August 20, 2019 Reference No. 017302

Mr. Rob Marshall
Indiana Department of Environmental Management
Office of Land Quality, Permits Branch
100 North Senate Avenue Room IGCN 1154
Indianapolis, IN 46204

Dear Mr. Marshall:

Re: Response to IDEM Comments
Bedrock Groundwater Investigation Report of Findings
2915 Dr. Martin Luther King Jr. Boulevard Facility
Anderson, Indiana

On behalf of the Revitalizing Auto Communities Environmental Response (RACER) Trust, GHD Services Inc. (GHD) prepared and submitted the Bedrock Groundwater Investigation Report of Findings (Report) to the Indiana Department of Environmental Management (IDEM) on March 19, 2019. On July 1, 2019, IDEM provided RACER Trust with comments on the Report, a copy of which is included as Attachment A.

On behalf of RACER Trust, GHD has prepared the following responses to IDEM's July 1, 2019 comments.

Comment 1

The sampling and analysis methodologies are acceptable; however, the field sheets for the collected ground water samples were not provided. Well stabilization parameters were provided in Table 2 of the report and it appears samples were collected after stabilization; however, IDEM staff cannot determine if there were any issues with drawdown, pump depths, etc. This information should be provided.

Response

During the Bedrock Groundwater Investigation, GHD collected field data using an I-PAD and then copied the data to create Table 2. A revised Table 2 including water level measurements is provided in Attachment B. During the investigation, GHD placed the pump intake at the mid point of each screen as per GHD's groundwater sampling practices.

Comment 2

The ground water sample results indicated concentrations of cis-1,2-dichloroethylene (cis-1,2-DCE) in sample MW-81 (78 ppb), and vinyl chloride (VC) in samples MW-81 (27 ppb) and in MW-83 (12 ppb) were above the Remediation Closure Guide (RCG) groundwater screening levels (GWSLs). All other target compound list (TCL) volatile organic compounds (VOCs) were either below the RCG GWSLs and/or non-detect in the collected ground water samples from wells MW-62, MW-74, MW-77, MW-81, MW-82, MW-98-18, and MW-99-18. The groundwater water sample results are summarized in Table 4 of the report. The horizontal and vertical extent of ground water contamination appears to be delineated, once appropriate field documentation is provided and reviewed.

GHD
6520 Corporate Drive Indianapolis Indiana 46278 USA
T 317 291 7007 **F** 317 328 2666 **W** www.ghd.com

REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

Response

Acknowledged.

Comment 3

According to the chain-of-custody form and laboratory analytical sample results, it appears a ground water sample GW-101018-AF-046 was collected and analyzed for TCL VOCs; however, the results for this sample were neither reported nor discussed in the document. Based on the laboratory analytical results, concentrations of cis-1,2-DCE (300 ppb) and VC (240 ppb) were above the RCG GWSLs. Of these, a concentration of VC remains above the RCG commercial vapor intrusion ground water screening level of 35 ppb. All other TCL VOCs were non-detect in the sample. GHD should clarify where this sample was collected from and why it was not reported no discussed in the document.

Response

GHD's field technician inadvertently sampled monitoring well MW 39 (GW-101018-AF-046) instead of bedrock monitoring well MW 83 as part of the Bedrock Groundwater Investigation conducted in October 2018. On December 13, 2018, GHD went back to the Site and sampled monitoring well MW 83. The mistake was documented in GHD's 2018 Annual Monitoring Report and the Semi-Annual Technical Progress Report (July 2018 – December 2018). We apologize about the confusion.

Comment 4

The minimum data documentation requirements (MDDRs) provided for the collected ground water samples were adequate in supporting the sample results; however, full QA/QC, along with raw data, should be provided for the collected ground water samples for validation. The IDEM QA/QC documentation requirements can be found in section 3.9.1 (Table 3-A) of the RCG.

Response

Acknowledged. TestAmerica Laboratory only provided Level 2 analytical reports which satisfies the MDDRs, but not the Full QA/QC as detailed in IDEM's RCG Table 3-A requirements. As such, Level 4 analytical reports from TestAmerica Laboratory are provided in Attachment C.

Should you have questions regarding the above, please do not hesitate to contact the undersigned.

Sincerely,

GHD

Robert Catallo, B.Sc.

RC/mma/58

Encl.

cc: Robert Hare (RACER Trust)

Attachment A

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov
Eric J. Holcomb, *Governor*
Bruno L. Pigott, *Commissioner*

July 1, 2019

Mr. Robert W. Hare
Cleanup Manager
RACER Trust
500 Woodward Avenue
Suite 2650
Detroit, MI 48226

Dear Mr. Hare:

Re: Bedrock Groundwater Investigation Report
RACER Trust
Site No. 13200
Dr. Martin Luther King Jr. Boulevard Site
Anderson, Indiana
IND980700801

IDEM reviewed the March 19, 2019, *Bedrock Groundwater Investigation Report of Findings* (VFC # 82726171) submitted by GHD Services Inc. (GHD) for RACER Trust's Dr. Martin Luther King Jr. Boulevard site. The report provides a summary of the ground water sampling activities performed at the site to delineate the extent of bedrock ground water contamination. IDEM's comments are enclosed.

Please submit one hard copy and one electronic copy (in .pdf format) of a response to the enclosed comments, to this office, within 45 days of receipt of this letter.

If you have questions, please contact Robert Marshall at (317) 232-4534 or rmarshal@idem.IN.gov.

Sincerely,

Donald W. Stilz, Chief
Hazardous Waste Permit Section
Permits Branch
Office of Land Quality

REM
Enclosure
cc: Robert Catallo, GHD (w/ enclosure)
Shannon Richardson, GHD (w/ enclosure)
Thierry Liberge, IDEM (w/ enclosure)
Namrata Patel, IDEM (w/ enclosure)

Bedrock Groundwater Investigation Report of Findings
RACER Trust – Site No. 13200
Dr. Martin Luther King Jr. Boulevard Site
Anderson, Indiana
IND980700801

1. The sampling and analysis methodologies are acceptable; however, the field sheets for the collected ground water samples were not provided. Well stabilization parameters were provided in Table 2 of the report and it appears samples were collected after stabilization; however, IDEM staff cannot determine if there were any issues with drawdown, pump depths, etc. This information should be provided.

2. The ground water sample results indicated concentrations of cis-1,2-dichloroethylene (cis-1,2-DCE) in sample MW-81 (78 ppb), and vinyl chloride (VC) in samples MW-81 (27 ppb) and in MW-83 (12 ppb) were above the *Remediation Closure Guide* (RCG) ground water screening levels (GWSLs). All other target compound list (TCL) volatile organic compounds (VOCs) were either below the RCG GWSLs and/or non-detect in the collected ground water samples from wells MW-62, MW-74, MW-77, MW-81, MW-82, MW-98-18, and MW-99-18. The ground water sample results are summarized in Table 4 of the report. The horizontal and vertical extent of ground water contamination appears to be delineated, once appropriate field documentation is provided and reviewed.

3. According to the chain-of-custody form and laboratory analytical sample results, it appears a ground water sample GW-101018-AF-046 was collected and analyzed for TCL VOCs; however, the results for this sample were neither reported nor discussed in the document. Based on the laboratory analytical results, concentrations of cis-1,2-DCE (300 ppb) and VC (240 ppb) were above the RCG GWSLs. Of these, a concentration of VC remains above the RCG commercial vapor intrusion ground water screening level of 35 ppb. All other TCL VOCs were non-detect in the sample. GHD should clarify where this sample was collected from and why it was not reported nor discussed in the document.

4. The minimum data documentation requirements (MDDRs) provided for the collected ground water samples were adequate in supporting the sample results; however, full QA/QC, along with raw data, should be provided for the collected ground water samples for validation. The IDEM QA/QC documentation requirements can be found in Section 3.9.1 (Table 3-A) of the RCG and on the internet at: www.in.gov/idem/cleanups/files/remediation_closure_guide.pdf. The following was noted for the MDDRs provided.

    a. A ground water field duplicate sample was collected from MW-82 and analyzed for VOCs and the results were in good agreement.

    b. A matrix spike/matrix spike duplicate was performed on ground water sample

GW-101018-AF-046 and the recoveries met the laboratory established control limits.

c. An equipment blank was taken with samples collected on October 2018. Low levels of cis-1,2-DCE (0.37 ppb, J estimated value) and carbon disulfide (0.33 ppb, J estimated value) were detected below the reporting limits. The low level detections of cis-1,2-DCE and carbon disulfide indicate that the sampling equipment was not decontaminated appropriately between sampling locations. Since the concentrations of cis-1,2-DCE in the site's samples were much higher than the detected level of cis-1,2-DCE in the equipment blank, the data quality is not affected. Carbon disulfide was non-detect in site's samples and therefore, the data quality is not affected.

d. A trip blank was submitted with the October 2018 sampling event and analyzed for VOCs. VOCs were non-detect in the trip blank sample.

e. A trip blank was submitted with the December 2018 sampling event and analyzed for VOCs. Concentrations of methylene chloride (6.1 ppb) and acetone (28 ppb) were detected in the trip blank sample. Methylene chloride and acetone were non-detect in the site sample and are common laboratory artifacts; therefore, the data quality is not affected.

Attachment B

Table 2

Well Stabilization Parameters (Revised)
Bedrock Groundwater Investigation
Report of Findings
2915 Dr. Martin Luther King Jr. Boulevard,
Anderson, Indiana

Location	*Date*	*Time (24 hr)*	*Water Level (f BTOR)*	*Temperature (^{O}C)*	*Conductivity (mS/cm)*	*DO mg/L*	*Turbidity (NTU)*	*pH*	*ORP (mV)*
MW 62	10/10/2018	9:50	18.35	17.86	0.88	0.38	9.6	7.08	-96.8
		9:55	18.35	18.34	0.88	0.4	55.7	7.08	-95.4
		10:00	18.35	17.31	0.85	0.26	229.0	7.09	-114.4
		10:10	18.35	17.36	0.82	0.06	169.0	7.13	-143.3
		10:20	18.35	17.72	0.82	0.05	57.5	7.13	-146.9
		10:25	18.35	17.70	0.81	0.05	28.3	7.13	-147.8
		10:30	18.35	17.69	0.81	0.06	26.3	7.13	-147.6
		10:35	18.35	17.63	0.81	0.05	22.2	7.14	-147.1
		10:40	18.35	17.49	0.81	0.04	15.0	7.14	-147
		10:45	18.35	17.47	0.81	0.04	10.3	7.14	-146.8
		10:55	18.35	17.54	0.81	0.04	9.04	7.14	-146.4
		10:55	18.35	17.62	0.81	0.05	9.36	7.14	-145.9
MW 74	10/10/2018	15:55	16.02	--	--	--	--	--	--
		16:10	17.32	14.49	0.89	0.75	110.0	7.22	-101.7
		16:20	16.98	15.23	0.89	0.83	95.4	7.20	-99.5
		16:30	16.94	15.31	0.89	0.52	61.8	7.19	-96.4
		16:35	16.95	15.18	0.89	0.38	43.6	7.19	-95.3
		16:40	16.96	15.23	0.89	0.35	27.1	7.18	-94.2
		16:45	16.85	15.30	0.89	0.28	26.4	7.18	-93.4
		16:50	16.85	15.46	0.89	0.23	23.8	7.17	-93.1
		16:55	16.85	15.57	0.89	0.2	19.9	7.17	-92.7
		17:00	16.85	15.36	0.89	0.17	19.8	7.17	-92.2
MW 77	10/10/2018	13:19	5.78	--	--	--	--	--	--
		13:34	5.80	16.65	1.11	0.1	23.9	7.08	-86.4
		13:39	5.80	16.65	1.11	0.11	20.8	7.08	-86.4
		13:44	5.80	16.78	1.11	0.1	15.7	7.07	-87.5
		13:49	5.80	16.88	1.11	0.12	18.4	7.07	-87.7
MW 81	10/10/2018	14:41	6.97	--	--	--	--	--	--
		14:56	6.99	17.94	0.88	0.05	24.5	7.42	-218.7
		15:01	7.02	17.83	0.91	0.07	14.2	7.38	-217.2
		15:06	7.01	18.12	0.91	0.06	14.4	7.35	-217.3
		15:11	7.01	17.59	0.90	0.04	7.6	7.35	-219.8
		15:16	7.01	17.81	0.91	0.04	7.9	7.32	-218.6

Table 2

Well Stabilization Parameters (Revised)
Bedrock Groundwater Investigation
Report of Findings
2915 Dr. Martin Luther King Jr. Boulevard,
Anderson, Indiana

Location	*Date*	*Time (24 hr)*	*Water Level (f BTOR)*	*Temperature (^{O}C)*	*Conductivity (mS/cm)*	*DO mg/L*	*Turbidity (NTU)*	*pH*	*ORP (mV)*
MW 82	10/10/2018	15:00	15.61	--	--	--	--	--	--
		15:15	15.65	15.03	0.27	0.09	8.07	8.63	-224.2
		15:20	15.65	15.17	0.28	0.08	7.32	8.57	-228.9
		15:25	15.65	15.26	0.28	0.06	7.56	8.56	-238.5
MW 83	12/13/2018	12:25	18.46	--	--	--	--	--	--
		12:40	18.58	13.82	0.98	0.08	5.96	6.92	-134.4
		12:14	18.58	13.72	0.98	0.07	4.33	6.93	-131.2
		12:50	18.57	13.49	0.99	0.08	3.59	6.93	-125.6
MW 98-18	10/9/2018	15:37	6.89	--	--	--	--	--	--
		15:52	6.91	21.00	1.03	0.29	3.15	7.15	-91.1
		15:57	6.91	20.46	1.03	0.22	2.98	7.14	-84.8
		16:02	6.91	20.39	1.04	0.22	3.48	7.12	-81.8
MW 99-18	10/10/2018	17:42	4.67	--	--	--	--	--	--
		17:57	4.69	16.47	1.13	0.18	27.7	7.01	-63.7
		18:02	4.69	16.33	1.15	0.15	13.0	7.00	-62.7
		18:07	4.69	16.50	1.15	0.12	7.53	7.00	-63.1
		18:12	4.69	16.34	1.15	0.09	5.21	7.00	-62.5

Notes:

f BTOR	feet Below Top of Riser
mg/L	milligram per litre
mS/cm	millisiemens per centimetre
mV	millivolts
s.u.	Scientific Units
^{o}C	degrees Celsius
NTU	Nephelometric Turbidity Units

Attachment C

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Job Number: 240-102783-2

Job Description: 17302, RACER Delphi Anderson

For:
GHD Services Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, NY 14304

Attention: Ms. Deborah Andrasko

Approved for release.
Denise D Heckler
Project Manager II
8/1/2019 10:24 AM

Denise D Heckler, Project Manager II
4101 Shuffel Street NW, North Canton, OH, 44720
(330)966-9477
denise.heckler@testamericainc.com
08/01/2019

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
240-102783-2

Receipt
The samples were received on 10/12/2018 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: GHD Services Inc.
Job ID: 240-102783-2
Project/Site: 17302, RACER Delphi Anderson

Client Sample ID: GW-100918-AF-043 — Lab Sample ID: 240-102783-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.2	J	4.0	0.68	ug/L	4		8260B	Total/NA
cis-1,2-Dichloroethene	78		4.0	0.64	ug/L	4		8260B	Total/NA
trans-1,2-Dichloroethene	1.0	J	4.0	0.76	ug/L	4		8260B	Total/NA
Vinyl chloride	27		4.0	0.80	ug/L	4		8260B	Total/NA

Client Sample ID: GW-100918-AF-044 — Lab Sample ID: 240-102783-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.25	J	1.0	0.13	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.21	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: GW-101018-AF-045 — Lab Sample ID: 240-102783-11

No Detections.

Client Sample ID: GW-101018-AF-046 — Lab Sample ID: 240-102783-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	300		17	2.7	ug/L	16.67		8260B	Total/NA
Vinyl chloride	240		17	3.3	ug/L	16.67		8260B	Total/NA

Client Sample ID: EB-101018-AF-005 — Lab Sample ID: 240-102783-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.33	J	1.0	0.28	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.37	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: GW-101018-AF-047 — Lab Sample ID: 240-102783-14

No Detections.

Client Sample ID: GW-101018-AF-048 — Lab Sample ID: 240-102783-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.45	J	1.0	0.16	ug/L	1		8260B	Total/NA
Trichloroethene	0.12	J	1.0	0.10	ug/L	1		8260B	Total/NA

Client Sample ID: GW-101018-AF-049 — Lab Sample ID: 240-102783-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.38	J	1.0	0.16	ug/L	1		8260B	Total/NA
Trichloroethene	0.14	J	1.0	0.10	ug/L	1		8260B	Total/NA

Client Sample ID: GW-101018-AF-050 — Lab Sample ID: 240-102783-17

No Detections.

Client Sample ID: GW-101018-AF-051 — Lab Sample ID: 240-102783-18

No Detections.

