FIBERS SITE GROUP

January 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 – December 2017
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, CHMM
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 – December 2017
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 70% of the time during December 2017. The GWETS was repaired on December 5, 2017. The GWETS had three automated shut downs due to power outages and/or electrical overload, three shut downs due to GWETS maintenance, and two shut downs due to the annual electrical inspection. In most of these instances the GWETS was restarted no later than the next business day.

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 214 gallons per minute (gpm) and treated approximately 10.01 million gallons of water. To date (since May 1999), approximately 3.16 billion gallons of water have been treated at the Fibers Site. The total volume of water treated to date correlates with the treatment system influent flow meter totalizer reading.

(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 December 7, 2017. 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 December 7, 2017 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 #28927R 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 #2066643 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 #28934R 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 #242035 (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.

As requested by the United States Environmental Protection Agency (USEPA), in its letter dated October 2, 2017, the Fibers Site Group provided updates regarding the GWETS return to service.

(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 first semi-annual groundwater monitoring report for 2017 is anticipated to be submitted to the USEPA within the next six weeks.

The Fibers Group will prepare and submit an updated Quality Assurance Project Plan (QAPP) to the USEPA within the next six weeks.

The second semi-annual groundwater monitoring and sampling event for 2017 is anticipated to be completed in the next six weeks.

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

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

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

None.

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

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

(h) Actions undertaken to address outside parties concerns.

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

Tables

Table 1
Summary of Daily Treatment System Operating Records - December 2017
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
12/1/2017	0	0	0	0	0	NR	GWETS shut down; regional power loss, VR-1 damaged.
12/2/2017	0	0	0	0	0	NR	GWETS shut down; regional power loss, VR-1 damaged.
12/3/2017	0	0	0	0	0	NR	GWETS shut down; regional power loss, VR-1 damaged.
12/4/2017	0	0	0	0	0	NR	GWETS maintenance; VR-1 repair.
12/5/2017	151	187	49	73	33	9.1	GWETS maintenance; VR-1 repaired, system restarted.
12/6/2017	306	376	97	145	70	8.4	
12/7/2017	306	376	97	145	70	8.4	
12/8/2017	319	391	101	150	75	8.3	
12/9/2017	0	0	0	0	0	NR	GWETS shut down due to power outage/electrical overload; main breaker tripped.
12/10/2017	0	0	0	0	0	NR	GWETS shut down.
12/11/2017	0	0	0	0	0	NR	GWETS shut down.
12/12/2017	182	223	85	90	13	8.5	Reset main breaker; system restarted.
12/13/2017	215	266	98	112	26	8.4	GWETS maintenance.
12/14/2017	131	161	42	62	32	8.7	GWETS maintenance.
12/15/2017	95	110	31	45	24	9.1	GWETS maintenance; system restarted.
12/16/2017	325	399	100	150	80	8.4	
12/17/2017	325	398	100	150	80	8.4	
12/18/2017	202	248	63	93	50	8.2	GWETS maintenance; system restarted.
12/19/2017	320	393	100	145	80	8.4	GWETS maintenance.
12/20/2017	320	392	100	145	80	8.4	
12/21/2017	320	393	100	145	80	8.4	
12/22/2017	320	392	100	145	80	8.4	
12/23/2017	320	393	100	145	80	8.4	
12/24/2017	320	393	100	145	80	8.4	
12/25/2017	320	393	100	145	80	8.4	
12/26/2017	279	346	96	132	77	7.7	GWETS down due to power outage; system restarted.
12/27/2017	320	394	100	145	80	8.4	
12/28/2017	280	327	88	127	70	7.8	GWETS shut down due to annual electrical inspection; system restarted.
12/29/2017	319	394	100	145	80	8.4	GWETS shut down due to annual electrical inspection; system restarted.
12/30/2017	306	384	96	139	77	8.4	GWETS down due to power outage; system restarted.

Table 1
Summary of Daily Treatment System Operating Records - December 2017
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
12/31/2017	320	394	100	145	80	8.4	
Monthly Average	214	262	69	99	51	8.4	

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.

NR = no reading.

Table 2
Summary of Treatment System Laboratory Analytical Results – Split Samples
Collected at the Treatment System Compound December 7, 2017
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 December 7, 2017 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 to investigate past acetone detections in the influent and effluent treatment system water samples. Analytical results from both laboratories are presented below. The treatment system average influent flow rate at the time the samples were collected was 306 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 treatment system water 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-20171207		EFFDUP-20171207		INF-20171207		TB-20171207	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
Tetrachloroethene	ND	ND	ND	ND	7.9	4.20	ND	ND
Trichloroethene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND
Acrolein	ND	75.0 UJ	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	15.0 UJ	ND	ND	ND	ND	ND	ND
Benzene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Bromobenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
Bromodichloromethane	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Bromoform	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Epichlorohydrin	NA	75.0 UJ	NA	ND	NA	ND	NA	ND
Hexachlorobutadiene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
Isopropylbenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
n-Butylbenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
o-Dichlorobenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
sec-Butylbenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
tert-Butylbenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
Trans-1,3-dichloropropene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Styrene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
Tetrahydrofuran	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
Toluene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND

m&p-Xylene	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NA	R	NA	R	NA	R	NA	R
Naphthalene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1,1,1,2-Tetrachloroethane	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1,1,1-Trichloroethane	ND	3.0 UJ	NA	ND	NA	ND	NA	ND
1,1,2,2-Tetrachloroethane	ND	3.0 UJ	NA	ND	NA	ND	NA	ND
1,1,2-Trichloroethane	ND	3.0 UJ	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1,2,3-Trichlorobenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1,2,4-Trichlorobenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1,2-Dibromo-3-chloropropane	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1,2-Dibromoethane	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1,2-Dichloroethane	ND	3.0 UJ	NA	ND	NA	ND	NA	ND
1,2-Dichloropropane	ND	3.0 UJ	NA	ND	NA	ND	NA	ND
1,3-Dichloropropane	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1,4-Dichlorobenzene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
1-Chlorohexane	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
2-Chlorotoluene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
2-Hexanone	ND	15.0 UJ	NA	ND	NA	ND	NA	ND
4-Chlorotoluene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
4-Isopropyltoluene	NA	3.0 UJ	NA	ND	NA	ND	NA	ND
4-Methyl-2-pentanone	ND	15.0 UJ	NA	ND	NA	ND	NA	ND
Enflurane	ND	NA	ND	NA	1.4	NA	ND	NA
Haloether 229	ND	NA	ND	NA	5.6	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
Haloether 428	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 508	ND	NA	ND	NA	58.2	NA	ND	NA
Haloether 528	ND	NA	ND	NA	ND	NA	ND	NA
Halomar	ND	NA	ND	NA	ND	NA	ND	NA
Isoflurane	ND	NA	ND	NA	33.1	NA	ND	NA
Total Haloethers	ND	NA	ND	NA	98.3	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.
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.

Figures

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

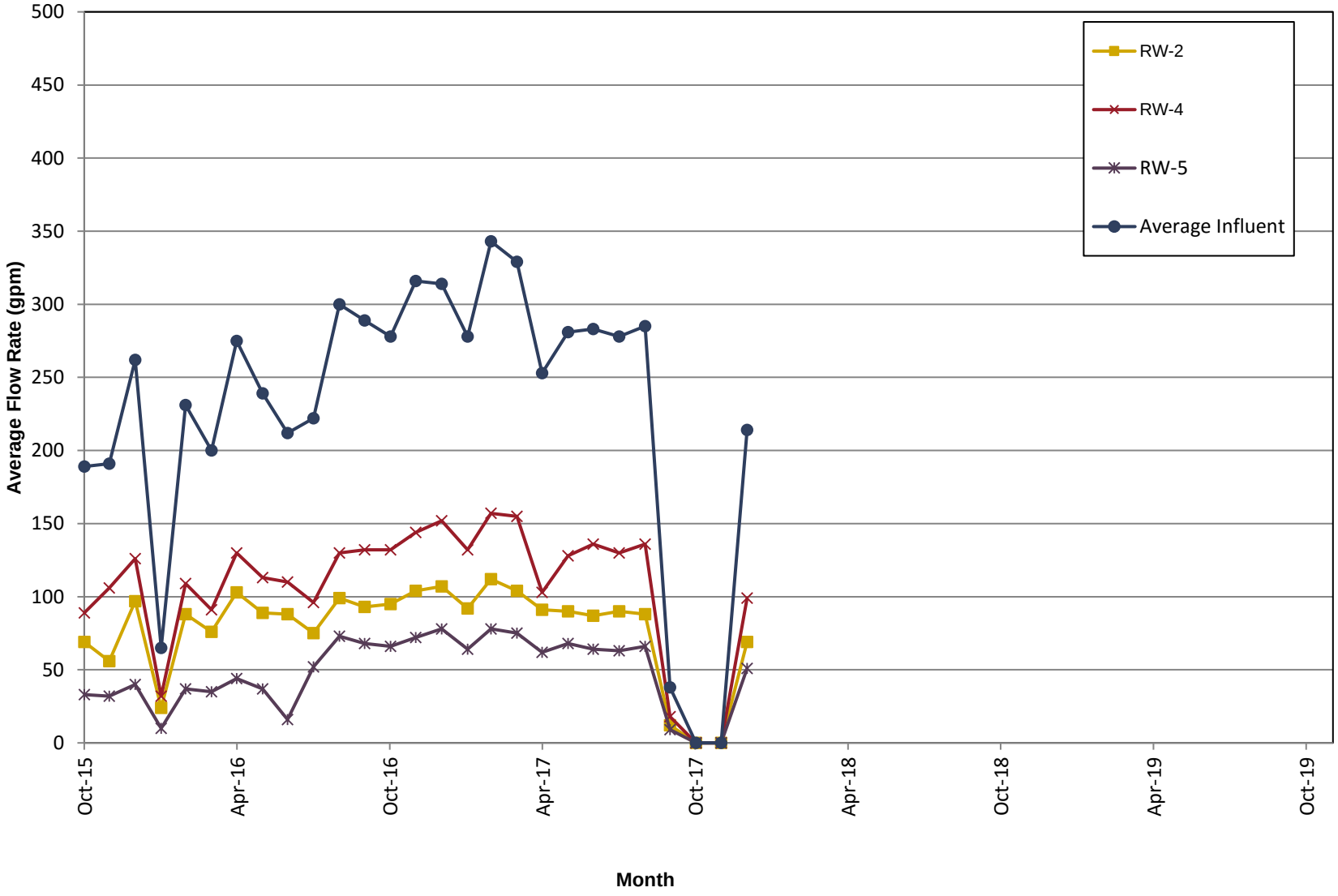


Figure 2
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Tetrachloroethene (PCE) Concentrations

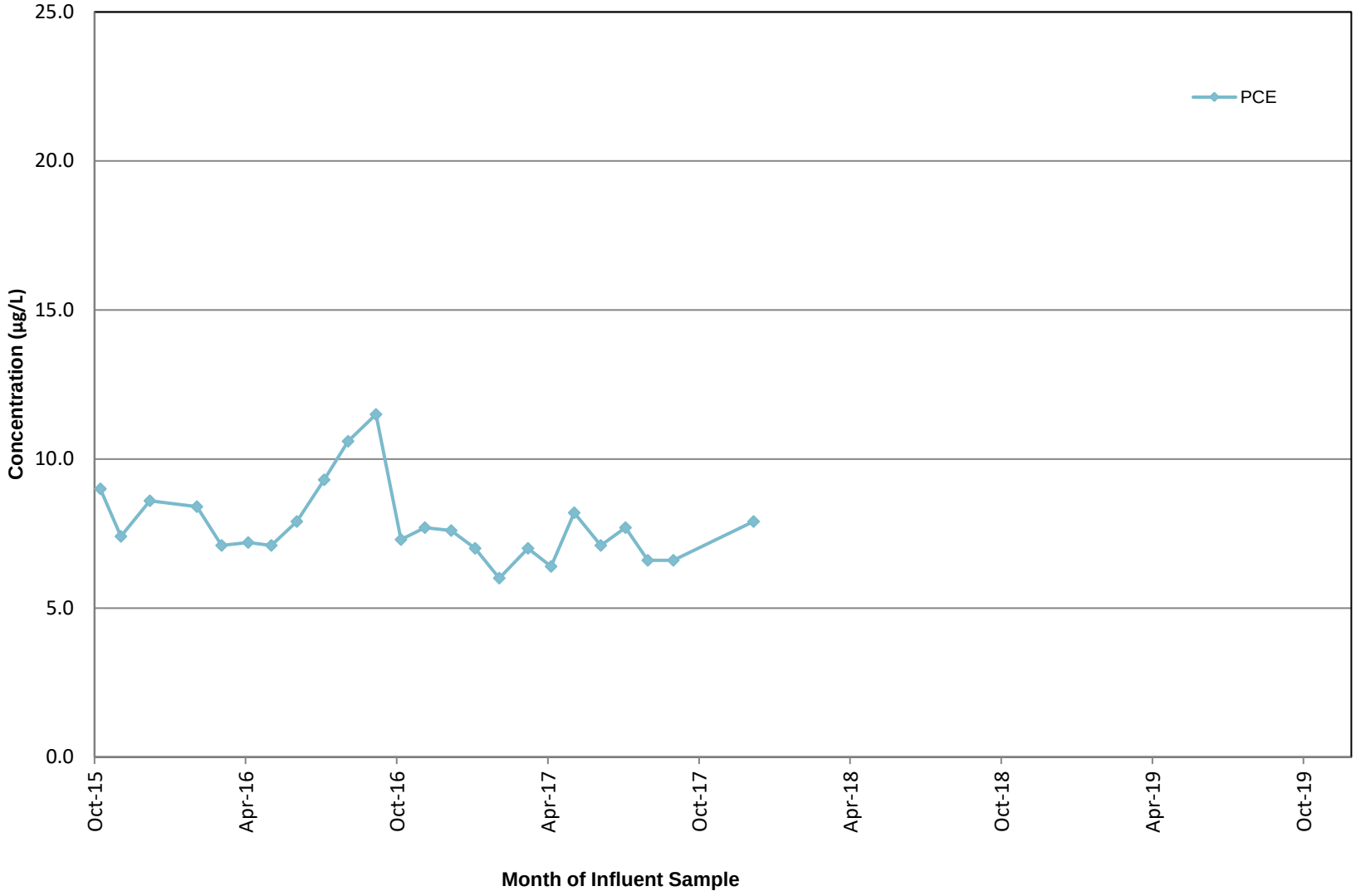
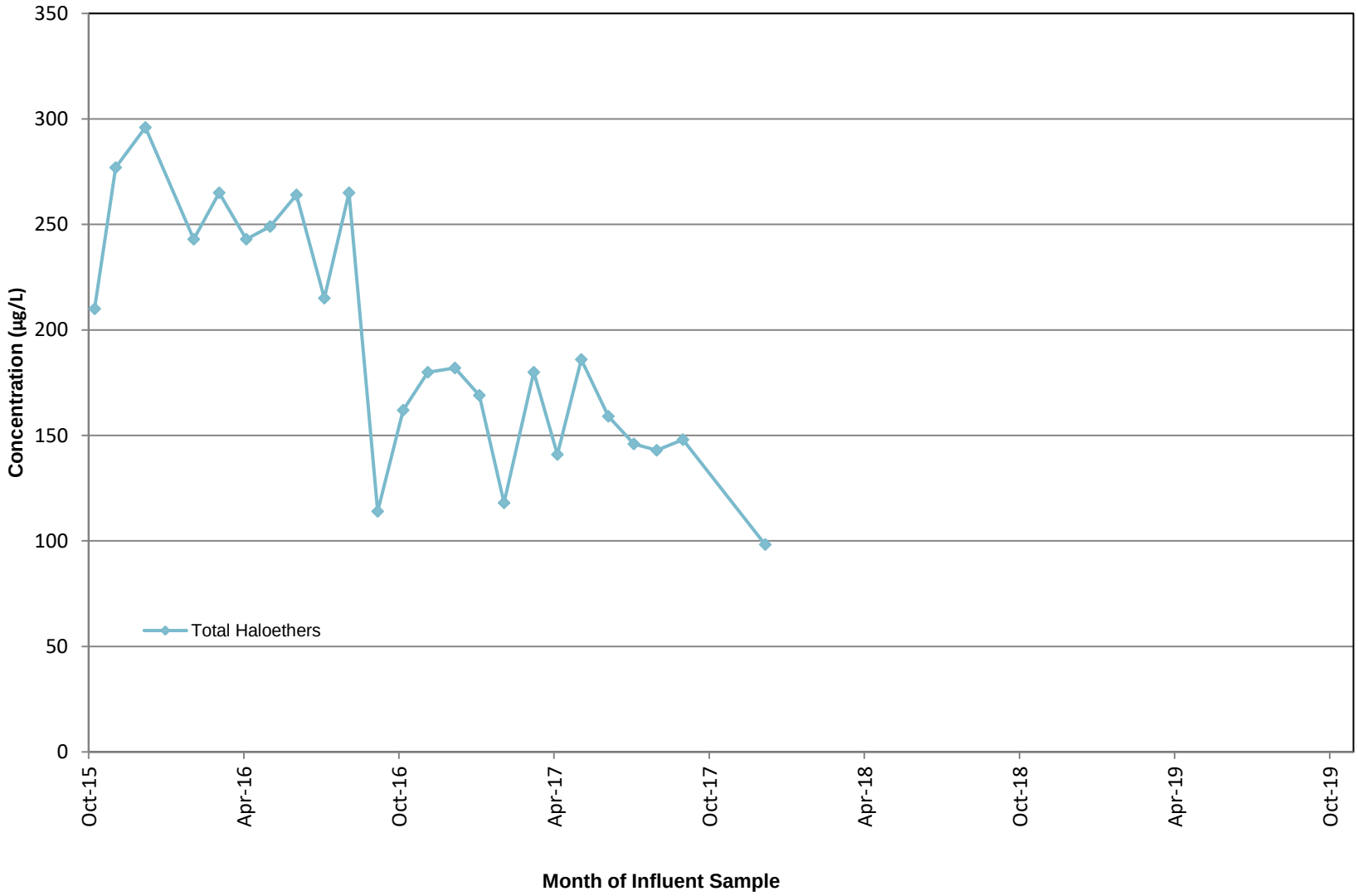


Figure 3
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Total Haloethers Concentrations



Attachment 1
Data Review Report #28927R

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2066643
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #28927R
Review Level: Tier II
Project: CO001911.0005.1705A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2066643 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. 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	TPH	MET	MISC
TB-20171207	2066643001	Water	12/07/2017		X				
INF-20171207	2066643002	Water	12/07/2017		X				
EFF-20171207	2066643003	Water	12/07/2017		X				
EFFDUP-20171207	2066643004	Water	12/07/2017	EFF-20171207	X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location EFF-20171207.

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	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

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-20171207	Haloether 427	> UL	AC

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 (LCS) Analysis

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 precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water 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-20171207/ EFFDUP-20171207	All compounds	U	U	AC

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/Field blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: December 22, 2017

PEER REVIEW: Dennis Capria

DATE: December 22, 2017

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: TB-20171207 **Lab ID: 2066643001** Collected: 12/07/17 00:00 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 12:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 12:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 12:01	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 12:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 12:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 12:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 12:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 12:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 12:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 12:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 12:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 12:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 12:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 12:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 12:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 12:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 12:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:01	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 12:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 12:01	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 406	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 421	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 427	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 428	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 508	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 528	ND	ug/L	1.0	1		12/12/17 12:01		
Halomar	ND	ug/L	1.0	1		12/12/17 12:01		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 12:01	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 12:01		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 12:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 12:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 12:01	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 12:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 12:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 12:01	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 12:01	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 12:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 12:01	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: TB-20171207 **Lab ID: 2066643001** Collected: 12/07/17 00:00 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 12:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 12:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 12:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 12:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 12:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 12:01	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 12:01	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/12/17 12:01	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/12/17 12:01	1868-53-7	

Sample: INF-20171207 **Lab ID: 2066643002** Collected: 12/07/17 07:58 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 12:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 12:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 12:18	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 12:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 12:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 12:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 12:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 12:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 12:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 12:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 12:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 12:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 12:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 12:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 12:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 12:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 12:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:18	10061-02-6	
Enflurane	**1.4**	ug/L	1.0	1		12/12/17 12:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 12:18	100-41-4	
Haloether 229	**5.6**	ug/L	1.0	1		12/12/17 12:18		
Haloether 406	ND	ug/L	1.0	1		12/12/17 12:18		
Haloether 421	ND	ug/L	1.0	1		12/12/17 12:18		
Haloether 427	ND	ug/L	1.0	1		12/12/17 12:18		

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: INF-20171207 **Lab ID: 2066643002** Collected: 12/07/17 07:58 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 12:18		
Haloether 508	**58.2**	ug/L	1.0	1		12/12/17 12:18		
Haloether 528	ND	ug/L	1.0	1		12/12/17 12:18		
Halomar	ND	ug/L	1.0	1		12/12/17 12:18		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 12:18	591-78-6	
Isoflurane	**33.1**	ug/L	1.0	1		12/12/17 12:18		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 12:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 12:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 12:18	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 12:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 12:18	79-34-5	
Tetrachloroethene	**7.9**	ug/L	1.0	1		12/12/17 12:18	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 12:18	108-88-3	
Total Haloether	**98.3**	ug/L	1.0	1		12/12/17 12:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 12:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 12:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 12:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 12:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 12:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 12:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 12:18	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/12/17 12:18	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/12/17 12:18	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 12:18	1868-53-7	

Sample: EFF-20171207 **Lab ID: 2066643003** Collected: 12/07/17 08:18 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 11:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 11:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 11:43	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 11:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 11:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 11:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 11:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 11:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 11:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 11:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 11:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 11:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 11:43	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: EFF-20171207 **Lab ID: 2066643003** Collected: 12/07/17 08:18 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 11:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 11:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 11:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 11:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 11:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 11:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 11:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 11:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 11:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 11:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 11:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 11:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 11:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 406	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 421	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 427	ND	ug/L	1.0	1		12/12/17 11:43		~~M1~~
Haloether 428	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 508	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 528	ND	ug/L	1.0	1		12/12/17 11:43		
Halomar	ND	ug/L	1.0	1		12/12/17 11:43		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 11:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 11:43		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 11:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 11:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 11:43	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 11:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 11:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 11:43	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 11:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 11:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 11:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 11:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 11:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 11:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 11:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 11:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 11:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 11:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 11:43	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/12/17 11:43	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 11:43	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/12/17 11:43	1868-53-7	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: EFFDUP-20171207 **Lab ID: 2066643004** Collected: 12/07/17 08:18 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 12:36	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 12:36	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 12:36	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 12:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 12:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 12:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 12:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 12:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 12:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 12:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 12:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 12:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 12:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 12:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 12:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 12:36	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 12:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:36	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 12:36	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 12:36	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 406	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 421	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 427	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 428	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 508	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 528	ND	ug/L	1.0	1		12/12/17 12:36		
Halomar	ND	ug/L	1.0	1		12/12/17 12:36		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 12:36	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 12:36		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 12:36	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 12:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 12:36	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 12:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 12:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 12:36	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 12:36	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 12:36		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 12:36	79-01-6	

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(504)469-0333

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: EFFDUP-20171207 **Lab ID: 2066643004** Collected: 12/07/17 08:18 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 12:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 12:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 12:36	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 12:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 12:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 12:36	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		12/12/17 12:36	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/12/17 12:36	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/12/17 12:36	1868-53-7	

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields

WO# : 2066643

2066643

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ARCADIS	Report To:	David Howard	Attention:	
Address:	410 North 44th St.	Copy To:		Company Name:	
Phoenix, AZ 85008				Address:	
Email:	david.howard@arcadis-us.com	Purchase Order #:		Pace Quote:	
Phone:	NONE Fax:	Project Name:	Fibers	Pace Project Manager:	justin.stock@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	1037

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	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	8260- VOCs + Halos	Trip BLANK	Residual Chlorine (Y/N)	
1	TB-20171207	WT	G	—	—	12/07/17	LAB		2				2						X	X		
2	INF-20171207	WT	G	—	—	12/07/17	0759		3				3						X			
3	EFF-20171207	WT	G	—	—	12/07/17	0818		3				3						X			
4	EFF DUP-20171207	WT	G	—	—	12/07/17	0818		3				3						X			
5	EFF MS-20171207	WT	G	—	—	12/07/17	0818		3				3						X			
6	EFF MSD-20171207	WT	G	—	—	12/07/17	0818		3				3						X			
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Lab results by Monday, December 18 for the influent and effluent samples	[illegible] / ARCADIS	12/07/17	14:00	[illegible] - Pace	12/07/17	14:00	4C Y N Y
	Fed Ex	12/8/17	1030	Fed Ex - Pace	12/8/17	1030	0.1 Y Y Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Elvin Varela

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/07/17

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

Attachment 2
Pace Laboratory Analytical Report #2066643

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

December 18, 2017

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

RE: Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on December 08, 2017. 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 Wells
Pace Project No.:	2066643

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 Wells
Pace Project No.: 2066643

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2066643001	**TB-20171207**	Water	12/07/17 00:00	12/08/17 10:30
2066643002	**INF-20171207**	Water	12/07/17 07:58	12/08/17 10:30
2066643003	**EFF-20171207**	Water	12/07/17 08:18	12/08/17 10:30
2066643004	**EFFDUP-20171207**	Water	12/07/17 08:18	12/08/17 10:30

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SAMPLE ANALYTE COUNT

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2066643001	**TB-20171207**	EPA 5030B/8260	GEM	56	PASI-N
2066643002	**INF-20171207**	EPA 5030B/8260	GEM	56	PASI-N
2066643003	**EFF-20171207**	EPA 5030B/8260	GEM	56	PASI-N
2066643004	**EFFDUP-20171207**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: December 18, 2017

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

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

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

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

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

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

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

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

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

QC Batch: 96489

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2066643003

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

- MS (Lab ID: 415096)
  - Haloether 427

Additional Comments:

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

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: TB-20171207 **Lab ID: 2066643001** Collected: 12/07/17 00:00 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 12:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 12:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 12:01	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 12:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 12:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 12:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 12:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 12:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 12:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 12:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 12:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 12:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 12:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 12:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 12:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 12:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 12:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:01	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 12:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 12:01	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 406	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 421	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 427	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 428	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 508	ND	ug/L	1.0	1		12/12/17 12:01		
Haloether 528	ND	ug/L	1.0	1		12/12/17 12:01		
Halomar	ND	ug/L	1.0	1		12/12/17 12:01		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 12:01	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 12:01		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 12:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 12:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 12:01	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 12:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 12:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 12:01	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 12:01	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 12:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 12:01	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: TB-20171207 **Lab ID: 2066643001** Collected: 12/07/17 00:00 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 12:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 12:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 12:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 12:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 12:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 12:01	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 12:01	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/12/17 12:01	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/12/17 12:01	1868-53-7	

Sample: INF-20171207 **Lab ID: 2066643002** Collected: 12/07/17 07:58 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 12:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 12:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 12:18	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 12:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 12:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 12:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 12:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 12:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 12:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 12:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 12:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 12:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 12:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 12:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 12:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 12:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 12:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:18	10061-02-6	
Enflurane	**1.4**	ug/L	1.0	1		12/12/17 12:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 12:18	100-41-4	
Haloether 229	**5.6**	ug/L	1.0	1		12/12/17 12:18		
Haloether 406	ND	ug/L	1.0	1		12/12/17 12:18		
Haloether 421	ND	ug/L	1.0	1		12/12/17 12:18		
Haloether 427	ND	ug/L	1.0	1		12/12/17 12:18		

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: INF-20171207 **Lab ID: 2066643002** Collected: 12/07/17 07:58 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 12:18		
Haloether 508	**58.2**	ug/L	1.0	1		12/12/17 12:18		
Haloether 528	ND	ug/L	1.0	1		12/12/17 12:18		
Halomar	ND	ug/L	1.0	1		12/12/17 12:18		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 12:18	591-78-6	
Isoflurane	**33.1**	ug/L	1.0	1		12/12/17 12:18		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 12:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 12:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 12:18	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 12:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 12:18	79-34-5	
Tetrachloroethene	**7.9**	ug/L	1.0	1		12/12/17 12:18	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 12:18	108-88-3	
Total Haloether	**98.3**	ug/L	1.0	1		12/12/17 12:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 12:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 12:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 12:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 12:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 12:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 12:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 12:18	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/12/17 12:18	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/12/17 12:18	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 12:18	1868-53-7	

Sample: EFF-20171207 **Lab ID: 2066643003** Collected: 12/07/17 08:18 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 11:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 11:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 11:43	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 11:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 11:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 11:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 11:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 11:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 11:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 11:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 11:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 11:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 11:43	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: EFF-20171207 **Lab ID: 2066643003** Collected: 12/07/17 08:18 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 11:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 11:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 11:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 11:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 11:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 11:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 11:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 11:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 11:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 11:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 11:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 11:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 11:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 406	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 421	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 427	ND	ug/L	1.0	1		12/12/17 11:43		M1
Haloether 428	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 508	ND	ug/L	1.0	1		12/12/17 11:43		
Haloether 528	ND	ug/L	1.0	1		12/12/17 11:43		
Halomar	ND	ug/L	1.0	1		12/12/17 11:43		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 11:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 11:43		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 11:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 11:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 11:43	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 11:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 11:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 11:43	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 11:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 11:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 11:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 11:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 11:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 11:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 11:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 11:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 11:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 11:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 11:43	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/12/17 11:43	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 11:43	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/12/17 11:43	1868-53-7	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: EFFDUP-20171207 **Lab ID: 2066643004** Collected: 12/07/17 08:18 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 12:36	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 12:36	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 12:36	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 12:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 12:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 12:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 12:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 12:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 12:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 12:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 12:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 12:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 12:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 12:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 12:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 12:36	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 12:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:36	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 12:36	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 12:36	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 406	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 421	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 427	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 428	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 508	ND	ug/L	1.0	1		12/12/17 12:36		
Haloether 528	ND	ug/L	1.0	1		12/12/17 12:36		
Halomar	ND	ug/L	1.0	1		12/12/17 12:36		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 12:36	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 12:36		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 12:36	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 12:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 12:36	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 12:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 12:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 12:36	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 12:36	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 12:36		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 12:36	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Sample: EFFDUP-20171207 **Lab ID: 2066643004** Collected: 12/07/17 08:18 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 12:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 12:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 12:36	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 12:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 12:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 12:36	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		12/12/17 12:36	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/12/17 12:36	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/12/17 12:36	1868-53-7	

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QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

QC Batch: 96489 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2066643001, 2066643002, 2066643003, 2066643004

METHOD BLANK: 415094 | Matrix: Water
Associated Lab Samples: 2066643001, 2066643002, 2066643003, 2066643004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1-Dichloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1-Dichloroethene	ug/L	ND	1.0	12/12/17 10:15	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/12/17 10:15	
1,2-Dichloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,2-Dichloropropane	ug/L	ND	1.0	12/12/17 10:15	
2-Butanone (MEK)	ug/L	ND	2.0	12/12/17 10:15	
2-Hexanone	ug/L	ND	2.0	12/12/17 10:15	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/12/17 10:15	
Acetone	ug/L	ND	4.0	12/12/17 10:15	
Acrolein	ug/L	ND	8.0	12/12/17 10:15	
Acrylonitrile	ug/L	ND	4.0	12/12/17 10:15	
Benzene	ug/L	ND	1.0	12/12/17 10:15	
Bromodichloromethane	ug/L	ND	1.0	12/12/17 10:15	
Bromoform	ug/L	ND	1.0	12/12/17 10:15	
Bromomethane	ug/L	ND	1.0	12/12/17 10:15	
Carbon disulfide	ug/L	ND	1.0	12/12/17 10:15	
Carbon tetrachloride	ug/L	ND	1.0	12/12/17 10:15	
Chlorobenzene	ug/L	ND	1.0	12/12/17 10:15	
Chloroethane	ug/L	ND	1.0	12/12/17 10:15	
Chloroform	ug/L	ND	1.0	12/12/17 10:15	
Chloromethane	ug/L	ND	1.0	12/12/17 10:15	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/12/17 10:15	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/12/17 10:15	
Dibromochloromethane	ug/L	ND	1.0	12/12/17 10:15	
Dibromomethane	ug/L	ND	1.0	12/12/17 10:15	
Enflurane	ug/L	ND	1.0	12/12/17 10:15	
Ethylbenzene	ug/L	ND	1.0	12/12/17 10:15	
Haloether 229	ug/L	ND	1.0	12/12/17 10:15	
Haloether 406	ug/L	ND	1.0	12/12/17 10:15	
Haloether 421	ug/L	ND	1.0	12/12/17 10:15	
Haloether 427	ug/L	ND	1.0	12/12/17 10:15	
Haloether 428	ug/L	ND	1.0	12/12/17 10:15	
Haloether 508	ug/L	ND	1.0	12/12/17 10:15	
Haloether 528	ug/L	ND	1.0	12/12/17 10:15	
Halomar	ug/L	ND	1.0	12/12/17 10:15	
Isoflurane	ug/L	ND	1.0	12/12/17 10:15	
m&p-Xylene	ug/L	ND	2.0	12/12/17 10:15	

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QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

METHOD BLANK: 415094 Matrix: Water
Associated Lab Samples: 2066643001, 2066643002, 2066643003, 2066643004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methoxyflurane	ug/L	ND	1.0	12/12/17 10:15	
Methylene Chloride	ug/L	ND	5.0	12/12/17 10:15	
o-Xylene	ug/L	ND	1.0	12/12/17 10:15	
Styrene	ug/L	ND	1.0	12/12/17 10:15	
Tetrachloroethene	ug/L	ND	1.0	12/12/17 10:15	
Toluene	ug/L	ND	1.0	12/12/17 10:15	
Total Haloether	ug/L	ND	1.0	12/12/17 10:15	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/12/17 10:15	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/12/17 10:15	
Trichloroethene	ug/L	ND	1.0	12/12/17 10:15	
Trichlorofluoromethane	ug/L	ND	1.0	12/12/17 10:15	
Vinyl chloride	ug/L	ND	1.0	12/12/17 10:15	
4-Bromofluorobenzene (S)	%.	103	68-124	12/12/17 10:15	
Dibromofluoromethane (S)	%.	99	72-126	12/12/17 10:15	
Toluene-d8 (S)	%.	100	79-119	12/12/17 10:15	

LABORATORY CONTROL SAMPLE: 415095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	45.5	91	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	47.4	95	15-179	
1,1,2-Trichloroethane	ug/L	50	43.3	87	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	43.7	87	38-121	
1,1-Dichloroethane	ug/L	50	47.1	94	63-129	
1,1-Dichloroethene	ug/L	50	43.9	88	51-139	
1,2,3-Trichloropropane	ug/L	50	49.3	99	13-187	
1,2-Dichloroethane	ug/L	50	44.3	89	57-148	
1,2-Dichloropropane	ug/L	50	44.5	89	66-128	
2-Butanone (MEK)	ug/L	50	43.5	87	32-183	
2-Hexanone	ug/L	50	46.5	93	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	47.5	95	26-171	
Acetone	ug/L	50	52.3	105	22-165	
Acrolein	ug/L	50	39.1	78	10-131	
Acrylonitrile	ug/L	50	41.0	82	18-149	
Benzene	ug/L	50	44.9	90	62-131	
Bromodichloromethane	ug/L	50	46.2	92	69-132	
Bromoform	ug/L	50	42.6	85	35-166	
Bromomethane	ug/L	50	45.6	91	34-158	
Carbon disulfide	ug/L	50	42.1	84	31-128	
Carbon tetrachloride	ug/L	50	48.4	97	54-144	
Chlorobenzene	ug/L	50	51.2	102	70-127	
Chloroethane	ug/L	50	41.1	82	17-195	
Chloroform	ug/L	50	46.8	94	73-134	
Chloromethane	ug/L	50	41.0	82	17-153	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

LABORATORY CONTROL SAMPLE: 415095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	43.8	88	68-129	
cis-1,3-Dichloropropene	ug/L	50	46.8	94	72-138	
Dibromochloromethane	ug/L	50	44.1	88	49-146	
Dibromomethane	ug/L	50	44.4	89	56-145	
Enflurane	ug/L	50	49.2	98	56-135	
Ethylbenzene	ug/L	50	49.6	99	66-126	
Haloether 229	ug/L	50	37.0	74	62-123	
Haloether 406	ug/L	50	45.8	92	62-134	
Haloether 421	ug/L	50	45.6	91	70-128	
Haloether 427	ug/L	50	48.8	98	69-153	
Haloether 428	ug/L	50	46.1	92	70-134	
Haloether 508	ug/L	50	46.4	93	52-139	
Haloether 528	ug/L	50	46.6	93	48-157	
Halomar	ug/L	50	45.7	91	62-128	
Isoflurane	ug/L	50	46.4	93	61-132	
m&p-Xylene	ug/L	100	95.4	95	65-129	
Methoxyflurane	ug/L	50	43.5	87	72-124	
Methylene Chloride	ug/L	50	44.0	88	46-168	
o-Xylene	ug/L	50	49.4	99	65-124	
Styrene	ug/L	50	49.9	100	72-133	
Tetrachloroethene	ug/L	50	54.5	109	46-157	
Toluene	ug/L	50	46.4	93	69-126	
Total Haloether	ug/L		501			
trans-1,2-Dichloroethene	ug/L	50	45.5	91	60-129	
trans-1,3-Dichloropropene	ug/L	50	45.5	91	59-149	
Trichloroethene	ug/L	50	46.4	93	67-132	
Trichlorofluoromethane	ug/L	50	44.6	89	39-171	
Vinyl chloride	ug/L	50	37.3	75	27-149	
4-Bromofluorobenzene (S)	%.			100	68-124	
Dibromofluoromethane (S)	%.			95	72-126	
Toluene-d8 (S)	%.			96	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 415096 415097

Parameter	Units	2066643003 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	55.1	47.9	110	96	54-137	14	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	52.9	48.4	106	97	15-187	9	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	48.2	45.3	96	91	59-148	6	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	53.1	46.0	106	92	40-117	14	20	
1,1-Dichloroethane	ug/L	ND	50	50	54.9	48.5	110	97	59-133	12	20	
1,1-Dichloroethene	ug/L	ND	50	50	53.8	46.9	108	94	44-146	14	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	53.1	47.7	106	95	14-199	11	20	
1,2-Dichloroethane	ug/L	ND	50	50	50.1	45.2	100	90	56-154	10	20	
1,2-Dichloropropane	ug/L	ND	50	50	53.0	47.5	106	95	62-135	11	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 415096 415097

Parameter	Units	2066643003 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	43.5	40.2	87	80	20-205	8	20	
2-Hexanone	ug/L	ND	50	50	48.9	46.4	98	93	25-189	5	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	49.7	47.6	99	95	23-184	4	20	
Acetone	ug/L	ND	50	50	44.5	42.6	85	81	11-217	5	20	
Acrolein	ug/L	ND	50	50	42.0	40.1	84	80	10-142	5	20	
Acrylonitrile	ug/L	ND	50	50	45.1	42.4	90	85	20-164	6	20	
Benzene	ug/L	ND	50	50	52.1	46.3	104	93	52-141	12	20	
Bromodichloromethane	ug/L	ND	50	50	52.0	47.1	104	94	70-134	10	20	
Bromoform	ug/L	ND	50	50	46.3	41.7	93	83	37-171	10	20	
Bromomethane	ug/L	ND	50	50	55.1	48.6	110	97	34-155	12	20	
Carbon disulfide	ug/L	ND	50	50	53.2	44.3	106	89	28-130	18	20	
Carbon tetrachloride	ug/L	ND	50	50	59.2	52.1	118	104	48-146	13	20	
Chlorobenzene	ug/L	ND	50	50	57.7	51.7	115	103	67-129	11	20	
Chloroethane	ug/L	ND	50	50	52.4	44.4	105	89	12-192	17	20	
Chloroform	ug/L	ND	50	50	54.5	48.0	109	96	66-143	13	20	
Chloromethane	ug/L	ND	50	50	49.1	42.0	98	84	14-155	16	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	51.5	44.1	103	88	56-141	16	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	54.3	47.8	109	96	70-139	13	20	
Dibromochloromethane	ug/L	ND	50	50	47.6	43.1	95	86	50-150	10	20	
Dibromomethane	ug/L	ND	50	50	50.2	45.3	100	91	58-153	10	20	
Enflurane	ug/L	ND	50	50	59.7	51.4	119	103	63-126	15	20	
Ethylbenzene	ug/L	ND	50	50	56.0	50.0	112	100	57-135	11	20	
Haloether 229	ug/L	ND	50	50	46.1	41.1	92	82	56-127	12	20	
Haloether 406	ug/L	ND	50	50	57.8	50.2	116	100	68-128	14	20	
Haloether 421	ug/L	ND	50	50	53.8	47.3	108	95	74-120	13	20	
Haloether 427	ug/L	ND	50	50	60.4	54.4	121	109	78-120	11	20	M1
Haloether 428	ug/L	ND	50	50	56.0	50.9	112	102	74-125	10	20	
Haloether 508	ug/L	ND	50	50	57.2	48.0	114	96	28-156	18	20	
Haloether 528	ug/L	ND	50	50	55.3	48.9	111	98	45-142	12	20	
Halomar	ug/L	ND	50	50	55.1	47.9	110	96	67-123	14	20	
Isoflurane	ug/L	ND	50	50	57.8	50.8	116	102	45-140	13	20	
m&p-Xylene	ug/L	ND	100	100	110	99.2	110	99	56-136	10	20	
Methoxyflurane	ug/L	ND	50	50	50.6	45.5	101	91	75-119	11	20	
Methylene Chloride	ug/L	ND	50	50	49.6	42.5	99	85	45-166	15	20	
o-Xylene	ug/L	ND	50	50	54.3	49.9	109	100	57-133	9	20	
Styrene	ug/L	ND	50	50	56.1	51.0	112	102	58-144	10	20	
Tetrachloroethene	ug/L	ND	50	50	61.7	56.9	123	114	48-143	8	20	
Toluene	ug/L	ND	50	50	54.2	47.6	108	95	59-136	13	20	
Total Haloether	ug/L	ND			610	536				13		
trans-1,2-Dichloroethene	ug/L	ND	50	50	56.6	48.3	113	97	57-132	16	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	52.1	47.1	104	94	59-154	10	20	
Trichloroethene	ug/L	ND	50	50	54.8	49.2	110	98	58-140	11	20	
Trichlorofluoromethane	ug/L	ND	50	50	54.7	47.8	109	96	24-175	14	20	
Vinyl chloride	ug/L	ND	50	50	44.4	38.0	89	76	21-150	16	20	
4-Bromofluorobenzene (S)	%.						103	104	68-124			

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 415096 415097

Parameter	Units	2066643003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						99	96	72-126			
Toluene-d8 (S)	%.						98	97	79-119			

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QUALIFIERS

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

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.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The Nelac Institute

LABORATORIES

PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fibers Public Supply Wells
Pace Project No.: 2066643

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2066643001	**TB-20171207**	EPA 5030B/8260	96489		
2066643002	**INF-20171207**	EPA 5030B/8260	96489		
2066643003	**EFF-20171207**	EPA 5030B/8260	96489		
2066643004	**EFFDUP-20171207**	EPA 5030B/8260	96489		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields

WO# : 2066643

2066643

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ARCADIS	Report To:	David Howard	Attention:	
Address:	410 North 44th St.	Copy To:		Company Name:	
Phoenix, AZ 85008				Address:	
Email:	david.howard@arcadis-us.com	Purchase Order #:		Pace Quote:	
Phone:	NONE Fax:	Project Name:	Fibers	Pace Project Manager:	justin.stock@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	1037

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	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	8260- VOCs + Halos	Trip BLANK	Residual Chlorine (Y/N)	
1	TB-20171207	WT	G	—	—	12/07/17	LAB		2				2						X	X		
2	INF-20171207	WT	G	—	—	12/07/17	0759		3				3						X			
3	EFF-20171207	WT	G	—	—	12/07/17	0818		3				3						X			
4	EFF DUP-20171207	WT	G	—	—	12/07/17	0818		3				3						X			
5	EFF MS-20171207	WT	G	—	—	12/07/17	0818		3				3						X			
6	EFF MSD-20171207	WT	G	—	—	12/07/17	0818		3				3						X			
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Lab results by Monday, December 18 for the influent and effluent samples	[illegible] / ARCADIS	12/07/17	14:00	[illegible] - Pace	12/07/17	14:00	4C Y N Y
	Fed Ex	12/8/17	1030	Fed Ex - Pace	12/8/17	1030	0.1 Y Y Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Elvin Varela

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/07/17

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

Pace Analytical

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

Sample Condition Upon

WO# : 2066643

PM: CJM Due Date: 12/18/17
CLIENT: 20-CHEV-ARC

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

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

Custody Seals intact: ☑ Yes ☐ No

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

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12/8/17 HWB

Temp must be measured from Temperature blank when present

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

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Attachment 3
Data Review Report #28934R

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #242035 (WO 655-04-26)
Analyses Performed By:
eqlab - Environmental Quality Laboratories, Inc.
San Juan, Puerto Rico

Report: #28934R
Review Level: Tier II
Project: CO001911.0005.1705A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #242035 (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. 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	TPH	MET	MISC
INF-20171207	2760985	Water	12/07/2017		X				
EFF-20171207	2760986	Water	12/07/2017		X				
EFFDUP-20171207	2760987	Water	12/07/2017	EFF-20171207	X				
TB-20171207	2760990	Water	12/07/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location EFF-20171207.

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	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

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.

Several compounds exhibited MS/MSD recoveries below control limits for the MS/MSD performed on sample location EFF-20171207. All the low recoveries were greater than 10% therefore, the compounds associated with low recoveries for sample location EFF-20171207 were qualified as estimated.

5. Laboratory Control Sample (LCS) Analysis

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 precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water 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-20171207/ EFFDUP-20171207	All compounds	U	U	AC

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/Field blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: December 28, 2017

PEER REVIEW: Dennis Capria

DATE: January 4, 2018

CHAIN OF CUSTODY/
ANNOTATED 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: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017** 07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

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	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	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: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017** 07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~12/08/2017~~	~~13:59~~	~~KMOR~~	~~12/08/2017~~	~~--~~	~~EPA 5030B~~ R
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	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: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017** 07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	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: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017** 07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	4.20	µg/L	--	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B

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EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017** 07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 238

Certified by Laboratory Director

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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFF-20171207**
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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

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 UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND UJ	µg/L	U	1.4	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B

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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFF-20171207**
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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND UJ	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND UJ	µg/L	U	1.5	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
~~2-Chloroethyl vinyl ether~~	~~EPA 8260B~~	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~12/08/2017~~	~~13:33~~	~~KMOR~~	~~12/08/2017~~	~~--~~	~~EPA 5030B~~ R
2-Chlorotoluene	EPA 8260B	ND UJ	µg/L	U	1.4	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND UJ	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND UJ	µg/L	U	1.4	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND UJ	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND UJ	µg/L	U	25.0	75.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND UJ	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B

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

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

PRDOH Certified
EPA ID PR00014

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

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

Attn: MR. ELVIN VARELA
Source: **EFF-20171207**
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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND UJ	µg/L	U	1.5	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND UJ	µg/L	U	30.0	75.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	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: **EFF-20171207**
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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

	Parameter	Method	Results		Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
	Ethylbenzene	EPA 8260B	ND		µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	UJ	µg/L	U	1.4	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Iodomethane	EPA 8260B	ND		µg/L	U	8.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	UJ	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	UJ	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Styrene	EPA 8260B	ND	UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND		µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Toluene	EPA 8260B	ND	UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND		µg/L	U	1.5	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND		µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND		µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND		µg/L	U	1.8	6.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B

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

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Laboratory Test Report

Sample Number:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND UJ	µg/L	U	1.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND UJ	µg/L	U	2.3	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND UJ	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 3338

Certified by Laboratory Director

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Attn: MR. ELVIN VARELA
Source: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

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	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B

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Source: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~12/08/2017~~	~~14:25~~	~~KMOR~~	~~12/08/2017~~	~~--~~	~~EPA 5030B~~ R
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	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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PRDOH Certified
EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B

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EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B

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EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B

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

Certified by Laboratory Director

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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: **TB-20171207**
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:	**2760990**	Collected Date & Time:	**12/07/2017** 08:00	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

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	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B

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Attn: MR. ELVIN VARELA
Source: **TB-20171207**
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:	**2760990**	Collected Date & Time:	**12/07/2017** 08:00	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~12/08/2017~~	~~13:07~~	~~KMOR~~	~~12/08/2017~~	~~--~~	~~EPA 5030B~~ R
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B

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

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Laboratory Test Report

Sample Number:	**2760990**	Collected Date & Time:	**12/07/2017** 08:00	Date of Report:	12/15/2017
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Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B

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

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

PRDOH Certified
EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **TB-20171207**
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:	**2760990**	Collected Date & Time:	**12/07/2017** 08:00	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	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

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

Attn: MR. ELVIN VARELA
Source: **TB-20171207**
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:	**2760990**	Collected Date & Time:	**12/07/2017** 08:00	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 238

Certified by Laboratory Director

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

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

PRDOH Certified
EPA ID PR00014

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

2017-12096

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: 935-04 | W.O. #: 26 | SITE: GUAYAMA, PR. | CLIENT REP: MR. ELMIN VARELA

P.O. #: 465 | PWSID #: | FOLDER #: 242055 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2760965-1 MATRIX: GROUND WATER SOURCE: POINT #1, GUAYAMA, PR INF-20171207	DATE: 12/07/17 TIME: 0758 TYPE: Grab	TYPE: VIAL/TC COLOR: CLEAR VOLUME: 40 PRESERVATIVE: HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2760966-1 MATRIX: GROUND WATER SOURCE: POINT #2, GUAYAMA, PR EFF-20171207	DATE: 12/07/17 TIME: 0825 TYPE: Grab	TYPE: VIAL/TC COLOR: CLEAR VOLUME: 40 PRESERVATIVE: HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2760967-1 MATRIX: GROUND WATER SOURCE: POINT #3, GUAYAMA, PR EFFDUP-20171207	DATE: 12/07/17 TIME: 0825 TYPE: Grab	TYPE: VIAL/TC COLOR: CLEAR VOLUME: 40 PRESERVATIVE: HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2760968-1 MATRIX: GROUND WATER SOURCE: POINT #4, GUAYAMA, PR EFFMS-20171207	DATE: 12/07/17 TIME: 0825 TYPE: Grab	TYPE: VIAL/TC COLOR: CLEAR VOLUME: 40 PRESERVATIVE: HCl pH<2,Cool 4 °C			EPA 8260B VOC

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Elmin Varela / [signature]	12/07/17	
Fixed in field by:	Elmin Varela / [signature]	12/07/17	VARIOS
Authorized by:	N/A	N/A	
Received by EQLF:			
Released to EQLL by:	X [signature]	12/07/17	1330
Received by EQLL:	[signature]	12/07/17	1330

SPECIAL INSTRUCTIONS / COMMENTS:
RUSH

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

PIAR

Arrival Temperature: 3.0°C Signature: [signature]

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

2017-12098

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: 653-UA W.O. #: 36 SITE: GUAYAMA, PR CLIENT REP: MAC ELVIN VARELA

P.O. #: 465 PWSID #: FOLDER #: 248635 PROJECT: GUAYAMA PROJECT EQLAB REP:

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2760989-1 MATRIX: GROUND WATER SOURCE: POINT #5, GUAYAMA, PR EFFMSD-20171207	DATE: 12/07/17 TIME: 0825 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME 40 PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2760990-1 MATRIX: DI WATER SOURCE: TRIP BLANK, GUAYAMA PR TB-20171207	DATE: 12/07/17 TIME: LAB TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME 40 PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE			
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE			

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Elvin Varela / [illegible]	12/07/17	
Fixed in field by:	Elvin Varela / [illegible]	12/07/17	1100S
Authorized by:			
Received by EQLF:	N/A	N/A	
Released to EQLL by:	[illegible]	12/07/17	1330
Received by EQLL:	Diego [illegible]	12/07/17	1330

SPECIAL INSTRUCTIONS / COMMENTS:

RUSH

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

PIAR

Arrival Temperature: 3.0°C Signature: [illegible]

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

Attachment 4
EQLAB Laboratory Analytical Report #242035 (WO 655-04-26)

Quality Assurance Report

Prepared for:
ARCADIS CARIBE, PSC

Facility:
GUAYAMA PROJECT

Project
INTERNAL

Samples Received:
December 07, 2017

Folder Number:
242035

W.O. #:
655-04-26

ENVIRONMENTAL QUALITY LABORATORIES, INC.

