FIBERS SITE GROUP

May 10, 2017

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 – April 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. Mel Hauptman- 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 – April 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 92% of the time during April 2017. The GWETS had three automated shut downs due to power outages and six shut downs due to GWETS maintenance, and was restarted, in each instance, the same business day. The GWETS had one automated shut down due to a transfer pump fault and was restarted on 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 253 gallons per minute (gpm) and treated approximately 10.87 million gallons of water in April 2017. To date (since May 1999), approximately 3.10 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.

Groundwater extraction well RW-4 shut down for a period of time in April 2017. During troubleshooting, it was determined that the Pressure Indicator Transmitter (PIT) malfunctioned and shut the pump down due to a high-pressure alarm; the PIT was replaced. There is also an apparent problem with the RW-4 control panel Programmable Logic Controller and Variable Frequency Drive. The RW-4 control panel equipment will be evaluated and repaired in May 2017.

Groundwater extraction well RW-5 shut down for a short period of time due to low pumping water levels. RW-5 was restarted at a lower pumping rate of 70 gallons per minute.

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

Groundwater influent and effluent samples were collected on April 6, 2017 and analyzed by Pace Analytical Services, Inc. (Pace) in St. Rose, Louisiana. A summary of the April 6, 2017 GWETS Laboratory Analytical Results is provided in Table 2. A summary of influent groundwater concentrations of tetrachloroethene (PCE) and total haloethers from the GWETS is depicted on Figures 2 and 3, respectively.

Arcadis U.S., Inc. (Arcadis) performed a data quality assessment (validation) of the laboratory analytical results reported by Pace. Results are summarized in the Data Review Report #27526R 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 Laboratory Analytical Report #2052873 is provided as Attachment 2. 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 3.

Arcadis collected a split influent and effluent sample on March 9, 2017. The samples were submitted to Environmental Quality Laboratories, Inc. (eqlab) in Bayamon, Puerto Rico for volatile organic compound analyses. A summary of the March 9, 2017 GWETS Laboratory Analytical Results is provided in Table 3. Arcadis performed a data quality assessment (validation) of the laboratory analytical results reported by eqlab. Results are summarized in the Data Review Report #27455R and provided as Attachment 4. 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 Laboratory Analytical Report #655-04-26 is provided as Attachment 5.

Arcadis collected air samples on March 9, 2017 inside the treatment system control room and near the air stripper unit. The samples were submitted to Eurofins Air Toxics, Ltd. (Eurofins) in Folsom, California for TO-15 analyses. A summary of the March 9, 2017 air samples Laboratory Analytical Results is provided in Table 4. Arcadis performed a data quality assessment (validation) of the laboratory analytical results reported by Eurofins. Results are summarized in the Data Review Report #27461R and provided as Attachment 6. 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 Laboratory Analytical Report #1703183 is provided as Attachment 7.

Arcadis collected groundwater samples at piezometer wells PCPZ-1 and PCPZ-2 on March 2, 2017. The samples were submitted to Pace for volatile organic compound analyses. A summary of the March 2, 2017 groundwater samples Laboratory Analytical Results is provided in Table 5. The piezometer wells location is depicted on Figure 4. Arcadis performed a data quality assessment (validation) of the laboratory analytical results reported by Pace. Results are summarized in the Data Review Report #27409R and provided as Attachment 8. 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 Laboratory Analytical Report #2051188 is provided as Attachment 9.

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

None for this reporting period.

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

Per the United States Environmental Protection Agency (USEPA) letter, dated April 27, 2017, the Fibers Group will submit a schedule, to the USEPA by May 30, 2017, for the engineering design and construction of a proposed infiltration basin(s) and associated piping to transport and percolate treated GWETS effluent water.

The second semi-annual groundwater monitoring and sampling report of 2016 is anticipated to be submitted to the USEPA in the next six weeks.

The first semi-annual groundwater monitoring and sampling event of 2017 started on May 1, 2017.

Environmental Resource Technologies (ERTEC) commenced a soil vapor extraction pilot study at the Baxter-Guayama facility on the Fibers Site at the end of April 2017 which included baseline soil gas sampling, drilling, and well installation activities.

Once the laboratory data packages are validated, a summary of results from the second phase of a subsurface soil investigation on the Wyeth LLC leased portion of the Site will be submitted to the USEPA.

(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 - April 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
4/1/2017	289	353	77	160	57	8.4	
4/2/2017	319	375	101	160	61	8.4	
4/3/2017	270	302	78	134	64	8.4	GWETS maintenance.
4/4/2017	296	362	106	163	33	8.6	GWETS maintenance.
4/5/2017	207	241	63	104	44	8.6	GWETS maintenance; power outage.
4/6/2017	336	392	100	165	75	8.4	Power outage.
4/7/2017	329	391	100	165	69	8.4	
4/8/2017	331	352	100	157	72	8.4	
4/9/2017	301	311	100	131	75	8.4	Power outage.
4/10/2017	302	341	100	137	71	8.4	
4/11/2017	308	367	100	143	75	8.4	
4/12/2017	319	369	100	150	73	8.4	
4/13/2017	302	363	100	137	69	8.4	
4/14/2017	301	366	100	134	72	8.4	
4/15/2017	285	352	100	120	71	8.4	
4/16/2017	160	161	95	0	67	7.7	RW-4 not operating.
4/17/2017	136	157	82	0	49	8.5	GWETS maintenance.
4/18/2017	146	167	100	0	49	8.5	GWETS maintenance; RW-5 not operating.
4/19/2017	195	228	100	53	45	8.5	GWETS maintenance; restarted RW-4 and RW-5.
4/20/2017	303	354	100	137	70	8.4	
4/21/2017	300	351	99	136	70	8.4	
4/22/2017	295	346	95	135	70	8.4	
4/23/2017	295	346	95	135	70	8.4	
4/24/2017	295	346	95	135	70	8.4	
4/25/2017	295	346	95	134	70	8.4	
4/26/2017	232	271	95	68	70	8.4	RW-4 not operating.
4/27/2017	164	191	95	0	70	8.4	
4/28/2017	163	191	95	0	70	8.4	
4/29/2017	109	127	64	0	47	8.5	GWETS shut down; transfer pump fault.
4/30/2017	0	0	0	0	0	8.6	GWETS shut down; transfer pump fault.
Monthly Average	253	294	91	103	62	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.

Table 2
Summary of Treatment System Laboratory Analytical Results
April 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Fibers Groundwater Extraction and Treatment System

Laboratory analytical results for water samples collected at the influent and effluent sample tap locations from the Fibers Groundwater Extraction and Treatment System on April 6, 2017 are presented below. The system average influent flow rate at the time the samples were collected was 333 gallons per minute (gpm). Sample results indicate that the treatment system is operating in compliance with operating parameters pursuant to the Consent Decree.

	VOC (µg/L)			
	Sample ID			
Compound	EFF-20170406	EFFDUP-20170406	INF-20170406	TB-20170406
Tetrachloroethene	ND	ND	6.4	ND
Trichloroethene	ND	ND	ND	ND
cis-1,2-dichloroethene	ND	ND	ND	ND
Vinyl Chloride	1.0 UJ	ND	ND	ND
Acetone	7.8	7.0	ND	9.1
Bromoform	1.0	ND	ND	ND
Dibromochloromethane	1.0	ND	ND	ND
Styrene	1.0 R	ND	ND	ND
m&p-xylene	2.0 R	ND	ND	ND
o-xylene	1.0 UJ	ND	ND	ND
Enflurane	ND	ND	1.4	ND
Haloether 229	ND	ND	19.6	ND
Haloether 406	ND	ND	ND	ND
Haloether 508	ND	ND	41.2	ND
Haloether 528	ND	ND	ND	ND
Halomar	ND	ND	ND	ND
Isoflurane	ND	ND	79.1	ND
Total Haloethers	ND	ND	141	ND
Other VOC	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 = The sample results are rejected.

Table 3
Summary of Treatment System Laboratory Analytical Results – Split Samples
Collected at the Treatment System Compound March 9, 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 March 9, 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 350 gallons per minute (gpm). Laboratory analytical results 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 Analytical Report is included in the Fibers RD/RA Monthly Report – March 2017, Attachment 2. A copy of the EQLAB Analytical Report is included in this report as Attachment 5.

	VOC (µg/L)							
	Sample ID							
Compound	EFF-20170309		EFFDUP-20170309		INF-20170309		TB-20170309	
	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB	PACE	EQLAB
Tetrachloroethene	ND	ND	ND	ND	7.0	8.40	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	1.0	ND	ND	ND
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	BDL	ND	1.40	ND	ND	ND	ND
Dibromochloromethane	ND	1.50	ND	2.00	ND	ND	ND	ND
Enflurane	ND	NA	ND	NA	1.8	NA	ND	NA
Haloether 229	ND	NA	ND	NA	33.5	NA	ND	NA
Haloether 406	ND	NA	ND	NA	ND	NA	ND	NA
Haloether 508	ND	NA	ND	NA	50.3	NA	ND	NA
Haloether 528	ND	NA	ND	NA	ND	NA	ND	NA
Halomar	ND	NA	ND	NA	1.2	NA	ND	NA
Isoflurane	ND	NA	ND	NA	92.7	NA	ND	NA
Total Haloethers	ND	NA	ND	NA	180	NA	ND	NA
Acetone	ND	ND	ND	ND	ND	ND	ND	ND
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.
BDL = below detection limit.
NA = not analyzed.

Table 4
Summary of Air Sample Laboratory Analytical Results
Collected at the Treatment System Compound March 9, 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Fibers Groundwater Extraction and Treatment System Air Samples

Laboratory analytical results for air samples collected at the Fibers Treatment System Compound on March 9, 2017 are presented below. The air samples were collected to evaluate whether potential contaminants of concern (COCs) are present near the treatment system. The air samples were collected the same morning prior to the collection of the treatment system water samples.

	VOC (µg/m^3)		
	Sample ID		
Compound	Control Room-20170309	Outdoor-20170309	Trip Blank
Tetrachloroethene	ND	ND	ND
Trichloroethene	ND	ND	0.45 J
cis-1,2-dichloroethene	ND	ND	ND
2,2,4-Trimethylpentane	ND	ND	0.30 J
2-Butanone (MEK)	3.1 J	ND	ND
2-Propanol	19 UB	11 UB	5.9
Acetone	28 UB	27 UB	4.4 J
Benzene	3.8 UB	3.6 UB	0.24 J
Chlorobenzene	0.59 J	ND	ND
Chloromethane	ND	3.2 J	ND
Ethanol	23 UB	ND	19
Freon 11	1.2 J	1.1 J	ND
Freon 12	2.9 J	2.7 J	ND
Heptane	4.8 UB	ND	1.0 J
Hexane	1.7 J	ND	ND
m,p-Xylene	0.76 J	ND	ND
Methylene Chloride	ND	ND	1.1 J
Toluene	4.5 UB	4.2 UB	16
Other VOC	ND	ND	ND

Notes:
VOC = volatile organic compounds.
µg/m^3 = micrograms per cubic meter.
ND = not detected at or above laboratory reporting limit.
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.
UB = Compound considered non-detect at the listed value due to associated blank contamination.

Table 5
Summary of Piezometer Wells Laboratory Analytical Results
Collected on March 2, 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Piezometer Wells PCPZ-1 and PCPZ-2

Groundwater samples were collected at piezometer wells PCPZ-1 and PCPZ-2 on March 2, 2017. A summary of laboratory analytical results is presented below.

	VOC (µg/L)		
	Sample ID		
Compound	PCPZ-1	PCPZ-2	TB-20170302
Tetrachloroethene	7.5	12.8	ND
Trichloroethene	3.1	1.5	ND
Acetone	5.4	4.4	ND
Acrolein	8.0 UJ	ND	ND
Chloroethane	1.0 UJ	ND	ND
Other VOC	ND	ND	ND

Notes:
VOC = volatile organic compounds.
µg/L = micrograms per liter.
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.

Figures

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

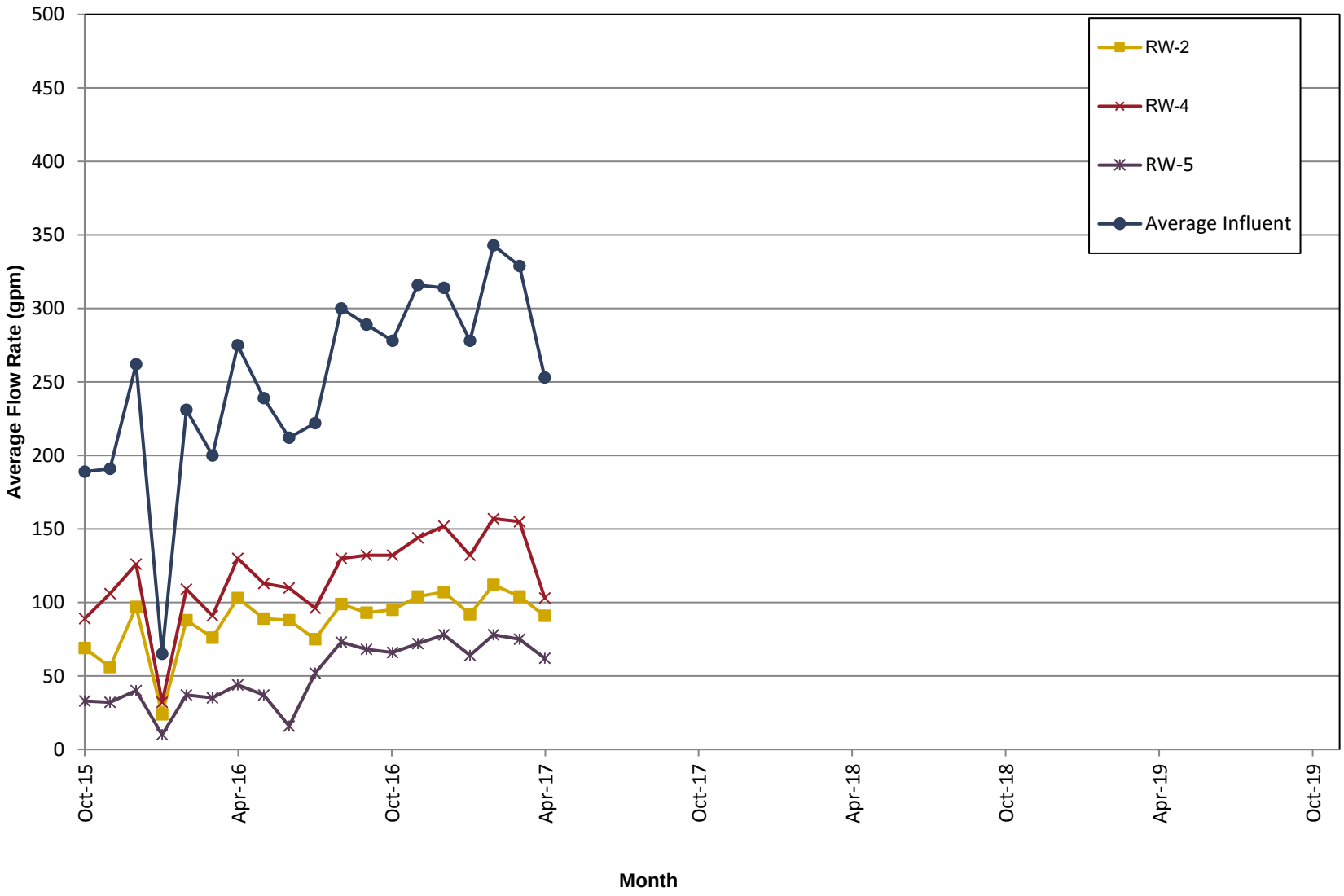


Figure 2
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Tetrachloroethene (PCE) Concentrations

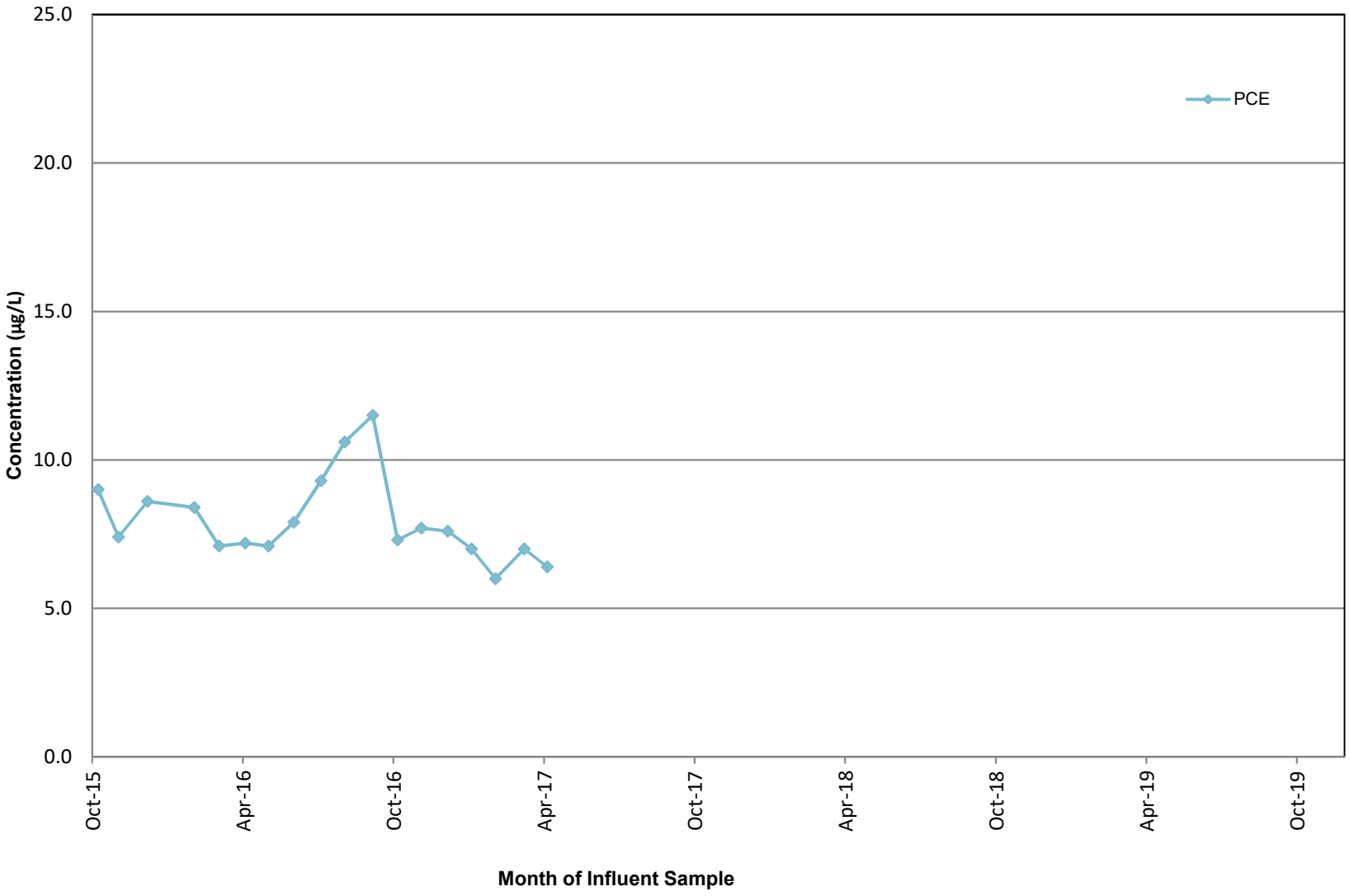
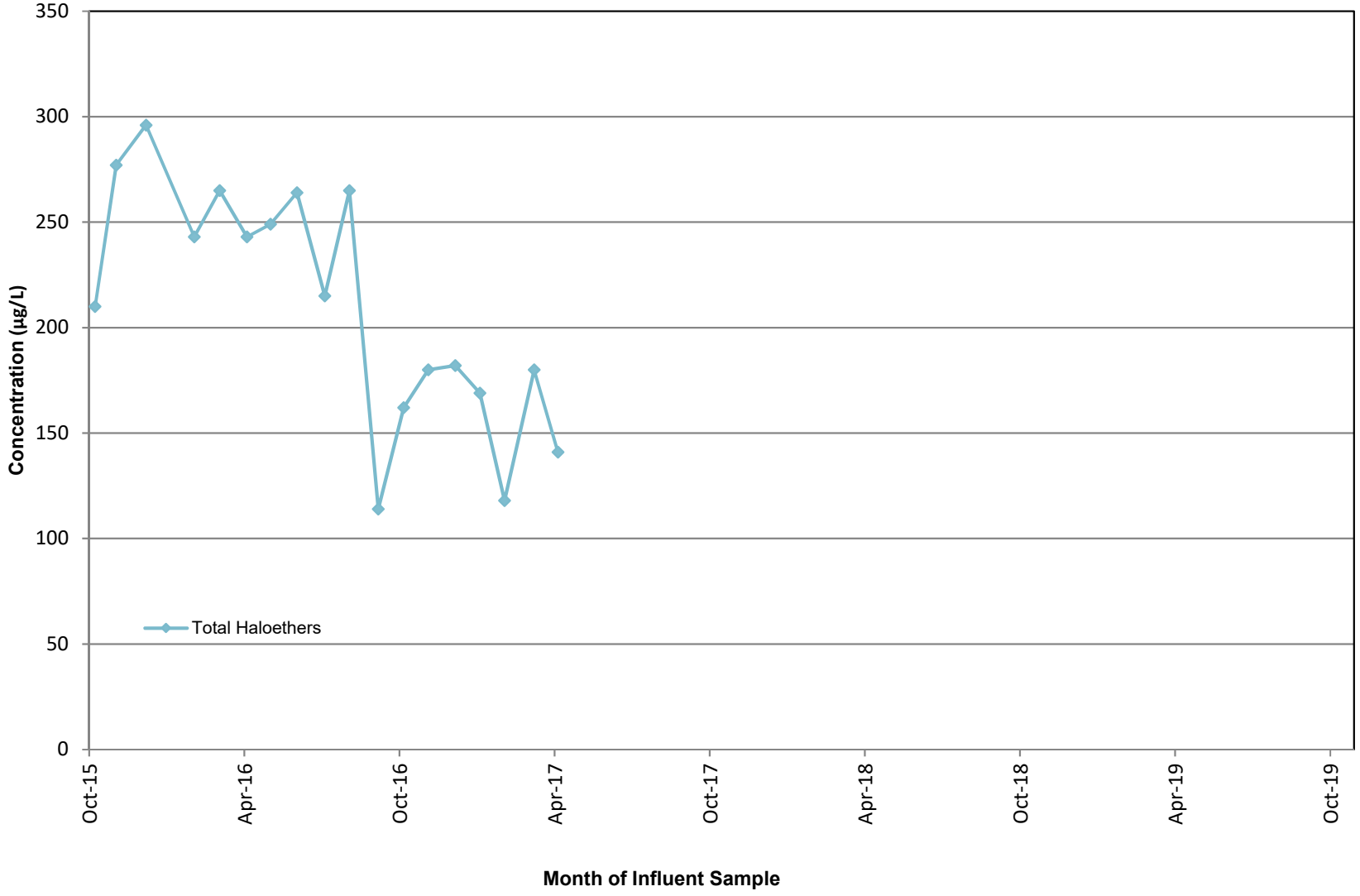
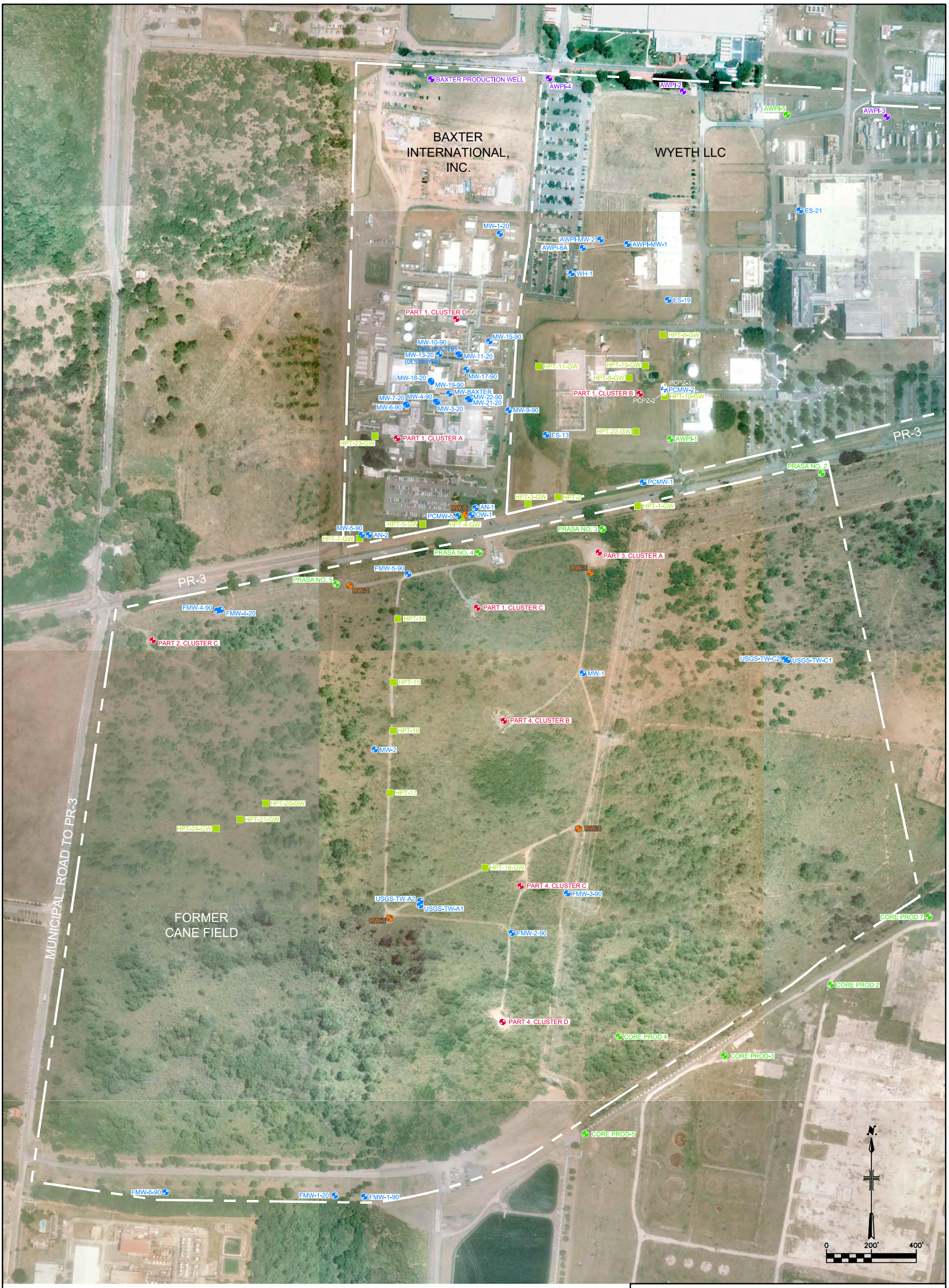


Figure 3
Fibers Public Supply Wells Superfund Site
Treatment System Influent -
Total Haloethers Concentrations



Acad Version : R19.1s (LMS Tech)
User Name : RKosciolek

Date\Time : Thu, 04 May 2017 – 11:06am
Path\Name : G:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2016\Fig02 Site Map.dwg



LEGEND

- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL (CURRENTLY NOT IN USE)
- HYDRAULIC PROFILE TOOL (HPT) PROBE LOCATION (GW = GROUNDWATER SAMPLE)

PR-3 PUERTO RICO HIGHWAY 3

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS SITE BOUNDARY

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO

SITE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
4

Attachment 1
Data Review Report #27526R

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2052873
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #27526R
Review Level: Tier II
Project: CO001911.0005.1705A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2052873 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-20170406	2052873001	Water	04/06/2017		X				
INF-20170406	2052873002	Water	04/06/2017		X				
EFF-20170406	2052873003	Water	04/06/2017		X				
EFFDUP-20170406	2052873004	Water	04/06/2017	EFF-20170406	X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location EFF-20170406.

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.

All compounds associated with the QA blanks exhibited a concentration less than the RL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
EFF-20170406 EFFDUP-20170406	Acetone (TB)	Detected sample results >RL and <BAL	“UB” at detected sample concentration

RL Reporting limit

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-20170406	Styrene	<10%	<10%
	m&p-Xylene		
	o-Xylene	< LL but > 10%	< LL but > 10%

AC Acceptable

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

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

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

Sample Locations	Compound
EFF-20170406	o-Xylene
	Vinyl chloride

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

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

5. Laboratory Control Sample (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-20170406 / EFFDUP-20170406	Bromoform	1.0	1.0 U	AC
	Dibromochloromethane	1.0	1.0 U	AC

AC Acceptable

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

7. System Performance and Overall Assessment

Note: The laboratory qualified a few Acetone results with a C9 qualifier to indicate that this compound is a “Common Laboratory Contaminant”. This qualifier was removed for reporting purposes.

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: Joseph C. Houser

DATE: April 19, 2017

PEER REVIEW: Dennis Capria

DATE: April 25, 2017

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

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

ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: TB-20170406 **Lab ID: 2052873001** Collected: 04/06/17 00:00 Received: 04/07/17 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.1**	ug/L	4.0	1		04/13/17 11:47	67-64-1	~~C9~~
Acrolein	ND	ug/L	8.0	1		04/13/17 11:47	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		04/13/17 11:47	107-13-1	
Benzene	ND	ug/L	1.0	1		04/13/17 11:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		04/13/17 11:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		04/13/17 11:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		04/13/17 11:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		04/13/17 11:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		04/13/17 11:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/13/17 11:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/13/17 11:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/13/17 11:47	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/13/17 11:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		04/13/17 11:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		04/13/17 11:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		04/13/17 11:47	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/13/17 11:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:47	10061-02-6	
Enflurane	ND	ug/L	1.0	1		04/13/17 11:47	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		04/13/17 11:47	100-41-4	
Haloether 229	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 406	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 421	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 427	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 428	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 508	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 528	ND	ug/L	1.0	1		04/13/17 11:47		
Halomar	ND	ug/L	1.0	1		04/13/17 11:47		
2-Hexanone	ND	ug/L	2.0	1		04/13/17 11:47	591-78-6	
Isoflurane	ND	ug/L	1.0	1		04/13/17 11:47		
Methoxyflurane	ND	ug/L	1.0	1		04/13/17 11:47	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		04/13/17 11:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		04/13/17 11:47	108-10-1	
Styrene	ND	ug/L	1.0	1		04/13/17 11:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/13/17 11:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/13/17 11:47	127-18-4	
Toluene	ND	ug/L	1.0	1		04/13/17 11:47	108-88-3	
Total Haloether	ND	ug/L	1.0	1		04/13/17 11:47		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/13/17 11:47	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: TB-20170406 **Lab ID: 2052873001** Collected: 04/06/17 00:00 Received: 04/07/17 08:15 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		04/13/17 11:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/13/17 11:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/13/17 11:47	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		04/13/17 11:47	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		04/13/17 11:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		04/13/17 11:47	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		04/13/17 11:47	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		04/13/17 11:47	460-00-4	
Dibromofluoromethane (S)	95	%.	72-126	1		04/13/17 11:47	1868-53-7	

Sample: INF-20170406 **Lab ID: 2052873002** Collected: 04/06/17 09:30 Received: 04/07/17 08:15 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		04/13/17 11:29	67-64-1	
Acrolein	ND	ug/L	8.0	1		04/13/17 11:29	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		04/13/17 11:29	107-13-1	
Benzene	ND	ug/L	1.0	1		04/13/17 11:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		04/13/17 11:29	75-27-4	
Bromoform	ND	ug/L	1.0	1		04/13/17 11:29	75-25-2	
Bromomethane	ND	ug/L	1.0	1		04/13/17 11:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		04/13/17 11:29	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		04/13/17 11:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/13/17 11:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/13/17 11:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/13/17 11:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/13/17 11:29	67-66-3	
Chloromethane	ND	ug/L	1.0	1		04/13/17 11:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		04/13/17 11:29	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		04/13/17 11:29	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/13/17 11:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:29	10061-02-6	
Enflurane	**1.4**	ug/L	1.0	1		04/13/17 11:29	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		04/13/17 11:29	100-41-4	
Haloether 229	**19.6**	ug/L	1.0	1		04/13/17 11:29		
Haloether 406	ND	ug/L	1.0	1		04/13/17 11:29		
Haloether 421	ND	ug/L	1.0	1		04/13/17 11:29		
Haloether 427	ND	ug/L	1.0	1		04/13/17 11:29		

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: INF-20170406 **Lab ID: 2052873002** Collected: 04/06/17 09:30 Received: 04/07/17 08:15 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		04/13/17 11:29		
Haloether 508	**41.2**	ug/L	1.0	1		04/13/17 11:29		
Haloether 528	ND	ug/L	1.0	1		04/13/17 11:29		
Halomar	ND	ug/L	1.0	1		04/13/17 11:29		
2-Hexanone	ND	ug/L	2.0	1		04/13/17 11:29	591-78-6	
Isoflurane	**79.1**	ug/L	1.0	1		04/13/17 11:29		
Methoxyflurane	ND	ug/L	1.0	1		04/13/17 11:29	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		04/13/17 11:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		04/13/17 11:29	108-10-1	
Styrene	ND	ug/L	1.0	1		04/13/17 11:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/13/17 11:29	79-34-5	
Tetrachloroethene	**6.4**	ug/L	1.0	1		04/13/17 11:29	127-18-4	
Toluene	ND	ug/L	1.0	1		04/13/17 11:29	108-88-3	
Total Haloether	**141**	ug/L	1.0	1		04/13/17 11:29		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/13/17 11:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/13/17 11:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/13/17 11:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/13/17 11:29	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		04/13/17 11:29	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		04/13/17 11:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		04/13/17 11:29	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		04/13/17 11:29	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		04/13/17 11:29	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		04/13/17 11:29	1868-53-7	

Sample: EFF-20170406 **Lab ID: 2052873003** Collected: 04/06/17 09:50 Received: 04/07/17 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.8**	ug/L	4.0	1		04/13/17 11:11	67-64-1	
Acrolein	ND	ug/L	8.0	1		04/13/17 11:11	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		04/13/17 11:11	107-13-1	
Benzene	ND	ug/L	1.0	1		04/13/17 11:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		04/13/17 11:11	75-27-4	
Bromoform	**1.0**	ug/L	1.0	1		04/13/17 11:11	75-25-2	
Bromomethane	ND	ug/L	1.0	1		04/13/17 11:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		04/13/17 11:11	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		04/13/17 11:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/13/17 11:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/13/17 11:11	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/13/17 11:11	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/13/17 11:11	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: EFF-20170406 **Lab ID: 2052873003** Collected: 04/06/17 09:50 Received: 04/07/17 08:15 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		04/13/17 11:11	74-87-3	
Dibromochloromethane	**1.0**	ug/L	1.0	1		04/13/17 11:11	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		04/13/17 11:11	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/13/17 11:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:11	10061-02-6	
Enflurane	ND	ug/L	1.0	1		04/13/17 11:11	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		04/13/17 11:11	100-41-4	
Haloether 229	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 406	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 421	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 427	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 428	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 508	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 528	ND	ug/L	1.0	1		04/13/17 11:11		
Halomar	ND	ug/L	1.0	1		04/13/17 11:11		
2-Hexanone	ND	ug/L	2.0	1		04/13/17 11:11	591-78-6	
Isoflurane	ND	ug/L	1.0	1		04/13/17 11:11		
Methoxyflurane	ND	ug/L	1.0	1		04/13/17 11:11	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		04/13/17 11:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		04/13/17 11:11	108-10-1	
Styrene	~~ND~~	~~ug/L~~	~~1.0~~	~~1~~		~~04/13/17 11:11~~	~~100-42-5~~	~~M1~~ R
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/13/17 11:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/13/17 11:11	127-18-4	
Toluene	ND	ug/L	1.0	1		04/13/17 11:11	108-88-3	
Total Haloether	ND	ug/L	1.0	1		04/13/17 11:11		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:11	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/13/17 11:11	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/13/17 11:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/13/17 11:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/13/17 11:11	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		04/13/17 11:11	75-01-4	~~R1~~ UJ
m&p-Xylene	~~ND~~	~~ug/L~~	~~2.0~~	~~1~~		~~04/13/17 11:11~~	~~179601-23-1~~	~~M1,R1~~ R
o-Xylene	ND	ug/L	1.0	1		04/13/17 11:11	95-47-6	~~M1,R1~~ UJ
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		04/13/17 11:11	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		04/13/17 11:11	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		04/13/17 11:11	1868-53-7	

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: EFFDUP-20170406 **Lab ID: 2052873004** Collected: 04/06/17 09:50 Received: 04/07/17 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.0**	ug/L	4.0	1		04/13/17 12:05	67-64-1	~~C9~~
Acrolein	ND	ug/L	8.0	1		04/13/17 12:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		04/13/17 12:05	107-13-1	
Benzene	ND	ug/L	1.0	1		04/13/17 12:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		04/13/17 12:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		04/13/17 12:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		04/13/17 12:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		04/13/17 12:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		04/13/17 12:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/13/17 12:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/13/17 12:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/13/17 12:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/13/17 12:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		04/13/17 12:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		04/13/17 12:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		04/13/17 12:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/13/17 12:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/13/17 12:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/13/17 12:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 12:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 12:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/13/17 12:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 12:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 12:05	10061-02-6	
Enflurane	ND	ug/L	1.0	1		04/13/17 12:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		04/13/17 12:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 406	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 421	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 427	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 428	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 508	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 528	ND	ug/L	1.0	1		04/13/17 12:05		
Halomar	ND	ug/L	1.0	1		04/13/17 12:05		
2-Hexanone	ND	ug/L	2.0	1		04/13/17 12:05	591-78-6	
Isoflurane	ND	ug/L	1.0	1		04/13/17 12:05		
Methoxyflurane	ND	ug/L	1.0	1		04/13/17 12:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		04/13/17 12:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		04/13/17 12:05	108-10-1	
Styrene	ND	ug/L	1.0	1		04/13/17 12:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/13/17 12:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/13/17 12:05	127-18-4	
Toluene	ND	ug/L	1.0	1		04/13/17 12:05	108-88-3	
Total Haloether	ND	ug/L	1.0	1		04/13/17 12:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/13/17 12:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/13/17 12:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/13/17 12:05	79-01-6	

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

ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: EFFDUP-20170406 **Lab ID: 2052873004** Collected: 04/06/17 09:50 Received: 04/07/17 08:15 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		04/13/17 12:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/13/17 12:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/13/17 12:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		04/13/17 12:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		04/13/17 12:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		04/13/17 12:05	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		04/13/17 12:05	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		04/13/17 12:05	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		04/13/17 12:05	1868-53-7	

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CHAIN-OF-CUSTODY / Analytical Request Docum

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

WO# : 2052873

2052873

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	Analyses Test Y/N: 8260- VOCs + Halos	Trip BLANK	Residual Chlorine (Y/N)	
1	TB-20170406	WT	G			04/06/17	LAB		2				2						X		
2	INF-20170406	WT	G			04/06/17	0930		3				3					X			
3	EFF-20170406	WT	G			04/06/17	0950		3				3					X			
4	EFFDUP-20170406	WT	G			04/06/17	0950		3				3					X			
5	EFFMS-20170406	WT	G			04/06/17	0950		3				3					X			
6	EFFMSD-20170406	WT	G			04/06/17	0950		3				3					X			
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrew Colom / Arcadis	04/06/17	13:30	[illegible] Fed Ex	13:30	4/6/17	20	Y	N	Y
	[illegible]	4/6/17	17:00	Fed Ex [illegible]						
	Fed Ex	4/7/17	0815	[illegible] Pace	4/7/17	0815	5.2	Y	Y	Y

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Andrew Colom		
SIGNATURE of SAMPLER:	[signature]	DATE Signed:	04/06/17

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

Attachment 2
Laboratory Analytical Report #2052873

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

April 18, 2017

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

RE: Project: Fibers
Pace Project No.: 2052873

Dear David Howard:

Enclosed are the analytical results for sample(s) received by the laboratory on April 07, 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,

Justin Stock

Justin L. Stock for
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
Pace Project No.:	2052873

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
Pace Project No.: 2052873

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2052873001	**TB-20170406**	Water	04/06/17 00:00	04/07/17 08:15
2052873002	**INF-20170406**	Water	04/06/17 09:30	04/07/17 08:15
2052873003	**EFF-20170406**	Water	04/06/17 09:50	04/07/17 08:15
2052873004	**EFFDUP-20170406**	Water	04/06/17 09:50	04/07/17 08:15

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SAMPLE ANALYTE COUNT

Project: Fibers
Pace Project No.: 2052873

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2052873001	**TB-20170406**	EPA 5030B/8260	JRP, RMP	56	PASI-N
2052873002	**INF-20170406**	EPA 5030B/8260	JRP, RMP	56	PASI-N
2052873003	**EFF-20170406**	EPA 5030B/8260	JRP, RMP	56	PASI-N
2052873004	**EFFDUP-20170406**	EPA 5030B/8260	JRP, RMP	56	PASI-N

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PROJECT NARRATIVE

Project: Fibers
Pace Project No.: 2052873

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: April 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: 78230

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2052873003

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

- MS (Lab ID: 330951)
  - Styrene
  - m&p-Xylene
  - o-Xylene
- MSD (Lab ID: 330952)
  - Styrene
  - m&p-Xylene
  - o-Xylene

R1: RPD value was outside control limits.

- MSD (Lab ID: 330952)
  - Vinyl chloride
  - m&p-Xylene
  - o-Xylene

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PROJECT NARRATIVE

Project: Fibers
Pace Project No.: 2052873

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

Additional Comments:

Analyte Comments:

QC Batch: 78230

C9: Common Laboratory Contaminant.

- EFFDUP-20170406 (Lab ID: 2052873004)
  - Acetone
- TB-20170406 (Lab ID: 2052873001)
  - Acetone

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

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: TB-20170406 **Lab ID: 2052873001** Collected: 04/06/17 00:00 Received: 04/07/17 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.1**	ug/L	4.0	1		04/13/17 11:47	67-64-1	C9
Acrolein	ND	ug/L	8.0	1		04/13/17 11:47	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		04/13/17 11:47	107-13-1	
Benzene	ND	ug/L	1.0	1		04/13/17 11:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		04/13/17 11:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		04/13/17 11:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		04/13/17 11:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		04/13/17 11:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		04/13/17 11:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/13/17 11:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/13/17 11:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/13/17 11:47	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/13/17 11:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		04/13/17 11:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		04/13/17 11:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		04/13/17 11:47	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/13/17 11:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:47	10061-02-6	
Enflurane	ND	ug/L	1.0	1		04/13/17 11:47	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		04/13/17 11:47	100-41-4	
Haloether 229	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 406	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 421	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 427	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 428	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 508	ND	ug/L	1.0	1		04/13/17 11:47		
Haloether 528	ND	ug/L	1.0	1		04/13/17 11:47		
Halomar	ND	ug/L	1.0	1		04/13/17 11:47		
2-Hexanone	ND	ug/L	2.0	1		04/13/17 11:47	591-78-6	
Isoflurane	ND	ug/L	1.0	1		04/13/17 11:47		
Methoxyflurane	ND	ug/L	1.0	1		04/13/17 11:47	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		04/13/17 11:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		04/13/17 11:47	108-10-1	
Styrene	ND	ug/L	1.0	1		04/13/17 11:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/13/17 11:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/13/17 11:47	127-18-4	
Toluene	ND	ug/L	1.0	1		04/13/17 11:47	108-88-3	
Total Haloether	ND	ug/L	1.0	1		04/13/17 11:47		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/13/17 11:47	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: TB-20170406 **Lab ID: 2052873001** Collected: 04/06/17 00:00 Received: 04/07/17 08:15 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		04/13/17 11:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/13/17 11:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/13/17 11:47	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		04/13/17 11:47	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		04/13/17 11:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		04/13/17 11:47	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		04/13/17 11:47	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		04/13/17 11:47	460-00-4	
Dibromofluoromethane (S)	95	%.	72-126	1		04/13/17 11:47	1868-53-7	

Sample: INF-20170406 **Lab ID: 2052873002** Collected: 04/06/17 09:30 Received: 04/07/17 08:15 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		04/13/17 11:29	67-64-1	
Acrolein	ND	ug/L	8.0	1		04/13/17 11:29	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		04/13/17 11:29	107-13-1	
Benzene	ND	ug/L	1.0	1		04/13/17 11:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		04/13/17 11:29	75-27-4	
Bromoform	ND	ug/L	1.0	1		04/13/17 11:29	75-25-2	
Bromomethane	ND	ug/L	1.0	1		04/13/17 11:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		04/13/17 11:29	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		04/13/17 11:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/13/17 11:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/13/17 11:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/13/17 11:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/13/17 11:29	67-66-3	
Chloromethane	ND	ug/L	1.0	1		04/13/17 11:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		04/13/17 11:29	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		04/13/17 11:29	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/13/17 11:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:29	10061-02-6	
Enflurane	**1.4**	ug/L	1.0	1		04/13/17 11:29	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		04/13/17 11:29	100-41-4	
Haloether 229	**19.6**	ug/L	1.0	1		04/13/17 11:29		
Haloether 406	ND	ug/L	1.0	1		04/13/17 11:29		
Haloether 421	ND	ug/L	1.0	1		04/13/17 11:29		
Haloether 427	ND	ug/L	1.0	1		04/13/17 11:29		

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: INF-20170406 **Lab ID: 2052873002** Collected: 04/06/17 09:30 Received: 04/07/17 08:15 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		04/13/17 11:29		
Haloether 508	**41.2**	ug/L	1.0	1		04/13/17 11:29		
Haloether 528	ND	ug/L	1.0	1		04/13/17 11:29		
Halomar	ND	ug/L	1.0	1		04/13/17 11:29		
2-Hexanone	ND	ug/L	2.0	1		04/13/17 11:29	591-78-6	
Isoflurane	**79.1**	ug/L	1.0	1		04/13/17 11:29		
Methoxyflurane	ND	ug/L	1.0	1		04/13/17 11:29	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		04/13/17 11:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		04/13/17 11:29	108-10-1	
Styrene	ND	ug/L	1.0	1		04/13/17 11:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/13/17 11:29	79-34-5	
Tetrachloroethene	**6.4**	ug/L	1.0	1		04/13/17 11:29	127-18-4	
Toluene	ND	ug/L	1.0	1		04/13/17 11:29	108-88-3	
Total Haloether	**141**	ug/L	1.0	1		04/13/17 11:29		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/13/17 11:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/13/17 11:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/13/17 11:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/13/17 11:29	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		04/13/17 11:29	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		04/13/17 11:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		04/13/17 11:29	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		04/13/17 11:29	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		04/13/17 11:29	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		04/13/17 11:29	1868-53-7	

Sample: EFF-20170406 **Lab ID: 2052873003** Collected: 04/06/17 09:50 Received: 04/07/17 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.8**	ug/L	4.0	1		04/13/17 11:11	67-64-1	
Acrolein	ND	ug/L	8.0	1		04/13/17 11:11	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		04/13/17 11:11	107-13-1	
Benzene	ND	ug/L	1.0	1		04/13/17 11:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		04/13/17 11:11	75-27-4	
Bromoform	**1.0**	ug/L	1.0	1		04/13/17 11:11	75-25-2	
Bromomethane	ND	ug/L	1.0	1		04/13/17 11:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		04/13/17 11:11	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		04/13/17 11:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/13/17 11:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/13/17 11:11	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/13/17 11:11	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/13/17 11:11	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: EFF-20170406 **Lab ID: 2052873003** Collected: 04/06/17 09:50 Received: 04/07/17 08:15 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		04/13/17 11:11	74-87-3	
Dibromochloromethane	**1.0**	ug/L	1.0	1		04/13/17 11:11	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		04/13/17 11:11	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/13/17 11:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 11:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/13/17 11:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 11:11	10061-02-6	
Enflurane	ND	ug/L	1.0	1		04/13/17 11:11	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		04/13/17 11:11	100-41-4	
Haloether 229	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 406	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 421	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 427	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 428	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 508	ND	ug/L	1.0	1		04/13/17 11:11		
Haloether 528	ND	ug/L	1.0	1		04/13/17 11:11		
Halomar	ND	ug/L	1.0	1		04/13/17 11:11		
2-Hexanone	ND	ug/L	2.0	1		04/13/17 11:11	591-78-6	
Isoflurane	ND	ug/L	1.0	1		04/13/17 11:11		
Methoxyflurane	ND	ug/L	1.0	1		04/13/17 11:11	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		04/13/17 11:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		04/13/17 11:11	108-10-1	
Styrene	ND	ug/L	1.0	1		04/13/17 11:11	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/13/17 11:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/13/17 11:11	127-18-4	
Toluene	ND	ug/L	1.0	1		04/13/17 11:11	108-88-3	
Total Haloether	ND	ug/L	1.0	1		04/13/17 11:11		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/13/17 11:11	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/13/17 11:11	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/13/17 11:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/13/17 11:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/13/17 11:11	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		04/13/17 11:11	75-01-4	R1
m&p-Xylene	ND	ug/L	2.0	1		04/13/17 11:11	179601-23-1	M1,R1
o-Xylene	ND	ug/L	1.0	1		04/13/17 11:11	95-47-6	M1,R1
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		04/13/17 11:11	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		04/13/17 11:11	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		04/13/17 11:11	1868-53-7	

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: EFFDUP-20170406 **Lab ID: 2052873004** Collected: 04/06/17 09:50 Received: 04/07/17 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.0**	ug/L	4.0	1		04/13/17 12:05	67-64-1	C9
Acrolein	ND	ug/L	8.0	1		04/13/17 12:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		04/13/17 12:05	107-13-1	
Benzene	ND	ug/L	1.0	1		04/13/17 12:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		04/13/17 12:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		04/13/17 12:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		04/13/17 12:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		04/13/17 12:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		04/13/17 12:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/13/17 12:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/13/17 12:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/13/17 12:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/13/17 12:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		04/13/17 12:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		04/13/17 12:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		04/13/17 12:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/13/17 12:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/13/17 12:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/13/17 12:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 12:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/13/17 12:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/13/17 12:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 12:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/13/17 12:05	10061-02-6	
Enflurane	ND	ug/L	1.0	1		04/13/17 12:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		04/13/17 12:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 406	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 421	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 427	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 428	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 508	ND	ug/L	1.0	1		04/13/17 12:05		
Haloether 528	ND	ug/L	1.0	1		04/13/17 12:05		
Halomar	ND	ug/L	1.0	1		04/13/17 12:05		
2-Hexanone	ND	ug/L	2.0	1		04/13/17 12:05	591-78-6	
Isoflurane	ND	ug/L	1.0	1		04/13/17 12:05		
Methoxyflurane	ND	ug/L	1.0	1		04/13/17 12:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		04/13/17 12:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		04/13/17 12:05	108-10-1	
Styrene	ND	ug/L	1.0	1		04/13/17 12:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/13/17 12:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/13/17 12:05	127-18-4	
Toluene	ND	ug/L	1.0	1		04/13/17 12:05	108-88-3	
Total Haloether	ND	ug/L	1.0	1		04/13/17 12:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/13/17 12:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/13/17 12:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/13/17 12:05	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers
Pace Project No.: 2052873

Sample: EFFDUP-20170406 **Lab ID: 2052873004** Collected: 04/06/17 09:50 Received: 04/07/17 08:15 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		04/13/17 12:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/13/17 12:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		04/13/17 12:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		04/13/17 12:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		04/13/17 12:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		04/13/17 12:05	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		04/13/17 12:05	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		04/13/17 12:05	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		04/13/17 12:05	1868-53-7	

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QUALITY CONTROL DATA

Project: Fibers
Pace Project No.: 2052873

QC Batch: 78230 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2052873001, 2052873002, 2052873003, 2052873004

METHOD BLANK: 330949 | Matrix: Water
Associated Lab Samples: 2052873001, 2052873002, 2052873003, 2052873004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/13/17 09:42	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/13/17 09:42	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/13/17 09:42	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	04/13/17 09:42	
1,1-Dichloroethane	ug/L	ND	1.0	04/13/17 09:42	
1,1-Dichloroethene	ug/L	ND	1.0	04/13/17 09:42	
1,2,3-Trichloropropane	ug/L	ND	1.0	04/13/17 09:42	
1,2-Dichloroethane	ug/L	ND	1.0	04/13/17 09:42	
1,2-Dichloropropane	ug/L	ND	1.0	04/13/17 09:42	
2-Butanone (MEK)	ug/L	ND	2.0	04/13/17 09:42	
2-Hexanone	ug/L	ND	2.0	04/13/17 09:42	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	04/13/17 09:42	
Acetone	ug/L	ND	4.0	04/13/17 09:42	
Acrolein	ug/L	ND	8.0	04/13/17 09:42	
Acrylonitrile	ug/L	ND	4.0	04/13/17 09:42	
Benzene	ug/L	ND	1.0	04/13/17 09:42	
Bromodichloromethane	ug/L	ND	1.0	04/13/17 09:42	
Bromoform	ug/L	ND	1.0	04/13/17 09:42	
Bromomethane	ug/L	ND	1.0	04/13/17 09:42	
Carbon disulfide	ug/L	ND	1.0	04/13/17 09:42	
Carbon tetrachloride	ug/L	ND	1.0	04/13/17 09:42	
Chlorobenzene	ug/L	ND	1.0	04/13/17 09:42	
Chloroethane	ug/L	ND	1.0	04/13/17 09:42	
Chloroform	ug/L	ND	1.0	04/13/17 09:42	
Chloromethane	ug/L	ND	1.0	04/13/17 09:42	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/13/17 09:42	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/13/17 09:42	
Dibromochloromethane	ug/L	ND	1.0	04/13/17 09:42	
Dibromomethane	ug/L	ND	1.0	04/13/17 09:42	
Enflurane	ug/L	ND	1.0	04/13/17 09:42	
Ethylbenzene	ug/L	ND	1.0	04/13/17 09:42	
Haloether 229	ug/L	ND	1.0	04/13/17 09:42	
Haloether 406	ug/L	ND	1.0	04/13/17 09:42	
Haloether 421	ug/L	ND	1.0	04/13/17 09:42	
Haloether 427	ug/L	ND	1.0	04/13/17 09:42	
Haloether 428	ug/L	ND	1.0	04/13/17 09:42	
Haloether 508	ug/L	ND	1.0	04/13/17 09:42	
Haloether 528	ug/L	ND	1.0	04/13/17 09:42	
Halomar	ug/L	ND	1.0	04/13/17 09:42	
Isoflurane	ug/L	ND	1.0	04/13/17 09:42	
m&p-Xylene	ug/L	ND	2.0	04/13/17 09:42	

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

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QUALITY CONTROL DATA

Project: Fibers
Pace Project No.: 2052873

METHOD BLANK: 330949 Matrix: Water
Associated Lab Samples: 2052873001, 2052873002, 2052873003, 2052873004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methoxyflurane	ug/L	ND	1.0	04/13/17 09:42	
Methylene Chloride	ug/L	ND	5.0	04/13/17 09:42	
o-Xylene	ug/L	ND	1.0	04/13/17 09:42	
Styrene	ug/L	ND	1.0	04/13/17 09:42	
Tetrachloroethene	ug/L	ND	1.0	04/13/17 09:42	
Toluene	ug/L	ND	1.0	04/13/17 09:42	
Total Haloether	ug/L	ND	1.0	04/13/17 09:42	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/13/17 09:42	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/13/17 09:42	
Trichloroethene	ug/L	ND	1.0	04/13/17 09:42	
Trichlorofluoromethane	ug/L	ND	1.0	04/13/17 09:42	
Vinyl chloride	ug/L	ND	1.0	04/13/17 09:42	
4-Bromofluorobenzene (S)	%.	99	68-124	04/13/17 09:42	
Dibromofluoromethane (S)	%.	94	72-126	04/13/17 09:42	
Toluene-d8 (S)	%.	101	79-119	04/13/17 09:42	

LABORATORY CONTROL SAMPLE: 330950

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	44.2	88	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	44.9	90	15-179	
1,1,2-Trichloroethane	ug/L	50	48.3	97	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	45.1	90	38-121	
1,1-Dichloroethane	ug/L	50	43.9	88	63-129	
1,1-Dichloroethene	ug/L	50	43.6	87	51-139	
1,2,3-Trichloropropane	ug/L	50	44.9	90	13-187	
1,2-Dichloroethane	ug/L	50	42.9	86	57-148	
1,2-Dichloropropane	ug/L	50	44.6	89	66-128	
2-Butanone (MEK)	ug/L	50	44.5	89	32-183	
2-Hexanone	ug/L	50	44.5	89	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	44.0	88	26-171	
Acetone	ug/L	50	43.7	87	22-165	
Acrolein	ug/L	100	82.0	82	10-131	
Acrylonitrile	ug/L	50	43.5	87	18-149	
Benzene	ug/L	50	42.1	84	62-131	
Bromodichloromethane	ug/L	50	45.8	92	69-132	
Bromoform	ug/L	50	44.7	89	35-166	
Bromomethane	ug/L	50	40.3	81	34-158	
Carbon disulfide	ug/L	50	47.1	94	31-128	
Carbon tetrachloride	ug/L	50	44.9	90	54-144	
Chlorobenzene	ug/L	50	50.0	100	70-127	
Chloroethane	ug/L	50	32.1	64	17-195	
Chloroform	ug/L	50	44.7	89	73-134	
Chloromethane	ug/L	50	37.4	75	17-153	

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QUALITY CONTROL DATA

Project: Fibers
Pace Project No.: 2052873

LABORATORY CONTROL SAMPLE: 330950

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	43.5	87	68-129	
cis-1,3-Dichloropropene	ug/L	50	44.0	88	72-138	
Dibromochloromethane	ug/L	50	47.4	95	49-146	
Dibromomethane	ug/L	50	44.7	89	56-145	
Enflurane	ug/L	50	50.1	100	56-135	
Ethylbenzene	ug/L	50	48.2	96	66-126	
Haloether 229	ug/L	50	39.4	79	62-123	
Haloether 406	ug/L	50	45.0	90	62-134	
Haloether 421	ug/L	50	47.8	96	70-128	
Haloether 427	ug/L	50	52.9	106	69-153	
Haloether 428	ug/L	50	52.0	104	70-134	
Haloether 508	ug/L	50	46.7	93	52-139	
Haloether 528	ug/L	50	46.6	93	48-157	
Halomar	ug/L	50	42.4	85	62-128	
Isoflurane	ug/L	50	49.4	99	61-132	
m&p-Xylene	ug/L	100	96.8	97	65-129	
Methoxyflurane	ug/L	50	44.3	89	72-124	
Methylene Chloride	ug/L	50	45.4	91	46-168	
o-Xylene	ug/L	50	48.2	96	65-124	
Styrene	ug/L	50	48.4	97	72-133	
Tetrachloroethene	ug/L	50	47.8	96	46-157	
Toluene	ug/L	50	45.6	91	69-126	
Total Haloether	ug/L		517			
trans-1,2-Dichloroethene	ug/L	50	44.1	88	60-129	
trans-1,3-Dichloropropene	ug/L	50	46.5	93	59-149	
Trichloroethene	ug/L	50	46.8	94	67-132	
Trichlorofluoromethane	ug/L	50	49.0	98	39-171	
Vinyl chloride	ug/L	50	33.8	68	27-149	
4-Bromofluorobenzene (S)	%.			97	68-124	
Dibromofluoromethane (S)	%.			95	72-126	
Toluene-d8 (S)	%.			97	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 330951 330952

Parameter	Units	2052873003 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	48.1	46.2	96	92	54-137	4	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	46.7	46.6	93	93	15-187	0	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	50.3	50.3	101	101	59-148	0	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	50.1	46.8	100	94	40-117	7	20	
1,1-Dichloroethane	ug/L	ND	50	50	45.7	43.7	91	87	59-133	4	20	
1,1-Dichloroethene	ug/L	ND	50	50	43.5	40.6	87	81	44-146	7	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	46.5	46.4	93	93	14-199	0	20	
1,2-Dichloroethane	ug/L	ND	50	50	44.5	43.6	89	87	56-154	2	20	
1,2-Dichloropropane	ug/L	ND	50	50	45.9	45.6	92	91	62-135	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Fibers
Pace Project No.: 2052873

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 330951 330952

Parameter	Units	2052873003 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	47.9	48.6	96	97	20-205	1	20	
2-Hexanone	ug/L	ND	50	50	44.5	45.2	89	90	25-189	1	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	45.0	46.9	90	94	23-184	4	20	
Acetone	ug/L	7.8	50	50	50.5	54.2	85	93	11-217	7	20	
Acrolein	ug/L	ND	100	100	23.4	19.7	23	20	10-142	17	20	
Acrylonitrile	ug/L	ND	50	50	42.1	44.4	84	89	20-164	5	20	
Benzene	ug/L	ND	50	50	44.8	43.5	90	87	52-141	3	20	
Bromodichloromethane	ug/L	ND	50	50	48.5	48.4	96	96	70-134	0	20	
Bromoform	ug/L	1.0	50	50	45.3	44.9	88	88	37-171	1	20	
Bromomethane	ug/L	ND	50	50	44.0	40.9	88	82	34-155	7	20	
Carbon disulfide	ug/L	ND	50	50	54.9	48.8	110	98	28-130	12	20	
Carbon tetrachloride	ug/L	ND	50	50	48.8	46.4	98	93	48-146	5	20	
Chlorobenzene	ug/L	ND	50	50	53.8	52.1	108	104	67-129	3	20	
Chloroethane	ug/L	ND	50	50	33.9	31.8	68	64	12-192	7	20	
Chloroform	ug/L	ND	50	50	47.2	45.8	94	92	66-143	3	20	
Chloromethane	ug/L	ND	50	50	47.6	44.8	95	90	14-155	6	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	46.0	44.2	92	88	56-141	4	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	41.8	40.6	84	81	70-139	3	20	
Dibromochloromethane	ug/L	1.0	50	50	50.9	50.5	100	99	50-150	1	20	
Dibromomethane	ug/L	ND	50	50	47.7	47.7	95	95	58-153	0	20	
Enflurane	ug/L	ND	50	50	53.4	51.1	107	102	63-126	4	20	
Ethylbenzene	ug/L	ND	50	50	41.9	39.3	84	79	57-135	6	20	
Haloether 229	ug/L	ND	50	50	48.3	42.2	97	84	56-127	14	20	
Haloether 406	ug/L	ND	50	50	49.6	47.2	99	94	68-128	5	20	
Haloether 421	ug/L	ND	50	50	51.5	49.7	103	99	74-120	4	20	
Haloether 427	ug/L	ND	50	50	58.7	57.1	117	114	78-120	3	20	
Haloether 428	ug/L	ND	50	50	58.5	56.5	117	113	74-125	4	20	
Haloether 508	ug/L	ND	50	50	51.4	48.7	103	97	28-156	5	20	
Haloether 528	ug/L	ND	50	50	50.1	48.1	100	96	45-142	4	20	
Halomar	ug/L	ND	50	50	45.3	43.7	91	87	67-123	4	20	
Isoflurane	ug/L	ND	50	50	53.4	51.5	107	103	45-140	4	20	
m&p-Xylene	ug/L	ND	100	100	9.2	6.4	9	6	56-136	35	20	M1,R1
Methoxyflurane	ug/L	ND	50	50	46.4	45.7	93	91	75-119	1	20	
Methylene Chloride	ug/L	ND	50	50	46.8	46.5	94	93	45-166	1	20	
o-Xylene	ug/L	ND	50	50	13.3	10.3	27	21	57-133	25	20	M1,R1
Styrene	ug/L	ND	50	50	.4J	.3J	1	1	58-144		20	M1
Tetrachloroethene	ug/L	ND	50	50	53.3	50.3	107	101	48-143	6	20	
Toluene	ug/L	ND	50	50	38.3	35.7	77	71	59-136	7	20	
Total Haloether	ug/L	ND			567	542				5		
trans-1,2-Dichloroethene	ug/L	ND	50	50	47.6	45.3	95	91	57-132	5	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	44.7	43.1	89	86	59-154	4	20	
Trichloroethene	ug/L	ND	50	50	52.3	50.5	105	101	58-140	4	20	
Trichlorofluoromethane	ug/L	ND	50	50	54.1	51.1	108	102	24-175	6	20	
Vinyl chloride	ug/L	ND	50	50	16.9	13.5	34	27	21-150	22	20	R1
4-Bromofluorobenzene (S)	%.						99	97	68-124			

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QUALITY CONTROL DATA

Project: Fibers
Pace Project No.: 2052873

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 330951 330952

Parameter	Units	2052873003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						93	93	72-126			
Toluene-d8 (S)	%.						98	98	79-119			

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QUALIFIERS

Project: Fibers
Pace Project No.: 2052873

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.

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

C9	Common Laboratory Contaminant.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fibers
Pace Project No.: 2052873

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2052873001	**TB-20170406**	EPA 5030B/8260	78230		
2052873002	**INF-20170406**	EPA 5030B/8260	78230		
2052873003	**EFF-20170406**	EPA 5030B/8260	78230		
2052873004	**EFFDUP-20170406**	EPA 5030B/8260	78230		

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CHAIN-OF-CUSTODY / Analytical Request Docum

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

WO# : 2052873

2052873

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	Analyses Test Y/N: 8260- VOCs + Halos	Trip BLANK	Residual Chlorine (Y/N)	
1	TB-20170406	WT	G			04/06/17	LAB		2				2						X		
2	INF-20170406	WT	G			04/06/17	0930		3				3					X			
3	EFF-20170406	WT	G			04/06/17	0950		3				3					X			
4	EFFDUP-20170406	WT	G			04/06/17	0950		3				3					X			
5	EFFMS-20170406	WT	G			04/06/17	0950		3				3					X			
6	EFFMSD-20170406	WT	G			04/06/17	0950		3				3					X			
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrew Colom / Arcadis	04/06/17	13:30	[illegible] Fed Ex	13:30	4/6/17	20	Y	N	Y
	[illegible]	4/6/17	17:00	Fed Ex [illegible]						
	Fed Ex	4/7/17	0815	[illegible] Pace	4/7/17	0815	5.2	Y	Y	Y

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Andrew Colom		
SIGNATURE of SAMPLER:	[signature]	DATE Signed:	04/06/17

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

WO#: 2052873

PM: CJM Due Date: 04/21/17

CLIENT: 20-CHEV-ARC

Pace Analytical

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

Sample Condition Upon

Project #: [illegible]

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

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

Therometer Used: ☐ Therm Fisher IR 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: 4/7/17 AMB

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
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
04/06/17	INF-20170406	0930	AC
04/06/17	EFF-20170406	0950	AC
04/06/17	EFFDUP-20170406	0950	AC
04/06/17	EFFMS-20170406	0950	AC
04/06/17	EFFMSD-20170406	0950	AC
04/06/17	TB-20170406	LAB	LAB

GWETS Operational Data at Sample Collection

Extraction Wells

RW-2	99.5	gpm
RW-4	164.6	gpm
RW-5	54.8	gpm

Compound Treatment System

Influent Flow Rate (FIT-101)	333.1	gpm
Effluent Flow Rate (FIT-301)	390.8	gpm
Blower (FIT-201A)	2402	cfm
Influent Flow Pressure (PIT-101)	2.6	psi
Effluent Flow Pressure (PIT-301)	20.6	psi
pH (pHIT-201A)	8.5	

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

Attachment 4
Data Review Report #27455R

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

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

Report: #27455R
Review Level: Tier II
Project: CO001911.0005.1705A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #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
Trip Blank	2656245	Water	03/09/2017		X				
EFF-20170309	2656246	Water	03/09/2017		X				
EFF DUP-20170309	2656247	Water	03/09/2017	EFF-20170309	X				
INF-20170309	2656250	Water	03/09/2017		X				
DI-20170309	2656251	Water	03/09/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location EFF-20170309.

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 detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, no qualification of the sample results was required.

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-20170309	1,1,2-Trichloroethane	>UL	>UL
	1,2-Dichloropropane		
	1,3-Dichloropropane		
	Bromochloromethane		
	Chloroform		
	Chloromethane		
	Trichloroethene		
	cis-1,2-Dichloroethene		
	1,1,1-Trichloroethane	AC	>UL
	1,1-Dichloroethane		
	1,2-Dibromoethane		
	1,2-Dichloroethane		
	Benzene		
	Bromodichloromethane		
	Dibromochloromethane		
	Tetrachloroethene		
	trans-1,2-Dichloroethene		
	Trichlorofluoromethane	>UL	AC
	Haloether 421		
	Halomar		
	Carbon disulfide		
	1,1-Dichloropropene	< LL but > 10%	< LL but > 10%
	Ethylbenzene		
	Isopropylbenzene		
	Toluene		
	Vinyl Acetate		
	Vinyl chloride		

Sample Locations	Compound	MS Recovery	MSD Recovery
	n-Butylbenzene		
	n-Propylbenzene		
	sec-Butylbenzene		
	tert-Butylbenzene	AC	< LL but > 10%
	1,3,5-Trimethylbenzene	<10%	<10%
	2-Chloroethyl vinyl ether		
	4-Isopropyltoluene		
	Acrolein		
	Iodomethane		
	Naphthalene		
	Styrene		
	m,p-Xylene		
	o-Xylene		
	trans-1,4-Dichloro-2-butene		

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.

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

Sample Locations	Compound	LCS Recovery
All sample locations within this SDG	1,3-Dichloropropane	>UL
	cis-1,2-Dichloroethene	
	cis-1,3-Dichloropropene	

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

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

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-20170309/ EFF DUP-20170309	Dibromochloromethane	1.5 J	2.0 J	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	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: April 4, 2017

PEER REVIEW: Dennis Capria

DATE: April 14, 2017

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	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 E87785 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

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

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B

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

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PRDOH Certified
EPA ID PR00014

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To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B

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

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	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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ACCREDITED IN ACCORDANCE WITH nelac

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

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

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B

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

Certified by Laboratory Director

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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

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To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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: **2656246**
Work Order: 655-04-26
Delivery Slip: 2017-02226
Folder Number: 232071

Collected Date & Time: **03/09/2017** 09:12
Received Date & Time: 03/09/2017 14:07
Temperature at Arrival: 3.0 °C

Date of Report: 03/21/2017
Collected By: EDELGADO
Eqlab Rep.: EGARCIA
Proposal Number: 20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1-Dicbloropropene	EPA 8260B	ND	µg/L	U,J	1.4	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	R ~~ND~~	~~µg/L~~	~~U,J~~	~~6.0~~	~~15.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U,J	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	R ~~ND~~	~~µg/L~~	~~U,J~~	~~1.4~~	~~3.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	R ~~ND~~	~~µg/L~~	~~U,J~~	~~25.0~~	~~75.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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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
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits			Analysis			Prep Method		
					MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	BDL	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	1.50	µg/L	J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B

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To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

	Parameter	Method		Results	Units	DQ	Limits MDL	MRL	MCL	Analysis Date	Time	By	Prep Method Date	By	Method
	Ethylbenzene	EPA 8260B		ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B		ND	µg/L	U	1.4	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	Iodomethane	EPA 8260B	R	~~ND~~	~~µg/L~~	~~U,J~~	~~8.0~~	~~15.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~
	Isopropylbenzene	EPA 8260B		ND	µg/L	U,J	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	Naphthalene	EPA 8260B	R	~~ND~~	~~µg/L~~	~~U,J~~	~~2.0~~	~~3.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~
	Styrene	EPA 8260B	R	~~ND~~	~~µg/L~~	~~U,J~~	~~1.2~~	~~3.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~
	Tetrachloroethene	EPA 8260B		ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B		ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	Toluene	EPA 8260B		ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	Trichloroethene	EPA 8260B		ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B		ND	µg/L	U	1.5	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	Vinyl Acetate	EPA 8260B		ND	µg/L	U,J	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	Vinyl chloride	EPA 8260B		ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B		ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B		ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
	m,p-Xylene	EPA 8260B	R	~~ND~~	~~µg/L~~	~~U,J~~	~~1.8~~	~~6.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~

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PRDOH Certified
EPA ID PR00014

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LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B R	~~ND~~	~~µg/L~~	~~U,J~~	~~2.3~~	~~3.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~
sec-Butylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B R	~~ND~~	~~µg/L~~	~~U~~	~~6.0~~	~~15.0~~	~~--~~	~~03/14/2017~~	~~21:54~~	~~SEDS~~	~~03/14/2017~~	~~--~~	~~EPA 5030B~~

SONIA PICHARDO RODRIGUEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 4 JL PR00014

Certified 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

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

PRDOH Certified
EPA-JL 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
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF DUP-20170309**
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:	**2656247**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF DUP-20170309**
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:	**2656247**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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EPA ID PR00014

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Source: **EFF DUP-20170309**
GUAYAMA, PR

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

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Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	1.40	µg/L	J	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	2.00	µg/L	J	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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GUAYAMA, PR

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

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Laboratory Test Report

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Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

	Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
	Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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GUAYAMA, PR

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

eqlab
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Laboratory Test Report

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Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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

Certified Director

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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

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **INF-20170309**
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:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	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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PRDOH Certified
EPA ID PR00014

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Source: **INF-20170309**
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:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B

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

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PRDOH Certified
EPA ID PR00014

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SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **INF-20170309**
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:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B

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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:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	8.40	µg/L	--	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B

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Laboratory Test Report

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Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 38

Certified Laboratory Director

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Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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

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

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	20.6	µg/L	--	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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

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

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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

Certified by: [illegible] Director

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

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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

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

M-

LIMS # 2017-02226

CLIENT NAME: Arcadis Caribe, PSC | CLIENT ID: 656-04 | W.O. #: 24 | SITE: Guayama, P.R. | CLIENT REP: E. Varela

P.O. #: | PWSID #: | FOLDER #: ~~231769~~ 232071 | PROJECT: Guayama, Project | EQLAB REP:

SAMPLE INFORMATION		CONTAINER INFORMATION			FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: Trip blank MATRIX: Water SOURCE: ~~2652771-1~~ 2656245	DATE: 3-9-17 TIME: 0800 TYPE: Grab	TYPE: Vial PRESERVATIVE	COLOR: Clear	VOLUME: 40ml			EPA 8260B VOC
SAMPLE #: EFF-20170309 MATRIX: GW SOURCE: Fibers, Guayama P.R. 2656246	DATE: 3-9-17 TIME: 0912 TYPE: G	TYPE: Vial PRESERVATIVE	COLOR: Clear	VOLUME: 3/40ml			EPA 8260B VOC
SAMPLE #: EFFDUP-20170309 MATRIX: GW SOURCE: Fibers, Guayama P.R. 2656247	DATE: 3-9-17 TIME: 0912 TYPE: G	TYPE: Vial PRESERVATIVE	COLOR: Clear	VOLUME: 3/40ml			EPA 8260B VOC
SAMPLE #: EFFMS-20170309 MATRIX: GW SOURCE: Fibers, Guayama P.R 2656248	DATE: 3-9-17 0912 TYPE: G	TYPE: Vial PRESERVATIVE	COLOR: Clear	VOLUME: 3/40ml			EPA 8260B VOC

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Eliot Delgado	3-9-2017	0912
Fixed in field by:	N/A	N/A	
Authorized by:			
Received by EQLF:			
Released to EQLL by:		03/09/17	1407
Received by EQLL:		03/09/17	1407

SPECIAL INSTRUCTIONS / COMMENTS:

*EQLF = Eqlabs' Field Personnel.
*EQLL = Eqlabs' Log-in Personnel.