Client Sample ID: TB-101118-AF-006 — Lab Sample ID: 240-102783-19

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-100918-AF-043 — Lab Sample ID: 240-102783-9

Date Collected: 10/09/18 15:20 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0	0.96	ug/L			10/22/18 15:36	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.52	ug/L			10/22/18 15:36	4
1,1,2-Trichloroethane	4.0	U	4.0	0.36	ug/L			10/22/18 15:36	4
1,1-Dichloroethane	**1.2**	**J**	4.0	0.68	ug/L			10/22/18 15:36	4
1,1-Dichloroethene	4.0	U	4.0	0.76	ug/L			10/22/18 15:36	4
1,2-Dichloroethane	4.0	U	4.0	0.84	ug/L			10/22/18 15:36	4
1,2-Dichloropropane	4.0	U	4.0	0.60	ug/L			10/22/18 15:36	4
2-Hexanone	40	U	40	2.2	ug/L			10/22/18 15:36	4
Acetone	40	U	40	22	ug/L			10/22/18 15:36	4
Benzene	4.0	U	4.0	0.52	ug/L			10/22/18 15:36	4
Bromoform	4.0	U	4.0	3.0	ug/L			10/22/18 15:36	4
Bromomethane	4.0	U	4.0	1.7	ug/L			10/22/18 15:36	4
Carbon disulfide	4.0	U	4.0	1.1	ug/L			10/22/18 15:36	4
Carbon tetrachloride	4.0	U	4.0	1.0	ug/L			10/22/18 15:36	4
Chlorobenzene	4.0	U	4.0	0.56	ug/L			10/22/18 15:36	4
Chloroethane	4.0	U	4.0	3.3	ug/L			10/22/18 15:36	4
Chloroform	4.0	U	4.0	0.52	ug/L			10/22/18 15:36	4
Chloromethane	4.0	U	4.0	0.80	ug/L			10/22/18 15:36	4
cis-1,2-Dichloroethene	**78**		4.0	0.64	ug/L			10/22/18 15:36	4
cis-1,3-Dichloropropene	4.0	U	4.0	2.4	ug/L			10/22/18 15:36	4
Dichlorobromomethane	4.0	U	4.0	0.68	ug/L			10/22/18 15:36	4
Ethylbenzene	4.0	U	4.0	0.44	ug/L			10/22/18 15:36	4
2-Butanone (MEK)	40	U	40	4.6	ug/L			10/22/18 15:36	4
4-Methyl-2-pentanone (MIBK)	40	U	40	1.7	ug/L			10/22/18 15:36	4
Methylene Chloride	20	U	20	10	ug/L			10/22/18 15:36	4
Styrene	4.0	U	4.0	0.40	ug/L			10/22/18 15:36	4
Tetrachloroethene	4.0	U	4.0	0.60	ug/L			10/22/18 15:36	4
Toluene	4.0	U	4.0	0.56	ug/L			10/22/18 15:36	4
trans-1,2-Dichloroethene	**1.0**	**J**	4.0	0.76	ug/L			10/22/18 15:36	4
trans-1,3-Dichloropropene	4.0	U	4.0	2.7	ug/L			10/22/18 15:36	4
Trichloroethene	4.0	U	4.0	0.40	ug/L			10/22/18 15:36	4
Vinyl chloride	**27**		4.0	0.80	ug/L			10/22/18 15:36	4
Xylenes, Total	8.0	U	8.0	0.60	ug/L			10/22/18 15:36	4
Chlorodibromomethane	4.0	U	4.0	1.6	ug/L			10/22/18 15:36	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 121*		*10/22/18 15:36*	*4*
4-Bromofluorobenzene (Surr)	*92*		*59 - 120*		*10/22/18 15:36*	*4*
Toluene-d8 (Surr)	*95*		*70 - 123*		*10/22/18 15:36*	*4*
Dibromofluoromethane (Surr)	*121*		*75 - 128*		*10/22/18 15:36*	*4*

Client Sample ID: GW-100918-AF-044 — Lab Sample ID: 240-102783-10

Date Collected: 10/09/18 16:07 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/22/18 15:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/22/18 15:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/22/18 15:58	1

Client Sample ID: GW-100918-AF-044 Lab Sample ID: 240-102783-10

Date Collected: 10/09/18 16:07 **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/22/18 15:58	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 15:58	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/22/18 15:58	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/22/18 15:58	1
2-Hexanone	10	U	10	0.54	ug/L			10/22/18 15:58	1
Acetone	10	U	10	5.4	ug/L			10/22/18 15:58	1
Benzene	1.0	U	1.0	0.13	ug/L			10/22/18 15:58	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/22/18 15:58	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/22/18 15:58	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/22/18 15:58	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/22/18 15:58	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/22/18 15:58	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/22/18 15:58	1
Chloroform	**0.25**	**J**	1.0	0.13	ug/L			10/22/18 15:58	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/22/18 15:58	1
cis-1,2-Dichloroethene	**0.21**	**J**	1.0	0.16	ug/L			10/22/18 15:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/22/18 15:58	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/22/18 15:58	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/22/18 15:58	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/22/18 15:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/22/18 15:58	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/22/18 15:58	1
Styrene	1.0	U	1.0	0.10	ug/L			10/22/18 15:58	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/22/18 15:58	1
Toluene	1.0	U	1.0	0.14	ug/L			10/22/18 15:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 15:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/22/18 15:58	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/22/18 15:58	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/22/18 15:58	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/22/18 15:58	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/22/18 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 121*		*10/22/18 15:58*	*1*
4-Bromofluorobenzene (Surr)	*72*		*59 - 120*		*10/22/18 15:58*	*1*
Toluene-d8 (Surr)	*74*		*70 - 123*		*10/22/18 15:58*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 128*		*10/22/18 15:58*	*1*

Client Sample ID: GW-101018-AF-045 Lab Sample ID: 240-102783-11

Date Collected: 10/10/18 10:57 **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/22/18 16:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/22/18 16:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/22/18 16:19	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/22/18 16:19	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 16:19	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/22/18 16:19	1

Client Sample ID: GW-101018-AF-045 — Lab Sample ID: 240-102783-11

Date Collected: 10/10/18 10:57 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/22/18 16:19	1
2-Hexanone	10	U	10	0.54	ug/L			10/22/18 16:19	1
Acetone	10	U	10	5.4	ug/L			10/22/18 16:19	1
Benzene	1.0	U	1.0	0.13	ug/L			10/22/18 16:19	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/22/18 16:19	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/22/18 16:19	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/22/18 16:19	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/22/18 16:19	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/22/18 16:19	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/22/18 16:19	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/22/18 16:19	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/22/18 16:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/22/18 16:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/22/18 16:19	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/22/18 16:19	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/22/18 16:19	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/22/18 16:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/22/18 16:19	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/22/18 16:19	1
Styrene	1.0	U	1.0	0.10	ug/L			10/22/18 16:19	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/22/18 16:19	1
Toluene	1.0	U	1.0	0.14	ug/L			10/22/18 16:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 16:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/22/18 16:19	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/22/18 16:19	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/22/18 16:19	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/22/18 16:19	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/22/18 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 121*		*10/22/18 16:19*	*1*
4-Bromofluorobenzene (Surr)	*87*		*59 - 120*		*10/22/18 16:19*	*1*
Toluene-d8 (Surr)	*92*		*70 - 123*		*10/22/18 16:19*	*1*
Dibromofluoromethane (Surr)	*120*		*75 - 128*		*10/22/18 16:19*	*1*

Client Sample ID: GW-101018-AF-046 — Lab Sample ID: 240-102783-12

Date Collected: 10/10/18 12:17 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	17	U	17	4.0	ug/L			10/22/18 16:41	16.67
1,1,2,2-Tetrachloroethane	17	U	17	2.2	ug/L			10/22/18 16:41	16.67
1,1,2-Trichloroethane	17	U	17	1.5	ug/L			10/22/18 16:41	16.67
1,1-Dichloroethane	17	U	17	2.8	ug/L			10/22/18 16:41	16.67
1,1-Dichloroethene	17	U	17	3.2	ug/L			10/22/18 16:41	16.67
1,2-Dichloroethane	17	U	17	3.5	ug/L			10/22/18 16:41	16.67
1,2-Dichloropropane	17	U	17	2.5	ug/L			10/22/18 16:41	16.67
2-Hexanone	170	U	170	9.0	ug/L			10/22/18 16:41	16.67
Acetone	170	U	170	90	ug/L			10/22/18 16:41	16.67

Client Sample ID: GW-101018-AF-046 — Lab Sample ID: 240-102783-12

Date Collected: 10/10/18 12:17 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	17	U	17	2.2	ug/L			10/22/18 16:41	16.67
Bromoform	17	U	17	13	ug/L			10/22/18 16:41	16.67
Bromomethane	17	U	17	7.0	ug/L			10/22/18 16:41	16.67
Carbon disulfide	17	U	17	4.7	ug/L			10/22/18 16:41	16.67
Carbon tetrachloride	17	U	17	4.3	ug/L			10/22/18 16:41	16.67
Chlorobenzene	17	U	17	2.3	ug/L			10/22/18 16:41	16.67
Chloroethane	17	U	17	14	ug/L			10/22/18 16:41	16.67
Chloroform	17	U	17	2.2	ug/L			10/22/18 16:41	16.67
Chloromethane	17	U	17	3.3	ug/L			10/22/18 16:41	16.67
cis-1,2-Dichloroethene	**300**		17	2.7	ug/L			10/22/18 16:41	16.67
cis-1,3-Dichloropropene	17	U	17	10	ug/L			10/22/18 16:41	16.67
Dichlorobromomethane	17	U	17	2.8	ug/L			10/22/18 16:41	16.67
Ethylbenzene	17	U	17	1.8	ug/L			10/22/18 16:41	16.67
2-Butanone (MEK)	170	U	170	19	ug/L			10/22/18 16:41	16.67
4-Methyl-2-pentanone (MIBK)	170	U	170	7.0	ug/L			10/22/18 16:41	16.67
Methylene Chloride	83	U	83	44	ug/L			10/22/18 16:41	16.67
Styrene	17	U	17	1.7	ug/L			10/22/18 16:41	16.67
Tetrachloroethene	17	U	17	2.5	ug/L			10/22/18 16:41	16.67
Toluene	17	U	17	2.3	ug/L			10/22/18 16:41	16.67
trans-1,2-Dichloroethene	17	U	17	3.2	ug/L			10/22/18 16:41	16.67
trans-1,3-Dichloropropene	17	U	17	11	ug/L			10/22/18 16:41	16.67
Trichloroethene	17	U	17	1.7	ug/L			10/22/18 16:41	16.67
Vinyl chloride	**240**		17	3.3	ug/L			10/22/18 16:41	16.67
Xylenes, Total	33	U	33	2.5	ug/L			10/22/18 16:41	16.67
Chlorodibromomethane	17	U	17	6.5	ug/L			10/22/18 16:41	16.67

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 121*		*10/22/18 16:41*	*16.67*
4-Bromofluorobenzene (Surr)	*90*		*59 - 120*		*10/22/18 16:41*	*16.67*
Toluene-d8 (Surr)	*93*		*70 - 123*		*10/22/18 16:41*	*16.67*
Dibromofluoromethane (Surr)	*118*		*75 - 128*		*10/22/18 16:41*	*16.67*

Client Sample ID: EB-101018-AF-005 — Lab Sample ID: 240-102783-13

Date Collected: 10/10/18 12:33 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/22/18 17:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/22/18 17:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/22/18 17:03	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/22/18 17:03	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 17:03	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/22/18 17:03	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/22/18 17:03	1
2-Hexanone	10	U	10	0.54	ug/L			10/22/18 17:03	1
Acetone	10	U	10	5.4	ug/L			10/22/18 17:03	1
Benzene	1.0	U	1.0	0.13	ug/L			10/22/18 17:03	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/22/18 17:03	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/22/18 17:03	1

Client Sample ID: EB-101018-AF-005 Lab Sample ID: 240-102783-13

Date Collected: 10/10/18 12:33 **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	**0.33**	**J**	1.0	0.28	ug/L			10/22/18 17:03	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/22/18 17:03	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/22/18 17:03	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/22/18 17:03	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/22/18 17:03	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/22/18 17:03	1
cis-1,2-Dichloroethene	**0.37**	**J**	1.0	0.16	ug/L			10/22/18 17:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/22/18 17:03	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/22/18 17:03	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/22/18 17:03	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/22/18 17:03	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/22/18 17:03	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/22/18 17:03	1
Styrene	1.0	U	1.0	0.10	ug/L			10/22/18 17:03	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/22/18 17:03	1
Toluene	1.0	U	1.0	0.14	ug/L			10/22/18 17:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 17:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/22/18 17:03	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/22/18 17:03	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/22/18 17:03	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/22/18 17:03	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/22/18 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 121*		*10/22/18 17:03*	*1*
4-Bromofluorobenzene (Surr)	*85*		*59 - 120*		*10/22/18 17:03*	*1*
Toluene-d8 (Surr)	*91*		*70 - 123*		*10/22/18 17:03*	*1*
Dibromofluoromethane (Surr)	*115*		*75 - 128*		*10/22/18 17:03*	*1*

Client Sample ID: GW-101018-AF-047 Lab Sample ID: 240-102783-14

Date Collected: 10/10/18 13:51 **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/22/18 17:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/22/18 17:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/22/18 17:25	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/22/18 17:25	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 17:25	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/22/18 17:25	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/22/18 17:25	1
2-Hexanone	10	U	10	0.54	ug/L			10/22/18 17:25	1
Acetone	10	U	10	5.4	ug/L			10/22/18 17:25	1
Benzene	1.0	U	1.0	0.13	ug/L			10/22/18 17:25	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/22/18 17:25	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/22/18 17:25	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/22/18 17:25	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/22/18 17:25	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/22/18 17:25	1

Client Sample ID: GW-101018-AF-047 — Lab Sample ID: 240-102783-14

Date Collected: 10/10/18 13:51 **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	0.83	ug/L			10/22/18 17:25	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/22/18 17:25	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/22/18 17:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/22/18 17:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/22/18 17:25	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/22/18 17:25	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/22/18 17:25	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/22/18 17:25	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/22/18 17:25	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/22/18 17:25	1
Styrene	1.0	U	1.0	0.10	ug/L			10/22/18 17:25	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/22/18 17:25	1
Toluene	1.0	U	1.0	0.14	ug/L			10/22/18 17:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 17:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/22/18 17:25	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/22/18 17:25	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/22/18 17:25	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/22/18 17:25	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/22/18 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 121*		*10/22/18 17:25*	*1*
4-Bromofluorobenzene (Surr)	*94*		*59 - 120*		*10/22/18 17:25*	*1*
Toluene-d8 (Surr)	*94*		*70 - 123*		*10/22/18 17:25*	*1*
Dibromofluoromethane (Surr)	*125*		*75 - 128*		*10/22/18 17:25*	*1*

Client Sample ID: GW-101018-AF-048 — Lab Sample ID: 240-102783-15

Date Collected: 10/10/18 15:27 **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/22/18 17:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/22/18 17:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/22/18 17:47	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/22/18 17:47	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 17:47	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/22/18 17:47	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/22/18 17:47	1
2-Hexanone	10	U	10	0.54	ug/L			10/22/18 17:47	1
Acetone	10	U	10	5.4	ug/L			10/22/18 17:47	1
Benzene	1.0	U	1.0	0.13	ug/L			10/22/18 17:47	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/22/18 17:47	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/22/18 17:47	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/22/18 17:47	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/22/18 17:47	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/22/18 17:47	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/22/18 17:47	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/22/18 17:47	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/22/18 17:47	1

Client Sample ID: GW-101018-AF-048 — Lab Sample ID: 240-102783-15

Date Collected: 10/10/18 15:27 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**0.45**	**J**	1.0	0.16	ug/L			10/22/18 17:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/22/18 17:47	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/22/18 17:47	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/22/18 17:47	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/22/18 17:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/22/18 17:47	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/22/18 17:47	1
Styrene	1.0	U	1.0	0.10	ug/L			10/22/18 17:47	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/22/18 17:47	1
Toluene	1.0	U	1.0	0.14	ug/L			10/22/18 17:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 17:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/22/18 17:47	1
Trichloroethene	**0.12**	**J**	1.0	0.10	ug/L			10/22/18 17:47	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/22/18 17:47	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/22/18 17:47	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/22/18 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 121*		*10/22/18 17:47*	*1*
4-Bromofluorobenzene (Surr)	*94*		*59 - 120*		*10/22/18 17:47*	*1*
Toluene-d8 (Surr)	*103*		*70 - 123*		*10/22/18 17:47*	*1*
Dibromofluoromethane (Surr)	*124*		*75 - 128*		*10/22/18 17:47*	*1*

Client Sample ID: GW-101018-AF-049 — Lab Sample ID: 240-102783-16

Date Collected: 10/10/18 15:30 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/22/18 18:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/22/18 18:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/22/18 18:08	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/22/18 18:08	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 18:08	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/22/18 18:08	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/22/18 18:08	1
2-Hexanone	10	U	10	0.54	ug/L			10/22/18 18:08	1
Acetone	10	U	10	5.4	ug/L			10/22/18 18:08	1
Benzene	1.0	U	1.0	0.13	ug/L			10/22/18 18:08	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/22/18 18:08	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/22/18 18:08	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/22/18 18:08	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/22/18 18:08	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/22/18 18:08	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/22/18 18:08	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/22/18 18:08	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/22/18 18:08	1
cis-1,2-Dichloroethene	**0.38**	**J**	1.0	0.16	ug/L			10/22/18 18:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/22/18 18:08	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/22/18 18:08	1

Client Sample ID: GW-101018-AF-049 — Lab Sample ID: 240-102783-16

Date Collected: 10/10/18 15:30 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/22/18 18:08	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/22/18 18:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/22/18 18:08	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/22/18 18:08	1
Styrene	1.0	U	1.0	0.10	ug/L			10/22/18 18:08	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/22/18 18:08	1
Toluene	1.0	U	1.0	0.14	ug/L			10/22/18 18:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 18:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/22/18 18:08	1
Trichloroethene	**0.14**	**J**	1.0	0.10	ug/L			10/22/18 18:08	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/22/18 18:08	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/22/18 18:08	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/22/18 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 121*		*10/22/18 18:08*	*1*
4-Bromofluorobenzene (Surr)	*88*		*59 - 120*		*10/22/18 18:08*	*1*
Toluene-d8 (Surr)	*99*		*70 - 123*		*10/22/18 18:08*	*1*
Dibromofluoromethane (Surr)	*117*		*75 - 128*		*10/22/18 18:08*	*1*