December 26, 2017

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 December 07, 2017

Dear Mr. Varela

Enclosed you will find the Quality Assurance Report for the samples received on December 07, 2017 for the INTERNAL Project. The QC data submitted reflects the precision and accuracy of the analyzed samples.

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

Cordially,

Environmental Quality Laboratories, Inc.

Janet Gómez Rosario

Lic. Janet Gómez-Rosario
QA/QC Supervisor

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

List of Appendices

Appendix	Description
A	Chain of Custody Documentation
B	Raw Data Worksheets

SECTION 1
QUALITY ASSURANCE NARRATIVE

QUALITY ASSURANCE NARRATIVE

OVERVIEW

On December 07, 2017, Environmental Quality Laboratories, Inc. received from ARCADIS CARIBE, PSC, six samples. (five Ground Water and one DI Water) The samples were collected at the Guayama Project facility on December 07,2017, for the interno Project. The samples were analyzed EPA 8260B VOC. The samples were received in good condition (3° C) and stored at 4 °C ± 2 °C in the refrigerator until the time of analysis. The following table shows the sample sources and the EQLAB sample number assigned to your sample upon receipt:

SAMPLE #	SOURCE	MATRIX
2760985	INF-20171207	GROUND WATER
2760986	EFF-20171207	GROUND WATER
2760987	EFFDUP-20171207	GROUND WATER
2760988	EFFMS-20171207	GROUND WATER
2760989	EFFMSD-20171207	GROUND WATER
2760985	TB-20171207	DI WATER

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

Quality Control Remarks

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

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

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

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

.

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

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

Run # 194103

Analysis Date: 8 and 15 December 2017

Sample	Analyte	Deviation	Recovery	Range
2769708/MS	1,1,1,2-Tetrachloroethane	00S	45.5%	**67-124%**
	1,1,1-Trichloroethane	00S	49.0%	**69-140%**
	1,1,2,2-Tetrachloroethane	00S	45.0%	**64-122%**
	1,1,2-Trichloroethane	00S	45.5%	**78-125%**
	1,1-Dichloropropene	00S	45.0%	**83-110%**
	1,2,3-Trichlorobenzene	00S	30.5%	**71-119%**
	1,2,3-Trichloropropane	00S	45.5%	**47-131%**
	1,2,4-Trichlorobenzene	00S	27.5%	**53-139%**
	1,2,4-Trimethylbenzene	00S	44.0%	**52-141%**
	1,2-Dibromo-3-chloropropane	00S	33.5%	**67-140%**
	1,2-Dibromoethane	00S	40.0%	**66-140%**
	1,2-Dichloroethane	00S	44.5%	**60-139%**
	1,2-Dichloropropane	00S	45.5%	**71-121%**
	1,3,5-Trimethylbenzene	00S	45.5%	**61-125%**
	1,3-Dichlorobenzene	00S	44.0%	**61-129%**
	1,3-Dichloropropane	00S	41.0%	**69-124%**
	1,4-Dichlorobenzene	00S	45.0%	**73-122%**
	1-Chlorohexane	00S	19.0%	**48-136%**
	2-Chloroethyl vinyl ether	00S	0	**10-178%**
	2-Chlorotoluene	00S	45.5%	**64-139%**
	2-Hexanone	00S	31.0%	**53-147%**
	4-Chlorotoluene	00S	41.0%	**64-128%**
	4-Isopropyltoluene	00S	42.0%	**66-129%**
	4-Methyl-2-pentanone	00S	39.4%	**57-143%**
	Acrolein	00S	33.6%	**47-157%**
	Acrylonitrile	00S	26.8%	**34-160%**
	Benzene	00S	48.5%	**65-139%**
	Bromobenzene	00S	46.5%	**64-120%**
	Bromodichloromethane	00S	46.5%	**64-141%**
	Bromoform	00S	42.0%	**61-132%**
	Carbon disulfide	00S	44.1%	**48-158%**

Run # 194103

Analysis Date: 8 and 15 December 2017

Sample	Analyte	Deviation	Recovery	Range
2769708/MS	Carbon tetrachloride	00S	49.5%	**73-137%**
	Chlorobenzene	00S	49.0%	**68-121%**
	Chloroform	00S	48.5%	**59-140%**
	Dibromochloromethane	00S	40.0%	**67-137%**
	Dibromomethane	00S	43.0%	**72-139%**
	Epichlorohydrin	00S	24.6%	**37-219%**
	Ethylbenzene	00S	45.0%	**58-136%**
	Hexachlorobutadiene	00S	35.0%	**62-124%**
	Iodomethane	00S	32.9%	**45-148%**
	Isopropylbenzene	00S	36.0%	**64-122%**
	Naphthalene	00S	23.0%	**66-135%**
	Styrene	00S	36.5%	**65-123%**
	Tetrachloroethene	00S	49.5%	**64-138%**
	Tetrahydrofuran	00S	15.5%	**51-147%**
	Toluene	00S	47.0%	**65-140%**
	Trichloroethene	00S	49.5%	**76-126%**
	cis-1,2-Dichloroethene	00S	45.5%	**66-127%**
	cis-1,3-Dichloropropene	00S	26.0%	**57-131%**
	m,p-Xylene	00S	47.0%	**56-145%**
	n-Butylbenzene	00S	43.0%	**72-114%**
	n-Propylbenzene	00S	44.5%	**61-123%**
	o-Dichlorobenzene	00S	40.0%	**73-124%**
	o-Xylene	00S	32.5%	**54-143%**
	sec-Butylbenzene	00S	43.5%	**64-114%**
	tert-Butylbenzene	00S	41.5%	**68-113%**
	trans-1,3-Dichloropropene	00S	41.5%	**59-130%**
	trans-1,4-Dichloro-2-butene	00S	43.5%	**47-129%**
Sample	**Analyte**	**Deviation**	**Recovery**	**Range**
2760988/MS	1,1,1,2-Tetrachloroethane	00S	66.0%	**67-124%**
	1,1,2-Trichloroethane	00S	65.0%	**78-125%**
	1,1-Dichloropropene	00S	67.0%	**83-110%**

Run # 194103

Analysis Date: 8 and 15 December 2017

Sample	Analyte	Deviation	Recovery	Range
2760988/MS	1,2,3-Trichlorobenzene	00S	45.5%	**71-119%**
	1,2,4-Trichlorobenzene	00S	41.0%	**53-139%**
	1,2-Dibromo-3-chloropropane	00S	46.5%	**67_140%**
	1,2-Dibromoethane	00S	57.5%	**66-140%**
	1,2-Dichloropropane	00S	65.0%	**71-121%**
	1,3-Dichloropropane	00S	60.5%	**69-124%**
	1,4-Dichlorobenzene	00S	63.5%	**73-122%**
	1-Chlorohexane	00S	41.0%	**48-136%**
	2-Chloroethyl vinyl ether	00S	1.17%	**10-178%**
	4-Chlorotoluene	00S	61.5%	**64-128%**
	4-Isopropyltoluene	00S	65.5%	**66-129%**
	Acrolein	00S	39.1%	**47-157%**
	Acrylonitrile	00S	33.2%	**34-160%**
	Carbon tetrachloride	00S	70.5%	**73-137%**
	Dibromochloromethane	00S	58.5%	**67-137%**
	Dibromomethane	00S	62.5%	**72-139%**
	Hexachlorobutadiene	00S	48.0%	**62-124%**
	Isopropylbenzene	00S	57.0%	**64-122%**
	Naphthalene	00S	38.0%	**66-135%**
	Styrene	00S	57.0%	**65-123%**
	Tetrahydrofuran	00S	22.5%	**51-147%**
	Trichloroethene	00S	70.0%	**76-126%**
	cis-1,3-Dichloropropene	00S	39.7%	**57-131%**
	n-Butylbenzene	00S	66.0%	**72-114%**
	o-Dichlorobenzene	00S	58.0%	**73-124%**
	o-Xylene	00S	52.0%	**54-143%**
	tert-Butylbenzene	00S	64.5%	**68-113%**
Sample	**Analyte**	**Deviation**	**Recovery**	**Range**
2760989/MSD	1,1,1,2-Tetrachloroethane	00S	60.5%	**67-124%**
	1,1,1-Trichloroethane	00S	64.5%	**69-140%**
	1,1,2,2-Tetrachloroethane	00S	61.5%	**64-122%**
	1,1,2-Trichloroethane	00S	59.0%	**78-125%**

Run # 194103

Analysis Date: 8 and 15 December 2017

Sample	Analyte	Deviation	Recovery	Range
2760989/MSD	1,1-Dichloropropene	00S	62.0%	**83-110%**
	1,2,3-Trichlorobenzene	00S	44.5%	**71-119%**
	1,2,4-Trichlorobenzene	00S	39.5%	**53-139%**
	1,2-Dibromo-3-chloropropane	00S	45.0%	**67_140%**
	1,2-Dibromoethane	00S	52.0%	**66-140%**
	1,2-Dichloroethane	00S	57.0%	**60-136%**
	1,2-Dichloropropane	00S	59.5%	**71-121%**
	1,3-Dichloropropane	00S	54.0%	**69-124%**
	1,4-Dichlorobenzene	00S	60.5%	**73-122%**
	1-Chlorohexane	00S	38.0%	**48-136%**
	2-Chloroethyl vinyl ether	00S	0	**10-178%**
	2-Chlorotoluene	00S	61.0%	**64-139%**
	2-Hexanone	00S	47.2%	**53-147%**
	4-Chlorotoluene	00S	57.5%	**64-128%**
	4-Isopropyltoluene	00S	61.5%	**66-129%**
	4-Methyl-2-pentanone	00S	56.9%	**57-143%**
	Acrolein	00S	35.2%	**47-157%**
	Acrylonitrile	00S	29.6%	**34-160%**
	Benzene	00S	62.5%	**65-139%**
	Bromobenzene	00S	61.8%	**64-120%**
	Bromodichloromethane	00S	60.2%	**64-141%**
	Bromoform	00S	59.5%	**61-132%**
	Carbon tetrachloride	00S	64.5%	**73-137%**
	Chlorobenzene	00S	64.0%	**68-121%**
	Dibromochloromethane	00S	52.5%	**67-137%**
	Dibromomethane	00S	57.5%	**72-139%**
	Epichlorohydrin	00S	34.6%	**37-219%**
	Hexachlorobutadiene	00S	46.0%	**62-124%**
	Isopropylbenzene	00S	52.5%	**64-122%**
	Naphthalene	00S	37.4%	**66-135%**
	Styrene	00S	52.5%	**65-123%**
	Tetrahydrofuran	00S	20.5%	**51-147%**
	Toluene	00S	60.5%	**65-140%**
	Trichloroethene	00S	63.0%	**76-126%**
	cis-1,2-Dichloroethene	00S	63.1%	**66-127%**
	cis-1,3-Dichloropropene	00S	36.0%	**57-131%**

Run # 194103

Analysis Date: 8 and 15 December 2017

Sample	Analyte	Deviation	Recovery	Range
	n-Butylbenzene	00S	62.0%	**72-114%**
2760989/MSD	o-Dichlorobenzene	00S	55.1%	**73-124%**
	o-Xylene	00S	47.7%	**54-143%**
	sec-Butylbenzene	00S	62.1%	**64-114%**
	tert-Butylbenzene	00S	59.2%	**68-113%**
	trans-1,3-Dichloropropene	00S	56.3%	**59-130%**

Explanation: All the above analytes of samples 2760988/MS, 2760988/MS and 2760989/MSD appears to have matrix spike interferences. They all have recoveries within acceptable limits in the 2769710 /LFB. See the following table.

Run # 194103

Analysis Date: 8 and 15 December 2017

Sample	Analyte	Recovery	Range
2769710 /LFB	1,1,1,2-Tetrachloroethane	79.5%	**67-126%**
	1,1,1-Trichloroethane	78.5%	**64-139%**
	1,1,2,2-Tetrachloroethane	79%	**60-131%**
	1,1,2-Trichloroethane	77.5	**70-129%**
	1,1-Dichloropropene	79.5%	**67-131%**
	1,2,3-Trichlorobenzene	75.5%	**68-131%**
	1,2,3-Trichloropropane	80.5%	**52-131%**
	1,2,4-Trichlorobenzene	70.5%	**51-132%**
	1,2,4-Trimethylbenzene	82%	**63-129%**
	1,2-Dibromo-3-chloropropane	75.5%	**66-139%**
	1,2-Dibromoethane	85%	**76-126%**
	1,2-Dichloroethane	75.5%	**60-136%**
	1,2-Dichloropropane	80%	**70-124%**
	1,3,5-Trimethylbenzene	82.5%	**68-123%**
	1,3-Dichlorobenzene	81.5%	**62-127%**
	1,3-Dichloropropane	76.5%	**74-124%**
	1,4-Dichlorobenzene	89%	**73-123%**
	1-Chlorohexane	94%	**56-139%**
	2-Chloroethyl vinyl ether	50%	**47-143%**
	2-Chlorotoluene	83%	**66-127%**
	2-Hexanone	66.7%	**62-136%**
	4-Chlorotoluene	78.5%	**63-125%**

Run # 194103

Analysis Date: 8 and 15 December 2017

Sample	Analyte	Recovery	Range
2769710 /LFB	4-Isopropyltoluene	94%	**68-131%**
	4-Methyl-2-pentanone	75.8%	**62-135%**
	Acrolein	85.4%	**40-153%**
	Acrylonitrile	80.2%	**53-141%**
	Benzene	77.5%	**66-131%**
	Bromobenzene	79.5%	**61-126%**
	Bromodichloromethane	78.5%	**72-129%**
	Bromoform	79%	**61-130%**
	Carbon disulfide	64.3%	**58-140%**
	Carbon tetrachloride	78.5%	**69-134%**
	Chlorobenzene	83.5%	**67-122%**
	Chloroform	76%	**61-134%**
	Dibromochloromethane	71%	**69-134%**
	Dibromomethane	76%	**76-131%**
	Epichlorohydrin	83.2%	**52-134%**
	Ethylbenzene	78%	**69-131%**
	Hexachlorobutadiene	73%	**51-139%**
	Iodomethane	61.7%	**54-143%**
	Isopropylbenzene	76.5%	**69-121%**
	Naphthalene	71%	**71-134%**
	Styrene	77.5%	**65.127%**
	Tetrachloroethene	79.5%	**62-135%**
	Tetrahydrofuran	85%	**67-134%**
	Toluene	78.5%	**59-143%**
	Trichloroethene	78.5%	**67-138%**
	cis-1,2-Dichloroethene	85%	**71-128%**
	cis-1,3-Dichloropropene	76.5%	**63-125%**
	m,p-Xylene	86%	**63-130%**
	n-Butylbenzene	95.5%	**67-127%**
	n-Propylbenzene	80.5%	**64-124%**
	o-Dichlorobenzene	85.5%	**75-121%**
	o-Xylene	73%	**66-124%**
	sec-Butylbenzene	81%	**66-122%**
	tert-Butylbenzene	80%	**65-126%**
	trans-1,3-Dichloropropene	78%	**60-131%**
	trans-1,4-Dichloro-2-butene	79.3%	**53-123%**

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:

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

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

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

Marcelino Benitez

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

December 26, 2017
Date

Janet Gómez Rosario

Checked by:
Lcda. Janet Gómez
QA/QC Supervisor

December 26, 2017
Date

SECTION 2
LABORATORY TEST REPORT

ENVIRONMENTAL QUALITY LABORATORIES, INC.

December 15, 2017

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 from 2760985 to 2760990 have been reviewed by me and are correct as presented herein.

Lcda Sonia Pichardo Rodríguez
Certified by Laboratory Director

SONIA PICHARDO RODRIGUEZ
Química Licenciada
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 4538
A 1643718

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

Attn: MR. ELVIN VARELA
Source: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017**	07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017	13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	242035				Proposal Number:	20166 - 2

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	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B

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

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

PRDOH Certified
EPA ID PR00014

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

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

Attn: MR. ELVIN VARELA
Source: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017**	07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017	13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	242035				Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	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

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

Attn: MR. ELVIN VARELA
Source: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017** 07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	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: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017** 07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	4.20	µg/L	--	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	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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PRDOH Certified
EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **INF-20171207**
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:	**2760985**	Collected Date & Time:	**12/07/2017** 07:58	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:59	KMOR	12/08/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 2638

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: **EFF-20171207**
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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

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	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

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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: **EFF-20171207**
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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B

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EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **EFF-20171207**
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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	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

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

Attn: MR. ELVIN VARELA
Source: **EFF-20171207**
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:	**2760986**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:33	KMOR	12/08/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 238

Certified by Laboratory Director

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ACCREDITED IN ACCORDANCE WITH nelac
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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: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

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	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	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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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: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	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: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	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: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B

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Attn: MR. ELVIN VARELA
Source: **EFFDUP-20171207**
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:	**2760987**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	14:25	KMOR	12/08/2017	--	EPA 5030B

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

Certified by Laboratory Director

ND = Not Detected MCL = Maximum Contaminant Level BDL = Below Detection Limit DNI = Does Not Ignite MDL = Minimum Detection Limit N/A = Not Applicable
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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: **EFFMS-20171207**
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:	**2760988**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

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	66.0	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	71.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	66.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	65.0	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	77.5	%	--	2.0	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	69.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	67.0	%	Q	1.4	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	45.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	67.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	41.0	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	66.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	46.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	57.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	63.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	65.0	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	68.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **EFFMS-20171207**
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:	**2760988**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	66.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	60.5	%	Q	2.0	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	63.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	41.0	%	Q	1.5	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	83.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	71.3	%	--	6.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	1.17	%	Q	6.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	66.5	%	--	1.4	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	53.6	%	--	6.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	61.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	65.5	%	Q	1.4	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	64.4	%	--	6.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	89.4	%	--	6.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	39.1	%	Q	25.0	75.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	33.2	%	Q	6.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	68.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B

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EPA ID PR00014

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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: **EFFMS-20171207**
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:	**2760988**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	67.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	68.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	67.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	64.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	99.5	%	--	2.0	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	106	%	--	7.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	70.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	68.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	106	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	67.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	94.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	58.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	62.5	%	Q	1.5	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	78.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	93.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	42.7	%	--	30.0	75.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	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: **EFFMS-20171207**
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:	**2760988**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	64.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	48.0	%	Q	1.4	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	94.5	%	--	8.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	57.0	%	Q	2.0	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	38.0	%	Q	2.0	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	57.0	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	72.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	22.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	68.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	70.0	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	103	%	--	1.5	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	89.9	%	--	6.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	89.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	66.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	39.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	69.0	%	--	1.8	6.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B

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Attn: MR. ELVIN VARELA
Source: **EFFMS-20171207**
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:	**2760988**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	66.0	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	66.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	58.0	%	Q	1.0	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	52.0	%	Q	2.3	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	67.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	64.5	%	Q	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	82.0	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	63.5	%	--	1.2	3.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	59.7	%	--	6.0	15.0	--	12/15/2017	15:49	KMOR	12/08/2017	--	EPA 5030B

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

Certified by Laboratory Director

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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFMSD-20171207**
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:	**2760989**	Collected Date & Time:	**12/07/2017**	08:25	Date of Report:	12/14/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017	13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	242035				Proposal Number:	20166 - 2

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	60.6	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	64.7	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	61.4	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	59.0	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	68.5	%	--	2.0	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	65.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	61.9	%	Q	1.4	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	44.7	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	61.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	39.6	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	61.5	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	44.9	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	52.1	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	57.2	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	59.3	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	62.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

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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: **EFFMSD-20171207**
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:	**2760989**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/14/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	62.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	53.8	%	Q	2.0	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	60.3	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	37.9	%	Q	1.5	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	74.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	62.2	%	--	6.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	0.00	µg/L	U	6.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	61.0	%	Q	1.4	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	47.2	%	Q	6.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	57.4	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	61.3	%	Q	1.4	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	56.9	%	Q	6.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	77.5	%	--	6.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	35.2	%	Q	25.0	75.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	29.6	%	Q	6.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	62.4	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B

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MQ = 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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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFMSD-20171207**
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:	**2760989**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/14/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	61.8	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	62.5	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	60.2	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	59.5	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	83.5	%	--	2.0	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	95.9	%	--	7.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	64.5	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	64.2	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	83.5	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	61.5	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	81.5	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	52.4	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	57.4	%	Q	1.5	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	60.5	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	83.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	34.6	%	Q	30.0	75.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B

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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFMSD-20171207**
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:	**2760989**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/14/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	60.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	46.1	%	Q	1.4	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	85.5	%	--	8.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	52.4	%	Q	2.0	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	37.4	%	Q	2.0	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	52.3	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	65.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	20.7	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	60.5	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	63.1	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	81.0	%	--	1.5	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	76.4	%	--	6.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	74.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	63.1	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	36.0	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	63.3	%	--	1.8	6.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B

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GUAYNABO, PR 00968

Attn: MR. ELVIN VARELA
Source: **EFFMSD-20171207**
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:	**2760989**	Collected Date & Time:	**12/07/2017** 08:25	Date of Report:	12/14/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	62.0	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	61.0	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	55.1	%	Q	1.0	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	47.7	%	Q	2.3	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	62.1	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	59.2	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	75.5	%	--	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	56.3	%	Q	1.2	3.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	53.5	%	--	6.0	15.0	--	12/15/2017	16:15	KMOR	12/08/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ · Químico Licenciado · Estado Libre Asociado de Puerto Rico · LICENCIA NUM. 0538

Certified by Laboratory Director

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Attn: MR. ELVIN VARELA
Source: **TB-20171207**
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:	**2760990**	Collected Date & Time:	**12/07/2017**	08:00	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017	13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	242035				Proposal Number:	20166 - 2

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	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	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: **TB-20171207**
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:	**2760990**	Collected Date & Time:	**12/07/2017** 08:00	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B

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EPA ID PR00014

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

Attn: MR. ELVIN VARELA
Source: **TB-20171207**
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:	**2760990**	Collected Date & Time:	**12/07/2017** 08:00	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B

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Source: **TB-20171207**
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:	**2760990**	Collected Date & Time:	**12/07/2017** 08:00	Date of Report:	12/15/2017
Work Order:	655-04-26	Received Date & Time:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	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

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GUAYAMA, PR

Project Name: INTERNO
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Description: DI 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:	12/07/2017 13:30	Collected By:	EVARELA
Delivery Slip:	2017-12098	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	242035			Proposal Number:	20166 - 2

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	12/08/2017	13:07	KMOR	12/08/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 238

Certified by Laboratory Director

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SECTION 3
ANALYTICAL TEST RESULTS
QUALITY ASSURANCE REPORT

Analytical Test Results Quality Assurance Report

W. O. # 655-04-26 Date: December 26, 2017

1.0 Samples Analyzed:

EQL SAMPLE #	DATE COLLECTED	DATE RECEIVED
2760985, 2760986, 2760987 2760988, 2760989, 2760990	December 07, 2017	December 07, 2017

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	December 08, 2017 December 15, 2017	K. OTERO

Lcdo Marcelino Benítez
QA/QC Coordinador Licensed

QUALITY CONTROL SUMMARY

EPA 8260B VOC - Run #194103

2769703 - LRB
Reference Sample Number is: 2760985

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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR

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	12/08/17	11:23	KMOR
4-Bromofluorobenzene-SURR	19.0	19.4	--	µg/L	N/A	N/A	20.0	97.0	79	121	N/A	N/A	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
Acetone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Acrolein	N.D	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Acrylonitrile	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Benzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Bromobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Bromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Bromodichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Bromoform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Bromomethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
Chlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Chloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Chloroform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Chloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Dibromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Dibromofluoromethane-SURR	22.7	22.9	--	µg/L	N/A	N/A	20.0	115	83	120	N/A	N/A	12/08/17	11:23	KMOR
Dibromomethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Dichlorodifluoromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Dichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Epichlorohydrin	N.D	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Ethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Hexachlorobutadiene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Iodomethane	N.D	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Isopropylbenzene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Naphthalene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR

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	12/08/17	11:23	KMOR
Tetrachloroethene	4.2	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Tetrahydrofuran	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Toluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Toluene-d8-SURR	19.3	19.3	--	µg/L	N/A	N/A	20.0	96.7	80	116	N/A	N/A	12/08/17	11:23	KMOR
Trichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
Trichlorofluoromethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N/A	N/A	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR
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	12/08/17	11:23	KMOR

2769704 - ICV
Reference Sample Number is: 2760985

							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	16.7	--	µg/L	1.2	3.0	20.0	83.3	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,1,1-Trichloroethane	N.D	20.1	--	µg/L	1.2	3.0	20.0	100	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,1,2,2-Tetrachloroethane	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.5	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,1,2-Trichloroethane	N.D	17.1	--	µg/L	1.2	3.0	20.0	85.4	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,1-Dichloroethane	N.D	18.0	--	µg/L	2.0	3.0	20.0	90.2	80	120	N/A	N/A	12/08/17	12:41	KMOR

QUALITY CONTROL SUMMARY

1,1-Dichloroethene	N.D	17.0	--	µg/L	1.2	3.0	20.0	84.9	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,1-Dichloropropene	N.D	16.9	--	µg/L	1.4	3.0	20.0	84.5	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,2,3-Trichlorobenzene	N.D	16.6	--	µg/L	1.2	3.0	20.0	82.9	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,2,3-Trichloropropane	N.D	16.7	--	µg/L	1.2	3.0	20.0	83.4	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,2,4-Trichlorobenzene	N.D	21.2	--	µg/L	1.2	3.0	20.0	106	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,2,4-Trimethylbenzene	N.D	17.5	--	µg/L	1.2	3.0	20.0	87.7	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,2-Dibromo-3-chloropropane	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.7	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,2-Dibromoethane	N.D	18.2	--	µg/L	1.2	3.0	20.0	91.2	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,2-Dichloroethane	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.3	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,2-Dichloropropane	N.D	17.3	--	µg/L	1.2	3.0	20.0	86.3	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,3,5-Trimethylbenzene	N.D	17.6	--	µg/L	1.2	3.0	20.0	88.1	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,3-Dichlorobenzene	N.D	17.2	--	µg/L	1.2	3.0	20.0	85.8	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,3-Dichloropropane	N.D	16.6	--	µg/L	2.0	3.0	20.0	83.1	80	120	N/A	N/A	12/08/17	12:41	KMOR
1,4-Dichlorobenzene	N.D	20.8	--	µg/L	1.2	3.0	20.0	104	80	120	N/A	N/A	12/08/17	12:41	KMOR
1-Chlorohexane	N.D	19.9	--	µg/L	1.5	3.0	20.0	99.5	80	120	N/A	N/A	12/08/17	12:41	KMOR
2,2-Dichloropropane	N.D	19.0	--	µg/L	1.2	3.0	20.0	95.0	80	120	N/A	N/A	12/08/17	12:41	KMOR
2-Butanone	N.D	91.0	--	µg/L	6.0	15.0	100	91.0	80	120	N/A	N/A	12/08/17	12:41	KMOR
2-Chloroethyl vinyl ether	N.D	112.1	--	µg/L	6.0	15.0	100	112	80	120	N/A	N/A	12/08/17	12:41	KMOR
2-Chlorotoluene	N.D	17.5	--	µg/L	1.4	3.0	20.0	87.4	80	120	N/A	N/A	12/08/17	12:41	KMOR
2-Hexanone	N.D	95.6	--	µg/L	6.0	15.0	100	95.6	80	120	N/A	N/A	12/08/17	12:41	KMOR
4-Bromofluorobenzene-SURR	19.0	22.2	--	µg/L	N/A	N/A	20.0	111	79	121	N/A	N/A	12/08/17	12:41	KMOR
4-Chlorotoluene	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.7	80	120	N/A	N/A	12/08/17	12:41	KMOR
4-Isopropyltoluene	N.D	22.0	--	µg/L	1.4	3.0	20.0	110	80	120	N/A	N/A	12/08/17	12:41	KMOR
4-Methyl-2-pentanone	N.D	80.8	--	µg/L	6.0	15.0	100	80.8	80	120	N/A	N/A	12/08/17	12:41	KMOR
Acetone	N.D	86.7	--	µg/L	6.0	15.0	100	86.7	80	120	N/A	N/A	12/08/17	12:41	KMOR
Acrolein	N.D	450.2	--	µg/L	25.0	75.0	500	90.0	80	120	N/A	N/A	12/08/17	12:41	KMOR
Acrylonitrile	N.D	87.0	--	µg/L	6.0	15.0	100	87.0	80	120	N/A	N/A	12/08/17	12:41	KMOR
Benzene	N.D	16.9	--	µg/L	1.2	3.0	20.0	84.7	80	120	N/A	N/A	12/08/17	12:41	KMOR
Bromobenzene	N.D	17.1	--	µg/L	1.2	3.0	20.0	85.7	80	120	N/A	N/A	12/08/17	12:41	KMOR
Bromochloromethane	N.D	21.6	--	µg/L	1.2	3.0	20.0	108	80	120	N/A	N/A	12/08/17	12:41	KMOR
Bromodichloromethane	N.D	17.3	--	µg/L	1.2	3.0	20.0	86.5	80	120	N/A	N/A	12/08/17	12:41	KMOR

QUALITY CONTROL SUMMARY

Bromoform	N.D	16.1	--	µg/L	1.2	3.0	20.0	80.3	80	120	N/A	N/A	12/08/17	12:41	KMOR
Bromomethane	N.D	16.3	--	µg/L	2.0	3.0	20.0	81.4	80	120	N/A	N/A	12/08/17	12:41	KMOR
Carbon disulfide	N.D	115.0	--	µg/L	7.0	15.0	100	115	80	120	N/A	N/A	12/08/17	12:41	KMOR
Carbon tetrachloride	N.D	17.6	--	µg/L	1.2	3.0	20.0	87.9	80	120	N/A	N/A	12/08/17	12:41	KMOR
Chlorobenzene	N.D	17.6	--	µg/L	1.2	3.0	20.0	87.9	80	120	N/A	N/A	12/08/17	12:41	KMOR
Chloroethane	N.D	21.3	--	µg/L	1.2	3.0	20.0	107	80	120	N/A	N/A	12/08/17	12:41	KMOR
Chloroform	N.D	17.4	--	µg/L	1.2	3.0	20.0	87.1	80	120	N/A	N/A	12/08/17	12:41	KMOR
Chloromethane	N.D	20.9	--	µg/L	1.2	3.0	20.0	104	80	120	N/A	N/A	12/08/17	12:41	KMOR
Dibromochloromethane	N.D	17.5	--	µg/L	1.2	3.0	20.0	87.5	80	120	N/A	N/A	12/08/17	12:41	KMOR
Dibromofluoromethane-SURR	22.7	20.9	--	µg/L	N/A	N/A	20.0	104	83	120	N/A	N/A	12/08/17	12:41	KMOR
Dibromomethane	N.D	16.0	--	µg/L	1.5	3.0	20.0	80.2	80	120	N/A	N/A	12/08/17	12:41	KMOR
Dichlorodifluoromethane	N.D	21.6	--	µg/L	1.2	3.0	20.0	108	80	120	N/A	N/A	12/08/17	12:41	KMOR
Dichloromethane	N.D	21.7	--	µg/L	1.2	3.0	20.0	108	80	120	N/A	N/A	12/08/17	12:41	KMOR
Epichlorohydrin	N.D	442.4	--	µg/L	30.0	75.0	500	88.5	80	120	N/A	N/A	12/08/17	12:41	KMOR
Ethylbenzene	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.3	80	120	N/A	N/A	12/08/17	12:41	KMOR
Hexachlorobutadiene	N.D	17.2	--	µg/L	1.4	3.0	20.0	86.2	80	120	N/A	N/A	12/08/17	12:41	KMOR
Iodomethane	N.D	49.2	Q	µg/L	8.0	15.0	100	49.2	80	120	N/A	N/A	12/08/17	12:41	KMOR
Isopropylbenzene	N.D	16.0	--	µg/L	2.0	3.0	20.0	80.2	80	120	N/A	N/A	12/08/17	12:41	KMOR
Naphthalene	N.D	22.0	--	µg/L	2.0	3.0	20.0	110	80	120	N/A	N/A	12/08/17	12:41	KMOR
Styrene	N.D	16.6	--	µg/L	1.2	3.0	20.0	83.2	80	120	N/A	N/A	12/08/17	12:41	KMOR
Tetrachloroethene	4.2	18.1	--	µg/L	1.2	3.0	20.0	90.7	80	120	N/A	N/A	12/08/17	12:41	KMOR
Tetrahydrofuran	N.D	18.9	--	µg/L	1.2	3.0	20.0	94.3	80	120	N/A	N/A	12/08/17	12:41	KMOR
Toluene	N.D	17.7	--	µg/L	1.2	3.0	20.0	88.3	80	120	N/A	N/A	12/08/17	12:41	KMOR
Toluene-d8-SURR	19.3	20.1	--	µg/L	N/A	N/A	20.0	100	80	116	N/A	N/A	12/08/17	12:41	KMOR
Trichloroethene	N.D	17.3	--	µg/L	1.2	3.0	20.0	86.5	80	120	N/A	N/A	12/08/17	12:41	KMOR
Trichlorofluoromethane	N.D	23.8	--	µg/L	1.5	3.0	20.0	119	80	120	N/A	N/A	12/08/17	12:41	KMOR
Vinyl Acetate	N.D	85.1	--	µg/L	6.0	15.0	100	85.1	80	120	N/A	N/A	12/08/17	12:41	KMOR
Vinyl chloride	N.D	23.7	--	µg/L	1.2	3.0	20.0	119	80	120	N/A	N/A	12/08/17	12:41	KMOR
cis-1,2-Dichloroethene	N.D	16.0	--	µg/L	1.2	3.0	20.0	80.2	80	120	N/A	N/A	12/08/17	12:41	KMOR
cis-1,3-Dichloropropene	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.5	80	120	N/A	N/A	12/08/17	12:41	KMOR
m,p-Xylene	N.D	36.3	--	µg/L	1.8	6.0	40.0	90.8	80	120	N/A	N/A	12/08/17	12:41	KMOR

QUALITY CONTROL SUMMARY

n-Butylbenzene	N.D	22.3	--	µg/L	1.2	3.0	20.0	112	80	120	N/A	N/A	12/08/17	12:41	KMOR
n-Propylbenzene	N.D	17.2	--	µg/L	1.2	3.0	20.0	86.0	80	120	N/A	N/A	12/08/17	12:41	KMOR
o-Dichlorobenzene	N.D	19.6	--	µg/L	1.0	3.0	20.0	98.0	80	120	N/A	N/A	12/08/17	12:41	KMOR
o-Xylene	N.D	16.3	--	µg/L	2.3	3.0	20.0	81.7	80	120	N/A	N/A	12/08/17	12:41	KMOR
sec-Butylbenzene	N.D	17.4	--	µg/L	1.2	3.0	20.0	86.8	80	120	N/A	N/A	12/08/17	12:41	KMOR
tert-Butylbenzene	N.D	17.0	--	µg/L	1.2	3.0	20.0	84.9	80	120	N/A	N/A	12/08/17	12:41	KMOR
trans-1,2-Dichloroethene	N.D	18.6	--	µg/L	1.2	3.0	20.0	93.0	80	120	N/A	N/A	12/08/17	12:41	KMOR
trans-1,3-Dichloropropene	N.D	17.0	--	µg/L	1.2	3.0	20.0	85.2	80	120	N/A	N/A	12/08/17	12:41	KMOR
trans-1,4-Dichloro-2-butene	N.D	85.3	--	µg/L	6.0	15.0	100	85.3	80	120	N/A	N/A	12/08/17	12:41	KMOR

2760987 - DUP
Reference Sample Number is: 2760986

							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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
1,1-Dichloroethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
1,1-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
1,1-Dichloropropene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
1,2-Dibromoethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
1,2-Dichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
1,2-Dichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
1,3-Dichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR

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.	N/A	12/08/17	14:25	KMOR
1,4-Dichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
1-Chlorohexane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
2,2-Dichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
2-Butanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
2-Chlorotoluene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
2-Hexanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
4-Bromofluorobenzene-SURR	19.4	19.4	--	µg/L	N/A	N/A	20.00	96.9	71	125	N/A	N/A	12/08/17	14:25	KMOR
4-Chlorotoluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
4-Isopropyltoluene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
Acetone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Acrolein	N.D	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Acrylonitrile	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Benzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Bromobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Bromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Bromodichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Bromoform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Bromomethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Carbon disulfide	N.D	N.D	U	µg/L	7.0	15.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Carbon tetrachloride	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Chlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Chloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Chloroform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Chloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Dibromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Dibromofluoromethane-SURR	23.1	22.8	--	µg/L	N/A	N/A	20.00	114	76	123	N/A	N/A	12/08/17	14:25	KMOR
Dibromomethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Dichlorodifluoromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR

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.	N/A	12/08/17	14:25	KMOR
Epichlorohydrin	N.D	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Ethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Hexachlorobutadiene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Iodomethane	N.D	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Isopropylbenzene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Naphthalene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Styrene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Tetrachloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Tetrahydrofuran	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Toluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Toluene-d8-SURR	19.2	19.3	--	µg/L	N/A	N/A	20.00	96.5	77	122	N/A	N/A	12/08/17	14:25	KMOR
Trichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Trichlorofluoromethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Vinyl Acetate	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
Vinyl chloride	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
m,p-Xylene	N.D	N.D	U	µg/L	1.8	6.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
n-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
n-Propylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
o-Dichlorobenzene	N.D	N.D	U	µg/L	1.0	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
o-Xylene	N.D	N.D	U	µg/L	2.3	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
sec-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
tert-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR
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.	N/A	12/08/17	14:25	KMOR

QUALITY CONTROL SUMMARY

2769706 - DUP
Reference Sample Number is: 2760989

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	12.1	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,1,1-Trichloroethane	12.9	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,1,2,2-Tetrachloroethane	12.3	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,1,2-Trichloroethane	11.8	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,1-Dichloroethane	13.7	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,1-Dichloroethene	13.0	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,1-Dichloropropene	12.4	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,2,3-Trichlorobenzene	8.9	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,2,3-Trichloropropane	12.2	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,2,4-Trichlorobenzene	7.9	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,2,4-Trimethylbenzene	12.3	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,2-Dibromo-3-chloropropane	9.0	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,2-Dibromoethane	10.4	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,2-Dichloroethane	11.4	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,2-Dichloropropane	11.9	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,3,5-Trimethylbenzene	12.4	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,3-Dichlorobenzene	12.4	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,3-Dichloropropane	10.8	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1,4-Dichlorobenzene	12.1	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
1-Chlorohexane	7.6	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
2,2-Dichloropropane	14.8	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
2-Butanone	62.2	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
2-Chloroethyl vinyl ether	0.00	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
2-Chlorotoluene	12.2	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
2-Hexanone	47.2	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
4-Bromofluorobenzene-SURR	19.5	19.2	--	µg/L	N/A	N/A	20.0	96.0	71	125	N/A	N/A	12/08/17	15:43	KMOR
4-Chlorotoluene	11.5	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR

QUALITY CONTROL SUMMARY

4-Isopropyltoluene	12.3	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
4-Methyl-2-pentanone	56.9	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Acetone	77.5	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Acrolein	175.9	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Acrylonitrile	29.6	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Benzene	12.5	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Bromobenzene	12.4	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Bromochloromethane	12.5	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Bromodichloromethane	12.0	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Bromoform	11.9	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Bromomethane	16.7	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Carbon disulfide	95.9	N.D	U	µg/L	7.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Carbon tetrachloride	12.9	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Chlorobenzene	12.8	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Chloroethane	16.7	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Chloroform	12.3	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Chloromethane	16.3	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Dibromochloromethane	10.5	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Dibromofluoromethane-SURR	23.1	22.4	--	µg/L	N/A	N/A	20.0	112	76	123	N/A	N/A	12/08/17	15:43	KMOR
Dibromomethane	11.5	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Dichlorodifluoromethane	12.1	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Dichloromethane	16.6	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Epichlorohydrin	173.1	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Ethylbenzene	12.0	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Hexachlorobutadiene	9.2	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Iodomethane	85.5	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Isopropylbenzene	10.5	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Naphthalene	7.5	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Styrene	10.5	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Tetrachloroethene	13.0	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Tetrahydrofuran	4.1	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR

QUALITY CONTROL SUMMARY

Toluene	12.1	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Toluene-d8-SURR	19.6	19.4	--	µg/L	N/A	N/A	20.0	97.1	77	122	N/A	N/A	12/08/17	15:43	KMOR
Trichloroethene	12.6	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Trichlorofluoromethane	16.2	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Vinyl Acetate	76.4	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
Vinyl chloride	14.8	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
cis-1,2-Dichloroethene	12.6	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
cis-1,3-Dichloropropene	7.2	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
m,p-Xylene	25.3	N.D	U	µg/L	1.8	6.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
n-Butylbenzene	12.4	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
n-Propylbenzene	12.2	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
o-Dichlorobenzene	11.0	N.D	U	µg/L	1.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
o-Xylene	9.5	N.D	U	µg/L	2.3	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
sec-Butylbenzene	12.4	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
tert-Butylbenzene	11.8	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
trans-1,2-Dichloroethene	15.1	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
trans-1,3-Dichloropropene	11.3	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR
trans-1,4-Dichloro-2-butene	53.5	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	12/08/17	15:43	KMOR

2769708 - MS
Reference Sample Number is: 2760988

							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	13.2	9.1	Q	µg/L	1.2	3.0	20.0	45.5	67	124	N/A	N/A	12/08/17	16:09	KMOR
1,1,1-Trichloroethane	14.2	9.8	Q	µg/L	1.2	3.0	20.0	49.0	69	140	N/A	N/A	12/08/17	16:09	KMOR
1,1,2,2-Tetrachloroethane	13.3	9.0	Q	µg/L	1.2	3.0	20.0	45.0	64	122	N/A	N/A	12/08/17	16:09	KMOR
1,1,2-Trichloroethane	13.0	9.1	Q	µg/L	1.2	3.0	20.0	45.5	78	125	N/A	N/A	12/08/17	16:09	KMOR
1,1-Dichloroethane	15.5	11.3	--	µg/L	2.0	3.0	20.0	56.5	56	141	N/A	N/A	12/08/17	16:09	KMOR
1,1-Dichloroethene	13.9	9.9	--	µg/L	1.2	3.0	20.0	49.5	44	155	N/A	N/A	12/08/17	16:09	KMOR
1,1-Dichloropropene	13.4	9.0	Q	µg/L	1.4	3.0	20.0	45.0	83	110	N/A	N/A	12/08/17	16:09	KMOR
1,2,3-Trichlorobenzene	9.1	6.1	Q	µg/L	1.2	3.0	20.0	30.5	71	119	N/A	N/A	12/08/17	16:09	KMOR

QUALITY CONTROL SUMMARY

1,2,3-Trichloropropane	13.4	9.1	Q	µg/L	1.2	3.0	20.0	45.5	47	131	N/A	N/A	12/08/17	16:09	KMOR
1,2,4-Trichlorobenzene	8.2	5.5	Q	µg/L	1.2	3.0	20.0	27.5	53	139	N/A	N/A	12/08/17	16:09	KMOR
1,2,4-Trimethylbenzene	13.3	8.8	Q	µg/L	1.2	3.0	20.0	44.0	52	141	N/A	N/A	12/08/17	16:09	KMOR
1,2-Dibromo-3-chloropropane	9.3	6.7	Q	µg/L	1.2	3.0	20.0	33.5	67	140	N/A	N/A	12/08/17	16:09	KMOR
1,2-Dibromoethane	11.5	8.0	Q	µg/L	1.2	3.0	20.0	40.0	66	140	N/A	N/A	12/08/17	16:09	KMOR
1,2-Dichloroethane	12.6	8.9	Q	µg/L	1.2	3.0	20.0	44.5	60	139	N/A	N/A	12/08/17	16:09	KMOR
1,2-Dichloropropane	13.0	9.1	Q	µg/L	1.2	3.0	20.0	45.5	71	121	N/A	N/A	12/08/17	16:09	KMOR
1,3,5-Trimethylbenzene	13.7	9.1	Q	µg/L	1.2	3.0	20.0	45.5	61	125	N/A	N/A	12/08/17	16:09	KMOR
1,3-Dichlorobenzene	13.2	8.8	Q	µg/L	1.2	3.0	20.0	44.0	61	129	N/A	N/A	12/08/17	16:09	KMOR
1,3-Dichloropropane	12.1	8.2	Q	µg/L	2.0	3.0	20.0	41.0	69	124	N/A	N/A	12/08/17	16:09	KMOR
1,4-Dichlorobenzene	12.7	9.0	Q	µg/L	1.2	3.0	20.0	45.0	73	122	N/A	N/A	12/08/17	16:09	KMOR
1-Chlorohexane	8.2	3.8	Q	µg/L	1.5	3.0	20.0	19.0	48	136	N/A	N/A	12/08/17	16:09	KMOR
2,2-Dichloropropane	16.6	11.1	--	µg/L	1.2	3.0	20.0	55.5	13	157	N/A	N/A	12/08/17	16:09	KMOR
2-Butanone	71.3	43.7	--	µg/L	6.0	15.0	100	43.7	43	151	N/A	N/A	12/08/17	16:09	KMOR
2-Chloroethyl vinyl ether	1.2	BDL	Q	µg/L	6.0	15.0	100	0.00	10	178	N/A	N/A	12/08/17	16:09	KMOR
2-Chlorotoluene	13.3	9.1	Q	µg/L	1.4	3.0	20.0	45.5	64	139	N/A	N/A	12/08/17	16:09	KMOR
2-Hexanone	53.6	31.0	Q	µg/L	6.0	15.0	100	31.0	53	147	N/A	N/A	12/08/17	16:09	KMOR
4-Bromofluorobenzene-SURR	19.3	19.4	--	µg/L	N/A	N/A	20.0	96.8	71	125	N/A	N/A	12/08/17	16:09	KMOR
4-Chlorotoluene	12.3	8.2	Q	µg/L	1.2	3.0	20.0	41.0	64	128	N/A	N/A	12/08/17	16:09	KMOR
4-Isopropyltoluene	13.1	8.4	Q	µg/L	1.4	3.0	20.0	42.0	66	129	N/A	N/A	12/08/17	16:09	KMOR
4-Methyl-2-pentanone	64.4	39.4	Q	µg/L	6.0	15.0	100	39.4	57	143	N/A	N/A	12/08/17	16:09	KMOR
Acetone	89.4	58.9	--	µg/L	6.0	15.0	100	58.9	33	154	N/A	N/A	12/08/17	16:09	KMOR
Acrolein	195.6	167.8	Q	µg/L	25.0	75.0	500	33.6	47	157	N/A	N/A	12/08/17	16:09	KMOR
Acrylonitrile	33.2	26.8	Q	µg/L	6.0	15.0	100	26.8	34	160	N/A	N/A	12/08/17	16:09	KMOR
Benzene	13.7	9.7	Q	µg/L	1.2	3.0	20.0	48.5	65	139	N/A	N/A	12/08/17	16:09	KMOR
Bromobenzene	13.4	9.3	Q	µg/L	1.2	3.0	20.0	46.5	64	120	N/A	N/A	12/08/17	16:09	KMOR
Bromochloromethane	13.7	9.9	--	µg/L	1.2	3.0	20.0	49.5	49	150	N/A	N/A	12/08/17	16:09	KMOR
Bromodichloromethane	13.4	9.3	Q	µg/L	1.2	3.0	20.0	46.5	64	141	N/A	N/A	12/08/17	16:09	KMOR
Bromoform	12.9	8.4	Q	µg/L	1.2	3.0	20.0	42.0	61	132	N/A	N/A	12/08/17	16:09	KMOR
Bromomethane	19.9	15.8	--	µg/L	2.0	3.0	20.0	79.0	35	163	N/A	N/A	12/08/17	16:09	KMOR
Carbon disulfide	105.7	44.1	Q	µg/L	7.0	15.0	100	44.1	48	158	N/A	N/A	12/08/17	16:09	KMOR