Arrival Temperature: 3.0°C Signature:

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

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

M-

LIMS # 2017-02226

CLIENT NAME: Arcadis Caribe, PSC
P.O. #:

CLIENT ID: 655-04
PWSID #:

W.O. #: 26
FOLDER #: ~~231749~~ 233201

SITE: Guayama, P.R.
PROJECT: Guayama Project

CLIENT REP: E. Varela
EQLAB REP:

SAMPLE INFORMATION		CONTAINER INFORMATION			FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: EFF MSD-20170309	DATE: 3-9-2017	TYPE	COLOR	VOLUME			EPA 8260B VOC
MATRIX: GW	TIME: 0912	Vial	clear	3/40ml			
SOURCE: Fibers, Guayama 2656249 P.R.	TYPE: G	PRESERVATIVE					
SAMPLE #: INF-20170309	DATE: 3-9-2017	TYPE	COLOR	VOLUME			EPA 8260B VOC
MATRIX: GW	TIME: 0948	Vial	clear	3/40ml			
SOURCE: Fibers, Guayama 2656250 P.R.	TYPE: G	PRESERVATIVE					
SAMPLE #:	DATE:	TYPE	COLOR	VOLUME			
MATRIX:	TIME:						
SOURCE:	TYPE:	PRESERVATIVE					
SAMPLE #:	DATE:	TYPE	COLOR	VOLUME			
MATRIX:							
SOURCE:	TYPE:	PRESERVATIVE					

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Eliot Delgado	3-9-2017	0912
Fixed in field by:			
Authorized by:			
Received by EQLF:			
Released to EQLL by:		03/09/17	1407
Received by EQLL:		03/09/17	1407

SPECIAL INSTRUCTIONS / COMMENTS:

*EQLF = Eqlabs' Field Personnel.
*EQLL = Eqlabs' Log-in Personnel.

Arrival Temperature: 30°C Signature:

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

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

M-

LIMS # 2017-0026

CLIENT NAME: Arcadis Caribe, PSC | CLIENT ID: 655-04 | W.O. #: 24 | SITE: Guayama, P.R. | CLIENT REP: E. Valdela

P.O. #: | PWSID #: | FOLDER #: ~~231769~~ | PROJECT: Guayama Project | EQLAB REP:

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING	ANALYSIS REQUESTED
SAMPLE #: DI-20170309 MATRIX: Water SOURCE: Fibers, Guayama P.R 2656251	DATE: 3-9-2017 TIME: 0844 TYPE: G	TYPE: Vials COLOR: Clear VOLUME: 3/40ml PRESERVATIVE		EPA 8260B VOC
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE		
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE		
SAMPLE #: MATRIX: SOURCE:	DATE: TYPE:	TYPE COLOR VOLUME PRESERVATIVE		

03/09/17

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Eliot Delgado	3-9-2017	0844
Fixed in field by:			
Authorized by:			
Received by EQLF:			
Released to EQLL by:		03/09/17	1407
Received by EQLL:		03/09/17	1407

SPECIAL INSTRUCTIONS / COMMENTS:

*EQLF = Eqlabs' Field Personnel.
*EQLL = Eqlabs' Log-in Personnel.

Arrival Temperature: 3.0°C Signature:

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

Attachment 5
Laboratory Analytical Report #655-04-26

QUALITY ASSURANCE REPORT

Prepared for:
Arcadis Caribe, PSC

Facility:
Guayama Project

Project Name:
Interno

Samples Received On:
March 09, 2017

W.O.#: **655-04-26**

Folder: **232071**

ENVIRONMENTAL QUALITY LABORATORIES, INC.
PO BOX 11458 SAN JUAN PR 00910-1458

March 31, 2017

Arcadis Caribe, PSC
Las Vistas Shopping Village #300
Ave. Felisa Rincón Office 23
San Juan, PR 00926-5956

Attn: Mr. Elvin Varela

Re: Quality Assurance Report for the samples received on March 09, 2017

Dear Mr. Varela:

Enclosed you will find the Quality Assurance Report for the samples received on March 09, 2017 for the Interno project. The QC data submitted reflects the precision and accuracy of the analyzed samples.

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

Cordially,

Janet Gómez Rosario

Lic. Janet Gomez
QA/QC Supervisor
Environmental Quality Laboratories, Inc.

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2	Laboratory Test Reports
3	Analytical Tests Results Quality Assurance Report

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B	Raw Data
C	Control Charts

ENVIRONMENTAL QUALITY LABORATORIES, INC.
PO BOX 11458 SAN JUAN PR 00910-1458

SECTION 1
QUALITY ASSURANCE NARRATIVE

ENVIRONMENTAL QUALITY LABORATORIES, INC.
PO BOX 11458 SAN JUAN PR 00910-1458

Overview

On March 09, 2017 Environmental Quality Laboratories, Inc. received from Arcadis Caribe, PSC, one DI Water sample and six Groundwater samples, collected on March 09, 2017 at the Guayama Project facility for the Interno project. The samples were analyzed for EPA 8260B VOC. These samples were received in good condition, at 3.0°C and were stored in a refrigerator at 4°C ± 2°C until the time of the analysis. The following table summarizes the source of the samples analyzed and the EQ Lab sample numbers assigned to them upon receipt:

EQL Sample #	Source	Matrix
2656245	Trip Blank	DI Water
2656246	EFF-20170309	Groundwater
2656247	EFF DUP-20170309	Groundwater
2656248	EFF MS-20170309	Groundwater
2656249	EFF MSD-20170309	Groundwater
2656250	INF-20170309	Groundwater
2656251	DI-20170309	Groundwater

Quality Control Samples

QC samples were included with each batch of samples. Enclosed you will find a report summarizing precision and accuracy results obtained during the analysis of your samples.

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 sample are:

Sample Collection: All samples were collected by the client personnel. EQ Lab did not find any deviation about this item.

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

Sample Preparation & Analysis: EQ Lab found the following deviations about this item.

Sample Analysis: **EPA 8260B VOC**
Method: **USEPA SW-846 8260B**
Run Number: **187023**
Analysis Date: **03/14/17 – 03/15/17**

Deviation: The recoveries of some analytes in samples 2656248/MS, 2656249/MSD and 2658118 were found Out of Specifications (OOS).

Sample	Analyte	Deviation	Recovery (%)	Range (%)	Control Chart Calculated Range (%)
2656248/MS	1,1,2-Trichloroethane	OOS	136	78-125	61-145
	1,2-Dichloropropane		132	71-121	57-150
	1,3-Dichloropropane		133	69-124	51-150
	Acrolein		9	47-157	Detection - 189
	Chloroform		142	59-140	52-166
	Ethylbenzene		38	58-136	Detection - 215
	Isopropylbenzene		41.9	64-122	35-154
	Trichloroethene		142	76-126	55-149
	Trichlorofluoromethane		148	60-144	13-197
	Vinyl Acetate		36	52-141	14-194
	cis-1,2-Dichloroethene		142	66-127	50-151
	sec-Butylbenzene		39	64-114	38-153
2656249/MSD	1,1,1-Trichloroethane		147	69-140	57-162
	1,1,2-Trichloroethane		143	78-125	62-144
	1,1-Dichloroethane		150	56-141	66-157
	1,2-Dichloroethane		142	60-139	61-152
	1,2-Dichloropropane		137	71-121	57-150
	1,3-Dichloropropane		141	69-124	51-150
	4-Isopropyltoluene		9	66-129	Detection - 176
	Acrolein		9	47-157	Detection - 189
	Benzene		146	65-139	51-166
	Bromodichloromethane		145	64-141	69-146
	Chloroform		150	59-140	52-166
	Dibromochloromethane		143	67-137	53-155
	Ethylbenzene		38	58-136	Detection - 215
	Isopropylbenzene		49	64-122	35-154
	Tetrachloroethene		142	64-138	49-157
	Trichloroethene		149	76-126	55-149
	Vinyl Acetate		39	52-141	14-194
	cis-1,2-Dichloroethene		150	66-127	50-151
	n-Propylbenzene		46	61-123	45-154
	sec-Butylbenzene		54	64-114	38-153
	tert-Butylbenzene		67	68-113	35-160
2658118/LFB	1,3-Dichloropropane		129	74-124	69-136
	cis-1,2-Dichloroethene		130	71-128	67-143
	cis-1,3-Dichloropropene		126	63-125	67-133

Explanation: The recoveries of mentioned analytes were found out of specifications due to recoveries out of the specified range. According with Eqlab internal general guidelines; if the recovery falls outside the control limits and laboratory has sufficient performance data available (usually a minimum of 20-30 analyses), optional control limits can be developed from the percent mean recovery (R) and standard deviation (S) of the percent recovery.

The data could be used to establish upper and lower control limits as follows:

Upper Control Limit = R + 3S
Lower Control Limit = R - 3S

Control Charts of the analytes were developed and evaluated, obtaining new Lower and Upper Control Limits.

The recoveries of the samples mentioned above are considered valid because their recoveries fall within the expected statistical limit of three times the standard deviation of the historical recovery.

Deviation: The recoveries of some analytes in samples 2656248/MS and 2656249/MSD were found Out of Specifications (OOS).

Sample	Analyte	Deviation	Recovery (%)	Range (%)
2656248/MS	1,1-Dichloropropene	OOS	22	83-110
	1,3,5-Trimethylbenzene		0	61-125
	2-Chloroethyl vinyl ether		0	10-178
	4-Isopropyltoluene		0	66-129
	Bromochloromethane		175	49-150
	Chloromethane		214	42-139
	Iodomethane		1	45-148
	Naphthalene		4	66-135
	Styrene		2	65-123
	Toluene		47	65-140
	Vinyl chloride		19	39-151
	m,p-Xylene		2	56-145
	n-Butylbenzene		33	72-114
	n-Propylbenzene		31	61-123
	o-Xylene		2	54-143
	trans-1,4-Dichloro-2-butene		5	47-129
2656249/MSD	1,1-Dichloropropene		25	83-110
	1,2-Dibromoethane		143	66-140
	1,3,5-Trimethylbenzene		0	61-125

Sample	Analyte	Deviation	Recovery (%)	Range (%)
2656249/MSD	2-Chloroethyl vinyl ether	OOS	0	10-178
	Bromochloromethane		185	49-150
	Chloromethane		202	42-139
	Iodomethane		0	45-148
	Naphthalene		0	66-135
	Styrene		0	65-123
	Toluene		43	65-140
	Vinyl chloride		17	39-151
	m,p-Xylene		0	56-145
	n-Butylbenzene		42	72-114
	o-Xylene		0	54-143
	trans-1,2-Dichloroethene		151	56-146
	trans-1,4-Dichloro-2-butene		6	47-129
2658118/LFB	1,1-Dichloropropene	None	126	67-131
	1,2-Dibromoethane		125	76-126
	1,3,5-Trimethylbenzene		82	68-123
	2-Chloroethyl vinyl ether		116	47-143
	4-Isopropyltoluene		78	68-131
	Bromochloromethane		112	60-133
	Chloromethane		124	43-142
	Iodomethane		119	54-143
	Naphthalene		81	71-134
	Styrene		83	65-127
	Toluene		130	59-143
	Vinyl chloride		133	52-140
	m,p-Xylene		85	63-130
	n-Butylbenzene		75	67-127
	n-Propylbenzene		83	64-124
	o-Xylene		81	66-124
	trans-1,2-Dichloroethene		128	66-129
	trans-1,4-Dichloro-2-butene		81	53-123

Explanation: The recoveries of the above mentioned analytes in samples 2656248/MS and 2656249/MSD have recoveries which are out of specifications. Nevertheless, these analytes are in control in the Laboratory Fortified Blank 2658118/LFB, indicating that recoveries are out of specifications due to possible matrix interference and not to a system related issue.

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

General Comments

All analyses were performed in accordance with U.S. Environmental Protection Agency SW-846 or Standard Methods for the Examination of Water and Wastewater approved methodologies. The results associates with quality control samples were within the acceptance criteria established for these parameters with the exception of those discussed previously. After reviewing the documentation mentioned above we conclude that the data presented herein is valid and acceptable.

Calculation & Reporting

Formulas:

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

$$RPD = \left[\frac{|QC\ Final\ Result - Reference\ Final\ Result|}{\left(\frac{QC\ Final\ Result + Reference\ Final\ Result}{2}\right)}\right] \times 100$$

$$RPD_{Micro} = (\log_{10} QC\ Final\ Result) - (\log_{10} Reference\ Final\ Result)$$ (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. RPD general acceptance criteria are ≤ 20% for all matrices except Solid / Soil which is ≤ 40%.

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

$$\%Rec = \frac{QC\ Final\ Result}{QC\ Fortified\ Concentration} \times 100$$

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

$$\%Rec = \frac{QC\ Final\ Result - Reference\ Final\ Result}{QC\ Fortified\ Concentration} \times 100$$

Prepared by: Enrique Lázaro
QA/QC Coordinator Licensed
Environmental Quality Laboratories

March 31, 2017
Date

Checked by: Janet Gómez Rosario
QA/QC Supervisor
Environmental Quality Laboratories

March 31, 2017
Date

SECTION 2
LABORATORY TEST REPORTS

ENVIRONMENTAL QUALITY LABORATORIES, INC.
PO BOX 11458 SAN JUAN PR 00910-1458

ENVIRONMENTAL QUALITY LABORATORIES, INC.

March 21, 2017

MR. ELVIN VALERA

ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING CENTER VILLAGE #300
AVENIDA FELISA RINCON OFFICE 23
SAN JUAN PR 00926-5956

I hereby certify that the results reported for EQ Lab Samples from 2656245 to 26568251 have been reviewed by me and are correct as presented herein.

Leda Sonia Pichardo Rodríguez
Certified by Laboratory Director

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	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 E87785 at www.eqlab.com.

PRDOH Certified
EPA ID PR00014

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

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	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
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	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
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	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

PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

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

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656245**	Collected Date & Time:	**03/09/2017** 08:00	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:25	SEDS	03/14/2017	--	EPA 5030B

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

Certified by Laboratory Director

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LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,1-Dicbloropropene	EPA 8260B	ND	µg/L	U,J	1.4	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

ENVIRONMENTAL QUALITY LABORATORIES, INC.
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PO BOX 11458 SANTURCE, PR 00910-1458 TEL. (787) 288-6420 FAX (787) 288-6465 www.eqlab.com

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U,J	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U,J	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U,J	1.4	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U,J	25.0	75.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B

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LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	BDL	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	1.50	µg/L	J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B

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Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U,J	8.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U,J	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U,J	2.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U,J	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U,J	1.8	6.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B

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

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
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF-20170309**
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:	**2656246**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U,J	2.3	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U,J	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	21:54	SEDS	03/14/2017	--	EPA 5030B

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

Certified 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
MQ = Monitoring Only MRL = Minimum Reporting Level FTRL = 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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PROOF Certified
EPA-ID PR00014

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AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF DUP-20170309**
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:	**2656247**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF DUP-20170309**
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:	**2656247**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF DUP-20170309**
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:	**2656247**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	1.40	µg/L	J	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	2.00	µg/L	J	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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Source: **EFF DUP-20170309**
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:	**2656247**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

	Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
	Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
+	Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
	m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	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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ACCREDITED IN ACCORDANCE WITH nelac

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF DUP-20170309**
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:	**2656247**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:48	SEDS	03/14/2017	--	EPA 5030B

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

Certified Director

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SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF MS-20170309**
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:	**2656248**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	92.5	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	140	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	78.0	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	136	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	140	%	--	2.0	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	140	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	21.5	%	Q	1.4	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	86.0	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	80.5	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	87.0	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	66.0	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	102	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	135	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	134	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	132	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	0	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

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LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF MS-20170309**
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:	**2656248**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	80.5	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	133	%	Q	2.0	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	84.5	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	96.5	%	--	1.5	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	131	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	129	%	--	6.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	0	%	Q	6.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	128	%	--	1.4	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	124	%	--	6.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	127	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	0	%	Q	1.4	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	128	%	--	6.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	146	%	--	6.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	8.50	%	Q	25.0	75.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	129	%	--	6.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	139	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B

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To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF MS-20170309**
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:	**2656248**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 **14:07**	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	83.0	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	175	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	138	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	84.5	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	134	%	--	2.0	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	146	%	--	7.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	129	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	92.4	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	135	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	142	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	214	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	135	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	121	%	--	1.5	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	143	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	126	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	68.9	%	--	30.0	75.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B

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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:	**2656248**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	37.5	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	98.9	%	--	1.4	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	0.990	%	Q	8.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	41.9	%	Q	2.0	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	3.50	%	Q	2.0	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	2.15	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	137	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	141	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	46.5	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	142	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	148	%	Q	1.5	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	36.4	%	Q	6.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	19.4	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	142	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	79.7	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	1.58	%	Q	1.8	6.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	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:	**2656248**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	32.9	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	31.3	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	84.0	%	--	1.0	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	2.20	%	Q	2.3	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	38.8	%	Q	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	68.0	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	143	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	79.9	%	--	1.2	3.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	4.74	%	Q	6.0	15.0	--	03/15/2017	00:17	SEDS	03/14/2017	--	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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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
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF MSD-20170309**
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:	**2656249**	Collected Date & Time:	**03/09/2017**	09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017	14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C		Eqlab Rep.:	EGARCIA
Folder Number:	232071				Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,1,1,2-Tetrachloroethane	EPA 8260B	94.5	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	147	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	87.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	143	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	150	%	Q	2.0	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	150	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	25.0	%	Q	1.4	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	78.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	90.5	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	78.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	68.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	94.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	143	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	142	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	137	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	0	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B

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PRDOH Certified
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To: ARCADIS CARIBE, PSC
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AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF MSD-20170309**
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:	**2656249**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	89.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	141	%	Q	2.0	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	86.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	98.5	%	--	1.5	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	137	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	136	%	--	6.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	0	%	Q	6.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	126	%	--	1.4	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	130	%	--	6.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	126	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	8.50	%	Q	1.4	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	133	%	--	6.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	153	%	--	6.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	9.10	%	Q	25.0	75.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	138	%	--	6.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	146	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B

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EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF MSD-20170309**
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:	**2656249**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	92.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	185	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	145	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	95.5	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	117	%	--	2.0	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	152	%	--	7.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	135	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	95.5	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	116	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	150	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	202	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	143	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	128	%	--	1.5	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	121	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	131	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	79.1	%	--	30.0	75.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B

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To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **EFF MSD-20170309**
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:	**2656249**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	37.5	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	85.5	%	--	1.4	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	0	%	Q	8.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	49.0	%	Q	2.0	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	0	%	Q	2.0	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	0	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	142	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	145	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	42.5	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	149	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	124	%	--	1.5	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	38.5	%	Q	6.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	16.5	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	150	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	97.0	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	0	%	Q	1.8	6.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	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:	**2656249**	Collected Date & Time:	**03/09/2017** 09:12	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	42.0	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	46.0	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	83.5	%	--	1.0	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	0	%	Q	2.3	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	53.5	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	67.0	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	151	%	Q	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	92.5	%	--	1.2	3.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	6.00	%	Q	6.0	15.0	--	03/15/2017	00:46	SEDS	03/14/2017	--	EPA 5030B

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

Certified Director

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Client Ref. #: N/A

eqlab ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	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
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **INF-20170309**
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:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	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
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **INF-20170309**
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:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

Laboratory Test Report

Sample Number:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	8.40	µg/L	--	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B

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SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **INF-20170309**
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:	**2656250**	Collected Date & Time:	**03/09/2017** 08:48	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	22:51	SEDS	03/14/2017	--	EPA 5030B

SONIA PICHARDO RODRIGUEZ Químico Licenciado Estado Libre Asociado de Puerto Rico LICENCIA NUM. 38

Certified Laboratory Director

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SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

Parameter	Method	Results	Units	DQ	Limits MDL	Limits MRL	Limits MCL	Analysis Date	Analysis Time	Analysis By	Prep Method Date	Prep Method By	Prep Method Method
1,1,1,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1,1-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1,2,2-Tetrachloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1,2-Trichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,1-Dichloropropene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2,3-Trichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2,4-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromo-3-chloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2-Dibromoethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,3,5-Trimethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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PRDOH Certified
EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
1,3-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,3-Dichloropropane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1,4-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
1-Chlorohexane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2,2-Dichloropropane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2-Butanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2-Chloroethyl vinyl ether	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
2-Hexanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
4-Chlorotoluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
4-Isopropyltoluene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
4-Methyl-2-pentanone	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Acetone	EPA 8260B	20.6	µg/L	--	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Acrolein	EPA 8260B	ND	µg/L	U	25.0	75.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Acrylonitrile	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Benzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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EPA ID PR00014

To: ARCADIS CARIBE, PSC
LAS VISTAS SHOPPING VILLAGE # 300
AVE. FELISA RINCON OFFICE 23
SAN JUAN, PR 00926-5956

Attn: MR. ELVIN VARELA
Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Bromobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Bromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Bromodichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Bromoform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Bromomethane	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Carbon disulfide	EPA 8260B	ND	µg/L	U	7.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Carbon tetrachloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Chlorobenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Chloroethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Chloroform	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Chloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Dibromochloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Dibromomethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Dichlorodifluoromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Dichloromethane	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Epichlorohydrin	EPA 8260B	ND	µg/L	U	30.0	75.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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Source: **DI-20170309**
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:	**2656251**	Collected Date & Time:	**03/09/2017** 08:44	Date of Report:	03/21/2017
Work Order:	655-04-26	Received Date & Time:	03/09/2017 14:07	Collected By:	EDELGADO
Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
Ethylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Hexachlorobutadiene	EPA 8260B	ND	µg/L	U	1.4	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Iodomethane	EPA 8260B	ND	µg/L	U	8.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Isopropylbenzene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Naphthalene	EPA 8260B	ND	µg/L	U	2.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Styrene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Tetrachloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
+ Tetrahydrofuran	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Toluene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Trichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Trichlorofluoromethane	EPA 8260B	ND	µg/L	U	1.5	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Vinyl Acetate	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
Vinyl chloride	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
cis-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
cis-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
m,p-Xylene	EPA 8260B	ND	µg/L	U	1.8	6.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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Client Ref. #: N/A

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Delivery Slip:	2017-02226	Temperature at Arrival:	3.0 °C	Eqlab Rep.:	EGARCIA
Folder Number:	232071			Proposal Number:	20166 - 1

Remarks:

					Limits			Analysis			Prep Method		
Parameter	Method	Results	Units	DQ	MDL	MRL	MCL	Date	Time	By	Date	By	Method
n-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
n-Propylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
o-Dichlorobenzene	EPA 8260B	ND	µg/L	U	1.0	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
o-Xylene	EPA 8260B	ND	µg/L	U	2.3	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
sec-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
tert-Butylbenzene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
trans-1,2-Dichloroethene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
trans-1,3-Dichloropropene	EPA 8260B	ND	µg/L	U	1.2	3.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B
trans-1,4-Dichloro-2-butene	EPA 8260B	ND	µg/L	U	6.0	15.0	--	03/14/2017	23:19	SEDS	03/14/2017	--	EPA 5030B

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

Certified by: [illegible] Director

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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

SECTION 3
ANALYTICAL TESTS RESULTS QUALITY ASSURANCE REPORT

ENVIRONMENTAL QUALITY LABORATORIES, INC.
PO BOX 11458 SAN JUAN PR 00910-1458

Analytical Tests Results Quality Assurance Report

W.O. #: 655-04-26 March 31, 2017

1.0 Samples Analyzed

EQL Sample #	Date Collected	Date Received
2656245 - 2656251	03/09/17	03/09/17

2.0 Instrumentation

Parameter	Instrument Used
EPA 8260B VOC	V8 – AG7890MS Gas Chromatograph with a Mass Selective Detector.

3.0 Methodology

Parameter	Method	Date Analyzed	Analyst
EPA 8260B VOC	EPA 8260 B	03/14/17 – 03/15/17	SEDS

Enrique Lázaro
QA/QC Coordinator
Environmental Quality Laboratories, Inc.

QUALITY CONTROL SUMMARY

EPA 8260B VOC - Run #187023

2658112 - LRB

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/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,1,1-Trichloroethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,1,2,2-Tetrachloroethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,1,2-Trichloroethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,1-Dichloroethane	N/A	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,1-Dichloroethene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,1-Dichloropropene	N/A	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,2,3-Trichlorobenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,2,3-Trichloropropane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,2,4-Trichlorobenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,2,4-Trimethylbenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,2-Dibromo-3-chloropropane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,2-Dibromoethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,2-Dichloroethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,2-Dichloropropane	N/A	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,3,5-Trimethylbenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,3-Dichlorobenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,3-Dichloropropane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1,4-Dichlorobenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
1-Chlorohexane	N/A	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
2,2-Dichloropropane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
2-Butanone	N/A	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
2-Chloroethyl vinyl ether	N/A	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
2-Chlorotoluene	N/A	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS

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

ENVIRONMENTAL QUALITY LABORATORIES, INC. P.O. BOX 11458, SAN JUAN, P.R. 00910-1458
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QUALITY CONTROL SUMMARY

2-Hexanone	N/A	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
4-Bromofluorobenzene-SURR	N/A	19.9	--	µg/L	N/A	N/A	20.0	99.4	79	121	N/A	N/A	03/14/17	19:03	SEDS
4-Chlorotoluene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
4-Isopropyltoluene	N/A	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
4-Methyl-2-pentanone	N/A	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Acetone	N/A	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Acrolein	N/A	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Acrylonitrile	N/A	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Benzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Bromobenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Bromochloromethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Bromodichloromethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Bromoform	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Bromomethane	N/A	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Carbon disulfide	N/A	N.D	U	µg/L	7.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Carbon tetrachloride	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Chlorobenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Chloroethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Chloroform	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Chloromethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Dibromochloromethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Dibromofluoromethane-SURR	N/A	20.0	--	µg/L	N/A	N/A	20.0	100	83	120	N/A	N/A	03/14/17	19:03	SEDS
Dibromomethane	N/A	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Dichlorodifluoromethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Dichloromethane	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Epichlorohydrin	N/A	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Ethylbenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Hexachlorobutadiene	N/A	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Iodomethane	N/A	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Isopropylbenzene	N/A	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Naphthalene	N/A	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS

QUALITY CONTROL SUMMARY

Styrene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Tetrachloroethene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Tetrahydrofuran	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Toluene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Toluene-d8-SURR	N/A	21.2	--	µg/L	N/A	N/A	20.0	106	80	116	N/A	N/A	03/14/17	19:03	SEDS
Trichloroethene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Trichlorofluoromethane	N/A	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Vinyl Acetate	N/A	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
Vinyl chloride	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
cis-1,2-Dichloroethene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
cis-1,3-Dichloropropene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
m,p-Xylene	N/A	N.D	U	µg/L	1.8	6.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
n-Butylbenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
n-Propylbenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
o-Dichlorobenzene	N/A	N.D	U	µg/L	1.0	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
o-Xylene	N/A	N.D	U	µg/L	2.3	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
sec-Butylbenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
tert-Butylbenzene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
trans-1,2-Dichloroethene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
trans-1,3-Dichloropropene	N/A	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS
trans-1,4-Dichloro-2-butene	N/A	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N/A	N/A	03/14/17	19:03	SEDS

2656247 - DUP

Reference Sample Number is: 2656246

							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	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,1,1-Trichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,1,2,2-Tetrachloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,1,2-Trichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,1-Dichloroethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS

QUALITY CONTROL SUMMARY

1,1-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,1-Dichloropropene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,2,3-Trichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,2,3-Trichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,2,4-Trichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,2,4-Trimethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,2-Dibromo-3-chloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,2-Dibromoethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,2-Dichloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,2-Dichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,3,5-Trimethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,3-Dichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,3-Dichloropropane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1,4-Dichlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
1-Chlorohexane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
2,2-Dichloropropane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
2-Butanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
2-Chloroethyl vinyl ether	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
2-Chlorotoluene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
2-Hexanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
4-Bromofluorobenzene-SURR	19.6	21.3	--	µg/L	N/A	N/A	20.00	106	71	125	N/A	N/A	03/14/17	23:48	SEDS
4-Chlorotoluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
4-Isopropyltoluene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
4-Methyl-2-pentanone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Acetone	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Acrolein	N.D	N.D	U	µg/L	25.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Acrylonitrile	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Benzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Bromobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Bromochloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Bromodichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS

QUALITY CONTROL SUMMARY

Bromoform	BDL	1.4	J	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Bromomethane	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Carbon disulfide	N.D	N.D	U	µg/L	7.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Carbon tetrachloride	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Chlorobenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Chloroethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Chloroform	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Chloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Dibromochloromethane	1.5	2.0	J	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Dibromofluoromethane-SURR	19.9	19.8	--	µg/L	N/A	N/A	20.00	99.0	76	123	N/A	N/A	03/14/17	23:48	SEDS
Dibromomethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Dichlorodifluoromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Dichloromethane	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Epichlorohydrin	N.D	N.D	U	µg/L	30.0	75.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Ethylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Hexachlorobutadiene	N.D	N.D	U	µg/L	1.4	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Iodomethane	N.D	N.D	U	µg/L	8.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Isopropylbenzene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Naphthalene	N.D	N.D	U	µg/L	2.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Styrene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Tetrachloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Tetrahydrofuran	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Toluene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Toluene-d8-SURR	20.9	19.6	--	µg/L	N/A	N/A	20.00	97.8	77	122	N/A	N/A	03/14/17	23:48	SEDS
Trichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Trichlorofluoromethane	N.D	N.D	U	µg/L	1.5	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Vinyl Acetate	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
Vinyl chloride	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
cis-1,2-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
cis-1,3-Dichloropropene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
m,p-Xylene	N.D	N.D	U	µg/L	1.8	6.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS

QUALITY CONTROL SUMMARY

n-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
n-Propylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
o-Dichlorobenzene	N.D	N.D	U	µg/L	1.0	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
o-Xylene	N.D	N.D	U	µg/L	2.3	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
sec-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
tert-Butylbenzene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
trans-1,2-Dichloroethene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
trans-1,3-Dichloropropene	N.D	N.D	U	µg/L	1.2	3.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS
trans-1,4-Dichloro-2-butene	N.D	N.D	U	µg/L	6.0	15.0	N/A	N/A	N/A	N/A	N.C.	20	03/14/17	23:48	SEDS

2656248 - MS

Reference Sample Number is: 2656246

							Accuracy				Precision				
									Acceptance Criteria			Acceptance Criteria	Analysis		
Analyte Name	**Reference Result**	**QC Result**	**DQ**	**Units**	**MDL**	**MRL**	**A/A**	**Rec. %**	**Low Limit**	**High Limit**	**RPD**	**High Limit**	**Date**	**Time**	**By**
1,1,1,2-Tetrachloroethane	N.D	18.5	--	µg/L	1.2	3.0	20.0	92.5	67	124	N/A	N/A	03/15/17	00:17	SEDS
1,1,1-Trichloroethane	N.D	27.9	--	µg/L	1.2	3.0	20.0	140	69	140	N/A	N/A	03/15/17	00:17	SEDS
1,1,2,2-Tetrachloroethane	N.D	15.6	--	µg/L	1.2	3.0	20.0	78.0	64	122	N/A	N/A	03/15/17	00:17	SEDS
1,1,2-Trichloroethane	N.D	27.1	Q	µg/L	1.2	3.0	20.0	136	78	125	N/A	N/A	03/15/17	00:17	SEDS
1,1-Dichloroethane	N.D	27.9	--	µg/L	2.0	3.0	20.0	140	56	141	N/A	N/A	03/15/17	00:17	SEDS
1,1-Dichloroethene	N.D	28.0	--	µg/L	1.2	3.0	20.0	140	44	155	N/A	N/A	03/15/17	00:17	SEDS
1,1-Dichloropropene	N.D	4.3	Q	µg/L	1.4	3.0	20.0	21.5	83	110	N/A	N/A	03/15/17	00:17	SEDS
1,2,3-Trichlorobenzene	N.D	17.2	--	µg/L	1.2	3.0	20.0	86.0	71	119	N/A	N/A	03/15/17	00:17	SEDS
1,2,3-Trichloropropane	N.D	16.1	--	µg/L	1.2	3.0	20.0	80.5	47	131	N/A	N/A	03/15/17	00:17	SEDS
1,2,4-Trichlorobenzene	N.D	17.4	--	µg/L	1.2	3.0	20.0	87.0	53	139	N/A	N/A	03/15/17	00:17	SEDS
1,2,4-Trimethylbenzene	N.D	13.2	--	µg/L	1.2	3.0	20.0	66.0	52	141	N/A	N/A	03/15/17	00:17	SEDS
1,2-Dibromo-3-chloropropane	N.D	20.4	--	µg/L	1.2	3.0	20.0	102	67	140	N/A	N/A	03/15/17	00:17	SEDS
1,2-Dibromoethane	N.D	27.0	--	µg/L	1.2	3.0	20.0	135	66	140	N/A	N/A	03/15/17	00:17	SEDS
1,2-Dichloroethane	N.D	26.8	--	µg/L	1.2	3.0	20.0	134	60	139	N/A	N/A	03/15/17	00:17	SEDS
1,2-Dichloropropane	N.D	26.3	Q	µg/L	1.2	3.0	20.0	132	71	121	N/A	N/A	03/15/17	00:17	SEDS
1,3,5-Trimethylbenzene	N.D	0.00	Q	µg/L	1.2	3.0	20.0	0.00	61	125	N/A	N/A	03/15/17	00:17	SEDS
1,3-Dichlorobenzene	N.D	16.1	--	µg/L	1.2	3.0	20.0	80.5	61	129	N/A	N/A	03/15/17	00:17	SEDS

QUALITY CONTROL SUMMARY

1,3-Dichloropropane	N.D	26.6	Q	µg/L	2.0	3.0	20.0	133	69	124	N/A	N/A	03/15/17	00:17	SEDS
1,4-Dichlorobenzene	N.D	16.9	--	µg/L	1.2	3.0	20.0	84.5	73	122	N/A	N/A	03/15/17	00:17	SEDS
1-Chlorohexane	N.D	19.3	--	µg/L	1.5	3.0	20.0	96.5	48	136	N/A	N/A	03/15/17	00:17	SEDS
2,2-Dichloropropane	N.D	26.1	--	µg/L	1.2	3.0	20.0	131	13	157	N/A	N/A	03/15/17	00:17	SEDS
2-Butanone	N.D	128.5	--	µg/L	6.0	15.0	100	129	43	151	N/A	N/A	03/15/17	00:17	SEDS
2-Chloroethyl vinyl ether	N.D	0.00	Q	µg/L	6.0	15.0	100	0.00	10	178	N/A	N/A	03/15/17	00:17	SEDS
2-Chlorotoluene	N.D	25.5	--	µg/L	1.4	3.0	20.0	128	64	139	N/A	N/A	03/15/17	00:17	SEDS
2-Hexanone	N.D	123.6	--	µg/L	6.0	15.0	100	124	53	147	N/A	N/A	03/15/17	00:17	SEDS
4-Bromofluorobenzene-SURR	19.6	19.5	--	µg/L	N/A	N/A	20.00	97.6	71	125	N/A	N/A	03/15/17	00:17	SEDS
4-Chlorotoluene	N.D	25.4	--	µg/L	1.2	3.0	20.0	127	64	128	N/A	N/A	03/15/17	00:17	SEDS
4-Isopropyltoluene	N.D	0.00	Q	µg/L	1.4	3.0	20.0	0.00	66	129	N/A	N/A	03/15/17	00:17	SEDS
4-Methyl-2-pentanone	N.D	127.9	--	µg/L	6.0	15.0	100	128	57	143	N/A	N/A	03/15/17	00:17	SEDS
Acetone	N.D	146.3	--	µg/L	6.0	15.0	100	146	33	154	N/A	N/A	03/15/17	00:17	SEDS
Acrolein	N.D	42.7	Q	µg/L	25.0	75.0	500	8.50	47	157	N/A	N/A	03/15/17	00:17	SEDS
Acrylonitrile	N.D	129.2	--	µg/L	6.0	15.0	100	129	34	160	N/A	N/A	03/15/17	00:17	SEDS
Benzene	N.D	27.8	--	µg/L	1.2	3.0	20.0	139	65	139	N/A	N/A	03/15/17	00:17	SEDS
Bromobenzene	N.D	16.6	--	µg/L	1.2	3.0	20.0	83.0	64	120	N/A	N/A	03/15/17	00:17	SEDS
Bromochloromethane	N.D	34.9	Q	µg/L	1.2	3.0	20.0	175	49	150	N/A	N/A	03/15/17	00:17	SEDS
Bromodichloromethane	N.D	27.6	--	µg/L	1.2	3.0	20.0	138	64	141	N/A	N/A	03/15/17	00:17	SEDS
Bromoform	BDL	16.9	--	µg/L	1.2	3.0	20.0	84.5	61	132	N/A	N/A	03/15/17	00:17	SEDS
Bromomethane	N.D	26.8	--	µg/L	2.0	3.0	20.0	134	35	163	N/A	N/A	03/15/17	00:17	SEDS
Carbon disulfide	N.D	146.0	--	µg/L	7.0	15.0	100	146	48	158	N/A	N/A	03/15/17	00:17	SEDS
Carbon tetrachloride	N.D	25.7	--	µg/L	1.2	3.0	20.0	129	73	137	N/A	N/A	03/15/17	00:17	SEDS
Chlorobenzene	N.D	18.5	--	µg/L	1.2	3.0	20.0	92.4	68	121	N/A	N/A	03/15/17	00:17	SEDS
Chloroethane	N.D	27.0	--	µg/L	1.2	3.0	20.0	135	50	142	N/A	N/A	03/15/17	00:17	SEDS
Chloroform	N.D	28.4	Q	µg/L	1.2	3.0	20.0	142	59	140	N/A	N/A	03/15/17	00:17	SEDS
Chloromethane	N.D	42.9	Q	µg/L	1.2	3.0	20.0	214	42	139	N/A	N/A	03/15/17	00:17	SEDS
Dibromochloromethane	1.5	28.5	--	µg/L	1.2	3.0	20.0	135	67	137	N/A	N/A	03/15/17	00:17	SEDS
Dibromofluoromethane-SURR	19.9	19.9	--	µg/L	N/A	N/A	20.00	99.5	76	123	N/A	N/A	03/15/17	00:17	SEDS
Dibromomethane	N.D	24.2	--	µg/L	1.5	3.0	20.0	121	72	139	N/A	N/A	03/15/17	00:17	SEDS
Dichlorodifluoromethane	N.D	28.7	--	µg/L	1.2	3.0	20.0	143	42	157	N/A	N/A	03/15/17	00:17	SEDS

QUALITY CONTROL SUMMARY

Dichloromethane	N.D	25.2	--	µg/L	1.2	3.0	20.0	126	56	135	N/A	N/A	03/15/17	00:17	SEDS
Epichlorohydrin	N.D	344.3	--	µg/L	30.0	75.0	500	68.9	37	129	N/A	N/A	03/15/17	00:17	SEDS
Ethylbenzene	N.D	7.5	Q	µg/L	1.2	3.0	20.0	37.5	58	136	N/A	N/A	03/15/17	00:17	SEDS
Hexachlorobutadiene	N.D	19.8	--	µg/L	1.4	3.0	20.0	98.9	62	124	N/A	N/A	03/15/17	00:17	SEDS
Iodomethane	N.D	BDL	Q	µg/L	8.0	15.0	100	0.990	45	148	N/A	N/A	03/15/17	00:17	SEDS
Isopropylbenzene	N.D	8.4	Q	µg/L	2.0	3.0	20.0	41.9	64	122	N/A	N/A	03/15/17	00:17	SEDS
Naphthalene	N.D	BDL	Q	µg/L	2.0	3.0	20.0	3.50	66	135	N/A	N/A	03/15/17	00:17	SEDS
Styrene	N.D	BDL	Q	µg/L	1.2	3.0	20.0	2.15	65	123	N/A	N/A	03/15/17	00:17	SEDS
Tetrachloroethene	N.D	27.4	--	µg/L	1.2	3.0	20.0	137	64	138	N/A	N/A	03/15/17	00:17	SEDS
Tetrahydrofuran	N.D	28.1	--	µg/L	1.2	3.0	20.0	141	51	147	N/A	N/A	03/15/17	00:17	SEDS
Toluene	N.D	9.3	Q	µg/L	1.2	3.0	20.0	46.5	65	140	N/A	N/A	03/15/17	00:17	SEDS
Toluene-d8-SURR	20.9	22.0	--	µg/L	N/A	N/A	20.00	110	77	122	N/A	N/A	03/15/17	00:17	SEDS
Trichloroethene	N.D	28.3	Q	µg/L	1.2	3.0	20.0	142	76	126	N/A	N/A	03/15/17	00:17	SEDS
Trichlorofluoromethane	N.D	29.5	Q	µg/L	1.5	3.0	20.0	148	60	144	N/A	N/A	03/15/17	00:17	SEDS
Vinyl Acetate	N.D	36.4	Q	µg/L	6.0	15.0	100	36.4	52	141	N/A	N/A	03/15/17	00:17	SEDS
Vinyl chloride	N.D	3.9	Q	µg/L	1.2	3.0	20.0	19.4	39	151	N/A	N/A	03/15/17	00:17	SEDS
cis-1,2-Dichloroethene	N.D	28.4	Q	µg/L	1.2	3.0	20.0	142	66	127	N/A	N/A	03/15/17	00:17	SEDS
cis-1,3-Dichloropropene	N.D	15.9	--	µg/L	1.2	3.0	20.0	79.7	57	131	N/A	N/A	03/15/17	00:17	SEDS
m,p-Xylene	N.D	BDL	Q	µg/L	1.8	6.0	40.0	1.58	56	145	N/A	N/A	03/15/17	00:17	SEDS
n-Butylbenzene	N.D	6.6	Q	µg/L	1.2	3.0	20.0	32.9	72	114	N/A	N/A	03/15/17	00:17	SEDS
n-Propylbenzene	N.D	6.3	Q	µg/L	1.2	3.0	20.0	31.3	61	123	N/A	N/A	03/15/17	00:17	SEDS
o-Dichlorobenzene	N.D	16.8	--	µg/L	1.0	3.0	20.0	84.0	73	124	N/A	N/A	03/15/17	00:17	SEDS
o-Xylene	N.D	BDL	Q	µg/L	2.3	3.0	20.0	2.20	54	143	N/A	N/A	03/15/17	00:17	SEDS
sec-Butylbenzene	N.D	7.8	Q	µg/L	1.2	3.0	20.0	38.8	64	114	N/A	N/A	03/15/17	00:17	SEDS
tert-Butylbenzene	N.D	13.6	--	µg/L	1.2	3.0	20.0	68.0	68	113	N/A	N/A	03/15/17	00:17	SEDS
trans-1,2-Dichloroethene	N.D	28.6	--	µg/L	1.2	3.0	20.0	143	56	146	N/A	N/A	03/15/17	00:17	SEDS
trans-1,3-Dichloropropene	N.D	16.0	--	µg/L	1.2	3.0	20.0	79.9	59	130	N/A	N/A	03/15/17	00:17	SEDS
trans-1,4-Dichloro-2-butene	N.D	BDL	Q	µg/L	6.0	15.0	100	4.74	47	129	N/A	N/A	03/15/17	00:17	SEDS

QUALITY CONTROL SUMMARY

2656249 - MSD

Reference Sample Number is: 2656246

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	18.9	--	µg/L	1.2	3.0	20.0	94.5	67	124	2.14	20	03/15/17	00:46	SEDS
1,1,1-Trichloroethane	N.D	29.3	Q	µg/L	1.2	3.0	20.0	147	69	140	4.90	20	03/15/17	00:46	SEDS
1,1,2,2-Tetrachloroethane	N.D	17.4	--	µg/L	1.2	3.0	20.0	87.0	64	122	10.9	20	03/15/17	00:46	SEDS
1,1,2-Trichloroethane	N.D	28.6	Q	µg/L	1.2	3.0	20.0	143	78	125	5.39	20	03/15/17	00:46	SEDS
1,1-Dichloroethane	N.D	29.9	Q	µg/L	2.0	3.0	20.0	150	56	141	6.92	20	03/15/17	00:46	SEDS
1,1-Dichloroethene	N.D	30.0	--	µg/L	1.2	3.0	20.0	150	44	155	6.90	20	03/15/17	00:46	SEDS
1,1-Dichloropropene	N.D	5.0	Q	µg/L	1.4	3.0	20.0	25.0	83	110	N.C.	20	03/15/17	00:46	SEDS
1,2,3-Trichlorobenzene	N.D	15.6	--	µg/L	1.2	3.0	20.0	78.0	71	119	9.76	20	03/15/17	00:46	SEDS
1,2,3-Trichloropropane	N.D	18.1	--	µg/L	1.2	3.0	20.0	90.5	47	131	11.7	20	03/15/17	00:46	SEDS
1,2,4-Trichlorobenzene	N.D	15.6	--	µg/L	1.2	3.0	20.0	78.0	53	139	10.9	20	03/15/17	00:46	SEDS
1,2,4-Trimethylbenzene	N.D	13.6	--	µg/L	1.2	3.0	20.0	68.0	52	141	2.99	20	03/15/17	00:46	SEDS
1,2-Dibromo-3-chloropropane	N.D	18.8	--	µg/L	1.2	3.0	20.0	94.0	67	140	8.16	20	03/15/17	00:46	SEDS
1,2-Dibromoethane	N.D	28.5	Q	µg/L	1.2	3.0	20.0	143	66	140	5.41	20	03/15/17	00:46	SEDS
1,2-Dichloroethane	N.D	28.3	Q	µg/L	1.2	3.0	20.0	142	60	139	5.45	20	03/15/17	00:46	SEDS
1,2-Dichloropropane	N.D	27.4	Q	µg/L	1.2	3.0	20.0	137	71	121	4.10	20	03/15/17	00:46	SEDS
1,3,5-Trimethylbenzene	N.D	0.00	Q	µg/L	1.2	3.0	20.0	0.00	61	125	N.C.	20	03/15/17	00:46	SEDS
1,3-Dichlorobenzene	N.D	17.8	--	µg/L	1.2	3.0	20.0	89.0	61	129	10.0	20	03/15/17	00:46	SEDS
1,3-Dichloropropane	N.D	28.1	Q	µg/L	2.0	3.0	20.0	141	69	124	5.48	20	03/15/17	00:46	SEDS
1,4-Dichlorobenzene	N.D	17.2	--	µg/L	1.2	3.0	20.0	86.0	73	122	1.76	20	03/15/17	00:46	SEDS
1-Chlorohexane	N.D	19.7	--	µg/L	1.5	3.0	20.0	98.5	48	136	2.05	20	03/15/17	00:46	SEDS
2,2-Dichloropropane	N.D	27.4	--	µg/L	1.2	3.0	20.0	137	13	157	4.86	20	03/15/17	00:46	SEDS
2-Butanone	N.D	136.0	--	µg/L	6.0	15.0	100	136	43	151	5.67	20	03/15/17	00:46	SEDS
2-Chloroethyl vinyl ether	N.D	0.00	Q	µg/L	6.0	15.0	100	0.00	10	178	N.C.	20	03/15/17	00:46	SEDS
2-Chlorotoluene	N.D	25.1	--	µg/L	1.4	3.0	20.0	126	64	139	1.58	20	03/15/17	00:46	SEDS
2-Hexanone	N.D	130.0	--	µg/L	6.0	15.0	100	130	53	147	5.05	20	03/15/17	00:46	SEDS
4-Bromofluorobenzene-SURR	19.6	21.0	--	µg/L	N/A	N/A	20.00	105	71	125	N/A	N/A	03/15/17	00:46	SEDS
4-Chlorotoluene	N.D	25.1	--	µg/L	1.2	3.0	20.0	126	64	128	1.19	20	03/15/17	00:46	SEDS

QUALITY CONTROL SUMMARY

4-Isopropyltoluene	N.D	1.7	Q	µg/L	1.4	3.0	20.0	8.50	66	129	N.C.	20	03/15/17	00:46	SEDS
4-Methyl-2-pentanone	N.D	132.8	--	µg/L	6.0	15.0	100	133	57	143	3.76	20	03/15/17	00:46	SEDS
Acetone	N.D	152.7	--	µg/L	6.0	15.0	100	153	33	154	4.28	20	03/15/17	00:46	SEDS
Acrolein	N.D	45.5	Q	µg/L	25.0	75.0	500	9.10	47	157	N.C.	20	03/15/17	00:46	SEDS
Acrylonitrile	N.D	138.1	--	µg/L	6.0	15.0	100	138	34	160	6.66	20	03/15/17	00:46	SEDS
Benzene	N.D	29.1	Q	µg/L	1.2	3.0	20.0	146	65	139	4.57	20	03/15/17	00:46	SEDS
Bromobenzene	N.D	18.4	--	µg/L	1.2	3.0	20.0	92.0	64	120	10.3	20	03/15/17	00:46	SEDS
Bromochloromethane	N.D	37.0	Q	µg/L	1.2	3.0	20.0	185	49	150	5.84	20	03/15/17	00:46	SEDS
Bromodichloromethane	N.D	29.0	Q	µg/L	1.2	3.0	20.0	145	64	141	4.95	20	03/15/17	00:46	SEDS
Bromoform	BDL	19.1	--	µg/L	1.2	3.0	20.0	95.5	61	132	12.2	20	03/15/17	00:46	SEDS
Bromomethane	N.D	23.4	--	µg/L	2.0	3.0	20.0	117	35	163	13.5	20	03/15/17	00:46	SEDS
Carbon disulfide	N.D	151.9	--	µg/L	7.0	15.0	100	152	48	158	3.96	20	03/15/17	00:46	SEDS
Carbon tetrachloride	N.D	26.9	--	µg/L	1.2	3.0	20.0	135	73	137	4.56	20	03/15/17	00:46	SEDS
Chlorobenzene	N.D	19.1	--	µg/L	1.2	3.0	20.0	95.5	68	121	3.19	20	03/15/17	00:46	SEDS
Chloroethane	N.D	23.2	--	µg/L	1.2	3.0	20.0	116	50	142	15.1	20	03/15/17	00:46	SEDS
Chloroform	N.D	30.0	Q	µg/L	1.2	3.0	20.0	150	59	140	5.48	20	03/15/17	00:46	SEDS
Chloromethane	N.D	40.4	Q	µg/L	1.2	3.0	20.0	202	42	139	6.00	20	03/15/17	00:46	SEDS
Dibromochloromethane	1.5	30.0	Q	µg/L	1.2	3.0	20.0	143	67	137	5.13	20	03/15/17	00:46	SEDS
Dibromofluoromethane-SURR	19.9	19.7	--	µg/L	N/A	N/A	20.00	98.5	76	123	N/A	N/A	03/15/17	00:46	SEDS
Dibromomethane	N.D	25.6	--	µg/L	1.5	3.0	20.0	128	72	139	5.62	20	03/15/17	00:46	SEDS
Dichlorodifluoromethane	N.D	24.2	--	µg/L	1.2	3.0	20.0	121	42	157	17.0	20	03/15/17	00:46	SEDS
Dichloromethane	N.D	26.1	--	µg/L	1.2	3.0	20.0	131	56	135	3.51	20	03/15/17	00:46	SEDS
Epichlorohydrin	N.D	395.6	--	µg/L	30.0	75.0	500	79.1	37	129	13.9	20	03/15/17	00:46	SEDS
Ethylbenzene	N.D	7.5	Q	µg/L	1.2	3.0	20.0	37.5	58	136	N.C.	20	03/15/17	00:46	SEDS
Hexachlorobutadiene	N.D	17.1	--	µg/L	1.4	3.0	20.0	85.5	62	124	14.6	20	03/15/17	00:46	SEDS
Iodomethane	N.D	0.00	Q	µg/L	8.0	15.0	100	0.00	45	148	N.C.	20	03/15/17	00:46	SEDS
Isopropylbenzene	N.D	9.8	Q	µg/L	2.0	3.0	20.0	49.0	64	122	N.C.	20	03/15/17	00:46	SEDS
Naphthalene	N.D	0.00	Q	µg/L	2.0	3.0	20.0	0.00	66	135	N.C.	20	03/15/17	00:46	SEDS
Styrene	N.D	0.00	Q	µg/L	1.2	3.0	20.0	0.00	65	123	N.C.	20	03/15/17	00:46	SEDS
Tetrachloroethene	N.D	28.4	Q	µg/L	1.2	3.0	20.0	142	64	138	3.58	20	03/15/17	00:46	SEDS
Tetrahydrofuran	N.D	28.9	--	µg/L	1.2	3.0	20.0	145	51	147	2.81	20	03/15/17	00:46	SEDS

QUALITY CONTROL SUMMARY

Toluene	N.D	8.5	Q	µg/L	1.2	3.0	20.0	42.5	65	140	N.C.	20	03/15/17	00:46	SEDS
Toluene-d8-SURR	20.9	22.1	--	µg/L	N/A	N/A	20.00	111	77	122	N/A	N/A	03/15/17	00:46	SEDS
Trichloroethene	N.D	29.7	Q	µg/L	1.2	3.0	20.0	149	76	126	4.83	20	03/15/17	00:46	SEDS
Trichlorofluoromethane	N.D	24.7	--	µg/L	1.5	3.0	20.0	124	60	144	17.7	20	03/15/17	00:46	SEDS
Vinyl Acetate	N.D	38.5	Q	µg/L	6.0	15.0	100	38.5	52	141	N.C.	20	03/15/17	00:46	SEDS
Vinyl chloride	N.D	3.3	Q	µg/L	1.2	3.0	20.0	16.5	39	151	N.C.	20	03/15/17	00:46	SEDS
cis-1,2-Dichloroethene	N.D	30.0	Q	µg/L	1.2	3.0	20.0	150	66	127	5.48	20	03/15/17	00:46	SEDS
cis-1,3-Dichloropropene	N.D	19.4	--	µg/L	1.2	3.0	20.0	97.0	57	131	19.8	20	03/15/17	00:46	SEDS
m,p-Xylene	N.D	0.00	Q	µg/L	1.8	6.0	40.0	0.00	56	145	N.C.	20	03/15/17	00:46	SEDS
n-Butylbenzene	N.D	8.4	Q	µg/L	1.2	3.0	20.0	42.0	72	114	N.C.	20	03/15/17	00:46	SEDS
n-Propylbenzene	N.D	9.2	Q	µg/L	1.2	3.0	20.0	46.0	61	123	N.C.	20	03/15/17	00:46	SEDS
o-Dichlorobenzene	N.D	16.7	--	µg/L	1.0	3.0	20.0	83.5	73	124	0.597	20	03/15/17	00:46	SEDS
o-Xylene	N.D	0.00	Q	µg/L	2.3	3.0	20.0	0.00	54	143	N.C.	20	03/15/17	00:46	SEDS
sec-Butylbenzene	N.D	10.7	Q	µg/L	1.2	3.0	20.0	53.5	64	114	N.C.	20	03/15/17	00:46	SEDS
tert-Butylbenzene	N.D	13.4	Q	µg/L	1.2	3.0	20.0	67.0	68	113	1.48	20	03/15/17	00:46	SEDS
trans-1,2-Dichloroethene	N.D	30.1	Q	µg/L	1.2	3.0	20.0	151	56	146	5.11	20	03/15/17	00:46	SEDS
trans-1,3-Dichloropropene	N.D	18.5	--	µg/L	1.2	3.0	20.0	92.5	59	130	14.5	20	03/15/17	00:46	SEDS
trans-1,4-Dichloro-2-butene	N.D	6.0	Q	µg/L	6.0	15.0	100	6.00	47	129	N.C.	20	03/15/17	00:46	SEDS

2658118 - LFB

							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/A	16.7	--	µg/L	1.2	3.0	20.0	83.5	67	126	N/A	N/A	03/15/17	01:14	SEDS
1,1,1-Trichloroethane	N/A	25.5	--	µg/L	1.2	3.0	20.0	128	64	139	N/A	N/A	03/15/17	01:14	SEDS
1,1,2,2-Tetrachloroethane	N/A	16.2	--	µg/L	1.2	3.0	20.0	81.0	60	131	N/A	N/A	03/15/17	01:14	SEDS
1,1,2-Trichloroethane	N/A	25.2	--	µg/L	1.2	3.0	20.0	126	70	129	N/A	N/A	03/15/17	01:14	SEDS
1,1-Dichloroethane	N/A	25.9	--	µg/L	2.0	3.0	20.0	130	63	133	N/A	N/A	03/15/17	01:14	SEDS
1,1-Dichloroethene	N/A	26.0	--	µg/L	1.2	3.0	20.0	130	55	139	N/A	N/A	03/15/17	01:14	SEDS
1,1-Dichloropropene	N/A	25.1	--	µg/L	1.4	3.0	20.0	126	67	131	N/A	N/A	03/15/17	01:14	SEDS
1,2,3-Trichlorobenzene	N/A	14.6	--	µg/L	1.2	3.0	20.0	73.0	68	131	N/A	N/A	03/15/17	01:14	SEDS

QUALITY CONTROL SUMMARY

1,2,3-Trichloropropane	N/A	16.8	--	µg/L	1.2	3.0	20.0	84.0	52	131	N/A	N/A	03/15/17	01:14	SEDS
1,2,4-Trichlorobenzene	N/A	14.7	--	µg/L	1.2	3.0	20.0	73.5	51	132	N/A	N/A	03/15/17	01:14	SEDS
1,2,4-Trimethylbenzene	N/A	16.1	--	µg/L	1.2	3.0	20.0	80.5	63	129	N/A	N/A	03/15/17	01:14	SEDS
1,2-Dibromo-3-chloropropane	N/A	18.0	--	µg/L	1.2	3.0	20.0	90.0	66	139	N/A	N/A	03/15/17	01:14	SEDS
1,2-Dibromoethane	N/A	25.0	--	µg/L	1.2	3.0	20.0	125	76	126	N/A	N/A	03/15/17	01:14	SEDS
1,2-Dichloroethane	N/A	25.5	--	µg/L	1.2	3.0	20.0	128	60	136	N/A	N/A	03/15/17	01:14	SEDS
1,2-Dichloropropane	N/A	24.6	--	µg/L	2.0	3.0	20.0	123	70	124	N/A	N/A	03/15/17	01:14	SEDS
1,3,5-Trimethylbenzene	N/A	16.4	--	µg/L	1.2	3.0	20.0	82.0	68	123	N/A	N/A	03/15/17	01:14	SEDS
1,3-Dichlorobenzene	N/A	16.6	--	µg/L	1.2	3.0	20.0	83.0	62	127	N/A	N/A	03/15/17	01:14	SEDS
1,3-Dichloropropane	N/A	25.7	Q	µg/L	1.2	3.0	20.0	129	74	124	N/A	N/A	03/15/17	01:14	SEDS
1,4-Dichlorobenzene	N/A	15.6	--	µg/L	1.2	3.0	20.0	78.0	73	123	N/A	N/A	03/15/17	01:14	SEDS
1-Chlorohexane	N/A	17.8	--	µg/L	1.5	3.0	20.0	89.0	56	139	N/A	N/A	03/15/17	01:14	SEDS
2,2-Dichloropropane	N/A	22.0	--	µg/L	1.2	3.0	20.0	110	37	148	N/A	N/A	03/15/17	01:14	SEDS
2-Butanone	N/A	125.9	--	µg/L	6.0	15.0	100	126	57	136	N/A	N/A	03/15/17	01:14	SEDS
2-Chloroethyl vinyl ether	N/A	115.7	--	µg/L	6.0	15.0	100	116	47	143	N/A	N/A	03/15/17	01:14	SEDS
2-Chlorotoluene	N/A	16.1	--	µg/L	1.4	3.0	20.0	80.5	66	127	N/A	N/A	03/15/17	01:14	SEDS
2-Hexanone	N/A	126.5	--	µg/L	6.0	15.0	100	127	62	136	N/A	N/A	03/15/17	01:14	SEDS
4-Bromofluorobenzene-SURR	N/A	21.1	--	µg/L	N/A	N/A	20.0	106	79	121	N/A	N/A	03/15/17	01:14	SEDS
4-Chlorotoluene	N/A	16.0	--	µg/L	1.2	3.0	20.0	80.0	63	125	N/A	N/A	03/15/17	01:14	SEDS
4-Isopropyltoluene	N/A	15.6	--	µg/L	1.4	3.0	20.0	78.0	68	131	N/A	N/A	03/15/17	01:14	SEDS
4-Methyl-2-pentanone	N/A	128.0	--	µg/L	6.0	15.0	100	128	62	135	N/A	N/A	03/15/17	01:14	SEDS
Acetone	N/A	103.4	--	µg/L	6.0	15.0	100	103	46	142	N/A	N/A	03/15/17	01:14	SEDS
Acrolein	N/A	633.1	--	µg/L	25.0	75.0	500	127	40	153	N/A	N/A	03/15/17	01:14	SEDS
Acrylonitrile	N/A	126.9	--	µg/L	6.0	15.0	100	127	53	141	N/A	N/A	03/15/17	01:14	SEDS
Benzene	N/A	25.6	--	µg/L	1.2	3.0	20.0	128	66	131	N/A	N/A	03/15/17	01:14	SEDS
Bromobenzene	N/A	16.8	--	µg/L	1.2	3.0	20.0	84.0	61	126	N/A	N/A	03/15/17	01:14	SEDS
Bromochloromethane	N/A	22.4	--	µg/L	1.2	3.0	20.0	112	60	133	N/A	N/A	03/15/17	01:14	SEDS
Bromodichloromethane	N/A	25.6	--	µg/L	1.2	3.0	20.0	128	72	129	N/A	N/A	03/15/17	01:14	SEDS
Bromoform	N/A	16.5	--	µg/L	1.2	3.0	20.0	82.5	61	130	N/A	N/A	03/15/17	01:14	SEDS
Bromomethane	N/A	28.0	--	µg/L	2.0	3.0	20.0	140	47	151	N/A	N/A	03/15/17	01:14	SEDS
Carbon disulfide	N/A	126.9	--	µg/L	7.0	15.0	100	127	58	140	N/A	N/A	03/15/17	01:14	SEDS

QUALITY CONTROL SUMMARY

Carbon tetrachloride	N/A	23.1	--	µg/L	1.2	3.0	20.0	116	69	134	N/A	N/A	03/15/17	01:14	SEDS
Chlorobenzene	N/A	16.8	--	µg/L	1.2	3.0	20.0	84.0	67	122	N/A	N/A	03/15/17	01:14	SEDS
Chloroethane	N/A	22.1	--	µg/L	1.2	3.0	20.0	111	47	144	N/A	N/A	03/15/17	01:14	SEDS
Chloroform	N/A	26.0	--	µg/L	1.2	3.0	20.0	130	61	134	N/A	N/A	03/15/17	01:14	SEDS
Chloromethane	N/A	24.8	--	µg/L	1.2	3.0	20.0	124	43	142	N/A	N/A	03/15/17	01:14	SEDS
Dibromochloromethane	N/A	25.9	--	µg/L	1.2	3.0	20.0	130	69	134	N/A	N/A	03/15/17	01:14	SEDS
Dibromofluoromethane-SURR	N/A	19.8	--	µg/L	N/A	N/A	20.0	99.2	83	120	N/A	N/A	03/15/17	01:14	SEDS
Dibromomethane	N/A	23.2	--	µg/L	1.5	3.0	20.0	116	76	131	N/A	N/A	03/15/17	01:14	SEDS
Dichlorodifluoromethane	N/A	25.7	--	µg/L	1.2	3.0	20.0	129	49	145	N/A	N/A	03/15/17	01:14	SEDS
Dichloromethane	N/A	24.0	--	µg/L	1.2	3.0	20.0	120	62	129	N/A	N/A	03/15/17	01:14	SEDS
Epichlorohydrin	N/A	604.5	--	µg/L	30.0	75.0	500	121	52	134	N/A	N/A	03/15/17	01:14	SEDS
Ethylbenzene	N/A	16.7	--	µg/L	1.2	3.0	20.0	83.5	69	131	N/A	N/A	03/15/17	01:14	SEDS
Hexachlorobutadiene	N/A	16.1	--	µg/L	1.4	3.0	20.0	80.5	51	139	N/A	N/A	03/15/17	01:14	SEDS
Iodomethane	N/A	119.2	--	µg/L	8.0	15.0	100	119	54	143	N/A	N/A	03/15/17	01:14	SEDS
Isopropylbenzene	N/A	16.6	--	µg/L	2.0	3.0	20.0	83.0	69	121	N/A	N/A	03/15/17	01:14	SEDS
Naphthalene	N/A	16.1	--	µg/L	2.0	3.0	20.0	80.5	71	134	N/A	N/A	03/15/17	01:14	SEDS
Styrene	N/A	16.5	--	µg/L	1.2	3.0	20.0	82.5	65	127	N/A	N/A	03/15/17	01:14	SEDS
Tetrachloroethene	N/A	25.6	--	µg/L	1.2	3.0	20.0	128	62	135	N/A	N/A	03/15/17	01:14	SEDS
Tetrahydrofuran	N/A	25.2	--	µg/L	1.2	3.0	20.0	126	67	134	N/A	N/A	03/15/17	01:14	SEDS
Toluene	N/A	25.9	--	µg/L	1.2	3.0	20.0	130	59	143	N/A	N/A	03/15/17	01:14	SEDS
Toluene-d8-SURR	N/A	22.1	--	µg/L	N/A	N/A	20.0	111	80	116	N/A	N/A	03/15/17	01:14	SEDS
Trichloroethene	N/A	26.0	--	µg/L	1.2	3.0	20.0	130	67	138	N/A	N/A	03/15/17	01:14	SEDS
Trichlorofluoromethane	N/A	24.6	--	µg/L	1.5	3.0	20.0	123	45	157	N/A	N/A	03/15/17	01:14	SEDS
Vinyl Acetate	N/A	134.9	--	µg/L	6.0	15.0	100	135	53	144	N/A	N/A	03/15/17	01:14	SEDS
Vinyl chloride	N/A	26.6	--	µg/L	1.2	3.0	20.0	133	52	140	N/A	N/A	03/15/17	01:14	SEDS
cis-1,2-Dichloroethene	N/A	25.9	Q	µg/L	1.2	3.0	20.0	130	71	128	N/A	N/A	03/15/17	01:14	SEDS
cis-1,3-Dichloropropene	N/A	25.2	Q	µg/L	1.2	3.0	20.0	126	63	125	N/A	N/A	03/15/17	01:14	SEDS
m,p-Xylene	N/A	33.8	--	µg/L	1.8	6.0	40.0	84.5	63	130	N/A	N/A	03/15/17	01:14	SEDS
n-Butylbenzene	N/A	15.0	--	µg/L	1.2	3.0	20.0	75.0	67	127	N/A	N/A	03/15/17	01:14	SEDS
n-Propylbenzene	N/A	16.5	--	µg/L	1.2	3.0	20.0	82.5	64	124	N/A	N/A	03/15/17	01:14	SEDS
o-Dichlorobenzene	N/A	15.8	--	µg/L	1.0	3.0	20.0	79.0	75	121	N/A	N/A	03/15/17	01:14	SEDS

QUALITY CONTROL SUMMARY

o-Xylene	N/A	16.2	--	µg/L	2.3	3.0	20.0	81.0	66	124	N/A	N/A	03/15/17	01:14	SEDS
sec-Butylbenzene	N/A	16.3	--	µg/L	1.2	3.0	20.0	81.5	66	122	N/A	N/A	03/15/17	01:14	SEDS
tert-Butylbenzene	N/A	16.3	--	µg/L	1.2	3.0	20.0	81.5	65	126	N/A	N/A	03/15/17	01:14	SEDS
trans-1,2-Dichloroethene	N/A	25.6	--	µg/L	1.2	3.0	20.0	128	66	129	N/A	N/A	03/15/17	01:14	SEDS
trans-1,3-Dichloropropene	N/A	25.4	--	µg/L	1.2	3.0	20.0	127	60	131	N/A	N/A	03/15/17	01:14	SEDS
trans-1,4-Dichloro-2-butene	N/A	81.1	--	µg/L	6.0	15.0	100	81.1	53	123	N/A	N/A	03/15/17	01:14	SEDS

ENVIRONMENTAL QUALITY LABORATORIES, INC. P.O. BOX 11458, SAN JUAN, P.R. 00910-1458
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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
LRB – Laboratory Reagent Blank
MB – Method Blank
MCL – Maximum Contaminant Level
MDL – Method Detection Limit
MO – Monitoring Only
MRL – Minimum Reporting Limit

ENVIRONMENTAL QUALITY LABORATORIES, INC. P.O. BOX 11458, SAN JUAN, P.R. 00910-1458
TELS. (787) 288-6420, FAX (787) 288-6465, email: info@eqlab.com

DUP – Duplicate
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
MS – Matrix Spike
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
CHAINS OF CUSTODY

ENVIRONMENTAL QUALITY LABORATORIES, INC.
PO BOX 11458 SAN JUAN PR 00910-1458

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

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M-

LIMS # 2017-02226

CLIENT NAME: Arcadis Caribe, PSC | CLIENT ID: 656-04 | W.O. #: 24 | SITE: Guayama, P.R. | CLIENT REP: E. Varela

P.O. #: | PWSID #: | FOLDER #: ~~231769~~ 232071 | PROJECT: Guayama, Project | EQLAB REP:

SAMPLE INFORMATION		CONTAINER INFORMATION			FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: Trip blank MATRIX: Water SOURCE: ~~2652771-1~~ 2656245	DATE: 3-9-17 TIME: 0800 TYPE: Grab	TYPE: Vial PRESERVATIVE	COLOR: Clear	VOLUME: 40ml			EPA 8260B VOC
SAMPLE #: EFF-20170309 MATRIX: GW SOURCE: Fibers, Guayama P.R. 2656246	DATE: 3-9-17 TIME: 0912 TYPE: G	TYPE: Vial PRESERVATIVE	COLOR: Clear	VOLUME: 3/40ml			EPA 8260B VOC
SAMPLE #: EFFDUP-20170309 MATRIX: GW SOURCE: Fibers, Guayama P.R. 2656247	DATE: 3-9-17 TIME: 0912 TYPE: G	TYPE: Vial PRESERVATIVE	COLOR: Clear	VOLUME: 3/40ml			EPA 8260B VOC
SAMPLE #: EFFMS-20170309 MATRIX: GW SOURCE: Fibers, Guayama P.R 2656248	DATE: 3-9-17 0912 TYPE: G	TYPE: Vial PRESERVATIVE	COLOR: Clear	VOLUME: 3/40ml			EPA 8260B VOC

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Eliot Delgado	3-9-2017	0912
Fixed in field by:	N/A	N/A	
Authorized by:			
Received by EQLF:			
Released to EQLL by:		03/09/17	1407
Received by EQLL:		03/09/17	1407

SPECIAL INSTRUCTIONS / COMMENTS:

*EQLF = Eqlabs' Field Personnel.
*EQLL = Eqlabs' Log-in Personnel.

Arrival Temperature: 3.0°C Signature:

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

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M-

LIMS # 2017-02226

CLIENT NAME: Arcadis Caribe, PSC
P.O. #:

CLIENT ID: 655-04
PWSID #:

W.O. #: 26
FOLDER #: ~~231749~~ 233201

SITE: Guayama, P.R.
PROJECT: Guayama Project

CLIENT REP: E. Varela
EQLAB REP:

SAMPLE INFORMATION		CONTAINER INFORMATION			FIELD TESTING		ANALYSIS REQUESTED
SAMPLE #: EFF MSD-20170309	DATE: 3-9-2017	TYPE	COLOR	VOLUME			EPA 8260B VOC
MATRIX: GW	TIME: 0912	Vial	clear	3/40ml			
SOURCE: Fibers, Guayama 2656249 P.R.	TYPE: G	PRESERVATIVE					
SAMPLE #: INF-20170309	DATE: 3-9-2017	TYPE	COLOR	VOLUME			EPA 8260B VOC
MATRIX: GW	TIME: 0948	Vial	clear	3/40ml			
SOURCE: Fibers, Guayama 2656250 P.R.	TYPE: G	PRESERVATIVE					
SAMPLE #:	DATE:	TYPE	COLOR	VOLUME			
MATRIX:	TIME:						
SOURCE:	TYPE:	PRESERVATIVE					
SAMPLE #:	DATE:	TYPE	COLOR	VOLUME			
MATRIX:							
SOURCE:	TYPE:	PRESERVATIVE					

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Eliot Delgado	3-9-2017	0912
Fixed in field by:			
Authorized by:			
Received by EQLF:			
Released to EQLL by:		03/09/17	1407
Received by EQLL:		03/09/17	1407

SPECIAL INSTRUCTIONS / COMMENTS:

*EQLF = Eqlabs' Field Personnel.
*EQLL = Eqlabs' Log-in Personnel.

Arrival Temperature: 30°C Signature:

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

ENVIRONMENTAL QUALITY LABORATORIES, INC.

SAMPLE DELIVERY SLIP & CHAIN OF CUSTODY

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M-

LIMS # 2017-0026

CLIENT NAME: Arcadis Caribe, PSC | CLIENT ID: 655-04 | W.O. #: 24 | SITE: Guayama, P.R. | CLIENT REP: E. Valdela

P.O. #: | PWSID #: | FOLDER #: ~~231769~~ | PROJECT: Guayama Project | EQLAB REP:

SAMPLE INFORMATION		CONTAINER INFORMATION	FIELD TESTING	ANALYSIS REQUESTED
SAMPLE #: DI-20170309 MATRIX: Water SOURCE: Fibers, Guayama P.R 2656251	DATE: 3-9-2017 TIME: 0844 TYPE: G	TYPE: Vials COLOR: Clear VOLUME: 3/40ml PRESERVATIVE		EPA 8260B VOC
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE		
SAMPLE #: MATRIX: SOURCE:	DATE: TIME: TYPE:	TYPE COLOR VOLUME PRESERVATIVE		
SAMPLE #: MATRIX: SOURCE:	DATE: TYPE:	TYPE COLOR VOLUME PRESERVATIVE		

03/09/17

CUSTODY RECORD	SIGNATURE	DATE	TIME
Collected in field by:	Eliot Delgado	3-9-2017	0844
Fixed in field by:			
Authorized by:			
Received by EQLF:			
Released to EQLL by:		03/09/17	1407
Received by EQLL:		03/09/17	1407

SPECIAL INSTRUCTIONS / COMMENTS:

*EQLF = Eqlabs' Field Personnel.
*EQLL = Eqlabs' Log-in Personnel.

