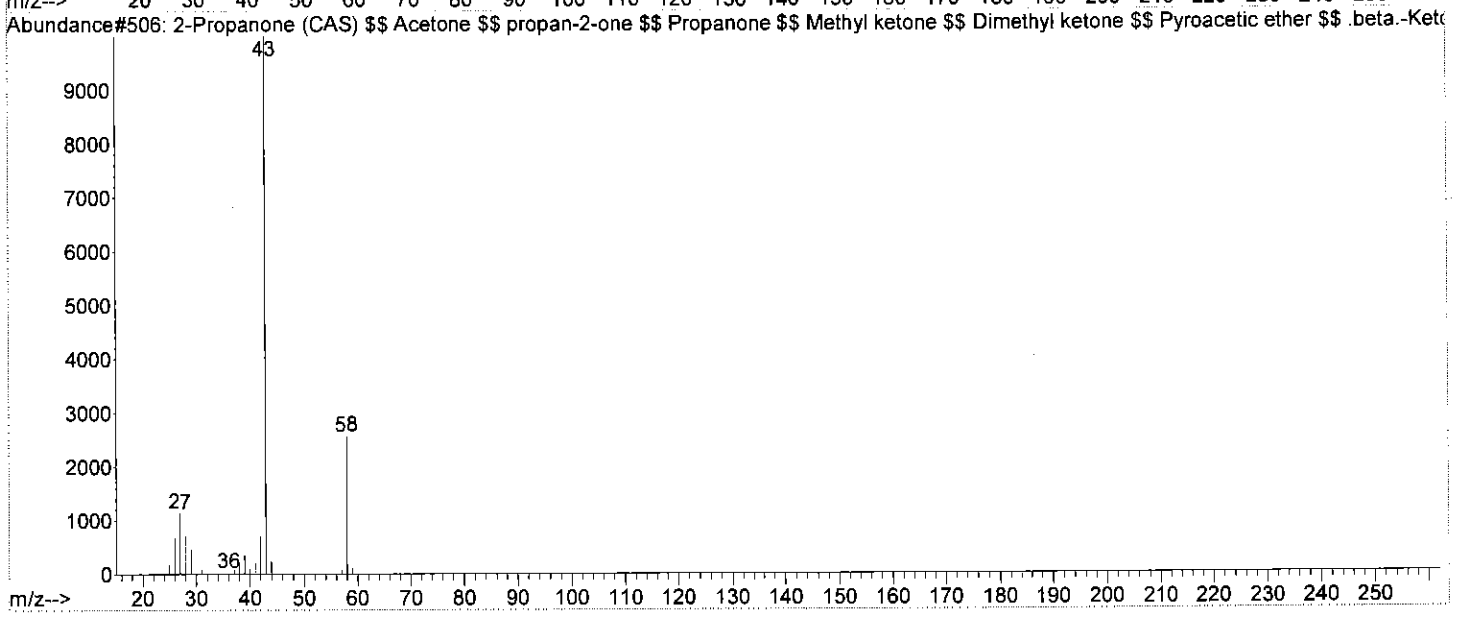
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989842.D
Acq On : 7 Jun 2018 5:45 am
Operator : NIVA
Sample : 2875451
Misc : RUN199900
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jun 08 14:36:59 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

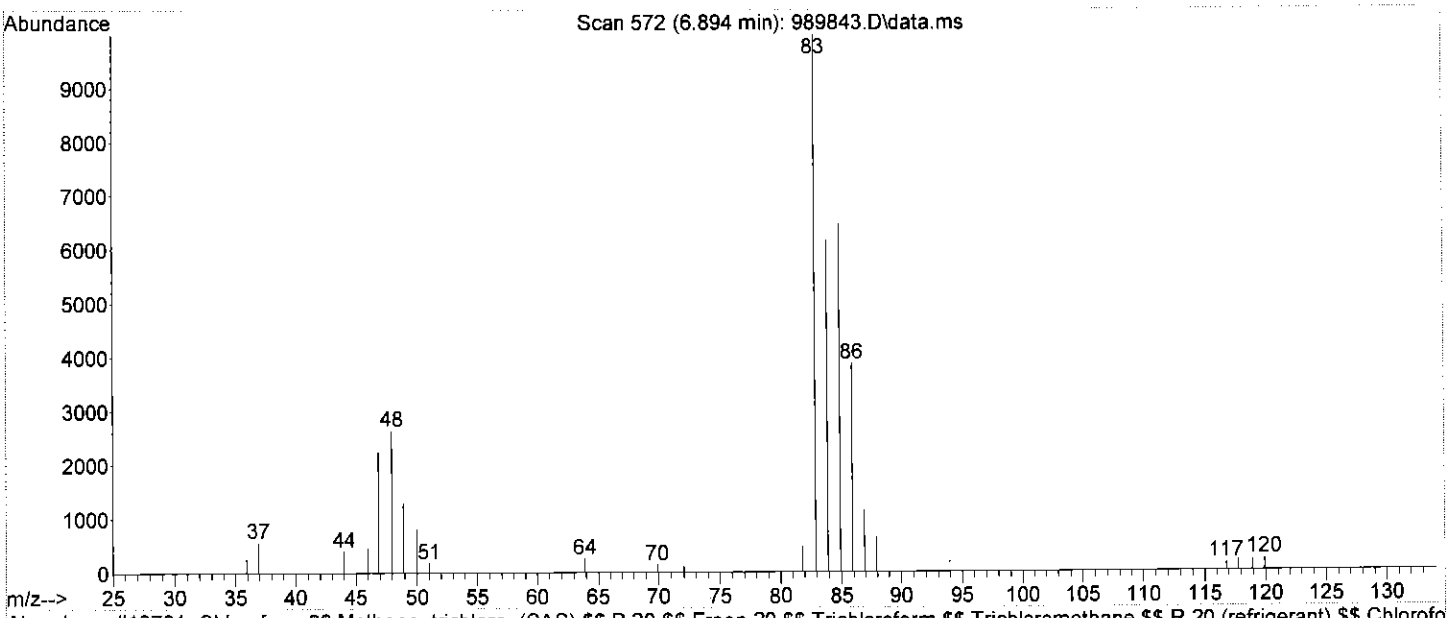


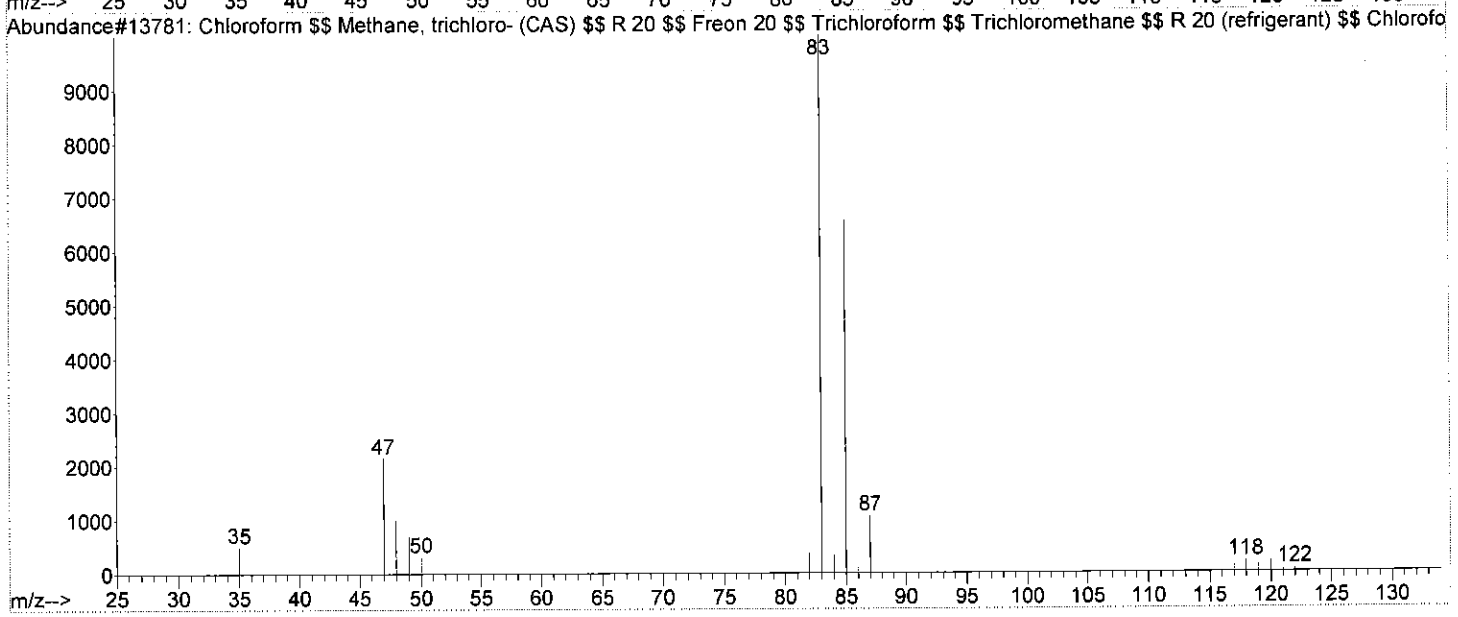
Library Searched : C:\Database\WILEY275.L
Quality : 58
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