QUALITY CONTROL SUMMARY

Carbon tetrachloride	14.1	9.9	Q	µg/L	1.2	3.0	20.0	49.5	73	137	N/A	N/A	12/08/17	16:09	KMOR
Chlorobenzene	13.7	9.8	Q	µg/L	1.2	3.0	20.0	49.0	68	121	N/A	N/A	12/08/17	16:09	KMOR
Chloroethane	21.1	22.0	--	µg/L	1.2	3.0	20.0	110	50	142	N/A	N/A	12/08/17	16:09	KMOR
Chloroform	13.5	9.7	Q	µg/L	1.2	3.0	20.0	48.5	59	140	N/A	N/A	12/08/17	16:09	KMOR
Chloromethane	18.8	18.9	--	µg/L	1.2	3.0	20.0	94.5	42	139	N/A	N/A	12/08/17	16:09	KMOR
Dibromochloromethane	11.7	8.0	Q	µg/L	1.2	3.0	20.0	40.0	67	137	N/A	N/A	12/08/17	16:09	KMOR
Dibromofluoromethane-SURR	23.4	22.8	--	µg/L	N/A	N/A	20.0	114	76	123	N/A	N/A	12/08/17	16:09	KMOR
Dibromomethane	12.5	8.6	Q	µg/L	1.5	3.0	20.0	43.0	72	139	N/A	N/A	12/08/17	16:09	KMOR
Dichlorodifluoromethane	15.6	19.2	--	µg/L	1.2	3.0	20.0	96.0	42	157	N/A	N/A	12/08/17	16:09	KMOR
Dichloromethane	18.6	13.3	--	µg/L	1.2	3.0	20.0	66.5	56	135	N/A	N/A	12/08/17	16:09	KMOR
Epichlorohydrin	213.7	123.1	Q	µg/L	30.0	75.0	500	24.6	37	129	N/A	N/A	12/08/17	16:09	KMOR
Ethylbenzene	12.9	9.0	Q	µg/L	1.2	3.0	20.0	45.0	58	136	N/A	N/A	12/08/17	16:09	KMOR
Hexachlorobutadiene	9.6	7.0	Q	µg/L	1.4	3.0	20.0	35.0	62	124	N/A	N/A	12/08/17	16:09	KMOR
Iodomethane	94.5	32.9	Q	µg/L	8.0	15.0	100	32.9	45	148	N/A	N/A	12/08/17	16:09	KMOR
Isopropylbenzene	11.4	7.2	Q	µg/L	2.0	3.0	20.0	36.0	64	122	N/A	N/A	12/08/17	16:09	KMOR
Naphthalene	7.6	4.6	Q	µg/L	2.0	3.0	20.0	23.0	66	135	N/A	N/A	12/08/17	16:09	KMOR
Styrene	11.4	7.3	Q	µg/L	1.2	3.0	20.0	36.5	65	123	N/A	N/A	12/08/17	16:09	KMOR
Tetrachloroethene	14.4	9.9	Q	µg/L	1.2	3.0	20.0	49.5	64	138	N/A	N/A	12/08/17	16:09	KMOR
Tetrahydrofuran	4.5	3.1	Q	µg/L	1.2	3.0	20.0	15.5	51	147	N/A	N/A	12/08/17	16:09	KMOR
Toluene	13.6	9.4	Q	µg/L	1.2	3.0	20.0	47.0	65	140	N/A	N/A	12/08/17	16:09	KMOR
Toluene-d8-SURR	20.1	20.0	--	µg/L	N/A	N/A	20.0	100	77	122	N/A	N/A	12/08/17	16:09	KMOR
Trichloroethene	14.0	9.9	Q	µg/L	1.2	3.0	20.0	49.5	76	126	N/A	N/A	12/08/17	16:09	KMOR
Trichlorofluoromethane	20.5	22.3	--	µg/L	1.5	3.0	20.0	112	60	144	N/A	N/A	12/08/17	16:09	KMOR
Vinyl Acetate	89.9	90.8	--	µg/L	6.0	15.0	100	90.8	52	141	N/A	N/A	12/08/17	16:09	KMOR
Vinyl chloride	17.8	19.7	--	µg/L	1.2	3.0	20.0	98.5	39	151	N/A	N/A	12/08/17	16:09	KMOR
cis-1,2-Dichloroethene	13.2	9.1	Q	µg/L	1.2	3.0	20.0	45.5	66	127	N/A	N/A	12/08/17	16:09	KMOR
cis-1,3-Dichloropropene	7.9	5.2	Q	µg/L	1.2	3.0	20.0	26.0	57	131	N/A	N/A	12/08/17	16:09	KMOR
m,p-Xylene	27.6	18.8	Q	µg/L	1.8	6.0	40.0	47.0	56	145	N/A	N/A	12/08/17	16:09	KMOR
n-Butylbenzene	13.2	8.6	Q	µg/L	1.2	3.0	20.0	43.0	72	114	N/A	N/A	12/08/17	16:09	KMOR
n-Propylbenzene	13.3	8.9	Q	µg/L	1.2	3.0	20.0	44.5	61	123	N/A	N/A	12/08/17	16:09	KMOR
o-Dichlorobenzene	11.6	8.0	Q	µg/L	1.0	3.0	20.0	40.0	73	124	N/A	N/A	12/08/17	16:09	KMOR

QUALITY CONTROL SUMMARY

o-Xylene	10.4	6.5	Q	µg/L	2.3	3.0	20.0	32.5	54	143	N/A	N/A	12/08/17	16:09	KMOR
sec-Butylbenzene	13.5	8.7	Q	µg/L	1.2	3.0	20.0	43.5	64	114	N/A	N/A	12/08/17	16:09	KMOR
tert-Butylbenzene	12.9	8.3	Q	µg/L	1.2	3.0	20.0	41.5	68	113	N/A	N/A	12/08/17	16:09	KMOR
trans-1,2-Dichloroethene	16.4	12.1	--	µg/L	1.2	3.0	20.0	60.5	56	146	N/A	N/A	12/08/17	16:09	KMOR
trans-1,3-Dichloropropene	12.7	8.3	Q	µg/L	1.2	3.0	20.0	41.5	59	130	N/A	N/A	12/08/17	16:09	KMOR
trans-1,4-Dichloro-2-butene	59.7	43.5	Q	µg/L	6.0	15.0	100	43.5	47	129	N/A	N/A	12/08/17	16:09	KMOR

2760988 - MS
Reference Sample Number is: 2760986

							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	13.2	Q	µg/L	1.2	3.0	20.0	66.2	67	124	N/A	N/A	12/15/17	15:49	KMOR
1,1,1-Trichloroethane	N.D	14.2	--	µg/L	1.2	3.0	20.0	71.0	69	140	N/A	N/A	12/15/17	15:49	KMOR
1,1,2,2-Tetrachloroethane	N.D	13.3	--	µg/L	1.2	3.0	20.0	66.5	64	122	N/A	N/A	12/15/17	15:49	KMOR
1,1,2-Trichloroethane	N.D	13.0	Q	µg/L	1.2	3.0	20.0	64.8	78	125	N/A	N/A	12/15/17	15:49	KMOR
1,1-Dichloroethane	N.D	15.5	--	µg/L	2.0	3.0	20.0	77.5	56	141	N/A	N/A	12/15/17	15:49	KMOR
1,1-Dichloroethene	N.D	13.9	--	µg/L	1.2	3.0	20.0	69.5	44	155	N/A	N/A	12/15/17	15:49	KMOR
1,1-Dichloropropene	N.D	13.4	Q	µg/L	1.4	3.0	20.0	66.9	83	110	N/A	N/A	12/15/17	15:49	KMOR
1,2,3-Trichlorobenzene	N.D	9.1	Q	µg/L	1.2	3.0	20.0	45.7	71	119	N/A	N/A	12/15/17	15:49	KMOR
1,2,3-Trichloropropane	N.D	13.4	--	µg/L	1.2	3.0	20.0	67.0	47	131	N/A	N/A	12/15/17	15:49	KMOR
1,2,4-Trichlorobenzene	N.D	8.2	Q	µg/L	1.2	3.0	20.0	41.1	53	139	N/A	N/A	12/15/17	15:49	KMOR
1,2,4-Trimethylbenzene	N.D	13.3	--	µg/L	1.2	3.0	20.0	66.5	52	141	N/A	N/A	12/15/17	15:49	KMOR
1,2-Dibromo-3-chloropropane	N.D	9.3	Q	µg/L	1.2	3.0	20.0	46.7	67	140	N/A	N/A	12/15/17	15:49	KMOR
1,2-Dibromoethane	N.D	11.5	Q	µg/L	1.2	3.0	20.0	57.7	66	140	N/A	N/A	12/15/17	15:49	KMOR
1,2-Dichloroethane	N.D	12.6	--	µg/L	1.2	3.0	20.0	63.0	60	139	N/A	N/A	12/15/17	15:49	KMOR
1,2-Dichloropropane	N.D	13.0	Q	µg/L	1.2	3.0	20.0	65.0	71	121	N/A	N/A	12/15/17	15:49	KMOR
1,3,5-Trimethylbenzene	N.D	13.7	--	µg/L	1.2	3.0	20.0	68.5	61	125	N/A	N/A	12/15/17	15:49	KMOR
1,3-Dichlorobenzene	N.D	13.2	--	µg/L	1.2	3.0	20.0	66.0	61	129	N/A	N/A	12/15/17	15:49	KMOR
1,3-Dichloropropane	N.D	12.1	Q	µg/L	2.0	3.0	20.0	60.4	69	124	N/A	N/A	12/15/17	15:49	KMOR
1,4-Dichlorobenzene	N.D	12.7	Q	µg/L	1.2	3.0	20.0	63.7	73	122	N/A	N/A	12/15/17	15:49	KMOR
1-Chlorohexane	N.D	8.2	Q	µg/L	1.5	3.0	20.0	40.8	48	136	N/A	N/A	12/15/17	15:49	KMOR

QUALITY CONTROL SUMMARY

2,2-Dichloropropane	N.D	16.6	--	µg/L	1.2	3.0	20.0	83.0	13	157	N/A	N/A	12/15/17	15:49	KMOR
2-Butanone	N.D	71.3	--	µg/L	6.0	15.0	100.0	71.3	43	151	N/A	N/A	12/15/17	15:49	KMOR
2-Chloroethyl vinyl ether	N.D	1.2	Q	µg/L	6.0	15.0	100.0	1.17	10	178	N/A	N/A	12/15/17	15:49	KMOR
2-Chlorotoluene	N.D	13.3	--	µg/L	1.4	3.0	20.0	66.5	64	139	N/A	N/A	12/15/17	15:49	KMOR
2-Hexanone	N.D	53.6	--	µg/L	6.0	15.0	100.0	53.6	53	147	N/A	N/A	12/15/17	15:49	KMOR
4-Bromofluorobenzene-SURR	19.4	19.3	--	µg/L	N/A	N/A	20.00	96.5	71	125	N/A	N/A	12/15/17	15:49	KMOR
4-Chlorotoluene	N.D	12.3	Q	µg/L	1.2	3.0	20.0	61.3	64	128	N/A	N/A	12/15/17	15:49	KMOR
4-Isopropyltoluene	N.D	13.1	Q	µg/L	1.4	3.0	20.0	65.7	66	129	N/A	N/A	12/15/17	15:49	KMOR
4-Methyl-2-pentanone	N.D	64.4	--	µg/L	6.0	15.0	100.0	64.4	57	143	N/A	N/A	12/15/17	15:49	KMOR
Acetone	N.D	89.4	--	µg/L	6.0	15.0	100.0	89.4	33	154	N/A	N/A	12/15/17	15:49	KMOR
Acrolein	N.D	195.6	Q	µg/L	25.0	75.0	500.0	39.1	47	157	N/A	N/A	12/15/17	15:49	KMOR
Acrylonitrile	N.D	33.2	Q	µg/L	6.0	15.0	100.0	33.2	34	160	N/A	N/A	12/15/17	15:49	KMOR
Benzene	N.D	13.7	--	µg/L	1.2	3.0	20.0	68.5	65	139	N/A	N/A	12/15/17	15:49	KMOR
Bromobenzene	N.D	13.4	--	µg/L	1.2	3.0	20.0	67.0	64	120	N/A	N/A	12/15/17	15:49	KMOR
Bromochloromethane	N.D	13.7	--	µg/L	1.2	3.0	20.0	68.5	49	150	N/A	N/A	12/15/17	15:49	KMOR
Bromodichloromethane	N.D	13.4	--	µg/L	1.2	3.0	20.0	67.0	64	141	N/A	N/A	12/15/17	15:49	KMOR
Bromoform	N.D	12.9	--	µg/L	1.2	3.0	20.0	64.5	61	132	N/A	N/A	12/15/17	15:49	KMOR
Bromomethane	N.D	19.9	--	µg/L	2.0	3.0	20.0	99.5	35	163	N/A	N/A	12/15/17	15:49	KMOR
Carbon disulfide	N.D	105.7	--	µg/L	7.0	15.0	100.0	106	48	158	N/A	N/A	12/15/17	15:49	KMOR
Carbon tetrachloride	N.D	14.1	Q	µg/L	1.2	3.0	20.0	70.5	73	137	N/A	N/A	12/15/17	15:49	KMOR
Chlorobenzene	N.D	13.7	--	µg/L	1.2	3.0	20.0	68.5	68	121	N/A	N/A	12/15/17	15:49	KMOR
Chloroethane	N.D	21.1	--	µg/L	1.2	3.0	20.0	106	50	142	N/A	N/A	12/15/17	15:49	KMOR
Chloroform	N.D	13.5	--	µg/L	1.2	3.0	20.0	67.5	59	140	N/A	N/A	12/15/17	15:49	KMOR
Chloromethane	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.0	42	139	N/A	N/A	12/15/17	15:49	KMOR
Dibromochloromethane	N.D	11.7	Q	µg/L	1.2	3.0	20.0	58.6	67	137	N/A	N/A	12/15/17	15:49	KMOR
Dibromofluoromethane-SURR	23.1	23.4	--	µg/L	N/A	N/A	20.00	117	76	123	N/A	N/A	12/15/17	15:49	KMOR
Dibromomethane	N.D	12.5	Q	µg/L	1.5	3.0	20.0	62.3	72	139	N/A	N/A	12/15/17	15:49	KMOR
Dichlorodifluoromethane	N.D	15.6	--	µg/L	1.2	3.0	20.0	78.0	42	157	N/A	N/A	12/15/17	15:49	KMOR
Dichloromethane	N.D	18.6	--	µg/L	1.2	3.0	20.0	93.0	56	135	N/A	N/A	12/15/17	15:49	KMOR
Epichlorohydrin	N.D	213.7	--	µg/L	30.0	75.0	500.0	42.7	37	129	N/A	N/A	12/15/17	15:49	KMOR
Ethylbenzene	N.D	12.9	--	µg/L	1.2	3.0	20.0	64.5	58	136	N/A	N/A	12/15/17	15:49	KMOR

QUALITY CONTROL SUMMARY

Hexachlorobutadiene	N.D	9.6	Q	µg/L	1.4	3.0	20.0	48.2	62	124	N/A	N/A	12/15/17	15:49	KMOR
Iodomethane	N.D	94.5	--	µg/L	8.0	15.0	100.0	94.5	45	148	N/A	N/A	12/15/17	15:49	KMOR
Isopropylbenzene	N.D	11.4	Q	µg/L	2.0	3.0	20.0	57.1	64	122	N/A	N/A	12/15/17	15:49	KMOR
Naphthalene	N.D	7.6	Q	µg/L	2.0	3.0	20.0	37.9	66	135	N/A	N/A	12/15/17	15:49	KMOR
Styrene	N.D	11.4	Q	µg/L	1.2	3.0	20.0	56.8	65	123	N/A	N/A	12/15/17	15:49	KMOR
Tetrachloroethene	N.D	14.4	--	µg/L	1.2	3.0	20.0	72.0	64	138	N/A	N/A	12/15/17	15:49	KMOR
Tetrahydrofuran	N.D	4.5	Q	µg/L	1.2	3.0	20.0	22.3	51	147	N/A	N/A	12/15/17	15:49	KMOR
Toluene	N.D	13.6	--	µg/L	1.2	3.0	20.0	68.0	65	140	N/A	N/A	12/15/17	15:49	KMOR
Toluene-d8-SURR	19.2	20.1	--	µg/L	N/A	N/A	20.00	101	77	122	N/A	N/A	12/15/17	15:49	KMOR
Trichloroethene	N.D	14.0	Q	µg/L	1.2	3.0	20.0	69.8	76	126	N/A	N/A	12/15/17	15:49	KMOR
Trichlorofluoromethane	N.D	20.5	--	µg/L	1.5	3.0	20.0	103	60	144	N/A	N/A	12/15/17	15:49	KMOR
Vinyl Acetate	N.D	89.9	--	µg/L	6.0	15.0	100.0	89.9	52	141	N/A	N/A	12/15/17	15:49	KMOR
Vinyl chloride	N.D	17.8	--	µg/L	1.2	3.0	20.0	89.0	39	151	N/A	N/A	12/15/17	15:49	KMOR
cis-1,2-Dichloroethene	N.D	13.2	--	µg/L	1.2	3.0	20.0	66.0	66	127	N/A	N/A	12/15/17	15:49	KMOR
cis-1,3-Dichloropropene	N.D	7.9	Q	µg/L	1.2	3.0	20.0	39.7	57	131	N/A	N/A	12/15/17	15:49	KMOR
m,p-Xylene	N.D	27.6	--	µg/L	1.8	6.0	40.0	69.0	56	145	N/A	N/A	12/15/17	15:49	KMOR
n-Butylbenzene	N.D	13.2	Q	µg/L	1.2	3.0	20.0	66.2	72	114	N/A	N/A	12/15/17	15:49	KMOR
n-Propylbenzene	N.D	13.3	--	µg/L	1.2	3.0	20.0	66.5	61	123	N/A	N/A	12/15/17	15:49	KMOR
o-Dichlorobenzene	N.D	11.6	Q	µg/L	1.0	3.0	20.0	58.0	73	124	N/A	N/A	12/15/17	15:49	KMOR
o-Xylene	N.D	10.4	Q	µg/L	2.3	3.0	20.0	52.1	54	143	N/A	N/A	12/15/17	15:49	KMOR
sec-Butylbenzene	N.D	13.5	--	µg/L	1.2	3.0	20.0	67.5	64	114	N/A	N/A	12/15/17	15:49	KMOR
tert-Butylbenzene	N.D	12.9	Q	µg/L	1.2	3.0	20.0	64.5	68	113	N/A	N/A	12/15/17	15:49	KMOR
trans-1,2-Dichloroethene	N.D	16.4	--	µg/L	1.2	3.0	20.0	82.0	56	146	N/A	N/A	12/15/17	15:49	KMOR
trans-1,3-Dichloropropene	N.D	12.7	--	µg/L	1.2	3.0	20.0	63.5	59	130	N/A	N/A	12/15/17	15:49	KMOR
trans-1,4-Dichloro-2-butene	N.D	59.7	--	µg/L	6.0	15.0	100.0	59.7	47	129	N/A	N/A	12/15/17	15:49	KMOR

2760989 - MSD
Reference Sample Number is: 2760986

							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	12.1	Q	µg/L	1.2	3.0	20.0	60.6	67	124	8.92	N/A	12/15/17	16:15	KMOR

QUALITY CONTROL SUMMARY

1,1,1-Trichloroethane	N.D	12.9	Q	µg/L	1.2	3.0	20.0	64.7	69	140	9.50	N/A	12/15/17	16:15	KMOR
1,1,2,2-Tetrachloroethane	N.D	12.3	Q	µg/L	1.2	3.0	20.0	61.4	64	122	7.98	N/A	12/15/17	16:15	KMOR
1,1,2-Trichloroethane	N.D	11.8	Q	µg/L	1.2	3.0	20.0	59.0	78	125	9.46	N/A	12/15/17	16:15	KMOR
1,1-Dichloroethane	N.D	13.7	--	µg/L	2.0	3.0	20.0	68.5	56	141	N.C.	N/A	12/15/17	16:15	KMOR
1,1-Dichloroethene	N.D	13.0	--	µg/L	1.2	3.0	20.0	65.0	44	155	6.69	N/A	12/15/17	16:15	KMOR
1,1-Dichloropropene	N.D	12.4	Q	µg/L	1.4	3.0	20.0	61.9	83	110	N.C.	N/A	12/15/17	16:15	KMOR
1,2,3-Trichlorobenzene	N.D	8.9	Q	µg/L	1.2	3.0	20.0	44.7	71	119	N.C.	N/A	12/15/17	16:15	KMOR
1,2,3-Trichloropropane	N.D	12.2	--	µg/L	1.2	3.0	20.0	61.0	47	131	9.38	N/A	12/15/17	16:15	KMOR
1,2,4-Trichlorobenzene	N.D	7.9	Q	µg/L	1.2	3.0	20.0	39.6	53	139	N.C.	N/A	12/15/17	16:15	KMOR
1,2,4-Trimethylbenzene	N.D	12.3	--	µg/L	1.2	3.0	20.0	61.5	52	141	7.81	N/A	12/15/17	16:15	KMOR
1,2-Dibromo-3-chloropropane	N.D	9.0	Q	µg/L	1.2	3.0	20.0	44.9	67	140	N.C.	N/A	12/15/17	16:15	KMOR
1,2-Dibromoethane	N.D	10.4	Q	µg/L	1.2	3.0	20.0	52.1	66	140	N.C.	N/A	12/15/17	16:15	KMOR
1,2-Dichloroethane	N.D	11.4	Q	µg/L	1.2	3.0	20.0	57.2	60	139	9.82	N/A	12/15/17	16:15	KMOR
1,2-Dichloropropane	N.D	11.9	Q	µg/L	1.2	3.0	20.0	59.3	71	121	9.26	N/A	12/15/17	16:15	KMOR
1,3,5-Trimethylbenzene	N.D	12.4	--	µg/L	1.2	3.0	20.0	62.0	61	125	9.96	N/A	12/15/17	16:15	KMOR
1,3-Dichlorobenzene	N.D	12.4	--	µg/L	1.2	3.0	20.0	62.0	61	129	6.25	N/A	12/15/17	16:15	KMOR
1,3-Dichloropropane	N.D	10.8	Q	µg/L	2.0	3.0	20.0	53.8	69	124	N.C.	N/A	12/15/17	16:15	KMOR
1,4-Dichlorobenzene	N.D	12.1	Q	µg/L	1.2	3.0	20.0	60.3	73	122	5.41	N/A	12/15/17	16:15	KMOR
1-Chlorohexane	N.D	7.6	Q	µg/L	1.5	3.0	20.0	37.9	48	136	N.C.	N/A	12/15/17	16:15	KMOR
2,2-Dichloropropane	N.D	14.8	--	µg/L	1.2	3.0	20.0	74.0	13	157	11.5	N/A	12/15/17	16:15	KMOR
2-Butanone	N.D	62.2	--	µg/L	6.0	15.0	100.0	62.2	43	151	13.6	N/A	12/15/17	16:15	KMOR
2-Chloroethyl vinyl ether	N.D	0.00	U	µg/L	6.0	15.0	100.0	0.00	10	178	N/A	N/A	12/15/17	16:15	KMOR
2-Chlorotoluene	N.D	12.2	Q	µg/L	1.4	3.0	20.0	61.0	64	139	N.C.	N/A	12/15/17	16:15	KMOR
2-Hexanone	N.D	47.2	Q	µg/L	6.0	15.0	100.0	47.2	53	147	N.C.	N/A	12/15/17	16:15	KMOR
4-Bromofluorobenzene-SURR	19.4	19.5	--	µg/L	N/A	N/A	20.00	97.3	71	125	N/A	N/A	12/15/17	16:15	KMOR
4-Chlorotoluene	N.D	11.5	Q	µg/L	1.2	3.0	20.0	57.4	64	128	6.57	N/A	12/15/17	16:15	KMOR
4-Isopropyltoluene	N.D	12.3	Q	µg/L	1.4	3.0	20.0	61.3	66	129	N.C.	N/A	12/15/17	16:15	KMOR
4-Methyl-2-pentanone	N.D	56.9	Q	µg/L	6.0	15.0	100.0	56.9	57	143	12.3	N/A	12/15/17	16:15	KMOR
Acetone	N.D	77.5	--	µg/L	6.0	15.0	100.0	77.5	33	154	14.3	N/A	12/15/17	16:15	KMOR
Acrolein	N.D	175.9	Q	µg/L	25.0	75.0	500.0	35.2	47	157	N.C.	N/A	12/15/17	16:15	KMOR
Acrylonitrile	N.D	29.6	Q	µg/L	6.0	15.0	100.0	29.6	34	160	N.C.	N/A	12/15/17	16:15	KMOR

QUALITY CONTROL SUMMARY

Benzene	N.D	12.5	Q	µg/L	1.2	3.0	20.0	62.4	65	139	9.17	N/A	12/15/17	16:15	KMOR
Bromobenzene	N.D	12.4	Q	µg/L	1.2	3.0	20.0	61.8	64	120	7.78	N/A	12/15/17	16:15	KMOR
Bromochloromethane	N.D	12.5	--	µg/L	1.2	3.0	20.0	62.5	49	150	9.16	N/A	12/15/17	16:15	KMOR
Bromodichloromethane	N.D	12.0	Q	µg/L	1.2	3.0	20.0	60.2	64	141	10.9	N/A	12/15/17	16:15	KMOR
Bromoform	N.D	11.9	Q	µg/L	1.2	3.0	20.0	59.5	61	132	7.99	N/A	12/15/17	16:15	KMOR
Bromomethane	N.D	16.7	--	µg/L	2.0	3.0	20.0	83.5	35	163	N.C.	N/A	12/15/17	16:15	KMOR
Carbon disulfide	N.D	95.9	--	µg/L	7.0	15.0	100.0	95.9	48	158	9.72	N/A	12/15/17	16:15	KMOR
Carbon tetrachloride	N.D	12.9	Q	µg/L	1.2	3.0	20.0	64.5	73	137	8.90	N/A	12/15/17	16:15	KMOR
Chlorobenzene	N.D	12.8	Q	µg/L	1.2	3.0	20.0	64.2	68	121	6.55	N/A	12/15/17	16:15	KMOR
Chloroethane	N.D	16.7	--	µg/L	1.2	3.0	20.0	83.5	50	142	23.3	N/A	12/15/17	16:15	KMOR
Chloroform	N.D	12.3	--	µg/L	1.2	3.0	20.0	61.5	59	140	9.30	N/A	12/15/17	16:15	KMOR
Chloromethane	N.D	16.3	--	µg/L	1.2	3.0	20.0	81.5	42	139	14.2	N/A	12/15/17	16:15	KMOR
Dibromochloromethane	N.D	10.5	Q	µg/L	1.2	3.0	20.0	52.4	67	137	N.C.	N/A	12/15/17	16:15	KMOR
Dibromofluoromethane-SURR	23.1	23.1	--	µg/L	N/A	N/A	20.00	116	76	123	N/A	N/A	12/15/17	16:15	KMOR
Dibromomethane	N.D	11.5	Q	µg/L	1.5	3.0	20.0	57.4	72	139	N.C.	N/A	12/15/17	16:15	KMOR
Dichlorodifluoromethane	N.D	12.1	--	µg/L	1.2	3.0	20.0	60.5	42	157	25.3	N/A	12/15/17	16:15	KMOR
Dichloromethane	N.D	16.6	--	µg/L	1.2	3.0	20.0	83.0	56	135	11.4	N/A	12/15/17	16:15	KMOR
Epichlorohydrin	N.D	173.1	Q	µg/L	30.0	75.0	500.0	34.6	37	129	N.C.	N/A	12/15/17	16:15	KMOR
Ethylbenzene	N.D	12.0	--	µg/L	1.2	3.0	20.0	60.0	58	136	7.23	N/A	12/15/17	16:15	KMOR
Hexachlorobutadiene	N.D	9.2	Q	µg/L	1.4	3.0	20.0	46.1	62	124	N.C.	N/A	12/15/17	16:15	KMOR
Iodomethane	N.D	85.5	--	µg/L	8.0	15.0	100.0	85.5	45	148	10.0	N/A	12/15/17	16:15	KMOR
Isopropylbenzene	N.D	10.5	Q	µg/L	2.0	3.0	20.0	52.4	64	122	N.C.	N/A	12/15/17	16:15	KMOR
Naphthalene	N.D	7.5	Q	µg/L	2.0	3.0	20.0	37.4	66	135	N.C.	N/A	12/15/17	16:15	KMOR
Styrene	N.D	10.5	Q	µg/L	1.2	3.0	20.0	52.3	65	123	N.C.	N/A	12/15/17	16:15	KMOR
Tetrachloroethene	N.D	13.0	--	µg/L	1.2	3.0	20.0	65.0	64	138	10.2	N/A	12/15/17	16:15	KMOR
Tetrahydrofuran	N.D	4.1	Q	µg/L	1.2	3.0	20.0	20.7	51	147	N.C.	N/A	12/15/17	16:15	KMOR
Toluene	N.D	12.1	Q	µg/L	1.2	3.0	20.0	60.5	65	140	11.7	N/A	12/15/17	16:15	KMOR
Toluene-d8-SURR	19.2	19.6	--	µg/L	N/A	N/A	20.00	97.8	77	122	N/A	N/A	12/15/17	16:15	KMOR
Trichloroethene	N.D	12.6	Q	µg/L	1.2	3.0	20.0	63.1	76	126	10.0	N/A	12/15/17	16:15	KMOR
Trichlorofluoromethane	N.D	16.2	--	µg/L	1.5	3.0	20.0	81.0	60	144	23.4	N/A	12/15/17	16:15	KMOR
Vinyl Acetate	N.D	76.4	--	µg/L	6.0	15.0	100.0	76.4	52	141	16.2	N/A	12/15/17	16:15	KMOR

QUALITY CONTROL SUMMARY

Vinyl chloride	N.D	14.8	--	µg/L	1.2	3.0	20.0	74.0	39	151	18.4	N/A	12/15/17	16:15	KMOR
cis-1,2-Dichloroethene	N.D	12.6	Q	µg/L	1.2	3.0	20.0	63.1	66	127	4.49	N/A	12/15/17	16:15	KMOR
cis-1,3-Dichloropropene	N.D	7.2	Q	µg/L	1.2	3.0	20.0	36.0	57	131	N.C.	N/A	12/15/17	16:15	KMOR
m,p-Xylene	N.D	25.3	--	µg/L	1.8	6.0	40.0	63.3	56	145	8.70	N/A	12/15/17	16:15	KMOR
n-Butylbenzene	N.D	12.4	Q	µg/L	1.2	3.0	20.0	62.0	72	114	6.48	N/A	12/15/17	16:15	KMOR
n-Propylbenzene	N.D	12.2	--	µg/L	1.2	3.0	20.0	61.0	61	123	8.63	N/A	12/15/17	16:15	KMOR
o-Dichlorobenzene	N.D	11.0	Q	µg/L	1.0	3.0	20.0	55.1	73	124	5.13	N/A	12/15/17	16:15	KMOR
o-Xylene	N.D	9.5	Q	µg/L	2.3	3.0	20.0	47.7	54	143	N.C.	N/A	12/15/17	16:15	KMOR
sec-Butylbenzene	N.D	12.4	Q	µg/L	1.2	3.0	20.0	62.1	64	114	8.04	N/A	12/15/17	16:15	KMOR
tert-Butylbenzene	N.D	11.8	Q	µg/L	1.2	3.0	20.0	59.2	68	113	8.49	N/A	12/15/17	16:15	KMOR
trans-1,2-Dichloroethene	N.D	15.1	--	µg/L	1.2	3.0	20.0	75.5	56	146	8.25	N/A	12/15/17	16:15	KMOR
trans-1,3-Dichloropropene	N.D	11.3	Q	µg/L	1.2	3.0	20.0	56.3	59	130	12.3	N/A	12/15/17	16:15	KMOR
trans-1,4-Dichloro-2-butene	N.D	53.5	--	µg/L	6.0	15.0	100.0	53.5	47	129	N.C.	N/A	12/15/17	16:15	KMOR

2769710 - LFB
Reference Sample Number is: 2760985

							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	15.9	--	µg/L	1.2	3.0	20.0	79.5	67	126	N/A	N/A	12/08/17	17:27	KMOR
1,1,1-Trichloroethane	N.D	15.7	--	µg/L	1.2	3.0	20.0	78.5	64	139	N/A	N/A	12/08/17	17:27	KMOR
1,1,2,2-Tetrachloroethane	N.D	15.8	--	µg/L	1.2	3.0	20.0	79.0	60	131	N/A	N/A	12/08/17	17:27	KMOR
1,1,2-Trichloroethane	N.D	15.5	--	µg/L	1.2	3.0	20.0	77.5	70	129	N/A	N/A	12/08/17	17:27	KMOR
1,1-Dichloroethane	N.D	16.5	--	µg/L	2.0	3.0	20.0	82.5	63	133	N/A	N/A	12/08/17	17:27	KMOR
1,1-Dichloroethene	N.D	14.6	--	µg/L	1.2	3.0	20.0	73.0	55	139	N/A	N/A	12/08/17	17:27	KMOR
1,1-Dichloropropene	N.D	15.9	--	µg/L	1.4	3.0	20.0	79.5	67	131	N/A	N/A	12/08/17	17:27	KMOR
1,2,3-Trichlorobenzene	N.D	15.1	--	µg/L	1.2	3.0	20.0	75.5	68	131	N/A	N/A	12/08/17	17:27	KMOR
1,2,3-Trichloropropane	N.D	16.1	--	µg/L	1.2	3.0	20.0	80.5	52	131	N/A	N/A	12/08/17	17:27	KMOR
1,2,4-Trichlorobenzene	N.D	14.1	--	µg/L	1.2	3.0	20.0	70.5	51	132	N/A	N/A	12/08/17	17:27	KMOR
1,2,4-Trimethylbenzene	N.D	16.4	--	µg/L	1.2	3.0	20.0	82.0	63	129	N/A	N/A	12/08/17	17:27	KMOR
1,2-Dibromo-3-chloropropane	N.D	15.1	--	µg/L	1.2	3.0	20.0	75.5	66	139	N/A	N/A	12/08/17	17:27	KMOR
1,2-Dibromoethane	N.D	17.0	--	µg/L	1.2	3.0	20.0	85.0	76	126	N/A	N/A	12/08/17	17:27	KMOR

QUALITY CONTROL SUMMARY

1,2-Dichloroethane	N.D	15.1	--	µg/L	1.2	3.0	20.0	75.5	60	136	N/A	N/A	12/08/17	17:27	KMOR
1,2-Dichloropropane	N.D	16.0	--	µg/L	1.2	3.0	20.0	80.0	70	124	N/A	N/A	12/08/17	17:27	KMOR
1,3,5-Trimethylbenzene	N.D	16.5	--	µg/L	1.2	3.0	20.0	82.5	68	123	N/A	N/A	12/08/17	17:27	KMOR
1,3-Dichlorobenzene	N.D	16.3	--	µg/L	1.2	3.0	20.0	81.5	62	127	N/A	N/A	12/08/17	17:27	KMOR
1,3-Dichloropropane	N.D	15.3	--	µg/L	2.0	3.0	20.0	76.5	74	124	N/A	N/A	12/08/17	17:27	KMOR
1,4-Dichlorobenzene	N.D	17.8	--	µg/L	1.2	3.0	20.0	89.0	73	123	N/A	N/A	12/08/17	17:27	KMOR
1-Chlorohexane	N.D	18.8	--	µg/L	1.5	3.0	20.0	94.0	56	139	N/A	N/A	12/08/17	17:27	KMOR
2,2-Dichloropropane	N.D	16.9	--	µg/L	1.2	3.0	20.0	84.5	37	148	N/A	N/A	12/08/17	17:27	KMOR
2-Butanone	N.D	76.2	--	µg/L	6.0	15.0	100	76.2	57	136	N/A	N/A	12/08/17	17:27	KMOR
2-Chloroethyl vinyl ether	N.D	50.0	--	µg/L	6.0	15.0	100	50.0	47	143	N/A	N/A	12/08/17	17:27	KMOR
2-Chlorotoluene	N.D	16.6	--	µg/L	1.4	3.0	20.0	83.0	66	127	N/A	N/A	12/08/17	17:27	KMOR
2-Hexanone	N.D	66.7	--	µg/L	6.0	15.0	100	66.7	62	136	N/A	N/A	12/08/17	17:27	KMOR
4-Bromofluorobenzene-SURR	19.0	19.7	--	µg/L	N/A	N/A	20.0	98.3	79	121	N/A	N/A	12/08/17	17:27	KMOR
4-Chlorotoluene	N.D	15.7	--	µg/L	1.2	3.0	20.0	78.5	63	125	N/A	N/A	12/08/17	17:27	KMOR
4-Isopropyltoluene	N.D	18.8	--	µg/L	1.4	3.0	20.0	94.0	68	131	N/A	N/A	12/08/17	17:27	KMOR
4-Methyl-2-pentanone	N.D	75.8	--	µg/L	6.0	15.0	100	75.8	62	135	N/A	N/A	12/08/17	17:27	KMOR
Acetone	N.D	83.2	--	µg/L	6.0	15.0	100	83.2	46	142	N/A	N/A	12/08/17	17:27	KMOR
Acrolein	N.D	427.1	--	µg/L	25.0	75.0	500	85.4	40	153	N/A	N/A	12/08/17	17:27	KMOR
Acrylonitrile	N.D	80.2	--	µg/L	6.0	15.0	100	80.2	53	141	N/A	N/A	12/08/17	17:27	KMOR
Benzene	N.D	15.5	--	µg/L	1.2	3.0	20.0	77.5	66	131	N/A	N/A	12/08/17	17:27	KMOR
Bromobenzene	N.D	15.9	--	µg/L	1.2	3.0	20.0	79.5	61	126	N/A	N/A	12/08/17	17:27	KMOR
Bromochloromethane	N.D	15.8	--	µg/L	1.2	3.0	20.0	79.0	60	133	N/A	N/A	12/08/17	17:27	KMOR
Bromodichloromethane	N.D	15.7	--	µg/L	1.2	3.0	20.0	78.5	72	129	N/A	N/A	12/08/17	17:27	KMOR
Bromoform	N.D	15.8	--	µg/L	1.2	3.0	20.0	79.0	61	130	N/A	N/A	12/08/17	17:27	KMOR
Bromomethane	N.D	16.4	--	µg/L	2.0	3.0	20.0	82.0	47	151	N/A	N/A	12/08/17	17:27	KMOR
Carbon disulfide	N.D	64.3	--	µg/L	7.0	15.0	100	64.3	58	140	N/A	N/A	12/08/17	17:27	KMOR
Carbon tetrachloride	N.D	15.7	--	µg/L	1.2	3.0	20.0	78.5	69	134	N/A	N/A	12/08/17	17:27	KMOR
Chlorobenzene	N.D	16.7	--	µg/L	1.2	3.0	20.0	83.5	67	122	N/A	N/A	12/08/17	17:27	KMOR
Chloroethane	N.D	17.4	--	µg/L	1.2	3.0	20.0	87.0	47	144	N/A	N/A	12/08/17	17:27	KMOR
Chloroform	N.D	15.2	--	µg/L	1.2	3.0	20.0	76.0	61	134	N/A	N/A	12/08/17	17:27	KMOR
Chloromethane	N.D	18.9	--	µg/L	1.2	3.0	20.0	94.5	43	142	N/A	N/A	12/08/17	17:27	KMOR

QUALITY CONTROL SUMMARY

Dibromochloromethane	N.D	14.2	--	µg/L	1.2	3.0	20.0	71.0	69	134	N/A	N/A	12/08/17	17:27	KMOR
Dibromofluoromethane-SURR	22.7	22.5	--	µg/L	N/A	N/A	20.0	112	83	120	N/A	N/A	12/08/17	17:27	KMOR
Dibromomethane	N.D	15.2	--	µg/L	1.5	3.0	20.0	76.0	76	131	N/A	N/A	12/08/17	17:27	KMOR
Dichlorodifluoromethane	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.5	49	145	N/A	N/A	12/08/17	17:27	KMOR
Dichloromethane	N.D	20.1	--	µg/L	1.2	3.0	20.0	101	62	129	N/A	N/A	12/08/17	17:27	KMOR
Epichlorohydrin	N.D	416.0	--	µg/L	30.0	75.0	500	83.2	52	134	N/A	N/A	12/08/17	17:27	KMOR
Ethylbenzene	N.D	15.6	--	µg/L	1.2	3.0	20.0	78.0	69	131	N/A	N/A	12/08/17	17:27	KMOR
Hexachlorobutadiene	N.D	14.6	--	µg/L	1.4	3.0	20.0	73.0	51	139	N/A	N/A	12/08/17	17:27	KMOR
Iodomethane	N.D	61.7	--	µg/L	8.0	15.0	100	61.7	54	143	N/A	N/A	12/08/17	17:27	KMOR
Isopropylbenzene	N.D	15.3	--	µg/L	2.0	3.0	20.0	76.5	69	121	N/A	N/A	12/08/17	17:27	KMOR
Naphthalene	N.D	14.2	--	µg/L	2.0	3.0	20.0	71.0	71	134	N/A	N/A	12/08/17	17:27	KMOR
Styrene	N.D	15.5	--	µg/L	1.2	3.0	20.0	77.5	65	127	N/A	N/A	12/08/17	17:27	KMOR
Tetrachloroethene	4.2	15.9	--	µg/L	1.2	3.0	20.0	79.5	62	135	N/A	N/A	12/08/17	17:27	KMOR
Tetrahydrofuran	N.D	17.0	--	µg/L	1.2	3.0	20.0	85.0	67	134	N/A	N/A	12/08/17	17:27	KMOR
Toluene	N.D	15.7	--	µg/L	1.2	3.0	20.0	78.5	59	143	N/A	N/A	12/08/17	17:27	KMOR
Toluene-d8-SURR	19.3	20.1	--	µg/L	N/A	N/A	20.0	100	80	116	N/A	N/A	12/08/17	17:27	KMOR
Trichloroethene	N.D	15.7	--	µg/L	1.2	3.0	20.0	78.5	67	138	N/A	N/A	12/08/17	17:27	KMOR
Trichlorofluoromethane	N.D	19.7	--	µg/L	1.5	3.0	20.0	98.5	45	157	N/A	N/A	12/08/17	17:27	KMOR
Vinyl Acetate	N.D	110.1	--	µg/L	6.0	15.0	100	110	53	144	N/A	N/A	12/08/17	17:27	KMOR
Vinyl chloride	N.D	19.2	--	µg/L	1.2	3.0	20.0	96.0	52	140	N/A	N/A	12/08/17	17:27	KMOR
cis-1,2-Dichloroethene	N.D	17.0	--	µg/L	1.2	3.0	20.0	85.0	71	128	N/A	N/A	12/08/17	17:27	KMOR
cis-1,3-Dichloropropene	N.D	15.3	--	µg/L	1.2	3.0	20.0	76.5	63	125	N/A	N/A	12/08/17	17:27	KMOR
m,p-Xylene	N.D	34.4	--	µg/L	1.8	6.0	40.0	86.0	63	130	N/A	N/A	12/08/17	17:27	KMOR
n-Butylbenzene	N.D	19.1	--	µg/L	1.2	3.0	20.0	95.5	67	127	N/A	N/A	12/08/17	17:27	KMOR
n-Propylbenzene	N.D	16.1	--	µg/L	1.2	3.0	20.0	80.5	64	124	N/A	N/A	12/08/17	17:27	KMOR
o-Dichlorobenzene	N.D	17.1	--	µg/L	1.0	3.0	20.0	85.5	75	121	N/A	N/A	12/08/17	17:27	KMOR
o-Xylene	N.D	14.6	--	µg/L	2.3	3.0	20.0	73.0	66	124	N/A	N/A	12/08/17	17:27	KMOR
sec-Butylbenzene	N.D	16.2	--	µg/L	1.2	3.0	20.0	81.0	66	122	N/A	N/A	12/08/17	17:27	KMOR
tert-Butylbenzene	N.D	16.0	--	µg/L	1.2	3.0	20.0	80.0	65	126	N/A	N/A	12/08/17	17:27	KMOR
trans-1,2-Dichloroethene	N.D	17.3	--	µg/L	1.2	3.0	20.0	86.5	66	129	N/A	N/A	12/08/17	17:27	KMOR
trans-1,3-Dichloropropene	N.D	15.6	--	µg/L	1.2	3.0	20.0	78.0	60	131	N/A	N/A	12/08/17	17:27	KMOR

QUALITY CONTROL SUMMARY

trans-1,4-Dichloro-2-butene	N.D	79.3	--	µg/L	6.0	15.0	100	79.3	53	123	N/A	N/A	12/08/17	17:27	KMOR

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

2017-12098

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

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

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

P.O. #: 465 | PWSID #: | FOLDER #: 242035 | PROJECT: GUAYAMA PROJECT | EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2760985-1 MATRIX: GROUND WATER SOURCE: POINT #1, GUAYAMA, PR INF-20171207	DATE: 12/07/17 TIME: 0758 TYPE: Grab	TYPE: VIAL/TC COLOR: CLEAR VOLUME: 40 PRESERVATIVE: HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2760986-1 MATRIX: GROUND WATER SOURCE: POINT #2, GUAYAMA, PR EFF-20171207	DATE: 12/07/17 TIME: 0825 TYPE: Grab	TYPE: VIAL/TC COLOR: CLEAR VOLUME: 40 PRESERVATIVE: HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2760987-1 MATRIX: GROUND WATER SOURCE: POINT #3, GUAYAMA, PR EFFDUP-20171207	DATE: 12/07/17 TIME: 0825 TYPE: Grab	TYPE: VIAL/TC COLOR: CLEAR VOLUME: 40 PRESERVATIVE: HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2760988-1 MATRIX: GROUND WATER SOURCE: POINT #4, GUAYAMA, PR EFFMS-20171207	DATE: 12/07/17 TIME: 0825 TYPE: Grab	TYPE: VIAL/TC COLOR: CLEAR VOLUME: 40 PRESERVATIVE: HCl pH<2,Cool 4 °C			EPA 8260B VOC

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Elvin Varela /	12/07/17	
Fixed in field by:	Elvin Varela	12/07/17	varias
Authorized by:	N/A	N/A	
Received by EQLF:			
Released to EQLL by:	X	12/07/17	1330
Received by EQLL:		12/07/17	1330

SPECIAL INSTRUCTIONS / COMMENTS:
RUSH

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

PIRAR

Arrival Temperature: 3.0°C Signature: AR

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

2017-12098

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

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

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

P.O. #: 465 PWSID #: FOLDER #: 242035 PROJECT: GUAYAMA PROJECT EQLAB REP: EGARCIA

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: 2760989-1 MATRIX: GROUND WATER SOURCE: POINT #5, GUAYAMA, PR EFFMSD-20171207	DATE: 12/07/17 TIME: 0825 TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME 40 PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: 2760990-1 MATRIX: DI WATER TRIP SOURCE: TRIP BLANK, GUAYAMA, PR TB-20171207	DATE: 12/07/17 TIME: LQR TYPE: Grab	TYPE VIAL/TC COLOR CLEAR VOLUME 40 PRESERVATIVE HCl pH<2,Cool 4 °C			EPA 8260B VOC
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE			
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE			

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Elvin Varela / [illegible]	12/07/17	
Fixed in field by:	Elvin Varela / [illegible]	12/07/17	varios
Authorized by:	N/A	N/A	
Received by EQLF:	[illegible]		
Released to EQLL by:	[illegible]	12/07/17	1330
Received by EQLL:	Diego [illegible]	12/07/17	1330

SPECIAL INSTRUCTIONS / COMMENTS:

RUSH

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

PNAR

Arrival Temperature: 3.0°C Signature: [illegible]

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

APPENDIX B
RAW DATA WORKSHEETS

ORGANICS DEPARTMENT
RAW DATA PACKAGE CHECKLIST

RUN NUMBER: 194103 & 194105

☑ 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: _____ Analyst Date: 12/13/17.