Arrival Temperature: 3.0°C Signature:

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

APPENDIX B
RAW DATA

ENVIRONMENTAL QUALITY LABORATORIES, INC.
PO BOX 11458 SAN JUAN PR 00910-1458

ORGANICS DEPARTMENT
RAW DATA PACKAGE CHECKLIST

RUN NUMBER: 187023

☑ 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: 03/20/17

Checked by: _____ Laboratory Group Leader Date: 03-20-17

Approved by: _____ Supervisor Date: 03-20-2017

ORGANICS DEPARTMENT
RUN WORKSHEET

eqlab

General Information

Method Number	Run Number	Sequence Number	Sample prep by	Sample Setup by	Sample Evaluated by	Run Approved by
8260	187023	187017	VILLANUEVA	SDIAZ	SDIAZ	SDIAZ
VOC			PR57540			

Calibration Curve Reference

Calib. Curve Name	NBK Reference
8260VOC-MARCH-LIQ-17-1	NBK079Pg28

Instrument Information

Description/Identification Number: V8-AG7890MS

PM Expiration Date: May-17

Run Controls Information

[X] LRB [ ] 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 ppb
N/A	VOC'S WATER	NBK079Pg27	N/A	N/A	N/A	N/A
5	SIM VOC 8260/624	NBK079Pg16	07/26/17	20	5	20
10	MIX GASES	NBK079Pg23	03/20/17	100	50	20
10	MIX 8260/624 VOC	NBK079Pg23	08/20/17	100	50	20

Preparation Controls Information

[ ] N/A

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

Amount	Solution Name	NBK Reference	Expiration Date	Solution Concentration ppm	Dilution Volume mL	Analyte Concentration ppb
N/A	VOC'S WATER	NBK079Pg27	N/A	N/A	N/A	N/A
5	SIM 8260/624	NBK062Pg95	05/14/17	20	5	20
10	MIX GASES	NBK079Pg23	03/20/17	100	50	20
10	MIX 8260/624 VOC	NBK079Pg23	08/20/17	100	50	20

RUN STATUS

[ ] Run in Control [ ] OOMCL [ ] OORPD [X] OOS [ ] HMOCC

SOP-QC-004 Accepted Exemption:

[ ] # 1 [ ] # 2 [ ] # 3 [ ] # 4 [ ] # 5
[ ] # 6 [ ] # 7 [ ] # 8 [ ] # 9 [ ] # 10
[ ] #11 [ ] #12 [ ] #13 [ ] #14

QUALIFIERS

[ ] B [ ] U [ ] J [ ] P [ ] S
[ ] N [X] Q

Analysts Comments:
Analitos positivos confirmados por iones. ICV y LFB se encuentran en control.
Niveles descartados en la curva de calibración no cumple con el criterio de RFD<15% del ICAL AVE RF según el SOP GN002 Ap.1.
2nd Source: NBK079Pg07 Data File: \1\DATA\186984\698404 03/20/17

Supervisor Comments: 03-20-2017

QA/QC Comments:

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

Run Worksheet

For: Tuesday, March 14, 2017

Run #: 187023

Template Name: EPA 8260B VOC BY GC/MS

Analyst: SDIAZ

Cup#	TYPE	ORDER#	METHOD	QC LINK	MATRIX	TEST NAME	PRE RUN	VOLUME	FINALVOL	WEIGHT
1	LRB	LRB/2658112-1		2656251	GROUND WATER	EPA 8260B VOC	--	--	--	0
2	MDL	MDL/2658115-1		2656251	GROUND WATER	EPA 8260B VOC	--	--	--	0
3	ICV	ICV/2658113-1		2656251	GROUND WATER	EPA 8260B VOC	--	--	--	0
4	FIELD BL	FIELD BLK/2654331-1			DI WATER	EPA 8260B VOC	PR57540	50	50	N/A
5	TRIP BL	TRIP BLK/2654337-1			DI WATER	EPA 8260B VOC	PR57540	50	50	N/A
6	TRIP BL	TRIP BLK/2656245-1			DI WATER	EPA 8260B VOC	PR57540	50	50	N/A
7		2656246-1	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR57540	50	50	N/A
10		2653487-3	EPA 8260B		PROCESS WATER	TCL 8260B VOC	PR57540	50	50	N/A
11		2656250-1	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR57540	50	50	N/A
12		2656251-1	EPA 8260B		GROUND WATER	EPA 8260B VOC	PR57540	50	50	N/A
13	DUP	DUP/2656247-1		2656246	GROUND WATER	EPA 8260B VOC	PR57540	50	50	N/A
14	MS	MS/2656248-1		2656246	GROUND WATER	EPA 8260B VOC	PR57540	50	50	N/A
15	MSD	MSD/2656249-1		2656246	GROUND WATER	EPA 8260B VOC	PR57540	50	50	N/A
17	LFB	LFB/2658118-1		2656251	GROUND WATER	EPA 8260B VOC	--	50	50	N/A

↳ Se analizó la alicuota A de todas las muestras 03/14/17

Printed Date: 3/20/2017
3:45 pm

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 57540

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
2653487-3	1	Done	PROCESS WATER	EPA 5030B	TCL 8260B VOC	3/14/2017	VILLANUEV	09:02	3/8/2017	50	50	N/A	
2654331-1	2	Done	DI WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/7/2017	50	50	N/A	
2654337-1	3	Done	DI WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/7/2017	50	50	N/A	
2656245-1	4	Done	DI WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/9/2017	50	50	N/A	
2656246-1	5	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/9/2017	50	50	N/A	
2656247-1/DUP Linked to 2656246	6	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/9/2017	50	50	N/A	
2656248-1/MS Linked to 2656246	7	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/9/2017	50	50	N/A	
2656249-1/MSD Linked to 2656246	8	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/9/2017	50	50	N/A	

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 57540

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

2656250-1	9	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/9/2017	50	50	N/A	
2656251-1	10	Done	GROUND WATER	EPA 5030B	EPA 8260B VOC	3/14/2017	VILLANUEV	09:02	3/9/2017	50	50	N/A	

ENVIRONMENTAL QUALITY LABORATORIES, INC.

PRE-RUN WORKSHEET

PRE RUN # 57540

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

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

Prepered Sample(s) Transfered by / Date: [signature] / 03-14-17

Prepared Sample(s) Received by / Date: [signature] / 03/14/17

Comments:

Response Factor Report 5977B

Method Path : D:\MassHunter\GCMS\1\methods\
Method File : 8260VOC-MARCH-LIQ-17-1.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Mon Mar 20 12:08:34 2017
Response Via : Initial Calibration

Calibration Files
1 =CC624VOC02.D 2 =CC624VOC03.D 3 =CC624VOC04.D 4 =CC624VOC05.D 5 =CC624VOC06.D 6 =CC624VOC07.D 7 =CC624VOC08.D

		Compound	1	2	3	4	5	6	7	Avg	%RSD
1)	I	IPENTAFLUOROBENZENE	----------ISTD----------								
2)	M	DICLDIFLUOROME...	1.564	1.847	2.113	1.771	1.938	2.201	1.795	1.890	11.43
3)	P,T	CHLOROMETHANE	1.302	1.718	1.482	1.494	1.846	1.769	1.629	1.606	11.86
4)	C,T	VINYL CHLORIDE	1.384	1.665	1.502	1.635	1.883	1.891	1.646	1.658	11.16
5)	T	BROMOMETHANE	7.184		2.544	1.422		0.656	0.608	2.483	110.45
6)	T	CHLOROETHANE	1.164	1.508	1.155	0.667			0.720	1.043	33.55
7)	T	TRICLFLUOROMET...	2.810	2.365	2.593	2.020	2.967	2.531		2.548	13.12
8)	T	ACROLEIN	0.242	0.216	0.215	0.254	0.215	0.188	0.267	0.228	11.98
9)	T	ACETONE	0.319	0.289	0.288	0.253	0.276	0.315		0.290	8.51
10)	C,T	11-DICHLOROETHENE	1.569	1.464	1.822	1.354	1.600	1.887	1.574	1.610	11.65
11)	T	IODOMETHANE	2.408	2.285	2.491	2.211	2.789	2.975		2.526	11.80
12)	T	CARBON DISULFIDE	3.255	2.928	3.627	2.526	2.833	3.618		3.131	14.24
13)	T	ACRYLONITRILE	0.374	0.456	0.414	0.313	0.371	0.435	0.368	0.390	12.33
14)	T	DICHLOROMETHANE	1.566	1.473	1.733	1.521	1.419	1.848	1.332	1.556	11.54
15)	T	TRANS12DICLETHENE	1.356	1.216	1.584	1.310	1.373	1.645	1.365	1.407	10.84
16)	P,T	11-DICHLOROETHANE	2.081	2.546	2.364	1.841	2.164	2.428	2.061	2.212	11.09
17)		VINYL ACETATE	2.640	2.347	2.364	2.039	2.375	2.840	2.167	2.396	11.30
18)		2-BUTANONE	0.584	0.632	0.594	0.474	0.690	0.618	0.532	0.589	11.88
19)	T	CIS12DICHLOROE...	1.880	1.666	1.985	1.437	1.778	1.993	1.619	1.765	11.62
20)	T	22-DICHLOROPRO...	1.556	2.113	1.849	1.392	1.686	1.664	1.715	1.710	13.27
21)	C,T	CHLOROFORM	2.650	3.104	2.909	2.520	3.373	2.893	2.471	2.846	11.44
22)	T	BROMOCHLOROMET...	0.954	0.883	1.116	0.831	0.943	1.093	0.832	0.950	12.21
23)	I	I14-DIFLUOROBENZENE	----------ISTD----------								
24)	S	SDIBRFLUOROMET...	0.312	0.314	0.310	0.310	0.308	0.304	0.296	0.308	1.90
25)	T	TETRAHYDROFURAN	0.084	0.111	0.120	0.108	0.121	0.123	0.111	0.111	12.03
26)	T	111-TRICHLOROE...	0.926	0.875	0.935	0.870	0.969	0.966	0.870	0.916	4.83
27)	T	11-DICHLOROPRO...	0.773	0.710	0.761	0.710	0.783	0.765	0.666	0.738	5.89
28)	T	12-DICHLOROETHANE	0.837	0.780	0.815	0.748	0.832	0.803	0.713	0.790	5.79
29)	T	CARBONTETRACHL...	0.890	1.121	1.012	0.800	0.940	1.062	0.866	0.956	11.95
30)	T	BENZENE	2.318	2.168	2.273	2.106	2.319	2.203	1.850	2.177	7.55
31)	T	TRICHLOROETHENE	0.742	0.684	0.722	0.667	0.755	0.741	0.660	0.710	5.49
32)	C,T	12-DICHLOROPRO...	0.551	0.511	0.544	0.509	0.575	0.562	0.508	0.537	5.20
33)	T	DIBROMOMETHANE	0.662	0.604	0.759	0.637	0.663	0.784	0.639	0.678	9.86
34)	T	BROMODICLMETHANE	0.896	0.864	0.898	0.838	0.938	0.908	0.821	0.880	4.66
35)	T	2-CLETHYLVINYL...	0.049	0.091	0.155	0.209	0.213			0.143	50.38

Method Path : D:\MassHunter\GCMS\1\methods\
Method File : 8260VOC-MARCH-LIQ-17-1.M

36)	T	EPICHLOROHYDRIN	0.047	0.043	0.046	0.043	0.048	0.050	0.044	0.046#	5.79
37)	T	4METHYL-2-PENT...	0.514	0.479	0.501	0.458	0.503	0.489	0.400	0.478	8.16
38)	T	CIS13DICLPROPENE	0.920	0.881	0.956	0.898	1.032	0.996	0.886	0.938	6.20
39)	S	STOLUENE-D8	1.421	1.416	1.416	1.412	1.427	1.426	1.414	1.419	0.40
40)	C,T	TOLUENE	2.828	2.634	2.740	2.525	2.773	2.603	2.145	2.607	8.79
41)	T	TRANS13DICLPRO...	0.748	0.725	0.789	0.754	0.896	0.894	0.820	0.804	8.63
42)	T	112-TRICHLOROE...	0.648	0.616	0.648	0.599	0.674	0.663	0.599	0.635	4.81
43)		2-HEXANONE	0.346	0.325	0.345	0.318	0.356	0.356	0.305	0.336	5.97
44)	T	13-DICHLOROPRO...	1.078	1.020	1.061	0.985	1.111	1.085	0.970	1.044	5.11
45)	T	DIBRCHLOROMETHANE	0.852	0.823	0.864	0.804	0.907	0.891	0.814	0.851	4.62
46)	T	TETRACHLOROETHENE	0.834		0.832	0.769	0.854	0.843	0.752	0.814	5.24
47)	T	12-DIBROMOETHANE	0.699	0.662	0.689	0.645	0.733	0.726	0.669	0.689	4.80
48)	I	CHLOROBENZEN-d5-IS	----------ISTD----------								
49)	P,T	CHLOROBENZENE	1.005	0.953	1.004	0.939	1.081	1.123	1.194	1.043	8.99
50)		1-CHLOROHEXANE	3.562	3.288	3.539	3.269	3.431	3.162	2.583	3.262	10.22
51)	T	1112-TETRACLET...	0.282	0.263	0.283	0.264	0.304	0.334		0.288	9.32
52)	C,T	ETHYLBENZENE	1.624	1.510	1.612	1.515	1.716	1.762	1.807	1.650	7.06
53)	T	MP-XYLENE	1.310	1.213	1.271	1.194	1.337	1.334	1.282	1.277	4.40
54)	T	STYRENE	1.122	1.058	1.131	1.076	1.249	1.314	1.466	1.202	12.34
55)	T	O-XYLENE	1.352	1.261	1.317	1.246	1.440	1.518	1.688	1.403	11.30
56)	P,T	BROMOFORM	0.374	0.363	0.384	0.366	0.437	0.486		0.402	12.31
57)	P,T	1122-TETRACLET...	0.492	0.460	0.483	0.452	0.529	0.574	0.661	0.522	14.28
58)	T	ISOPROPYL BENZENE	1.645	1.544	1.659	1.577	1.811	1.902	2.032	1.739	10.43
59)	S	S4BRFLUOROBENZENE	0.669	0.667	0.675	0.684	0.739	0.839		0.712	9.48
60)	T	123-TRICLPROPANE	0.166	0.154	0.166	0.154	0.180	0.193	0.219	0.176	13.31
61)	T	TRANS14DICL2BU...	0.091	0.085	0.092	0.088	0.104	0.115		0.096#	12.05
62)	T	BROMOBENZENE	0.619	0.584	0.615	0.583	0.690	0.747		0.640	10.21
63)	T	N-PROPYLBENZENE	1.932	1.804	1.936	1.834	2.086	2.153	2.257	2.000	8.46
64)	T	2-CHLOROTOLUENE	1.077	1.003	1.062	1.001	1.172	1.259	1.459	1.148	14.43
65)	T	4-CHLOROTOLUENE	1.077	1.011	1.062	1.001	1.172	1.259	1.459	1.149	14.32
66)	T	135TRIMETHYLBE...	1.457	1.351	1.448	1.372	1.586	1.669	1.801	1.526	10.87
67)	T	TERT-BUTYLBENZENE	1.248	1.155	1.256	1.192	1.380	1.483	1.673	1.341	13.77
68)	T	124TRIMETHYLBE...	1.415	1.333	1.406	1.332	1.541	1.638	1.819	1.498	12.05
69)	T	SEC-BUTYLBENZENE	1.729	1.588	1.742	1.648	1.902	2.012	2.173	1.828	11.52
70)	T	13-DICHLOROBEN...	0.887	0.833	0.879	0.830	0.969	1.042	1.189	0.947	13.84
71)	I	I14-DICLBENZENE-D4	----------ISTD----------								
72)	T	4-ISOPROPYLTOL...	1.763	1.631	1.751	1.645	1.756	1.640	1.268	1.636	10.56
73)	T	14-DICHLOROBEN...	1.022	0.950	0.986	0.922	1.006	0.964	0.828	0.954	6.81
74)	T	12-DICHLOROBEN...	1.008	0.934	0.969	0.908	0.992	0.946	0.809	0.938	7.06
75)	T	N-BUTYLBENZENE	1.507	1.380	1.489	1.398	1.512	1.439	1.157	1.412	8.77
76)	T	12-DIBR-3CLPRO...	0.113	0.118	0.136	0.137			0.106	0.122	11.25
77)		124-TRICLBENZENE	0.771	0.720	0.759	0.721	0.788	0.776	0.670	0.744	5.64
78)	T	NAPHTHALENE	1.398	1.435		1.604		1.598	1.330	1.473	8.34
79)	T	HEXACHLOROBUTA...	0.328	0.318	0.263	0.337			0.291	0.307	9.87
80)		123-TRICLBENZENE	0.742	0.689	0.731	0.692	0.757	0.743	0.643	0.714	5.67

Response Factor Report 5977B

Method Path : D:\MassHunter\GCMS\1\methods\
Method File : 8260VOC-MARCH-LIQ-17-1.M

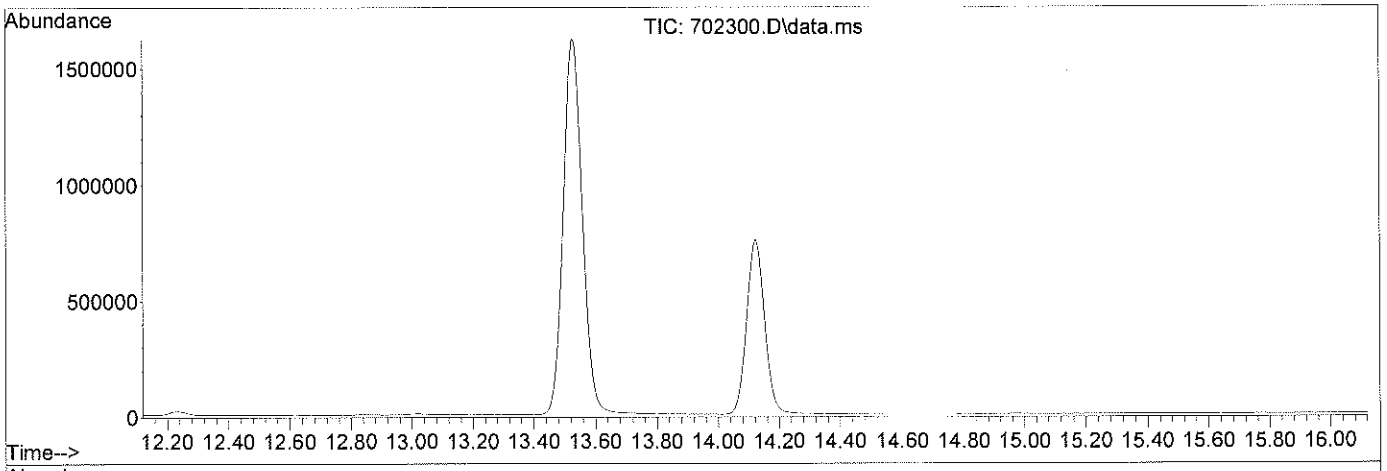
(#) = Out of Range

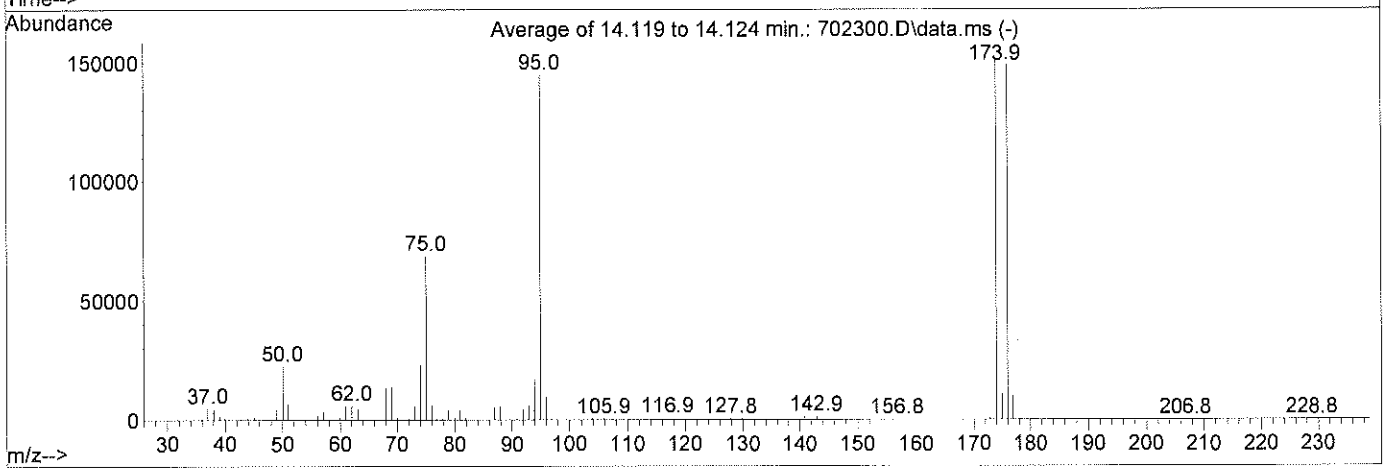
Method VOC

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702300.D
Acq On : 14 Mar 2017 06:35 pm
Operator : SEDS
Sample : BFB/BROMOFORMO
Misc : RUN187023
ALS Vial : 52 Sample Multiplier: 1

Integration File: VOC.P

Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Title : Analysis of VOC'S by 8260B,624
Last Update : Mon Mar 20 12:08:34 2017





AutoFind: Scans 4673, 4674, 4675; Background Corrected with Scan 4635

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.6	22579	PASS
75	95	30	60	47.5	68955	PASS
95	95	100	100	100.0	145067	PASS
96	95	5	9	6.7	9652	PASS
173	174	0.00	2	0.5	684	PASS
174	95	50	150	104.4	151445	PASS
175	174	5	9	7.2	10958	PASS
176	174	95	101	98.5	149120	PASS
177	176	5	9	6.6	9916	PASS

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702301.D
Acq On : 14 Mar 2017 07:03 pm
Operator : SEDS
Sample : LRB/2658112
Misc : RUN187023
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Mar 20 12:10:36 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	6.012	168	406995	20.00 µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.996	114	1037454	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.782	117	2571319	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	16.537	152	2485782	20.00 µg/L	-0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	6.029	111	319614	20.03 µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.15%		
39) STOLUENE-D8	9.197	98	1560588	21.21 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.05%		
59) S4BRFLUOROBENZENE	14.119	95	1818684	19.87 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.35%		

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	2.166	50	1281	N.D.
4) VINYL CHLORIDE	0.000		0	N.D.
5) BROMOMETHANE	2.621	94	206	N.D.
6) CHLOROETHANE	0.000		0	N.D. d
7) TRICLFLUOROMETHANE	0.000		0	N.D.
8) ACROLEIN	3.458	56	56	N.D.
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	0.000		0	N.D.
11) IODOMETHANE	3.664	142	263	N.D.
12) CARBON DISULFIDE	3.725	76	6313	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	0.000		0	N.D. d
15) TRANS12DICLETHENE	0.000		0	N.D.
16) 11-DICHLOROETHANE	3.728	63	69	N.D.
17) VINYL ACETATE	4.768	43	54	N.D.
18) 2-BUTANONE	5.505	43	178	N.D.
19) CIS12DICHLOROETHENE	5.410	96	26	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	5.817	83	1914	N.D.
22) BROMOCHLOROMETHANE	5.795	49	152	N.D.
25) TETRAHYDROFURAN	6.001	42	392	N.D.
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D. d
28) 12-DICHLOROETHANE	6.455	62	313	N.D.
29) CARBONTETRACHLORIDE	6.154	117	113	N.D.
30) BENZENE	6.461	78	652	N.D.
31) TRICHLOROETHENE	0.000		0	N.D.
32) 12-DICHLOROPROPANE	7.445	63	26	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	8.798	57	33	N.D.
37) 4METHYL-2-PENTANONE	9.130	43	34	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702301.D
Acq On : 14 Mar 2017 07:03 pm
Operator : SEDS
Sample : LRB/2658112
Misc : RUN187023
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Mar 20 12:10:36 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

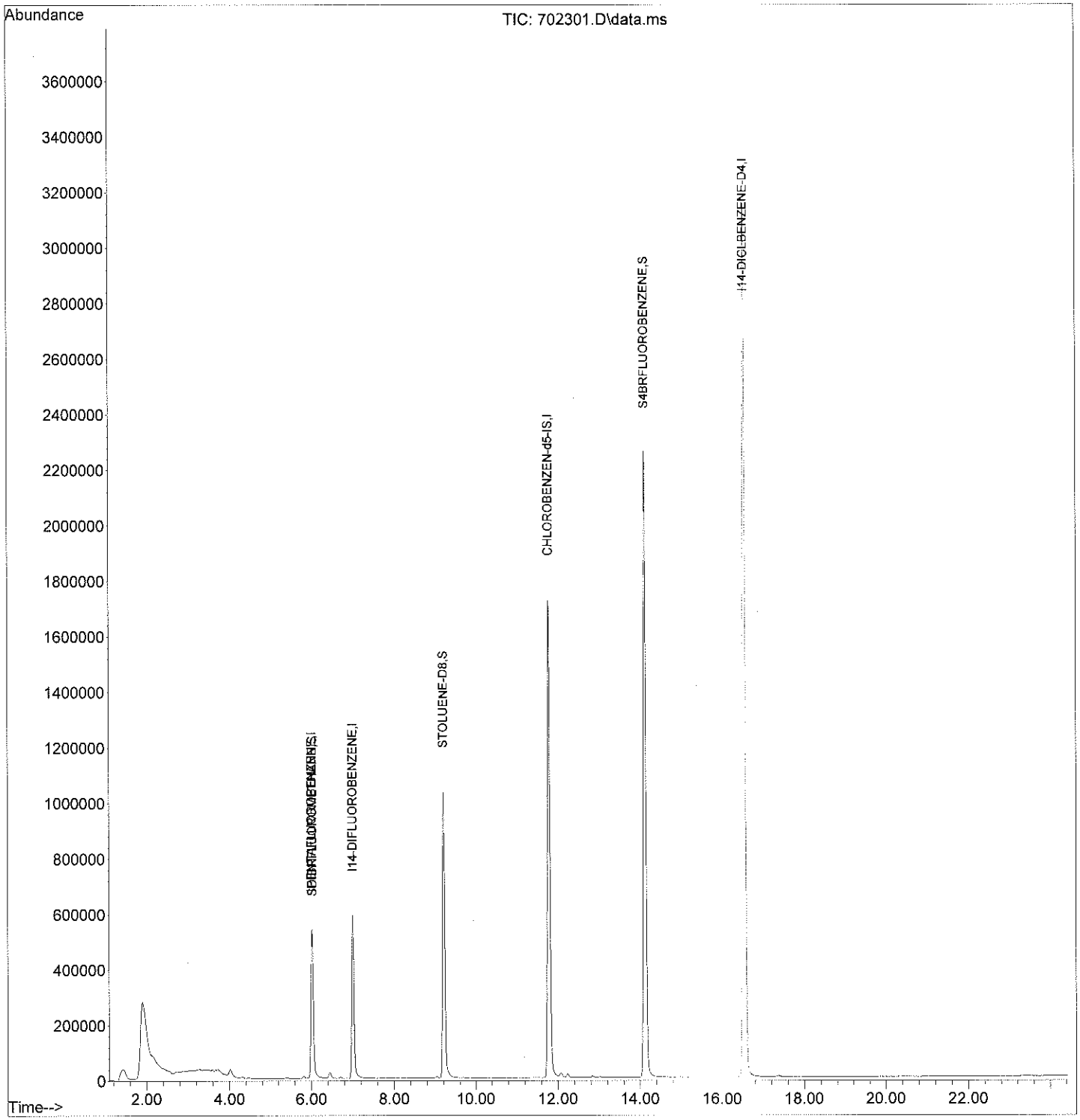
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.305	91	7510	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	0.000		0	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	10.223	166	103	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	11.840	112	464	N.D.	
50) 1-CHLOROHEXANE	11.771	91	9381	N.D.	
51) 1112-TETRACLETHANE	10.209	131	26	N.D.	
52) ETHYLBENZENE	12.013	91	721	N.D.	
53) MP-XYLENE	12.234	91	16866	N.D.	
54) STYRENE	13.084	104	121	N.D.	
55) O-XYLENE	13.023	91	2403	N.D.	
56) BROMOFORM	13.541	173	637	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	13.739	105	67	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	14.398	77	31	N.D.	
63) N-PROPYLBENZENE	14.596	91	1151	N.D.	
64) 2-CHLOROTOLUENE	14.821	91	225	N.D.	
65) 4-CHLOROTOLUENE	14.810	91	165	N.D.	
66) 135TRIMETHYLBENZENE	14.972	105	602	N.D.	
67) TERT-BUTYLBENZENE	15.641	119	396	N.D.	
68) 124TRIMETHYLBENZENE	15.758	105	502	N.D.	
69) SEC-BUTYLBENZENE	16.115	105	694	N.D.	
70) 13-DICHLOROBENZENE	16.383	146	856	N.D.	
72) 4-ISOPROPYLTOLUENE	16.419	119	913	N.D.	
73) 14-DICHLOROBENZENE	16.576	146	692	N.D.	
74) 12-DICHLOROBENZENE	17.393	146	2088	N.D.	
75) N-BUTYLBENZENE	17.328	91	1797	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	20.918	180	605	N.D.	
78) NAPHTHALENE	21.506	128	927	N.D.	
79) HEXACHLOROBUTADIENE	21.247	225	326	N.D.	
80) 123-TRICLBENZENE	20.915	182	323	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702301.D
Acq On : 14 Mar 2017 07:03 pm
Operator : SEDS
Sample : LRB/2658112
Misc : RUN187023
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Mar 20 12:10:36 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702302.D
Acq On : 14 Mar 2017 07:31 pm
Operator : SEDS
Sample : MDL/2658115
Misc : RUN187023
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Mar 20 12:11:23 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.012	168	374048	20.00	µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.996	114	940177	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.779	117	2371618	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.539	152	2314384	20.00	µg/L	0.00
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	6.029	111	288976	19.98	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.90%			
39) STOLUENE-D8	9.199	98	1434377	21.51	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.55%			
59) S4BRFLUOROBENZENE	14.121	95	1690597	20.02	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.10%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.024	85	34738	0.98	µg/L #	96
3) CHLOROMETHANE	2.242	50	53203m	1.77	µg/L	
4) VINYL CHLORIDE	2.333	62	31980	1.03	µg/L #	1
5) BROMOMETHANE	2.646	94	22589m	1.92	µg/L	
6) CHLOROETHANE	2.741	64	29207	2.17	µg/L #	86
7) TRICLFLUOROMETHANE	2.975	101	50720	1.06	µg/L	95
8) ACROLEIN	3.455	56	143342	33.59	µg/L #	95
9) ACETONE	3.614	43	46008	8.48	µg/L #	48
10) 11-DICHLOROETHENE	4.269	61	19771	0.66	µg/L #	19
11) IODOMETHANE	3.669	142	210722	4.46	µg/L #	89
12) CARBON DISULFIDE	3.714	76	364235	6.22	µg/L #	89
13) ACRYLONITRILE	4.333	53	42480	5.82	µg/L #	98
14) DICHLOROMETHANE	4.018	84	59587	2.05	µg/L	95
15) TRANS12DICLETHENE	4.266	96	31965	1.21	µg/L #	65
16) 11-DICHLOROETHANE	4.746	63	47833	1.16	µg/L #	75
17) VINYL ACETATE	4.802	43	262066	5.85	µg/L #	90
18) 2-BUTANONE	5.493	43	72443	6.57	µg/L	95
19) CIS12DICHLOROETHENE	5.426	96	38434	1.16	µg/L	95
20) 22-DICHLOROPROPANE	5.379	77	36870	1.15	µg/L	95
21) CHLOROFORM	5.819	83	65471	1.23	µg/L #	94
22) BROMOCHLOROMETHANE	5.739	49	22589	1.27	µg/L	97
25) TETRAHYDROFURAN	5.819	42	4505	0.86	µg/L #	1
26) 111-TRICHLOROETHANE	5.984	97	51636	1.20	µg/L #	1
27) 11-DICHLOROPROPENE	6.193	75	41589	1.20	µg/L	97
28) 12-DICHLOROETHANE	6.567	62	46997	1.27	µg/L #	96
29) CARBONTETRACHLORIDE	6.174	117	49552	1.10	µg/L #	24
30) BENZENE	6.472	78	124647	1.22	µg/L	96
31) TRICHLOROETHENE	7.345	132	41441	1.24	µg/L	97
32) 12-DICHLOROPROPANE	7.718	63	30256	1.20	µg/L	97
33) DIBROMOMETHANE	7.933	174	35756	1.12	µg/L	96
34) BROMODICLMETHANE	8.165	83	52784	1.28	µg/L	97
35) 2-CLETHYLVINYLETHER	8.602	63	21581	2.20	µg/L	94
36) EPICHLOROHYDRIN	8.770	57	70913	32.80	µg/L	96
37) 4METHYL-2-PENTANONE	9.091	43	163739	7.29	µg/L #	85
38) CIS13DICLPROPENE	8.828	75	52802	1.20	µg/L	93

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702302.D
Acq On : 14 Mar 2017 07:31 pm
Operator : SEDS
Sample : MDL/2658115
Misc : RUN187023
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Mar 20 12:11:23 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

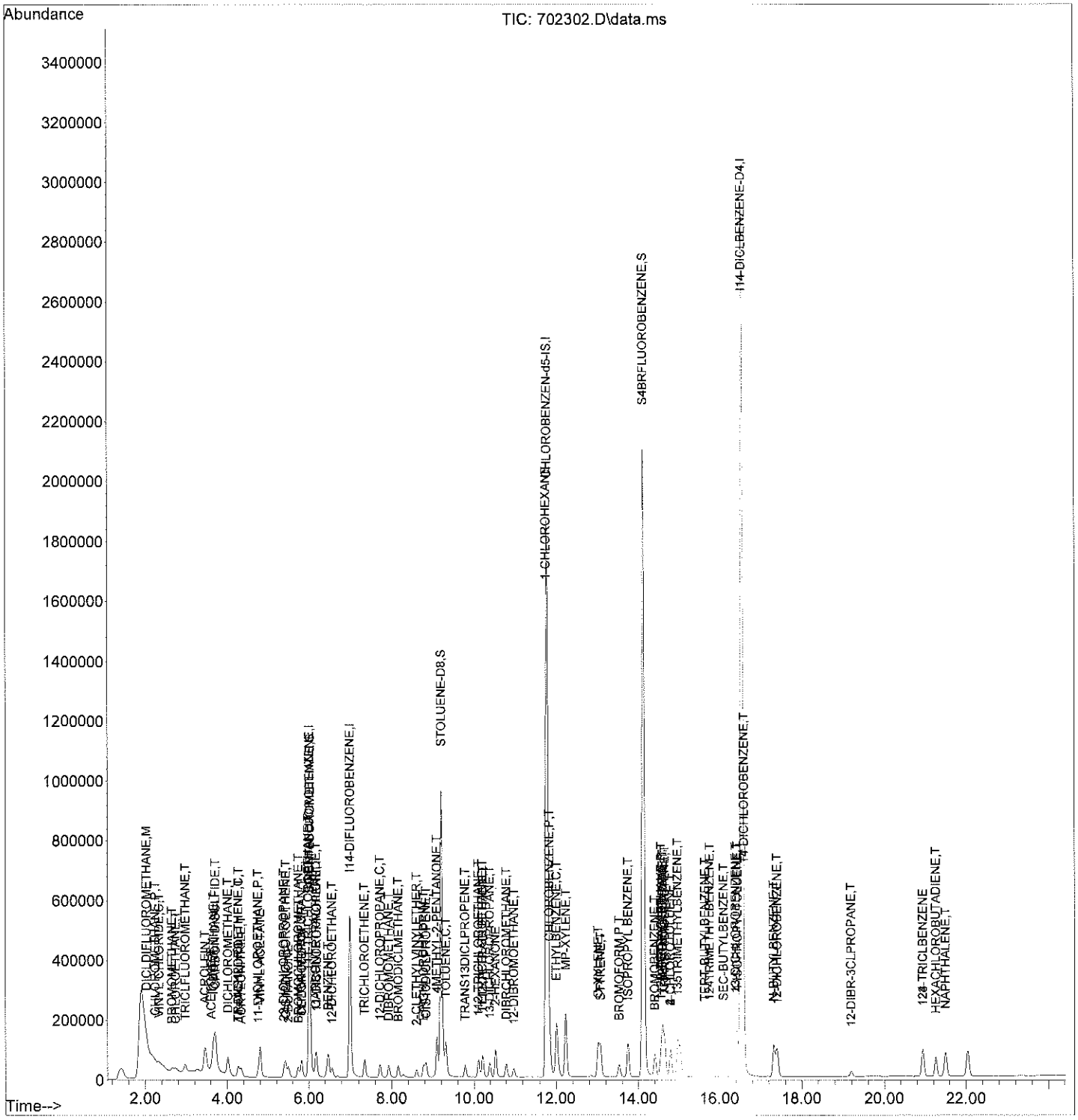
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.311	91	163181	1.33 µg/L	91
41) TRANS13DICLPROPENE	9.782	75	45949	1.22 µg/L	96
42) 112-TRICHLOROETHANE	10.106	97	41755	1.40 µg/L	98
43) 2-HEXANONE	10.532	43	111715	7.08 µg/L	92
44) 13-DICHLOROPROPANE	10.390	76	64626	1.32 µg/L	96
45) DIBRCHLOROMETHANE	10.803	129	54006	1.35 µg/L	99
46) TETRACHLOROETHENE	10.203	166	48992	1.28 µg/L	96
47) 12-DIBROMOETHANE	10.984	107	42571	1.31 µg/L	99
49) CHLOROBENZENE	11.837	112	119800	0.97 µg/L	90
50) 1-CHLOROHEXANE	11.759	91	380935	0.98 µg/L	93
51) 1112-TETRACLETHANE	10.214	131	30486	0.89 µg/L #	98
52) ETHYLBENZENE	12.005	91	178132	0.91 µg/L	91
53) MP-XYLENE	12.236	91	291763	1.93 µg/L	85
54) STYRENE	13.076	104	128871	0.90 µg/L	97
55) O-XYLENE	13.020	91	153680	0.92 µg/L	89
56) BROMOFORM	13.533	173	49169	1.03 µg/L	95
57) 1122-TETRACLETHANE	14.559	83	64605	1.04 µg/L #	26
58) ISOPROPYL BENZENE	13.742	105	184232	0.89 µg/L	88
60) 123-TRICLPROPANE	14.601	110	22110	1.06 µg/L	88
61) TRANS14DICL2BUTENE	14.651	53	55586	4.88 µg/L	83
62) BROMOBENZENE	14.403	77	71559	0.94 µg/L	98
63) N-PROPYLBENZENE	14.595	91	215127	0.91 µg/L	86
64) 2-CHLOROTOLUENE	14.788	91	123436	0.91 µg/L	98
65) 4-CHLOROTOLUENE	14.788	91	125995	0.92 µg/L	97
66) 135TRIMETHYLBENZENE	14.969	105	161589	0.89 µg/L	90
67) TERT-BUTYLBENZENE	15.647	119	138733	0.87 µg/L	92
68) 124TRIMETHYLBENZENE	15.761	105	155014	0.87 µg/L	92
69) SEC-BUTYLBENZENE	16.101	105	187646	0.87 µg/L	89
70) 13-DICHLOROBENZENE	16.394	146	110068	0.98 µg/L	95
72) 4-ISOPROPYLTOLUENE	16.433	119	168210	0.89 µg/L	88
73) 14-DICHLOROBENZENE	16.595	146	116107	1.05 µg/L #	36
74) 12-DICHLOROBENZENE	17.401	146	112598	1.04 µg/L	95
75) N-BUTYLBENZENE	17.320	91	143025	0.88 µg/L	85
76) 12-DIBR-3CLPROPANE	19.194	157	10158	0.72 µg/L	87
77) 124-TRICLBENZENE	20.937	180	89082	1.04 µg/L	94
78) NAPHTHALENE	21.497	128	195987	1.15 µg/L	92
79) HEXACHLOROBUTADIENE	21.260	225	38288	1.08 µg/L	98
80) 123-TRICLBENZENE	20.940	182	86519	1.05 µg/L	97

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702302.D
Acq On : 14 Mar 2017 07:31 pm
Operator : SEDS
Sample : MDL/26S8115
Misc : RUN187023
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Mar 20 12:11:23 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702303.D
Acq On : 14 Mar 2017 08:00 pm
Operator : SEDS
Sample : ICV/2658113
Misc : RUN187023
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Mar 20 12:12:27 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IPENTAFLUOROBENZENE	1.000	1.000	0.0	65	0.03
2	M	DICLDIFLUOROMETHANE	1.890	2.189	-15.8	80	0.06
3	P,T	CHLOROMETHANE	1.606	1.700	-5.9	73	0.07
4	C,T	VINYL CHLORIDE	1.658	1.970	-18.8	78	0.05
5	T	BROMOMETHANE	2.483	0.728	70.7#	33#	0.06
6	T	CHLOROETHANE	1.043	0.844	19.1	82	0.09
7	T	TRICLFLUOROMETHANE	2.548	2.817	-10.6	90	0.13
8	T	ACROLEIN	0.228	0.246	-7.9	63	0.04
9	T	ACETONE	0.290	0.343	-18.3	88	0.00
10	C,T	11-DICHLOROETHENE	1.610	1.831	-13.7	87	0.06
11	T	IODOMETHANE	2.526	2.735	-8.3	80	0.08
12	T	CARBON DISULFIDE	3.131	3.524	-12.6	90	0.09
13	T	ACRYLONITRILE	0.390	0.418	-7.2	86	0.02
14	T	DICHLOROMETHANE	1.556	1.674	-7.6	71	0.06
15	T	TRANS12DICLETHENE	1.407	1.630	-15.8	80	0.06
16	P,T	11-DICHLOROETHANE	2.212	2.505	-13.2	88	0.05
17		VINYL ACETATE	2.396	2.824	-17.9	89	0.05
18		2-BUTANONE	0.589	0.623	-5.8	85	0.01
19	T	CIS12DICHLOROETHENE	1.765	2.041	-15.6	92	0.04
20	T	22-DICHLOROPROPANE	1.710	2.036	-19.1	94	0.04
21	C,T	CHLOROFORM	2.846	3.306	-16.2	85	0.03
22	T	BROMOCHLOROMETHANE	0.950	1.142	-20.2	89	0.03
23	I	I14-DIFLUOROBENZENE	1.000	1.000	0.0	74	0.03
24	S	SDIBRFLUOROMETHANE	0.308	0.304	1.3	73	0.02
25	T	TETRAHYDROFURAN	0.111	0.126	-13.5	87	0.03
26	T	111-TRICHLOROETHANE	0.916	1.073	-17.1	92	0.03
27	T	11-DICHLOROPROPENE	0.738	0.855	-15.9	89	0.03
28	T	12-DICHLOROETHANE	0.790	0.917	-16.1	91	0.03
29	T	CARBONTETRACHLORIDE	0.956	1.035	-8.3	96	0.04
30	T	BENZENE	2.177	2.559	-17.5	90	0.03
31	T	TRICHLOROETHENE	0.710	0.852	-20.0	95	0.02
32	C,T	12-DICHLOROPROPANE	0.537	0.608	-13.2	89	0.02
33	T	DIBROMOMETHANE	0.678	0.724	-6.8	84	0.02
34	T	BROMODICLMETHANE	0.880	1.039	-18.1	92	0.01
35	T	2-CLETHYLVINYLETHER	0.143	0.183	-28.0	65	0.00
36	T	EPICHLOROHYDRIN	0.046	0.049#	-6.5	85	-0.02
37	T	4METHYL-2-PENTANONE	0.478	0.532	-11.3	86	-0.01
38	T	CIS13DICLPROPENE	0.938	1.109	-18.2	92	0.00
39	S	STOLUENE-D8	1.419	1.523	-7.3	80	0.00
40	C,T	TOLUENE	2.607	3.116	-19.5	92	0.00
41	T	TRANS13DICLPROPENE	0.804	0.952	-18.4	94	0.00
42	T	112-TRICHLOROETHANE	0.635	0.752	-18.4	93	0.00
43		2-HEXANONE	0.336	0.365	-8.6	85	-0.01
44	T	13-DICHLOROPROPANE	1.044	1.211	-16.0	91	0.00
45	T	DIBRCHLOROMETHANE	0.851	1.002	-17.7	92	0.00

Evaluate Continuing Calibration Report

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702303.D
Acq On : 14 Mar 2017 08:00 pm
Operator : SEDS
Sample : ICV/2658113
Misc : RUN187023
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Mar 20 12:12:27 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	TETRACHLOROETHENE	0.814	0.976	-19.9	94	0.00
47	T	12-DIBROMOETHANE	0.689	0.816	-18.4	94	0.00
48	I	CHLOROBENZEN-d5-IS	1.000	1.000	0.0	99	0.00
49	P,T	CHLOROBENZENE	1.043	0.889	14.8	94	0.00
50		1-CHLOROHEXANE	3.262	2.986	8.S	90	0.00
51	T	1112-TETRACLETHANE	0.288	0.248	13.9	93	0.00
S2	C,T	ETHYLBENZENE	1.650	1.404	14.9	92	0.00
53	T	MP-XYLENE	1.277	1.111	13.0	92	0.00
54	T	STYRENE	1.202	1.006	16.3	92	0.00
S5	T	O-XYLENE	1.403	1.155	17.7	92	0.00
56	P,T	BROMOFORM	0.402	0.331	17.7	90	0.00
57	P,T	1122-TETRACLETHANE	0.522	0.418	19.9	91	0.00
S8	T	ISOPROPYL BENZENE	1.739	1.472	15.4	92	0.00
59	S	S4BRFLUOROBENZENE	0.712	0.737	-3.5	107	0.00
60	T	123-TRICLPROPANE	0.176	0.145	17.6	93	-0.02
61	T	TRANS14DICL2BUTENE	0.096	0.079#	17.7	89	-0.02
62	T	BROMOBENZENE	0.640	0.540	15.6	92	0.00
63	T	N-PROPYLBENZENE	2.000	1.692	15.4	91	-0.01
64	T	2-CHLOROTOLUENE	1.148	0.938	18.3	93	-0.01
65	T	4-CHLOROTOLUENE	1.149	0.938	18.4	93	-0.01
66	T	135TRIMETHYLBENZENE	1.526	1.284	15.9	93	-0.02
67	T	TERT-BUTYLBENZENE	1.341	1.113	17.0	92	0.00
68	T	124TRIMETHYLBENZENE	1.498	1.238	17.4	92	0.00
69	T	SEC-BUTYLBENZENE	1.828	1.529	16.4	92	-0.01
70	T	13-DICHLOROBENZENE	0.947	0.802	15.3	96	-0.01
71	I	I14-DICLBENZENE-D4	1.000	1.000	0.0	111	0.00
72	T	4-ISOPROPYLTOLUENE	1.636	1.359	16.9	92	-0.02
73	T	14-DICHLOROBENZENE	0.954	0.784	17.8	95	-0.01
74	T	12-DICHLOROBENZENE	0.938	0.777	17.2	95	0.00
75	T	N-BUTYLBENZENE	1.412	1.136	19.5	91	0.00
76	T	12-DIBR-3CLPROPANE	0.122	0.111	9.0	91	0.00
77		124-TRICLBENZENE	0.744	0.607	18.4	94	0.00
78	T	NAPHTHALENE	1.473	1.272	13.6	88	0.00
79	T	HEXACHLOROBUTADIENE	0.307	0.275	10.4	91	-0.01
80		123-TRICLBENZENE	0.714	0.579	18.9	93	0.00

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702303.D
Acq On : 14 Mar 2017 08:00 pm
Operator : SEDS
Sample : ICV/2658113
Misc : RUN187023
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Mar 20 12:12:27 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.009	168	365628	20.00	µg/L	0.03
23) I14-DIFLUOROBENZENE	6.994	114	940095	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.782	117	2330518	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.539	152	2396597	20.00	µg/L	0.00
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	6.026	111	285451	19.74	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.70%			
39) 5TOLUENE-D8	9.199	98	1431702	21.47	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.35%			
59) S4BRFLUOROBENZENE	14.121	95	1717078	20.70	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.50%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.027	85	800502	23.17	µg/L	99
3) CHLOROMETHANE	2.242	50	621662	21.18	µg/L #	59
4) VINYL CHLORIDE	2.340	62	720401	23.77	µg/L	100
5) BROMOMETHANE	2.640	94	266257	23.15	µg/L	95
6) CHLOROETHANE	2.741	64	308664	23.42	µg/L #	95
7) TRICLFLUOROMETHANE	2.964	101	1029965	22.11	µg/L	98
8) ACROLEIN	3.446	56	2249814	539.37	µg/L #	96
9) ACETONE	3.614	43	627966	118.45	µg/L	97
10) 11-DICHLOROETHENE	4.258	61	669381	22.74	µg/L	93
11) IODOMETHANE	3.658	142	5000829	108.28	µg/L	90
12) CARBON DISULFIDE	3.708	76	6443131	112.55	µg/L #	91
13) ACRYLONITRILE	4.336	53	764142	107.10	µg/L #	99
14) DICHLOROMETHANE	4.015	84	612005	21.51	µg/L	99
15) TRAN512DICLETHENE	4.261	96	595816	23.17	µg/L	94
16) 11-DICHLOROETHANE	4.746	63	916080	22.65	µg/L	99
17) VINYL ACETATE	4.790	43	5162765	117.86	µg/L #	90
18) 2-BUTANONE	5.485	43	1138745	105.73	µg/L	98
19) CIS12DICHLOROETHENE	5.421	96	746260	23.12	µg/L	94
20) 22-DICHLOROPROPANE	5.382	77	744418	23.81	µg/L #	92
21) CHLOROFORM	5.817	83	1208919	23.24	µg/L	98
22) BROMOCHLOROMETHANE	5.727	49	417687	24.04	µg/L	96
25) TETRAHYDROFURAN	5.806	42	118523	22.68	µg/L #	1
26) 111-TRICHLOROETHANE	5.981	97	1008648	23.43	µg/L	97
27) 11-DICHLOROPROPENE	6.185	75	803864	23.16	µg/L	99
28) 12-DICHLOROETHANE	6.564	62	862131	23.22	µg/L	98
29) CARBONTETRACHLORIDE	6.168	117	973183	21.66	µg/L	99
30) BENZENE	6.472	78	2405974	23.51	µg/L	92
31) TRICHLOROETHENE	7.345	132	801361	24.01	µg/L	99
32) 12-DICHLOROPROPANE	7.719	63	571275	22.63	µg/L	98
33) DIBROMOMETHANE	7.928	174	680769	21.35	µg/L	98
34) BROMODICLMETHANE	8.159	83	976891	23.61	µg/L	98
35) 2-CLETHYLVINYLETHER	8.600	63	859854	87.68	µg/L	95
36) EPICHLOROHYDRIN	8.764	57	1153098	533.39	µg/L	93
37) 4METHYL-2-PENTANONE	9.085	43	2498667	111.24	µg/L #	89
38) CI513DICLPROPENE	8.828	75	1042700	23.64	µg/L	92

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCM5\1\data\187017\
Data File : 702303.D
Acq On : 14 Mar 2017 08:00 pm
Operator : SED5
Sample : ICV/2658113
Misc : RUN187023
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Mar 20 12:12:27 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

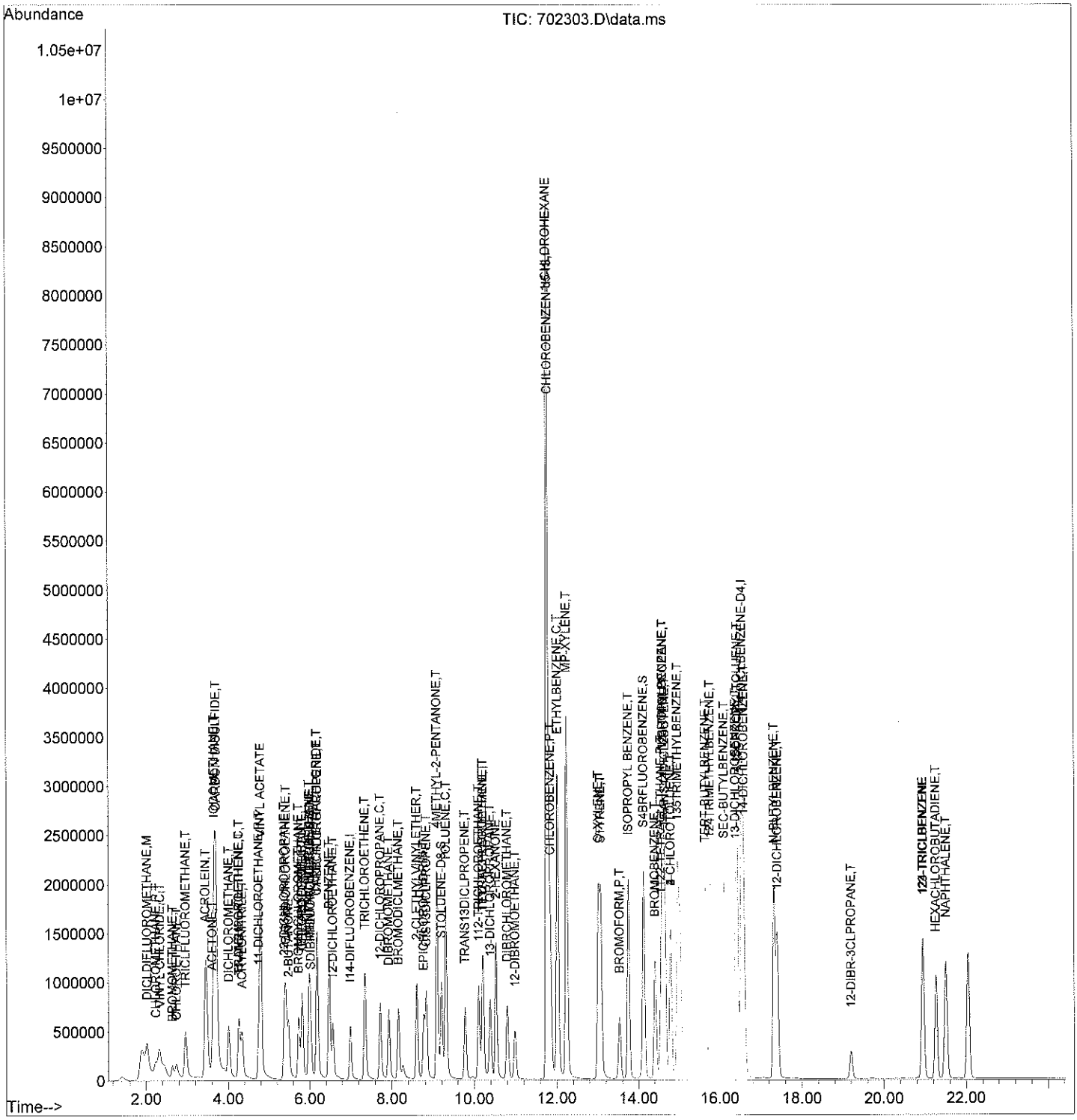
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40)	TOLUENE	9.311	91	2929345	23.90 µg/L	89
41)	TRANS13DICLPROPENE	9.777	75	894707	23.68 µg/L	97
42)	112-TRICHLOROETHANE	10.106	97	706698	23.66 µg/L	99
43)	2-HEXANONE	10.527	43	1713959	108.56 µg/L	93
44)	13-DICHLOROPROPANE	10.390	76	1138061	23.18 µg/L	96
45)	DIBRCHLOROMETHANE	10.794	129	942179	23.56 µg/L	99
46)	TETRACHLOROETHENE	10.206	166	918001	23.99 µg/L	97
47)	12-DIBROMOETHANE	10.984	107	767006	23.68 µg/L	99
49)	CHLOROBENZENE	11.835	112	2071050	17.05 µg/L	96
50)	1-CHLOROHEXANE	11.757	91	6959572	18.31 µg/L	99
51)	1112-TETRACLETHANE	10.209	131	578678	17.22 µg/L #	99
52)	ETHYLBENZENE	12.008	91	3271338	17.02 µg/L	91
53)	MP-XYLENE	12.231	91	5177428	34.78 µg/L	85
54)	STYRENE	13.073	104	2344078	16.73 µg/L	97
55)	O-XYLENE	13.017	91	2692367	16.47 µg/L	87
56)	BROMOFORM	13.527	173	772128	16.50 µg/L	100
57)	1122-TETRACLETHANE	14.554	83	973156	16.01 µg/L	99
58)	ISOPROPYL BENZENE	13.742	105	3430900	16.94 µg/L	89
60)	123-TRICLPROPANE	14.604	110	338279	16.50 µg/L	99
61)	TRANS14DICL2BUTENE	14.654	53	921246	82.36 µg/L	90
62)	BROMOBENZENE	14.406	77	1257929	16.87 µg/L	99
63)	N-PROPYLBENZENE	14.595	91	3943352	16.92 µg/L	88
64)	2-CHLOROTOLUENE	14.796	91	2186506	16.35 µg/L	95
65)	4-CHLOROTOLUENE	14.796	91	2186506	16.33 µg/L	93
66)	135TRIMETHYLBENZENE	14.966	105	2992941	16.83 µg/L	90
67)	TERT-BUTYLBENZENE	15.641	119	2594320	16.60 µg/L	91
68)	124TRIMETHYLBENZENE	15.761	105	2886010	16.54 µg/L	91
69)	SEC-BUTYLBENZENE	16.101	105	3562404	16.73 µg/L	88
70)	13-DICHLOROBENZENE	16.386	146	1869207	16.94 µg/L	95
72)	4-ISOPROPYLTOLUENE	16.428	119	3257781	16.61 µg/L	90
73)	14-DICHLOROBENZENE	16.589	146	1879807	16.44 µg/L	94
74)	12-DICHLOROBENZENE	17.404	146	1862702	16.57 µg/L	95
75)	N-BUTYLBENZENE	17.323	91	2722832	16.10 µg/L	90
76)	12-DIBR-3CLPROPANE	19.197	157	267067	18.27 µg/L	98
77)	124-TRICLBENZENE	20.937	180	1453798	16.31 µg/L	95
78)	NAPHTHALENE	21.497	128	3047516	17.27 µg/L	93
79)	HEXACHLOROBUTADIENE	21.255	225	659897	17.92 µg/L	99
80)	123-TRICLBENZENE	20.942	182	1386687	16.21 µg/L	97

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702303.D
Acq On : 14 Mar 2017 08:00 pm
Operator : SEDS
Sample : ICV/2658113
Misc : RUN187023
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Mar 20 12:12:27 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702304.D
Acq On : 14 Mar 2017 08:28 pm
Operator : SEDS
Sample : FB/2654331
Misc : RUN187023
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Mar 20 12:13:10 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.012	168	373960	20.00	µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.999	114	958808	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.785	117	2405729	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.536	152	2285119	20.00	µg/L	-0.01
System Monitoring Compounds						
24) 5DIBRFLUOROMETHANE	6.026	111	295457	20.04	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.20%			
39) STOLUENE-D8	9.202	98	1442054	21.20	µg/L	0.01
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.00%			
59) S4BRFLUOROBENZENE	14.119	95	1713577	20.01	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.05%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	1.999	85	244	N.D.		
3) CHLOROMETHANE	2.169	50	2861	N.D.		
4) VINYL CHLORIDE	2.311	62	386	N.D.		
5) BROMOMETHANE	2.585	94	53	N.D.		
6) CHLOROETHANE	2.721	64	3277	N.D.		
7) TRICLFLUOROMETHANE	2.967	101	1736	N.D.		
8) ACROLEIN	3.477	56	1364	N.D.		
9) ACETONE	0.000		0	N.D.	d	
10) 11-DICHLOROETHENE	4.266	61	1404	N.D.		
11) IODOMETHANE	3.647	142	72	N.D.		
12) CARBON DISULFIDE	0.000		0	N.D.	d	
13) ACRYLONITRILE	4.328	53	772	N.D.		
14) DICHLOROMETHANE	0.000		0	N.D.	d	
15) TRANS12DICLETHENE	4.280	96	792	N.D.		
16) 11-DICHLOROETHANE	4.286	63	220	N.D.		
17) VINYL ACETATE	4.760	43	231	N.D.		
18) 2-BUTANONE	5.502	43	542	N.D.		
19) CIS12DICHLOROETHENE	5.404	96	444	N.D.		
20) 22-DICHLOROPROPANE	5.362	77	30	N.D.		
21) CHLOROFORM	5.811	83	3421	N.D.		
22) BROMOCHLOROMETHANE	5.728	49	115	N.D.		
25) TETRAHYDROFURAN	5.987	42	81	N.D.		
26) 111-TRICHLOROETHANE	5.981	97	104	N.D.		
27) 11-DICHLOROPROPENE	0.000		0	N.D.	d	
28) 12-DICHLOROETHANE	6.573	62	426	N.D.		
29) CARBONTETRACHLORIDE	6.157	117	378	N.D.		
30) BENZENE	6.472	78	659	N.D.		
31) TRICHLOROETHENE	7.351	132	906	N.D.		
32) 12-DICHLOROPROPANE	7.721	63	36	N.D.		
33) DIBROMOMETHANE	7.956	174	60	N.D.		
34) BROMODICLMETHANE	8.179	83	29	N.D.		
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.		
36) EPICHLOROHYDRIN	8.820	57	84	N.D.		
37) 4METHYL-2-PENTANONE	9.144	43	233	N.D.		
38) CIS13DICLPROPENE	8.831	75	543	N.D.		

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702304.D
Acq On : 14 Mar 2017 08:28 pm
Operator : SEDS
Sample : FB/26S4331
Misc : RUN187023
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Mar 20 12:13:10 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

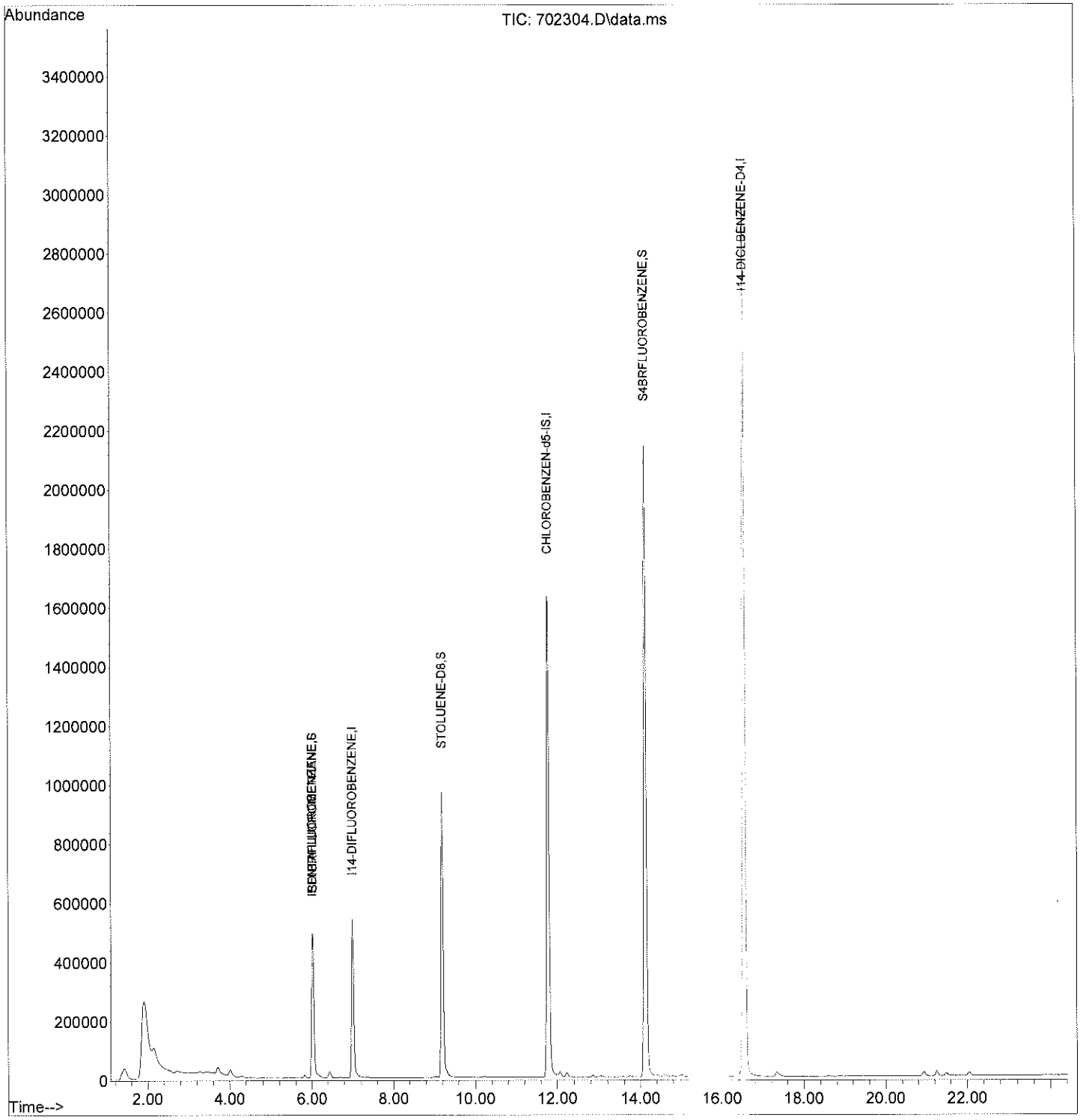
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
40) TOLUENE	9.319	91	9252	N.D.
41) TRANS13DICLPROPENE	9.807	75	90	N.D.
42) 112-TRICHLOROETHANE	10.106	97	65	N.D.
43) 2-HEXANONE	10.588	43	94	N.D.
44) 13-DICHLOROPROPANE	10.390	76	244	N.D.
45) DIBRCHLOROMETHANE	10.797	129	480	N.D.
46) TETRACHLOROETHENE	10.251	166	37	N.D.
47) 12-DIBROMOETHANE	11.007	107	62	N.D.
49) CHLOROBENZENE	11.851	112	539	N.D.
50) 1-CHLOROHEXANE	11.759	91	30096	N.D.
51) 1112-TETRACLETHANE	10.203	131	722	N.D.
52) ETHYLBENZENE	12.013	91	3773	N.D.
53) MP-XYLENE	12.234	91	20877	N.D.
54) STYRENE	13.076	104	834	N.D.
55) O-XYLENE	12.992	91	1776	N.D.
56) BROMOFORM	13.539	173	352	N.D.
57) 1122-TETRACLETHANE	14.557	83	156	N.D.
58) ISOPROPYL BENZENE	13.734	105	6001	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	14.676	53	361	N.D.
62) BROMOBENZENE	14.423	77	537	N.D.
63) N-PROPYLBENZENE	14.598	91	12586	N.D.
64) 2-CHLOROTOLUENE	14.813	91	2230	N.D.
65) 4-CHLOROTOLUENE	14.796	91	3597	N.D.
66) 135TRIMETHYLBENZENE	14.950	105	2344	N.D.
67) TERT-BUTYLBENZENE	15.636	119	7041	N.D.
68) 124TRIMETHYLBENZENE	15.767	105	7929	N.D.
69) SEC-BUTYLBENZENE	16.099	105	12383	N.D.
70) 13-DICHLOROBENZENE	16.391	146	6592	N.D.
72) 4-ISOPROPYLTOLUENE	16.433	119	8185	N.D.
73) 14-DICHLOROBENZENE	16.587	146	3771	N.D.
74) 12-DICHLOROBENZENE	17.381	146	2561	N.D.
75) N-BUTYLBENZENE	17.320	91	19176	N.D.
76) 12-DIBR-3CLPROPANE	19.202	157	69	N.D.
77) 124-TRICLBENZENE	20.954	180	14364	N.D.
78) NAPHTHALENE	21.500	128	24187	N.D.
79) HEXACHLOROBUTADIENE	21.266	225	5136	N.D.
80) 123-TRICLBENZENE	20.937	182	13614	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702304.D
Acq On : 14 Mar 2017 08:28 pm
Operator : SEDS
Sample : FB/2654331
Misc : RUN187023
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Mar 20 12:13:10 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702305.D
Acq On : 14 Mar 2017 08:57 pm
Operator : SEDS
Sample : TB/2654337
Misc : RUN187023
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Mar 20 12:14:00 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.012	168	346951	20.00	µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.996	114	886848	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.785	117	2242775	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.545	152	2058888	20.00	µg/L	0.00
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	6.026	111	276002	20.23	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.15%			
39) STOLUENE-D8	9.199	98	1353174	21.51	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.55%			
59) S4BRFLUOROBENZENE	14.124	95	1541497	19.31	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 96.55%			

Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.027	85	62	N.D.	
3) CHLOROMETHANE	2.172	50	1222	N.D.	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	2.590	94	123	N.D.	
6) CHLOROETHANE	2.886	64	1037	N.D.	
7) TRICLFLUOROMETHANE	2.961	101	450	N.D.	
8) ACROLEIN	3.463	56	325	N.D.	
9) ACETONE	0.000		0	N.D.	d
10) 11-DICHLOROETHENE	4.283	61	233	N.D.	
11) IODOMETHANE	3.664	142	149	N.D.	
12) CARBON DISULFIDE	0.000		0	N.D.	d
13) ACRYLONITRILE	4.333	53	33	N.D.	
14) DICHLOROMETHANE	0.000		0	N.D.	d
15) TRANS12DICLETHENE	4.272	96	263	N.D.	
16) 11-DICHLOROETHANE	4.252	63	31	N.D.	
17) VINYL ACETATE	4.768	43	57	N.D.	
18) 2-BUTANONE	5.499	43	172	N.D.	
19) CIS12DICHLOROETHENE	5.415	96	64	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	5.820	83	3692	N.D.	
22) BROMOCHLOROMETHANE	5.781	49	26	N.D.	
25) TETRAHYDROFURAN	5.987	42	38	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D.	d
28) 12-DICHLOROETHANE	6.467	62	96	N.D.	
29) CARBONTETRACHLORIDE	6.165	117	103	N.D.	
30) BENZENE	6.464	78	205	N.D.	
31) TRICHLOROETHENE	7.353	132	189	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	7.939	174	54	N.D.	
34) BROMODICLMETHANE	0.000		0	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	8.798	57	26	N.D.	
37) 4METHYL-2-PENTANONE	9.135	43	58	N.D.	
38) CIS13DICLPROPENE	8.840	75	29	N.D.	

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702305.D
Acq On : 14 Mar 2017 08:57 pm
Operator : SEDS
Sample : TB/2654337
Misc : RUN187023
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Mar 20 12:14:00 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

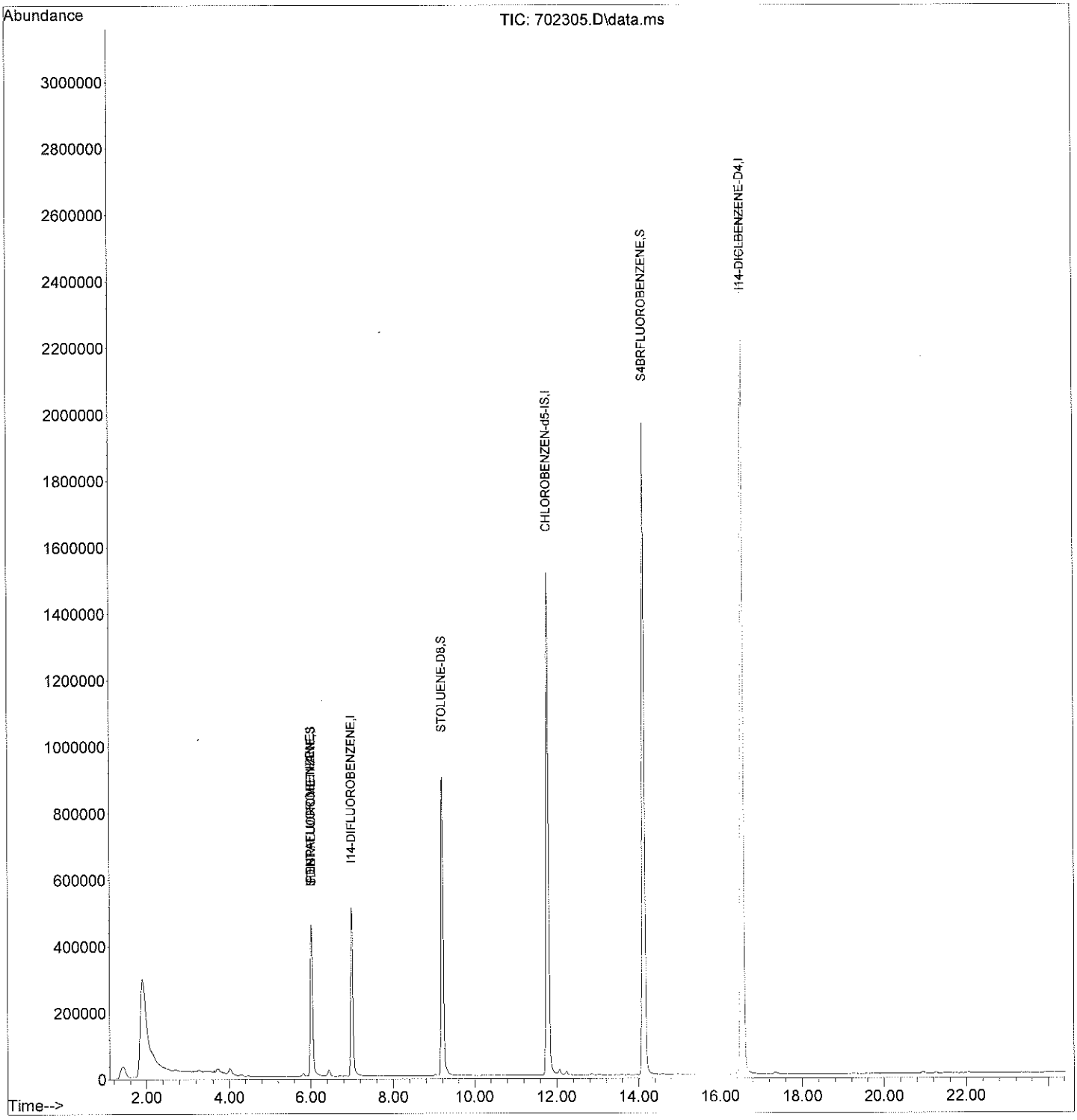
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
40) TOLUENE	9.308	91	6752	N.D.
41) TRANS13DICLPROPENE	9.796	75	32	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	10.549	43	29	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.
45) DIBRCHLOROMETHANE	10.806	129	65	N.D.
46) TETRACHLOROETHENE	10.245	166	30	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	11.865	112	139	N.D.
50) 1-CHLOROHEXANE	11.762	91	15929	N.D.
51) 1112-TETRACLETHANE	10.195	131	56	N.D.
52) ETHYLBENZENE	12.010	91	2518	N.D.
53) MP-XYLENE	12.228	91	13839	N.D.
54) STYRENE	13.067	104	302	N.D.
55) O-XYLENE	13.006	91	1086	N.D.
56) BROMOFORM	13.547	173	56	N.D.
57) 1122-TETRACLETHANE	0.000		0	N.D.
58) ISOPROPYL BENZENE	13.745	105	243	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	14.679	53	26	N.D.
62) BROMOBENZENE	14.409	77	237	N.D.
63) N-PROPYLBENZENE	14.601	91	4477	N.D.
64) 2-CHLOROTOLUENE	14.788	91	1387	N.D.
65) 4-CHLOROTOLUENE	14.821	91	520	N.D.
66) 135TRIMETHYLBENZENE	14.992	105	849	N.D.
67) TERT-BUTYLBENZENE	15.647	119	1030	N.D.
68) 124TRIMETHYLBENZENE	15.756	105	2203	N.D.
69) SEC-BUTYLBENZENE	16.104	105	2734	N.D.
70) 13-DICHLOROBENZENE	16.403	146	1567	N.D.
72) 4-ISOPROPYLTOLUENE	16.422	119	2881	N.D.
73) 14-DICHLOROBENZENE	16.570	146	2097	N.D.
74) 12-DICHLOROBENZENE	17.390	146	2968	N.D.
75) N-BUTYLBENZENE	17.323	91	8114	N.D.
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.
77) 124-TRICLBENZENE	20.937	180	5296	N.D.
78) NAPHTHALENE	21.495	128	5208	N.D.
79) HEXACHLOROBUTADIENE	21.280	225	776	N.D.
80) 123-TRICLBENZENE	20.945	182	2397	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702305.D
Acq On : 14 Mar 2017 08:57 pm
Operator : SEDS
Sample : TB/2654337
Misc : RUN187023
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Mar 20 12:14:00 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702306.D
Acq On : 14 Mar 2017 09:25 pm
Operator : SEDS
Sample : TB/2656245
Misc : RUN187023
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Mar 20 12:14:45 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.009	168	348860	20.00	µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.996	114	892148	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.782	117	2269199	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.542	152	2136150	20.00	µg/L	0.00
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	6.023	111	279630	20.38	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.90%			
39) STOLUENE-D8	9.199	98	1373007	21.70	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 108.50%			
59) S4BRFLUOROBENZENE	14.127	95	1533713	18.99	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 94.95%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.		
3) CHLOROMETHANE	2.183	50	427	N.D.		
4) VINYL CHLORIDE	2.688	62	30	N.D.		
5) BROMOMETHANE	2.587	94	55	N.D.		
6) CHLOROETHANE	2.735	64	967	N.D.		
7) TRICLFLUOROMETHANE	2.972	101	107	N.D.		
8) ACROLEIN	3.466	56	173	N.D.		
9) ACETONE	0.000		0	N.D.	d	
10) 11-DICHLOROETHENE	4.272	61	277	N.D.		
11) IODOMETHANE	3.656	142	53	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	4.258	96	128	N.D.		
16) 11-DICHLOROETHANE	4.250	63	26	N.D.		
17) VINYL ACETATE	4.768	43	91	N.D.		
18) 2-BUTANONE	5.507	43	310	N.D.		
19) CIS12DICHLOROETHENE	5.412	96	25	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	5.814	83	4374	N.D.		
22) BROMOCHLOROMETHANE	5.775	49	28	N.D.		
25) TETRAHYDROFURAN	5.778	42	60	N.D.		
26) 111-TRICHLOROETHANE	0.000		0	N.D.		
27) 11-DICHLOROPROPENE	0.000		0	N.D.	d	
28) 12-DICHLOROETHANE	6.472	62	29	N.D.		
29) CARBONTETRACHLORIDE	6.163	117	104	N.D.		
30) BENZENE	6.475	78	508	N.D.		
31) TRICHLOROETHENE	7.351	132	60	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	8.778	57	28	N.D.		
37) 4METHYL-2-PENTANONE	9.107	43	36	N.D.		
38) CIS13DICLPROPENE	8.823	75	27	N.D.		

