FIBERS SITE GROUP

October 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 – September 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 – September 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 97% of the time during September 2018. The GWETS had two shut downs due to equipment issues, three shut downs due to GWETS maintenance, and five automated shut downs due to power outages. The GWETS was restarted no later than the next business day in each instance. The air conditioner (a/c) unit inside the control panel of extraction well RW-2 broke on September 17, 2018; RW-2 was shut down. The a/c unit will be replaced.

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 288 gallons per minute (gpm) and treated approximately 12.44 million gallons of water. To date (since May 1999), approximately 3.26 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 234 gpm, versus 288 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 is being 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 September 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 September 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 #30760R 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 #2083579 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 #30761R 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 #259943 (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 second semi-annual groundwater monitoring and sampling event of 2018 commenced on October 1, 2018.

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.

(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 - September 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
9/1/2018	292	395	115	155	80	7.9	
9/2/2018	293	396	115	155	80	7.9	
9/3/2018	292	396	115	155	80	7.9	
9/4/2018	293	397	115	155	80	7.9	
9/5/2018	292	397	115	155	80	8.0	
9/6/2018	292	397	115	155	80	7.9	
9/7/2018	230	308	93	123	64	8.0	GWETS down due to equipment issues; GWETS restarted. Power outage; GWETS auto restarted.
9/8/2018	246	361	101	135	67	8.0	Power outage; GWETS auto restarted.
9/9/2018	279	374	110	149	77	8.0	Power outage; GWETS auto restarted.
9/10/2018	219	296	88	117	60	8.0	GWETS maintenance; GWETS restarted.
9/11/2018	292	396	115	155	80	8.0	GWETS maintenance.
9/12/2018	292	398	115	155	80	8.0	GWETS maintenance.
9/13/2018	292	398	115	155	80	8.0	GWETS maintenance.
9/14/2018	293	400	115	155	80	8.0	GWETS maintenance.
9/15/2018	293	398	115	155	80	7.9	Power outage; GWETS auto restarted.
9/16/2018	293	398	115	155	80	7.9	
9/17/2018	249	338	72	155	80	8.0	RWCP-2 a/c unit broke; RW-2 shut down.
9/18/2018	183	249	0	155	80	8.0	
9/19/2018	167	231	0	142	74	8.0	GWETS down due to equipment isssues; GWETS restarted.
9/20/2018	182	249	0	155	80	8.0	
9/21/2018	183	249	0	155	80	7.9	
9/22/2018	183	249	0	155	80	7.9	
9/23/2018	183	250	0	155	80	7.9	
9/24/2018	137	187	0	117	60	8.2	GWETS maintenance; GWETS restarted.
9/25/2018	166	228	0	142	74	8.0	GWETS maintenance; GWETS restarted.
9/26/2018	181	251	0	155	80	8.0	Power outage; GWETS auto restarted.
9/27/2018	182	249	0	155	80	7.9	
9/28/2018	183	250	0	155	80	7.9	
9/29/2018	183	250	0	155	80	7.9	
9/30/2018	183	251	0	155	80	7.9	
Monthly Average	234	320	61	150	77	8.0	

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

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 September 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 September 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 292 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. 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-20180905		EFFDUP-20180905		INF-20180905		TB-20180905	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
Tetrachloroethene	ND	ND	ND	ND	4.3	3.30	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	ND	NA	ND	NA	ND	NA	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NA	ND	NA	ND	NA	ND	NA	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	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	ND	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
n-Butylbenzene	NA	ND	NA	ND	NA	ND	NA	ND

	VOC (µg/L)							
	Sample ID							
Compound	EFF-20180905		EFFDUP-20180905		INF-20180905		TB-20180905	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
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	ND	ND	ND	ND	ND	ND	ND	ND
Tetrahydrofuran	NA	ND	NA	ND	NA	ND	NA	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NA	R	NA	R	NA	R	NA	R
Naphthalene	NA	ND	NA	ND	NA	ND	NA	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	NA	ND	NA	ND	NA	ND	NA	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	NA	ND	NA	ND	NA	ND	NA	ND
1,2,3-Trichlorobenzene	NA	ND	NA	ND	NA	ND	NA	ND
1,2,3-Trichlororopane	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NA	ND	NA	ND	NA	ND	NA	ND
1,2,4-Trimethylbenzene	NA	ND	NA	ND	NA	ND	NA	ND
1,2-Dibromo-3-chloropropane	NA	ND	NA	ND	NA	ND	NA	ND
1,2-Dibromoethane	NA	ND	NA	ND	NA	ND	NA	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	NA	ND	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	1.6	NA	ND	NA
Haloether 229	ND	NA	ND	NA	15.2	NA	ND	NA
Haloether 406	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 421	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 427	ND	NA	ND	NA	ND	NA	ND	NA

	VOC (µg/L)							
	Sample ID							
Compound	EFF-20180905		EFFDUP-20180905		INF-20180905		TB-20180905	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
Haloether 428	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 508	ND	NA	ND	NA	32.9	NA	ND	NA
Haloether 528	ND	NA	ND	NA	1.1	NA	ND	NA
Halomar	ND	NA	ND	NA	1.0	NA	ND	NA
Isoflurane	ND	NA	ND	NA	65.6	NA	ND	NA
Methoxyflurane	ND	NA	ND	NA	ND	NA	ND	NA
Total Haloethers	ND	NA	ND	NA	117	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

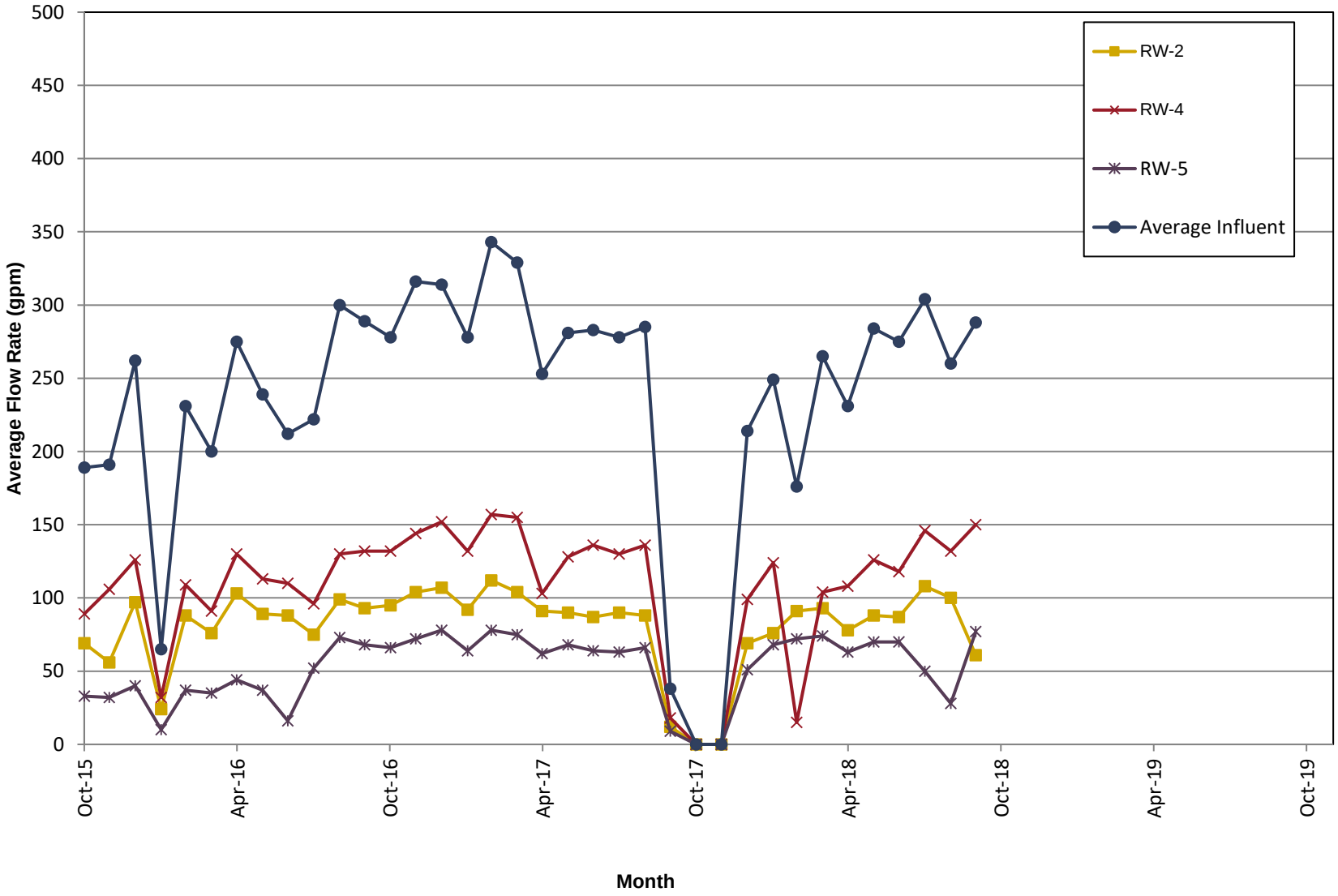


Figure 2
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Tetrachloroethene (PCE) Concentrations

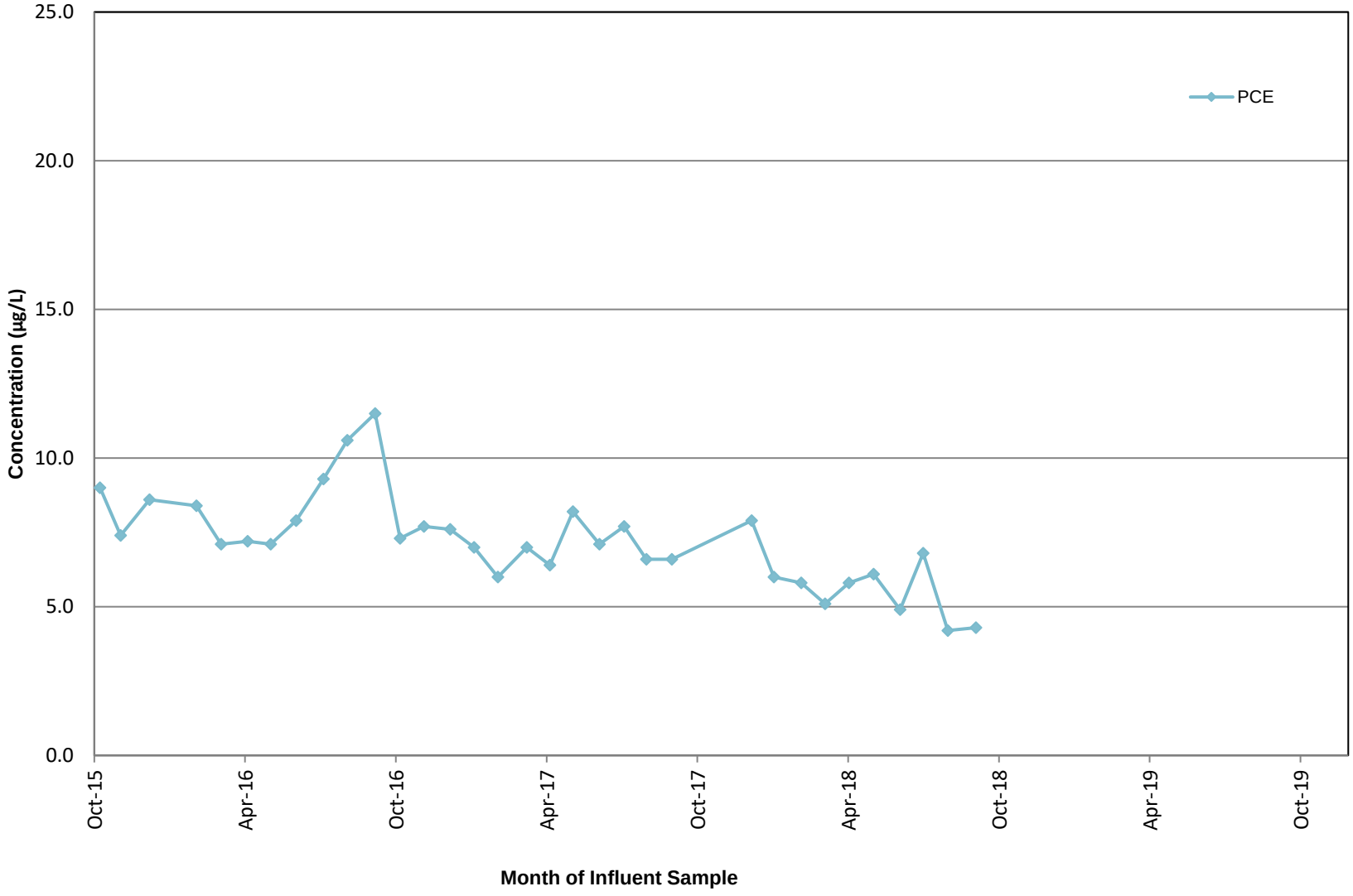
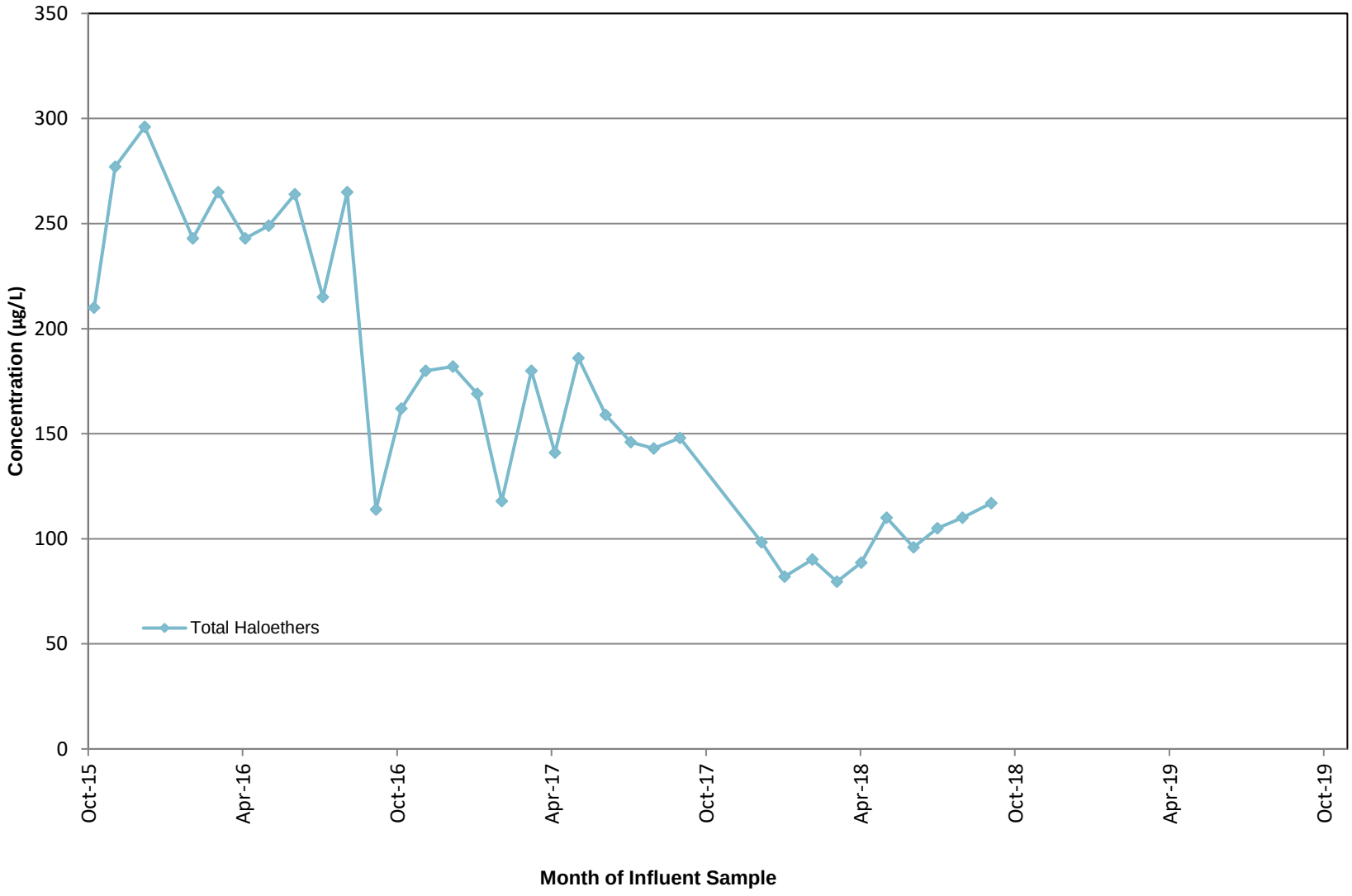


Figure 3
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Total Haloethers Concentrations



Attachment 1
Data Review Report #30760R

ARCADIS Design & Consultancy for natural and built assets

Fibers Group

DATA REVIEW

GUAYAMA, PUERTO RICO

Volatile Analyses

SDG #2083579

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

Report #30760R
Review Level: Tier II
Project: CO001911.0007.1805A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2083579 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-20180905	2083579001	Water	09/05/2018		X				
INF-20180905	2083579002	Water	09/05/2018		X				
EFF-20180905	2083579003	Water	09/05/2018		X				
EFFDUP-20180905	2083579004	Water	09/05/2018	EFF-20180905	X				

Notes:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location EFF-20180905 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-20180905	Halomar	>UL	>UL
	1,1,2-Trichlorotrifluoroethane	>UL	AC

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.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
All sample locations within this SDG	Acetone	>UL

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS 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

Control Limit	Sample Result	Qualification
< 10%	Non-detect	R
	Detect	J

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-20180905/EFFDUP-20180905	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: October 3, 2018

PEER REVIEW: Jeffrey L. Davin

DATE: October 4, 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 Well
Pace Project No.: 2083579

Sample: TB-20180905 **Lab ID: 2083579001** Collected: 09/05/18 00:00 Received: 09/07/18 10:20 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		09/18/18 14:54	67-64-1	~~L1~~
Acrolein	ND	ug/L	8.0	1		09/18/18 14:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		09/18/18 14:54	107-13-1	
Benzene	ND	ug/L	1.0	1		09/18/18 14:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		09/18/18 14:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		09/18/18 14:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		09/18/18 14:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		09/18/18 14:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		09/18/18 14:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/18/18 14:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/18/18 14:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/18/18 14:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		09/18/18 14:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		09/18/18 14:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		09/18/18 14:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		09/18/18 14:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/18/18 14:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/18/18 14:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/18/18 14:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 14:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 14:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		09/18/18 14:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		09/18/18 14:54	100-41-4	
Haloether 229	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 406	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 421	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 427	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 428	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 508	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 528	ND	ug/L	1.0	1		09/18/18 14:54		
Halomar	ND	ug/L	1.0	1		09/18/18 14:54		
2-Hexanone	ND	ug/L	2.0	1		09/18/18 14:54	591-78-6	
Isoflurane	ND	ug/L	1.0	1		09/18/18 14:54		
Methoxyflurane	ND	ug/L	1.0	1		09/18/18 14:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		09/18/18 14:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		09/18/18 14:54	108-10-1	
Styrene	ND	ug/L	1.0	1		09/18/18 14:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/18/18 14:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		09/18/18 14:54	127-18-4	
Toluene	ND	ug/L	1.0	1		09/18/18 14:54	108-88-3	
Total Haloether	ND	ug/L	1.0	1		09/18/18 14:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/18/18 14:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/18/18 14:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/18/18 14:54	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: TB-20180905 **Lab ID: 2083579001** Collected: 09/05/18 00:00 Received: 09/07/18 10:20 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		09/18/18 14:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/18/18 14:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/18/18 14:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		09/18/18 14:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		09/18/18 14:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		09/18/18 14:54	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		09/18/18 14:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		09/18/18 14:54	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		09/18/18 14:54	1868-53-7	

Sample: INF-20180905 **Lab ID: 2083579002** Collected: 09/05/18 09:14 Received: 09/07/18 10:20 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		09/18/18 15:30	67-64-1	~~L1~~
Acrolein	ND	ug/L	8.0	1		09/18/18 15:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		09/18/18 15:30	107-13-1	
Benzene	ND	ug/L	1.0	1		09/18/18 15:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		09/18/18 15:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		09/18/18 15:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		09/18/18 15:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		09/18/18 15:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		09/18/18 15:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/18/18 15:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/18/18 15:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/18/18 15:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		09/18/18 15:30	67-66-3	
Chloromethane	ND	ug/L	1.0	1		09/18/18 15:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		09/18/18 15:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		09/18/18 15:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/18/18 15:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/18/18 15:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/18/18 15:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 15:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 15:30	10061-02-6	
Enflurane	**1.6**	ug/L	1.0	1		09/18/18 15:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		09/18/18 15:30	100-41-4	
Haloether 229	**15.2**	ug/L	1.0	1		09/18/18 15:30		
Haloether 406	ND	ug/L	1.0	1		09/18/18 15:30		
Haloether 421	ND	ug/L	1.0	1		09/18/18 15:30		
Haloether 427	ND	ug/L	1.0	1		09/18/18 15:30		

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: INF-20180905 **Lab ID: 2083579002** Collected: 09/05/18 09:14 Received: 09/07/18 10:20 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		09/18/18 15:30		
Haloether 508	**32.9**	ug/L	1.0	1		09/18/18 15:30		
Haloether 528	**1.1**	ug/L	1.0	1		09/18/18 15:30		
Halomar	**1.0**	ug/L	1.0	1		09/18/18 15:30		
2-Hexanone	ND	ug/L	2.0	1		09/18/18 15:30	591-78-6	
Isoflurane	**65.6**	ug/L	1.0	1		09/18/18 15:30		
Methoxyflurane	ND	ug/L	1.0	1		09/18/18 15:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		09/18/18 15:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		09/18/18 15:30	108-10-1	
Styrene	ND	ug/L	1.0	1		09/18/18 15:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/18/18 15:30	79-34-5	
Tetrachloroethene	**4.3**	ug/L	1.0	1		09/18/18 15:30	127-18-4	
Toluene	ND	ug/L	1.0	1		09/18/18 15:30	108-88-3	
Total Haloether	**117**	ug/L	1.0	1		09/18/18 15:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/18/18 15:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/18/18 15:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/18/18 15:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		09/18/18 15:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/18/18 15:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/18/18 15:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		09/18/18 15:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		09/18/18 15:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		09/18/18 15:30	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		09/18/18 15:30	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		09/18/18 15:30	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		09/18/18 15:30	1868-53-7	

Sample: EFF-20180905 **Lab ID: 2083579003** Collected: 09/05/18 09:30 Received: 09/07/18 10:20 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		09/18/18 14:36	67-64-1	~~L1~~
Acrolein	ND	ug/L	8.0	1		09/18/18 14:36	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		09/18/18 14:36	107-13-1	
Benzene	ND	ug/L	1.0	1		09/18/18 14:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		09/18/18 14:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		09/18/18 14:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		09/18/18 14:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		09/18/18 14:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		09/18/18 14:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/18/18 14:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/18/18 14:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/18/18 14:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		09/18/18 14:36	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: EFF-20180905 **Lab ID: 2083579003** Collected: 09/05/18 09:30 Received: 09/07/18 10:20 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		09/18/18 14:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		09/18/18 14:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		09/18/18 14:36	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/18/18 14:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/18/18 14:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/18/18 14:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 14:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 14:36	10061-02-6	
Enflurane	ND	ug/L	1.0	1		09/18/18 14:36	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		09/18/18 14:36	100-41-4	
Haloether 229	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 406	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 421	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 427	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 428	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 508	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 528	ND	ug/L	1.0	1		09/18/18 14:36		
Halomar	ND	ug/L	1.0	1		09/18/18 14:36		~~M1~~
2-Hexanone	ND	ug/L	2.0	1		09/18/18 14:36	591-78-6	
Isoflurane	ND	ug/L	1.0	1		09/18/18 14:36		
Methoxyflurane	ND	ug/L	1.0	1		09/18/18 14:36	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		09/18/18 14:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		09/18/18 14:36	108-10-1	
Styrene	ND	ug/L	1.0	1		09/18/18 14:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/18/18 14:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		09/18/18 14:36	127-18-4	
Toluene	ND	ug/L	1.0	1		09/18/18 14:36	108-88-3	
Total Haloether	ND	ug/L	1.0	1		09/18/18 14:36		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/18/18 14:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/18/18 14:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/18/18 14:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		09/18/18 14:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/18/18 14:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/18/18 14:36	76-13-1	~~M1~~
Vinyl chloride	ND	ug/L	1.0	1		09/18/18 14:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		09/18/18 14:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		09/18/18 14:36	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		09/18/18 14:36	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		09/18/18 14:36	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		09/18/18 14:36	1868-53-7	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: EFFDUP-20180905 **Lab ID: 2083579004** Collected: 09/05/18 09:30 Received: 09/07/18 10:20 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		09/18/18 15:12	67-64-1	~~L1~~
Acrolein	ND	ug/L	8.0	1		09/18/18 15:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		09/18/18 15:12	107-13-1	
Benzene	ND	ug/L	1.0	1		09/18/18 15:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		09/18/18 15:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		09/18/18 15:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		09/18/18 15:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		09/18/18 15:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		09/18/18 15:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/18/18 15:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/18/18 15:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/18/18 15:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		09/18/18 15:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		09/18/18 15:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		09/18/18 15:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		09/18/18 15:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/18/18 15:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/18/18 15:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/18/18 15:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 15:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 15:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		09/18/18 15:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		09/18/18 15:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 406	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 421	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 427	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 428	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 508	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 528	ND	ug/L	1.0	1		09/18/18 15:12		
Halomar	ND	ug/L	1.0	1		09/18/18 15:12		
2-Hexanone	ND	ug/L	2.0	1		09/18/18 15:12	591-78-6	
Isoflurane	ND	ug/L	1.0	1		09/18/18 15:12		
Methoxyflurane	ND	ug/L	1.0	1		09/18/18 15:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		09/18/18 15:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		09/18/18 15:12	108-10-1	
Styrene	ND	ug/L	1.0	1		09/18/18 15:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/18/18 15:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		09/18/18 15:12	127-18-4	
Toluene	ND	ug/L	1.0	1		09/18/18 15:12	108-88-3	
Total Haloether	ND	ug/L	1.0	1		09/18/18 15:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/18/18 15:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/18/18 15:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/18/18 15:12	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: EFFDUP-20180905 **Lab ID: 2083579004** Collected: 09/05/18 09:30 Received: 09/07/18 10:20 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		09/18/18 15:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/18/18 15:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/18/18 15:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		09/18/18 15:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		09/18/18 15:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		09/18/18 15:12	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		09/18/18 15:12	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		09/18/18 15:12	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		09/18/18 15:12	1868-53-7	

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CHAIN-OF-CUSTODY / Analytical R

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

WO# : 2083579

2083579

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:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Fibers Public Supply Well(PO#CO001911.000)	Pace Project Manager:	craig.mccollum@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	1037 L1

Regulatory Agency	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-20180905	WT	G			09/05/18	4Ag		2				2							X	
2	INF-20180905	WT	G			09/05/18	0914		3				3						X		
3	EFF-20180905	WT	G			09/05/18	0930		3				3						X		
4	EFFDUP-20180905	WT	G			09/05/18	0930		3				3						X		
5	EFFMS-20180905	WT	G			09/05/18	0930		3				3						X		
6	EFFMSD-20180905	WT	G			09/05/18	0930		3				3						X		
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colom / Arcadis	09/05/18	1526	[illegible] FEDEX	9/5/18	1526	4°	y	N	y
	[illegible] FEDEX	9/5/18	1700	[illegible] FEDEX	9/5/18	1700				
	Fed Ex	9/7/18	1020	[illegible]	9/7/18	1020	1.1	y	y	y
							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: Andrés Colom

SIGNATURE of SAMPLER: [illegible] DATE Signed: 9-5-18

Attachment 2
Pace Laboratory Analytical Report #2083579

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

September 20, 2018

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

RE: Project: Fibers Public Supply Well
Pace Project No.: 2083579

Dear David Howard:

Enclosed are the analytical results for sample(s) received by the laboratory on September 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

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CERTIFICATIONS

Project:	Fibers Public Supply Well
Pace Project No.:	2083579

New Orleans Certification IDs

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

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SAMPLE SUMMARY

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2083579001	**TB-20180905**	Water	09/05/18 00:00	09/07/18 10:20
2083579002	**INF-20180905**	Water	09/05/18 09:14	09/07/18 10:20
2083579003	**EFF-20180905**	Water	09/05/18 09:30	09/07/18 10:20
2083579004	**EFFDUP-20180905**	Water	09/05/18 09:30	09/07/18 10:20

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SAMPLE ANALYTE COUNT

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2083579001	**TB-20180905**	EPA 5030B/8260	GEM	56	PASI-N
2083579002	**INF-20180905**	EPA 5030B/8260	GEM	56	PASI-N
2083579003	**EFF-20180905**	EPA 5030B/8260	GEM	56	PASI-N
2083579004	**EFFDUP-20180905**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: September 20, 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.

QC Batch: 120720

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 520236)
  - Acetone

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

QC Batch: 120720

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2083579003

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

- MS (Lab ID: 520237)
  - 1,1,2-Trichlorotrifluoroethane
  - Halomar
- MSD (Lab ID: 520238)
  - Halomar

Additional Comments:

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PROJECT NARRATIVE

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: September 20, 2018

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

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: TB-20180905 **Lab ID: 2083579001** Collected: 09/05/18 00:00 Received: 09/07/18 10:20 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		09/18/18 14:54	67-64-1	L1
Acrolein	ND	ug/L	8.0	1		09/18/18 14:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		09/18/18 14:54	107-13-1	
Benzene	ND	ug/L	1.0	1		09/18/18 14:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		09/18/18 14:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		09/18/18 14:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		09/18/18 14:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		09/18/18 14:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		09/18/18 14:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/18/18 14:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/18/18 14:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/18/18 14:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		09/18/18 14:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		09/18/18 14:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		09/18/18 14:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		09/18/18 14:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/18/18 14:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/18/18 14:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/18/18 14:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 14:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 14:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		09/18/18 14:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		09/18/18 14:54	100-41-4	
Haloether 229	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 406	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 421	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 427	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 428	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 508	ND	ug/L	1.0	1		09/18/18 14:54		
Haloether 528	ND	ug/L	1.0	1		09/18/18 14:54		
Halomar	ND	ug/L	1.0	1		09/18/18 14:54		
2-Hexanone	ND	ug/L	2.0	1		09/18/18 14:54	591-78-6	
Isoflurane	ND	ug/L	1.0	1		09/18/18 14:54		
Methoxyflurane	ND	ug/L	1.0	1		09/18/18 14:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		09/18/18 14:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		09/18/18 14:54	108-10-1	
Styrene	ND	ug/L	1.0	1		09/18/18 14:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/18/18 14:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		09/18/18 14:54	127-18-4	
Toluene	ND	ug/L	1.0	1		09/18/18 14:54	108-88-3	
Total Haloether	ND	ug/L	1.0	1		09/18/18 14:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/18/18 14:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/18/18 14:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/18/18 14:54	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: TB-20180905 **Lab ID: 2083579001** Collected: 09/05/18 00:00 Received: 09/07/18 10:20 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		09/18/18 14:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/18/18 14:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/18/18 14:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		09/18/18 14:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		09/18/18 14:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		09/18/18 14:54	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		09/18/18 14:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		09/18/18 14:54	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		09/18/18 14:54	1868-53-7	

Sample: INF-20180905 **Lab ID: 2083579002** Collected: 09/05/18 09:14 Received: 09/07/18 10:20 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		09/18/18 15:30	67-64-1	L1
Acrolein	ND	ug/L	8.0	1		09/18/18 15:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		09/18/18 15:30	107-13-1	
Benzene	ND	ug/L	1.0	1		09/18/18 15:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		09/18/18 15:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		09/18/18 15:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		09/18/18 15:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		09/18/18 15:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		09/18/18 15:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/18/18 15:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/18/18 15:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/18/18 15:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		09/18/18 15:30	67-66-3	
Chloromethane	ND	ug/L	1.0	1		09/18/18 15:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		09/18/18 15:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		09/18/18 15:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/18/18 15:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/18/18 15:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/18/18 15:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 15:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 15:30	10061-02-6	
Enflurane	**1.6**	ug/L	1.0	1		09/18/18 15:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		09/18/18 15:30	100-41-4	
Haloether 229	**15.2**	ug/L	1.0	1		09/18/18 15:30		
Haloether 406	ND	ug/L	1.0	1		09/18/18 15:30		
Haloether 421	ND	ug/L	1.0	1		09/18/18 15:30		
Haloether 427	ND	ug/L	1.0	1		09/18/18 15:30		

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: INF-20180905 **Lab ID: 2083579002** Collected: 09/05/18 09:14 Received: 09/07/18 10:20 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		09/18/18 15:30		
Haloether 508	**32.9**	ug/L	1.0	1		09/18/18 15:30		
Haloether 528	**1.1**	ug/L	1.0	1		09/18/18 15:30		
Halomar	**1.0**	ug/L	1.0	1		09/18/18 15:30		
2-Hexanone	ND	ug/L	2.0	1		09/18/18 15:30	591-78-6	
Isoflurane	**65.6**	ug/L	1.0	1		09/18/18 15:30		
Methoxyflurane	ND	ug/L	1.0	1		09/18/18 15:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		09/18/18 15:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		09/18/18 15:30	108-10-1	
Styrene	ND	ug/L	1.0	1		09/18/18 15:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/18/18 15:30	79-34-5	
Tetrachloroethene	**4.3**	ug/L	1.0	1		09/18/18 15:30	127-18-4	
Toluene	ND	ug/L	1.0	1		09/18/18 15:30	108-88-3	
Total Haloether	**117**	ug/L	1.0	1		09/18/18 15:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/18/18 15:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/18/18 15:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/18/18 15:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		09/18/18 15:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/18/18 15:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/18/18 15:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		09/18/18 15:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		09/18/18 15:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		09/18/18 15:30	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		09/18/18 15:30	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		09/18/18 15:30	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		09/18/18 15:30	1868-53-7	

Sample: EFF-20180905 **Lab ID: 2083579003** Collected: 09/05/18 09:30 Received: 09/07/18 10:20 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		09/18/18 14:36	67-64-1	L1
Acrolein	ND	ug/L	8.0	1		09/18/18 14:36	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		09/18/18 14:36	107-13-1	
Benzene	ND	ug/L	1.0	1		09/18/18 14:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		09/18/18 14:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		09/18/18 14:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		09/18/18 14:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		09/18/18 14:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		09/18/18 14:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/18/18 14:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/18/18 14:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/18/18 14:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		09/18/18 14:36	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: EFF-20180905 **Lab ID: 2083579003** Collected: 09/05/18 09:30 Received: 09/07/18 10:20 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		09/18/18 14:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		09/18/18 14:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		09/18/18 14:36	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/18/18 14:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/18/18 14:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 14:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/18/18 14:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 14:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 14:36	10061-02-6	
Enflurane	ND	ug/L	1.0	1		09/18/18 14:36	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		09/18/18 14:36	100-41-4	
Haloether 229	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 406	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 421	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 427	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 428	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 508	ND	ug/L	1.0	1		09/18/18 14:36		
Haloether 528	ND	ug/L	1.0	1		09/18/18 14:36		
Halomar	ND	ug/L	1.0	1		09/18/18 14:36		M1
2-Hexanone	ND	ug/L	2.0	1		09/18/18 14:36	591-78-6	
Isoflurane	ND	ug/L	1.0	1		09/18/18 14:36		
Methoxyflurane	ND	ug/L	1.0	1		09/18/18 14:36	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		09/18/18 14:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		09/18/18 14:36	108-10-1	
Styrene	ND	ug/L	1.0	1		09/18/18 14:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/18/18 14:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		09/18/18 14:36	127-18-4	
Toluene	ND	ug/L	1.0	1		09/18/18 14:36	108-88-3	
Total Haloether	ND	ug/L	1.0	1		09/18/18 14:36		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/18/18 14:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/18/18 14:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/18/18 14:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		09/18/18 14:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/18/18 14:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/18/18 14:36	76-13-1	M1
Vinyl chloride	ND	ug/L	1.0	1		09/18/18 14:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		09/18/18 14:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		09/18/18 14:36	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		09/18/18 14:36	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		09/18/18 14:36	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		09/18/18 14:36	1868-53-7	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: EFFDUP-20180905 **Lab ID: 2083579004** Collected: 09/05/18 09:30 Received: 09/07/18 10:20 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		09/18/18 15:12	67-64-1	L1
Acrolein	ND	ug/L	8.0	1		09/18/18 15:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		09/18/18 15:12	107-13-1	
Benzene	ND	ug/L	1.0	1		09/18/18 15:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		09/18/18 15:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		09/18/18 15:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		09/18/18 15:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		09/18/18 15:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		09/18/18 15:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/18/18 15:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/18/18 15:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/18/18 15:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		09/18/18 15:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		09/18/18 15:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		09/18/18 15:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		09/18/18 15:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/18/18 15:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/18/18 15:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/18/18 15:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/18/18 15:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 15:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/18/18 15:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		09/18/18 15:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		09/18/18 15:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 406	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 421	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 427	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 428	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 508	ND	ug/L	1.0	1		09/18/18 15:12		
Haloether 528	ND	ug/L	1.0	1		09/18/18 15:12		
Halomar	ND	ug/L	1.0	1		09/18/18 15:12		
2-Hexanone	ND	ug/L	2.0	1		09/18/18 15:12	591-78-6	
Isoflurane	ND	ug/L	1.0	1		09/18/18 15:12		
Methoxyflurane	ND	ug/L	1.0	1		09/18/18 15:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		09/18/18 15:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		09/18/18 15:12	108-10-1	
Styrene	ND	ug/L	1.0	1		09/18/18 15:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/18/18 15:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		09/18/18 15:12	127-18-4	
Toluene	ND	ug/L	1.0	1		09/18/18 15:12	108-88-3	
Total Haloether	ND	ug/L	1.0	1		09/18/18 15:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/18/18 15:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/18/18 15:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/18/18 15:12	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Sample: EFFDUP-20180905 **Lab ID: 2083579004** Collected: 09/05/18 09:30 Received: 09/07/18 10:20 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		09/18/18 15:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/18/18 15:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/18/18 15:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		09/18/18 15:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		09/18/18 15:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		09/18/18 15:12	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		09/18/18 15:12	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		09/18/18 15:12	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		09/18/18 15:12	1868-53-7	

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QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2083579

QC Batch: 120720 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2083579001, 2083579002, 2083579003, 2083579004

METHOD BLANK: 520235 | Matrix: Water
Associated Lab Samples: 2083579001, 2083579002, 2083579003, 2083579004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	09/18/18 13:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	09/18/18 13:24	
1,1,2-Trichloroethane	ug/L	ND	1.0	09/18/18 13:24	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	09/18/18 13:24	
1,1-Dichloroethane	ug/L	ND	1.0	09/18/18 13:24	
1,1-Dichloroethene	ug/L	ND	1.0	09/18/18 13:24	
1,2,3-Trichloropropane	ug/L	ND	1.0	09/18/18 13:24	
1,2-Dichloroethane	ug/L	ND	1.0	09/18/18 13:24	
1,2-Dichloropropane	ug/L	ND	1.0	09/18/18 13:24	
2-Butanone (MEK)	ug/L	ND	2.0	09/18/18 13:24	
2-Hexanone	ug/L	ND	2.0	09/18/18 13:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	09/18/18 13:24	
Acetone	ug/L	ND	4.0	09/18/18 13:24	
Acrolein	ug/L	ND	8.0	09/18/18 13:24	
Acrylonitrile	ug/L	ND	4.0	09/18/18 13:24	
Benzene	ug/L	ND	1.0	09/18/18 13:24	
Bromodichloromethane	ug/L	ND	1.0	09/18/18 13:24	
Bromoform	ug/L	ND	1.0	09/18/18 13:24	
Bromomethane	ug/L	ND	1.0	09/18/18 13:24	
Carbon disulfide	ug/L	ND	1.0	09/18/18 13:24	
Carbon tetrachloride	ug/L	ND	1.0	09/18/18 13:24	
Chlorobenzene	ug/L	ND	1.0	09/18/18 13:24	
Chloroethane	ug/L	ND	1.0	09/18/18 13:24	
Chloroform	ug/L	ND	1.0	09/18/18 13:24	
Chloromethane	ug/L	ND	1.0	09/18/18 13:24	
cis-1,2-Dichloroethene	ug/L	ND	1.0	09/18/18 13:24	
cis-1,3-Dichloropropene	ug/L	ND	1.0	09/18/18 13:24	
Dibromochloromethane	ug/L	ND	1.0	09/18/18 13:24	
Dibromomethane	ug/L	ND	1.0	09/18/18 13:24	
Enflurane	ug/L	ND	1.0	09/18/18 13:24	
Ethylbenzene	ug/L	ND	1.0	09/18/18 13:24	
Haloether 229	ug/L	ND	1.0	09/18/18 13:24	
Haloether 406	ug/L	ND	1.0	09/18/18 13:24	
Haloether 421	ug/L	ND	1.0	09/18/18 13:24	
Haloether 427	ug/L	ND	1.0	09/18/18 13:24	
Haloether 428	ug/L	ND	1.0	09/18/18 13:24	
Haloether 508	ug/L	ND	1.0	09/18/18 13:24	
Haloether 528	ug/L	ND	1.0	09/18/18 13:24	
Halomar	ug/L	ND	1.0	09/18/18 13:24	
Isoflurane	ug/L	ND	1.0	09/18/18 13:24	
m&p-Xylene	ug/L	ND	2.0	09/18/18 13:24	

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

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QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2083579

METHOD BLANK: 520235 Matrix: Water
Associated Lab Samples: 2083579001, 2083579002, 2083579003, 2083579004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methoxyflurane	ug/L	ND	1.0	09/18/18 13:24	
Methylene Chloride	ug/L	ND	5.0	09/18/18 13:24	
o-Xylene	ug/L	ND	1.0	09/18/18 13:24	
Styrene	ug/L	ND	1.0	09/18/18 13:24	
Tetrachloroethene	ug/L	ND	1.0	09/18/18 13:24	
Toluene	ug/L	ND	1.0	09/18/18 13:24	
Total Haloether	ug/L	ND	1.0	09/18/18 13:24	
trans-1,2-Dichloroethene	ug/L	ND	1.0	09/18/18 13:24	
trans-1,3-Dichloropropene	ug/L	ND	1.0	09/18/18 13:24	
Trichloroethene	ug/L	ND	1.0	09/18/18 13:24	
Trichlorofluoromethane	ug/L	ND	1.0	09/18/18 13:24	
Vinyl chloride	ug/L	ND	1.0	09/18/18 13:24	
4-Bromofluorobenzene (S)	%.	98	68-124	09/18/18 13:24	
Dibromofluoromethane (S)	%.	101	72-126	09/18/18 13:24	
Toluene-d8 (S)	%.	103	79-119	09/18/18 13:24	

LABORATORY CONTROL SAMPLE: 520236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.6	103	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	50.7	101	15-179	
1,1,2-Trichloroethane	ug/L	50	48.3	97	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	59.0	118	38-121	
1,1-Dichloroethane	ug/L	50	53.3	107	63-129	
1,1-Dichloroethene	ug/L	50	53.5	107	51-139	
1,2,3-Trichloropropane	ug/L	50	47.4	95	13-187	
1,2-Dichloroethane	ug/L	50	46.6	93	57-148	
1,2-Dichloropropane	ug/L	50	52.3	105	66-128	
2-Butanone (MEK)	ug/L	50	70.0	140	32-183	
2-Hexanone	ug/L	50	63.2	126	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	47.6	95	26-171	
Acetone	ug/L	50	92.6	185	22-165	L1
Acrolein	ug/L	50	48.8	98	10-131	
Acrylonitrile	ug/L	50	51.7	103	18-149	
Benzene	ug/L	50	50.6	101	62-131	
Bromodichloromethane	ug/L	50	49.5	99	69-132	
Bromoform	ug/L	50	42.1	84	35-166	
Bromomethane	ug/L	50	41.9	84	34-158	
Carbon disulfide	ug/L	50	55.5	111	31-128	
Carbon tetrachloride	ug/L	50	53.8	108	54-144	
Chlorobenzene	ug/L	50	47.9	96	70-127	
Chloroethane	ug/L	50	47.2	94	17-195	
Chloroform	ug/L	50	48.9	98	73-134	
Chloromethane	ug/L	50	45.4	91	17-153	