Checked by: _____ Laboratory Group Leader Date: _____

Approved by: _____ Supervisor Date: 12-13-17

ORGANICS DEPARTMENT
RUN COVER SHEET

eqlab

General Information

Method Number	Run Number	Sequence Number	Sample prep by	Sample Setup by	Sample Evaluated by	Run Approved by
EPA 8260B VOC	194103	194103	KOTERO	KOTERO	KOTERO	KOTERO
EPA 624 VOC	194105		PR60236			

Calibration Curve Information / Instrument Information

Calib. Curve Name	NBK Reference	Description / Identification Number
8260VOC-NOV-LIQ-17	NBK 079 Pg. 088	V7-AG7890MS
		PM Expiration Date: 10/2018

Run Controls Information

[X] LRB [X] BFB / LPC [ ] DFTPP / Degradation [X] ICV / CCS [ ] QCS [ ] 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 079 Pg. 093	N/A	N/A	N/A	N/A
1	p-Bromofluorobenzene	NBK 062 Pg. 089	4/23/2022	250	50	5
20	Mix 8260 & 624 VOC	NBK 079 Pg. 090	5/21/2018	50	50	20
10	Mix 8260 & 624 VOC Gases	NBK 079 Pg. 093	1/7/2017	100	50	20
5	SIM para VOC	NBK 079 Pg. 083	4/13/2018	20	5	20

Preparation Controls Information

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

Amount µL	Solution Name	NBK Reference	Expiration Date	Solution Concentration ppm	Dilution Volume mL	Analyte Concentration µg/L
0.5	Mix 8260 & 624 VOC	NBK 079 Pg. 090	5/21/2018	100	50	1
0.5	Mix 8260 & 624 VOC Gases	NBK 079 Pg. 093	1/7/2017	100	50	1
10	Mix 8260 & 624 VOC	NBK 079 Pg. 090	5/21/2018	100	50	20
10	Mix 8260 & 624 VOC Gases	NBK 079 Pg. 093	1/7/2017	100	50	20

RUN STATUS

[X] Run in Control [ ] OOCRL [ ] OOCRS [ ] [illegible] [ ] [illegible]

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

[illegible]

[ ] [illegible] [ ] [illegible] [ ] [illegible] [ ] [illegible] [ ] [illegible]

Analyzed and Reviewed by / Date: [illegible]

Run and Preparation Controls are within acceptance criteria according to SOP QC-016 / Rev 03. Manual integrations were performed according to SOP QC-014 / Rev. 01. Detected analytes were confirmed using MS Spectrums library databases. Recovery percentages of final LFB sample were qualified. For order 2760988MS/2769708-1 (EPA 8260B VOC) matrix interferences were confirmed.

Discarded levels in Calibration Curve exceeded acceptance criteria for Initial Calibration according to QC-002 / Rev. 17. RFD of discarted levels were > 20%.

2ND SOURCE DATA FILE: DATA\192341\234105.D NBK REF: 079 Pg. 088 (exp. 05/13/2018).

Supervisor Review and Approval / Date: [illegible] 12-13-2017

QA/QC Review and Approval / Date:

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

Run Worksheet

For: Friday, December 8, 2017

[redacted]

Analyst: KOTERO

Cup#	TYPE	ORDER#	Vial	METHOD	QC LINK	MATRIX	TEST NAME	PRE RUN	VOLUME	FINALVOL	WEIGHT
1	LRB	LRB/2769703-1			2760985	GROUND WATER	EPA 8260B VOC	--	--	--	0
2	MDL	MDL/2769705-1			2760985	GROUND WATER	EPA 8260B VOC	--	1	1	1
3	ICV	ICV/2769704-1			2760985	GROUND WATER	EPA 8260B VOC	--	--	--	0
4	TRIP BL	TRIP BLK/2760990-1	A			DI WATER	EPA 8260B VOC	PR60236	50.0	50.0	N/A
5		2760986-1	A	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR60236	50.0	50.0	N/A
6		2760985-1	A	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR60236	50.0	50.0	N/A
7	DUP	DUP/2760987-1	A		2760986	GROUND WATER	EPA 8260B VOC	PR60236	50.0	50.0	N/A
10	DUP	DUP/2769706-1	A		2760989	GROUND WATER	EPA 8260B VOC	--	--	--	0
11	MS	MS/2769708-1	A		2760988	GROUND WATER	EPA 8260B VOC	--	1	1	1
12	MS	MS/2760988-1	A		2760986	GROUND WATER	EPA 8260B VOC	PR60236	50.0	50.0	N/A
13	MSD	MSD/2760989-1	A		2760986	GROUND WATER	EPA 8260B VOC	PR60236	50.0	50.0	N/A
14	LFB	LFB/2769710-1			2760985	GROUND WATER	EPA 8260B VOC	--	1	1	1

Printed Date: 12/19/2017
9:15 am

Run Worksheet

For: Friday, December 8, 2017

[redacted]

Analyst: KOTERO

Cup#	TYPE	ORDER#	Vial	METHOD	pH	QC LINK	MATRIX	TEST NAME	PRE RUN	Due	VOLUME	FINALVOL	WEIGHT
1	LRB	LRB/2769747-1						EPA 624 VOC	--		--	--	--
2	MDL	MDL/2769749-1						EPA 624 VOC	--		--	--	--
3	ICV	ICV/2769748-1						EPA 624 VOC	--		--	--	--
4	①	2766754-3	A	EPA 624	22		WASTEWATER	TTO 624 VOC	--	11	--	--	--
5	LFB	LFB/2769751-1						EPA 624 VOC	--		--	--	--

① None Residual Chloride was detected. DL 12/11/2017.

Printed Date: 12/8/17
10:45 am

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 60236

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

ORDNO	CUP NO	STATUS	MATRIX	METHOD	TESTS	PREP DATE	PREP BY	PREP TIME	COLLEC DATE	VOL. (mL)	FINAL VOLUME (mL)	WEIGHT (g)	pH init / final
2760986-1 ①	1	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/7/2017	50.0	50.0	N/A	<2
2760990-1 ①	2	Done	DI WATER	EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/7/2017	50.0	50.0	N/A	<2
2760985-1 ①	3	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/7/2017	50.0	50.0	N/A	<2
2760989-1 ①	4	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/7/2017	50.0	50.0	N/A	<2
2760987-1 ①	5	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/7/2017	50.0	50.0	N/A	<2
2760988-1 ①	6	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/7/2017	50.0	50.0	N/A	<2
2769694-1/DUP Linked to 2760990 ①	7	Logged		EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/8/2017	50.0	50.0	N/A	<2
2769694-1/DUP Linked to 2760990 ①	7	Logged		EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/8/2017	50.0	50.0	N/A	<2

① None Residual Chloride was detected. DK 12/11/2017.

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 60236

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

2769693-1/ MS Linked to 2760989	8	Logged		EPA 5030B	EPA 8260B VOC	12/8/2017	KOTERO	10:20	12/8/2017	50.0	50.0	N/A	CL

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 60236

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

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

Prepered Sample(s) Transfered by / Date: DDL / 12/08/17

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

Comments:

Calibration Status Report V7-AG7890MS

Method Path : C:\msdchem\1\METHODS\
Method File : 8260VOC-NOV-LIQ-17.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Wed Nov 29 09:51:01 2017
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	3	20	C:\msdchem\1\DATA\193245-47\324511.D
2	2	5	20	C:\msdchem\1\DATA\193245-47\324512.D
3	3	10	20	C:\msdchem\1\DATA\193245-47\324513.D
4	4	20	20	C:\msdchem\1\DATA\193245-47\324514.D
5	5	50	20	C:\msdchem\1\DATA\193245-47\324515.D
6	6	100	20	C:\msdchem\1\DATA\193245-47\324516.D
7	7	200	20	C:\msdchem\1\DATA\193245-47\324517.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Nov 14 07:29 2017	Nov 14 07:28 2017	13 Nov 2017 6:04 pm
2	2	Nov 14 07:31 2017	Nov 14 07:31 2017	13 Nov 2017 6:30 pm
3	3	Nov 14 07:32 2017	Nov 14 07:32 2017	13 Nov 2017 6:56 pm
4	4	Nov 14 07:33 2017	Nov 14 07:32 2017	13 Nov 2017 7:22 pm
5	5	Nov 14 07:34 2017	Nov 14 07:34 2017	13 Nov 2017 7:49 pm
6	6	Nov 14 07:35 2017	Nov 14 07:34 2017	13 Nov 2017 8:15 pm
7	7	Nov 14 07:36 2017	Nov 14 07:35 2017	13 Nov 2017 8:41 pm

8260VOC-NOV-LIQ-17.M Tue Dec 12 13:56:42 2017

Response Factor Report V7-AG7890MS

Method Path : C:\msdchem\1\METHODS\
Method File : 8260VOC-NOV-LIQ-17.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Wed Nov 29 09:51:01 2017
Response Via : Initial Calibration

Calibration Files
1 =324511.D 2 =324512.D 3 =324513.D 4 =324514.D 5 =324515.D 6 =324516.D 7 =324517.D

		Compound	1	2	3	4	5	6	7	Avg	%RSD
1)	I	IPENTAFLUOROBENZENE	----------ISTD----------								
2)	M	DICLDIFLUOROME...	0.319	0.283	0.279	0.338	0.301	0.263	0.233	0.288	12.28
3)	P,T	CHLOROMETHANE	0.271	0.298	0.259	0.287	0.254	0.229	0.202	0.257	12.98
4)	C,T	VINYL CHLORIDE	0.149	0.134	0.133	0.164	0.163	0.157	0.161	0.152	8.77
5)	T	BROMOMETHANE	0.091	0.079	0.078	0.082	0.075	0.065	0.059	0.076#	14.20
6)	T	CHLOROETHANE	0.073	0.083	0.068	0.077	0.075	0.057		0.072#	12.37
7)	T	TRICLFLUOROMET...	0.396	0.360	0.349	0.396	0.370	0.320	0.274	0.352	12.36
8)	T	ACROLEIN	0.019	0.020	0.020	0.016	0.014	0.015		0.018#	14.76
9)	T	ACETONE	0.056		0.043	0.047	0.050	0.046		0.049#	10.20
10)	C,T	11-DICHLOROETHENE	0.175	0.143	0.144	0.123		0.147		0.146	12.81
11)	T	IODOMETHANE	0.267	0.261	0.264	0.227	0.226	0.234		0.246	7.94
12)	T	CARBON DISULFIDE	0.366	0.307	0.307	0.262	0.313	0.297		0.309	10.91
13)	T	ACRYLONITRILE	0.156	0.151	0.147	0.121	0.116	0.134		0.137	12.14
14)	T	DICHLOROMETHANE	0.148	0.124	0.129	0.131	0.111	0.095		0.123	14.67
15)	T	TRANS12DICLETHENE	0.128	0.149	0.145	0.123	0.105	0.118		0.128	13.02
16)	P,T	11-DICHLOROETHANE	0.278	0.284	0.280	0.229		0.257		0.266	8.72
17)		VINYL ACETATE	0.331	0.328		0.303	0.235	0.271		0.294	13.88
18)		2-BUTANONE	0.196	0.170	0.183	0.159	0.143	0.150		0.167	12.05
19)	T	CIS12DICHLOROE...	0.276	0.247	0.266	0.247	0.238	0.222	0.208	0.243	9.67
20)	T	22-DICHLOROPRO...	0.275	0.248	0.282	0.275	0.248	0.273		0.267	5.58
21)	C,T	CHLOROFORM	0.735	0.626	0.620	0.524	0.542	0.562		0.602	12.85
22)	T	BROMOCHLOROMET...	0.322	0.333	0.327	0.273	0.318	0.273		0.308	8.91
23)	I	I14-DIFLUOROBENZENE	----------ISTD----------								
24)	S	SDIBRFLUOROMET...	0.486	0.474	0.466	0.450	0.425	0.381	0.320	0.429	13.87
25)	T	TETRAHYDROFURAN	0.596	0.551	0.626	0.555	0.479	0.427		0.539	13.72
26)	T	111-TRICHLOROE...	0.392	0.333	0.355	0.314	0.276	0.293		0.327	12.98
27)	T	11-DICHLOROPRO...	0.229	0.204	0.235	0.218	0.199	0.191	0.183	0.208	9.38
28)	T	12-DICHLOROETHANE	0.383	0.310	0.322	0.277	0.249	0.309		0.308	14.71
29)	T	CARBONTETRACHL...	0.361	0.307	0.315	0.284	0.254	0.247		0.295	14.41
30)	T	BENZENE	0.941	0.781	0.807	0.698	0.606	0.775		0.768	14.62
31)	T	TRICHLOROETHENE	0.266	0.221	0.230	0.206	0.184	0.181		0.215	14.80
32)	C,T	12-DICHLOROPRO...	0.198	0.172	0.193	0.178	0.171	0.166	0.161	0.177	7.71
33)	T	DIBROMOMETHANE	0.205	0.168	0.176	0.159	0.152	0.157	0.169	0.169	10.53
34)	T	BROMODICLMETHANE	0.337	0.275	0.307	0.273	0.258	0.250	0.248	0.278	11.76
35)	T	2-CLETHYLVINYL...	0.057		0.047	0.049	0.059	0.066		0.056#	13.80
36)	T	EPICHLOROHYDRIN	0.031	0.028	0.032	0.029	0.028	0.025		0.029#	8.18
37)	T	4METHYL-2-PENT...	0.231	0.220	0.269	0.255	0.241	0.211		0.238	9.13
38)	T	CIS13DICLPROPENE	0.206	0.194	0.249	0.249	0.262	0.272	0.277	0.244	13.05
39)	S	STOLUENE-D8	1.220	1.216	1.227	1.214	1.192	1.165	1.188	1.203	1.84
40)	C,T	TOLUENE	0.933	0.810	0.893	0.798	0.729	0.667		0.805	12.31
41)	T	TRANS13DICLPRO...	0.210	0.190	0.234	0.224	0.238	0.244	0.237	0.225	8.47

Method Path : C:\msdchem\1\METHODS\
Method File : 8260VOC-NOV-LIQ-17.M

42)	T	112-TRICHLOROE...	0.267	0.223	0.239	0.213	0.201	0.197	0.198	0.220	11.84
43)		2-HEXANONE	0.117		0.158	0.164	0.174	0.165	0.143	0.153	13.27
44)	T	13-DICHLOROPRO...	0.297	0.264	0.318	0.309	0.312	0.312	0.314	0.304	6.15
45)	T	DIBRCHLOROMETHANE	0.252	0.211	0.239	0.225	0.233	0.247	0.267	0.239	7.67
46)	T	TETRACHLOROETHENE	0.282	0.247	0.277	0.251	0.232	0.232	0.232	0.251	8.60
47)	T	12-DIBROMOETHANE	0.189	0.157	0.182	0.170	0.181	0.195	0.219	0.185	10.55
48)	I	CHLOROBENZEN-d5-IS	----------ISTD----------								
49)	P,T	CHLOROBENZENE	0.625	0.516	0.594	0.539	0.503	0.496	0.485	0.537	9.91
50)		1-CHLOROHEXANE	2.096	2.024	2.629	2.476	2.216	1.835		2.213	13.31
51)	T	1112-TETRACLET...	0.221	0.186	0.218	0.199	0.193	0.198	0.214	0.204	6.54
52)	C,T	ETHYLBENZENE	0.862	0.736	0.911	0.868	0.810	0.808	0.753	0.821	7.71
53)	T	MP-XYLENE	0.427	0.430	0.596	0.591	0.581	0.588	0.553	0.538	14.14
54)	T	STYRENE	0.340		0.358	0.396	0.445	0.483		0.404	14.72
55)	T	O-XYLENE	0.508		0.429	0.504	0.564	0.610		0.523	13.06
56)	P,T	BROMOFORM	0.156	0.137	0.167	0.164	0.176	0.193		0.166	11.34
57)	P,T	1122-TETRACLET...	0.327	0.269	0.306	0.272	0.267	0.279	0.296	0.288#	7.83
58)	T	ISOPROPYL BENZENE	0.546		0.564	0.631	0.679	0.732		0.630	12.33
59)	S	S4BRFLUOROBENZENE	0.298	0.307	0.346	0.360	0.389	0.412	0.443	0.365	14.65
60)	T	123-TRICLPROPANE	0.091	0.079	0.090	0.080	0.077	0.082	0.088	0.084#	6.85
61)	T	TRANS14DICL2BU...	0.029		0.033	0.031	0.035	0.041		0.034#	13.31
62)	T	BROMOBENZENE	0.315	0.281	0.339	0.314	0.327	0.353	0.346	0.325	7.46
63)	T	N-PROPYLBENZENE	0.618		0.759	0.754	0.790	0.871		0.758	12.02
64)	T	2-CHLOROTOLUENE	0.433	0.414	0.523	0.519	0.546	0.608		0.507	14.32
65)	T	4-CHLOROTOLUENE	0.435		0.468	0.442	0.461	0.518		0.465	7.05
66)	T	135TRIMETHYLBE...	0.509		0.613	0.605	0.619	0.685		0.606	10.44
67)	T	TERT-BUTYLBENZENE	0.397		0.445	0.465	0.471	0.525		0.461	10.08
68)	T	124TRIMETHYLBE...	0.435		0.558	0.553	0.563	0.635		0.549	13.11
69)	T	SEC-BUTYLBENZENE	0.548		0.631	0.644	0.637	0.701		0.632	8.66
70)	T	13-DICHLOROBEN...	0.315	0.288	0.366	0.349	0.351	0.385		0.342	10.32
71)	I	I14-DICLBENZENE-D4	----------ISTD----------								
72)	T	4-ISOPROPYLTOL...	0.838		1.055	1.091	1.081	1.143	1.202	1.068	11.65
73)	T	14-DICHLOROBEN...	1.019		0.836	0.756	0.722	0.745	0.808	0.814	13.38
74)	T	12-DICHLOROBEN...	0.755	0.677	0.750	0.708	0.689	0.705	0.761	0.721	4.74
75)	T	N-BUTYLBENZENE	0.600		0.848	0.855	0.848	0.881	0.964	0.833	14.66
76)	T	12-DIBR-3CLPRO...	0.078	0.074	0.082	0.077	0.081	0.083	0.087	0.080#	5.30
77)		124-TRICLBENZENE	0.365		0.357	0.377	0.425	0.455		0.396	10.76
78)	T	NAPHTHALENE	0.824		0.733	0.850	0.988	1.038		0.887	14.07
79)	T	HEXACHLOROBUTA...	0.199	0.179	0.193	0.186	0.179	0.188	0.198	0.189	4.45
80)		123-TRICLBENZENE	0.327	0.314	0.388	0.390	0.417	0.436	0.461	0.390	13.90

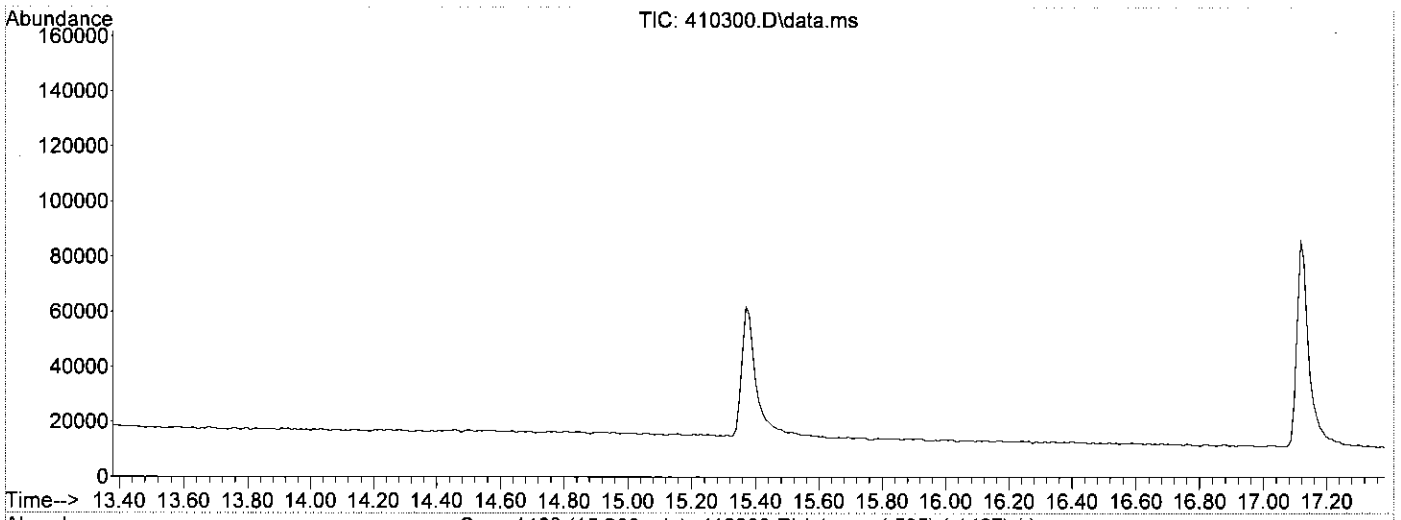
(#) = Out of Range

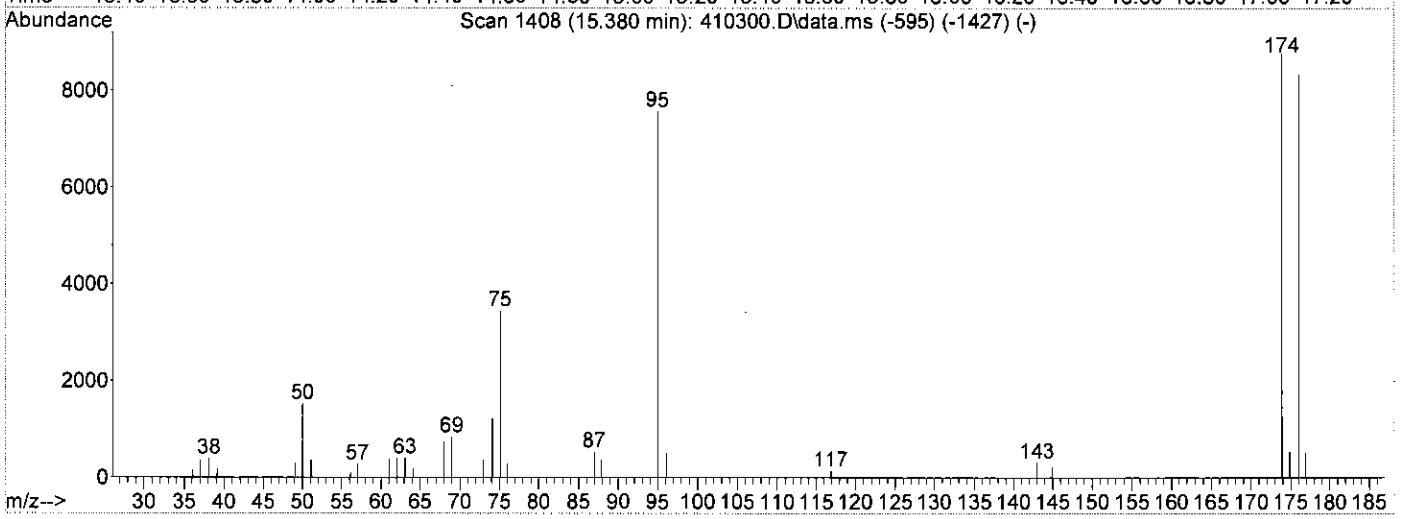
Method VOC

Data Path : C:\msdchem\1\DATA\194103\
Data File : 410300.D
Acq On : 8 Dec 2017 10:57 am
Operator : KMOR
Sample : BFB
Misc : RUN194103
ALS Vial : 1 Sample Multiplier: 1

Integration File: VOC.P

Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Wed Nov 29 09:51:01 2017





Spectrum Information: Scan 1408 ①

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	1519	PASS
75	95	30	60	45.4	3441	PASS
95	95	100	100	100.0	7572	PASS
96	95	5	9	6.7	507	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	115.8	8765	PASS
175	174	5	9	6.2	540	PASS
176	174	95	101	95.1	8332	PASS
177	176	5	9	6.1	512	PASS

① Background subtraction was required. DL 12/12/17.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194103\
Data File : 410301.D
Acq On : 8 Dec 2017 11:23 am
Operator : KMOR
Sample : LRB/2769703
Misc : RUN194103
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 12 11:15:35 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	283976	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.416	114	448815	20.00 µg/L	0.02
48) CHLOROBENZEN-d5-IS	13.137	117	356955	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.116	152	147673	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	220663	22.92 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.60%		
39) STOLUENE-D8	10.437	98	522133	19.34 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.70%		
59) S4BRFLUOROBENZENE	15.370	95	126352	19.40 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.00%		

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	3.148	50	1053	N.D.
4) VINYL CHLORIDE	0.000		0	N.D.
5) BROMOMETHANE	0.000		0	N.D.
6) CHLOROETHANE	0.000		0	N.D. d
7) TRICLFLUOROMETHANE	0.000		0	N.D.
8) ACROLEIN	0.000		0	N.D.
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	0.000		0	N.D.
11) IODOMETHANE	0.000		0	N.D.
12) CARBON DISULFIDE	4.620	76	756	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	0.000		0	N.D. d
15) TRANS12DICLETHENE	5.249	96	157	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	7.645	43	353	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.914	83	547	N.D.
22) BROMOCHLOROMETHANE	6.914	49	203	N.D.
25) TETRAHYDROFURAN	0.000		0	N.D.
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D.
28) 12-DICHLOROETHANE	0.000		0	N.D.
29) CARBONTETRACHLORIDE	7.056	117	219	N.D.
30) BENZENE	0.000		0	N.D.
31) TRICHLOROETHENE	0.000		0	N.D.
32) 12-DICHLOROPROPANE	0.000		0	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	0.000		0	N.D.
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.
36) EPICHLOROHYDRIN	10.437	57	302	N.D.
37) 4METHYL-2-PENTANONE	0.000		0	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.
40) TOLUENE	0.000		0	N.D.
41) TRANS13DICLPROPENE	0.000		0	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	0.000		0	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.
45) DIBRCHLOROMETHANE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194103\
Data File : 410301.D
Acq On : 8 Dec 2017 11:23 am
Operator : KMOR
Sample : LRB/2769703
Misc : RUN194103
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 12 11:15:35 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

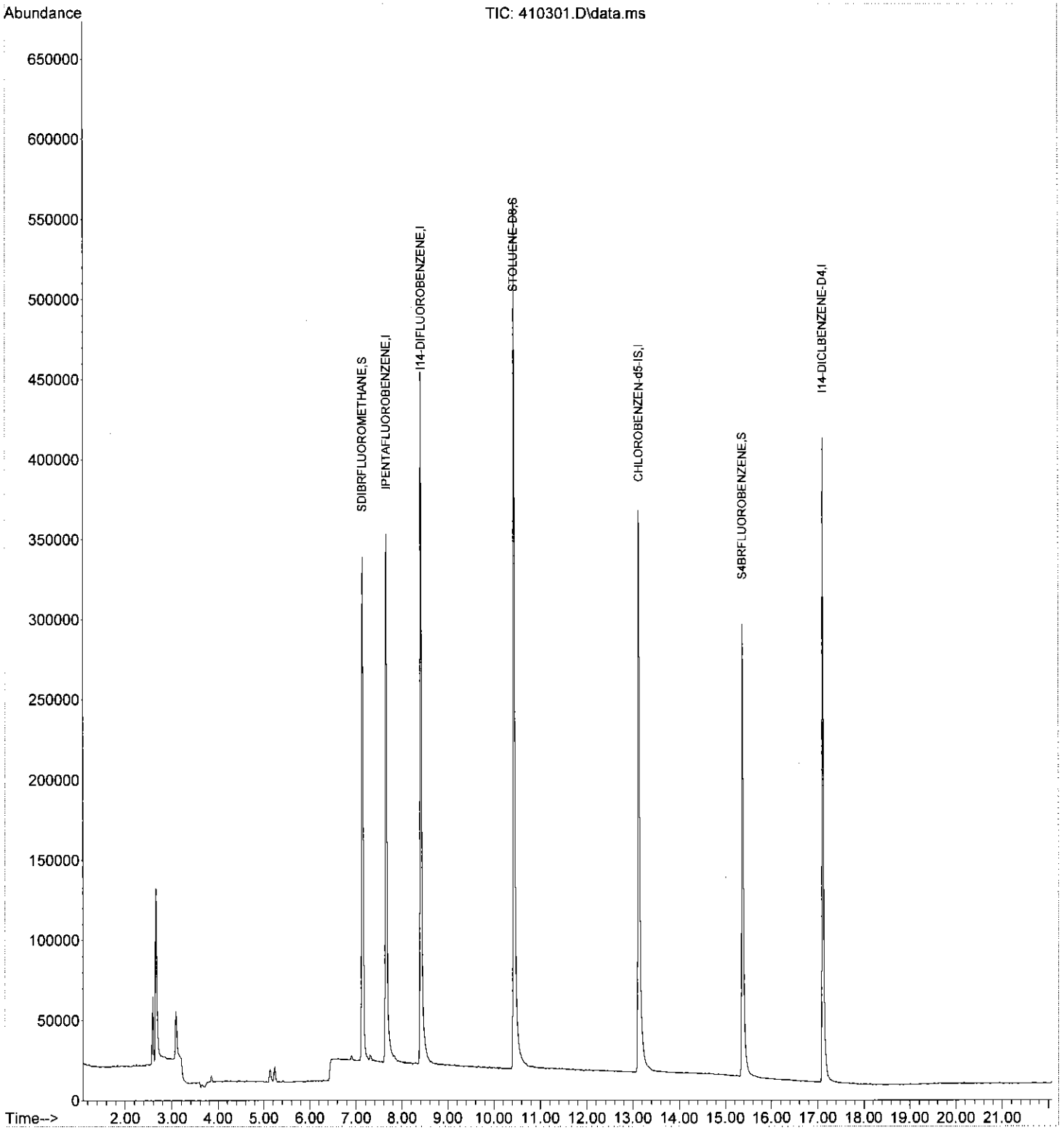
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.127	91	549	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.127	91	549	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.370	77	580	N.D.	
63) N-PROPYLBENZENE	15.370	91	420	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194103\
Data File : 410301.D
Acq On : 8 Dec 2017 11:23 am
Operator : KMOR
Sample : LRB/2769703
Misc : RUN194103
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 12 11:15:35 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410302.D
Acq On : 8 Dec 2017 11:49 am
Operator : KMOR
Sample : MDL0.5/2769705
Misc : RUN194103
ALS Vial : 3 Sample Multiplier: 1

DOU indentified peak that will results in false negative. DL 12/13/2017.

Quant Time: Dec 12 11:19:28 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	295975	20.00 µg/L	0.01
23) I14-DIFLUOROBENZENE	8.406	114	458490	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	415022	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.117	152	167029m (i)	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	228285	23.22 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 116.10%		
39) STOLUENE-D8	10.437	98	544556	19.74 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.70%		
59) S4BRFLUOROBENZENE	15.370	95	135953	17.95 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 89.75%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.884	85	2903	0.68 µg/L	93
3) CHLOROMETHANE	3.148	50	4745	1.25 µg/L #	83
4) VINYL CHLORIDE	3.253	62	1437	0.64 µg/L #	3
5) BROMOMETHANE	3.655	94	713	0.64 µg/L #	91
6) CHLOROETHANE	3.797	64	4756	4.45 µg/L #	87
7) TRICLFLUOROMETHANE	3.950	101	4317	0.83 µg/L #	96
8) ACROLEIN	4.884	56	2283	8.81 µg/L #	96
9) ACETONE	5.188	43	4012	5.57 µg/L #	86
10) 11-DICHLOROETHENE	4.528	61	1258	0.58 µg/L	97
11) IODOMETHANE	4.721	142	3130	0.83 µg/L	91
12) CARBON DISULFIDE	4.610	76	11675	2.55 µg/L #	95
13) ACRYLONITRILE	6.051	53	2902	1.43 µg/L #	96
14) DICHLOROMETHANE	5.148	84	4237	2.33 µg/L #	66
15) TRANS12DICLETHENE	5.330	96	1355	0.71 µg/L	94
16) 11-DICHLOROETHANE	6.000	63	2412	0.61 µg/L	99
17) VINYL ACETATE	6.224	43	10342	2.38 µg/L #	93
18) 2-BUTANONE	7.279	43	2957	1.20 µg/L #	82
19) CIS12DICHLOROETHENE	6.620	96	1554	0.43 µg/L	90
20) 22-DICHLOROPROPANE	6.741	77	2318	0.59 µg/L	97
21) CHLOROFORM	6.904	83	5123	0.58 µg/L #	99
22) BROMOCHLOROMETHANE	6.863	49	2508	0.55 µg/L #	78
25) TETRAHYDROFURAN	7.147	42	975	N.D.	
26) 111-TRICHLOROETHANE	7.198	97	3226	0.43 µg/L	96
27) 11-DICHLOROPROPENE	7.351	75	997	0.21 µg/L	94
28) 12-DICHLOROETHANE	7.919	62	2817	0.40 µg/L #	96
29) CARBONTETRACHLORIDE	7.127	117	3043	0.45 µg/L #	62
30) BENZENE	7.665	78	7643	0.43 µg/L #	72
31) TRICHLOROETHENE	8.416	132	2084	0.42 µg/L #	64
32) 12-DICHLOROPROPANE	9.147	63	1162	0.29 µg/L	96
33) DIBROMOMETHANE	9.026	174	1508	0.39 µg/L	97
34) BROMODICLMETHANE	9.208	83	2219	0.35 µg/L	92
35) 2-CLETHYLVINYLETHER	10.010	63	160	0.13 µg/L #	31
36) EPICHLOROHYDRIN	10.538	57	2757	4.16 µg/L	83
37) 4METHYL-2-PENTANONE	11.086	43	3642	0.67 µg/L #	76
38) CIS13DICLPROPENE	10.152	75	822	0.15 µg/L #	74
40) TOLUENE	10.528	91	6310	0.34 µg/L	98
41) TRANS13DICLPROPENE	11.188	75	794	0.15 µg/L #	61
42) 112-TRICHLOROETHANE	11.462	97	1630	0.32 µg/L	97
43) 2-HEXANONE	12.558	43	1162	0.33 µg/L #	57
44) 13-DICHLOROPROPANE	11.949	76	1349	0.19 µg/L	98
45) DIBRCHLOROMETHANE	11.797	129	1333	0.24 µg/L	92

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410302.D
Acq On : 8 Dec 2017 11:49 am
Operator : KMOR
Sample : MDL0.5/2769705
Misc : RUN194103
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 12 11:19:28 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

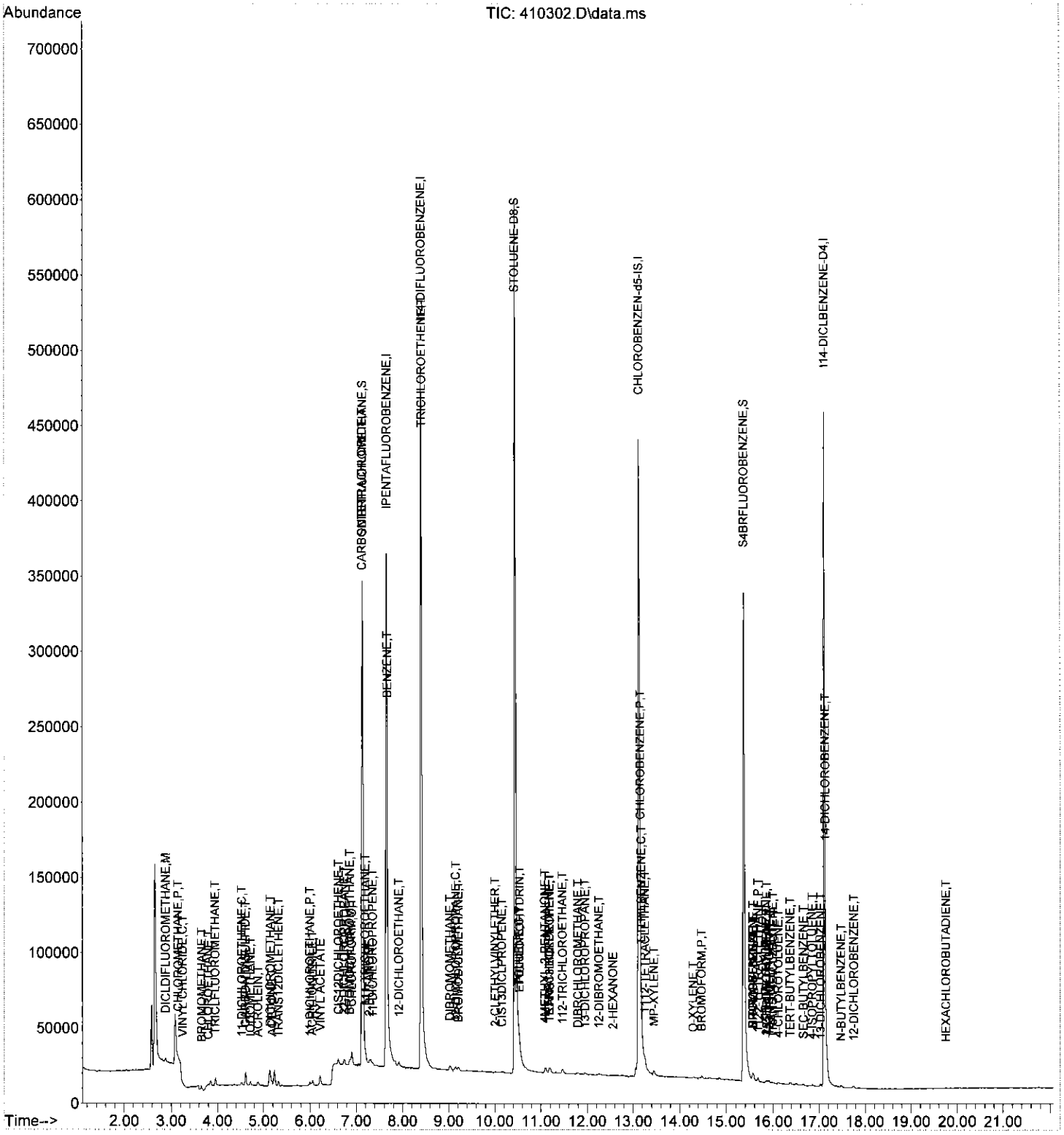
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.178	166	1637	0.29 µg/L	94
47) 12-DIBROMOETHANE	12.254	107	967	0.23 µg/L #	84
49) CHLOROBENZENE	13.157	112	5088	0.46 µg/L #	31
50) 1-CHLOROHEXANE	13.056	91	2135	N.D.	
51) 1112-TETRACLETHANE	13.259	131	1651	0.39 µg/L #	1
52) ETHYLBENZENE	13.178	91	6988	0.41 µg/L	78
53) MP-XYLENE	13.452	91	3719	0.33 µg/L	97
54) STYRENE	14.406	104	554	N.D.	
55) O-XYLENE	14.284	91	1251	0.12 µg/L #	81
56) BROMOFORM	14.477	173	953	0.28 µg/L	98
57) 1122-TETRACLETHANE	15.675	83	2262	0.38 µg/L #	93
58) ISOPROPYL BENZENE	14.863	105	1243	N.D.	
60) 123-TRICLPROPANE	15.919	110	330	0.19 µg/L	95
61) TRANS14DICL2BUTENE	16.000	53	405	0.58 µg/L #	15
62) BROMOBENZENE	15.563	77	2138	0.32 µg/L	90
63) N-PROPYLBENZENE	15.573	91	3057	0.19 µg/L	84
64) 2-CHLOROTOLUENE	15.858	91	1885	0.18 µg/L	73
65) 4-CHLOROTOLUENE	16.122	91	1039	0.11 µg/L	90
66) 135TRIMETHYLBENZENE	15.868	105	1291	0.10 µg/L	94
67) TERT-BUTYLBENZENE	16.375	119	1166	0.12 µg/L	83
68) 124TRIMETHYLBENZENE	16.497	105	1023	N.D.	
69) SEC-BUTYLBENZENE	16.660	105	1427	0.11 µg/L	70
70) 13-DICHLOROBENZENE	17.035	146	1388	0.20 µg/L	90
72) 4-ISOPROPYLTOLUENE	16.853	119	916	0.10 µg/L	86
73) 14-DICHLOROBENZENE	17.137	146	3413	0.50 µg/L #	1
74) 12-DICHLOROBENZENE	17.756	146	1392	0.23 µg/L	86
75) N-BUTYLBENZENE	17.482	91	1187	0.17 µg/L	81
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	19.878	180	135	N.D.	
78) NAPHTHALENE	20.365	128	66	N.D.	
79) HEXACHLOROBUTADIENE	19.756	225	470	0.30 µg/L #	76
80) 123-TRICLBENZENE	20.619	182	242	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410302.D
Acq On : 8 Dec 2017 11:49 am
Operator : KMOR
Sample : MDL0.5/2769705
Misc : RUN194103
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 12 11:19:28 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410303.D
Acq On : 8 Dec 2017 12:15 pm
Operator : KMOR
Sample : MDL1.0/2769705
Misc : RUN194103
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 12 11:21:48 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.655	168	301551	20.00	µg/L	0.01
23) I14-DIFLUOROBENZENE	8.406	114	471585	20.00	µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	453086	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	17.117	152	176877	20.00	µg/L	0.01
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.137	111	228335	22.58	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.90%			
39) STOLUENE-D8	10.437	98	564473	19.90	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.50%			
59) S4BRFLUOROBENZENE	15.370	95	143395	17.34	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 86.70%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.874	85	2998	0.69	µg/L	98
3) CHLOROMETHANE	3.148	50	5537	1.43	µg/L #	87
4) VINYL CHLORIDE	3.253	62	1749	0.77	µg/L #	84
5) BROMOMETHANE	3.645	94	1096	0.96	µg/L	90
6) CHLOROETHANE	3.787	64	3923	3.60	µg/L #	84
7) TRICLFLUOROMETHANE	3.950	101	4507	0.85	µg/L	97
8) ACROLEIN	4.884	56	4058	15.36	µg/L	96
9) ACETONE	5.188	43	5084	6.93	µg/L #	93
10) 11-DICHLOROETHENE	4.528	61	2044	0.93	µg/L	99
11) IODOMETHANE	4.711	142	6364	1.66	µg/L	92
12) CARBON DISULFIDE	4.610	76	18572	3.99	µg/L #	93
13) ACRYLONITRILE	6.051	53	5557	2.68	µg/L	99
14) DICHLOROMETHANE	5.148	84	4120	2.22	µg/L #	60
15) TRANS12DICLETHENE	5.330	96	2118	1.10	µg/L	96
16) 11-DICHLOROETHANE	6.000	63	4309	1.08	µg/L	97
17) VINYL ACETATE	6.213	43	18809	4.25	µg/L #	92
18) 2-BUTANONE	7.279	43	5887	2.34	µg/L #	88
19) CIS12DICHLOROETHENE	6.620	96	2525	0.69	µg/L	96
20) 22-DICHLOROPROPANE	6.741	77	3747	0.93	µg/L	96
21) CHLOROFORM	6.904	83	8057	0.89	µg/L #	97
22) BROMOCHLOROMETHANE	6.863	49	4374	0.94	µg/L #	81
25) TETRAHYDROFURAN	7.147	42	1858	0.15	µg/L #	85
26) 111-TRICHLOROETHANE	7.198	97	5448	0.71	µg/L	99
27) 11-DICHLOROPROPENE	7.351	75	2001	0.41	µg/L	96
28) 12-DICHLOROETHANE	7.919	62	5156	0.71	µg/L	97
29) CARBONTETRACHLORIDE	7.127	117	4922	0.71	µg/L #	74
30) BENZENE	7.665	78	13696	0.76	µg/L #	84
31) TRICHLOROETHENE	8.416	132	3839	0.76	µg/L #	78
32) 12-DICHLOROPROPANE	9.147	63	2416	0.58	µg/L	98
33) DIBROMOMETHANE	9.026	174	2799	0.70	µg/L	95
34) BROMODICLMETHANE	9.208	83	4307	0.66	µg/L	93
35) 2-CLETHYLVINYLETHER	10.010	63	635	0.48	µg/L #	49
36) EPICHLOROHYDRIN	10.538	57	5640	8.28	µg/L	91
37) 4METHYL-2-PENTANONE	11.086	43	8112	1.45	µg/L #	81
38) CIS13DICLPROPENE	10.152	75	1713	0.30	µg/L #	81
40) TOLUENE	10.528	91	11585	0.61	µg/L	95
41) TRANS13DICLPROPENE	11.188	75	1794	0.34	µg/L	74
42) 112-TRICHLOROETHANE	11.462	97	3078	0.59	µg/L	98
43) 2-HEXANONE	12.548	43	2512	0.69	µg/L #	72
44) 13-DICHLOROPROPANE	11.949	76	2970	0.41	µg/L	99
45) DIBRCHLOROMETHANE	11.797	129	2628	0.47	µg/L	95

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410303.D
Acq On : 8 Dec 2017 12:15 pm
Operator : KMOR
Sample : MDL1.0/2769705
Misc : RUN194103
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 12 11:21:48 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.188	166	2743	0.46 µg/L	93
47) 12-DIBROMOETHANE	12.254	107	2070	0.48 µg/L #	86
49) CHLOROBENZENE	13.157	112	9782	0.80 µg/L #	60
50) 1-CHLOROHEXANE	13.168	91	16642m ①	0.33 µg/L	
51) 1112-TETRACLETHANE	13.259	131	3226	0.70 µg/L #	1
52) ETHYLBENZENE	13.168	91	11974	0.64 µg/L	85
53) MP-XYLENE	13.452	91	7481	0.61 µg/L	95
54) STYRENE	14.416	104	1129	0.12 µg/L	84
55) O-XYLENE	14.284	91	2556	0.22 µg/L	84
56) BROMOFORM	14.477	173	1774	0.47 µg/L	98
57) 1122-TETRACLETHANE	15.675	83	4412	0.68 µg/L	98
58) ISOPROPYL BENZENE	14.853	105	2624	0.18 µg/L	93
60) 123-TRICLPROPANE	15.919	110	1094	0.58 µg/L	94
61) TRANS14DICL2BUTENE	15.980	53	1143	1.50 µg/L #	72
62) BROMOBENZENE	15.563	77	3972	0.54 µg/L	94
63) N-PROPYLBENZENE	15.573	91	5807	0.34 µg/L	91
64) 2-CHLOROTOLUENE	15.848	91	3767	0.33 µg/L	98
65) 4-CHLOROTOLUENE	16.122	91	2673	0.25 µg/L	95
66) 135TRIMETHYLBENZENE	15.878	105	3025	0.22 µg/L	93
67) TERT-BUTYLBENZENE	16.375	119	2131	0.20 µg/L	92
68) 124TRIMETHYLBENZENE	16.497	105	2069	0.17 µg/L #	90
69) SEC-BUTYLBENZENE	16.660	105	3144	0.22 µg/L	94
70) 13-DICHLOROBENZENE	17.025	146	2792	0.36 µg/L	98
72) 4-ISOPROPYLTOLUENE	16.853	119	1890	0.20 µg/L	89
73) 14-DICHLOROBENZENE	17.137	146	6504	0.90 µg/L #	1
74) 12-DICHLOROBENZENE	17.756	146	2846	0.45 µg/L	96
75) N-BUTYLBENZENE	17.482	91	2348	0.32 µg/L	89
76) 12-DIBR-3CLPROPANE	18.883	157	74	0.10 µg/L	75
77) 124-TRICLBENZENE	19.868	180	707	0.20 µg/L #	60
78) NAPHTHALENE	20.355	128	1121	0.14 µg/L	71
79) HEXACHLOROBUTADIENE	19.756	225	904	0.54 µg/L	96
80) 123-TRICLBENZENE	20.619	182	888	0.26 µg/L	89

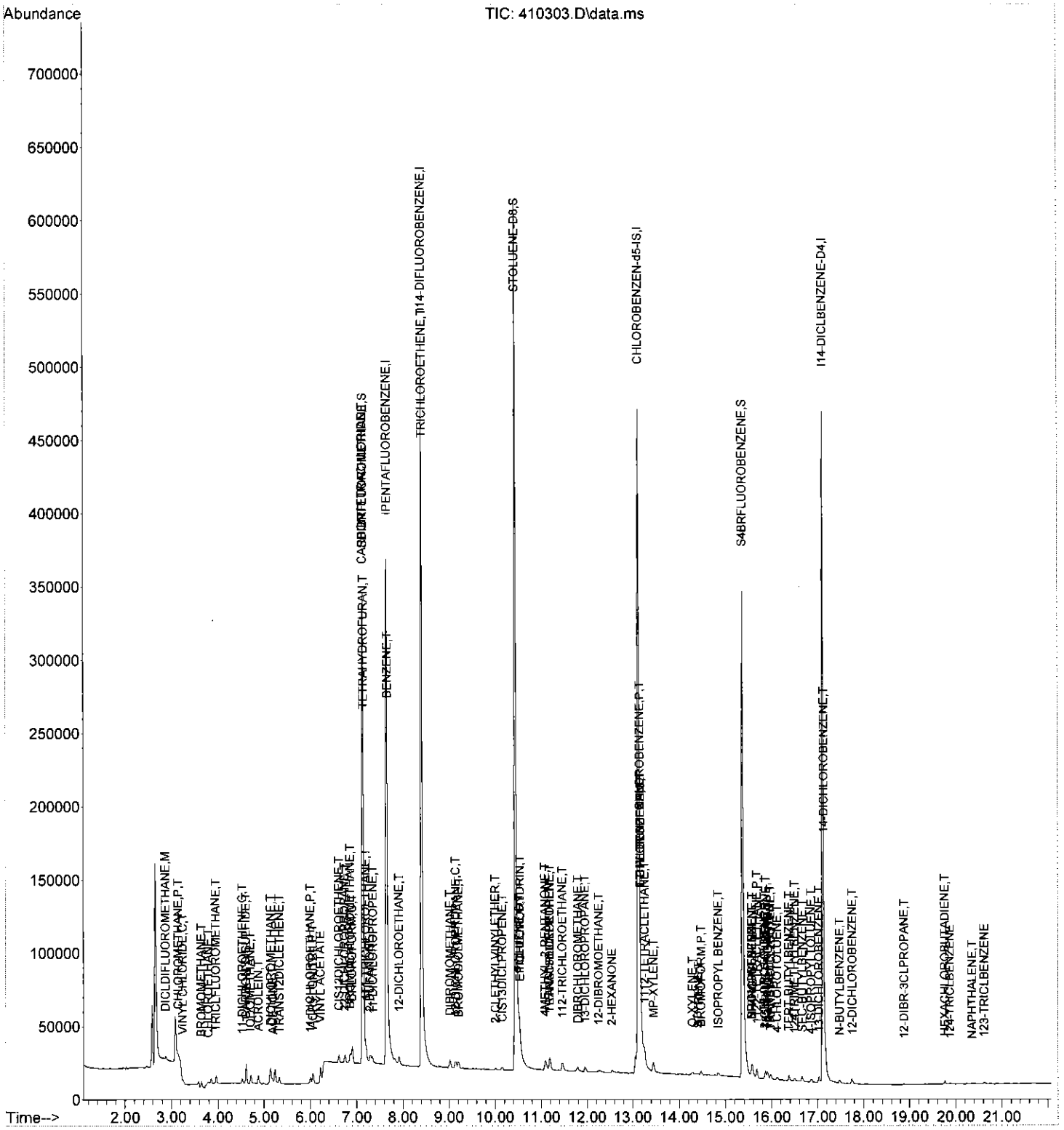
(#) = qualifier out of range (m) = manual integration (+) = signals summed

① Unidentified peak that will result in false negative. DL 12/12/17.