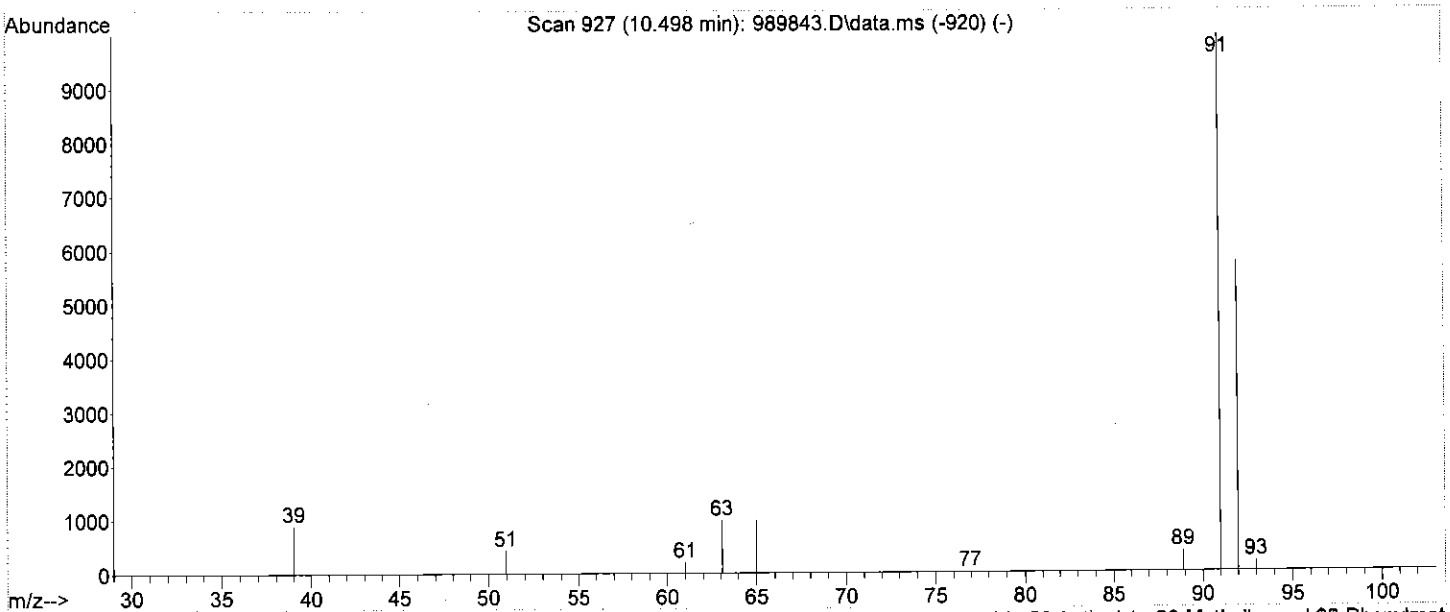


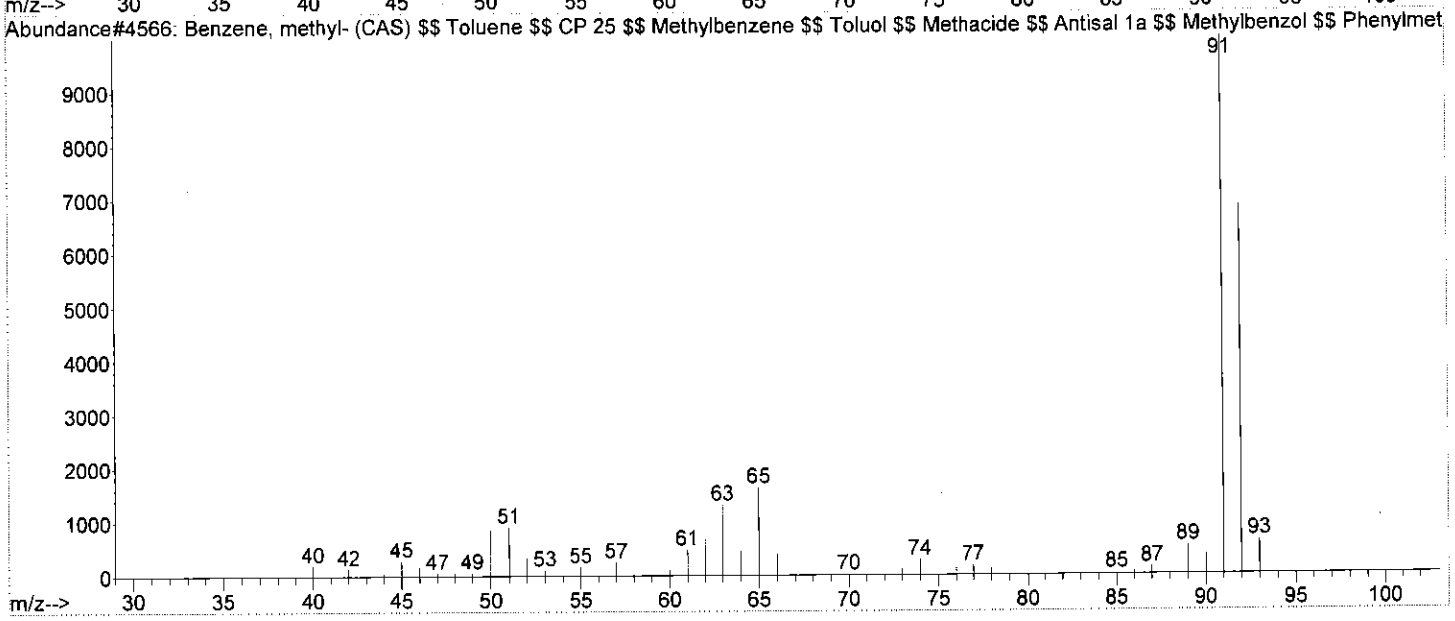
Library Searched : C:\Database\WILEY275.L
Quality : 64
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



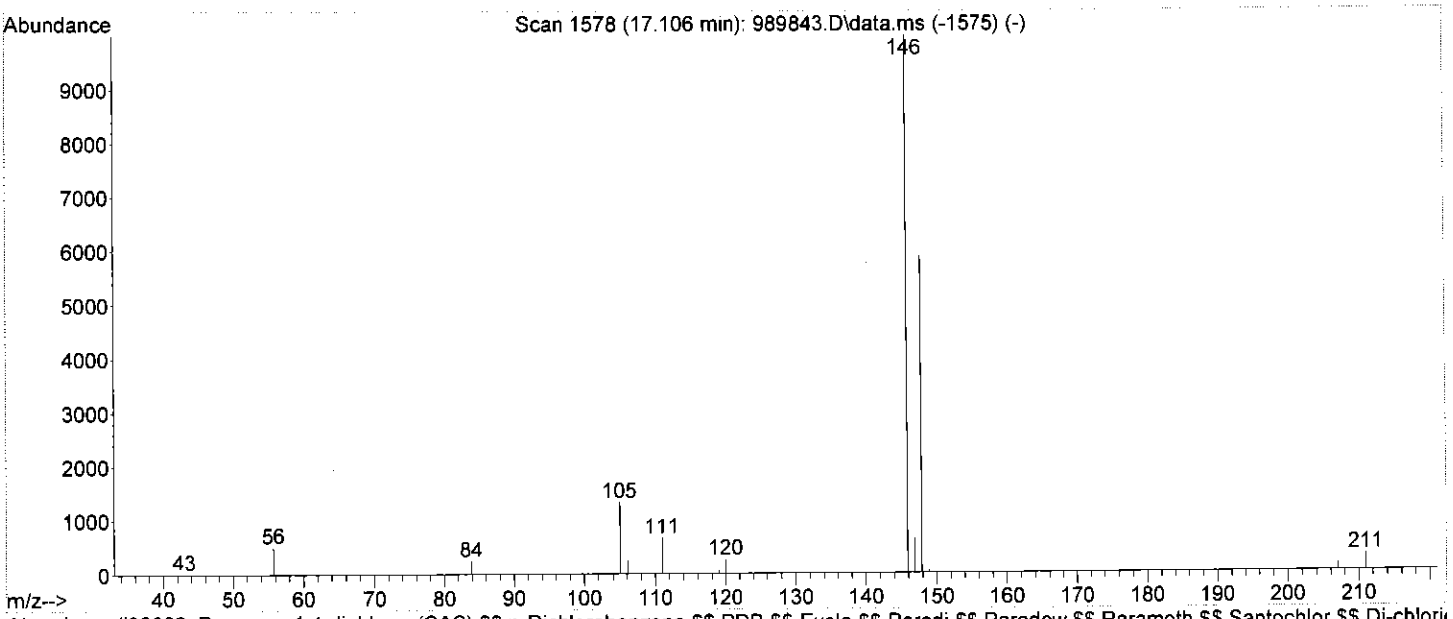


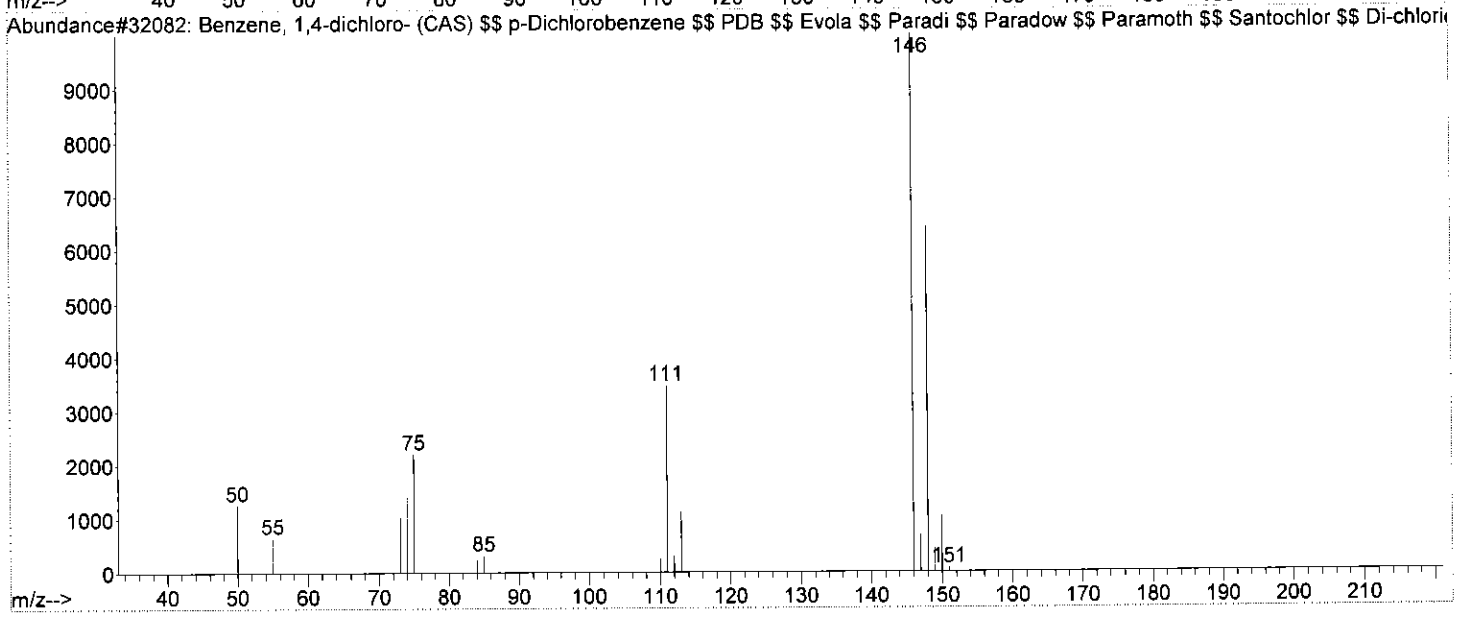
Library Searched : C:\Database\WILEY275.L
Quality : 90
ID : Benzene, methyl- (CAS) $$ Toluene $$ CP 25 $$ Methylbenzene $$ Toluol $$ Metha cide $$ Antisal 1a $$ Methylbenzol $$ Phenylmethane $$ METHYLBENZENE(TOLUENE) $$ Benzene, methyl $$ Methane, phenyl- $$ NCI-C07272 $$ Tolueen $$ Toluen $$ T oluolo $$ Rcra waste





Library Searched : C:\Database\WILEY275.L
Quality : 39
ID : Benzene, 1,4-dichloro- (CAS) $$ p-Dichlorobenzene $$ PDB $$ Evola $$ Paradi $$ Paradow $$ Paramoth $$ Santochlor $$ Di-chloricide $$ Persia-Perazol $$ 1,4-Dichlorobenzene $$ Benzene, p-dichloro- $$ p-Chlorophenyl chloride $$ Paradichlorobenzene $$ Di-Chor





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989843.D
Acq On : 7 Jun 2018 6:11 am
Operator : NIVA
Sample : 2877532
Misc : RUN199900
ALS Vial : 42 Sample Multiplier: 1