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702306.D
Acq On : 14 Mar 2017 09:25 pm
Operator : SEDS
Sample : TB/2656245
Misc : RUN187023
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Mar 20 12:14:45 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

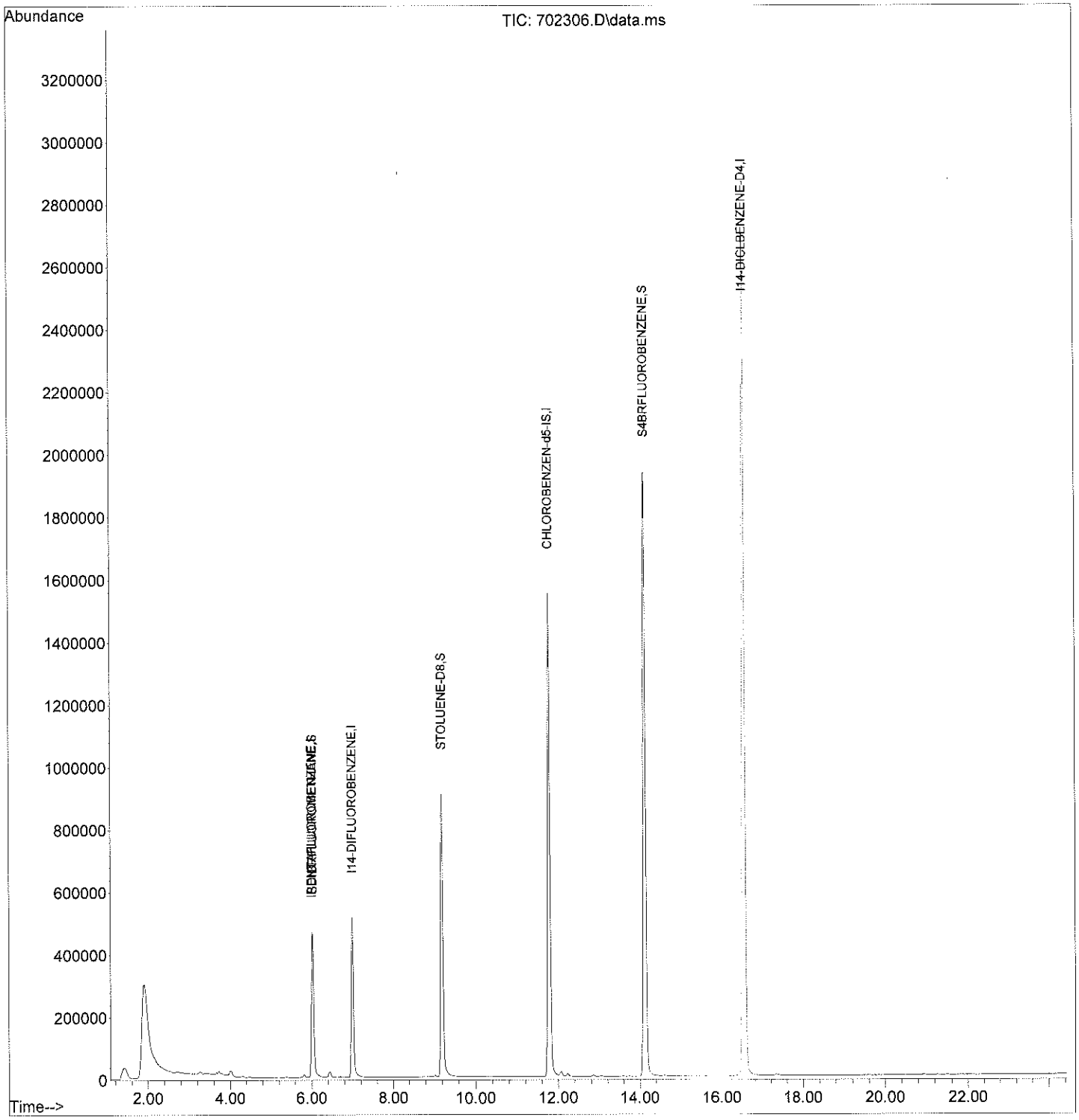
Compound	R.T.	QIon	Response	Conc Units Dev(Min)
40) TOLUENE	9.319	91	5973	N.D.
41) TRANS13DICLPROPENE	9.799	75	35	N.D.
42) 112-TRICHLOROETHANE	0.000		0	N.D.
43) 2-HEXANONE	10.577	43	25	N.D.
44) 13-DICHLOROPROPANE	0.000		0	N.D.
45) DIBRCHLOROMETHANE	10.797	129	30	N.D.
46) TETRACHLOROETHENE	10.245	166	40	N.D.
47) 12-DIBROMOETHANE	0.000		0	N.D.
49) CHLOROBENZENE	11.838	112	472	N.D.
50) 1-CHLOROHEXANE	11.748	91	4315	N.D.
51) 1112-TETRACLETHANE	10.206	131	125	N.D.
52) ETHYLBENZENE	12.013	91	1237	N.D.
53) MP-XYLENE	12.228	91	11461	N.D.
54) STYRENE	13.076	104	871	N.D.
55) O-XYLENE	13.025	91	2050	N.D.
56) BROMOFORM	0.000		0	N.D.
57) 1122-TETRACLETHANE	0.000		0	N.D.
58) ISOPROPYL BENZENE	13.748	105	240	N.D.
60) 123-TRICLPROPANE	0.000		0	N.D.
61) TRANS14DICL2BUTENE	14.643	53	30	N.D.
62) BROMOBENZENE	14.403	77	48	N.D.
63) N-PROPYLBENZENE	14.607	91	996	N.D.
64) 2-CHLOROTOLUENE	14.796	91	590	N.D.
65) 4-CHLOROTOLUENE	14.796	91	625	N.D.
66) 135TRIMETHYLBENZENE	14.980	105	876	N.D.
67) TERT-BUTYLBENZENE	15.636	119	784	N.D.
68) 124TRIMETHYLBENZENE	15.772	105	941	N.D.
69) SEC-BUTYLBENZENE	16.099	105	1960	N.D.
70) 13-DICHLOROBENZENE	16.394	146	1642	N.D.
72) 4-ISOPROPYLTOLUENE	16.439	119	1458	N.D.
73) 14-DICHLOROBENZENE	16.587	146	1235	N.D.
74) 12-DICHLOROBENZENE	17.434	146	272	N.D.
75) N-BUTYLBENZENE	17.320	91	2676	N.D.
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.
77) 124-TRICLBENZENE	20.934	180	788	N.D.
78) NAPHTHALENE	21.511	128	1778	N.D.
79) HEXACHLOROBUTADIENE	21.260	225	533	N.D.
80) 123-TRICLBENZENE	20.926	182	1780	N.D.

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702306.D
Acq On : 14 Mar 2017 09:25 pm
Operator : SEDS
Sample : TB/2656245
Misc : RUN187023
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Mar 20 12:14:45 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



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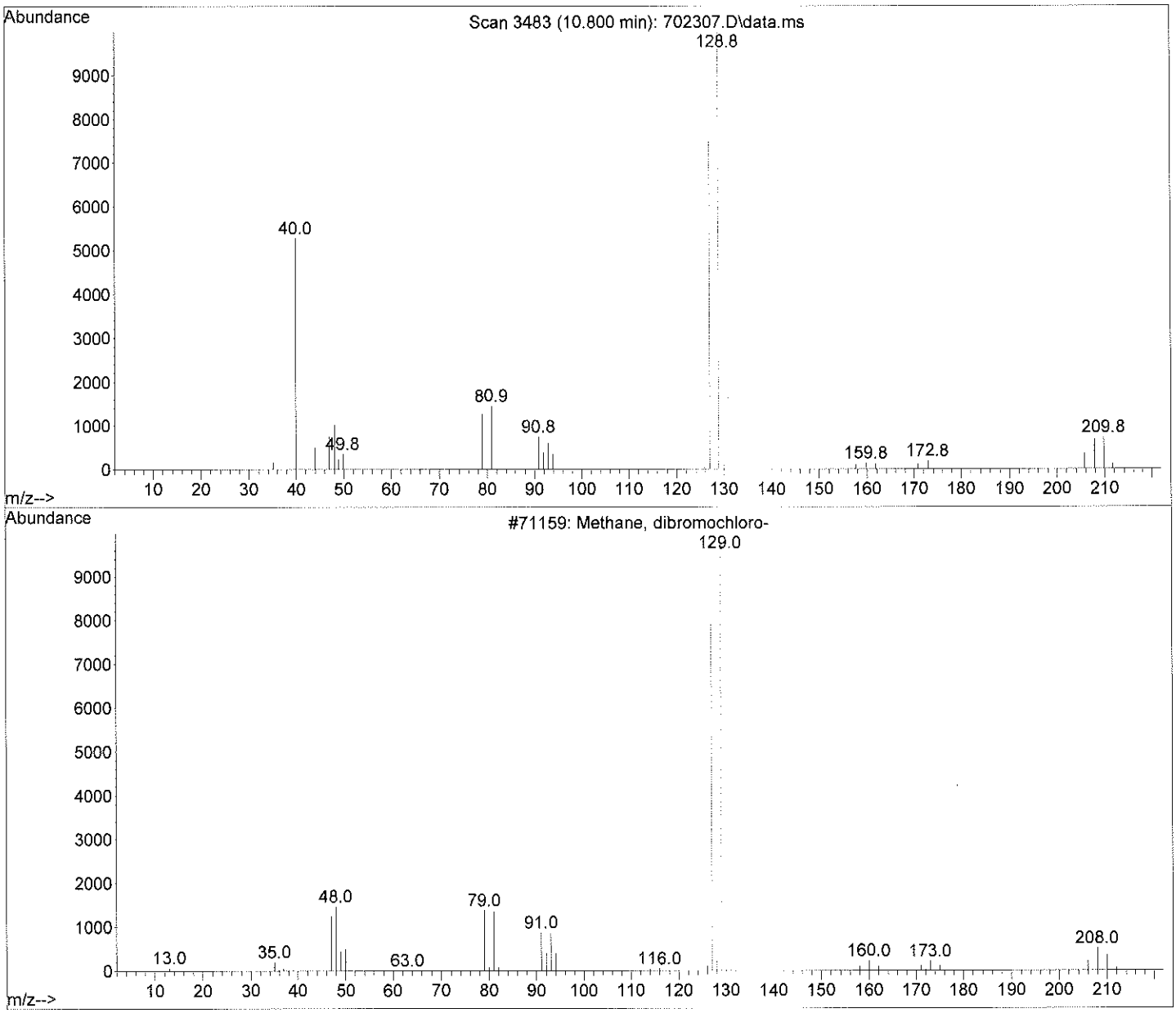
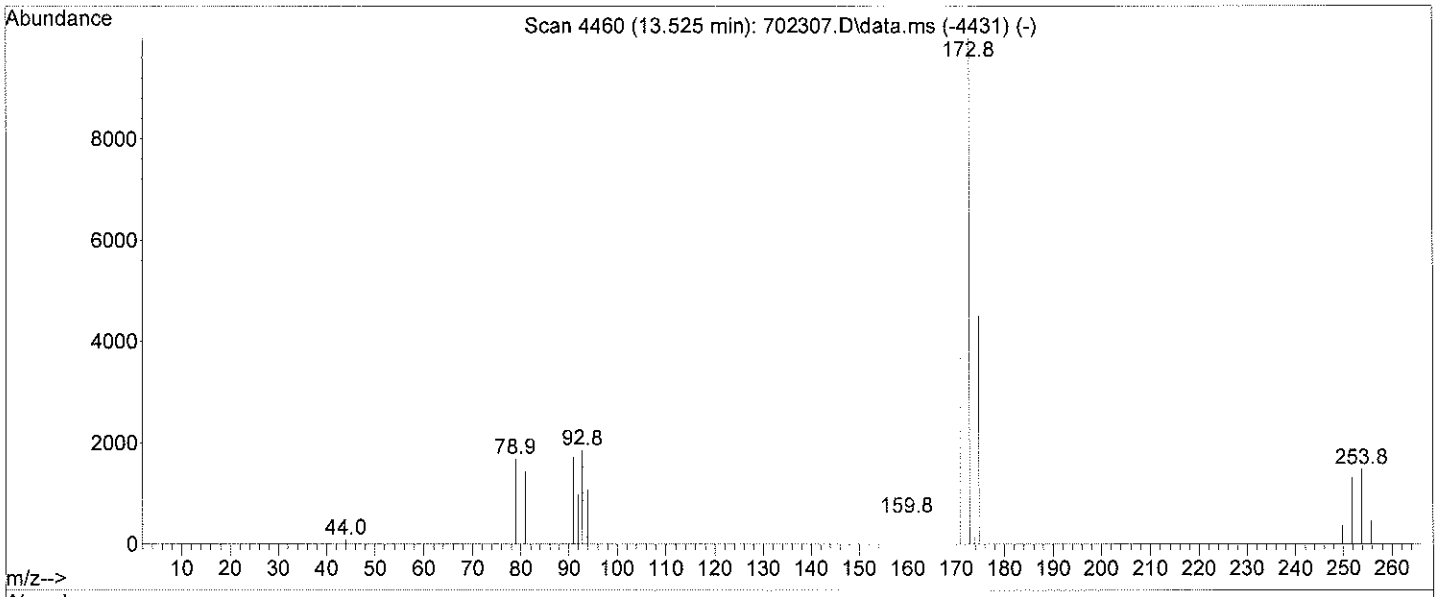
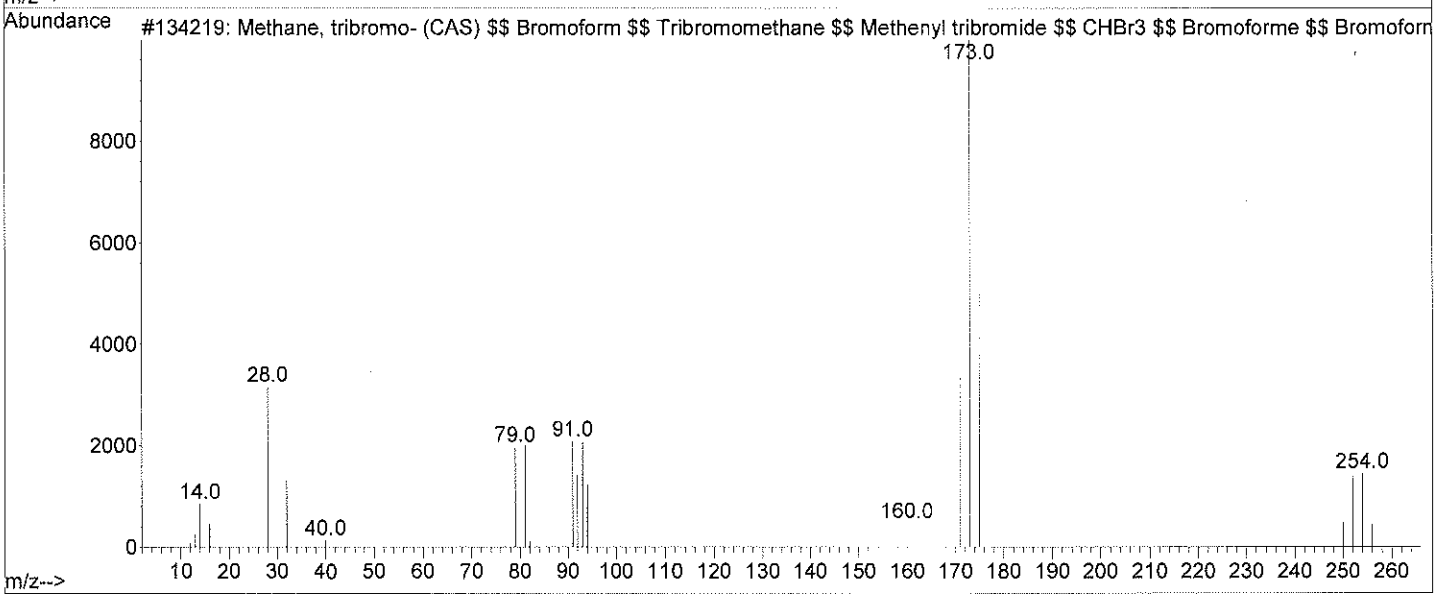
Quality : 97
ID : Methane, dibromochloro-



Library Searched : D:\MassHunter\Library\WILEY275.L
Quality : 98
ID : Methane, tribromo- (CAS) $$ Bromoform $$ Tribromomethane $$ Methenyl tribromide $$ CHBr3 $$ Bromoforme $$ Bromoformio $$ NCI-C55130 $$ Tribrommethaan $$ Tribrommethan $$ Tribromometan $$ Rcra waste number U225 $$ UN 2515





Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702307.D
Acq On : 14 Mar 2017 09:54 pm
Operator : SEDS
Sample : 2656246
Misc : RUN187023
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Mar 20 12:15:20 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.012	168	359503	20.00	µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.996	114	923409	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.787	117	2280994	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.531	152	1230152	20.00	µg/L	-0.02
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	6.032	111	283055	19.93	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.65%			
39) STOLUENE-D8	9.199	98	1366705	20.86	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.30%			
59) S4BRFLUOROBENZENE	14.119	95	1587058	19.55	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.75%			

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.
3) CHLOROMETHANE	2.186	50	1131	N.D.
4) VINYL CHLORIDE	0.000		0	N.D.
5) BROMOMETHANE	2.601	94	28	N.D.
6) CHLOROETHANE	2.699	64	1869	N.D.
7) TRICLFLUOROMETHANE	0.000		0	N.D.
8) ACROLEIN	3.471	56	67	N.D.
9) ACETONE	3.538	43	382	N.D.
10) 11-DICHLOROETHENE	4.269	61	37	N.D.
11) IODOMETHANE	3.650	142	31	N.D.
12) CARBON DISULFIDE	3.714	76	21366	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	4.018	84	4819	N.D.
15) TRANS12DICLETHENE	4.266	96	81	N.D.
16) 11-DICHLOROETHANE	4.813	63	5003	N.D.
17) VINYL ACETATE	4.763	43	26	N.D.
18) 2-BUTANONE	0.000		0	N.D. d
19) CIS12DICHLOROETHENE	5.429	96	26	N.D.
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	5.833	83	919	N.D.
22) BROMOCHLOROMETHANE	5.792	49	128	N.D.
25) TETRAHYDROFURAN	0.000		0	N.D. d
26) 111-TRICHLOROETHANE	0.000		0	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D. d
28) 12-DICHLOROETHANE	6.467	62	73	N.D.
29) CARBONTETRACHLORIDE	6.154	117	100	N.D.
30) BENZENE	6.467	78	245	N.D.
31) TRICHLOROETHENE	7.353	132	32	N.D.
32) 12-DICHLOROPROPANE	7.479	63	25	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	8.156	83	12670	N.D.
35) 2-CLETHYLVINYLETHER	8.486	63	65	N.D.
36) EPICHLOROHYDRIN	0.000		0	N.D.
37) 4METHYL-2-PENTANONE	9.144	43	161	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702307.D
Acq On : 14 Mar 2017 09:54 pm
Operator : SEDS
Sample : 2656246
Misc : RUN187023
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Mar 20 12:15:20 2017
Quant Method : D:\MassHunter\GCM5\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

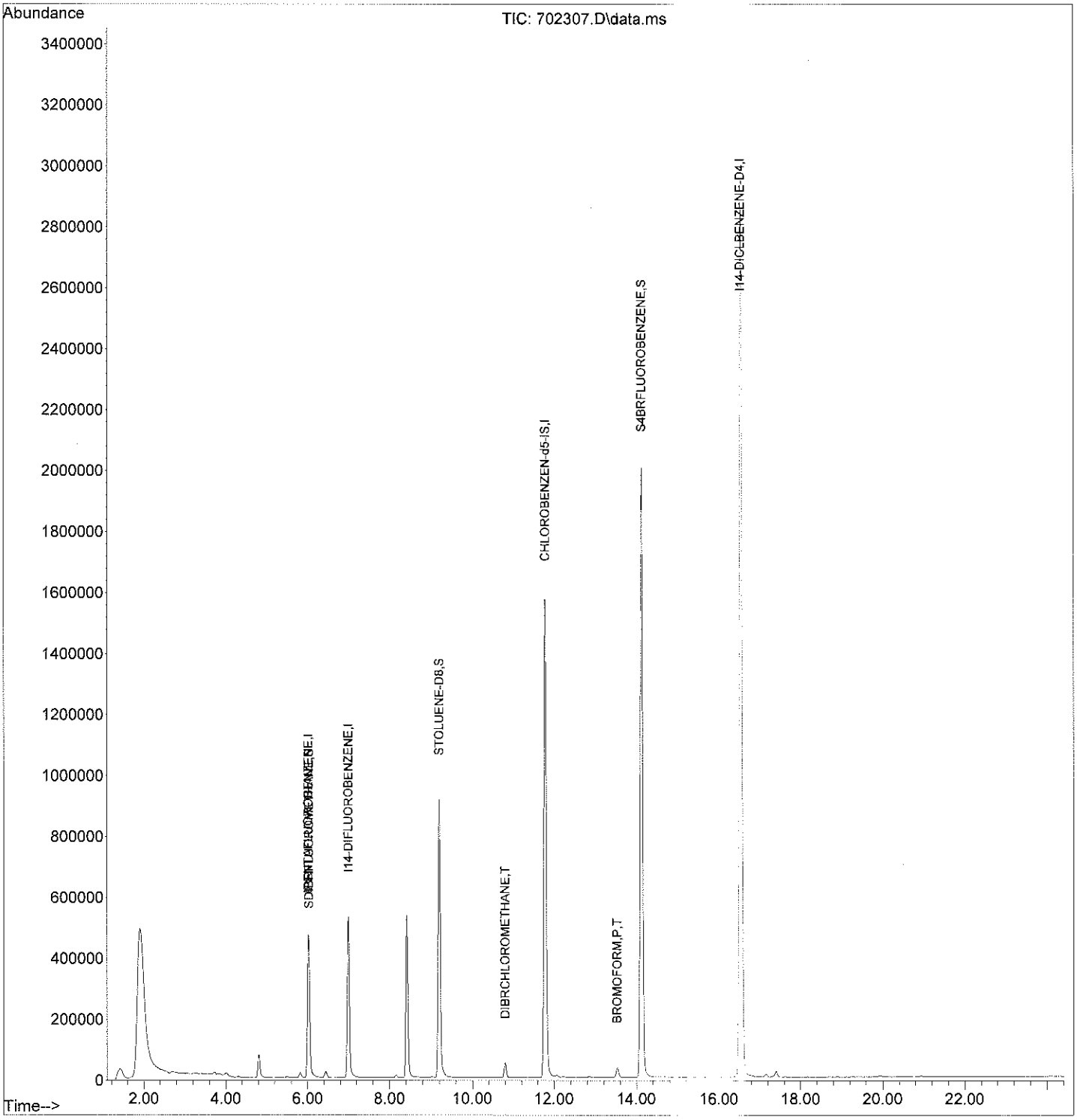
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.311	91	2683	N.D.	
41) TRANS13DICLPROPENE	9.788	75	26	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	10.594	43	27	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	10.800	129	60460	1.54 µg/L	93
46) TETRACHLOROETHENE	10.242	166	36	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	11.851	112	349	N.D.	
50) 1-CHLOROHEXANE	11.771	91	6814	N.D.	
51) 1112-TETRACLETHANE	10.203	131	166	N.D.	
52) ETHYLBENZENE	11.994	91	306	N.D.	
53) MP-XYLENE	12.228	91	650	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	13.023	91	241	N.D.	
56) BROMOFORM	13.525	173	40223	0.88 µg/L	90
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	13.751	105	176	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	14.417	77	142	N.D.	
63) N-PROPYLBENZENE	14.593	91	1134	N.D.	
64) 2-CHLOROTOLUENE	14.780	91	332	N.D.	
65) 4-CHLOROTOLUENE	14.780	91	459	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	15.633	119	609	N.D.	
68) 124TRIMETHYLBENZENE	15.758	105	88	N.D.	
69) SEC-BUTYLBENZENE	16.115	105	583	N.D.	
70) 13-DICHLOROBENZENE	16.405	146	355	N.D.	
72) 4-ISOPROPYLTOLUENE	16.414	119	494	N.D.	
73) 14-DICHLOROBENZENE	16.575	146	1722	N.D.	
74) 12-DICHLOROBENZENE	17.407	146	795	N.D.	
75) N-BUTYLBENZENE	17.326	91	2082	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	20.917	180	165	N.D.	
78) NAPHTHALENE	21.503	128	417	N.D.	
79) HEXACHLOROBUTADIENE	21.249	225	108	N.D.	
80) 123-TRICLBENZENE	20.931	182	1145	N.D.	

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

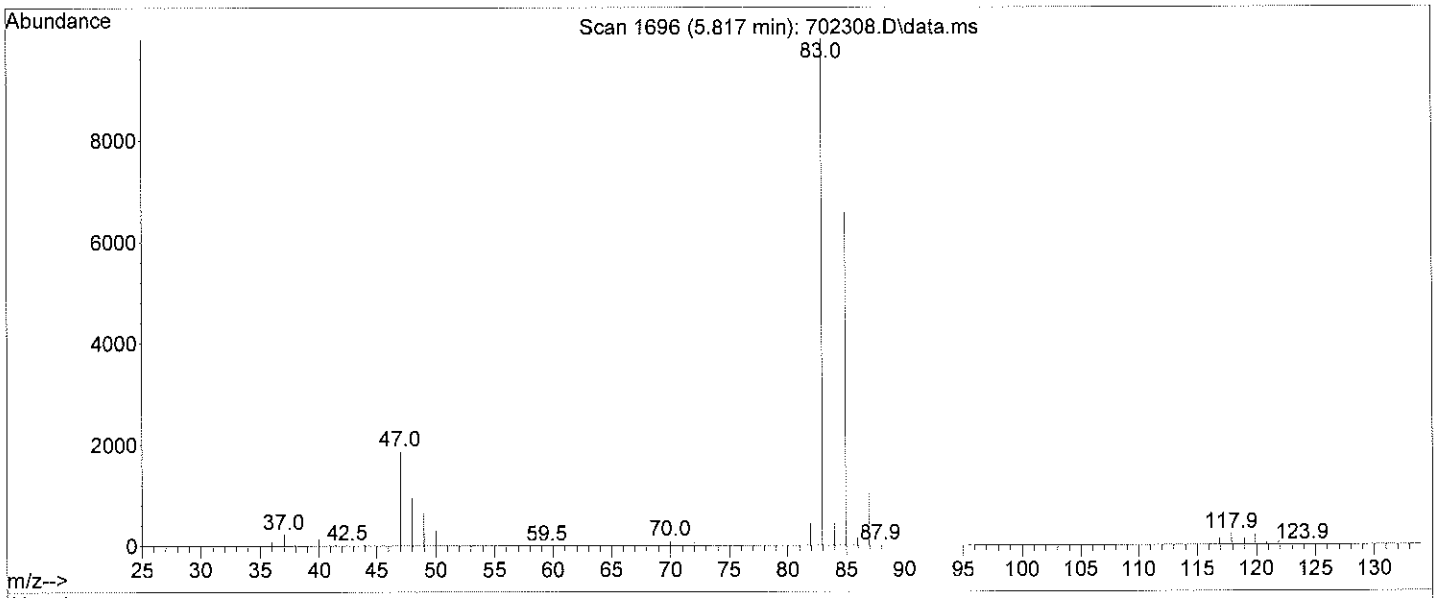
Quantitation Report (QT Reviewed)

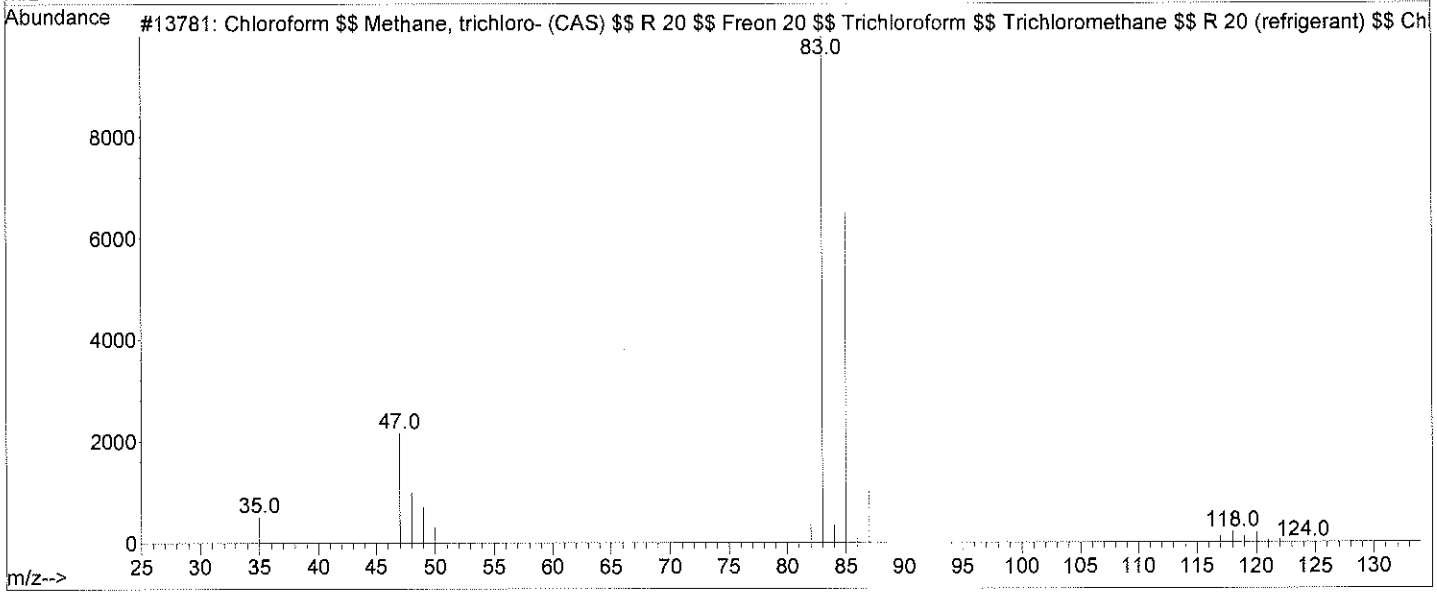
Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702307.D
Acq On : 14 Mar 2017 09:54 pm
Operator : SEDS
Sample : 2656246
Misc : RUN187023
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Mar 20 12:15:20 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

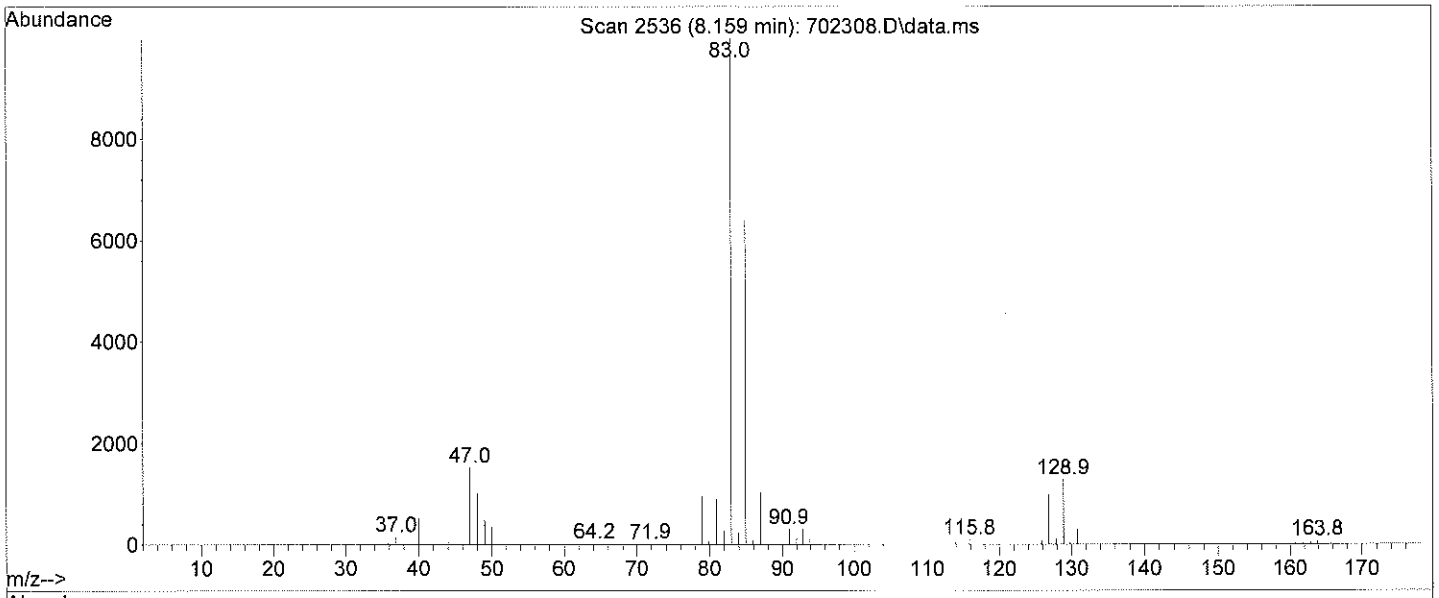


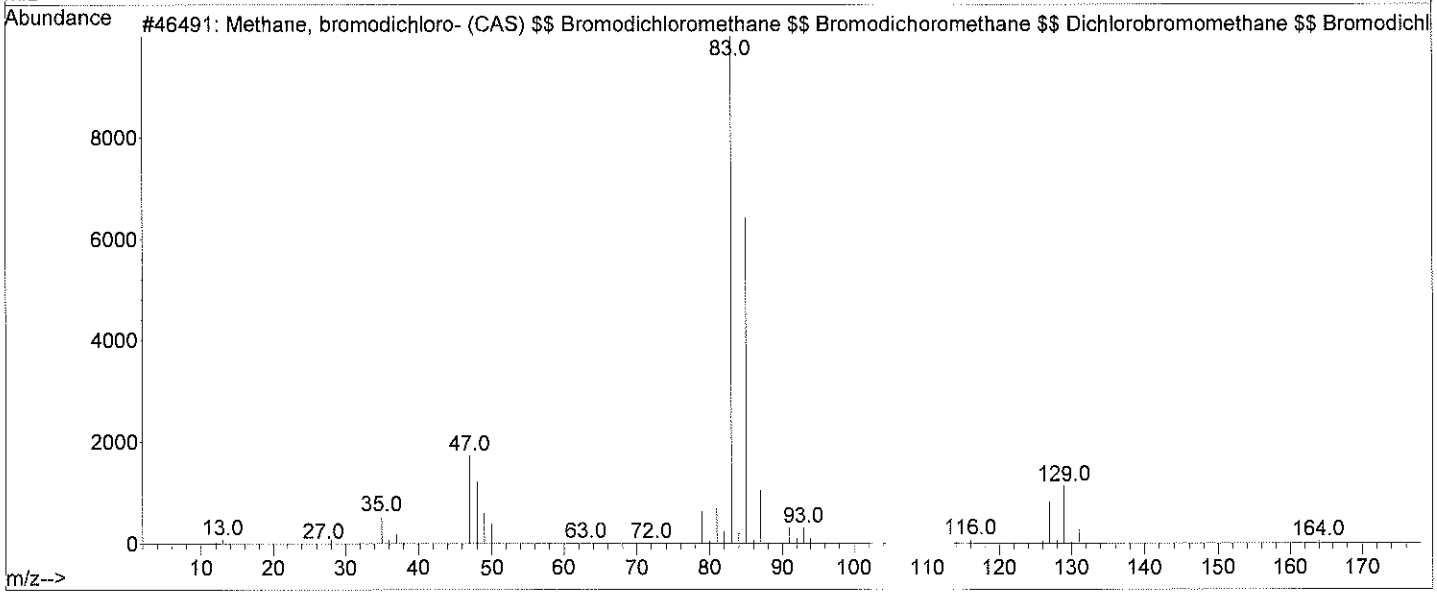
Library Searched : D:\MassHunter\Library\WILEY275.L
Quality : 97
ID : Chloroform $$ Methane, trichloro- (CAS) $$ R 20 $$ Freon 20 $$ Trichloroform $$ Trichlor omethane $$ R 20 (refrigerant) $$ Chloroform (ACN)(DOT) $$ TRICHLOROMETHANE (CHLOROFORM) $$ CHCl3 $$ Formyl trichloride $$ Methane trichloride $$ Methenyl trichloride



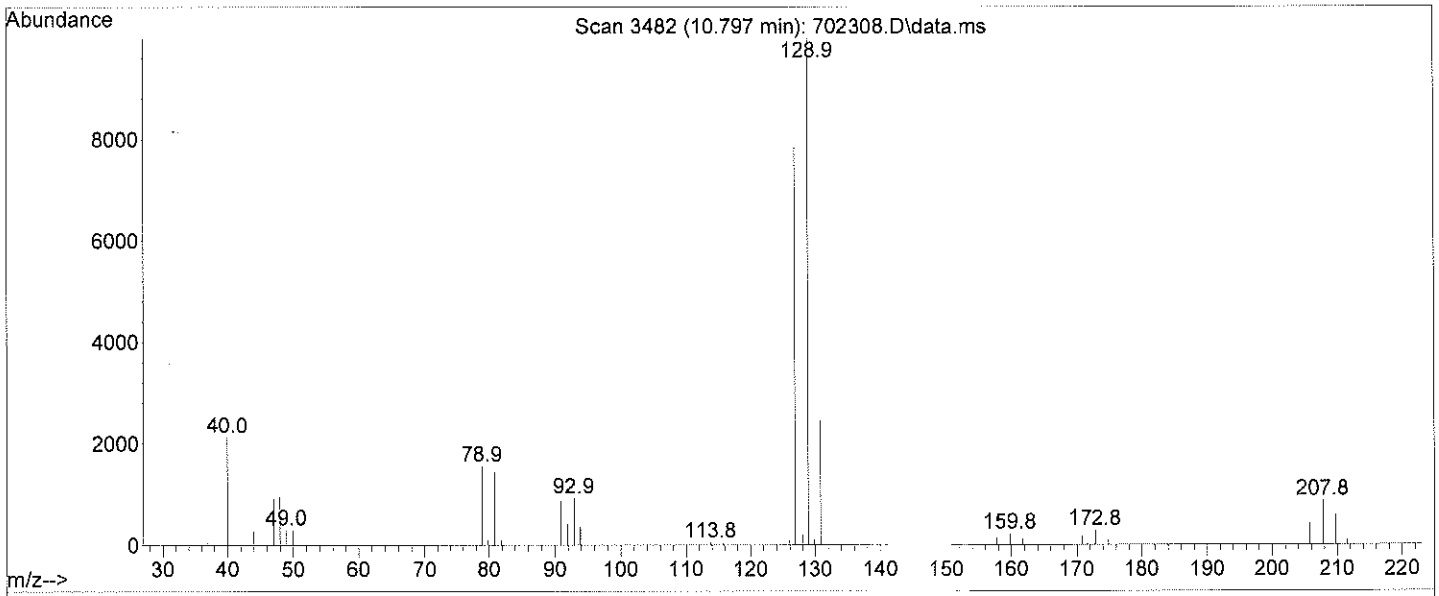


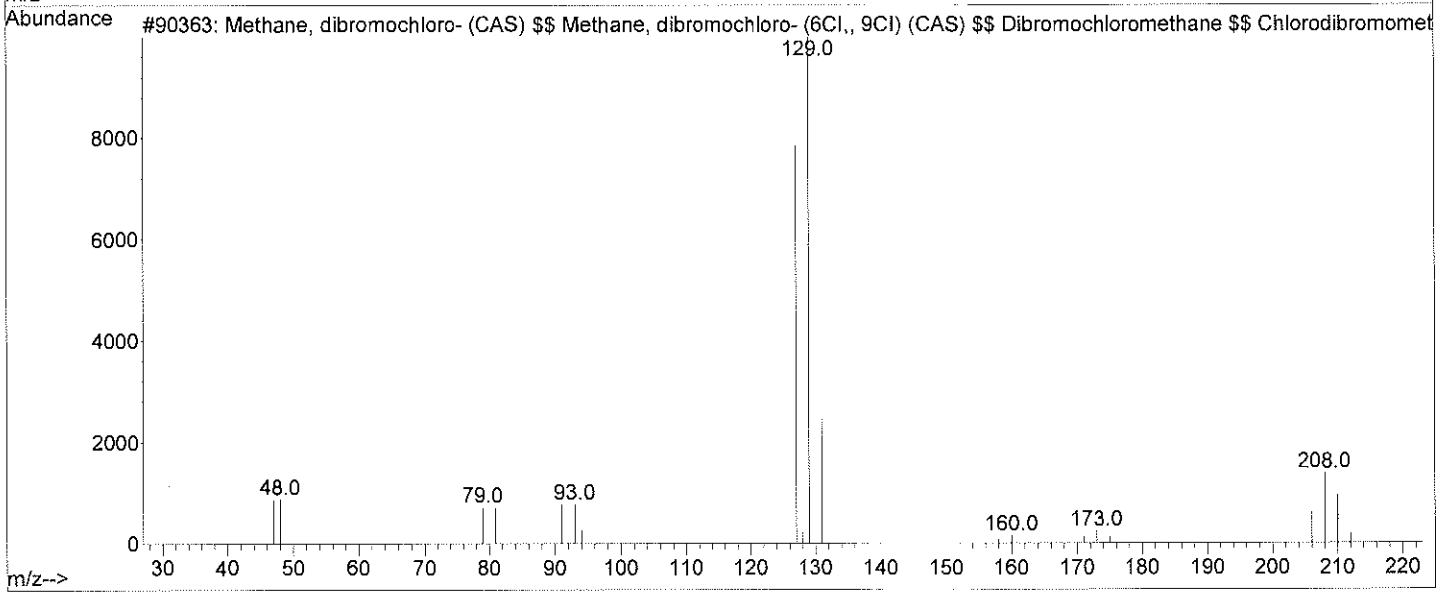
Library Searched : D:\MassHunter\Library\WILEY275.L
Quality : 97
ID : Methane, bromodichloro- (CAS) $$ Bromodichloromethane $$ Bromodichoromethane $$ Dichloro bromomethane $$ Bromodichloro-methane $$ CHBrCl2 $$ NCI-C55243 $$ Bdcm $$ Dichloromonobr omomethane $$ Monobromodichloromethane





Library Searched : D:\MassHunter\Library\WILEY275.L
Quality : 97
ID : Methane, dibromochloro- (CAS) $$ Methane, dibromochloro- (6CI,, 9CI) (CAS) $$ Dibromochloromethane $$ Chlorodibromomethane $$ Monochlorodibromomethane $$ Dibromomonochloromethane $$ CHClBr2 $$ Methane, chlorodibromo- $$ Cdbm $$ NCI-C55254





Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702308.D
Acq On : 14 Mar 2017 10:22 pm
Operator : SEDS
Sample : 2653487
Misc : RUN187023
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Mar 20 12:17:35 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.012	168	332070	20.00	µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.996	114	868200	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.782	117	2108163	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.536	152	2208600	20.00	µg/L	-0.01
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	6.029	111	266406	19.95	µg/L	0.03
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.75%			
39) STOLUENE-D8	9.199	98	1301435	21.13	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.65%			
59) S4BRFLUOROBENZENE	14.121	95	1522118	20.28	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 101.40%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.		
3) CHLOROMETHANE	2.194	50	650	N.D.		
4) VINYL CHLORIDE	2.297	62	26	N.D.		
5) BROMOMETHANE	2.593	94	71	N.D.		
6) CHLOROETHANE	2.713	64	1700	N.D.		
7) TRICLFLUOROMETHANE	0.000		0	N.D.		
8) ACROLEIN	3.482	56	59	N.D.		
9) ACETONE	0.000		0	N.D. d		
10) 11-DICHLOROETHENE	4.249	61	29	N.D.		
11) IODOMETHANE	3.653	142	35	N.D.		
12) CARBON DISULFIDE	3.703	76	18030	N.D.		
13) ACRYLONITRILE	0.000		0	N.D.		
14) DICHLOROMETHANE	4.010	84	2875	N.D.		
15) TRANS12DICLETHENE	4.247	96	25	N.D.		
16) 11-DICHLOROETHANE	3.839	63	27	N.D.		
17) VINYL ACETATE	4.762	43	28	N.D.		
18) 2-BUTANONE	5.507	43	755	N.D.		
19) CIS12DICHLOROETHENE	5.415	96	25	N.D.		
20) 22-DICHLOROPROPANE	0.000		0	N.D.		
21) CHLOROFORM	5.817	83	2030259	42.97	µg/L	97
22) BROMOCHLOROMETHANE	0.000		0	N.D. d		
25) TETRAHYDROFURAN	5.808	42	292	N.D.		
26) 111-TRICHLOROETHANE	0.000		0	N.D.		
27) 11-DICHLOROPROPENE	0.000		0	N.D. d		
28) 12-DICHLOROETHANE	6.461	62	61	N.D.		
29) CARBONTETRACHLORIDE	6.160	117	394	N.D.		
30) BENZENE	6.466	78	393	N.D.		
31) TRICHLOROETHENE	7.364	132	27	N.D.		
32) 12-DICHLOROPROPANE	0.000		0	N.D.		
33) DIBROMOMETHANE	0.000		0	N.D.		
34) BROMODICLMETHANE	8.159	83	564675	14.78	µg/L	97
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.		
36) EPICHLOROHYDRIN	0.000		0	N.D.		
37) 4METHYL-2-PENTANONE	9.107	43	76	N.D.		
38) CIS13DICLPROPENE	8.784	75	51	N.D.		

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702308.D
Acq On : 14 Mar 2017 10:22 pm
Operator : SEDS
Sample : 2653487
Misc : RUN187023
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Mar 20 12:17:35 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

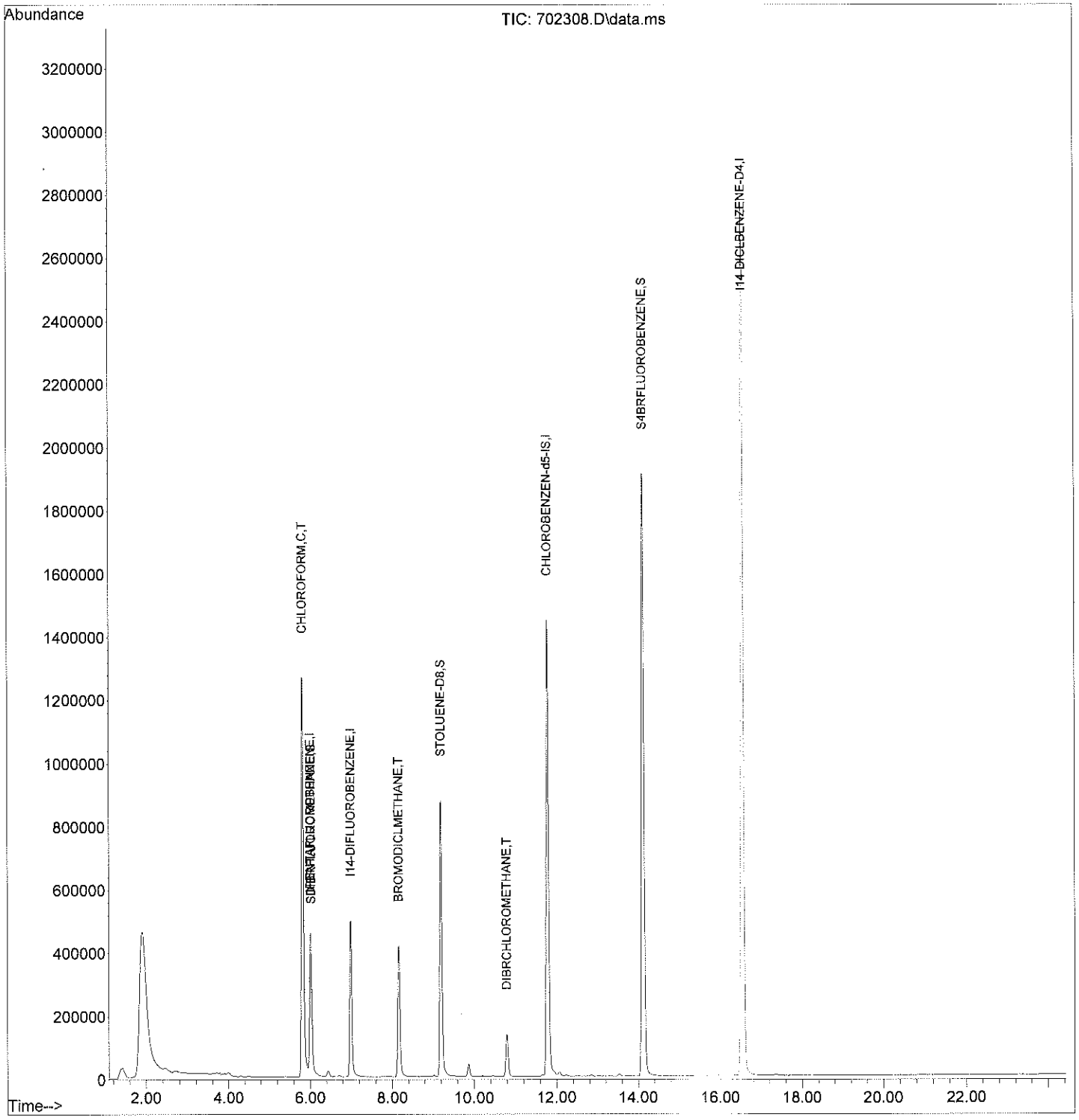
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.308	91	4503	N.D.	
41) TRANS13DICLPROPENE	9.863	75	2569	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	10.555	43	26	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	10.797	129	168267	4.56 µg/L	98
46) TETRACHLOROETHENE	10.239	166	34	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	11.835	112	76	N.D.	
50) 1-CHLOROHEXANE	11.759	91	3620	N.D.	
51) 1112-TETRACLETHANE	10.203	131	82	N.D.	
52) ETHYLBENZENE	12.019	91	623	N.D.	
53) MP-XYLENE	12.222	91	2674	N.D.	
54) STYRENE	13.078	104	30	N.D.	
55) O-XYLENE	13.025	91	1135	N.D.	
56) BROMOFORM	13.522	173	8363	N.D.	
57) 1122-TETRACLETHANE	0.000		0	N.D.	
58) ISOPROPYL BENZENE	13.742	105	785	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	14.403	77	41	N.D.	
63) N-PROPYLBENZENE	14.601	91	859	N.D.	
64) 2-CHLOROTOLUENE	14.785	91	373	N.D.	
65) 4-CHLOROTOLUENE	14.802	91	264	N.D.	
66) 135TRIMETHYLBENZENE	14.977	105	31	N.D.	
67) TERT-BUTYLBENZENE	15.647	119	621	N.D.	
68) 124TRIMETHYLBENZENE	15.753	105	363	N.D.	
69) SEC-BUTYLBENZENE	16.112	105	287	N.D.	
70) 13-DICHLOROBENZENE	16.394	146	337	N.D.	
72) 4-ISOPROPYLTOLUENE	16.427	119	1215	N.D.	
73) 14-DICHLOROBENZENE	16.603	146	1046	N.D.	
74) 12-DICHLOROBENZENE	17.395	146	1071	N.D.	
75) N-BUTYLBENZENE	17.317	91	2886	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	20.926	180	263	N.D.	
78) NAPHTHALENE	21.508	128	998	N.D.	
79) HEXACHLOROBUTADIENE	21.244	225	221	N.D.	
80) 123-TRICLBENZENE	20.909	182	307	N.D.	

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

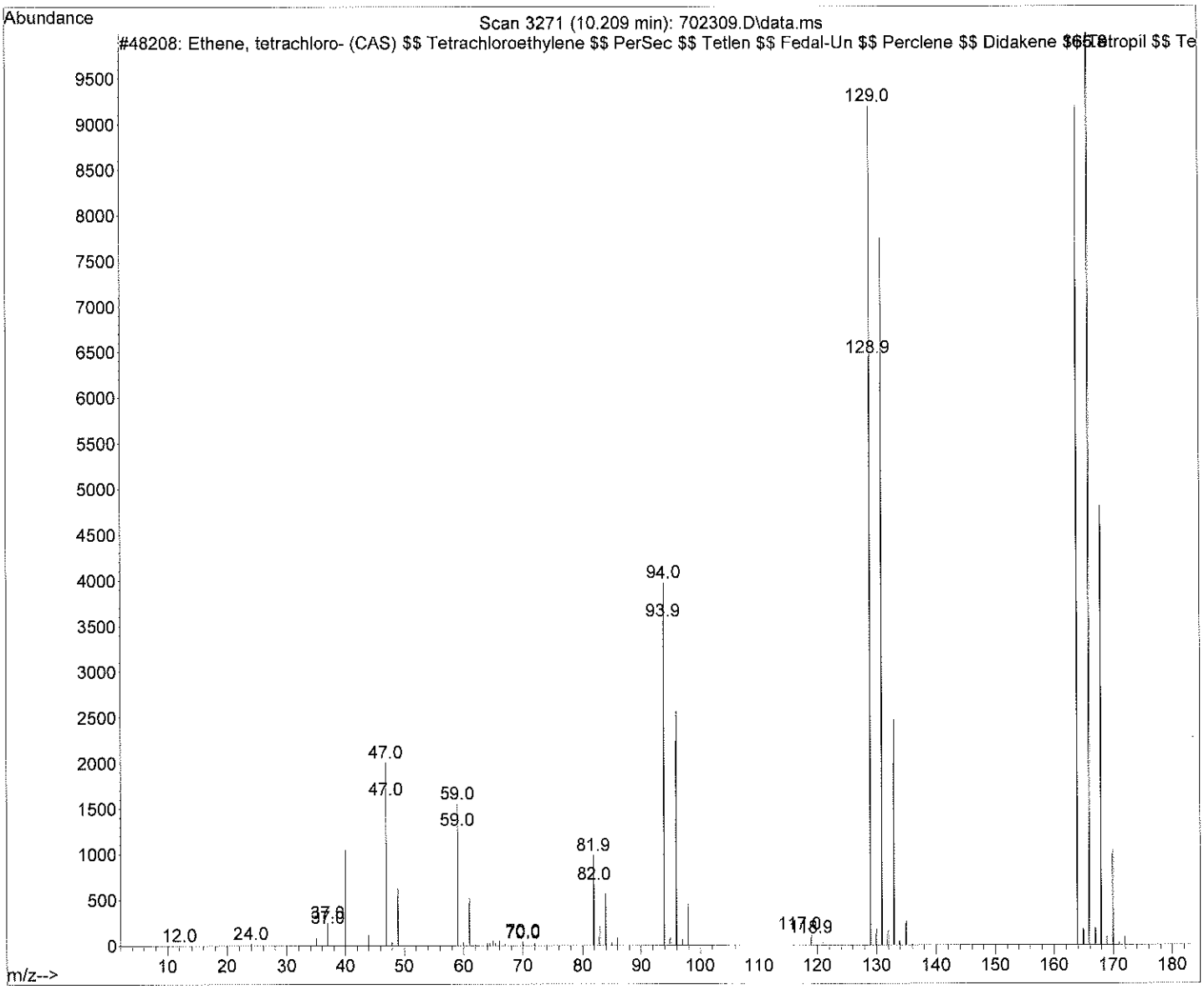
Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702308.D
Acq On : 14 Mar 2017 10:22 pm
Operator : SEDS
Sample : 2653487
Misc : RUN187023
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Mar 20 12:17:35 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



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



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702309.D
Acq On : 14 Mar 2017 10:51 pm
Operator : SEDS
Sample : 2656250
Misc : RUN187023
ALS Vial : 61 Sample Multiplier: 1

Quant Time: Mar 20 12:20:02 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.006	168	329510	20.00	µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.996	114	857796	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.784	117	2111636	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.539	152	2222538	20.00	µg/L	0.00
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	6.023	111	261322	19.81	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.05%			
39) STOLUENE-D8	9.199	98	1303563	21.42	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.10%			
59) S4BRFLUOROBENZENE	14.124	95	1558282	20.73	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 103.65%			

Target Compounds				Qvalue
2) DICLDIFLUOROMETHANE	2.585	85	56	N.D.
3) CHLOROMETHANE	2.197	50	678	N.D.
4) VINYL CHLORIDE	2.366	62	1613	N.D.
5) BROMOMETHANE	2.612	94	254	N.D.
6) CHLOROETHANE	2.794	64	2964	N.D.
7) TRICLFLUOROMETHANE	0.000		0	N.D. d
8) ACROLEIN	3.424	56	28	N.D.
9) ACETONE	0.000		0	N.D. d
10) 11-DICHLOROETHENE	4.258	61	176	N.D.
11) IODOMETHANE	3.658	142	27	N.D.
12) CARBON DISULFIDE	3.711	76	9013	N.D.
13) ACRYLONITRILE	0.000		0	N.D.
14) DICHLOROMETHANE	3.937	84	33	N.D.
15) TRANS12DICLETHENE	4.261	96	283	N.D.
16) 11-DICHLOROETHANE	0.000		0	N.D. d
17) VINYL ACETATE	4.760	43	27	N.D.
18) 2-BUTANONE	5.502	43	163	N.D.
19) CIS12DICHLOROETHENE	0.000		0	N.D. d
20) 22-DICHLOROPROPANE	0.000		0	N.D.
21) CHLOROFORM	0.000		0	N.D. d
22) BROMOCHLOROMETHANE	5.806	49	1630	N.D.
25) TETRAHYDROFURAN	5.800	42	34	N.D.
26) 111-TRICHLOROETHANE	6.062	97	92	N.D.
27) 11-DICHLOROPROPENE	0.000		0	N.D. d
28) 12-DICHLOROETHANE	6.439	62	496	N.D.
29) CARBONTETRACHLORIDE	6.162	117	5395	N.D.
30) BENZENE	6.466	78	337	N.D.
31) TRICHLOROETHENE	0.000		0	N.D. d
32) 12-DICHLOROPROPANE	7.490	63	28	N.D.
33) DIBROMOMETHANE	0.000		0	N.D.
34) BROMODICLMETHANE	8.195	83	140	N.D.
35) 2-CLETHYLVINYLETHER	8.736	63	26	N.D.
36) EPICHLOROHYDRIN	0.000		0	N.D.
37) 4METHYL-2-PENTANONE	9.135	43	26	N.D.
38) CIS13DICLPROPENE	0.000		0	N.D.

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702309.D
Acq On : 14 Mar 2017 10:51 pm
Operator : SEDS
Sample : 2656250
Misc : RUN187023
ALS Vial : 61 Sample Multiplier: 1

Quant Time: Mar 20 12:20:02 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

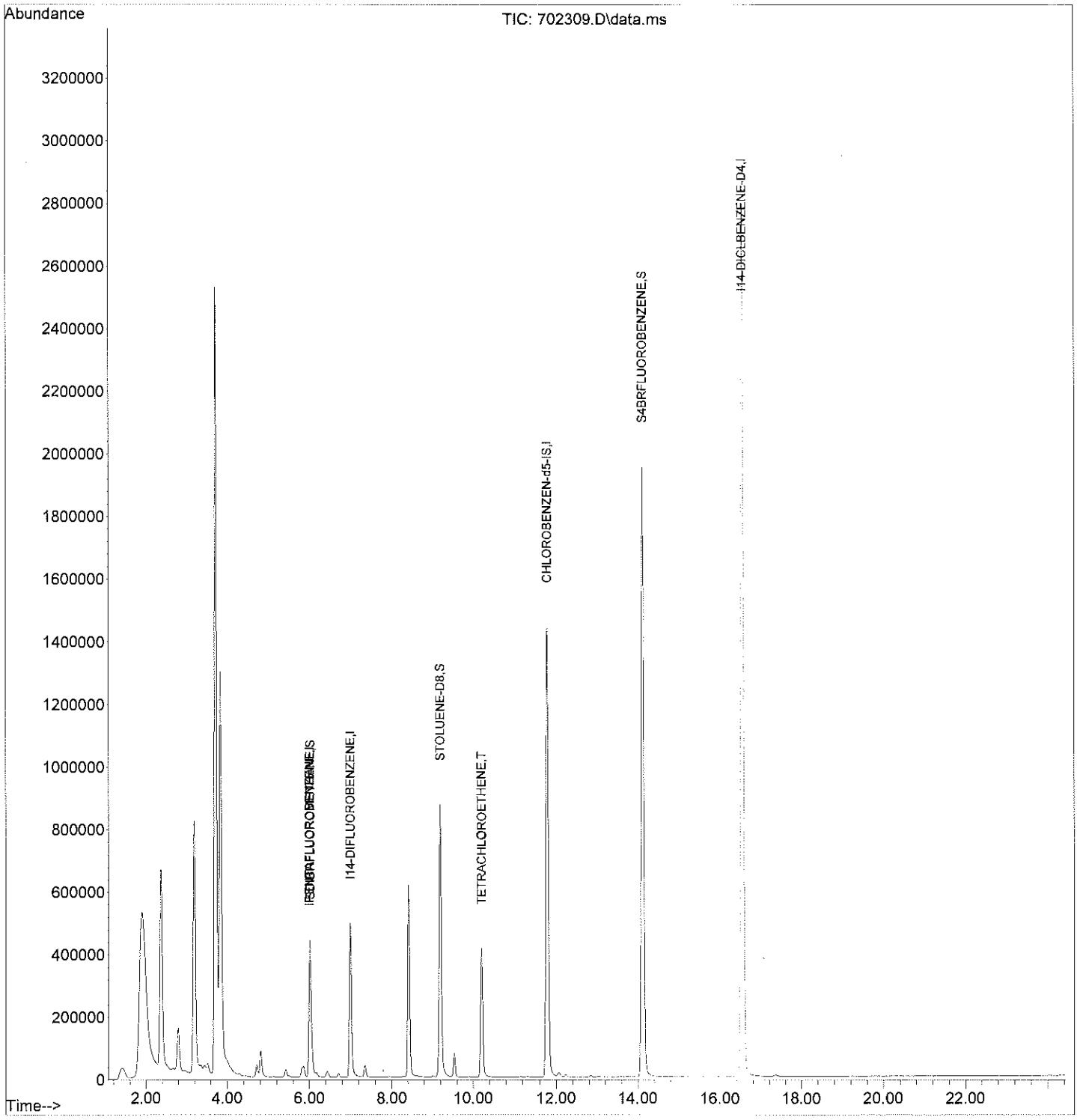
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40)	TOLUENE	9.305	91	5987	N.D.	
41)	TRANS13DICLPROPENE	0.000		0	N.D.	
42)	112-TRICHLOROETHANE	10.203	97	1462	N.D.	
43)	2-HEXANONE	0.000		0	N.D.	
44)	13-DICHLOROPROPANE	0.000		0	N.D.	
45)	DIBRCHLOROMETHANE	10.845	129	27	N.D.	
46)	TETRACHLOROETHENE	10.209	166	293837	8.42 µg/L	99
47)	12-DIBROMOETHANE	0.000		0	N.D.	
49)	CHLOROBENZENE	11.835	112	263	N.D.	
50)	1-CHLOROHEXANE	11.757	91	4518	N.D.	
51)	1112-TETRACLETHANE	0.000		0	N.D. d	
52)	ETHYLBENZENE	12.024	91	385	N.D.	
53)	MP-XYLENE	12.225	91	1455	N.D.	
54)	STYRENE	13.087	104	363	N.D.	
55)	O-XYLENE	13.023	91	1411	N.D.	
56)	BROMOFORM	13.513	173	62	N.D.	
57)	1122-TETRACLETHANE	0.000		0	N.D.	
58)	ISOPROPYL BENZENE	13.753	105	142	N.D.	
60)	123-TRICLPROPANE	0.000		0	N.D.	
61)	TRANS14DICL2BUTENE	0.000		0	N.D.	
62)	BROMOBENZENE	14.403	77	27	N.D.	
63)	N-PROPYLBENZENE	14.598	91	899	N.D.	
64)	2-CHLOROTOLUENE	14.802	91	284	N.D.	
65)	4-CHLOROTOLUENE	14.802	91	414	N.D.	
66)	135TRIMETHYLBENZENE	14.997	105	139	N.D.	
67)	TERT-BUTYLBENZENE	15.658	119	190	N.D.	
68)	124TRIMETHYLBENZENE	15.744	105	1353	N.D.	
69)	SEC-BUTYLBENZENE	16.101	105	1163	N.D.	
70)	13-DICHLOROBENZENE	16.400	146	589	N.D.	
72)	4-ISOPROPYLTOLUENE	16.428	119	1237	N.D.	
73)	14-DICHLOROBENZENE	16.570	146	552	N.D.	
74)	12-DICHLOROBENZENE	17.392	146	276	N.D.	
75)	N-BUTYLBENZENE	17.314	91	1197	N.D.	
76)	12-DIBR-3CLPROPANE	0.000		0	N.D.	
77)	124-TRICLBENZENE	20.929	180	415	N.D.	
78)	NAPHTHALENE	21.503	128	640	N.D.	
79)	HEXACHLOROBUTADIENE	21.260	225	257	N.D.	
80)	123-TRICLBENZENE	20.945	182	1228	N.D.	