Client Sample ID: GW-101018-AF-050 — Lab Sample ID: 240-102783-17

Date Collected: 10/10/18 17:05 — **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/23/18 12:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/23/18 12:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/23/18 12:55	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/23/18 12:55	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/23/18 12:55	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/23/18 12:55	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/23/18 12:55	1
2-Hexanone	10	U	10	0.54	ug/L			10/23/18 12:55	1
Acetone	10	U	10	5.4	ug/L			10/23/18 12:55	1
Benzene	1.0	U	1.0	0.13	ug/L			10/23/18 12:55	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/23/18 12:55	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/23/18 12:55	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/23/18 12:55	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/23/18 12:55	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/23/18 12:55	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/23/18 12:55	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/23/18 12:55	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/23/18 12:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/23/18 12:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/23/18 12:55	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/23/18 12:55	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/23/18 12:55	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/23/18 12:55	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/23/18 12:55	1

Client Sample ID: GW-101018-AF-050
Lab Sample ID: 240-102783-17

Date Collected: 10/10/18 17:05
Matrix: Water
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/23/18 12:55	1
Styrene	1.0	U	1.0	0.10	ug/L			10/23/18 12:55	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/23/18 12:55	1
Toluene	1.0	U	1.0	0.14	ug/L			10/23/18 12:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/23/18 12:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/23/18 12:55	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/23/18 12:55	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/23/18 12:55	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/23/18 12:55	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/23/18 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 121*		*10/23/18 12:55*	*1*
4-Bromofluorobenzene (Surr)	*84*		*59 - 120*		*10/23/18 12:55*	*1*
Toluene-d8 (Surr)	*89*		*70 - 123*		*10/23/18 12:55*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 128*		*10/23/18 12:55*	*1*

Client Sample ID: GW-101018-AF-051
Lab Sample ID: 240-102783-18

Date Collected: 10/10/18 18:15
Matrix: Water
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/23/18 13:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/23/18 13:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/23/18 13:17	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/23/18 13:17	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/23/18 13:17	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/23/18 13:17	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/23/18 13:17	1
2-Hexanone	10	U	10	0.54	ug/L			10/23/18 13:17	1
Acetone	10	U	10	5.4	ug/L			10/23/18 13:17	1
Benzene	1.0	U	1.0	0.13	ug/L			10/23/18 13:17	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/23/18 13:17	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/23/18 13:17	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/23/18 13:17	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/23/18 13:17	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/23/18 13:17	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/23/18 13:17	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/23/18 13:17	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/23/18 13:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/23/18 13:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/23/18 13:17	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/23/18 13:17	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/23/18 13:17	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/23/18 13:17	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/23/18 13:17	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/23/18 13:17	1
Styrene	1.0	U	1.0	0.10	ug/L			10/23/18 13:17	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/23/18 13:17	1

Client Sample ID: GW-101018-AF-051 Lab Sample ID: 240-102783-18

Date Collected: 10/10/18 18:15 **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	1.0	U	1.0	0.14	ug/L			10/23/18 13:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/23/18 13:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/23/18 13:17	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/23/18 13:17	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/23/18 13:17	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/23/18 13:17	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/23/18 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 121*		*10/23/18 13:17*	*1*
4-Bromofluorobenzene (Surr)	*89*		*59 - 120*		*10/23/18 13:17*	*1*
Toluene-d8 (Surr)	*92*		*70 - 123*		*10/23/18 13:17*	*1*
Dibromofluoromethane (Surr)	*116*		*75 - 128*		*10/23/18 13:17*	*1*

Client Sample ID: TB-101118-AF-006 Lab Sample ID: 240-102783-19

Date Collected: 10/11/18 15:30 **Matrix: Water**
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/23/18 13:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/23/18 13:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/23/18 13:38	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/23/18 13:38	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/23/18 13:38	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/23/18 13:38	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/23/18 13:38	1
2-Hexanone	10	U	10	0.54	ug/L			10/23/18 13:38	1
Acetone	10	U	10	5.4	ug/L			10/23/18 13:38	1
Benzene	1.0	U	1.0	0.13	ug/L			10/23/18 13:38	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/23/18 13:38	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/23/18 13:38	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/23/18 13:38	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/23/18 13:38	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/23/18 13:38	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/23/18 13:38	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/23/18 13:38	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/23/18 13:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/23/18 13:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/23/18 13:38	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/23/18 13:38	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/23/18 13:38	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/23/18 13:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/23/18 13:38	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/23/18 13:38	1
Styrene	1.0	U	1.0	0.10	ug/L			10/23/18 13:38	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/23/18 13:38	1
Toluene	1.0	U	1.0	0.14	ug/L			10/23/18 13:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/23/18 13:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/23/18 13:38	1

Client: GHD Services Inc.
Job ID: 240-102783-2
Project/Site: 17302, RACER Delphi Anderson

Client Sample ID: TB-101118-AF-006
Lab Sample ID: 240-102783-19
Date Collected: 10/11/18 15:30
Matrix: Water
Date Received: 10/12/18 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/23/18 13:38	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/23/18 13:38	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/23/18 13:38	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/23/18 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 121*		*10/23/18 13:38*	*1*
4-Bromofluorobenzene (Surr)	*90*		*59 - 120*		*10/23/18 13:38*	*1*
Toluene-d8 (Surr)	*95*		*70 - 123*		*10/23/18 13:38*	*1*
Dibromofluoromethane (Surr)	*119*		*75 - 128*		*10/23/18 13:38*	*1*

Surrogate Summary

Client: GHD Services Inc.
Job ID: 240-102783-2
Project/Site: 17302, RACER Delphi Anderson

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-102783-9	GW-100918-AF-043	107	92	95	121
240-102783-10	GW-100918-AF-044	87	72	74	99
240-102783-11	GW-101018-AF-045	106	87	92	120
240-102783-12	GW-101018-AF-046	104	90	93	118
240-102783-12 MS	GW-101018-AF-046	90	110	109	108
240-102783-12 MSD	GW-101018-AF-046	89	107	105	103
240-102783-13	EB-101018-AF-005	102	85	91	115
240-102783-14	GW-101018-AF-047	111	94	94	125
240-102783-15	GW-101018-AF-048	109	94	103	124
240-102783-16	GW-101018-AF-049	103	88	99	117
240-102783-17	GW-101018-AF-050	100	84	89	112
240-102783-18	GW-101018-AF-051	100	89	92	116
240-102783-19	TB-101118-AF-006	105	90	95	119
LCS 240-351197/4	Lab Control Sample	88	103	103	101
LCS 240-351439/4	Lab Control Sample	91	110	107	105
MB 240-351197/6	Method Blank	95	90	96	109
MB 240-351439/6	Method Blank	101	92	95	115

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-351197/6
Matrix: Water
Analysis Batch: 351197

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/22/18 10:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/22/18 10:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/22/18 10:29	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/22/18 10:29	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 10:29	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/22/18 10:29	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/22/18 10:29	1
2-Hexanone	10	U	10	0.54	ug/L			10/22/18 10:29	1
Acetone	10	U	10	5.4	ug/L			10/22/18 10:29	1
Benzene	1.0	U	1.0	0.13	ug/L			10/22/18 10:29	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/22/18 10:29	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/22/18 10:29	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/22/18 10:29	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/22/18 10:29	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/22/18 10:29	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/22/18 10:29	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/22/18 10:29	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/22/18 10:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/22/18 10:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/22/18 10:29	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/22/18 10:29	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/22/18 10:29	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/22/18 10:29	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/22/18 10:29	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/22/18 10:29	1
Styrene	1.0	U	1.0	0.10	ug/L			10/22/18 10:29	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/22/18 10:29	1
Toluene	1.0	U	1.0	0.14	ug/L			10/22/18 10:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/22/18 10:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/22/18 10:29	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/22/18 10:29	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/22/18 10:29	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/22/18 10:29	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/22/18 10:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 121*		*10/22/18 10:29*	*1*
4-Bromofluorobenzene (Surr)	*90*		*59 - 120*		*10/22/18 10:29*	*1*
Toluene-d8 (Surr)	*96*		*70 - 123*		*10/22/18 10:29*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 128*		*10/22/18 10:29*	*1*

Lab Sample ID: LCS 240-351197/4
Matrix: Water
Analysis Batch: 351197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane			10.0	10.1		ug/L		101	69 - 134		
1,1,2,2-Tetrachloroethane			10.0	9.72		ug/L		97	65 - 139		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-351197/4
Matrix: Water
Analysis Batch: 351197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	78 - 133
1,1-Dichloroethane	10.0	9.86		ug/L		99	75 - 133
1,1-Dichloroethene	10.0	8.48		ug/L		85	65 - 139
1,2-Dichloroethane	10.0	8.58		ug/L		86	71 - 135
1,2-Dichloropropane	10.0	9.78		ug/L		98	78 - 133
2-Hexanone	20.0	18.4		ug/L		92	43 - 148
Acetone	20.0	18.1		ug/L		91	21 - 162
Benzene	10.0	9.94		ug/L		99	80 - 123
Bromoform	10.0	9.80		ug/L		98	49 - 141
Bromomethane	10.0	5.06		ug/L		51	41 - 175
Carbon disulfide	10.0	8.83		ug/L		88	60 - 138
Carbon tetrachloride	10.0	10.7		ug/L		107	63 - 140
Chlorobenzene	10.0	9.73		ug/L		97	80 - 121
Chloroethane	10.0	5.64		ug/L		56	33 - 173
Chloroform	10.0	9.97		ug/L		100	79 - 127
Chloromethane	10.0	9.07		ug/L		91	54 - 143
cis-1,2-Dichloroethene	10.0	9.83		ug/L		98	76 - 128
cis-1,3-Dichloropropene	10.0	8.04		ug/L		80	64 - 132
Dichlorobromomethane	10.0	9.26		ug/L		93	77 - 125
Ethylbenzene	10.0	9.31		ug/L		93	80 - 120
m-Xylene & p-Xylene	10.0	9.44		ug/L		94	80 - 120
2-Butanone (MEK)	20.0	16.9		ug/L		85	39 - 163
4-Methyl-2-pentanone (MIBK)	20.0	15.2		ug/L		76	49 - 143
Methylene Chloride	10.0	10.5		ug/L		105	70 - 134
o-Xylene	10.0	9.42		ug/L		94	80 - 120
Styrene	10.0	9.51		ug/L		95	79 - 120
Tetrachloroethene	10.0	10.3		ug/L		103	74 - 130
Toluene	10.0	10.2		ug/L		102	78 - 129
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	78 - 133
trans-1,3-Dichloropropene	10.0	8.20		ug/L		82	55 - 128
Trichloroethene	10.0	9.29		ug/L		93	76 - 125
Vinyl chloride	10.0	7.81		ug/L		78	58 - 143
Xylenes, Total	20.0	18.9		ug/L		94	80 - 120
Chlorodibromomethane	10.0	10.1		ug/L		101	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 121*
4-Bromofluorobenzene (Surr)	*103*		*59 - 120*
Toluene-d8 (Surr)	*103*		*70 - 123*
Dibromofluoromethane (Surr)	*101*		*75 - 128*

Lab Sample ID: 240-102783-12 MS
Matrix: Water
Analysis Batch: 351197

Client Sample ID: GW-101018-AF-046
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	17	U	167	167		ug/L		100	51 - 138
1,1,2,2-Tetrachloroethane	17	U	167	164		ug/L		98	60 - 137

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-102783-12 MS **Client Sample ID: GW-101018-AF-046**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 351197

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	17	U	167	178		ug/L		107	76 - 132
1,1-Dichloroethane	17	U	167	174		ug/L		104	63 - 136
1,1-Dichloroethene	17	U	167	138		ug/L		83	53 - 140
1,2-Dichloroethane	17	U	167	150		ug/L		90	65 - 135
1,2-Dichloropropane	17	U	167	162		ug/L		97	70 - 132
2-Hexanone	170	U	333	260		ug/L		78	42 - 150
Acetone	170	U	333	275		ug/L		82	10 - 168
Benzene	17	U	167	168		ug/L		101	71 - 122
Bromoform	17	U	167	159		ug/L		95	44 - 129
Bromomethane	17	U	167	75.2		ug/L		45	19 - 187
Carbon disulfide	17	U	167	145		ug/L		87	43 - 144
Carbon tetrachloride	17	U	167	168		ug/L		101	41 - 143
Chlorobenzene	17	U	167	165		ug/L		99	70 - 123
Chloroethane	17	U	167	91.5		ug/L		55	11 - 189
Chloroform	17	U	167	173		ug/L		104	68 - 130
Chloromethane	17	U	167	117		ug/L		70	31 - 154
cis-1,2-Dichloroethene	300		167	430		ug/L		79	64 - 130
cis-1,3-Dichloropropene	17	U	167	121		ug/L		73	48 - 127
Dichlorobromomethane	17	U	167	153		ug/L		92	64 - 125
Ethylbenzene	17	U	167	157		ug/L		94	66 - 120
m-Xylene & p-Xylene	33	U	167	158		ug/L		95	63 - 121
2-Butanone (MEK)	170	U	333	298		ug/L		89	37 - 156
4-Methyl-2-pentanone (MIBK)	170	U	333	237		ug/L		71	44 - 143
Methylene Chloride	83	U	167	182		ug/L		109	61 - 130
o-Xylene	17	U	167	158		ug/L		95	69 - 120
Styrene	17	U	167	161		ug/L		96	68 - 120
Tetrachloroethene	17	U	167	163		ug/L		98	51 - 136
Toluene	17	U	167	169		ug/L		102	62 - 132
trans-1,2-Dichloroethene	17	U	167	175		ug/L		105	68 - 133
trans-1,3-Dichloropropene	17	U	167	121		ug/L		73	40 - 125
Trichloroethene	17	U	167	151		ug/L		90	55 - 131
Vinyl chloride	240		167	339		ug/L		56	43 - 154
Xylenes, Total	33	U	333	316		ug/L		95	67 - 120
Chlorodibromomethane	17	U	167	170		ug/L		102	60 - 129

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 121*
4-Bromofluorobenzene (Surr)	*110*		*59 - 120*
Toluene-d8 (Surr)	*109*		*70 - 123*
Dibromofluoromethane (Surr)	*108*		*75 - 128*

Lab Sample ID: 240-102783-12 MSD **Client Sample ID: GW-101018-AF-046**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 351197

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	17	U	167	167		ug/L		100	51 - 138	0	27
1,1,2,2-Tetrachloroethane	17	U	167	160		ug/L		96	60 - 137	2	31

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-102783-12 MSD
Client Sample ID: GW-101018-AF-046
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 351197

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloroethane	17	U	167	169		ug/L		101	76 - 132	5	25
1,1-Dichloroethane	17	U	167	168		ug/L		101	63 - 136	3	23
1,1-Dichloroethene	17	U	167	137		ug/L		82	53 - 140	1	35
1,2-Dichloroethane	17	U	167	144		ug/L		86	65 - 135	4	24
1,2-Dichloropropane	17	U	167	158		ug/L		95	70 - 132	2	26
2-Hexanone	170	U	333	256		ug/L		77	42 - 150	2	35
Acetone	170	U	333	282		ug/L		84	10 - 168	3	35
Benzene	17	U	167	165		ug/L		99	71 - 122	2	22
Bromoform	17	U	167	163		ug/L		98	44 - 129	3	28
Bromomethane	17	U	167	95.3		ug/L		57	19 - 187	24	35
Carbon disulfide	17	U	167	144		ug/L		86	43 - 144	1	33
Carbon tetrachloride	17	U	167	170		ug/L		102	41 - 143	1	30
Chlorobenzene	17	U	167	161		ug/L		97	70 - 123	2	23
Chloroethane	17	U	167	110		ug/L		66	11 - 189	19	35
Chloroform	17	U	167	167		ug/L		100	68 - 130	3	23
Chloromethane	17	U	167	143		ug/L		86	31 - 154	20	35
cis-1,2-Dichloroethene	300		167	425		ug/L		76	64 - 130	1	21
cis-1,3-Dichloropropene	17	U	167	123		ug/L		74	48 - 127	1	30
Dichlorobromomethane	17	U	167	151		ug/L		90	64 - 125	1	27
Ethylbenzene	17	U	167	153		ug/L		92	66 - 120	3	24
m-Xylene & p-Xylene	33	U	167	157		ug/L		94	63 - 121	1	25
2-Butanone (MEK)	170	U	333	298		ug/L		89	37 - 156	0	35
4-Methyl-2-pentanone (MIBK)	170	U	333	238		ug/L		71	44 - 143	0	35
Methylene Chloride	83	U	167	179		ug/L		107	61 - 130	2	29
o-Xylene	17	U	167	154		ug/L		93	69 - 120	2	25
Styrene	17	U	167	157		ug/L		94	68 - 120	2	26
Tetrachloroethene	17	U	167	164		ug/L		98	51 - 136	0	23
Toluene	17	U	167	165		ug/L		99	62 - 132	2	23
trans-1,2-Dichloroethene	17	U	167	170		ug/L		102	68 - 133	3	24
trans-1,3-Dichloropropene	17	U	167	123		ug/L		74	40 - 125	2	27
Trichloroethene	17	U	167	150		ug/L		90	55 - 131	1	23
Vinyl chloride	240		167	335		ug/L		54	43 - 154	1	29
Xylenes, Total	33	U	333	311		ug/L		93	67 - 120	2	25
Chlorodibromomethane	17	U	167	167		ug/L		100	60 - 129	2	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 121*
4-Bromofluorobenzene (Surr)	*107*		*59 - 120*
Toluene-d8 (Surr)	*105*		*70 - 123*
Dibromofluoromethane (Surr)	*103*		*75 - 128*

Lab Sample ID: MB 240-351439/6
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 351439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/23/18 12:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			10/23/18 12:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-351439/6
Matrix: Water
Analysis Batch: 351439