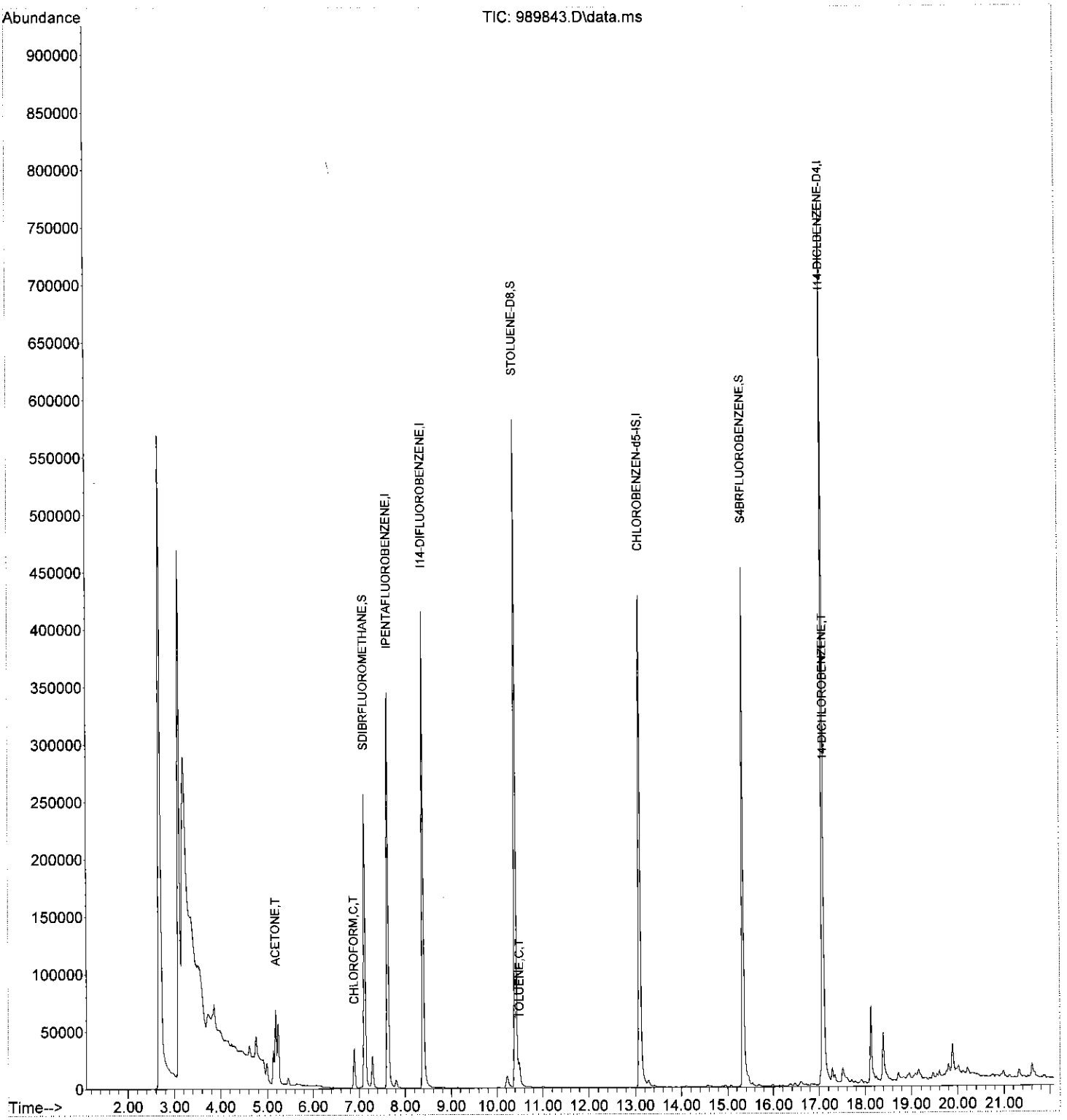
Quant Time: Jun 08 14:39:26 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.635	168	239538	20.00	µg/L	0.12
23) I14-DIFLUOROBENZENE	8.386	114	373549	20.00	µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.096	117	376589	20.00	µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	270732	20.00	µg/L	-0.04
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.117	111	184026	21.96	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.80%			
39) STOLUENE-D8	10.406	98	498188	21.23	µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.15%			
59) S4BRFLUOROBENZENE	15.340	95	201135	20.83	µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.15%			
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	3.665	94	474	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	5.178	43	97199	105.95	µg/L	97
10) 11-DICHLOROETHENE	0.000		0	N.D.		
11) IODOMETHANE	4.721	142	1367	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	5.229	96	1117	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	6.173	43	66	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	6.894	83	20818	2.98	µg/L	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d		
25) TETRAHYDROFURAN	0.000		0	N.D. 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	7.046	117	569	N.D.		
30) BENZENE	7.645	78	3006	N.D.		
31) TRICHLOROETHENE	8.396	132	61	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	11.056	43	151	N.D.		
38) CIS13DICLPROPENE	0.000		0	N.D.		
40) TOLUENE	10.498	91	16110	1.14	µg/L	97
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.		

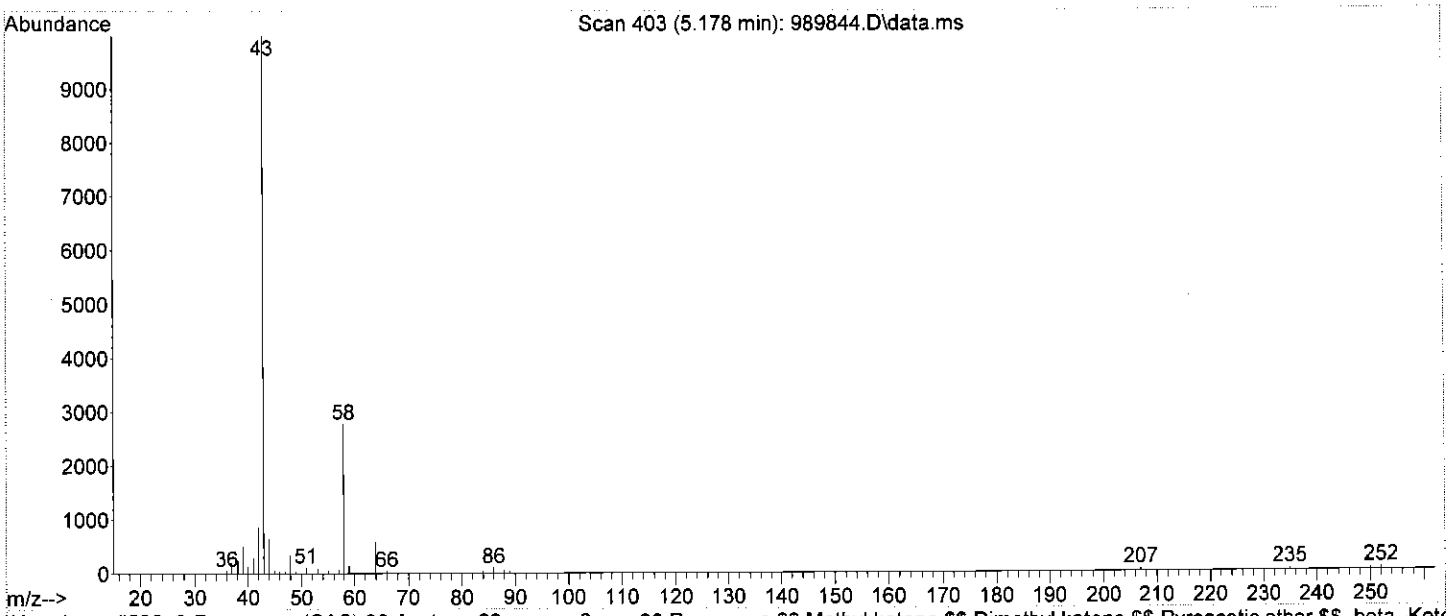
Quantitation Report (QT Reviewed)

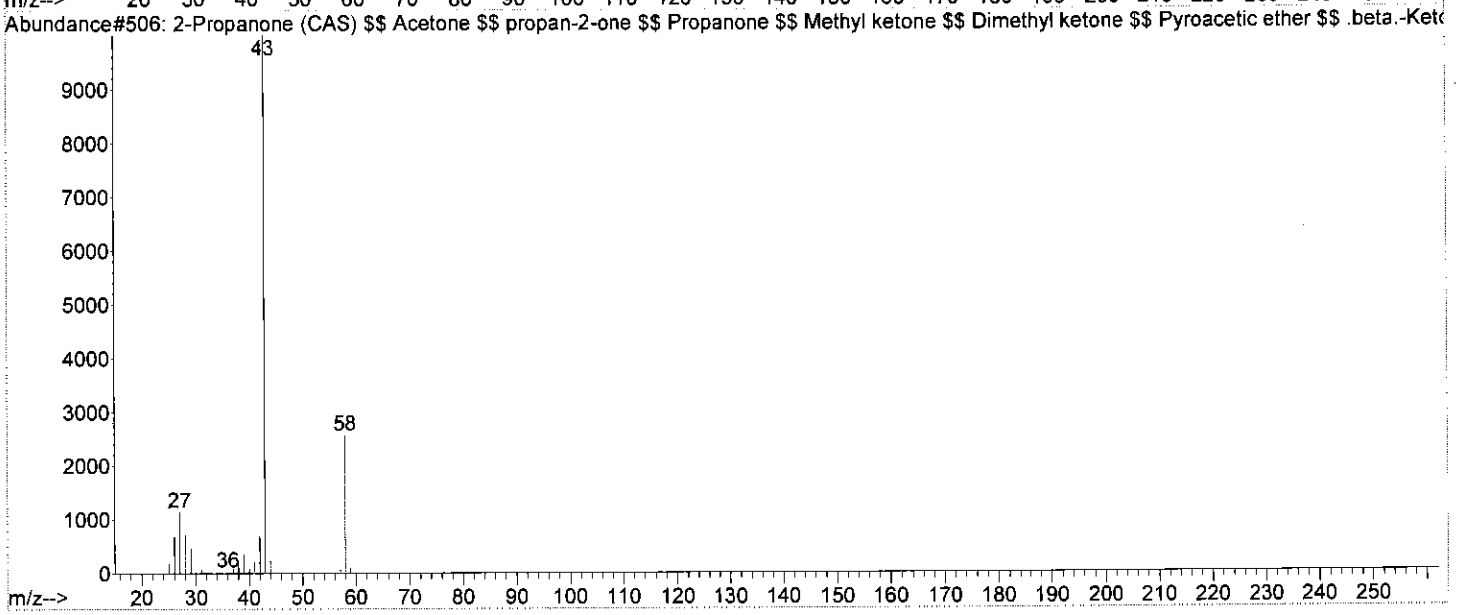
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989843.D
Acq On : 7 Jun 2018 6:11 am
Operator : NIVA
Sample : 2877532
Misc : RUN199900
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jun 08 14:39:26 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