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2083579

LABORATORY CONTROL SAMPLE: 520236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	51.4	103	68-129	
cis-1,3-Dichloropropene	ug/L	50	53.9	108	72-138	
Dibromochloromethane	ug/L	50	46.5	93	49-146	
Dibromomethane	ug/L	50	50.1	100	56-145	
Enflurane	ug/L	50	58.3	117	56-135	
Ethylbenzene	ug/L	50	47.6	95	66-126	
Haloether 229	ug/L	50	52.9	106	62-123	
Haloether 406	ug/L	50	56.1	112	62-134	
Haloether 421	ug/L	50	51.3	103	70-128	
Haloether 427	ug/L	50	50.6	101	69-153	
Haloether 428	ug/L	50	49.4	99	70-134	
Haloether 508	ug/L	50	58.6	117	52-139	
Haloether 528	ug/L	50	48.2	96	48-157	
Halomar	ug/L	50	60.7	121	62-128	
Isoflurane	ug/L	50	56.6	113	61-132	
m&p-Xylene	ug/L	100	95.0	95	65-129	
Methoxyflurane	ug/L	50	51.4	103	72-124	
Methylene Chloride	ug/L	50	52.7	105	46-168	
o-Xylene	ug/L	50	46.6	93	65-124	
Styrene	ug/L	50	48.7	97	72-133	
Tetrachloroethene	ug/L	50	49.3	99	46-157	
Toluene	ug/L	50	49.6	99	69-126	
Total Haloether	ug/L		594			
trans-1,2-Dichloroethene	ug/L	50	54.8	110	60-129	
trans-1,3-Dichloropropene	ug/L	50	50.2	100	59-149	
Trichloroethene	ug/L	50	48.7	97	67-132	
Trichlorofluoromethane	ug/L	50	52.5	105	39-171	
Vinyl chloride	ug/L	50	53.7	107	27-149	
4-Bromofluorobenzene (S)	%.			99	68-124	
Dibromofluoromethane (S)	%.			102	72-126	
Toluene-d8 (S)	%.			102	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 520237 520238

Parameter	Units	2083579003 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	53.0	52.6	106	105	54-137	1	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	50.6	51.3	101	103	15-187	1	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	47.3	46.9	95	94	59-148	1	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	60.5	58.5	121	117	40-117	3	20	M1
1,1-Dichloroethane	ug/L	ND	50	50	55.2	53.9	110	108	59-133	2	20	
1,1-Dichloroethene	ug/L	ND	50	50	55.6	54.4	111	109	44-146	2	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	47.2	47.2	94	94	14-199	0	20	
1,2-Dichloroethane	ug/L	ND	50	50	46.6	46.0	93	92	56-154	1	20	
1,2-Dichloropropane	ug/L	ND	50	50	52.9	52.4	106	105	62-135	1	20	

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QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2083579

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 520237 520238

Parameter	Units	2083579003 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	46.2	47.4	92	95	20-205	2	20	
2-Hexanone	ug/L	ND	50	50	45.5	46.2	91	92	25-189	2	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	44.3	45.2	89	90	23-184	2	20	
Acetone	ug/L	ND	50	50	49.3	51.0	96	99	11-217	3	20	
Acrolein	ug/L	ND	50	50	46.4	45.3	93	91	10-142	2	20	
Acrylonitrile	ug/L	ND	50	50	51.4	50.0	103	100	20-164	3	20	
Benzene	ug/L	ND	50	50	52.3	51.6	105	103	52-141	1	20	
Bromodichloromethane	ug/L	ND	50	50	50.5	49.4	101	99	70-134	2	20	
Bromoform	ug/L	ND	50	50	41.9	41.3	84	83	37-171	1	20	
Bromomethane	ug/L	ND	50	50	45.2	43.5	90	87	34-155	4	20	
Carbon disulfide	ug/L	ND	50	50	61.8	57.6	124	115	28-130	7	20	
Carbon tetrachloride	ug/L	ND	50	50	55.4	54.8	111	110	48-146	1	20	
Chlorobenzene	ug/L	ND	50	50	48.4	47.9	97	96	67-129	1	20	
Chloroethane	ug/L	ND	50	50	49.6	48.9	99	98	12-192	1	20	
Chloroform	ug/L	ND	50	50	50.6	49.2	101	98	66-143	3	20	
Chloromethane	ug/L	ND	50	50	48.1	46.1	96	92	14-155	4	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	51.7	50.8	103	102	56-141	2	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	53.4	53.2	107	106	70-139	0	20	
Dibromochloromethane	ug/L	ND	50	50	45.0	45.4	90	91	50-150	1	20	
Dibromomethane	ug/L	ND	50	50	49.5	49.6	99	99	58-153	0	20	
Enflurane	ug/L	ND	50	50	61.2	60.3	122	121	63-126	2	20	
Ethylbenzene	ug/L	ND	50	50	49.2	48.2	98	96	57-135	2	20	
Haloether 229	ug/L	ND	50	50	57.0	55.8	114	112	56-127	2	20	
Haloether 406	ug/L	ND	50	50	60.7	57.5	121	115	68-128	5	20	
Haloether 421	ug/L	ND	50	50	53.7	53.2	107	106	74-120	1	20	
Haloether 427	ug/L	ND	50	50	54.4	53.3	109	107	78-120	2	20	
Haloether 428	ug/L	ND	50	50	53.2	52.4	106	105	74-125	1	20	
Haloether 508	ug/L	ND	50	50	60.9	60.2	122	120	28-156	1	20	
Haloether 528	ug/L	ND	50	50	47.6	47.2	95	94	45-142	1	20	
Halomar	ug/L	ND	50	50	63.6	63.6	127	127	67-123	0	20	M1
Isoflurane	ug/L	ND	50	50	60.4	58.6	121	117	45-140	3	20	
m&p-Xylene	ug/L	ND	100	100	97.6	96.2	98	96	56-136	1	20	
Methoxyflurane	ug/L	ND	50	50	52.2	52.0	104	104	75-119	1	20	
Methylene Chloride	ug/L	ND	50	50	53.3	51.4	107	103	45-166	4	20	
o-Xylene	ug/L	ND	50	50	47.1	46.6	94	93	57-133	1	20	
Styrene	ug/L	ND	50	50	49.4	48.0	99	96	58-144	3	20	
Tetrachloroethene	ug/L	ND	50	50	50.5	49.7	101	99	48-143	1	20	
Toluene	ug/L	ND	50	50	51.2	50.8	102	102	59-136	1	20	
Total Haloether	ug/L	ND			625	614				2		
trans-1,2-Dichloroethene	ug/L	ND	50	50	56.7	55.2	113	110	57-132	3	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	49.3	49.2	99	98	59-154	0	20	
Trichloroethene	ug/L	ND	50	50	50.5	48.9	101	98	58-140	3	20	
Trichlorofluoromethane	ug/L	ND	50	50	55.6	53.4	111	107	24-175	4	20	
Vinyl chloride	ug/L	ND	50	50	58.7	56.6	117	113	21-150	4	20	
4-Bromofluorobenzene (S)	%.						98	100	68-124			

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QUALITY CONTROL DATA

Project: Fibers Public Supply Well
Pace Project No.: 2083579

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 520237 520238

Parameter	Units	2083579003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						102	101	72-126			
Toluene-d8 (S)	%.						102	102	79-119			

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QUALIFIERS

Project: Fibers Public Supply Well
Pace Project No.: 2083579

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

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fibers Public Supply Well
Pace Project No.: 2083579

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2083579001	**TB-20180905**	EPA 5030B/8260	120720		
2083579002	**INF-20180905**	EPA 5030B/8260	120720		
2083579003	**EFF-20180905**	EPA 5030B/8260	120720		
2083579004	**EFFDUP-20180905**	EPA 5030B/8260	120720		

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CHAIN-OF-CUSTODY / Analytical R

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

WO# : 2083579

2083579

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:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Fibers Public Supply Well(PO#CO001911.000)	Pace Project Manager:	craig.mccollum@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	1037 L1

Regulatory Agency	
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-20180905	WT	G			09/05/18	1400		2				2							X	
2	INF-20180905	WT	G			09/05/18	0914		3				3						X		
3	EFF-20180905	WT	G			09/05/18	0930		3				3						X		
4	EFFDUP-20180905	WT	G			09/05/18	0930		3				3						X		
5	EFFMS-20180905	WT	G			09/05/18	0930		3				3						X		
6	EFFMSD-20180905	WT	G			09/05/18	0930		3				3						X		
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colom / Arcadis	09/05/18	1526	[illegible] FEDEX	9/5/18	1526	4°	y	N	y
	[illegible] FEDEX	9/5/18	1700	[illegible] FEDEX	9/5/18	1700				
	Fed Ex	9/7/18	1020	[illegible]	9/7/18	1020	1.1	y	y	y
							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: Andrés Colom

SIGNATURE of SAMPLER: [illegible]

DATE Signed: 9-5-18

Pace Analytical

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

Sample Condition Upon Receipt

Fibers Public Supply Well

Project #: 20

Courier: [ ] Pace Courier [ ] Hired Courier [ ] Fed X [ ] UPS [ ] DHL [ ] USPS [✓] Customer [ ] Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** [ ] Yes [ ] No

Therometer Used: [✓] Therm Fisher IR 4 [ ] Therm Fisher IR 6 [ ] Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9/5/18 PLP/PACE

Temp must be measured from Temperature blank when present

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

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Pace Analytical

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

Sample Condition Upon R

Pro

WO# : 2083579

PM: CJM Due Date: 09/21/18
CLIENT: 20-CHEV-ARC

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

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: 9/7/18 JMS

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: _____

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Attachment 3
Data Review Report #30761R

ARCADIS Design & Consultancy for natural and built assets

Fibers Group

DATA REVIEW

GUAYAMA, PUERTO RICO

Volatile Analyses

SDG #259943 (WO 655-04-26)

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

Report #30761R
Review Level: Tier II
Project: CO001911.0007.1805A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #259943 (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	2928657	Water	09/05/2018		X				
EFFLUENT – DUPLICATE	2928658	Water	09/05/2018	EFFLUENT	X				
INFLUENT	2928661	Water	09/05/2018		X				
TRIP BLANK	2928662	Water	09/05/2018		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.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

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	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

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: October 3, 2018

PEER REVIEW: Jeffrey L. Davin

DATE: October 4, 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

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ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928657**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				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	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

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

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

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

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Laboratory Test Report

Sample Number:	**2928657**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				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
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	R ~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~09/19/2018~~	~~22:07~~	~~NIVA~~	~~09/19/2018~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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EPA ID PR00014

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GUAYNABO, PR 00968

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

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Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				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
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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

Attn: MR. ELVIN VARELA
Source: **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:	**2928657**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
	Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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Project Name: INTERNO
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eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

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Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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

PRDOH Certified
EPA ID PR00014

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:	**2928657**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 4[illegible]
Certified by Laboratory Director

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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:	**2928658**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018	
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON	
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA	
Folder Number:	259943				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	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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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:	**2928658**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	R ~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~09/19/2018~~	~~22:33~~	~~NIVA~~	~~09/19/2018~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac
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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-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:	**2928658**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

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

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928658**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

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Client Ref. #: N/A

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ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928658**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	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
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ACCREDITED IN ACCORDANCE WITH nela

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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-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:	**2928658**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Colegio de Químicos de Puerto Rico
Miembro Asociado de Pleno Derecho
LICENCIA NUM. 4535

Collection Services Manager

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

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

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928661**	Collected Date & Time:	**09/05/2018**	09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				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	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

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

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928661**	Collected Date & Time:	**09/05/2018** 09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	R ~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~09/19/2018~~	~~21:41~~	~~NIVA~~	~~09/19/2018~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

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

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928661**	Collected Date & Time:	**09/05/2018**	09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits			Analysis			Prep Method		
					MDL	MRL	MCL	Date	Time	By	Date	By	Method
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

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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:	**2928661**	Collected Date & Time:	**09/05/2018**	09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	3.30	µg/L	--	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928661**	Collected Date & Time:	**09/05/2018** 09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	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
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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:	**2928661**	Collected Date & Time:	**09/05/2018**	09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Bajo Vigente Asociado de Puerto Rico
LICENCIA NUM. 455

Certificado por Delegación Decreto

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GUAYNABO, PR 00968

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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#48 CITY VIEW PLAZA 1, SUITE 401
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GUAYNABO, PR 00968

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	R ~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~09/19/2018~~	~~21:15~~	~~NIVA~~	~~09/19/2018~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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#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:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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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:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
	Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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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:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits			Analysis			Prep Method		
					MDL	MRL	MCL	Date	Time	By	Date	By	Method
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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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: **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:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Laboratorio Libre Asociado de Puerto Rico
LICENCIA NUM. 4533
Laboratorio 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 the 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 E87763 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

2018-14470

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 #: 259943 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2928657-1 MATRIX: GROUND WATER SOURCE: EFFLUENT, GUAYAMA, PR	DATE: 09/05/18 TIME: 0936 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2928658-1 MATRIX: GROUND WATER DUP SOURCE: EFFLUENT-DUPLICATE, GUAYAMA, PR	DATE: 09/05/18 TIME: 0936 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2928659-1 MATRIX: GROUND WATER MS SOURCE: EFFLUENT-MS, GUAYAMA, PR	DATE: 09/05/18 TIME: 0936 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2928660-1 MATRIX: GROUND WATER MSD SOURCE: EFFLUENT-MSD, GUAYAMA, PR	DATE: 09/05/18 TIME: 0936 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:	Andrés Colón	9-5-18	varias
Fixed in field by:	Andrés Colón	9-5-18	varias
Authorized by:	N	N	N
Received by EQLF:	A	A	A
Released to EQLL by:	AM Andrés Colón	9-5-18	1500
Received by EQLL:		09.05.18	1500

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QC Level II Report
For September 24 2018

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

Arrival Temperature: 2.5°C Signature:

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

2018-14470

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. #: 307 | PWSID #: | FOLDER #: 259943 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2928661-1 MATRIX: GROUND WATER SOURCE: INFLUENT, GUAYAMA, PR	DATE: 09-05-18 TIME: 0915 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2928662-1 MATRIX: DI WATER SOURCE: TRIP BLANK, GUAYAMA, PR	DATE: 09-05-18 TIME: 0700 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 A		
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE			

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Andrés Colón	9-5-18	15 varias
Fixed in field by:	Andrés Colón	9-5-18	varias
Authorized by:	N	N	N
Received by EQLF:	A	A	A
Released to EQLL by:	Andrés Colón	9-5-18	1500
Received by EQLL:		09-05-18	1500

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QL Level II Report

For September, 24 2018

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

Arrival Temperature: 2.5°C Signature:

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

Attachment 4
EQLAB Laboratory Analytical Report #259943 (WO 655-04-26)

Quality Assurance Report

Prepared for:
ARCADIS CARIBE, PSC

Facility:
GUAYAMA PROJECT

Project
INTERNO

Samples Received:
September 05, 2018

Folder Number:
259943

W.O. #:
655-04-26

ENVIRONMENTAL QUALITY LABORATORIES, INC.

October 1, 2018

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

Attn: Mr. ELVIN VARELA

Re: Quality Assurance Report for the samples received on September 05, 2018

Dear Mr. Varela

Enclosed you will find the Quality Assurance Report for the samples received on September 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

SECTION 1
QUALITY ASSURANCE NARRATIVE

QUALITY ASSURANCE NARRATIVE

OVERVIEW

On September 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 September 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
2928657	EFFLUENT	GROUND WATER
2928658	EFFLUENT – DUPLICATE	GROUND WATER
2928659	EFFLUENT – MS	GROUND WATER
2928660	EFFLUENT – MSD	GROUND WATER
2928661	INFLUENT	GROUND WATER
2928662	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.

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 Benitez

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

October 1, 2018
Date

Janet Gómez Rosario

Checked by:
Lcda. Janet Gómez
QA/QC Supervisor

October 1, 2018
Date

SECTION 2
LABORATORY TEST REPORT

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

September 27, 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 Number : 2928657 to 2928662 have been reviewed by me and are correct as presented herein.

Lcda. Sonia Pichardo Rodriguez
Certified by Laboratory Director

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIADO
A 1689653

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:	**2928657**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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

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

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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:	**2928657**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018	
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON	
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA	
Folder Number:	259943				Proposal Number:	20805 - 1	

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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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

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Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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PRDOH Certified
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To: ARCADIS CARIBE, PSC
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Source: **EFFLUENT**
GUAYAMA, PR

Project Name: INTERNO
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eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928657**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nelac
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Refer to eqlab certification number E87783 at www.eqlab.com.

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:	**2928657**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

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To: ARCADIS CARIBE, PSC
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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:	**2928657**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:07	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Eduardo Abril Asociado de Puerto Rico
LICENCIA NUM. 4538

Certified by Laboratory Director

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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:	**2928658**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				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	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

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ROAD 165, KM 1.2
GUAYNABO, PR 00968

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

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

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928658**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

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GUAYAMA, PR

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

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Laboratory Test Report

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Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

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Project Name: INTERNO
Facility: GUAYAMA PROJECT
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Client Ref. #: N/A

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Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

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

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

PRDOH Certified
EPA ID PR00014

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

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928658**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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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:	**2928658**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	22:33	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Colegio de Químicos de Puerto Rico
LICENCIA NUM. 45

Coordinador Laboratorio Director

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **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:	2928659	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018	
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON	
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA	
Folder Number:	259943				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	105	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	102	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	107	%	--	2.0	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	113	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	103	%	--	1.4	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	95.6	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	93.6	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	102	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	102	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	102	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nela

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PRDOH Certified
EPA ID PR00014

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

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928659**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,2-Dichloropropane	EPA 8260B	106	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	102	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	102	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	105	%	--	2.0	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	97.2	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	99.6	%	--	1.5	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	121	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	97.6	%	--	6.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	27.6	%	--	6.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	99.4	%	--	1.4	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	99.4	%	--	6.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	96.4	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	98.3	%	--	1.4	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	101	%	--	6.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B

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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-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:	**2928659**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Acetone	EPA 8260B	104	%	--	6.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	115	%	--	25.0	75.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	99.7	%	--	6.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	104	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	102	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	104	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	117	%	--	2.0	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	113	%	--	7.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	104	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	116	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B

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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:	**2928659**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Chloromethane	EPA 8260B	108	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	104	%	--	1.5	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	111	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	97.9	%	--	30.0	75.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Ethylbenzene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	93.3	%	--	1.4	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Iodomethane	EPA 8260B	111	%	--	8.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	103	%	--	2.0	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Naphthalene	EPA 8260B	98.2	%	--	2.0	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Styrene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	99.8	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	106	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	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

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

PRDOH Certified
EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-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:	**2928659**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Toluene	EPA 8260B	104	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	114	%	--	1.5	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	98.0	%	--	6.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	114	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	101	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	81.8	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	103	%	--	1.8	6.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	93.7	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	101	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	100	%	--	1.0	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	106	%	--	2.3	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	100	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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ACCREDITED IN ACCORDANCE WITH nela
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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-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:	**2928659**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018	
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON	
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA	
Folder Number:	259943				Proposal Number:	20805 - 1	

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
trans-1,2-Dichloroethene	EPA 8260B	112	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	104	%	--	1.2	3.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	111	%	--	6.0	15.0	--	09/19/2018	22:59	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 4535

Sonia Pichardo, Laboratory Director

PRDOH Certified
EPA ID PR00014

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
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ACCREDITED IN ACCORDANCE WITH nelac

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

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928660**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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	106	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	108	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	109	%	--	2.0	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	110	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	108	%	--	1.4	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	104	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	104	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	106	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	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
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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **EFFLUENT-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:	**2928660**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,2-Dichloropropane	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	106	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	103	%	--	2.0	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	102	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	106	%	--	1.5	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	119	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	97.5	%	--	6.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	27.5	%	--	6.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	104	%	--	1.4	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	101	%	--	6.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	103	%	--	1.4	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	101	%	--	6.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B

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MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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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-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:	**2928660**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Acetone	EPA 8260B	100	%	--	6.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	105	%	--	25.0	75.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	103	%	--	6.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	108	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	106	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	96.8	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	117	%	--	2.0	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	107	%	--	7.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	108	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	119	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	101	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B

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

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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:	**2928660**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Chloromethane	EPA 8260B	116	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	104	%	--	1.5	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	123	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	88.5	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	90.5	%	--	30.0	75.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Ethylbenzene	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	104	%	--	1.4	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Iodomethane	EPA 8260B	101	%	--	8.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	108	%	--	2.0	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Naphthalene	EPA 8260B	107	%	--	2.0	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Styrene	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	117	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B

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

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PRDOH Certified
EPA ID PR00014

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

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928660**	Collected Date & Time:	**09/05/2018** 09:36	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
Toluene	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	105	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	116	%	--	1.5	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	110	%	--	6.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	121	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	122	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	84.5	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	107	%	--	1.8	6.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	103	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	105	%	--	1.0	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	108	%	--	2.3	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	106	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	108	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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

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-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:	**2928660**	Collected Date & Time:	**09/05/2018**	09:36	Date of Report:	09/27/2018	
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON	
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA	
Folder Number:	259943				Proposal Number:	20805 - 1	

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
trans-1,2-Dichloroethene	EPA 8260B	107	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	104	%	--	1.2	3.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	117	%	--	6.0	15.0	--	09/19/2018	23:25	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 4532

Certified by: Laboratory Director

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

Attn: MR. ELVIN VARELA
Source: **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:	**2928661**	Collected Date & Time:	**09/05/2018** 09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

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

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

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

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928661**	Collected Date & Time:	**09/05/2018** 09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

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

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928661**	Collected Date & Time:	**09/05/2018** 09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

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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:	**2928661**	Collected Date & Time:	**09/05/2018** 09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - I

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	3.30	µg/L	--	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

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

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

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928661**	Collected Date & Time:	**09/05/2018** 09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
MO = Monitoring Only MRL = Minimum Reporting Level PTRL = Pattern Recognition Level. All results are calculated on a wet weight basis unless otherwise stated. All results relate only to this sample.
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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:	**2928661**	Collected Date & Time:	**09/05/2018**	09:15	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA
Folder Number:	259943				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
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:41	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 453

Certified Laboratory Director

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PRDOH Certified
EPA ID PR00014

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

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:	**2928662**	Collected Date & Time:	**09/05/2018**	07:00	Date of Report:	09/27/2018	
Work Order:	655-04-26	Received Date & Time:	09/05/2018	15:00	Collected By:	ACOLON	
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C		Eqlab Rep.:	EGARCIA	
Folder Number:	259943				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	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nela

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

PRDOH Certified
EPA ID PR00014

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

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

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

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nela
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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: **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:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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

Attn: MR. ELVIN VARELA
Source: **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:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

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To: ARCADIS CARIBE, PSC
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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:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			Proposal Number:	20805 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

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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: **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:	**2928662**	Collected Date & Time:	**09/05/2018** 07:00	Date of Report:	09/27/2018
Work Order:	655-04-26	Received Date & Time:	09/05/2018 15:00	Collected By:	ACOLON
Delivery Slip:	2018-14470	Temperature at Arrival:	2.5 °C	Eqlab Rep.:	EGARCIA
Folder Number:	259943			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
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	09/19/2018	21:15	NIVA	09/19/2018	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Colegio de Químicos de Puerto Rico
LICENCIA NUM. 4530

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 the sample.
+ = Parameter is not accredited under EQLab's NELAP Certification

ACCREDITED IN ACCORDANCE WITH nelac

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

PRDOH Certified
EPA ID PR00014

SECTION 3
ANALYTICAL TEST RESULTS
QUALITY ASSURANCE REPORT

Analytical Test Results Quality Assurance Report

W. O. # 655-04-26 Date: October 1, 2018

1.0 Samples Analyzed:

EQL SAMPLE #	DATE COLLECTED	DATE RECEIVED
2928657, 2928658, 2928659, 2928660, 2928661, 2928662	September 05, 2018	September 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	September 19, 2018	N. Villanueva

Lcdo Marcelino Benítez
QA/QIC Coordinador Licensed

QUALITY CONTROL SUMMARY

EPA 8260B VOC - Run #203012

2942268 - LRB
Reference Sample Number is: 2928657

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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	NIVA
4-Bromofluorobenzene-SURR	18.3	18.3	--	µg/L	N/A	N/A	20.0	91.6	79	121	N/A	N/A	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	NIVA
Bromoform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	NIVA
Dibromofluoromethane-SURR	20.7	21.9	--	µg/L	N/A	N/A	20.0	110	83	120	N/A	N/A	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	NIVA
Toluene-d8-SURR	19.1	18.5	--	µg/L	N/A	N/A	20.0	92.5	80	116	N/A	N/A	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	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	09/19/18	17:47	NIVA

2942269 - ICV
Reference Sample Number is: 2928657

							Accuracy				Precision		Analysis		
									Acceptance Criteria			Acceptance Criteria			
Analyte Name	**Reference Result**	**QC Result**	**DQ**	**Units**	**MDL**	**MRL**	**A/A**	**Rec. %**	**Low Limit**	**High Limit**	**RPD**	**High Limit**	**Date**	**Time**	**By**
1,1,1,2-Tetrachloroethane	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,1,1-Trichloroethane	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,1,2,2-Tetrachloroethane	N.D	21.5	--	µg/L	1.2	3.0	20.0	107	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,1,2-Trichloroethane	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,1-Dichloroethane	N.D	20.8	--	µg/L	2.0	3.0	20.0	104	80	120	N/A	N/A	09/19/18	20:49	NIVA

QUALITY CONTROL SUMMARY

1,1-Dichloroethene	N.D	19.2	--	µg/L	1.2	3.0	20.0	95.9	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,1-Dichloropropene	N.D	20.1	--	µg/L	1.4	3.0	20.0	100	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,2,3-Trichlorobenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.3	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,2,3-Trichloropropane	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,2,4-Trichlorobenzene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.5	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,2,4-Trimethylbenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,2-Dibromo-3-chloropropane	N.D	22.3	--	µg/L	1.2	3.0	20.0	112	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,2-Dibromoethane	N.D	21.1	--	µg/L	1.2	3.0	20.0	105	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,2-Dichloroethane	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,2-Dichloropropane	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,3,5-Trimethylbenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.6	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,3-Dichlorobenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.5	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,3-Dichloropropane	N.D	20.5	--	µg/L	2.0	3.0	20.0	103	80	120	N/A	N/A	09/19/18	20:49	NIVA
1,4-Dichlorobenzene	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	80	120	N/A	N/A	09/19/18	20:49	NIVA
1-Chlorohexane	N.D	20.0	--	µg/L	1.5	3.0	20.0	100	80	120	N/A	N/A	09/19/18	20:49	NIVA
2,2-Dichloropropane	N.D	24.0	--	µg/L	1.2	3.0	20.0	120	80	120	N/A	N/A	09/19/18	20:49	NIVA
2-Butanone	N.D	112.8	--	µg/L	6.0	15.0	100	113	80	120	N/A	N/A	09/19/18	20:49	NIVA
2-Chloroethyl vinyl ether	N.D	108.9	--	µg/L	6.0	15.0	100	109	80	120	N/A	N/A	09/19/18	20:49	NIVA
2-Chlorotoluene	N.D	19.5	--	µg/L	1.4	3.0	20.0	97.5	80	120	N/A	N/A	09/19/18	20:49	NIVA
2-Hexanone	N.D	113.8	--	µg/L	6.0	15.0	100	114	80	120	N/A	N/A	09/19/18	20:49	NIVA
4-Bromofluorobenzene-SURR	18.3	20.0	--	µg/L	N/A	N/A	20.0	99.8	79	121	N/A	N/A	09/19/18	20:49	NIVA
4-Chlorotoluene	N.D	18.9	--	µg/L	1.2	3.0	20.0	94.3	80	120	N/A	N/A	09/19/18	20:49	NIVA
4-Isopropyltoluene	N.D	20.0	--	µg/L	1.4	3.0	20.0	99.8	80	120	N/A	N/A	09/19/18	20:49	NIVA
4-Methyl-2-pentanone	N.D	110.6	--	µg/L	6.0	15.0	100	111	80	120	N/A	N/A	09/19/18	20:49	NIVA
Acetone	N.D	108.0	--	µg/L	6.0	15.0	100	108	80	120	N/A	N/A	09/19/18	20:49	NIVA
Acrolein	N.D	574.2	--	µg/L	25.0	75.0	500	115	80	120	N/A	N/A	09/19/18	20:49	NIVA
Acrylonitrile	N.D	112.2	--	µg/L	6.0	15.0	100	112	80	120	N/A	N/A	09/19/18	20:49	NIVA
Benzene	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	80	120	N/A	N/A	09/19/18	20:49	NIVA
Bromobenzene	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	80	120	N/A	N/A	09/19/18	20:49	NIVA
Bromochloromethane	N.D	20.5	--	µg/L	1.2	3.0	20.0	103	80	120	N/A	N/A	09/19/18	20:49	NIVA
Bromodichloromethane	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA

QUALITY CONTROL SUMMARY

Bromoform	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	80	120	N/A	N/A	09/19/18	20:49	NIVA
Bromomethane	N.D	19.6	--	µg/L	2.0	3.0	20.0	98.0	80	120	N/A	N/A	09/19/18	20:49	NIVA
Carbon disulfide	N.D	94.0	--	µg/L	7.0	15.0	100	94.0	80	120	N/A	N/A	09/19/18	20:49	NIVA
Carbon tetrachloride	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.0	80	120	N/A	N/A	09/19/18	20:49	NIVA
Chlorobenzene	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA
Chloroethane	N.D	21.1	--	µg/L	1.2	3.0	20.0	106	80	120	N/A	N/A	09/19/18	20:49	NIVA
Chloroform	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	80	120	N/A	N/A	09/19/18	20:49	NIVA
Chloromethane	N.D	18.4	--	µg/L	1.2	3.0	20.0	91.9	80	120	N/A	N/A	09/19/18	20:49	NIVA
Dibromochloromethane	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	80	120	N/A	N/A	09/19/18	20:49	NIVA
Dibromofluoromethane-SURR	20.7	20.2	--	µg/L	N/A	N/A	20.0	101	83	120	N/A	N/A	09/19/18	20:49	NIVA
Dibromomethane	N.D	20.4	--	µg/L	1.5	3.0	20.0	102	80	120	N/A	N/A	09/19/18	20:49	NIVA
Dichlorodifluoromethane	N.D	17.7	--	µg/L	1.2	3.0	20.0	88.4	80	120	N/A	N/A	09/19/18	20:49	NIVA
Dichloromethane	N.D	19.2	--	µg/L	1.2	3.0	20.0	96.1	80	120	N/A	N/A	09/19/18	20:49	NIVA
Epichlorohydrin	N.D	593.8	--	µg/L	30.0	75.0	500	119	80	120	N/A	N/A	09/19/18	20:49	NIVA
Ethylbenzene	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA
Hexachlorobutadiene	N.D	19.0	--	µg/L	1.4	3.0	20.0	95.1	80	120	N/A	N/A	09/19/18	20:49	NIVA
Iodomethane	N.D	95.1	--	µg/L	8.0	15.0	100	95.1	80	120	N/A	N/A	09/19/18	20:49	NIVA
Isopropylbenzene	N.D	19.9	--	µg/L	2.0	3.0	20.0	99.7	80	120	N/A	N/A	09/19/18	20:49	NIVA
Naphthalene	N.D	20.8	--	µg/L	2.0	3.0	20.0	104	80	120	N/A	N/A	09/19/18	20:49	NIVA
Styrene	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	80	120	N/A	N/A	09/19/18	20:49	NIVA
Tetrachloroethene	N.D	20.0	--	µg/L	1.2	3.0	20.0	99.9	80	120	N/A	N/A	09/19/18	20:49	NIVA
Tetrahydrofuran	N.D	21.7	--	µg/L	1.2	3.0	20.0	108	80	120	N/A	N/A	09/19/18	20:49	NIVA
Toluene	N.D	20.3	--	µg/L	1.2	3.0	20.0	102	80	120	N/A	N/A	09/19/18	20:49	NIVA
Toluene-d8-SURR	19.1	20.2	--	µg/L	N/A	N/A	20.0	101	80	116	N/A	N/A	09/19/18	20:49	NIVA
Trichloroethene	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA
Trichlorofluoromethane	N.D	18.7	--	µg/L	1.5	3.0	20.0	93.6	80	120	N/A	N/A	09/19/18	20:49	NIVA
Vinyl Acetate	N.D	113.2	--	µg/L	6.0	15.0	100	113	80	120	N/A	N/A	09/19/18	20:49	NIVA
Vinyl chloride	N.D	17.9	--	µg/L	1.2	3.0	20.0	89.6	80	120	N/A	N/A	09/19/18	20:49	NIVA
cis-1,2-Dichloroethene	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA
cis-1,3-Dichloropropene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	80	120	N/A	N/A	09/19/18	20:49	NIVA
m,p-Xylene	N.D	40.4	--	µg/L	1.8	6.0	40.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA

QUALITY CONTROL SUMMARY

n-Butylbenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	98.9	80	120	N/A	N/A	09/19/18	20:49	NIVA
n-Propylbenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.7	80	120	N/A	N/A	09/19/18	20:49	NIVA
o-Dichlorobenzene	N.D	20.1	--	µg/L	1.0	3.0	20.0	101	80	120	N/A	N/A	09/19/18	20:49	NIVA
o-Xylene	N.D	20.0	--	µg/L	2.3	3.0	20.0	100	80	120	N/A	N/A	09/19/18	20:49	NIVA
sec-Butylbenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.2	80	120	N/A	N/A	09/19/18	20:49	NIVA
tert-Butylbenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.3	80	120	N/A	N/A	09/19/18	20:49	NIVA
trans-1,2-Dichloroethene	N.D	18.6	--	µg/L	1.2	3.0	20.0	93.2	80	120	N/A	N/A	09/19/18	20:49	NIVA
trans-1,3-Dichloropropene	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	80	120	N/A	N/A	09/19/18	20:49	NIVA
trans-1,4-Dichloro-2-butene	N.D	96.0	--	µg/L	6.0	15.0	100	96.0	80	120	N/A	N/A	09/19/18	20:49	NIVA

2928658 - DUP
Reference Sample Number is: 2928657

							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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	NIVA
4-Bromofluorobenzene-SURR	18.3	18.7	--	µg/L	N/A	N/A	20.00	93.4	71	125	N/A	N/A	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	NIVA
Acetone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Acrolein	N.D	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Acrylonitrile	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Benzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Bromobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Bromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Bromodichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Bromoform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Bromomethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	NIVA
Chlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Chloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Chloroform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Chloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Dibromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Dibromofluoromethane-SURR	20.7	20.7	--	µg/L	N/A	N/A	20.00	103	76	123	N/A	N/A	09/19/18	22:33	NIVA
Dibromomethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Dichlorodifluoromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	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	09/19/18	22:33	NIVA
Epichlorohydrin	N.D	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Ethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Hexachlorobutadiene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Iodomethane	N.D	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Isopropylbenzene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Naphthalene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Styrene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Tetrachloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Tetrahydrofuran	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Toluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Toluene-d8-SURR	19.1	19.0	--	µg/L	N/A	N/A	20.00	95.0	77	122	N/A	N/A	09/19/18	22:33	NIVA
Trichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	NIVA
Trichlorofluoromethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	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	09/19/18	22:33	NIVA

QUALITY CONTROL SUMMARY

2928659 - MS
Reference Sample Number is: 2928657

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	21.0	--	µg/L	1.2	3.0	20.0	105	67	124	N/A	N/A	09/19/18	22:59	NIVA
1,1,1-Trichloroethane	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	69	140	N/A	N/A	09/19/18	22:59	NIVA
1,1,2,2-Tetrachloroethane	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	64	122	N/A	N/A	09/19/18	22:59	NIVA
1,1,2-Trichloroethane	N.D	20.5	--	µg/L	1.2	3.0	20.0	102	78	125	N/A	N/A	09/19/18	22:59	NIVA
1,1-Dichloroethane	N.D	21.3	--	µg/L	2.0	3.0	20.0	107	56	141	N/A	N/A	09/19/18	22:59	NIVA
1,1-Dichloroethene	N.D	22.6	--	µg/L	1.2	3.0	20.0	113	44	155	N/A	N/A	09/19/18	22:59	NIVA
1,1-Dichloropropene	N.D	20.6	--	µg/L	1.4	3.0	20.0	103	83	110	N/A	N/A	09/19/18	22:59	NIVA
1,2,3-Trichlorobenzene	N.D	19.1	--	µg/L	1.2	3.0	20.0	95.6	71	119	N/A	N/A	09/19/18	22:59	NIVA
1,2,3-Trichloropropane	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	47	131	N/A	N/A	09/19/18	22:59	NIVA
1,2,4-Trichlorobenzene	N.D	18.7	--	µg/L	1.2	3.0	20.0	93.6	53	139	N/A	N/A	09/19/18	22:59	NIVA
1,2,4-Trimethylbenzene	N.D	20.3	--	µg/L	1.2	3.0	20.0	102	52	141	N/A	N/A	09/19/18	22:59	NIVA
1,2-Dibromo-3-chloropropane	N.D	20.5	--	µg/L	1.2	3.0	20.0	102	67	140	N/A	N/A	09/19/18	22:59	NIVA
1,2-Dibromoethane	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	66	140	N/A	N/A	09/19/18	22:59	NIVA
1,2-Dichloroethane	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	60	139	N/A	N/A	09/19/18	22:59	NIVA
1,2-Dichloropropane	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	71	121	N/A	N/A	09/19/18	22:59	NIVA
1,3,5-Trimethylbenzene	N.D	20.5	--	µg/L	1.2	3.0	20.0	102	61	125	N/A	N/A	09/19/18	22:59	NIVA
1,3-Dichlorobenzene	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	61	129	N/A	N/A	09/19/18	22:59	NIVA
1,3-Dichloropropane	N.D	20.9	--	µg/L	2.0	3.0	20.0	105	69	124	N/A	N/A	09/19/18	22:59	NIVA
1,4-Dichlorobenzene	N.D	19.4	--	µg/L	1.2	3.0	20.0	97.2	73	122	N/A	N/A	09/19/18	22:59	NIVA
1-Chlorohexane	N.D	19.9	--	µg/L	1.5	3.0	20.0	99.6	48	136	N/A	N/A	09/19/18	22:59	NIVA
2,2-Dichloropropane	N.D	24.3	--	µg/L	1.2	3.0	20.0	121	13	157	N/A	N/A	09/19/18	22:59	NIVA
2-Butanone	N.D	97.6	--	µg/L	6.0	15.0	100	97.6	43	151	N/A	N/A	09/19/18	22:59	NIVA
2-Chloroethyl vinyl ether	N.D	27.6	--	µg/L	6.0	15.0	100	27.6	10	178	N/A	N/A	09/19/18	22:59	NIVA
2-Chlorotoluene	N.D	19.9	--	µg/L	1.4	3.0	20.0	99.4	64	139	N/A	N/A	09/19/18	22:59	NIVA
2-Hexanone	N.D	99.4	--	µg/L	6.0	15.0	100	99.4	53	147	N/A	N/A	09/19/18	22:59	NIVA
4-Bromofluorobenzene-SURR	18.3	20.3	--	µg/L	N/A	N/A	20.00	102	71	125	N/A	N/A	09/19/18	22:59	NIVA
4-Chlorotoluene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.4	64	128	N/A	N/A	09/19/18	22:59	NIVA

QUALITY CONTROL SUMMARY

4-Isopropyltoluene	N.D	19.7	--	µg/L	1.4	3.0	20.0	98.3	66	129	N/A	N/A	09/19/18	22:59	NIVA
4-Methyl-2-pentanone	N.D	100.8	--	µg/L	6.0	15.0	100	101	57	143	N/A	N/A	09/19/18	22:59	NIVA
Acetone	N.D	103.7	--	µg/L	6.0	15.0	100	104	33	154	N/A	N/A	09/19/18	22:59	NIVA
Acrolein	N.D	573.1	--	µg/L	25.0	75.0	500	115	47	157	N/A	N/A	09/19/18	22:59	NIVA
Acrylonitrile	N.D	99.7	--	µg/L	6.0	15.0	100	99.7	34	160	N/A	N/A	09/19/18	22:59	NIVA
Benzene	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	65	139	N/A	N/A	09/19/18	22:59	NIVA
Bromobenzene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	64	120	N/A	N/A	09/19/18	22:59	NIVA
Bromochloromethane	N.D	20.5	--	µg/L	1.2	3.0	20.0	102	49	150	N/A	N/A	09/19/18	22:59	NIVA
Bromodichloromethane	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	64	141	N/A	N/A	09/19/18	22:59	NIVA
Bromoform	N.D	20.5	--	µg/L	1.2	3.0	20.0	103	61	132	N/A	N/A	09/19/18	22:59	NIVA
Bromomethane	N.D	23.3	--	µg/L	2.0	3.0	20.0	117	35	163	N/A	N/A	09/19/18	22:59	NIVA
Carbon disulfide	N.D	112.9	--	µg/L	7.0	15.0	100	113	48	158	N/A	N/A	09/19/18	22:59	NIVA
Carbon tetrachloride	N.D	21.1	--	µg/L	1.2	3.0	20.0	105	73	137	N/A	N/A	09/19/18	22:59	NIVA
Chlorobenzene	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	68	121	N/A	N/A	09/19/18	22:59	NIVA
Chloroethane	N.D	23.1	--	µg/L	1.2	3.0	20.0	116	50	142	N/A	N/A	09/19/18	22:59	NIVA
Chloroform	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	59	140	N/A	N/A	09/19/18	22:59	NIVA
Chloromethane	N.D	21.7	--	µg/L	1.2	3.0	20.0	108	42	139	N/A	N/A	09/19/18	22:59	NIVA
Dibromochloromethane	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	67	137	N/A	N/A	09/19/18	22:59	NIVA
Dibromofluoromethane-SURR	20.7	19.8	--	µg/L	N/A	N/A	20.00	98.8	76	123	N/A	N/A	09/19/18	22:59	NIVA
Dibromomethane	N.D	20.9	--	µg/L	1.5	3.0	20.0	104	72	139	N/A	N/A	09/19/18	22:59	NIVA
Dichlorodifluoromethane	N.D	22.1	--	µg/L	1.2	3.0	20.0	111	42	157	N/A	N/A	09/19/18	22:59	NIVA
Dichloromethane	N.D	20.7	--	µg/L	1.2	3.0	20.0	103	56	135	N/A	N/A	09/19/18	22:59	NIVA
Epichlorohydrin	N.D	489.5	--	µg/L	30.0	75.0	500	97.9	37	129	N/A	N/A	09/19/18	22:59	NIVA
Ethylbenzene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	58	136	N/A	N/A	09/19/18	22:59	NIVA
Hexachlorobutadiene	N.D	18.7	--	µg/L	1.4	3.0	20.0	93.3	62	124	N/A	N/A	09/19/18	22:59	NIVA
Iodomethane	N.D	110.5	--	µg/L	8.0	15.0	100	111	45	148	N/A	N/A	09/19/18	22:59	NIVA
Isopropylbenzene	N.D	20.6	--	µg/L	2.0	3.0	20.0	103	64	122	N/A	N/A	09/19/18	22:59	NIVA
Naphthalene	N.D	19.6	--	µg/L	2.0	3.0	20.0	98.2	66	135	N/A	N/A	09/19/18	22:59	NIVA
Styrene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	65	123	N/A	N/A	09/19/18	22:59	NIVA
Tetrachloroethene	N.D	20.0	--	µg/L	1.2	3.0	20.0	99.8	64	138	N/A	N/A	09/19/18	22:59	NIVA
Tetrahydrofuran	N.D	21.3	--	µg/L	1.2	3.0	20.0	106	51	147	N/A	N/A	09/19/18	22:59	NIVA

QUALITY CONTROL SUMMARY

Toluene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	65	140	N/A	N/A	09/19/18	22:59	NIVA
Toluene-d8-SURR	19.1	19.7	--	µg/L	N/A	N/A	20.00	98.5	77	122	N/A	N/A	09/19/18	22:59	NIVA
Trichloroethene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	76	126	N/A	N/A	09/19/18	22:59	NIVA
Trichlorofluoromethane	N.D	22.9	--	µg/L	1.5	3.0	20.0	114	60	144	N/A	N/A	09/19/18	22:59	NIVA
Vinyl Acetate	N.D	98.0	--	µg/L	6.0	15.0	100	98.0	52	141	N/A	N/A	09/19/18	22:59	NIVA
Vinyl chloride	N.D	22.7	--	µg/L	1.2	3.0	20.0	114	39	151	N/A	N/A	09/19/18	22:59	NIVA
cis-1,2-Dichloroethene	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	66	127	N/A	N/A	09/19/18	22:59	NIVA
cis-1,3-Dichloropropene	N.D	16.4	--	µg/L	1.2	3.0	20.0	81.8	57	131	N/A	N/A	09/19/18	22:59	NIVA
m,p-Xylene	N.D	41.3	--	µg/L	1.8	6.0	40.0	103	56	145	N/A	N/A	09/19/18	22:59	NIVA
n-Butylbenzene	N.D	18.7	--	µg/L	1.2	3.0	20.0	93.7	72	114	N/A	N/A	09/19/18	22:59	NIVA
n-Propylbenzene	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	61	123	N/A	N/A	09/19/18	22:59	NIVA
o-Dichlorobenzene	N.D	20.1	--	µg/L	1.0	3.0	20.0	100	73	124	N/A	N/A	09/19/18	22:59	NIVA
o-Xylene	N.D	21.2	--	µg/L	2.3	3.0	20.0	106	54	143	N/A	N/A	09/19/18	22:59	NIVA
sec-Butylbenzene	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	64	114	N/A	N/A	09/19/18	22:59	NIVA
tert-Butylbenzene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	68	113	N/A	N/A	09/19/18	22:59	NIVA
trans-1,2-Dichloroethene	N.D	22.4	--	µg/L	1.2	3.0	20.0	112	56	146	N/A	N/A	09/19/18	22:59	NIVA
trans-1,3-Dichloropropene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	59	130	N/A	N/A	09/19/18	22:59	NIVA
trans-1,4-Dichloro-2-butene	N.D	111.1	--	µg/L	6.0	15.0	100	111	47	129	N/A	N/A	09/19/18	22:59	NIVA