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410303.D
Acq On : 8 Dec 2017 12:15 pm
Operator : KMOR
Sample : MDL1.0/2769705
Misc : RUN194103
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 12 11:21:48 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410304.D
Acq On : 8 Dec 2017 12:41 pm
Operator : KMOR
Sample : ICV/2769704
Misc : RUN194103
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 12 13:28:44 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

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	99	0.01
2	M	DICLDIFLUOROMETHANE	20.000	21.571	-7.9	91	0.01
3	P,T	CHLOROMETHANE	20.000	20.850	-4.3	93	0.02
4	C,T	VINYL CHLORIDE	20.000	23.707	-18.5	109	0.00
5	T	BROMOMETHANE	20.000	16.273	18.6	75	0.01
6	T	CHLOROETHANE	20.000	21.339	-6.7	100	0.02
7	T	TRICLFLUOROMETHANE	20.000	23.785	-18.9	105	0.02
8	T	ACROLEIN	500.000	450.190	10.0	95	0.01
9	T	ACETONE	100.000	86.726	13.3	90	0.00
10	C,T	11-DICHLOROETHENE	20.000	16.966	15.2	101	0.02
11	T	IODOMETHANE	100.000	49.218	50.8#	55	0.01
12	T	CARBON DISULFIDE	100.000	114.962	-15.0	135	0.01
13	T	ACRYLONITRILE	100.000	87.042	13.0	99	0.01
14	T	DICHLOROMETHANE	20.000	21.694	-8.5	101	0.01
15	T	TRANS12DICLETHENE	20.000	18.600	7.0	96	0.01
16	P,T	11-DICHLOROETHANE	20.000	18.043	9.8	104	0.01
17		VINYL ACETATE	100.000	85.077	14.9	82	0.01
18		2-BUTANONE	100.000	91.043	9.0	95	0.01
19	T	CIS12DICHLOROETHENE	20.000	16.025	19.9	78	0.01
20	T	22-DICHLOROPROPANE	20.000	19.001	5.0	92	0.00
21	C,T	CHLOROFORM	20.000	15.172	24.1	87	0.00
22	T	BROMOCHLOROMETHANE	20.000	21.578	-7.9	121	0.00
23	I	I14-DIFLUOROBENZENE	20.000	20.000	0.0	91	0.01
24	S	SDIBRFLUOROMETHANE	20.000	20.875	-4.4	90	0.00
25	T	TETRAHYDROFURAN	20.000	18.848	5.8	83	0.01
26	T	111-TRICHLOROETHANE	20.000	20.082	-0.4	95	0.00
27	T	11-DICHLOROPROPENE	20.000	16.898	15.5	73	0.00
28	T	12-DICHLOROETHANE	20.000	16.450	17.8	83	0.00
29	T	CARBONTETRACHLORIDE	20.000	17.580	12.1	83	0.00
30	T	BENZENE	20.000	16.932	15.3	85	0.00
31	T	TRICHLOROETHENE	20.000	17.290	13.6	82	0.00
32	C,T	12-DICHLOROPROPANE	20.000	17.258	13.7	78	0.00
33	T	DIBROMOMETHANE	20.000	16.037	19.8	78	0.01
34	T	BROMODICLMETHANE	20.000	17.300	13.5	80	0.00
35	T	2-CLETHYLVINYLETHER	100.000	112.140	-12.1	116	0.00
36	T	EPICHLOROHYDRIN	500.000	442.354	11.5	80	0.00
37	T	4METHYL-2-PENTANONE	100.000	80.844	19.2	68	0.00
38	T	CIS13DICLPROPENE	20.000	16.488	17.6	73	0.01
39	S	STOLUENE-D8	20.000	23.551	-17.8	106	0.00
40	C,T	TOLUENE	20.000	17.657	11.7	81	0.00
41	T	TRANS13DICLPROPENE	20.000	17.041	14.8	78	0.00
42	T	112-TRICHLOROETHANE	20.000	17.067	14.7	80	0.00
43		2-HEXANONE	100.000	95.554	4.4	81	0.00
44	T	13-DICHLOROPROPANE	20.000	16.608	17.0	74	0.01
45	T	DIBRCHLOROMETHANE	20.000	17.486	12.6	84	0.00
46	T	TETRACHLOROETHENE	20.000	18.131	9.3	82	0.00
47	T	12-DIBROMOETHANE	20.000	18.230	8.8	90	0.01
48	I	CHLOROBENZEN-d5-IS	20.000	20.000	0.0	91	0.00
49	P,T	CHLOROBENZENE	20.000	17.575	12.1	79	0.00
50		1-CHLOROHEXANE	20.000	19.886	0.6	80	-0.03

Evaluate Continuing Calibration Report

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410304.D
Acq On : 8 Dec 2017 12:41 pm
Operator : KMOR
Sample : ICV/2769704
Misc : RUN194103
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 12 13:28:44 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

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)
51	T	1112-TETRACLETHANE	20.000	16.658	16.7	77	-0.01
52	C,T	ETHYLBENZENE	20.000	16.450	17.8	70	0.00
53	T	MP-XYLENE	40.000	36.311	9.2	75	0.00
54	T	STYRENE	20.000	16.639	16.8	77	0.01
55	T	O-XYLENE	20.000	16.325	18.4	77	0.00
56	P,T	BROMOFORM	20.000	16.065	19.7	74	0.00
57	P,T	1122-TETRACLETHANE	20.000	16.490	17.6	79	0.00
58	T	ISOPROPYL BENZENE	20.000	16.044	19.8	73	0.00
59	S	S4BRFLUOROBENZENE	20.000	22.239	-11.2	102	0.00
60	T	123-TRICLPROPANE	20.000	16.677	16.6	79	0.01
61	T	TRANS14DICL2BUTENE	100.000	85.302	14.7	84	0.00
62	T	BROMOBENZENE	20.000	17.127	14.4	80	0.01
63	T	N-PROPYLBENZENE	20.000	17.189	14.1	78	0.01
64	T	2-CHLOROTOLUENE	20.000	17.469	12.7	77	0.01
65	T	4-CHLOROTOLUENE	20.000	16.534	17.3	79	0.00
66	T	135TRIMETHYLBENZENE	20.000	17.607	12.0	80	0.00
67	T	TERT-BUTYLBENZENE	20.000	16.977	15.1	76	0.00
68	T	124TRIMETHYLBENZENE	20.000	17.531	12.3	79	0.01
69	T	SEC-BUTYLBENZENE	20.000	17.359	13.2	77	0.01
70	T	13-DICHLOROBENZENE	20.000	17.153	14.2	76	0.00
71	I	I14-DICLBENZENE-D4	20.000	20.000	0.0	71	0.00
72	T	4-ISOPROPYLTOLUENE	20.000	21.981	-9.9	76	0.01
73	T	14-DICHLOROBENZENE	20.000	20.760	-3.8	79	0.00
74	T	12-DICHLOROBENZENE	20.000	19.599	2.0	71	0.00
75	T	N-BUTYLBENZENE	20.000	22.321	-11.6	77	0.00
76	T	12-DIBR-3CLPROPANE	20.000	16.540	17.3	61	0.01
77		124-TRICLBENZENE	20.000	21.146	-5.7	79	0.01
78	T	NAPHTHALENE	20.000	21.984	-9.9	81	0.02
79	T	HEXACHLOROBUTADIENE	20.000	17.242	13.8	62	0.01
80		123-TRICLBENZENE	20.000	16.566	17.2	59	0.01

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410304.D
Acq On : 8 Dec 2017 12:41 pm
Operator : KMOR
Sample : ICV/2769704
Misc : RUN194103
ALS Vial : 5 Sample Multiplier: 1

OOmr - integration of peak due noisy baseline. DL 12/12/17.

Quant Time: Dec 12 14:14:52 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,62
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Poor integration of peak by computer data system. DL 12/12/17

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	363748	20.00 µg/L	0.01
23) I14-DIFLUOROBENZENE	8.406	114	454793m	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	499294m	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.106	152	190015m	20.00 µg/L	0.00
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.127	111	203615m	20.87 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.35%		
39) STOLUENE-D8	10.437	98	549114m	20.07 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.35%		
59) S4BRFLUOROBENZENE	15.360	95	202635	22.24 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.20%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.874	85	112983	21.57 µg/L	100
3) CHLOROMETHANE	3.148	50	97510	20.85 µg/L	98
4) VINYL CHLORIDE	3.253	62	65353	23.71 µg/L	100
5) BROMOMETHANE	3.645	94	22408	16.27 µg/L	100
6) CHLOROETHANE	3.787	64	28028m	21.34 µg/L	
7) TRICLFLUOROMETHANE	3.950	101	152428m	23.79 µg/L	
8) ACROLEIN	4.884	56	143423m	450.19 µg/L	
9) ACETONE	5.178	43	76753	86.73 µg/L #	93
10) 11-DICHLOROETHENE	4.528	61	45162m	16.97 µg/L	
11) IODOMETHANE	4.711	142	228116	49.22 µg/L	89
12) CARBON DISULFIDE	4.610	76	645624m	114.96 µg/L	
13) ACRYLONITRILE	6.051	53	217501m	87.04 µg/L	
14) DICHLOROMETHANE	5.148	84	48561	21.69 µg/L	91
15) TRANS12DICLETHENE	5.320	96	43366	18.60 µg/L	96
16) 11-DICHLOROETHANE	6.000	63	87131	18.04 µg/L	98
17) VINYL ACETATE	6.213	43	454153	85.08 µg/L #	96
18) 2-BUTANONE	7.269	43	276403m	91.04 µg/L	
19) CIS12DICHLOROETHENE	6.620	96	70967	16.03 µg/L	96
20) 22-DICHLOROPROPANE	6.741	77	92147	19.00 µg/L	99
21) CHLOROFORM	6.904	83	190518m	17.41 µg/L	
22) BROMOCHLOROMETHANE	6.853	49	120701m	21.58 µg/L	
25) TETRAHYDROFURAN	7.147	42	231006m	18.85 µg/L	
26) 111-TRICHLOROETHANE	7.198	97	149346m	20.08 µg/L	
27) 11-DICHLOROPROPENE	7.340	75	80083m	16.90 µg/L	
28) 12-DICHLOROETHANE	7.909	62	115250	16.45 µg/L	99
29) CARBONTETRACHLORIDE	7.127	117	117897	17.58 µg/L	100
30) BENZENE	7.655	78	295706	16.93 µg/L	98
31) TRICHLOROETHENE	8.406	132	84407	17.29 µg/L #	96
32) 12-DICHLOROPROPANE	9.137	63	69479	17.26 µg/L	97
33) DIBROMOMETHANE	9.015	174	61775	16.04 µg/L	98
34) BROMODICLMETHANE	9.198	83	109491	17.30 µg/L	99
35) 2-CLETHYLVINYLETHER	9.980	63	142206m	112.14 µg/L	
36) EPICHLOROHYDRIN	10.518	57	290638m	442.35 µg/L	
37) 4METHYL-2-PENTANONE	11.076	43	437223	80.84 µg/L	94
38) CIS13DICLPROPENE	10.142	75	91488	16.49 µg/L	95
40) TOLUENE	10.518	91	323199	17.66 µg/L	97
41) TRANS13DICLPROPENE	11.168	75	87260	17.04 µg/L	89
42) 112-TRICHLOROETHANE	11.452	97	85195	17.07 µg/L	99
43) 2-HEXANONE	12.518	43	333282m	95.55 µg/L	
44) 13-DICHLOROPROPANE	11.939	76	114656	16.61 µg/L	96
45) DIBRCHLOROMETHANE	11.787	129	95120m	17.49 µg/L	

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410304.D
Acq On : 8 Dec 2017 12:41 pm
Operator : KMOR
Sample : ICV/2769704
Misc : RUN194103
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 12 14:14:52 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

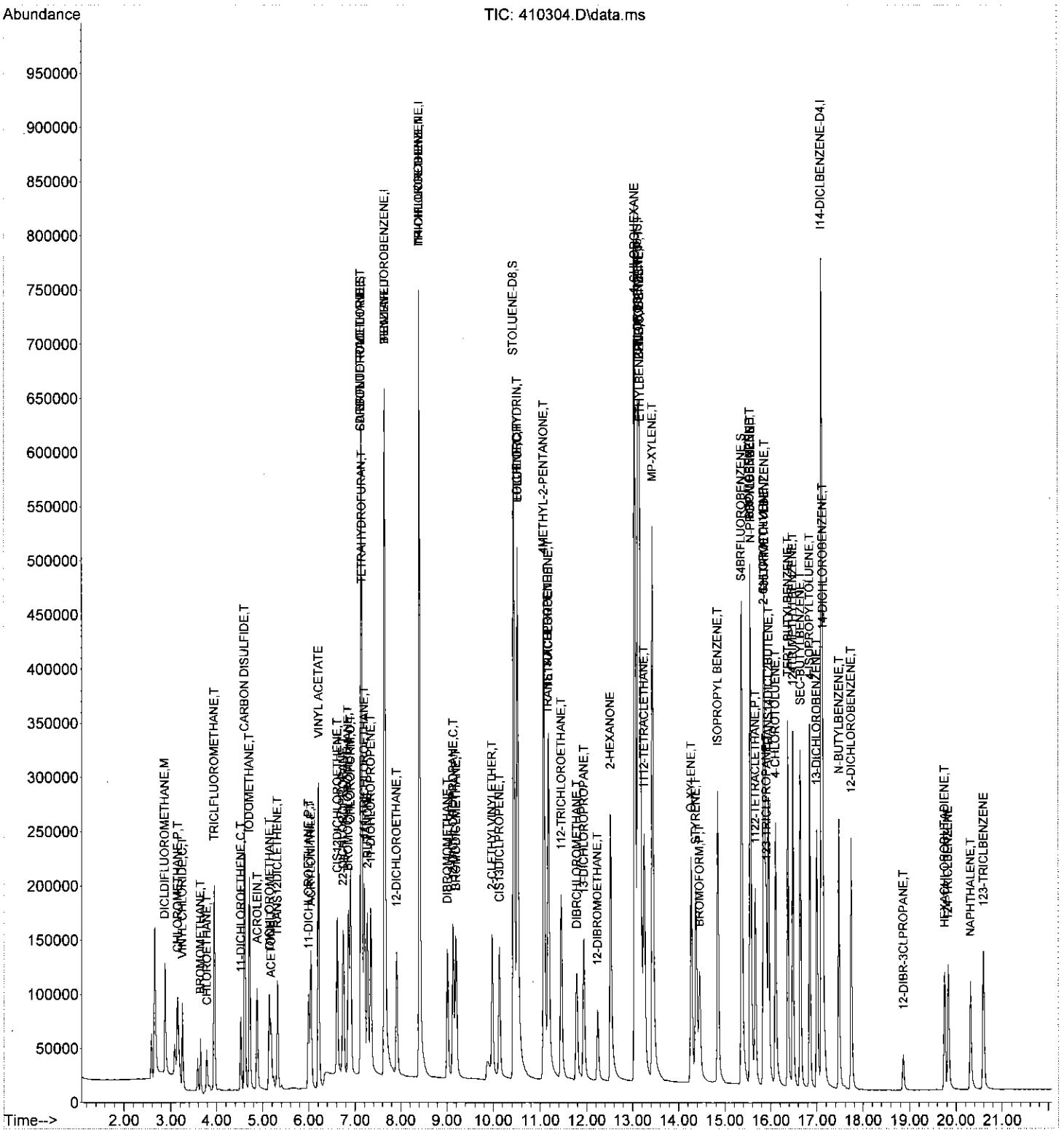
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.178	166	103284	18.13 µg/L	98
47) 12-DIBROMOETHANE	12.234	107	76566m	18.23 µg/L	
49) CHLOROBENZENE	13.157	112	235519	17.57 µg/L	96
50) 1-CHLOROHEXANE	13.056	91	1098406m	19.89 µg/L	
51) 1112-TETRACLETHANE	13.249	131	84917	16.66 µg/L	85
52) ETHYLBENZENE	13.168	91	337222	16.45 µg/L	100
53) MP-XYLENE	13.431	91	487695	36.31 µg/L	99
54) STYRENE	14.376	104	168007m	16.64 µg/L	
55) O-XYLENE	14.274	91	213221m	16.33 µg/L	
56) BROMOFORM	14.457	173	66439	16.06 µg/L	99
57) 1122-TETRACLETHANE	15.665	83	118651	16.49 µg/L	99
58) ISOPROPYL BENZENE	14.843	105	252452	16.04 µg/L	98
60) 123-TRICLPROPANE	15.909	110	34862	16.68 µg/L	93
61) TRANS14DICL2BUTENE	15.949	53	71540	85.30 µg/L	85
62) BROMOBENZENE	15.553	77	138974	17.13 µg/L	97
63) N-PROPYLBENZENE	15.563	91	325374	17.19 µg/L	97
64) 2-CHLOROTOLUENE	15.848	91	221172	17.47 µg/L	86
65) 4-CHLOROTOLUENE	16.101	91	191836	16.53 µg/L	99
66) 135TRIMETHYLBENZENE	15.868	105	266391	17.61 µg/L	99
67) TERT-BUTYLBENZENE	16.375	119	195178	16.98 µg/L	99
68) 124TRIMETHYLBENZENE	16.487	105	240183	17.53 µg/L	99
69) SEC-BUTYLBENZENE	16.650	105	273991	17.36 µg/L	97
70) 13-DICHLOROBENZENE	17.005	146	146536	17.15 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.853	119	223056	21.98 µg/L	99
73) 14-DICHLOROBENZENE	17.137	146	160606	20.76 µg/L	92
74) 12-DICHLOROBENZENE	17.736	146	134194	19.60 µg/L	99
75) N-BUTYLBENZENE	17.472	91	176611	22.32 µg/L	98
76) 12-DIBR-3CLPROPANE	18.863	157	12642m	16.54 µg/L	
77) 124-TRICLBENZENE	19.827	180	79517m	21.15 µg/L	
78) NAPHTHALENE	20.314	128	185171m	21.98 µg/L	
79) HEXACHLOROBUTADIENE	19.756	225	30914m	17.24 µg/L	
80) 123-TRICLBENZENE	20.599	182	61450	16.57 µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410304.D
Acq On : 8 Dec 2017 12:41 pm
Operator : KMOR
Sample : ICV/2769704
Misc : RUN194103
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 12 14:14:52 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410305.D
Acq On : 8 Dec 2017 1:07 pm
Operator : KMOR
Sample : TB/2760990
Misc : RUN194103
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 12 13:30:56 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	321720	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.406	114	491089	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	391273	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.116	152	160237	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	236606	22.46 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.30%		
39) STOLUENE-D8	10.437	98	553570	18.74 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 93.70%		
59) S4BRFLUOROBENZENE	15.370	95	136934	19.18 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.90%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.884	85	319	N.D.	
3) CHLOROMETHANE	3.148	50	1343	N.D.	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	3.655	94	233	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	3.960	101	386	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.721	142	332	N.D.	
12) CARBON DISULFIDE	0.000		0	N.D.	d
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	d
15) TRANS12DICLETHENE	5.330	96	252	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.213	43	78	N.D.	
18) 2-BUTANONE	7.279	43	403	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	6.640	77	341	N.D.	
21) CHLOROFORM	6.904	83	627	N.D.	
22) BROMOCHLOROMETHANE	6.904	49	219	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	7.046	117	537	N.D.	
30) BENZENE	7.655	78	236	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	10.650		0	N.D.	
37) 4METHYL-2-PENTANONE	11.117	43	66	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.528	91	559	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410305.D
Acq On : 8 Dec 2017 1:07 pm
Operator : KMOR
Sample : TB/2760990
Misc : RUN194103
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 12 13:30:56 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

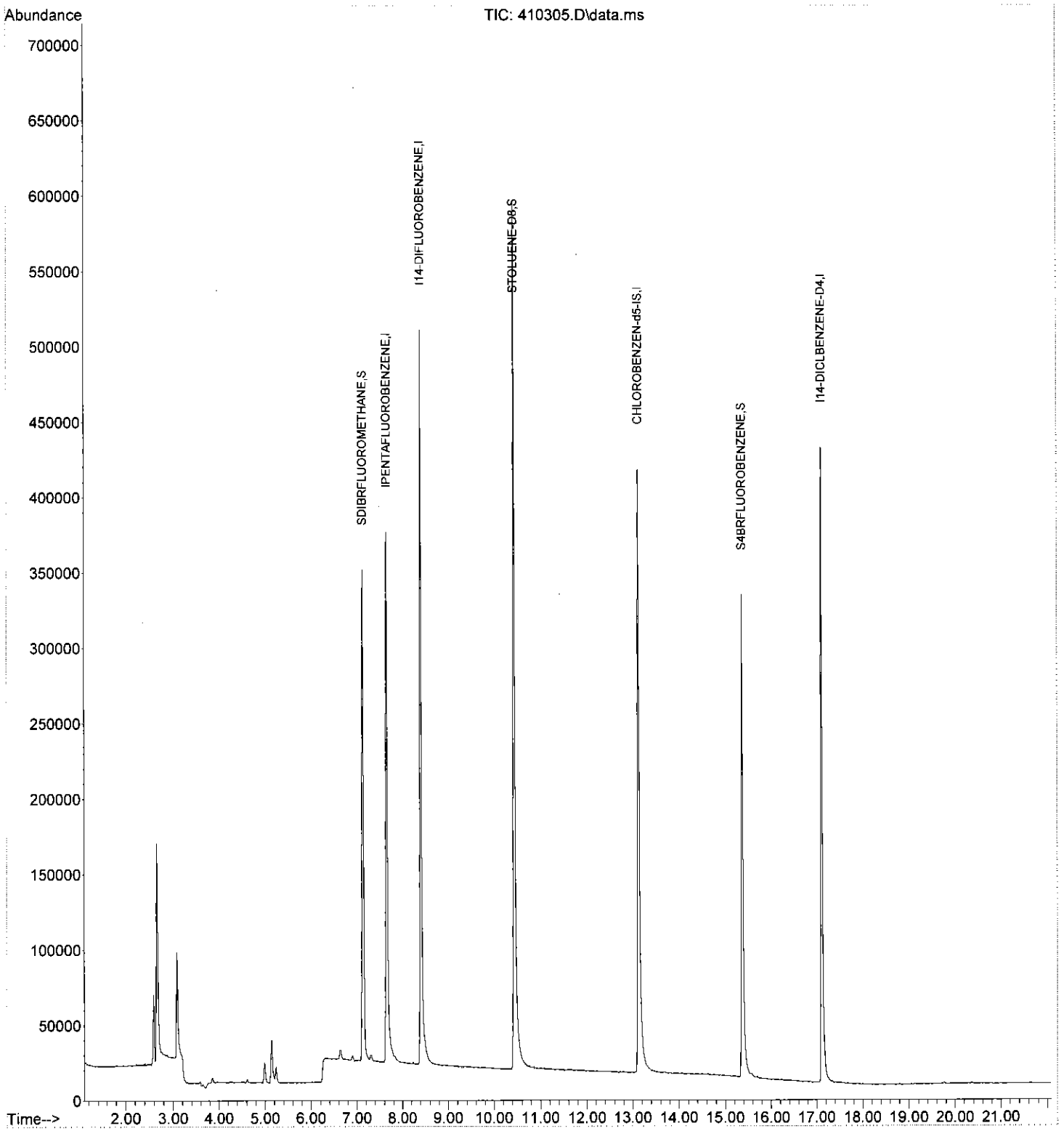
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46)	TETRACHLOROETHENE	0.000		0	N.D.	
47)	12-DIBROMOETHANE	0.000		0	N.D.	
49)	CHLOROBENZENE	13.147	112	436	N.D.	
50)	1-CHLOROHEXANE	13.076	91	213	N.D.	
51)	1112-TETRACLETHANE	0.000		0	N.D.	
52)	ETHYLBENZENE	13.127	91	907	N.D.	
53)	MP-XYLENE	13.452	91	454	N.D.	
54)	STYRENE	0.000		0	N.D.	
55)	O-XYLENE	0.000		0	N.D.	
56)	BROMOFORM	0.000		0	N.D.	
57)	1122-TETRACLETHANE	0.000		0	N.D.	
58)	ISOPROPYL BENZENE	0.000		0	N.D.	
60)	123-TRICLPROPANE	0.000		0	N.D.	
61)	TRANS14DICL2BUTENE	0.000		0	N.D.	
62)	BROMOBENZENE	15.553	77	373	N.D.	
63)	N-PROPYLBENZENE	15.584	91	849	N.D.	
64)	2-CHLOROTOLUENE	15.858	91	258	N.D.	
65)	4-CHLOROTOLUENE	16.132	91	69	N.D.	
66)	135TRIMETHYLBENZENE	15.868	105	191	N.D.	
67)	TERT-BUTYLBENZENE	0.000		0	N.D.	
68)	124TRIMETHYLBENZENE	16.507	105	138	N.D.	
69)	SEC-BUTYLBENZENE	16.649	105	437	N.D.	
70)	13-DICHLOROBENZENE	17.035	146	426	N.D.	
72)	4-ISOPROPYLTOLUENE	16.852	119	387	N.D.	
73)	14-DICHLOROBENZENE	17.137	146	1692	N.D.	
74)	12-DICHLOROBENZENE	17.756	146	397	N.D.	
75)	N-BUTYLBENZENE	17.492	91	904	N.D.	
76)	12-DIBR-3CLPROPANE	0.000		0	N.D.	
77)	124-TRICLBENZENE	19.888	180	219	N.D.	
78)	NAPHTHALENE	20.365	128	574	N.D.	
79)	HEXACHLOROBUTADIENE	19.746	225	555	N.D.	
80)	123-TRICLBENZENE	20.629	182	312	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410305.D
Acq On : 8 Dec 2017 1:07 pm
Operator : KMOR
Sample : TB/2760990
Misc : RUN194103
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 12 13:30:56 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410306.D
Acq On : 8 Dec 2017 1:33 pm
Operator : KMOR
Sample : 2760986
Misc : RUN194103
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 12 13:32:33 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.655	168	294646	20.00	µg/L	0.01
23) I14-DIFLUOROBENZENE	8.406	114	458124	20.00	µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.137	117	361040	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	17.117	152	146579	20.00	µg/L	0.01
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.137	111	227104	23.11	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.55%			
39) STOLUENE-D8	10.437	98	527950	19.15	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.75%			
59) S4BRFLUOROBENZENE	15.370	95	127672	19.38	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.90%			

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	3.148	50	1064	N.D.
4) VINYL CHLORIDE	0.000		0	N.D.
5) BROMOMETHANE	0.000		0	N.D.
6) CHLOROETHANE	0.000		0	N.D. d
7) TRICLFLUOROMETHANE	0.000		0	N.D.
8) ACROLEIN	0.000		0	N.D.
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	0.000		0	N.D.
11) IODOMETHANE	4.731	142	256	N.D.
12) CARBON DISULFIDE	4.609	76	1375	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	0.000		0	N.D. d
15) TRANS12DICLETHENE	5.239	96	216	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	7.279	43	640	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.904	83	152	N.D.
22) BROMOCHLOROMETHANE	6.904	49	216	N.D.
25) TETRAHYDROFURAN	7.147	42	575	N.D.
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D.
28) 12-DICHLOROETHANE	0.000		0	N.D.
29) CARBONTETRACHLORIDE	7.056	117	443	N.D.
30) BENZENE	0.000		0	N.D.
31) TRICHLOROETHENE	0.000		0	N.D.
32) 12-DICHLOROPROPANE	0.000		0	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	0.000		0	N.D.
35) 2-CLETHYLVINYLETHER	0.000		0	N.D. d
36) EPICHLOROHYDRIN	0.000		0	N.D. d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.
40) TOLUENE	0.000		0	N.D.
41) TRANS13DICLPROPENE	0.000		0	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	0.000		0	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.
45) DIBRCHLOROMETHANE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410306.D
Acq On : 8 Dec 2017 1:33 pm
Operator : KMOR
Sample : 2760986
Misc : RUN194103
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 12 13:32:33 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

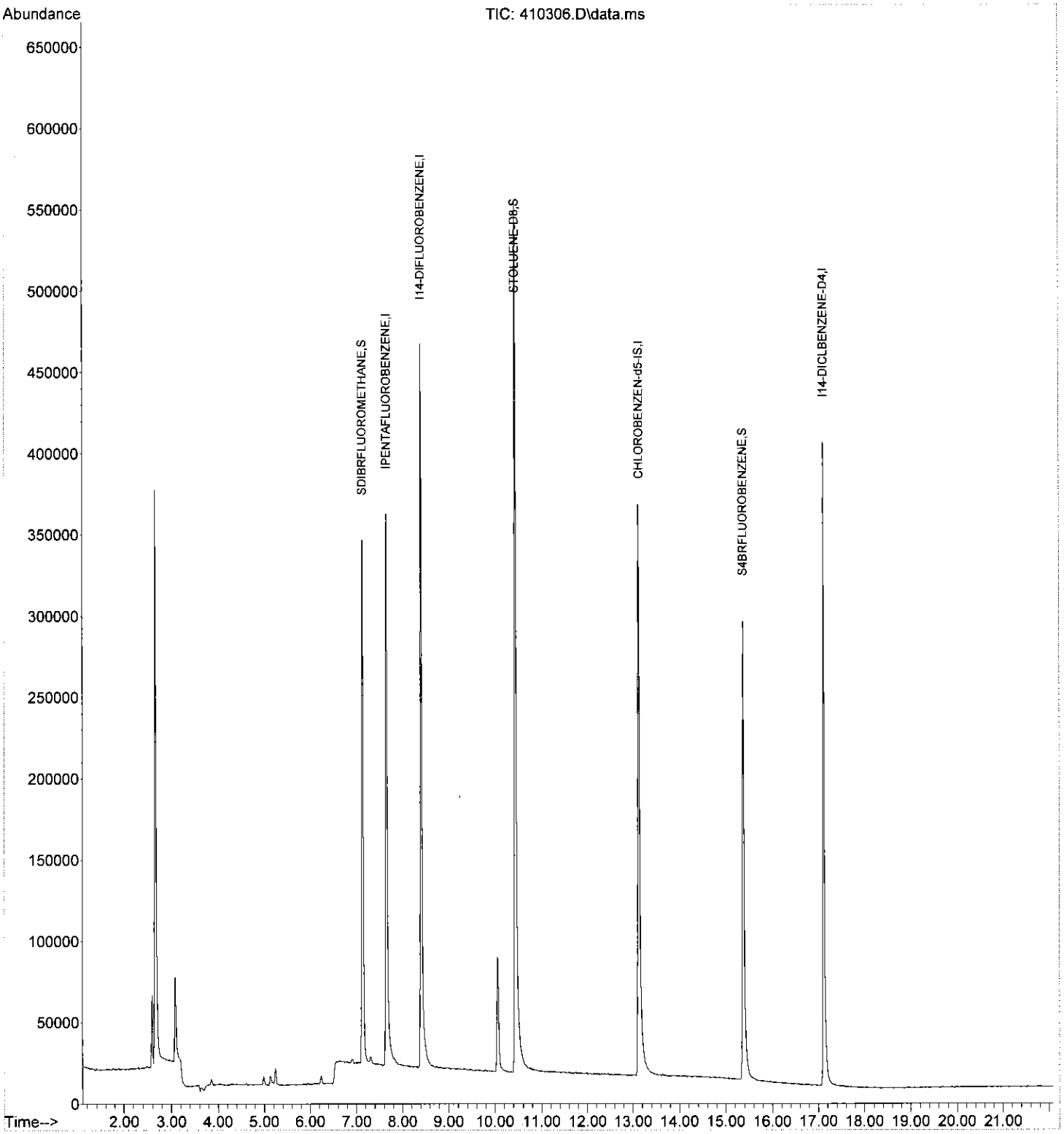
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.137	91	507	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.137	91	507	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.370	77	769	N.D.	
63) N-PROPYLBENZENE	15.584	91	66	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	17.127	146	322	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

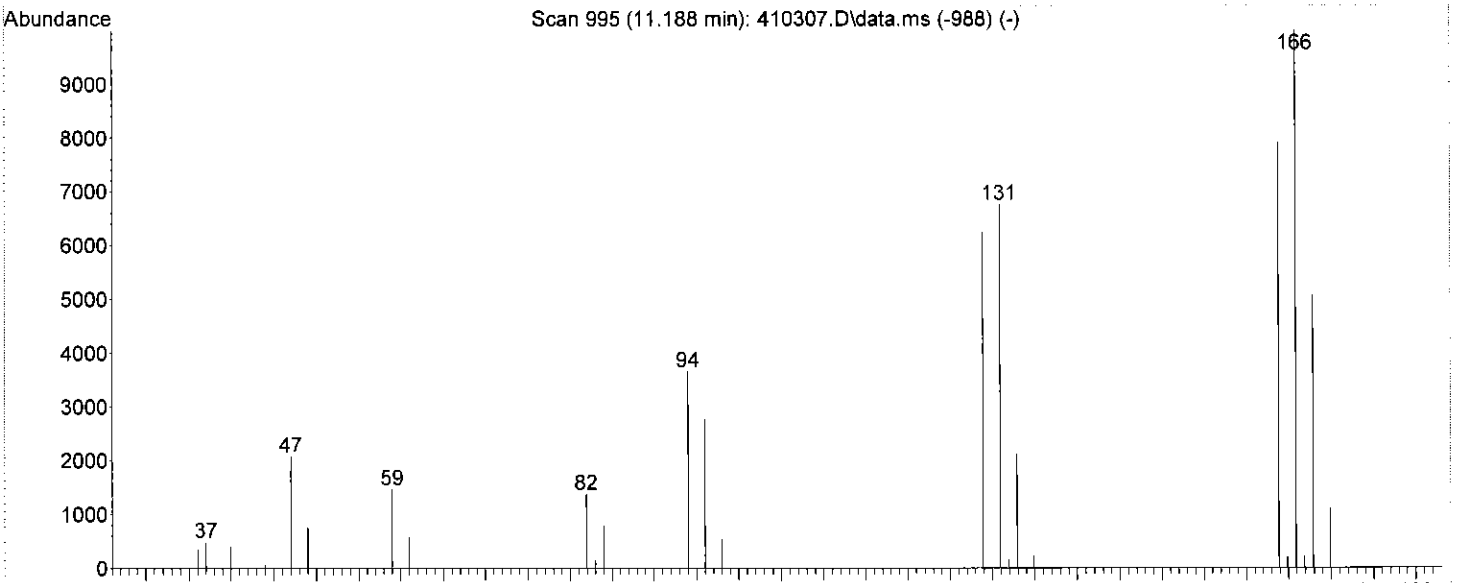
Quantitation Report (QT Reviewed)

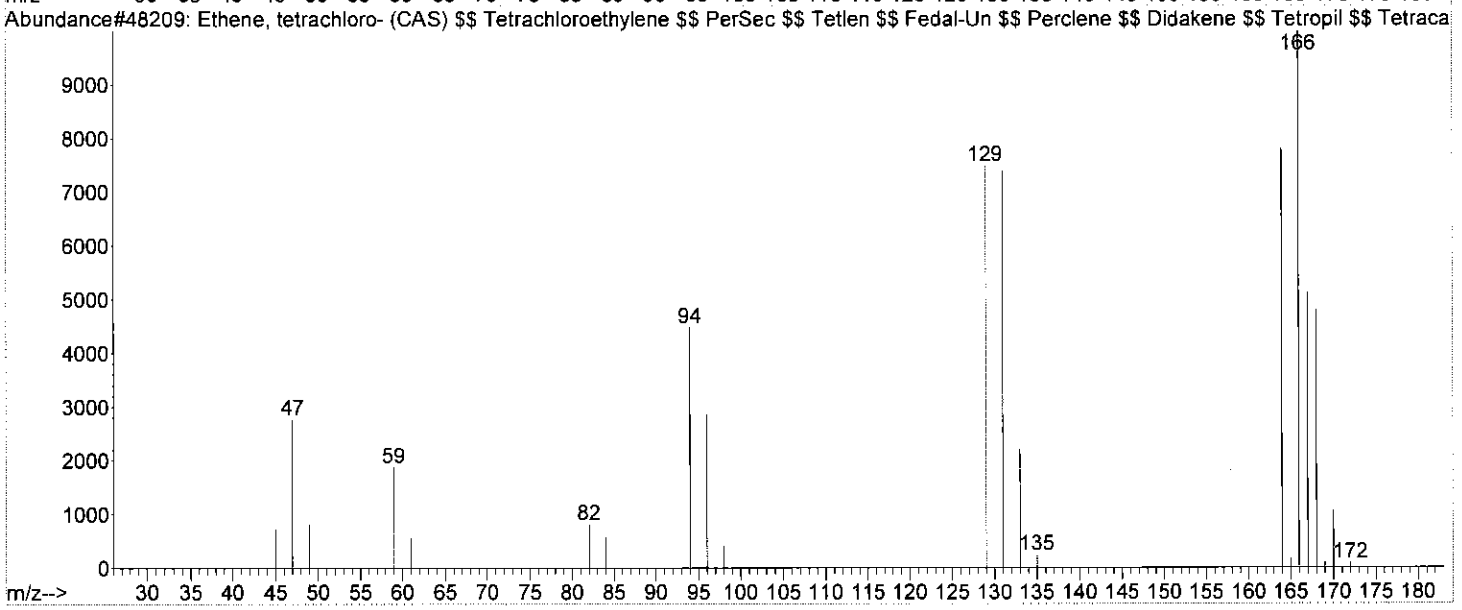
Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410306.D
Acq On : 8 Dec 2017 1:33 pm
Operator : KMOR
Sample : 2760986
Misc : RUN194103
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 12 13:32:33 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Library Searched : C:\Database\WILEY275.L
Quality : 99
ID : Ethene, tetrachloro- (CAS) $$ Tetrachloroethylene $$ PerSec $$ Tetlen $$ Fedal -Un $$ Perclene $$ Didakene $$ Tetropil $$ Tetracap $$ Antisal 1 $$ Tetraguer $$ Tetraleno $$ Ankilostin $$ Perchlorethylene $$ Perchloroethylene $$ Tetrach loroethene $$ Tetrach





Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410307.D
Acq On : 8 Dec 2017 1:59 pm
Operator : KMOR
Sample : 2760985
Misc : RUN194103
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 12 13:36:25 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	287288	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.416	114	454223	20.00 µg/L	0.02
48) CHLOROBENZEN-d5-IS	13.137	117	360585	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.116	152	145645	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	220960	22.68 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.40%		
39) STOLUENE-D8	10.437	98	527818	19.31 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.55%		
59) S4BRFLUOROBENZENE	15.370	95	125177	19.02 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.10%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	0.000		0	N.D.	
6) CHLOROETHANE	0.000		0	N.D. d	
7) TRICLFLUOROMETHANE	3.960	101	2430	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	4.630	61	748	N.D.	
11) IODOMETHANE	4.721	142	147	N.D.	
12) CARBON DISULFIDE	4.609	76	801	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D. d	
15) TRANS12DICLETHENE	5.249	96	302	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.655	43	331	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D. d	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.914	83	4182	N.D.	
22) BROMOCHLOROMETHANE	6.904	49	441	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	7.127	117	902	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D. d	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D. d	
36) EPICHLOROHYDRIN	0.000		0	N.D. d	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	0.000		0	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410307.D
Acq On : 8 Dec 2017 1:59 pm
Operator : KMOR
Sample : 2760985
Misc : RUN194103
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 12 13:36:25 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

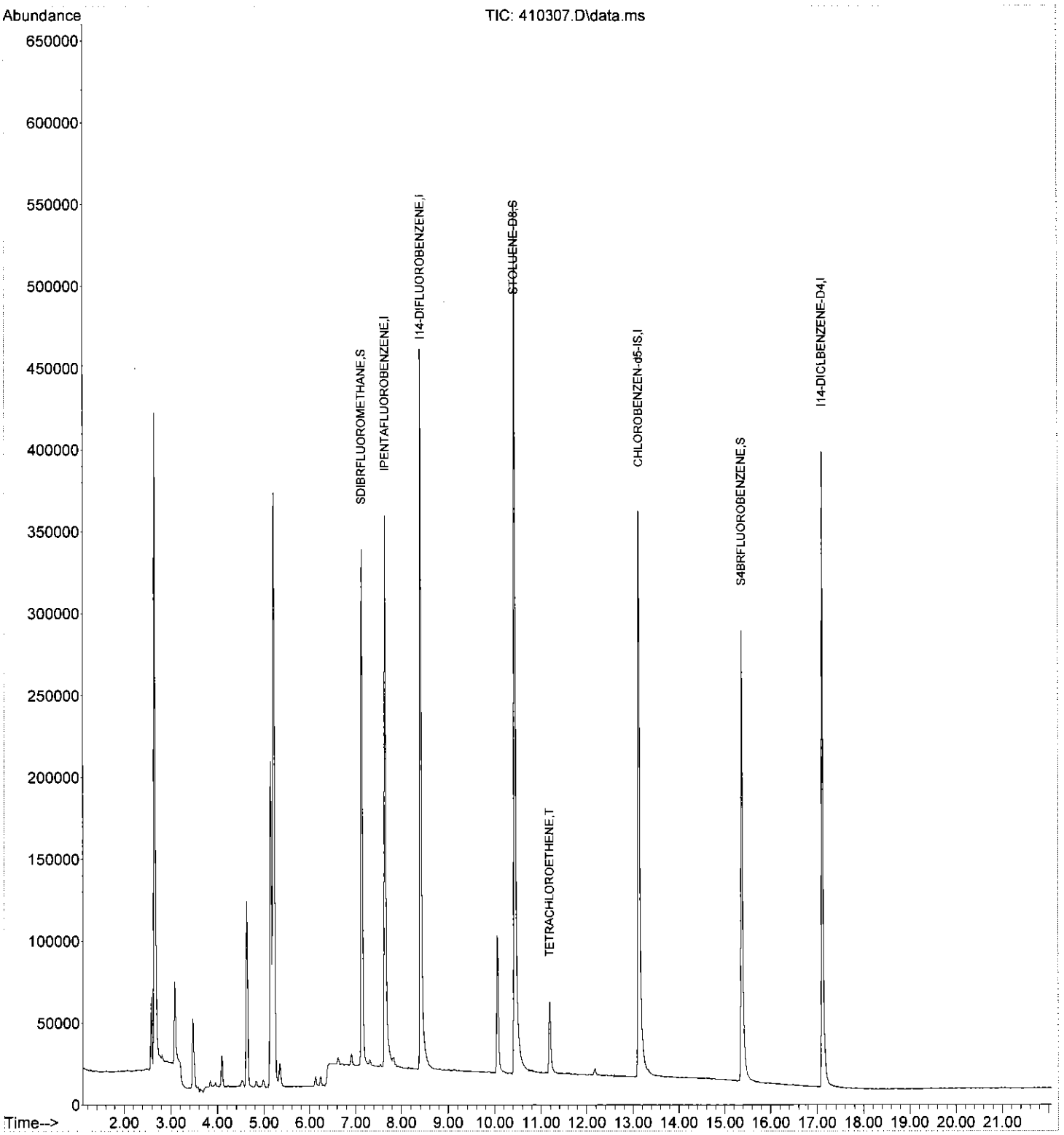
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46)	TETRACHLOROETHENE	11.188	166	23877	4.20 µg/L	97
47)	12-DIBROMOETHANE	0.000		0	N.D.	
49)	CHLOROBENZENE	0.000		0	N.D.	
50)	1-CHLOROHEXANE	13.137	91	554	N.D.	
51)	1112-TETRACLETHANE	0.000		0	N.D.	
52)	ETHYLBENZENE	13.137	91	625	N.D.	
53)	MP-XYLENE	0.000		0	N.D.	
54)	STYRENE	0.000		0	N.D.	
55)	O-XYLENE	0.000		0	N.D.	
56)	BROMOFORM	0.000		0	N.D.	
57)	1122-TETRACLETHANE	0.000		0	N.D.	
58)	ISOPROPYL BENZENE	0.000		0	N.D.	
60)	123-TRICLPROPANE	0.000		0	N.D.	
61)	TRANS14DICL2BUTENE	0.000		0	N.D.	
62)	BROMOBENZENE	15.370	77	758	N.D.	
63)	N-PROPYLBENZENE	15.370	91	388	N.D.	
64)	2-CHLOROTOLUENE	0.000		0	N.D.	
65)	4-CHLOROTOLUENE	0.000		0	N.D.	
66)	135TRIMETHYLBENZENE	0.000		0	N.D.	
67)	TERT-BUTYLBENZENE	0.000		0	N.D.	
68)	124TRIMETHYLBENZENE	0.000		0	N.D.	
69)	SEC-BUTYLBENZENE	0.000		0	N.D.	
70)	13-DICHLOROBENZENE	0.000		0	N.D.	
72)	4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73)	14-DICHLOROBENZENE	17.137	146	78	N.D.	
74)	12-DICHLOROBENZENE	0.000		0	N.D.	
75)	N-BUTYLBENZENE	0.000		0	N.D.	
76)	12-DIBR-3CLPROPANE	0.000		0	N.D.	
77)	124-TRICLBENZENE	0.000		0	N.D.	
78)	NAPHTHALENE	0.000		0	N.D.	
79)	HEXACHLOROBUTADIENE	0.000		0	N.D.	
80)	123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410307.D
Acq On : 8 Dec 2017 1:59 pm
Operator : KMOR
Sample : 2760985
Misc : RUN194103
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 12 13:36:25 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410308.D
Acq On : 8 Dec 2017 2:25 pm
Operator : KMOR
Sample : 2760987
Misc : RUN194103
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 12 13:39:53 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	292565	20.00 µg/L	0.01
23) I14-DIFLUOROBENZENE	8.406	114	458284	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.137	117	358208	20.00 µg/L	0.01
71) I14-DICLBENZENE-D4	17.117	152	145910	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	223944	22.78 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.90%		
39) STOLUENE-D8	10.437	98	531844	19.29 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.45%		
59) S4BRFLUOROBENZENE	15.371	95	126604	19.37 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.85%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	3.148	50	998	N.D.	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	0.000		0	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.721	142	86	N.D.	
12) CARBON DISULFIDE	4.620	76	671	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	d
15) TRANS12DICLETHENE	5.229	96	70	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.290	43	555	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.914	83	82	N.D.	
22) BROMOCHLOROMETHANE	0.000		0	N.D.	
25) TETRAHYDROFURAN	7.148	42	509	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	7.056	117	261	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	d
36) EPICHLOROHYDRIN	0.000		0	N.D.	d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	0.000		0	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410308.D
Acq On : 8 Dec 2017 2:25 pm
Operator : KMOR
Sample : 2760987
Misc : RUN194103
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 12 13:39:53 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