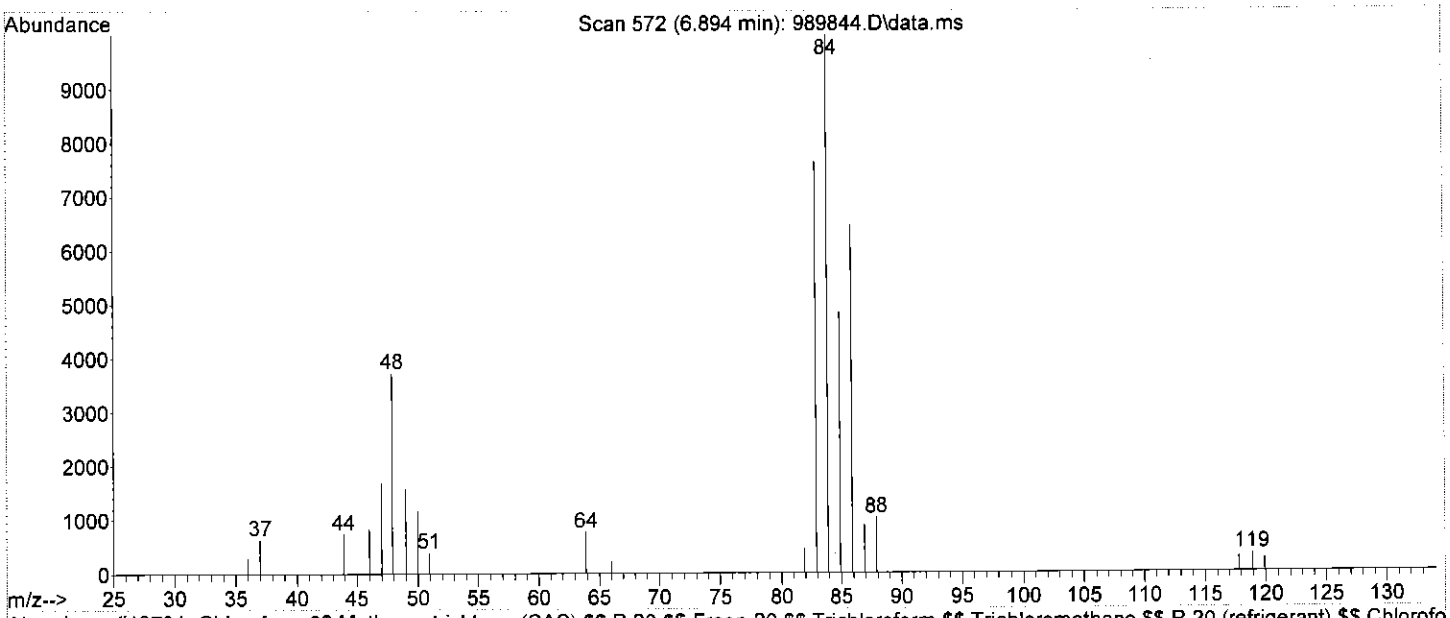


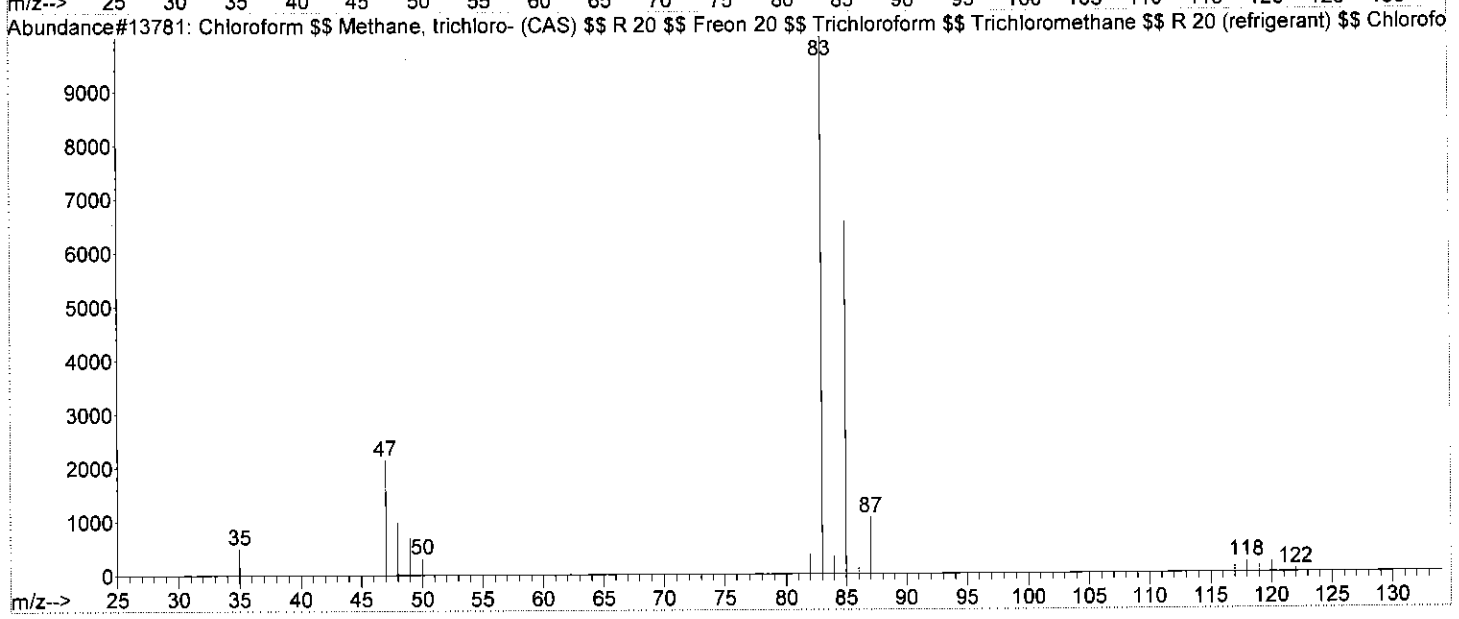
Library Searched : C:\Database\WILEY275.L
Quality : 52
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K



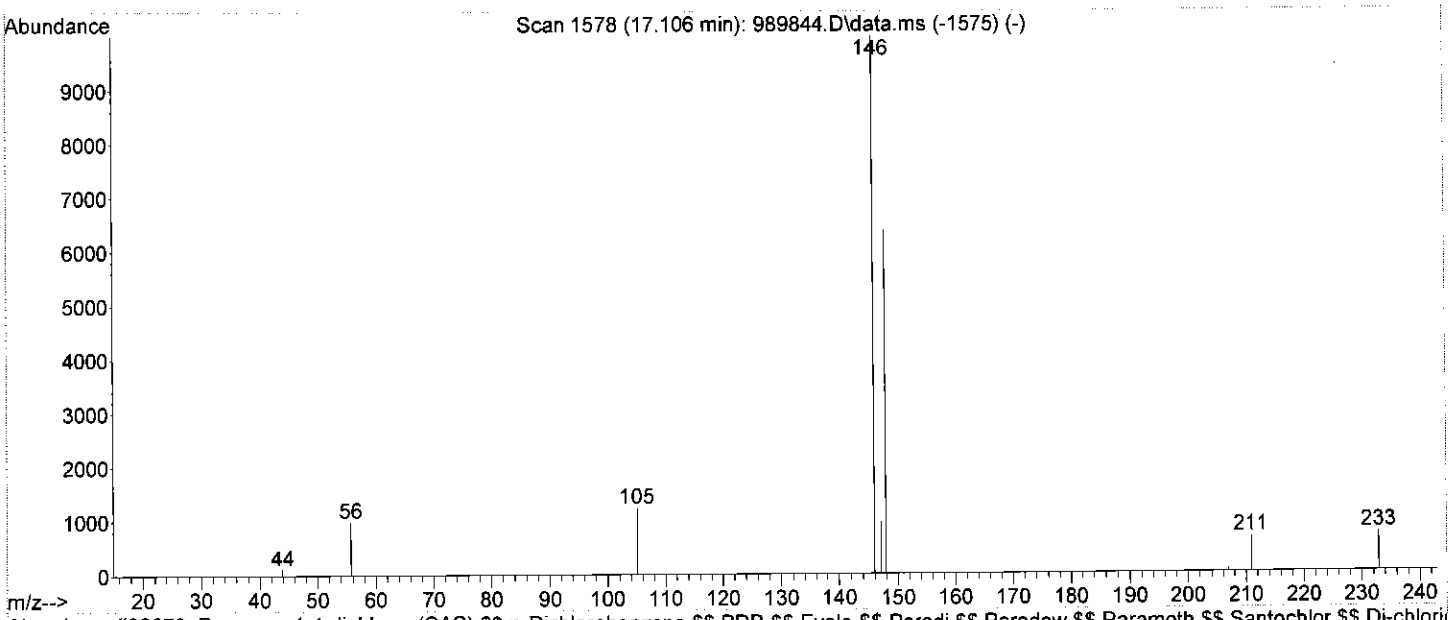


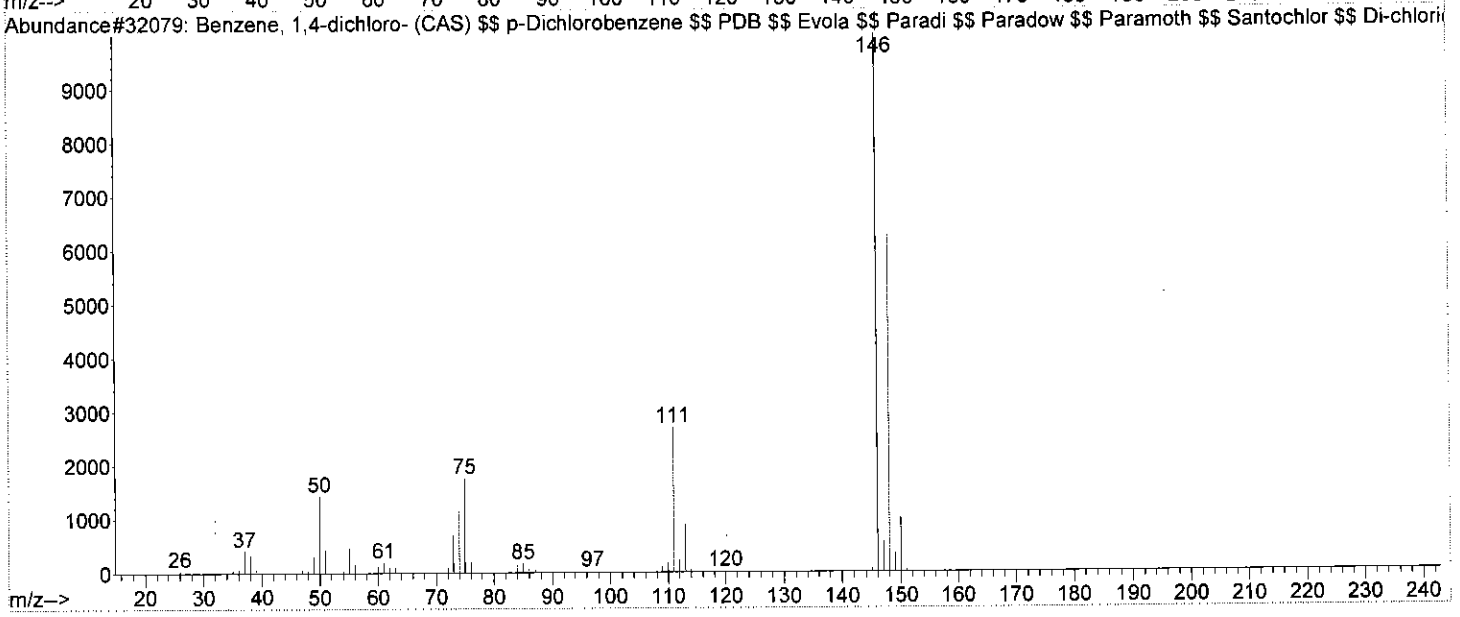
Library Searched : C:\Database\WILEY275.L
Quality : 43
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride





Library Searched : C:\Database\WILEY275.L
Quality : 9
ID : Benzene, 1,4-dichloro- (CAS) $$ p-Dichlorobenzene $$ PDB $$ Evola $$ Paradi $$ Paradow $$ Paramoth $$ Santochlor $$ Di-chloricide $$ Persia-Perazol $$ 1,4-Dichlorobenzene $$ Benzene, p-dichloro- $$ p-Chlorophenyl chloride $$ Paradichlorobenzene $$ Di-Chor





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989844.D
Acq On : 7 Jun 2018 6:37 am
Operator : NIVA
Sample : 2877533
Misc : RUN199900
ALS Vial : 43 Sample Multiplier: 1

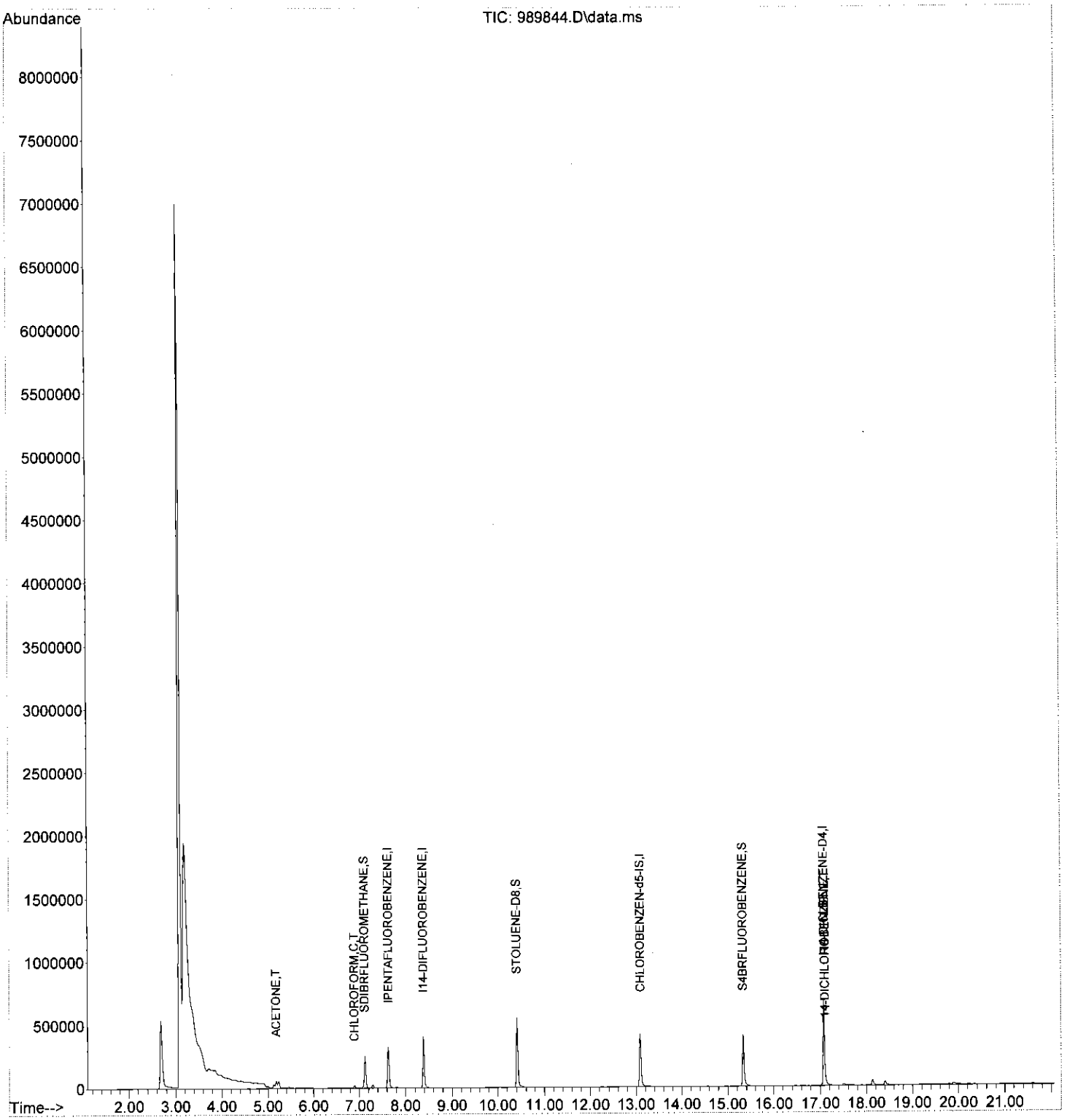
Quant Time: Jun 08 14:40:56 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.635	168	232433	20.00 µg/L	0.12
23) I14-DIFLUOROBENZENE	8.386	114	361251	20.00 µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.096	117	366411	20.00 µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	253463	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.117	111	178845	22.07 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 110.35%		
39) STOLUENE-D8	10.406	98	462319	20.37 µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.85%		
59) S4BRFLUOROBENZENE	15.330	95	193700	20.62 µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.10%		
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	3.665	94	482	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	5.178	43	84310	94.71 µg/L	98
10) 11-DICHLOROETHENE	0.000		0	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	5.147	84	1516	N.D.	
15) TRANS12DICLETHENE	5.239	96	379	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.081	43	136	N.D.	
18) 2-BUTANONE	6.985	43	203	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.894	83	8437	1.24 µg/L #	98
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	0.000		0	N.D. 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	536	N.D.	
30) BENZENE	7.645	78	2517	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	11.046	43	474	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.497	91	6017	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\199898-899-900\
Data File : 989844.D
Acq On : 7 Jun 2018 6:37 am
Operator : NIVA
Sample : 2877533
Misc : RUN199900
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jun 08 14:40:56 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\199898-899-900\
Data File : 989845.D
Acq On : 7 Jun 2018 7:03 am
Operator : NIVA
Sample : 2877532DUP/2879680
Misc : RUN199900
ALS Vial : 44 Sample Multiplier: 1