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			10/23/18 12:11	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			10/23/18 12:11	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/23/18 12:11	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/23/18 12:11	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			10/23/18 12:11	1
2-Hexanone	10	U	10	0.54	ug/L			10/23/18 12:11	1
Acetone	10	U	10	5.4	ug/L			10/23/18 12:11	1
Benzene	1.0	U	1.0	0.13	ug/L			10/23/18 12:11	1
Bromoform	1.0	U	1.0	0.76	ug/L			10/23/18 12:11	1
Bromomethane	1.0	U	1.0	0.42	ug/L			10/23/18 12:11	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			10/23/18 12:11	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			10/23/18 12:11	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			10/23/18 12:11	1
Chloroethane	1.0	U	1.0	0.83	ug/L			10/23/18 12:11	1
Chloroform	1.0	U	1.0	0.13	ug/L			10/23/18 12:11	1
Chloromethane	1.0	U	1.0	0.20	ug/L			10/23/18 12:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/23/18 12:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			10/23/18 12:11	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			10/23/18 12:11	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			10/23/18 12:11	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			10/23/18 12:11	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			10/23/18 12:11	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			10/23/18 12:11	1
Styrene	1.0	U	1.0	0.10	ug/L			10/23/18 12:11	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/23/18 12:11	1
Toluene	1.0	U	1.0	0.14	ug/L			10/23/18 12:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/23/18 12:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			10/23/18 12:11	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/23/18 12:11	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/23/18 12:11	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			10/23/18 12:11	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			10/23/18 12:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 121*		*10/23/18 12:11*	*1*
4-Bromofluorobenzene (Surr)	*92*		*59 - 120*		*10/23/18 12:11*	*1*
Toluene-d8 (Surr)	*95*		*70 - 123*		*10/23/18 12:11*	*1*
Dibromofluoromethane (Surr)	*115*		*75 - 128*		*10/23/18 12:11*	*1*

Lab Sample ID: LCS 240-351439/4
Matrix: Water
Analysis Batch: 351439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	69 - 134
1,1,2,2-Tetrachloroethane	10.0	9.84		ug/L		98	65 - 139
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	78 - 133
1,1-Dichloroethane	10.0	10.2		ug/L		102	75 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-351439/4
Matrix: Water
Analysis Batch: 351439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	8.42		ug/L		84	65 - 139
1,2-Dichloroethane	10.0	8.84		ug/L		88	71 - 135
1,2-Dichloropropane	10.0	10.2		ug/L		102	78 - 133
2-Hexanone	20.0	16.9		ug/L		84	43 - 148
Acetone	20.0	21.9		ug/L		109	21 - 162
Benzene	10.0	10.3		ug/L		103	80 - 123
Bromoform	10.0	9.94		ug/L		99	49 - 141
Bromomethane	10.0	5.30		ug/L		53	41 - 175
Carbon disulfide	10.0	8.23		ug/L		82	60 - 138
Carbon tetrachloride	10.0	10.7		ug/L		107	63 - 140
Chlorobenzene	10.0	10.0		ug/L		100	80 - 121
Chloroethane	10.0	6.41		ug/L		64	33 - 173
Chloroform	10.0	10.2		ug/L		102	79 - 127
Chloromethane	10.0	9.17		ug/L		92	54 - 143
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	76 - 128
cis-1,3-Dichloropropene	10.0	8.25		ug/L		83	64 - 132
Dichlorobromomethane	10.0	9.52		ug/L		95	77 - 125
Ethylbenzene	10.0	9.56		ug/L		96	80 - 120
m-Xylene & p-Xylene	10.0	9.69		ug/L		97	80 - 120
2-Butanone (MEK)	20.0	17.8		ug/L		89	39 - 163
4-Methyl-2-pentanone (MIBK)	20.0	14.7		ug/L		73	49 - 143
Methylene Chloride	10.0	10.4		ug/L		104	70 - 134
o-Xylene	10.0	9.65		ug/L		97	80 - 120
Styrene	10.0	9.67		ug/L		97	79 - 120
Tetrachloroethene	10.0	10.5		ug/L		105	74 - 130
Toluene	10.0	10.4		ug/L		104	78 - 129
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	78 - 133
trans-1,3-Dichloropropene	10.0	8.22		ug/L		82	55 - 128
Trichloroethene	10.0	9.62		ug/L		96	76 - 125
Vinyl chloride	10.0	7.60		ug/L		76	58 - 143
Xylenes, Total	20.0	19.3		ug/L		97	80 - 120
Chlorodibromomethane	10.0	10.1		ug/L		101	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 121*
4-Bromofluorobenzene (Surr)	*110*		*59 - 120*
Toluene-d8 (Surr)	*107*		*70 - 123*
Dibromofluoromethane (Surr)	*105*		*75 - 128*

QC Association Summary

Client: GHD Services Inc.
Job ID: 240-102783-2
Project/Site: 17302, RACER Delphi Anderson

GC/MS VOA

Analysis Batch: 351197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-102783-9	GW-100918-AF-043	Total/NA	Water	8260B	
240-102783-10	GW-100918-AF-044	Total/NA	Water	8260B	
240-102783-11	GW-101018-AF-045	Total/NA	Water	8260B	
240-102783-12	GW-101018-AF-046	Total/NA	Water	8260B	
240-102783-13	EB-101018-AF-005	Total/NA	Water	8260B	
240-102783-14	GW-101018-AF-047	Total/NA	Water	8260B	
240-102783-15	GW-101018-AF-048	Total/NA	Water	8260B	
240-102783-16	GW-101018-AF-049	Total/NA	Water	8260B	
MB 240-351197/6	Method Blank	Total/NA	Water	8260B	
LCS 240-351197/4	Lab Control Sample	Total/NA	Water	8260B	
240-102783-12 MS	GW-101018-AF-046	Total/NA	Water	8260B	
240-102783-12 MSD	GW-101018-AF-046	Total/NA	Water	8260B	

Analysis Batch: 351439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-102783-17	GW-101018-AF-050	Total/NA	Water	8260B	
240-102783-18	GW-101018-AF-051	Total/NA	Water	8260B	
240-102783-19	TB-101118-AF-006	Total/NA	Water	8260B	
MB 240-351439/6	Method Blank	Total/NA	Water	8260B	
LCS 240-351439/4	Lab Control Sample	Total/NA	Water	8260B	

Client Sample ID: GW-100918-AF-043 — Lab Sample ID: 240-102783-9

Date Collected: 10/09/18 15:20 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	351197	10/22/18 15:36	LEE	TAL CAN

Client Sample ID: GW-100918-AF-044 — Lab Sample ID: 240-102783-10

Date Collected: 10/09/18 16:07 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351197	10/22/18 15:58	LEE	TAL CAN

Client Sample ID: GW-101018-AF-045 — Lab Sample ID: 240-102783-11

Date Collected: 10/10/18 10:57 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351197	10/22/18 16:19	LEE	TAL CAN

Client Sample ID: GW-101018-AF-046 — Lab Sample ID: 240-102783-12

Date Collected: 10/10/18 12:17 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		16.67	351197	10/22/18 16:41	LEE	TAL CAN

Client Sample ID: EB-101018-AF-005 — Lab Sample ID: 240-102783-13

Date Collected: 10/10/18 12:33 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351197	10/22/18 17:03	LEE	TAL CAN

Client Sample ID: GW-101018-AF-047 — Lab Sample ID: 240-102783-14

Date Collected: 10/10/18 13:51 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351197	10/22/18 17:25	LEE	TAL CAN

Client Sample ID: GW-101018-AF-048 — Lab Sample ID: 240-102783-15

Date Collected: 10/10/18 15:27 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351197	10/22/18 17:47	LEE	TAL CAN

Lab Chronicle

Client: GHD Services Inc. Job ID: 240-102783-2
Project/Site: 17302, RACER Delphi Anderson

Client Sample ID: GW-101018-AF-049 — Lab Sample ID: 240-102783-16

Date Collected: 10/10/18 15:30 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351197	10/22/18 18:08	LEE	TAL CAN

Client Sample ID: GW-101018-AF-050 — Lab Sample ID: 240-102783-17

Date Collected: 10/10/18 17:05 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351439	10/23/18 12:55	LEE	TAL CAN

Client Sample ID: GW-101018-AF-051 — Lab Sample ID: 240-102783-18

Date Collected: 10/10/18 18:15 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351439	10/23/18 13:17	LEE	TAL CAN

Client Sample ID: TB-101118-AF-006 — Lab Sample ID: 240-102783-19

Date Collected: 10/11/18 15:30 **Matrix: Water**
Date Received: 10/12/18 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	351439	10/23/18 13:38	LEE	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc. Job ID: 240-102783-2
Project/Site: 17302, RACER Delphi Anderson

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-20
Illinois	NELAP	5	200004	07-31-19 *
Illinois	NELAP		004498	07-31-19
Iowa	State Program	7	421	06-01-21
Kansas	NELAP	7	E-10336	04-30-20
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-21
Nevada	State		OH00048	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-20
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	06-05-21
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19 *
Texas	NELAP		T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19 *
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: GHD Services Inc. Job ID: 240-102783-2
Project/Site: 17302, RACER Delphi Anderson

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: GHD Services Inc. Job ID: 240-102783-2
Project/Site: 17302, RACER Delphi Anderson

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-102783-9	GW-100918-AF-043	Water	10/09/18 15:20	10/12/18 09:30	
240-102783-10	GW-100918-AF-044	Water	10/09/18 16:07	10/12/18 09:30	
240-102783-11	GW-101018-AF-045	Water	10/10/18 10:57	10/12/18 09:30	
240-102783-12	GW-101018-AF-046	Water	10/10/18 12:17	10/12/18 09:30	
240-102783-13	EB-101018-AF-005	Water	10/10/18 12:33	10/12/18 09:30	
240-102783-14	GW-101018-AF-047	Water	10/10/18 13:51	10/12/18 09:30	
240-102783-15	GW-101018-AF-048	Water	10/10/18 15:27	10/12/18 09:30	
240-102783-16	GW-101018-AF-049	Water	10/10/18 15:30	10/12/18 09:30	
240-102783-17	GW-101018-AF-050	Water	10/10/18 17:05	10/12/18 09:30	
240-102783-18	GW-101018-AF-051	Water	10/10/18 18:15	10/12/18 09:30	
240-102783-19	TB-101118-AF-006	Water	10/11/18 15:30	10/12/18 09:30	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Instrument ID: A3UX15 Analysis Batch Number: 342615

Lab Sample ID: STD8260 240-342615/7 IC Client Sample ID:

Date Analyzed: 08/27/18 12:45 Lab File ID: UXC4608.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptane	5.22	Peak assignment corrected	evansle	08/27/18 14:12

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VM50IS_00071	01/03/19	07/03/18	MEOH, Lot 177891	50 mL	VM568718_00011	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00011	01/31/22		restek, Lot A0124343		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM50IS_00072	03/18/19	09/18/18	MEOH, Lot 177891	50 mL	VM568718_00012	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00012	05/31/22		restek, Lot A0127975		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50ss_stk_00078	12/20/18	06/20/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00029	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00260	08/27/18	08/20/18	MEOH, Lot na	4 mL	VMACROLSTD_00062	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00062	08/31/18	06/01/18	MEOH, Lot 178178	100 mL	VM568720_00028	1.25 mL	Acrolein	250 ug/mL
..VM568720_00028	08/31/18		restek, Lot A0135693		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00020							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00002	1.25 mL	BFB	50 ug/mL
.vm30026_00002	07/31/21		restek, Lot A0120567		(Purchased Reagent)		BFB	2000 ug/mL
VMFASGW_00271	08/28/18	08/21/18	MEOH, Lot NA	4 mL	VMFASG_00074	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00074	09/13/18	08/13/18	MEOH, Lot 0000196626	100 mL	vm569722S_00004	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00004	11/30/18		Restek, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00279	10/22/18	10/15/18	MEOH, Lot NA	4 mL	VMFASG_00076	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00076	11/15/18	10/15/18	MEOH, Lot 0000196628	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00280	10/30/18	10/23/18	MEOH, Lot NA	4 mL	VMFASG_00076	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00076	11/15/18	10/15/18	MEOH, Lot 0000196628	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASPW_00264	09/03/18	08/27/18	MEOH, Lot n/a	4 mL	VMRFASP_00049	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00049	10/31/18	07/18/18	MEOH, Lot 0000196626	100 mL	VM569721S_00003	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992S_00002	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00002	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00272	10/28/18	10/21/18	MEOH, Lot n/a	4 mL	VMRFASP_00050	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00050	10/31/18	08/30/18	MEOH, Lot 0000196626	100 mL	VM569721S_00003	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992S_00001	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00001	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMRGAS_00259	08/31/18	08/24/18	MEOH, Lot 0000196628	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00266	10/24/18	10/17/18	MEOH, Lot 0000196628	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	2500 ug/mL
VMRPRIMW_00297	08/29/18	08/22/18	MEOH, Lot NA	4 mL	VMRPRIM_00029	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00029	10/31/18	07/28/18	MEOH, Lot 0000196626	50 mL	VM569721_00004	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00004	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00016	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00004	11/30/18		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00004	11/30/18		restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00016	10/31/18		Restek, Lot A0137562		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00305	10/24/18	10/17/18	MEOH, Lot NA	4 mL	VMRPRIM_00030	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00030	10/31/18	09/24/18	MEOH, Lot +200920000196626JH	50 mL	VM569721_00003	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992_00002	1 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721_00003	11/30/18		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992_00002	06/30/19		Restek, Lot A0123711		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL

Reagent

vm30026_00002

Rec: 4/11/17 (5)

VM30026-00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0120567

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,019.3 µg/mL	+/- 11.8506	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 113.2335	µg/mL	Unstressed
	Purity 99%		+/- 115.8825	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00029

Rec: 8/22/17

VM567650-00029

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0124069

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane	2,521.2 µg/mL	+/- 14.6582	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 0012016)		+/- 141.3584	µg/mL	Unstressed
	Purity 99%		+/- 144.6660	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,513.8 µg/mL	+/- 14.6157	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-25433)		+/- 140.9489	µg/mL	Unstressed
	Purity 98%		+/- 144.2469	µg/mL	Stressed
3	Toluene-d8	2,519.4 µg/mL	+/- 14.6480	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-27311)		+/- 141.2603	µg/mL	Unstressed
	Purity 99%		+/- 144.5656	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,520.8 µg/mL	+/- 14.6559	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 141.3360	µg/mL	Unstressed
	Purity 99%		+/- 144.6430	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00011

VM568718_00011 Rec: 8-22-2017

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0124343

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot I-201) **Purity** 99%	5,050.0 µg/mL	+/- 29.3596 µg/mL +/- 108.1207 µg/mL +/- 111.2640 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,262.5 µg/mL	+/- 7.3403 µg/mL +/- 27.0303 µg/mL +/- 27.8161 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	251.6 µg/mL	+/- 1.4664 µg/mL +/- 5.3884 µg/mL +/- 5.5450 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19942) **Purity** 99%	5,048.8 µg/mL	+/- 29.3526 µg/mL +/- 108.0950 µg/mL +/- 111.2375 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	251.5 µg/mL	+/- 1.4654 µg/mL +/- 5.3849 µg/mL +/- 5.5413 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	252.5 µg/mL	+/- 1.4714 µg/mL +/- 5.4070 µg/mL +/- 5.5641 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM568718_00012

Rec'd: 11/8/17

VM568718_00012

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0127975

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot I-201) **Purity** 99%	5,022.1 µg/mL	+/- 29.1976 µg/mL +/- 107.5241 µg/mL +/- 110.6500 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,257.5 µg/mL	+/- 7.3114 µg/mL +/- 26.9239 µg/mL +/- 27.7067 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	250.8 µg/mL	+/- 1.4613 µg/mL +/- 5.3699 µg/mL +/- 5.5259 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19942) **Purity** 99%	5,009.4 µg/mL	+/- 29.1236 µg/mL +/- 107.2514 µg/mL +/- 110.3694 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-21944) **Purity** 99%	251.7 µg/mL	+/- 1.4666 µg/mL +/- 5.3891 µg/mL +/- 5.5458 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	251.3 µg/mL	+/- 1.4645 µg/mL +/- 5.3813 µg/mL +/- 5.5377 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM568720_00028

rec: 6/1/18

VM568720-00028

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0135693

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,777.5	µg/mL	+/- 115.8016	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 171116JLM)			+/- 634.1288	µg/mL	Unstressed
	Purity 99%				+/- 737.1054	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00003

VM569721_00003 Rec: 9/8/16

(70)

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0115554

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1 (Lot 07196AK) **Purity** 99%	12,501.8 µg/mL	+/- 72.6865 µg/mL +/- 754.2890 µg/mL +/- 756.0798 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBG0444V) **Purity** 98%	12,499.7 µg/mL	+/- 72.6744 µg/mL +/- 754.1625 µg/mL +/- 755.9530 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF9556V) **Purity** 99%	12,500.6 µg/mL	+/- 72.6796 µg/mL +/- 754.2166 µg/mL +/- 756.0072 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBT3158V) **Purity** 99%	12,502.4 µg/mL	+/- 72.6900 µg/mL +/- 754.3252 µg/mL +/- 756.1161 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721_00004

Rec: 1-25-17

VM569721-00004

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0115554

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,501.8 µg/mL	+/- 72.6865	µg/mL	Gravimetric
	CAS # 67-64-1	(Lot 07196AK)		+/- 754.2890	µg/mL	Unstressed
	Purity 99%			+/- 756.0798	µg/mL	Stressed
2	2-Butanone (MEK)		12,499.7 µg/mL	+/- 72.6744	µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBG0444V)		+/- 754.1625	µg/mL	Unstressed
	Purity 98%			+/- 755.9530	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,500.6 µg/mL	+/- 72.6796	µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBF9556V)		+/- 754.2166	µg/mL	Unstressed
	Purity 99%			+/- 756.0072	µg/mL	Stressed
4	2-Hexanone		12,502.4 µg/mL	+/- 72.6900	µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKBT3158V)		+/- 754.3252	µg/mL	Unstressed
	Purity 99%			+/- 756.1161	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721S_00003