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

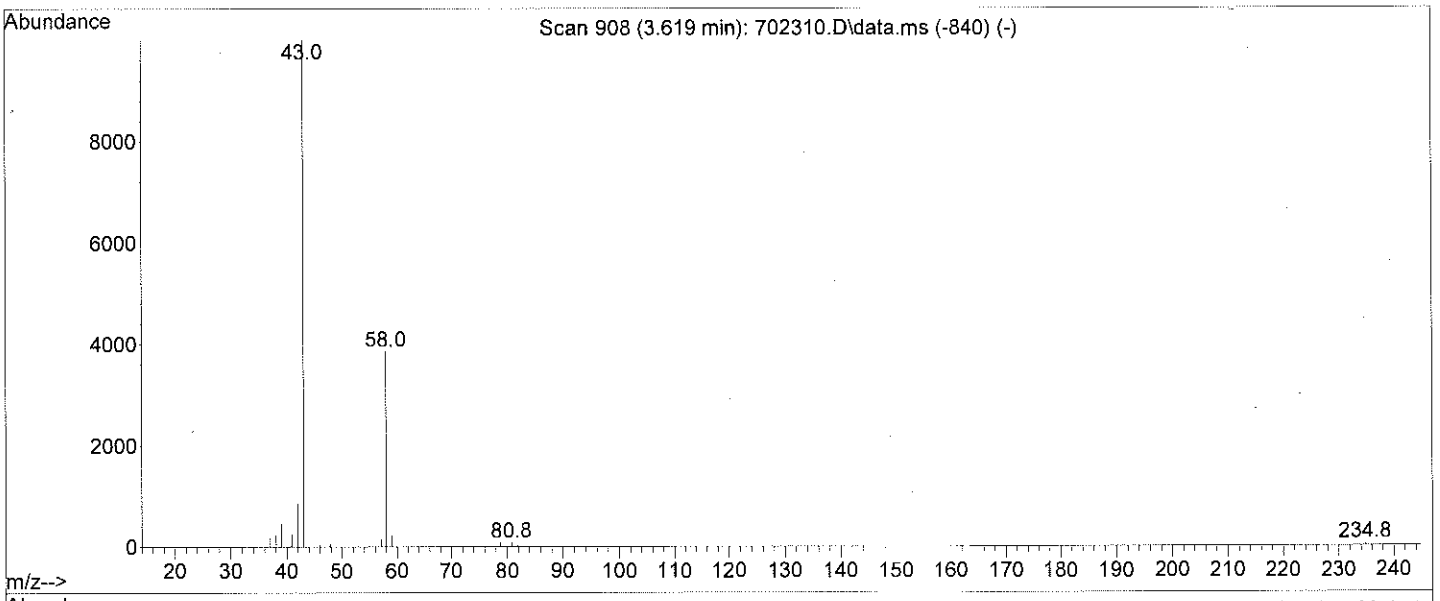
Quantitation Report (QT Reviewed)

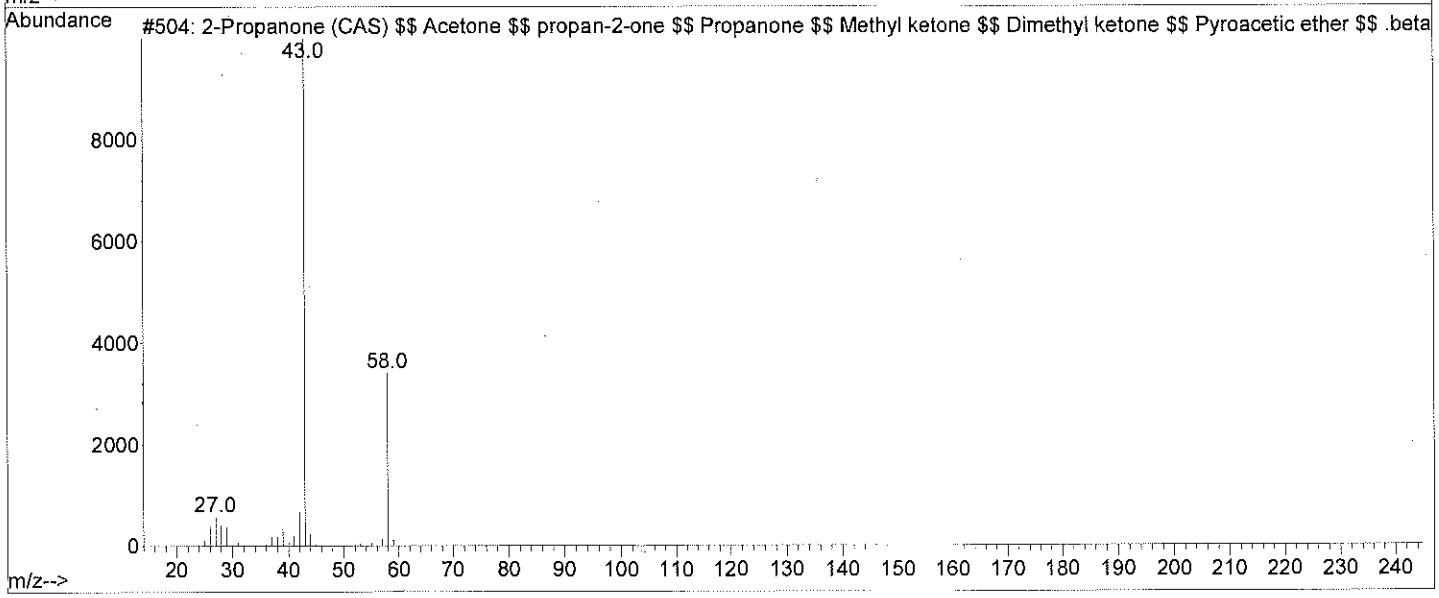
Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702309.D
Acq On : 14 Mar 2017 10:51 pm
Operator : SEDS
Sample : 2656250
Misc : RUN187023
ALS Vial : 61 Sample Multiplier: 1

Quant Time: Mar 20 12:20:02 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Library Searched : D:\MassHunter\Library\WILEY275.L
Quality : 80
ID : 2-Propanone (CAS) $$ Acetone $$ propan-2-one $$ Propanone $$ Methyl ketone $$ Dimethyl ketone $$ Pyroacetic ether $$ .beta.-Ketopropane $$ Dimethylformaldehyde $$ ACETONE (2-PROPANONE) $$ (CH3)2CO $$ Allylic alcohol $$ Dimethylketal $$ Ketone propane $$ K





Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702310.D
Acq On : 14 Mar 2017 11:19 pm
Operator : SEDS
Sample : 2656251
Misc : RUN187023
ALS Vial : 62 Sample Multiplier: 1

Quant Time: Mar 20 12:24:05 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	6.009	168	337164	20.00 µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.996	114	893521	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.784	117	2189114	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	16.539	152	2336282	20.00 µg/L	0.00
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	6.026	111	277068	20.16 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 100.80%		
39) STOLUENE-D8	9.199	98	1357601	21.42 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 107.10%		
59) S4BRFLUOROBENZENE	14.124	95	1629259	20.91 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 104.55%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	2.177	50	735	N.D.	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	2.601	94	93	N.D.	
6) CHLOROETHANE	2.716	64	972	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	3.480	56	199	N.D.	
9) ACETONE	3.619	43	100561	20.57 µg/L #	91
10) 11-DICHLOROETHENE	4.247	61	56	N.D.	
11) IODOMETHANE	3.661	142	53	N.D.	
12) CARBON DISULFIDE	3.711	76	14830	N.D.	
13) ACRYLONITRILE	4.230	53	55	N.D.	
14) DICHLOROMETHANE	4.004	84	7914	N.D.	
15) TRANS12DICLETHENE	4.258	96	26	N.D.	
16) 11-DICHLOROETHANE	3.853	63	176	N.D.	
17) VINYL ACETATE	4.768	43	90	N.D.	
18) 2-BUTANONE	0.000		0	N.D. d	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	5.407	77	31	N.D.	
21) CHLOROFORM	5.814	83	1274	N.D.	
22) BROMOCHLOROMETHANE	5.794	49	175	N.D.	
25) TETRAHYDROFURAN	5.501	42	294	N.D.	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D. d	
28) 12-DICHLOROETHANE	6.466	62	30	N.D.	
29) CARBONTETRACHLORIDE	6.148	117	55	N.D.	
30) BENZENE	6.464	78	401	N.D.	
31) TRICHLOROETHENE	7.348	132	56	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	8.159	83	27	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D.	
37) 4METHYL-2-PENTANONE	9.102	43	424	N.D.	
38) CIS13DICLPROPENE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702310.D
Acq On : 14 Mar 2017 11:19 pm
Operator : SEDS
Sample : 2656251
Misc : RUN187023
ALS Vial : 62 Sample Multiplier: 1

Quant Time: Mar 20 12:24:05 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

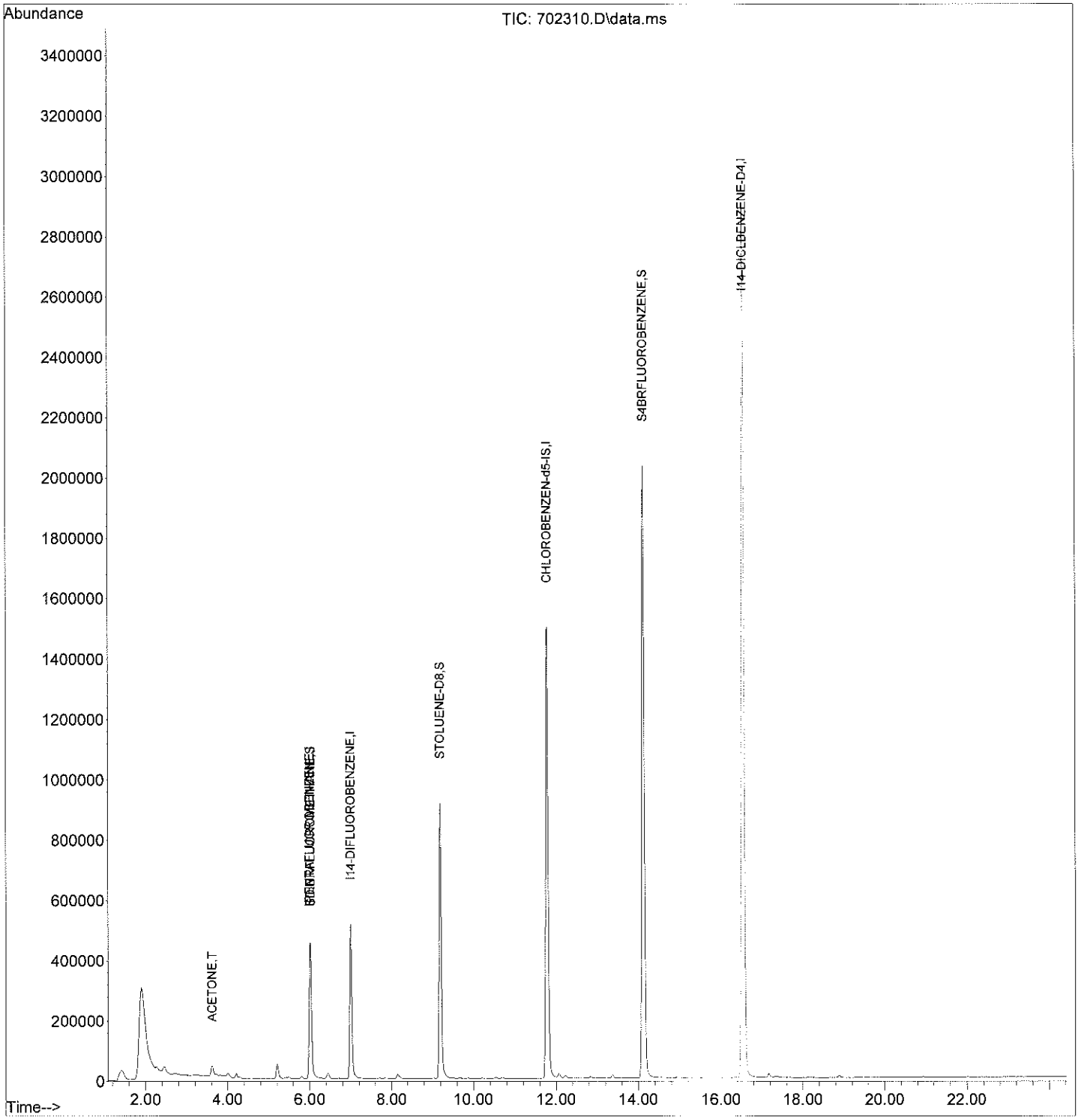
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.314	91	2369	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	10.608	43	73	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	0.000		0	N.D.	
46) TETRACHLOROETHENE	10.234	166	30	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	11.846	112	101	N.D.	
50) 1-CHLOROHEXANE	11.759	91	643	N.D.	
51) 1112-TETRACLETHANE	10.200	131	295	N.D.	
52) ETHYLBENZENE	12.013	91	569	N.D.	
53) MP-XYLENE	12.228	91	5074	N.D.	
54) STYRENE	13.087	104	207	N.D.	
55) O-XYLENE	13.009	91	3727	N.D.	
56) BROMOFORM	13.530	173	64	N.D.	
57) 1122-TETRACLETHANE	14.567	83	1188	N.D.	
58) ISOPROPYL BENZENE	13.748	105	176	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	14.397	77	30	N.D.	
63) N-PROPYLBENZENE	14.604	91	775	N.D.	
64) 2-CHLOROTOLUENE	14.802	91	297	N.D.	
65) 4-CHLOROTOLUENE	14.813	91	98	N.D.	
66) 135TRIMETHYLBENZENE	14.991	105	426	N.D.	
67) TERT-BUTYLBENZENE	15.652	119	155	N.D.	
68) 124TRIMETHYLBENZENE	15.744	105	692	N.D.	
69) SEC-BUTYLBENZENE	16.115	105	1053	N.D.	
70) 13-DICHLOROBENZENE	16.400	146	473	N.D.	
72) 4-ISOPROPYLTOLUENE	16.411	119	682	N.D.	
73) 14-DICHLOROBENZENE	16.592	146	863	N.D.	
74) 12-DICHLOROBENZENE	17.395	146	1114	N.D.	
75) N-BUTYLBENZENE	17.314	91	2046	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	20.937	180	448	N.D.	
78) NAPHTHALENE	21.506	128	776	N.D.	
79) HEXACHLOROBUTADIENE	21.266	225	503	N.D.	
80) 123-TRICLBENZENE	20.917	182	733	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702310.D
Acq On : 14 Mar 2017 11:19 pm
Operator : SEDS
Sample : 2656251
Misc : RUN187023
ALS Vial : 62 Sample Multiplier: 1

Quant Time: Mar 20 12:24:05 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702311.D
Acq On : 14 Mar 2017 11:48 pm
Operator : SEDS
Sample : 2656246DUP/2656247
Misc : RUN187023
ALS Vial : 63 Sample Multiplier: 1

Quant Time: Mar 20 12:25:12 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	6.006	168	316946	20.00 µg/L	# 0.03
23) I14-DIFLUOROBENZENE	6.999	114	844788	20.00 µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.779	117	2087687	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	16.536	152	2229694	20.00 µg/L	-0.01
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	6.023	111	257126	19.79 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.95%		
39) STOLUENE-D8	9.199	98	1171506	19.55 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.75%		
59) S4BRFLUOROBENZENE	14.121	95	1582193	21.29 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 106.45%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	0.000		0	N.D.	
3) CHLOROMETHANE	2.152	50	311	N.D.	
4) VINYL CHLORIDE	0.000		0	N.D.	
5) BROMOMETHANE	2.657	94	671	N.D.	
6) CHLOROETHANE	2.961	64	1041	N.D.	
7) TRICLFLUOROMETHANE	0.000		0	N.D.	
8) ACROLEIN	3.466	56	62	N.D.	
9) ACETONE	0.000		0	N.D. d	
10) 11-DICHLOROETHENE	0.000		0	N.D.	
11) IODOMETHANE	3.661	142	113	N.D.	
12) CARBON DISULFIDE	3.703	76	14698	N.D.	
13) ACRYLONITRILE	0.000		0	N.D.	
14) DICHLOROMETHANE	4.015	84	4111	N.D.	
15) TRANS12DICLETHENE	4.266	96	55	N.D.	
16) 11-DICHLOROETHANE	4.818	63	2954	N.D.	
17) VINYL ACETATE	4.763	43	31	N.D.	
18) 2-BUTANONE	0.000		0	N.D. d	
19) CIS12DICHLOROETHENE	0.000		0	N.D.	
20) 22-DICHLOROPROPANE	0.000		0	N.D.	
21) CHLOROFORM	5.803	83	834	N.D.	
22) BROMOCHLOROMETHANE	5.808	49	409	N.D.	
25) TETRAHYDROFURAN	0.000		0	N.D. d	
26) 111-TRICHLOROETHANE	0.000		0	N.D.	
27) 11-DICHLOROPROPENE	0.000		0	N.D. d	
28) 12-DICHLOROETHANE	6.458	62	30	N.D.	
29) CARBONTETRACHLORIDE	6.162	117	258	N.D.	
30) BENZENE	6.475	78	374	N.D.	
31) TRICHLOROETHENE	7.364	132	36	N.D.	
32) 12-DICHLOROPROPANE	0.000		0	N.D.	
33) DIBROMOMETHANE	0.000		0	N.D.	
34) BROMODICLMETHANE	8.1S6	83	11708	N.D.	
35) 2-CLETHYLVINYLETHER	0.000		0	N.D.	
36) EPICHLOROHYDRIN	0.000		0	N.D.	
37) 4METHYL-2-PENTANONE	9.135	43	27	N.D.	
38) CI513DICLPROPENE	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702311.D
Acq On : 14 Mar 2017 11:48 pm
Operator : SEDS
Sample : 2656246DUP/2656247
Misc : RUN187023
ALS Vial : 63 Sample Multiplier: 1

Quant Time: Mar 20 12:25:12 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

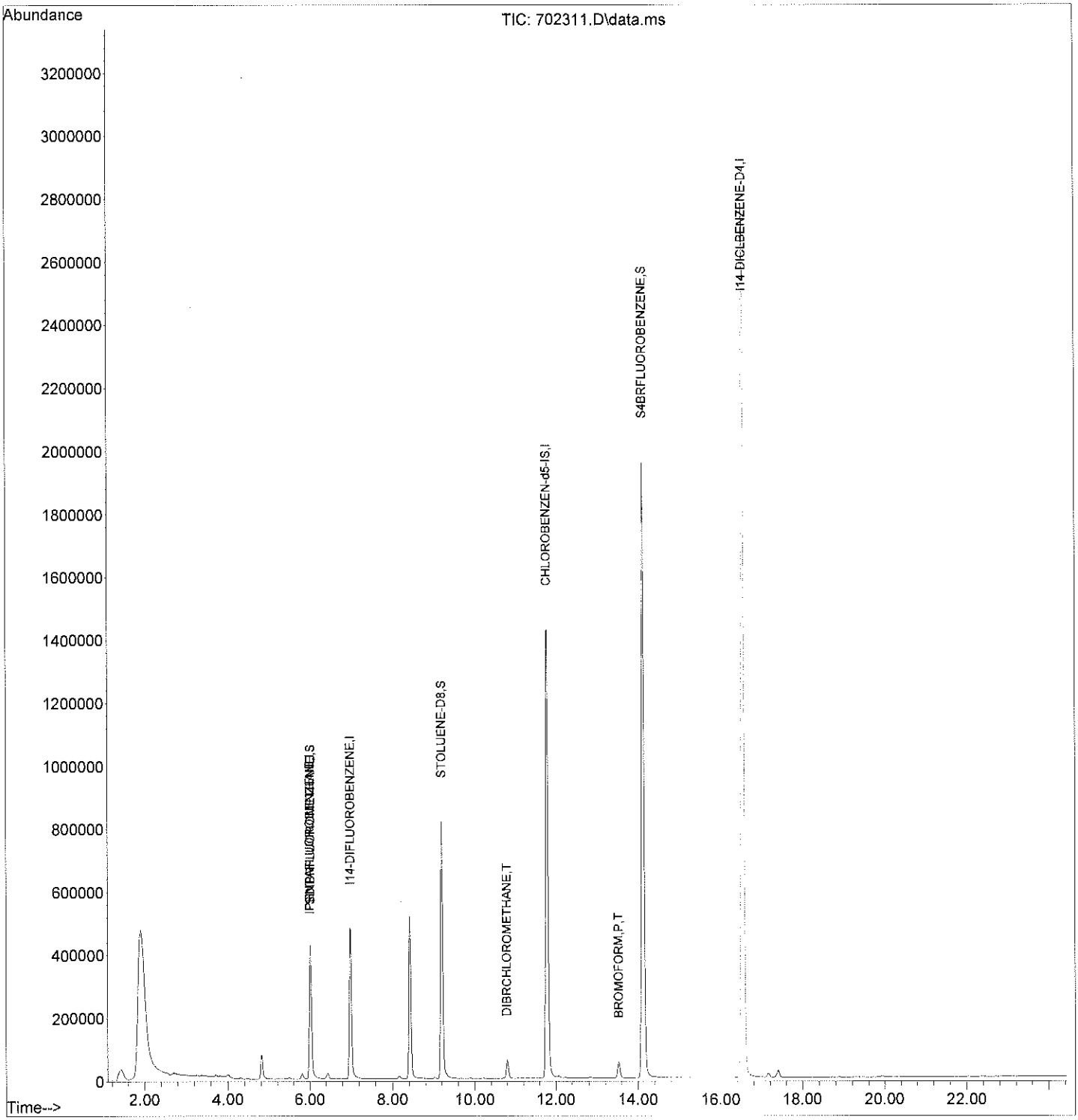
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.322	91	1358	N.D.	
41) TRANS13DICLPROPENE	0.000		0	N.D.	
42) 112-TRICHLOROETHANE	0.000		0	N.D.	
43) 2-HEXANONE	10.683	43	44	N.D.	
44) 13-DICHLOROPROPANE	0.000		0	N.D.	
45) DIBRCHLOROMETHANE	10.792	129	72526	2.02 µg/L	99
46) TETRACHLOROETHENE	10.234	166	33	N.D.	
47) 12-DIBROMOETHANE	0.000		0	N.D.	
49) CHLOROBENZENE	11.837	112	409	N.D.	
50) 1-CHLOROHEXANE	11.768	91	4829	N.D.	
51) 1112-TETRACLETHANE	10.203	131	76	N.D.	
52) ETHYLBENZENE	12.005	91	450	N.D.	
53) MP-XYLENE	12.228	91	1109	N.D.	
54) STYRENE	0.000		0	N.D.	
55) O-XYLENE	13.020	91	517	N.D.	
56) BROMOFORM	13.530	173	60579	1.44 µg/L	96
57) 1122-TETRACLETHANE	0.000		0	N.D.	
S8) ISOPROPYL BENZENE	13.742	105	23S	N.D.	
60) 123-TRICLPROPANE	0.000		0	N.D.	
61) TRANS14DICL2BUTENE	0.000		0	N.D.	
62) BROMOBENZENE	14.406	77	196	N.D.	
63) N-PROPYLBENZENE	14.604	91	724	N.D.	
64) 2-CHLOROTOLUENE	14.785	91	199	N.D.	
65) 4-CHLOROTOLUENE	14.802	91	305	N.D.	
66) 135TRIMETHYLBENZENE	0.000		0	N.D.	
67) TERT-BUTYLBENZENE	15.644	119	105	N.D.	
68) 124TRIMETHYLBENZENE	15.742	105	31	N.D.	
69) SEC-BUTYLBENZENE	16.110	105	618	N.D.	
70) 13-DICHLOROBENZENE	16.397	146	232	N.D.	
72) 4-ISOPROPYLTOLUENE	16.439	119	299	N.D.	
73) 14-DICHLOROBENZENE	16.592	146	1068	N.D.	
74) 12-DICHLOROBENZENE	17.401	146	S95	N.D.	
7S) N-BUTYLBENZENE	17.317	91	1428	N.D.	
76) 12-DIBR-3CLPROPANE	0.000		0	N.D.	
77) 124-TRICLBENZENE	20.928	180	751	N.D.	
78) NAPHTHALENE	21.483	128	268	N.D.	
79) HEXACHLOROBUTADIENE	21.255	225	104	N.D.	
80) 123-TRICLBENZENE	20.917	182	483	N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702311.D
Acq On : 14 Mar 2017 11:48 pm
Operator : SEDS
Sample : 26S6246DUP/26S6247
Misc : RUN187023
ALS Vial : 63 Sample Multiplier: 1

Quant Time: Mar 20 12:25:12 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702312.D
Acq On : 15 Mar 2017 12:17 am
Operator : SEDS
Sample : 2656246MS/2656248
Misc : RUN187023
ALS Vial : 64 Sample Multiplier: 1

Quant Time: Mar 20 12:33:36 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IPENTAFLUOROBENZENE	6.006	168	317783	20.00	µg/L	0.03
23) I14-DIFLUOROBENZENE	6.994	114	848379	20.00	µg/L	0.03
48) CHLOROBENZEN-d5-IS	11.785	117	2264757	20.00	µg/L	0.00
71) I14-DICLBENZENE-D4	16.539	152	2206652	20.00	µg/L	0.00
System Monitoring Compounds						
24) SDIBRFLUOROMETHANE	6.026	111	259689	19.90	µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.50%			
39) STOLUENE-D8	9.197	98	1321835	21.96	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 109.80%			
59) S4BRFLUOROBENZENE	14.124	95	1573213	19.51	µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 97.55%			
Target Compounds						Qvalue
2) DICLDIFLUOROMETHANE	2.019	85	860477m	28.66	µg/L	
3) CHLOROMETHANE	2.231	50	1093804	42.87	µg/L #	59
4) VINYL CHLORIDE	2.314	62	101928m	3.87	µg/L	
5) BROMOMETHANE	2.638	94	268282m	26.83	µg/L	
6) CHLOROETHANE	2.732	64	309303m	27.00	µg/L	
7) TRICLFLUOROMETHANE	2.958	101	1194383	29.50	µg/L	99
8) ACROLEIN	3.444	56	154833m	42.71	µg/L	
9) ACETONE	3.616	43	674334	146.34	µg/L	94
10) 11-DICHLOROETHENE	4.255	61	717071	28.03	µg/L	93
11) IODOMETHANE	3.681	142	39892	0.99	µg/L #	63
12) CARBON DISULFIDE	3.706	76	7264319	146.00	µg/L #	90
13) ACRYLONITRILE	4.330	53	801309	129.22	µg/L #	99
14) DICHLOROMETHANE	4.010	84	624024	25.24	µg/L	98
15) TRANS12DICLETHENE	4.258	96	639928	28.63	µg/L	94
16) 11-DICHLOROETHANE	4.743	63	981984	27.94	µg/L	98
17) VINYL ACETATE	5.482	43	1387456m	36.44	µg/L	
18) 2-BUTANONE	5.482	43	1203255	128.54	µg/L	97
19) CI512DICHLOROETHENE	5.421	96	796397	28.39	µg/L	95
20) 22-DICHLOROPROPANE	5.379	77	708928	26.08	µg/L #	91
21) CHLOROFORM	5.814	83	1285728	28.43	µg/L	98
22) BROMOCHLOROMETHANE	5.728	49	527714	34.94	µg/L	86
25) TETRAHYDROFURAN	5.800	42	132641	28.13	µg/L #	1
26) 111-TRICHLOROETHANE	5.984	97	1083103	27.88	µg/L	98
27) 11-DICHLOROPROPENE	6.179	75	134078	4.28	µg/L	98
28) 12-DICHLOROETHANE	6.564	62	896505	26.76	µg/L	98
29) CARBONTETRACHLORIDE	6.168	117	1041654	25.69	µg/L	98
30) BENZENE	6.472	78	2562466	27.75	µg/L	92
31) TRICHLOROETHENE	7.348	132	853180	28.33	µg/L	99
32) 12-DICHLOROPROPANE	7.719	63	598119	26.25	µg/L	99
33) DIBROMOMETHANE	7.928	174	696384	24.20	µg/L	99
34) BROMODICLMETHANE	8.156	83	1030007	27.58	µg/L	98
35) 2-CLETHYLVINYLETHER	8.767	63	34497m	3.90	µg/L	
36) EPICHLOROHYDRIN	8.764	57	671602	344.25	µg/L	94
37) 4METHYL-2-PENTANONE	9.088	43	2592452	127.89	µg/L #	88
38) CI513DICLPROPENE	8.829	75	634090	15.93	µg/L	90

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702312.D
Acq On : 1S Mar 2017 12:17 am
Operator : SEDS
Sample : 2656246MS/2656248
Misc : RUN187023
ALS Vial : 64 Sample Multiplier: 1

Quant Time: Mar 20 12:33:36 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

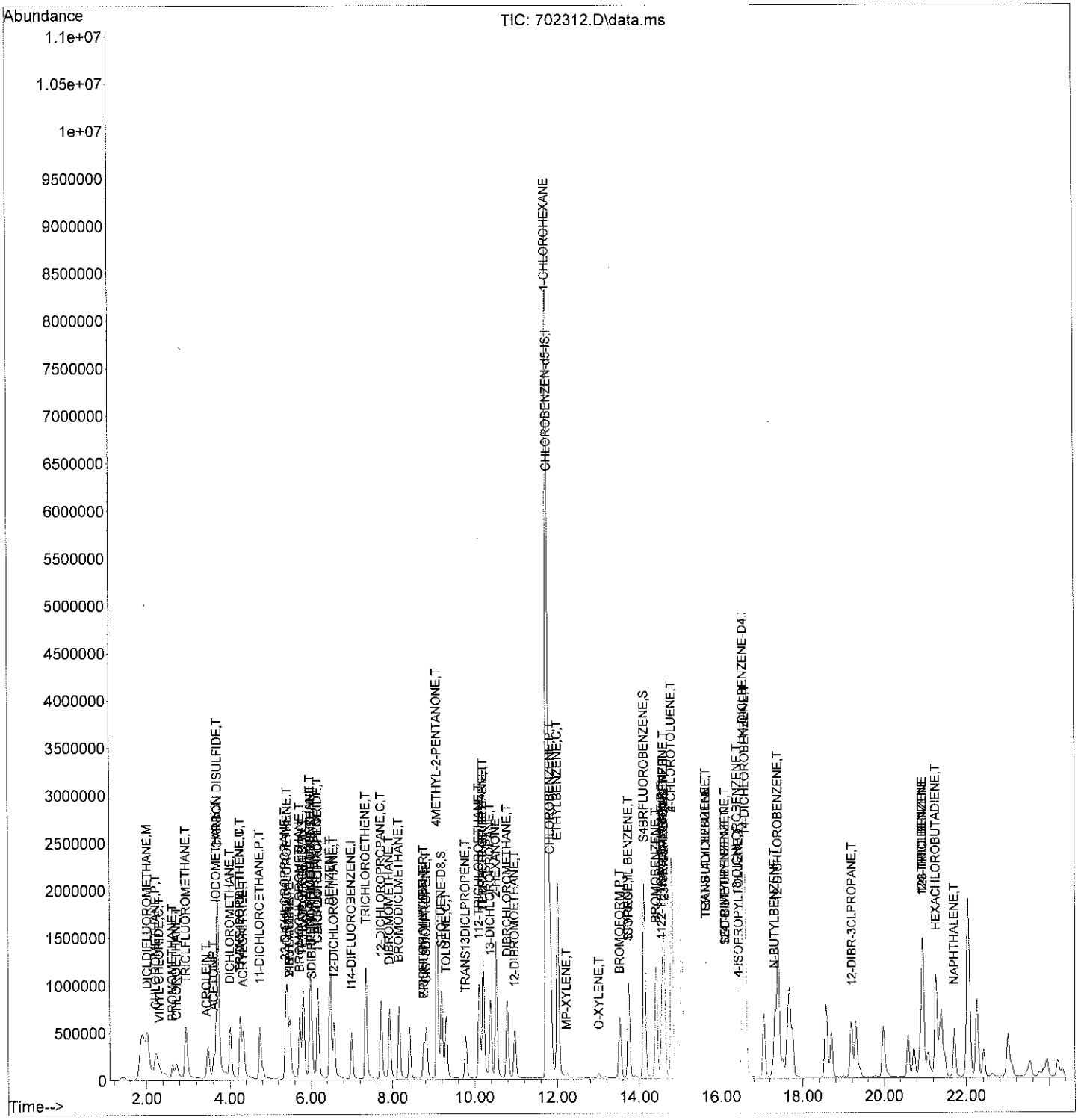
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.308	91	1027567	9.29 µg/L	88
41) TRANS13DICLPROPENE	9.779	75	544578	15.97 µg/L	96
42) 112-TRICHLOROETHANE	10.106	97	731333	27.13 µg/L	98
43) 2-HEXANONE	10.527	43	1761194	123.61 µg/L	94
44) 13-DICHLOROPROPANE	10.385	76	1179661	26.63 µg/L	96
45) DIBRCHLOROMETHANE	10.797	129	1029251	28.52 µg/L	99
46) TETRACHLOROETHENE	10.206	166	945194	27.38 µg/L	98
47) 12-DIBROMOETHANE	10.987	107	788947	26.99 µg/L	100
49) CHLOROBENZENE	11.835	112	2182034	18.48 µg/L	96
50) 1-CHLOROHEXANE	11.757	91	7116269	19.27 µg/L	98
51) 1112-TETRACLETHANE	10.209	131	603658	18.48 µg/L	99
52) ETHYLBENZENE	12.008	91	1399404	7.49 µg/L	90
53) MP-XYLENE	12.228	91	91286m	0.63 µg/L	
54) STYRENE	13.739	104	58359m	0.43 µg/L	
55) O-XYLENE	13.020	91	69674	0.44 µg/L	91
56) BROMOFORM	13.530	173	770662	16.94 µg/L	98
57) 1122-TETRACLETHANE	14.548	83	924344	15.64 µg/L	99
58) ISOPROPYL BENZENE	13.742	105	1647480	8.37 µg/L	89
60) 123-TRICLPROPANE	14.609	110	321330	16.13 µg/L	95
61) TRANS14DICL2BUTENE	15.636	53	51575m	4.74 µg/L	
62) BROMOBENZENE	14.409	77	1204991	16.63 µg/L	99
63) N-PROPYLBENZENE	14.590	91	141SS36	6.25 µg/L	90
64) 2-CHLOROTOLUENE	14.794	91	3307861	25.45 µg/L	97
65) 4-CHLOROTOLUENE	14.794	91	3307861	25.43 µg/L	95
66) 135TRIMETHYLBENZENE	14.595	105	85231m	0.49 µg/L	
67) TERT-BUTYLBENZENE	15.633	119	2070952m	13.64 µg/L	
68) 124TRIMETHYLBENZENE	16.104	105	2232456m	13.16 µg/L	
69) SEC-BUTYLBENZENE	16.104	105	1605744	7.76 µg/L	88
70) 13-DICHLOROBENZENE	16.389	146	1727104	16.10 µg/L	95
72) 4-ISOPROPYLTOLUENE	16.428	119	91238	0.51 µg/L	88
73) 14-DICHLOROBENZENE	16.589	146	1778606	16.90 µg/L	94
74) 12-DICHLOROBENZENE	17.401	146	1738893	16.80 µg/L	95
75) N-BUTYLBENZENE	17.317	91	1024187	6.58 µg/L	85
76) 12-DIBR-3CLPROPANE	19.202	157	274311	20.38 µg/L	97
77) 124-TRICLBENZENE	20.934	180	1424552	17.36 µg/L	93
78) NAPHTHALENE	21.704	128	113307m	0.70 µg/L	
79) HEXACHLOROBUTADIENE	21.258	225	670677	19.78 µg/L	99
80) 123-TRICLBENZENE	20.940	182	1356684	17.22 µg/L	99

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702312.D
Acq On : 15 Mar 2017 12:17 am
Operator : SEDS
Sample : 2656246MS/2656248
Misc : RUN187023
ALS Vial : 64 Sample Multiplier: 1

Quant Time: Mar 20 12:33:36 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702313.D
Acq On : 15 Mar 2017 12:46 am
Operator : SEDS
Sample : 2656246MSD/2656249
Misc : RUN187023
ALS Vial : 65 Sample Multiplier: 1

Quant Time: Mar 20 12:37:11 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IPENTAFLUOROBENZENE	6.006	168	348186	20.00	µg/L	#	0.03
23) I14-DIFLUOROBENZENE	6.996	114	934494	20.00	µg/L		0.03
48) CHLOROBENZEN-d5-IS	11.782	117	2516403	20.00	µg/L		0.00
71) I14-DICLBENZENE-D4	16.542	152	2647658	20.00	µg/L		0.00
System Monitoring Compounds							
24) SDIBRFLUOROMETHANE	6.026	111	282959	19.69	µg/L		0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 98.45%				
39) STOLUENE-D8	9.197	98	1465831	22.11	µg/L		0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 110.55%				
59) S4BRFLUOROBENZENE	14.122	95	1882794	21.02	µg/L		0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.10%				
Target Compounds							Qvalue
2) DICLDIFLUOROMETHANE	2.019	85	795766	24.19	µg/L		100
3) CHLOROMETHANE	2.239	50	1129076m	40.39	µg/L		
4) VINYL CHLORIDE	2.320	62	96274m	3.34	µg/L		
5) BROMOMETHANE	2.632	94	255939	23.36	µg/L	#	98
6) CHLOROETHANE	2.727	64	290811	23.17	µg/L		95
7) TRICLFLUOROMETHANE	2.956	101	1094966	24.69	µg/L	#	98
8) ACROLEIN	3.446	56	180564m	45.46	µg/L		
9) ACETONE	3.614	43	770825	152.68	µg/L		94
10) 11-DICHLOROETHENE	4.252	61	840160	29.97	µg/L		95
11) IODOMETHANE	3.686	142	43640m	0.99	µg/L		
12) CARBON DISULFIDE	3.700	76	8278736	151.86	µg/L	#	90
13) ACRYLONITRILE	4.328	53	938068	138.07	µg/L		99
14) DICHLOROMETHANE	4.007	84	706432	26.08	µg/L		98
15) TRANS12DICLETHENE	4.255	96	736448	30.07	µg/L		96
16) 11-DICHLOROETHANE	4.743	63	1153205	29.94	µg/L		98
17) VINYL ACETATE	5.479	43	1605136m	38.48	µg/L		
18) 2-BUTANONE	5.479	43	1394599	135.97	µg/L		97
19) CIS12DICHLOROETHENE	5.415	96	920353	29.95	µg/L		95
20) 22-DICHLOROPROPANE	5.379	77	816197	27.41	µg/L	#	88
21) CHLOROFORM	5.811	83	1484418	29.96	µg/L		98
22) BROMOCHLOROMETHANE	5.722	49	612775	37.03	µg/L		87
25) TETRAHYDROFURAN	5.800	42	150271	28.93	µg/L	#	1
26) 111-TRICHLOROETHANE	5.981	97	1254372	29.31	µg/L		97
27) 11-DICHLOROPROPENE	6.179	75	171215m	4.96	µg/L		
28) 12-DICHLOROETHANE	6.561	62	1042994	28.26	µg/L		99
29) CARBONTETRACHLORIDE	6.165	117	1202284	26.91	µg/L		98
30) BENZENE	6.469	78	2957223	29.07	µg/L		92
31) TRICHLOROETHENE	7.342	132	985241	29.70	µg/L		99
32) 12-DICHLOROPROPANE	7.716	63	686889	27.37	µg/L		99
33) DIBROMOMETHANE	7.925	174	810727	25.58	µg/L		99
34) BROMODICLMETHANE	8.154	83	1191764	28.97	µg/L		97
35) 2-CLETHYLVINYLETHER	8.764	63	44182m	4.53	µg/L		
36) EPICHLOROHYDRIN	8.762	57	850182	395.63	µg/L		94
37) 4METHYL-2-PENTANONE	9.088	43	2965903	132.83	µg/L	#	89
38) CIS13DICLPROPENE	8.829	75	852351	19.44	µg/L		91

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702313.D
Acq On : 15 Mar 2017 12:46 am
Operator : SEDS
Sample : 26S6246MSD/2656249
Misc : RUN187023
ALS Vial : 65 Sample Multiplier: 1

Quant Time: Mar 20 12:37:11 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

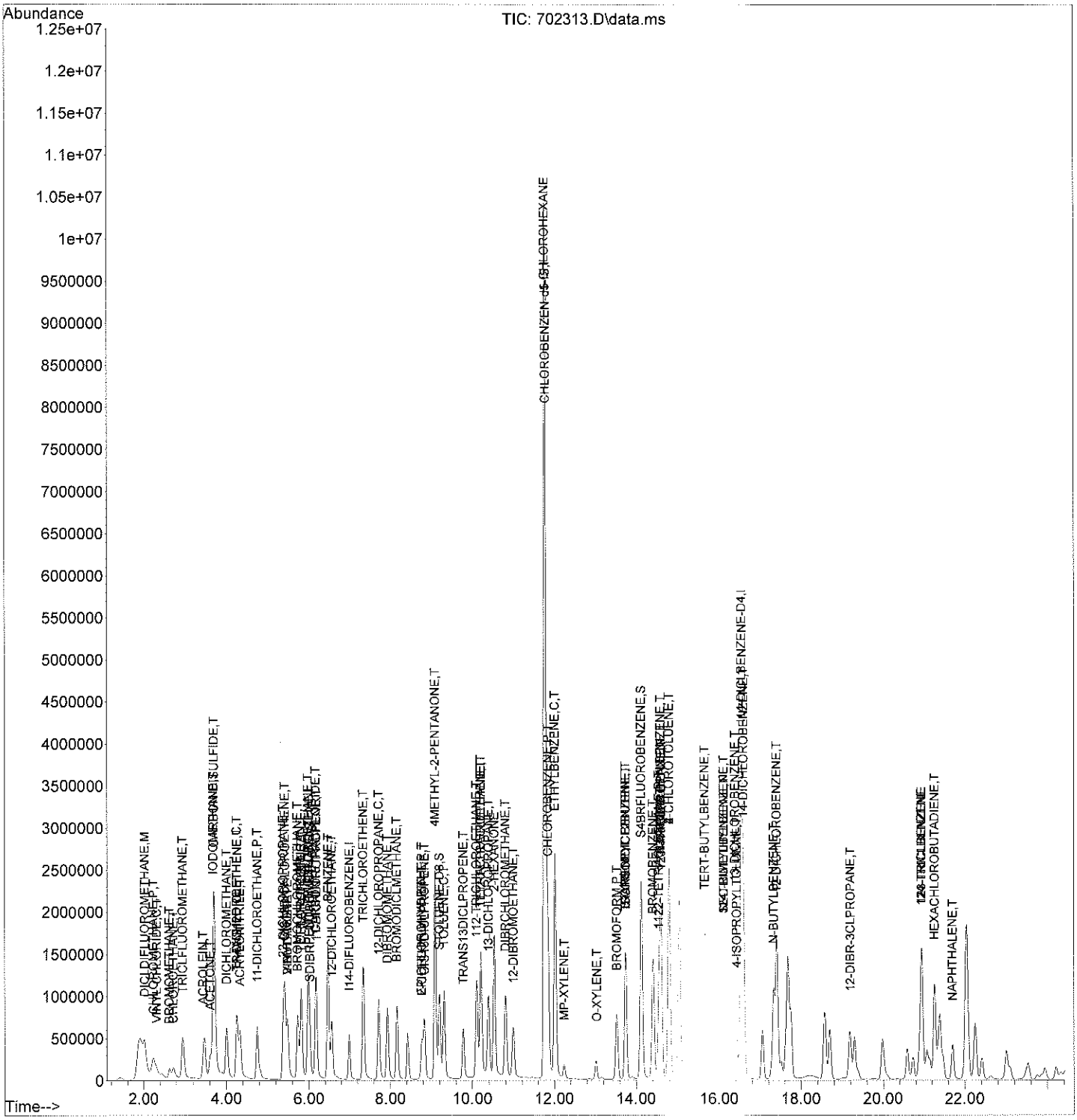
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.305	91	1040338m	8.54 µg/L	
41) TRANS13DICLPROPENE	9.780	75	695682m	18.52 µg/L	
42) 112-TRICHLOROETHANE	10.100	97	849854	28.62 µg/L	99
43) 2-HEXANONE	10.527	43	2040166	129.99 µg/L	94
44) 13-DICHLOROPROPANE	10.387	76	1371895	28.11 µg/L	96
45) DIBRCHLOROMETHANE	10.795	129	1191500	29.97 µg/L	99
46) TETRACHLOROETHENE	10.206	166	1081553	28.44 µg/L	98
47) 12-DIBROMOETHANE	10.984	107	917550	28.50 µg/L	100
49) CHLOROBENZENE	11.838	112	2507600	19.11 µg/L	96
50) 1-CHLOROHEXANE	11.759	91	8082003	19.69 µg/L	98
51) 1112-TETRACLETHANE	10.206	131	684362	18.86 µg/L	99
52) ETHYLBENZENE	12.008	91	1561311m	7.52 µg/L	
53) MP-XYLENE	12.236	91	117051m	0.73 µg/L	
54) STYRENE	13.739	104	63320m	0.42 µg/L	
55) O-XYLENE	13.037	91	74803m	0.42 µg/L	
56) BROMOFORM	13.S30	173	963S21	19.07 µg/L	99
57) 1122-TETRACLETHANE	14.548	83	1140102	17.37 µg/L	99
58) ISOPROPYL BENZENE	13.745	105	2146009m	9.81 µg/L	
60) 123-TRICLPROPANE	14.607	110	400013	18.07 µg/L	95
61) TRANS14DICL2BUTENE	13.748	53	72905m	6.04 µg/L	
62) BROMOBENZENE	14.406	77	1483915	18.44 µg/L	99
63) N-PROPYLBENZENE	14.596	91	2326332	9.24 µg/L	90
64) 2-CHLOROTOLUENE	14.794	91	3625376	25.10 µg/L	96
65) 4-CHLOROTOLUENE	14.794	91	3625376	25.08 µg/L	95
66) 135TRIMETHYLBENZENE	14.593	105	143528m	0.75 µg/L	
67) TERT-BUTYLBENZENE	15.639	119	2263718	13.42 µg/L	90
68) 124TRIMETHYLBENZENE	16.107	105	2565487m	13.62 µg/L	
69) SEC-BUTYLBENZENE	16.107	105	2458925	10.69 µg/L	88
70) 13-DICHLOROBENZENE	16.386	146	2120412	17.79 µg/L	95
72) 4-ISOPROPYLTOLUENE	16.431	119	361218	1.67 µg/L	90
73) 14-DICHLOROBENZENE	16.S89	146	2175849	17.23 µg/L	94
74) 12-DICHLOROBENZENE	17.398	146	2072158	16.69 µg/L	96
75) N-BUTYLBENZENE	17.326	91	1564360	8.37 µg/L	89
76) 12-DIBR-3CLPROPANE	19.200	157	303847	18.81 µg/L	98
77) 124-TRICLBENZENE	20.934	180	1535036	15.59 µg/L	96
78) NAPHTHALENE	21.701	128	105493m	0.54 µg/L	
79) HEXACHLOROBUTADIENE	21.261	225	6966S5	17.12 µg/L	97
80) 123-TRICLBENZENE	20.937	182	1469391	15.55 µg/L	99

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702313.D
Acq On : 15 Mar 2017 12:46 am
Operator : SEDS
Sample : 2656246MSD/2656249
Misc : RUN187023
ALS Vial : 65 Sample Multiplier: 1

Quant Time: Mar 20 12:37:11 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702314.D
Acq On : 15 Mar 2017 01:14 am
Operator : SEDS
Sample : LFB/0325005
Misc : RUN187023
ALS Vial : 66 Sample Multiplier: 1

Quant Time: Mar 20 13:01:10 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IPENTAFLUOROBENZENE	6.006	168	313431m	20.00 µg/L	0.03
23) I14-DIFLUOROBENZENE	6.991	114	826539	20.00 µg/L	0.02
48) CHLOROBENZEN-d5-IS	11.782	117	2266170	20.00 µg/L	0.00
71) I14-DICLBENZENE-D4	16.542	152	2402977	20.00 µg/L	0.00
System Monitoring Compounds					
24) SDIBRFLUOROMETHANE	6.023	111	252246	19.84 µg/L	0.02
Spiked Amount 20.000	Range 80 - 120		Recovery = 99.20%		
39) STOLUENE-D8	9.197	98	1296890	22.12 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 110.60%		
59) S4BRFLUOROBENZENE	14.121	95	1703660	21.12 µg/L	0.00
Spiked Amount 20.000	Range 80 - 120		Recovery = 105.60%		
Target Compounds					Qvalue
2) DICLDIFLUOROMETHANE	2.021	85	761546	25.71 µg/L	99
3) CHLOROMETHANE	2.236	50	623551m	24.78 µg/L	
4) VINYL CHLORIDE	2.335	62	690939	26.59 µg/L	92
5) BROMOMETHANE	2.635	94	275659	27.95 µg/L	98
6) CHLOROETHANE	2.732	64	250044m	22.13 µg/L	
7) TRICLFLUOROMETHANE	2.958	101	980592	24.56 µg/L	99
8) ACROLEIN	3.446	56	2263589	633.05 µg/L #	96
9) ACETONE	3.614	43	469950m	103.41 µg/L	
10) 11-DICHLOROETHENE	4.258	61	655989	26.00 µg/L	96
11) IODOMETHANE	3.655	142	4717615	119.16 µg/L	90
12) CARBON DISULFIDE	3.703	76	6225522	126.86 µg/L #	91
13) ACRYLONITRILE	4.327	53	776131	126.90 µg/L	99
14) DICHLOROMETHANE	4.007	84	585963	24.03 µg/L #	40
15) TRANS12DICLETHENE	4.255	96	565007	25.63 µg/L	97
16) 11-DICHLOROETHANE	4.740	63	896467	25.86 µg/L	98
17) VINYL ACETATE	4.788	43	5065373	134.90 µg/L #	90
18) 2-BUTANONE	5.482	43	1162504	125.91 µg/L	98
19) CIS12DICHLOROETHENE	5.421	96	717569	25.94 µg/L	95
20) 22-DICHLOROPROPANE	5.376	77	589394	21.99 µg/L #	93
21) CHLOROFORM	5.811	83	1161131	26.04 µg/L	97
22) BROMOCHLOROMETHANE	5.727	49	333846m	22.41 µg/L	
25) TETRAHYDROFURAN	5.800	42	115704	25.18 µg/L #	1
26) 111-TRICHLOROETHANE	5.981	97	965770	25.52 µg/L	96
27) 11-DICHLOROPROPENE	6.179	75	767253	25.14 µg/L	99
28) 12-DICHLOROETHANE	6.561	62	833289	25.53 µg/L	99
29) CARBONTETRACHLORIDE	6.165	117	912832	23.10 µg/L	99
30) BENZENE	6.469	78	2300336	25.57 µg/L	92
31) TRICHLOROETHENE	7.342	132	763610	26.02 µg/L	98
32) 12-DICHLOROPROPANE	7.716	63	546030	24.60 µg/L	98
33) DIBROMOMETHANE	7.928	174	649051	23.15 µg/L	99
34) BROMODICLMETHANE	8.156	83	929852	25.56 µg/L	98
35) 2-CLETHYLVINYLETHER	8.600	63	997431	115.68 µg/L	94
36) EPICHLOROHYDRIN	8.764	57	1148962	604.50 µg/L	93
37) 4METHYL-2-PENTANONE	9.085	43	2527720	127.99 µg/L #	89
38) CIS13DICLPROPENE	8.828	75	978997	25.24 µg/L	92

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702314.D
Acq On : 15 Mar 2017 01:14 am
Operator : SEDS
Sample : LFB/0325005
Misc : RUN187023
ALS Vial : 66 Sample Multiplier: 1

Quant Time: Mar 20 13:01:10 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration

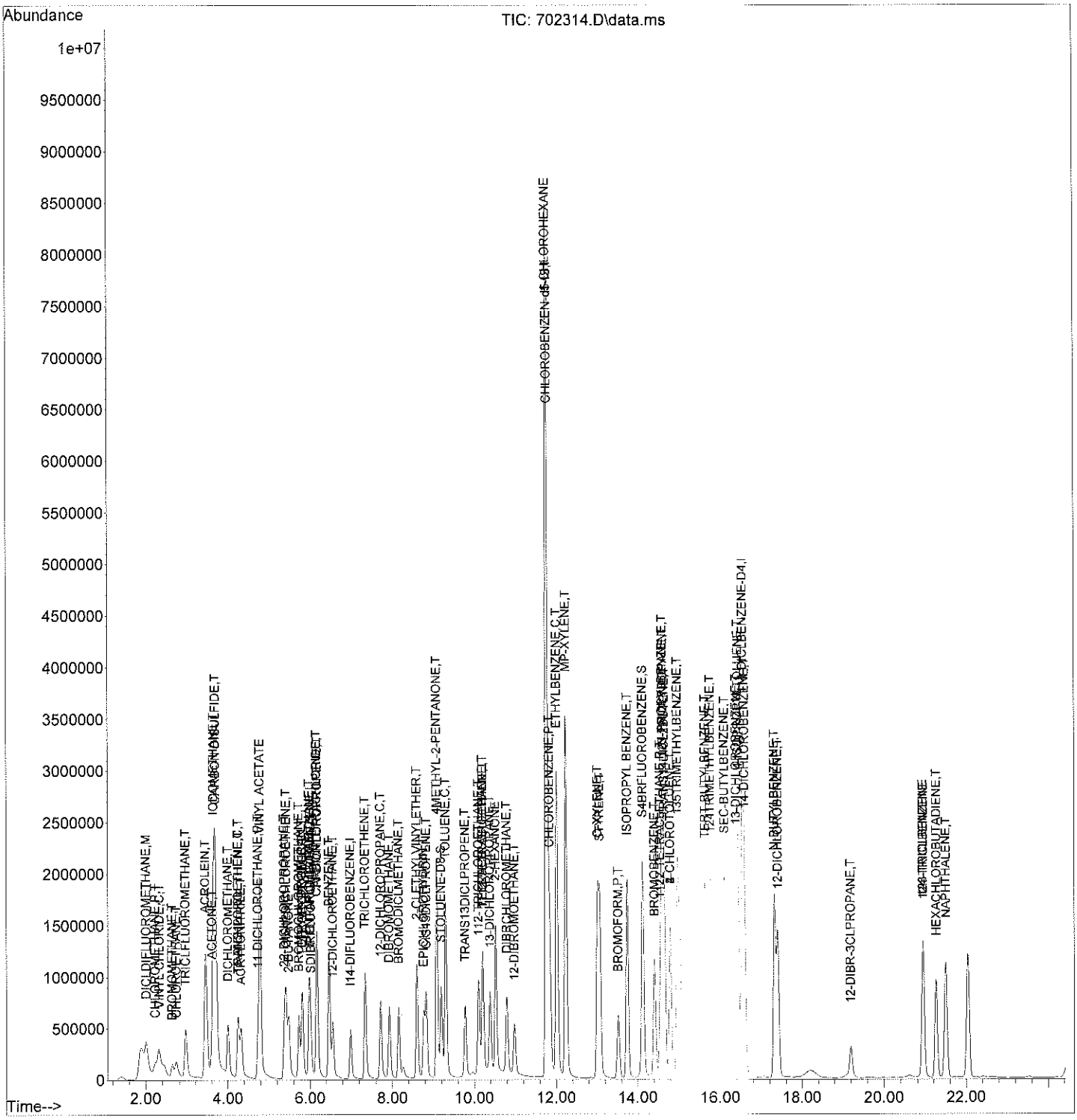
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) TOLUENE	9.308	91	2790893	25.90 µg/L	89
41) TRANS13DICLPROPENE	9.779	75	842263	25.36 µg/L	97
42) 112-TRICHLOROETHANE	10.108	97	660729m	25.16 µg/L	
43) 2-HEXANONE	10.524	43	1756510	126.54 µg/L	94
44) 13-DICHLOROPROPANE	10.384	76	1109637	25.71 µg/L	96
45) DIBRCHLOROMETHANE	10.794	129	909372	25.86 µg/L	99
46) TETRACHLOROETHENE	10.206	166	861401	25.61 µg/L	97
47) 12-DIBROMOETHANE	10.981	107	711592m	24.99 µg/L	
49) CHLOROBENZENE	11.832	112	1987109	16.82 µg/L	96
50) 1-CHLOROHEXANE	11.757	91	6569205	17.77 µg/L	99
51) 1112-TETRACLETHANE	10.209	131	545749	16.70 µg/L #	45
52) ETHYLBENZENE	12.008	91	3121078	16.70 µg/L	91
53) MP-XYLENE	12.231	91	4894954	33.82 µg/L	85
54) STYRENE	13.073	104	2247990	16.50 µg/L	96
55) O-XYLENE	13.020	91	2578151	16.22 µg/L	87
56) BROMOFORM	13.525	173	752924	16.54 µg/L	99
57) 1122-TETRACLETHANE	14.551	83	956089	16.17 µg/L	99
58) ISOPROPYL BENZENE	13.745	105	3261539	16.56 µg/L	89
60) 123-TRICLPROPANE	14.612	110	335216	16.81 µg/L	97
61) TRANS14DICL2BUTENE	14.651	53	882151	81.10 µg/L	91
62) BROMOBENZENE	14.409	77	1215056	16.76 µg/L	99
63) N-PROPYLBENZENE	14.595	91	3735878	16.48 µg/L	88
64) 2-CHLOROTOLUENE	14.793	91	2087505	16.05 µg/L	95
65) 4-CHLOROTOLUENE	14.793	91	2087505	16.04 µg/L	94
66) 135TRIMETHYLBENZENE	14.969	105	2831766	16.38 µg/L	90
67) TERT-BUTYLBENZENE	15.638	119	2476259	16.30 µg/L	91
68) 124TRIMETHYLBENZENE	15.764	105	2732795	16.10 µg/L	91
69) SEC-BUTYLBENZENE	16.101	105	3381027	16.33 µg/L	88
70) 13-DICHLOROBENZENE	16.389	146	1780603	16.59 µg/L	95
72) 4-ISOPROPYLTOLUENE	16.428	119	3061248	15.57 µg/L	90
73) 14-DICHLOROBENZENE	16.589	146	1792569	15.64 µg/L	94
74) 12-DICHLOROBENZENE	17.404	146	1780342	15.80 µg/L	96
75) N-BUTYLBENZENE	17.320	91	2544957	15.01 µg/L	89
76) 12-DIBR-3CLPROPANE	19.194	157	263119	17.95 µg/L	95
77) 124-TRICLBENZENE	20.940	180	1311893	14.68 µg/L	94
78) NAPHTHALENE	21.497	128	2851437	16.11 µg/L	94
79) HEXACHLOROBUTADIENE	21.266	225	594862	16.11 µg/L	96
80) 123-TRICLBENZENE	20.934	182	1247871	14.55 µg/L	93

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

Quantitation Report (QT Reviewed)

Data Path : D:\MassHunter\GCMS\1\data\187017\
Data File : 702314.D
Acq On : 15 Mar 2017 01:14 am
Operator : SEDS
Sample : LFB/0325005
Misc : RUN187023
ALS Vial : 66 Sample Multiplier: 1

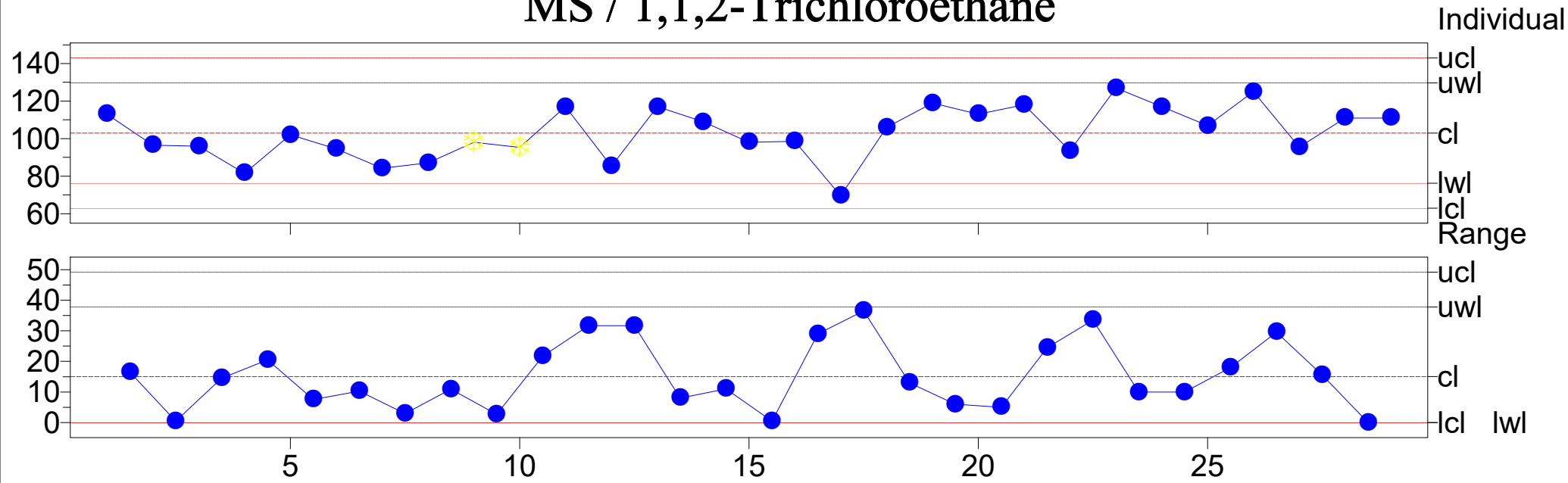
Quant Time: Mar 20 13:01:10 2017
Quant Method : D:\MassHunter\GCMS\1\methods\8260VOC-MARCH-LIQ-17-1.M
Quant Title : Analysis of VOC'S by 8260B,624
QLast Update : Mon Mar 20 12:08:34 2017
Response via : Initial Calibration



APPENDIX C
CONTROL CHARTS

ENVIRONMENTAL QUALITY LABORATORIES, INC.
PO BOX 11458 SAN JUAN PR 00910-1458

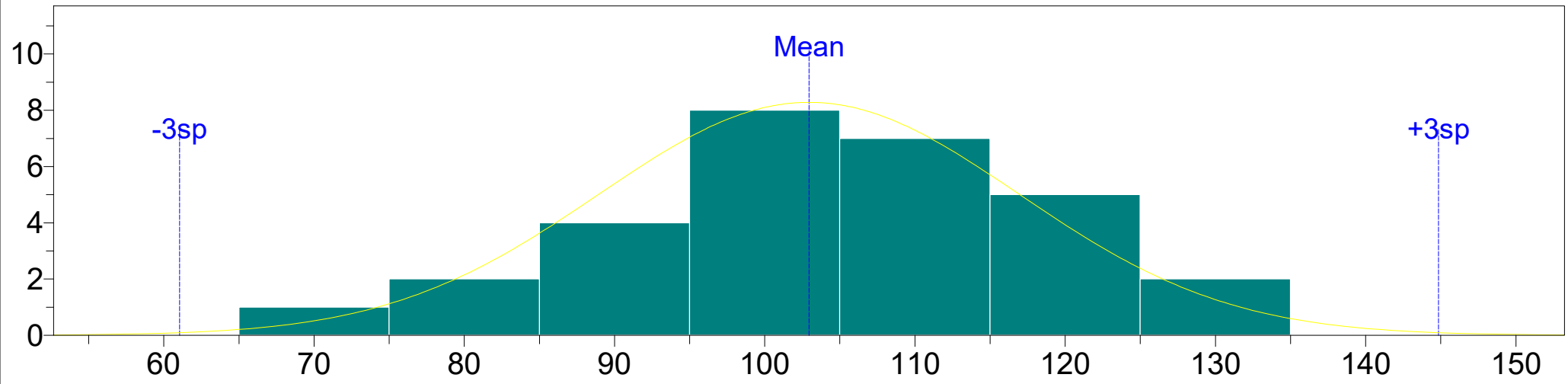
MS / 1,1,2-Trichloroethane



Individual: cl: 102.945 ucl: 142.971 lcl: 62.9182 Subgroup Size: 1
Range: cl: 15.05 ucl: 49.1727 lcl: 0

❄ Rule Violation

MS / 1,1,2-Trichloroethane



Samples: 29 3sp Lim: (61.043, 144.85)
Mean: 102.945
Std Dev: 13.967
Skewness:-.30203

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** 1,1,2-Trichloroethane

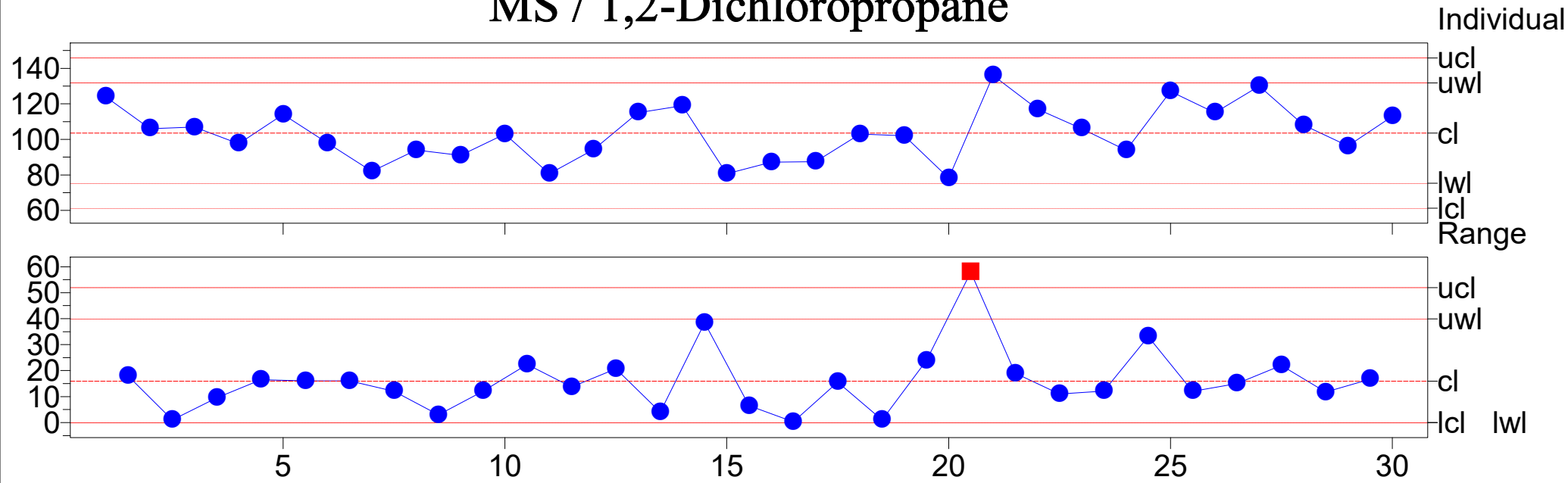
FROM : 27-Jun-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
169805	2384948	106.00	21.2	0	µg/L	JERJ
170046	2389224	113.00	22.5	0	µg/L	JERJ
170125	2390300	96.50	19.3	0	µg/L	JERJ
170139	2390640	96.00	19.2	0	µg/L	SEDS
170190	2391537	81.50	16.3	0	µg/L	SEDS
170555	2397632	102.00	20.3	0	µg/L	JERJ
170902	2402288	94.50	18.9	0	µg/L	JERJ
171042	2404639	84.20	33679.3	0	µg/L	SEDS
171340	2409452	87.10	17.4	0	µg/L	JERJ
171631	2415486	98.00	19.6	0	µg/L	JERJ
171542	2414023	95.30	190.6	0	µg/L	SEDS
172183	2424036	117.00	116.6	0	µg/L	SEDS
173600	2448489	85.30	17.1	0	µg/L	JERJ
174811	2468126	117.00	23.4	0	µg/L	JERJ
174528	2463581	109.00	21.7	0	µg/L	JERJ
175089	2472512	98.00	19.6	0	µg/L	JERJ
175157	2473311	98.50	19.7	0	µg/L	JERJ
178331	2526023	69.50	13.9	0	µg/L	SEDS
179907	2545508	106.00	21.1	0	µg/L	NIVA
180011	2547189	119.00	23.8	0	µg/L	NIVA
179934	2545952	113.00	22.5	0	µg/L	NIVA
181519	2569463	118.00	23.6	0	µg/L	SEDS
183490	2602291	93.50	93.5	0	µg/L	KOTERO
183902	2608841	127.00	25.4	0	µg/L	SEDS
184299	2615555	117.00	23.4	0	µg/L	SEDS
184501	2618750	107.00	21.3	0	µg/L	SEDS
184689	2622122	125.00	24.9	0	µg/L	SEDS
186026	2643277	95.50	19.1	0	µg/L	SEDS
185849	2640485	111.00	22.2	0	µg/L	SEDS
186254	2646434	111.00	2227.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO

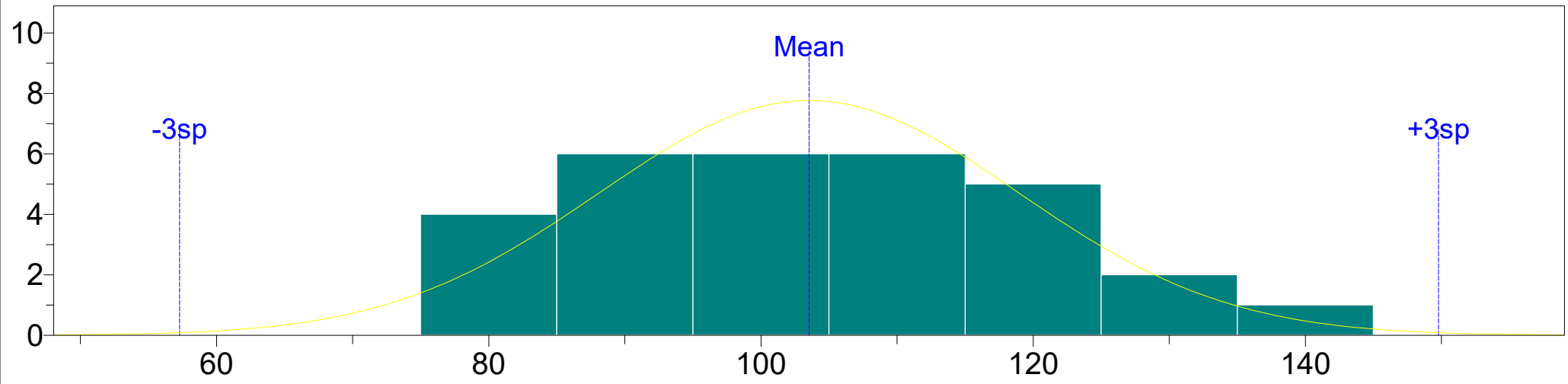
MS / 1,2-Dichloropropane



Individual: cl: 103.527 ucl: 145.805 lcl: 61.2486 Subgroup Size: 1
Range: cl: 15.8966 ucl: 51.9386 lcl: 0

❄ Rule Violation

MS / 1,2-Dichloropropane



Samples: 30 3sp Lim: (57.278, 149.78)
Mean: 103.527
Std Dev: 15.416
Skewness: .20318

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** 1,2-Dichloropropane

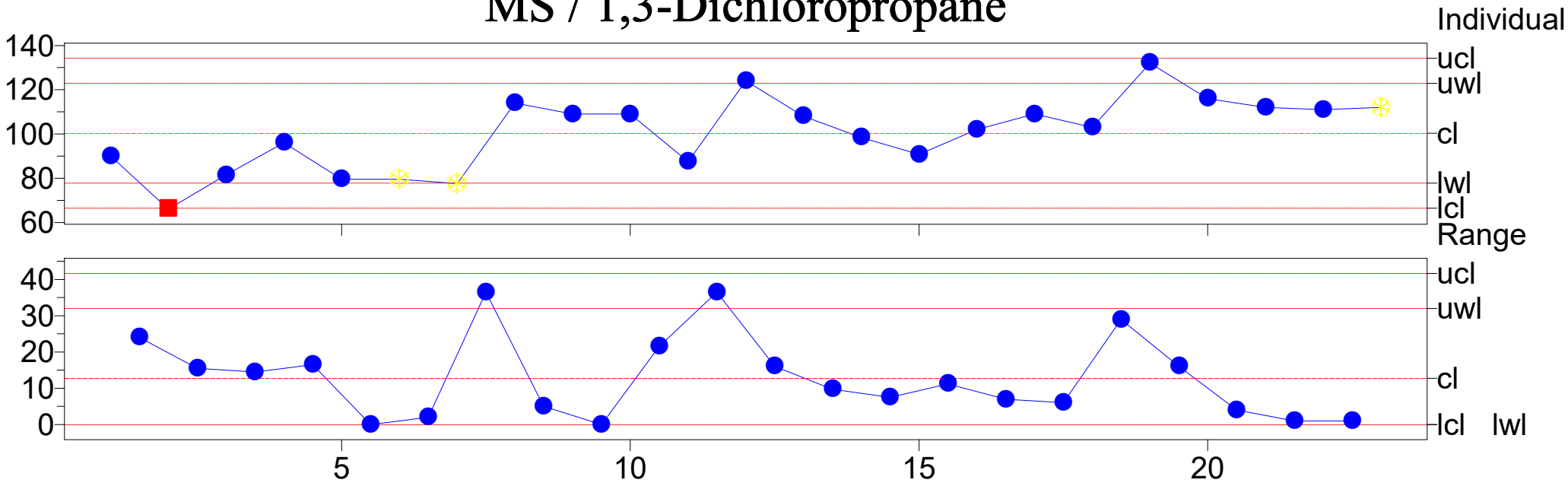
FROM : 17-May-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
168547	2366101	124.00	24.8	0	µg/L	NIVA
169580	2378983	106.00	21.1	0	µg/L	JERJ
169805	2384948	107.00	21.4	0	µg/L	JERJ
170125	2390300	97.50	19.5	0	µg/L	JERJ
170046	2389224	114.00	22.8	0	µg/L	JERJ
170139	2390640	98.00	19.6	0	µg/L	SEDS
170190	2391537	82.00	16.4	0	µg/L	SEDS
170555	2397632	94.00	18.8	0	µg/L	JERJ
170902	2402288	91.00	18.2	0	µg/L	JERJ
171042	2404639	103.00	41206.7	0	µg/L	SEDS
171340	2409452	80.60	16.1	0	µg/L	JERJ
171631	2415486	94.30	18.9	0	µg/L	JERJ
171542	2414023	115.00	229.0	0	µg/L	SEDS
172183	2424036	119.00	118.5	0	µg/L	SEDS
173600	2448489	80.60	16.1	0	µg/L	JERJ
174528	2463581	87.10	17.4	0	µg/L	JERJ
174811	2468126	87.40	17.5	0	µg/L	JERJ
175089	2472512	103.00	20.5	0	µg/L	JERJ
175157	2473311	102.00	20.4	0	µg/L	JERJ
178331	2526023	78.10	15.6	0	µg/L	SEDS
180011	2547189	136.00	27.2	0	µg/L	NIVA
179934	2545952	117.00	23.3	0	µg/L	NIVA
179907	2545508	106.00	21.2	0	µg/L	NIVA
183490	2602291	93.90	93.9	0	µg/L	KOTERO
183902	2608841	127.00	25.5	0	µg/L	SEDS
184299	2615555	115.00	22.9	0	µg/L	SEDS
184689	2622122	130.00	26.0	0	µg/L	SEDS
184501	2618750	108.00	21.5	0	µg/L	SEDS
186026	2643277	96.30	19.3	0	µg/L	SEDS
186254	2646434	113.00	2266.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO

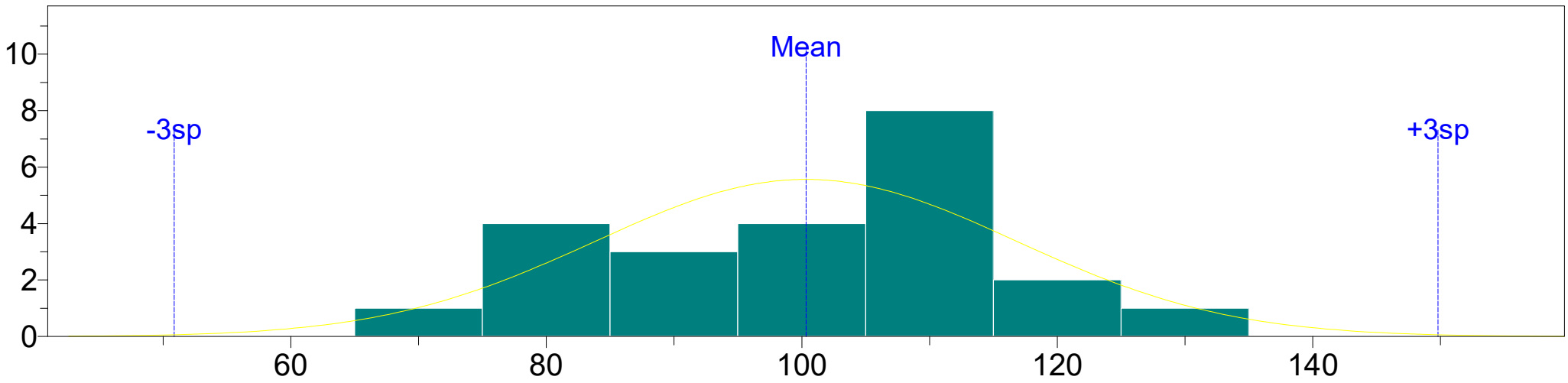
MS / 1,3-Dichloropropane



Individual: cl: 100.33 ucl: 134.228 lcl: 66.4329 Subgroup Size: 1
Range: cl: 12.7455 ucl: 41.6431 lcl: 0

❄ Rule Violation

MS / 1,3-Dichloropropane



Samples: 23 3sp Lim: (50.856, 149.8)
Mean: 100.33
Std Dev: 16.491
Skewness:-.23871

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** 1,3-Dichloropropane

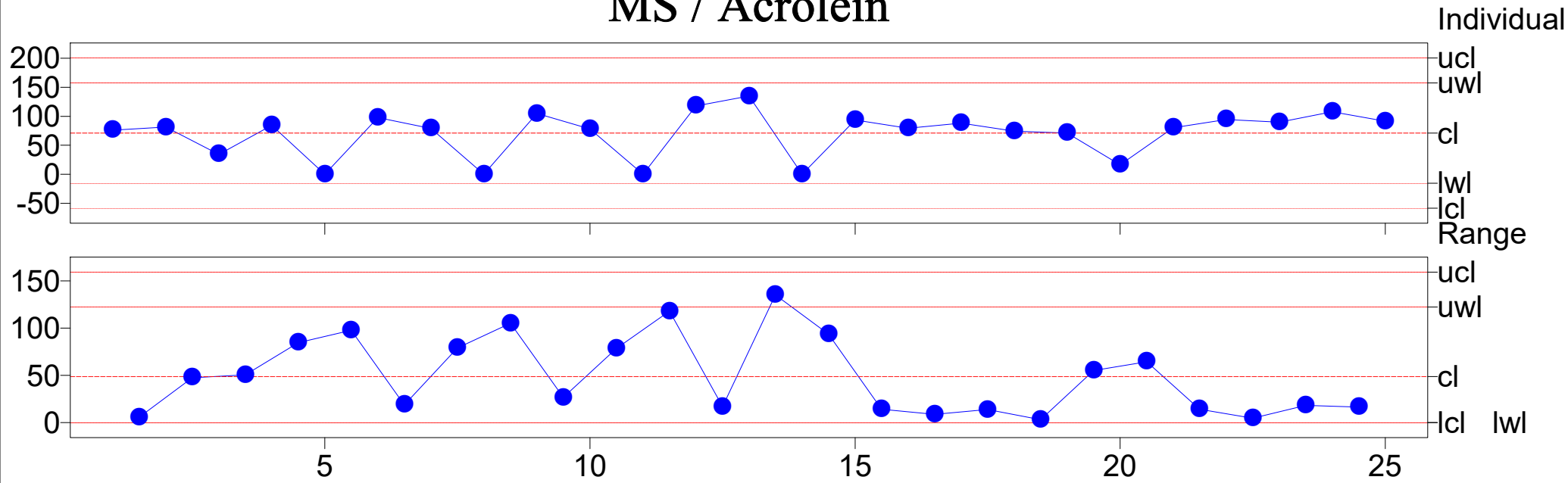
FROM : 18-Mar-2014 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
156484	2182169	90.00	18.0	0	µg/L	JRIVERA
157624	2197725	66.00	13.2	0	µg/L	SDIAZ
158628	2211578	81.50	16.3	0	µg/L	JRIVERA
160134	2232512	96.00	19.2	0	µg/L	JRIVERA
161170	2248533	79.50	15.9	0	µg/L	NVILLANUEV
161170	2248533	79.50	15.9	0	µg/L	NVILLANUEV
161004	2249923	77.50	15.5	0	µg/L	JRIVERA
163193	2281278	114.00	22.7	0	µg/L	JRIVERA
163385	2284593	109.00	21.7	0	µg/L	SDIAZ
166452	2334316	109.00	108.7	0	µg/L	SEDS
167880	2356681	87.50	17.5	0	µg/L	JERJ
168547	2366101	124.00	24.7	0	µg/L	NIVA
170555	2397632	108.00	21.5	0	µg/L	JERJ
171042	2404639	98.30	39305.5	0	µg/L	SEDS
171340	2409452	90.80	18.2	0	µg/L	JERJ
171542	2414023	102.00	203.0	0	µg/L	SEDS
172183	2424036	109.00	109.1	0	µg/L	SEDS
183490	2602291	103.00	102.7	0	µg/L	KOTERO
183902	2608841	132.00	26.4	0	µg/L	SEDS
184299	2615555	116.00	23.2	0	µg/L	SEDS
184501	2618750	112.00	22.3	0	µg/L	SEDS
184689	2622122	111.00	22.2	0	µg/L	SEDS
186254	2646434	112.00	2231.0	0	µg/L	SEDS

Quantity of samples : 23

Printed by : ELAZARO

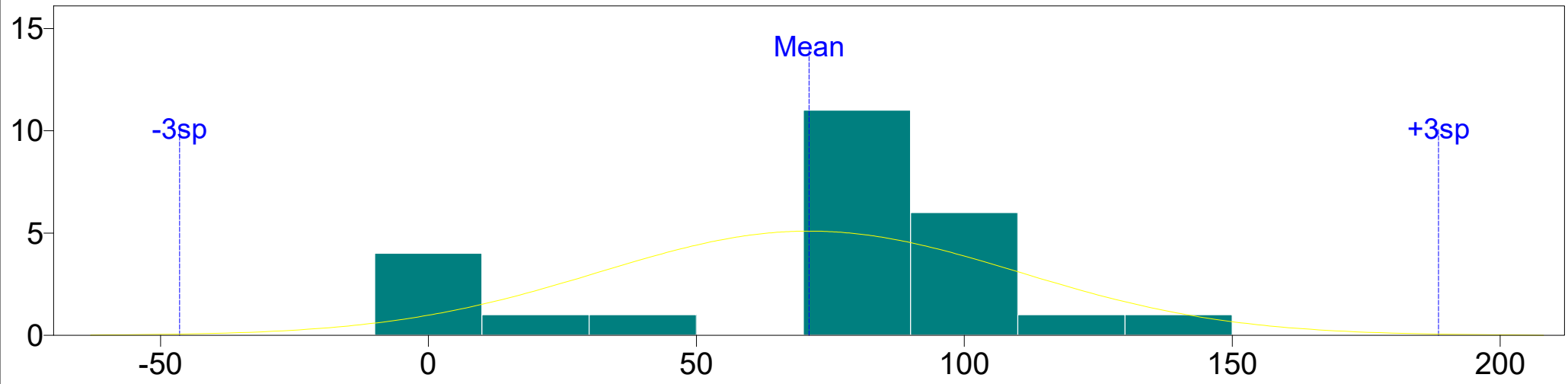
MS / Acrolein



Individual: cl: 71.024 ucl: 200.556 lcl: -58.5084 Subgroup Size: 1
Range: cl: 48.7042 ucl: 159.13 lcl: 0

❄ Rule Violation

MS / Acrolein



Samples: 25 3sp Lim: (-46.454, 188.5)
Mean: 71.024
Std Dev: 39.159
Skewness:-.79641

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Acrolein

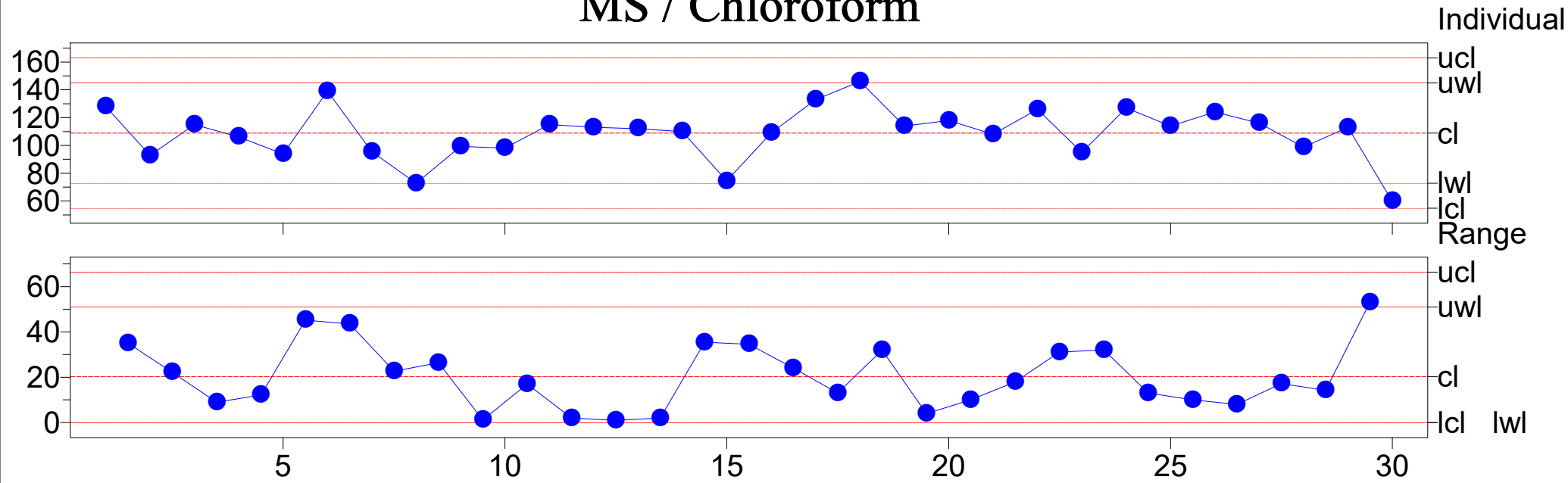
FROM : 18-Mar-2014 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
168547	2366101	75.90	379.4	0	µg/L	NIVA
170555	2397632	81.40	406.9	0	µg/L	JERJ
171042	2404639	34.10	341119.4	0	µg/L	SEDS
171340	2409452	84.50	422.3	0	µg/L	JERJ
171542	2414023	0.00	0	0	µg/L	SEDS
172183	2424036	97.70	2443.2	0	µg/L	SEDS
174116	2456945	79.00	19760.5	0	µg/L	SEDS
178331	2526023	0.00	0	0	µg/L	SEDS
180011	2547189	105.00	526.6	0	µg/L	NIVA
183490	2602291	78.30	1958.7	0	µg/L	KOTERO
183902	2608841	0.00	0	0	µg/L	SEDS
184299	2615555	118.00	590.4	0	µg/L	SEDS
184689	2622122	135.00	673.4	0	µg/L	SEDS
184501	2618750	0.00	0	0	µg/L	SEDS
186026	2643277	93.50	467.4	0	µg/L	SEDS
186254	2646434	79.50	39736.0	0	µg/L	SEDS
156484	2182169	88.20	440.9	0	µg/L	JRIVERA
157624	2197725	74.30	371.5	0	µg/L	SDIAZ
158628	2211578	71.20	356.0	0	µg/L	JRIVERA
161170	2248533	16.10	80.3	0	µg/L	NVILLANUEV
161170	2248533	80.30	80.3	0	µg/L	NVILLANUEV
161004	2249923	94.30	94.3	0	µg/L	JRIVERA
163193	2281278	89.70	448.4	0	µg/L	JRIVERA
163385	2284593	108.00	537.5	0	µg/L	SDIAZ
166452	2334316	91.60	2288.9	0	µg/L	SEDS