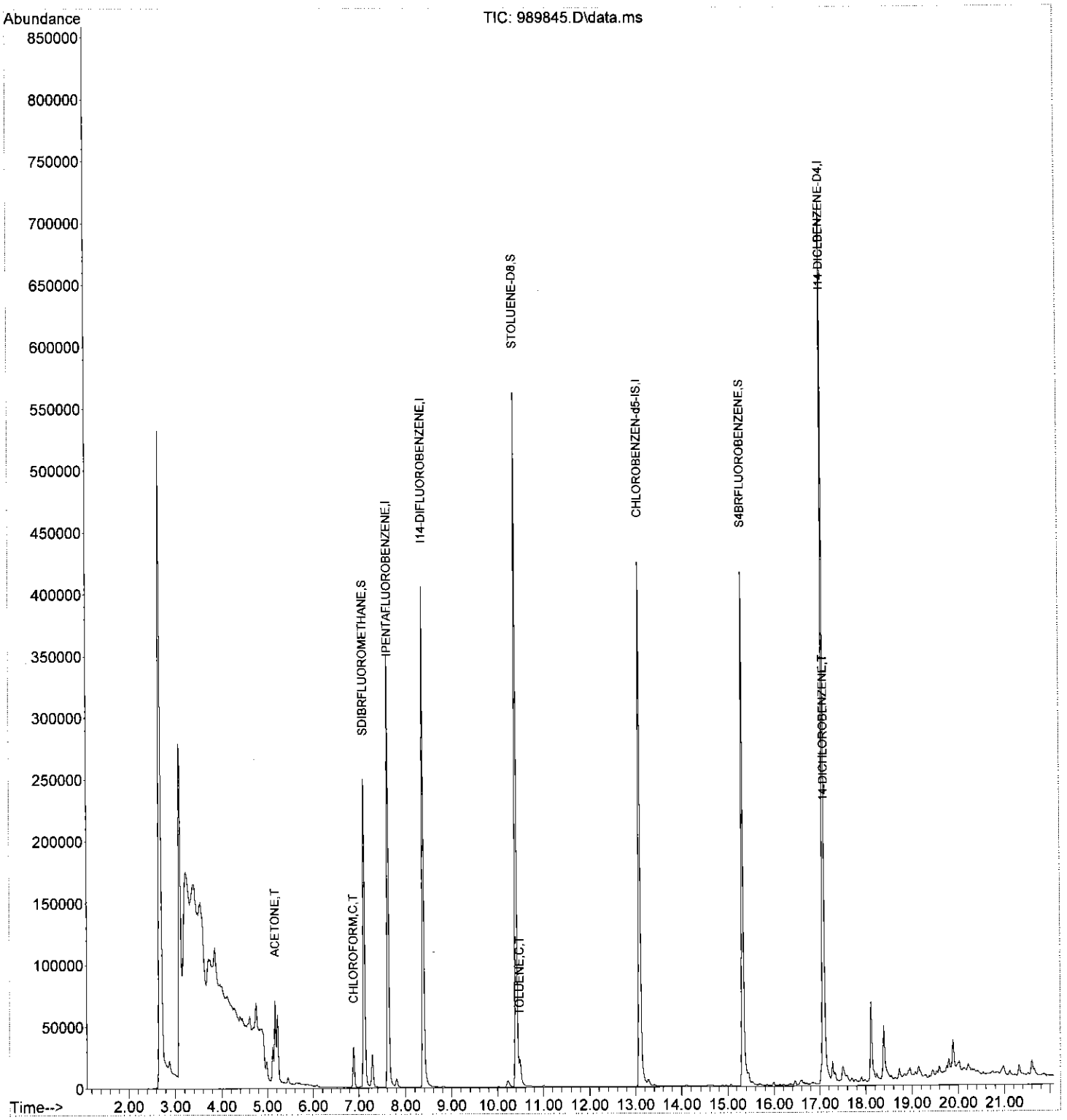
Quant Time: Jun 08 14:42:22 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.635	168	243458	20.00 µg/L	0.12
23) I14-DIFLUOROBENZENE	8.386	114	362705	20.00 µg/L	0.12
48) CHLOROBENZEN-d5-IS	13.086	117	367995	20.00 µg/L	0.14
71) I14-DICLBENZENE-D4	17.086	152	265521	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.117	111	178467	21.93 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.65%		
39) STOLUENE-D8	10.406	98	479972	21.06 µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.30%		
59) S4BRFLUOROBENZENE	15.330	95	195804	20.76 µg/L	0.18
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.80%		
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	3.665	94	366	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	5.178	43	98306	105.43 µg/L	99
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.731	142	753	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	5.229	96	734	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.081	43	588	N.D.	
18) 2-BUTANONE	7.127	43	67	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.894	83	20707	2.91 µg/L #	99
22) BROMOCHLOROMETHANE	0.000		0	N.D. d	
25) TETRAHYDROFURAN	0.000		0	N.D. 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	7.036	117	516	N.D.	
30) BENZENE	7.645	78	2813	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	11.056	43	63	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.487	91	16349	1.19 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\199898-899-900\
Data File : 989845.D
Acq On : 7 Jun 2018 7:03 am
Operator : NIVA
Sample : 2877532DUP/2879680
Misc : RUN199900
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jun 08 14:42:22 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\199898-899-900\
Data File : 989846.D
Acq On : 7 Jun 2018 7:29 am
Operator : NIVA
Sample : 2877533MS/2879682
Misc : RUN199900
ALS Vial : 45 Sample Multiplier: 1

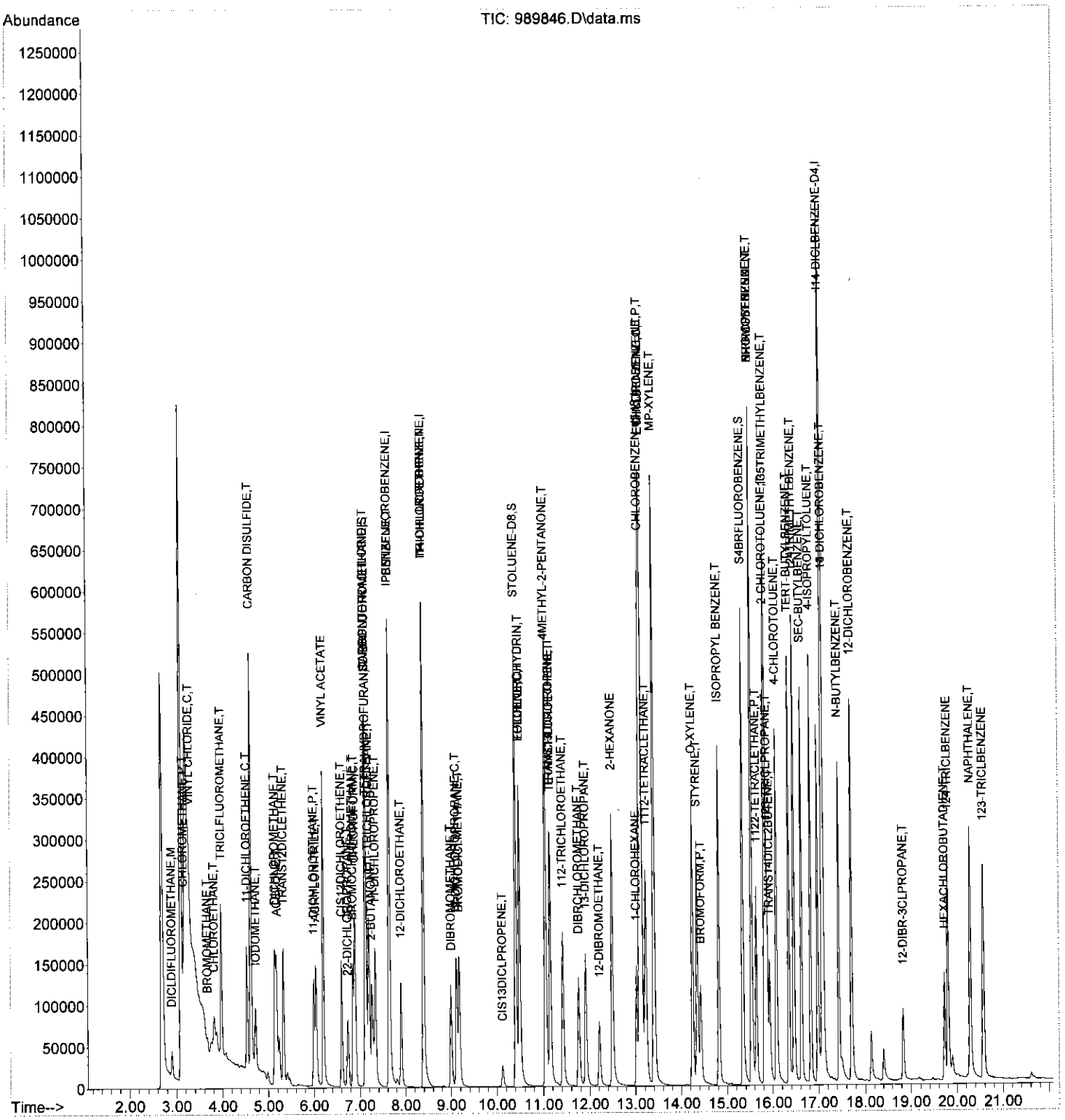
Quant Time: Jun 08 14:54:16 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.635	168	279496m	20.00 µg/L	0.12
23) I14-DIFLUOROBENZENE	8.396	114	382195	20.00 µg/L	0.13
48) CHLOROBENZEN-d5-IS	13.096	117	476536	20.00 µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	331476	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.127	111	186779	21.78 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 108.90%		
39) STOLUENE-D8	10.416	98	487276	20.29 µg/L	0.14
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.45%		
59) S4BRFLUOROBENZENE	15.340	95	247715	20.28 µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.40%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.904	85	38044	24.68 µg/L	99
3) CHLOROMETHANE	3.158	50	53115m	17.80 µg/L	
4) VINYL CHLORIDE	3.278	62	60151	23.56 µg/L #	1
5) BROMOMETHANE	3.665	94	8402	3.47 µg/L	96
6) CHLOROETHANE	3.808	64	149502	77.01 µg/L #	82
7) TRICLFLUOROMETHANE	3.970	101	181740m	27.73 µg/L	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	5.188	43	204377	190.93 µg/L	97
10) 11-DICHLOROETHENE	4.538	61	100530	23.81 µg/L	95
11) IODOMETHANE	4.731	142	92854	20.84 µg/L	95
12) CARBON DISULFIDE	4.620	76	850336	126.66 µg/L	99
13) ACRYLONITRILE	6.041	53	127298	100.80 µg/L	99
14) DICHLOROMETHANE	5.148	84	84463	22.46 µg/L #	85
15) TRANS12DICLETHENE	5.330	96	78595	23.86 µg/L	97
16) 11-DICHLOROETHANE	6.000	63	139041	23.03 µg/L	97
17) VINYL ACETATE	6.203	43	615994	110.89 µg/L	98
18) 2-BUTANONE	7.249	43	184320	106.99 µg/L	97
19) CIS12DICHLOROETHENE	6.609	96	72953	19.15 µg/L	92
20) 22-DICHLOROPROPANE	6.741	77	62043	13.79 µg/L	96
21) CHLOROFORM	6.894	83	189776	23.27 µg/L	99
22) BROMOCHLOROMETHANE	6.853	49	83558	25.57 µg/L #	84
25) TETRAHYDROFURAN	7.137	42	15171	18.16 µg/L #	88
26) 111-TRICHLOROETHANE	7.188	97	167946	25.95 µg/L	99
27) 11-DICHLOROPROPENE	7.330	75	93914	23.68 µg/L	93
28) 12-DICHLOROETHANE	7.899	62	139999	23.02 µg/L #	99
29) CARBONTETRACHLORIDE	7.117	117	159790	25.35 µg/L #	94
30) BENZENE	7.645	78	297068	23.07 µg/L	97
31) TRICHLOROETHENE	8.396	132	83635	22.77 µg/L #	93
32) 12-DICHLOROPROPANE	9.117	63	71232	22.63 µg/L #	88
33) DIBROMOMETHANE	9.005	174	62984	21.46 µg/L	98
34) BROMODICLMETHANE	9.178	83	137965	23.80 µg/L	100
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	10.498	57	25936	77.15 µg/L #	1
37) 4METHYL-2-PENTANONE	11.046	43	450119	110.77 µg/L	93
38) CIS13DICLPROPENE	10.122	75	21295	3.77 µg/L	98
40) TOLUENE	10.498	91	337339	23.36 µg/L	98
41) TRANS13DICLPROPENE	11.147	75	70607	16.65 µg/L	89
42) 112-TRICHLOROETHANE	11.421	97	86230	22.36 µg/L	93
43) 2-HEXANONE	12.487	43	315194	106.02 µg/L	95
44) 13-DICHLOROPROPANE	11.909	76	132460	22.34 µg/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989846.D
Acq On : 7 Jun 2018 7:29 am
Operator : NIVA
Sample : 2877533MS/2879682
Misc : RUN199900
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jun 08 14:54:16 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\199898-899-900\
Data File : 989847.D
Acq On : 7 Jun 2018 7:56 am
Operator : NIVA
Sample : LFB/2879681
Misc : RUN199900
ALS Vial : 46 Sample Multiplier: 1