Rec: 7/12/16 (20)
VM569721S-00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.sec **Lot No.:** A0118013

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1.SEC (Lot P14A572) **Purity** 99%	12,550.0 µg/mL	+/- 73.4830 µg/mL +/- 757.2470 µg/mL +/- 759.0446 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RA58J) **Purity** 99%	12,603.0 µg/mL	+/- 73.7933 µg/mL +/- 760.4450 µg/mL +/- 762.2502 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,591.5 µg/mL	+/- 73.7260 µg/mL +/- 759.7511 µg/mL +/- 761.5546 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot V3NRA) **Purity** 99%	12,588.0 µg/mL	+/- 73.7055 µg/mL +/- 759.5399 µg/mL +/- 761.3429 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00011

Rec: 4/17/18

VM569722_00011

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0131502

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,501.3 µg/mL	+/- 20.2137 µg/mL +/- 140.9452 µg/mL +/- 144.2108 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG9707V) **Purity** 99%	2,504.9 µg/mL	+/- 24.8531 µg/mL +/- 141.8827 µg/mL +/- 145.1364 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.3 µg/mL	+/- 21.7258 µg/mL +/- 141.0069 µg/mL +/- 144.2635 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBH7966) **Purity** 99%	2,499.9 µg/mL	+/- 19.8572 µg/mL +/- 140.8167 µg/mL +/- 144.0816 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.4 µg/mL	+/- 24.9675 µg/mL +/- 141.6590 µg/mL +/- 144.9064 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.1 µg/mL	+/- 25.2649 µg/mL +/- 141.6931 µg/mL +/- 144.9388 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 16.7114 µg/mL +/- 140.4149 µg/mL +/- 143.6892 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	(Lot SHBH4155V)	2,499.5 µg/mL	+/- 20.7085 +/- 140.9189 +/- 144.1805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

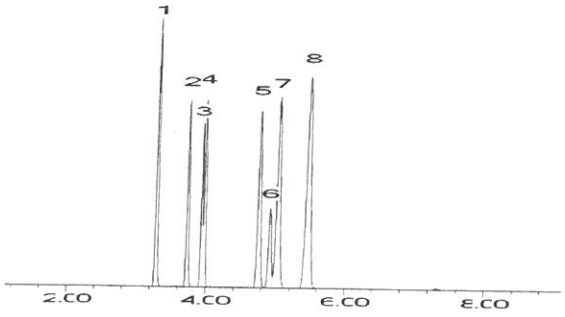
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 10-Oct-2017 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 12-Oct-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

vm569722S_00004

VM569722S-00004 Rec'd 7/12/16 (20)

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.sec **Lot No.:** A0115484

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 22274) **Purity** 99%	2,505.6 µg/mL	+/- 16.6251 µg/mL +/- 140.7169 µg/mL +/- 143.9990 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,517.3 µg/mL	+/- 17.3796 µg/mL +/- 141.4522 µg/mL +/- 144.7477 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,510.2 µg/mL	+/- 16.6342 µg/mL +/- 140.9727 µg/mL +/- 144.2609 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 22331) **Purity** 99%	2,516.5 µg/mL	+/- 17.4874 µg/mL +/- 141.4240 µg/mL +/- 144.7182 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,511.5 µg/mL	+/- 16.8310 µg/mL +/- 141.0664 µg/mL +/- 144.3557 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,504.8 µg/mL	+/- 16.4341 µg/mL +/- 140.6469 µg/mL +/- 143.9283 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,500.5 µg/mL	+/- 16.1659 µg/mL +/- 140.3776 µg/mL +/- 143.6540 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,524.5	µg/mL	+/- 16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/- 141.7952	µg/mL	Unstressed
	Purity 99%				+/- 145.1017	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

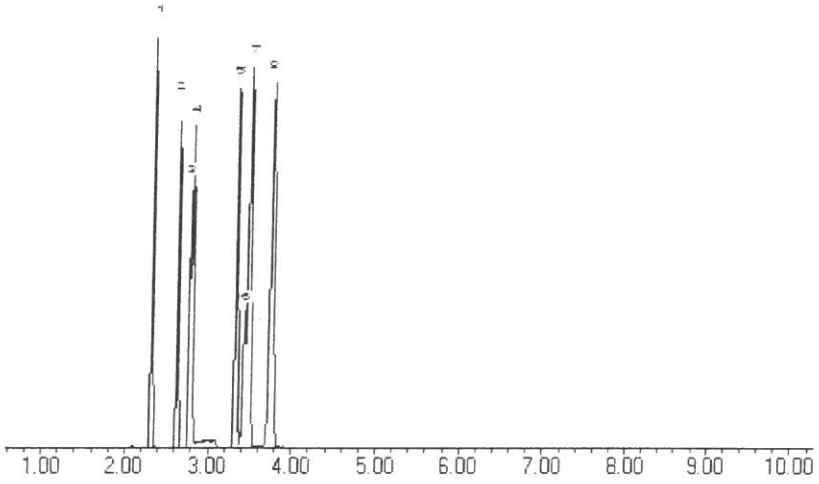
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

Manufactured under Restek's ISO 9001:2008
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Certificate #FM 80397

Reagent

vm569722S_00005

VM 569722S-0005 Rec: 7/17/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0124116

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 23586) **Purity** 99%	2,503.4 µg/mL	+/- 19.5506 µg/mL +/- 140.9699 µg/mL +/- 144.2404 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,508.1 µg/mL	+/- 21.1963 µg/mL +/- 141.4639 µg/mL +/- 144.7353 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.6 µg/mL	+/- 19.4186 µg/mL +/- 141.7924 µg/mL +/- 145.0836 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 22331) **Purity** 99%	2,504.0 µg/mL	+/- 20.5722 µg/mL +/- 141.1450 µg/mL +/- 144.4130 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,498.5 µg/mL	+/- 19.9806 µg/mL +/- 140.7602 µg/mL +/- 144.0229 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,494.9 µg/mL	+/- 17.8868 µg/mL +/- 140.2786 µg/mL +/- 143.5429 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,503.4 µg/mL	+/- 20.0421 µg/mL +/- 141.0350 µg/mL +/- 144.3039 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,503.2	µg/mL	+/-	18.7037	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	140.8450	µg/mL	Unstressed
	Purity 99%				+/-	144.1179	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

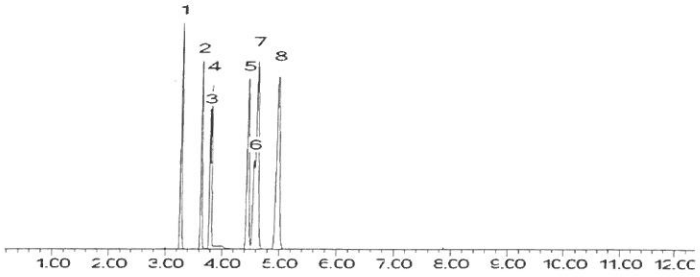
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 12-Jan-2017 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00004

VM569723-00004 Rec: 5/16/16 (20)

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Catalog No. : 569723 **Lot No.:** A0115628

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBK2735V) **Purity** 99%	2,509.2 µg/mL	+/- 14.5887 µg/mL +/- 53.7223 µg/mL +/- 55.2841 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00016

VM569724_ 05016 Rcd: 7/13/18

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Catalog No. : 569724 **Lot No.:** A0137562

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,020.0 µg/mL	+/- 29.4602	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 302.9053	µg/mL	Unstressed
	Purity 99%		+/- 303.6243	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00001

VM571992_00001 Rec'd 1-25-17

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Catalog No. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3 µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5 µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5 µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9 µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3 µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5 µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8 µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4 µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0 µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4 µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9 µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3 µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6 µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,500.2 µg/mL	+/-	14.5365	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBW3597V)		+/-	150.8497	µg/mL	Unstressed
	Purity 98%			+/-	151.2078	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
42	Chlorobenzene		2,500.1 µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)		+/-	150.8436	µg/mL	Unstressed
	Purity 99%			+/-	151.2017	µg/mL	Stressed
43	m-Xylene		1,250.3 µg/mL	+/-	7.2691	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBG4347V)		+/-	75.4331	µg/mL	Unstressed
	Purity 99%			+/-	75.6122	µg/mL	Stressed
44	p-Xylene		1,251.3 µg/mL	+/-	7.2749	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBG3928V)		+/-	75.4935	µg/mL	Unstressed
	Purity 99%			+/-	75.6727	µg/mL	Stressed
45	Ethylbenzene		2,503.3 µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)		+/-	151.0322	µg/mL	Unstressed
	Purity 99%			+/-	151.3907	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.3 µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)		+/-	150.8512	µg/mL	Unstressed
	Purity 99%			+/-	151.2093	µg/mL	Stressed
47	o-Xylene		2,504.9 µg/mL	+/-	14.5636	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH3432V)		+/-	151.1302	µg/mL	Unstressed
	Purity 99%			+/-	151.4890	µg/mL	Stressed
48	Styrene		2,506.3 µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)		+/-	151.2132	µg/mL	Unstressed
	Purity 99%			+/-	151.5722	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,501.6 µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)		+/-	150.9341	µg/mL	Unstressed
	Purity 99%			+/-	151.2925	µg/mL	Stressed
50	bromoform		2,502.9 µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBD8459V)		+/-	151.0095	µg/mL	Unstressed
	Purity 99%			+/-	151.3681	µg/mL	Stressed
51	bromodichloromethane		2,506.8 µg/mL	+/-	14.5750	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKBW5506V)		+/-	151.2490	µg/mL	Unstressed
	Purity 97%			+/-	151.6081	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,508.5 µg/mL	+/-	14.5846	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)		+/-	151.3489	µg/mL	Unstressed
	Purity 99%			+/-	151.7082	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.8 µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)		+/-	150.8817	µg/mL	Unstressed
	Purity 95%			+/-	151.2399	µg/mL	Stressed
55	n-Propylbenzene		2,501.9 µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)		+/-	150.9492	µg/mL	Unstressed
	Purity 99%			+/-	151.3076	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot MKBD4032V)	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBQ2165V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.6 µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot S52237V)	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 98%	(Lot MKBJ6229V)	2,500.8 µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,505.4 µg/mL	+/- 14.5665 +/- 151.1604 +/- 151.5193	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBS2604V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBM5751V)	2,503.9 µg/mL	+/- 14.5577 +/- 151.0699 +/- 151.4285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS1350V)	2,509.9 µg/mL	+/- 14.5926 +/- 151.4319 +/- 151.7914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09418JJV)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBD7331V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,505.0 µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBC5541V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,506.5 µg/mL	+/- 14.5728 +/- 151.2266 +/- 151.5856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,511.1	µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)			+/-	151.5073	µg/mL	Unstressed
	Purity 99%				+/-	151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

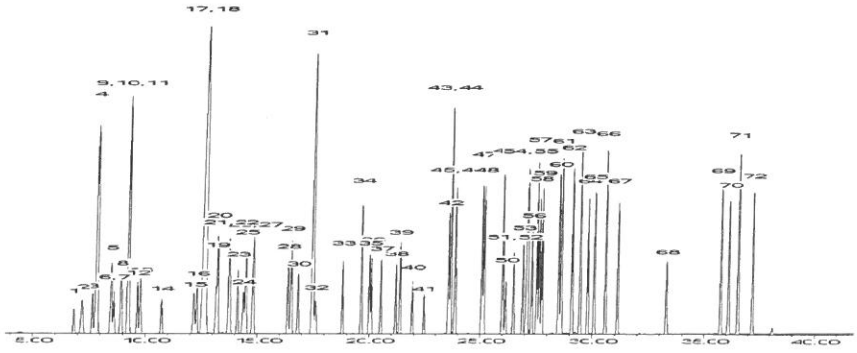
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM571992_00002

Rec'd 6/15/18 20 vials

VMS71992_00002

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Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3 µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5 µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5 µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9 µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3 µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5 µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8 µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4 µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0 µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4 µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9 µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3 µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6 µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKBW3597V)	2,500.2	µg/mL	+/- 14.5365 +/- 150.8497 +/- 151.2078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBF0505V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBG4347V)	1,250.3	µg/mL	+/- 7.2691 +/- 75.4331 +/- 75.6122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBG3928V)	1,251.3	µg/mL	+/- 7.2749 +/- 75.4935 +/- 75.6727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBG5920V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH3432V)	2,504.9	µg/mL	+/- 14.5636 +/- 151.1302 +/- 151.4890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKBS7097V)	2,506.3	µg/mL	+/- 14.5716 +/- 151.2132 +/- 151.5722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBD8459V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 97%	(Lot MKBW5506V)	2,506.8	µg/mL	+/- 14.5750 +/- 151.2490 +/- 151.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,508.5	µg/mL	+/- 14.5846 +/- 151.3489 +/- 151.7082	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBP6041V)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8817 +/- 151.2399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKBJ0332V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,507.0 µg/mL	+/- 14.5759	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)		+/- 151.2584	µg/mL	Unstressed
	Purity 99%			+/- 151.6175	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,501.1 µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBQ2165V)		+/- 150.9040	µg/mL	Unstressed
	Purity 99%			+/- 151.2622	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)		+/- 150.8738	µg/mL	Unstressed
	Purity 99%			+/- 151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,501.3 µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)		+/- 150.9115	µg/mL	Unstressed
	Purity 99%			+/- 151.2698	µg/mL	Stressed
60	tert-Butylbenzene		2,507.0 µg/mL	+/- 14.5759	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot S52237V)		+/- 151.2584	µg/mL	Unstressed
	Purity 99%			+/- 151.6175	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.8 µg/mL	+/- 14.5401	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)		+/- 150.8866	µg/mL	Unstressed
	Purity 98%			+/- 151.2448	µg/mL	Stressed
62	sec-Butylbenzene		2,505.4 µg/mL	+/- 14.5665	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)		+/- 151.1604	µg/mL	Unstressed
	Purity 99%			+/- 151.5193	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,503.8 µg/mL	+/- 14.5570	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBS2604V)		+/- 151.0623	µg/mL	Unstressed
	Purity 99%			+/- 151.4210	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,503.9 µg/mL	+/- 14.5577	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)		+/- 151.0699	µg/mL	Unstressed
	Purity 99%			+/- 151.4285	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.9 µg/mL	+/- 14.5926	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)		+/- 151.4319	µg/mL	Unstressed
	Purity 99%			+/- 151.7914	µg/mL	Stressed
66	n-Butylbenzene		2,503.3 µg/mL	+/- 14.5541	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09418JJV)		+/- 151.0322	µg/mL	Unstressed
	Purity 99%			+/- 151.3907	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,503.8 µg/mL	+/- 14.5570	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)		+/- 151.0623	µg/mL	Unstressed
	Purity 99%			+/- 151.4210	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,505.0 µg/mL	+/- 14.5643	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)		+/- 151.1378	µg/mL	Unstressed
	Purity 99%			+/- 151.4966	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,505.3 µg/mL	+/- 14.5657	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)		+/- 151.1528	µg/mL	Unstressed
	Purity 99%			+/- 151.5117	µg/mL	Stressed
70	Hexachlorobutadiene		2,506.5 µg/mL	+/- 14.5728	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)		+/- 151.2266	µg/mL	Unstressed
	Purity 98%			+/- 151.5856	µg/mL	Stressed
71	Naphthalene		2,500.9 µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)		+/- 150.8889	µg/mL	Unstressed
	Purity 99%			+/- 151.2471	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,511.1 µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	151.5073	µg/mL	Unstressed
	Purity 99%			+/-	151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

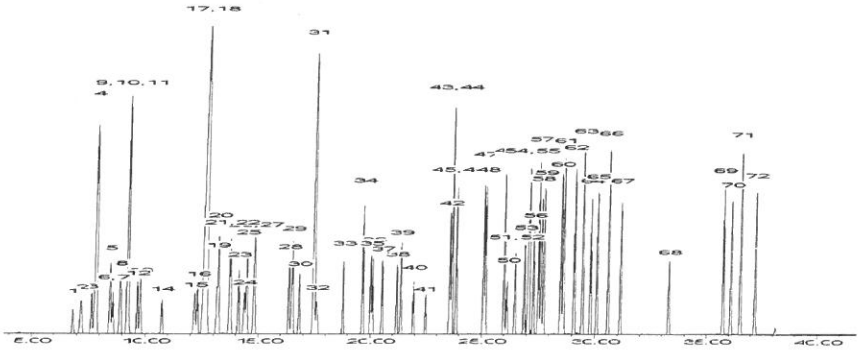
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00001

Rec: 1-25-17
VMS71992S-00001

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%		2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%		2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%		25,000.9	µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZAQTA-MS) **Purity** 99%		2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%		2,500.7	µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot 10188491) **Purity** 99%		2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%		2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%		2,500.1	µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%		2,500.2	µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot 83NHH) **Purity** 99%		62,506.9	µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%		2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%		2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot K3V7J-SJ) **Purity** 99%		5,002.3	µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot CS160712) **Purity** 98%		2,500.7	µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%		2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%		2,501.3	µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
25	n-Heptane (C7)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
26	1,2-Dichloroethane		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
27	Benzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
28	Trichloroethene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
29	Methylcyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
30	1,2-Dichloropropane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
31	1,4-Dioxane		50,007.1	µg/mL	+/-	290.7305	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot MUFZH)			+/-	3,017.1500	µg/mL	Unstressed
	Purity 99%				+/-	3,024.3132	µg/mL	Stressed
32	Dibromomethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
34	Toluene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
35	Ethyl methacrylate		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 5034600)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
39	Tetrachloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed