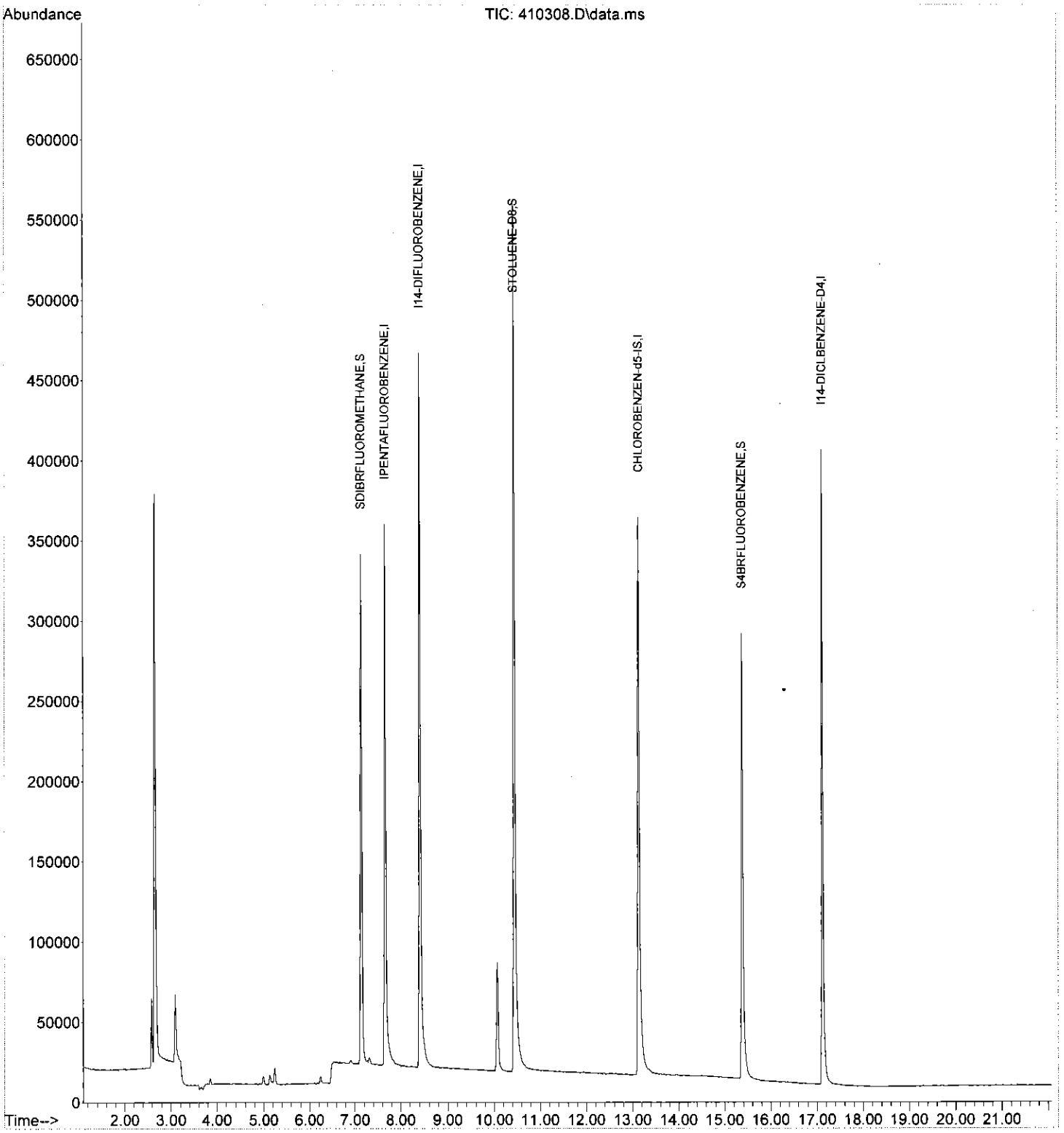
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	0.000		0	N.D.	
50) 1-CHLOROHEXANE	13.127	91	581	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.127	91	655	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.371	77	743	N.D.	
63) N-PROPYLBENZENE	15.371	91	436	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	0.000		0	N.D.	
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.	
73) 14-DICHLOROBENZENE	0.000		0	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	0.000		0	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	0.000		0	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410308.D
Acq On : 8 Dec 2017 2:25 pm
Operator : KMOR
Sample : 2760987
Misc : RUN194103
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 12 13:39:53 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410309.D
Acq On : 8 Dec 2017 2:51 pm
Operator : KMOR
Sample : 2760989
Misc : RUN194103
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 12 13:38:23 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	280531	20.00 µg/L	0.01
23) I14-DIFLUOROBENZENE	8.406	114	445683	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	350818	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.117	152	142563	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	216672	22.67 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.35%		
39) STOLUENE-D8	10.437	98	521806	19.46 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.30%		
59) S4BRFLUOROBENZENE	15.370	95	123485	19.29 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.45%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	0.000		0	N.D.	d
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	0.000		0	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.721	142	99	N.D.	
12) CARBON DISULFIDE	4.610	76	641	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	d
15) TRANS12DICLETHENE	5.249	96	76	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.279	43	666	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.914	83	89	N.D.	
22) BROMOCHLOROMETHANE	6.904	49	137	N.D.	
25) TETRAHYDROFURAN	7.158	42	429	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	7.056	117	383	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	d
36) EPICHLOROHYDRIN	0.000		0	N.D.	d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	0.000		0	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410309.D
Acq On : 8 Dec 2017 2:51 pm
Operator : KMOR
Sample : 2760989
Misc : RUN194103
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 12 13:38:23 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

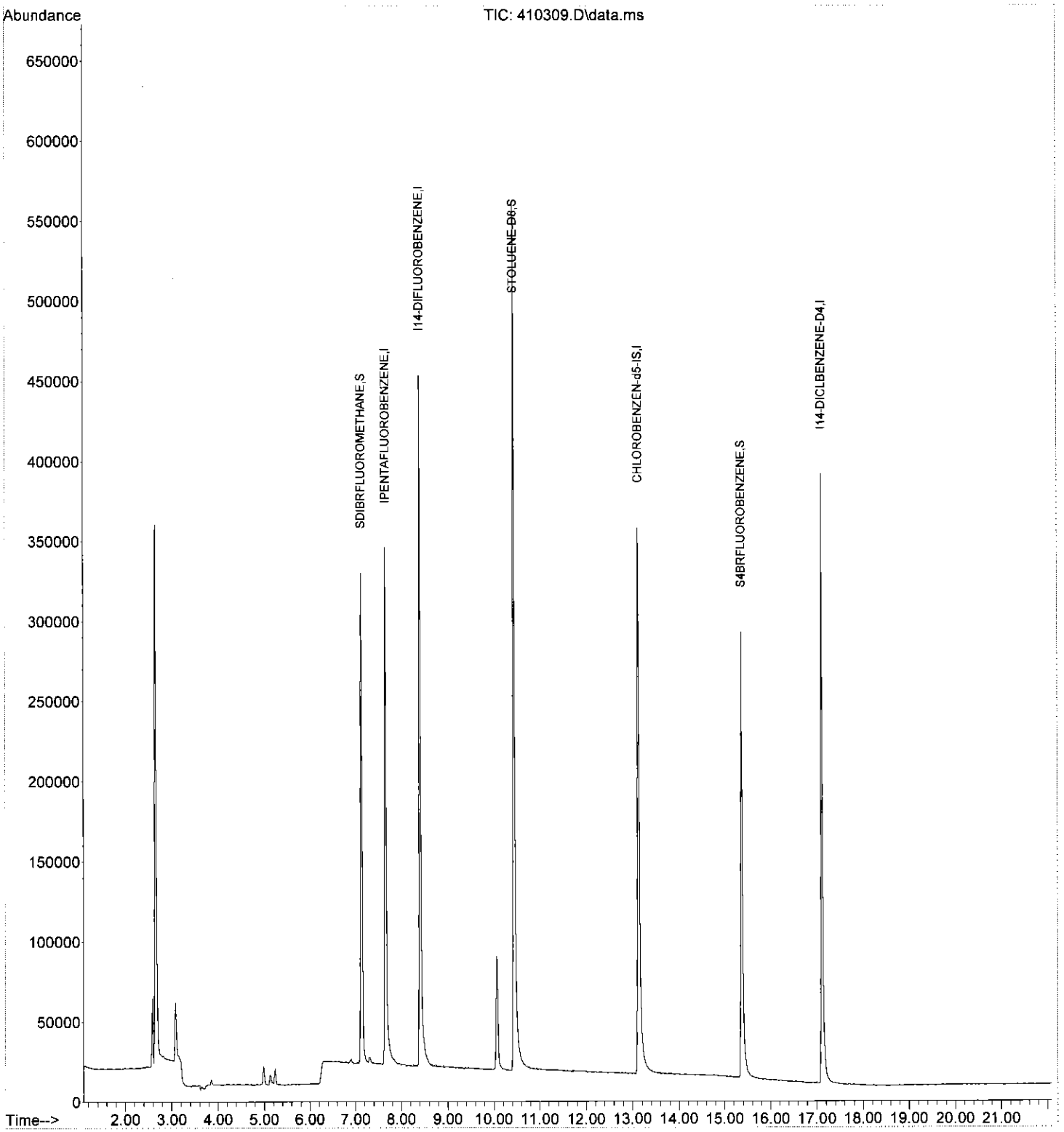
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
46) TETRACHLOROETHENE	0.000		0	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	0.000		0	N.D.
50) 1-CHLOROHEXANE	13.137	91	447	N.D.
51) 1112-TETRACLETHANE	0.000		0	N.D.
52) ETHYLBENZENE	13.137	91	447	N.D.
53) MP-XYLENE	0.000		0	N.D.
54) STYRENE	0.000		0	N.D.
55) O-XYLENE	0.000		0	N.D.
56) BROMOFORM	0.000		0	N.D.
57) 1122-TETRACLETHANE	0.000		0	N.D.
58) ISOPROPYL BENZENE	0.000		0	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	0.000		0	N.D.
62) BROMOBENZENE	15.370	77	757	N.D.
63) N-PROPYLBENZENE	15.370	91	400	N.D.
64) 2-CHLOROTOLUENE	0.000		0	N.D.
65) 4-CHLOROTOLUENE	0.000		0	N.D.
66) 135TRIMETHYLBENZENE	0.000		0	N.D.
67) TERT-BUTYLBENZENE	0.000		0	N.D.
68) 124TRIMETHYLBENZENE	0.000		0	N.D.
69) SEC-BUTYLBENZENE	0.000		0	N.D.
70) 13-DICHLOROBENZENE	0.000		0	N.D.
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.
73) 14-DICHLOROBENZENE	0.000		0	N.D.
74) 12-DICHLOROBENZENE	0.000		0	N.D.
75) N-BUTYLBENZENE	0.000		0	N.D.
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.
77) 124-TRICLBENZENE	0.000		0	N.D.
78) NAPHTHALENE	0.000		0	N.D.
79) HEXACHLOROBUTADIENE	0.000		0	N.D.
80) 123-TRICLBENZENE	0.000		0	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410309.D
Acq On : 8 Dec 2017 2:51 pm
Operator : KMOR
Sample : 2760989
Misc : RUN194103
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 12 13:38:23 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410310.D
Acq On : 8 Dec 2017 3:17 pm
Operator : KMOR
Sample : 2760988
Misc : RUN194103
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 12 13:41:50 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	277500	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.406	114	437316	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	347059	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.116	152	141597	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	214642	22.88 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.40%		
39) STOLUENE-D8	10.437	98	515311	19.59 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.95%		
59) S4BRFLUOROBENZENE	15.370	95	123466	19.49 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.45%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	3.148	50	995	N.D.	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	0.000		0	N.D.	
6) CHLOROETHANE	0.000		0	N.D.	d
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.721	142	66	N.D.	
12) CARBON DISULFIDE	4.609	76	529	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	d
15) TRANS12DICLETHENE	5.239	96	244	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	0.000		0	N.D.	
18) 2-BUTANONE	7.279	43	644	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.904	83	158	N.D.	
22) BROMOCHLOROMETHANE	0.000		0	N.D.	
25) TETRAHYDROFURAN	7.147	42	565	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	7.056	117	311	N.D.	
30) BENZENE	0.000		0	N.D.	
31) TRICHLOROETHENE	0.000		0	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	d
36) EPICHLOROHYDRIN	0.000		0	N.D.	d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	0.000		0	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410310.D
Acq On : 8 Dec 2017 3:17 pm
Operator : KMOR
Sample : 2760988
Misc : RUN194103
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 12 13:41:50 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

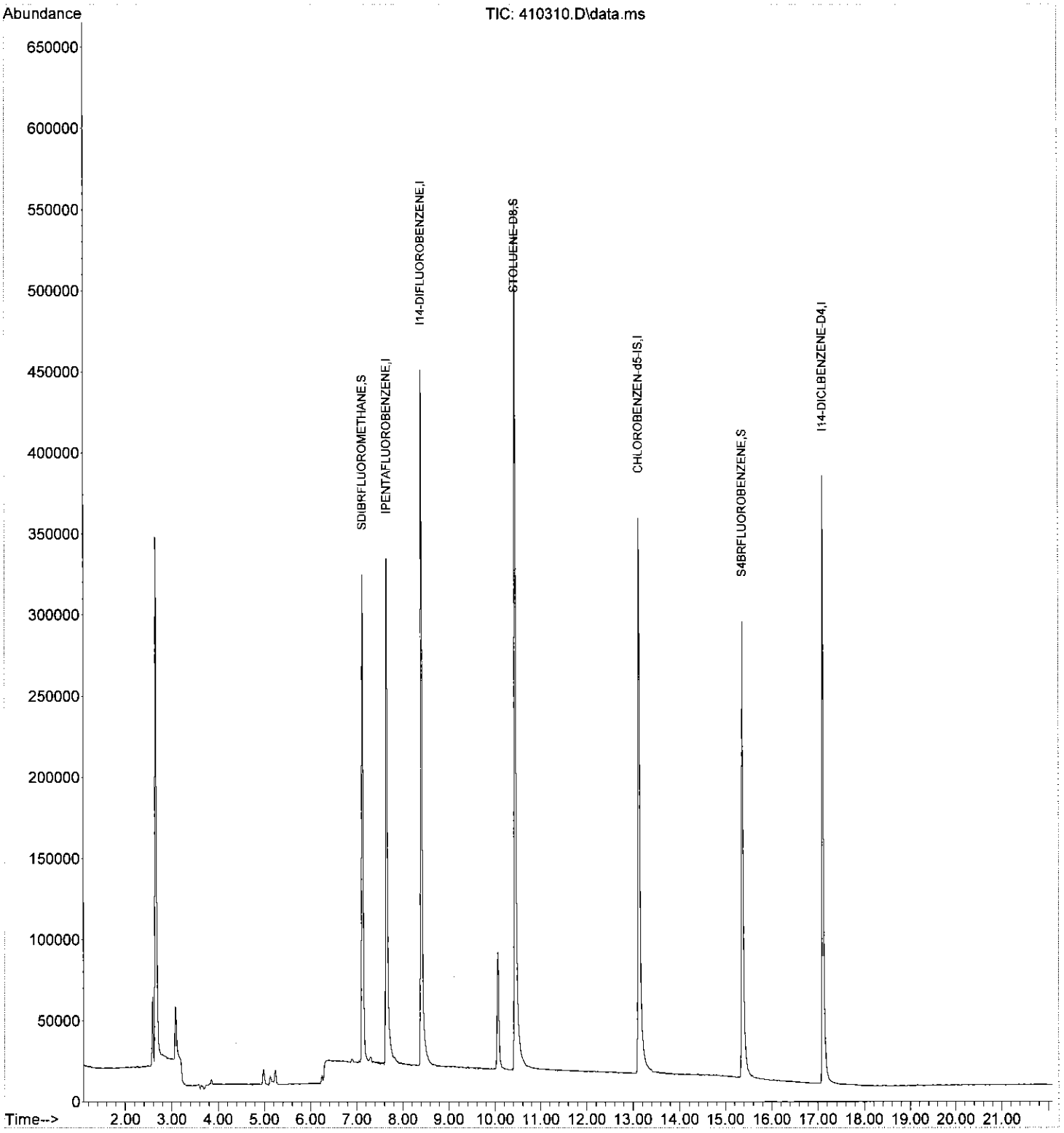
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
46) TETRACHLOROETHENE	0.000		0	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	0.000		0	N.D.
50) 1-CHLOROHEXANE	13.127	91	481	N.D.
51) 1112-TETRACLETHANE	0.000		0	N.D.
52) ETHYLBENZENE	13.127	91	481	N.D.
53) MP-XYLENE	0.000		0	N.D.
54) STYRENE	0.000		0	N.D.
55) O-XYLENE	0.000		0	N.D.
56) BROMOFORM	0.000		0	N.D.
57) 1122-TETRACLETHANE	0.000		0	N.D.
58) ISOPROPYL BENZENE	0.000		0	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	0.000		0	N.D.
62) BROMOBENZENE	15.370	77	724	N.D.
63) N-PROPYLBENZENE	15.370	91	381	N.D.
64) 2-CHLOROTOLUENE	0.000		0	N.D.
65) 4-CHLOROTOLUENE	0.000		0	N.D.
66) 135TRIMETHYLBENZENE	0.000		0	N.D.
67) TERT-BUTYLBENZENE	0.000		0	N.D.
68) 124TRIMETHYLBENZENE	0.000		0	N.D.
69) SEC-BUTYLBENZENE	0.000		0	N.D.
70) 13-DICHLOROBENZENE	0.000		0	N.D.
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.
73) 14-DICHLOROBENZENE	0.000		0	N.D.
74) 12-DICHLOROBENZENE	0.000		0	N.D.
75) N-BUTYLBENZENE	0.000		0	N.D.
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.
77) 124-TRICLBENZENE	0.000		0	N.D.
78) NAPHTHALENE	0.000		0	N.D.
79) HEXACHLOROBUTADIENE	0.000		0	N.D.
80) 123-TRICLBENZENE	0.000		0	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410310.D
Acq On : 8 Dec 2017 3:17 pm
Operator : KMOR
Sample : 2760988
Misc : RUN194103
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 12 13:41:50 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410311.D
Acq On : 8 Dec 2017 3:43 pm
Operator : KMOR
Sample : 2760989DUP/2769706
Misc : RUN194103
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 12 13:43:55 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.655	168	291112	20.00	µg/L	0.00
23) I14-DIFLUOROBENZENE	8.406	114	459297	20.00	µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	361914	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	17.116	152	146429	20.00	µg/L	0.01
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.137	111	220400	22.37	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 111.85%			
39) STOLUENE-D8	10.437	98	536607	19.42	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.10%			
59) S4BRFLUOROBENZENE	15.370	95	126733	19.19	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.95%			

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	0.000		0	N.D. d
4) VINYL CHLORIDE	0.000		0	N.D.
5) BROMOMETHANE	0.000		0	N.D.
6) CHLOROETHANE	0.000		0	N.D. d
7) TRICLFLUOROMETHANE	0.000		0	N.D.
8) ACROLEIN	0.000		0	N.D.
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	0.000		0	N.D.
11) IODOMETHANE	4.721	142	63	N.D.
12) CARBON DISULFIDE	4.609	76	391	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	0.000		0	N.D. d
15) TRANS12DICLETHENE	5.249	96	74	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	7.290	43	652	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.904	83	151	N.D.
22) BROMOCHLOROMETHANE	6.894	49	153	N.D.
25) TETRAHYDROFURAN	7.158	42	536	N.D.
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D.
28) 12-DICHLOROETHANE	0.000		0	N.D.
29) CARBONTETRACHLORIDE	7.066	117	200	N.D.
30) BENZENE	0.000		0	N.D.
31) TRICHLOROETHENE	0.000		0	N.D.
32) 12-DICHLOROPROPANE	0.000		0	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	0.000		0	N.D.
35) 2-CLETHYLVINYLETHER	0.000		0	N.D. d
36) EPICHLOROHYDRIN	0.000		0	N.D. d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.
40) TOLUENE	0.000		0	N.D.
41) TRANS13DICLPROPENE	0.000		0	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	0.000		0	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.
45) DIBRCHLOROMETHANE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410311.D
Acq On : 8 Dec 2017 3:43 pm
Operator : KMOR
Sample : 2760989DUP/2769706
Misc : RUN194103
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 12 13:43:55 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

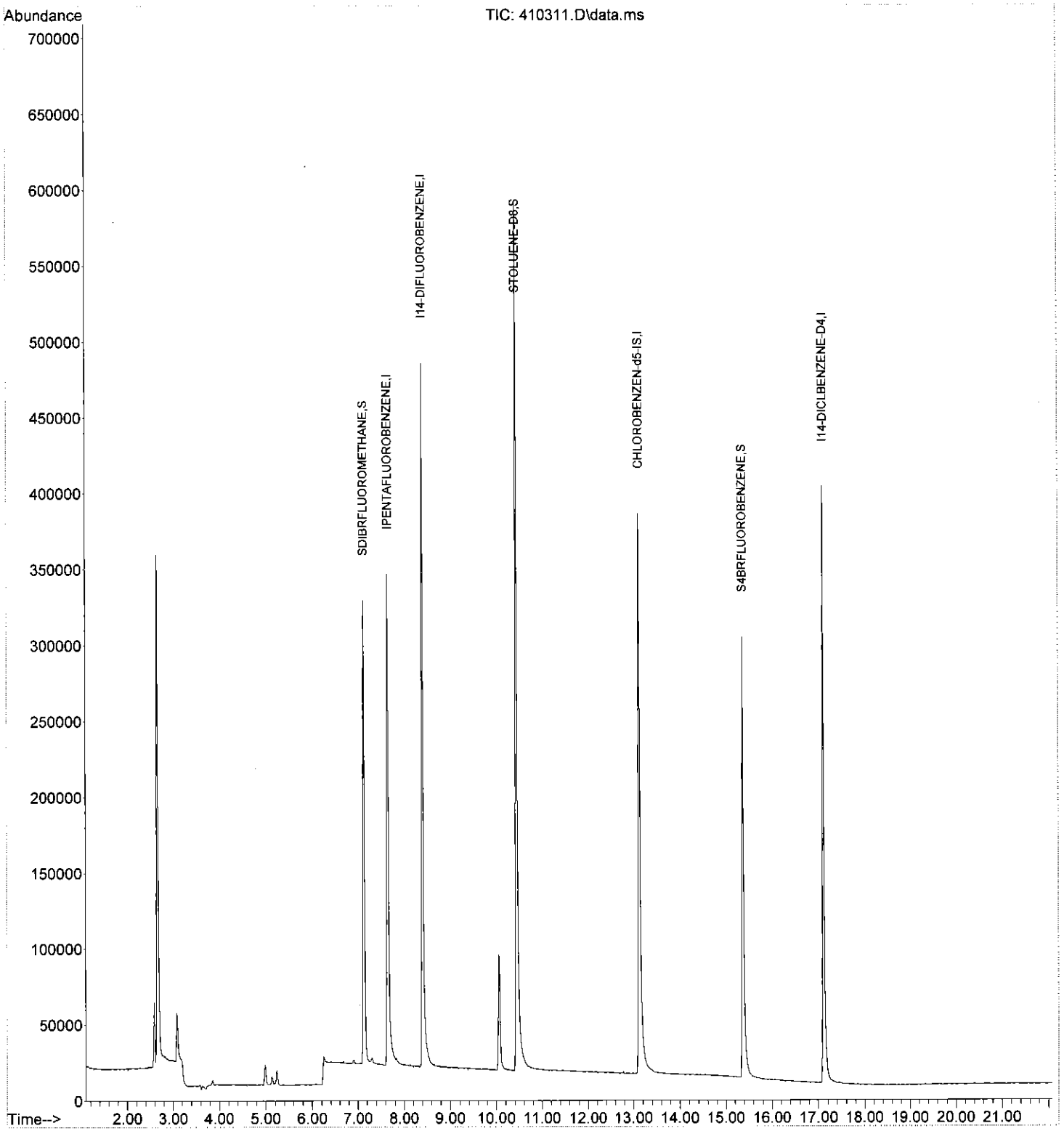
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
46) TETRACHLOROETHENE	0.000		0	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	0.000		0	N.D.
50) 1-CHLOROHEXANE	13.127	91	554	N.D.
51) 1112-TETRACLETHANE	0.000		0	N.D.
52) ETHYLBENZENE	13.127	91	554	N.D.
53) MP-XYLENE	0.000		0	N.D.
54) STYRENE	0.000		0	N.D.
55) O-XYLENE	0.000		0	N.D.
56) BROMOFORM	0.000		0	N.D.
57) 1122-TETRACLETHANE	0.000		0	N.D.
58) ISOPROPYL BENZENE	0.000		0	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	0.000		0	N.D.
62) BROMOBENZENE	15.370	77	744	N.D.
63) N-PROPYLBENZENE	15.370	91	303	N.D.
64) 2-CHLOROTOLUENE	0.000		0	N.D.
65) 4-CHLOROTOLUENE	0.000		0	N.D.
66) 135TRIMETHYLBENZENE	0.000		0	N.D.
67) TERT-BUTYLBENZENE	0.000		0	N.D.
68) 124TRIMETHYLBENZENE	0.000		0	N.D.
69) SEC-BUTYLBENZENE	0.000		0	N.D.
70) 13-DICHLOROBENZENE	0.000		0	N.D.
72) 4-ISOPROPYLTOLUENE	0.000		0	N.D.
73) 14-DICHLOROBENZENE	0.000		0	N.D.
74) 12-DICHLOROBENZENE	0.000		0	N.D.
75) N-BUTYLBENZENE	0.000		0	N.D.
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.
77) 124-TRICLBENZENE	0.000		0	N.D.
78) NAPHTHALENE	0.000		0	N.D.
79) HEXACHLOROBUTADIENE	0.000		0	N.D.
80) 123-TRICLBENZENE	0.000		0	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410311.D
Acq On : 8 Dec 2017 3:43 pm
Operator : KMOR
Sample : 2760989DUP/2769706
Misc : RUN194103
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 12 13:43:55 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410312.D
Acq On : 8 Dec 2017 4:09 pm
Operator : KMOR
Sample : 2760988MS/2769708
Misc : RUN194103
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 12 13:45:28 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	7.655	168	348021	20.00	µg/L		0.01
23) I14-DIFLUOROBENZENE	8.406	114	501155	20.00	µg/L		0.01
48) CHLOROBENZEN-d5-IS	13.127	117	538978	20.00	µg/L		0.00
71) I14-DICLBENZENE-D4	17.106	152	254703	20.00	µg/L		0.00
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	7.137	111	245467	22.84	µg/L		0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.20%				
39) STOLUENE-D8	10.437	98	603093	20.00	µg/L		0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.00%				
59) S4BRFLUOROBENZENE	15.370	95	190319	19.35	µg/L		0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.75%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.874	85	95949	19.15	µg/L		99
3) CHLOROMETHANE	3.148	50	84605	18.91	µg/L		99
4) VINYL CHLORIDE	3.253	62	51818	19.65	µg/L		99
5) BROMOMETHANE	3.645	94	20839	15.82	µg/L		99
6) CHLOROETHANE	3.787	64	27619	21.98	µg/L	#	96
7) TRICLFLUOROMETHANE	3.950	101	136608	22.28	µg/L		99
8) ACROLEIN	4.884	56	51133	167.75	µg/L	#	99
9) ACETONE	5.188	43	49871	58.90	µg/L	#	92
10) 11-DICHLOROETHENE	4.528	61	25259	9.92	µg/L		95
11) IODOMETHANE	4.711	142	145939	32.91	µg/L		89
12) CARBON DISULFIDE	4.609	76	236777	44.07	µg/L	#	96
13) ACRYLONITRILE	6.051	53	63970	26.76	µg/L		95
14) DICHLOROMETHANE	5.148	84	28433	13.28	µg/L		88
15) TRANS12DICLETHENE	5.320	96	26930	12.07	µg/L		95
16) 11-DICHLOROETHANE	6.000	63	52387	11.34	µg/L		97
17) VINYL ACETATE	6.213	43	463622	90.78	µg/L	#	94
18) 2-BUTANONE	7.269	43	127037	43.73	µg/L		99
19) CIS12DICHLOROETHENE	6.620	96	38614	9.11	µg/L		95
20) 22-DICHLOROPROPANE	6.741	77	51341	11.06	µg/L		99
21) CHLOROFORM	6.904	83	101257	9.67	µg/L		100
22) BROMOCHLOROMETHANE	6.853	49	52966	9.90	µg/L		88
25) TETRAHYDROFURAN	7.147	42	42384	3.14	µg/L		92
26) 111-TRICHLOROETHANE	7.198	97	80231	9.79	µg/L		96
27) 11-DICHLOROPROPENE	7.340	75	47002	9.00	µg/L		96
28) 12-DICHLOROETHANE	7.909	62	68329	8.85	µg/L		98
29) CARBONTETRACHLORIDE	7.127	117	72899	9.86	µg/L		99
30) BENZENE	7.665	78	186530	9.69	µg/L		98
31) TRICHLOROETHENE	8.406	132	53450	9.94	µg/L	#	96
32) 12-DICHLOROPROPANE	9.137	63	40429	9.11	µg/L		96
33) DIBROMOMETHANE	9.015	174	36508	8.60	µg/L		99
34) BROMODICLMETHANE	9.198	83	64854	9.30	µg/L		99
35) 2-CLETHYLVINYLETHER	10.051	63	1401	1.00	µg/L	#	31
36) EPICHLOROHYDRIN	10.518	57	89140	123.12	µg/L		95
37) 4METHYL-2-PENTANONE	11.076	43	235016	39.44	µg/L		93
38) CIS13DICLPROPENE	10.142	75	31480	5.15	µg/L		95
40) TOLUENE	10.518	91	189951	9.42	µg/L		97
41) TRANS13DICLPROPENE	11.168	75	46782	8.29	µg/L		91
42) 112-TRICHLOROETHANE	11.452	97	49793	9.05	µg/L		98
43) 2-HEXANONE	12.528	43	119185	31.01	µg/L		92
44) 13-DICHLOROPROPANE	11.939	76	62613	8.23	µg/L		97
45) DIBRCHLOROMETHANE	11.787	129	48023	8.01	µg/L		98

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410312.D
Acq On : 8 Dec 2017 4:09 pm
Operator : KMOR
Sample : 2760988MS/2769708
Misc : RUN194103
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 12 13:45:28 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

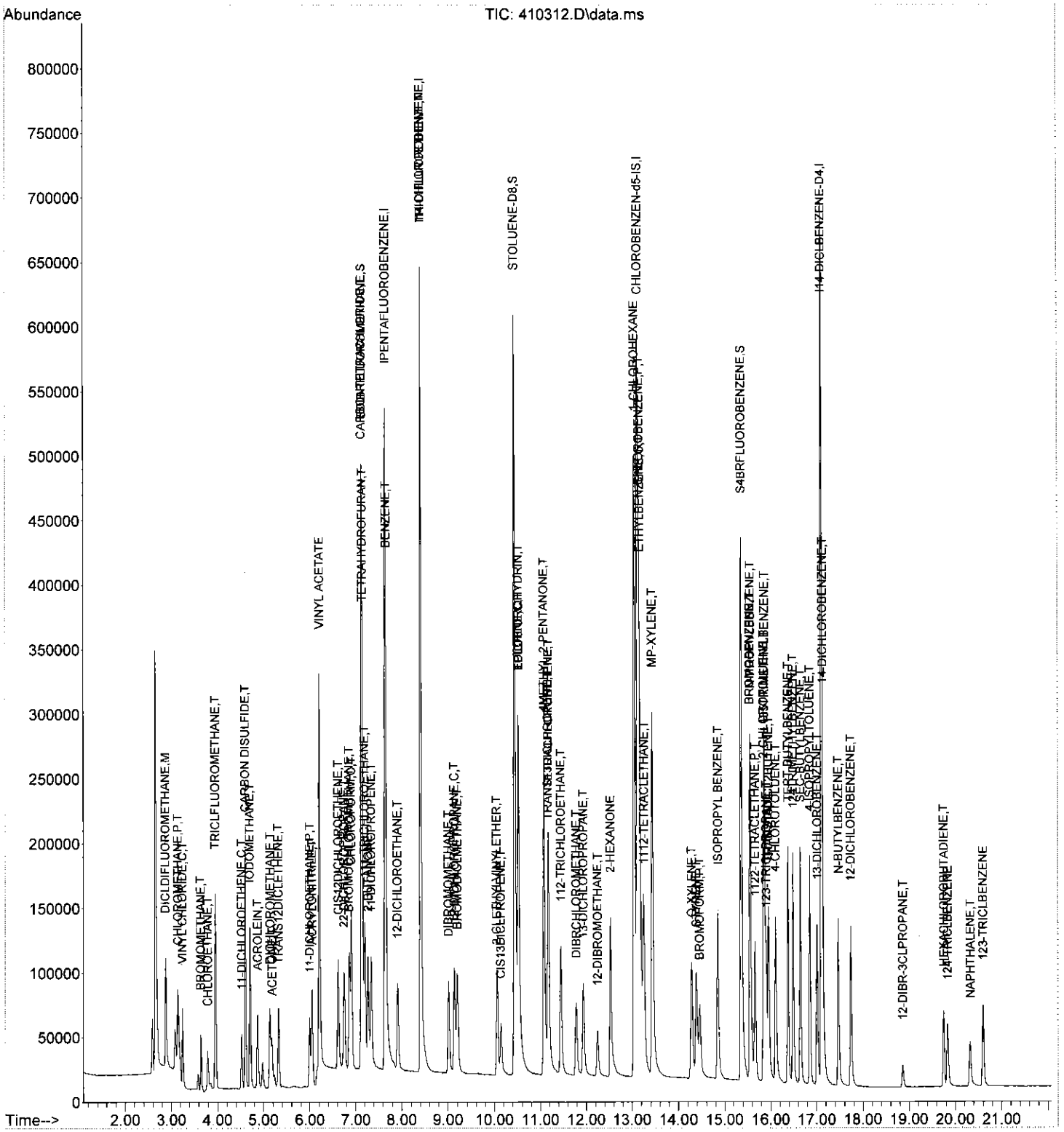
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.178	166	62099	9.89 µg/L	98
47) 12-DIBROMOETHANE	12.244	107	37158	8.03 µg/L	99
49) CHLOROBENZENE	13.157	112	141968	9.81 µg/L	95
50) 1-CHLOROHEXANE	13.056	91	227352	3.81 µg/L #	75
51) 1112-TETRACLETHANE	13.259	131	49890	9.07 µg/L #	79
52) ETHYLBENZENE	13.168	91	198826	8.98 µg/L	98
53) MP-XYLENE	13.431	91	272570	18.80 µg/L	98
54) STYRENE	14.386	104	79342	7.28 µg/L	99
55) O-XYLENE	14.284	91	91605	6.50 µg/L	99
56) BROMOFORM	14.457	173	37401	8.38 µg/L	99
57) 1122-TETRACLETHANE	15.665	83	70184	9.04 µg/L	99
58) ISOPROPYL BENZENE	14.853	105	121988	7.18 µg/L	98
60) 123-TRICLPROPANE	15.908	110	20518	9.09 µg/L	94
61) TRANS14DICL2BUTENE	15.949	53	39366	43.48 µg/L	82
62) BROMOBENZENE	15.553	77	81062	9.25 µg/L	97
63) N-PROPYLBENZENE	15.563	91	182439	8.93 µg/L	96
64) 2-CHLOROTOLUENE	15.848	91	124127	9.08 µg/L	86
65) 4-CHLOROTOLUENE	16.101	91	103250	8.24 µg/L	98
66) 135TRIMETHYLBENZENE	15.868	105	148028	9.06 µg/L	99
67) TERT-BUTYLBENZENE	16.375	119	102882	8.29 µg/L	99
68) 124TRIMETHYLBENZENE	16.487	105	130335	8.81 µg/L	98
69) SEC-BUTYLBENZENE	16.650	105	148281	8.70 µg/L	98
70) 13-DICHLOROBENZENE	17.015	146	80958	8.78 µg/L	98
72) 4-ISOPROPYLTOLUENE	16.853	119	113786	8.37 µg/L	99
73) 14-DICHLOROBENZENE	17.137	146	93430	9.01 µg/L	87
74) 12-DICHLOROBENZENE	17.736	146	73690	8.03 µg/L	99
75) N-BUTYLBENZENE	17.472	91	90811	8.56 µg/L	96
76) 12-DIBR-3CLPROPANE	18.863	157	6813	6.65 µg/L	86
77) 124-TRICLBENZENE	19.837	180	27455	5.45 µg/L	97
78) NAPHTHALENE	20.325	128	51643	4.57 µg/L	98
79) HEXACHLOROBUTADIENE	19.756	225	16834	7.00 µg/L	95
80) 123-TRICLBENZENE	20.599	182	30498	6.13 µg/L	97

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

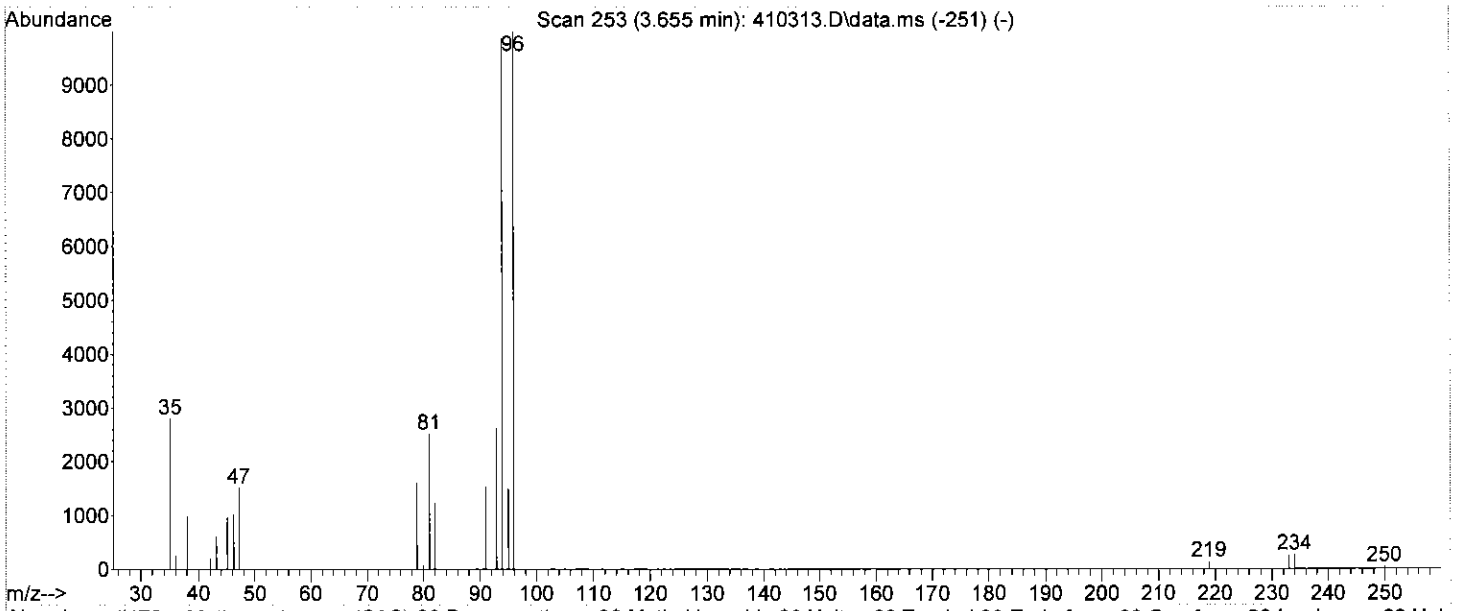
Quantitation Report (QT Reviewed)

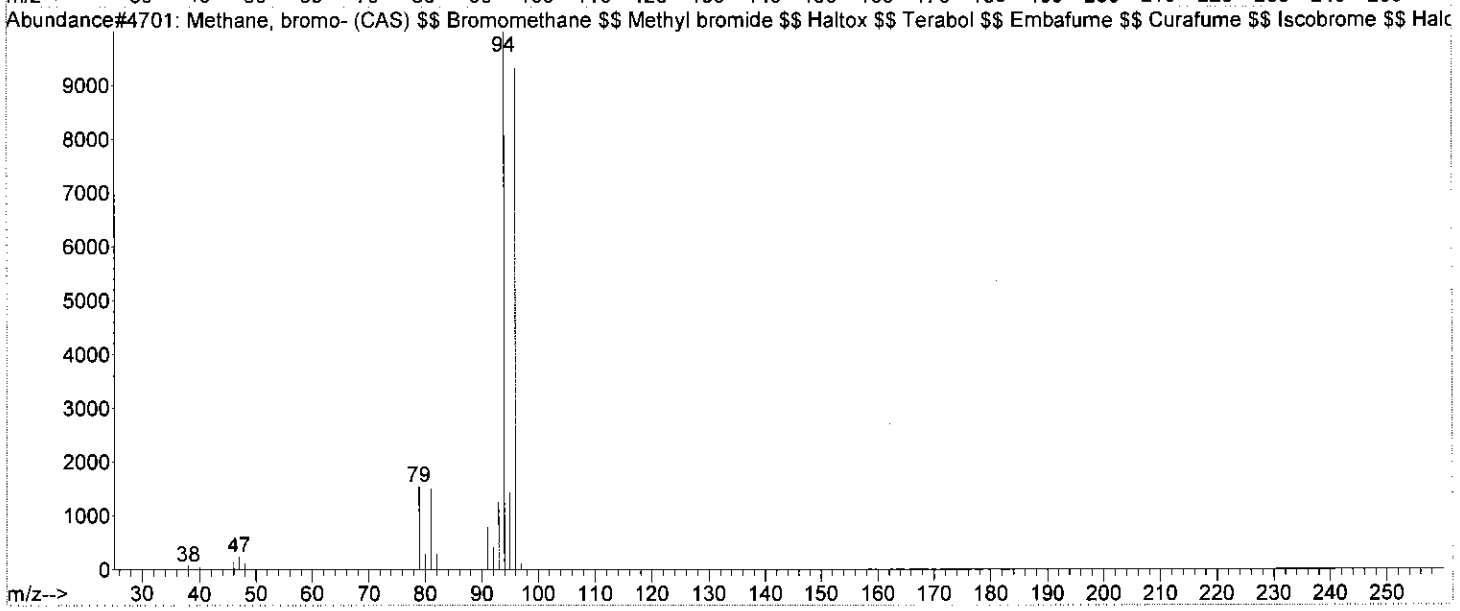
Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410312.D
Acq On : 8 Dec 2017 4:09 pm
Operator : KMOR
Sample : 2760988MS/2769708
Misc : RUN194103
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 12 13:45:28 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

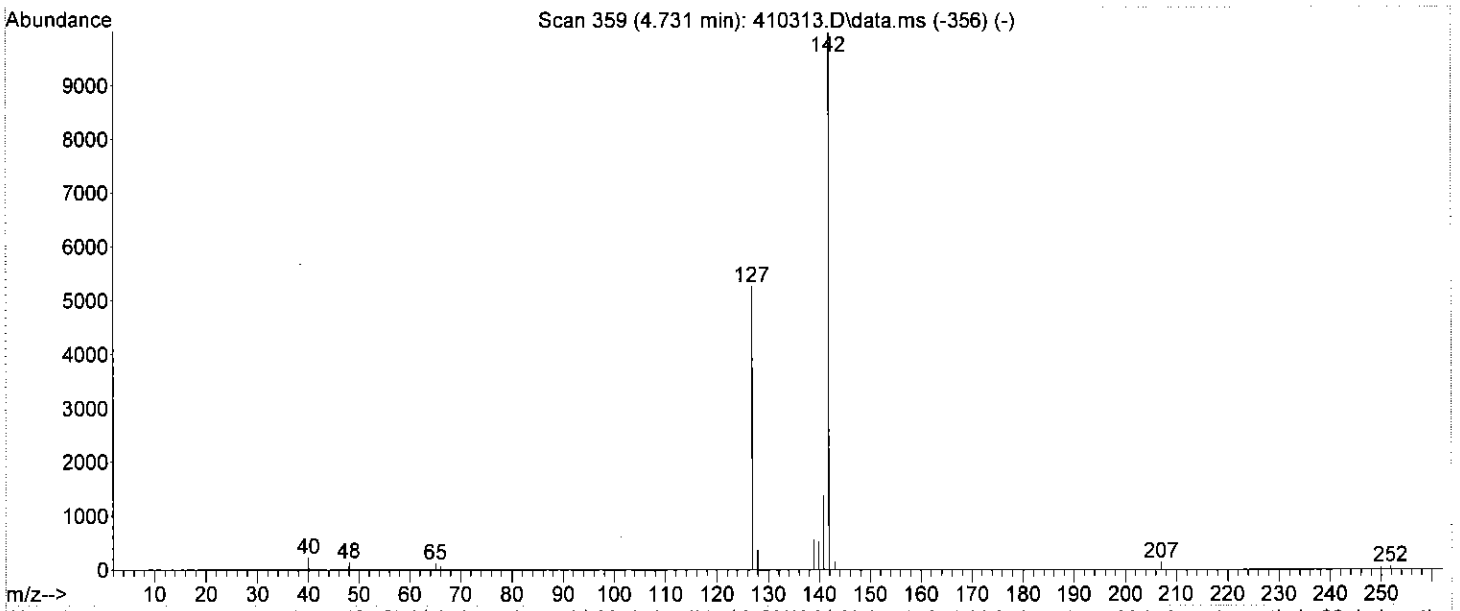


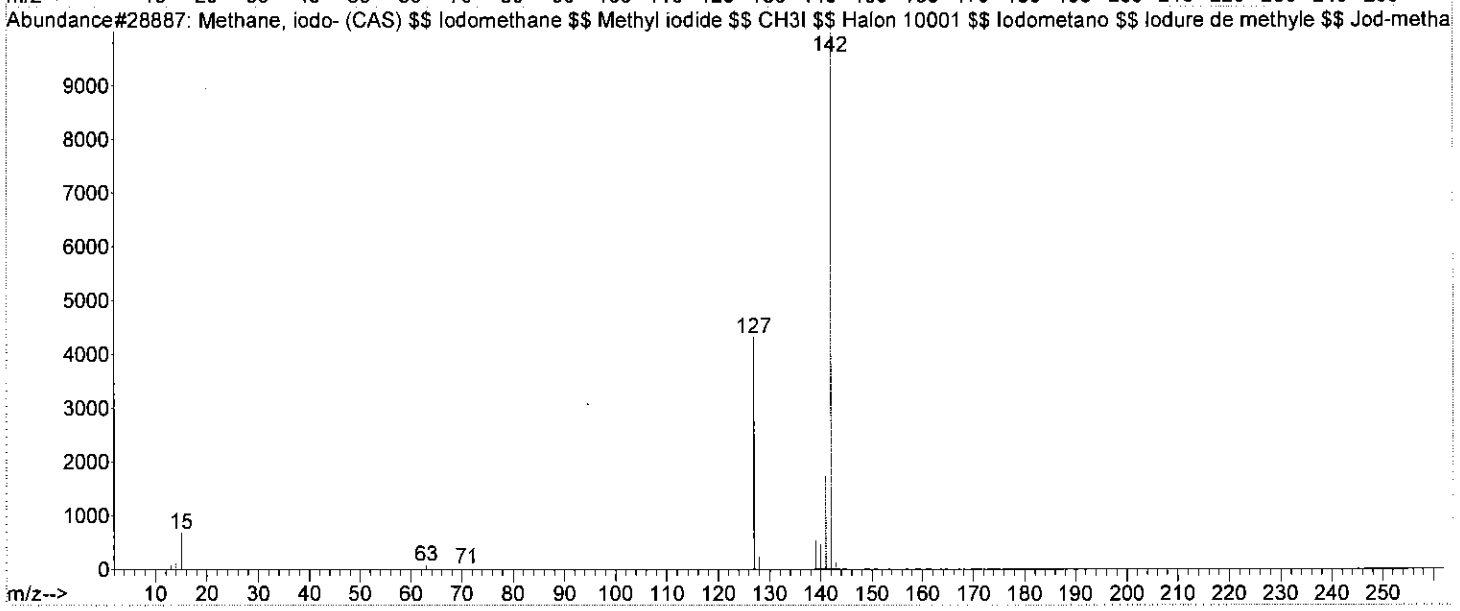
Library Searched : C:\Database\WILEY275.L
Quality : 72
ID : Methane, bromo- (CAS) $$ Bromomethane $$ Methyl bromide $$ Haltox $$ Terabol $$ Embafume $$ Curafume $$ Iscobrome $$ Halon 1001 $$ Monobromomethane $$ CH3Br $$ Bercema $$ Brom-methan $$ Brom-O-gas $$ Brom-O-gaz $$ Bromometano $$ Bromure de methyle $$ Brom



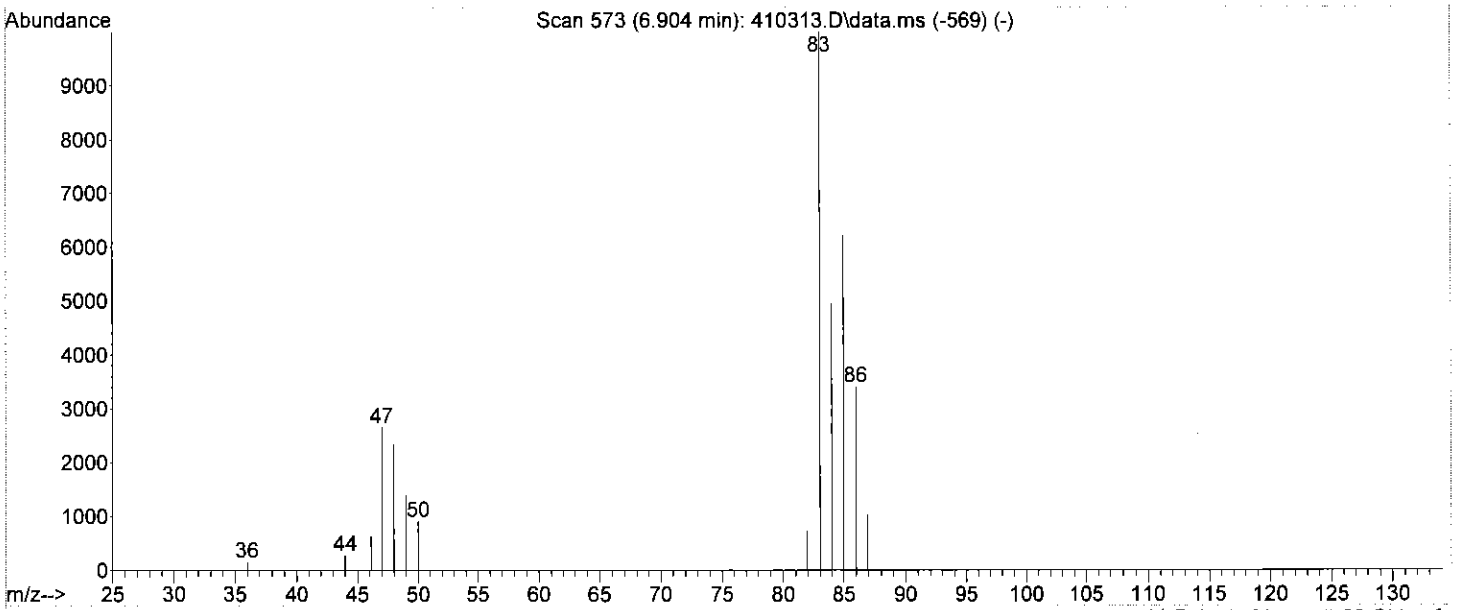


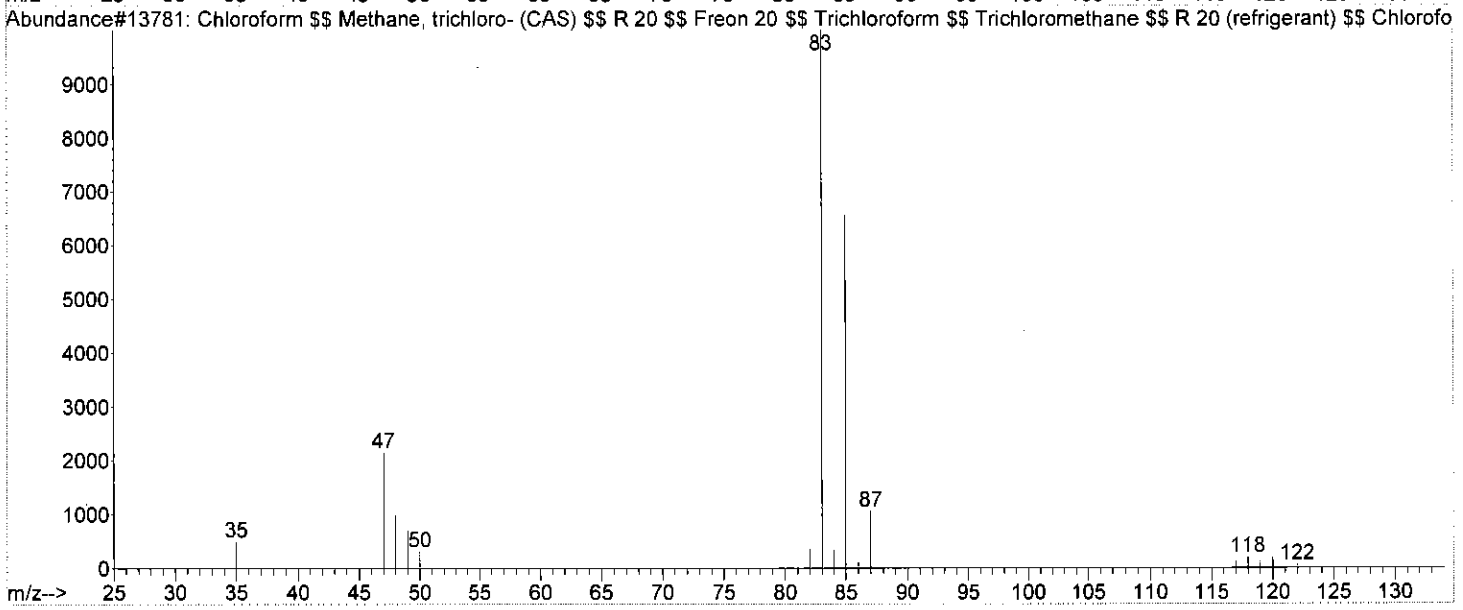
Library Searched : C:\Database\WILEY275.L
Quality : 78
ID : Methane, iodo- (CAS) $$ Iodomethane $$ Methyl iodide $$ CH3I $$ Halon 10001 $$ Iodometano $$ Iodure de methyle $$ Jod-methan $$ Joodmethaan $$ Methyljodid $$ Methyljodide $$ Metylu jodek $$ Monoioduro di metile $$ Rcra waste number U138 $$ UN 2644





Library Searched : C:\Database\WILEY275.L
Quality : 53
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichloromethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLORO METHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride





Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410313.D
Acq On : 8 Dec 2017 4:35 pm
Operator : KMOR
Sample : 2766754
Misc : RUN194105
ALS Vial : 16 Sample Multiplier: 1

① Unidentified peak that will result in false negative. DDC 12/12/17.