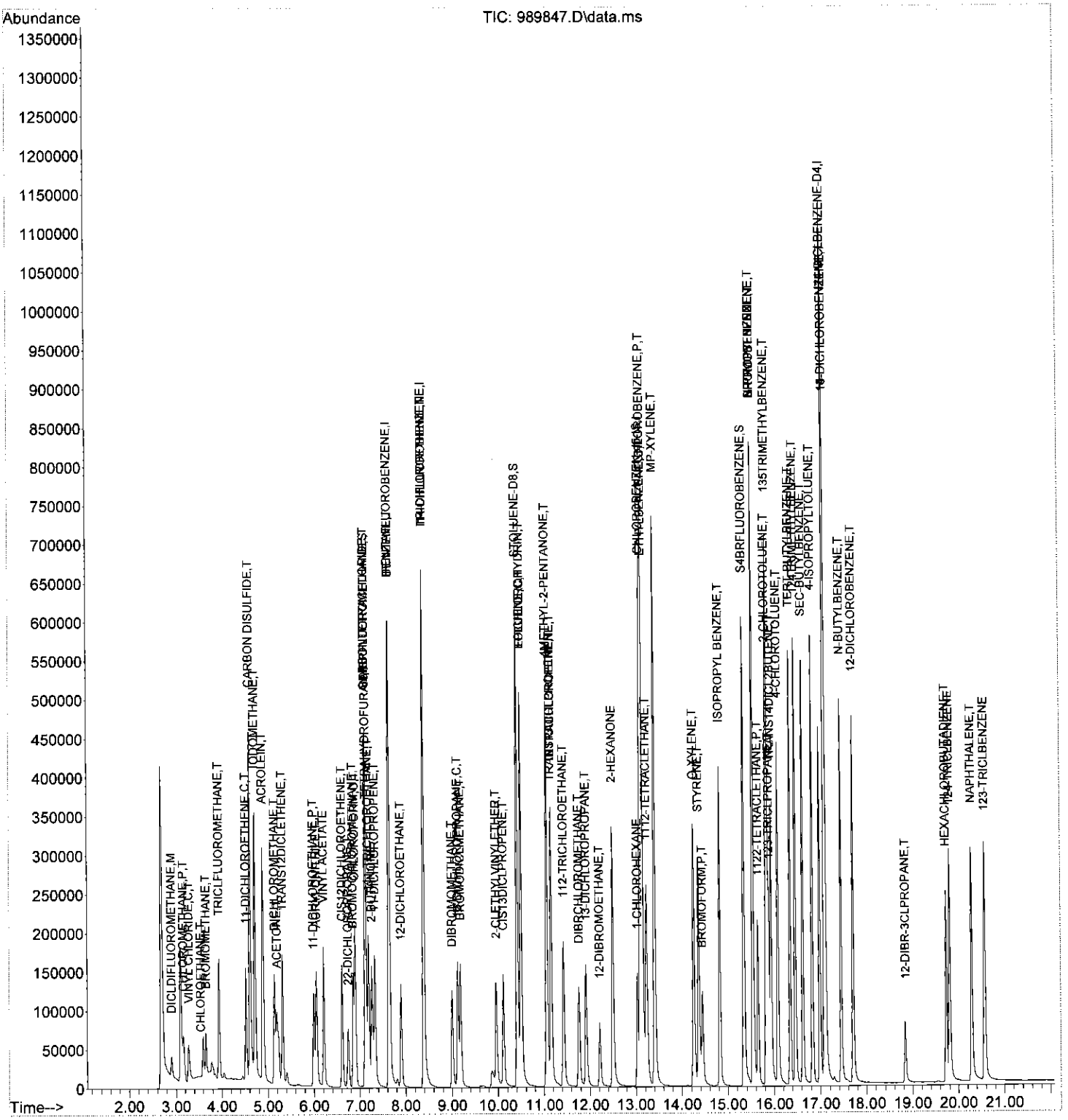
Quant Time: Jun 08 14:55:14 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.635	168	325170m	20.00	µg/L	0.12
23) I14-DIFLUOROBENZENE	8.396	114	453670	20.00	µg/L	0.13
48) CHLOROBENZEN-d5-IS	13.096	117	516184	20.00	µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	349838	20.00	µg/L	-0.04
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.127	111	206765	20.31	µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.55%			
39) STOLUENE-D8	10.416	98	565646	19.85	µg/L	0.14
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.25%			
59) S4BRFLUOROBENZENE	15.340	95	267322	20.20	µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.00%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.904	85	35236	19.64	µg/L	98
3) CHLOROMETHANE	3.158	50	63403	18.27	µg/L #	93
4) VINYL CHLORIDE	3.279	62	60513	20.37	µg/L #	56
5) BROMOMETHANE	3.655	94	56683m	20.13	µg/L	
6) CHLOROETHANE	3.543	64	49001	21.70	µg/L #	52
7) TRICLFLUOROMETHANE	3.939	101	150942	19.79	µg/L	98
8) ACROLEIN	4.883	56	408800m	423.77	µg/L	
9) ACETONE	5.198	43	121948	97.92	µg/L #	93
10) 11-DICHLOROETHENE	4.528	61	97556	19.86	µg/L	96
11) IODOMETHANE	4.721	142	447410	86.29	µg/L	98
12) CARBON DISULFIDE	4.609	76	774450	99.15	µg/L	99
13) ACRYLONITRILE	6.051	53	132756	90.36	µg/L	99
14) DICHLOROMETHANE	5.147	84	78745	18.00	µg/L #	84
15) TRANS12DICLETHENE	5.320	96	73742	19.24	µg/L	98
16) 11-DICHLOROETHANE	5.990	63	132867	18.92	µg/L	97
17) VINYL ACETATE	6.203	43	533632m	82.57	µg/L	
18) 2-BUTANONE	7.259	43	219814	109.67	µg/L	98
19) CIS12DICHLOROETHENE	6.609	96	77189	17.41	µg/L	93
20) 22-DICHLOROPROPANE	6.741	77	87424m	16.70	µg/L	
21) CHLOROFORM	6.894	83	183431	19.33	µg/L	100
22) BROMOCHLOROMETHANE	6.853	49	83104	21.86	µg/L	85
25) TETRAHYDROFURAN	7.137	42	17147	17.29	µg/L #	91
26) 111-TRICHLOROETHANE	7.188	97	160412	20.88	µg/L	99
27) 11-DICHLOROPROPENE	7.330	75	92900	19.73	µg/L	92
28) 12-DICHLOROETHANE	7.899	62	145327	20.13	µg/L #	97
29) CARBONTETRACHLORIDE	7.117	117	148708	19.88	µg/L #	95
30) BENZENE	7.645	78	296512	19.40	µg/L	98
31) TRICHLOROETHENE	8.396	132	93385	21.42	µg/L #	95
32) 12-DICHLOROPROPANE	9.127	63	72073	19.29	µg/L #	89
33) DIBROMOMETHANE	9.005	174	65974	18.94	µg/L	98
34) BROMODICLMETHANE	9.188	83	137568	19.99	µg/L	100
35) 2-CLETHYLVINYLETHER	9.970	63	72271	80.68	µg/L #	90
36) EPICHLOROHYDRIN	10.497	57	178564	447.50	µg/L	95
37) 4METHYL-2-PENTANONE	11.056	43	455626	94.46	µg/L	93
38) CIS13DICLPROPENE	10.122	75	107253	16.02	µg/L	99
40) TOLUENE	10.497	91	335566	19.58	µg/L	97
41) TRANS13DICLPROPENE	11.147	75	105980	21.06	µg/L	88
42) 112-TRICHLOROETHANE	11.431	97	87709	19.16	µg/L	93
43) 2-HEXANONE	12.497	43	315776	89.48	µg/L	94
44) 13-DICHLOROPROPANE	11.919	76	134763	19.15	µg/L	99