40	Dibromochloromethane		2,500.4	µg/mL	+/- 14.5376	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)			+/- 150.8613	µg/mL	Unstressed
	Purity 97%				+/- 151.2194	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
42	Chlorobenzene		2,501.0	µg/mL	+/- 14.5410	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/- 150.8964	µg/mL	Unstressed
	Purity 99%				+/- 151.2547	µg/mL	Stressed
43	m-Xylene		1,250.9	µg/mL	+/- 7.2727	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/- 75.4708	µg/mL	Unstressed
	Purity 99%				+/- 75.6500	µg/mL	Stressed
44	p-Xylene		1,250.5	µg/mL	+/- 7.2705	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/- 75.4482	µg/mL	Unstressed
	Purity 99%				+/- 75.6273	µg/mL	Stressed
45	Ethylbenzene		2,500.9	µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/- 150.8889	µg/mL	Unstressed
	Purity 99%				+/- 151.2471	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,501.1	µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/- 150.9040	µg/mL	Unstressed
	Purity 99%				+/- 151.2622	µg/mL	Stressed
47	o-Xylene		2,500.9	µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/- 150.8889	µg/mL	Unstressed
	Purity 99%				+/- 151.2471	µg/mL	Stressed
48	Styrene		2,500.4	µg/mL	+/- 14.5374	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/- 150.8587	µg/mL	Unstressed
	Purity 99%				+/- 151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
50	Bromoform		2,502.3	µg/mL	+/- 14.5483	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5139000)			+/- 150.9718	µg/mL	Unstressed
	Purity 99%				+/- 151.3303	µg/mL	Stressed
51	Bromodichloromethane		2,500.1	µg/mL	+/- 14.5358	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/- 150.8423	µg/mL	Unstressed
	Purity 98%				+/- 151.2004	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3	µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/- 150.9115	µg/mL	Unstressed
	Purity 99%				+/- 151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,500.1	µg/mL	+/- 14.5358	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/- 150.8423	µg/mL	Unstressed
	Purity 98%				+/- 151.2004	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,501.0	µg/mL	+/- 14.5408	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/- 150.8940	µg/mL	Unstressed
	Purity 98%				+/- 151.2522	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/- 150.8361	µg/mL	Unstressed
	Purity 99%				+/- 151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

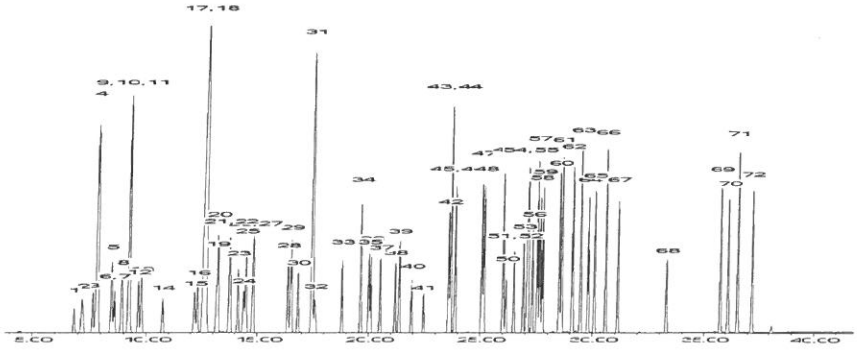
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00002

Rec: 5/4/17
VMS71992S-00002

(10)

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%		2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 99%	(Lot MKBL1376V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC **Purity** 99%	(Lot UERIL)	25,000.9 µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC **Purity** 99%	(Lot ZAQTA-MS)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC **Purity** 98%	(Lot HGC01-BLKT)	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC **Purity** 99%	(Lot 10188491)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC **Purity** 99%	(Lot 5379000)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC **Purity** 98%	(Lot 17E8E)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC **Purity** 97%	(Lot TS5UB)	2,500.2 µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC **Purity** 99%	(Lot 83NHH)	62,506.9 µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC **Purity** 99%	(Lot 1297547)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC **Purity** 99%	(Lot 5670200)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC **Purity** 99%	(Lot K3V7J-SJ)	5,002.3 µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC **Purity** 98%	(Lot CS160712)	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC **Purity** 99%	(Lot YADRA)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC **Purity** 96%	(Lot 5221100)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot OGM01)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot 24MSD-CD)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot OGG01)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot MUFZH)	50,007.1	µg/mL	+/- 290.7305 +/- 3,017.1500 +/- 3,024.3132	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 99%	(Lot ZDMSL)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 98%	(Lot 5034600)	2,500.8	µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10181507)	2,500.4	µg/mL	+/- 14.5376 +/- 150.8613 +/- 151.2194	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,250.9	µg/mL	+/- 7.2727 +/- 75.4708 +/- 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,250.5	µg/mL	+/- 7.2705 +/- 75.4482 +/- 75.6273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01-KTPK)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 99%	(Lot 5139000)	2,502.3	µg/mL	+/- 14.5483 +/- 150.9718 +/- 151.3303	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,500.1	µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 98%	(Lot OGI01)	2,500.1	µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,501.0	µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC-IT)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

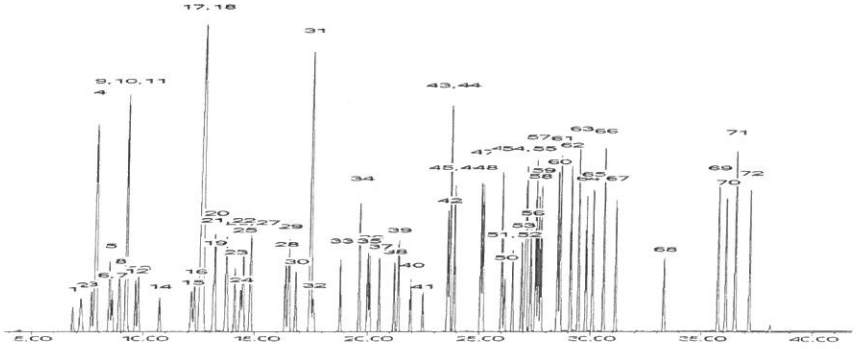
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
GW-100918-AF-043	240-102783-9	121	107	95	92
GW-100918-AF-044	240-102783-10	99	87	74	72
GW-101018-AF-045	240-102783-11	120	106	92	87
GW-101018-AF-046	240-102783-12	118	104	93	90
EB-101018-AF-005	240-102783-13	115	102	91	85
GW-101018-AF-047	240-102783-14	125	111	94	94
GW-101018-AF-048	240-102783-15	124	109	103	94
GW-101018-AF-049	240-102783-16	117	103	99	88
GW-101018-AF-050	240-102783-17	112	100	89	84
GW-101018-AF-051	240-102783-18	116	100	92	89
TB-101118-AF-006	240-102783-19	119	105	95	90
	MB 240-351197/6	109	95	96	90
	MB 240-351439/6	115	101	95	92
	LCS 240-351197/4	101	88	103	103
	LCS 240-351439/4	105	91	107	110
GW-101018-AF-046 MS	240-102783-12 MS	108	90	109	110
GW-101018-AF-046 MSD	240-102783-12 MSD	103	89	105	107

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-128
DCA = 1,2-Dichloroethane-d4 (Surr)	70-121
TOL = Toluene-d8 (Surr)	70-123
BFB = 4-Bromofluorobenzene (Surr)	59-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6481.D

Lab ID: LCS 240-351197/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	10.1	101	69-134	
1,1,2,2-Tetrachloroethane	10.0	9.72	97	65-139	
1,1,2-Trichloroethane	10.0	10.4	104	78-133	
1,1-Dichloroethane	10.0	9.86	99	75-133	
1,1-Dichloroethene	10.0	8.48	85	65-139	
1,2-Dichloroethane	10.0	8.58	86	71-135	
1,2-Dichloropropane	10.0	9.78	98	78-133	
2-Hexanone	20.0	18.4	92	43-148	
Acetone	20.0	18.1	91	21-162	
Benzene	10.0	9.94	99	80-123	
Bromoform	10.0	9.80	98	49-141	
Bromomethane	10.0	5.06	51	41-175	
Carbon disulfide	10.0	8.83	88	60-138	
Carbon tetrachloride	10.0	10.7	107	63-140	
Chlorobenzene	10.0	9.73	97	80-121	
Chloroethane	10.0	5.64	56	33-173	
Chloroform	10.0	9.97	100	79-127	
Chloromethane	10.0	9.07	91	54-143	
cis-1,2-Dichloroethene	10.0	9.83	98	76-128	
cis-1,3-Dichloropropene	10.0	8.04	80	64-132	
Dichlorobromomethane	10.0	9.26	93	77-125	
Ethylbenzene	10.0	9.31	93	80-120	
m-Xylene & p-Xylene	10.0	9.44	94	80-120	
2-Butanone (MEK)	20.0	16.9	85	39-163	
4-Methyl-2-pentanone (MIBK)	20.0	15.2	76	49-143	
Methylene Chloride	10.0	10.5	105	70-134	
o-Xylene	10.0	9.42	94	80-120	
Styrene	10.0	9.51	95	79-120	
Tetrachloroethene	10.0	10.3	103	74-130	
Toluene	10.0	10.2	102	78-129	
trans-1,2-Dichloroethene	10.0	10.2	102	78-133	
trans-1,3-Dichloropropene	10.0	8.20	82	55-128	
Trichloroethene	10.0	9.29	93	76-125	
Vinyl chloride	10.0	7.81	78	58-143	
Xylenes, Total	20.0	18.9	94	80-120	
Chlorodibromomethane	10.0	10.1	101	70-132	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6510.D

Lab ID: LCS 240-351439/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	10.3	103	69-134	
1,1,2,2-Tetrachloroethane	10.0	9.84	98	65-139	
1,1,2-Trichloroethane	10.0	10.4	104	78-133	
1,1-Dichloroethane	10.0	10.2	102	75-133	
1,1-Dichloroethene	10.0	8.42	84	65-139	
1,2-Dichloroethane	10.0	8.84	88	71-135	
1,2-Dichloropropane	10.0	10.2	102	78-133	
2-Hexanone	20.0	16.9	84	43-148	
Acetone	20.0	21.9	109	21-162	
Benzene	10.0	10.3	103	80-123	
Bromoform	10.0	9.94	99	49-141	
Bromomethane	10.0	5.30	53	41-175	
Carbon disulfide	10.0	8.23	82	60-138	
Carbon tetrachloride	10.0	10.7	107	63-140	
Chlorobenzene	10.0	10.0	100	80-121	
Chloroethane	10.0	6.41	64	33-173	
Chloroform	10.0	10.2	102	79-127	
Chloromethane	10.0	9.17	92	54-143	
cis-1,2-Dichloroethene	10.0	10.2	102	76-128	
cis-1,3-Dichloropropene	10.0	8.25	83	64-132	
Dichlorobromomethane	10.0	9.52	95	77-125	
Ethylbenzene	10.0	9.56	96	80-120	
m-Xylene & p-Xylene	10.0	9.69	97	80-120	
2-Butanone (MEK)	20.0	17.8	89	39-163	
4-Methyl-2-pentanone (MIBK)	20.0	14.7	73	49-143	
Methylene Chloride	10.0	10.4	104	70-134	
o-Xylene	10.0	9.65	97	80-120	
Styrene	10.0	9.67	97	79-120	
Tetrachloroethene	10.0	10.5	105	74-130	
Toluene	10.0	10.4	104	78-129	
trans-1,2-Dichloroethene	10.0	10.3	103	78-133	
trans-1,3-Dichloropropene	10.0	8.22	82	55-128	
Trichloroethene	10.0	9.62	96	76-125	
Vinyl chloride	10.0	7.60	76	58-143	
Xylenes, Total	20.0	19.3	97	80-120	
Chlorodibromomethane	10.0	10.1	101	70-132	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6506.D

Lab ID: 240-102783-12 MS Client ID: GW-101018-AF-046 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	167	17 U	167	100	51-138	
1,1,2,2-Tetrachloroethane	167	17 U	164	98	60-137	
1,1,2-Trichloroethane	167	17 U	178	107	76-132	
1,1-Dichloroethane	167	17 U	174	104	63-136	
1,1-Dichloroethene	167	17 U	138	83	53-140	
1,2-Dichloroethane	167	17 U	150	90	65-135	
1,2-Dichloropropane	167	17 U	162	97	70-132	
2-Hexanone	333	170 U	260	78	42-150	
Acetone	333	170 U	275	82	10-168	
Benzene	167	17 U	168	101	71-122	
Bromoform	167	17 U	159	95	44-129	
Bromomethane	167	17 U	75.2	45	19-187	
Carbon disulfide	167	17 U	145	87	43-144	
Carbon tetrachloride	167	17 U	168	101	41-143	
Chlorobenzene	167	17 U	165	99	70-123	
Chloroethane	167	17 U	91.5	55	11-189	
Chloroform	167	17 U	173	104	68-130	
Chloromethane	167	17 U	117	70	31-154	
cis-1,2-Dichloroethene	167	300	430	79	64-130	
cis-1,3-Dichloropropene	167	17 U	121	73	48-127	
Dichlorobromomethane	167	17 U	153	92	64-125	
Ethylbenzene	167	17 U	157	94	66-120	
m-Xylene & p-Xylene	167	33 U	158	95	63-121	
2-Butanone (MEK)	333	170 U	298	89	37-156	
4-Methyl-2-pentanone (MIBK)	333	170 U	237	71	44-143	
Methylene Chloride	167	83 U	182	109	61-130	
o-Xylene	167	17 U	158	95	69-120	
Styrene	167	17 U	161	96	68-120	
Tetrachloroethene	167	17 U	163	98	51-136	
Toluene	167	17 U	169	102	62-132	
trans-1,2-Dichloroethene	167	17 U	175	105	68-133	
trans-1,3-Dichloropropene	167	17 U	121	73	40-125	
Trichloroethene	167	17 U	151	90	55-131	
Vinyl chloride	167	240	339	56	43-154	
Xylenes, Total	333	33 U	316	95	67-120	
Chlorodibromomethane	167	17 U	170	102	60-129	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6507.D

Lab ID: 240-102783-12 MSD Client ID: GW-101018-AF-046 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	167	167	100	0	27	51-138	
1,1,2,2-Tetrachloroethane	167	160	96	2	31	60-137	
1,1,2-Trichloroethane	167	169	101	5	25	76-132	
1,1-Dichloroethane	167	168	101	3	23	63-136	
1,1-Dichloroethene	167	137	82	1	35	53-140	
1,2-Dichloroethane	167	144	86	4	24	65-135	
1,2-Dichloropropane	167	158	95	2	26	70-132	
2-Hexanone	333	256	77	2	35	42-150	
Acetone	333	282	84	3	35	10-168	
Benzene	167	165	99	2	22	71-122	
Bromoform	167	163	98	3	28	44-129	
Bromomethane	167	95.3	57	24	35	19-187	
Carbon disulfide	167	144	86	1	33	43-144	
Carbon tetrachloride	167	170	102	1	30	41-143	
Chlorobenzene	167	161	97	2	23	70-123	
Chloroethane	167	110	66	19	35	11-189	
Chloroform	167	167	100	3	23	68-130	
Chloromethane	167	143	86	20	35	31-154	
cis-1,2-Dichloroethene	167	425	76	1	21	64-130	
cis-1,3-Dichloropropene	167	123	74	1	30	48-127	
Dichlorobromomethane	167	151	90	1	27	64-125	
Ethylbenzene	167	153	92	3	24	66-120	
m-Xylene & p-Xylene	167	157	94	1	25	63-121	
2-Butanone (MEK)	333	298	89	0	35	37-156	
4-Methyl-2-pentanone (MIBK)	333	238	71	0	35	44-143	
Methylene Chloride	167	179	107	2	29	61-130	
o-Xylene	167	154	93	2	25	69-120	
Styrene	167	157	94	2	26	68-120	
Tetrachloroethene	167	164	98	0	23	51-136	
Toluene	167	165	99	2	23	62-132	
trans-1,2-Dichloroethene	167	170	102	3	24	68-133	
trans-1,3-Dichloropropene	167	123	74	2	27	40-125	
Trichloroethene	167	150	90	1	23	55-131	
Vinyl chloride	167	335	54	1	29	43-154	
Xylenes, Total	333	311	93	2	25	67-120	
Chlorodibromomethane	167	167	100	2	26	60-129	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab File ID: UXC6484.D Lab Sample ID: MB 240-351197/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 10/22/2018 10:29

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-351197/4	UXC6481.D	10/22/2018 09:24
GW-100918-AF-043	240-102783-9	UXC6498.D	10/22/2018 15:36
GW-100918-AF-044	240-102783-10	UXC6499.D	10/22/2018 15:58
GW-101018-AF-045	240-102783-11	UXC6500.D	10/22/2018 16:19
GW-101018-AF-046	240-102783-12	UXC6501.D	10/22/2018 16:41
EB-101018-AF-005	240-102783-13	UXC6502.D	10/22/2018 17:03
GW-101018-AF-047	240-102783-14	UXC6503.D	10/22/2018 17:25
GW-101018-AF-048	240-102783-15	UXC6504.D	10/22/2018 17:47
GW-101018-AF-049	240-102783-16	UXC6505.D	10/22/2018 18:08
GW-101018-AF-046 MS	240-102783-12 MS	UXC6506.D	10/22/2018 18:30
GW-101018-AF-046 MSD	240-102783-12 MSD	UXC6507.D	10/22/2018 18:52

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab File ID: UXC6513.D Lab Sample ID: MB 240-351439/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 10/23/2018 12:11

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-351439/4	UXC6510.D	10/23/2018 11:05
GW-101018-AF-050	240-102783-17	UXC6515.D	10/23/2018 12:55
GW-101018-AF-051	240-102783-18	UXC6516.D	10/23/2018 13:17
TB-101118-AF-006	240-102783-19	UXC6517.D	10/23/2018 13:38