2928660 - MSD
Reference Sample Number is: 2928657

							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	21.1	--	µg/L	1.2	3.0	20.0	106	67	124	0.475	20	09/19/18	23:25	NIVA
1,1,1-Trichloroethane	N.D	21.5	--	µg/L	1.2	3.0	20.0	108	69	140	2.35	20	09/19/18	23:25	NIVA
1,1,2,2-Tetrachloroethane	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	64	122	2.86	20	09/19/18	23:25	NIVA
1,1,2-Trichloroethane	N.D	20.5	--	µg/L	1.2	3.0	20.0	103	78	125	0.00	20	09/19/18	23:25	NIVA
1,1-Dichloroethane	N.D	21.7	--	µg/L	2.0	3.0	20.0	109	56	141	1.86	20	09/19/18	23:25	NIVA
1,1-Dichloroethene	N.D	21.9	--	µg/L	1.2	3.0	20.0	110	44	155	3.15	20	09/19/18	23:25	NIVA
1,1-Dichloropropene	N.D	21.6	--	µg/L	1.4	3.0	20.0	108	83	110	4.74	20	09/19/18	23:25	NIVA
1,2,3-Trichlorobenzene	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	71	119	8.04	20	09/19/18	23:25	NIVA

QUALITY CONTROL SUMMARY

1,2,3-Trichloropropane	N.D	20.5	--	µg/L	1.2	3.0	20.0	103	47	131	1.93	20	09/19/18	23:25	NIVA
1,2,4-Trichlorobenzene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	53	139	9.67	20	09/19/18	23:25	NIVA
1,2,4-Trimethylbenzene	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	52	141	4.81	20	09/19/18	23:25	NIVA
1,2-Dibromo-3-chloropropane	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	67	140	0.487	20	09/19/18	23:25	NIVA
1,2-Dibromoethane	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	66	140	1.46	20	09/19/18	23:25	NIVA
1,2-Dichloroethane	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	60	139	2.87	20	09/19/18	23:25	NIVA
1,2-Dichloropropane	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	71	121	0.471	20	09/19/18	23:25	NIVA
1,3,5-Trimethylbenzene	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	61	125	3.36	20	09/19/18	23:25	NIVA
1,3-Dichlorobenzene	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	61	129	4.79	20	09/19/18	23:25	NIVA
1,3-Dichloropropane	N.D	20.5	--	µg/L	2.0	3.0	20.0	103	69	124	1.93	20	09/19/18	23:25	NIVA
1,4-Dichlorobenzene	N.D	20.3	--	µg/L	1.2	3.0	20.0	102	73	122	4.53	20	09/19/18	23:25	NIVA
1-Chlorohexane	N.D	21.2	--	µg/L	1.5	3.0	20.0	106	48	136	6.33	20	09/19/18	23:25	NIVA
2,2-Dichloropropane	N.D	23.7	--	µg/L	1.2	3.0	20.0	119	13	157	2.50	20	09/19/18	23:25	NIVA
2-Butanone	N.D	97.5	--	µg/L	6.0	15.0	100	97.5	43	151	0.103	20	09/19/18	23:25	NIVA
2-Chloroethyl vinyl ether	N.D	27.5	--	µg/L	6.0	15.0	100	27.5	10	178	N.C.	20	09/19/18	23:25	NIVA
2-Chlorotoluene	N.D	20.8	--	µg/L	1.4	3.0	20.0	104	64	139	4.42	20	09/19/18	23:25	NIVA
2-Hexanone	N.D	101.2	--	µg/L	6.0	15.0	100	101	53	147	1.80	20	09/19/18	23:25	NIVA
4-Bromofluorobenzene-SURR	18.3	20.2	--	µg/L	N/A	N/A	20.00	101	71	125	N/A	N/A	09/19/18	23:25	NIVA
4-Chlorotoluene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	64	128	6.52	20	09/19/18	23:25	NIVA
4-Isopropyltoluene	N.D	20.6	--	µg/L	1.4	3.0	20.0	103	66	129	4.47	20	09/19/18	23:25	NIVA
4-Methyl-2-pentanone	N.D	101.4	--	µg/L	6.0	15.0	100	101	57	143	0.593	20	09/19/18	23:25	NIVA
Acetone	N.D	100.0	--	µg/L	6.0	15.0	100	100	33	154	3.65	20	09/19/18	23:25	NIVA
Acrolein	N.D	525.8	--	µg/L	25.0	75.0	500	105	47	157	8.61	20	09/19/18	23:25	NIVA
Acrylonitrile	N.D	103.1	--	µg/L	6.0	15.0	100	103	34	160	3.42	20	09/19/18	23:25	NIVA
Benzene	N.D	21.5	--	µg/L	1.2	3.0	20.0	108	65	139	3.79	20	09/19/18	23:25	NIVA
Bromobenzene	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	64	120	2.87	20	09/19/18	23:25	NIVA
Bromochloromethane	N.D	19.4	--	µg/L	1.2	3.0	20.0	96.8	49	150	5.53	20	09/19/18	23:25	NIVA
Bromodichloromethane	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	64	141	2.37	20	09/19/18	23:25	NIVA
Bromoform	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	61	132	2.22	20	09/19/18	23:25	NIVA
Bromomethane	N.D	23.3	--	µg/L	2.0	3.0	20.0	117	35	163	0.00	20	09/19/18	23:25	NIVA
Carbon disulfide	N.D	106.8	--	µg/L	7.0	15.0	100	107	48	158	5.55	20	09/19/18	23:25	NIVA

QUALITY CONTROL SUMMARY

Carbon tetrachloride	N.D	21.5	--	µg/L	1.2	3.0	20.0	108	73	137	1.88	20	09/19/18	23:25	NIVA
Chlorobenzene	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	68	121	1.44	20	09/19/18	23:25	NIVA
Chloroethane	N.D	23.7	--	µg/L	1.2	3.0	20.0	119	50	142	2.56	20	09/19/18	23:25	NIVA
Chloroform	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	59	140	3.88	20	09/19/18	23:25	NIVA
Chloromethane	N.D	23.2	--	µg/L	1.2	3.0	20.0	116	42	139	6.68	20	09/19/18	23:25	NIVA
Dibromochloromethane	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	67	137	0.00	20	09/19/18	23:25	NIVA
Dibromofluoromethane-SURR	20.7	20.3	--	µg/L	N/A	N/A	20.00	102	76	123	N/A	N/A	09/19/18	23:25	NIVA
Dibromomethane	N.D	20.7	--	µg/L	1.5	3.0	20.0	104	72	139	0.962	20	09/19/18	23:25	NIVA
Dichlorodifluoromethane	N.D	24.5	--	µg/L	1.2	3.0	20.0	123	42	157	10.3	20	09/19/18	23:25	NIVA
Dichloromethane	N.D	17.7	--	µg/L	1.2	3.0	20.0	88.5	56	135	15.6	20	09/19/18	23:25	NIVA
Epichlorohydrin	N.D	452.7	--	µg/L	30.0	75.0	500	90.5	37	129	7.81	20	09/19/18	23:25	NIVA
Ethylbenzene	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	58	136	3.34	20	09/19/18	23:25	NIVA
Hexachlorobutadiene	N.D	20.7	--	µg/L	1.4	3.0	20.0	104	62	124	10.2	20	09/19/18	23:25	NIVA
Iodomethane	N.D	101.4	--	µg/L	8.0	15.0	100	101	45	148	8.59	20	09/19/18	23:25	NIVA
Isopropylbenzene	N.D	21.5	--	µg/L	2.0	3.0	20.0	108	64	122	4.28	20	09/19/18	23:25	NIVA
Naphthalene	N.D	21.4	--	µg/L	2.0	3.0	20.0	107	66	135	8.78	20	09/19/18	23:25	NIVA
Styrene	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	65	123	3.34	20	09/19/18	23:25	NIVA
Tetrachloroethene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	64	138	2.96	20	09/19/18	23:25	NIVA
Tetrahydrofuran	N.D	23.4	--	µg/L	1.2	3.0	20.0	117	51	147	9.40	20	09/19/18	23:25	NIVA
Toluene	N.D	20.9	--	µg/L	1.2	3.0	20.0	105	65	140	0.480	20	09/19/18	23:25	NIVA
Toluene-d8-SURR	19.1	19.2	--	µg/L	N/A	N/A	20.00	96.1	77	122	N/A	N/A	09/19/18	23:25	NIVA
Trichloroethene	N.D	21.0	--	µg/L	1.2	3.0	20.0	105	76	126	1.92	20	09/19/18	23:25	NIVA
Trichlorofluoromethane	N.D	23.2	--	µg/L	1.5	3.0	20.0	116	60	144	1.30	20	09/19/18	23:25	NIVA
Vinyl Acetate	N.D	110.1	--	µg/L	6.0	15.0	100	110	52	141	11.6	20	09/19/18	23:25	NIVA
Vinyl chloride	N.D	24.1	--	µg/L	1.2	3.0	20.0	121	39	151	5.98	20	09/19/18	23:25	NIVA
cis-1,2-Dichloroethene	N.D	24.4	--	µg/L	1.2	3.0	20.0	122	66	127	19.3	20	09/19/18	23:25	NIVA
cis-1,3-Dichloropropene	N.D	16.9	--	µg/L	1.2	3.0	20.0	84.5	57	131	3.00	20	09/19/18	23:25	NIVA
m,p-Xylene	N.D	42.7	--	µg/L	1.8	6.0	40.0	107	56	145	3.33	20	09/19/18	23:25	NIVA
n-Butylbenzene	N.D	20.6	--	µg/L	1.2	3.0	20.0	103	72	114	9.67	20	09/19/18	23:25	NIVA
n-Propylbenzene	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	61	123	5.80	20	09/19/18	23:25	NIVA
o-Dichlorobenzene	N.D	20.9	--	µg/L	1.0	3.0	20.0	105	73	124	3.90	20	09/19/18	23:25	NIVA

QUALITY CONTROL SUMMARY

o-Xylene	N.D	21.6	--	µg/L	2.3	3.0	20.0	108	54	143	N.C.	20	09/19/18	23:25	NIVA
sec-Butylbenzene	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	64	114	5.83	20	09/19/18	23:25	NIVA
tert-Butylbenzene	N.D	21.5	--	µg/L	1.2	3.0	20.0	108	68	113	4.28	20	09/19/18	23:25	NIVA
trans-1,2-Dichloroethene	N.D	21.4	--	µg/L	1.2	3.0	20.0	107	56	146	4.57	20	09/19/18	23:25	NIVA
trans-1,3-Dichloropropene	N.D	20.7	--	µg/L	1.2	3.0	20.0	104	59	130	0.482	20	09/19/18	23:25	NIVA
trans-1,4-Dichloro-2-butene	N.D	117.4	--	µg/L	6.0	15.0	100	117	47	129	5.51	20	09/19/18	23:25	NIVA

2942275 - LFB
Reference Sample Number is: 2928657

							Accuracy				Precision		Analysis		
									Acceptance Criteria			Acceptance Criteria			
Analyte Name	**Reference Result**	**QC Result**	**DQ**	**Units**	**MDL**	**MRL**	**A/A**	**Rec. %**	**Low Limit**	**High Limit**	**RPD**	**High Limit**	**Date**	**Time**	**By**
1,1,1,2-Tetrachloroethane	N.D	19.8	--	µg/L	1.2	3.0	20.0	98.9	67	126	N/A	N/A	09/20/18	01:35	NIVA
1,1,1-Trichloroethane	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.2	64	139	N/A	N/A	09/20/18	01:35	NIVA
1,1,2,2-Tetrachloroethane	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.7	60	131	N/A	N/A	09/20/18	01:35	NIVA
1,1,2-Trichloroethane	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	70	129	N/A	N/A	09/20/18	01:35	NIVA
1,1-Dichloroethane	N.D	19.9	--	µg/L	2.0	3.0	20.0	99.6	63	133	N/A	N/A	09/20/18	01:35	NIVA
1,1-Dichloroethene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.3	55	139	N/A	N/A	09/20/18	01:35	NIVA
1,1-Dichloropropene	N.D	19.5	--	µg/L	1.4	3.0	20.0	97.3	67	131	N/A	N/A	09/20/18	01:35	NIVA
1,2,3-Trichlorobenzene	N.D	19.4	--	µg/L	1.2	3.0	20.0	97.1	68	131	N/A	N/A	09/20/18	01:35	NIVA
1,2,3-Trichloropropane	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.3	52	131	N/A	N/A	09/20/18	01:35	NIVA
1,2,4-Trichlorobenzene	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.6	51	132	N/A	N/A	09/20/18	01:35	NIVA
1,2,4-Trimethylbenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.1	63	129	N/A	N/A	09/20/18	01:35	NIVA
1,2-Dibromo-3-chloropropane	N.D	19.0	--	µg/L	1.2	3.0	20.0	95.0	66	139	N/A	N/A	09/20/18	01:35	NIVA
1,2-Dibromoethane	N.D	19.4	--	µg/L	1.2	3.0	20.0	96.8	76	126	N/A	N/A	09/20/18	01:35	NIVA
1,2-Dichloroethane	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	60	136	N/A	N/A	09/20/18	01:35	NIVA
1,2-Dichloropropane	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.6	70	124	N/A	N/A	09/20/18	01:35	NIVA
1,3,5-Trimethylbenzene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.7	68	123	N/A	N/A	09/20/18	01:35	NIVA
1,3-Dichlorobenzene	N.D	19.6	--	µg/L	1.2	3.0	20.0	97.8	62	127	N/A	N/A	09/20/18	01:35	NIVA
1,3-Dichloropropane	N.D	19.7	--	µg/L	2.0	3.0	20.0	98.3	74	124	N/A	N/A	09/20/18	01:35	NIVA
1,4-Dichlorobenzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.0	73	123	N/A	N/A	09/20/18	01:35	NIVA
1-Chlorohexane	N.D	19.5	--	µg/L	1.5	3.0	20.0	97.7	56	139	N/A	N/A	09/20/18	01:35	NIVA

QUALITY CONTROL SUMMARY

2,2-Dichloropropane	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	37	148	N/A	N/A	09/20/18	01:35	NIVA
2-Butanone	N.D	96.8	--	µg/L	6.0	15.0	100	96.8	57	136	N/A	N/A	09/20/18	01:35	NIVA
2-Chloroethyl vinyl ether	N.D	99.0	--	µg/L	6.0	15.0	100	99.0	47	143	N/A	N/A	09/20/18	01:35	NIVA
2-Chlorotoluene	N.D	19.3	--	µg/L	1.4	3.0	20.0	96.4	66	127	N/A	N/A	09/20/18	01:35	NIVA
2-Hexanone	N.D	95.8	--	µg/L	6.0	15.0	100	95.8	62	136	N/A	N/A	09/20/18	01:35	NIVA
4-Bromofluorobenzene-SURR	18.3	19.7	--	µg/L	N/A	N/A	20.0	98.4	79	121	N/A	N/A	09/20/18	01:35	NIVA
4-Chlorotoluene	N.D	18.7	--	µg/L	1.2	3.0	20.0	93.5	63	125	N/A	N/A	09/20/18	01:35	NIVA
4-Isopropyltoluene	N.D	19.5	--	µg/L	1.4	3.0	20.0	97.5	68	131	N/A	N/A	09/20/18	01:35	NIVA
4-Methyl-2-pentanone	N.D	97.1	--	µg/L	6.0	15.0	100	97.1	62	135	N/A	N/A	09/20/18	01:35	NIVA
Acetone	N.D	95.1	--	µg/L	6.0	15.0	100	95.1	46	142	N/A	N/A	09/20/18	01:35	NIVA
Acrolein	N.D	467.0	--	µg/L	25.0	75.0	500	93.4	40	153	N/A	N/A	09/20/18	01:35	NIVA
Acrylonitrile	N.D	98.8	--	µg/L	6.0	15.0	100	98.8	53	141	N/A	N/A	09/20/18	01:35	NIVA
Benzene	N.D	19.8	--	µg/L	1.2	3.0	20.0	98.9	66	131	N/A	N/A	09/20/18	01:35	NIVA
Bromobenzene	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.4	61	126	N/A	N/A	09/20/18	01:35	NIVA
Bromochloromethane	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.3	60	133	N/A	N/A	09/20/18	01:35	NIVA
Bromodichloromethane	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.1	72	129	N/A	N/A	09/20/18	01:35	NIVA
Bromoform	N.D	19.9	--	µg/L	1.2	3.0	20.0	99.7	61	130	N/A	N/A	09/20/18	01:35	NIVA
Bromomethane	N.D	19.4	--	µg/L	2.0	3.0	20.0	96.9	47	151	N/A	N/A	09/20/18	01:35	NIVA
Carbon disulfide	N.D	102.2	--	µg/L	7.0	15.0	100	102	58	140	N/A	N/A	09/20/18	01:35	NIVA
Carbon tetrachloride	N.D	19.8	--	µg/L	1.2	3.0	20.0	98.8	69	134	N/A	N/A	09/20/18	01:35	NIVA
Chlorobenzene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.3	67	122	N/A	N/A	09/20/18	01:35	NIVA
Chloroethane	N.D	20.2	--	µg/L	1.2	3.0	20.0	101	47	144	N/A	N/A	09/20/18	01:35	NIVA
Chloroform	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.6	61	134	N/A	N/A	09/20/18	01:35	NIVA
Chloromethane	N.D	18.8	--	µg/L	1.2	3.0	20.0	93.9	43	142	N/A	N/A	09/20/18	01:35	NIVA
Dibromochloromethane	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.0	69	134	N/A	N/A	09/20/18	01:35	NIVA
Dibromofluoromethane-SURR	20.7	20.1	--	µg/L	N/A	N/A	20.0	100	83	120	N/A	N/A	09/20/18	01:35	NIVA
Dibromomethane	N.D	19.8	--	µg/L	1.5	3.0	20.0	98.8	76	131	N/A	N/A	09/20/18	01:35	NIVA
Dichlorodifluoromethane	N.D	17.3	--	µg/L	1.2	3.0	20.0	86.3	49	145	N/A	N/A	09/20/18	01:35	NIVA
Dichloromethane	N.D	19.8	--	µg/L	1.2	3.0	20.0	98.8	62	129	N/A	N/A	09/20/18	01:35	NIVA
Epichlorohydrin	N.D	467.9	--	µg/L	30.0	75.0	500	93.6	52	134	N/A	N/A	09/20/18	01:35	NIVA
Ethylbenzene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.4	69	131	N/A	N/A	09/20/18	01:35	NIVA

QUALITY CONTROL SUMMARY

Hexachlorobutadiene	N.D	19.9	--	µg/L	1.4	3.0	20.0	99.7	51	139	N/A	N/A	09/20/18	01:35	NIVA
Iodomethane	N.D	93.8	--	µg/L	8.0	15.0	100	93.8	54	143	N/A	N/A	09/20/18	01:35	NIVA
Isopropylbenzene	N.D	19.6	--	µg/L	2.0	3.0	20.0	98.2	69	121	N/A	N/A	09/20/18	01:35	NIVA
Naphthalene	N.D	19.2	--	µg/L	2.0	3.0	20.0	96.1	71	134	N/A	N/A	09/20/18	01:35	NIVA
Styrene	N.D	20.0	--	µg/L	1.2	3.0	20.0	100	65	127	N/A	N/A	09/20/18	01:35	NIVA
Tetrachloroethene	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.2	62	135	N/A	N/A	09/20/18	01:35	NIVA
Tetrahydrofuran	N.D	19.3	--	µg/L	1.2	3.0	20.0	96.3	67	134	N/A	N/A	09/20/18	01:35	NIVA
Toluene	N.D	19.8	--	µg/L	1.2	3.0	20.0	99.0	59	143	N/A	N/A	09/20/18	01:35	NIVA
Toluene-d8-SURR	19.1	19.9	--	µg/L	N/A	N/A	20.0	99.4	80	116	N/A	N/A	09/20/18	01:35	NIVA
Trichloroethene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.4	67	138	N/A	N/A	09/20/18	01:35	NIVA
Trichlorofluoromethane	N.D	17.9	--	µg/L	1.5	3.0	20.0	89.5	45	157	N/A	N/A	09/20/18	01:35	NIVA
Vinyl Acetate	N.D	90.3	--	µg/L	6.0	15.0	100	90.3	53	144	N/A	N/A	09/20/18	01:35	NIVA
Vinyl chloride	N.D	17.8	--	µg/L	1.2	3.0	20.0	89.1	52	140	N/A	N/A	09/20/18	01:35	NIVA
cis-1,2-Dichloroethene	N.D	19.5	--	µg/L	1.2	3.0	20.0	97.6	71	128	N/A	N/A	09/20/18	01:35	NIVA
cis-1,3-Dichloropropene	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.2	63	125	N/A	N/A	09/20/18	01:35	NIVA
m,p-Xylene	N.D	39.2	--	µg/L	1.8	6.0	40.0	98.1	63	130	N/A	N/A	09/20/18	01:35	NIVA
n-Butylbenzene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.4	67	127	N/A	N/A	09/20/18	01:35	NIVA
n-Propylbenzene	N.D	19.6	--	µg/L	1.2	3.0	20.0	98.2	64	124	N/A	N/A	09/20/18	01:35	NIVA
o-Dichlorobenzene	N.D	19.8	--	µg/L	1.0	3.0	20.0	99.1	75	121	N/A	N/A	09/20/18	01:35	NIVA
o-Xylene	N.D	19.5	--	µg/L	2.3	3.0	20.0	97.4	66	124	N/A	N/A	09/20/18	01:35	NIVA
sec-Butylbenzene	N.D	19.7	--	µg/L	1.2	3.0	20.0	98.4	66	122	N/A	N/A	09/20/18	01:35	NIVA
tert-Butylbenzene	N.D	19.5	--	µg/L	1.2	3.0	20.0	97.7	65	126	N/A	N/A	09/20/18	01:35	NIVA
trans-1,2-Dichloroethene	N.D	18.5	--	µg/L	1.2	3.0	20.0	92.4	66	129	N/A	N/A	09/20/18	01:35	NIVA
trans-1,3-Dichloropropene	N.D	20.0	--	µg/L	1.2	3.0	20.0	99.9	60	131	N/A	N/A	09/20/18	01:35	NIVA
trans-1,4-Dichloro-2-butene	N.D	84.9	--	µg/L	6.0	15.0	100	84.9	53	123	N/A	N/A	09/20/18	01:35	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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

2018-14470

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 #: 259943 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION			CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2928657-1 MATRIX: GROUND WATER SOURCE: EFFLUENT, GUAYAMA, PR	DATE: 09/05/18 TIME: 0936 TYPE: Grab		TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2928658-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-DUPLICATE, GUAYAMA, PR	DATE: 09/05/18 TIME: 0936 TYPE: Grab	DUP	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2928659-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-MS, GUAYAMA, PR	DATE: 09/05/18 TIME: 0936 TYPE: Grab	MS	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2928660-1 MATRIX: GROUND WATER SOURCE: EFFLUENT-MSD, GUAYAMA, PR	DATE: 09/05/18 TIME: 0936 TYPE: Grab	MSD	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:	Andrés Colón	9-5-18	varias
Fixed in field by:	Andrés Colón	9-5-18	varias
Authorized by:	N	N	N
Received by EQLF:	A	A	A
Released to EQLL by:	Andrés Colón	9-5-18	1500
Received by EQLL:		09.05.18	1500

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QC Level II Report
For September, 24 2018

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

Arrival Temperature: 2.5°C Signature:

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

2018-14470

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 #: 259943 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2928661-1 MATRIX: GROUND WATER SOURCE: INFLUENT, GUAYAMA, PR	DATE: 09-05-18 TIME: 0915 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2928662-1 MATRIX: DI WATER SOURCE: TRIP BLANK, GUAYAMA, PR	DATE: 09-05-18 TIME: 0700 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 A		
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE			

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Andrés Colón	9-5-18	~~15~~ varias
Fixed in field by:	Andrés Colón	9-5-18	varias
Authorized by:	N	N	N
Received by EQLF:	A	A	A
Released to EQLL by:	Andrés Colón	9-5-18	1500
Received by EQLL:		09-05-18	1500

SPECIAL INSTRUCTIONS / COMMENTS:

QA/QL Level II Report

For September, 24 2018

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

Arrival Temperature: 2.5°C Signature:

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

APPENDIX B
RAW DATA WORKSHEETS

ORGANICS DEPARTMENT
RAW DATA PACKAGE CHECKLIST

RUN NUMBER: 201712

☑ 1. Run Cover Sheet general information check.

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

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

☑ 4. Check for the presence of:

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

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

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

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

Checked by: [signature] (Laboratory Group Leader) Date: 09-19-18

Approved by: [signature] (Supervisor) Date: 09-19-2018

ORGANICS DEPARTMENT
RUN COVER SHEET

General Information

Method Number	Run Number	Sequence Number	Sample prep by	Sample Setup by	Sample Evaluated by	Run Approved by
8260B VOC BTEX	202722	202722	NIVA PR63557	NVILLANUEVA	NVILLANUEVA	NVILLANUEVA

Calibration Curve Information | **Instrument Information**

Calib. Curve Name	NBK Reference	Description / Identification Number
8260BTEX-AGO-LIQ-18A	NBK 090 Pg. 054	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. 057	N/A	N/A	N/A	N/A
2	p-Bromofluorobenzene	NBK 090 Pg. 037	12/13/2018	20	50	8
20	MIX 8260BTEX VOC	NBK 090 Pg. 059	3/11/2019	50	50	20
5	SIM VOC	NBK 090 Pg. 037	12/13/2018	20	5	20

Preparation Controls Information [ ] N/A

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

Amount µL	Solution Name	NBK Reference	Expiration Date	Solution Concentration ppm	Dilution Volume mL	Analyte Concentration µg/L
N/A	Agua para VOC	NBK 090 Pg. 057	N/A	N/A	N/A	N/A
1	MIX 8260BTEX VOC	NBK 090 Pg. 059	3/11/2019	50	50	1
20	MIX 8260BTEX VOC	NBK 090 Pg. 059	3/11/2019	50	50	20
20	MIX 8260BTEX VOC	NBK 090 Pg. 059	3/11/2019	50	50	20
20	MIX 8260BTEX VOC	NBK 090 Pg. 059	3/11/2019	50	50	20

RUN STATUS [✓] In Control [ ] OOMCL [ ] OOHPS [✓] [illegible] [ ] NSOOC

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

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

Analysis and Reviewed by / Date:

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

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

2ND SOURCE DATA FILE: DATA\202058-9PT\205806.D NBK REF: 090 Pg.049 & 205807.D NBK REF: 090 Pg. 054 & 021

QUALIFIER D for sample 2926068.

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: 09-19-2018 09-19-2018

QA/QC Review and Approval / Date:

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

Run Worksheet

For: Tuesday, September 11, 2018

[redacted]

Analyst: VILLANUEVA

Cup#	TYPE	ORDER#	METHOD	QC LINK	MATRIX	TEST NAME	PRE RUN	VOLUME	FINALVOL	WEIGHT
1	LRB	LRB/2935938-1				EPA 8260B BTEX VOC	--	--	--	--
2	MDL	MDL/2935937-1				EPA 8260B BTEX VOC	--	--	--	--
3	ICV	ICV/2935939-1				EPA 8260B BTEX VOC	--	--	--	--
4	TRIP BL	TRIP BLK/2926069-2			DI WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
5		2926066-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
6	DUP	DUP/2926061-1		2926066	GROUND WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
7	FIELD BL	FIELD BLK/2926063-1			DI WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
8	FIELD BL	FIELD BLK/2928161-1			DI WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
9	EQUIP B	EQUIP BLK/2926062-2			DI WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
10	CCV	CCV/2936818-1				EPA 8260B BTEX VOC	--	5	5	N/A
11		2926068-1 Dry Oil	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
13	MS	MS/2926064-2		2926068	GROUND WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
14	MSD	MSD/2926065-1		2926068	GROUND WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
15		2926067-1	EPA 8260B		GROUND WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
16	MS	MS/2928162-2		2926067	GROUND WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
17	MSD	MSD/2928163-2		2926067	GROUND WATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
18		2934649-1	EPA 8260B		WASTEWATER	EPA 8260B BTEX VOC	PR63557	5	5	N/A
20	LFB	LFB/2935946-1				EPA 8260B BTEX VOC	--	5.0	5.0	N/A

Printed Date: 9/19/2018
2:21 pm

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 63557

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
2934649-1	4	Done	WASTEWATER	EPA 5030B	EPA 8260B BTEX VOC	9/12/2018	VILLANUEV	09:04	8/30/2018	5	5	N/A	<2
2926069-2	5	Done	DI WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/28/2018	5	5	N/A	<2
2926063-1	6	Done	DI WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/28/2018	5	5	N/A	<2
2928161-1	7	Done	DI WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/29/2018	5	5	N/A	<2
2926062-2	8	Done	DI WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/28/2018	5	5	N/A	<2
2926068-1	9	Done	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/29/2018	5	5	N/A	<2
2926064-2/ MS Linked to 2926068	10	Done	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/29/2018	5	5	N/A	<2
2926065-1/ MSD Linked to 2926068	11	Done	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/29/2018	5	5	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 63557

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

2926067-1	12	Done	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/29/2018	5	5	N/A	<2
2928162-2/ MS Linked to 2926067	13	Done	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/29/2018	5	5	N/A	<2
2928163-2/ MSD Linked to 2926067	14	Done	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/29/2018	5	5	N/A	<2
2926066-1	15	Done	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/28/2018	5	5	N/A	<2
2926061-1/DUP Linked to 2926066	16	Done	GROUND WATER	EPA 5030B	EPA 8260B BTEX VOC	9/6/2018	VILLANUEV	08:30	8/28/2018	5	5	N/A	<2

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 63557

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] / 08-12-18

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

Comments:

Response Factor Report V7-AG7890MS

Method Path : C:\msdchem\1\METHODS\
Method File : 8260BTEX-AGO-LIQ-18A.M
Title : Analysis of VOC'S by EPA 8260B
Last Update : Wed Sep 12 13:48:56 2018
Response Via : Initial Calibration

Calibration Files
1 =CCVOC01.D 2 =CCVOC02.D 3 =CCVOC03.D 4 =CCVOC04.D 5 =CCVOC05.D 6 =CCVOC06.D 7 =CCVOC07.D

		Compound	1	2	3	4	5	6	7	Avg	%RSD
1)	I	IPENTAFLUOROBENZENE	----------ISTD----------								
2)	I	I14-DIFLUOROBENZENE	----------ISTD----------								
3)	S	SDIBRFLUOROMET...	0.545	0.552	0.536	0.597	0.535	0.501	0.483	0.536	6.87
4)	T	BENZENE	0.603	0.638	0.665	0.610	0.590	0.582	0.564	0.607	5.68
5)	S	STOLUENE-D8	1.245	1.267	1.213	1.236	1.225	1.217	1.143	1.221	3.20
6)	C,T	TOLUENE	0.530	0.591	0.688	0.682	0.665	0.681	0.668	0.644	9.31
7)	I	CHLOROBENZEN-d5-IS	----------ISTD----------								
8)	C,T	ETHYLBENZENE	0.647	0.685	0.785	0.791	0.779	0.803	0.843	0.762	9.12
9)	T	MP-XYLENE		0.537	0.721	0.788	0.779	0.810	0.837	0.745	14.63
10)	T	O-XYLENE		0.825	0.769	0.587	0.591	0.657	0.700	0.688	13.92
11)	S	S4BRFLUOROBENZENE	0.488	0.505	0.510	0.503	0.500	0.512	0.531	0.507	2.61
12)	I	I14-DICLBENZENE-D4	----------ISTD----------								

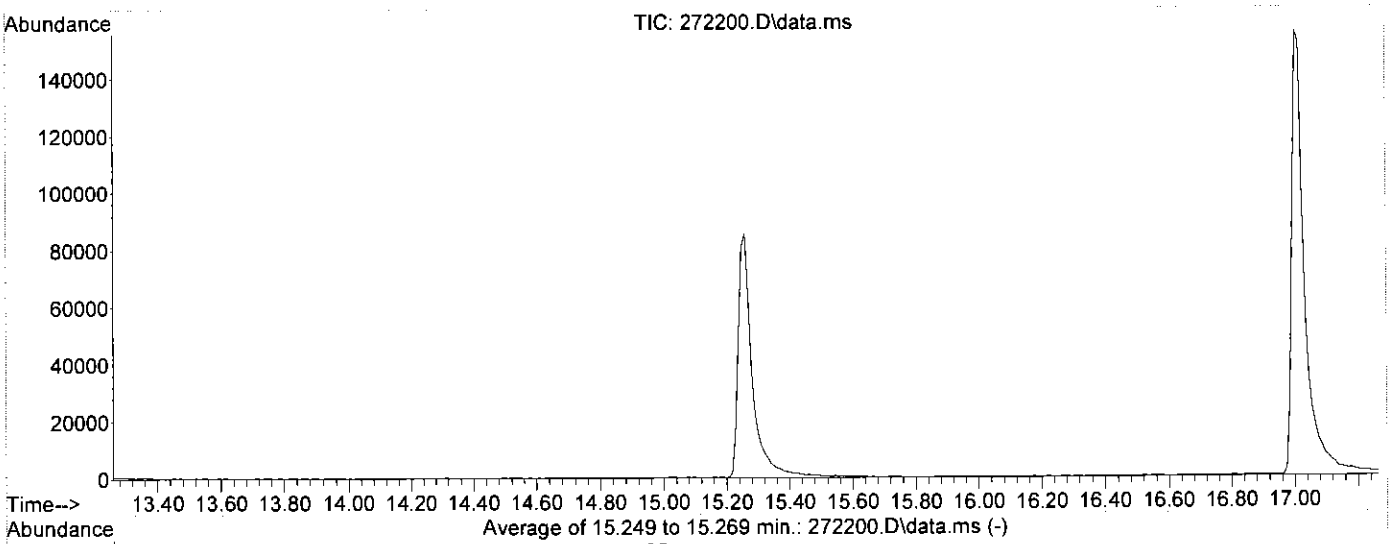
(#) = Out of Range

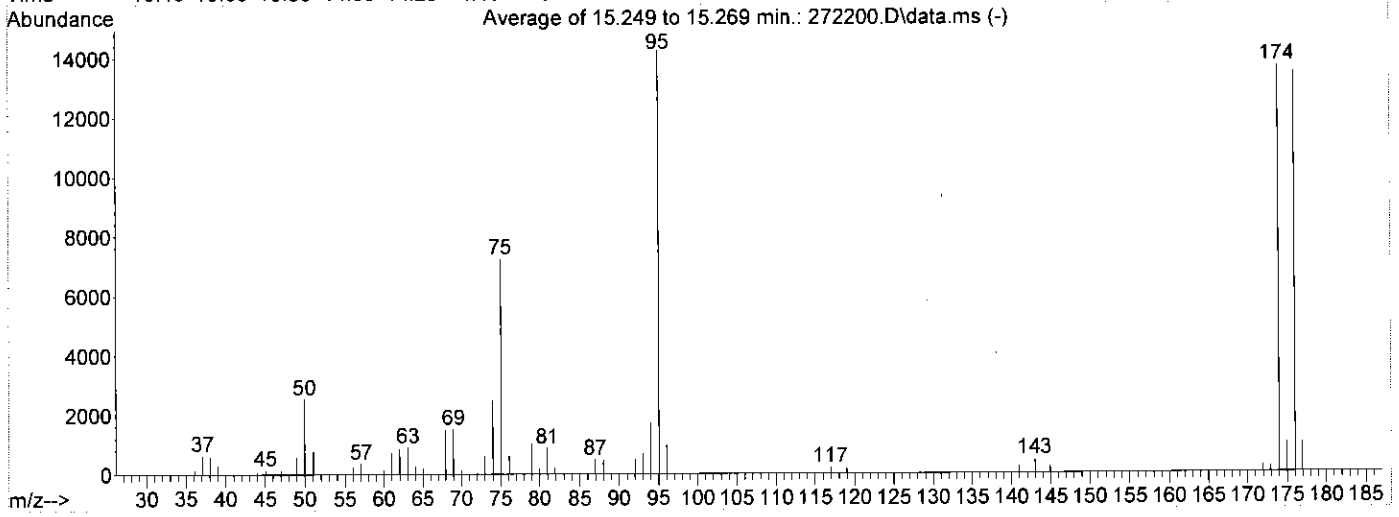
Method VOC

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272200.D
Acq On : 11 Sep 2018 2:51 pm
Operator : NIVA
Sample : BFB
Misc : RUN202722
ALS Vial : 99 Sample Multiplier: 1

Integration File: VOC.P

Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Title : Analysis of VOC'S by EPA 8260B
Last Update : Wed Sep 12 13:48:56 2018
InstName : V7-AG7890MS





AutoFind: Scans 1395, 1396, 1397; Background Corrected with Scan 1389

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	2533	PASS
75	95	30	60	50.8	7239	PASS
95	95	100	100	100.0	14245	PASS
96	95	5	9	6.8	969	PASS
173	174	0.00	2	1.3	180	PASS
174	95	50	150	95.9	13668	PASS
175	174	5	9	7.3	1002	PASS
176	174	95	101	98.6	13472	PASS
177	176	5	9	7.3	979	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272201.D
Acq On : 11 Sep 2018 3:17 pm
Operator : NIVA
Sample : LRB/2935938
Misc : RUN202722
ALS Vial : 99 Sample Multiplier: 1

Quant Time: Sep 19 14:30:49 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:48:56 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

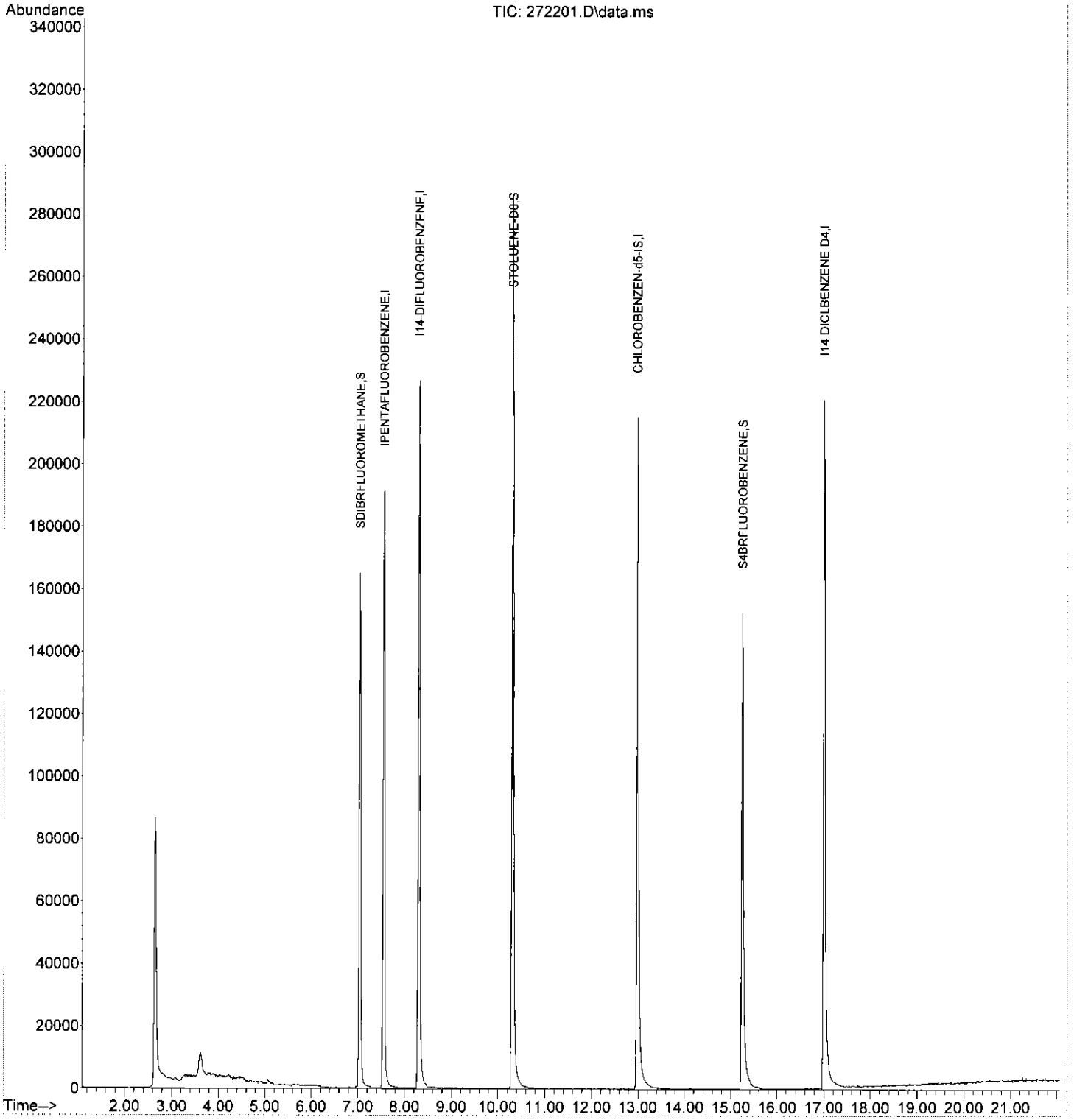
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.553	168	152813	20.00	µg/L	0.04
2) I14-DIFLUOROBENZENE	8.305	114	216775	20.00	µg/L	0.04
7) CHLOROBENZEN-d5-IS	12.985	117	197621	20.00	µg/L	0.04
12) I14-DICLBENZENE-D4	17.005	152	97147	20.00	µg/L	-0.12
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	116660	20.10	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.50%			
5) STOLUENE-D8	10.315	98	253324	19.14	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.70%			
11) S4BRFLUOROBENZENE	15.248	95	84007	16.77	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 83.85%			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	0.000		0	N.D.		
8) ETHYLBENZENE	12.985	91	278	N.D.		
9) MP-XYLENE	0.000		0	N.D.		
10) O-XYLENE	0.000		0	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272201.D
Acq On : 11 Sep 2018 3:17 pm
Operator : NIVA
Sample : LRB/2935938
Misc : RUN202722
ALS Vial : 99 Sample Multiplier: 1