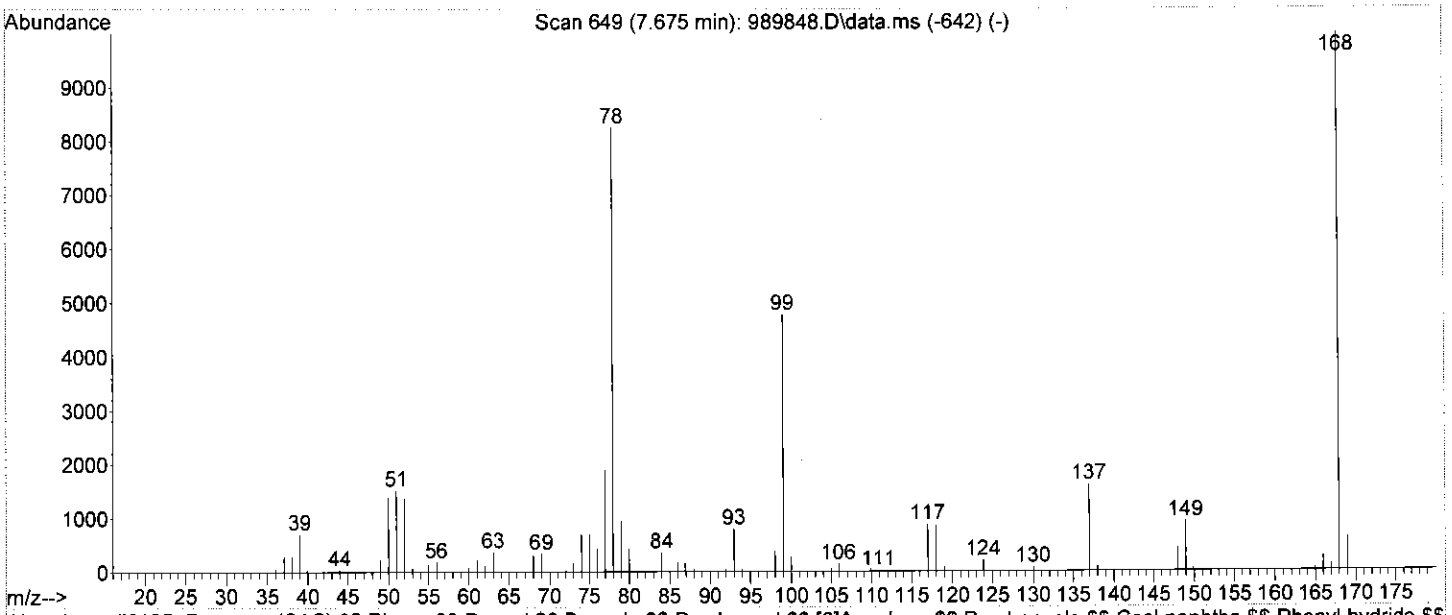
Quantitation Report (QT Reviewed)

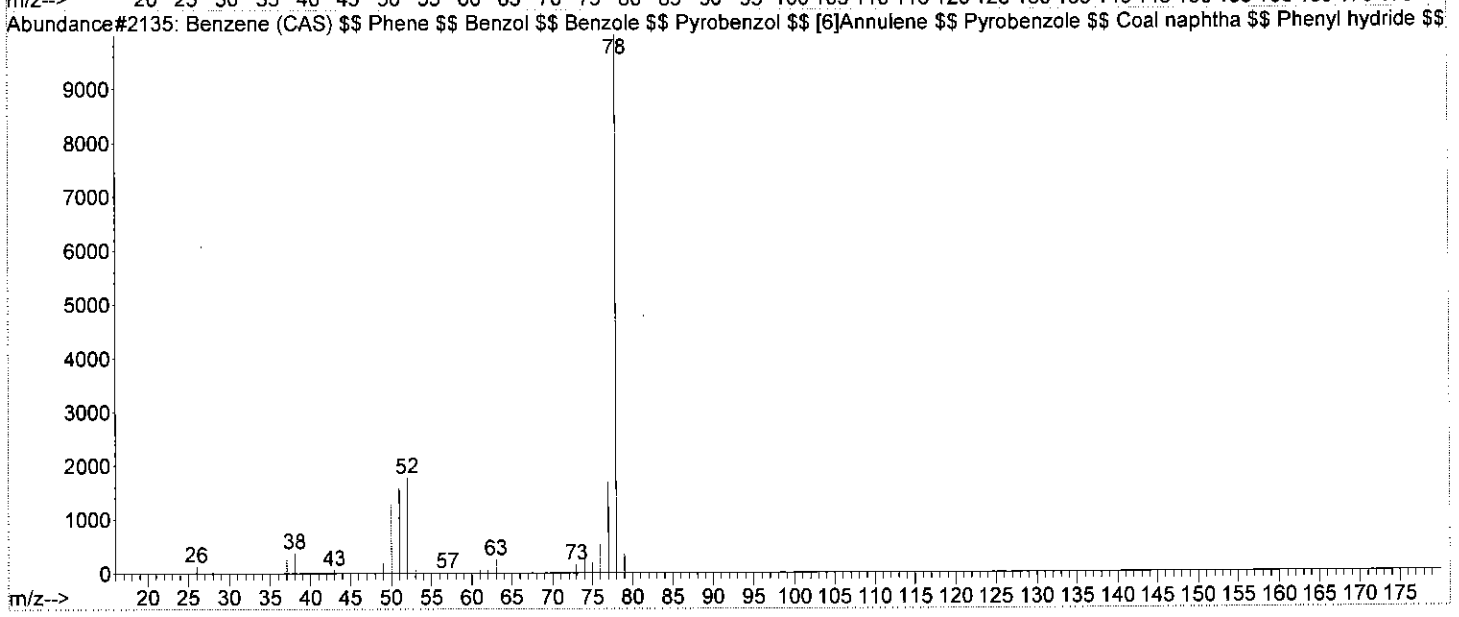
Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989847.D
Acq On : 7 Jun 2018 7:56 am
Operator : NIVA
Sample : LFB/2879681
Misc : RUN199900
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jun 08 14:55:14 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 : 64
ID : Benzene (CAS) $$ Phene $$ Benzol $$ Benzole $$ Pyrobenzol $$ [6]Annulene $$ Pyrobenzole $$ Coal naphtha $$ Phenyl hydride $$ Cyclohexatriene $$ Benzolene $$ Bicarburet of hydrogen $$ Carbon oil $$ Mineral naphtha $$ Motor benzol $$ Benzeen $$ Benzen $$ Be





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989848.D
Acq On : 7 Jun 2018 9:41 am
Operator : NIVA
Sample : 2875940
Misc : RUN199900, DF1000
ALS Vial : 47 Sample Multiplier: 1

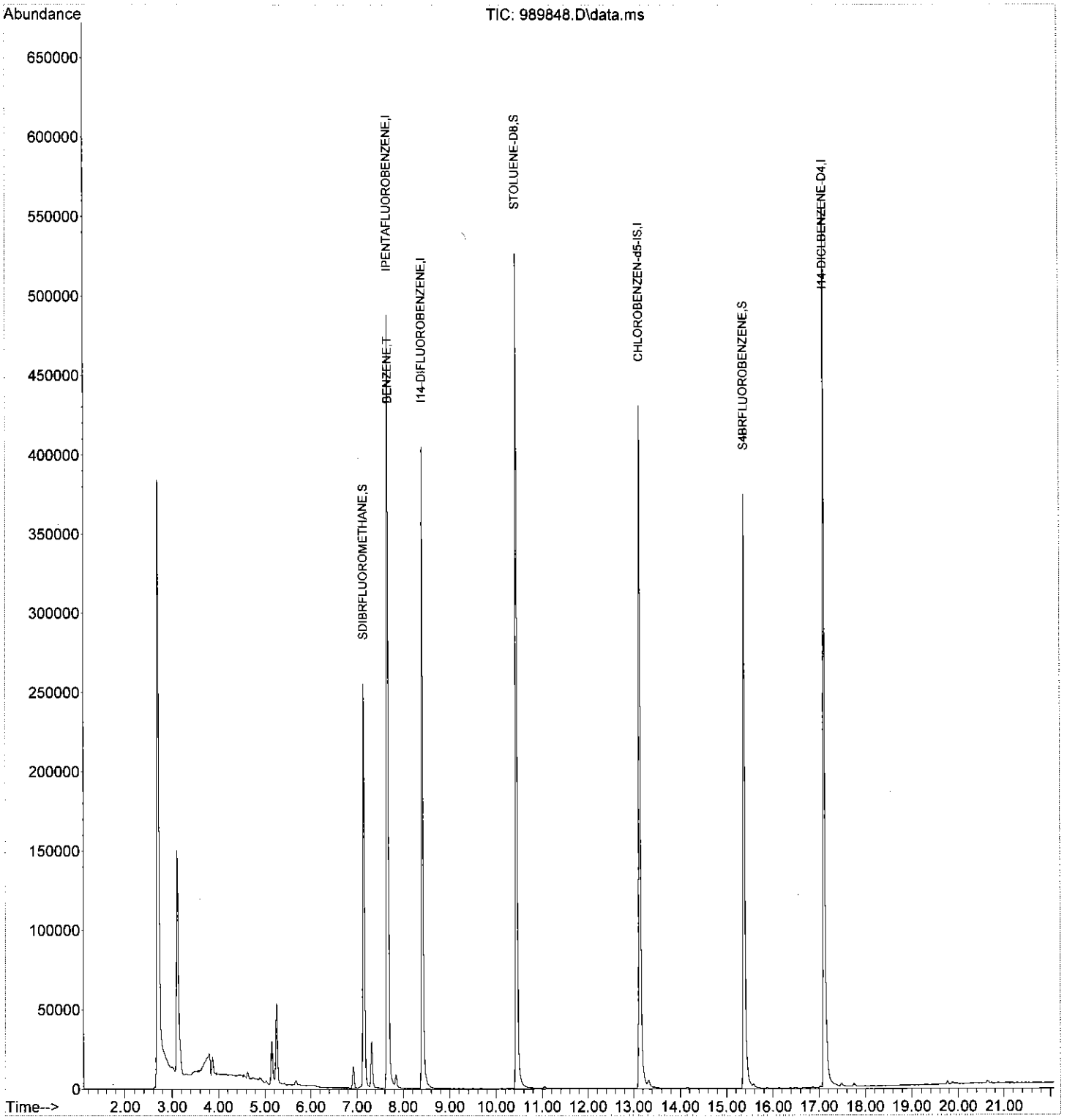
Quant Time: Jun 08 15:30:13 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.665	168	285796m	20.00	µg/L	0.15
23) I14-DIFLUOROBENZENE	8.416	114	379720	20.00	µg/L	0.15
48) CHLOROBENZEN-d5-IS	13.137	117	361362	20.00	µg/L	0.19
71) I14-DICLBENZENE-D4	17.117	152	209934	20.00	µg/L	-0.01
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.147	111	186684	21.91	µg/L	0.13
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.55%			
39) STOLUENE-D8	10.447	98	449348	18.84	µg/L	0.17
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.20%			
59) S4BRFLUOROBENZENE	15.381	95	175159	18.91	µg/L	0.23
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.55%			
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	3.686	94	921	N.D.		
6) CHLOROETHANE	0.000		0	N.D. d		
7) TRICLFLUOROMETHANE	3.970	101	254	N.D.		
8) ACROLEIN	0.000		0	N.D.		
9) ACETONE	0.000		0	N.D. d		
10) 11-DICHLOROETHENE	4.549	61	222	N.D.		
11) IODOMETHANE	4.741	142	1383	N.D.		
12) CARBON DISULFIDE	0.000		0	N.D.		
13) ACRYLONITRILE	6.082	53	223	N.D.		
14) DICHLOROMETHANE	0.000		0	N.D.		
15) TRANS12DICLETHENE	5.259	96	705	N.D.		
16) 11-DICHLOROETHANE	0.000		0	N.D.		
17) VINYL ACETATE	6.112	43	62	N.D.		
18) 2-BUTANONE	7.320	43	576	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	7.117	42	385	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	7.066	117	549	N.D.		
30) BENZENE	7.675	78	175642	13.73	µg/L	97
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	11.086	43	331	N.D.		
38) CIS13DICLPROPENE	0.000		0	N.D.		
40) TOLUENE	10.538	91	582	N.D.		
41) TRANS13DICLPROPENE	0.000		0	N.D.		
42) 112-TRICHLOROETHANE	0.000		0	N.D.		
43) 2-HEXANONE	12.579	43	310	N.D.		
44) 13-DICHLOROPROPANE	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989848.D
Acq On : 7 Jun 2018 9:41 am
Operator : NIVA
Sample : 2875940
Misc : RUN199900, DF1000
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jun 08 15:30:13 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\199898-899-900\
Data File : 989849.D
Acq On : 7 Jun 2018 10:11 am
Operator : NIVA
Sample : LFB
Misc : RUN199900
ALS Vial : 48 Sample Multiplier: 1