Quantity of samples : 25

Printed by : ELAZARO

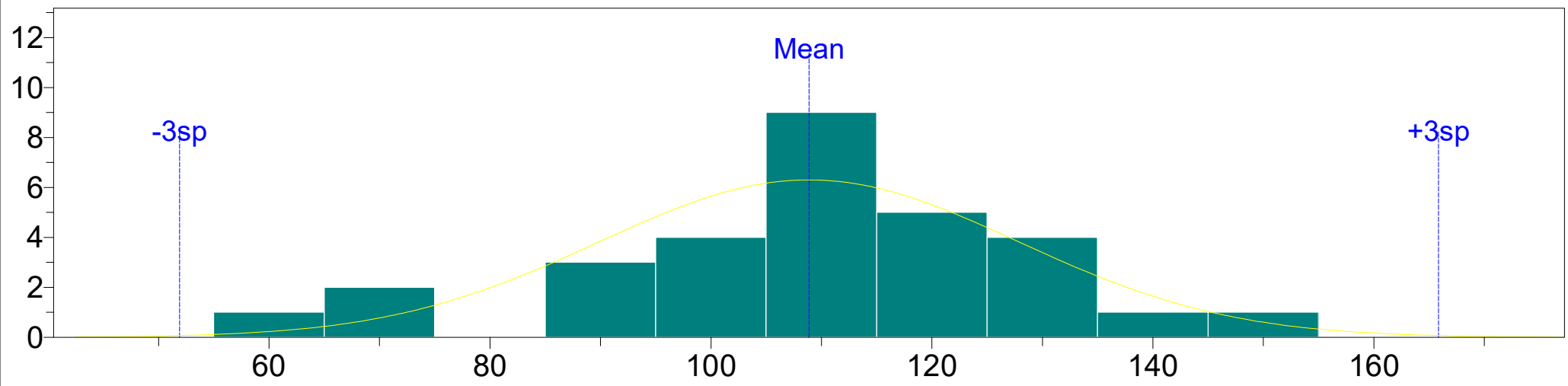
MS / Chloroform



Individual: cl: 108.873 ucl: 162.909 lcl: 54.8381 Subgroup Size: 1
Range: cl: 20.3172 ucl: 66.3823 lcl: 0

❄ Rule Violation

MS / Chloroform



Samples: 30 3sp Lim: (51.894, 165.85)
Mean: 108.873
Std Dev: 18.993
Skewness:-.54039

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Chloroform

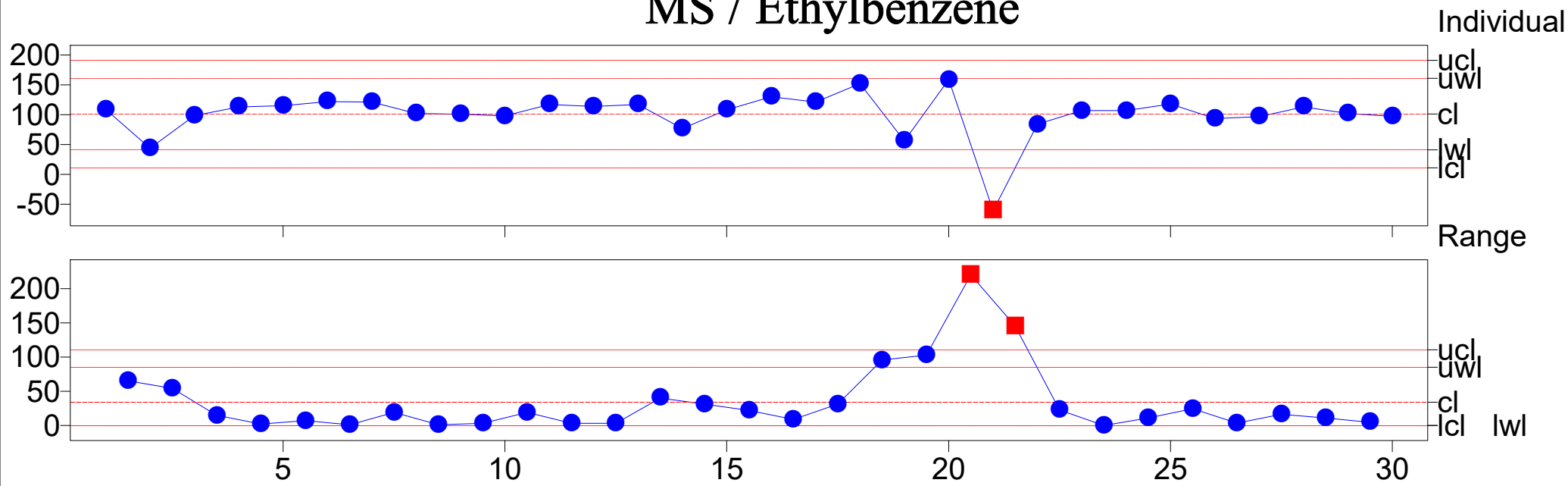
FROM : 11-Aug-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
171042	2404639	128.00	51353.2	0	µg/L	SEDS
171340	2409452	92.90	18.6	0	µg/L	JERJ
171307	2408530	115.00	23.0	0	µg/L	JERJ
171631	2415486	106.00	21.3	0	µg/L	JERJ
171542	2414023	93.80	187.6	0	µg/L	SEDS
172183	2424036	139.00	138.7	0	µg/L	SEDS
172226	2425026	95.50	29.5	10.4	µg/L	SEDS
173137	2440640	72.80	14.6	0	µg/L	JERJ
173600	2448489	99.20	19.8	0	µg/L	JERJ
174528	2463581	98.00	19.6	0	µg/L	JERJ
174811	2468126	115.00	23.0	0	µg/L	JERJ
175089	2472512	113.00	22.6	0	µg/L	JERJ
175157	2473311	112.00	22.5	0	µg/L	JERJ
175751	2482239	110.00	11.0	0	µg/L	JERJ
178331	2526023	74.50	14.9	0	µg/L	SEDS
179934	2545952	109.00	21.7	0	µg/L	NIVA
180011	2547189	133.00	26.5	0	µg/L	NIVA
179907	2545508	146.00	29.2	0	µg/L	NIVA
183296	2599123	114.00	22.8	0	µg/L	KOTERO
183490	2602291	118.00	130.1	12.1	µg/L	KOTERO
183902	2608841	108.00	27.3	5.8	µg/L	SEDS
184299	2615555	126.00	25.2	0	µg/L	SEDS
184501	2618750	94.90	19.0	0	µg/L	SEDS
184689	2622122	127.00	25.3	4.8	µg/L	SEDS
184977	2626804	114.00	22.9	0	µg/L	KMOR
185232	2631312	124.00	24.8	0	µg/L	SEDS
185765	2639358	116.00	23.2	0	µg/L	SEDS
186026	2643277	98.80	19.8	0	µg/L	SEDS
186254	2646434	113.00	2251.0	0	µg/L	SEDS
186362	2647886	59.80	12.0	0	µg/L	KMOR

Quantity of samples : 30

Printed by : ELAZARO

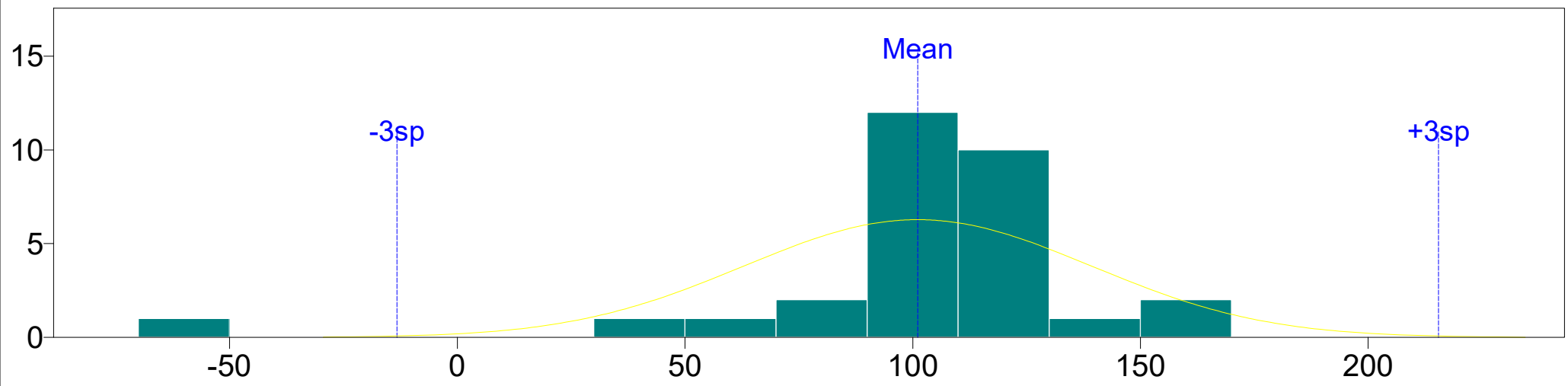
MS / Ethylbenzene



Individual: cl: 101.087 ucl: 191.145 lcl: 11.028 Subgroup Size: 1
Range: cl: 33.8621 ucl: 110.637 lcl: 0

❄ Rule Violation

MS / Ethylbenzene



Samples: 30 3sp Lim: (-13.271, 215.44)
Mean: 101.087
Std Dev: 38.119
Skewness:-2.6315

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Ethylbenzene

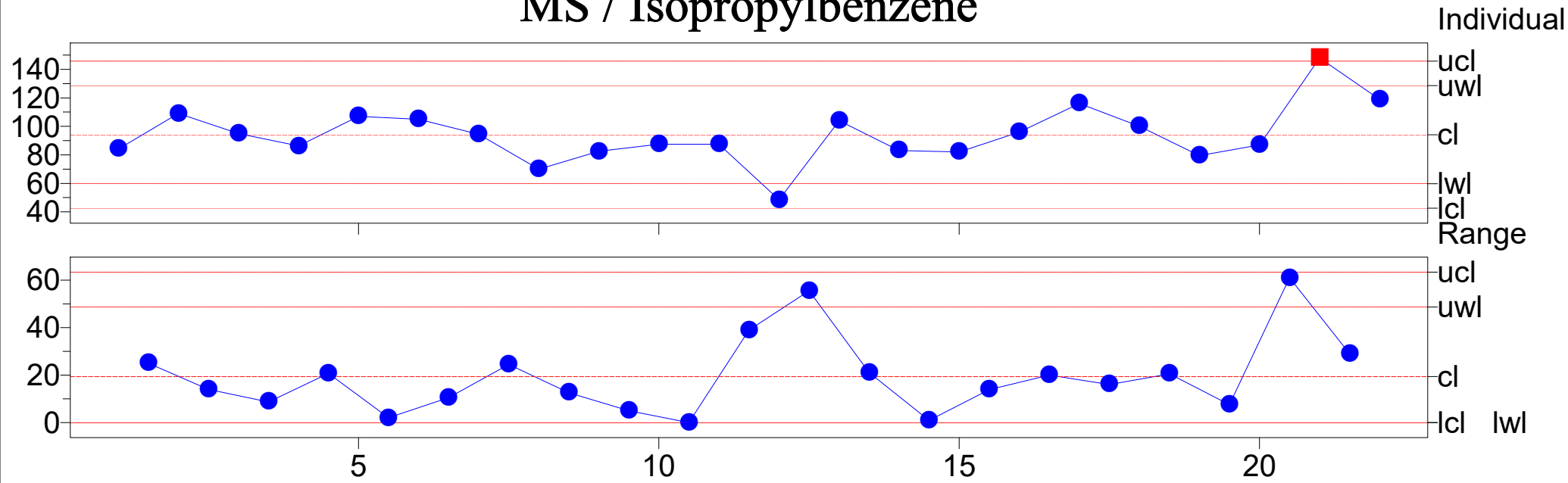
FROM : 16-Feb-2016 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
176422	2492230	109.00	21.9	0	µg/L	JERJ
178331	2526023	44.00	8.8	0	µg/L	SEDS
179451	2541594	98.30	491.3	0	µg/L	SEDS
179697	2542098	113.00	22.6	0	µg/L	SEDS
180011	2547189	115.00	23.1	0	µg/L	NIVA
179907	2545508	122.00	24.5	0	µg/L	NIVA
179934	2545952	121.00	24.1	0	µg/L	NIVA
180080	2548216	102.00	20.4	0	µg/L	NIVA
180534	2554969	101.00	2178.0	167.0	µg/L	SEDS
180761	2557488	98.00	19.6	0	µg/L	NIVA
181865	2575048	117.00	25.5	2.1	µg/L	NIVA
181865	2575049	114.00	28.6	2.1	µg/L	NIVA
181952	2576825	117.00	25.7	2.3	µg/L	SEDS
182452	2584811	77.00	112.7	105.0	µg/L	NIVA
182196	2580637	108.00	498.3	0	µg/L	NIVA
182410	2583893	130.00	26.0	0	µg/L	NIVA
182196	2580636	121.00	24.2	0	µg/L	NIVA
182597	2587475	152.00	30.3	0	µg/L	NIVA
182597	2587474	56.30	396.5	0	µg/L	NIVA
182647	2588414	159.00	31.7	0	µg/L	NIVA
183006	2594513	-61.00	464.8	477.0	µg/L	NIVA
183490	2602291	84.20	84.2	0	µg/L	KOTERO
183411	2601155	107.00	21.4	0	µg/L	NIVA
183411	2601155	107.00	21.4	0	µg/L	NIVA
183902	2608841	118.00	23.5	0	µg/L	SEDS
184299	2615555	93.50	18.7	0	µg/L	SEDS
184501	2618750	96.90	19.4	0	µg/L	SEDS
184689	2622122	113.00	22.5	0	µg/L	SEDS
186254	2646434	102.00	2043.0	0	µg/L	SEDS
186026	2643277	97.40	19.5	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO

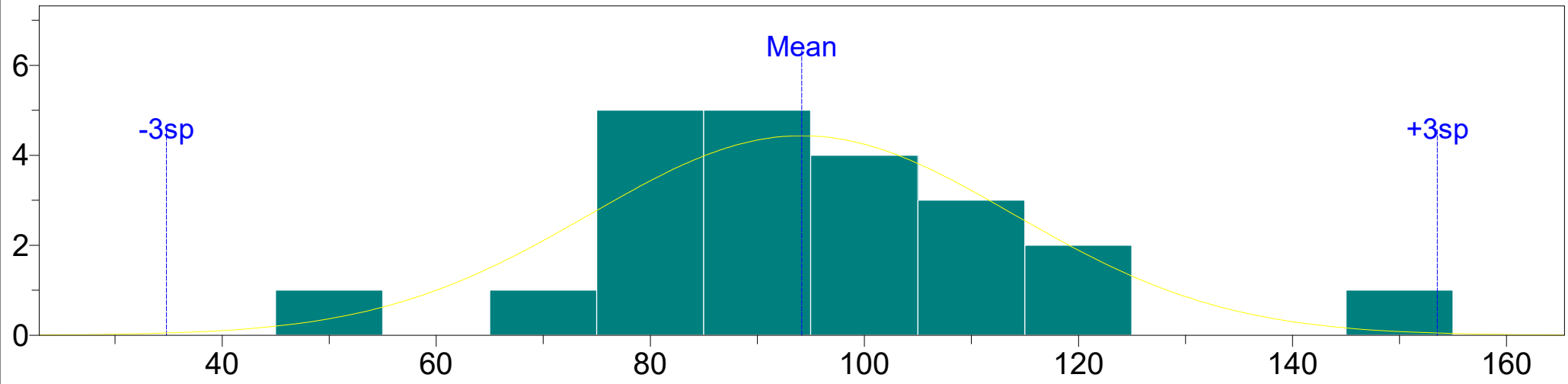
MS / Isopropylbenzene



Individual: cl: 94.1545 ucl: 145.725 lcl: 42.5841 Subgroup Size: 1
Range: cl: 19.3905 ucl: 63.3543 lcl: 0

❄ Rule Violation

MS / Isopropylbenzene



Samples: 22 3sp Lim: (34.783, 153.53)
Mean: 94.1545
Std Dev: 19.79
Skewness: .44077

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Isopropylbenzene

FROM : 18-Mar-2014 **TO :** 15-Feb-2017

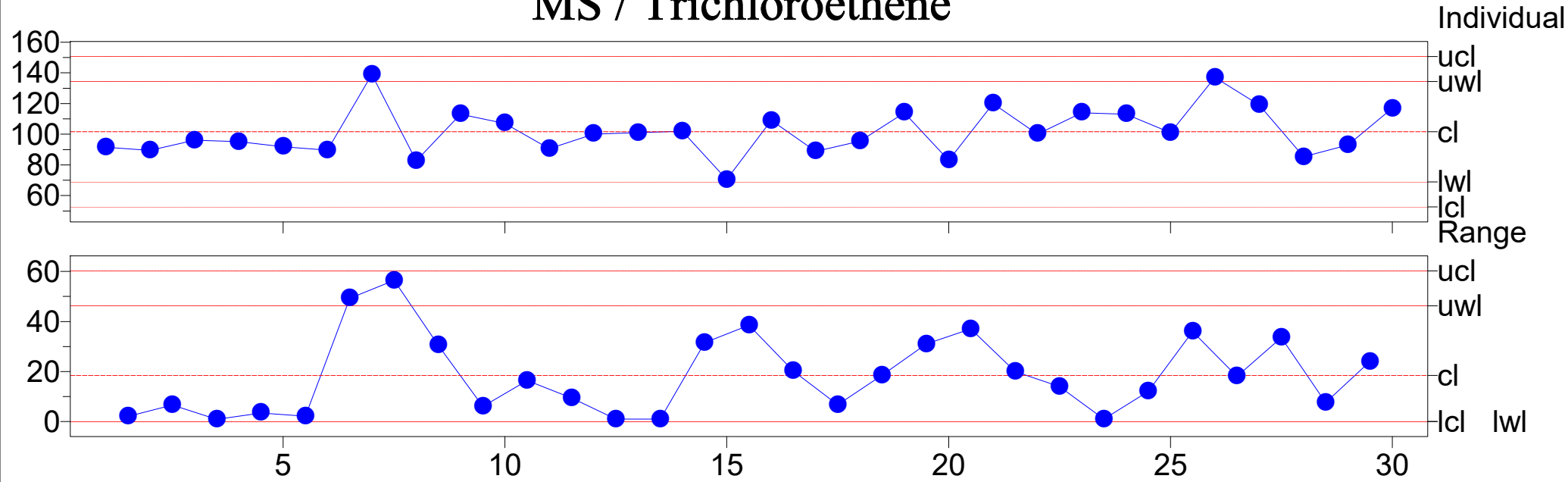
RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
183490	2602291	84.00	84.0	0	µg/L	KOTERO
183902	2608841	109.00	21.9	0	µg/L	SEDS
184299	2615555	95.00	19.0	0	µg/L	SEDS
184501	2618750	86.30	17.3	0	µg/L	SEDS
184689	2622122	107.00	21.4	0	µg/L	SEDS
186254	2646434	105.00	2107.0	0	µg/L	SEDS
156484	2182169	94.50	18.9	0	µg/L	JRIVERA
157624	2197725	70.00	14.0	0	µg/L	SDIAZ
158628	2211578	82.50	16.5	0	µg/L	JRIVERA
161170	2248533	87.50	17.5	0	µg/L	NVILLANUEV
161170	2248533	87.50	17.5	0	µg/L	NVILLANUEV
161004	2249923	48.50	216.0	206.3	µg/L	JRIVERA
163193	2281278	104.00	20.8	0	µg/L	JRIVERA
163385	2284593	83.00	16.6	0	µg/L	SDIAZ
166452	2334316	82.10	82.1	0	µg/L	SEDS
167880	2356681	96.00	19.2	0	µg/L	JERJ
168547	2366101	116.00	23.1	0	µg/L	NIVA
170555	2397632	100.00	20.0	0	µg/L	JERJ
171042	2404639	79.50	31816.9	0	µg/L	SEDS
171340	2409452	87.00	17.4	0	µg/L	JERJ
171542	2414023	148.00	295.0	0	µg/L	SEDS
172183	2424036	119.00	118.5	0	µg/L	SEDS

Quantity of samples : 22

Printed by : ELAZARO

ENVIRONMENTAL QUALITY LABORATORIES, INC. P.O. BOX 11458, SAN JUAN, P.R. 00910-1458, TELS. (787) 725-5333, (787) 725-3708, FAX (787) 722-0380, email: eqlab@coqui.net

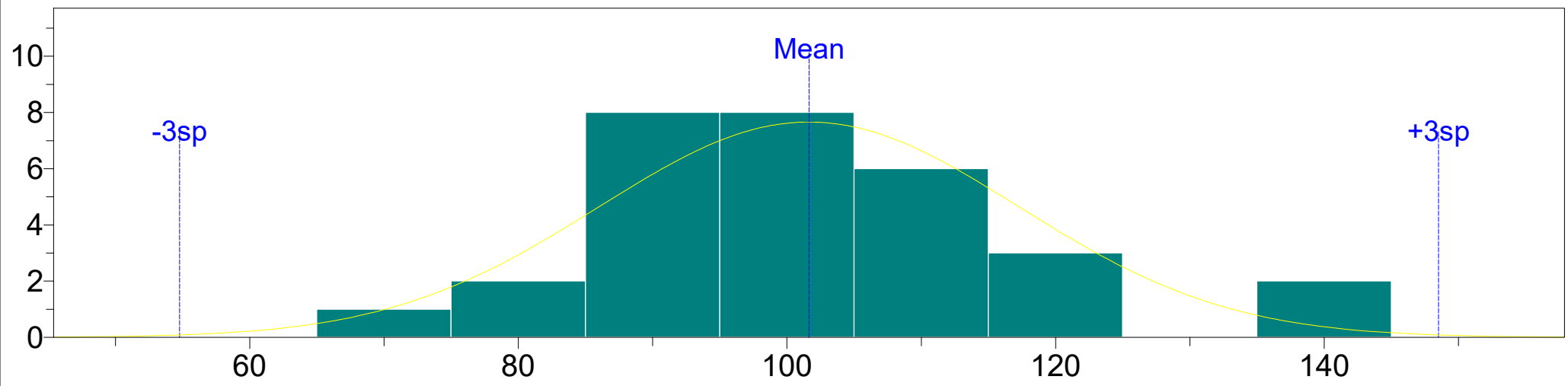
MS / Trichloroethene



Individual: cl: 101.64 ucl: 150.659 lcl: 52.6213 Subgroup Size: 1
Range: cl: 18.431 ucl: 60.2195 lcl: 0

❄ Rule Violation

MS / Trichloroethene



Samples: 30 3sp Lim: (54.773, 148.51)
Mean: 101.64
Std Dev: 15.622
Skewness: .55683

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Trichloroethene

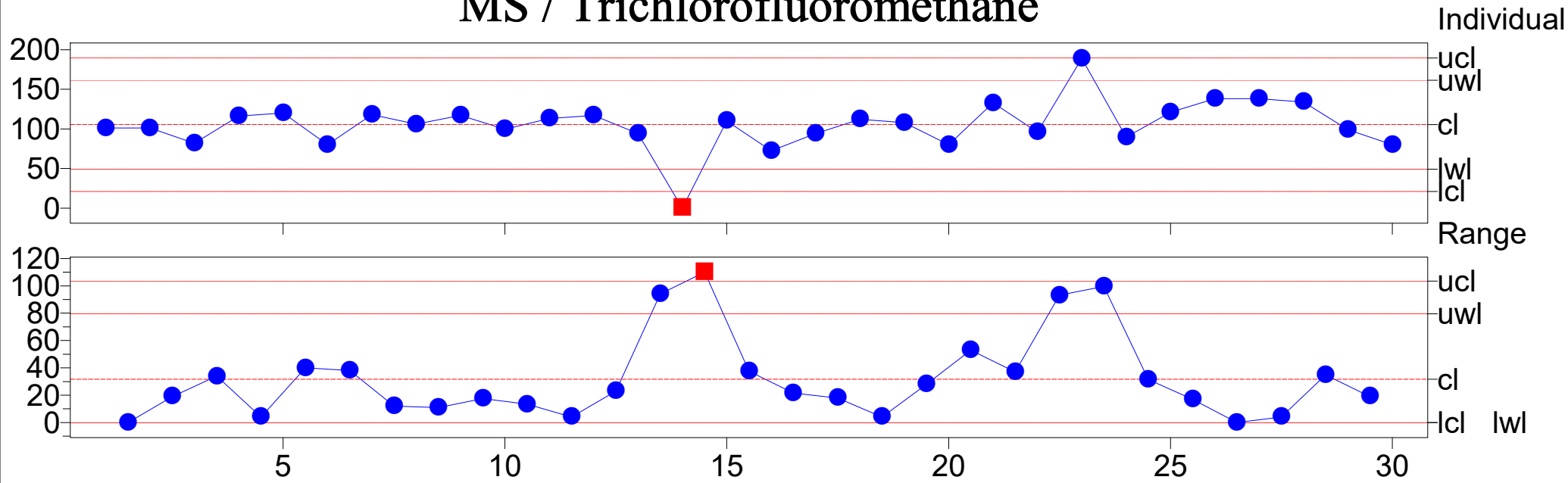
FROM : 07-Jul-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
170555	2397632	91.50	18.3	0	µg/L	JERJ
170902	2402288	89.50	17.9	0	µg/L	JERJ
171042	2404639	96.10	38451.8	0	µg/L	SEDS
171340	2409452	95.20	19.0	0	µg/L	JERJ
171631	2415486	91.80	18.4	0	µg/L	JERJ
171542	2414023	89.70	179.3	0	µg/L	SEDS
172183	2424036	139.00	254.9	116.0	µg/L	SEDS
173600	2448489	82.60	16.5	0	µg/L	JERJ
174116	2456945	113.00	1128.0	0	µg/L	SEDS
174285	2459534	107.00	21.3	0	µg/L	SEDS
174528	2463581	90.60	18.1	0	µg/L	JERJ
174811	2468126	100.00	20.1	0	µg/L	JERJ
175089	2472512	101.00	20.2	0	µg/L	JERJ
175157	2473311	102.00	20.5	0	µg/L	JERJ
178331	2526023	70.50	14.1	0	µg/L	SEDS
179697	2542098	109.00	21.8	0	µg/L	SEDS
179907	2545508	88.80	17.8	0	µg/L	NIVA
179934	2545952	95.50	19.1	0	µg/L	NIVA
180011	2547189	114.00	22.9	0	µg/L	NIVA
180761	2557488	83.00	16.6	0	µg/L	NIVA
181519	2569463	120.00	24.0	0	µg/L	SEDS
183490	2602291	100.00	100.0	0	µg/L	KOTERO
183902	2608841	114.00	22.8	0	µg/L	SEDS
184299	2615555	113.00	22.5	0	µg/L	SEDS
184501	2618750	101.00	20.3	0	µg/L	SEDS
184689	2622122	137.00	27.4	0	µg/L	SEDS
185232	2631312	119.00	23.8	0	µg/L	SEDS
186026	2643277	85.40	17.1	0	µg/L	SEDS
185849	2640485	93.00	18.6	0	µg/L	SEDS
186254	2646434	117.00	2332.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO

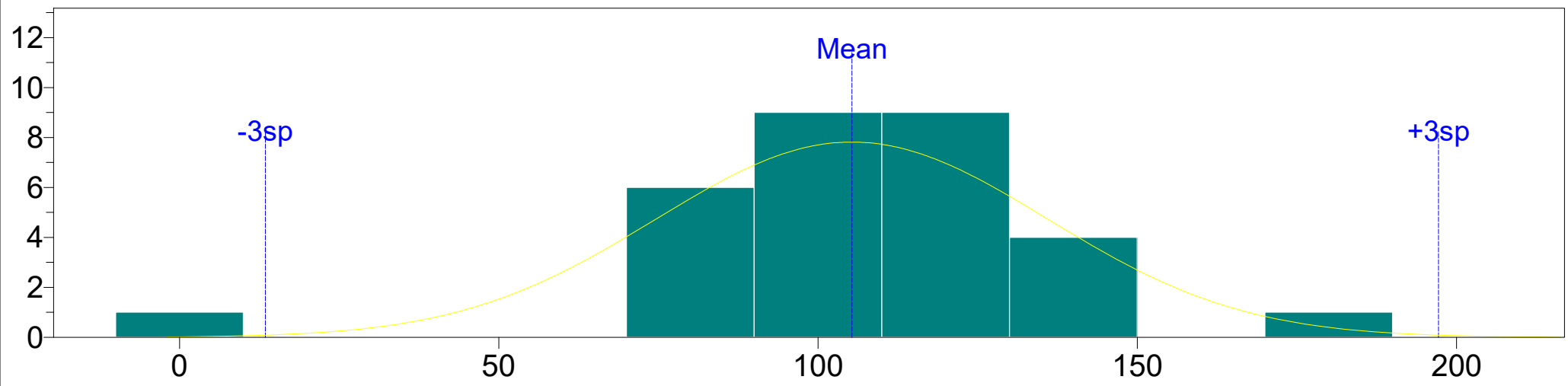
MS / Trichlorofluoromethane



Individual: cl: 105.297 ucl: 189.468 lcl: 21.1257 Subgroup Size: 1
Range: cl: 31.6483 ucl: 103.404 lcl: 0

Rule Violation

MS / Trichlorofluoromethane



Samples: 30 3sp Lim: (13.431, 197.16)
Mean: 105.297
Std Dev: 30.622
Skewness:-.67893

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Trichlorofluoromethane

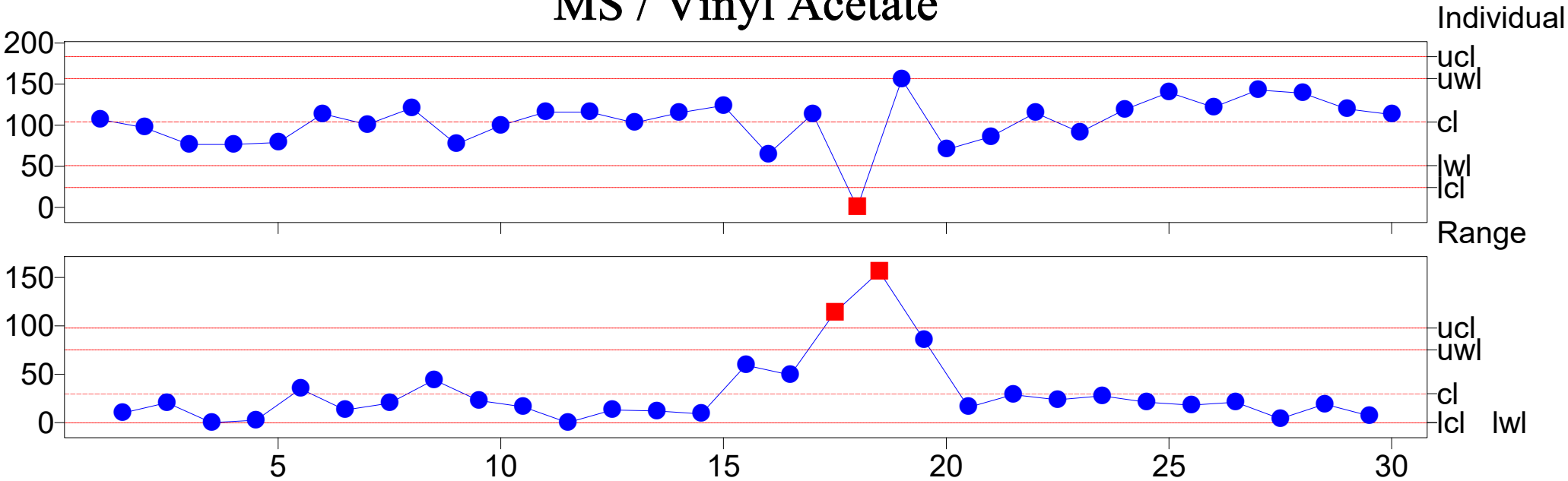
FROM : 26-Aug-2014 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
161170	2248533	101.00	20.2	0	µg/L	NVILLANUEV
161170	2248533	101.00	20.2	0	µg/L	NVILLANUEV
161004	2249923	82.00	8.2	0	µg/L	JRIVERA
163193	2281278	116.00	23.1	0	µg/L	JRIVERA
163385	2284593	120.00	24.0	0	µg/L	SDIAZ
164043	2294981	80.00	8.0	0	µg/L	JRIVERA
164153	2296552	118.00	23.5	0	µg/L	JRIVERA
166452	2334316	106.00	106.0	0	µg/L	SEDS
167880	2356681	117.00	23.3	0	µg/L	JERJ
168547	2366101	99.50	19.9	0	µg/L	NIVA
169805	2384948	113.00	22.5	0	µg/L	JERJ
170555	2397632	117.00	23.3	0	µg/L	JERJ
170902	2402288	94.00	18.8	0	µg/L	JERJ
171042	2404639	0.00	0	0	µg/L	SEDS
171340	2409452	110.00	22.1	0	µg/L	JERJ
171542	2414023	72.50	144.9	0	µg/L	SEDS
172183	2424036	94.10	94.1	0	µg/L	SEDS
174811	2468126	112.00	22.4	0	µg/L	JERJ
175157	2473311	108.00	21.6	0	µg/L	JERJ
178331	2526023	80.10	16.0	0	µg/L	SEDS
179934	2545952	133.00	26.5	0	µg/L	NIVA
180011	2547189	95.90	19.2	0	µg/L	NIVA
179907	2545508	189.00	37.9	0	µg/L	NIVA
183490	2602291	89.50	89.5	0	µg/L	KOTERO
183902	2608841	121.00	24.1	0	µg/L	SEDS
184299	2615555	138.00	27.6	0	µg/L	SEDS
184501	2618750	138.00	27.7	0	µg/L	SEDS
184689	2622122	134.00	26.9	0	µg/L	SEDS
186026	2643277	99.10	19.8	0	µg/L	SEDS
186254	2646434	80.20	1603.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO2

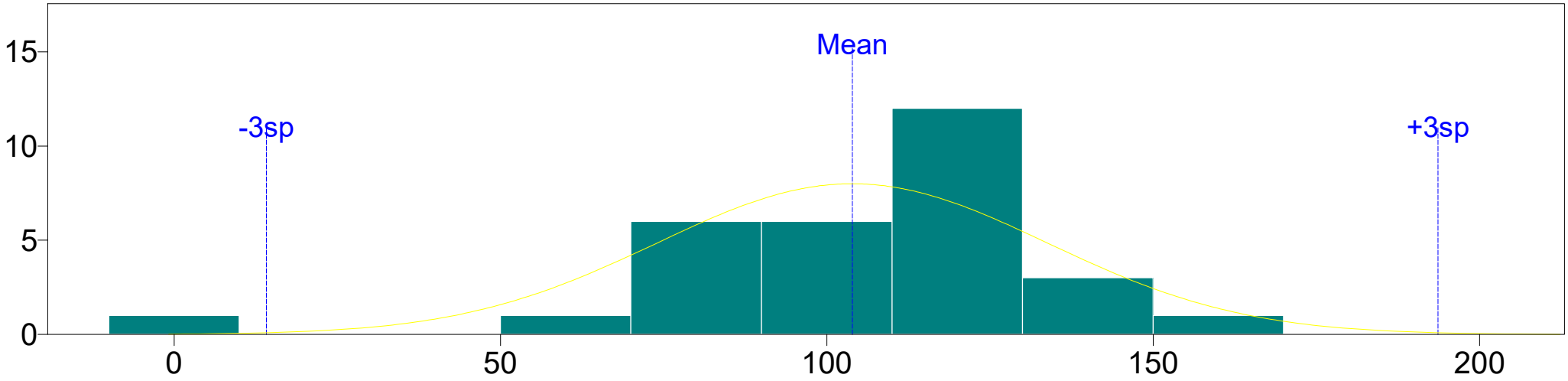
MS / Vinyl Acetate



Individual: cl: 103.897 ucl: 183.482 lcl: 24.3112 Subgroup Size: 1
Range: cl: 29.9241 ucl: 97.7708 lcl: 0

❄ Rule Violation

MS / Vinyl Acetate



Samples: 30 3sp Lim: (14.155, 193.64)
Mean: 103.897
Std Dev: 29.914
Skewness:-1.2777

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** cis-1,2-Dichloroethene

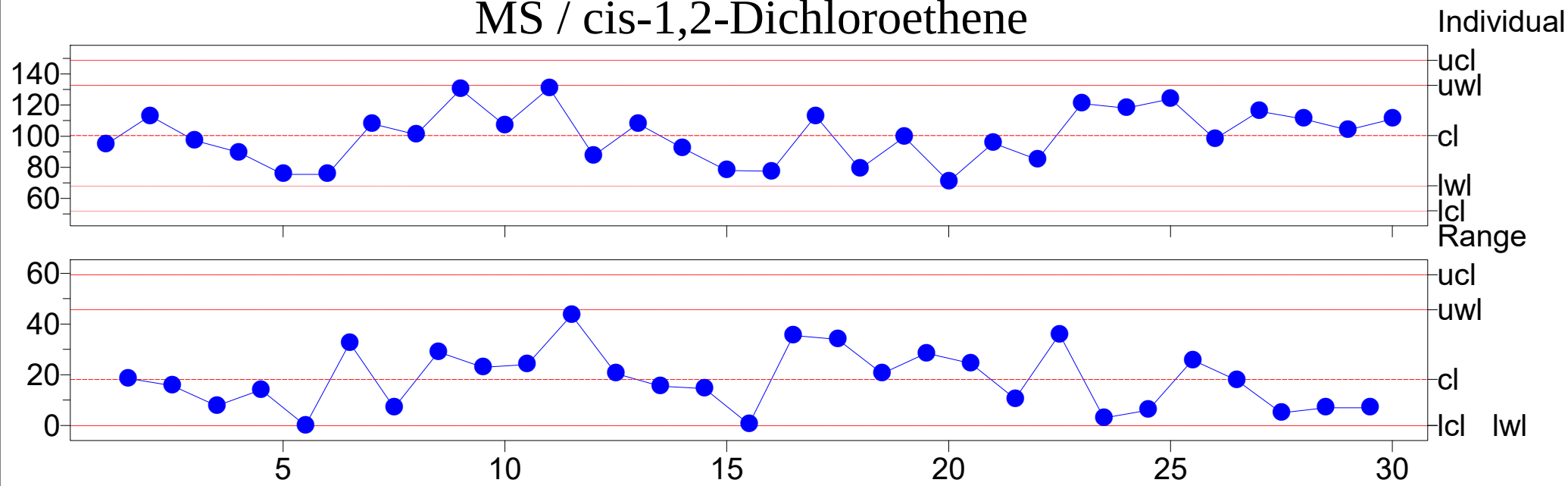
FROM : 14-Dec-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
174811	2468126	94.40	18.9	0	µg/L	JERJ
175089	2472512	113.00	22.5	0	µg/L	JERJ
175157	2473311	97.30	19.5	0	µg/L	JERJ
175218	2474350	89.60	17.9	0	µg/L	JER
175442	2477758	75.50	15.1	0	µg/L	SEDS
175442	2477758	75.50	15.1	0	µg/L	SEDS
176422	2492230	108.00	21.6	0	µg/L	JERJ
179934	2545952	101.00	20.2	0	µg/L	NIVA
179907	2545508	130.00	26.0	0	µg/L	NIVA
180080	2548216	107.00	21.3	0	µg/L	NIVA
181519	2569463	131.00	26.1	0	µg/L	SEDS
181865	2575048	87.50	17.5	0	µg/L	NIVA
181865	2575049	108.00	21.5	0	µg/L	NIVA
181952	2576825	92.50	18.5	0	µg/L	SEDS
182452	2584811	78.00	7.8	0	µg/L	NIVA
182410	2583893	77.50	15.5	0	µg/L	NIVA
182196	2580637	113.00	22.5	0	µg/L	NIVA
182196	2580636	79.00	15.8	0	µg/L	NIVA
182597	2587475	99.50	19.9	0	µg/L	NIVA
182647	2588414	71.00	14.2	0	µg/L	NIVA
182597	2587474	95.50	19.1	0	µg/L	NIVA
183006	2594513	85.00	17.0	0	µg/L	NIVA
183490	2602291	121.00	121.2	0	µg/L	KOTERO
183902	2608841	118.00	23.5	0	µg/L	SEDS
184299	2615555	124.00	24.7	0	µg/L	SEDS
184501	2618750	98.20	19.6	0	µg/L	SEDS
184689	2622122	116.00	23.2	0	µg/L	SEDS
185232	2631312	111.00	22.2	0	µg/L	SEDS
185849	2640485	104.00	20.8	0	µg/L	SEDS
186254	2646434	111.00	2222.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO

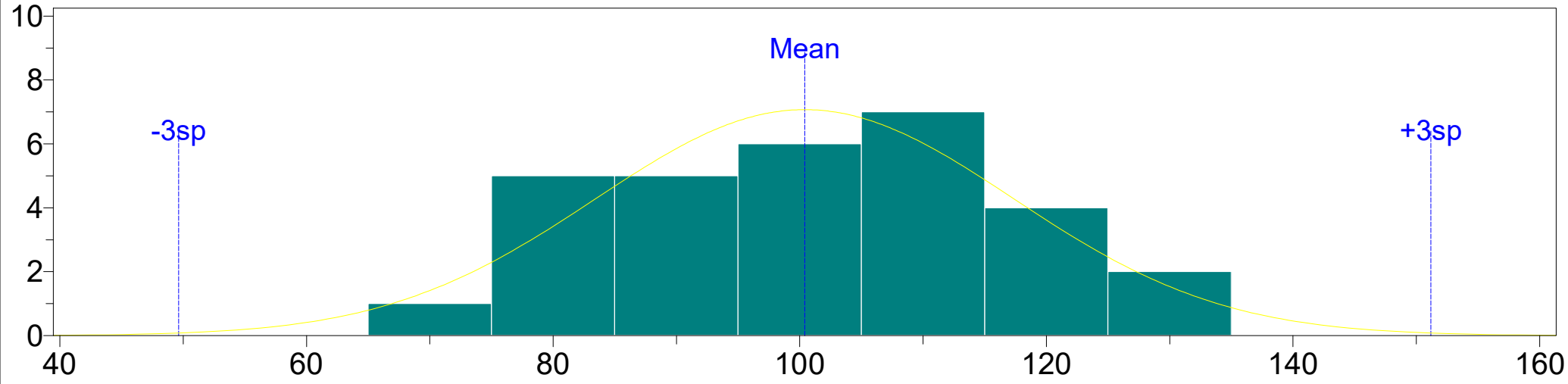
MS / cis-1,2-Dichloroethene



Individual: cl: 100.4 ucl: 148.749 lcl: 52.0508 Subgroup Size: 1
Range: cl: 18.1793 ucl: 59.397 lcl: 0

❄ Rule Violation

MS / cis-1,2-Dichloroethene



Samples: 30 3sp Lim: (49.623, 151.18)
Mean: 100.4
Std Dev: 16.926
Skewness:-.028553

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Vinyl Acetate

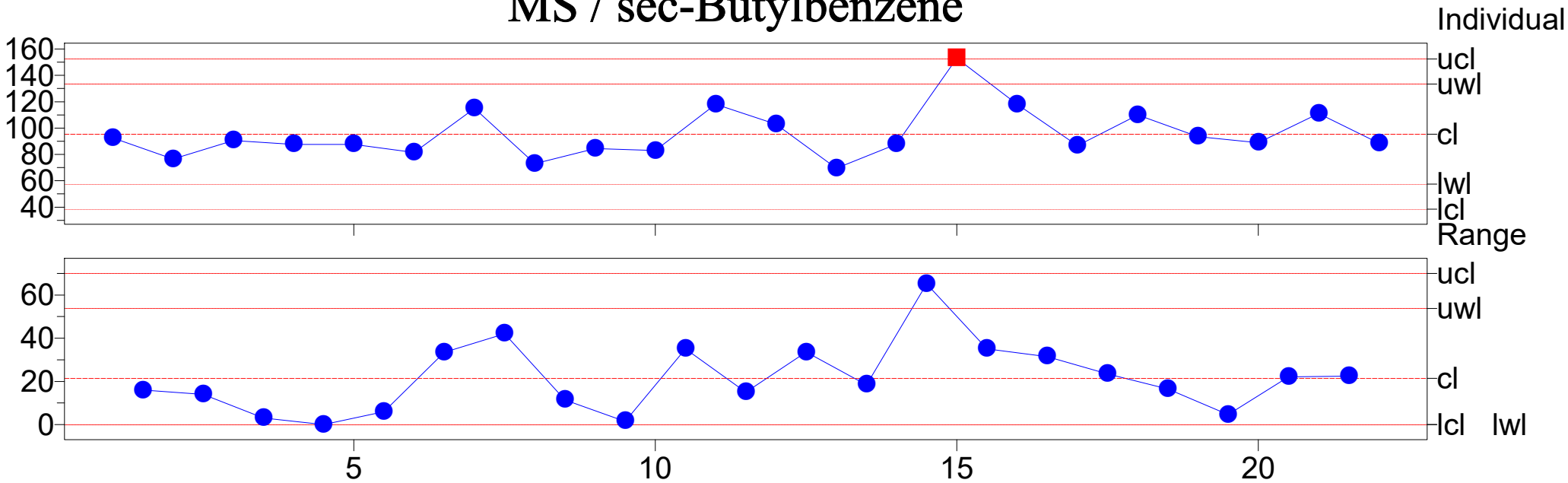
FROM : 12-Jun-2014 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
159000	2216604	107.00	106.6	0	µg/L	SDIAZ
159060	2217547	97.20	97.2	0	µg/L	SDIAZ
161170	2248533	76.60	76.6	0	µg/L	NVILLANUEV
161170	2248533	76.60	76.6	0	µg/L	NVILLANUEV
161004	2249923	79.10	79.1	0	µg/L	JRIVERA
163193	2281278	114.00	114.2	0	µg/L	JRIVERA
163385	2284593	101.00	101.0	0	µg/L	SDIAZ
164043	2294981	121.00	60.4	0	µg/L	JRIVERA
164153	2296552	76.80	76.8	0	µg/L	JRIVERA
166452	2334316	99.70	498.6	0	µg/L	SEDS
167880	2356681	116.00	116.1	0	µg/L	JERJ
168547	2366101	116.00	115.7	0	µg/L	NIVA
169805	2384948	103.00	103.1	0	µg/L	JERJ
170555	2397632	115.00	114.9	0	µg/L	JERJ
170902	2402288	124.00	123.7	0	µg/L	JERJ
171042	2404639	64.80	129653.7	0	µg/L	SEDS
171340	2409452	114.00	114.4	0	µg/L	JERJ
171542	2414023	0.00	0	0	µg/L	SEDS
172183	2424036	156.00	780.6	0	µg/L	SEDS
174116	2456945	70.40	3520.0	0	µg/L	SEDS
174811	2468126	86.20	86.2	0	µg/L	JERJ
175157	2473311	115.00	115.0	0	µg/L	JERJ
179934	2545952	91.50	91.5	0	µg/L	NIVA
179907	2545508	119.00	119.1	0	µg/L	NIVA
183490	2602291	140.00	701.2	0	µg/L	KOTERO
183902	2608841	122.00	122.3	0	µg/L	SEDS
184299	2615555	143.00	143.0	0	µg/L	SEDS
184501	2618750	139.00	138.6	0	µg/L	SEDS
184689	2622122	120.00	119.6	0	µg/L	SEDS
186254	2646434	113.00	11330.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO

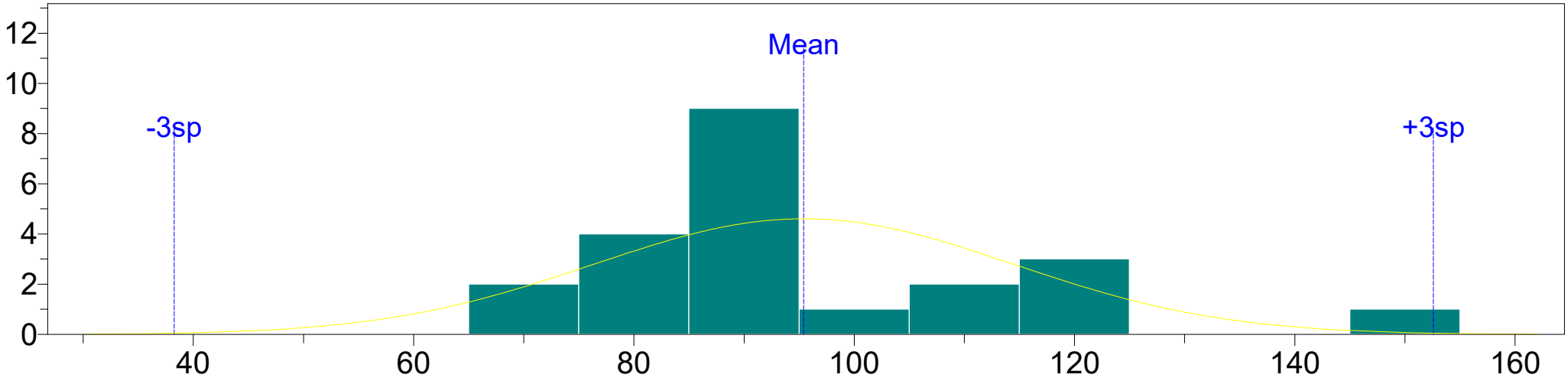
MS / sec-Butylbenzene



Individual: cl: 95.4182 ucl: 152.396 lcl: 38.44 Subgroup Size: 1
Range: cl: 21.4238 ucl: 69.9977 lcl: 0

❄ Rule Violation

MS / sec-Butylbenzene



Samples: 22 3sp Lim: (38.252, 152.58)
Mean: 95.4182
Std Dev: 19.055
Skewness: 1.2984

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** sec-Butylbenzene

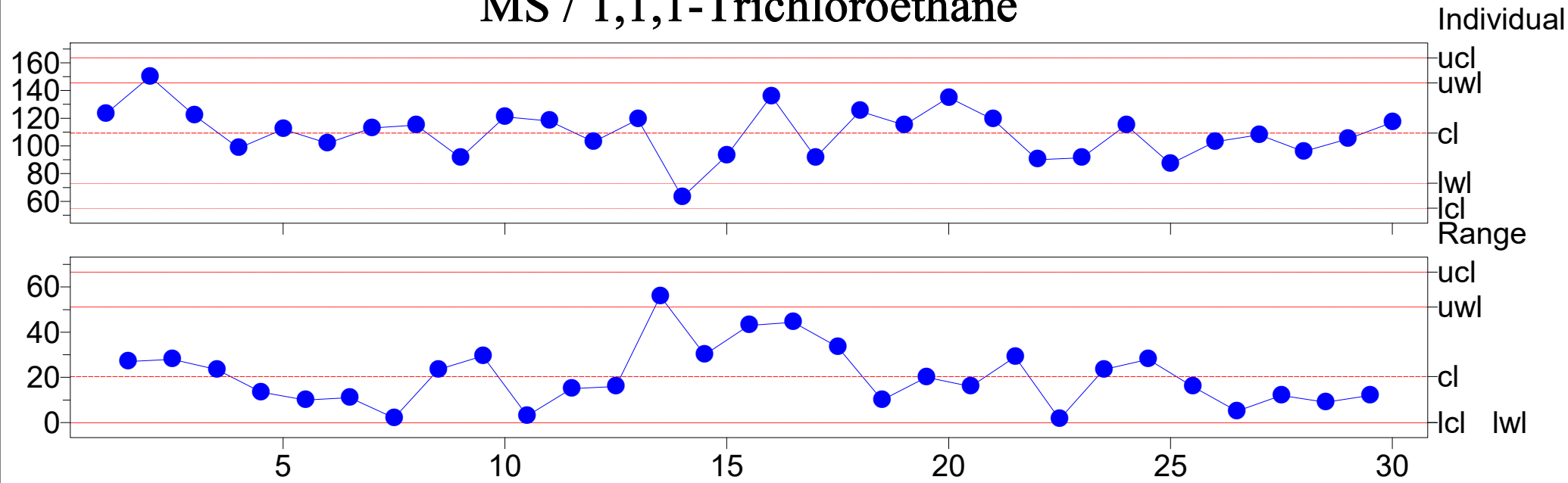
FROM : 13-Mar-2014 **TO :** 13-Mar-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
156484	2182169	92.50	18.5	0	µg/L	JRIVERA
157624	2197725	76.50	15.3	0	µg/L	SDIAZ
158628	2211578	90.50	18.1	0	µg/L	JRIVERA
161170	2248533	87.50	17.5	0	µg/L	NVILLANUEV
161170	2248533	87.50	17.5	0	µg/L	NVILLANUEV
161004	2249923	81.50	16.3	0	µg/L	JRIVERA
163193	2281278	115.00	23.0	0	µg/L	JRIVERA
163385	2284593	73.00	14.6	0	µg/L	SDIAZ
166452	2334316	84.40	84.4	0	µg/L	SEDS
167880	2356681	83.00	16.6	0	µg/L	JERJ
168547	2366101	118.00	23.6	0	µg/L	NIVA
170555	2397632	103.00	20.5	0	µg/L	JERJ
171042	2404639	69.40	27742.7	0	µg/L	SEDS
171340	2409452	87.80	17.6	0	µg/L	JERJ
171542	2414023	153.00	305.7	0	µg/L	SEDS
172183	2424036	118.00	117.6	0	µg/L	SEDS
183490	2602291	86.60	86.6	0	µg/L	KOTERO
183902	2608841	110.00	22.0	0	µg/L	SEDS
184299	2615555	93.50	18.7	0	µg/L	SEDS
184501	2618750	88.90	17.8	0	µg/L	SEDS
184689	2622122	111.00	22.2	0	µg/L	SEDS
186254	2646434	88.60	1772.0	0	µg/L	SEDS

Quantity of samples : 22

Printed by : ELAZARO1

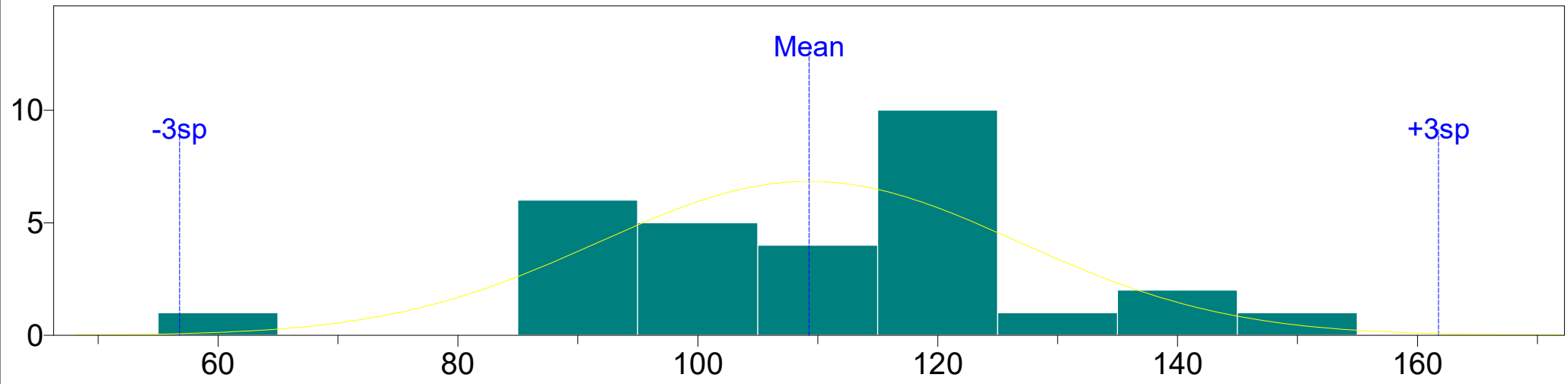
MS / 1,1,1-Trichloroethane



Individual: cl: 109.27 ucl: 163.452 lcl: 55.088 Subgroup Size: 1
Range: cl: 20.3724 ucl: 66.5625 lcl: 0

❄ Rule Violation

MS / 1,1,1-Trichloroethane



Samples: 30 3sp Lim: (56.785, 161.76)
Mean: 109.27
Std Dev: 17.495
Skewness:-.16627

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** 1,1,1-Trichloroethane

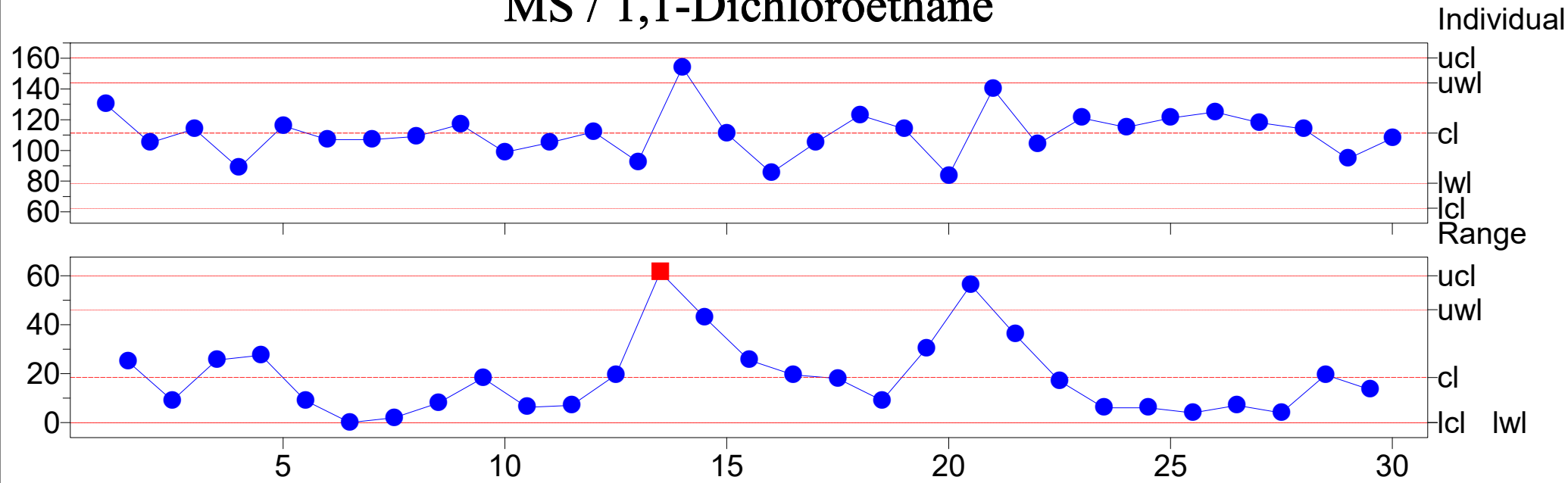
FROM : 10-Jul-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
171542	2414023	123.00	245.9	0	µg/L	SEDS
172183	2424036	150.00	150.0	0	µg/L	SEDS
173600	2448489	122.00	24.3	0	µg/L	JERJ
174285	2459534	98.50	19.7	0	µg/L	SEDS
174811	2468126	112.00	22.3	0	µg/L	JERJ
174528	2463581	102.00	20.3	0	µg/L	JERJ
175089	2472512	113.00	22.5	0	µg/L	JERJ
175157	2473311	115.00	22.9	0	µg/L	JERJ
178331	2526023	91.50	18.3	0	µg/L	SEDS
179697	2542098	121.00	24.2	0	µg/L	SEDS
180011	2547189	118.00	23.6	0	µg/L	NIVA
179934	2545952	103.00	20.6	0	µg/L	NIVA
179907	2545508	119.00	23.8	0	µg/L	NIVA
180761	2557488	63.00	12.6	0	µg/L	NIVA
180671	2556845	93.00	18.6	0	µg/L	NIVA
181519	2569463	136.00	27.1	0	µg/L	SEDS
183490	2602291	91.60	91.6	0	µg/L	KOTERO
183902	2608841	125.00	25.0	0	µg/L	SEDS
184299	2615555	115.00	23.0	0	µg/L	SEDS
184501	2618750	135.00	26.9	0	µg/L	SEDS
184689	2622122	119.00	23.7	0	µg/L	SEDS
186026	2643277	90.00	18.0	0	µg/L	SEDS
185849	2640485	91.50	18.3	0	µg/L	SEDS
186254	2646434	115.00	2293.0	0	µg/L	SEDS
170190	2391537	87.00	17.4	0	µg/L	SEDS
170555	2397632	103.00	20.5	0	µg/L	JERJ
170902	2402288	108.00	21.6	0	µg/L	JERJ
171042	2404639	96.00	38413.0	0	µg/L	SEDS
171340	2409452	105.00	21.0	0	µg/L	JERJ
171631	2415486	117.00	23.3	0	µg/L	JERJ

Quantity of samples : 30

Printed by : ELAZARO

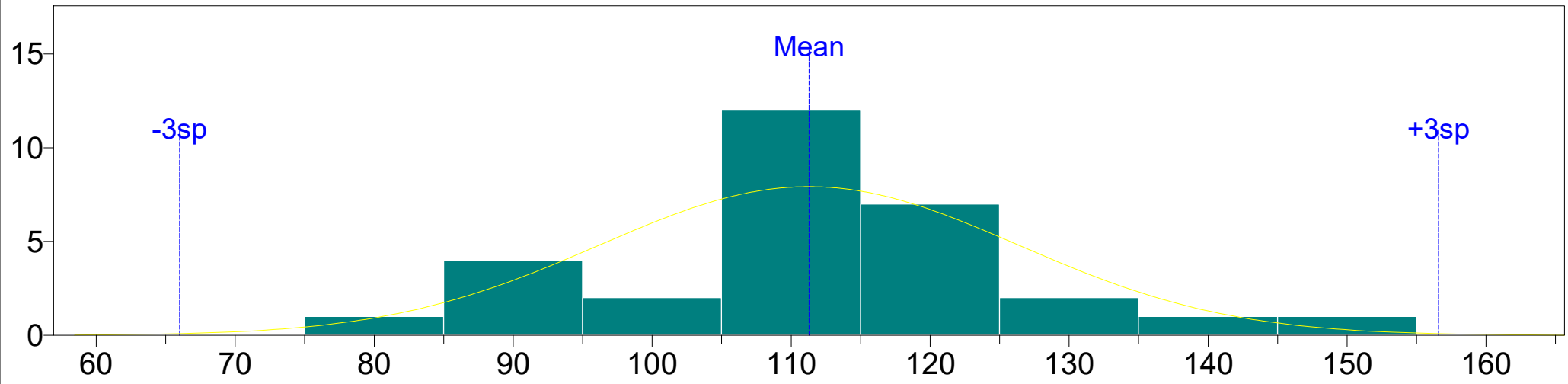
MS / 1,1-Dichloroethane



Individual: cl: 111.283 ucl: 160.164 lcl: 62.4022 Subgroup Size: 1
Range: cl: 18.3793 ucl: 60.0505 lcl: 0

❄ Rule Violation

MS / 1,1-Dichloroethane



Samples: 30 3sp Lim: (65.992, 156.57)
Mean: 111.283
Std Dev: 15.097
Skewness: .51295

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** 1,1-Dichloroethane

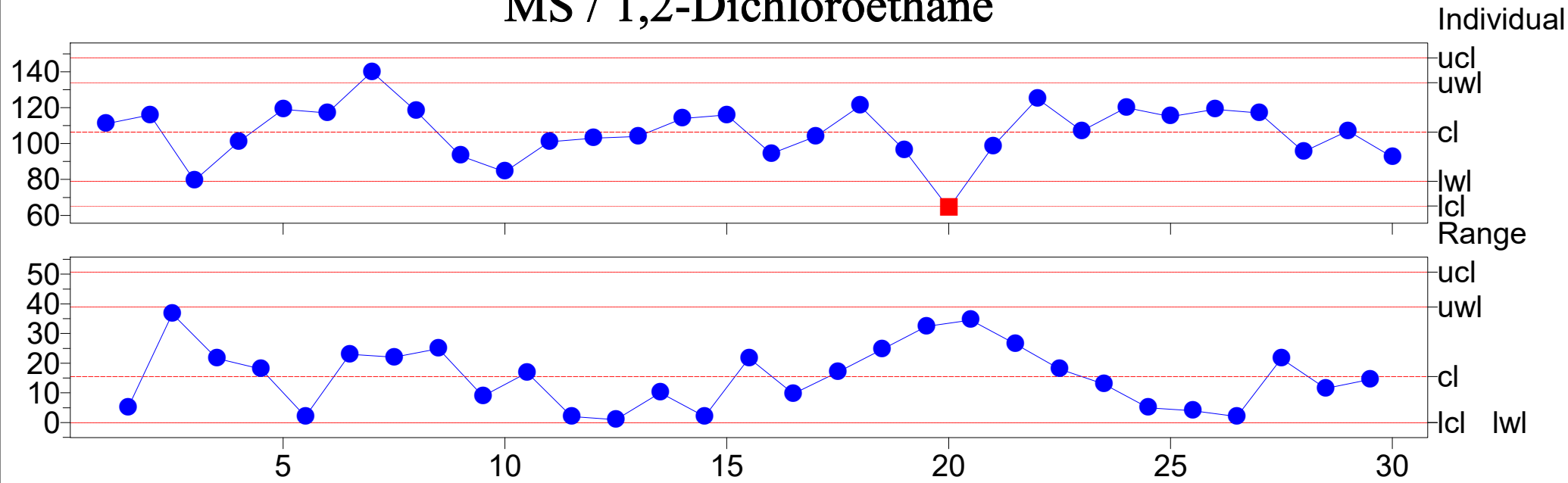
FROM : 17-May-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
168547	2366101	130.00	25.9	0	µg/L	NIVA
169580	2378983	105.00	20.9	0	µg/L	JERJ
169805	2384948	114.00	22.7	0	µg/L	JERJ
170190	2391537	88.50	17.7	0	µg/L	SEDS
170046	2389224	116.00	23.2	0	µg/L	JERJ
170139	2390640	107.00	21.4	0	µg/L	SEDS
170125	2390300	107.00	21.4	0	µg/L	JERJ
170555	2397632	109.00	21.7	0	µg/L	JERJ
170902	2402288	117.00	23.4	0	µg/L	JERJ
171042	2404639	98.80	39518.9	0	µg/L	SEDS
171340	2409452	105.00	21.0	0	µg/L	JERJ
171631	2415486	112.00	22.4	0	µg/L	JERJ
171542	2414023	92.50	185.0	0	µg/L	SEDS
172183	2424036	154.00	154.2	0	µg/L	SEDS
173600	2448489	111.00	22.2	0	µg/L	JERJ
174811	2468126	85.50	17.1	0	µg/L	JERJ
174528	2463581	105.00	20.9	0	µg/L	JERJ
175089	2472512	123.00	24.5	0	µg/L	JERJ
175157	2473311	114.00	22.8	0	µg/L	JERJ
178331	2526023	83.70	16.7	0	µg/L	SEDS
179907	2545508	140.00	28.0	0	µg/L	NIVA
179934	2545952	104.00	20.7	0	µg/L	NIVA
180011	2547189	121.00	24.2	0	µg/L	NIVA
183490	2602291	115.00	114.8	0	µg/L	KOTERO
183902	2608841	121.00	24.2	0	µg/L	SEDS
184299	2615555	125.00	25.0	0	µg/L	SEDS
184501	2618750	118.00	23.5	0	µg/L	SEDS
184689	2622122	114.00	22.8	0	µg/L	SEDS
186026	2643277	94.50	18.9	0	µg/L	SEDS
186254	2646434	108.00	2165.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO

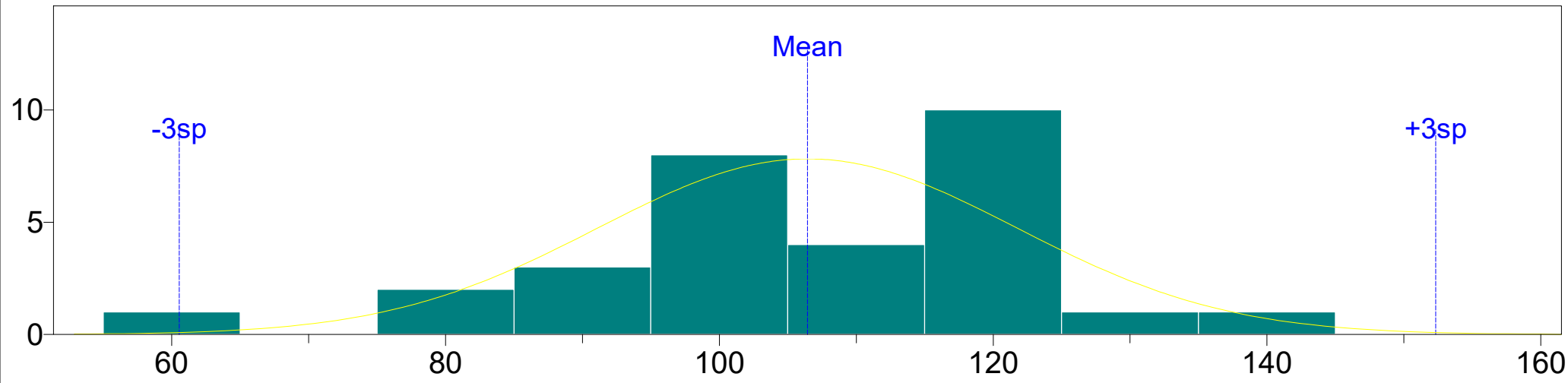
MS / 1,2-Dichloroethane



Individual: cl: 106.43 ucl: 147.672 lcl: 65.1883 Subgroup Size: 1
Range: cl: 15.5069 ucl: 50.6655 lcl: 0

❄ Rule Violation

MS / 1,2-Dichloroethane



Samples: 30 3sp Lim: (60.537, 152.32)
Mean: 106.43
Std Dev: 15.298
Skewness:-.5541

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** 1,2-Dichloroethane

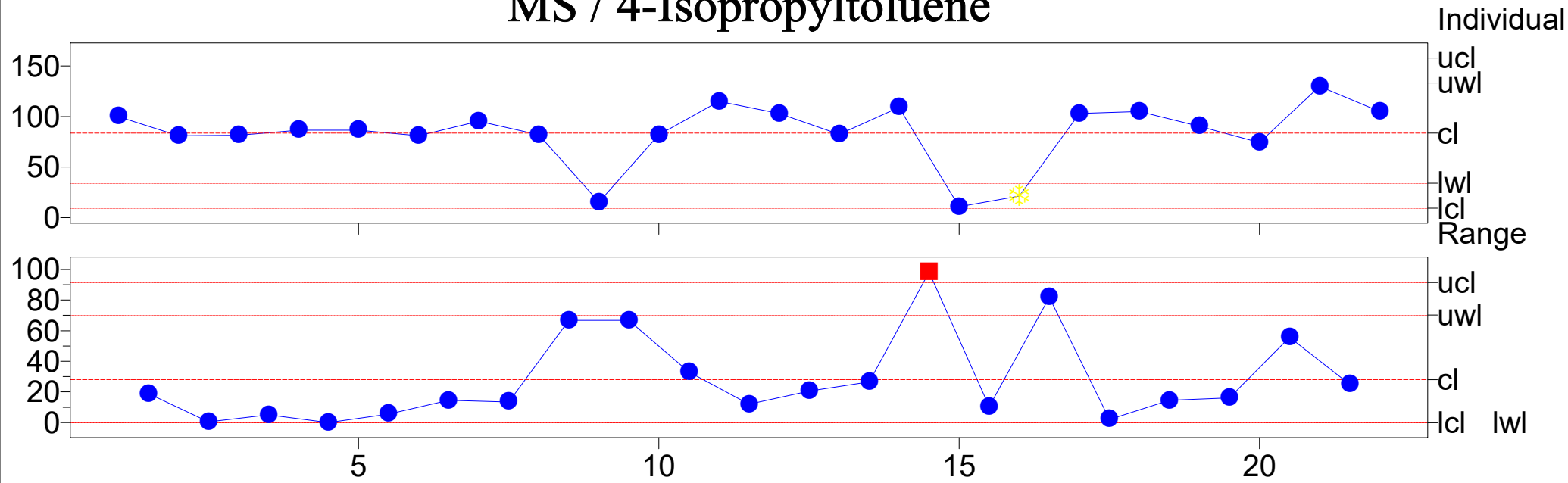
FROM : 22-Jul-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
170555	2397632	111.00	22.1	0	µg/L	JERJ
170902	2402288	116.00	23.2	0	µg/L	JERJ
171042	2404639	79.40	31778.1	0	µg/L	SEDS
171340	2409452	101.00	20.2	0	µg/L	JERJ
171542	2414023	119.00	238.0	0	µg/L	SEDS
171631	2415486	117.00	23.4	0	µg/L	JERJ
172183	2424036	140.00	140.1	0	µg/L	SEDS
173600	2448489	118.00	23.6	0	µg/L	JERJ
174116	2456945	93.10	931.0	0	µg/L	SEDS
174285	2459534	84.20	16.8	0	µg/L	SEDS
174811	2468126	103.00	20.6	0	µg/L	JERJ
174528	2463581	104.00	20.7	0	µg/L	JERJ
175089	2472512	114.00	22.8	0	µg/L	JERJ
175157	2473311	116.00	23.2	0	µg/L	JERJ
178331	2526023	94.30	18.9	0	µg/L	SEDS
179934	2545952	104.00	20.8	0	µg/L	NIVA
180011	2547189	121.00	24.2	0	µg/L	NIVA
179907	2545508	96.40	19.3	0	µg/L	NIVA
180761	2557488	64.00	12.8	0	µg/L	NIVA
180671	2556845	98.50	19.7	0	µg/L	NIVA
181519	2569463	125.00	25.0	0	µg/L	SEDS
183490	2602291	107.00	107.1	0	µg/L	KOTERO
183902	2608841	120.00	24.1	0	µg/L	SEDS
184299	2615555	115.00	23.0	0	µg/L	SEDS
184689	2622122	119.00	23.9	0	µg/L	SEDS
184501	2618750	117.00	23.4	0	µg/L	SEDS
185849	2640485	95.50	19.1	0	µg/L	SEDS
186254	2646434	107.00	3213.0	1066.0	µg/L	SEDS
186026	2643277	92.50	18.5	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO