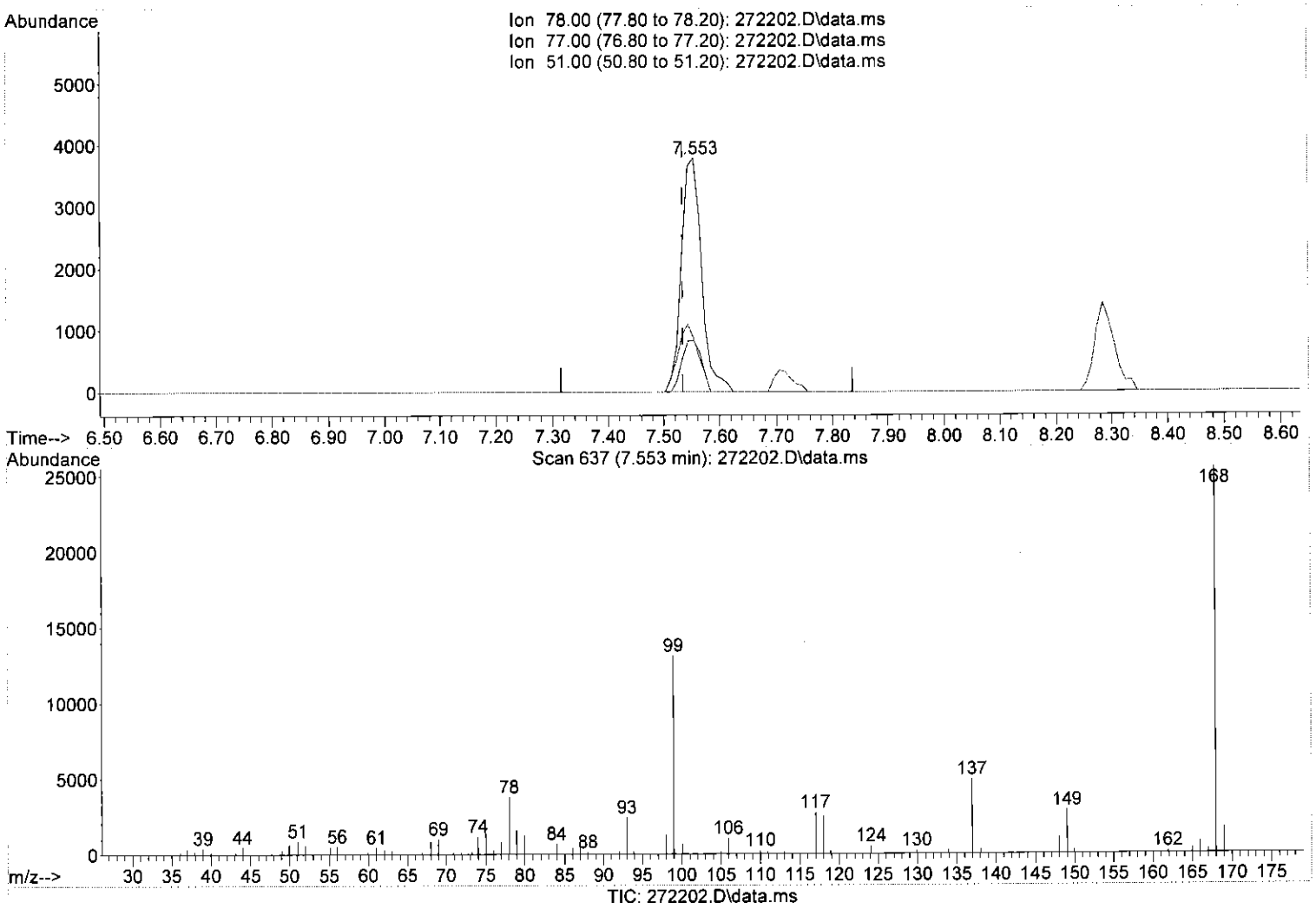
Quant Time: Sep 19 14:30:49 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:48:56 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272202.D
Acq On : 11 Sep 2018 3:45 pm
Operator : NIVA
Sample : MDL/2935937
Misc : RUN202722
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 12 13:44:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



(4) **BENZENE** (T)

7.553min (+0.019) 0.41 µg/L

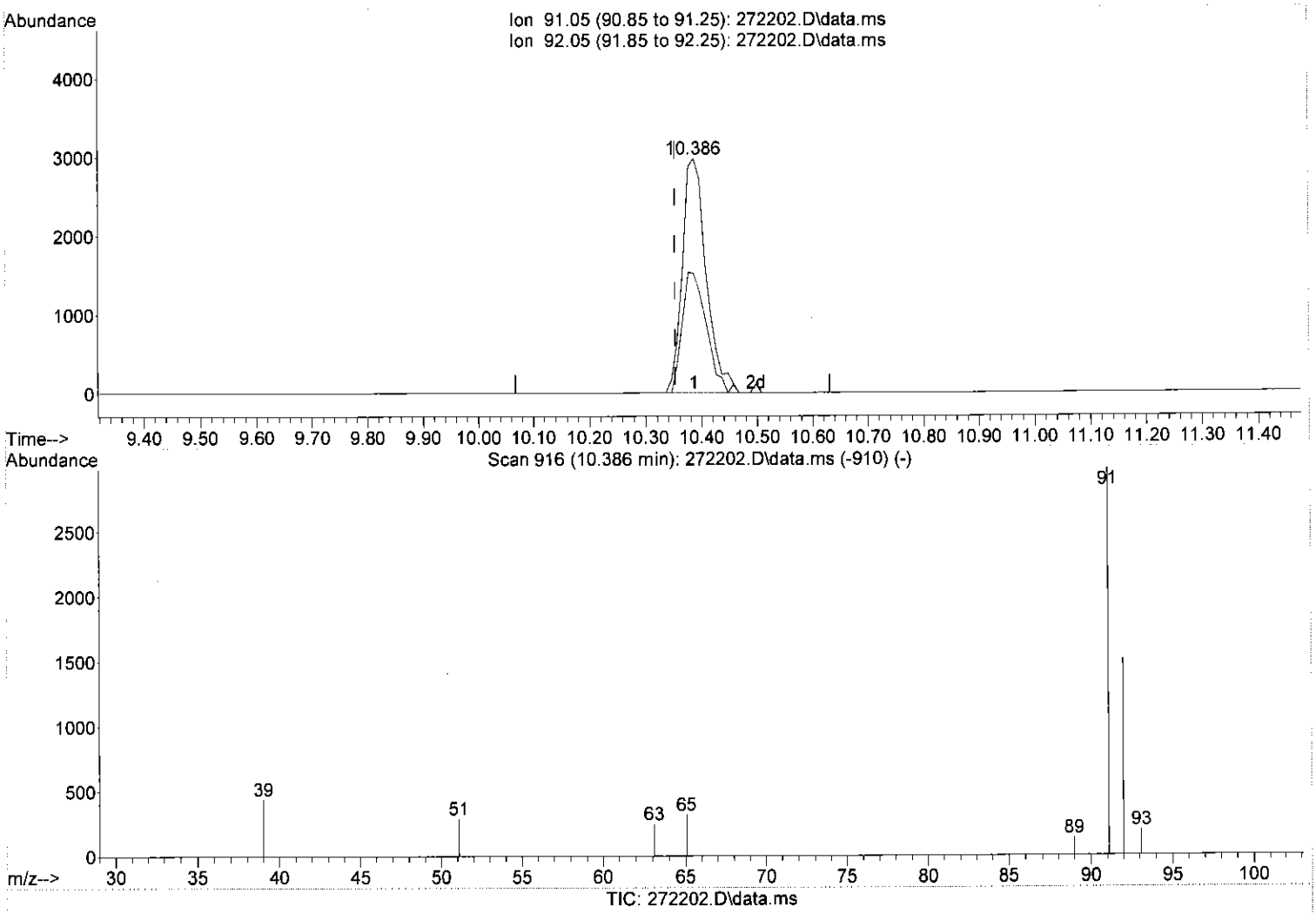
response 9486

Ion	Exp%	Act%
78.00	100	100
77.00	23.10	21.17
51.00	16.50	28.76#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272202.D
Acq On : 11 Sep 2018 3:45 pm
Operator : NIVA
Sample : MDL/2935937
Misc : RUN202722
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 12 13:44:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



(6) TOLUENE (C,T)

10.386min (+0.034) 0.37 µg/L

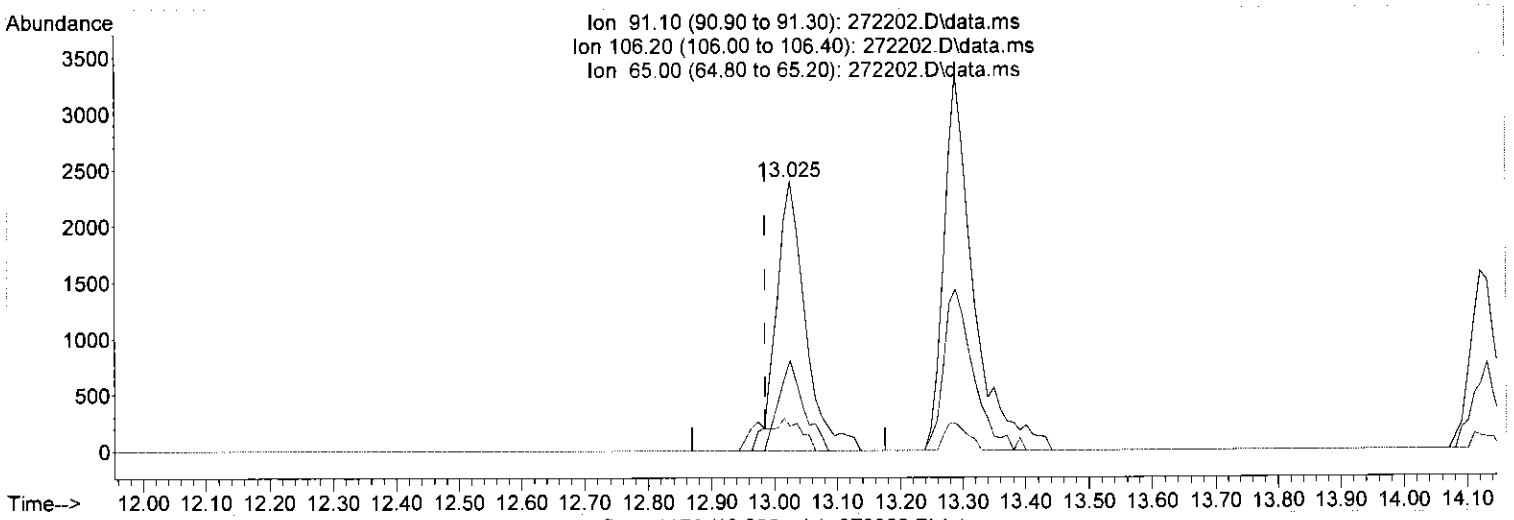
response 8995

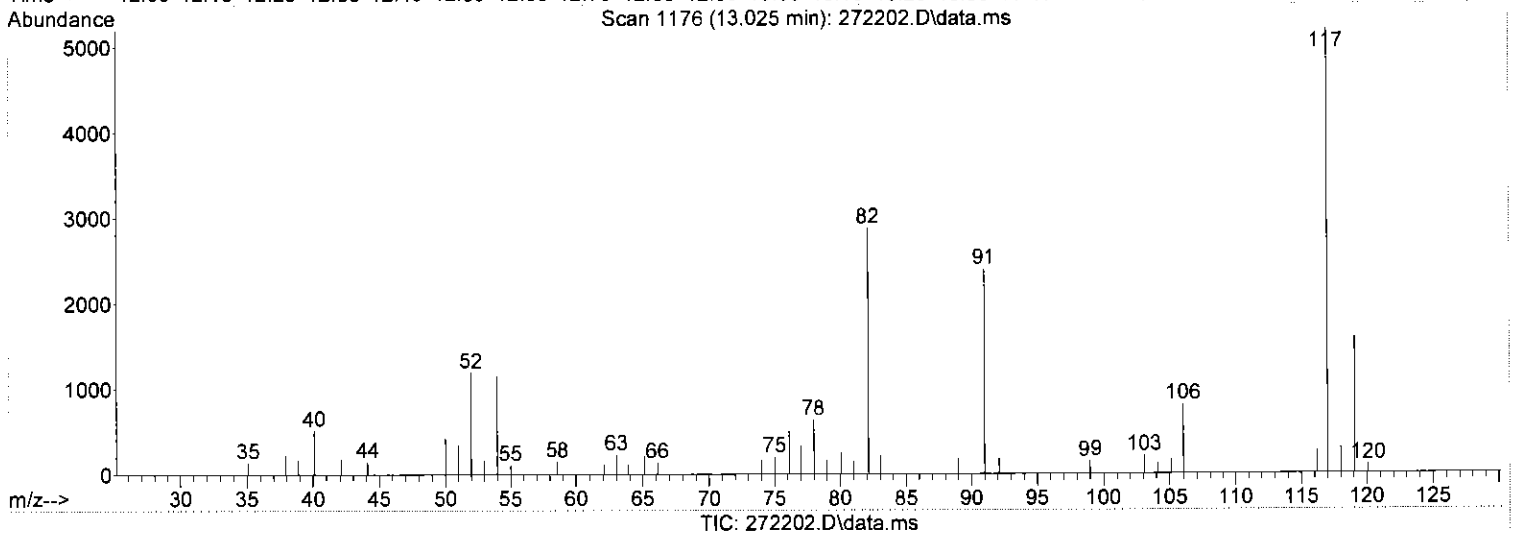
Ion	Exp%	Act%
91.05	100	100
92.05	60.30	50.74
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272202.D
Acq On : 11 Sep 2018 3:45 pm
Operator : NIVA
Sample : MDL/2935937
Misc : RUN202722
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 12 13:44:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(8) ETHYLBENZENE (C,T)

13.025min (+0.039) 0.29 µg/L

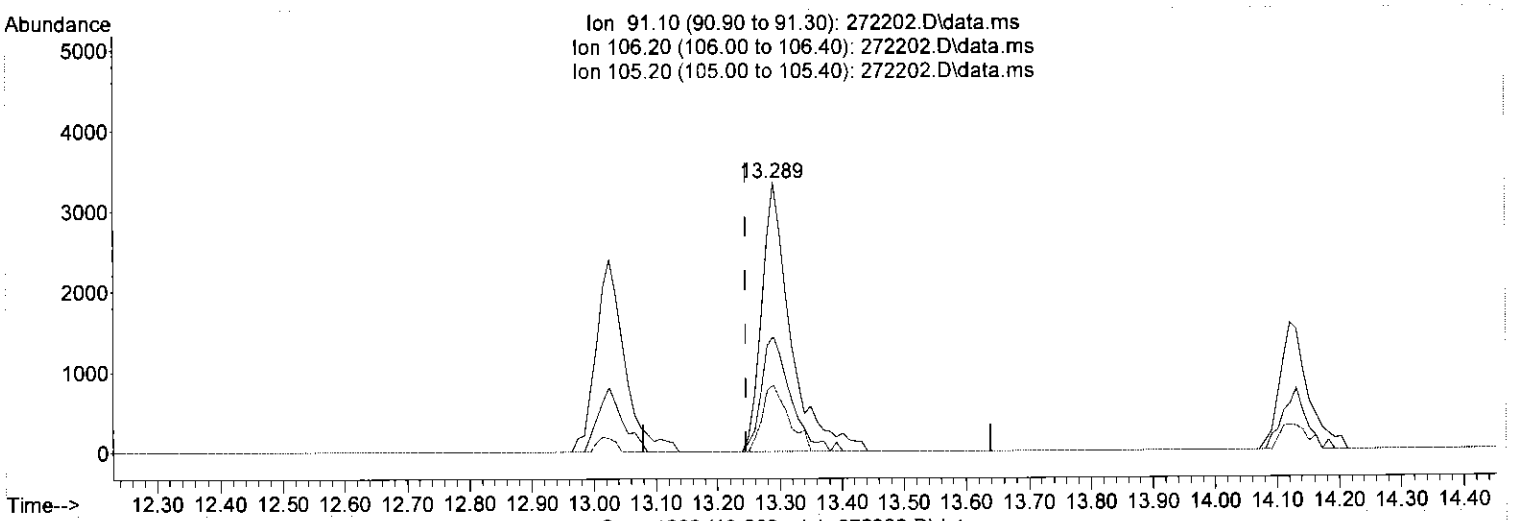
response 7694

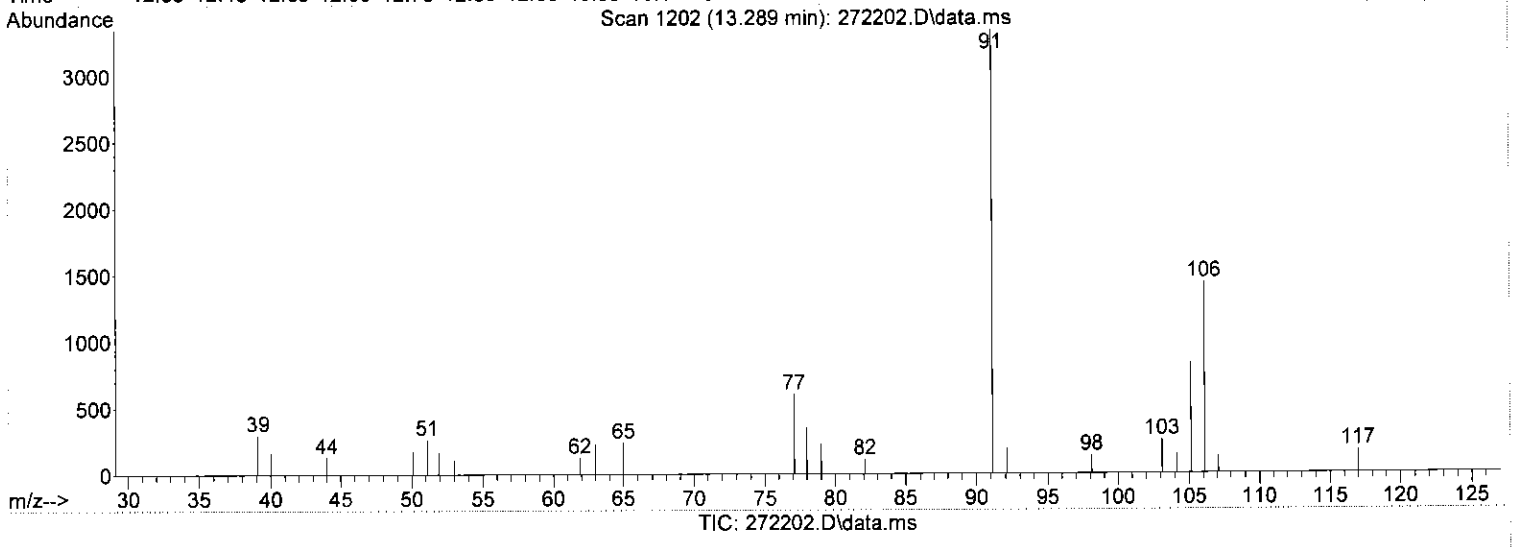
Ion	Exp%	Act%
91.10	100	100
106.20	31.80	28.78
65.00	8.60	9.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272202.D
Acq On : 11 Sep 2018 3:45 pm
Operator : NIVA
Sample : MDL/2935937
Misc : RUN202722
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 12 13:44:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(9) MP-XYLENE (T)

13.289min (+0.044) 0.38 µg/L

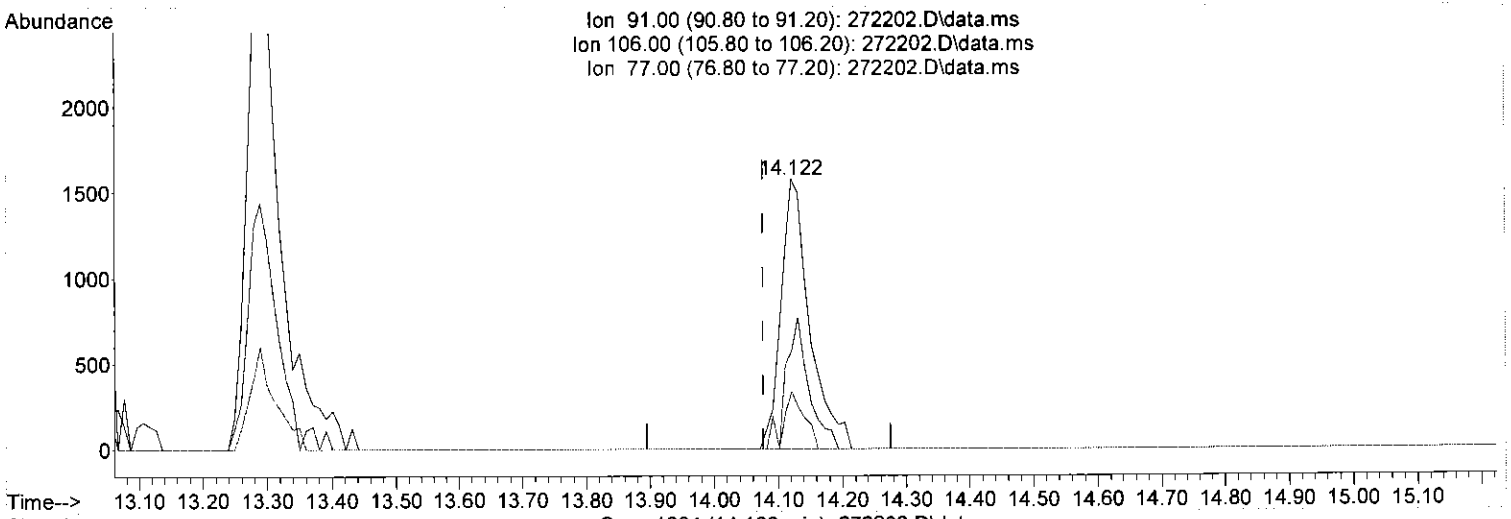
response 10995

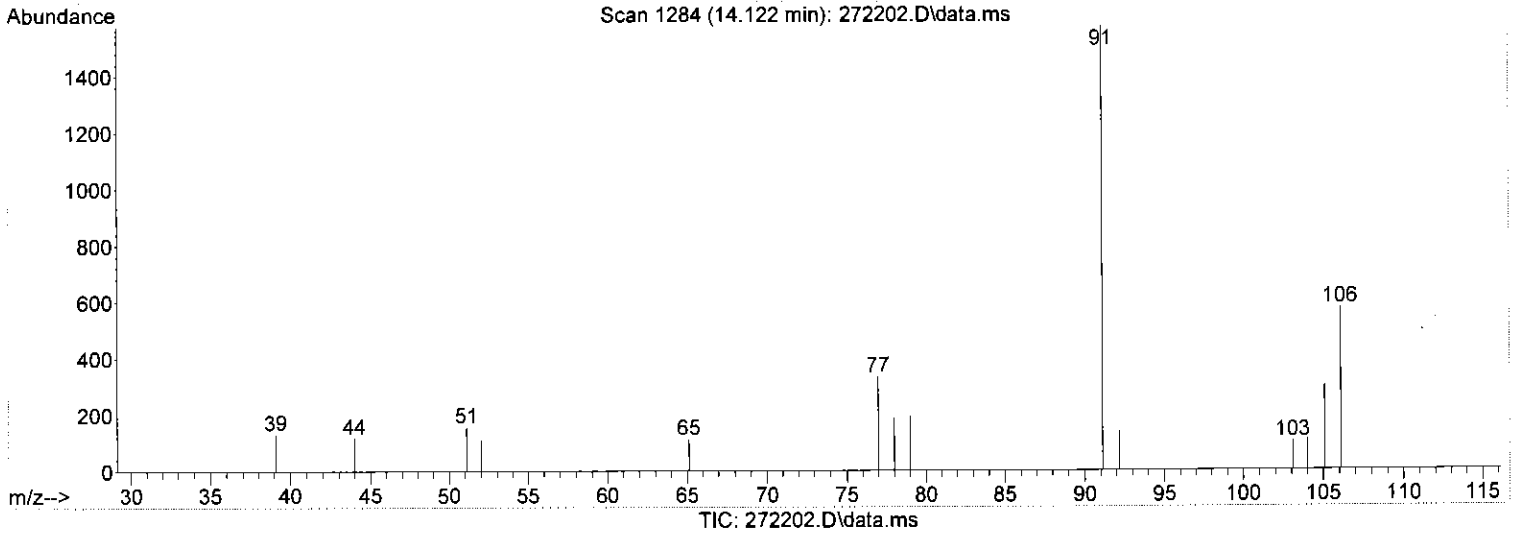
Ion	Exp%	Act%
91.10	100	100
106.20	52.10	43.05
105.20	22.60	22.44
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272202.D
Acq On : 11 Sep 2018 3:45 pm
Operator : NIVA
Sample : MDL/2935937
Misc : RUN202722
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 12 13:44:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 2018
Response via : Initial Calibration
InstName : V7-AG7890MS





(10) O-XYLENE (T)

14.122min (+0.046) 0.21 µg/L

response 4924

Ion	Exp%	Act%
91.00	100	100
106.00	48.20	38.95
77.00	12.60	13.69
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272202.D
Acq On : 11 Sep 2018 3:45 pm
Operator : NIVA
Sample : MDL/2935937
Misc : RUN202722
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 12 13:44:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

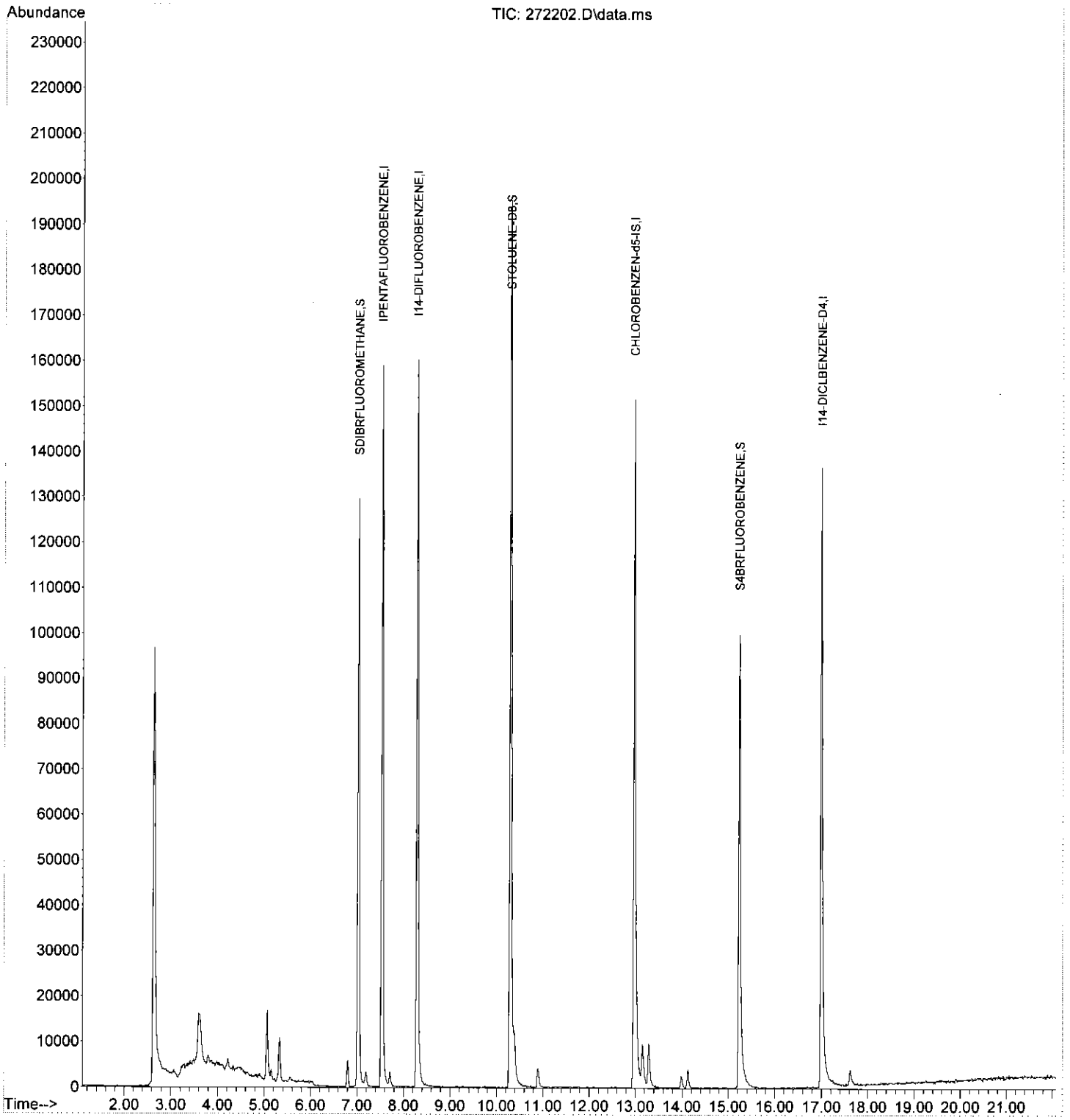
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	117224	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.284	114	156898	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.975	117	140969	20.00	µg/L	0.03
12) I14-DICLBENZENE-D4	16.995	152	64016	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.026	111	90699	19.83	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.15%			
5) STOLUENE-D8	10.305	98	188276	21.44	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.20%			
11) S4BRFLUOROBENZENE	15.228	95	56462	18.08	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 90.40%			
Target Compounds						Qvalue
4) BENZENE	7.553	78	9486	N.D.		
6) TOLUENE	10.386	91	8995	N.D.		
8) ETHYLBENZENE	13.025	91	7694	N.D.		
9) MP-XYLENE	13.289	91	10995	N.D.		
10) O-XYLENE	14.122	91	4924	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272202.D
Acq On : 11 Sep 2018 3:45 pm
Operator : NIVA
Sample : MDL/2935937
Misc : RUN202722
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 12 13:44:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272203.D
Acq On : 11 Sep 2018 4:11 pm
Operator : NIVA
Sample : ICV/2935939
Misc : RUN202722
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 19 14:34:16 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:48:56 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

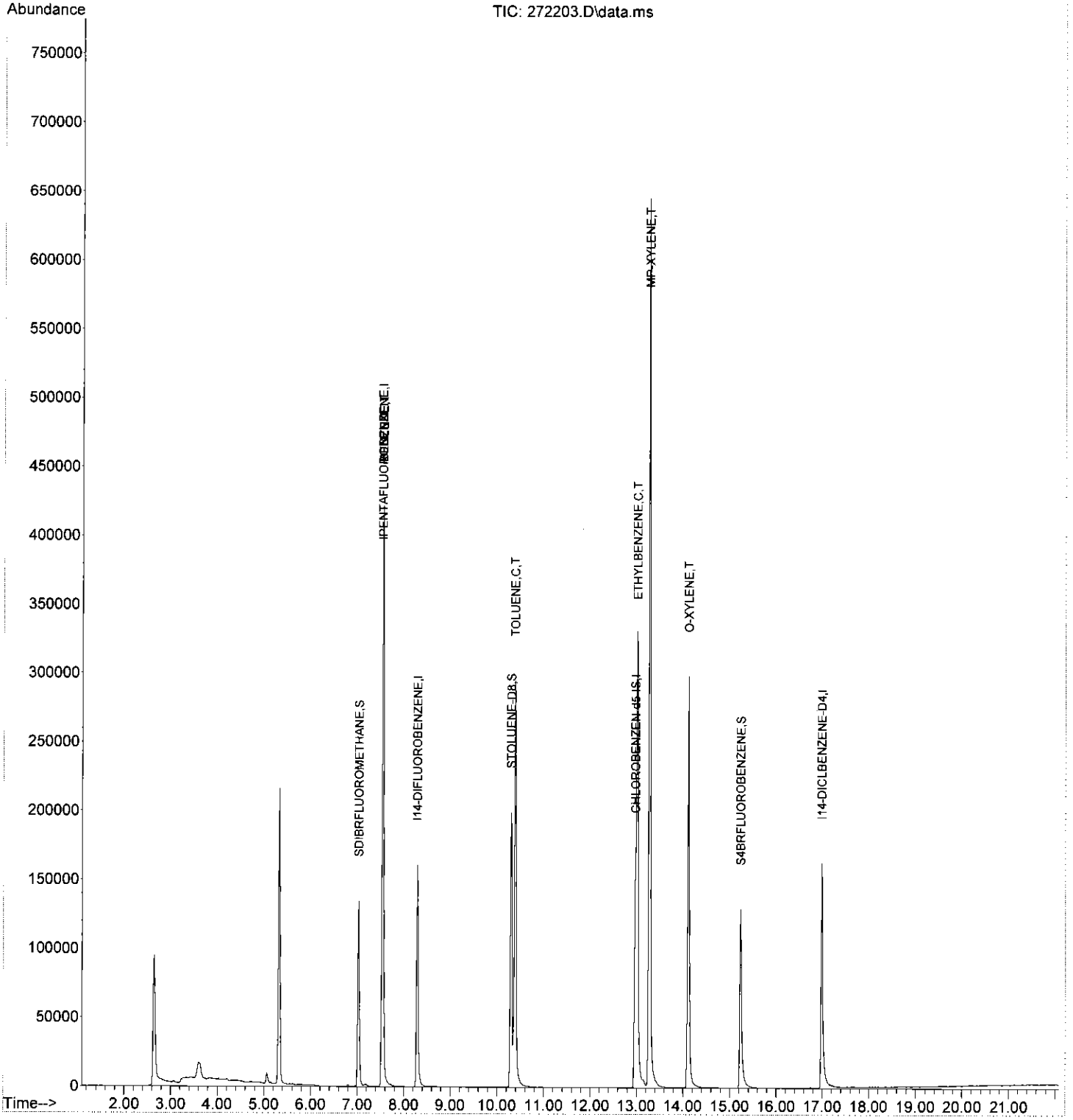
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	132065	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.284	114	148928m	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.975	117	129101m	20.00	µg/L	0.03
12) I14-DICLBENZENE-D4	16.985	152	73706	20.00	µg/L	-0.14
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.026	111	93533	17.99	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 89.95%			
5) STOLUENE-D8	10.294	98	188206	22.75	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.75%			
11) S4BRFLUOROBENZENE	15.228	95	58588m	22.32	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.60%			
Target Compounds						Qvalue
4) BENZENE	7.543	78	262407	8.38	µg/L #	96
6) TOLUENE	10.376	91	288272	8.81	µg/L	98
8) ETHYLBENZENE	13.015	91	303903	9.31	µg/L	96
9) MP-XYLENE	13.279	91	585382m	16.37	µg/L	
10) O-XYLENE	14.112	91	260159	8.90	µg/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272203.D
Acq On : 11 Sep 2018 4:11 pm
Operator : NIVA
Sample : ICV/2935939
Misc : RUN202722
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 19 14:34:16 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:48:56 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272204.D
Acq On : 11 Sep 2018 4:43 pm
Operator : NIVA
Sample : 2926069
Misc : RUN202722
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 14:34:52 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Thu Aug 23 11:13:40 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

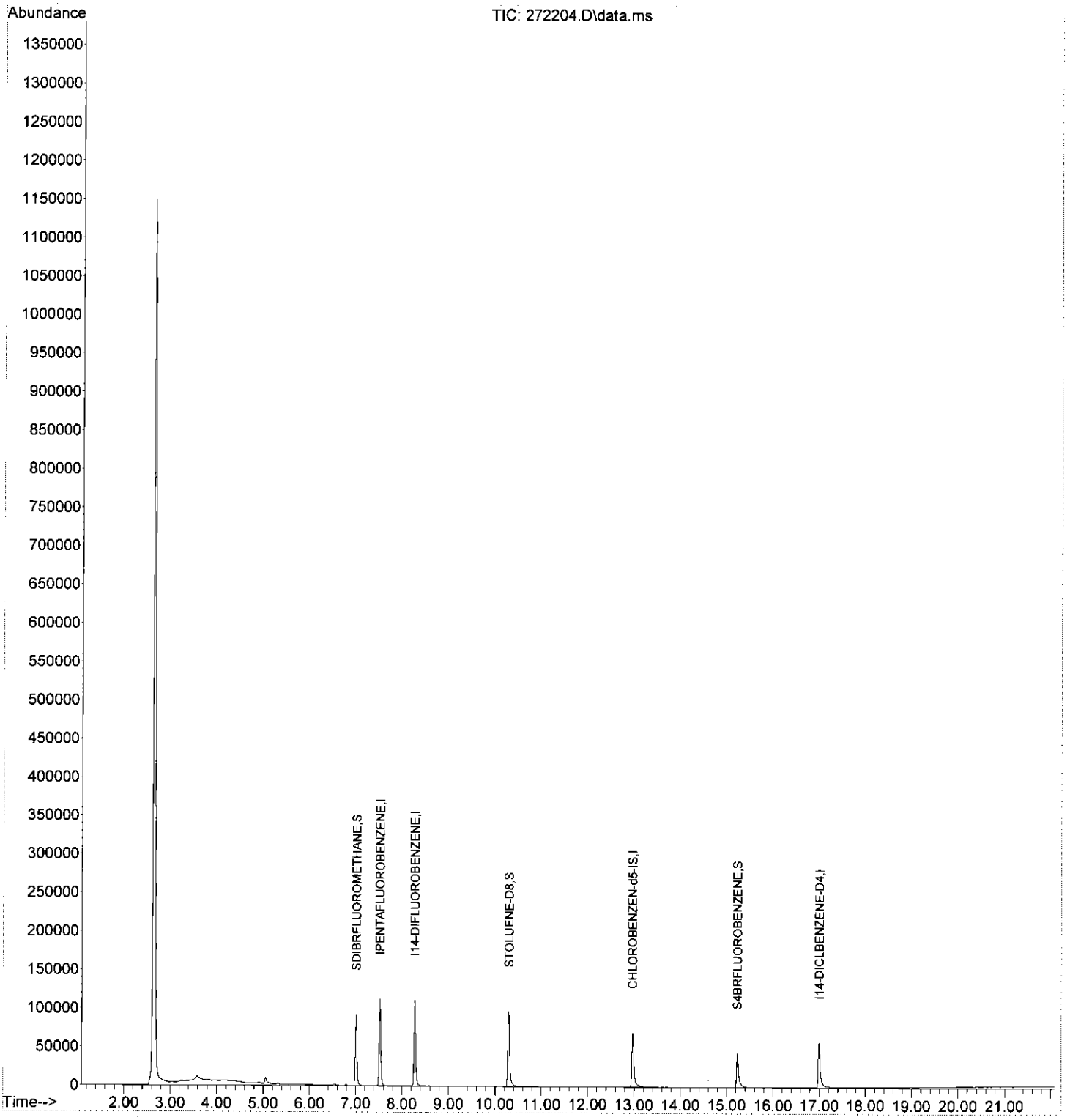
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.523	168	89570	20.00	µg/L	0.01
2) I14-DIFLUOROBENZENE	8.274	114	112050	20.00	µg/L	0.01
7) CHLOROBENZEN-d5-IS	12.964	117	76022	20.00	µg/L	0.02
12) I14-DICLBENZENE-D4	16.995	152	32184	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.015	111	65973	21.99	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.95%			
5) STOLUENE-D8	10.295	98	109651m	16.03	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 80.15%			
11) S4BRFLUOROBENZENE	15.228	95	31955m	16.58	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 82.90%			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	10.386	91	466	N.D.		
8) ETHYLBENZENE	13.025	91	378	N.D.		
9) MP-XYLENE	13.310	91	691	N.D.		
10) O-XYLENE	0.000		0	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272204.D
Acq On : 11 Sep 2018 4:43 pm
Operator : NIVA
Sample : 2926069
Misc : RUN202722
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 14:34:52 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Thu Aug 23 11:13:40 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272205.D
Acq On : 11 Sep 2018 5:10 pm
Operator : NIVA
Sample : 2926066
Misc : RUN202722
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 19 14:38:12 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:48:56 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

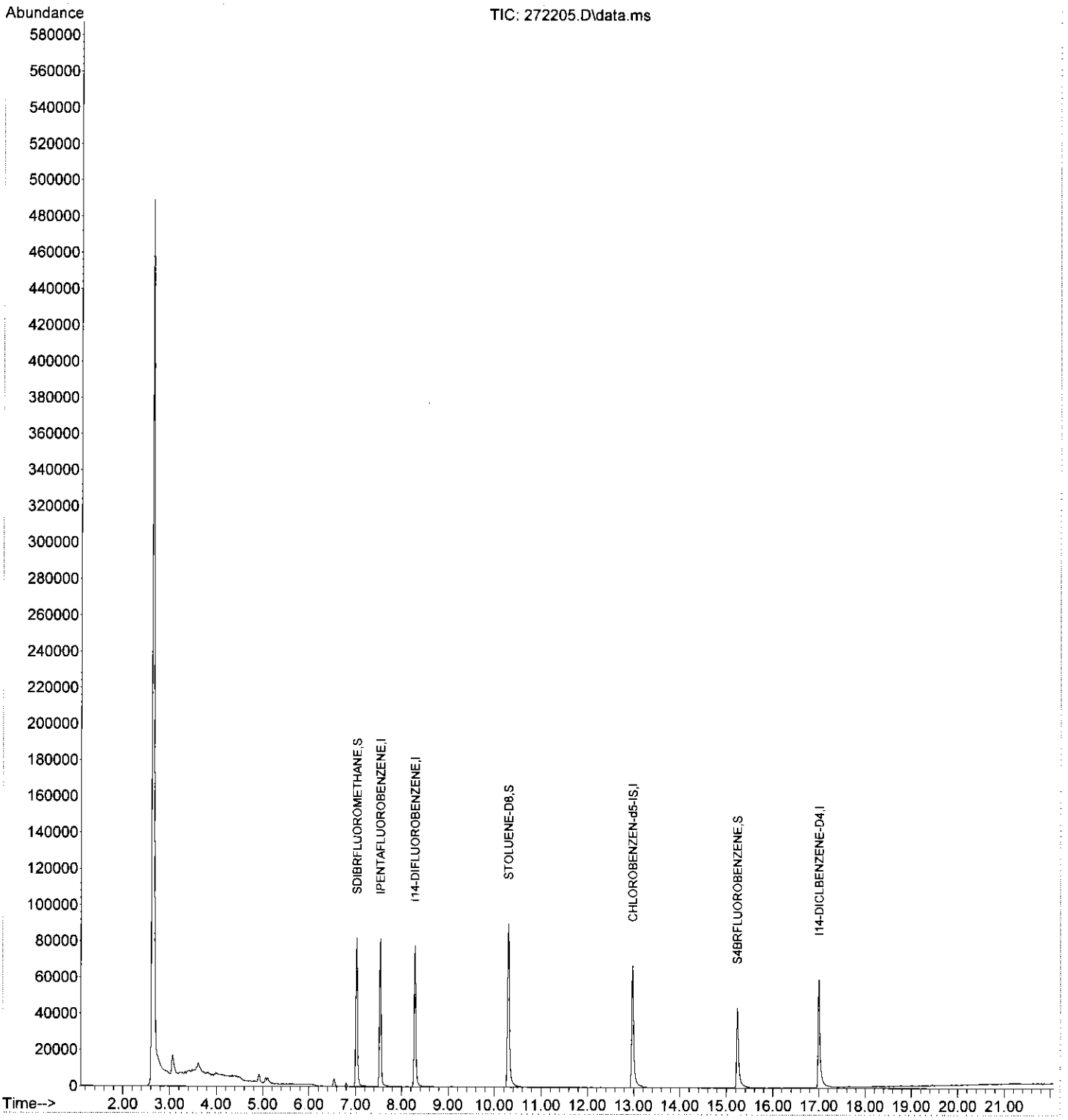
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	69857	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.284	114	83872	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.975	117	72867	20.00	µg/L	0.03
12) I14-DICLBENZENE-D4	16.995	152	32472	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.026	111	52241m	23.26	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 116.30%			
5) STOLUENE-D8	10.294	98	94032	18.36	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 91.80%			
11) S4BRFLUOROBENZENE	15.228	95	29932m	16.20	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 81.00%			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	10.386	91	133	N.D.		
8) ETHYLBENZENE	0.000		0	N.D.		
9) MP-XYLENE	0.000		0	N.D.		
10) O-XYLENE	0.000		0	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272205.D
Acq On : 11 Sep 2018 5:10 pm
Operator : NIVA
Sample : 2926066
Misc : RUN202722
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 19 14:38:12 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:48:56 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272206.D
Acq On : 11 Sep 2018 5:36 pm
Operator : NIVA
Sample : 2926066DUP/2926061
Misc : RUN202722
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 14:38:53 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Thu Aug 23 11:13:40 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