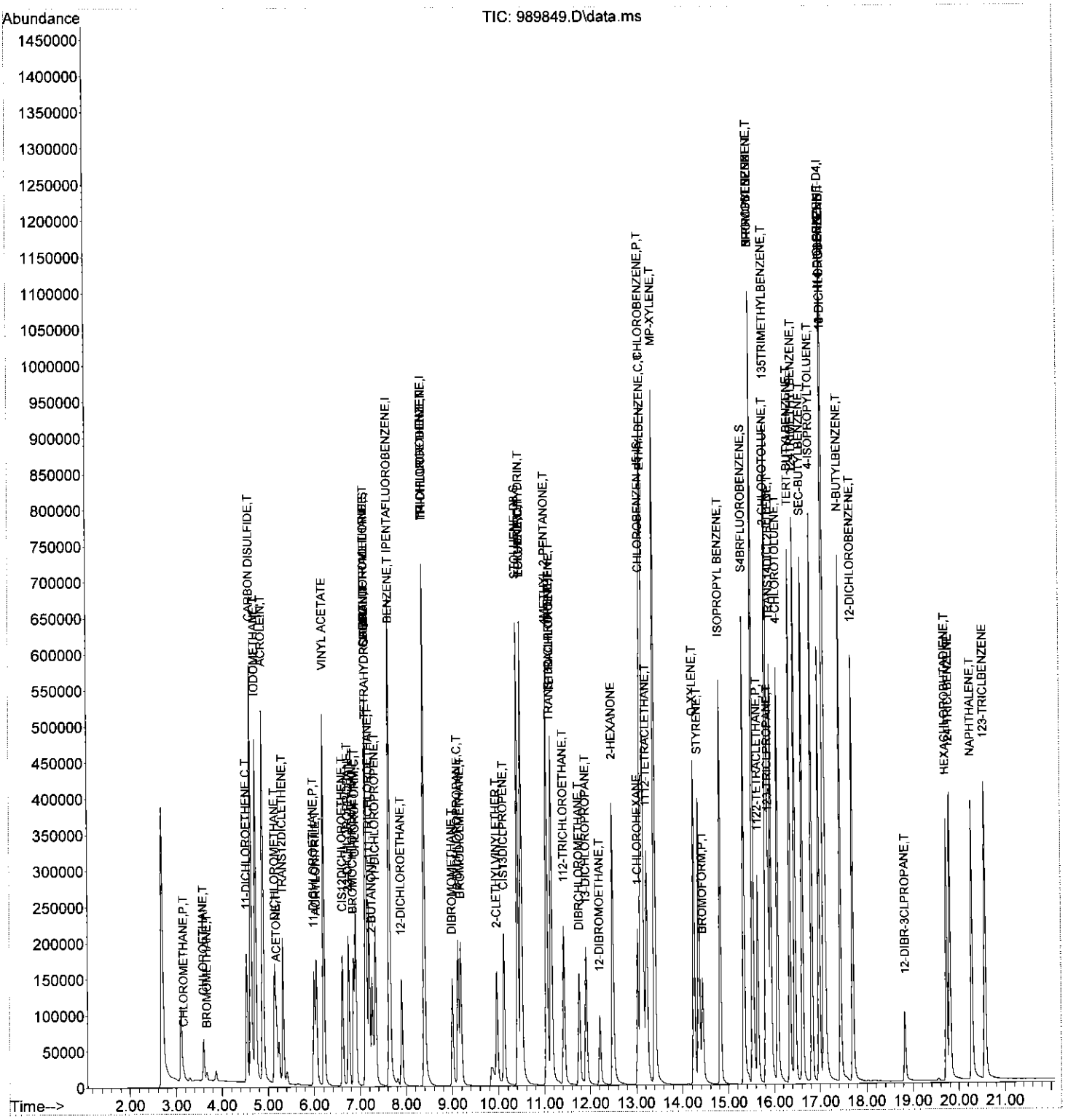
Quant Time: Jun 08 15:30:49 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Tue Jun 05 15:30:24 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.645	168	308079m	20.00 µg/L	0.13
23) I14-DIFLUOROBENZENE	8.396	114	434912	20.00 µg/L	0.13
48) CHLOROBENZEN-d5-IS	13.096	117	529664	20.00 µg/L	0.15
71) I14-DICLBENZENE-D4	17.086	152	366748	20.00 µg/L	-0.04
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.127	111	206686	21.18 µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.90%		
39) STOLUENE-D8	10.416	98	577639	21.14 µg/L	0.14
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.70%		
59) S4BRFLUOROBENZENE	15.340	95	274515	20.22 µg/L	0.19
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.10%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	3.168	50	12931	3.93 µg/L #	80
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.676	94	6282	2.35 µg/L	97
6) CHLOROETHANE	3.605	64	10252	4.79 µg/L #	53
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	4.884	56	524069	573.39 µg/L	99
9) ACETONE	5.188	43	125178	106.09 µg/L #	97
10) 11-DICHLOROETHENE	4.538	61	125134	26.89 µg/L	95
11) IODOMETHANE	4.731	142	589689	120.04 µg/L	96
12) CARBON DISULFIDE	4.630	76	1036589	140.08 µg/L #	99
13) ACRYLONITRILE	6.051	53	153646	110.37 µg/L	99
14) DICHLOROMETHANE	5.158	84	95137	22.95 µg/L #	86
15) TRANS12DICLETHENE	5.330	96	92874	25.58 µg/L	97
16) 11-DICHLOROETHANE	6.000	63	167414	25.16 µg/L	96
17) VINYL ACETATE	6.214	43	843610	137.77 µg/L	97
18) 2-BUTANONE	7.259	43	210708	110.96 µg/L	98
19) CIS12DICHLOROETHENE	6.620	96	92632	22.06 µg/L	93
20) 22-DICHLOROPROPANE	6.741	77	160061	32.27 µg/L	96
21) CHLOROFORM	6.904	83	223200	24.83 µg/L	99
22) BROMOCHLOROMETHANE	6.853	49	101209	28.10 µg/L	85
25) TETRAHYDROFURAN	7.137	42	17309	18.21 µg/L #	88
26) 111-TRICHLOROETHANE	7.198	97	204757	27.80 µg/L	99
27) 11-DICHLOROPROPENE	7.340	75	122606	27.17 µg/L	95
28) 12-DICHLOROETHANE	7.899	62	169289	24.46 µg/L	98
29) CARBONTETRACHLORIDE	7.127	117	195533	27.26 µg/L #	95
30) BENZENE	7.655	78	367163	25.06 µg/L	97
31) TRICHLOROETHENE	8.396	132	106632	25.51 µg/L #	92
32) 12-DICHLOROPROPANE	9.127	63	89533	25.00 µg/L #	89
33) DIBROMOMETHANE	9.005	174	76670	22.96 µg/L	98
34) BROMODICLMETHANE	9.188	83	169104	25.63 µg/L	100
35) 2-CLETHYLVINYLETHER	9.970	63	83431	97.16 µg/L	91
36) EPICHLOROHYDRIN	10.498	57	227134	593.77 µg/L	94
37) 4METHYL-2-PENTANONE	11.056	43	528772	114.36 µg/L	93
38) CIS13DICLPROPENE	10.122	75	155430	24.21 µg/L	99
40) TOLUENE	10.498	91	433572	26.39 µg/L	98
41) TRANS13DICLPROPENE	11.147	75	150565	31.21 µg/L	91
42) 112-TRICHLOROETHANE	11.432	97	104935	23.91 µg/L	93
43) 2-HEXANONE	12.498	43	365935	108.17 µg/L	94
44) 13-DICHLOROPROPANE	11.919	76	164460	24.38 µg/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\199898-899-900\
Data File : 989849.D
Acq On : 7 Jun 2018 10:11 am
Operator : NIVA
Sample : LFB
Misc : RUN199900
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jun 08 15:30:49 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\199898-899-900\
Data File : 989803.D
Acq On : 6 Jun 2018 12:44 pm
Operator : NIVA
Sample : ICV/2879643
Misc : RUN199898
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 08 09:52:35 2018
Quant Method : C:\msdchem\1\METHODS\8260VOC-JUNE-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Fri Jun 08 09:52:34 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) DIBRCHLOROMETHANE	11.604	129	110986	20.06 µg/L	99
46) TETRACHLOROETHENE	11.005	166	103805	20.51 µg/L	93
47) 12-DIBROMOETHANE	12.061	107	85525	20.48 µg/L	99
49) CHLOROBENZENE	12.975	112	263977	19.06 µg/L	85
50) 1-CHLOROHEXANE	12.883	91	53705	20.04 µg/L #	53
51) 1112-TETRACLETHANE	13.066	131	110959	18.54 µg/L	96
52) ETHYLBENZENE	12.985	91	408716	18.54 µg/L	98
53) MP-XYLENE	13.249	91	642801	37.99 µg/L	94
54) STYRENE	14.193	104	229065	16.05 µg/L	96
55) O-XYLENE	14.091	91	291934	17.89 µg/L	95
56) BROMOFORM	14.274	173	92449	19.82 µg/L	99
57) 1122-TETRACLETHANE	15.513	83	165450	19.63 µg/L	98
58) ISOPROPYL BENZENE	14.680	105	340627	15.42 µg/L	96
60) 123-TRICLPROPANE	15.746	110	56940	21.01 µg/L	96
61) TRANS14DICL2BUTENE	15.797	53	144388	111.22 µg/L	85
62) BROMOBENZENE	15.391	77	223928	19.32 µg/L	88
63) N-PROPYLBENZENE	15.401	91	498848	18.72 µg/L	94
64) 2-CHLOROTOLUENE	15.685	91	336947	17.80 µg/L	93
65) 4-CHLOROTOLUENE	15.949	91	306616	17.63 µg/L	94
66) 135TRIMETHYLBENZENE	15.716	105	393333	19.48 µg/L	95
67) TERT-BUTYLBENZENE	16.223	119	298494	18.98 µg/L	92
68) 124TRIMETHYLBENZENE	16.335	105	412119	20.53 µg/L	99
69) SEC-BUTYLBENZENE	16.497	105	429660	17.68 µg/L	98
70) 13-DICHLOROBENZENE	16.863	146	248358	20.29 µg/L	99
72) 4-ISOPROPYLTOLUENE	16.711	119	388654	17.55 µg/L	95
73) 14-DICHLOROBENZENE	16.985	146	261345	18.75 µg/L	85
74) 12-DICHLOROBENZENE	17.584	146	267656	19.42 µg/L	98
75) N-BUTYLBENZENE	17.320	91	340447	17.06 µg/L	98
76) 12-DIBR-3CLPROPANE	18.700	157	38666	17.83 µg/L	98
77) 124-TRICLBENZENE	19.665	180	151850	15.43 µg/L	97
78) NAPHTHALENE	20.142	128	399028	15.90 µg/L	97
79) HEXACHLOROBUTADIENE	19.594	225	79729	18.92 µg/L	98
80) 123-TRICLBENZENE	20.416	182	158451	17.58 µg/L	98

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

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	
June 5, 2018	TB-20180605	Lab	Lab	Lab
June 5, 2018	INF-20180605	1107	1109	EDR
June 5, 2018	EFF-20180605	1139	1143	EDR
June 5, 2018	EFFDUP-20180605	1139	1143	EDR
June 5, 2018	EFFMS-20180605	1139	1143	EDR
June 5, 2018	EFFMSD-20180605	1139	1143	EDR

GWETS Operational Data at Sample Collection

Extraction Wells

RW-2	99.8	gpm
RW-4	144.5	gpm
RW-5	79.8	gpm

Compound Treatment System

Influent Flow Rate (FIT-101)	255.9	gpm
Effluent Flow Rate (FIT-301)	271.7	gpm
Blower (FIT-201A)	2380	scfm
Influent Flow Pressure (PIT-101)	2.6	psi
Effluent Flow Pressure (PIT-301)	32.6	psi
pH (pHIT-201A)	8.4	

Notes:
gpm = gallons per minute
scfm = standard cubic feet per minute
psi = pounds per square inch