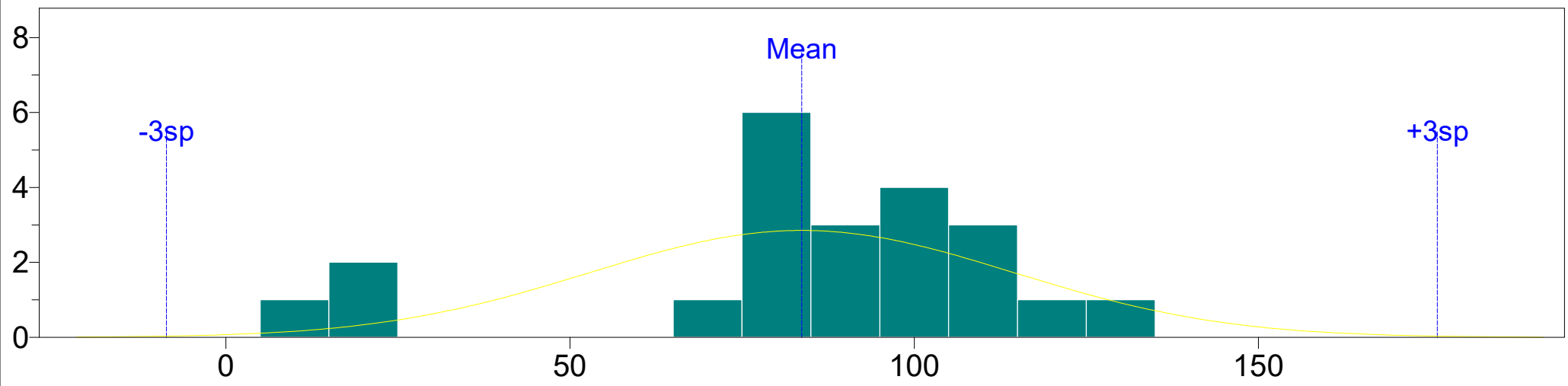
MS / 4-Isopropyltoluene



Individual: cl: 83.6682 ucl: 158.035 lcl: 9.30141 Subgroup Size: 1
Range: cl: 27.9619 ucl: 91.3596 lcl: 0

❄ Rule Violation

MS / 4-Isopropyltoluene



Samples: 22 3sp Lim: (-8.6421, 175.98)
Mean: 83.6682
Std Dev: 30.77
Skewness:-1.2769

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** 4-Isopropyltoluene

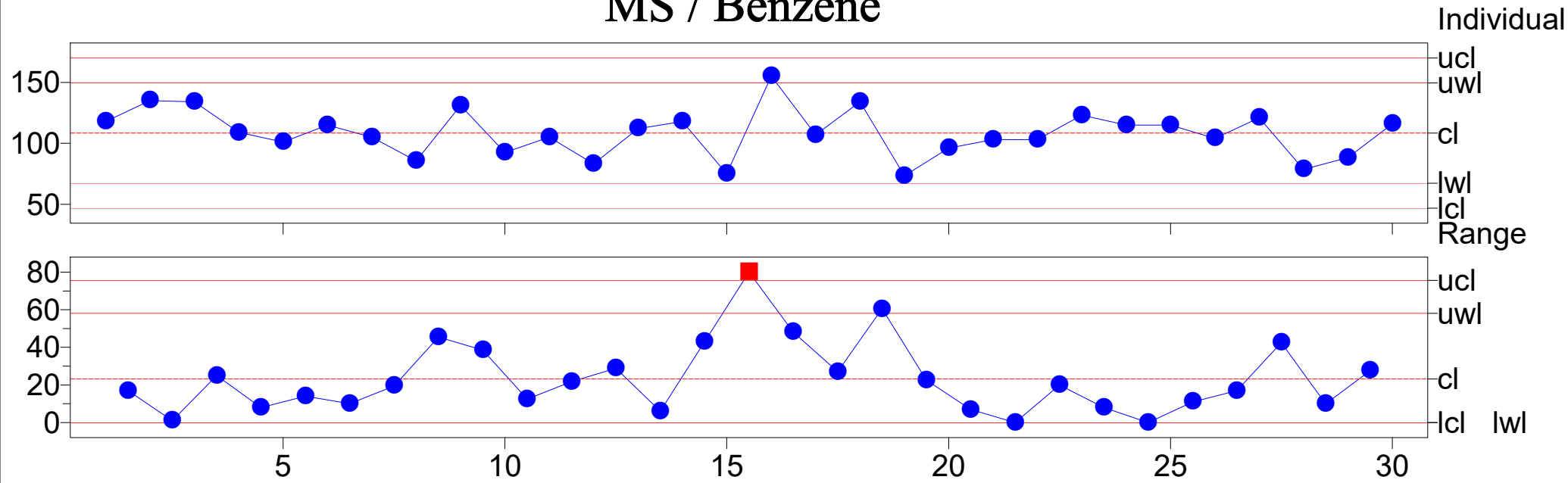
FROM : 18-Mar-2014 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
156484	2182169	100.00	20.0	0	µg/L	JRIVERA
157624	2197725	81.00	16.2	0	µg/L	SDIAZ
158628	2211578	81.50	16.3	0	µg/L	JRIVERA
161170	2248533	86.50	17.3	0	µg/L	NVILLANUEV
161170	2248533	86.50	17.3	0	µg/L	NVILLANUEV
161004	2249923	81.00	16.2	0	µg/L	JRIVERA
163193	2281278	95.50	19.1	0	µg/L	JRIVERA
163385	2284593	82.00	16.4	0	µg/L	SDIAZ
166452	2334316	15.30	15.3	0	µg/L	SEDS
167880	2356681	82.00	16.4	0	µg/L	JERJ
168547	2366101	115.00	23.0	0	µg/L	NIVA
170555	2397632	103.00	20.5	0	µg/L	JERJ
171042	2404639	82.40	32960.0	0	µg/L	SEDS
171340	2409452	109.00	21.7	0	µg/L	JERJ
171542	2414023	10.80	21.6	0	µg/L	SEDS
172183	2424036	21.30	21.3	0	µg/L	SEDS
183490	2602291	103.00	103.0	0	µg/L	KOTERO
183902	2608841	105.00	21.0	0	µg/L	SEDS
184299	2615555	90.50	18.1	0	µg/L	SEDS
184501	2618750	74.40	14.9	0	µg/L	SEDS
184689	2622122	130.00	25.9	0	µg/L	SEDS
186254	2646434	105.00	2092.0	0	µg/L	SEDS

Quantity of samples : 22

Printed by : ELAZARO

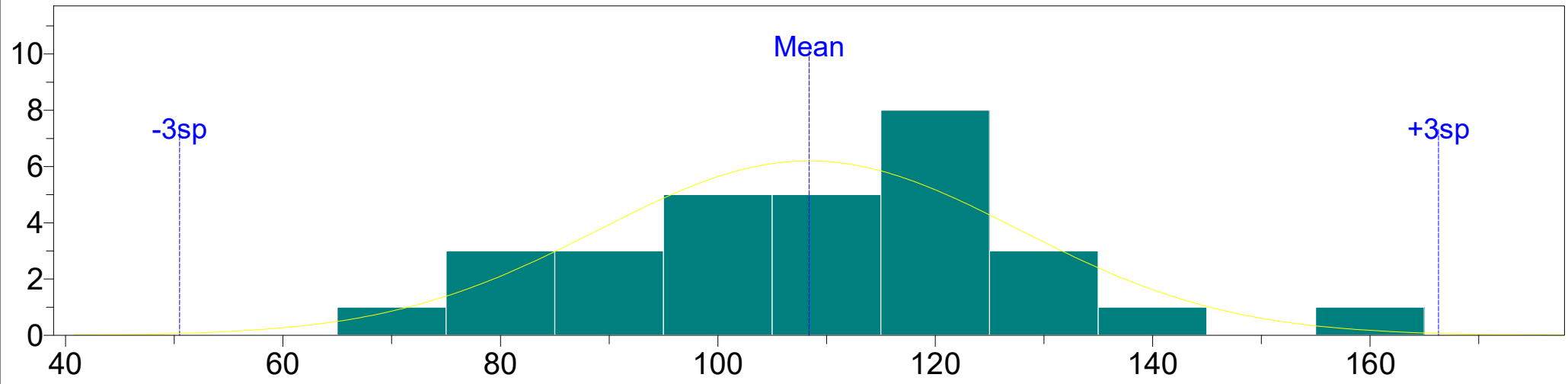
MS / Benzene



Individual: cl: 108.39 ucl: 169.982 lcl: 46.7979 Subgroup Size: 1
Range: cl: 23.1586 ucl: 75.6659 lcl: 0

❄ Rule Violation

MS / Benzene



Samples: 30 3sp Lim: (50.476, 166.3)
Mean: 108.39
Std Dev: 19.304
Skewness: .1189

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Benzene

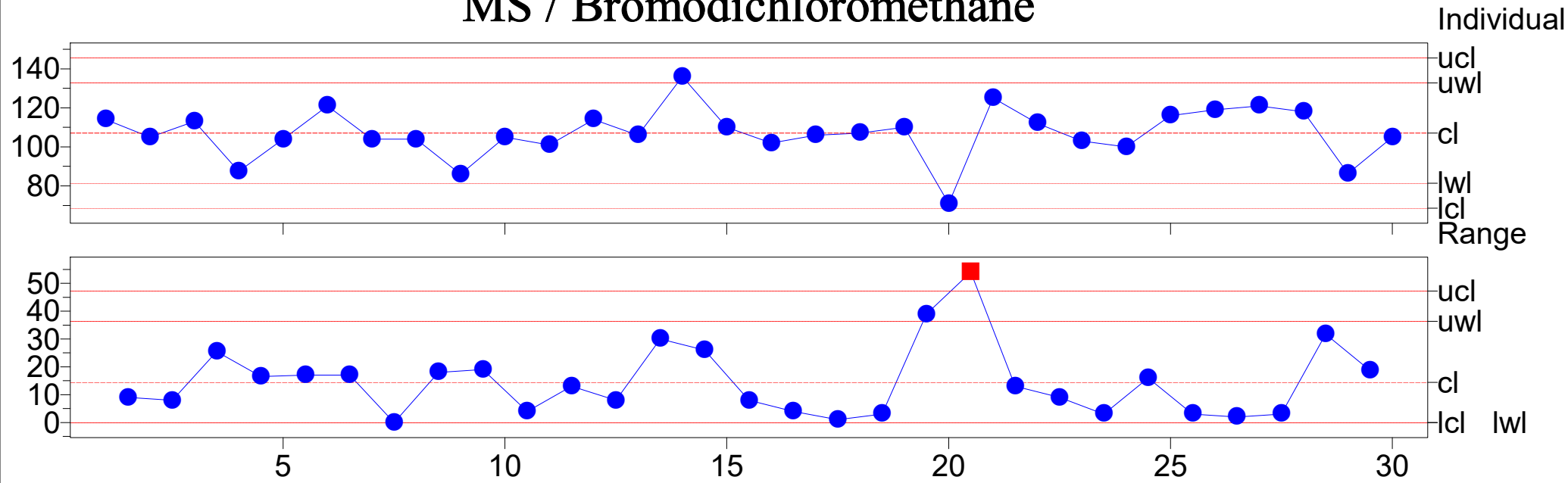
FROM : 09-Jun-2016 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
179697	2542098	118.00	23.5		µg/L	SEDS
179641	2541152	135.00	26.9		µg/L	SEDS
180011	2547189	134.00	26.8		µg/L	NIVA
179934	2545952	109.00	21.7		µg/L	NIVA
179907	2545508	101.00	20.3		µg/L	NIVA
180080	2548216	115.00	23.0		µg/L	NIVA
180534	2554969	105.00	2091.0		µg/L	SEDS
180761	2557488	85.50	17.1		µg/L	NIVA
181865	2575048	131.00	26.2		µg/L	NIVA
181952	2576825	92.50	25.9		µg/L	SEDS
181865	2575049	105.00	23.9		µg/L	NIVA
182196	2580637	83.20	361.7		µg/L	NIVA
182196	2580636	112.00	22.4		µg/L	NIVA
182410	2583893	118.00	25.6		µg/L	NIVA
182452	2584811	75.00	246.8		µg/L	NIVA
182597	2587475	155.00	31.0		µg/L	NIVA
182597	2587474	107.00	60.8		µg/L	NIVA
182647	2588414	134.00	26.7		µg/L	NIVA
183006	2594513	73.50	59.8		µg/L	NIVA
183490	2602291	96.10	96.1		µg/L	KOTERO
183411	2601155	103.00	20.6		µg/L	NIVA
183411	2601155	103.00	20.6		µg/L	NIVA
183902	2608841	123.00	24.6		µg/L	SEDS
184299	2615555	115.00	23.0		µg/L	SEDS
184501	2618750	115.00	23.0		µg/L	SEDS
184689	2622122	104.00	20.9		µg/L	SEDS
185093	2628755	121.00	5134.0		µg/L	KMOR
185358	2632956	78.50	31.4		µg/L	SEDS
186026	2643277	88.40	17.7		µg/L	SEDS
186254	2646434	116.00	2326.0		µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO1

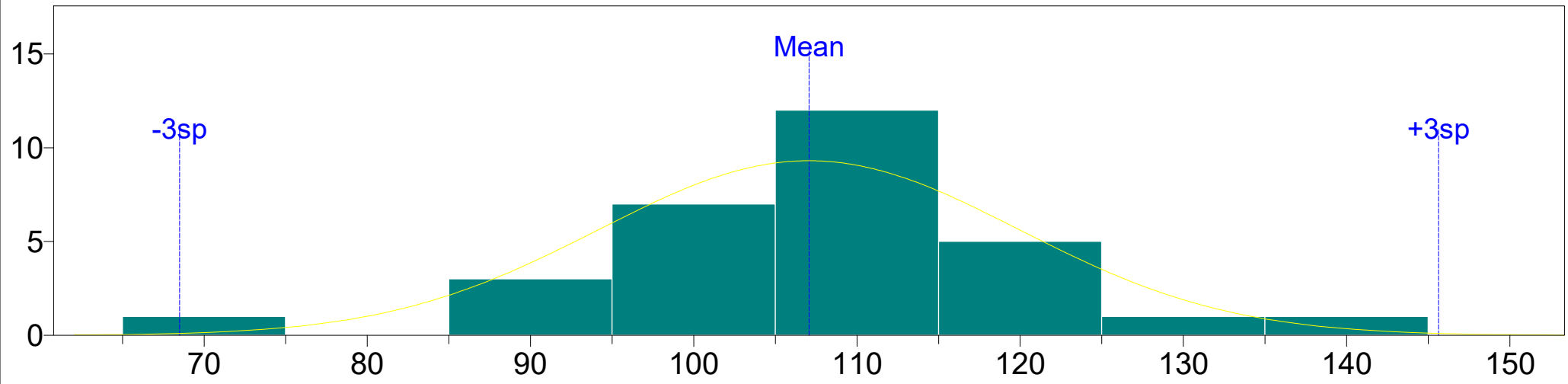
MS / Bromodichloromethane



Individual: cl: 107.06 ucl: 145.523 lcl: 68.597 Subgroup Size: 1
Range: cl: 14.4621 ucl: 47.2517 lcl: 0

❄ Rule Violation

MS / Bromodichloromethane



Samples: 30 3sp Lim: (68.494, 145.63)
Mean: 107.06
Std Dev: 12.855
Skewness:-.5504

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Bromodichloromethane

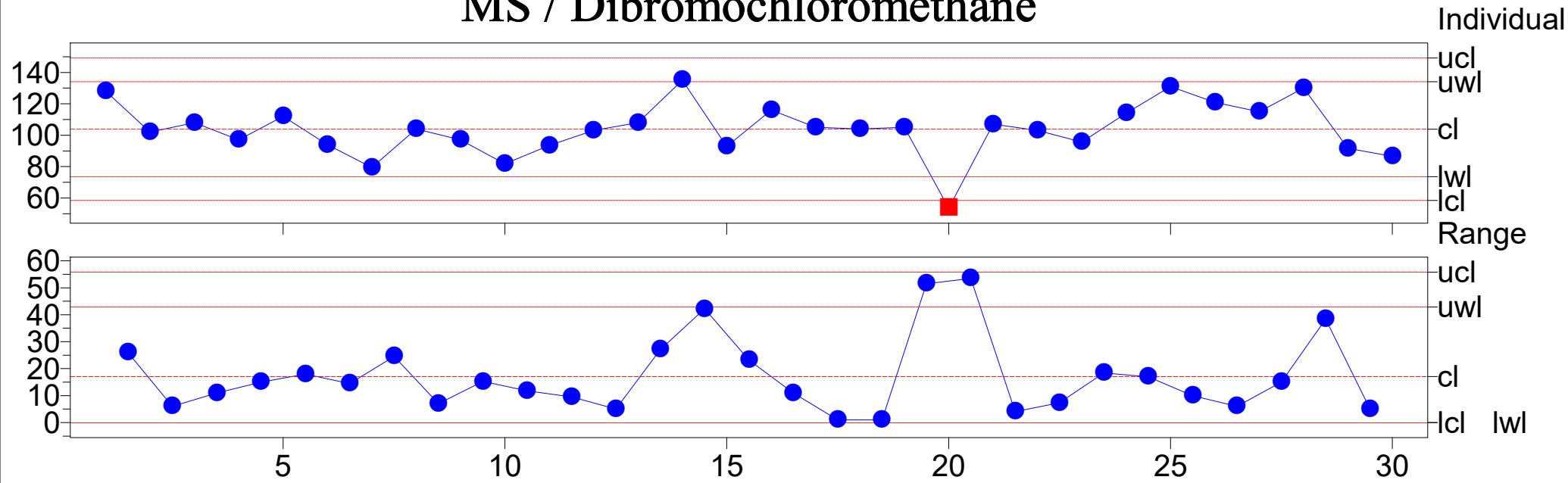
FROM : 17-May-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
168547	2366101	114.00	22.8	0	µg/L	NIVA
169580	2378983	105.00	20.9	0	µg/L	JERJ
169805	2384948	113.00	22.6	0	µg/L	JERJ
170190	2391537	87.50	17.5	0	µg/L	SEDS
170125	2390300	104.00	20.8	0	µg/L	JERJ
170046	2389224	121.00	24.2	0	µg/L	JERJ
170139	2390640	104.00	20.7	0	µg/L	SEDS
170555	2397632	104.00	20.7	0	µg/L	JERJ
171042	2404639	86.00	34416.5	0	µg/L	SEDS
170902	2402288	105.00	20.9	0	µg/L	JERJ
171340	2409452	101.00	20.2	0	µg/L	JERJ
171631	2415486	114.00	22.8	0	µg/L	JERJ
171542	2414023	106.00	212.6	0	µg/L	SEDS
172183	2424036	136.00	135.5	0	µg/L	SEDS
173600	2448489	110.00	22.0	0	µg/L	JERJ
174528	2463581	102.00	20.4	0	µg/L	JERJ
174811	2468126	106.00	21.2	0	µg/L	JERJ
175089	2472512	107.00	21.4	0	µg/L	JERJ
175157	2473311	110.00	22.0	0	µg/L	JERJ
178331	2526023	71.00	14.2	0	µg/L	SEDS
180011	2547189	125.00	25.0	0	µg/L	NIVA
179934	2545952	112.00	22.3	0	µg/L	NIVA
179907	2545508	103.00	20.6	0	µg/L	NIVA
183490	2602291	100.00	100.2	0	µg/L	KOTERO
183902	2608841	116.00	23.2	0	µg/L	SEDS
184299	2615555	119.00	23.8	0	µg/L	SEDS
184501	2618750	121.00	24.3	0	µg/L	SEDS
184689	2622122	118.00	23.7	0	µg/L	SEDS
186026	2643277	86.30	17.3	0	µg/L	SEDS
186254	2646434	105.00	2096.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO1

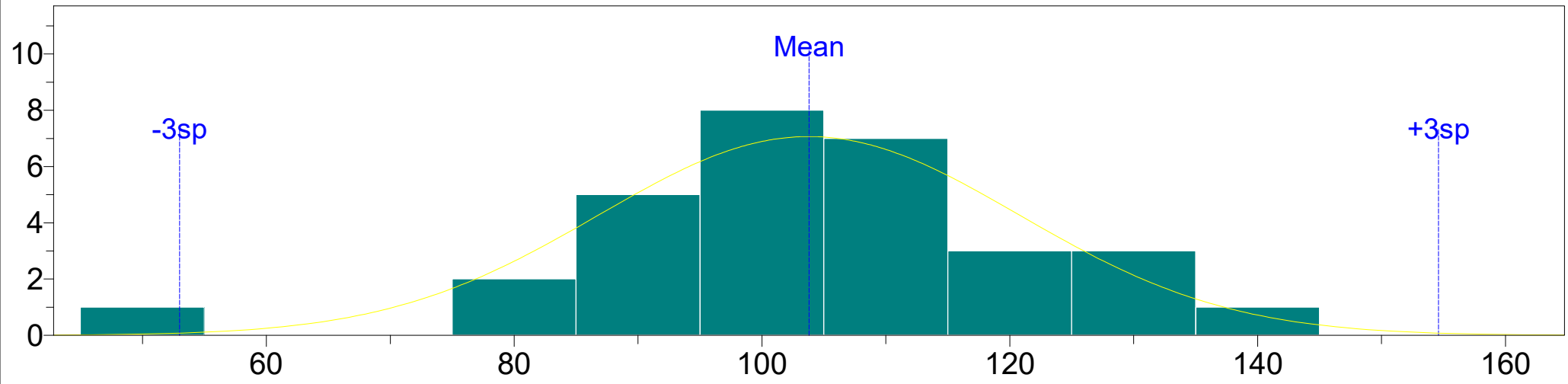
MS / Dibromochloromethane



Individual: cl: 103.793 ucl: 149.208 lcl: 58.3788 Subgroup Size: 1
Range: cl: 17.0759 ucl: 55.7917 lcl: 0

❄ Rule Violation

MS / Dibromochloromethane



Samples: 30 3sp Lim: (52.991, 154.6)
Mean: 103.793
Std Dev: 16.934
Skewness:-.51232

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Dibromochloromethane

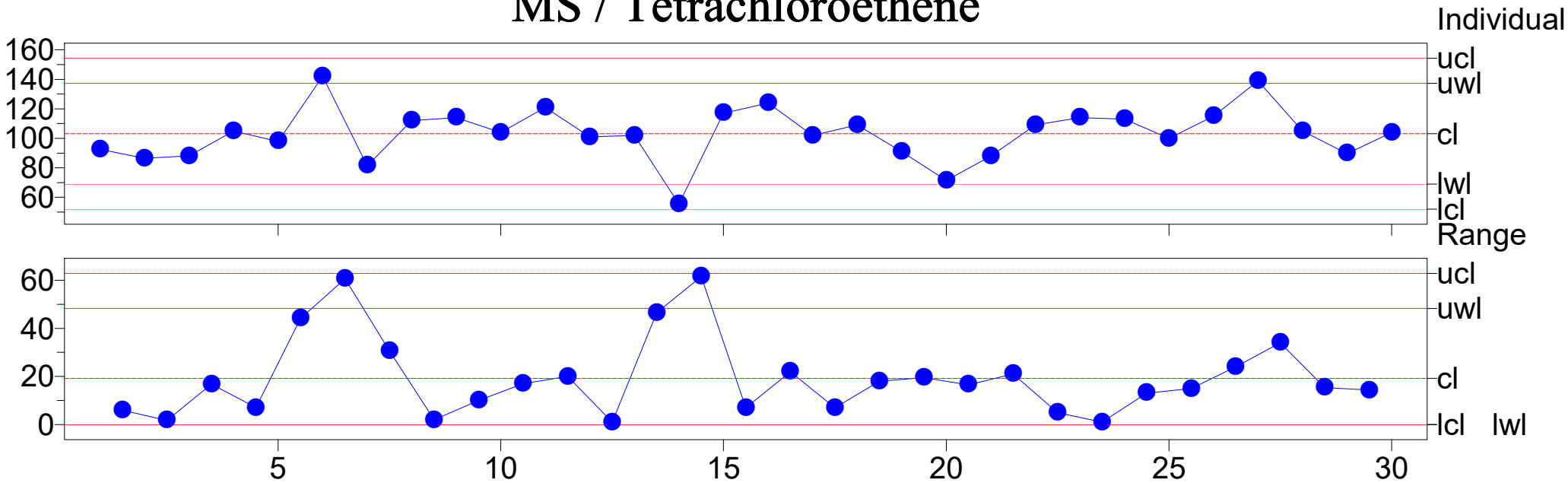
FROM : 17-May-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
168547	2366101	128.00	25.5	0	µg/L	NIVA
169580	2378983	102.00	20.4	0	µg/L	JERJ
169805	2384948	108.00	21.5	0	µg/L	JERJ
170125	2390300	97.00	19.4	0	µg/L	JERJ
170046	2389224	112.00	22.4	0	µg/L	JERJ
170139	2390640	94.00	18.8	0	µg/L	SEDS
170190	2391537	79.50	15.9	0	µg/L	SEDS
170555	2397632	104.00	20.7	0	µg/L	JERJ
170902	2402288	97.00	19.4	0	µg/L	JERJ
171042	2404639	81.70	32689.9	0	µg/L	SEDS
171340	2409452	93.50	18.7	0	µg/L	JERJ
171542	2414023	103.00	205.0	0	µg/L	SEDS
171631	2415486	108.00	21.6	0	µg/L	JERJ
172183	2424036	135.00	134.5	0	µg/L	SEDS
173600	2448489	92.80	18.6	0	µg/L	JERJ
174528	2463581	116.00	23.2	0	µg/L	JERJ
174811	2468126	105.00	21.0	0	µg/L	JERJ
175089	2472512	104.00	20.7	0	µg/L	JERJ
175157	2473311	105.00	21.1	0	µg/L	JERJ
178331	2526023	53.50	10.7	0	µg/L	SEDS
180011	2547189	107.00	21.4	0	µg/L	NIVA
179934	2545952	103.00	20.5	0	µg/L	NIVA
179907	2545508	95.60	19.1	0	µg/L	NIVA
183490	2602291	114.00	113.5	0	µg/L	KOTERO
183902	2608841	131.00	26.3	0	µg/L	SEDS
184299	2615555	121.00	24.2	0	µg/L	SEDS
184501	2618750	115.00	23.0	0	µg/L	SEDS
184689	2622122	130.00	26.0	0	µg/L	SEDS
186254	2646434	91.60	1832.0	0	µg/L	SEDS
186026	2643277	86.60	17.3	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO1

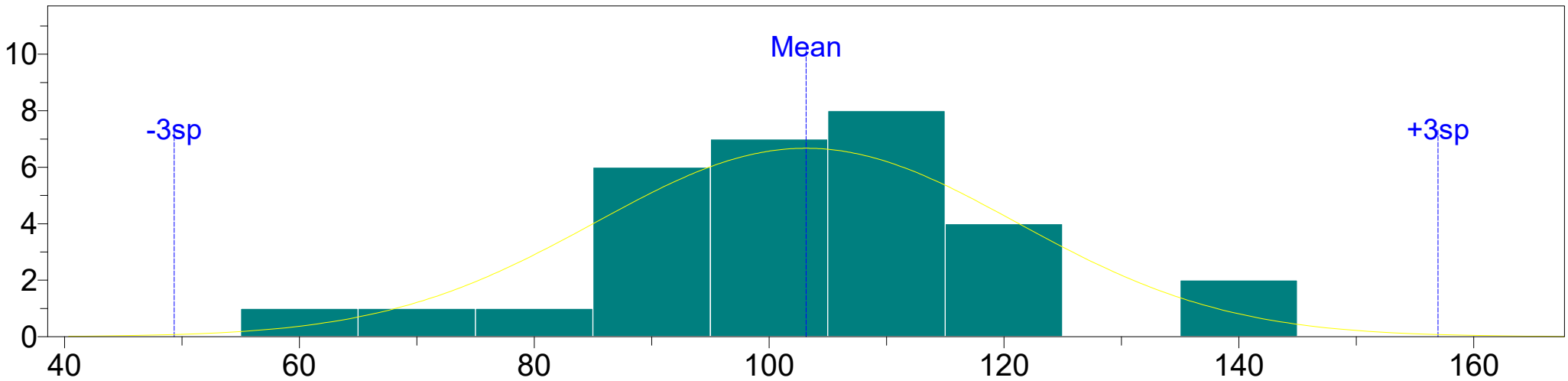
MS / Tetrachloroethene



Individual: cl: 103.137 ucl: 154.283 lcl: 51.9903 Subgroup Size: 1
Range: cl: 19.231 ucl: 62.8333 lcl: 0

❄ Rule Violation

MS / Tetrachloroethene



Samples: 30 3sp Lim: (49.319, 156.95)
Mean: 103.137
Std Dev: 17.939
Skewness:-.23402

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** Tetrachloroethene

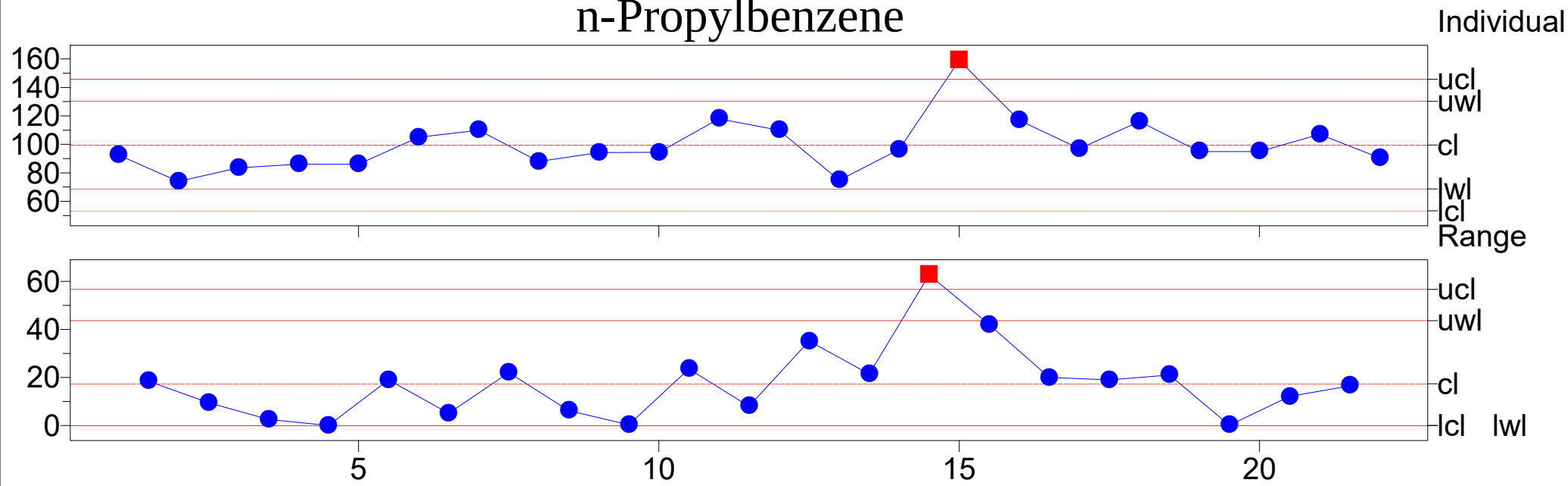
FROM : 04-Aug-2015 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
170902	2402288	92.50	18.5	0	µg/L	JERJ
171042	2404639	86.50	34610.5	0	µg/L	SEDS
171340	2409452	88.20	17.6	0	µg/L	JERJ
171631	2415486	105.00	23.6	2.5	µg/L	JERJ
171542	2414023	97.90	195.7	0	µg/L	SEDS
172183	2424036	142.00	142.0	0	µg/L	SEDS
173600	2448489	81.40	16.3	0	µg/L	JERJ
174116	2456945	112.00	1121.5	0	µg/L	SEDS
174285	2459534	114.00	22.8	0	µg/L	SEDS
174528	2463581	104.00	22.0	1.3	µg/L	JERJ
174811	2468126	121.00	24.1	0	µg/L	JERJ
175089	2472512	101.00	20.2	0	µg/L	JERJ
175157	2473311	102.00	20.5	0	µg/L	JERJ
178331	2526023	55.50	11.1	0	µg/L	SEDS
179697	2542098	117.00	23.4	0	µg/L	SEDS
180011	2547189	124.00	24.8	0	µg/L	NIVA
179907	2545508	102.00	20.3	0	µg/L	NIVA
179934	2545952	109.00	21.7	0	µg/L	NIVA
179990	2546896	91.00	18.2	0	µg/L	NIVA
180761	2557488	71.50	14.3	0	µg/L	NIVA
181519	2569463	88.00	17.6	0	µg/L	SEDS
183490	2602291	109.00	108.7	0	µg/L	KOTERO
183902	2608841	114.00	22.8	0	µg/L	SEDS
184299	2615555	113.00	22.5	0	µg/L	SEDS
184501	2618750	100.00	20.1	0	µg/L	SEDS
184689	2622122	115.00	23.0	0	µg/L	SEDS
185232	2631312	139.00	27.8	0	µg/L	SEDS
185849	2640485	105.00	20.9	0	µg/L	SEDS
186026	2643277	89.60	17.9	0	µg/L	SEDS
186254	2646434	104.00	2086.0	0	µg/L	SEDS

Quantity of samples : 30

Printed by : ELAZARO1

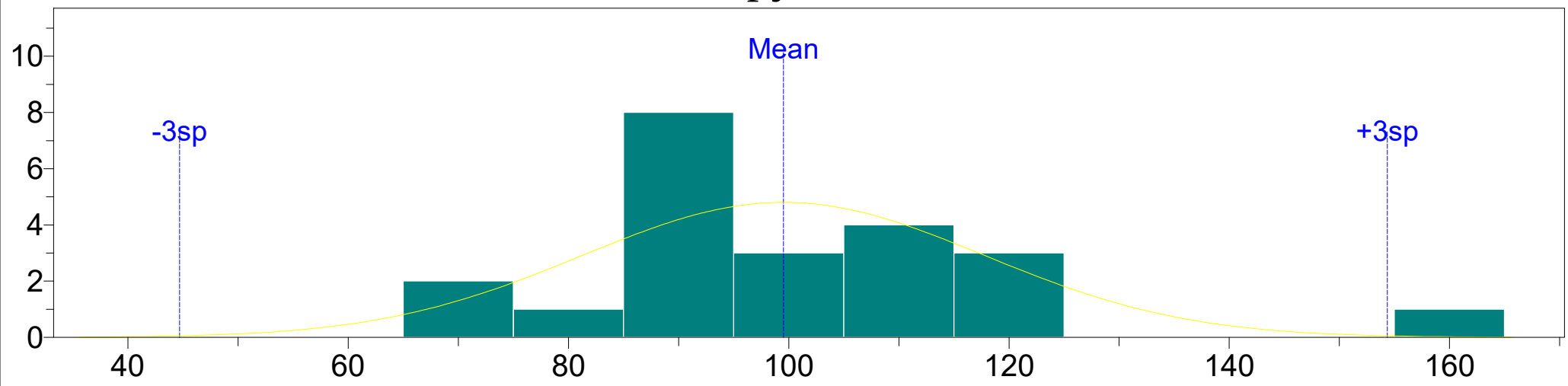
n-Propylbenzene



Individual: cl: 99.5136 ucl: 145.664 lcl: 53.3637 Subgroup Size: 1
Range: cl: 17.3524 ucl: 56.6952 lcl: 0

❄ Rule Violation

n-Propylbenzene



Samples: 22 3sp Lim: (44.674, 154.35)
Mean: 99.5136
Std Dev: 18.28
Skewness: 1.483

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** n-Propylbenzene

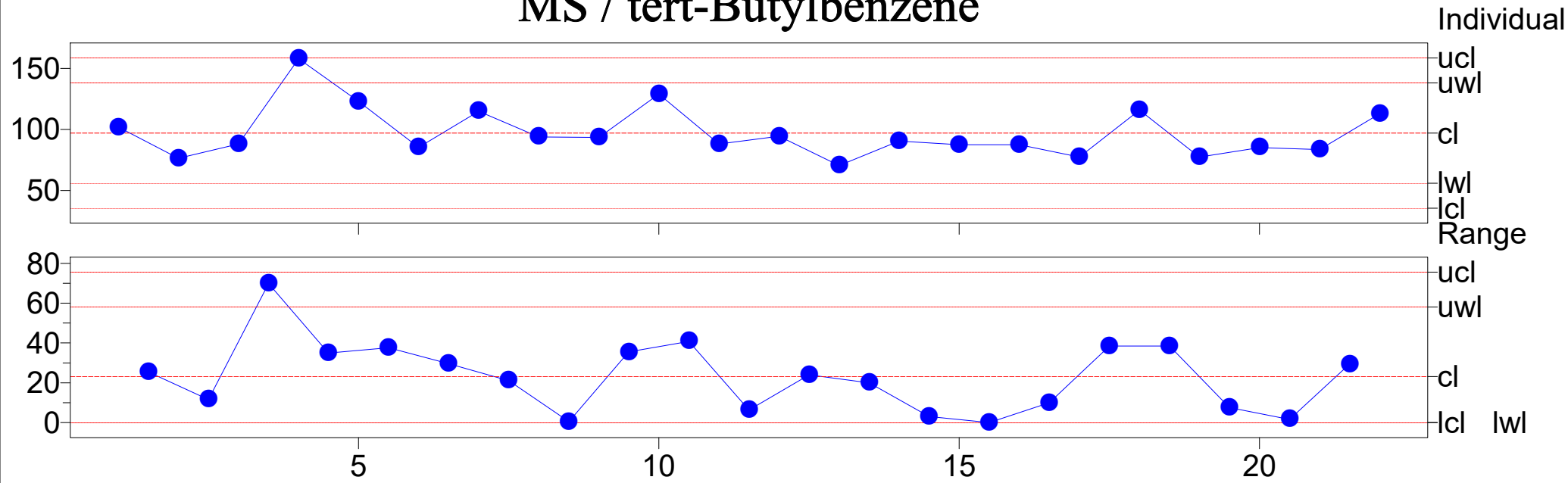
FROM : 18-Mar-2014 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
156484	2182169	92.50	18.5		µg/L	JRIVERA
157624	2197725	74.00	14.8		µg/L	SDIAZ
158628	2211578	83.50	16.7		µg/L	JRIVERA
161170	2248533	86.00	17.2		µg/L	NVILLANUEV
161170	2248533	86.00	17.2		µg/L	NVILLANUEV
161004	2249923	105.00	4576.0		µg/L	JRIVERA
163193	2281278	110.00	22.0		µg/L	JRIVERA
163385	2284593	88.00	17.6		µg/L	SDIAZ
166452	2334316	94.20	94.2		µg/L	SEDS
167880	2356681	94.50	18.9		µg/L	JERJ
168547	2366101	118.00	23.6		µg/L	NIVA
170555	2397632	110.00	22.0		µg/L	JERJ
171042	2404639	74.90	29954.4		µg/L	SEDS
171340	2409452	96.30	19.3		µg/L	JERJ
171542	2414023	159.00	318.5		µg/L	SEDS
172183	2424036	117.00	117.1		µg/L	SEDS
183490	2602291	97.00	97.0		µg/L	KOTERO
183902	2608841	116.00	23.3		µg/L	SEDS
184299	2615555	95.00	19.0		µg/L	SEDS
184501	2618750	94.90	19.0		µg/L	SEDS
184689	2622122	107.00	21.3		µg/L	SEDS
186254	2646434	90.50	1810.0		µg/L	SEDS

Quantity of samples : 22

Printed by : ELAZARO

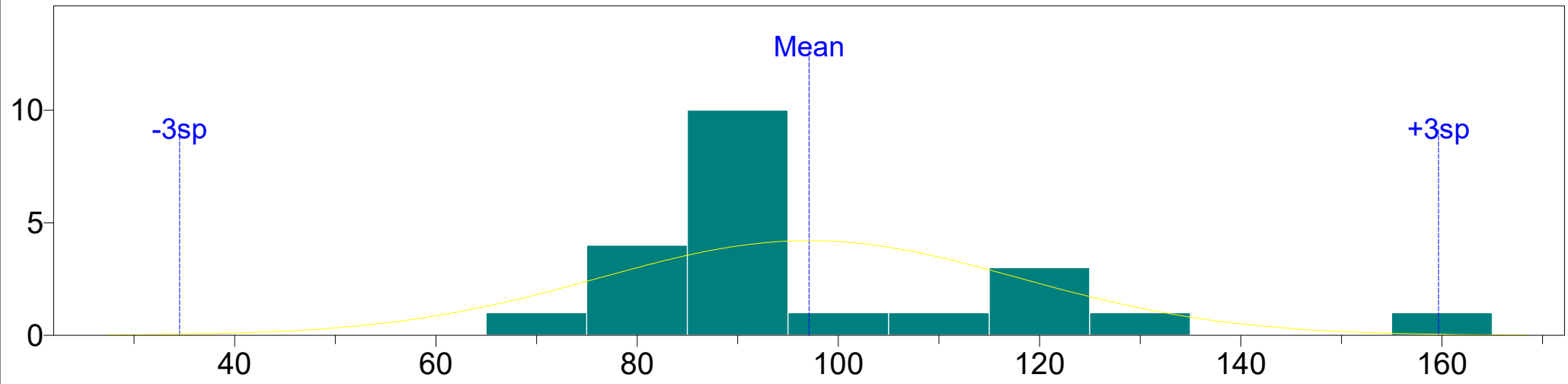
MS / tert-Butylbenzene



Individual: cl: 97.0818 ucl: 158.632 lcl: 35.5317 Subgroup Size: 1
Range: cl: 23.1429 ucl: 75.6144 lcl: 0

❄ Rule Violation

MS / tert-Butylbenzene



Samples: 22 3sp Lim: (34.511, 159.65)
Mean: 97.0818
Std Dev: 20.857
Skewness: 1.2934

QA REPORT

Analysis Type : Organic **QC :** MS

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** tert-Butylbenzene

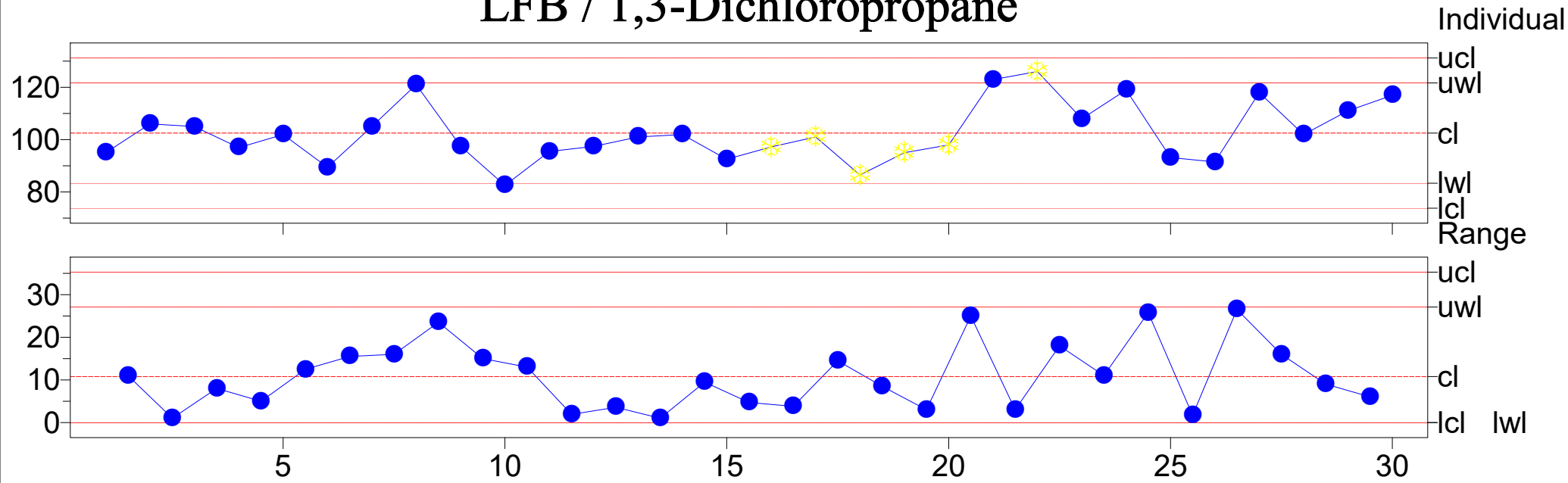
FROM : 13-Mar-2014 **TO :** 13-Mar-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
170555	2397632	102.00	20.3	0	µg/L	JERJ
171042	2404639	76.50	30614.0	0	µg/L	SEDS
171340	2409452	88.10	17.6	0	µg/L	JERJ
171542	2414023	158.00	315.5	0	µg/L	SEDS
172183	2424036	123.00	123.3	0	µg/L	SEDS
183490	2602291	85.40	85.4	0	µg/L	KOTERO
183902	2608841	115.00	23.0	0	µg/L	SEDS
184299	2615555	94.00	18.8	0	µg/L	SEDS
184501	2618750	93.50	18.7	0	µg/L	SEDS
184689	2622122	129.00	25.8	0	µg/L	SEDS
186254	2646434	88.20	1764.0	0	µg/L	SEDS
156484	2182169	94.50	18.9	0	µg/L	JRIVERA
157624	2197725	70.50	14.1	0	µg/L	SDIAZ
158628	2211578	90.50	18.1	0	µg/L	JRIVERA
161170	2248533	87.50	17.5	0	µg/L	NVILLANUEV
161170	2248533	87.50	17.5	0	µg/L	NVILLANUEV
161004	2249923	77.50	15.5	0	µg/L	JRIVERA
163193	2281278	116.00	23.2	0	µg/L	JRIVERA
163385	2284593	77.50	15.5	0	µg/L	SDIAZ
166452	2334316	85.10	85.1	0	µg/L	SEDS
167880	2356681	83.50	16.7	0	µg/L	JERJ
168547	2366101	113.00	22.7	0	µg/L	NIVA

Quantity of samples : 22

Printed by : ELAZARO1

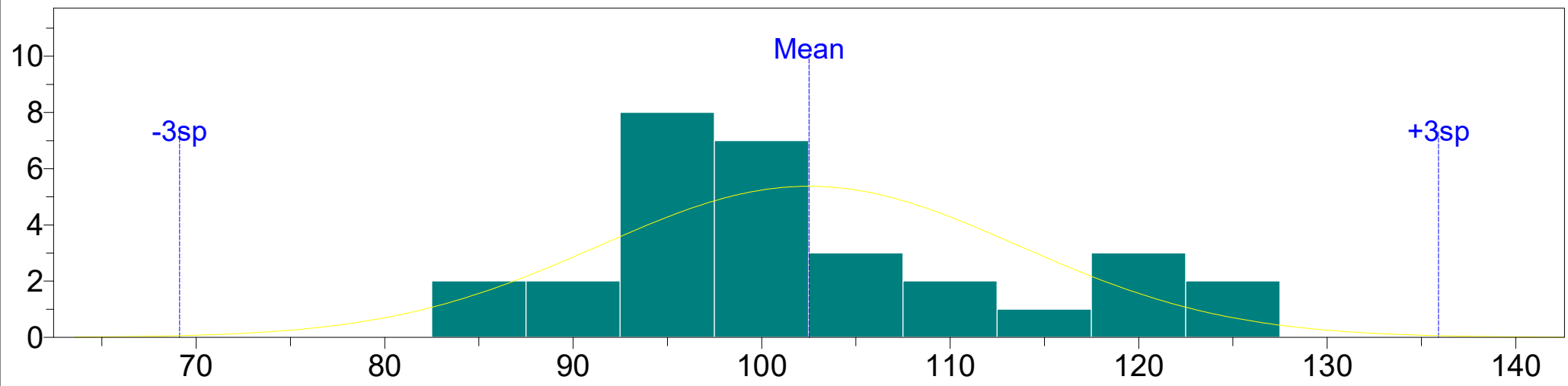
LFB / 1,3-Dichloropropane



Individual: cl: 102.51 ucl: 131.215 lcl: 73.8049 Subgroup Size: 1
Range: cl: 10.7931 ucl: 35.2642 lcl: 0

❄ Rule Violation

LFB / 1,3-Dichloropropane



Samples: 30 3sp Lim: (69.115, 135.91)
Mean: 102.51
Std Dev: 11.132
Skewness: .52503

QA REPORT

Analysis Type : Organic **QC :** LFB

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** 1,3-Dichloropropane

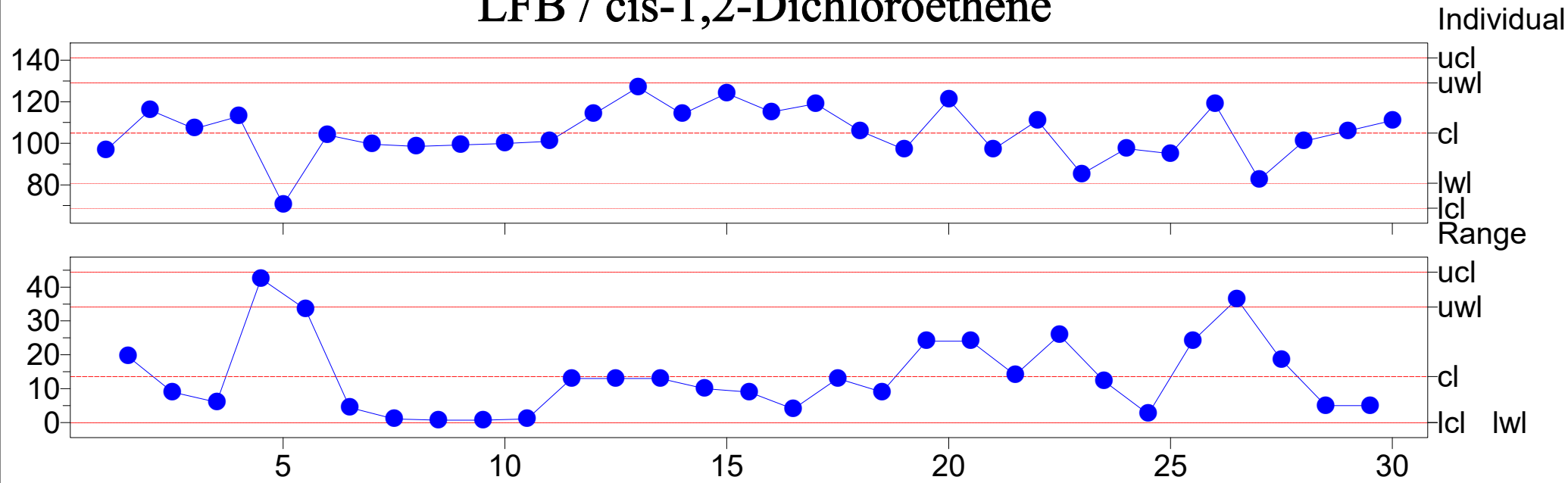
FROM : 23-Mar-2016 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
177468	2508366	95.00	19.0	0	µg/L	SEDS
177989	2515888	106.00	21.2	0	µg/L	SEDS
177989	2517720	105.00	20.9	0	µg/L	SEDS
178989	2531146	97.00	19.4	0	µg/L	SEDS
180761	2558038	102.00	20.4	0	µg/L	NIVA
181447	2568285	89.50	17.9	0	µg/L	NIVA
181519	2569461	105.00	20.9	0	µg/L	SEDS
181647	2573684	121.00	24.1	0	µg/L	SEDS
181715	2572579	97.50	19.5	0	µg/L	SEDS
182403	2583801	82.50	16.5	0	µg/L	NIVA
182883	2592336	95.50	19.1	0	µg/L	SDIAZ
183206	2597946	97.40	19.5	0	µg/L	KOTERO
183490	2602289	101.00	20.2	0	µg/L	KOTERO
183455	2601664	102.00	20.4	1.3	µg/L	KOTERO
183454	2601656	92.50	18.5	0.9	µg/L	KOTERO
183457	2601680	97.20	19.4	1.1	µg/L	KOTERO
183456	2601672	101.00	20.2	1.1	µg/L	KOTERO
183779	2606845	86.50	17.3	0	µg/L	SEDS
183736	2606229	95.00	19.0	0	µg/L	SEDS
183964	2609923	98.00	19.6	0	µg/L	KOTERO
183902	2608839	123.00	24.6	0	µg/L	SEDS
184299	2615553	126.00	25.2	0	µg/L	SEDS
184212	2614175	108.00	21.5	0	µg/L	KMOR
184689	2622152	119.00	23.7	0	µg/L	SEDS
184501	2618749	93.20	18.6	0	µg/L	SEDS
185395	2633692	91.50	18.3	0	µg/L	KMOR
186254	2646465	118.00	11.8	0	µg/L	SEDS
186362	2647884	102.00	20.5	0	µg/L	KMOR
186405	2648639	111.00	22.2	0	µg/L	SDIAZ
186880	2655653	117.00	23.4	0	µg/L	NIVA

Quantity of samples : 30

Printed by : ELAZARO1

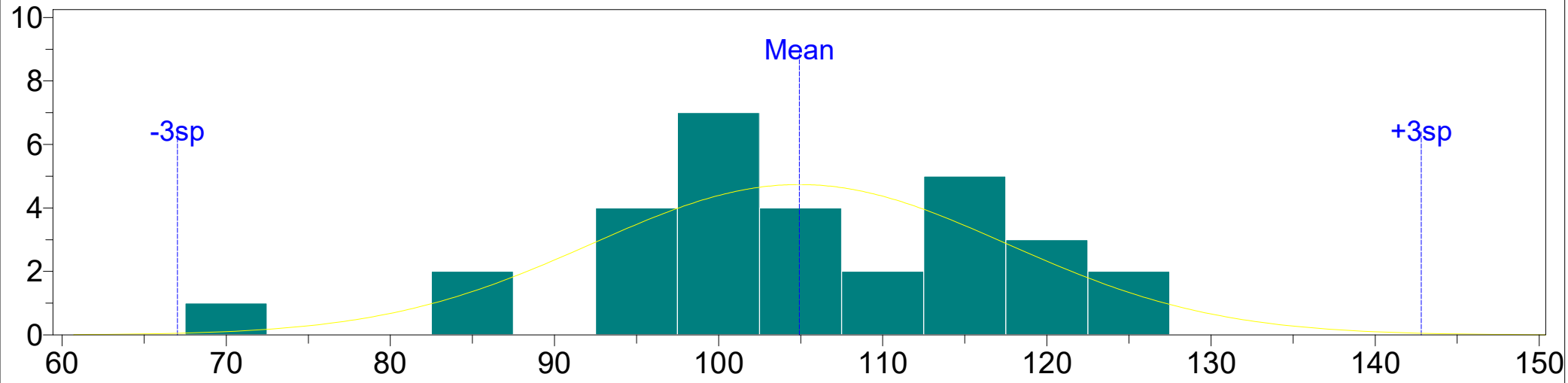
LFB / cis-1,2-Dichloroethene



Individual: cl: 104.913 ucl: 141.056 lcl: 68.7706 Subgroup Size: 1
Range: cl: 13.5897 ucl: 44.4013 lcl: 0

❄ Rule Violation

LFB / cis-1,2-Dichloroethene



Samples: 30 3sp Lim: (67.02, 142.81)
Mean: 104.913
Std Dev: 12.631
Skewness:-.54174

QA REPORT

Analysis Type : Organic **QC :** LFB

Run Template Name EPA 8260B VOC BY GC/MS **Control Details :** cis-1,2-Dichloroethene

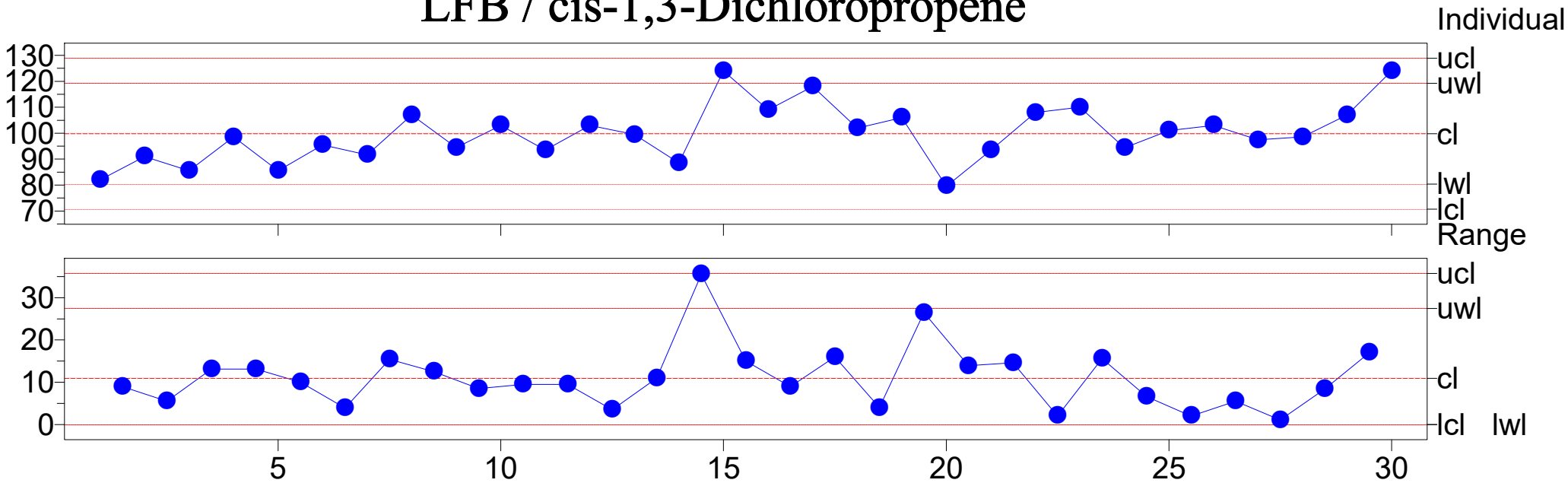
FROM : 28-Sep-2016 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
182456	2584832	96.50	19.3		µg/L	NIVA
182597	2587472	116.00	23.2		µg/L	NIVA
182647	2588412	107.00	21.4		µg/L	NIVA
182883	2592336	113.00	22.6		µg/L	SDIAZ
183006	2594511	70.50	14.1		µg/L	NIVA
183490	2602289	104.00	20.9		µg/L	KOTERO
183206	2597946	99.60	19.9		µg/L	KOTERO
183455	2601664	98.50	19.7		µg/L	KOTERO
183456	2601672	99.20	19.8		µg/L	KOTERO
183457	2601680	99.90	20.0		µg/L	KOTERO
183454	2601656	101.00	20.2		µg/L	KOTERO
183902	2608839	114.00	22.9		µg/L	SEDS
183779	2606845	127.00	25.3		µg/L	SEDS
183736	2606229	114.00	22.8		µg/L	SEDS
184076	2612100	124.00	24.9		µg/L	SEDS
183964	2609923	115.00	23.0		µg/L	KOTERO
184056	2611617	119.00	23.7		µg/L	SEDS
184212	2614175	106.00	21.1		µg/L	KMOR
184299	2615553	97.00	19.4		µg/L	SEDS
184501	2618749	121.00	24.2		µg/L	SEDS
184689	2622152	97.00	19.4		µg/L	SEDS
185232	2631310	111.00	22.2		µg/L	SEDS
185554	2636151	85.20	17.0		µg/L	KMOR
185395	2633692	97.50	19.5		µg/L	KMOR
185849	2640494	95.00	19.0		µg/L	SEDS
186254	2646465	119.00	11.9		µg/L	SEDS
186159	2644878	82.50	16.5		µg/L	SEDS
186362	2647884	101.00	20.3		µg/L	KMOR
186405	2648639	106.00	21.2		µg/L	SDIAZ
186880	2655653	111.00	22.1		µg/L	NIVA

Quantity of samples : 30

Printed by : ELAZARO1

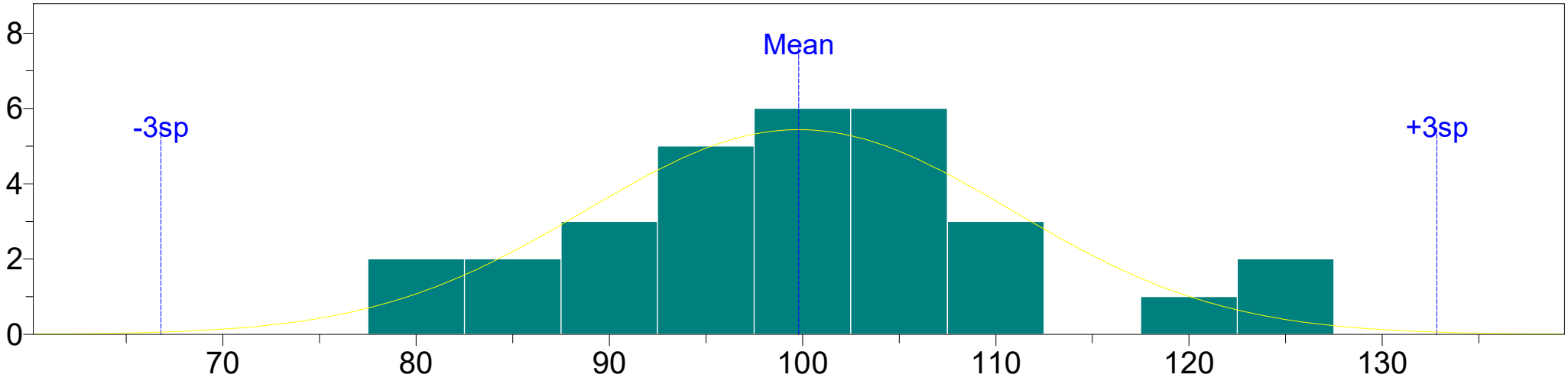
LFB / cis-1,3-Dichloropropene



Individual: cl: 99.8033 ucl: 128.894 lcl: 70.7131 Subgroup Size: 1
Range: cl: 10.9379 ucl: 35.7374 lcl: 0

❄ Rule Violation

LFB / cis-1,3-Dichloropropene



Samples: 30 3sp Lim: (66.787, 132.82)
Mean: 99.8033
Std Dev: 11.005
Skewness: .37841

QA REPORT

Analysis Type : Organic

QC : LFB

Run Template Name EPA 8260B VOC BY GC/MS

Control Details : cis-1,3-Dichloropropene

FROM : 24-Aug-2016 **TO :** 15-Feb-2017

RUN #	ORDER #	RECOVERY VALUE	FINAL RESULT	REFERENCE FINAL RESULT	UNITS	ANALYSBY
181519	2569461	82.00	16.4	0	µg/L	SEDS
181647	2573684	91.00	18.2	0	µg/L	SEDS
181715	2572579	85.50	17.1	0	µg/L	SEDS
181723	2572615	98.60	19.7	0	µg/L	NIVA
182403	2583801	85.50	17.1	0	µg/L	NIVA
182883	2592336	95.50	19.1	0	µg/L	SDIAZ
183490	2602289	91.60	18.3	0	µg/L	KOTERO
183206	2597946	107.00	21.5	0	µg/L	KOTERO
183455	2601664	94.50	18.9	1.0	µg/L	KOTERO
183456	2601672	103.00	20.7	0.9	µg/L	KOTERO
183454	2601656	93.50	18.7	0.9	µg/L	KOTERO
183457	2601680	103.00	20.7	1.0	µg/L	KOTERO
183736	2606229	99.50	19.9	0	µg/L	SEDS
183779	2606845	88.50	17.7	0	µg/L	SEDS
184076	2612100	124.00	24.8	0	µg/L	SEDS
183964	2609923	109.00	21.7	0	µg/L	KOTERO
183902	2608839	118.00	23.6	0	µg/L	SEDS
184056	2611617	102.00	20.3	0	µg/L	SEDS
184212	2614175	106.00	21.2	0	µg/L	KMOR
184299	2615553	79.50	15.9	0	µg/L	SEDS
184501	2618749	93.40	18.7	0	µg/L	SEDS
184689	2622152	108.00	21.5	0	µg/L	SEDS
185395	2633692	110.00	22.0	0	µg/L	KMOR
185554	2636151	94.40	18.9	0	µg/L	KMOR
186254	2646465	101.00	10.1	0	µg/L	SEDS
186026	2643297	103.00	20.5	0	µg/L	SEDS
186258	2646547	97.50	19.5	0	µg/L	SEDS
186362	2647884	98.60	19.7	19.3	µg/L	KMOR
186405	2648639	107.00	21.4	0	µg/L	SDIAZ
186880	2655653	124.00	24.8	0	µg/L	NIVA

Quantity of samples : 30

Printed by : ELAZARO

Attachment 6
Data Review Report #27461R

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #1703183
Analyses Performed By:
Eurofins/Air Toxics Ltd.
Folsom, California

Report: #27461R
Review Level: Tier II
Project: CO001911.0005.1705A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #1703183 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
Control Room-20170309	1703183-01A	Air	03/09/2017		X				
Outdoor-20170309	1703183-02A	Air	03/09/2017		X				
Trip Blank	1703183-03A	Air	03/09/2017		X				

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15 and ASTM Method 1946. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOP HW-31- Validating Air Samples Volatile Organic Analysis of Ambient Air In Canister by Method TO-15 of October 2006, New York State DEC Analytical Method ASP 2005 TO-15 (QA/QC Criteria R9 TO-15), NYSDEC Modifications to R9 TO-15 QA/QC Criteria October 2009.

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	Return Canister Pressure
EPA TO-15	Air	30 days from collection to analysis	Ambient Temperature	< -1" Hg

All samples met return canister pressure criteria and were analyzed within the specified holding time criteria.

2. Blank Contamination

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

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

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
Control Room-20170309 Outdoor-20170309	Benzene (MB)	Detected sample results <RL and <BAL	“UB” at the RL
Control Room-20170309	2-Propanol (TB)	Detected sample results >RL and <BAL	“UB” at detected sample concentration
Outdoor-20170309		Detected sample results <RL and <BAL	“UB” at the RL
Control Room-20170309 Outdoor-20170309	Acetone (TB)	Detected sample results <RL and <BAL	“UB” at the RL
Control Room-20170309	Ethanol (TB)	Detected sample results >RL and <BAL	“UB” at detected sample concentration
Control Room-20170309	Heptane (TB)	Detected sample results <RL and <BAL	“UB” at the RL
Control Room-20170309 Outdoor-20170309	Toluene (TB)	Detected sample results <RL and <BAL	“UB” at the RL

RL Reporting limit

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 a percent recovery within the established acceptance limits of 70% to 130%.

All surrogate recoveries were within control limits.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

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 established acceptance limits of 70% to 130%. The relative percent difference (RPD) between the LCS recoveries must exhibit an RPD within the laboratory-established acceptance limits.

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

Sample Locations	Compound	LCS Recovery
Control Room-20170309 Outdoor-20170309 Trip Blank	Styrene	>UL

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

Control Limit	Sample Result	Qualification
LCS percent recovery >130%	Non-detect	No Action
	Detect	J
LCS percent recovery <70% but > 10%	Non-detect	J
	Detect	J
< 10%	Non-detect	R
	Detect	J

6. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. 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 three times the RL is applied for air matrices.

Laboratory duplicates were not performed as part of this SDG.

7. 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 air 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 three times the RL is applied for air matrices.

A field duplicate was not performed on a sample location within this SDG.