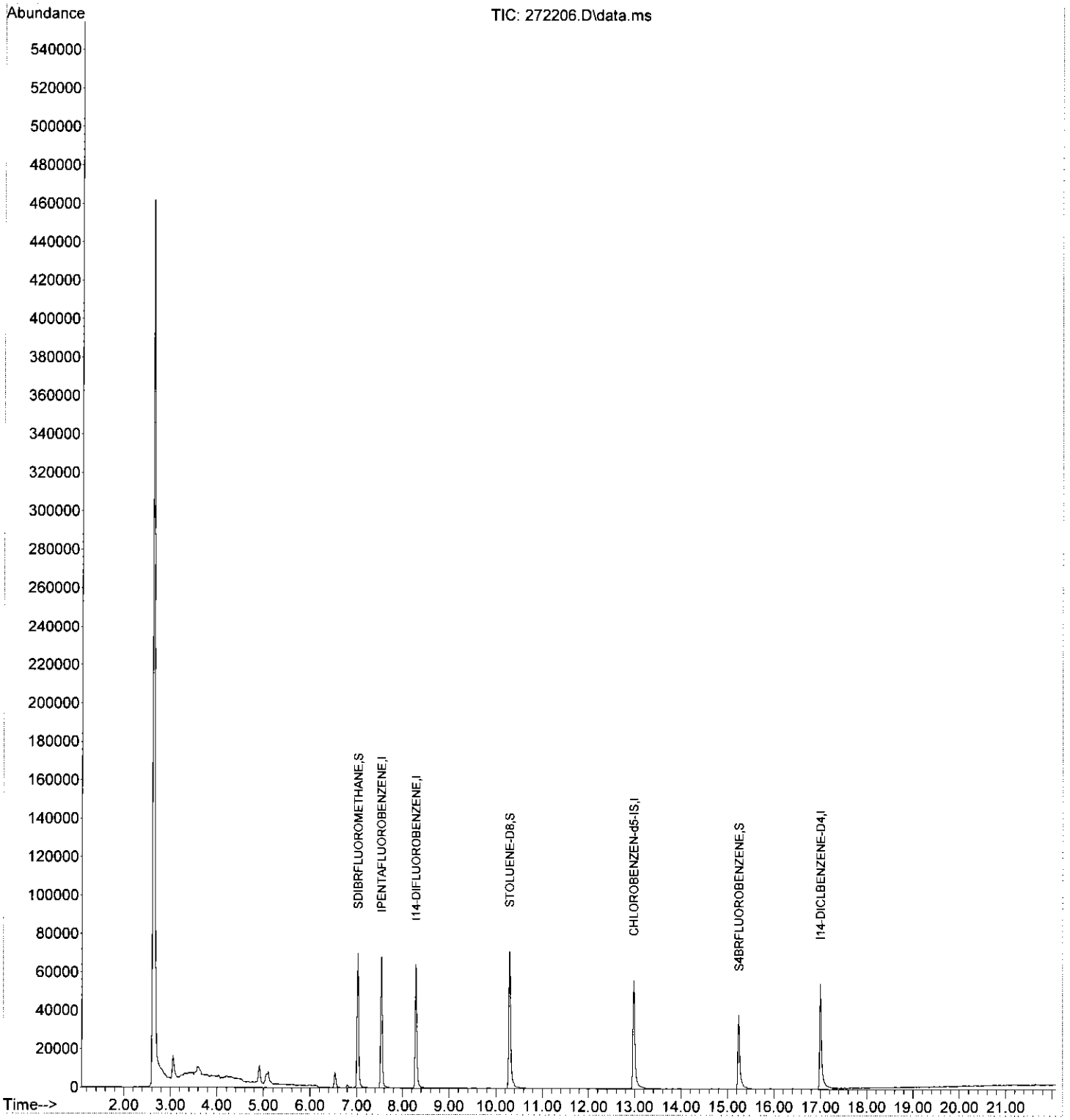
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	57005	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.284	114	67743	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.975	117	59847	20.00	µg/L	0.03
12) I14-DICLBENZENE-D4	16.995	152	28153	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.026	111	39771m	21.93	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.65%			
5) STOLUENE-D8	10.294	98	76851	18.58	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.90%			
11) S4BRFLUOROBENZENE	15.238	95	25247m	16.64	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 83.20%			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	10.386	91	403	N.D.		
8) ETHYLBENZENE	0.000		0	N.D.		
9) MP-XYLENE	0.000		0	N.D.		
10) O-XYLENE	0.000		0	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272206.D
Acq On : 11 Sep 2018 5:36 pm
Operator : NIVA
Sample : 2926066DUP/2926061
Misc : RUN202722
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 14:38:53 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Thu Aug 23 11:13:40 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272207.D
Acq On : 11 Sep 2018 6:02 pm
Operator : NIVA
Sample : 2926063
Misc : RUN202722
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:39:25 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:48:56 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

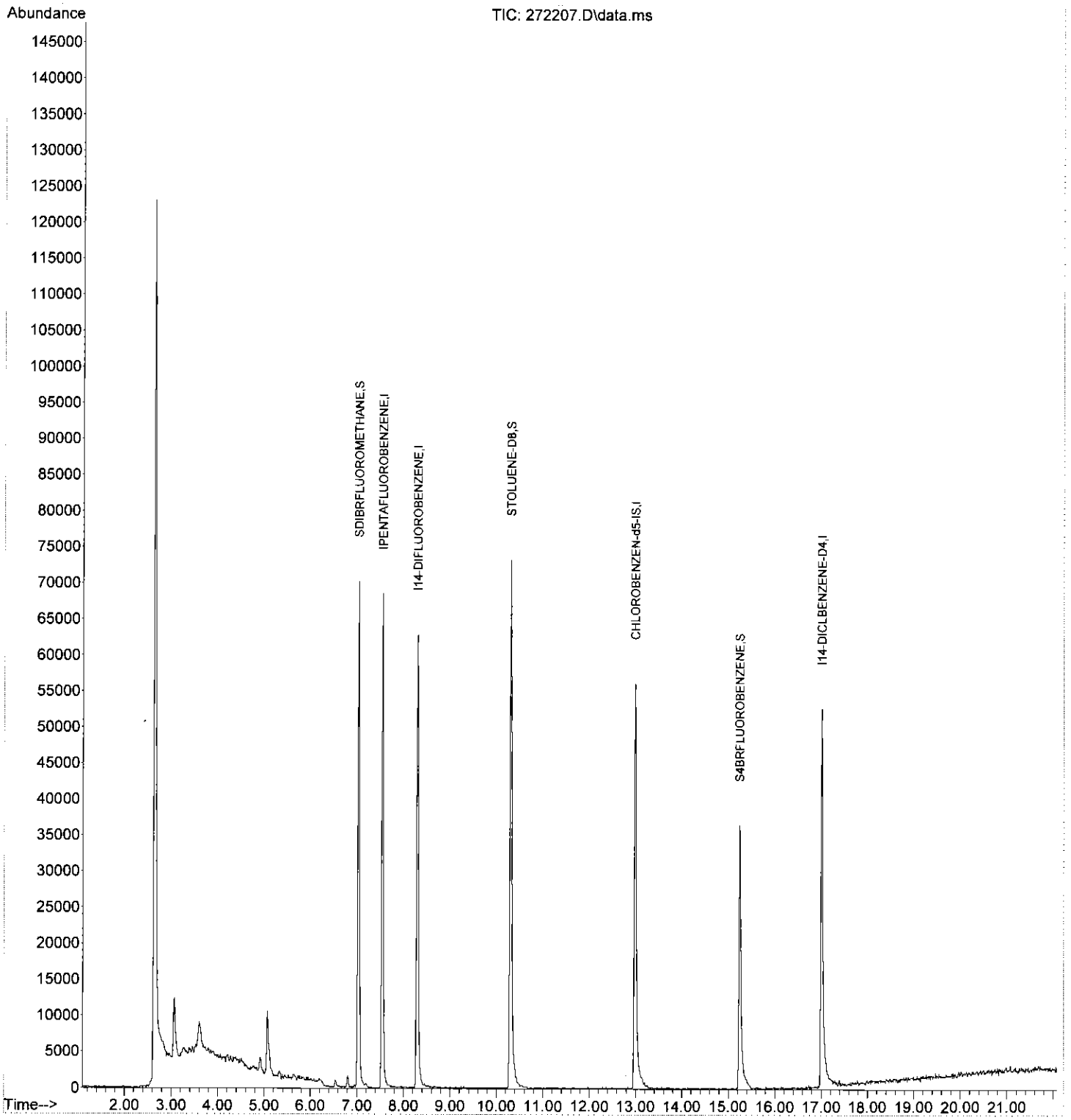
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	60421	20.00	µg/L	0.03
2) I14-DIFLUOROBENZENE	8.295	114	69779	20.00	µg/L	0.03
7) CHLOROBENZEN-d5-IS	12.985	117	62281	20.00	µg/L	0.04
12) I14-DICLBENZENE-D4	17.005	152	28246	20.00	µg/L	-0.12
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.026	111	44787m	23.97	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 119.85%			
5) STOLUENE-D8	10.305	98	79585	18.68	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.40%			
11) S4BRFLUOROBENZENE	15.239	95	24972m	15.82	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 79.10%#			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	10.386	91	244	N.D.		
8) ETHYLBENZENE	0.000		0	N.D.		
9) MP-XYLENE	0.000		0	N.D.		
10) O-XYLENE	0.000		0	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272207.D
Acq On : 11 Sep 2018 6:02 pm
Operator : NIVA
Sample : 2926063
Misc : RUN202722
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 14:39:25 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:48:56 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272209.D
Acq On : 11 Sep 2018 6:28 pm
Operator : NIVA
Sample : 2926062
Misc : RUN202722
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 16:02:40 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

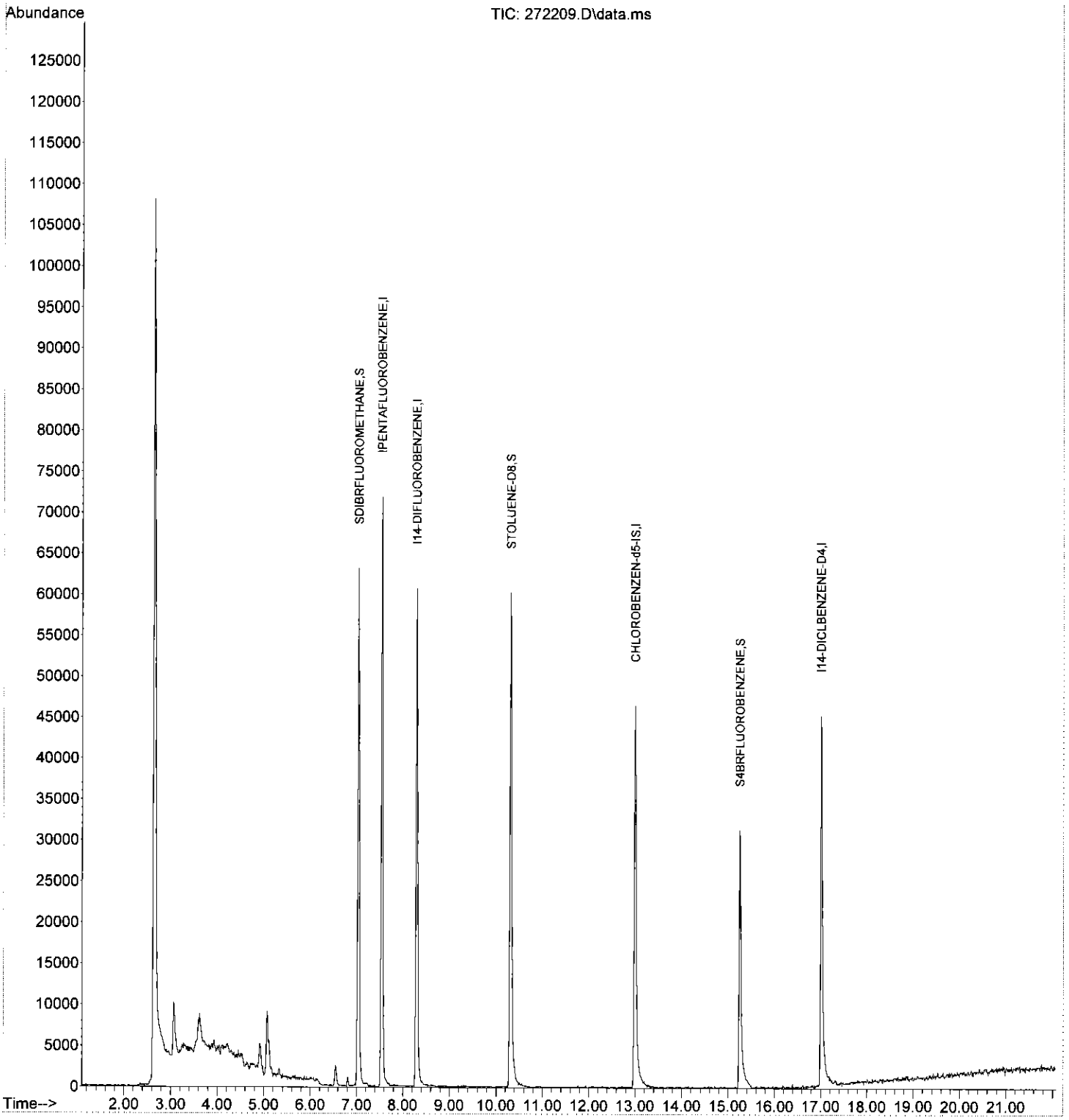
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	57657	20.00	µg/L	0.03
2) I14-DIFLUOROBENZENE	8.295	114	64057	20.00	µg/L	0.03
7) CHLOROBENZEN-d5-IS	12.995	117	50983	20.00	µg/L	0.05
12) I14-DICLBENZENE-D4	17.005	152	24167	20.00	µg/L	-0.12
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	45066	20.79	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.95%			
5) STOLUENE-D8	10.315	98	66139	19.57	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.85%			
11) S4BRFLUOROBENZENE	15.249	95	19457	18.83	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.15%			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	10.416	91	147	N.D.		
8) ETHYLBENZENE	0.000		0	N.D.		
9) MP-XYLENE	0.000		0	N.D.		
10) O-XYLENE	0.000		0	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272209.D
Acq On : 11 Sep 2018 6:28 pm
Operator : NIVA
Sample : 2926062
Misc : RUN202722
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 16:02:40 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272210.D
Acq On : 11 Sep 2018 6:54 pm
Operator : NIVA
Sample : CCV/2936818
Misc : RUN202722
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 14:41:32 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:46:17 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

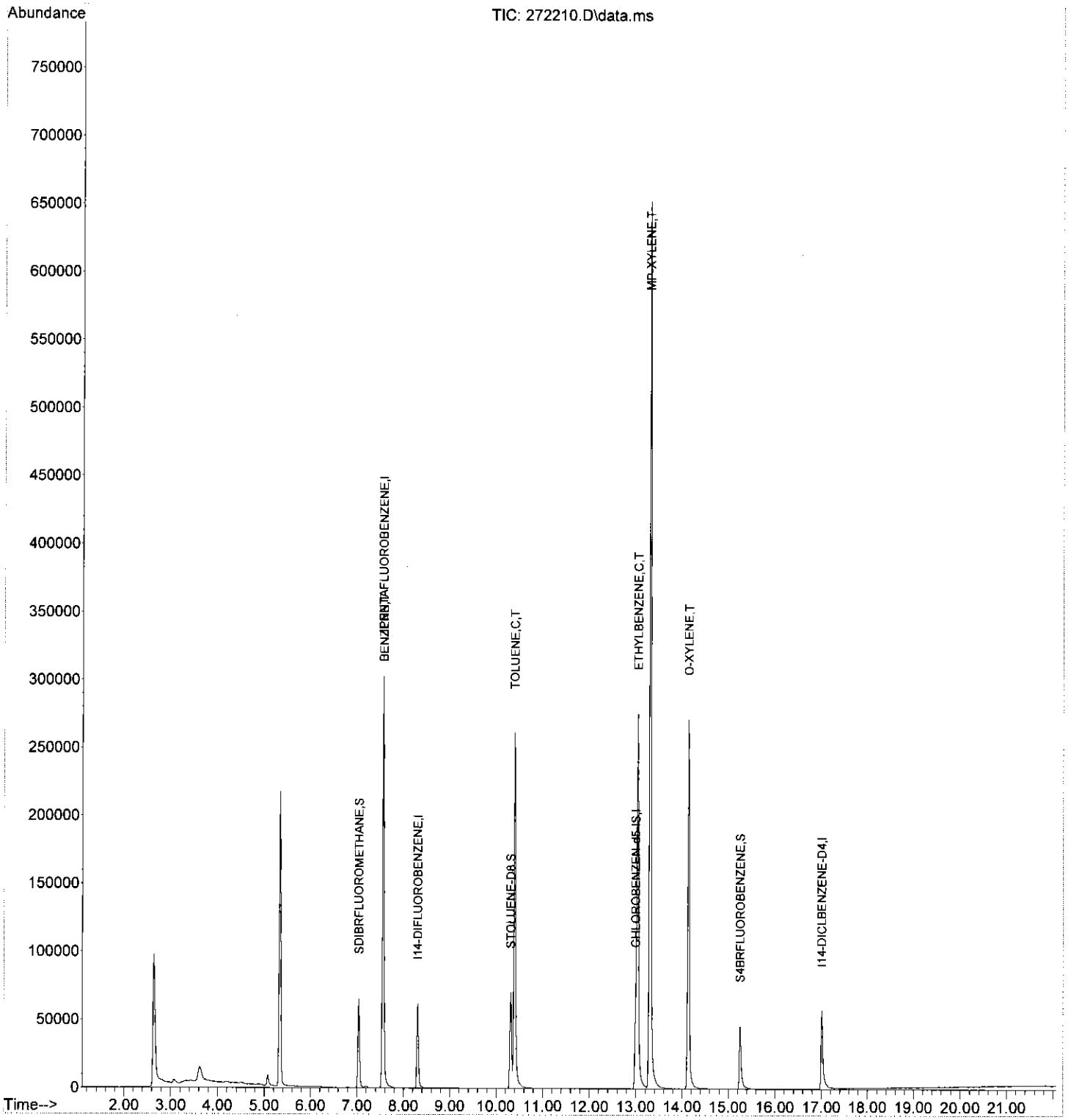
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.554	168	63194	20.00	µg/L	0.04
2) I14-DIFLUOROBENZENE	8.305	114	66183	20.00	µg/L	0.04
7) CHLOROBENZEN-d5-IS	12.995	117	67960	20.00	µg/L	0.05
12) I14-DICLBENZENE-D4	17.005	152	28835	20.00	µg/L	-0.12
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	45933	19.87	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.35%			
5) STOLUENE-D8	10.315	98	74228	20.19	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.95%			
11) S4BRFLUOROBENZENE	15.249	95	27810	20.13	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.65%			
Target Compounds						Qvalue
4) BENZENE	7.564	78	242050	17.39	µg/L	96
6) TOLUENE	10.396	91	255265	17.55	µg/L	96
8) ETHYLBENZENE	13.036	91	279423m	16.25	µg/L	
9) MP-XYLENE	13.289	91	617037m	32.77	µg/L	
10) O-XYLENE	14.132	91	259407m	16.85	µg/L	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272210.D
Acq On : 11 Sep 2018 6:54 pm
Operator : NIVA
Sample : CCV/2936818
Misc : RUN202722
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 14:41:32 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:46:17 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272211.D
Acq On : 11 Sep 2018 7:20 pm
Operator : NIVA
Sample : 2928161
Misc : RUN202722
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:42:00 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

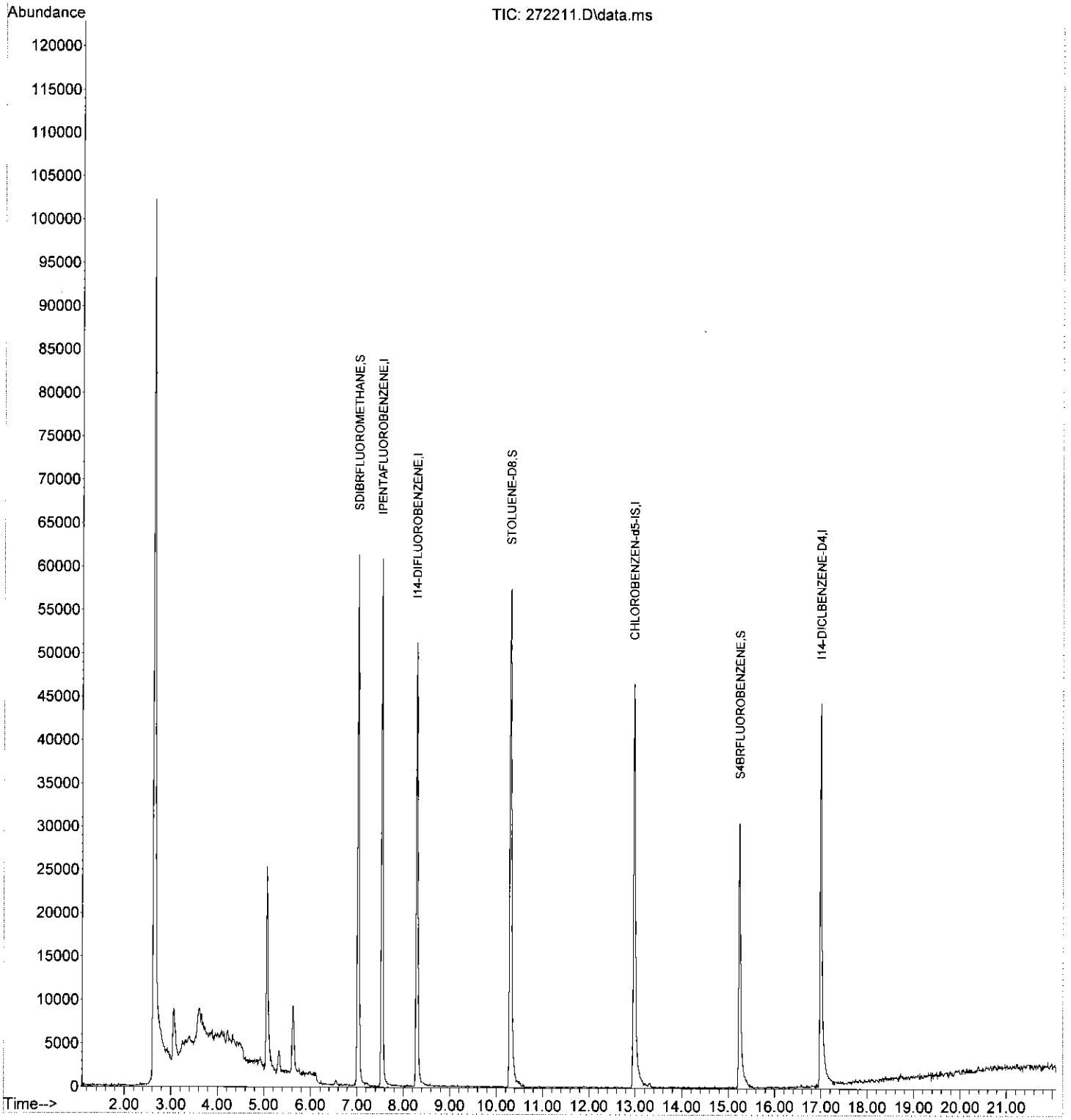
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	51483	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.284	114	57782	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.975	117	50511	20.00	µg/L	0.03
12) I14-DICLBENZENE-D4	16.995	152	23600	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.026	111	39317m	23.34	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 116.70%			
5) STOLUENE-D8	10.305	98	64200	19.85	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.25%			
11) S4BRFLUOROBENZENE	15.238	95	20536m	18.35	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 91.75%			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	10.386	91	575	N.D.		
8) ETHYLBENZENE	13.015	91	543	N.D.		
9) MP-XYLENE	13.299	91	872	N.D.		
10) O-XYLENE	14.152	91	142	N.D.		

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

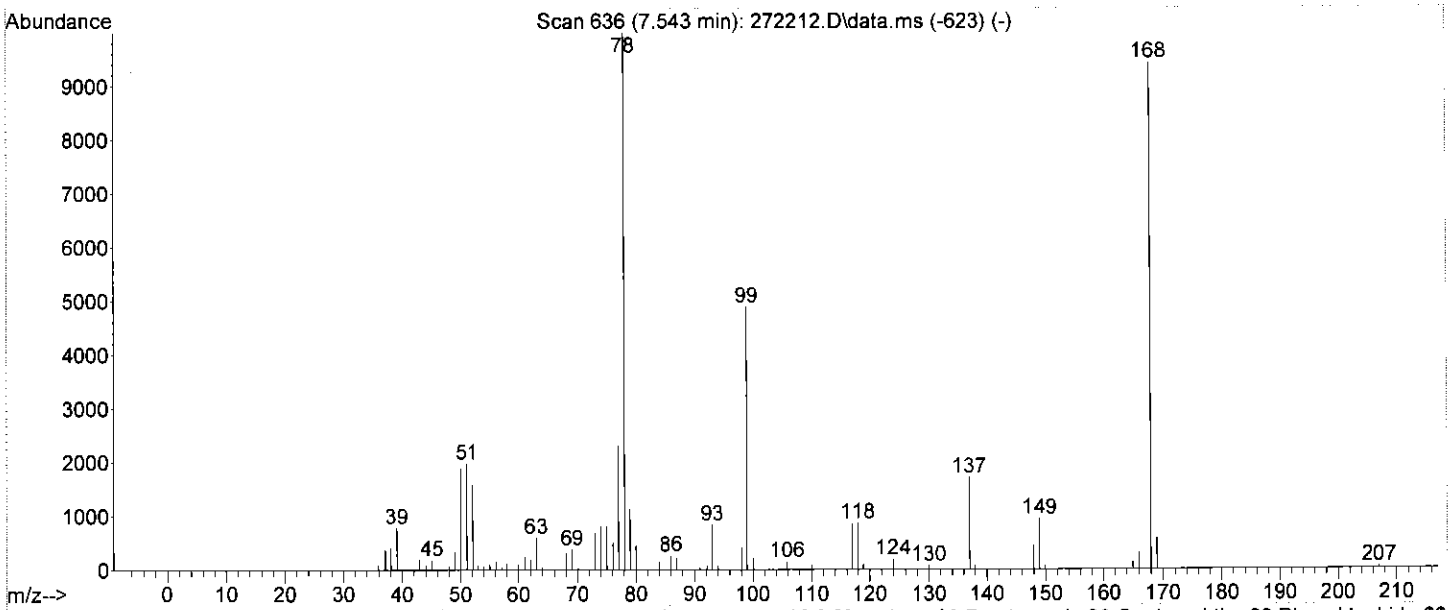
Quantitation Report (QT Reviewed)

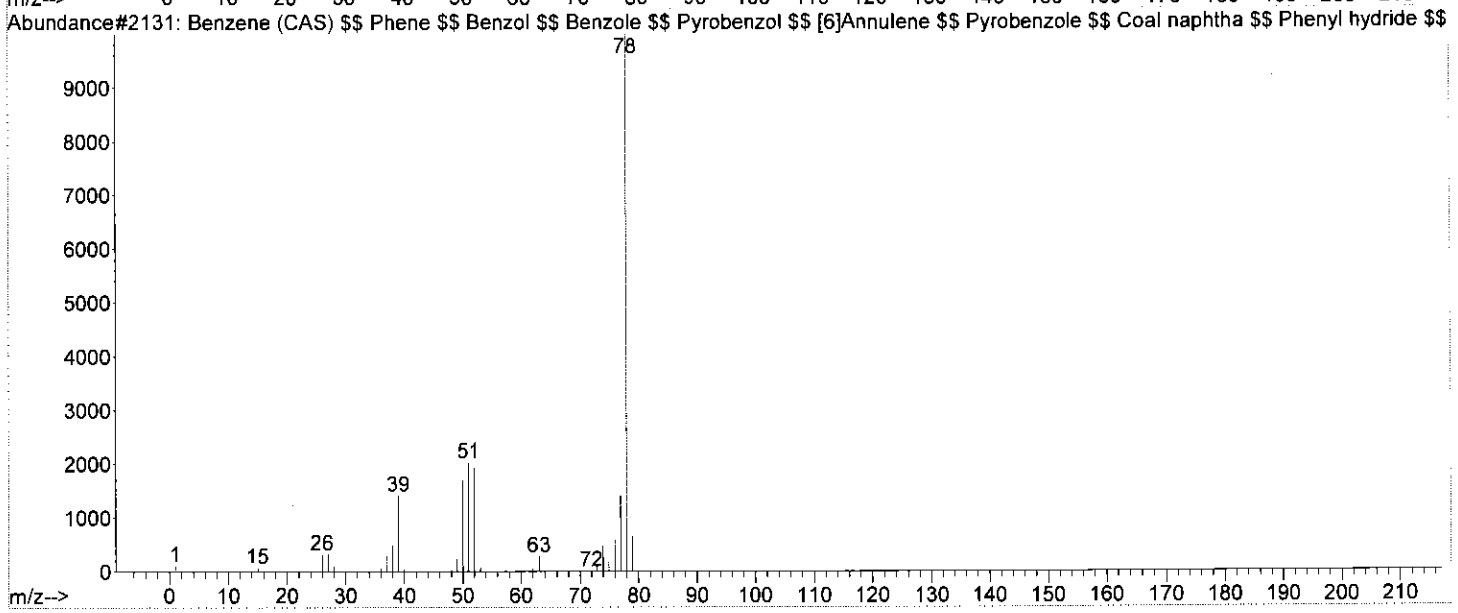
Data Path : C:\msdchem\1\DATA\202722\
Data File : 272211.D
Acq On : 11 Sep 2018 7:20 pm
Operator : NIVA
Sample : 2928161
Misc : RUN202722
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 14:42:00 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 12 13:43:43 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\202722\
Data File : 272212.D
Acq On : 11 Sep 2018 7:46 pm
Operator : NIVA
Sample : 2926068
Misc : RUN202722
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:59:39 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

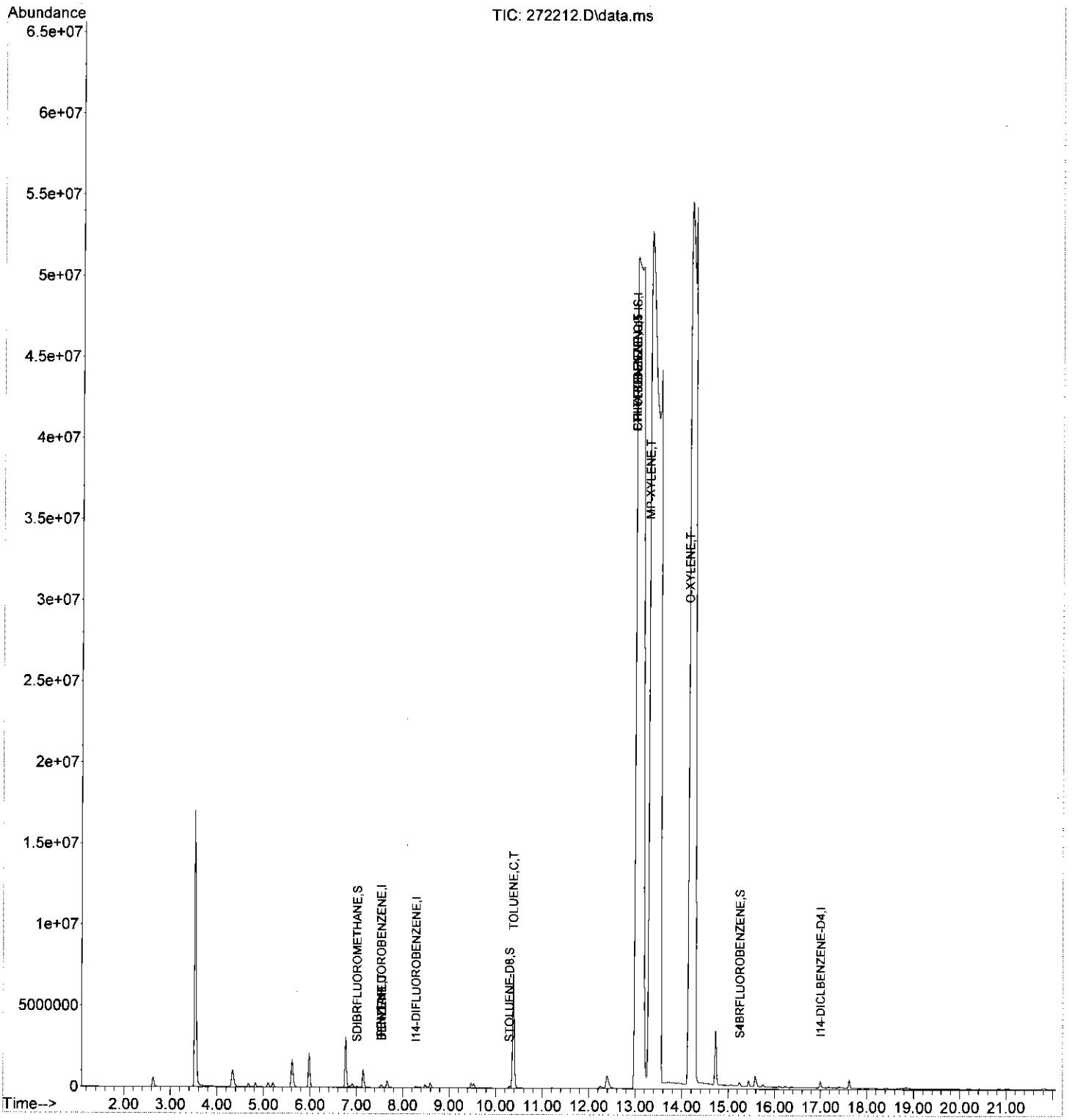
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	87705	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.284	114	91091	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	13.005	117	176631	20.00	µg/L	# 0.06
12) I14-DICLBENZENE-D4	16.995	152	141776	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.015	111	53348	17.31	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 86.55%			
5) STOLUENE-D8	10.294	98	112742	23.46	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 117.30%			
11) S4BRFLUOROBENZENE	15.249	95	104761	29.27	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 146.35%#			
Target Compounds						Qvalue
4) BENZENE	7.543	78	72374	3.40	µg/L	96
6) TOLUENE	10.376	91	7064542	322.35	µg/L	98
8) ETHYLBENZENE	13.005	91	101657982	2138.37	µg/L #	21
9) MP-XYLENE	13.299	91	140939277m	2609.87	µg/L	
10) O-XYLENE	14.152	91	81773904	1891.87	µg/L #	40

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272212.D
Acq On : 11 Sep 2018 7:46 pm
Operator : NIVA
Sample : 2926068
Misc : RUN202722
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 14:59:39 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272213.D
Acq On : 11 Sep 2018 8:12 pm
Operator : NIVA
Sample : 2926068MS/2926064
Misc : RUN202722
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 15:00:16 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

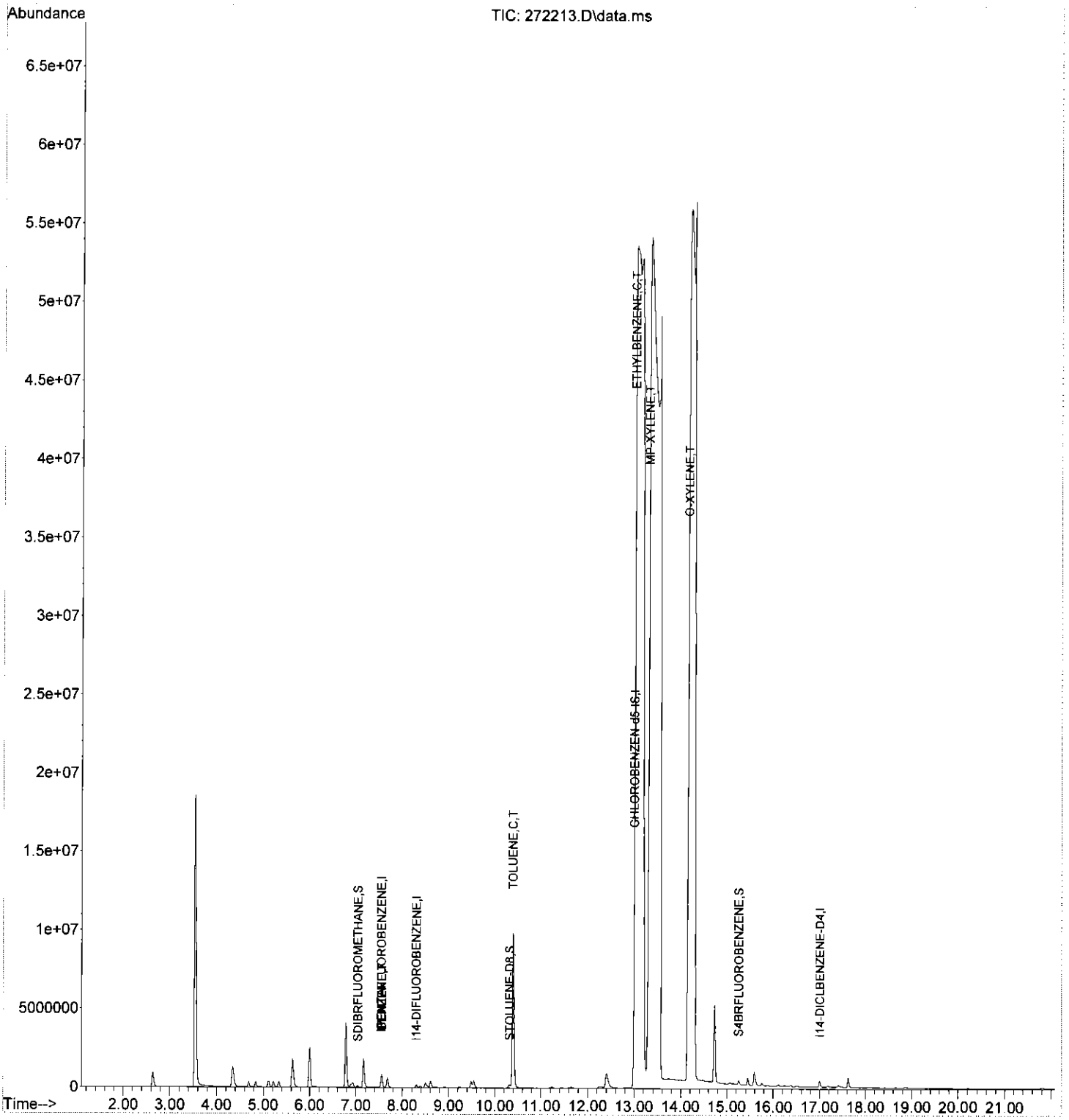
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	155927	20.00	µg/L	0.03
2) I14-DIFLUOROBENZENE	8.295	114	175650	20.00	µg/L	0.03
7) CHLOROBENZEN-d5-IS	12.995	117	190266	20.00	µg/L	# 0.05
12) I14-DICLBENZENE-D4	17.005	152	141312	20.00	µg/L	-0.12
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	69891	11.76	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 58.80%#			
5) STOLUENE-D8	10.315	98	209304	22.59	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.95%			
11) S4BRFLUOROBENZENE	15.249	95	116179	30.13	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 150.65%#			
Target Compounds						Qvalue
4) BENZENE	7.553	78	723998	17.61	µg/L	99
6) TOLUENE	10.386	91	11025554	260.90	µg/L	99
8) ETHYLBENZENE	13.015	91	105117332m	2052.68	µg/L	
9) MP-XYLENE	13.310	91	137754932	2368.10	µg/L #	41
10) O-XYLENE	14.162	91	84212379m	1808.67	µg/L	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272213.D
Acq On : 11 Sep 2018 8:12 pm
Operator : NIVA
Sample : 2926068MS/2926064
Misc : RUN202722
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 15:00:16 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272214.D
Acq On : 11 Sep 2018 8:39 pm
Operator : NIVA
Sample : 2926068MSD/2926065
Misc : RUN202722
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 15:00:54 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

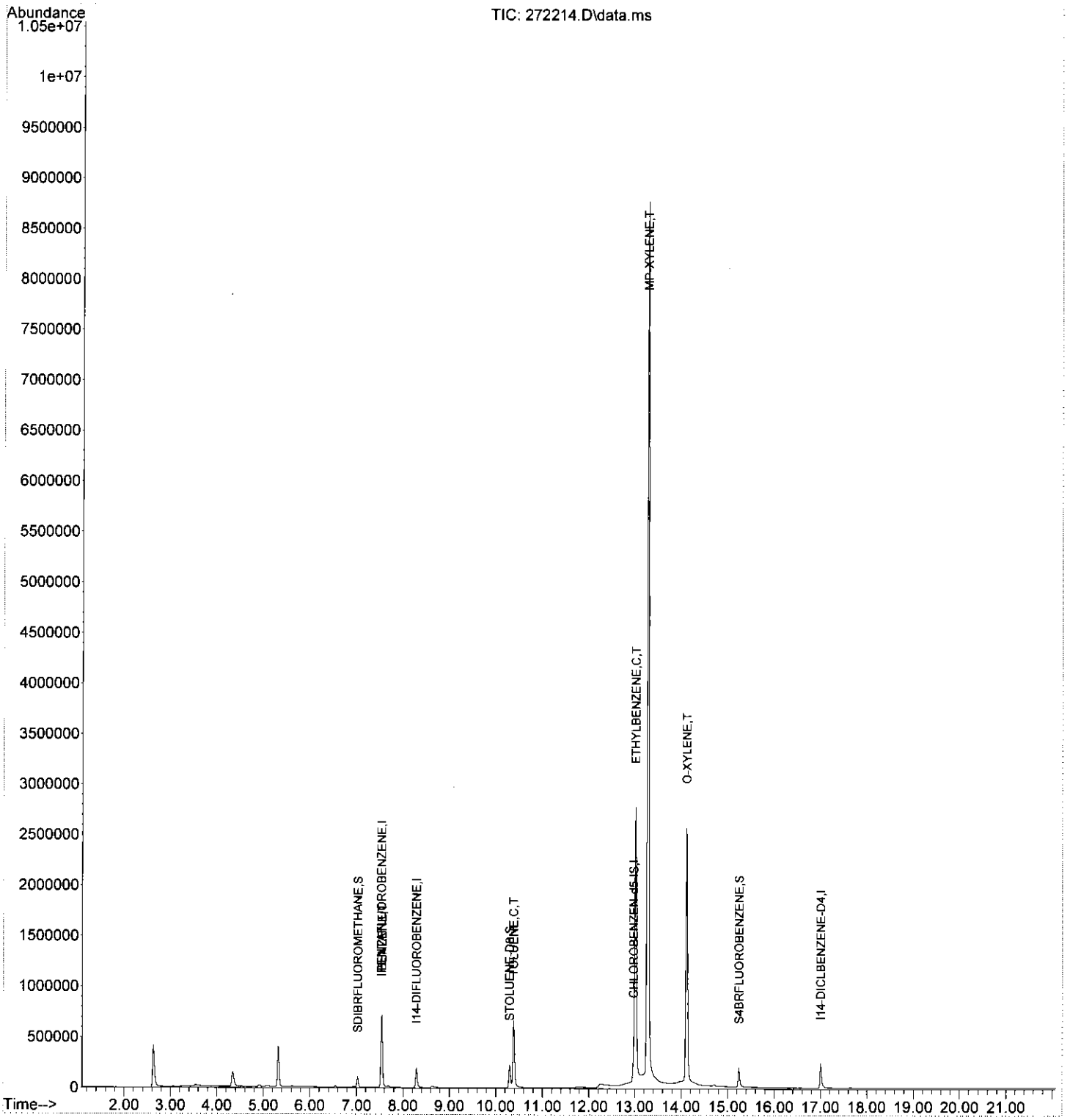
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	158469	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.285	114	148059m	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.975	117	200303	20.00	µg/L	0.03
12) I14-DICLBENZENE-D4	16.995	152	97987	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.026	111	75254	15.02	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 75.10%#			
5) STOLUENE-D8	10.295	98	219477	28.10	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 140.50%#			
11) S4BRFLUOROBENZENE	15.239	95	96484	23.77	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 118.85%			
Target Compounds						Qvalue
4) BENZENE	7.544	78	635294	18.34	µg/L	99
6) TOLUENE	10.376	91	734735	20.63	µg/L	97
8) ETHYLBENZENE	13.015	91	3111880	57.72	µg/L	99
9) MP-XYLENE	13.279	91	8488023	138.60	µg/L	95
10) O-XYLENE	14.112	91	2457686	50.14	µg/L	96

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

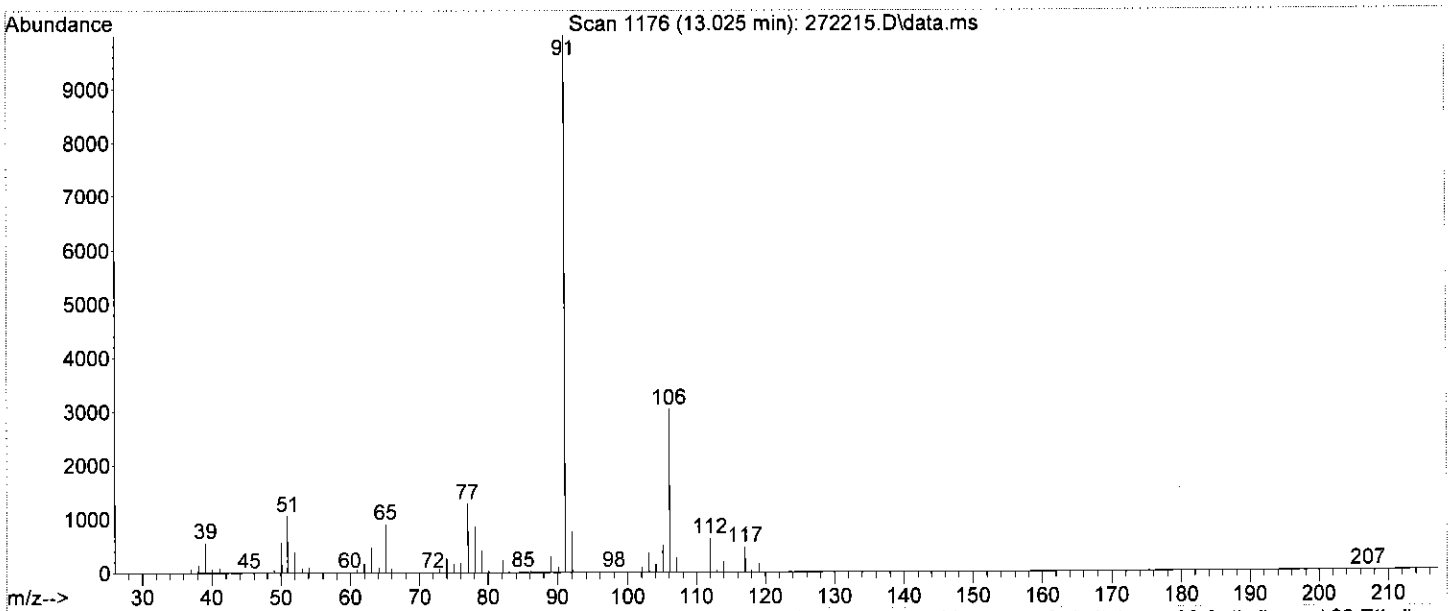
Quantitation Report (QT Reviewed)