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab File ID: BFB827.D BFB Injection Date: 08/27/2018

Instrument ID: A3UX15 BFB Injection Time: 10:10

Analysis Batch No.: 342615

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.4	
75	30.0 - 60.0 % of mass 95	53.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2) 1
174	50.0 - 120.00 % of mass 95	87.1	
175	5.0 - 9.0 % of mass 174	6.0	(6.9) 1
176	95.0 - 101.0 % of mass 174	84.9	(97.6) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-342615/2	UXC4603.D	08/27/2018	10:56
	STD8260 240-342615/3	UXC4604.D	08/27/2018	11:18
	STD8260 240-342615/4	UXC4605.D	08/27/2018	11:39
	STD8260 240-342615/5	UXC4606.D	08/27/2018	12:01
	STD8260 240-342615/6	UXC4607.D	08/27/2018	12:23
	STD8260 240-342615/7	UXC4608.D	08/27/2018	12:45
	ICV 240-342615/14	UXC4609.D	08/27/2018	13:07

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab File ID: BFB828.D BFB Injection Date: 08/28/2018

Instrument ID: A3UX15 BFB Injection Time: 11:13

Analysis Batch No.: 342834

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.2	
75	30.0 - 60.0 % of mass 95	54.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	50.0 - 120.00 % of mass 95	85.7	
175	5.0 - 9.0 % of mass 174	6.3	(7.4) 1
176	95.0 - 101.0 % of mass 174	84.4	(98.4) 1
177	5.0 - 9.0 % of mass 176	6.0	(7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 240-342834/32	UXC4629.D	08/28/2018	12:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab File ID: BFB1022.D BFB Injection Date: 10/22/2018

Instrument ID: A3UX15 BFB Injection Time: 08:37

Analysis Batch No.: 351197

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.9	
75	30.0 - 60.0 % of mass 95	49.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.1	
173	Less than 2.0 % of mass 174	0.5	(0.5) 1
174	50.0 - 120.00 % of mass 95	86.9	
175	5.0 - 9.0 % of mass 174	6.3	(7.3) 1
176	95.0 - 101.0 % of mass 174	83.2	(95.7) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-351197/2	UXC6480.D	10/22/2018	09:02
	LCS 240-351197/4	UXC6481.D	10/22/2018	09:24
	CCV 240-351197/3	UXC6482.D	10/22/2018	09:46
	MB 240-351197/6	UXC6484.D	10/22/2018	10:29
GW-100918-AF-043	240-102783-9	UXC6498.D	10/22/2018	15:36
GW-100918-AF-044	240-102783-10	UXC6499.D	10/22/2018	15:58
GW-101018-AF-045	240-102783-11	UXC6500.D	10/22/2018	16:19
GW-101018-AF-046	240-102783-12	UXC6501.D	10/22/2018	16:41
EB-101018-AF-005	240-102783-13	UXC6502.D	10/22/2018	17:03
GW-101018-AF-047	240-102783-14	UXC6503.D	10/22/2018	17:25
GW-101018-AF-048	240-102783-15	UXC6504.D	10/22/2018	17:47
GW-101018-AF-049	240-102783-16	UXC6505.D	10/22/2018	18:08
GW-101018-AF-046 MS	240-102783-12 MS	UXC6506.D	10/22/2018	18:30
GW-101018-AF-046 MSD	240-102783-12 MSD	UXC6507.D	10/22/2018	18:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab File ID: BFB1023.D BFB Injection Date: 10/23/2018

Instrument ID: A3UX15 BFB Injection Time: 10:02

Analysis Batch No.: 351439

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	46.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	88.9	
175	5.0 - 9.0 % of mass 174	6.2	(6.9) 1
176	95.0 - 101.0 % of mass 174	85.5	(96.2) 1
177	5.0 - 9.0 % of mass 176	6.0	(7.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-351439/2	UXC6509.D	10/23/2018	10:43
	LCS 240-351439/4	UXC6510.D	10/23/2018	11:05
	CCV 240-351439/3	UXC6511.D	10/23/2018	11:27
	MB 240-351439/6	UXC6513.D	10/23/2018	12:11
GW-101018-AF-050	240-102783-17	UXC6515.D	10/23/2018	12:55
GW-101018-AF-051	240-102783-18	UXC6516.D	10/23/2018	13:17
TB-101118-AF-006	240-102783-19	UXC6517.D	10/23/2018	13:38

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Sample No.: STD8260 240-342615/4 Date Analyzed: 08/27/2018 11:39

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC4605.D Heated Purge: (Y/N) N

Calibration ID: 46691

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1456997	5.26	1129967	7.94	616450	10.18
UPPER LIMIT		2913994	5.76	2259934	8.44	1232900	10.68
LOWER LIMIT		728499	4.76	564984	7.44	308225	9.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-342615/14		1402023	5.26	1092127	7.94	614205	10.18
CCVIS 240-351197/2		1836584	5.26	1277656	7.94	763027	10.18
CCVIS 240-351439/2		1758260	5.26	1247905	7.94	728603	10.18

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Sample No.: CCVIS 240-351197/2 Date Analyzed: 10/22/2018 09:02

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC6480.D Heated Purge: (Y/N) N

Calibration ID: 46695

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1836584	5.26	1277656	7.94	763027	10.18
UPPER LIMIT		3673168	5.76	2555312	8.44	1526054	10.68
LOWER LIMIT		918292	4.76	638828	7.44	381514	9.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-351197/4		1811075	5.26	1252697	7.94	723296	10.18
CCV 240-351197/3		1790010	5.26	1373246	7.94	607265	10.18
MB 240-351197/6		1641969	5.26	1201610	7.94	632007	10.18
240-102783-9	GW-100918-AF-043	1498721	5.26	1105876	7.94	582161	10.18
240-102783-10	GW-100918-AF-044	1438156	5.26	1080005	7.94	559384	10.18
240-102783-11	GW-101018-AF-045	1383799	5.26	1044062	7.94	518837	10.18
240-102783-12	GW-101018-AF-046	1493976	5.26	1099512	7.94	562580	10.18
240-102783-13	EB-101018-AF-005	1461438	5.26	1122243	7.94	556860	10.18
240-102783-14	GW-101018-AF-047	1396672	5.26	1062782	7.94	553721	10.18
240-102783-15	GW-101018-AF-048	1490407	5.26	1133483	7.94	614909	10.18
240-102783-16	GW-101018-AF-049	1481938	5.26	1110389	7.94	581873	10.18
240-102783-12 MS	GW-101018-AF-046 MS	1745019	5.26	1234685	7.94	721458	10.18
240-102783-12 MSD	GW-101018-AF-046 MSD	1838469	5.26	1300554	7.94	765165	10.18

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Sample No.: CCVIS 240-351439/2 Date Analyzed: 10/23/2018 10:43

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC6509.D Heated Purge: (Y/N) N

Calibration ID: 46695

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1758260	5.26	1247905	7.94	728603	10.18
UPPER LIMIT		3516520	5.76	2495810	8.44	1457206	10.68
LOWER LIMIT		879130	4.76	623953	7.44	364302	9.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-351439/4		1891341	5.26	1337930	7.94	767563	10.18
CCV 240-351439/3		1694741	5.26	1302951	7.94	592321	10.18
MB 240-351439/6		1655830	5.26	1228265	7.94	620990	10.18
240-102783-17	GW-101018-AF-050	1555459	5.26	1183484	7.94	580067	10.18
240-102783-18	GW-101018-AF-051	1594370	5.26	1204314	7.94	617298	10.18
240-102783-19	TB-101118-AF-006	1488980	5.26	1098849	7.94	540902	10.18

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-100918-AF-043 Lab Sample ID: 240-102783-9

Matrix: Water Lab File ID: UXC6498.D

Analysis Method: 8260B Date Collected: 10/09/2018 15:20

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 15:36

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	4.0	U	4.0	0.96
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.52
79-00-5	1,1,2-Trichloroethane	4.0	U	4.0	0.36
75-34-3	1,1-Dichloroethane	1.2	J	4.0	0.68
75-35-4	1,1-Dichloroethene	4.0	U	4.0	0.76
107-06-2	1,2-Dichloroethane	4.0	U	4.0	0.84
78-87-5	1,2-Dichloropropane	4.0	U	4.0	0.60
591-78-6	2-Hexanone	40	U	40	2.2
67-64-1	Acetone	40	U	40	22
71-43-2	Benzene	4.0	U	4.0	0.52
75-25-2	Bromoform	4.0	U	4.0	3.0
74-83-9	Bromomethane	4.0	U	4.0	1.7
75-15-0	Carbon disulfide	4.0	U	4.0	1.1
56-23-5	Carbon tetrachloride	4.0	U	4.0	1.0
108-90-7	Chlorobenzene	4.0	U	4.0	0.56
75-00-3	Chloroethane	4.0	U	4.0	3.3
67-66-3	Chloroform	4.0	U	4.0	0.52
74-87-3	Chloromethane	4.0	U	4.0	0.80
156-59-2	cis-1,2-Dichloroethene	78		4.0	0.64
10061-01-5	cis-1,3-Dichloropropene	4.0	U	4.0	2.4
75-27-4	Dichlorobromomethane	4.0	U	4.0	0.68
100-41-4	Ethylbenzene	4.0	U	4.0	0.44
78-93-3	2-Butanone (MEK)	40	U	40	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	40	U	40	1.7
75-09-2	Methylene Chloride	20	U	20	10
100-42-5	Styrene	4.0	U	4.0	0.40
127-18-4	Tetrachloroethene	4.0	U	4.0	0.60
108-88-3	Toluene	4.0	U	4.0	0.56
156-60-5	trans-1,2-Dichloroethene	1.0	J	4.0	0.76
10061-02-6	trans-1,3-Dichloropropene	4.0	U	4.0	2.7
79-01-6	Trichloroethene	4.0	U	4.0	0.40
75-01-4	Vinyl chloride	27		4.0	0.80
1330-20-7	Xylenes, Total	8.0	U	8.0	0.60
124-48-1	Chlorodibromomethane	4.0	U	4.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-100918-AF-043 Lab Sample ID: 240-102783-9

Matrix: Water Lab File ID: UXC6498.D

Analysis Method: 8260B Date Collected: 10/09/2018 15:20

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 15:36

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	95		70-123
1868-53-7	Dibromofluoromethane (Surr)	121		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6498.D
Lims ID: 240-102783-B-9
Client ID: GW-100918-AF-043
Sample Type: Client
Inject. Date: 22-Oct-2018 15:36:30 ALS Bottle#: 19 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 4.0000
Sample Info: 240-0081069-051
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:25:42

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1498721	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1105876	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	582161	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	374509	9.64	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	0.000	99	447503	8.49	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1120747	7.55	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	377348	7.31	
	10 Chloromethane	50		1.721				ND	
	11 Vinyl chloride	62	1.816	1.816	0.000	99	362101	6.82	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.172				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.872	2.860	0.012	97	4699	1.12	
	24 Carbon disulfide	76		3.026				ND	
	28 Methylene Chloride	84	3.227	3.227	0.000	92	10996	0.2564	
	30 trans-1,2-Dichloroethene	96	3.464	3.465	-0.001	97	11859	0.2616	
	34 1,1-Dichloroethane	63	3.808	3.809	0.000	96	21816	0.2955	
	39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	80	965710	19.5	
	41 2-Butanone (MEK)	72		4.295				ND	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.852				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130		5.564				ND	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.990				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.247				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

Report Date: 23-Oct-2018 09:34:00 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6498.D

Injection Date:	22-Oct-2018 15:36:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-9	Lab Sample ID:	240-102783-9	Worklist Smp#:	51
Client ID:	GW-100918-AF-043				
Purge Vol:	5.000 mL	Dil. Factor:	4.0000	ALS Bottle#:	19
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)

TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6498.D
Lims ID: 240-102783-B-9
Client ID: GW-100918-AF-043
Sample Type: Client
Inject. Date: 22-Oct-2018 15:36:30 ALS Bottle#: 19 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 4.0000
Sample Info: 240-0081069-051
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:25:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.64	120.95
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.49	106.58
$ 6 Toluene-d8 (Surr)	7.97	7.55	94.74
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.31	91.77

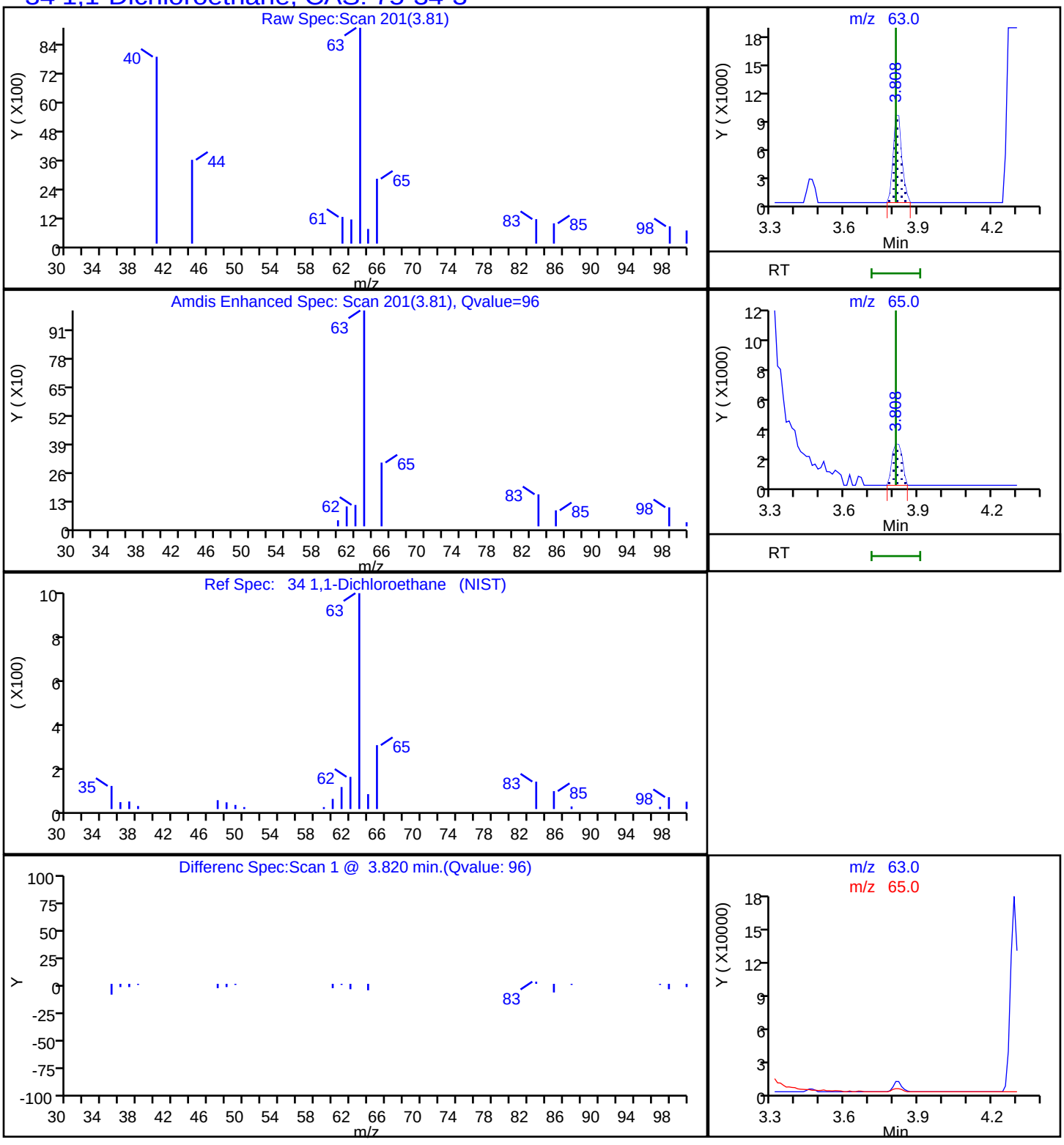
Report Date: 23-Oct-2018 09:34:00 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6498.D

Injection Date:	22-Oct-2018 15:36:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-9	Lab Sample ID:	240-102783-9
Client ID:	GW-100918-AF-043		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 51
Purge Vol:	5.000 mL	Dil. Factor:	4.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