8. 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: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-1”Hg)		X		X	
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Equipment blanks					
C. Trip blanks		X	X		
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Field/Lab Duplicate (%D)					X
Surrogate Spike Recoveries		X		X	
Continuing calibration %Ds		X		X	
Dilution Factor		X		X	

%R Percent recovery
RPD Relative percent difference
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: Joseph C. Houser

DATE: April 5, 2017

PEER REVIEW: Dennis Capria

DATE: April 14, 2017

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

eurofins | Air Toxics

Client ID:	Control Room-20170309		
Lab ID:	1703183-01A	**Date/Time Analyzed:**	3/15/17 07:44 AM
Date/Time Collecte	3/9/17 07:50 AM	**Dilution Factor:**	2.37
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031424

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
1,1,1-Trichloroethane	71-55-6	0.89	3.2	6.5	Not Detected	
1,1,2,2-Tetrachloroethane	79-34-5	1.4	4.1	8.1	Not Detected	
1,1,2-Trichloroethane	79-00-5	0.84	3.2	6.5	Not Detected	
1,1-Dichloroethane	75-34-3	0.72	2.4	4.8	Not Detected	
1,1-Dichloroethene	75-35-4	1.2	2.3	4.7	Not Detected	
1,2,4-Trichlorobenzene	120-82-1	1.0	18	35	Not Detected	
1,2,4-Trimethylbenzene	95-63-6	0.97	2.9	5.8	Not Detected	
1,2-Dibromoethane (EDB)	106-93-4	1.2	4.6	9.1	Not Detected	
1,2-Dichlorobenzene	95-50-1	0.68	3.6	7.1	Not Detected	
1,2-Dichloroethane	107-06-2	0.99	2.4	4.8	Not Detected	
1,2-Dichloropropane	78-87-5	1.4	2.7	5.5	Not Detected	
1,3,5-Trimethylbenzene	108-67-8	1.0	2.9	5.8	Not Detected	
1,3-Butadiene	106-99-0	0.55	1.3	2.6	Not Detected	
1,3-Dichlorobenzene	541-73-1	0.80	3.6	7.1	Not Detected	
1,4-Dichlorobenzene	106-46-7	0.80	3.6	7.1	Not Detected	
1,4-Dioxane	123-91-1	2.7	8.5	17	Not Detected	
2,2,4-Trimethylpentane	540-84-1	0.71	2.8	5.5	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	78-93-3	3.0	7.0	14	3.1 J	
2-Hexanone	591-78-6	2.4	9.7	19	Not Detected	
2-Propanol	67-63-0	1.7	5.8	12	19	UB
3-Chloropropene	107-05-1	2.4	7.4	15	Not Detected	
4-Ethyltoluene	622-96-8	0.88	2.9	5.8	Not Detected	
4-Methyl-2-pentanone	108-10-1	0.54	2.4	4.8	Not Detected	
Acetone	67-64-1	3.1	5.6	28	28 ~~24 J~~	UB

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Control Room-20170309		
Lab ID:	1703183-01A	**Date/Time Analyzed:**	3/15/17 07:44 AM
Date/Time Collecte	3/9/17 07:50 AM	**Dilution Factor:**	2.37
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031424

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
alpha-Chlorotoluene	100-44-7	0.46	3.1	6.1	Not Detected	
Benzene	71-43-2	0.33	1.9	3.8	3.8~~1.8 J~~	UB
Bromodichloromethane	75-27-4	1.5	4.0	7.9	Not Detected	
Bromoform	75-25-2	1.9	6.1	12	Not Detected	
Bromomethane	74-83-9	6.9	9.2	46	Not Detected	
Carbon Disulfide	75-15-0	1.3	7.4	15	Not Detected	
Carbon Tetrachloride	56-23-5	0.58	3.7	7.4	Not Detected	
Chlorobenzene	108-90-7	0.47	2.7	5.4	0.59 J	
Chloroethane	75-00-3	1.6	6.2	12	Not Detected	
Chloroform	67-66-3	1.1	2.9	5.8	Not Detected	
Chloromethane	74-87-3	3.3	4.9	24	Not Detected	
cis-1,2-Dichloroethene	156-59-2	1.5	2.3	4.7	Not Detected	
cis-1,3-Dichloropropene	10061-01-5	0.79	2.7	5.4	Not Detected	
Cumene	98-82-8	0.43	2.9	5.8	Not Detected	
Cyclohexane	110-82-7	0.61	2.0	4.1	Not Detected	
Dibromochloromethane	124-48-1	1.1	5.0	10	Not Detected	
Ethanol	64-17-5	2.9	4.5	8.9	23	UB
Ethyl Benzene	100-41-4	0.95	2.6	5.1	Not Detected	
Freon 11	75-69-4	0.92	3.3	6.6	1.2 J	
Freon 113	76-13-1	1.2	4.5	9.1	Not Detected	
Freon 114	76-14-2	1.0	4.1	8.3	Not Detected	
Freon 12	75-71-8	1.0	2.9	5.9	2.9 J	
Heptane	142-82-5	1.0	2.4	4.8	4.8 ~~1.2 J~~	UB
Hexachlorobutadiene	87-68-3	2.6	25	50	Not Detected	

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Control Room-20170309		
Lab ID:	1703183-01A	**Date/Time Analyzed:**	3/15/17 07:44 AM
Date/Time Collecte	3/9/17 07:50 AM	**Dilution Factor:**	2.37
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031424

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	110-54-3	0.84	2.1	4.2	1.7 J
m,p-Xylene	108-38-3	0.74	2.6	5.1	0.76 J
Methyl tert-butyl ether	1634-04-4	1.3	2.1	17	Not Detected
Methylene Chloride	75-09-2	2.7	8.2	41	Not Detected
o-Xylene	95-47-6	0.91	2.6	5.1	Not Detected
Propylbenzene	103-65-1	0.59	2.9	5.8	Not Detected
Styrene	100-42-5	0.23	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	1.5	4.0	8.0	Not Detected
Tetrahydrofuran	109-99-9	0.50	1.7	3.5	Not Detected
Toluene	108-88-3	0.44	2.2	4.5	4.5 ~~2.3 J~~ UB
trans-1,2-Dichloroethene	156-60-5	1.6	2.3	4.7	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.30	2.7	5.4	Not Detected
Trichloroethene	79-01-6	0.51	3.2	6.4	Not Detected
Vinyl Chloride	75-01-4	0.92	1.5	3.0	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	103
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Outdoor-20170309		
Lab ID:	1703183-02A	**Date/Time Analyzed:**	3/15/17 08:13 AM
Date/Time Collecte	3/9/17 08:16 AM	**Dilution Factor:**	2.26
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031425

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
1,1,1-Trichloroethane	71-55-6	0.85	3.1	6.2	Not Detected		
1,1,2,2-Tetrachloroethane	79-34-5	1.4	3.9	7.8	Not Detected		
1,1,2-Trichloroethane	79-00-5	0.80	3.1	6.2	Not Detected		
1,1-Dichloroethane	75-34-3	0.69	2.3	4.6	Not Detected		
1,1-Dichloroethene	75-35-4	1.1	2.2	4.5	Not Detected		
1,2,4-Trichlorobenzene	120-82-1	0.96	17	34	Not Detected		
1,2,4-Trimethylbenzene	95-63-6	0.92	2.8	5.6	Not Detected		
1,2-Dibromoethane (EDB)	106-93-4	1.2	4.3	8.7	Not Detected		
1,2-Dichlorobenzene	95-50-1	0.65	3.4	6.8	Not Detected		
1,2-Dichloroethane	107-06-2	0.94	2.3	4.6	Not Detected		
1,2-Dichloropropane	78-87-5	1.3	2.6	5.2	Not Detected		
1,3,5-Trimethylbenzene	108-67-8	0.98	2.8	5.6	Not Detected		
1,3-Butadiene	106-99-0	0.52	1.2	2.5	Not Detected		
1,3-Dichlorobenzene	541-73-1	0.76	3.4	6.8	Not Detected		
1,4-Dichlorobenzene	106-46-7	0.76	3.4	6.8	Not Detected		
1,4-Dioxane	123-91-1	2.6	8.1	16	Not Detected		
2,2,4-Trimethylpentane	540-84-1	0.68	2.6	5.3	Not Detected		
2-Butanone (Methyl Ethyl Ketone)	78-93-3	2.8	6.7	13	Not Detected		
2-Hexanone	591-78-6	2.2	9.2	18	Not Detected		
2-Propanol	67-63-0	1.6	5.6	11	11	~~4.3 J~~	UB
3-Chloropropene	107-05-1	2.3	7.1	14	Not Detected		
4-Ethyltoluene	622-96-8	0.84	2.8	5.6	Not Detected		
4-Methyl-2-pentanone	108-10-1	0.51	2.3	4.6	Not Detected		
Acetone	67-64-1	3.0	5.4	27	27	~~11 J~~	UB

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Outdoor-20170309		
Lab ID:	1703183-02A	**Date/Time Analyzed:**	3/15/17 08:13 AM
Date/Time Collecte	3/9/17 08:16 AM	**Dilution Factor:**	2.26
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031425

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Chlorotoluene	100-44-7	0.44	2.9	5.8	Not Detected
Benzene	71-43-2	0.31	1.8	3.6	3.6 ~~0.96 J~~ UB
Bromodichloromethane	75-27-4	1.4	3.8	7.6	Not Detected
Bromoform	75-25-2	1.8	5.8	12	Not Detected
Bromomethane	74-83-9	6.6	8.8	44	Not Detected
Carbon Disulfide	75-15-0	1.2	7.0	14	Not Detected
Carbon Tetrachloride	56-23-5	0.55	3.6	7.1	Not Detected
Chlorobenzene	108-90-7	0.45	2.6	5.2	Not Detected
Chloroethane	75-00-3	1.5	6.0	12	Not Detected
Chloroform	67-66-3	1.0	2.8	5.5	Not Detected
Chloromethane	74-87-3	3.1	4.7	23	3.2 J
cis-1,2-Dichloroethene	156-59-2	1.4	2.2	4.5	Not Detected
cis-1,3-Dichloropropene	10061-01-5	0.75	2.6	5.1	Not Detected
Cumene	98-82-8	0.41	2.8	5.6	Not Detected
Cyclohexane	110-82-7	0.58	1.9	3.9	Not Detected
Dibromochloromethane	124-48-1	1.1	4.8	9.6	Not Detected
Ethanol	64-17-5	2.7	4.2	8.5	Not Detected
Ethyl Benzene	100-41-4	0.90	2.4	4.9	Not Detected
Freon 11	75-69-4	0.88	3.2	6.3	1.1 J
Freon 113	76-13-1	1.2	4.3	8.7	Not Detected
Freon 114	76-14-2	0.95	3.9	7.9	Not Detected
Freon 12	75-71-8	0.95	2.8	5.6	2.7 J
Heptane	142-82-5	0.98	2.3	4.6	Not Detected
Hexachlorobutadiene	87-68-3	2.5	24	48	Not Detected

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Outdoor-20170309		
Lab ID:	1703183-02A	**Date/Time Analyzed:**	3/15/17 08:13 AM
Date/Time Collecte	3/9/17 08:16 AM	**Dilution Factor:**	2.26
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031425

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	110-54-3	0.80	2.0	4.0	Not Detected
m,p-Xylene	108-38-3	0.70	2.4	4.9	Not Detected
Methyl tert-butyl ether	1634-04-4	1.2	2.0	16	Not Detected
Methylene Chloride	75-09-2	2.6	7.8	39	Not Detected
o-Xylene	95-47-6	0.87	2.4	4.9	Not Detected
Propylbenzene	103-65-1	0.56	2.8	5.6	Not Detected
Styrene	100-42-5	0.22	2.4	4.8	Not Detected
Tetrachloroethene	127-18-4	1.4	3.8	7.7	Not Detected
Tetrahydrofuran	109-99-9	0.47	1.7	3.3	Not Detected
Toluene	108-88-3	0.42	2.1	4.2	4.2 ~~1.2 J~~ UB
trans-1,2-Dichloroethene	156-60-5	1.5	2.2	4.5	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.29	2.6	5.1	Not Detected
Trichloroethene	79-01-6	0.48	3.0	6.1	Not Detected
Vinyl Chloride	75-01-4	0.88	1.4	2.9	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	93
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Trip Blank		
Lab ID:	1703183-03A	**Date/Time Analyzed:**	3/14/17 10:00 PM
Date/Time Collecte	3/9/17 12:00 AM	**Dilution Factor:**	1.00
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	71-55-6	0.38	1.4	2.7	Not Detected
1,1,2,2-Tetrachloroethane	79-34-5	0.61	1.7	3.4	Not Detected
1,1,2-Trichloroethane	79-00-5	0.36	1.4	2.7	Not Detected
1,1-Dichloroethane	75-34-3	0.30	1.0	2.0	Not Detected
1,1-Dichloroethene	75-35-4	0.49	0.99	2.0	Not Detected
1,2,4-Trichlorobenzene	120-82-1	0.43	7.4	15	Not Detected
1,2,4-Trimethylbenzene	95-63-6	0.41	1.2	2.4	Not Detected
1,2-Dibromoethane (EDB)	106-93-4	0.53	1.9	3.8	Not Detected
1,2-Dichlorobenzene	95-50-1	0.29	1.5	3.0	Not Detected
1,2-Dichloroethane	107-06-2	0.42	1.0	2.0	Not Detected
1,2-Dichloropropane	78-87-5	0.57	1.2	2.3	Not Detected
1,3,5-Trimethylbenzene	108-67-8	0.44	1.2	2.4	Not Detected
1,3-Butadiene	106-99-0	0.23	0.55	1.1	Not Detected
1,3-Dichlorobenzene	541-73-1	0.34	1.5	3.0	Not Detected
1,4-Dichlorobenzene	106-46-7	0.34	1.5	3.0	Not Detected
1,4-Dioxane	123-91-1	1.1	3.6	7.2	Not Detected
2,2,4-Trimethylpentane	540-84-1	0.30	1.2	2.3	0.30 J
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.2	2.9	5.9	Not Detected
2-Hexanone	591-78-6	1.0	4.1	8.2	Not Detected
2-Propanol	67-63-0	0.72	2.4	4.9	5.9
3-Chloropropene	107-05-1	1.0	3.1	6.3	Not Detected
4-Ethyltoluene	622-96-8	0.37	1.2	2.4	Not Detected
4-Methyl-2-pentanone	108-10-1	0.23	1.0	2.0	Not Detected
Acetone	67-64-1	1.3	2.4	12	4.4 J

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Trip Blank		
Lab ID:	1703183-03A	**Date/Time Analyzed:**	3/14/17 10:00 PM
Date/Time Collecte	3/9/17 12:00 AM	**Dilution Factor:**	1.00
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Chlorotoluene	100-44-7	0.19	1.3	2.6	Not Detected
Benzene	71-43-2	0.14	0.80	1.6	0.24 J
Bromodichloromethane	75-27-4	0.64	1.7	3.4	Not Detected
Bromoform	75-25-2	0.80	2.6	5.2	Not Detected
Bromomethane	74-83-9	2.9	3.9	19	Not Detected
Carbon Disulfide	75-15-0	0.55	3.1	6.2	Not Detected
Carbon Tetrachloride	56-23-5	0.24	1.6	3.1	Not Detected
Chlorobenzene	108-90-7	0.20	1.2	2.3	Not Detected
Chloroethane	75-00-3	0.66	2.6	5.3	Not Detected
Chloroform	67-66-3	0.46	1.2	2.4	Not Detected
Chloromethane	74-87-3	1.4	2.1	10	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.62	0.99	2.0	Not Detected
cis-1,3-Dichloropropene	10061-01-5	0.33	1.1	2.3	Not Detected
Cumene	98-82-8	0.18	1.2	2.4	Not Detected
Cyclohexane	110-82-7	0.26	0.86	1.7	Not Detected
Dibromochloromethane	124-48-1	0.48	2.1	4.2	Not Detected
Ethanol	64-17-5	1.2	1.9	3.8	19
Ethyl Benzene	100-41-4	0.40	1.1	2.2	Not Detected
Freon 11	75-69-4	0.39	1.4	2.8	Not Detected
Freon 113	76-13-1	0.52	1.9	3.8	Not Detected
Freon 114	76-14-2	0.42	1.7	3.5	Not Detected
Freon 12	75-71-8	0.42	1.2	2.5	Not Detected
Heptane	142-82-5	0.43	1.0	2.0	1.0 J
Hexachlorobutadiene	87-68-3	1.1	11	21	Not Detected

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Trip Blank		
Lab ID:	1703183-03A	**Date/Time Analyzed:**	3/14/17 10:00 PM
Date/Time Collecte	3/9/17 12:00 AM	**Dilution Factor:**	1.00
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	110-54-3	0.35	0.88	1.8	Not Detected
m,p-Xylene	108-38-3	0.31	1.1	2.2	Not Detected
Methyl tert-butyl ether	1634-04-4	0.55	0.90	7.2	Not Detected
Methylene Chloride	75-09-2	1.1	3.5	17	1.1 J
o-Xylene	95-47-6	0.38	1.1	2.2	Not Detected
Propylbenzene	103-65-1	0.25	1.2	2.4	Not Detected
Styrene	100-42-5	0.096	1.1	2.1	Not Detected
Tetrachloroethene	127-18-4	0.64	1.7	3.4	Not Detected
Tetrahydrofuran	109-99-9	0.21	0.74	1.5	Not Detected
Toluene	108-88-3	0.18	0.94	1.9	16
trans-1,2-Dichloroethene	156-60-5	0.66	0.99	2.0	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.13	1.1	2.3	Not Detected
Trichloroethene	79-01-6	0.21	1.3	2.7	0.45 J
Vinyl Chloride	75-01-4	0.39	0.64	1.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	103
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	101

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager David Howard
Collected by: (Print and Sign) Elvin Varela / [signature]
Company ARCADIS Email david.howard@arcadis.com
Address 410 North 44th Phoenix City Phoenix State AZ Zip 85008
Phone 480-665-8580 Fax

Project Info:
P.O. #
Project # CO001911.0003
Project Name Fibers Public Supply Wells

Turn Around Time:
☑ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	Control Room-20170309	37946	03/09/17	0746-0750	TO-15	-28 in Hg	-5 in Hg		
02A	Outdoor-20170309	31782	03/09/17	0812-0816	TO-15	-27 in Hg	-4 in Hg		
03A	Trip Blank	1L1938	03/09/17	LAB	TO-15				

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	03/9/17 / 0837	FedEx	03/9/17 / 1330
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
		Andrea Augustin EATL	3/10/17 1115
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		NA	Good	Yes No None	1703183

Form 1293 rev.11

Attachment 7
Laboratory Analytical Report #1703183

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3/20/2017
Mr. David Howard
Arcadis U.S., Inc.
410 North 44th Street
Suite 1000
Phoenix AZ 85008

Project Name: Fibers Public Supply Wells
Project #: CO001911.0003
Workorder #: 1703183

Dear Mr. David Howard

The following report includes the data for the above referenced project for sample(s) received on 3/10/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Rachel Selenis at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1703183

Work Order Summary

CLIENT:	Mr. David Howard Arcadis U.S., Inc. 410 North 44th Street Suite 1000 Phoenix, AZ 85008	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	602-438-0883	**P.O. #**	CO01911.0003
FAX:	602-438-0102	**PROJECT #**	CO001911.0003 Fibers Public Supply Wells
DATE RECEIVED:	03/10/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	03/20/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	Control Room-20170309	TO-15	4.3 "Hg	15.1 psi
02A	Outdoor-20170309	TO-15	3.5 "Hg	14.7 psi
03A	Trip Blank	TO-15	17.8 "Hg	14.9 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Mayo

Technical Director

DATE: 03/20/17

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1703183

Three 1 Liter Summa Canister samples were received on March 10, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The trip blank, sample Trip Blank, was received at low vacuum (<25"Hg). The client was notified and requested the analysis to proceed.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

The trip blank, sample Trip Blank, has reportable levels of target compounds present. Re-analysis confirmed the detections.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Control Room-20170309		
Lab ID:	1703183-01A	**Date/Time Analyzed:**	3/15/17 07:44 AM
Date/Time Collecte	3/9/17 07:50 AM	**Dilution Factor:**	2.37
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031424

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	71-55-6	0.89	3.2	6.5	Not Detected
1,1,2,2-Tetrachloroethane	79-34-5	1.4	4.1	8.1	Not Detected
1,1,2-Trichloroethane	79-00-5	0.84	3.2	6.5	Not Detected
1,1-Dichloroethane	75-34-3	0.72	2.4	4.8	Not Detected
1,1-Dichloroethene	75-35-4	1.2	2.3	4.7	Not Detected
1,2,4-Trichlorobenzene	120-82-1	1.0	18	35	Not Detected
1,2,4-Trimethylbenzene	95-63-6	0.97	2.9	5.8	Not Detected
1,2-Dibromoethane (EDB)	106-93-4	1.2	4.6	9.1	Not Detected
1,2-Dichlorobenzene	95-50-1	0.68	3.6	7.1	Not Detected
1,2-Dichloroethane	107-06-2	0.99	2.4	4.8	Not Detected
1,2-Dichloropropane	78-87-5	1.4	2.7	5.5	Not Detected
1,3,5-Trimethylbenzene	108-67-8	1.0	2.9	5.8	Not Detected
1,3-Butadiene	106-99-0	0.55	1.3	2.6	Not Detected
1,3-Dichlorobenzene	541-73-1	0.80	3.6	7.1	Not Detected
1,4-Dichlorobenzene	106-46-7	0.80	3.6	7.1	Not Detected
1,4-Dioxane	123-91-1	2.7	8.5	17	Not Detected
2,2,4-Trimethylpentane	540-84-1	0.71	2.8	5.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	78-93-3	3.0	7.0	14	3.1 J
2-Hexanone	591-78-6	2.4	9.7	19	Not Detected
2-Propanol	67-63-0	1.7	5.8	12	19
3-Chloropropene	107-05-1	2.4	7.4	15	Not Detected
4-Ethyltoluene	622-96-8	0.88	2.9	5.8	Not Detected
4-Methyl-2-pentanone	108-10-1	0.54	2.4	4.8	Not Detected
Acetone	67-64-1	3.1	5.6	28	24 J

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Control Room-20170309		
Lab ID:	1703183-01A	**Date/Time Analyzed:**	3/15/17 07:44 AM
Date/Time Collecte	3/9/17 07:50 AM	**Dilution Factor:**	2.37
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031424

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Chlorotoluene	100-44-7	0.46	3.1	6.1	Not Detected
Benzene	71-43-2	0.33	1.9	3.8	1.8 J
Bromodichloromethane	75-27-4	1.5	4.0	7.9	Not Detected
Bromoform	75-25-2	1.9	6.1	12	Not Detected
Bromomethane	74-83-9	6.9	9.2	46	Not Detected
Carbon Disulfide	75-15-0	1.3	7.4	15	Not Detected
Carbon Tetrachloride	56-23-5	0.58	3.7	7.4	Not Detected
Chlorobenzene	108-90-7	0.47	2.7	5.4	0.59 J
Chloroethane	75-00-3	1.6	6.2	12	Not Detected
Chloroform	67-66-3	1.1	2.9	5.8	Not Detected
Chloromethane	74-87-3	3.3	4.9	24	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.3	4.7	Not Detected
cis-1,3-Dichloropropene	10061-01-5	0.79	2.7	5.4	Not Detected
Cumene	98-82-8	0.43	2.9	5.8	Not Detected
Cyclohexane	110-82-7	0.61	2.0	4.1	Not Detected
Dibromochloromethane	124-48-1	1.1	5.0	10	Not Detected
Ethanol	64-17-5	2.9	4.5	8.9	23
Ethyl Benzene	100-41-4	0.95	2.6	5.1	Not Detected
Freon 11	75-69-4	0.92	3.3	6.6	1.2 J
Freon 113	76-13-1	1.2	4.5	9.1	Not Detected
Freon 114	76-14-2	1.0	4.1	8.3	Not Detected
Freon 12	75-71-8	1.0	2.9	5.9	2.9 J
Heptane	142-82-5	1.0	2.4	4.8	1.2 J
Hexachlorobutadiene	87-68-3	2.6	25	50	Not Detected

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Control Room-20170309		
Lab ID:	1703183-01A	**Date/Time Analyzed:**	3/15/17 07:44 AM
Date/Time Collecte	3/9/17 07:50 AM	**Dilution Factor:**	2.37
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031424

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	110-54-3	0.84	2.1	4.2	1.7 J
m,p-Xylene	108-38-3	0.74	2.6	5.1	0.76 J
Methyl tert-butyl ether	1634-04-4	1.3	2.1	17	Not Detected
Methylene Chloride	75-09-2	2.7	8.2	41	Not Detected
o-Xylene	95-47-6	0.91	2.6	5.1	Not Detected
Propylbenzene	103-65-1	0.59	2.9	5.8	Not Detected
Styrene	100-42-5	0.23	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	1.5	4.0	8.0	Not Detected
Tetrahydrofuran	109-99-9	0.50	1.7	3.5	Not Detected
Toluene	108-88-3	0.44	2.2	4.5	2.3 J
trans-1,2-Dichloroethene	156-60-5	1.6	2.3	4.7	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.30	2.7	5.4	Not Detected
Trichloroethene	79-01-6	0.51	3.2	6.4	Not Detected
Vinyl Chloride	75-01-4	0.92	1.5	3.0	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	103
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Outdoor-20170309		
Lab ID:	1703183-02A	**Date/Time Analyzed:**	3/15/17 08:13 AM
Date/Time Collecte	3/9/17 08:16 AM	**Dilution Factor:**	2.26
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031425

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	71-55-6	0.85	3.1	6.2	Not Detected
1,1,2,2-Tetrachloroethane	79-34-5	1.4	3.9	7.8	Not Detected
1,1,2-Trichloroethane	79-00-5	0.80	3.1	6.2	Not Detected
1,1-Dichloroethane	75-34-3	0.69	2.3	4.6	Not Detected
1,1-Dichloroethene	75-35-4	1.1	2.2	4.5	Not Detected
1,2,4-Trichlorobenzene	120-82-1	0.96	17	34	Not Detected
1,2,4-Trimethylbenzene	95-63-6	0.92	2.8	5.6	Not Detected
1,2-Dibromoethane (EDB)	106-93-4	1.2	4.3	8.7	Not Detected
1,2-Dichlorobenzene	95-50-1	0.65	3.4	6.8	Not Detected
1,2-Dichloroethane	107-06-2	0.94	2.3	4.6	Not Detected
1,2-Dichloropropane	78-87-5	1.3	2.6	5.2	Not Detected
1,3,5-Trimethylbenzene	108-67-8	0.98	2.8	5.6	Not Detected
1,3-Butadiene	106-99-0	0.52	1.2	2.5	Not Detected
1,3-Dichlorobenzene	541-73-1	0.76	3.4	6.8	Not Detected
1,4-Dichlorobenzene	106-46-7	0.76	3.4	6.8	Not Detected
1,4-Dioxane	123-91-1	2.6	8.1	16	Not Detected
2,2,4-Trimethylpentane	540-84-1	0.68	2.6	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	78-93-3	2.8	6.7	13	Not Detected
2-Hexanone	591-78-6	2.2	9.2	18	Not Detected
2-Propanol	67-63-0	1.6	5.6	11	4.3 J
3-Chloropropene	107-05-1	2.3	7.1	14	Not Detected
4-Ethyltoluene	622-96-8	0.84	2.8	5.6	Not Detected
4-Methyl-2-pentanone	108-10-1	0.51	2.3	4.6	Not Detected
Acetone	67-64-1	3.0	5.4	27	11 J

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Outdoor-20170309		
Lab ID:	1703183-02A	**Date/Time Analyzed:**	3/15/17 08:13 AM
Date/Time Collecte	3/9/17 08:16 AM	**Dilution Factor:**	2.26
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031425

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Chlorotoluene	100-44-7	0.44	2.9	5.8	Not Detected
Benzene	71-43-2	0.31	1.8	3.6	0.96 J
Bromodichloromethane	75-27-4	1.4	3.8	7.6	Not Detected
Bromoform	75-25-2	1.8	5.8	12	Not Detected
Bromomethane	74-83-9	6.6	8.8	44	Not Detected
Carbon Disulfide	75-15-0	1.2	7.0	14	Not Detected
Carbon Tetrachloride	56-23-5	0.55	3.6	7.1	Not Detected
Chlorobenzene	108-90-7	0.45	2.6	5.2	Not Detected
Chloroethane	75-00-3	1.5	6.0	12	Not Detected
Chloroform	67-66-3	1.0	2.8	5.5	Not Detected
Chloromethane	74-87-3	3.1	4.7	23	3.2 J
cis-1,2-Dichloroethene	156-59-2	1.4	2.2	4.5	Not Detected
cis-1,3-Dichloropropene	10061-01-5	0.75	2.6	5.1	Not Detected
Cumene	98-82-8	0.41	2.8	5.6	Not Detected
Cyclohexane	110-82-7	0.58	1.9	3.9	Not Detected
Dibromochloromethane	124-48-1	1.1	4.8	9.6	Not Detected
Ethanol	64-17-5	2.7	4.2	8.5	Not Detected
Ethyl Benzene	100-41-4	0.90	2.4	4.9	Not Detected
Freon 11	75-69-4	0.88	3.2	6.3	1.1 J
Freon 113	76-13-1	1.2	4.3	8.7	Not Detected
Freon 114	76-14-2	0.95	3.9	7.9	Not Detected
Freon 12	75-71-8	0.95	2.8	5.6	2.7 J
Heptane	142-82-5	0.98	2.3	4.6	Not Detected
Hexachlorobutadiene	87-68-3	2.5	24	48	Not Detected

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Outdoor-20170309		
Lab ID:	1703183-02A	**Date/Time Analyzed:**	3/15/17 08:13 AM
Date/Time Collecte	3/9/17 08:16 AM	**Dilution Factor:**	2.26
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031425

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	110-54-3	0.80	2.0	4.0	Not Detected
m,p-Xylene	108-38-3	0.70	2.4	4.9	Not Detected
Methyl tert-butyl ether	1634-04-4	1.2	2.0	16	Not Detected
Methylene Chloride	75-09-2	2.6	7.8	39	Not Detected
o-Xylene	95-47-6	0.87	2.4	4.9	Not Detected
Propylbenzene	103-65-1	0.56	2.8	5.6	Not Detected
Styrene	100-42-5	0.22	2.4	4.8	Not Detected
Tetrachloroethene	127-18-4	1.4	3.8	7.7	Not Detected
Tetrahydrofuran	109-99-9	0.47	1.7	3.3	Not Detected
Toluene	108-88-3	0.42	2.1	4.2	1.2 J
trans-1,2-Dichloroethene	156-60-5	1.5	2.2	4.5	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.29	2.6	5.1	Not Detected
Trichloroethene	79-01-6	0.48	3.0	6.1	Not Detected
Vinyl Chloride	75-01-4	0.88	1.4	2.9	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	93
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Trip Blank		
Lab ID:	1703183-03A	**Date/Time Analyzed:**	3/14/17 10:00 PM
Date/Time Collecte	3/9/17 12:00 AM	**Dilution Factor:**	1.00
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	71-55-6	0.38	1.4	2.7	Not Detected
1,1,2,2-Tetrachloroethane	79-34-5	0.61	1.7	3.4	Not Detected
1,1,2-Trichloroethane	79-00-5	0.36	1.4	2.7	Not Detected
1,1-Dichloroethane	75-34-3	0.30	1.0	2.0	Not Detected
1,1-Dichloroethene	75-35-4	0.49	0.99	2.0	Not Detected
1,2,4-Trichlorobenzene	120-82-1	0.43	7.4	15	Not Detected
1,2,4-Trimethylbenzene	95-63-6	0.41	1.2	2.4	Not Detected
1,2-Dibromoethane (EDB)	106-93-4	0.53	1.9	3.8	Not Detected
1,2-Dichlorobenzene	95-50-1	0.29	1.5	3.0	Not Detected
1,2-Dichloroethane	107-06-2	0.42	1.0	2.0	Not Detected
1,2-Dichloropropane	78-87-5	0.57	1.2	2.3	Not Detected
1,3,5-Trimethylbenzene	108-67-8	0.44	1.2	2.4	Not Detected
1,3-Butadiene	106-99-0	0.23	0.55	1.1	Not Detected
1,3-Dichlorobenzene	541-73-1	0.34	1.5	3.0	Not Detected
1,4-Dichlorobenzene	106-46-7	0.34	1.5	3.0	Not Detected
1,4-Dioxane	123-91-1	1.1	3.6	7.2	Not Detected
2,2,4-Trimethylpentane	540-84-1	0.30	1.2	2.3	0.30 J
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.2	2.9	5.9	Not Detected
2-Hexanone	591-78-6	1.0	4.1	8.2	Not Detected
2-Propanol	67-63-0	0.72	2.4	4.9	5.9
3-Chloropropene	107-05-1	1.0	3.1	6.3	Not Detected
4-Ethyltoluene	622-96-8	0.37	1.2	2.4	Not Detected
4-Methyl-2-pentanone	108-10-1	0.23	1.0	2.0	Not Detected
Acetone	67-64-1	1.3	2.4	12	4.4 J

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Trip Blank		
Lab ID:	1703183-03A	**Date/Time Analyzed:**	3/14/17 10:00 PM
Date/Time Collecte	3/9/17 12:00 AM	**Dilution Factor:**	1.00
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Chlorotoluene	100-44-7	0.19	1.3	2.6	Not Detected
Benzene	71-43-2	0.14	0.80	1.6	0.24 J
Bromodichloromethane	75-27-4	0.64	1.7	3.4	Not Detected
Bromoform	75-25-2	0.80	2.6	5.2	Not Detected
Bromomethane	74-83-9	2.9	3.9	19	Not Detected
Carbon Disulfide	75-15-0	0.55	3.1	6.2	Not Detected
Carbon Tetrachloride	56-23-5	0.24	1.6	3.1	Not Detected
Chlorobenzene	108-90-7	0.20	1.2	2.3	Not Detected
Chloroethane	75-00-3	0.66	2.6	5.3	Not Detected
Chloroform	67-66-3	0.46	1.2	2.4	Not Detected
Chloromethane	74-87-3	1.4	2.1	10	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.62	0.99	2.0	Not Detected
cis-1,3-Dichloropropene	10061-01-5	0.33	1.1	2.3	Not Detected
Cumene	98-82-8	0.18	1.2	2.4	Not Detected
Cyclohexane	110-82-7	0.26	0.86	1.7	Not Detected
Dibromochloromethane	124-48-1	0.48	2.1	4.2	Not Detected
Ethanol	64-17-5	1.2	1.9	3.8	19
Ethyl Benzene	100-41-4	0.40	1.1	2.2	Not Detected
Freon 11	75-69-4	0.39	1.4	2.8	Not Detected
Freon 113	76-13-1	0.52	1.9	3.8	Not Detected
Freon 114	76-14-2	0.42	1.7	3.5	Not Detected
Freon 12	75-71-8	0.42	1.2	2.5	Not Detected
Heptane	142-82-5	0.43	1.0	2.0	1.0 J
Hexachlorobutadiene	87-68-3	1.1	11	21	Not Detected

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Trip Blank		
Lab ID:	1703183-03A	**Date/Time Analyzed:**	3/14/17 10:00 PM
Date/Time Collecte	3/9/17 12:00 AM	**Dilution Factor:**	1.00
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msd17.i / 17031419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	110-54-3	0.35	0.88	1.8	Not Detected
m,p-Xylene	108-38-3	0.31	1.1	2.2	Not Detected
Methyl tert-butyl ether	1634-04-4	0.55	0.90	7.2	Not Detected
Methylene Chloride	75-09-2	1.1	3.5	17	1.1 J
o-Xylene	95-47-6	0.38	1.1	2.2	Not Detected
Propylbenzene	103-65-1	0.25	1.2	2.4	Not Detected
Styrene	100-42-5	0.096	1.1	2.1	Not Detected
Tetrachloroethene	127-18-4	0.64	1.7	3.4	Not Detected
Tetrahydrofuran	109-99-9	0.21	0.74	1.5	Not Detected
Toluene	108-88-3	0.18	0.94	1.9	16
trans-1,2-Dichloroethene	156-60-5	0.66	0.99	2.0	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.13	1.1	2.3	Not Detected
Trichloroethene	79-01-6	0.21	1.3	2.7	0.45 J
Vinyl Chloride	75-01-4	0.39	0.64	1.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	103
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Lab Blank		
Lab ID:	1703183-04A	**Date/Time Analyzed:**	3/14/17 01:14 PM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031406a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	71-55-6	0.38	1.4	2.7	Not Detected
1,1,2,2-Tetrachloroethane	79-34-5	0.61	1.7	3.4	Not Detected
1,1,2-Trichloroethane	79-00-5	0.36	1.4	2.7	Not Detected
1,1-Dichloroethane	75-34-3	0.30	1.0	2.0	Not Detected
1,1-Dichloroethene	75-35-4	0.49	0.99	2.0	Not Detected
1,2,4-Trichlorobenzene	120-82-1	0.43	7.4	15	Not Detected
1,2,4-Trimethylbenzene	95-63-6	0.41	1.2	2.4	1.3 J
1,2-Dibromoethane (EDB)	106-93-4	0.53	1.9	3.8	Not Detected
1,2-Dichlorobenzene	95-50-1	0.29	1.5	3.0	Not Detected
1,2-Dichloroethane	107-06-2	0.42	1.0	2.0	Not Detected
1,2-Dichloropropane	78-87-5	0.57	1.2	2.3	Not Detected
1,3,5-Trimethylbenzene	108-67-8	0.44	1.2	2.4	1.2 J
1,3-Butadiene	106-99-0	0.23	0.55	1.1	Not Detected
1,3-Dichlorobenzene	541-73-1	0.34	1.5	3.0	Not Detected
1,4-Dichlorobenzene	106-46-7	0.34	1.5	3.0	Not Detected
1,4-Dioxane	123-91-1	1.1	3.6	7.2	Not Detected
2,2,4-Trimethylpentane	540-84-1	0.30	1.2	2.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	78-93-3	1.2	2.9	5.9	Not Detected
2-Hexanone	591-78-6	1.0	4.1	8.2	Not Detected
2-Propanol	67-63-0	0.72	2.4	4.9	Not Detected
3-Chloropropene	107-05-1	1.0	3.1	6.3	Not Detected
4-Ethyltoluene	622-96-8	0.37	1.2	2.4	Not Detected
4-Methyl-2-pentanone	108-10-1	0.23	1.0	2.0	Not Detected
Acetone	67-64-1	1.3	2.4	12	3.1 J

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Lab Blank		
Lab ID:	1703183-04A	**Date/Time Analyzed:**	3/14/17 01:14 PM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031406a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Chlorotoluene	100-44-7	0.19	1.3	2.6	Not Detected
Benzene	71-43-2	0.14	0.80	1.6	0.28 J
Bromodichloromethane	75-27-4	0.64	1.7	3.4	Not Detected
Bromoform	75-25-2	0.80	2.6	5.2	Not Detected
Bromomethane	74-83-9	2.9	3.9	19	Not Detected
Carbon Disulfide	75-15-0	0.55	3.1	6.2	Not Detected
Carbon Tetrachloride	56-23-5	0.24	1.6	3.1	Not Detected
Chlorobenzene	108-90-7	0.20	1.2	2.3	Not Detected
Chloroethane	75-00-3	0.66	2.6	5.3	Not Detected
Chloroform	67-66-3	0.46	1.2	2.4	Not Detected
Chloromethane	74-87-3	1.4	2.1	10	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.62	0.99	2.0	Not Detected
cis-1,3-Dichloropropene	10061-01-5	0.33	1.1	2.3	Not Detected
Cumene	98-82-8	0.18	1.2	2.4	Not Detected
Cyclohexane	110-82-7	0.26	0.86	1.7	Not Detected
Dibromochloromethane	124-48-1	0.48	2.1	4.2	Not Detected
Ethanol	64-17-5	1.2	1.9	3.8	1.6 J
Ethyl Benzene	100-41-4	0.40	1.1	2.2	Not Detected
Freon 11	75-69-4	0.39	1.4	2.8	Not Detected
Freon 113	76-13-1	0.52	1.9	3.8	Not Detected
Freon 114	76-14-2	0.42	1.7	3.5	Not Detected
Freon 12	75-71-8	0.42	1.2	2.5	Not Detected
Heptane	142-82-5	0.43	1.0	2.0	Not Detected
Hexachlorobutadiene	87-68-3	1.1	11	21	3.9 J

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	Lab Blank		
Lab ID:	1703183-04A	**Date/Time Analyzed:**	3/14/17 01:14 PM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031406a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	110-54-3	0.35	0.88	1.8	Not Detected
m,p-Xylene	108-38-3	0.31	1.1	2.2	Not Detected
Methyl tert-butyl ether	1634-04-4	0.55	0.90	7.2	Not Detected
Methylene Chloride	75-09-2	1.1	3.5	17	Not Detected
o-Xylene	95-47-6	0.38	1.1	2.2	Not Detected
Propylbenzene	103-65-1	0.25	1.2	2.4	Not Detected
Styrene	100-42-5	0.096	1.1	2.1	Not Detected
Tetrachloroethene	127-18-4	0.64	1.7	3.4	Not Detected
Tetrahydrofuran	109-99-9	0.21	0.74	1.5	Not Detected
Toluene	108-88-3	0.18	0.94	1.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.66	0.99	2.0	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.13	1.1	2.3	Not Detected
Trichloroethene	79-01-6	0.21	1.3	2.7	Not Detected
Vinyl Chloride	75-01-4	0.39	0.64	1.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	CCV		
Lab ID:	1703183-05A	**Date/Time Analyzed:**	3/14/17 09:45 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031402

Compound	CAS#	%Recovery
1,1,1-Trichloroethane	71-55-6	103
1,1,2,2-Tetrachloroethane	79-34-5	116
1,1,2-Trichloroethane	79-00-5	107
1,1-Dichloroethane	75-34-3	107
1,1-Dichloroethene	75-35-4	106
1,2,4-Trichlorobenzene	120-82-1	105
1,2,4-Trimethylbenzene	95-63-6	116
1,2-Dibromoethane (EDB)	106-93-4	108
1,2-Dichlorobenzene	95-50-1	109
1,2-Dichloroethane	107-06-2	104
1,2-Dichloropropane	78-87-5	104
1,3,5-Trimethylbenzene	108-67-8	115
1,3-Butadiene	106-99-0	105
1,3-Dichlorobenzene	541-73-1	108
1,4-Dichlorobenzene	106-46-7	110
1,4-Dioxane	123-91-1	102
2,2,4-Trimethylpentane	540-84-1	115
2-Butanone (Methyl Ethyl Ketone)	78-93-3	108
2-Hexanone	591-78-6	110
2-Propanol	67-63-0	108
3-Chloropropene	107-05-1	104
4-Ethyltoluene	622-96-8	118
4-Methyl-2-pentanone	108-10-1	107
Acetone	67-64-1	95

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	CCV		
Lab ID:	1703183-05A	**Date/Time Analyzed:**	3/14/17 09:45 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031402

Compound	CAS#	%Recovery
alpha-Chlorotoluene	100-44-7	114
Benzene	71-43-2	94
Bromodichloromethane	75-27-4	103
Bromoform	75-25-2	108
Bromomethane	74-83-9	107
Carbon Disulfide	75-15-0	104
Carbon Tetrachloride	56-23-5	105
Chlorobenzene	108-90-7	107
Chloroethane	75-00-3	104
Chloroform	67-66-3	104
Chloromethane	74-87-3	108
cis-1,2-Dichloroethene	156-59-2	110
cis-1,3-Dichloropropene	10061-01-5	106
Cumene	98-82-8	117
Cyclohexane	110-82-7	111
Dibromochloromethane	124-48-1	107
Ethanol	64-17-5	99
Ethyl Benzene	100-41-4	111
Freon 11	75-69-4	103
Freon 113	76-13-1	102
Freon 114	76-14-2	105
Freon 12	75-71-8	107
Heptane	142-82-5	114
Hexachlorobutadiene	87-68-3	102

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	CCV		
Lab ID:	1703183-05A	**Date/Time Analyzed:**	3/14/17 09:45 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031402

Compound	CAS#	%Recovery
Hexane	110-54-3	113
m,p-Xylene	108-38-3	119
Methyl tert-butyl ether	1634-04-4	106
Methylene Chloride	75-09-2	106
o-Xylene	95-47-6	117
Propylbenzene	103-65-1	114
Styrene	100-42-5	127
Tetrachloroethene	127-18-4	107
Tetrahydrofuran	109-99-9	112
Toluene	108-88-3	103
trans-1,2-Dichloroethene	156-60-5	106
trans-1,3-Dichloropropene	10061-02-6	110
Trichloroethene	79-01-6	95
Vinyl Chloride	75-01-4	106

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	104
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	LCS		
Lab ID:	1703183-06A	**Date/Time Analyzed:**	3/14/17 10:12 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031403

Compound	CAS#	%Recovery
1,1,1-Trichloroethane	71-55-6	106
1,1,2,2-Tetrachloroethane	79-34-5	112
1,1,2-Trichloroethane	79-00-5	107
1,1-Dichloroethane	75-34-3	104
1,1-Dichloroethene	75-35-4	105
1,2,4-Trichlorobenzene	120-82-1	93
1,2,4-Trimethylbenzene	95-63-6	122
1,2-Dibromoethane (EDB)	106-93-4	107
1,2-Dichlorobenzene	95-50-1	108
1,2-Dichloroethane	107-06-2	101
1,2-Dichloropropane	78-87-5	103
1,3,5-Trimethylbenzene	108-67-8	121
1,3-Butadiene	106-99-0	102
1,3-Dichlorobenzene	541-73-1	107
1,4-Dichlorobenzene	106-46-7	111
1,4-Dioxane	123-91-1	112
2,2,4-Trimethylpentane	540-84-1	116
2-Butanone (Methyl Ethyl Ketone)	78-93-3	108
2-Hexanone	591-78-6	123
2-Propanol	67-63-0	115
3-Chloropropene	107-05-1	107
4-Ethyltoluene	622-96-8	123
4-Methyl-2-pentanone	108-10-1	114
Acetone	67-64-1	90

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	LCS		
Lab ID:	1703183-06A	**Date/Time Analyzed:**	3/14/17 10:12 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031403

Compound	CAS#	%Recovery
alpha-Chlorotoluene	100-44-7	120
Benzene	71-43-2	93
Bromodichloromethane	75-27-4	104
Bromoform	75-25-2	111
Bromomethane	74-83-9	107
Carbon Disulfide	75-15-0	105
Carbon Tetrachloride	56-23-5	106
Chlorobenzene	108-90-7	107
Chloroethane	75-00-3	104
Chloroform	67-66-3	104
Chloromethane	74-87-3	114
cis-1,2-Dichloroethene	156-59-2	99
cis-1,3-Dichloropropene	10061-01-5	113
Cumene	98-82-8	118
Cyclohexane	110-82-7	114
Dibromochloromethane	124-48-1	106
Ethanol	64-17-5	89
Ethyl Benzene	100-41-4	112
Freon 11	75-69-4	102
Freon 113	76-13-1	100
Freon 114	76-14-2	104
Freon 12	75-71-8	105
Heptane	142-82-5	120
Hexachlorobutadiene	87-68-3	92

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	LCS		
Lab ID:	1703183-06A	**Date/Time Analyzed:**	3/14/17 10:12 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031403

Compound	CAS#	%Recovery
Hexane	110-54-3	115
m,p-Xylene	108-38-3	120
Methyl tert-butyl ether	1634-04-4	106
Methylene Chloride	75-09-2	103
o-Xylene	95-47-6	120
Propylbenzene	103-65-1	117
Styrene	100-42-5	138 Q
Tetrachloroethene	127-18-4	104
Tetrahydrofuran	109-99-9	115
Toluene	108-88-3	104
trans-1,2-Dichloroethene	156-60-5	114
trans-1,3-Dichloropropene	10061-02-6	110
Trichloroethene	79-01-6	97
Vinyl Chloride	75-01-4	108

Q = Exceeds Quality Control limits.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	100

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	LCSD		
Lab ID:	1703183-06AA	**Date/Time Analyzed:**	3/14/17 10:39 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031404

Compound	CAS#	%Recovery
1,1,1-Trichloroethane	71-55-6	103
1,1,2,2-Tetrachloroethane	79-34-5	111
1,1,2-Trichloroethane	79-00-5	106
1,1-Dichloroethane	75-34-3	101
1,1-Dichloroethene	75-35-4	102
1,2,4-Trichlorobenzene	120-82-1	101
1,2,4-Trimethylbenzene	95-63-6	121
1,2-Dibromoethane (EDB)	106-93-4	106
1,2-Dichlorobenzene	95-50-1	108
1,2-Dichloroethane	107-06-2	99
1,2-Dichloropropane	78-87-5	103
1,3,5-Trimethylbenzene	108-67-8	126
1,3-Butadiene	106-99-0	101
1,3-Dichlorobenzene	541-73-1	107
1,4-Dichlorobenzene	106-46-7	110
1,4-Dioxane	123-91-1	111
2,2,4-Trimethylpentane	540-84-1	114
2-Butanone (Methyl Ethyl Ketone)	78-93-3	105
2-Hexanone	591-78-6	122
2-Propanol	67-63-0	114
3-Chloropropene	107-05-1	104
4-Ethyltoluene	622-96-8	115
4-Methyl-2-pentanone	108-10-1	114
Acetone	67-64-1	88

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	LCSD		
Lab ID:	1703183-06AA	**Date/Time Analyzed:**	3/14/17 10:39 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031404

Compound	CAS#	%Recovery
alpha-Chlorotoluene	100-44-7	119
Benzene	71-43-2	91
Bromodichloromethane	75-27-4	104
Bromoform	75-25-2	109
Bromomethane	74-83-9	106
Carbon Disulfide	75-15-0	103
Carbon Tetrachloride	56-23-5	104
Chlorobenzene	108-90-7	106
Chloroethane	75-00-3	105
Chloroform	67-66-3	100
Chloromethane	74-87-3	113
cis-1,2-Dichloroethene	156-59-2	96
cis-1,3-Dichloropropene	10061-01-5	114
Cumene	98-82-8	117
Cyclohexane	110-82-7	112
Dibromochloromethane	124-48-1	106
Ethanol	64-17-5	87
Ethyl Benzene	100-41-4	111
Freon 11	75-69-4	99
Freon 113	76-13-1	98
Freon 114	76-14-2	102
Freon 12	75-71-8	105
Heptane	142-82-5	118
Hexachlorobutadiene	87-68-3	99

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Fibers Public Supply Wells

Client ID:	LCSD		
Lab ID:	1703183-06AA	**Date/Time Analyzed:**	3/14/17 10:39 AM
Date/Time Collecte	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17031404

Compound	CAS#	%Recovery
Hexane	110-54-3	113
m,p-Xylene	108-38-3	118
Methyl tert-butyl ether	1634-04-4	104
Methylene Chloride	75-09-2	100
o-Xylene	95-47-6	118
Propylbenzene	103-65-1	116
Styrene	100-42-5	134 Q
Tetrachloroethene	127-18-4	103
Tetrahydrofuran	109-99-9	112
Toluene	108-88-3	103
trans-1,2-Dichloroethene	156-60-5	111
trans-1,3-Dichloropropene	10061-02-6	109
Trichloroethene	79-01-6	97
Vinyl Chloride	75-01-4	104

Q = Exceeds Quality Control limits.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	103
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	102

* % Recovery is calculated using unrounded analytical results.

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Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
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Project Manager David Howard
Collected by: (Print and Sign) Elvin Varela / [signature]
Company ARCADIS Email david.howard@arcadis.com
Address 410 North 44th Phoenix City Phoenix State AZ Zip 85008
Phone 480-665-8580 Fax

Project Info:
P.O. #
Project # CO001911.0003
Project Name Fibers Public Supply Wells

Turn Around Time:
☑ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	Control Room-20170309	37946	03/09/17	0746-0750	TO-15	-28 in Hg	-5 in Hg		
02A	Outdoor-20170309	31782	03/09/17	0812-0816	TO-15	-27 in Hg	-4 in Hg		
03A	Trip Blank	1L1938	03/09/17	LAB	TO-15				

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	03/9/17 / 0837	FedEx	03/9/17 / 1330
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
		Andrea Augustin EATL	3/10/17 1115
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		NA	Good	Yes No None	1703183

Form 1293 rev.11

Attachment 8
Data Review Report #27409R

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2051188
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #27409R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2051188 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-20170302	2051188001	Water	03/02/2017		X				
PCPZ-1	2051188002	Water	03/02/2017		X				
PCPZ-2	2051188003	Water	03/02/2017		X				

Note:

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

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
PCPZ-1	Bromomethane	>UL	AC
	Haloether 229		
	Carbon disulfide		
	1,1,2-Trichlorotrifluoroethane		

AC Acceptable

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

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

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

Sample Locations	Compound
PCPZ-1	Acrolein
	Chloroethane

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

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

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and 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.

A field duplicate was not performed on a sample location within this SDG.

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
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: March 29, 2017

PEER REVIEW: Dennis Capria

DATE: April 3, 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.: 2051188

Sample: TB-20170302 **Lab ID: 2051188001** Collected: 03/02/17 00:00 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		03/06/17 19:31	67-64-1	
Acrolein	ND	ug/L	8.0	1		03/06/17 19:31	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		03/06/17 19:31	107-13-1	
Benzene	ND	ug/L	1.0	1		03/06/17 19:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/06/17 19:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/06/17 19:31	75-25-2	
Bromomethane	ND	ug/L	1.0	1		03/06/17 19:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		03/06/17 19:31	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		03/06/17 19:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/06/17 19:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/06/17 19:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/06/17 19:31	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/06/17 19:31	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/06/17 19:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		03/06/17 19:31	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		03/06/17 19:31	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/06/17 19:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:31	10061-02-6	
Enflurane	ND	ug/L	1.0	1		03/06/17 19:31	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		03/06/17 19:31	100-41-4	
Haloether 229	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 406	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 421	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 427	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 428	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 508	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 528	ND	ug/L	1.0	1		03/06/17 19:31		
Halomar	ND	ug/L	1.0	1		03/06/17 19:31		
2-Hexanone	ND	ug/L	2.0	1		03/06/17 19:31	591-78-6	
Isoflurane	ND	ug/L	1.0	1		03/06/17 19:31		
Methoxyflurane	ND	ug/L	1.0	1		03/06/17 19:31	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		03/06/17 19:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		03/06/17 19:31	108-10-1	
Styrene	ND	ug/L	1.0	1		03/06/17 19:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/06/17 19:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/06/17 19:31	127-18-4	
Toluene	ND	ug/L	1.0	1		03/06/17 19:31	108-88-3	
Total Haloether	ND	ug/L	1.0	1		03/06/17 19:31		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/06/17 19:31	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Sample: TB-20170302 **Lab ID: 2051188001** Collected: 03/02/17 00:00 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		03/06/17 19:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/06/17 19:31	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		03/06/17 19:31	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		03/06/17 19:31	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		03/06/17 19:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/06/17 19:31	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		03/06/17 19:31	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		03/06/17 19:31	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		03/06/17 19:31	1868-53-7	

Sample: PCPZ-1 **Lab ID: 2051188002** Collected: 03/02/17 09:40 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.4**	ug/L	4.0	1		03/06/17 19:13	67-64-1	
Acrolein	ND	ug/L	8.0	1		03/06/17 19:13	107-02-8	~~R1~~ UJ
Acrylonitrile	ND	ug/L	4.0	1		03/06/17 19:13	107-13-1	
Benzene	ND	ug/L	1.0	1		03/06/17 19:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/06/17 19:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/06/17 19:13	75-25-2	
Bromomethane	ND	ug/L	1.0	1		03/06/17 19:13	74-83-9	~~M1~~
2-Butanone (MEK)	ND	ug/L	2.0	1		03/06/17 19:13	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		03/06/17 19:13	75-15-0	~~M1~~
Carbon tetrachloride	ND	ug/L	1.0	1		03/06/17 19:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/06/17 19:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/06/17 19:13	75-00-3	~~R1~~ UJ
Chloroform	ND	ug/L	1.0	1		03/06/17 19:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/06/17 19:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		03/06/17 19:13	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		03/06/17 19:13	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/06/17 19:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:13	10061-02-6	
Enflurane	ND	ug/L	1.0	1		03/06/17 19:13	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		03/06/17 19:13	100-41-4	
Haloether 229	ND	ug/L	1.0	1		03/06/17 19:13		~~M1~~
Haloether 406	ND	ug/L	1.0	1		03/06/17 19:13		
Haloether 421	ND	ug/L	1.0	1		03/06/17 19:13		
Haloether 427	ND	ug/L	1.0	1		03/06/17 19:13		

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Sample: PCPZ-1 **Lab ID: 2051188002** Collected: 03/02/17 09:40 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		03/06/17 19:13		
Haloether 508	ND	ug/L	1.0	1		03/06/17 19:13		
Haloether 528	ND	ug/L	1.0	1		03/06/17 19:13		
Halomar	ND	ug/L	1.0	1		03/06/17 19:13		
2-Hexanone	ND	ug/L	2.0	1		03/06/17 19:13	591-78-6	
Isoflurane	ND	ug/L	1.0	1		03/06/17 19:13		
Methoxyflurane	ND	ug/L	1.0	1		03/06/17 19:13	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		03/06/17 19:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		03/06/17 19:13	108-10-1	
Styrene	ND	ug/L	1.0	1		03/06/17 19:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/06/17 19:13	79-34-5	
Tetrachloroethene	**7.5**	ug/L	1.0	1		03/06/17 19:13	127-18-4	
Toluene	ND	ug/L	1.0	1		03/06/17 19:13	108-88-3	
Total Haloether	ND	ug/L	1.0	1		03/06/17 19:13		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:13	79-00-5	
Trichloroethene	**3.1**	ug/L	1.0	1		03/06/17 19:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/06/17 19:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/06/17 19:13	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		03/06/17 19:13	76-13-1	~~M1~~
Vinyl chloride	ND	ug/L	1.0	1		03/06/17 19:13	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		03/06/17 19:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/06/17 19:13	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		03/06/17 19:13	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		03/06/17 19:13	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		03/06/17 19:13	1868-53-7	

Sample: PCPZ-2 **Lab ID: 2051188003** Collected: 03/02/17 10:41 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.4**	ug/L	4.0	1		03/06/17 19:49	67-64-1	
Acrolein	ND	ug/L	8.0	1		03/06/17 19:49	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		03/06/17 19:49	107-13-1	
Benzene	ND	ug/L	1.0	1		03/06/17 19:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/06/17 19:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/06/17 19:49	75-25-2	
Bromomethane	ND	ug/L	1.0	1		03/06/17 19:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		03/06/17 19:49	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		03/06/17 19:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/06/17 19:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/06/17 19:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/06/17 19:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/06/17 19:49	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Sample: PCPZ-2 **Lab ID: 2051188003** Collected: 03/02/17 10:41 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		03/06/17 19:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		03/06/17 19:49	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		03/06/17 19:49	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/06/17 19:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:49	10061-02-6	
Enflurane	ND	ug/L	1.0	1		03/06/17 19:49	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		03/06/17 19:49	100-41-4	
Haloether 229	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 406	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 421	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 427	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 428	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 508	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 528	ND	ug/L	1.0	1		03/06/17 19:49		
Halomar	ND	ug/L	1.0	1		03/06/17 19:49		
2-Hexanone	ND	ug/L	2.0	1		03/06/17 19:49	591-78-6	
Isoflurane	ND	ug/L	1.0	1		03/06/17 19:49		
Methoxyflurane	ND	ug/L	1.0	1		03/06/17 19:49	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		03/06/17 19:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		03/06/17 19:49	108-10-1	
Styrene	ND	ug/L	1.0	1		03/06/17 19:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/06/17 19:49	79-34-5	
Tetrachloroethene	**12.8**	ug/L	1.0	1		03/06/17 19:49	127-18-4	
Toluene	ND	ug/L	1.0	1		03/06/17 19:49	108-88-3	
Total Haloether	ND	ug/L	1.0	1		03/06/17 19:49		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:49	79-00-5	
Trichloroethene	**1.5**	ug/L	1.0	1		03/06/17 19:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/06/17 19:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/06/17 19:49	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		03/06/17 19:49	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		03/06/17 19:49	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		03/06/17 19:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/06/17 19:49	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		03/06/17 19:49	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		03/06/17 19:49	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		03/06/17 19:49	1868-53-7	

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CHAIN-OF-CUSTODY / A

The Chain-of-Custody is a LEGAL DO

WO# : 2051188

2051188

: 1 Of 1

Section A
Required Client Information:

Company:	ARCADIS U.S., Inc.
Address:	410 North 44th St., Suite 1000
	Phoenix, AZ 85008
Email To:	david.howard@arcadis-us.com
Phone: 602.797.4518	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	David Howard
Copy To:	Cassandra McCloud
	cassandra.mccloud@arcadis-us.com
Purchase Order #:	CO001911.0002.1502A
Project Name:	Fibers Public Supply Wells
Project #:	CO001911.0002.~~1502A~~ 16025

Section C
Invoice Information:

Attention:	Accounts Payable
Company Name:	ARCADIS
Address:	
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com
Pace Profile #:	

Regulatory Agency
CERCLA
State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analyses Test (Y/N)	EPA 8260B Haloathers	SM 2320B Alkalinity	SM 5310B TOC	ASTM D516,90,02 Sulfate	SM 4500 Nitrate	EPA 8015 TPH Kerosane	EPA 6010 Dissolved Metals (Fe, Mn)	EPA 6010 Total Metals (Fe, Mn)	RSK 175 Methane	EPA 300.0 Chloride	Residual Chlorine (Y/N)	Comments
1	TB-20170302	WT	G			03/02/17	LAB		2				2						X											
2	PCPZ-1	WT	G			03/02/17	0940		3				3						X											
3	PCPZ-2	WT	G			03/02/17	1041		3				3						X											
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colom / Arcadis	3/2/17	14:00	[signature] PACE	3/2/17	14:00	2°	Y	N	Y
				Fed Ex						
	Fed Ex	3-3-17	0820	[signature] Pace I	3-17	0820	2.8	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colom

SIGNATURE of SAMPLER: [signature]

DATE Signed: 3/2/17

NO charge pick up

Attachment 9
Laboratory Analytical Report #2051188

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

March 10, 2017

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

RE: Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on March 03, 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
Cassandra McCloud
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project:	Fibers Public Supply Wells
Pace Project No.:	2051188

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.: 2051188

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2051188001	**TB-20170302**	Water	03/02/17 00:00	03/03/17 08:20
2051188002	**PCPZ-1**	Water	03/02/17 09:40	03/03/17 08:20
2051188003	**PCPZ-2**	Water	03/02/17 10:41	03/03/17 08:20

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SAMPLE ANALYTE COUNT

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2051188001	**TB-20170302**	EPA 5030B/8260	RMP	56	PASI-N
2051188002	**PCPZ-1**	EPA 5030B/8260	RMP	56	PASI-N
2051188003	**PCPZ-2**	EPA 5030B/8260	RMP	56	PASI-N

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PROJECT NARRATIVE

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: March 10, 2017

General Information:
3 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: 75876

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2051188002

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

- MS (Lab ID: 319968)
  - 1,1,2-Trichlorotrifluoroethane
  - Bromomethane
  - Carbon disulfide
  - Haloether 229

R1: RPD value was outside control limits.

- MSD (Lab ID: 319969)
  - Acrolein
  - Chloroethane

Additional Comments:

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

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

ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Sample: TB-20170302 **Lab ID: 2051188001** Collected: 03/02/17 00:00 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		03/06/17 19:31	67-64-1	
Acrolein	ND	ug/L	8.0	1		03/06/17 19:31	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		03/06/17 19:31	107-13-1	
Benzene	ND	ug/L	1.0	1		03/06/17 19:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/06/17 19:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/06/17 19:31	75-25-2	
Bromomethane	ND	ug/L	1.0	1		03/06/17 19:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		03/06/17 19:31	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		03/06/17 19:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/06/17 19:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/06/17 19:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/06/17 19:31	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/06/17 19:31	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/06/17 19:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		03/06/17 19:31	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		03/06/17 19:31	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/06/17 19:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:31	10061-02-6	
Enflurane	ND	ug/L	1.0	1		03/06/17 19:31	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		03/06/17 19:31	100-41-4	
Haloether 229	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 406	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 421	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 427	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 428	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 508	ND	ug/L	1.0	1		03/06/17 19:31		
Haloether 528	ND	ug/L	1.0	1		03/06/17 19:31		
Halomar	ND	ug/L	1.0	1		03/06/17 19:31		
2-Hexanone	ND	ug/L	2.0	1		03/06/17 19:31	591-78-6	
Isoflurane	ND	ug/L	1.0	1		03/06/17 19:31		
Methoxyflurane	ND	ug/L	1.0	1		03/06/17 19:31	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		03/06/17 19:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		03/06/17 19:31	108-10-1	
Styrene	ND	ug/L	1.0	1		03/06/17 19:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/06/17 19:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		03/06/17 19:31	127-18-4	
Toluene	ND	ug/L	1.0	1		03/06/17 19:31	108-88-3	
Total Haloether	ND	ug/L	1.0	1		03/06/17 19:31		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/06/17 19:31	79-01-6	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Sample: TB-20170302 **Lab ID: 2051188001** Collected: 03/02/17 00:00 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		03/06/17 19:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/06/17 19:31	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		03/06/17 19:31	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		03/06/17 19:31	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		03/06/17 19:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/06/17 19:31	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		03/06/17 19:31	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		03/06/17 19:31	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		03/06/17 19:31	1868-53-7	

Sample: PCPZ-1 **Lab ID: 2051188002** Collected: 03/02/17 09:40 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.4**	ug/L	4.0	1		03/06/17 19:13	67-64-1	
Acrolein	ND	ug/L	8.0	1		03/06/17 19:13	107-02-8	R1
Acrylonitrile	ND	ug/L	4.0	1		03/06/17 19:13	107-13-1	
Benzene	ND	ug/L	1.0	1		03/06/17 19:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/06/17 19:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/06/17 19:13	75-25-2	
Bromomethane	ND	ug/L	1.0	1		03/06/17 19:13	74-83-9	M1
2-Butanone (MEK)	ND	ug/L	2.0	1		03/06/17 19:13	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		03/06/17 19:13	75-15-0	M1
Carbon tetrachloride	ND	ug/L	1.0	1		03/06/17 19:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/06/17 19:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/06/17 19:13	75-00-3	R1
Chloroform	ND	ug/L	1.0	1		03/06/17 19:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/06/17 19:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		03/06/17 19:13	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		03/06/17 19:13	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/06/17 19:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:13	10061-02-6	
Enflurane	ND	ug/L	1.0	1		03/06/17 19:13	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		03/06/17 19:13	100-41-4	
Haloether 229	ND	ug/L	1.0	1		03/06/17 19:13		M1
Haloether 406	ND	ug/L	1.0	1		03/06/17 19:13		
Haloether 421	ND	ug/L	1.0	1		03/06/17 19:13		
Haloether 427	ND	ug/L	1.0	1		03/06/17 19:13		

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Sample: PCPZ-1 **Lab ID: 2051188002** Collected: 03/02/17 09:40 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		03/06/17 19:13		
Haloether 508	ND	ug/L	1.0	1		03/06/17 19:13		
Haloether 528	ND	ug/L	1.0	1		03/06/17 19:13		
Halomar	ND	ug/L	1.0	1		03/06/17 19:13		
2-Hexanone	ND	ug/L	2.0	1		03/06/17 19:13	591-78-6	
Isoflurane	ND	ug/L	1.0	1		03/06/17 19:13		
Methoxyflurane	ND	ug/L	1.0	1		03/06/17 19:13	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		03/06/17 19:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		03/06/17 19:13	108-10-1	
Styrene	ND	ug/L	1.0	1		03/06/17 19:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/06/17 19:13	79-34-5	
Tetrachloroethene	**7.5**	ug/L	1.0	1		03/06/17 19:13	127-18-4	
Toluene	ND	ug/L	1.0	1		03/06/17 19:13	108-88-3	
Total Haloether	ND	ug/L	1.0	1		03/06/17 19:13		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:13	79-00-5	
Trichloroethene	**3.1**	ug/L	1.0	1		03/06/17 19:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/06/17 19:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/06/17 19:13	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		03/06/17 19:13	76-13-1	M1
Vinyl chloride	ND	ug/L	1.0	1		03/06/17 19:13	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		03/06/17 19:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/06/17 19:13	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		03/06/17 19:13	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		03/06/17 19:13	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		03/06/17 19:13	1868-53-7	

Sample: PCPZ-2 **Lab ID: 2051188003** Collected: 03/02/17 10:41 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.4**	ug/L	4.0	1		03/06/17 19:49	67-64-1	
Acrolein	ND	ug/L	8.0	1		03/06/17 19:49	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		03/06/17 19:49	107-13-1	
Benzene	ND	ug/L	1.0	1		03/06/17 19:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		03/06/17 19:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/06/17 19:49	75-25-2	
Bromomethane	ND	ug/L	1.0	1		03/06/17 19:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		03/06/17 19:49	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		03/06/17 19:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		03/06/17 19:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/06/17 19:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/06/17 19:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/06/17 19:49	67-66-3	

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ANALYTICAL RESULTS

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Sample: PCPZ-2 **Lab ID: 2051188003** Collected: 03/02/17 10:41 Received: 03/03/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		03/06/17 19:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		03/06/17 19:49	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		03/06/17 19:49	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/06/17 19:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/06/17 19:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/06/17 19:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/06/17 19:49	10061-02-6	
Enflurane	ND	ug/L	1.0	1		03/06/17 19:49	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		03/06/17 19:49	100-41-4	
Haloether 229	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 406	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 421	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 427	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 428	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 508	ND	ug/L	1.0	1		03/06/17 19:49		
Haloether 528	ND	ug/L	1.0	1		03/06/17 19:49		
Halomar	ND	ug/L	1.0	1		03/06/17 19:49		
2-Hexanone	ND	ug/L	2.0	1		03/06/17 19:49	591-78-6	
Isoflurane	ND	ug/L	1.0	1		03/06/17 19:49		
Methoxyflurane	ND	ug/L	1.0	1		03/06/17 19:49	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		03/06/17 19:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		03/06/17 19:49	108-10-1	
Styrene	ND	ug/L	1.0	1		03/06/17 19:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/06/17 19:49	79-34-5	
Tetrachloroethene	**12.8**	ug/L	1.0	1		03/06/17 19:49	127-18-4	
Toluene	ND	ug/L	1.0	1		03/06/17 19:49	108-88-3	
Total Haloether	ND	ug/L	1.0	1		03/06/17 19:49		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/06/17 19:49	79-00-5	
Trichloroethene	**1.5**	ug/L	1.0	1		03/06/17 19:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/06/17 19:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/06/17 19:49	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		03/06/17 19:49	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		03/06/17 19:49	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		03/06/17 19:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/06/17 19:49	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		03/06/17 19:49	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		03/06/17 19:49	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		03/06/17 19:49	1868-53-7	

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QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

QC Batch: 75876 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2051188001, 2051188002, 2051188003

METHOD BLANK: 319966 | Matrix: Water
Associated Lab Samples: 2051188001, 2051188002, 2051188003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	03/06/17 17:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/06/17 17:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/06/17 17:45	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	03/06/17 17:45	
1,1-Dichloroethane	ug/L	ND	1.0	03/06/17 17:45	
1,1-Dichloroethene	ug/L	ND	1.0	03/06/17 17:45	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/06/17 17:45	
1,2-Dichloroethane	ug/L	ND	1.0	03/06/17 17:45	
1,2-Dichloropropane	ug/L	ND	1.0	03/06/17 17:45	
2-Butanone (MEK)	ug/L	ND	2.0	03/06/17 17:45	
2-Hexanone	ug/L	ND	2.0	03/06/17 17:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	03/06/17 17:45	
Acetone	ug/L	ND	4.0	03/06/17 17:45	
Acrolein	ug/L	ND	8.0	03/06/17 17:45	
Acrylonitrile	ug/L	ND	4.0	03/06/17 17:45	
Benzene	ug/L	ND	1.0	03/06/17 17:45	
Bromodichloromethane	ug/L	ND	1.0	03/06/17 17:45	
Bromoform	ug/L	ND	1.0	03/06/17 17:45	
Bromomethane	ug/L	ND	1.0	03/06/17 17:45	
Carbon disulfide	ug/L	ND	1.0	03/06/17 17:45	
Carbon tetrachloride	ug/L	ND	1.0	03/06/17 17:45	
Chlorobenzene	ug/L	ND	1.0	03/06/17 17:45	
Chloroethane	ug/L	ND	1.0	03/06/17 17:45	
Chloroform	ug/L	ND	1.0	03/06/17 17:45	
Chloromethane	ug/L	ND	1.0	03/06/17 17:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/06/17 17:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/06/17 17:45	
Dibromochloromethane	ug/L	ND	1.0	03/06/17 17:45	
Dibromomethane	ug/L	ND	1.0	03/06/17 17:45	
Enflurane	ug/L	ND	1.0	03/06/17 17:45	
Ethylbenzene	ug/L	ND	1.0	03/06/17 17:45	
Haloether 229	ug/L	ND	1.0	03/06/17 17:45	
Haloether 406	ug/L	ND	1.0	03/06/17 17:45	
Haloether 421	ug/L	ND	1.0	03/06/17 17:45	
Haloether 427	ug/L	ND	1.0	03/06/17 17:45	
Haloether 428	ug/L	ND	1.0	03/06/17 17:45	
Haloether 508	ug/L	ND	1.0	03/06/17 17:45	
Haloether 528	ug/L	ND	1.0	03/06/17 17:45	
Halomar	ug/L	ND	1.0	03/06/17 17:45	
Isoflurane	ug/L	ND	1.0	03/06/17 17:45	
m&p-Xylene	ug/L	ND	2.0	03/06/17 17:45	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

METHOD BLANK: 319966 Matrix: Water
Associated Lab Samples: 2051188001, 2051188002, 2051188003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methoxyflurane	ug/L	ND	1.0	03/06/17 17:45	
Methylene Chloride	ug/L	ND	5.0	03/06/17 17:45	
o-Xylene	ug/L	ND	1.0	03/06/17 17:45	
Styrene	ug/L	ND	1.0	03/06/17 17:45	
Tetrachloroethene	ug/L	ND	1.0	03/06/17 17:45	
Toluene	ug/L	ND	1.0	03/06/17 17:45	
Total Haloether	ug/L	ND	1.0	03/06/17 17:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/06/17 17:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/06/17 17:45	
Trichloroethene	ug/L	ND	1.0	03/06/17 17:45	
Trichlorofluoromethane	ug/L	ND	1.0	03/06/17 17:45	
Vinyl chloride	ug/L	ND	1.0	03/06/17 17:45	
4-Bromofluorobenzene (S)	%.	99	68-124	03/06/17 17:45	
Dibromofluoromethane (S)	%.	107	72-126	03/06/17 17:45	
Toluene-d8 (S)	%.	97	79-119	03/06/17 17:45	

LABORATORY CONTROL SAMPLE: 319967

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	48.8	98	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	49.1	98	15-179	
1,1,2-Trichloroethane	ug/L	50	45.0	90	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	47.2	94	38-121	
1,1-Dichloroethane	ug/L	50	49.1	98	63-129	
1,1-Dichloroethene	ug/L	50	45.6	91	51-139	
1,2,3-Trichloropropane	ug/L	50	44.2	88	13-187	
1,2-Dichloroethane	ug/L	50	39.4	79	57-148	
1,2-Dichloropropane	ug/L	50	45.5	91	66-128	
2-Butanone (MEK)	ug/L	50	48.4	97	32-183	
2-Hexanone	ug/L	50	44.9	90	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	48.5	97	26-171	
Acetone	ug/L	50	51.4	103	22-165	
Acrolein	ug/L	100	84.7	85	10-131	
Acrylonitrile	ug/L	50	45.5	91	18-149	
Benzene	ug/L	50	46.0	92	62-131	
Bromodichloromethane	ug/L	50	42.8	86	69-132	
Bromoform	ug/L	50	35.4	71	35-166	
Bromomethane	ug/L	50	67.3	135	34-158	
Carbon disulfide	ug/L	50	55.7	111	31-128	
Carbon tetrachloride	ug/L	50	37.9	76	54-144	
Chlorobenzene	ug/L	50	46.5	93	70-127	
Chloroethane	ug/L	50	61.5	123	17-195	
Chloroform	ug/L	50	49.5	99	73-134	
Chloromethane	ug/L	50	36.7	73	17-153	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

LABORATORY CONTROL SAMPLE: 319967

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	48.5	97	68-129	
cis-1,3-Dichloropropene	ug/L	50	42.1	84	72-138	
Dibromochloromethane	ug/L	50	42.1	84	49-146	
Dibromomethane	ug/L	50	41.5	83	56-145	
Enflurane	ug/L	50	49.2	98	56-135	
Ethylbenzene	ug/L	50	44.7	89	66-126	
Haloether 229	ug/L	50	52.4	105	62-123	
Haloether 406	ug/L	50	47.0	94	62-134	
Haloether 421	ug/L	50	47.8	96	70-128	
Haloether 427	ug/L	50	42.5	85	69-153	
Haloether 428	ug/L	50	43.8	88	70-134	
Haloether 508	ug/L	50	50.0	100	52-139	
Haloether 528	ug/L	50	34.6	69	48-157	
Halomar	ug/L	50	49.7	99	62-128	
Isoflurane	ug/L	50	47.3	95	61-132	
m&p-Xylene	ug/L	100	92.2	92	65-129	
Methoxyflurane	ug/L	50	45.8	92	72-124	
Methylene Chloride	ug/L	50	51.6	103	46-168	
o-Xylene	ug/L	50	45.8	92	65-124	
Styrene	ug/L	50	48.6	97	72-133	
Tetrachloroethene	ug/L	50	45.5	91	46-157	
Toluene	ug/L	50	45.7	91	69-126	
Total Haloether	ug/L		510			
trans-1,2-Dichloroethene	ug/L	50	48.1	96	60-129	
trans-1,3-Dichloropropene	ug/L	50	39.7	79	59-149	
Trichloroethene	ug/L	50	48.9	98	67-132	
Trichlorofluoromethane	ug/L	50	46.4	93	39-171	
Vinyl chloride	ug/L	50	33.7	67	27-149	
4-Bromofluorobenzene (S)	%.			98	68-124	
Dibromofluoromethane (S)	%.			109	72-126	
Toluene-d8 (S)	%.			97	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 319968 319969

Parameter	Units	2051188002 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	60.0	51.5	120	103	54-137	15	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	57.4	49.4	115	99	15-187	15	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	52.7	45.6	105	91	59-148	15	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	59.7	51.9	119	104	40-117	14	20	M1
1,1-Dichloroethane	ug/L	ND	50	50	59.3	51.0	119	102	59-133	15	20	
1,1-Dichloroethene	ug/L	ND	50	50	56.8	48.4	114	97	44-146	16	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	53.4	44.8	107	90	14-199	17	20	
1,2-Dichloroethane	ug/L	ND	50	50	45.7	39.6	91	79	56-154	14	20	
1,2-Dichloropropane	ug/L	ND	50	50	53.7	46.5	107	93	62-135	14	20	

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REPORT OF LABORATORY ANALYSIS

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(504)469-0333

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 319968 319969

Parameter	Units	2051188002 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	56.5	49.6	113	99	20-205	13	20	
2-Hexanone	ug/L	ND	50	50	52.8	45.6	106	91	25-189	15	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	57.3	49.2	115	98	23-184	15	20	
Acetone	ug/L	5.4	50	50	73.1	63.3	136	116	11-217	14	20	
Acrolein	ug/L	ND	100	100	84.7	68.1	85	68	10-142	22	20	R1
Acrylonitrile	ug/L	ND	50	50	50.9	45.3	102	91	20-164	12	20	
Benzene	ug/L	ND	50	50	55.4	47.5	111	95	52-141	15	20	
Bromodichloromethane	ug/L	ND	50	50	50.4	43.4	101	87	70-134	15	20	
Bromoform	ug/L	ND	50	50	40.8	34.8	82	70	37-171	16	20	
Bromomethane	ug/L	ND	50	50	78.9	67.8	158	136	34-155	15	20	M1
Carbon disulfide	ug/L	ND	50	50	73.2	60.6	146	121	28-130	19	20	M1
Carbon tetrachloride	ug/L	ND	50	50	47.4	40.9	95	82	48-146	15	20	
Chlorobenzene	ug/L	ND	50	50	55.9	48.0	112	96	67-129	15	20	
Chloroethane	ug/L	ND	50	50	79.3	64.6	159	129	12-192	21	20	R1
Chloroform	ug/L	ND	50	50	58.8	50.7	118	101	66-143	15	20	
Chloromethane	ug/L	ND	50	50	44.2	38.6	88	77	14-155	13	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	58.0	50.0	116	100	56-141	15	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	49.1	42.4	98	85	70-139	14	20	
Dibromochloromethane	ug/L	ND	50	50	49.6	42.4	99	85	50-150	16	20	
Dibromomethane	ug/L	ND	50	50	48.3	42.1	97	84	58-153	14	20	
Enflurane	ug/L	ND	50	50	60.9	53.0	122	106	63-126	14	20	
Ethylbenzene	ug/L	ND	50	50	54.4	46.8	109	94	57-135	15	20	
Haloether 229	ug/L	ND	50	50	65.6	61.7	131	123	56-127	6	20	M1
Haloether 406	ug/L	ND	50	50	59.3	52.7	119	105	68-128	12	20	
Haloether 421	ug/L	ND	50	50	58.0	50.4	116	101	74-120	14	20	
Haloether 427	ug/L	ND	50	50	52.9	46.7	106	93	78-120	13	20	
Haloether 428	ug/L	ND	50	50	54.7	47.9	109	96	74-125	13	20	
Haloether 508	ug/L	ND	50	50	62.3	54.3	125	109	28-156	14	20	
Haloether 528	ug/L	ND	50	50	32.0	27.5	64	55	45-142	15	20	
Halomar	ug/L	ND	50	50	60.9	52.7	122	105	67-123	14	20	
Isoflurane	ug/L	ND	50	50	58.0	51.0	116	102	45-140	13	20	
m&p-Xylene	ug/L	ND	100	100	112	98.0	112	98	56-136	14	20	
Methoxyflurane	ug/L	ND	50	50	54.2	47.1	108	94	75-119	14	20	
Methylene Chloride	ug/L	ND	50	50	60.3	53.2	121	106	45-166	13	20	
o-Xylene	ug/L	ND	50	50	55.1	47.5	110	95	57-133	15	20	
Styrene	ug/L	ND	50	50	56.1	49.0	112	98	58-144	13	20	
Tetrachloroethene	ug/L	7.5	50	50	65.4	56.5	116	98	48-143	15	20	
Toluene	ug/L	ND	50	50	54.7	47.4	109	94	59-136	14	20	
Total Haloether	ug/L	ND			619	545				13		
trans-1,2-Dichloroethene	ug/L	ND	50	50	59.3	51.6	119	103	57-132	14	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	47.0	40.2	94	80	59-154	15	20	
Trichloroethene	ug/L	3.1	50	50	63.2	54.8	120	103	58-140	14	20	
Trichlorofluoromethane	ug/L	ND	50	50	59.4	51.3	117	101	24-175	15	20	
Vinyl chloride	ug/L	ND	50	50	43.4	37.9	87	76	21-150	14	20	
4-Bromofluorobenzene (S)	%.						100	97	68-124			

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

QUALITY CONTROL DATA

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 319968 319969

Parameter	Units	2051188002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						107	108	72-126			
Toluene-d8 (S)	%.						96	97	79-119			

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QUALIFIERS

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

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.

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.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fibers Public Supply Wells
Pace Project No.: 2051188

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2051188001	**TB-20170302**	EPA 5030B/8260	75876		
2051188002	**PCPZ-1**	EPA 5030B/8260	75876		
2051188003	**PCPZ-2**	EPA 5030B/8260	75876		

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Pace Analytical

CHAIN-OF-CUSTODY / A

The Chain-of-Custody is a LEGAL DO

WO# : 2051188

2051188

: 1 Of 1

Section A
Required Client Information:

Company:	ARCADIS U.S., Inc.
Address:	410 North 44th St., Suite 1000
	Phoenix, AZ 85008
Email To:	david.howard@arcadis-us.com
Phone: 602.797.4518	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	David Howard
Copy To:	Cassandra McCloud
	cassandra.mccloud@arcadis-us.com
Purchase Order #:	CO001911.0002.1502A
Project Name:	Fibers Public Supply Wells
Project #:	CO001911.0002.~~1502A~~ 16025

Section C
Invoice Information:

Attention:	Accounts Payable
Company Name:	ARCADIS
Address:	
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com
Pace Profile #:	

Regulatory Agency
CERCLA
State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analyses Test (Y/N)	EPA 8260B Haloathers	SM 2320B Alkalinity	SM 5310B TOC	ASTM D516,90,02 Sulfate	SM 4500 Nitrate	EPA 8015 TPH Kerosane	EPA 6010 Dissolved Metals (Fe, Mn)	EPA 6010 Total Metals (Fe, Mn)	RSK 175 Methane	EPA 300.0 Chloride	Residual Chlorine (Y/N)	Comments
1	TB-20170302	WT	G			03/02/17	LAB		2				2						X											
2	PCPZ-1	WT	G			03/02/17	0940		3				3						X											
3	PCPZ-2	WT	G			03/02/17	1041		3				3						X											
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colom / Arcadis	3/2/17	14:00	[signature] PACE	3/2/17	14:00	2°	Y	N	Y
				Fed Ex						
	Fed Ex	3-3-17	0820	[signature] Pace I	3-17	0820	2.8	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colom

SIGNATURE of SAMPLER: [signature]

DATE Signed: 3/2/17

NO charge pick up

WO#: 2051188

Pace Analytical

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

Sample Condition Upon R

PM: CJM Due Date: 03/17/17
CLIENT: 20-CHEV-ARC

Project #:

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

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

Therometer Used: ☐ Therm Fisher IR 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: 03-03-17 AB

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: _____