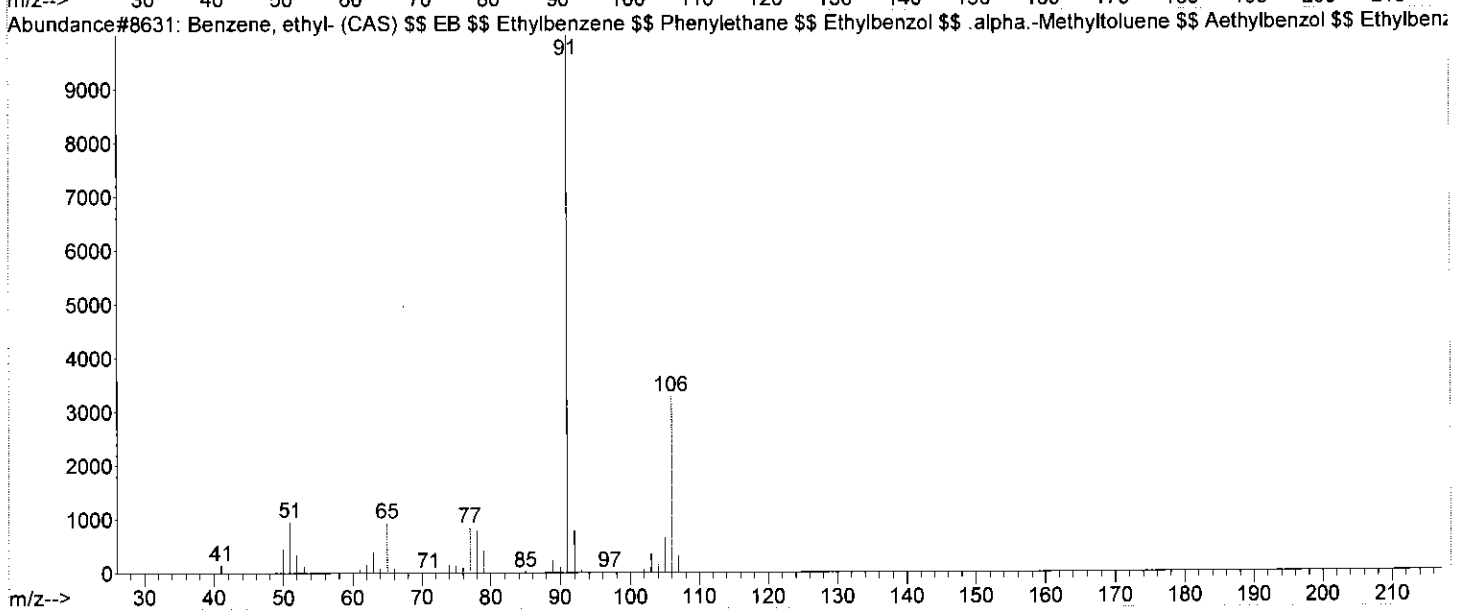
Data Path : C:\msdchem\1\DATA\202722\
Data File : 272214.D
Acq On : 11 Sep 2018 8:39 pm
Operator : NIVA
Sample : 2926068MSD/2926065
Misc : RUN202722
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 15:00:54 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

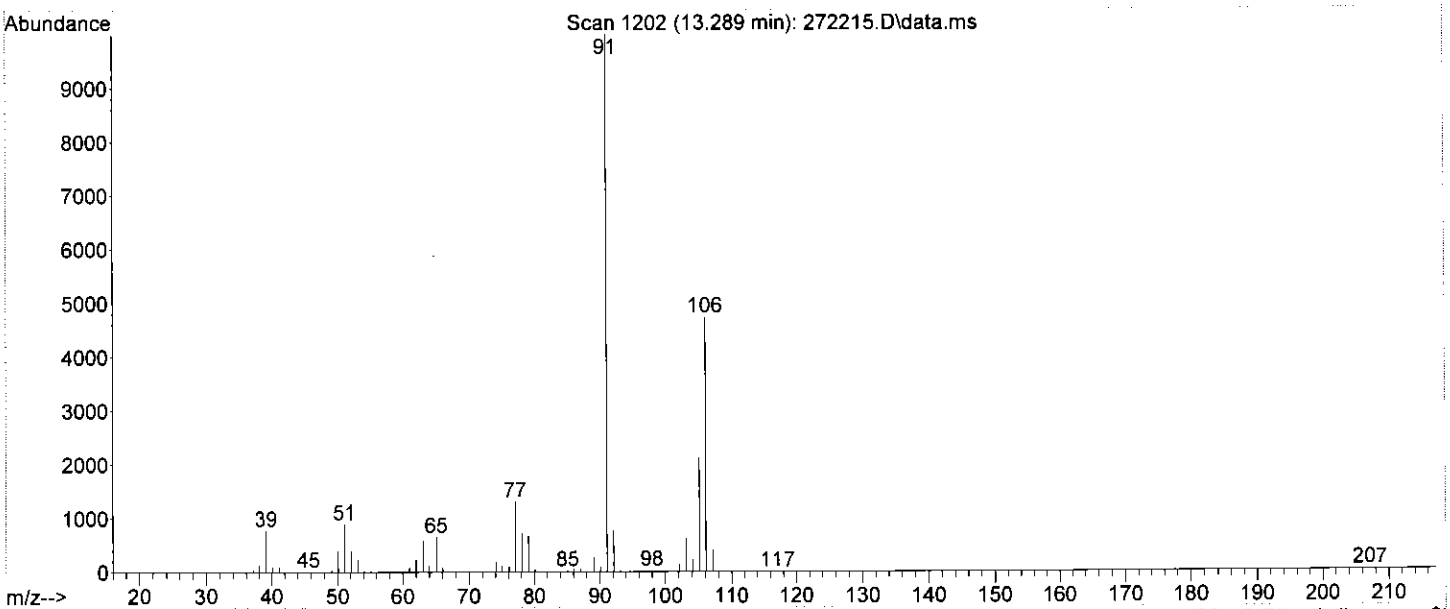


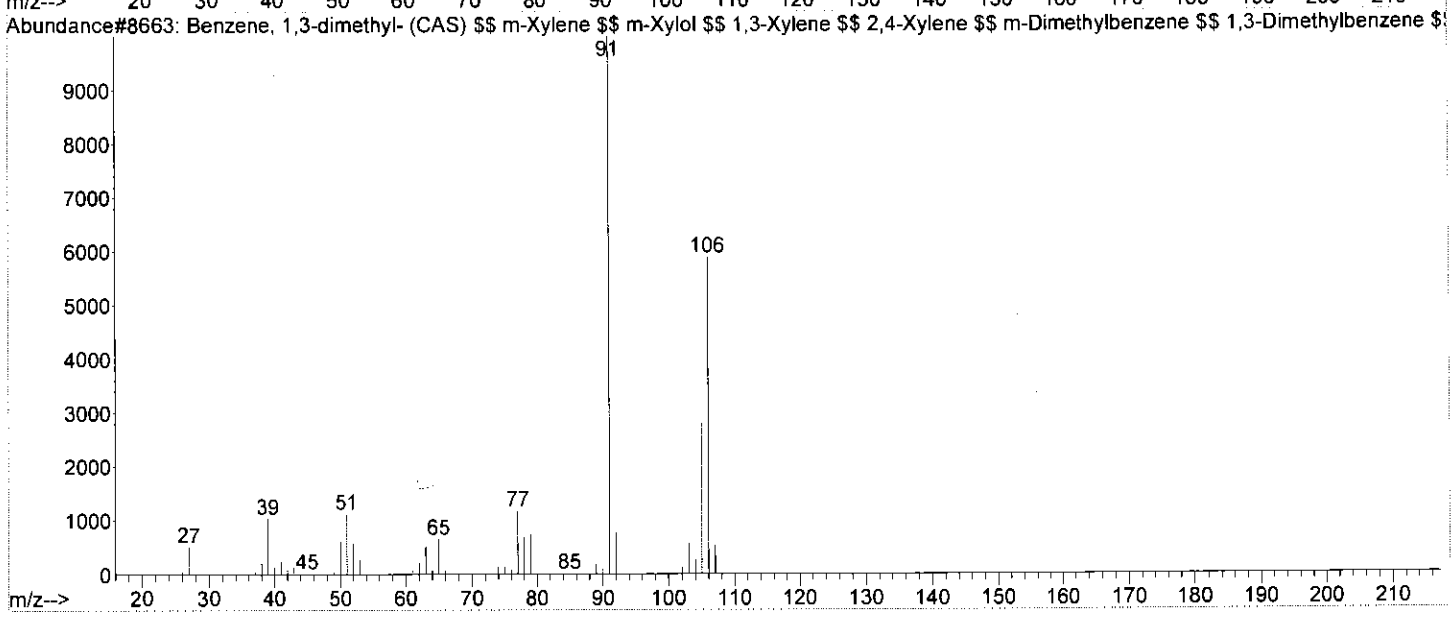
Library Searched : C:\Database\WILEY275.L
Quality : 94
ID : Benzene, ethyl- (CAS) $$ EB $$ Ethylbenzene $$ Phenylethane $$ Ethylbenzol $$ .alpha.-Methyltoluene $$ Aethylbenzol $$ Ethylbenzeen $$ Etilbenzene $$ Etylobenzen $$ NCI-C56393 $$ UN 1175



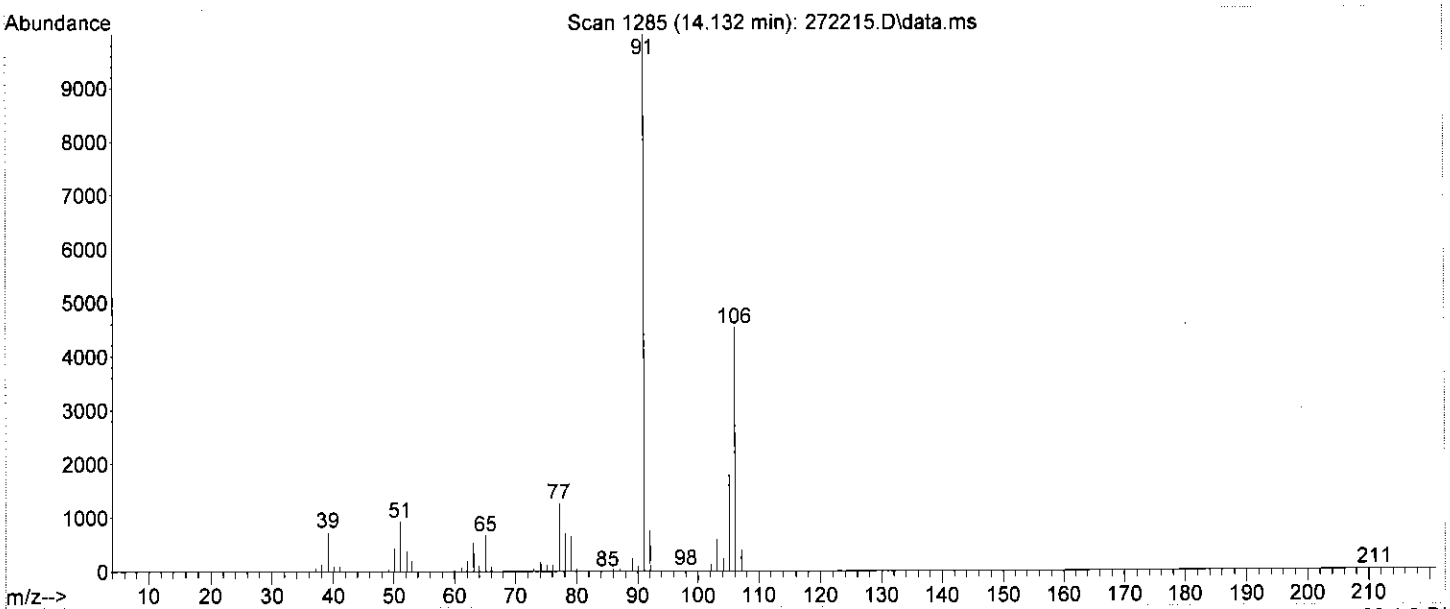


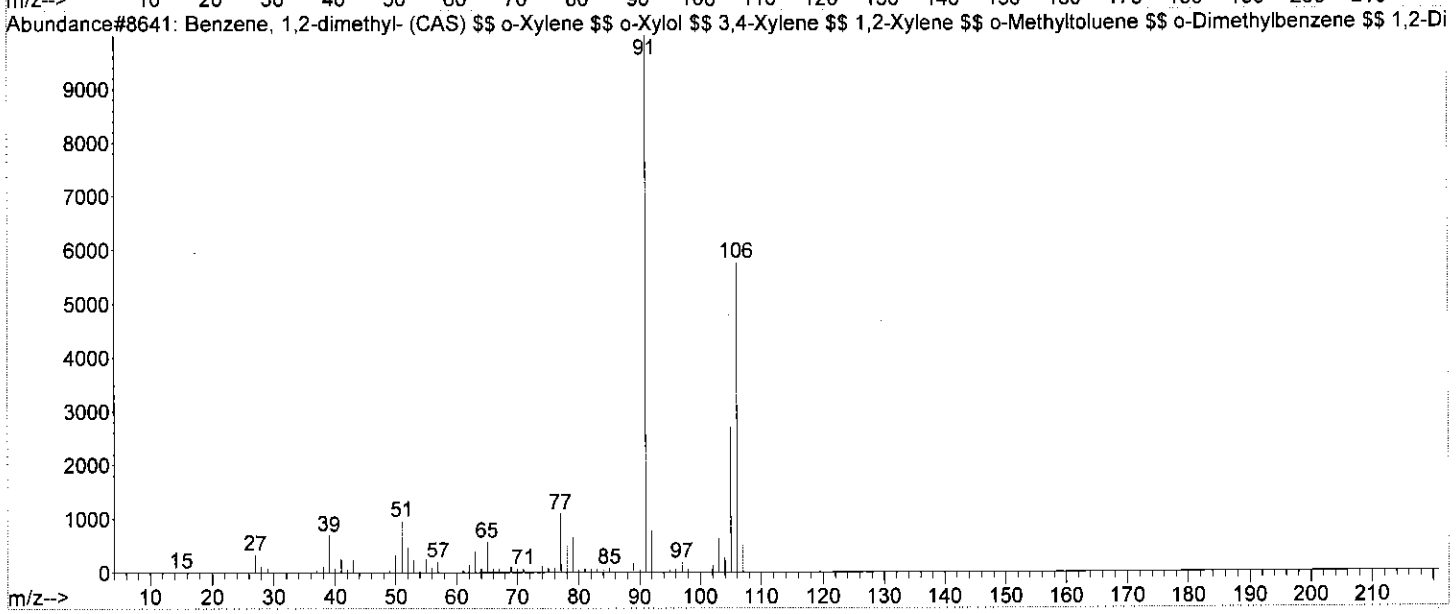
Library Searched : C:\Database\WILEY275.L
Quality : 97
ID : Benzene, 1,3-dimethyl- (CAS) $$ m-Xylene $$ m-Xylol $$ 1,3-Xylene $$ 2,4-Xylene $$ m-Dimethylbenzene $$ 1,3-Dimethylbenzene $$ m-Methyltoluene $$ 1,3-Dimethyl-benzene $$ 1,3-DIMETHYLBENZENE(M-XYLENE) $$ 1,3-DIMETHYLBENZENE (M-XYLENE) $$ meta-Xylene $$ UN





Library Searched : C:\Database\WILEY275.L
Quality : 95
ID : Benzene, 1,2-dimethyl- (CAS) $$ o-Xylene $$ o-Xylol $$ 3,4-Xylene $$ 1,2-Xylene $$ o-Methyltoluene $$ o-Dimethylbenzene $$ 1,2-Dimethylbenzene $$ ortho-Xylene $$ 1,2-Dimethyl-benzene $$ 0-Xylene $$ 1,2-DIMETHYLBENZENE (O-XYLENE) $$ 1,2-DIMETHYLBENZENE(O-X





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272215.D
Acq On : 11 Sep 2018 9:05 pm
Operator : NIVA
Sample : 2926067
Misc : RUN202722
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 15:01:42 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.554	168	153981	20.00 µg/L	0.04
2) I14-DIFLUOROBENZENE	8.305	114	190516	20.00 µg/L	0.04
7) CHLOROBENZEN-d5-IS	12.995	117	193386	20.00 µg/L	0.05
12) I14-DICLBENZENE-D4	17.005	152	97126	20.00 µg/L	-0.12
System Monitoring Compounds					
3) SDIBRFLUOROMETHANE	7.036	111	77210	11.98 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 59.90%#		
5) STOLUENE-D8	10.315	98	203261	20.22 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.10%		
11) S4BRFLUOROBENZENE	15.249	95	89233	22.77 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.85%		
Target Compounds					Qvalue
4) BENZENE	7.564	78	836	N.D.	
6) TOLUENE	10.406	91	12731	N.D.	
8) ETHYLBENZENE	13.025	91	864686	16.61 µg/L	99
9) MP-XYLENE	13.289	91	2960086	50.06 µg/L	94
10) O-XYLENE	14.132	91	608724	12.86 µg/L	95

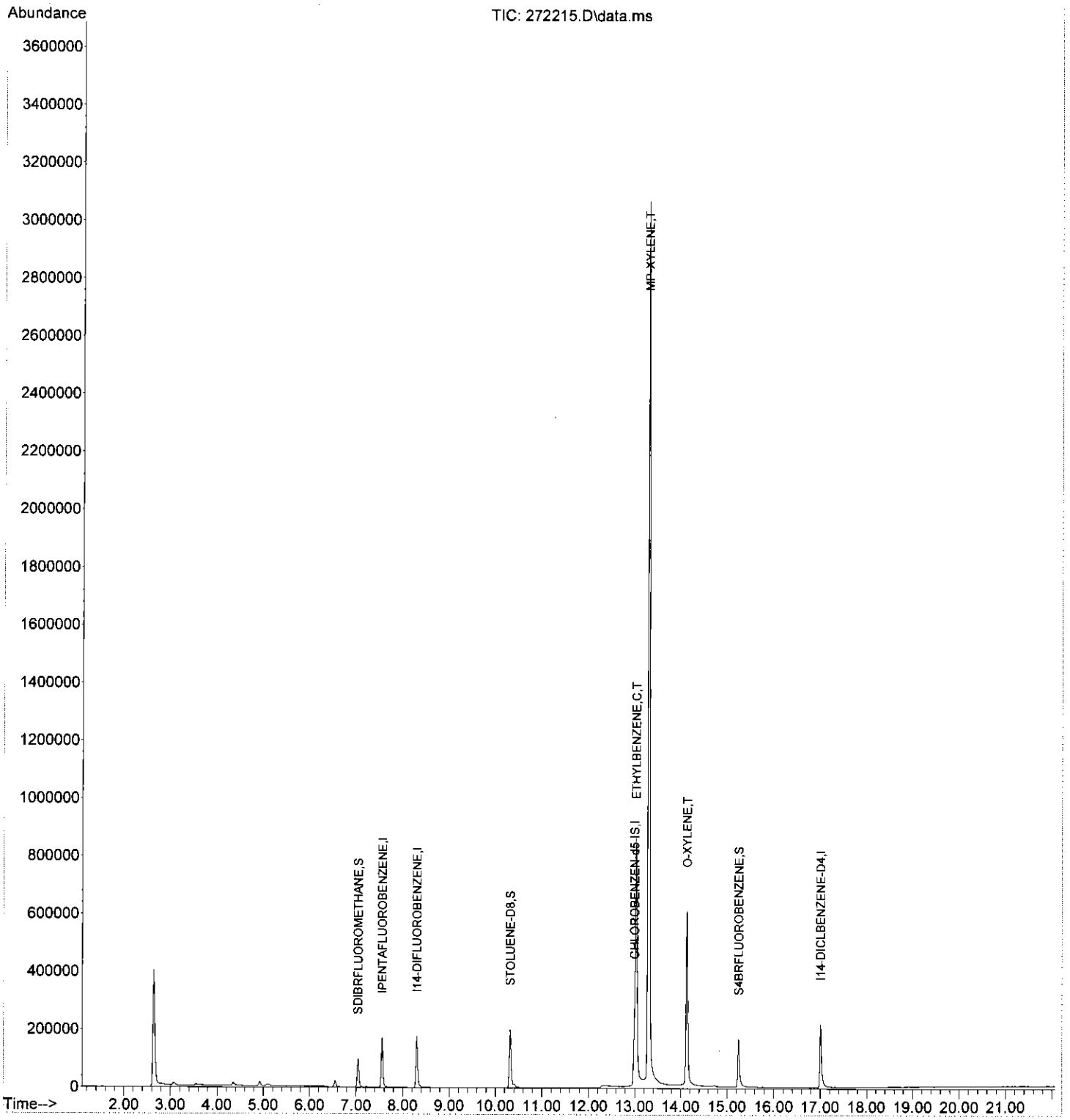
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Nota/ No se reportó y se repitió por aparente contaminación de muestra previa.
NSM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272215.D
Acq On : 11 Sep 2018 9:05 pm
Operator : NIVA
Sample : 2926067
Misc : RUN202722
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 15:01:42 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272216.D
Acq On : 11 Sep 2018 9:31 pm
Operator : NIVA
Sample : 2926067MS/2928162
Misc : RUN202722
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 15:02:43 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.553	168	149074	20.00	µg/L	0.04
2) I14-DIFLUOROBENZENE	8.305	114	185468	20.00	µg/L	0.04
7) CHLOROBENZEN-d5-IS	12.985	117	186421	20.00	µg/L	0.04
12) I14-DICLBENZENE-D4	17.005	152	94737	20.00	µg/L	-0.12
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	77057	12.28	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 61.40%#			
5) STOLUENE-D8	10.315	98	197351	20.17	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.85%			
11) S4BRFLUOROBENZENE	15.249	95	86516	22.90	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.50%			
Target Compounds						Qvalue
4) BENZENE	7.553	78	646831	14.90	µg/L	100
6) TOLUENE	10.396	91	707237	15.85	µg/L	97
8) ETHYLBENZENE	13.025	91	2004260	39.95	µg/L	98
9) MP-XYLENE	13.289	91	5043456	88.49	µg/L	94
10) O-XYLENE	14.122	91	1624421	35.61	µg/L	96

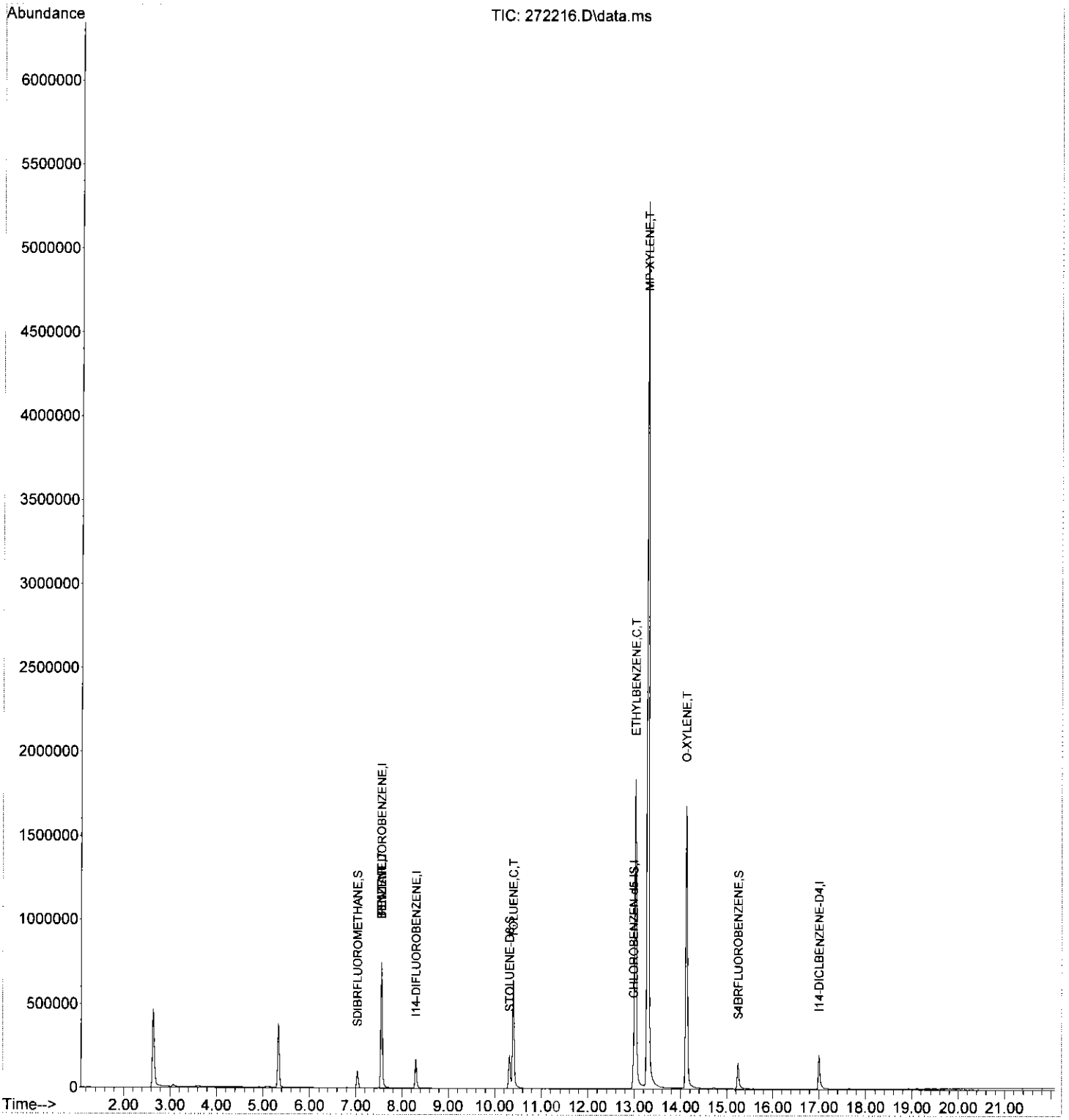
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Nota: ver comentario en muestra de referencia. NIVA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272216.D
Acq On : 11 Sep 2018 9:31 pm
Operator : NIVA
Sample : 2926067MS/2928162
Misc : RUN202722
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 15:02:43 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272217.D
Acq On : 11 Sep 2018 9:57 pm
Operator : NIVA
Sample : 2926067MSD/2928163
Misc : RUN202722
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 15:03:42 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.554	168	129941	20.00	µg/L	0.04
2) I14-DIFLUOROBENZENE	8.305	114	162827	20.00	µg/L	0.04
7) CHLOROBENZEN-d5-IS	12.995	117	161540	20.00	µg/L	0.05
12) I14-DICLBENZENE-D4	17.015	152	82337	20.00	µg/L	-0.11
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	67489	12.25	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 61.25%#			
5) STOLUENE-D8	10.315	98	171147	19.92	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.60%			
11) S4BRFLUOROBENZENE	15.249	95	75608	23.09	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.45%			
Target Compounds						Qvalue
4) BENZENE	7.554	78	598448	15.71	µg/L	99
6) TOLUENE	10.396	91	654662	16.71	µg/L	97
8) ETHYLBENZENE	13.025	91	1683459	38.72	µg/L	98
9) MP-XYLENE	13.289	91	4388984m	88.87	µg/L	
10) O-XYLENE	14.132	91	1411450	35.71	µg/L	96

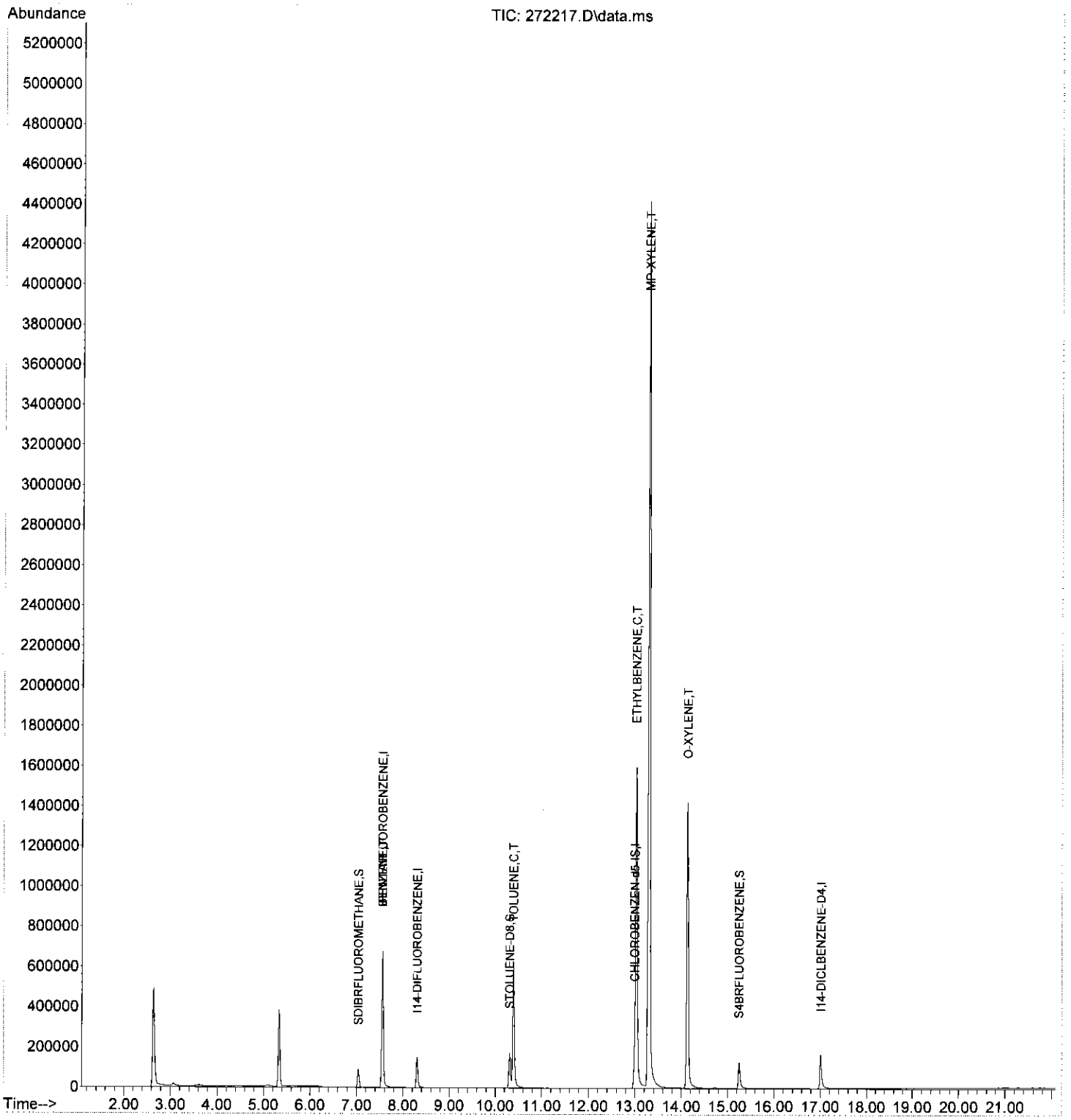
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Nota: No se reportó y se repitió por aparente contaminación de muestra previa. MSM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272217.D
Acq On : 11 Sep 2018 9:57 pm
Operator : NIVA
Sample : 2926067MSD/2928163
Misc : RUN202722
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 15:03:42 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272218.D
Acq On : 11 Sep 2018 10:23 pm
Operator : NIVA
Sample : LFB/2935946
Misc : RUN202722
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 15:03:55 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

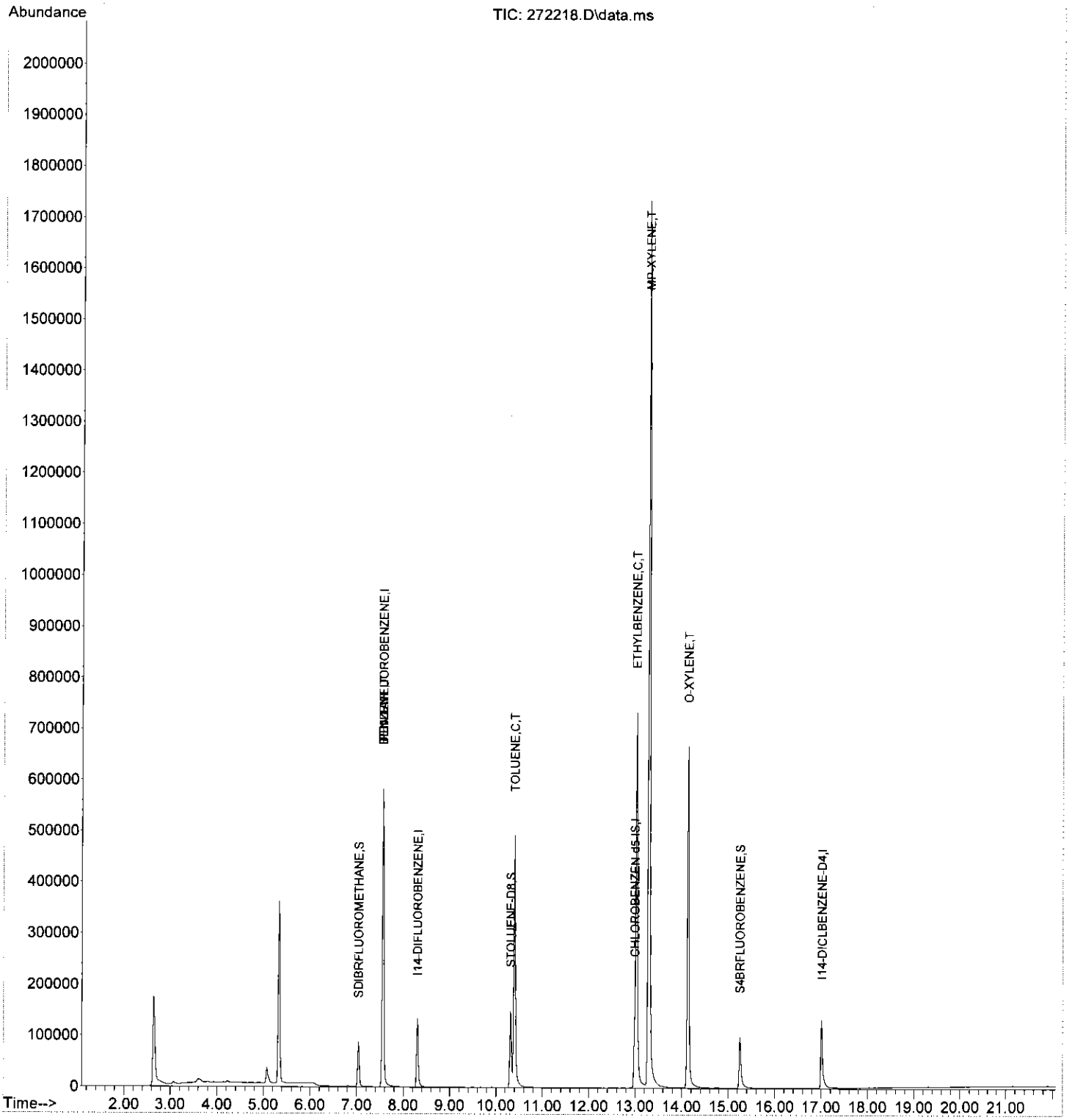
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.554	168	115900	20.00	µg/L	0.04
2) I14-DIFLUOROBENZENE	8.305	114	139394	20.00	µg/L	0.04
7) CHLOROBENZEN-d5-IS	12.995	117	131705	20.00	µg/L	0.05
12) I14-DICLBENZENE-D4	17.015	152	65207	20.00	µg/L	-0.11
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	64504	13.68	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 68.40%#			
5) STOLUENE-D8	10.315	98	145607	19.80	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.00%			
11) S4BRFLUOROBENZENE	15.249	95	58667	21.98	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.90%			
Target Compounds						Qvalue
4) BENZENE	7.554	78	492569	15.10	µg/L	99
6) TOLUENE	10.396	91	514809	15.35	µg/L	98
8) ETHYLBENZENE	13.025	91	726966	20.51	µg/L	98
9) MP-XYLENE	13.289	91	1623637	40.32	µg/L	93
10) O-XYLENE	14.132	91	615532	19.10	µg/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272218.D
Acq On : 11 Sep 2018 10:23 pm
Operator : NIVA
Sample : LFB/2935946
Misc : RUN202722
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 15:03:55 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272009.D
Acq On : 12 Sep 2018 9:23 am
Operator : NIVA
Sample : LRB/
Misc : RUN202720
ALS Vial : 99 Sample Multiplier: 1

Quant Time: Sep 19 15:41:23 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

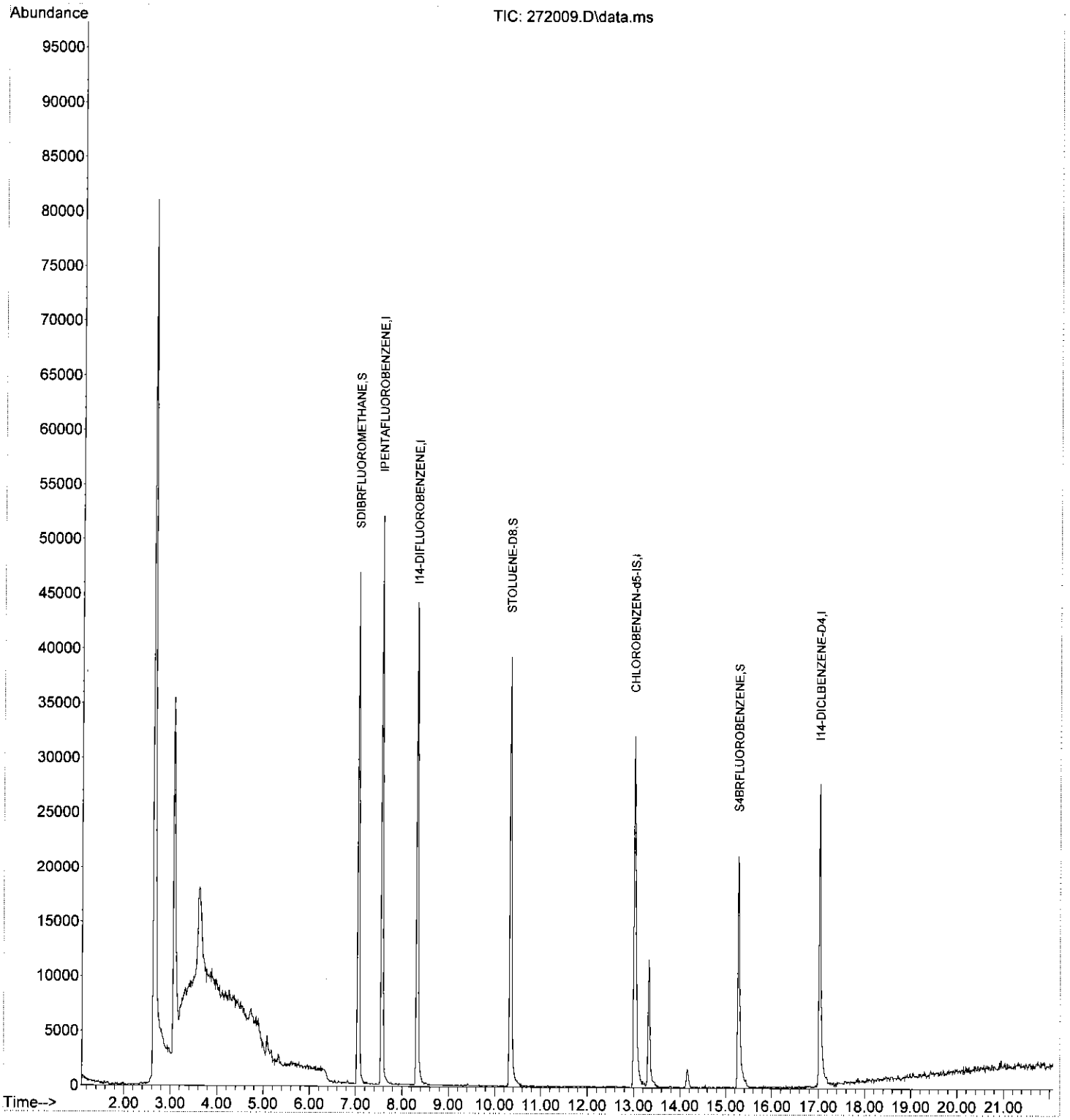
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.564	168	43221	20.00	µg/L	0.05
2) I14-DIFLUOROBENZENE	8.325	114	48111	20.00	µg/L	0.06
7) CHLOROBENZEN-d5-IS	13.015	117	37026	20.00	µg/L	0.07
12) I14-DICLBENZENE-D4	17.025	152	14647	20.00	µg/L	-0.10
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.056	111	31989	19.65	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.25%			
5) STOLUENE-D8	10.335	98	43291	17.06	µg/L	0.06
Spiked Amount 20.000	Range 80 - 120		Recovery = 85.30%			
11) S4BRFLUOROBENZENE	15.269	95	13599	18.12	µg/L	0.12
Spiked Amount 20.000	Range 80 - 120		Recovery = 90.60%			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	10.426	91	211	N.D.		
8) ETHYLBENZENE	13.056	91	4347	N.D.		
9) MP-XYLENE	0.000		0	N.D. d		
10) O-XYLENE	14.162	91	3229	N.D.		