Quant Time: Dec 12 13:47:48 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	319784	20.00 µg/L	0.01
23) I14-DIFLUOROBENZENE	8.406	114	487861	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	390602	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.117	152	160714m ①	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.127	111	235343	22.49 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.45%		
39) STOLUENE-D8	10.437	98	552838	18.84 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.20%		
59) S4BRFLUOROBENZENE	15.371	95	137572	19.30 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.50%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.874	85	350	N.D.	
3) CHLOROMETHANE	0.000		0	N.D. d	
4) VINYL CHLORIDE	3.508	62	157	N.D.	
5) BROMOMETHANE	3.655	94	2212	1.83 µg/L	98
6) CHLOROETHANE	0.000		0	N.D.	
7) TRICLFLUOROMETHANE	3.960	101	302	N.D.	
8) ACROLEIN	0.000		0	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	4.731	142	29940	7.35 µg/L	95
12) CARBON DISULFIDE	4.610	76	2020	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D. d	
15) TRANS12DICLETHENE	5.239	96	138	N.D.	
16) 11-DICHLOROETHANE	0.000		0	N.D.	
17) VINYL ACETATE	6.224	43	166	N.D.	
18) 2-BUTANONE	7.280	43	557	N.D.	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	6.904	83	5202	0.54 µg/L #	98
22) BROMOCHLOROMETHANE	6.904	49	614	N.D.	
25) TETRAHYDROFURAN	7.158	42	227	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	
28) 12-DICHLOROETHANE	0.000		0	N.D.	
29) CARBONTETRACHLORIDE	7.056	117	323	N.D.	
30) BENZENE	7.665	78	8431	N.D.	
31) TRICHLOROETHENE	8.417	132	75	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	9.198	83	715	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	10.437	57	348	N.D.	
37) 4METHYL-2-PENTANONE	0.000		0	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	
40) TOLUENE	10.518	91	556	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410313.D
Acq On : 8 Dec 2017 4:35 pm
Operator : KMOR
Sample : 2766754
Misc : RUN194105
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 12 13:47:48 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

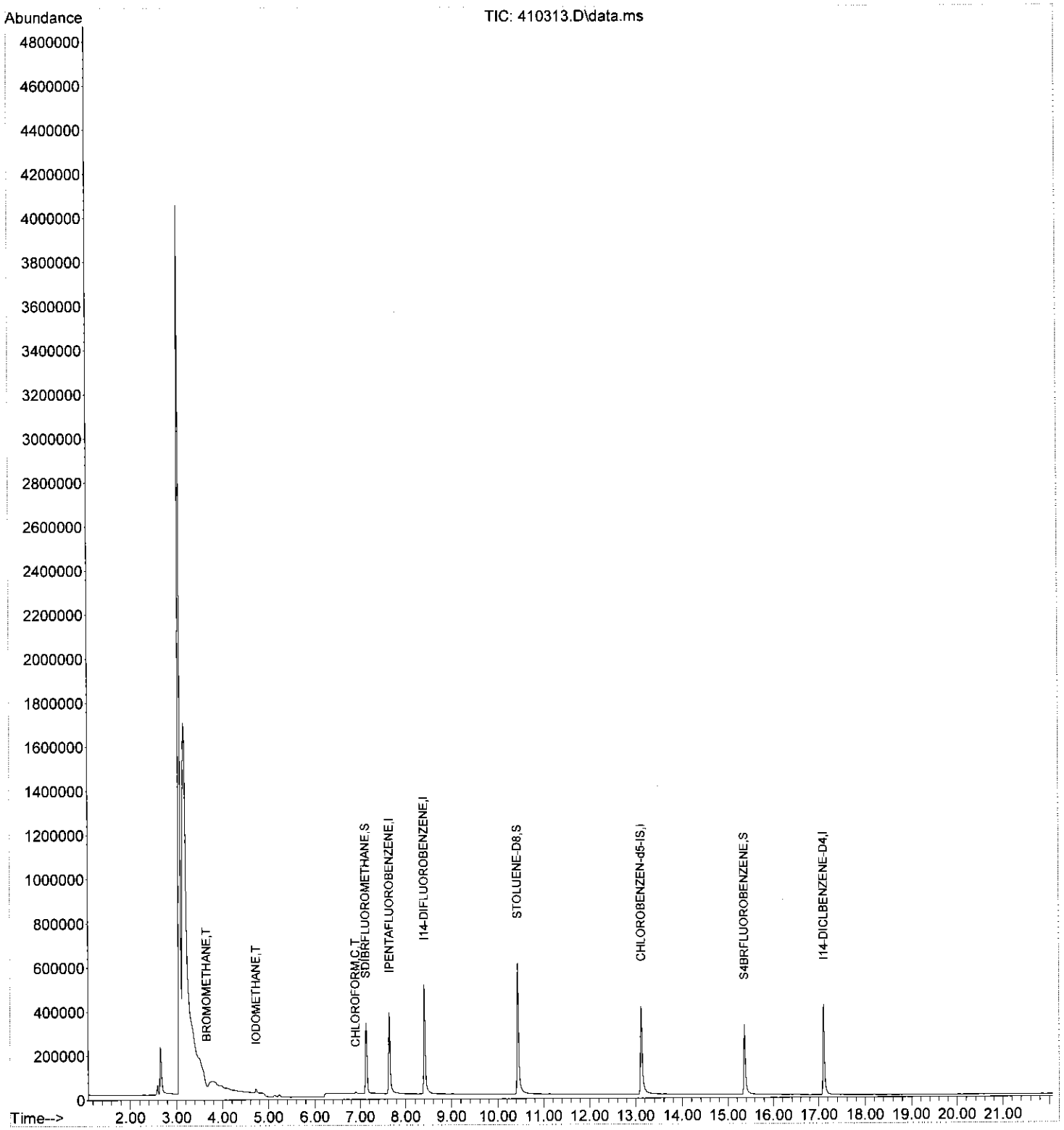
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
46) TETRACHLOROETHENE	0.000		0	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	13.157	112	1220	N.D.
50) 1-CHLOROHEXANE	13.127	91	722	N.D.
51) 1112-TETRACLETHANE	0.000		0	N.D.
52) ETHYLBENZENE	13.127	91	1316	N.D.
53) MP-XYLENE	13.462	91	366	N.D.
54) STYRENE	0.000		0	N.D.
55) O-XYLENE	0.000		0	N.D.
56) BROMOFORM	0.000		0	N.D.
57) 1122-TETRACLETHANE	0.000		0	N.D.
58) ISOPROPYL BENZENE	0.000		0	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	0.000		0	N.D.
62) BROMOBENZENE	15.574	77	131	N.D.
63) N-PROPYLBENZENE	15.574	91	504	N.D.
64) 2-CHLOROTOLUENE	15.858	91	349	N.D.
65) 4-CHLOROTOLUENE	0.000		0	N.D.
66) 135TRIMETHYLBENZENE	15.878	105	64	N.D.
67) TERT-BUTYLBENZENE	0.000		0	N.D.
68) 124TRIMETHYLBENZENE	0.000		0	N.D.
69) SEC-BUTYLBENZENE	16.660	105	202	N.D.
70) 13-DICHLOROBENZENE	17.035	146	334	N.D.
72) 4-ISOPROPYLTOLUENE	16.853	119	155	N.D.
73) 14-DICHLOROBENZENE	17.127	146	1097	N.D.
74) 12-DICHLOROBENZENE	17.756	146	253	N.D.
75) N-BUTYLBENZENE	17.492	91	513	N.D.
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.
77) 124-TRICLBENZENE	19.878	180	66	N.D.
78) NAPHTHALENE	20.365	128	68	N.D.
79) HEXACHLOROBUTADIENE	19.746	225	280	N.D.
80) 123-TRICLBENZENE	20.629	182	171	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410313.D
Acq On : 8 Dec 2017 4:35 pm
Operator : KMOR
Sample : 2766754
Misc : RUN194105
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 12 13:47:48 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410315.D
Acq On : 8 Dec 2017 5:27 pm
Operator : KMOR
Sample : LFB/2769710
Misc : RUN194103
ALS Vial : 15 Sample Multiplier: 1

① Unidentified peak that will result in false negative. DR 12/12/17
② Poor integration by computer data system. DR 12/12/17.

Quant Time: Dec 12 14:06:36 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.645	168	407865	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.406	114	564700	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	586732	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.107	152	244362m ①	20.00 µg/L	0.00
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.127	111	272381	22.49 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 112.45%		
39) STOLUENE-D8	10.437	98	682292	20.08 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.40%		
59) S4BRFLUOROBENZENE	15.360	95	210422	19.65 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.25%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.874	85	106427	18.12 µg/L	100
3) CHLOROMETHANE	3.148	50	99333	18.94 µg/L	97
4) VINYL CHLORIDE	3.251	62	59455	19.23 µg/L	99
5) BROMOMETHANE	3.645	94	25339	16.41 µg/L	97
6) CHLOROETHANE	3.787	64	25579m ②	17.37 µg/L	
7) TRICLFLUOROMETHANE	3.950	101	141370	19.67 µg/L	99
8) ACROLEIN	4.874	56	152559m ②	427.07 µg/L	
9) ACETONE	5.178	43	82602	83.24 µg/L #	94
10) 11-DICHLOROETHENE	4.528	61	43679	14.63 µg/L	96
11) IODOMETHANE	4.711	142	320467	61.66 µg/L	91
12) CARBON DISULFIDE	4.610	76	404645	64.26 µg/L	97
13) ACRYLONITRILE	6.041	53	224782m ②	80.23 µg/L	
14) DICHLOROMETHANE	5.137	84	50344	20.06 µg/L	93
15) TRANS12DICLETHENE	5.320	96	45179	17.28 µg/L	95
16) 11-DICHLOROETHANE	6.000	63	89580	16.54 µg/L	98
17) VINYL ACETATE	6.203	43	658925m ②	110.09 µg/L	
18) 2-BUTANONE	7.259	43	259356	76.19 µg/L	97
19) CIS12DICHLOROETHENE	6.620	96	84205	16.96 µg/L	98
20) 22-DICHLOROPROPANE	6.741	77	91723	16.87 µg/L	98
21) CHLOROFORM	6.904	83	186350	15.19 µg/L	100
22) BROMOCHLOROMETHANE	6.853	49	99161	15.81 µg/L	90
25) TETRAHYDROFURAN	7.148	42	257999m ②	16.95 µg/L	
26) 111-TRICHLOROETHANE	7.198	97	144665	15.67 µg/L	97
27) 11-DICHLOROPROPENE	7.340	75	93347	15.86 µg/L	99
28) 12-DICHLOROETHANE	7.909	62	131261	15.09 µg/L	100
29) CARBONTETRACHLORIDE	7.127	117	130751	15.70 µg/L	99
30) BENZENE	7.655	78	335423	15.47 µg/L	99
31) TRICHLOROETHENE	8.406	132	94871	15.65 µg/L	97
32) 12-DICHLOROPROPANE	9.137	63	79923	15.99 µg/L	97
33) DIBROMOMETHANE	9.015	174	72602	15.18 µg/L	98
34) BROMODICLMETHANE	9.198	83	123251	15.68 µg/L	99
35) 2-CLETHYLVINYLETHER	9.980	63	78678	49.97 µg/L	96
36) EPICHLOROHYDRIN	10.518	57	339390m ②	416.02 µg/L	
37) 4METHYL-2-PENTANONE	11.076	43	509006	75.80 µg/L	94
38) CIS13DICLPROPENE	10.132	75	105565	15.32 µg/L	97
40) TOLUENE	10.518	91	357807	15.74 µg/L	97
41) TRANS13DICLPROPENE	11.168	75	99124	15.59 µg/L	91
42) 112-TRICHLOROETHANE	11.452	97	95966	15.48 µg/L	99
43) 2-HEXANONE	12.518	43	288661	66.65 µg/L	95
44) 13-DICHLOROPROPANE	11.939	76	130933	15.27 µg/L	97
45) DIBRCHLOROMETHANE	11.777	129	95872	14.19 µg/L	99

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410315.D
Acq On : 8 Dec 2017 5:27 pm
Operator : KMOR
Sample : LFB/2769710
Misc : RUN194103
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 12 14:06:36 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

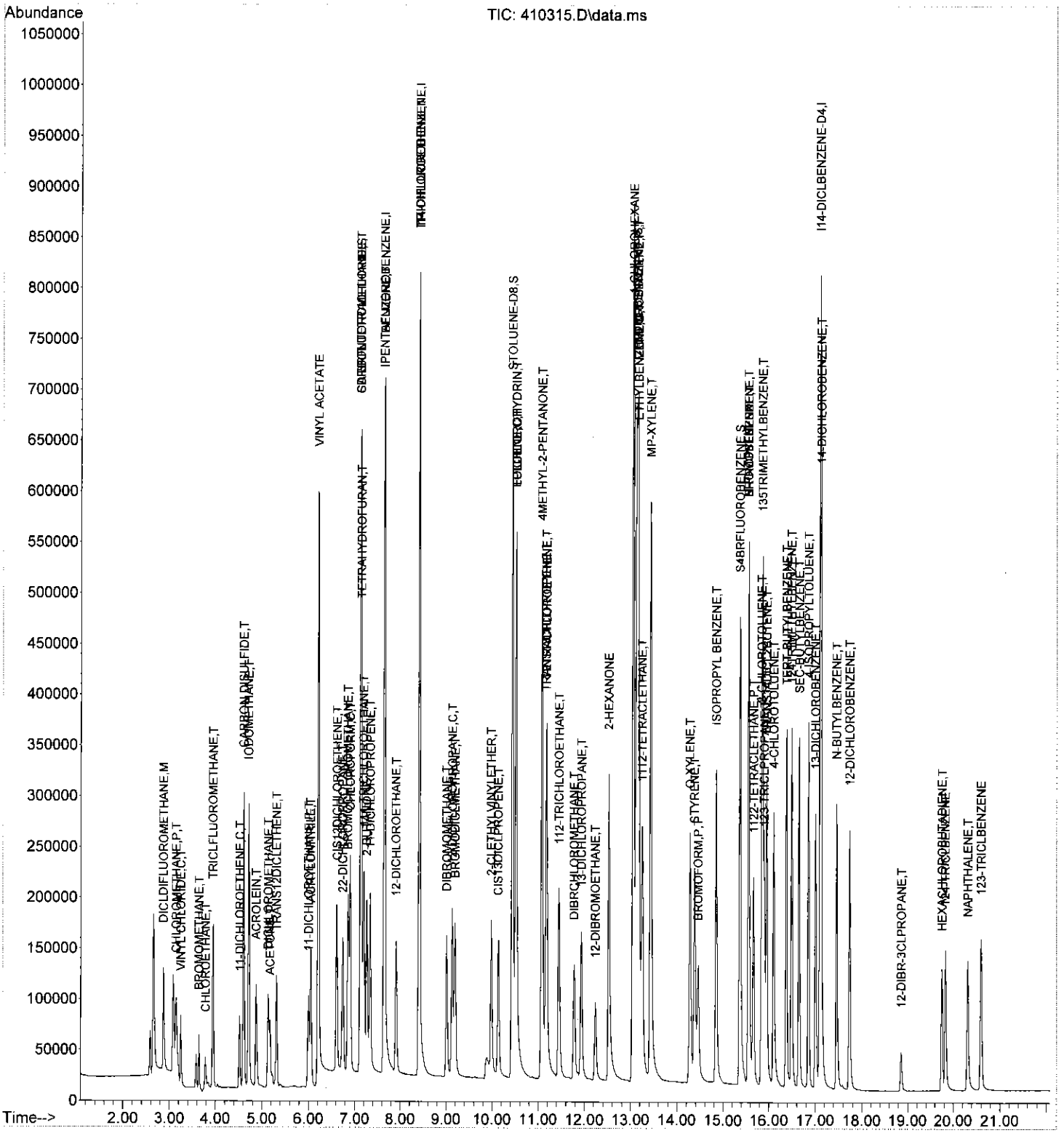
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.178	166	112613	15.92 µg/L	98
47) 12-DIBROMOETHANE	12.234	107	88812m	17.03 µg/L	
49) CHLOROBENZENE	13.157	112	262363	16.66 µg/L	96
50) 1-CHLOROHEXANE	13.056	91	1220217m	18.80 µg/L	
51) 1112-TETRACLETHANE	13.249	131	95233	15.90 µg/L	86
52) ETHYLBENZENE	13.168	91	374755	15.56 µg/L	99
53) MP-XYLENE	13.432	91	542404	34.37 µg/L	99
54) STYRENE	14.376	104	183371	15.45 µg/L	98
55) O-XYLENE	14.274	91	223605	14.57 µg/L	99
56) BROMOFORM	14.457	173	76893	15.82 µg/L	100
57) 1122-TETRACLETHANE	15.665	83	133241	15.76 µg/L	100
58) ISOPROPYL BENZENE	14.843	105	283027	15.31 µg/L	99
60) 123-TRICLPROPANE	15.898	110	39473	16.07 µg/L	98
61) TRANS14DICL2BUTENE	15.949	53	78142	79.29 µg/L	86
62) BROMOBENZENE	15.553	77	151152	15.85 µg/L	95
63) N-PROPYLBENZENE	15.553	91	358422	16.11 µg/L	97
64) 2-CHLOROTOLUENE	15.838	91	246468	16.57 µg/L	86
65) 4-CHLOROTOLUENE	16.101	91	213468	15.66 µg/L	99
66) 135TRIMETHYLBENZENE	15.858	105	292849	16.47 µg/L	100
67) TERT-BUTYLBENZENE	16.376	119	215882	15.98 µg/L	98
68) 124TRIMETHYLBENZENE	16.477	105	264513	16.43 µg/L	99
69) SEC-BUTYLBENZENE	16.650	105	300631	16.21 µg/L	96
70) 13-DICHLOROBENZENE	17.005	146	163192	16.26 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.853	119	245392	18.80 µg/L	99
73) 14-DICHLOROBENZENE	17.127	146	177030	17.79 µg/L	92
74) 12-DICHLOROBENZENE	17.736	146	150935	17.14 µg/L	100
75) N-BUTYLBENZENE	17.462	91	194210	19.09 µg/L	96
76) 12-DIBR-3CLPROPANE	18.863	157	14792	15.05 µg/L	94
77) 124-TRICLBENZENE	19.827	180	68312	14.13 µg/L #	94
78) NAPHTHALENE	20.314	128	153862	14.20 µg/L	99
79) HEXACHLOROBUTADIENE	19.756	225	33659	14.60 µg/L	99
80) 123-TRICLBENZENE	20.599	182	71989	15.09 µg/L	97

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194103\
Data File : 410315.D
Acq On : 8 Dec 2017 5:27 pm
Operator : KMOR
Sample : LFB/2769710
Misc : RUN194103
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 12 14:06:36 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

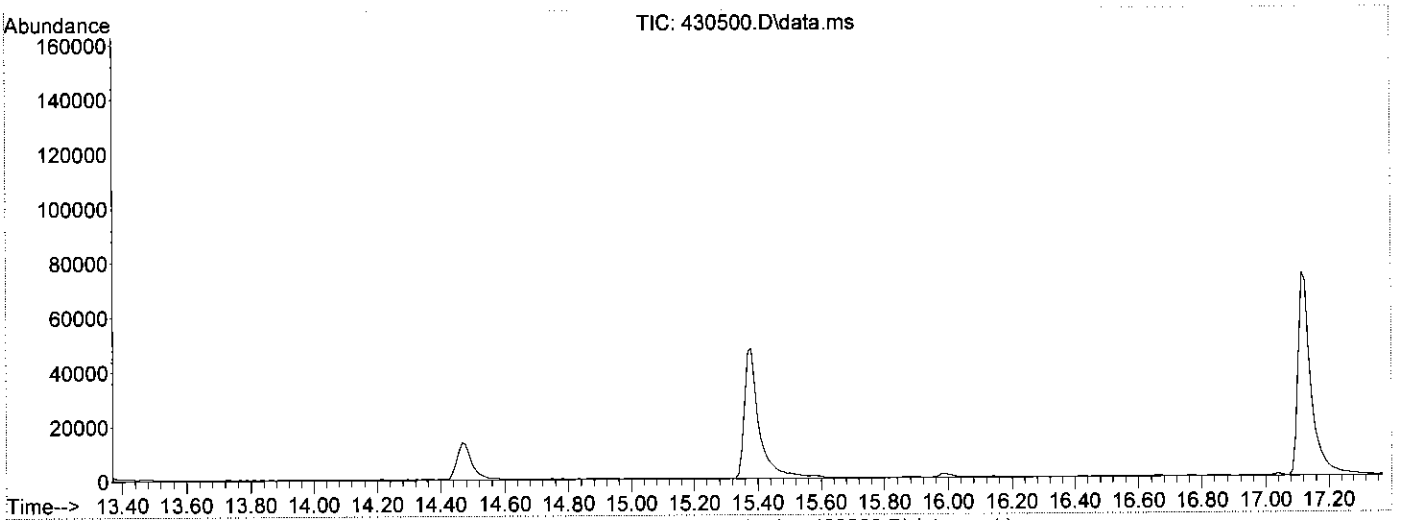


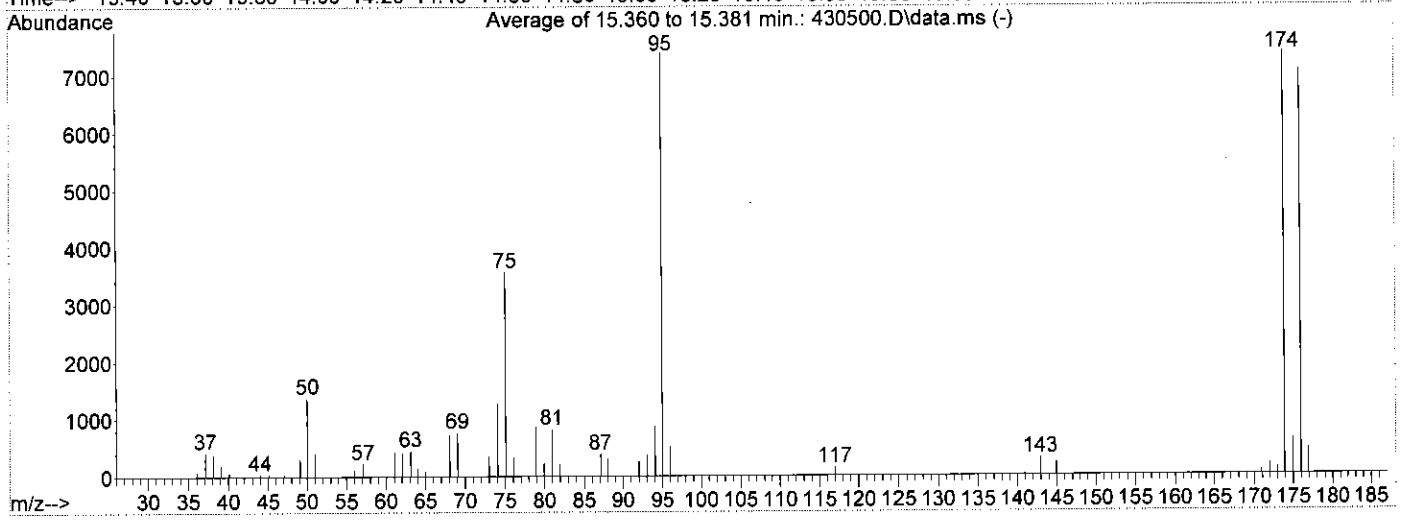
Method VOC

Data Path : C:\msdchem\1\DATA\194304CC\
Data File : 430500.D
Acq On : 15 Dec 2017 6:10 am
Operator : KMOR
Sample : BFB/Bromoform
Misc : RUN194305
ALS Vial : 32 Sample Multiplier: 1

Integration File: VOC.P

Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Wed Nov 29 09:51:01 2017





AutoFind: Scans 1406, 1407, 1408; Background Corrected with Scan 1401

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	1368	PASS
75	95	30	60	48.1	3559	PASS
95	95	100	100	100.0	7395	PASS
96	95	5	9	6.9	512	PASS
173	174	0.00	2	1.7	124	PASS
174	95	50	150	99.9	7386	PASS
175	174	5	9	8.4	619	PASS
176	174	95	101	95.5	7057	PASS
177	176	5	9	6.4	455	PASS

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430501.D
Acq On : 15 Dec 2017 6:36 am
Operator : KMOR
Sample : LRB/2773640
Misc : RUN194305
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Dec 19 09:41:13 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	7.655	168	286904	20.00	µg/L	0.00
23) I14-DIFLUOROBENZENE	8.416	114	447354	20.00	µg/L	0.02
48) CHLOROBENZEN-d5-IS	13.137	117	355230	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	17.116	152	140880	20.00	µg/L	0.01
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	7.137	111	228201	23.78	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 118.90%			
39) STOLUENE-D8	10.437	98	511594	19.01	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 95.05%			
59) S4BRFLUOROBENZENE	15.370	95	119767	18.47	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 92.35%			

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	0.000		0	N.D. d
4) VINYL CHLORIDE	0.000		0	N.D.
5) BROMOMETHANE	0.000		0	N.D.
6) CHLOROETHANE	0.000		0	N.D. d
7) TRICLFLUOROMETHANE	3.960	101	157	N.D.
8) ACROLEIN	0.000		0	N.D.
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	0.000		0	N.D.
11) IODOMETHANE	4.721	142	601	N.D.
12) CARBON DISULFIDE	0.000		0	N.D. d
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	0.000		0	N.D. d
15) TRANS12DICLETHENE	5.239	96	248	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D.
17) VINYL ACETATE	0.000		0	N.D.
18) 2-BUTANONE	7.645	43	403	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	6.914	83	1049	N.D.
22) BROMOCHLOROMETHANE	6.904	49	264	N.D.
25) TETRAHYDROFURAN	0.000		0	N.D.
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D.
28) 12-DICHLOROETHANE	0.000		0	N.D.
29) CARBONTETRACHLORIDE	7.046	117	401	N.D.
30) BENZENE	7.655	78	204	N.D.
31) TRICHLOROETHENE	8.416	132	68	N.D.
32) 12-DICHLOROPROPANE	0.000		0	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	0.000		0	N.D.
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.
36) EPICHLOROHYDRIN	0.000		0	N.D. d
37) 4METHYL-2-PENTANONE	0.000		0	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.
40) TOLUENE	10.528	91	263	N.D.
41) TRANS13DICLPROPENE	0.000		0	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	0.000		0	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.
45) DIBRCHLOROMETHANE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430501.D
Acq On : 15 Dec 2017 6:36 am
Operator : KMOR
Sample : LRB/2773640
Misc : RUN194305
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Dec 19 09:41:13 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

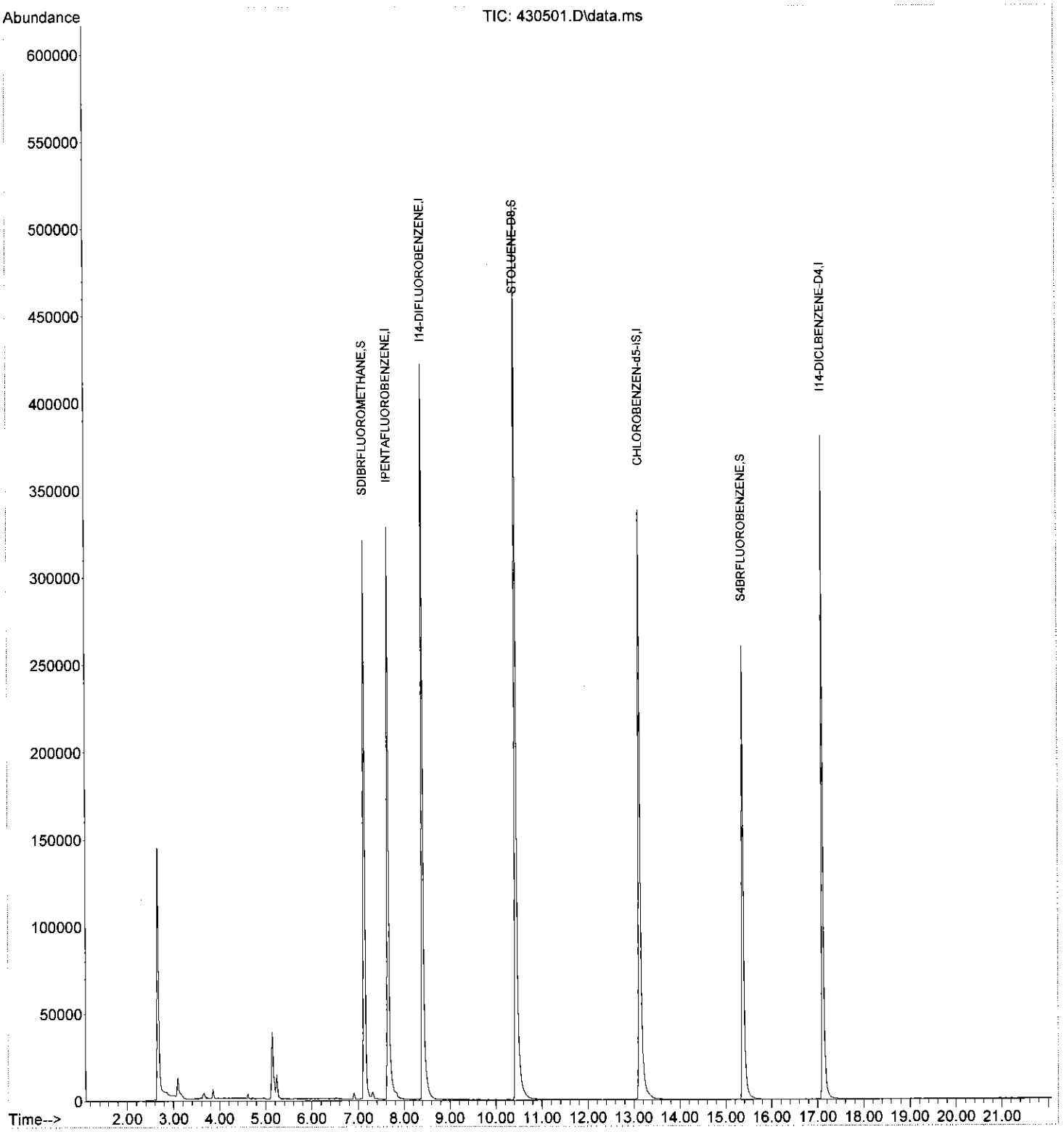
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	0.000		0	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	13.167	112	163	N.D.	
50) 1-CHLOROHEXANE	13.076	91	266	N.D.	
51) 1112-TETRACLETHANE	0.000		0	N.D.	
52) ETHYLBENZENE	13.127	91	611	N.D.	
53) MP-XYLENE	0.000		0	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	0.000		0	N.D.	
56) BROMOFORM	0.000		0	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	0.000		0	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	15.370	77	662	N.D.	
63) N-PROPYLBENZENE	15.584	91	308	N.D.	
64) 2-CHLOROTOLUENE	0.000		0	N.D.	
65) 4-CHLOROTOLUENE	0.000		0	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	0.000		0	N.D.	
68) 124TRIMETHYLBENZENE	0.000		0	N.D.	
69) SEC-BUTYLBENZENE	0.000		0	N.D.	
70) 13-DICHLOROBENZENE	17.045	146	61	N.D.	
72) 4-ISOPROPYLTOLUENE	16.863	119	70	N.D.	
73) 14-DICHLOROBENZENE	17.137	146	637	N.D.	
74) 12-DICHLOROBENZENE	0.000		0	N.D.	
75) N-BUTYLBENZENE	17.492	91	63	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	0.000		0	N.D.	
78) NAPHTHALENE	0.000		0	N.D.	
79) HEXACHLOROBUTADIENE	19.766	225	153	N.D.	
80) 123-TRICLBENZENE	0.000		0	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430501.D
Acq On : 15 Dec 2017 6:36 am
Operator : KMOR
Sample : LRB/2773640
Misc : RUN194305
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Dec 19 09:41:13 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430502.D
Acq On : 15 Dec 2017 7:02 am
Operator : KMOR
Sample : MDL/2773642
Misc : RUN194305
ALS Vial : 34 Sample Multiplier: 1

① Poor integration by computer data system. DOL 12/19/2017.

Quant Time: Dec 19 09:43:07 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	292478	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.416	114	457081	20.00 µg/L	0.02
48) CHLOROBENZEN-d5-IS	13.127	117	491931	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.116	152	168781	20.00 µg/L	0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	224735	22.92 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 114.60%		
39) STOLUENE-D8	10.437	98	546163	19.86 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.30%		
59) S4BRFLUOROBENZENE	15.370	95	157347m ①	17.53 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 87.65%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.884	85	4471	1.06 µg/L	97
3) CHLOROMETHANE	3.148	50	5538	1.47 µg/L #	98
4) VINYL CHLORIDE	3.253	62	2210	1.00 µg/L #	57
5) BROMOMETHANE	3.655	94	2374	2.14 µg/L #	97
6) CHLOROETHANE	3.797	64	3139	2.97 µg/L #	95
7) TRICLFLUOROMETHANE	3.960	101	6681	1.30 µg/L	96
8) ACROLEIN	4.883	56	3366	13.14 µg/L	92
9) ACETONE	5.188	43	17430	24.49 µg/L #	96
10) 11-DICHLOROETHENE	4.528	61	2311	1.08 µg/L	94
11) IODOMETHANE	4.721	142	23081	6.41 µg/L #	89
12) CARBON DISULFIDE	4.609	76	37322	8.27 µg/L #	96
13) ACRYLONITRILE	6.051	53	5766	2.87 µg/L	96
14) DICHLOROMETHANE	5.147	84	25409	14.12 µg/L	88
15) TRANS12DICLETHENE	5.330	96	2724	1.45 µg/L	89
16) 11-DICHLOROETHANE	6.000	63	5308	1.37 µg/L	99
17) VINYL ACETATE	6.224	43	20696	4.82 µg/L #	92
18) 2-BUTANONE	7.279	43	9822	4.02 µg/L #	92
19) CIS12DICHLOROETHENE	6.619	96	3014	0.85 µg/L	96
20) 22-DICHLOROPROPANE	6.751	77	2736	0.70 µg/L	99
21) CHLOROFORM	6.914	83	10212	1.16 µg/L #	99
22) BROMOCHLOROMETHANE	6.863	49	5111	1.14 µg/L #	82
25) TETRAHYDROFURAN	7.147	42	1933	0.16 µg/L #	78
26) 111-TRICHLOROETHANE	7.198	97	6228	0.83 µg/L	96
27) 11-DICHLOROPROPENE	7.350	75	2145	0.45 µg/L #	90
28) 12-DICHLOROETHANE	7.919	62	6206	0.88 µg/L	97
29) CARBONTETRACHLORIDE	7.208	117	823	0.12 µg/L	97
30) BENZENE	7.665	78	15748	0.90 µg/L #	86
31) TRICHLOROETHENE	8.416	132	4565	0.93 µg/L #	76
32) 12-DICHLOROPROPANE	9.147	63	2973	0.73 µg/L	96
33) DIBROMOMETHANE	9.025	174	3628	0.94 µg/L	92
34) BROMODICLMETHANE	9.208	83	5352	0.84 µg/L	92
35) 2-CLETHYLVINYLETHER	10.000	63	1039	0.82 µg/L #	58
36) EPICHLOROHYDRIN	10.538	57	6252	9.47 µg/L	89
37) 4METHYL-2-PENTANONE	11.086	43	10379	1.91 µg/L #	80
38) CIS13DICLPROPENE	10.162	75	2112	0.38 µg/L	83
40) TOLUENE	10.528	91	13452	0.73 µg/L	95
41) TRANS13DICLPROPENE	11.188	75	2056	0.40 µg/L	71
42) 112-TRICHLOROETHANE	11.462	97	4263	0.85 µg/L	94
43) 2-HEXANONE	12.548	43	3503	1.00 µg/L #	71
44) 13-DICHLOROPROPANE	11.949	76	3564	0.51 µg/L	96
45) DIBRCHLOROMETHANE	11.797	129	3658	0.67 µg/L	98

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430502.D
Acq On : 15 Dec 2017 7:02 am
Operator : KMOR
Sample : MDL/2773642
Misc : RUN194305
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Dec 19 09:43:07 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

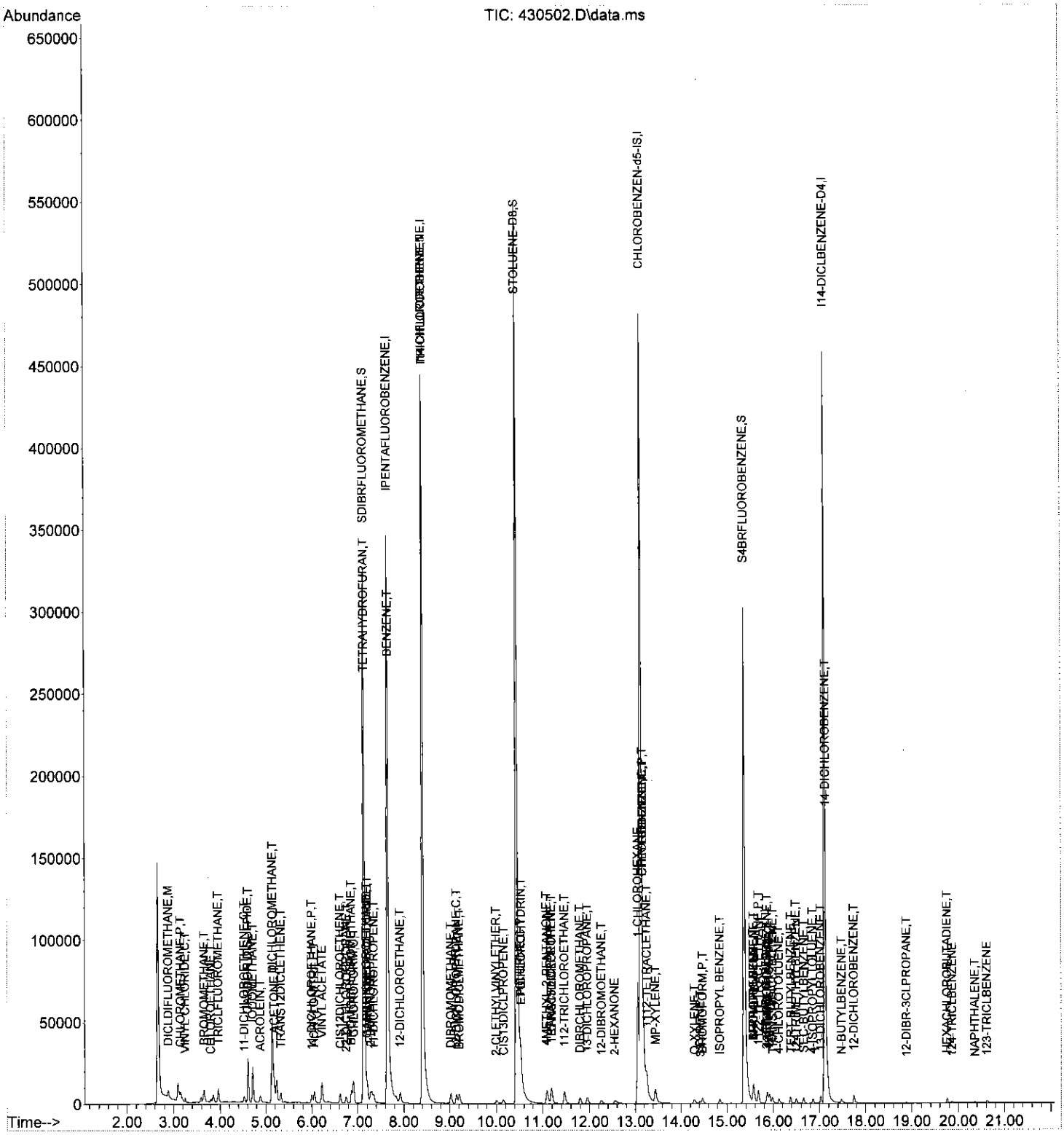
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.188	166	3392	0.59 µg/L	99
47) 12-DIBROMOETHANE	12.264	107	2451	0.58 µg/L #	97
49) CHLOROBENZENE	13.167	112	11507	0.87 µg/L #	60
50) 1-CHLOROHEXANE	13.066	91	27720	0.51 µg/L #	61
51) 1112-TETRACLETHANE	13.259	131	4176	0.83 µg/L #	1
52) ETHYLBENZENE	13.167	91	14763	0.73 µg/L	87
53) MP-XYLENE	13.452	91	9457	0.71 µg/L	91
54) STYRENE	14.426	104	1782	0.18 µg/L #	38
55) O-XYLENE	14.294	91	2960	0.23 µg/L	98
56) BROMOFORM	14.477	173	2473	0.61 µg/L	95
57) 1122-TETRACLETHANE	15.675	83	5785	0.82 µg/L	97
58) ISOPROPYL BENZENE	14.853	105	3019	0.19 µg/L	91
60) 123-TRICLPROPANE	15.908	110	1274	0.62 µg/L	91
61) TRANS14DICL2BUTENE	15.990	53	1351	1.64 µg/L	89
62) BROMOBENZENE	15.563	77	4933	0.62 µg/L	97
63) N-PROPYLBENZENE	15.573	91	6839	0.37 µg/L	90
64) 2-CHLOROTOLUENE	15.858	91	4356	0.35 µg/L	97
65) 4-CHLOROTOLUENE	16.122	91	3396	0.30 µg/L	93
66) 135TRIMETHYLBENZENE	15.868	105	3554	0.24 µg/L	91
67) TERT-BUTYLBENZENE	16.386	119	2438	0.22 µg/L	91
68) 124TRIMETHYLBENZENE	16.497	105	2801	0.21 µg/L	90
69) SEC-BUTYLBENZENE	16.660	105	3366	0.22 µg/L	92
70) 13-DICHLOROBENZENE	17.025	146	3417	0.41 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.852	119	2414	0.27 µg/L	89
73) 14-DICHLOROBENZENE	17.137	146	8039	1.17 µg/L #	1
74) 12-DICHLOROBENZENE	17.746	146	3761	0.62 µg/L	95
75) N-BUTYLBENZENE	17.482	91	2733	0.39 µg/L	82
76) 12-DIBR-3CLPROPANE	18.883	157	77	0.11 µg/L #	72
77) 124-TRICLBENZENE	19.868	180	920	0.28 µg/L #	60
78) NAPHTHALENE	20.355	128	1125	0.15 µg/L	71
79) HEXACHLOROBUTADIENE	19.756	225	961	0.60 µg/L	94
80) 123-TRICLBENZENE	20.609	182	1095	0.33 µg/L	86

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430502.D
Acq On : 15 Dec 2017 7:02 am
Operator : KMOR
Sample : MDL/2773642
Misc : RUN194305
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Dec 19 09:43:07 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430503.D
Acq On : 15 Dec 2017 7:28 am
Operator : KMOR
Sample : ICV/2773641
Misc : RUN194305
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 19 09:47:16 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

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	96	0.01
2	M	DICLDIFLUOROMETHANE	20.000	16.348	18.3	67	0.02
3	P,T	CHLOROMETHANE	20.000	19.654	1.7	84	0.02
4	C,T	VINYL CHLORIDE	20.000	18.472	7.6	82	0.00
5	T	BROMOMETHANE	20.000	22.334	-11.7	99	0.02
6	T	CHLOROETHANE	20.000	23.080	-15.4	104	0.03
7	T	TRICLFLUOROMETHANE	20.000	21.212	-6.1	90	0.03
8	T	ACROLEIN	500.000	416.160	16.8	85	0.01
9	T	ACETONE	100.000	113.564	-13.6	113	0.00
10	C,T	11-DICHLOROETHENE	20.000	19.042	4.8	109	0.02
11	T	IODOMETHANE	100.000	115.811	-15.8	121	0.02
12	T	CARBON DISULFIDE	100.000	103.715	-3.7	117	0.01
13	T	ACRYLONITRILE	100.000	88.632	11.4	97	0.01
14	T	DICHLOROMETHANE	20.000	22.967	-14.8	103	0.01
15	T	TRANS12DICLETHENE	20.000	22.409	-12.0	112	0.02
16	P,T	11-DICHLOROETHANE	20.000	21.496	-7.5	120	0.01
17		VINYL ACETATE	100.000	95.611	4.4	89	0.01
18		2-BUTANONE	100.000	87.676	12.3	88	0.01
19	T	CIS12DICHLOROETHENE	20.000	18.679	6.6	88	0.01
20	T	22-DICHLOROPROPANE	20.000	21.111	-5.6	98	0.01
21	C,T	CHLOROFORM	20.000	17.915	10.4	99	0.00
22	T	BROMOCHLOROMETHANE	20.000	17.970	10.2	97	0.01
23	I	I14-DIFLUOROBENZENE	20.000	20.000	0.0	100	0.01
24	S	SDIBRFLUOROMETHANE	20.000	22.610	-13.0	108	0.01
25	T	TETRAHYDROFURAN	20.000	23.213	-16.1	113	0.01
26	T	111-TRICHLOROETHANE	20.000	18.630	6.9	97	0.00
27	T	11-DICHLOROPROPENE	20.000	18.357	8.2	88	0.01
28	T	12-DICHLOROETHANE	20.000	17.283	13.6	96	0.00
29	T	CARBONTETRACHLORIDE	20.000	18.610	7.0	97	0.00
30	T	BENZENE	20.000	18.082	9.6	100	0.01
31	T	TRICHLOROETHENE	20.000	18.961	5.2	99	0.01
32	C,T	12-DICHLOROPROPANE	20.000	18.656	6.7	93	0.01
33	T	DIBROMOMETHANE	20.000	17.247	13.8	92	0.01
34	T	BROMODICLMETHANE	20.000	18.697	6.5	95	0.00
35	T	2-CLETHYLVINYLETHER	100.000	98.689	1.3	112	0.00
36	T	EPICHLOROHYDRIN	500.000	442.392	11.5	88	0.00
37	T	4METHYL-2-PENTANONE	100.000	88.121	11.9	82	0.00
38	T	CIS13DICLPROPENE	20.000	16.862	15.7	83	0.01
39	S	STOLUENE-D8	20.000	20.869	-4.3	103	0.00
40	C,T	TOLUENE	20.000	19.022	4.9	96	0.00
41	T	TRANS13DICLPROPENE	20.000	17.473	12.6	88	0.00
42	T	112-TRICHLOROETHANE	20.000	18.167	9.2	94	0.00
43		2-HEXANONE	100.000	100.436	-0.4	94	0.00
44	T	13-DICHLOROPROPANE	20.000	17.595	12.0	87	0.01
45	T	DIBRCHLOROMETHANE	20.000	16.692	16.5	89	0.00
46	T	TETRACHLOROETHENE	20.000	19.540	2.3	98	0.00
47	T	12-DIBROMOETHANE	20.000	16.238	18.8	88	0.02
48	I	CHLOROBENZEN-d5-IS	20.000	20.000	0.0	100	0.00
49	P,T	CHLOROBENZENE	20.000	18.956	5.2	95	0.00
50		1-CHLOROHEXANE	20.000	18.389	8.1	82	-0.03

Evaluate Continuing Calibration Report

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430503.D
Acq On : 15 Dec 2017 7:28 am
Operator : KMOR
Sample : ICV/2773641
Misc : RUN194305
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 19 09:47:16 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

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)
51	T	1112-TETRACLETHANE	20.000	18.611	6.9	96	0.00
52	C,T	ETHYLBENZENE	20.000	18.009	10.0	85	0.00
53	T	MP-XYLENE	40.000	39.324	1.7	90	0.00
54	T	STYRENE	20.000	17.378	13.1	89	0.01
55	T	O-XYLENE	20.000	16.261	18.7	85	0.00
56	P,T	BROMOFORM	20.000	18.282	8.6	93	0.00
57	P,T	1122-TETRACLETHANE	20.000	17.448	12.8	93	0.00
58	T	ISOPROPYL BENZENE	20.000	17.576	12.1	88	0.00
59	S	S4BRFLUOROBENZENE	20.000	19.399	3.0	99	0.01
60	T	123-TRICLPROPANE	20.000	17.762	11.2	93	0.01
61	T	TRANS14DICL2BUTENE	100.000	84.122	15.9	92	0.00
62	T	BROMOBENZENE	20.000	18.721	6.4	97	0.01
63	T	N-PROPYLBENZENE	20.000	18.593	7.0	94	0.01
64	T	2-CHLOROTOLUENE	20.000	19.202	4.0	94	0.00
65	T	4-CHLOROTOLUENE	20.000	17.821	10.9	94	0.00
66	T	135TRIMETHYLBENZENE	20.000	19.197	4.0	96	0.00
67	T	TERT-BUTYLBENZENE	20.000	18.756	6.2	93	0.00
68	T	124TRIMETHYLBENZENE	20.000	19.277	3.6	96	0.01
69	T	SEC-BUTYLBENZENE	20.000	19.040	4.8	94	0.01
70	T	13-DICHLOROBENZENE	20.000	18.906	5.5	93	0.00
71	I	I14-DICLBENZENE-D4	20.000	20.000	0.0	68	0.00
72	T	4-ISOPROPYLTOLUENE	20.000	23.214	-16.1	78	0.01
73	T	14-DICHLOROBENZENE	20.000	22.742	-13.7	84	0.00
74	T	12-DICHLOROBENZENE	20.000	22.477	-12.4	78	0.00
75	T	N-BUTYLBENZENE	20.000	20.060	-0.3	67	0.00
76	T	12-DIBR-3CLPROPANE	20.000	18.475	7.6	66	0.01
77		124-TRICLBENZENE	20.000	18.336	8.3	66	0.01
78	T	NAPHTHALENE	20.000	17.900	10.5	64	0.02
79	T	HEXACHLOROBUTADIENE	20.000	19.217	3.9	67	0.01
80		123-TRICLBENZENE	20.000	20.223	-1.1	69	0.01

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

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430503.D
Acq On : 15 Dec 2017 7:28 am
Operator : KMOR
Sample : ICV/2773641
Misc : RUN194305
ALS Vial : 35 Sample Multiplier: 1

① Area - integration of peak due noisy baseline. DR 12/19/2017.
② Abnormal peak shape that was not integrated completely. DR 12/19/2017.

Quant Time: Dec 19 09:47:16 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	351249	20.00 µg/L	0.01
23) I14-DIFLUOROBENZENE	8.406	114	501102	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	552825	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.106	152	182943m ①	20.00 µg/L	0.00
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.137	111	242999	22.61 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 113.05%		
39) STOLUENE-D8	10.437	98	629156	20.87 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.35%		
59) S4BRFLUOROBENZENE	15.371	95	195711	19.40 µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.00%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.884	85	82684	16.35 µg/L	100
3) CHLOROMETHANE	3.148	50	88762	19.65 µg/L	99
4) VINYL CHLORIDE	3.254	62	49173	18.47 µg/L	100
5) BROMOMETHANE	3.655	94	29697	22.33 µg/L	96
6) CHLOROETHANE	3.797	64	29274	23.08 µg/L	96
7) TRICLFLUOROMETHANE	3.960	101	131264	21.21 µg/L	99
8) ACROLEIN	4.884	56	128026m ②	416.16 µg/L	
9) ACETONE	5.178	43	97051m ②	113.56 µg/L	
10) 11-DICHLOROETHENE	4.528	61	48947	19.04 µg/L	95
11) IODOMETHANE	4.721	142	500881m ①	115.81 µg/L	
12) CARBON DISULFIDE	4.610	76	562443m ①	103.71 µg/L	
13) ACRYLONITRILE	6.051	53	213864m ②	88.63 µg/L	
14) DICHLOROMETHANE	5.148	84	49644m ①	22.97 µg/L	
15) TRANS12DICLETHENE	5.330	96	50452	22.41 µg/L	95
16) 11-DICHLOROETHANE	6.000	63	100236	21.50 µg/L	98
17) VINYL ACETATE	6.214	43	492846	95.61 µg/L #	96
18) 2-BUTANONE	7.269	43	257037	87.68 µg/L	97
19) CIS12DICHLOROETHENE	6.620	96	79876	18.68 µg/L	98
20) 22-DICHLOROPROPANE	6.752	77	98863m ②	21.11 µg/L	
21) CHLOROFORM	6.904	83	189308	17.92 µg/L	100
22) BROMOCHLOROMETHANE	6.863	49	97066	17.97 µg/L	90
25) TETRAHYDROFURAN	7.148	42	313471m ②	23.21 µg/L	
26) 111-TRICHLOROETHANE	7.198	97	152657	18.63 µg/L	97
27) 11-DICHLOROPROPENE	7.351	75	95859	18.36 µg/L	100
28) 12-DICHLOROETHANE	7.909	62	133416	17.28 µg/L	100
29) CARBONTETRACHLORIDE	7.127	117	137512	18.61 µg/L	99
30) BENZENE	7.665	78	347944	18.08 µg/L	99
31) TRICHLOROETHENE	8.416	132	101991	18.96 µg/L	98
32) 12-DICHLOROPROPANE	9.147	63	82754	18.66 µg/L	98
33) DIBROMOMETHANE	9.015	174	73202	17.25 µg/L	97
34) BROMODICLMETHANE	9.198	83	130378	18.70 µg/L	100
35) 2-CLETHYLVINYLETHER	9.980	63	137892m ②	98.69 µg/L	
36) EPICHLOROHYDRIN	10.518	57	320260m ②	442.39 µg/L	
37) 4METHYL-2-PENTANONE	11.076	43	525103	88.12 µg/L	95
38) CIS13DICLPROPENE	10.142	75	103087	16.86 µg/L	94
40) TOLUENE	10.518	91	383624	19.02 µg/L	97
41) TRANS13DICLPROPENE	11.168	75	98581	17.47 µg/L	90
42) 112-TRICHLOROETHANE	11.452	97	99916	18.17 µg/L	99
43) 2-HEXANONE	12.518	43	385980m ②	100.44 µg/L	
44) 13-DICHLOROPROPANE	11.939	76	133842	17.60 µg/L	97
45) DIBRCHLOROMETHANE	11.787	129	100046	16.69 µg/L	100

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430503.D
Acq On : 15 Dec 2017 7:28 am
Operator : KMOR
Sample : ICV/2773641
Misc : RUN194305
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 19 09:47:16 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.178	166	122645	19.54 µg/L	98
47) 12-DIBROMOETHANE	12.244	107	75142	16.24 µg/L	99
49) CHLOROBENZENE	13.157	112	281270	18.96 µg/L	97
50) 1-CHLOROHEXANE	13.056	91	1124655m ①	18.39 µg/L	
51) 1112-TETRACLETHANE	13.259	131	105050	18.61 µg/L	89
52) ETHYLBENZENE	13.168	91	408763	18.01 µg/L	100
53) MP-XYLENE	13.432	91	584779	39.32 µg/L	98
54) STYRENE	14.376	104	194283	17.38 µg/L	98
55) O-XYLENE	14.274	91	235152	16.26 µg/L	100
56) BROMOFORM	14.457	173	83712	18.28 µg/L	99
57) 1122-TETRACLETHANE	15.665	83	139001	17.45 µg/L	99
58) ISOPROPYL BENZENE	14.853	105	306219	17.58 µg/L	99
60) 123-TRICLPROPANE	15.909	110	41111	17.76 µg/L	94
61) TRANS14DICL2BUTENE	15.949	53	78114m ①	84.12 µg/L	
62) BROMOBENZENE	15.553	77	168193	18.72 µg/L	96
63) N-PROPYLBENZENE	15.563	91	389673	18.59 µg/L	97
64) 2-CHLOROTOLUENE	15.838	91	269180	19.20 µg/L	87
65) 4-CHLOROTOLUENE	16.101	91	228934	17.82 µg/L	100
66) 135TRIMETHYLBENZENE	15.868	105	321588	19.20 µg/L	99
67) TERT-BUTYLBENZENE	16.376	119	238750	18.76 µg/L	98
68) 124TRIMETHYLBENZENE	16.487	105	292418	19.28 µg/L	99
69) SEC-BUTYLBENZENE	16.650	105	332750	19.04 µg/L	97
70) 13-DICHLOROBENZENE	17.005	146	178830	18.91 µg/L	96
72) 4-ISOPROPYLTOLUENE	16.853	119	226794m ②	23.21 µg/L	
73) 14-DICHLOROBENZENE	17.137	146	169387m ②	22.74 µg/L	
74) 12-DICHLOROBENZENE	17.736	146	148173m ②	22.48 µg/L	
75) N-BUTYLBENZENE	17.472	91	152815m ②	20.06 µg/L	
76) 12-DIBR-3CLPROPANE	18.863	157	13595	18.47 µg/L	90
77) 124-TRICLBENZENE	19.827	180	66383	18.34 µg/L #	94
78) NAPHTHALENE	20.314	128	145161	17.90 µg/L	99
79) HEXACHLOROBUTADIENE	19.756	225	33174	19.22 µg/L	99
80) 123-TRICLBENZENE	20.599	182	72223m ①	20.22 µg/L	

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

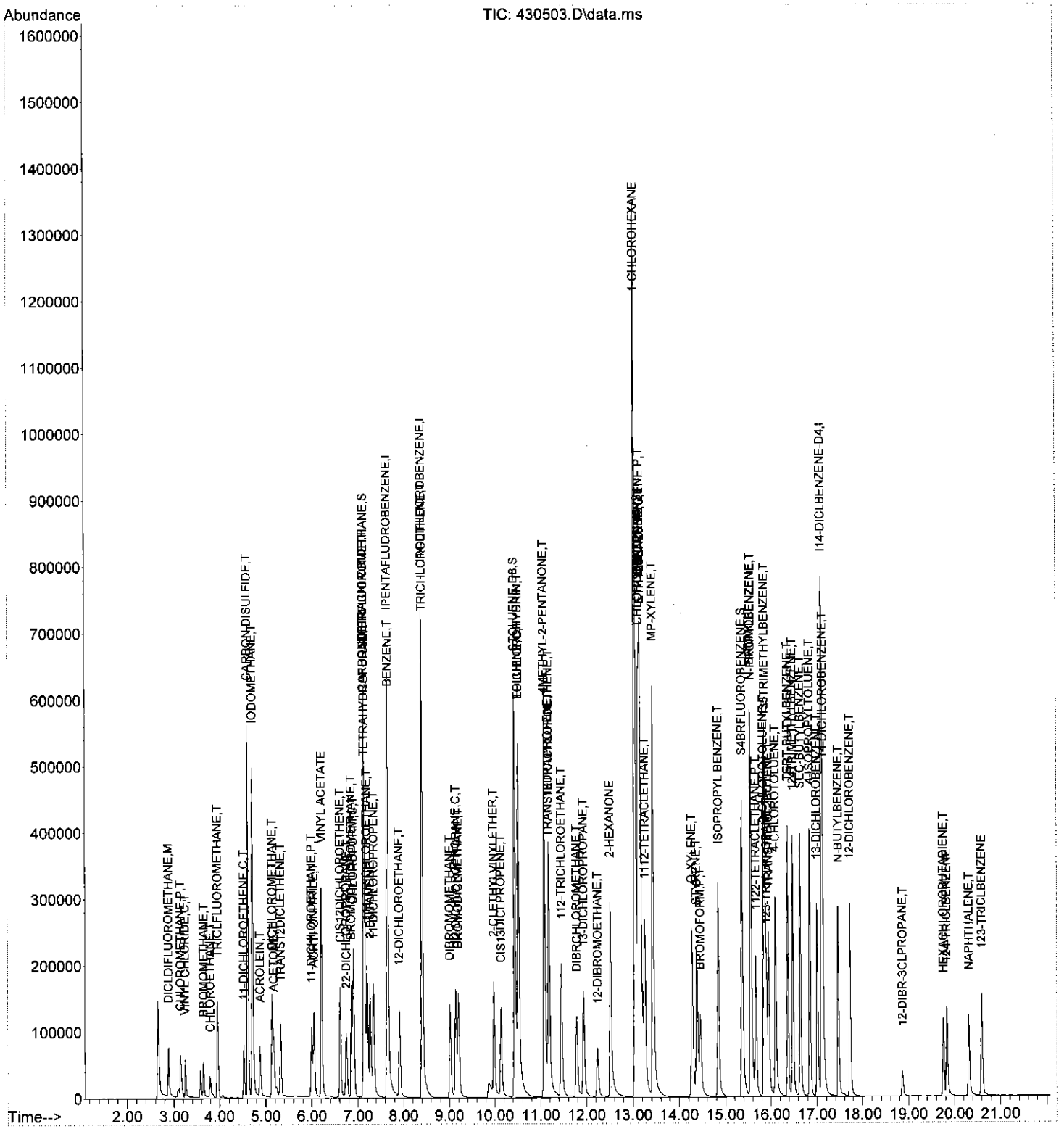
① Abnormal peak shape that was not integrated completely. DL 12/19/2017.

② Over-integration of peak due noisy baseline. DL 12/19/2017.

Quantitation Report (QT Reviewed)

Data Path : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Data\194304CC\
Data File : 430503.D
Acq On : 15 Dec 2017 7:28 am
Operator : KMOR
Sample : ICV/2773641
Misc : RUN194305
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 19 09:47:16 2017
Quant Method : G:\UsersData\UsersData\KOtero\Exported Data & Methods\V7\Methods\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430416.D
Acq On : 15 Dec 2017 3:49 pm
Operator : KMOR
Sample : 2760986MS/2760988
Misc : RUN194103
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 19 08:58:57 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.655	168	354218	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.406	114	505050	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	551685	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.106	152	268210	20.00 µg/L	0.00
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.127	111	253331	23.39 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 116.95%		
39) STOLUENE-D8	10.437	98	611154	20.11 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.55%		
59) S4BRFLUOROBENZENE	15.360	95	194278	19.30 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.50%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.873	85	79725	15.63 µg/L	99
3) CHLOROMETHANE	3.148	50	85395	18.75 µg/L	99
4) VINYL CHLORIDE	3.252	62	47641	17.75 µg/L	99
5) BROMOMETHANE	3.645	94	26647	19.87 µg/L	97
6) CHLOROETHANE	3.787	64	26925	21.05 µg/L	96
7) TRICLFLUOROMETHANE	3.950	101	128212	20.54 µg/L	99
8) ACROLEIN	4.884	56	60666	195.55 µg/L #	97
9) ACETONE	5.178	43	77019	89.37 µg/L #	95
10) 11-DICHLOROETHENE	4.528	61	35946	13.87 µg/L	96
11) IODOMETHANE	4.711	142	412120	94.49 µg/L	89
12) CARBON DISULFIDE	4.609	76	578180	105.72 µg/L #	96
13) ACRYLONITRILE	6.041	53	80672	33.15 µg/L	98
14) DICHLOROMETHANE	5.147	84	40538	18.60 µg/L	91
15) TRANS12DICLETHENE	5.320	96	37233	16.40 µg/L	96
16) 11-DICHLOROETHANE	6.000	63	72939	15.51 µg/L	98
17) VINYL ACETATE	6.213	43	467322	89.90 µg/L #	96
18) 2-BUTANONE	7.269	43	210653	71.25 µg/L	99
19) CIS12DICHLOROETHENE	6.620	96	56919	13.20 µg/L	96
20) 22-DICHLOROPROPANE	6.741	77	78497	16.62 µg/L	98
21) CHLOROFORM	6.904	83	144025	13.52 µg/L	99
22) BROMOCHLOROMETHANE	6.853	49	74578	13.69 µg/L	89
25) TETRAHYDROFURAN	7.147	42	60509	4.45 µg/L #	93
26) 111-TRICHLOROETHANE	7.198	97	117500	14.23 µg/L	97
27) 11-DICHLOROPROPENE	7.340	75	70366	13.37 µg/L	97
28) 12-DICHLOROETHANE	7.909	62	98110	12.61 µg/L	100
29) CARBONTETRACHLORIDE	7.127	117	104960	14.09 µg/L	98
30) BENZENE	7.655	78	265397	13.68 µg/L	98
31) TRICHLOROETHENE	8.406	132	75627	13.95 µg/L	96
32) 12-DICHLOROPROPANE	9.137	63	58123	13.00 µg/L	96
33) DIBROMOMETHANE	9.015	174	53251	12.45 µg/L	98
34) BROMODICLMETHANE	9.198	83	94405	13.43 µg/L	99
35) 2-CLETHYLVINYLETHER	10.071	63	1650	1.17 µg/L #	33
36) EPICHLOROHYDRIN	10.518	57	155929	213.71 µg/L	98
37) 4METHYL-2-PENTANONE	11.076	43	386544	64.36 µg/L	94
38) CIS13DICLPROPENE	10.142	75	48871	7.93 µg/L	94
40) TOLUENE	10.518	91	276264	13.59 µg/L	98
41) TRANS13DICLPROPENE	11.168	75	72340	12.72 µg/L	90
42) 112-TRICHLOROETHANE	11.452	97	71849	12.96 µg/L	98
43) 2-HEXANONE	12.518	43	207657	53.61 µg/L	94
44) 13-DICHLOROPROPANE	11.939	76	92556	12.07 µg/L	96
45) DIBRCHLOROMETHANE	11.787	129	70730	11.71 µg/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430416.D
Acq On : 15 Dec 2017 3:49 pm
Operator : KMOR
Sample : 2760986MS/2760988
Misc : RUN194103
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 19 08:58:57 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

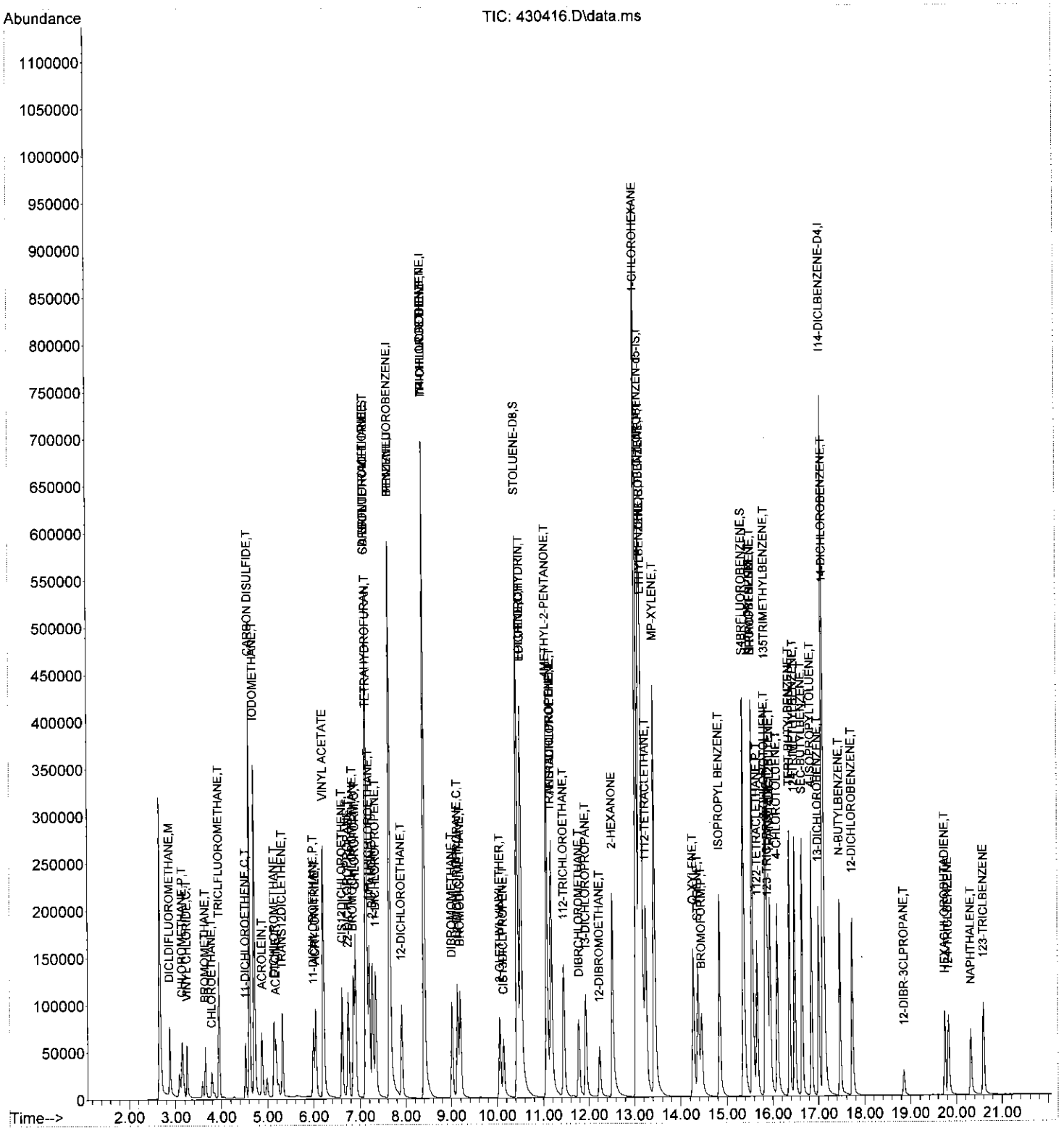
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.178	166	90779	14.35 µg/L	98
47) 12-DIBROMOETHANE	12.233	107	53799	11.53 µg/L	99
49) CHLOROBENZENE	13.157	112	203068	13.71 µg/L	95
50) 1-CHLOROHEXANE	13.056	91	497251	8.15 µg/L #	80
51) 1112-TETRACLETHANE	13.249	131	74567	13.24 µg/L #	83
52) ETHYLBENZENE	13.167	91	292917	12.93 µg/L	100
53) MP-XYLENE	13.431	91	408832	27.55 µg/L	99
54) STYRENE	14.376	104	126647	11.35 µg/L	98
55) O-XYLENE	14.274	91	150196	10.41 µg/L	99
56) BROMOFORM	14.457	173	58913	12.89 µg/L	99
57) 1122-TETRACLETHANE	15.665	83	105732	13.30 µg/L	100
58) ISOPROPYL BENZENE	14.842	105	198410	11.41 µg/L	99
60) 123-TRICLPROPANE	15.898	110	30923	13.39 µg/L	98
61) TRANS14DICL2BUTENE	15.949	53	55360	59.74 µg/L	86
62) BROMOBENZENE	15.553	77	119783	13.36 µg/L	96
63) N-PROPYLBENZENE	15.553	91	278596	13.32 µg/L	96
64) 2-CHLOROTOLUENE	15.837	91	186275	13.32 µg/L	86
65) 4-CHLOROTOLUENE	16.101	91	157149	12.26 µg/L	99
66) 135TRIMETHYLBENZENE	15.858	105	228244	13.65 µg/L	100
67) TERT-BUTYLBENZENE	16.375	119	163794	12.89 µg/L	99
68) 124TRIMETHYLBENZENE	16.477	105	201253	13.29 µg/L	100
69) SEC-BUTYLBENZENE	16.650	105	234828	13.46 µg/L	97
70) 13-DICHLOROBENZENE	17.005	146	124617	13.20 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.853	119	188132	13.13 µg/L	99
73) 14-DICHLOROBENZENE	17.127	146	139023	12.73 µg/L	91
74) 12-DICHLOROBENZENE	17.736	146	112034	11.59 µg/L	99
75) N-BUTYLBENZENE	17.462	91	147759	13.23 µg/L	94
76) 12-DIBR-3CLPROPANE	18.863	157	10073	9.34 µg/L	92
77) 124-TRICLBENZENE	19.827	180	43556	8.21 µg/L #	91
78) NAPHTHALENE	20.314	128	90133	7.58 µg/L	99
79) HEXACHLOROBUTADIENE	19.756	225	24368	9.63 µg/L	97
80) 123-TRICLBENZENE	20.599	182	47851	9.14 µg/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430416.D
Acq On : 15 Dec 2017 3:49 pm
Operator : KMOR
Sample : 2760986MS/2760988
Misc : RUN194103
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 19 08:58:57 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430417.D
Acq On : 15 Dec 2017 4:15 pm
Operator : KMOR
Sample : 2760986MSD/2760989
Misc : RUN194103
ALS Vial : 53 Sample Multiplier: 1

① Unidentified peak that will result in false negative. XL 12/19/2017.

Quant Time: Dec 19 09:01:15 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.645	168	389808	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.406	114	547737	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	576558	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.107	152	276480m ①	20.00 µg/L	0.00
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.127	111	271656	23.12 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.60%		
39) STOLUENE-D8	10.437	98	644152	19.55 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.75%		
59) S4BRFLUOROBENZENE	15.360	95	204721	19.46 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.30%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.874	85	67709	12.06 µg/L	99
3) CHLOROMETHANE	3.148	50	81548	16.27 µg/L	99
4) VINYL CHLORIDE	3.251	62	43793	14.82 µg/L	100
5) BROMOMETHANE	3.645	94	24576	16.65 µg/L	96
6) CHLOROETHANE	3.787	64	23460	16.67 µg/L #	94
7) TRICLFLUOROMETHANE	3.950	101	111238	16.20 µg/L	100
8) ACROLEIN	4.874	56	60057	175.91 µg/L #	98
9) ACETONE	5.178	43	73510	77.51 µg/L #	96
10) 11-DICHLOROETHENE	4.528	61	37129	13.02 µg/L	98
11) IODOMETHANE	4.711	142	410400	85.50 µg/L	90
12) CARBON DISULFIDE	4.610	76	576942	95.86 µg/L #	96
13) ACRYLONITRILE	6.041	53	79232	29.59 µg/L	98
14) DICHLOROMETHANE	5.138	84	39723	16.56 µg/L	91
15) TRANS12DICLETHENE	5.320	96	37619	15.06 µg/L	95
16) 11-DICHLOROETHANE	6.000	63	70823	13.69 µg/L	97
17) VINYL ACETATE	6.203	43	437033	76.40 µg/L #	96
18) 2-BUTANONE	7.269	43	202425	62.22 µg/L	98
19) CIS12DICHLOROETHENE	6.620	96	59893	12.62 µg/L	97
20) 22-DICHLOROPROPANE	6.742	77	77012	14.82 µg/L	98
21) CHLOROFORM	6.904	83	144160	12.29 µg/L	100
22) BROMOCHLOROMETHANE	6.853	49	75037	12.52 µg/L	90
25) TETRAHYDROFURAN	7.148	42	60941	4.13 µg/L	94
26) 111-TRICHLOROETHANE	7.198	97	115876	12.94 µg/L	98
27) 11-DICHLOROPROPENE	7.340	75	70681	12.38 µg/L	99
28) 12-DICHLOROETHANE	7.909	62	96407	11.43 µg/L	99
29) CARBONTETRACHLORIDE	7.127	117	104118	12.89 µg/L	99
30) BENZENE	7.655	78	262476	12.48 µg/L	99
31) TRICHLOROETHENE	8.406	132	74191	12.62 µg/L #	95
32) 12-DICHLOROPROPANE	9.137	63	57455	11.85 µg/L	97
33) DIBROMOMETHANE	9.016	174	53254	11.48 µg/L	97
34) BROMODICLMETHANE	9.198	83	91791	12.04 µg/L	100
35) 2-CLETHYLVINYLETHER	9.990	63	214	N.D.	
36) EPICHLOROHYDRIN	10.518	57	136947	173.07 µg/L	97
37) 4METHYL-2-PENTANONE	11.076	43	370615	56.90 µg/L	94
38) CIS13DICLPROPENE	10.142	75	48081	7.19 µg/L	95
40) TOLUENE	10.518	91	266430	12.09 µg/L	98
41) TRANS13DICLPROPENE	11.168	75	69402	11.25 µg/L	90
42) 112-TRICHLOROETHANE	11.442	97	70880	11.79 µg/L	98
43) 2-HEXANONE	12.518	43	198165	47.17 µg/L	94
44) 13-DICHLOROPROPANE	11.939	76	89395	10.75 µg/L	97
45) DIBRCHLOROMETHANE	11.777	129	68628	10.48 µg/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430417.D
Acq On : 15 Dec 2017 4:15 pm
Operator : KMOR
Sample : 2760986MSD/2760989
Misc : RUN194103
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 19 09:01:15 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

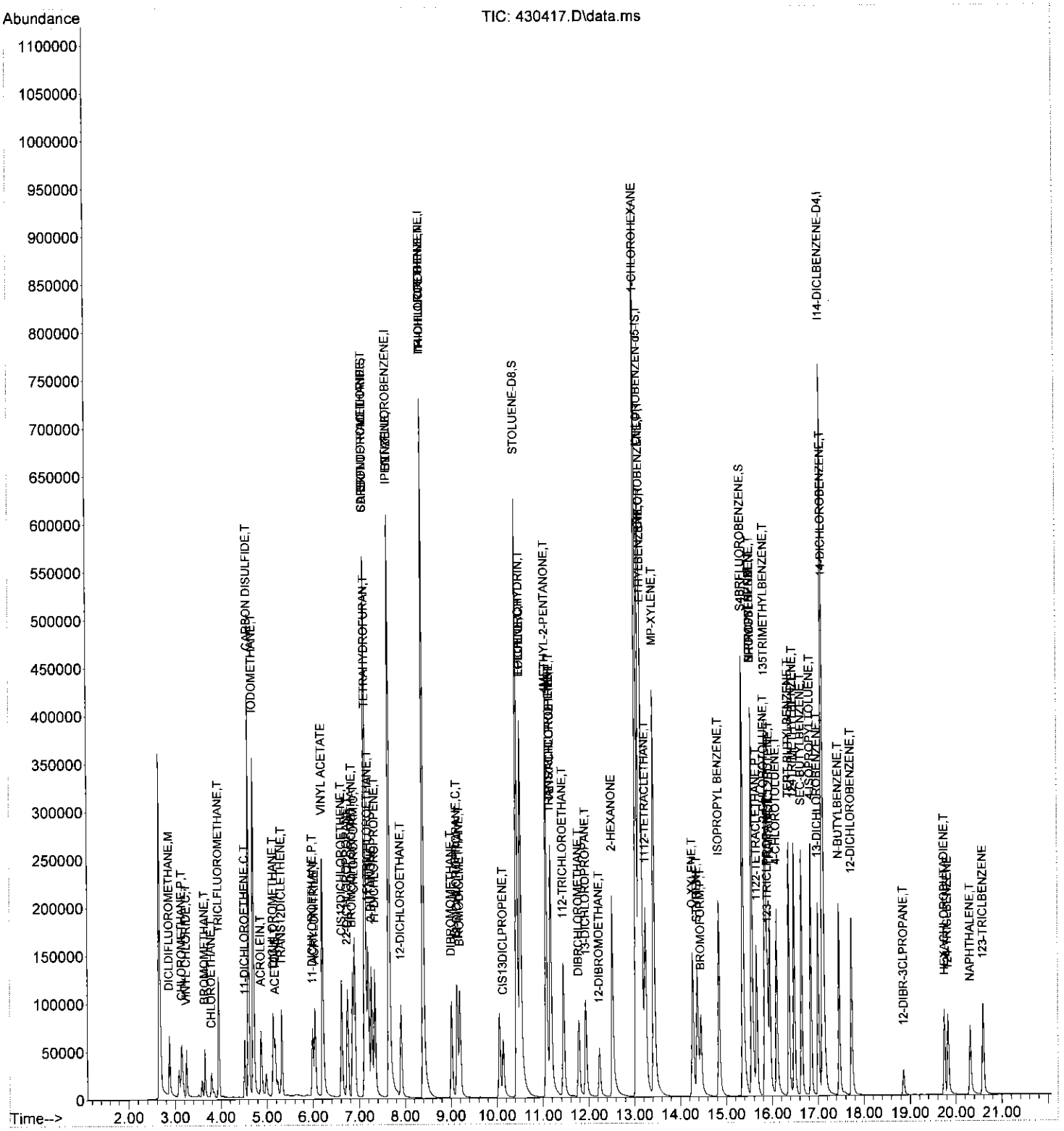
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.178	166	89222	13.00 µg/L	99
47) 12-DIBROMOETHANE	12.234	107	52698	10.42 µg/L	100
49) CHLOROBENZENE	13.157	112	198710	12.84 µg/L	96
50) 1-CHLOROHEXANE	13.056	91	483485	7.58 µg/L #	81
51) 1112-TETRACLETHANE	13.249	131	71270	12.11 µg/L #	82
52) ETHYLBENZENE	13.168	91	284908	12.04 µg/L	100
53) MP-XYLENE	13.432	91	392212	25.29 µg/L	99
54) STYRENE	14.376	104	121827	10.45 µg/L	98
55) O-XYLENE	14.274	91	143805	9.53 µg/L	99
56) BROMOFORM	14.457	173	56808	11.90 µg/L	98
57) 1122-TETRACLETHANE	15.665	83	102017	12.28 µg/L	100
58) ISOPROPYL BENZENE	14.843	105	190182	10.47 µg/L	99
60) 123-TRICLPROPANE	15.909	110	29493	12.22 µg/L	93
61) TRANS14DICL2BUTENE	15.949	53	51838	53.53 µg/L	87
62) BROMOBENZENE	15.553	77	115804	12.36 µg/L	96
63) N-PROPYLBENZENE	15.553	91	266477	12.19 µg/L	97
64) 2-CHLOROTOLUENE	15.838	91	178383	12.20 µg/L	86
65) 4-CHLOROTOLUENE	16.102	91	153864	11.48 µg/L	99
66) 135TRIMETHYLBENZENE	15.858	105	217114	12.43 µg/L	99
67) TERT-BUTYLBENZENE	16.376	119	157247	11.84 µg/L	98
68) 124TRIMETHYLBENZENE	16.477	105	193844	12.25 µg/L	99
69) SEC-BUTYLBENZENE	16.650	105	226452	12.42 µg/L	97
70) 13-DICHLOROBENZENE	17.005	146	122327	12.40 µg/L	97
72) 4-ISOPROPYLTOLUENE	16.853	119	180930	12.25 µg/L	98
73) 14-DICHLOROBENZENE	17.127	146	135740	12.06 µg/L	91
74) 12-DICHLOROBENZENE	17.736	146	109649	11.01 µg/L	99
75) N-BUTYLBENZENE	17.462	91	142769	12.40 µg/L	95
76) 12-DIBR-3CLPROPANE	18.863	157	9973	8.97 µg/L	91
77) 124-TRICLBENZENE	19.827	180	43290	7.91 µg/L #	93
78) NAPHTHALENE	20.315	128	91657	7.48 µg/L	100
79) HEXACHLOROBUTADIENE	19.756	225	24043	9.22 µg/L	98
80) 123-TRICLBENZENE	20.599	182	48206	8.93 µg/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430417.D
Acq On : 15 Dec 2017 4:15 pm
Operator : KMOR
Sample : 2760986MSD/2760989
Misc : RUN194103
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 19 09:01:15 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430418.D
Acq On : 15 Dec 2017 4:41 pm
Operator : KMOR
Sample : LFB/2774055
Misc : RUN194325
ALS Vial : 50 Sample Multiplier: 1

① Unidentified peak that will result in false negative. RDL 12/19/2017.

Quant Time: Dec 19 09:48:49 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	7.645	168	402820	20.00 µg/L	0.00
23) I14-DIFLUOROBENZENE	8.406	114	562079	20.00 µg/L	0.01
48) CHLOROBENZEN-d5-IS	13.127	117	595225	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	17.106	152	207378m ①	20.00 µg/L	0.00
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	7.127	111	277281	23.00 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 115.00%		
39) STOLUENE-D8	10.437	98	682528	20.18 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.90%		
59) S4BRFLUOROBENZENE	15.360	95	211901	19.51 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.55%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.874	85	86293	14.88 µg/L	99
3) CHLOROMETHANE	3.148	50	101404	19.58 µg/L	98
4) VINYL CHLORIDE	3.252	62	53439	17.50 µg/L	98
5) BROMOMETHANE	3.645	94	31197	20.46 µg/L	98
6) CHLOROETHANE	3.787	64	27870	19.16 µg/L	98
7) TRICLFLUOROMETHANE	3.950	101	140250	19.76 µg/L	98
8) ACROLEIN	4.873	56	76096	215.69 µg/L #	98
9) ACETONE	5.178	43	103555	105.66 µg/L #	94
10) 11-DICHLOROETHENE	4.528	61	46485	15.77 µg/L	97
11) IODOMETHANE	4.711	142	539319	108.73 µg/L	91
12) CARBON DISULFIDE	4.610	76	724553	116.50 µg/L	97
13) ACRYLONITRILE	6.041	53	107944	39.01 µg/L	98
14) DICHLOROMETHANE	5.148	84	57105	23.04 µg/L	93
15) TRANS12DICLETHENE	5.320	96	48413	18.75 µg/L	94
16) 11-DICHLOROETHANE	6.000	63	92330	17.27 µg/L	98
17) VINYL ACETATE	6.203	43	497615	84.18 µg/L #	97
18) 2-BUTANONE	7.259	43	289887	86.22 µg/L	98
19) CIS12DICHLOROETHENE	6.620	96	85515	17.44 µg/L	98
20) 22-DICHLOROPROPANE	6.741	77	98128	18.27 µg/L	98
21) CHLOROFORM	6.904	83	192177	15.86 µg/L	99
22) BROMOCHLOROMETHANE	6.853	49	101415	16.37 µg/L	91
25) TETRAHYDROFURAN	7.148	42	87079	5.75 µg/L	95
26) 111-TRICHLOROETHANE	7.198	97	151501	16.48 µg/L	98
27) 11-DICHLOROPROPENE	7.340	75	96714	16.51 µg/L	98
28) 12-DICHLOROETHANE	7.909	62	132823	15.34 µg/L	99
29) CARBONTETRACHLORIDE	7.127	117	135372	16.33 µg/L	100
30) BENZENE	7.655	78	347941	16.12 µg/L	99
31) TRICHLOROETHENE	8.406	132	100518	16.66 µg/L	97
32) 12-DICHLOROPROPANE	9.137	63	81854	16.45 µg/L	98
33) DIBROMOMETHANE	9.015	174	74719	15.69 µg/L	96
34) BROMODICLMETHANE	9.198	83	127204	16.26 µg/L	99
35) 2-CLETHYLVINYLETHER	9.980	63	106013	67.64 µg/L	98
36) EPICHLOROHYDRIN	10.518	57	216811	267.00 µg/L	98
37) 4METHYL-2-PENTANONE	11.076	43	545157	81.56 µg/L	95
38) CIS13DICLPROPENE	10.132	75	108274	15.79 µg/L	95
40) TOLUENE	10.518	91	368035	16.27 µg/L	99
41) TRANS13DICLPROPENE	11.168	75	103011	16.28 µg/L	92
42) 112-TRICHLOROETHANE	11.452	97	98390	15.95 µg/L	99
43) 2-HEXANONE	12.518	43	306436	71.09 µg/L	95
44) 13-DICHLOROPROPANE	11.939	76	132678	15.55 µg/L	95
45) DIBRCHLOROMETHANE	11.777	129	97326	14.48 µg/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430418.D
Acq On : 15 Dec 2017 4:41 pm
Operator : KMOR
Sample : LFB/2774055
Misc : RUN194325
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 19 09:48:49 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration

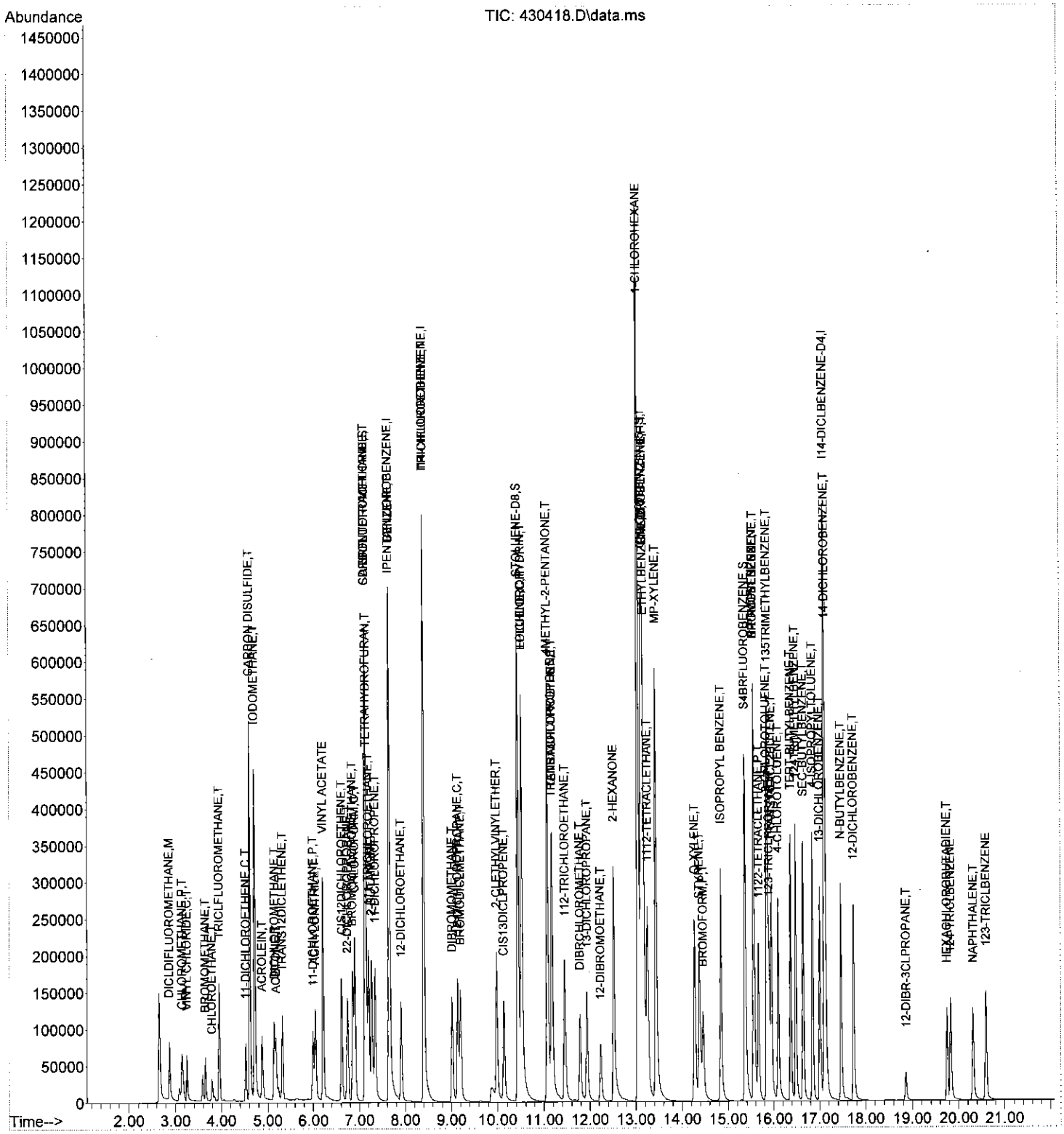
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) TETRACHLOROETHENE	11.178	166	119796	17.02 µg/L	99
47) 12-DIBROMOETHANE	12.234	107	76426	14.72 µg/L	100
49) CHLOROBENZENE	13.157	112	268231	16.79 µg/L	96
50) 1-CHLOROHEXANE	13.056	91	664898	10.10 µg/L #	83
51) 1112-TETRACLETHANE	13.249	131	99572	16.38 µg/L	88
52) ETHYLBENZENE	13.168	91	389009	15.92 µg/L	100
53) MP-XYLENE	13.432	91	551897	34.47 µg/L	99
54) STYRENE	14.376	104	186052	15.46 µg/L	98
55) O-XYLENE	14.274	91	212729	13.66 µg/L	96
56) BROMOFORM	14.457	173	83359	16.91 µg/L	98
57) 1122-TETRACLETHANE	15.665	83	138170	16.11 µg/L	99
58) ISOPROPYL BENZENE	14.843	105	288691	15.39 µg/L	99
60) 123-TRICLPROPANE	15.898	110	41038	16.47 µg/L	99
61) TRANS14DICL2BUTENE	15.949	53	73483	73.50 µg/L	90
62) BROMOBENZENE	15.553	77	157487	16.28 µg/L	94
63) N-PROPYLBENZENE	15.553	91	368908	16.35 µg/L	97
64) 2-CHLOROTOLUENE	15.838	91	255091	16.90 µg/L	87
65) 4-CHLOROTOLUENE	16.101	91	217932	15.76 µg/L	98
66) 135TRIMETHYLBENZENE	15.858	105	304078	16.86 µg/L	100
67) TERT-BUTYLBENZENE	16.376	119	223518	16.31 µg/L	98
68) 124TRIMETHYLBENZENE	16.477	105	274931	16.83 µg/L	100
69) SEC-BUTYLBENZENE	16.650	105	315460	16.76 µg/L	96
70) 13-DICHLOROBENZENE	17.005	146	173540	17.04 µg/L	96
72) 4-ISOPROPYLTOLUENE	16.853	119	259948	23.47 µg/L	98
73) 14-DICHLOROBENZENE	17.127	146	188001	22.27 µg/L	94
74) 12-DICHLOROBENZENE	17.736	146	160325	21.45 µg/L	99
75) N-BUTYLBENZENE	17.462	91	201688	23.36 µg/L	97
76) 12-DIBR-3CLPROPANE	18.863	157	14764	17.70 µg/L	94
77) 124-TRICLBENZENE	19.827	180	68231	16.63 µg/L #	97
78) NAPHTHALENE	20.314	128	153661	16.72 µg/L	99
79) HEXACHLOROBUTADIENE	19.746	225	33597	17.17 µg/L	98
80) 123-TRICLBENZENE	20.599	182	73304	18.11 µg/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\194325\
Data File : 430418.D
Acq On : 15 Dec 2017 4:41 pm
Operator : KMOR
Sample : LFB/2774055
Misc : RUN194325
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 19 09:48:49 2017
Quant Method : C:\msdchem\1\METHODS\8260VOC-NOV-LIQ-17.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Wed Nov 29 09:51:01 2017
Response via : Initial Calibration



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
		PALE / FBLAB	
12/07/17	TB-20171207	LAB / LAB	LAB
12/07/17	INF-20171207	0758 / 0758	EVB
12/07/17	EFF-20171207	0818 / 0825	EVB
12/07/17	EFFDUP-20171207	0818 / 0825	EVB
12/07/17	EFFMS-20171207	0818 / 0825	EVB
12/07/17	EFFMSD-20171207	0818 / 0825	EVB

GWETS Operational Data at Sample Collection

Extraction Wells

RW-2	96.3	gpm
RW-4	144.6	gpm
RW-5	69.8	gpm

Compound Treatment System

Influent Flow Rate (FIT-101)	306.4	gpm
Effluent Flow Rate (FIT-301)	375.6	gpm
Blower (FIT-201A)	2270	cfm
Influent Flow Pressure (PIT-101)	2.3	psi
Effluent Flow Pressure (PIT-301)	21.5	psi
pH (pHIT-201A)	8.4	

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