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272009.D
Acq On : 12 Sep 2018 9:23 am
Operator : NIVA
Sample : LRB/
Misc : RUN202720
ALS Vial : 99 Sample Multiplier: 1

Quant Time: Sep 19 15:41:23 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272010.D
Acq On : 12 Sep 2018 9:49 am
Operator : NIVA
Sample : CCV/
Misc : RUN202722
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 15:06:32 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 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	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	IPENTAFLUOROBENZENE	20.000	20.000	0.0	100	0.05
2	I	I14-DIFLUOROBENZENE	20.000	20.000	0.0	100	0.05
3	S	SDIBRFLUOROMETHANE	20.000	19.947	0.3	100	0.03
4	T	BENZENE	20.000	22.296	-11.5	100	0.03
5	S	STOLUENE-D8	20.000	19.374	3.1	100	0.05
6	C,T	TOLUENE	20.000	22.254	-11.3	100	0.05
7	I	CHLOROBENZEN-d5-IS	20.000	20.000	0.0	100	0.06
8	C,T	ETHYLBENZENE	20.000	22.486	-12.4	100	0.05
9	T	MP-XYLENE	40.000	43.617	-9.0	100	0.05
10	T	O-XYLENE	20.000	22.724	-13.6	100	0.07
11	S	S4BRFLUOROBENZENE	20.000	19.890	0.5	100	0.11
12	I	I14-DICLBENZENE-D4	20.000	20.000	0.0	100	-0.11

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

8260BTEX-AGO-LIQ-18A.M Wed Sep 19 15:53:12 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272010.D
Acq On : 12 Sep 2018 9:49 am
Operator : NIVA
Sample : CCV/
Misc : RUN202722
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 15:06:32 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

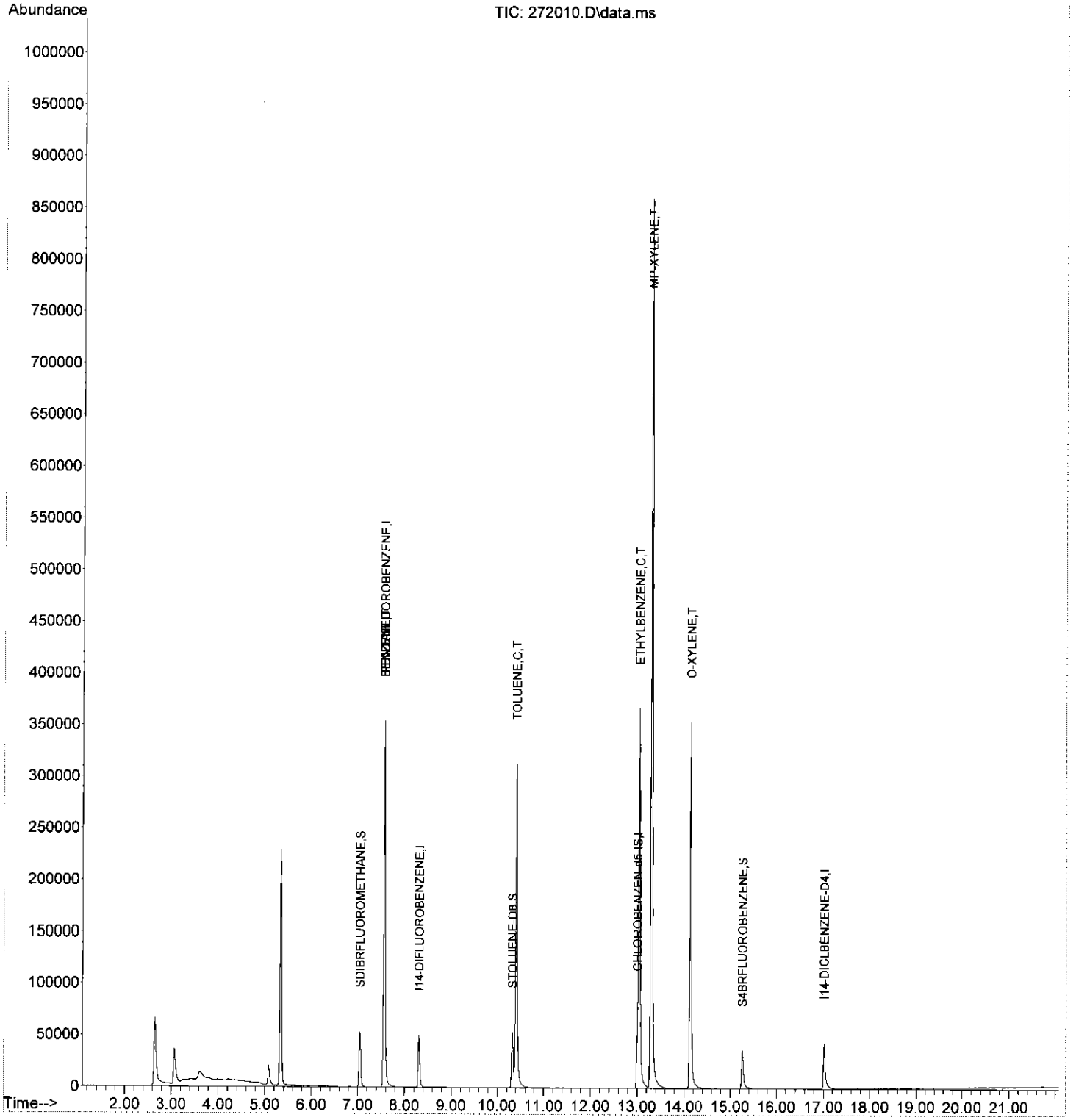
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.564	168	57036	20.00	µg/L	0.05
2) I14-DIFLUOROBENZENE	8.315	114	55637	20.00	µg/L	0.05
7) CHLOROBENZEN-d5-IS	13.005	117	54808	20.00	µg/L	0.06
12) I14-DICLBENZENE-D4	17.015	152	23021	20.00	µg/L	-0.11
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.046	111	37546	19.95	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.75%			
5) STOLUENE-D8	10.325	98	56862	19.37	µg/L	0.05
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.85%			
11) S4BRFLUOROBENZENE	15.259	95	22093	19.89	µg/L	0.11
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.45%			
Target Compounds						Qvalue
4) BENZENE	7.564	78	290302	22.30	µg/L	97
6) TOLUENE	10.406	91	297889	22.25	µg/L	97
8) ETHYLBENZENE	13.035	91	331696	22.49	µg/L	96
9) MP-XYLENE	13.299	91	730877	43.62	µg/L	92
10) O-XYLENE	14.142	91	304785	22.72	µg/L	93

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

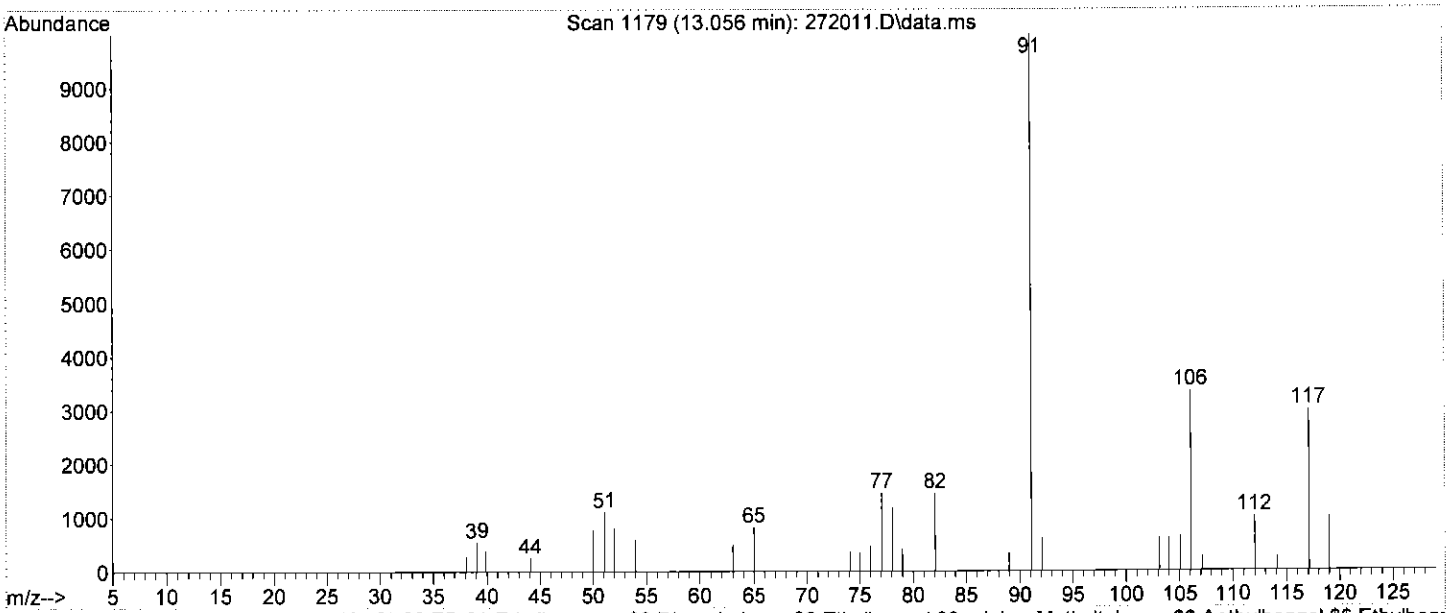
Quantitation Report (QT Reviewed)

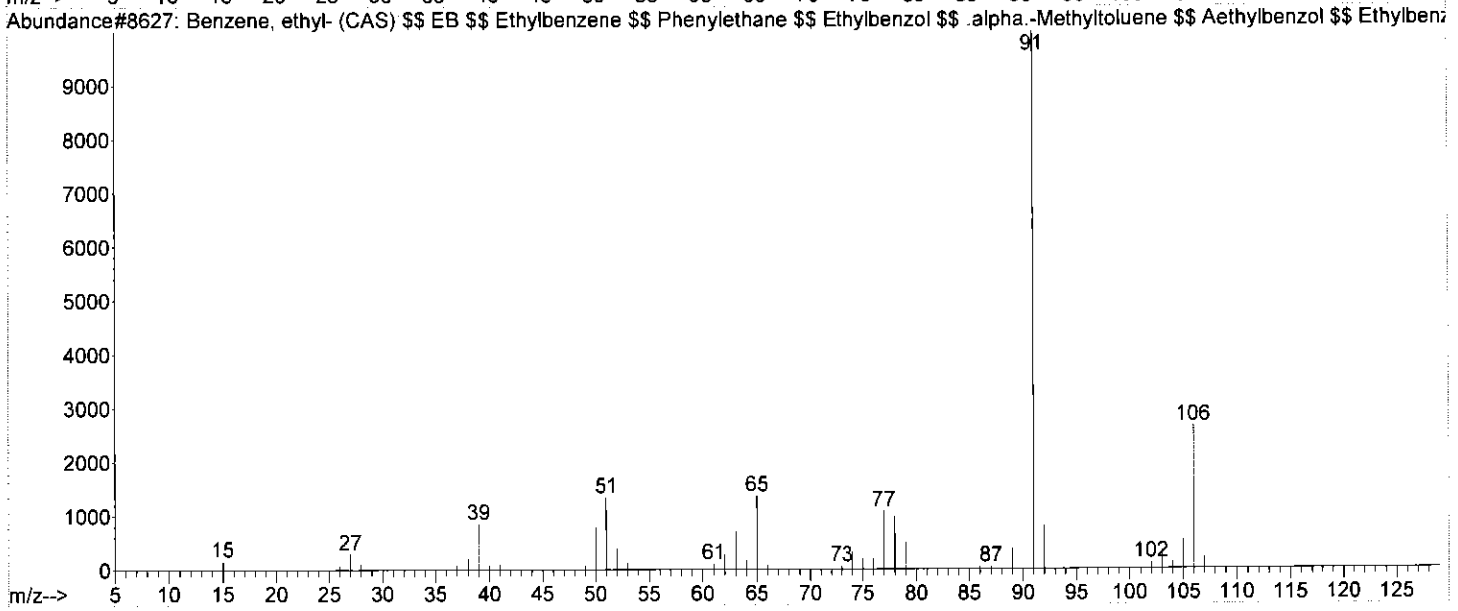
Data Path : C:\msdchem\1\DATA\202722\
Data File : 272010.D
Acq On : 12 Sep 2018 9:49 am
Operator : NIVA
Sample : CCV/
Misc : RUN202722
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 15:06:32 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

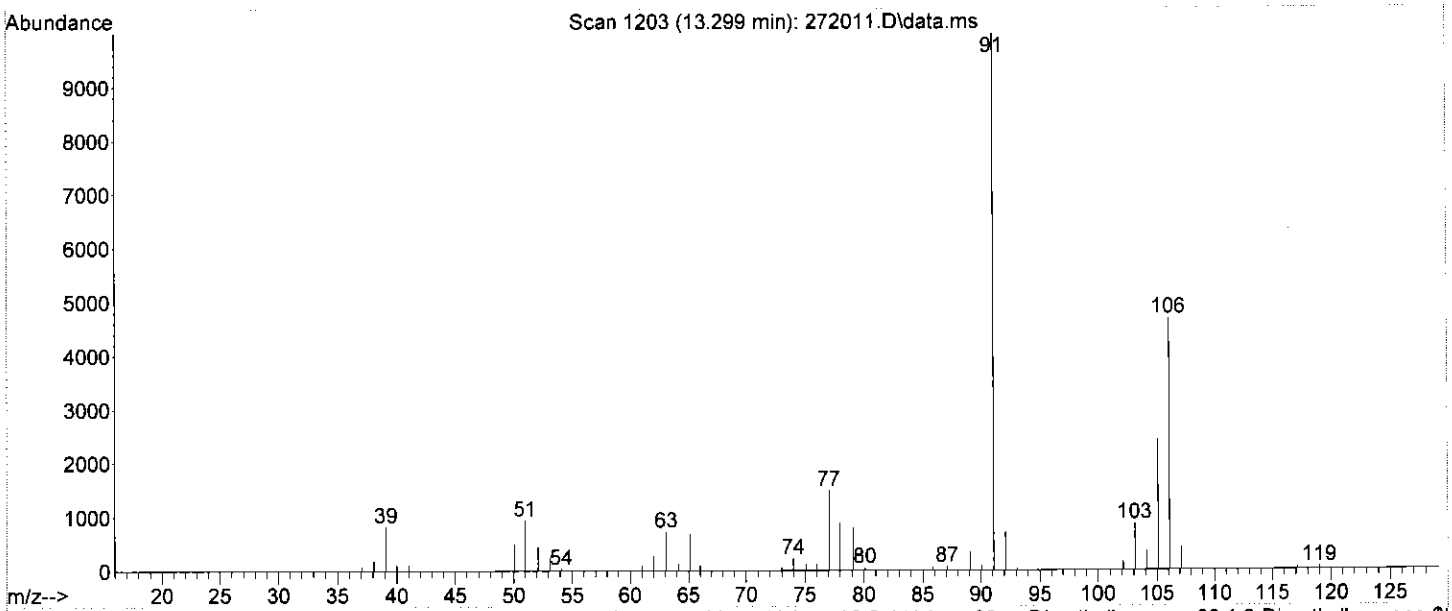


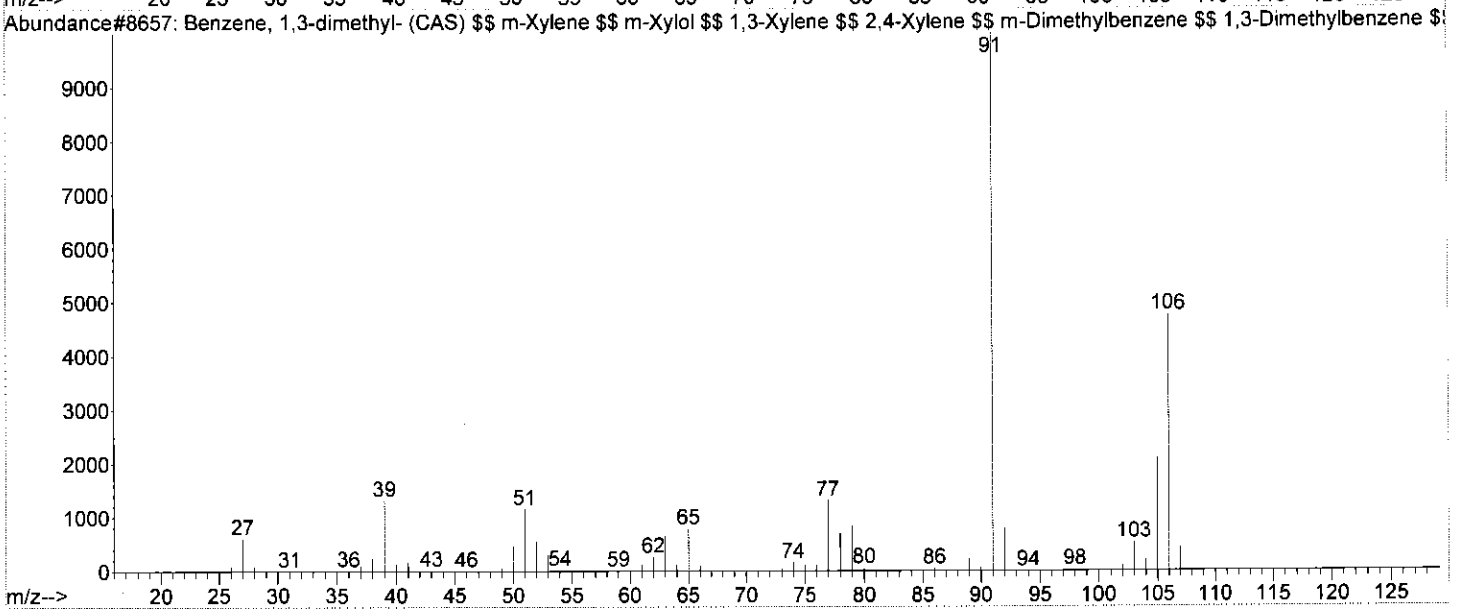
Library Searched : C:\Database\WILEY275.L
Quality : 55
ID : Benzene, ethyl- (CAS) $$ EB $$ Ethylbenzene $$ Phenylethane $$ Ethylbenzol $$ .alpha.-Methyltoluene $$ Aethylbenzol $$ Ethylbenzeen $$ Etilbenzene $$ Etylobenzen $$ NCI-C56393 $$ UN 1175



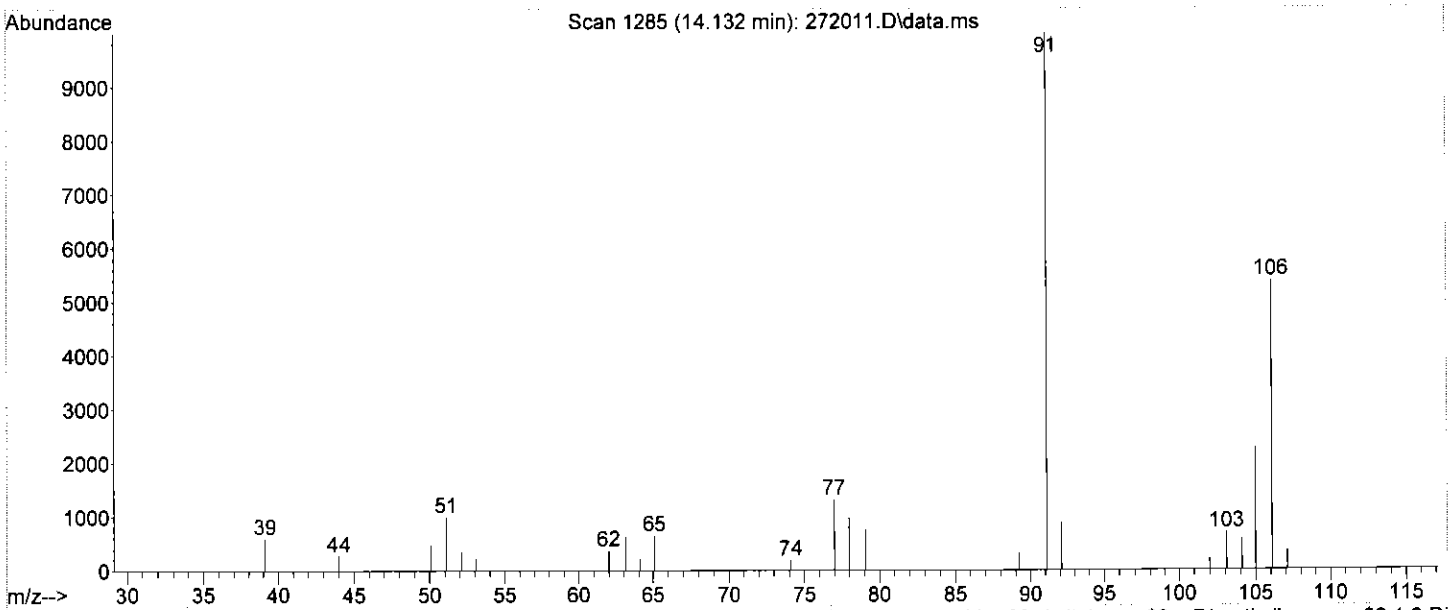


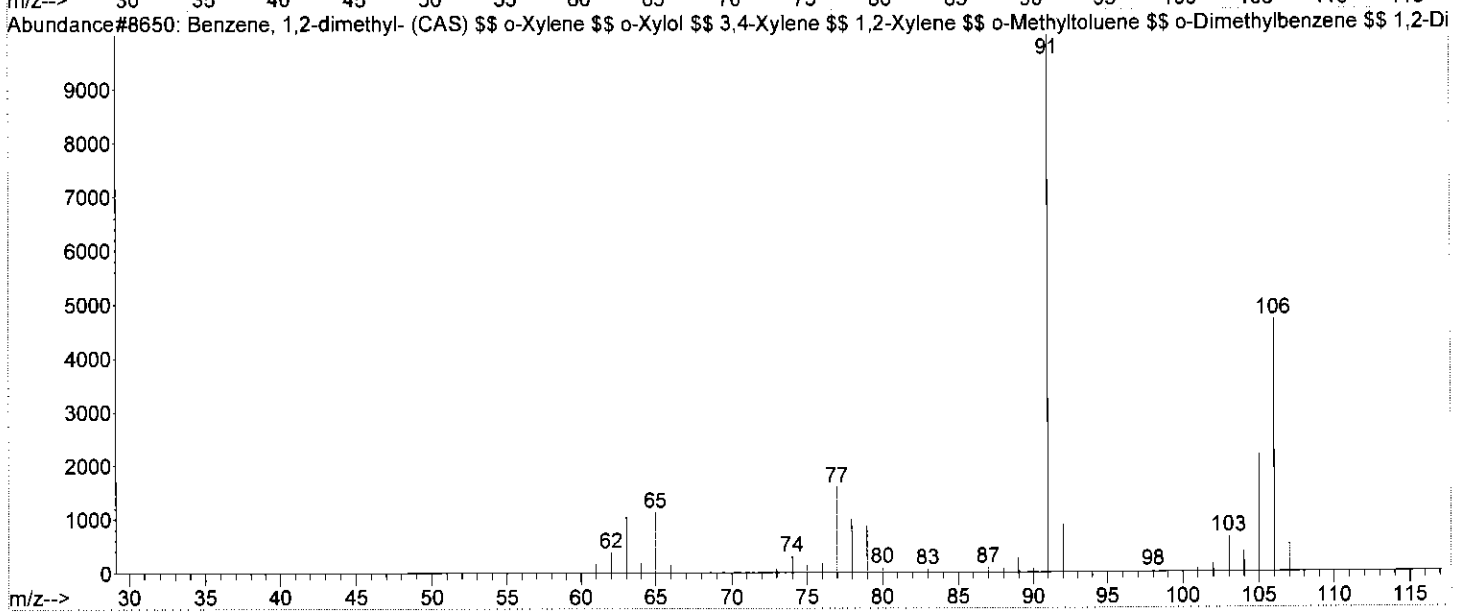
Library Searched : C:\Database\WILEY275.L
Quality : 97
ID : Benzene, 1,3-dimethyl- (CAS) $$ m-Xylene $$ m-Xylol $$ 1,3-Xylene $$ 2,4-Xylene $$ m-Dimethylbenzene $$ 1,3-Dimethylbenzene $$ m-Methyltoluene $$ 1,3-Dimethyl-benzene $$ 1,3-DIMETHYLBENZENE(M-XYLENE) $$ 1,3-DIMETHYLBENZENE (M-XYLENE) $$ meta-Xylene $$ UN





Library Searched : C:\Database\WILEY275.L
Quality : 91
ID : Benzene, 1,2-dimethyl- (CAS) $$ o-Xylene $$ o-Xylol $$ 3,4-Xylene $$ 1,2-Xylene $$ o-Methyltoluene $$ o-Dimethylbenzene $$ 1,2-Dimethylbenzene $$ ortho-Xylene $$ 1,2-Dimethyl-benzene $$ 0-Xylene $$ 1,2-DIMETHYLBENZENE (O-XYLENE) $$ 1,2-DIMETHYLBENZENE(O-X





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272011.D
Acq On : 12 Sep 2018 10:15 am
Operator : NIVA
Sample : 2926067
Misc : RUN202722
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 19 15:06:38 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

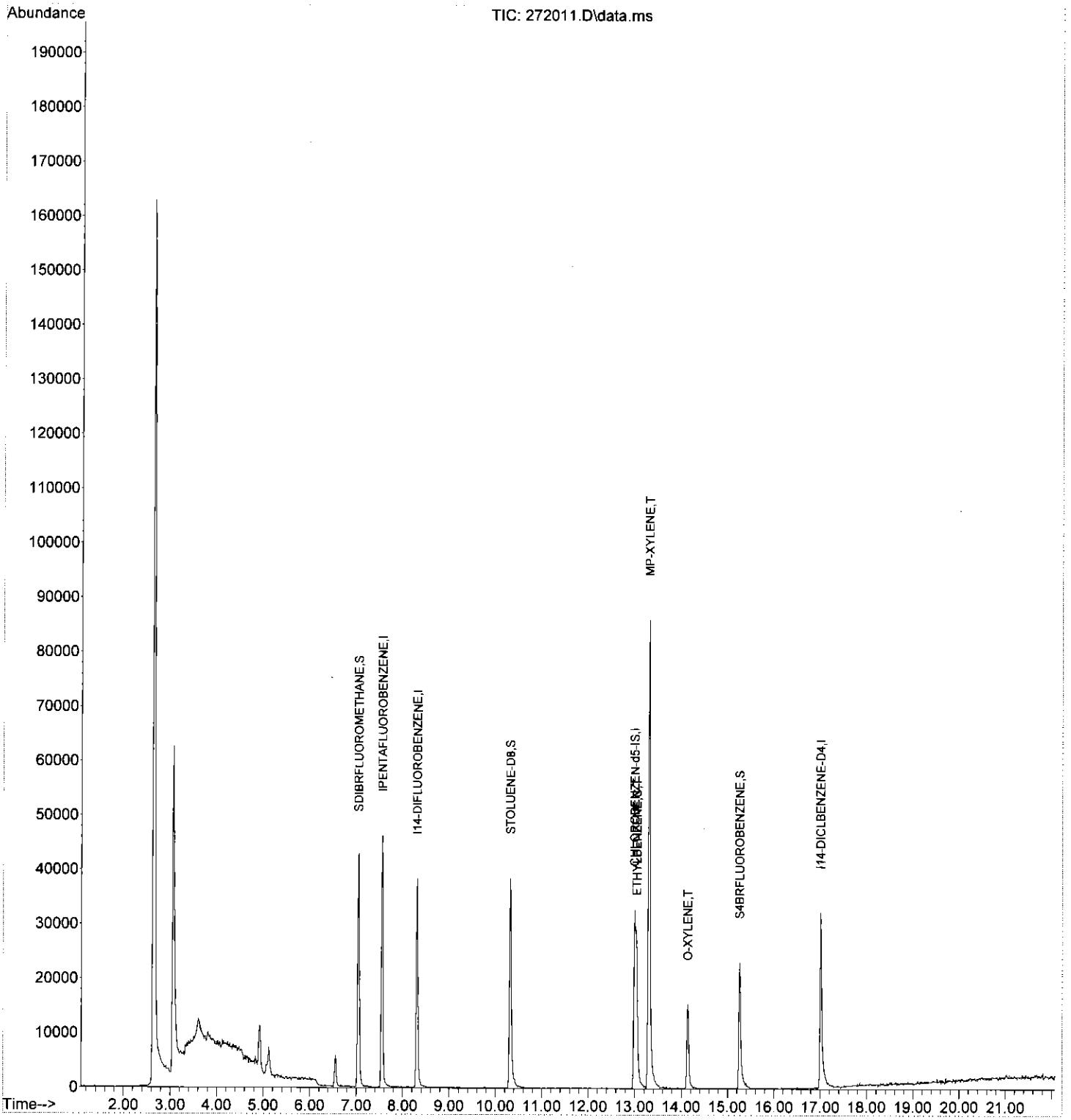
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.554	168	41291	20.00	µg/L	0.04
2) I14-DIFLUOROBENZENE	8.305	114	42429	20.00	µg/L	0.04
7) CHLOROBENZEN-d5-IS	12.995	117	34889	20.00	µg/L	0.05
12) I14-DICLBENZENE-D4	17.005	152	16922	20.00	µg/L	-0.12
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	32165	22.41	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.05%			
5) STOLUENE-D8	10.315	98	43074	19.24	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.20%			
11) S4BRFLUOROBENZENE	15.249	95	15546	21.99	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.95%			
Target Compounds						Qvalue
4) BENZENE	0.000		0	N.D.		
6) TOLUENE	10.406	91	1016	N.D.		
8) ETHYLBENZENE	13.036	91	22394	2.38	µg/L	97
9) MP-XYLENE	13.299	91	88457	8.29	µg/L	94
10) O-XYLENE	14.132	91	17873	2.09	µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272011.D
Acq On : 12 Sep 2018 10:15 am
Operator : NIVA
Sample : 2926067
Misc : RUN202722
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 19 15:06:38 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272012.D
Acq On : 12 Sep 2018 10:41 am
Operator : NIVA
Sample : 2926067MS/~~2929~~162 2929162 Toluene NIVA
Misc : RUN202722
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 19 15:06:43 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

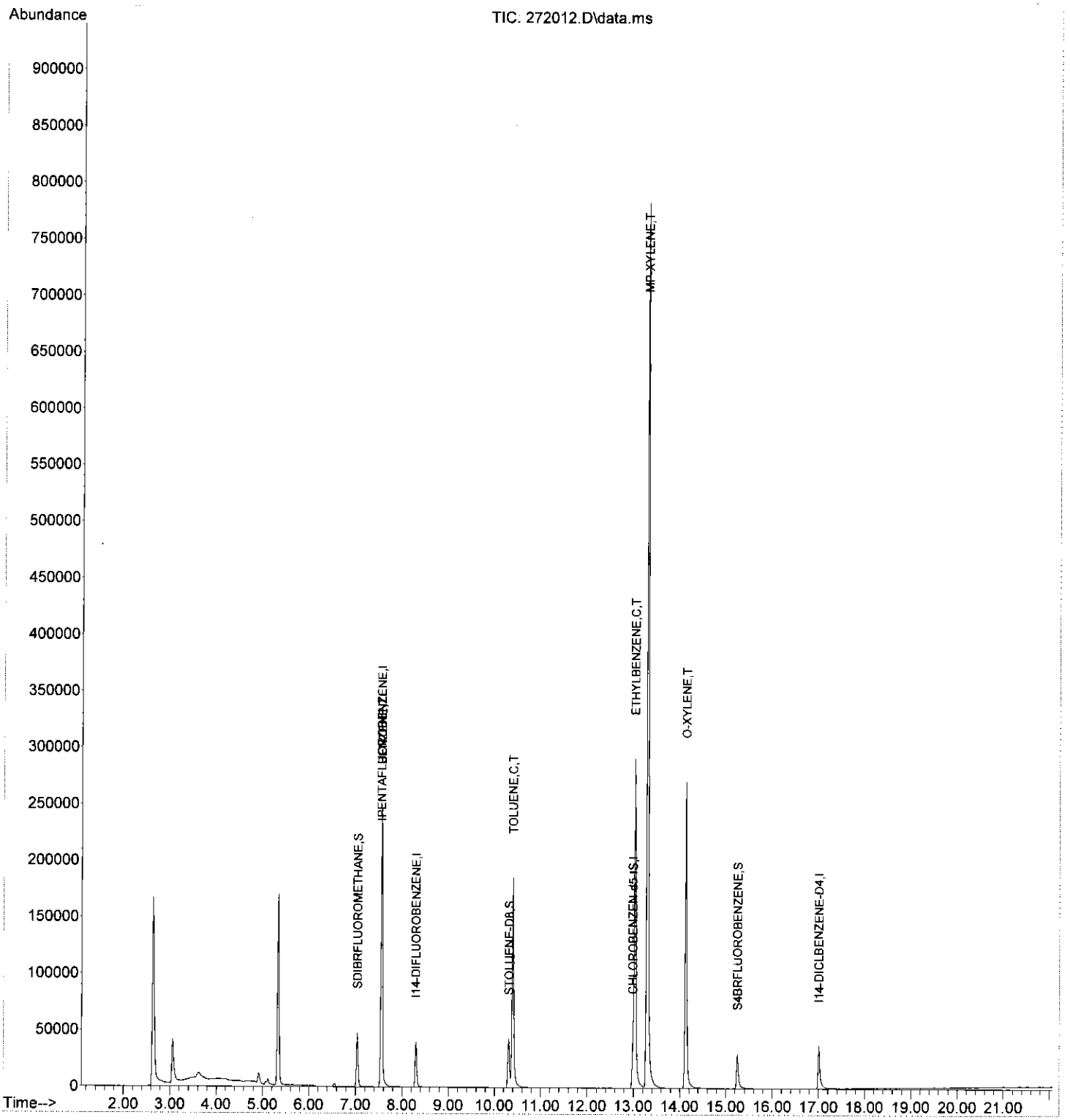
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	47735	20.00	µg/L	0.03
2) I14-DIFLUOROBENZENE	8.294	114	45291	20.00	µg/L	0.03
7) CHLOROBENZEN-d5-IS	12.985	117	46732	20.00	µg/L	0.04
12) I14-DICLBENZENE-D4	17.005	152	20391	20.00	µg/L	-0.12
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	33165	21.64	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 108.20%			
5) STOLUENE-D8	10.315	98	47765	19.99	µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.95%			
11) S4BRFLUOROBENZENE	15.249	95	17911	18.91	µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.55%			
Target Compounds						Qvalue
4) BENZENE	7.553	78	197498	18.63	µg/L	97
6) TOLUENE	10.396	91	188425	17.29	µg/L	96
8) ETHYLBENZENE	13.025	91	257250	20.45	µg/L	97
9) MP-XYLENE	13.289	91	679643	47.57	µg/L	92
10) O-XYLENE	14.132	91	243219	21.27	µg/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272012.D
Acq On : 12 Sep 2018 10:41 am
Operator : NIVA
Sample : 2926067MS/~~2929162~~ 2928162 Type error. NIVA
Misc : RUN202722
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 19 15:06:43 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272013.D
Acq On : 12 Sep 2018 11:07 am
Operator : NIVA
Sample : 2926067MSD/~~2929163~~ 292863 Type error NIVA
Misc : RUN202722
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 19 15:21:13 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

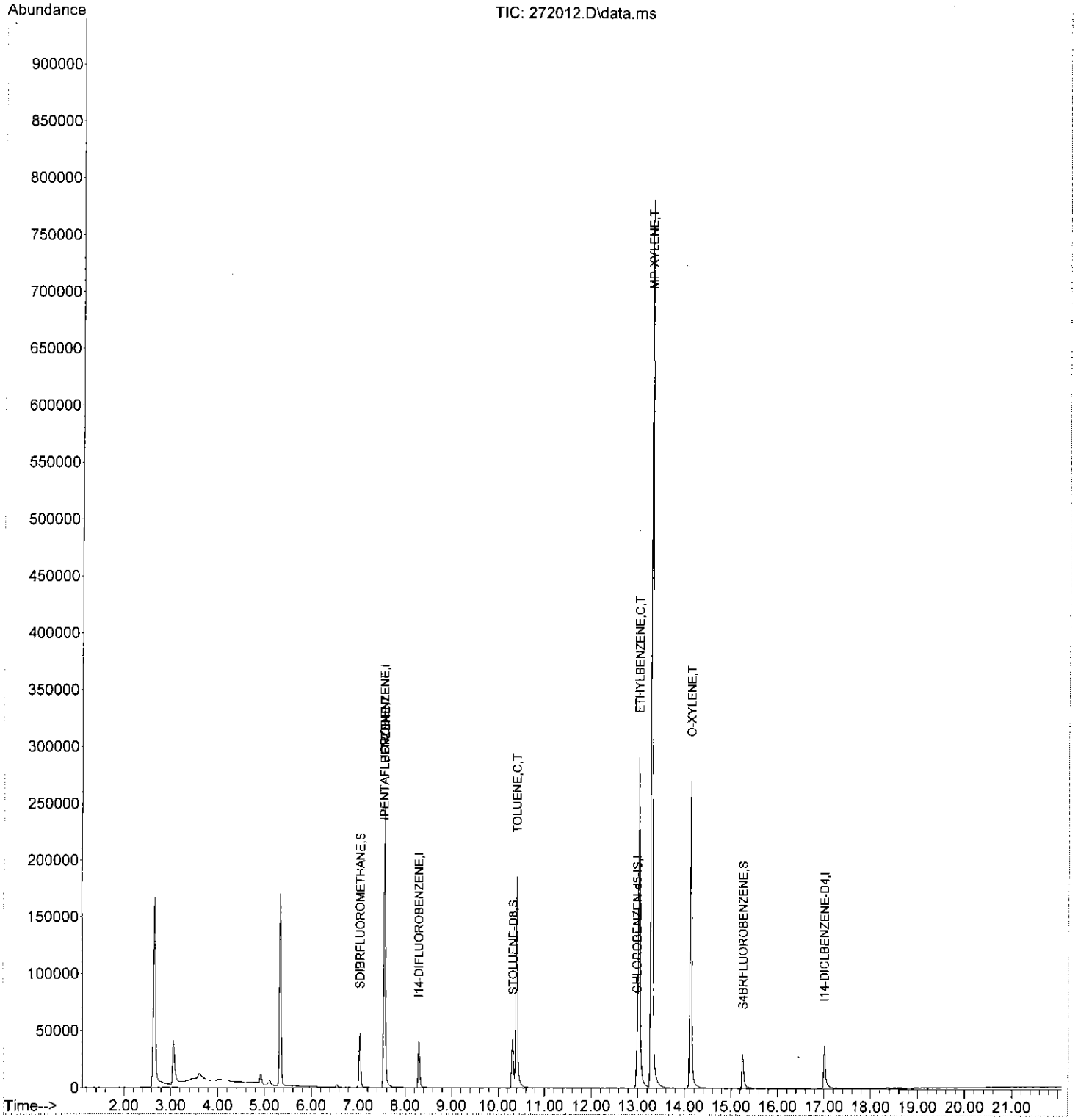
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.543	168	66022	20.00 µg/L	0.03
2) I14-DIFLUOROBENZENE	8.294	114	57487	20.00 µg/L	0.03
7) CHLOROBENZEN-d5-IS	13.015	117	137709	20.00 µg/L	# 0.07
12) I14-DICLBENZENE-D4	17.005	152	97117	20.00 µg/L	-0.12
System Monitoring Compounds					
3) SDIBRFLUOROMETHANE	7.036	111	37578	19.32 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.60%		
5) STOLUENE-D8	10.315	98	69360m	22.87 µg/L	0.04
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.35%		
11) S4BRFLUOROBENZENE	15.249	95	66492m	23.82 µg/L	0.10
Spiked Amount 20.000	Range 80 - 120		Recovery = 119.10%		
Target Compounds					Qvalue
4) BENZENE	7.553	78	291112m	21.64 µg/L	
6) TOLUENE	10.416	91	267863m	19.37 µg/L	
8) ETHYLBENZENE	13.025	91	638832m	17.24 µg/L	
9) MP-XYLENE	13.289	91	1939010m	46.05 µg/L	
10) O-XYLENE	14.132	91	742985m	22.05 µg/L	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272012.D
Acq On : 12 Sep 2018 10:41 am
Operator : NIVA
Sample : 2926067MS/~~2929162~~ 292881 BL Type amos. Niva
Misc : RUN202722
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 19 15:06:43 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272014.D
Acq On : 12 Sep 2018 11:33 am
Operator : NIVA
Sample : 2926068
Misc : RUN202722, DF200
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 19 15:30:56 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

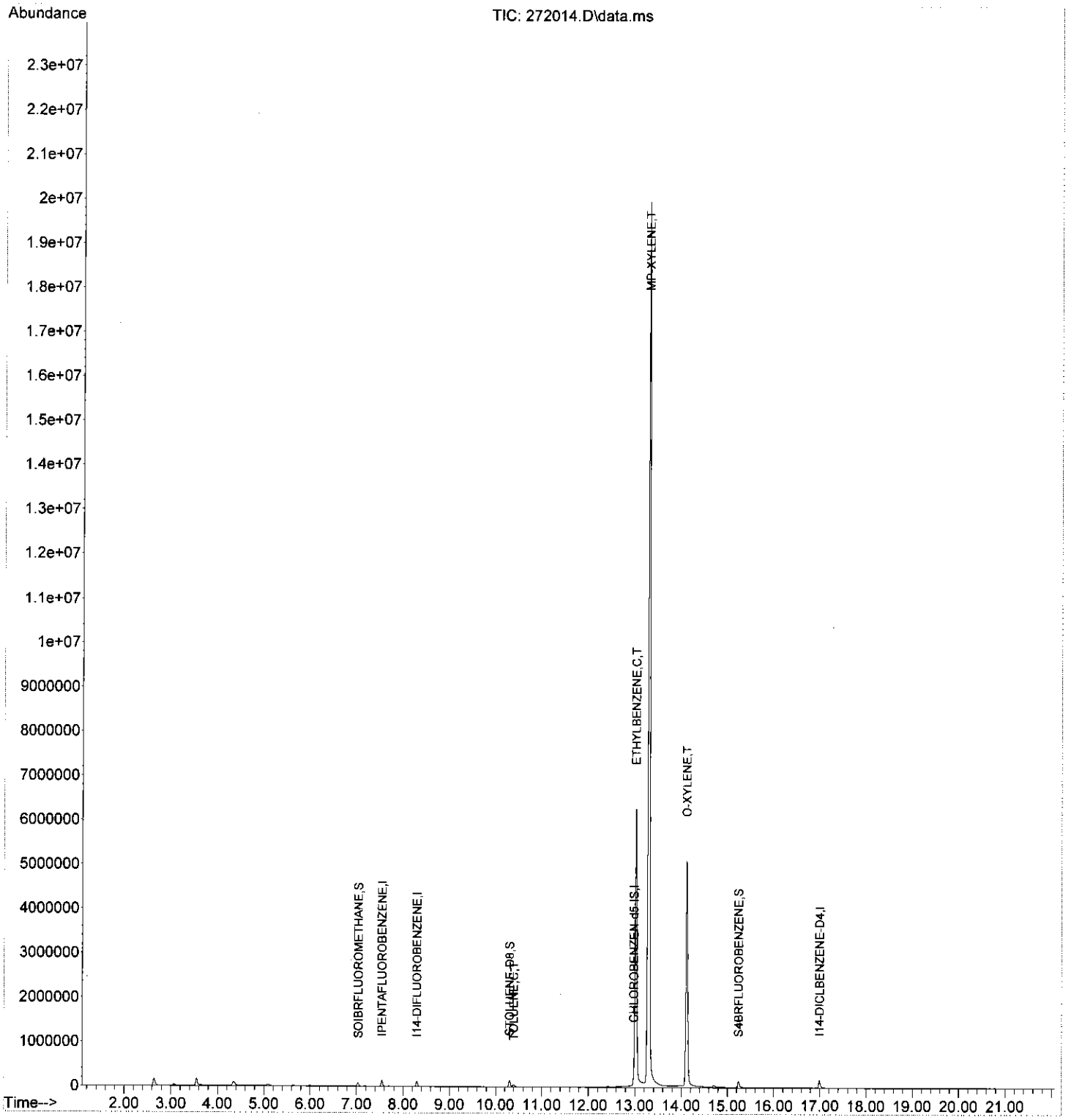
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.543	168	108856	20.00	µg/L	0.03
2) I14-DIFLUOROBENZENE	8.295	114	129319	20.00	µg/L	0.03
7) CHLOROBENZEN-d5-IS	12.975	117	156210	20.00	µg/L	0.03
12) I14-DICLBENZENE-D4	16.995	152	76524	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.036	111	59807	13.67	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 68.35%#			
5) STOLUENE-D8	10.305	98	147947	21.69	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 108.45%			
11) S4BRFLUOROBENZENE	15.239	95	72441	22.88	µg/L	0.09
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.40%			
Target Compounds						Qvalue
4) BENZENE	7.554	78	2556	N.D.		
6) TOLUENE	10.396	91	73903	2.38	µg/L	98
8) ETHYLBENZENE	13.015	91	3794519m	90.25	µg/L	
9) MP-XYLENE	13.289	91	10596720m	221.88	µg/L	
10) O-XYLENE	14.112	91	3083354m	80.66	µg/L	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272014.D
Acq On : 12 Sep 2018 11:33 am
Operator : NIVA
Sample : 2926068
Misc : RUN202722, DF200
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 19 15:30:56 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272015.D
Acq On : 12 Sep 2018 11:59 am
Operator : NIVA
Sample : 2926068MS/2926064
Misc : RUN202722, DF200
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Sep 19 15:07:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

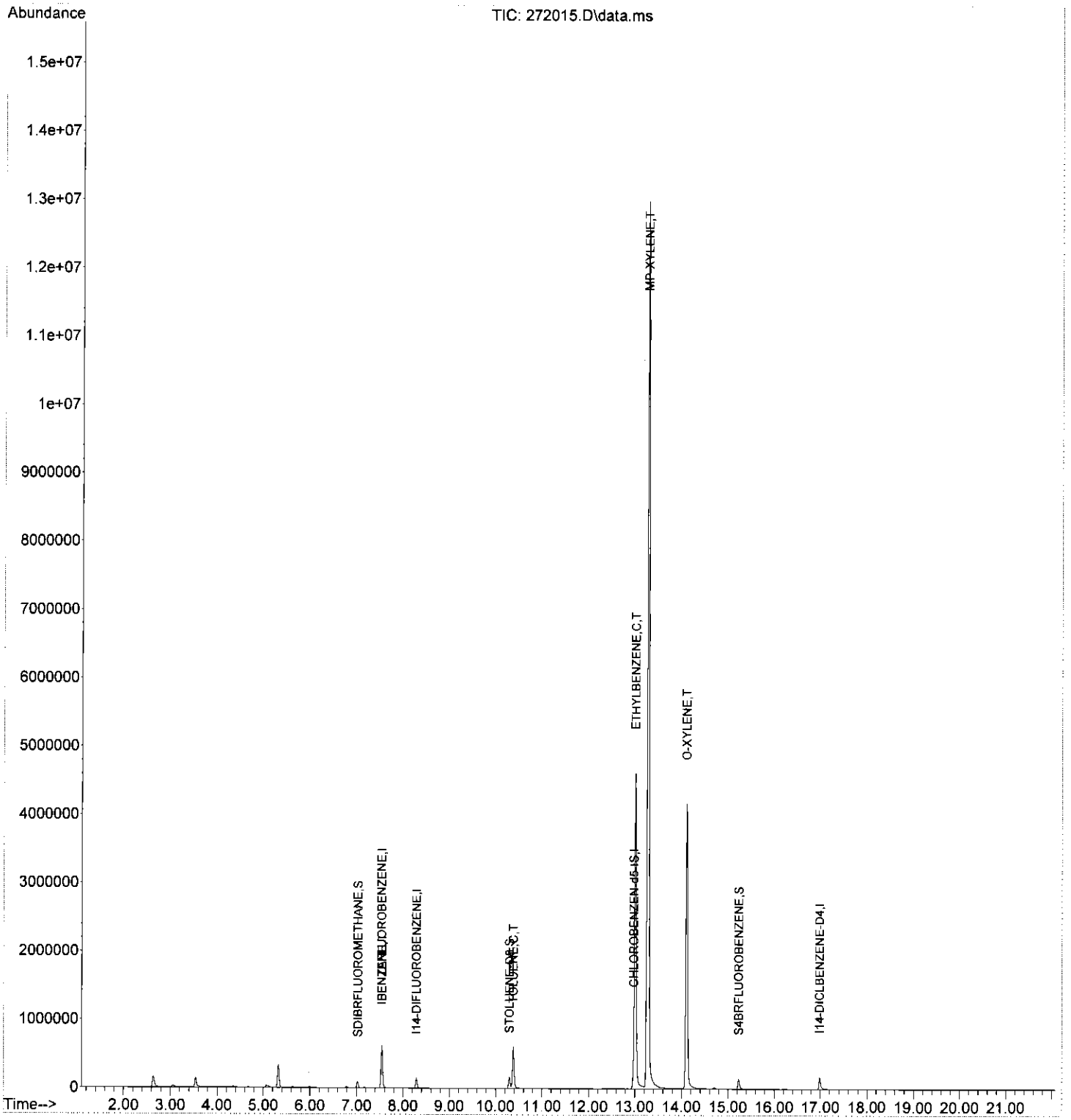
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	131456	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.285	114	150310	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.975	117	163240	20.00	µg/L	0.03
12) I14-DICLBENZENE-D4	16.985	152	79097	20.00	µg/L	-0.14
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.026	111	68632	13.50	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 67.50%#			
5) STOLUENE-D8	10.295	98	157114	19.81	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.05%			
11) S4BRFLUOROBENZENE	15.228	95	74630	22.56	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.80%			
Target Compounds						Qvalue
4) BENZENE	7.543	78	538424	15.31	µg/L	99
6) TOLUENE	10.376	91	624928	17.28	µg/L	97
8) ETHYLBENZENE	13.005	91	4793372	109.10	µg/L	98
9) MP-XYLENE	13.269	91	12591161	252.29	µg/L	94
10) O-XYLENE	14.102	91	4089354	102.37	µg/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272015.D
Acq On : 12 Sep 2018 11:59 am
Operator : NIVA
Sample : 2926068MS/2926064
Misc : RUN202722, DF200
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Sep 19 15:07:04 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272016.D
Acq On : 12 Sep 2018 12:25 pm
Operator : NIVA
Sample : 2926068MSD/2926065
Misc : RUN202722, DF200
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Sep 19 15:32:17 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

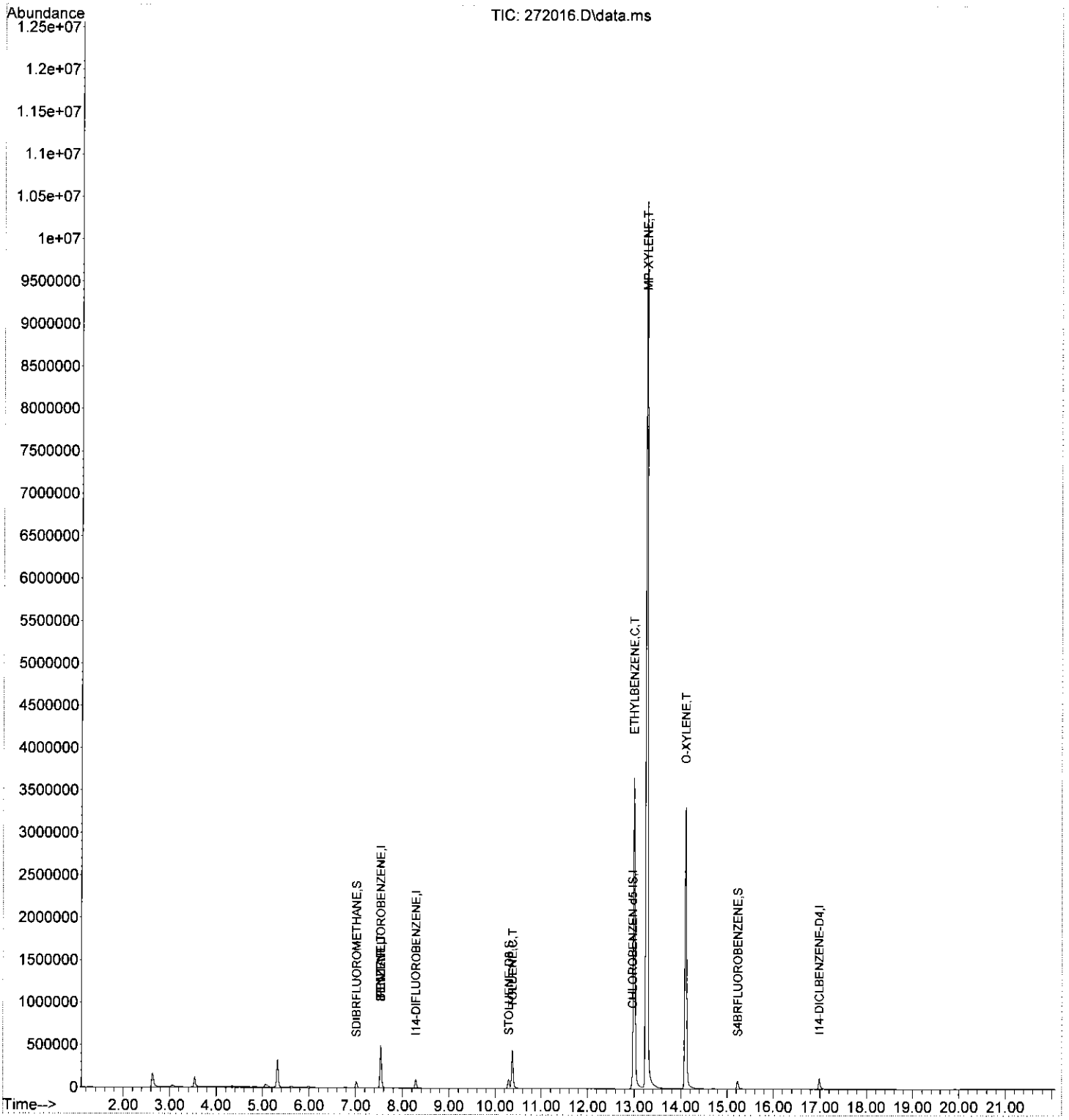
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	102833	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.284	114	107143	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.964	117	130324m	20.00	µg/L	0.02
12) I14-DICLBENZENE-D4	16.985	152	55646	20.00	µg/L	-0.14
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.015	111	55802	15.39	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 76.95%#			
5) STOLUENE-D8	10.295	98	107747	19.06	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.30%			
11) S4BRFLUOROBENZENE	15.228	95	52162	19.75	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.75%			
Target Compounds						Qvalue
4) BENZENE	7.533	78	417635	16.66	µg/L	99
6) TOLUENE	10.376	91	468333	18.17	µg/L	97
8) ETHYLBENZENE	12.995	91	3695719	105.36	µg/L	97
9) MP-XYLENE	13.269	91	10169161	255.22	µg/L	93
10) O-XYLENE	14.101	91	3247130	101.82	µg/L	95

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

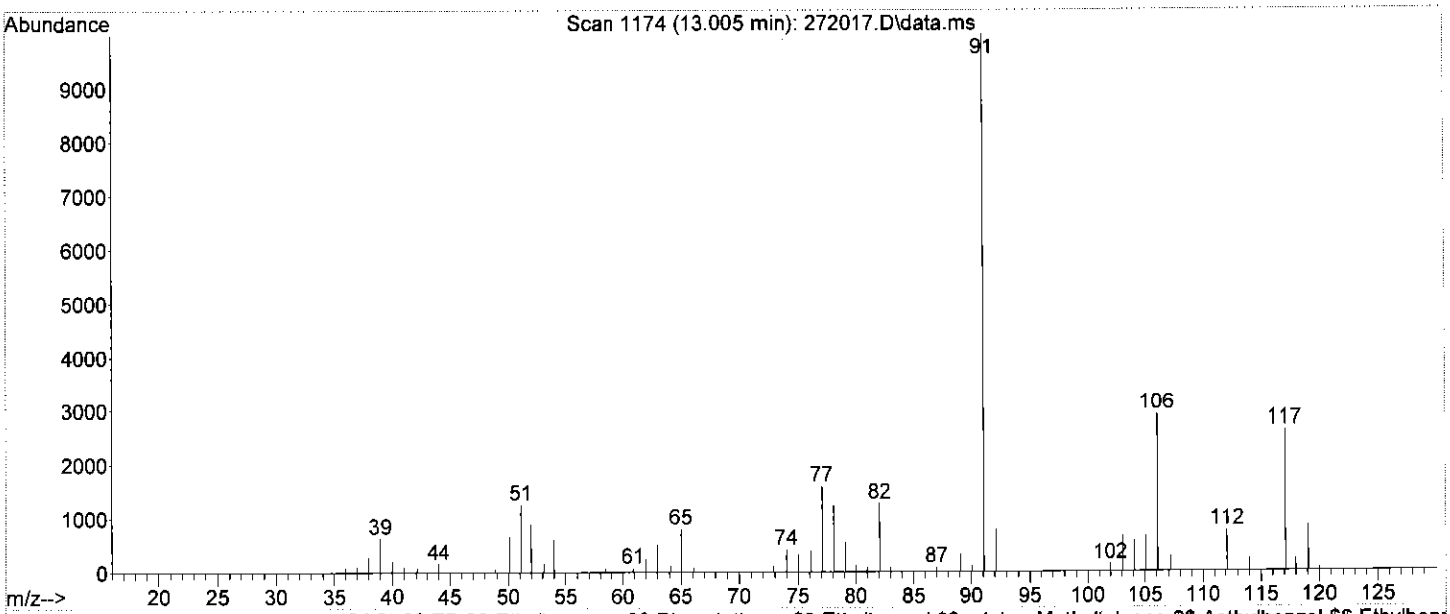
Quantitation Report (QT Reviewed)

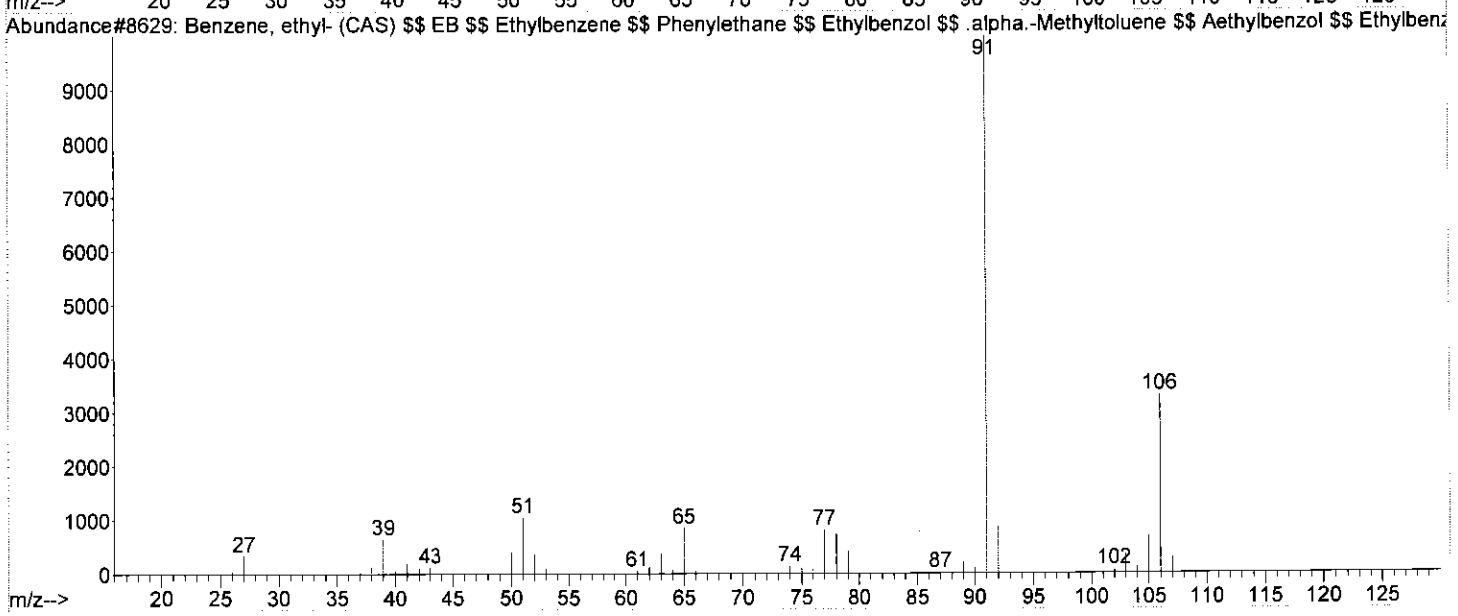
Data Path : C:\msdchem\1\DATA\202722\
Data File : 272016.D
Acq On : 12 Sep 2018 12:25 pm
Operator : NIVA
Sample : 2926068MSD/2926065
Misc : RUN202722, DF200
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Sep 19 15:32:17 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

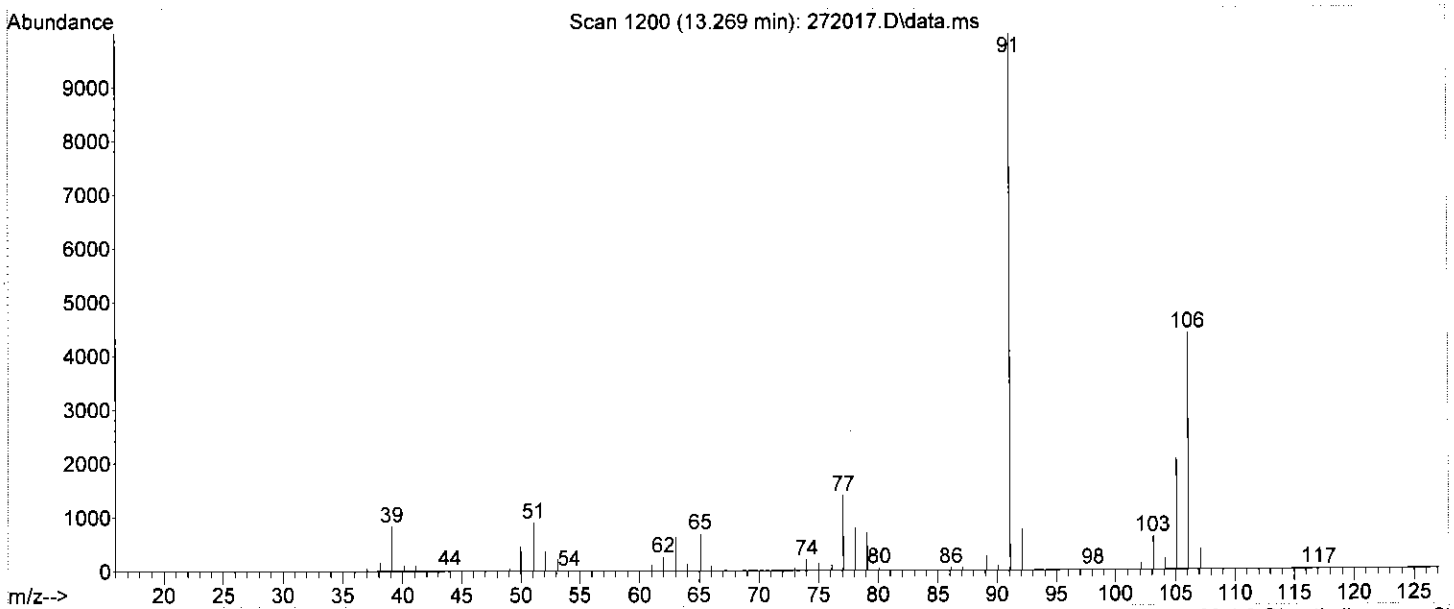


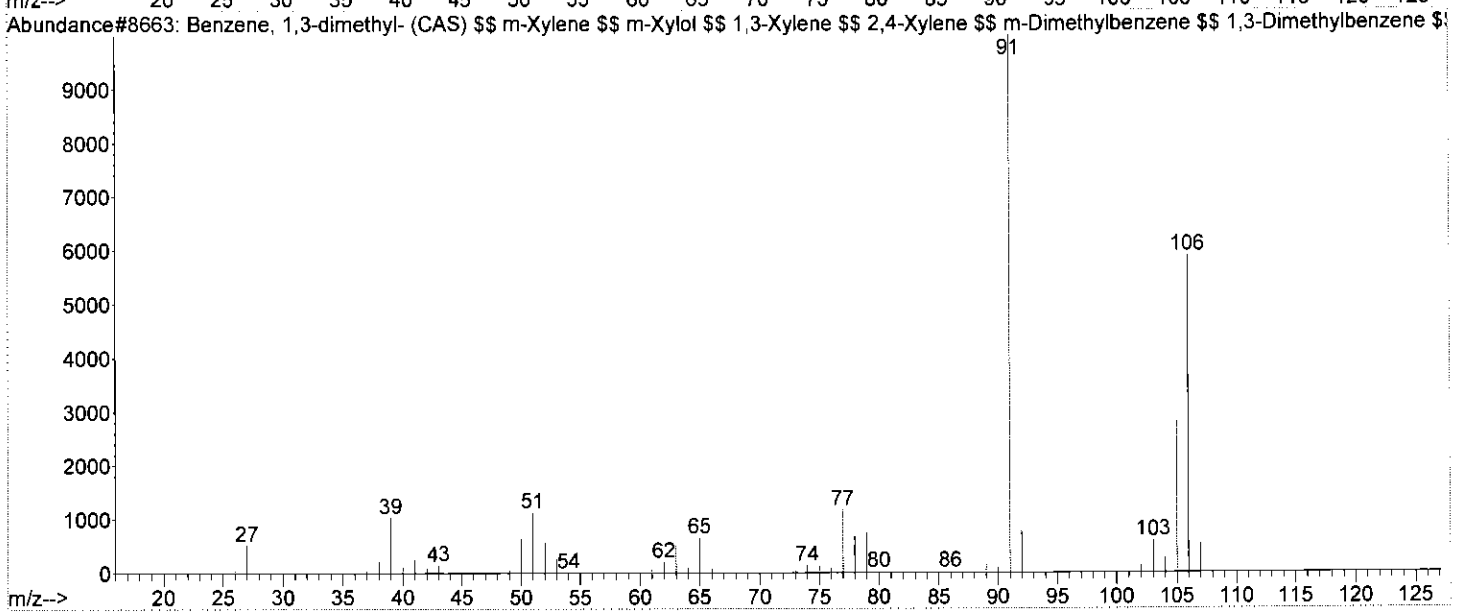
Library Searched : C:\Database\WILEY275.L
Quality : 50
ID : Benzene, ethyl- (CAS) $$ EB $$ Ethylbenzene $$ Phenylethane $$ Ethylbenzol $$ .alpha.-Methyltoluene $$ Aethylbenzol $$ Ethylbenzeen $$ Etilbenzene $$ Etylobenzen $$ NCI-C56393 $$ UN 1175



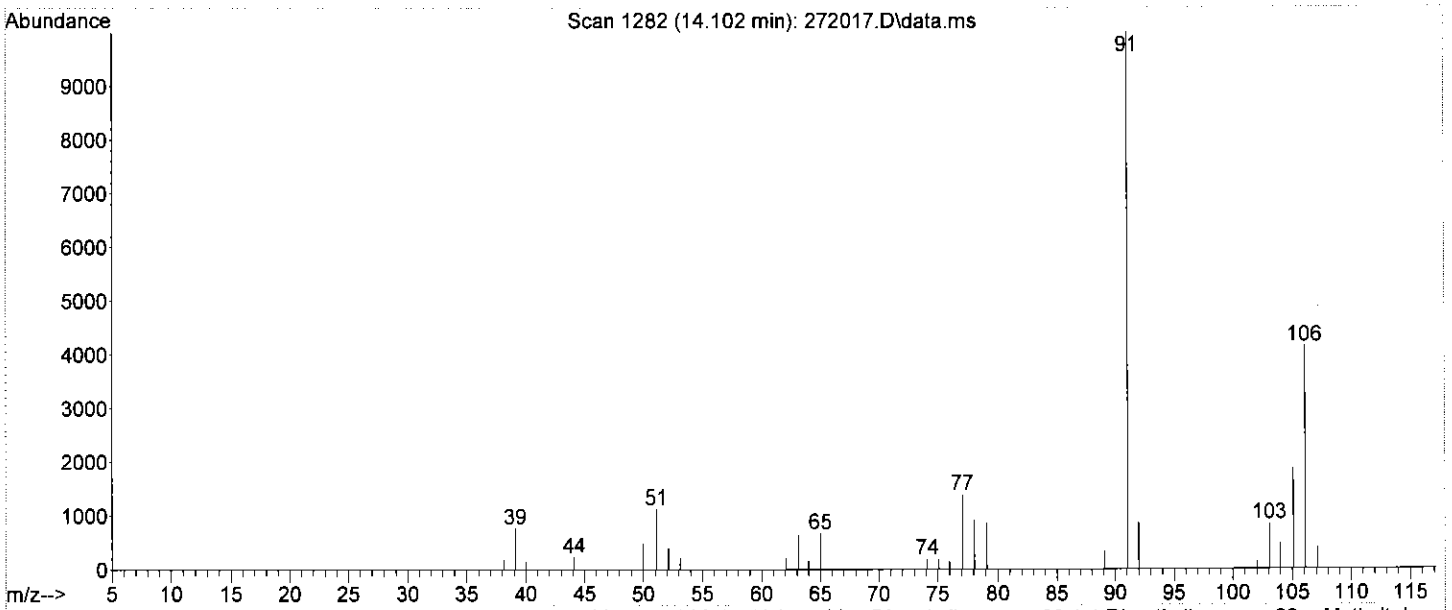


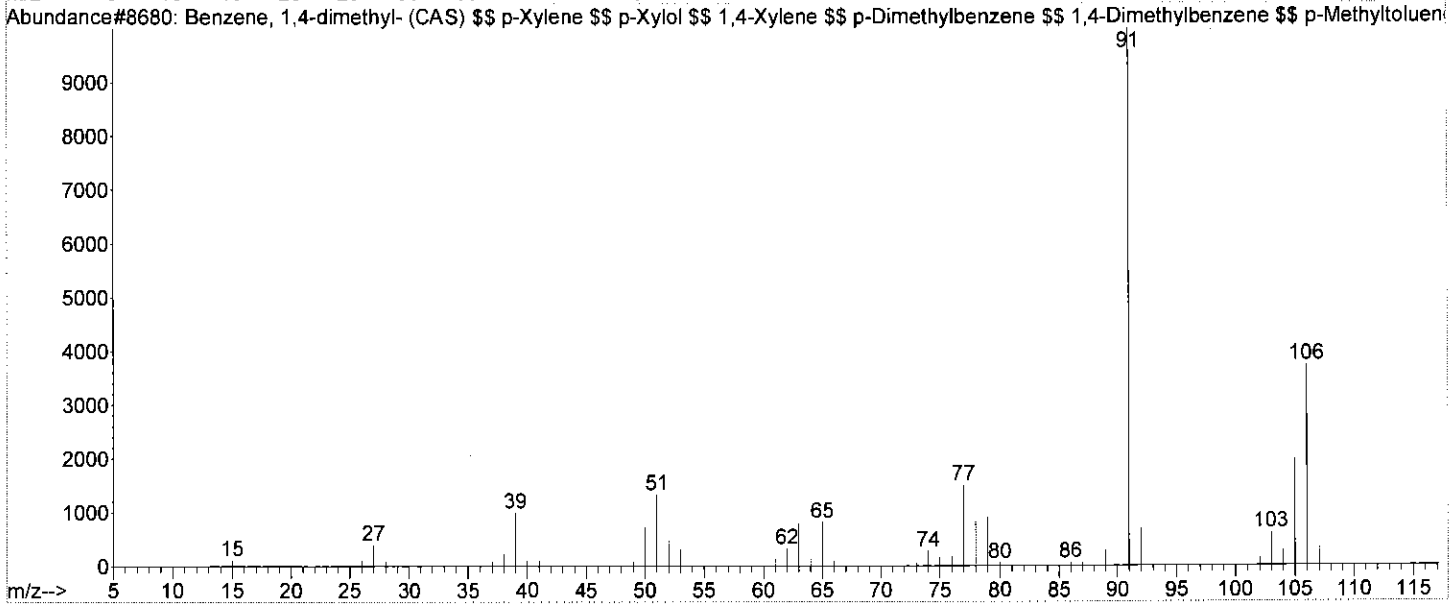
Library Searched : C:\Database\WILEY275.L
Quality : 97
ID : Benzene, 1,3-dimethyl- (CAS) $$ m-Xylene $$ m-Xylol $$ 1,3-Xylene $$ 2,4-Xylene $$ m-Dimethylbenzene $$ 1,3-Dimethylbenzene $$ m-Methyltoluene $$ 1,3-Dimethyl-benzene $$ 1,3-DIMETHYLBENZENE(M-XYLENE) $$ 1,3-DIMETHYLBENZENE (M-XYLENE) $$ meta-Xylene $$ UN



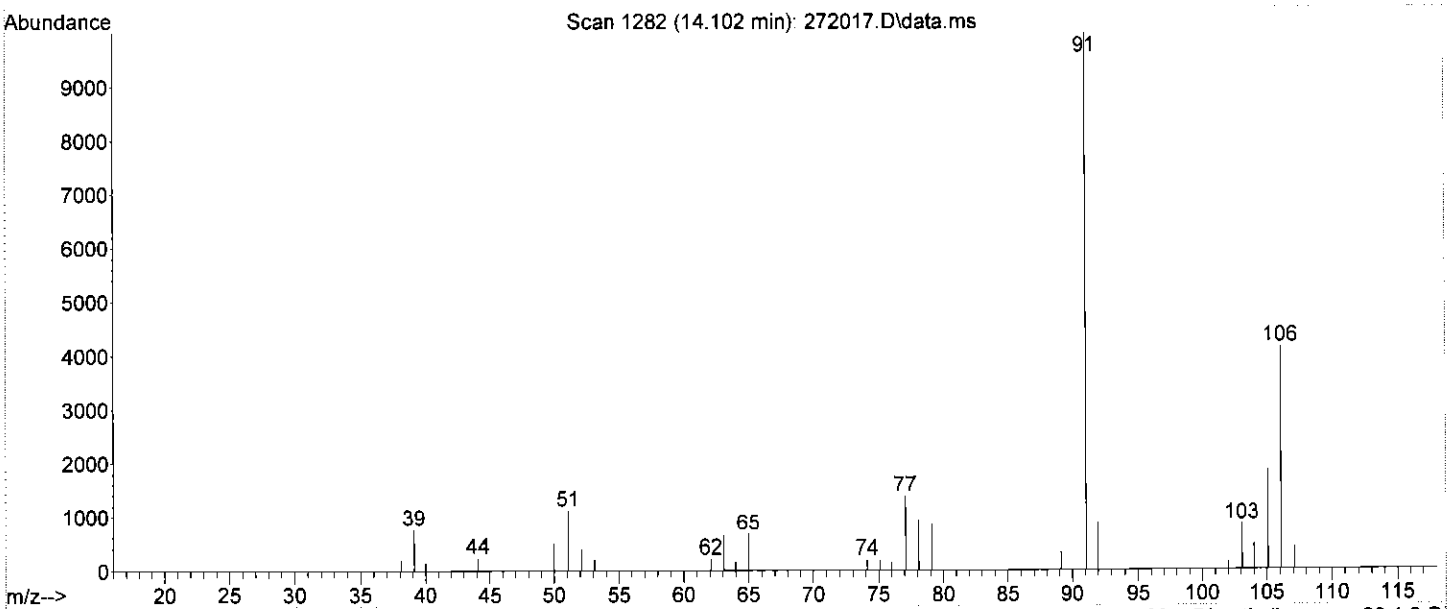


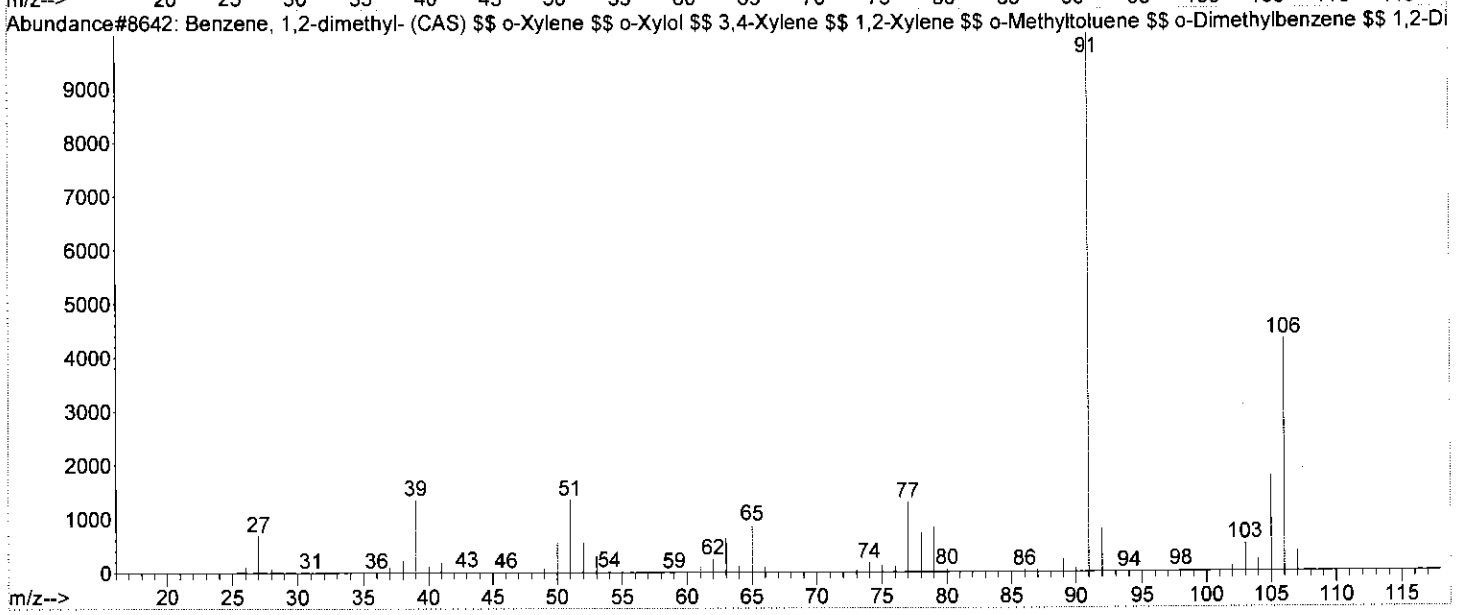
Library Searched : C:\Database\WILEY275.L
Quality : 97
ID : Benzene, 1,4-dimethyl- (CAS) $$ p-Xylene $$ p-Xylol $$ 1,4-Xylene $$ p-Dimethylbenzene $$ 1,4-Dimethylbenzene $$ p-Methyltoluene $$ 4-Methyltoluene $$ 1,4-Dimethyl-benzene $$ 1,4-DIMETHYLBENZENE(P-XYLENE) $$ 1,4-DIMETHYLBENZENE (P-XYLENE) $$ para-Xylene $





Library Searched : C:\Database\WILEY275.L
Quality : 95
ID : Benzene, 1,2-dimethyl- (CAS) $$ o-Xylene $$ o-Xylol $$ 3,4-Xylene $$ 1,2-Xylene $$ o-Methyltoluene $$ o-Dimethylbenzene $$ 1,2-Dimethylbenzene $$ ortho-Xylene $$ 1,2-Dimethyl-benzene $$ 0-Xylene $$ 1,2-DIMETHYLBENZENE (O-XYLENE) $$ 1,2-DIMETHYLBENZENE(O-X





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272017.D
Acq On : 12 Sep 2018 12:51 pm
Operator : NIVA
Sample : 2934649
Misc : RUN202722
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Sep 19 15:07:32 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

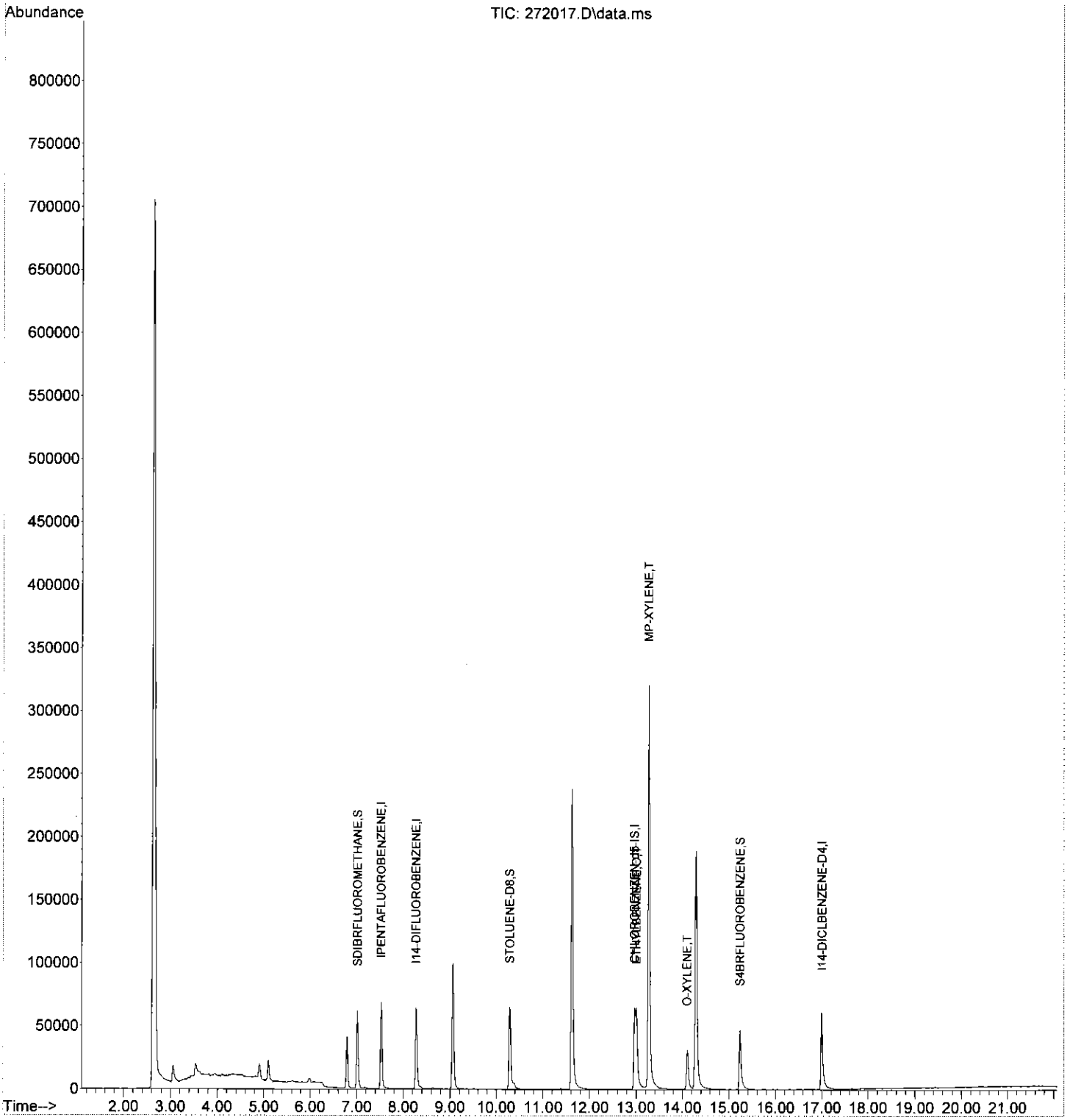
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.523	168	58059	20.00	µg/L	0.01
2) I14-DIFLUOROBENZENE	8.274	114	68947	20.00	µg/L	0.01
7) CHLOROBENZEN-d5-IS	12.965	117	63137	20.00	µg/L	0.02
12) I14-DICLBENZENE-D4	16.995	152	30980	20.00	µg/L	-0.13
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.016	111	43080	18.47	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.35%			
5) STOLUENE-D8	10.285	98	71737	19.72	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.60%			
11) S4BRFLUOROBENZENE	15.228	95	27657	21.61	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 108.05%			
Target Compounds						Qvalue
4) BENZENE	7.543	78	671	N.D.		
6) TOLUENE	10.376	91	4905	N.D.		
8) ETHYLBENZENE	13.005	91	53152	3.13	µg/L	99
9) MP-XYLENE	13.269	91	287666	14.90	µg/L	94
10) O-XYLENE	14.102	91	33753	2.18	µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272017.D
Acq On : 12 Sep 2018 12:51 pm
Operator : NIVA
Sample : 2934649
Misc : RUN202722
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Sep 19 15:07:32 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272018.D
Acq On : 12 Sep 2018 1:18 pm
Operator : NIVA
Sample : LFB/2935946
Misc : RUN202722
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Sep 19 15:07:38 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS

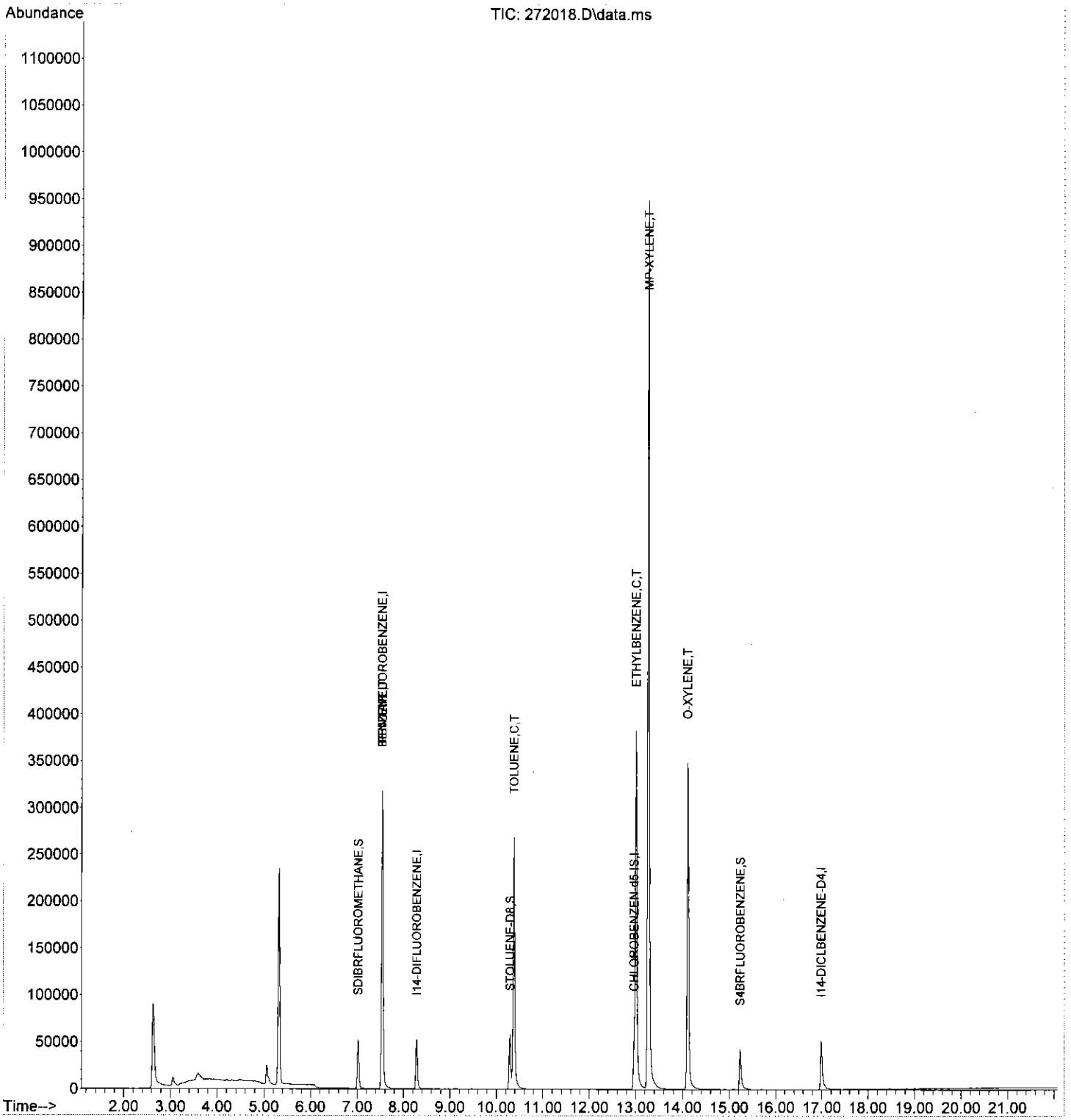
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.533	168	56487	20.00	µg/L	0.02
2) I14-DIFLUOROBENZENE	8.284	114	58641	20.00	µg/L	0.02
7) CHLOROBENZEN-d5-IS	12.964	117	58165	20.00	µg/L	0.02
12) I14-DICLBENZENE-D4	16.985	152	26984	20.00	µg/L	-0.14
System Monitoring Compounds						
3) SDIBRFLUOROMETHANE	7.015	111	37310	18.81	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.05%			
5) STOLUENE-D8	10.294	98	61414	19.85	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.25%			
11) S4BRFLUOROBENZENE	15.228	95	24280	20.60	µg/L	0.08
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.00%			
Target Compounds						Qvalue
4) BENZENE	7.533	78	264051	19.24	µg/L	97
6) TOLUENE	10.376	91	268775	19.05	µg/L	96
8) ETHYLBENZENE	13.005	91	343165	21.92	µg/L	96
9) MP-XYLENE	13.269	91	834311	46.92	µg/L	92
10) O-XYLENE	14.101	91	305752	21.48	µg/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\202722\
Data File : 272018.D
Acq On : 12 Sep 2018 1:18 pm
Operator : NIVA
Sample : LFB/2935946
Misc : RUN202722
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Sep 19 15:07:38 2018
Quant Method : C:\msdchem\1\METHODS\8260BTEX-AGO-LIQ-18A.M
Quant Title : Analysis of VOC'S by EPA 8260B
QLast Update : Wed Sep 19 14:57:54 2018
Response via : Initial Calibration
InstName : V7-AG7890MS



Attachment 5
Sampling and Monitoring Field Form

ARCADIS Design & Consultancy for natural and built assets

Groundwater Extraction and Treatment System (GWETS) Sampling and Monitoring Field Form
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Collection Date	Sample ID	Collection Time		Sampler's Initials
		Pace	Eqlab	
09-05-18	TB-20180905	LAB	LAB	A.L
09-05-18	INF-20180905	0914	0915	A.L.
09-05-18	EFF-20180905	0930	0936	A.L
09-05-18	EFFDUP-20180905	0930	0936	A.L
09-05-18	EFFMS-20180905	0930	0936	A.L
09-05-18	EFFMSD-20180905	0930	0936	A.L

GWETS Operational Data at Sample Collection

Extraction Wells

RW-2	114.6	gpm
RW-4	154.6	gpm
RW-5	79.9	gpm

Compound Treatment System

Influent Flow Rate (FIT-101)	291.6	gpm
Effluent Flow Rate (FIT-301)	392.6	gpm
Blower (FIT-201A)	2265	scfm
Influent Flow Pressure (PIT-101)	2.4	psi
Effluent Flow Pressure (PIT-301)	30.2	psi
pH (pHIT-201A)	7.9	

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