34 1,1-Dichloroethane, CAS: 75-34-3



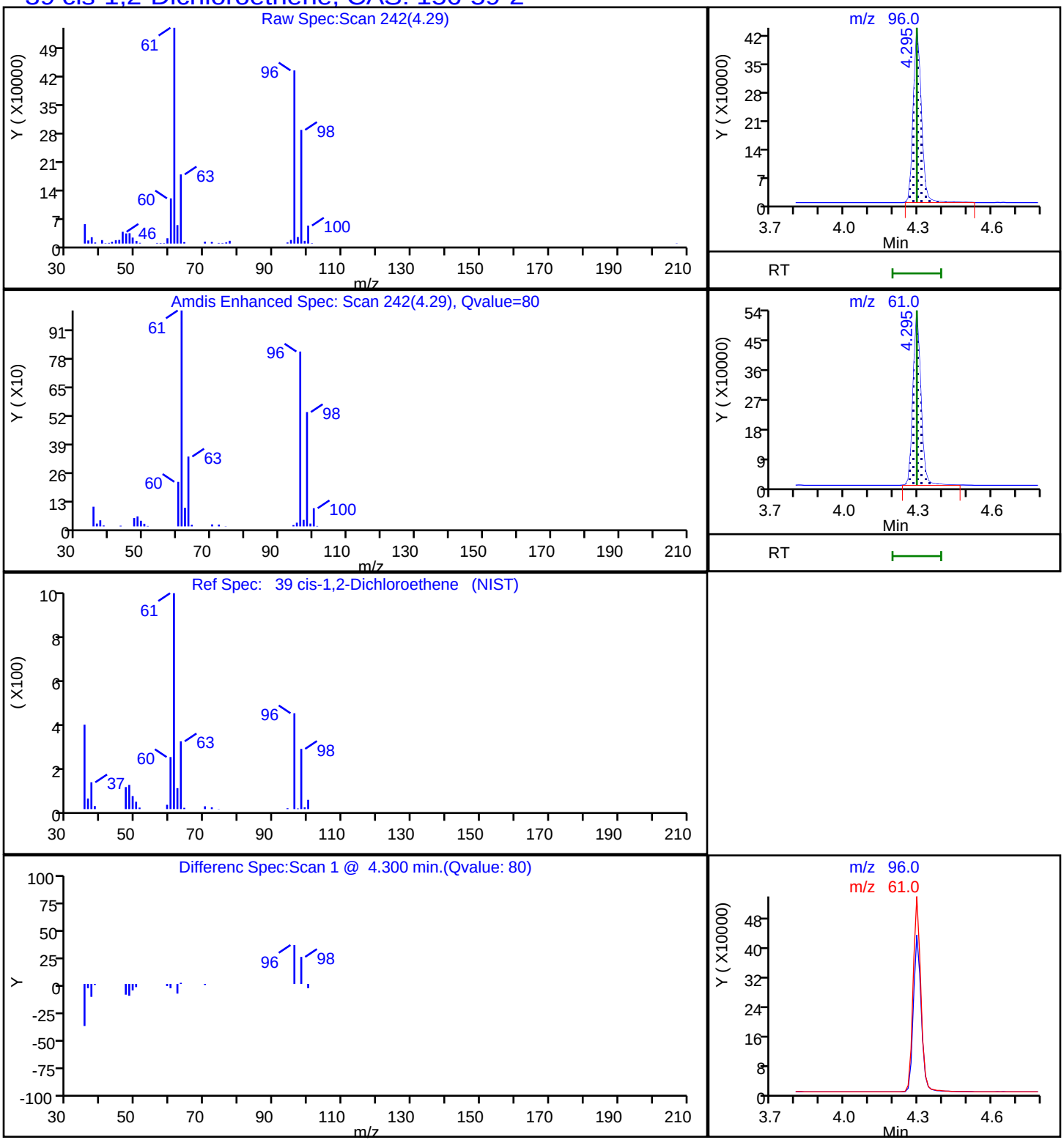
Report Date: 23-Oct-2018 09:34:00 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6498.D

Injection Date:	22-Oct-2018 15:36:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-9	Lab Sample ID:	240-102783-9
Client ID:	GW-100918-AF-043		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 51
Purge Vol:	5.000 mL	Dil. Factor:	4.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

39 cis-1,2-Dichloroethene, CAS: 156-59-2



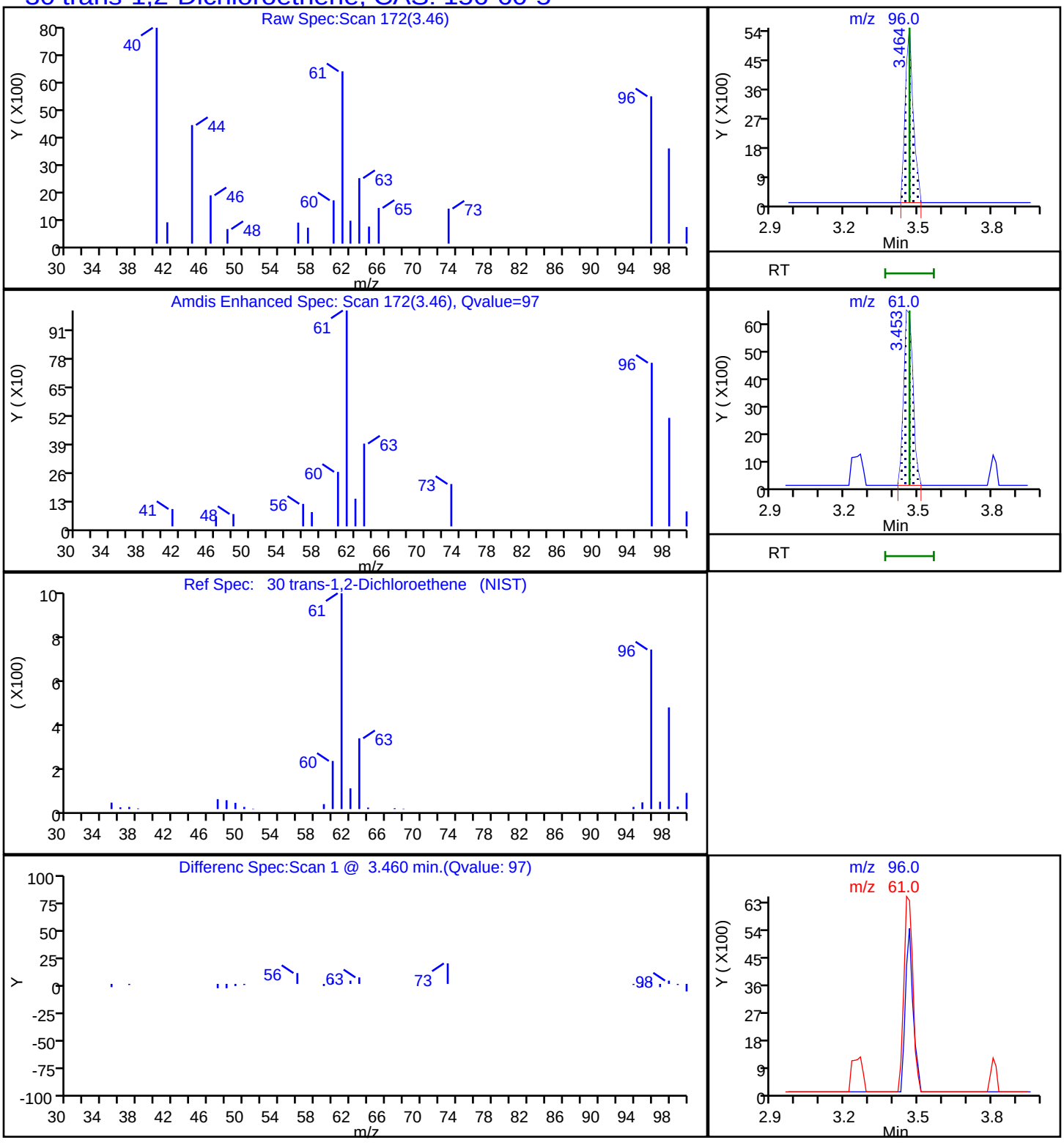
Report Date: 23-Oct-2018 09:34:00 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6498.D

Injection Date:	22-Oct-2018 15:36:30	Instrument ID:	A3UX15		
Lims ID:	240-102783-B-9	Lab Sample ID:	240-102783-9		
Client ID:	GW-100918-AF-043				
Operator ID:		ALS Bottle#:	19	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 trans-1,2-Dichloroethene, CAS: 156-60-5



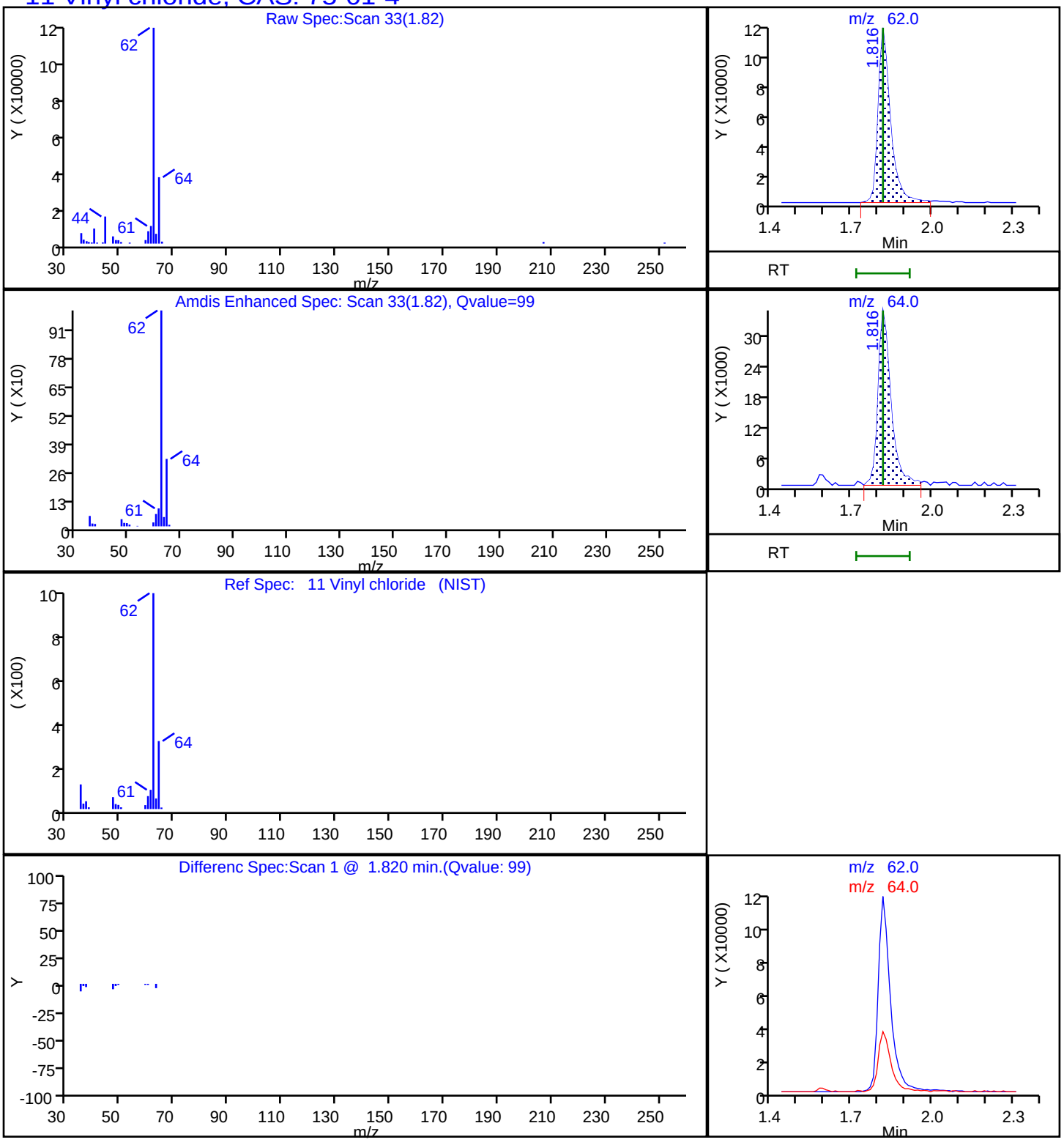
Report Date: 23-Oct-2018 09:34:00 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6498.D

Injection Date:	22-Oct-2018 15:36:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-9	Lab Sample ID:	240-102783-9
Client ID:	GW-100918-AF-043		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 51
Purge Vol:	5.000 mL	Dil. Factor:	4.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-100918-AF-044 Lab Sample ID: 240-102783-10

Matrix: Water Lab File ID: UXC6499.D

Analysis Method: 8260B Date Collected: 10/09/2018 16:07

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 15:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	0.25	J	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	0.21	J	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-100918-AF-044 Lab Sample ID: 240-102783-10

Matrix: Water Lab File ID: UXC6499.D

Analysis Method: 8260B Date Collected: 10/09/2018 16:07

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 15:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		70-121
460-00-4	4-Bromofluorobenzene (Surr)	72		59-120
2037-26-5	Toluene-d8 (Surr)	74		70-123
1868-53-7	Dibromofluoromethane (Surr)	99		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6499.D
Lims ID: 240-102783-B-10
Client ID: GW-100918-AF-044
Sample Type: Client
Inject. Date: 22-Oct-2018 15:58:30 ALS Bottle#: 20 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-052
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:26:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1438156	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	86	1080005	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	559384	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	95	293843	7.88	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	0.000	100	351745	6.96	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	94	853444	5.89	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	289550	5.75	
10 Chloromethane	50		1.721				ND	
11 Vinyl chloride	62		1.816				ND	
13 Bromomethane	94		2.101				ND	
14 Chloroethane	64		2.172				ND	
19 1,1-Dichloroethene	96		2.824				ND	
22 Acetone	58	2.883	2.860	0.023	97	6981	1.73	
24 Carbon disulfide	76		3.026				ND	
28 Methylene Chloride	84		3.227				ND	
30 trans-1,2-Dichloroethene	96		3.465				ND	
34 1,1-Dichloroethane	63		3.809				ND	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	81	9809	0.2061	
41 2-Butanone (MEK)	72		4.295				ND	
47 Chloroform	83	4.556	4.556	0.000	94	17798	0.2466	
48 1,1,1-Trichloroethane	97		4.722				ND	
50 Carbon tetrachloride	117		4.852				ND	
53 Benzene	78		5.030				ND	
54 1,2-Dichloroethane	62		5.042				ND	
58 Trichloroethene	130		5.564				ND	
61 1,2-Dichloropropane	63		5.765				ND	
65 Dichlorobromomethane	83	5.990	5.990	0.000	92	5857	0.1131	
68 cis-1,3-Dichloropropene	75		6.382				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
70 Toluene	91		6.678				ND	
71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.247				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

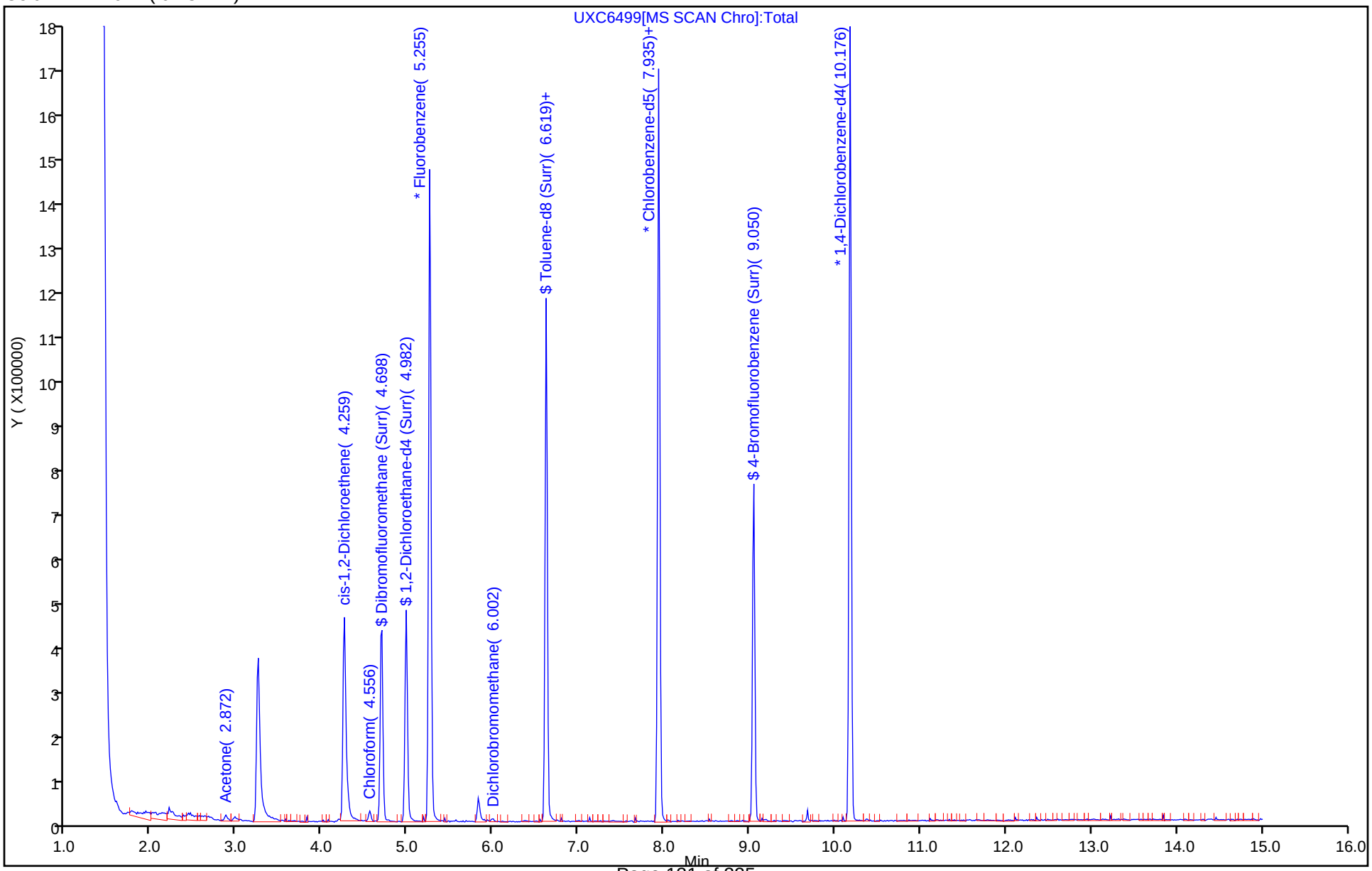
Report Date: 23-Oct-2018 09:34:06 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6499.D

Injection Date:	22-Oct-2018 15:58:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-10	Lab Sample ID:	240-102783-10	Worklist Smp#:	52
Client ID:	GW-100918-AF-044				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6499.D
Lims ID: 240-102783-B-10
Client ID: GW-100918-AF-044
Sample Type: Client
Inject. Date: 22-Oct-2018 15:58:30 ALS Bottle#: 20 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-052
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:26:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	7.88	98.90
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	6.96	87.30
$ 6 Toluene-d8 (Surr)	7.97	5.89	73.87
$ 7 4-Bromofluorobenzene (Surr)	7.97	5.75	72.10

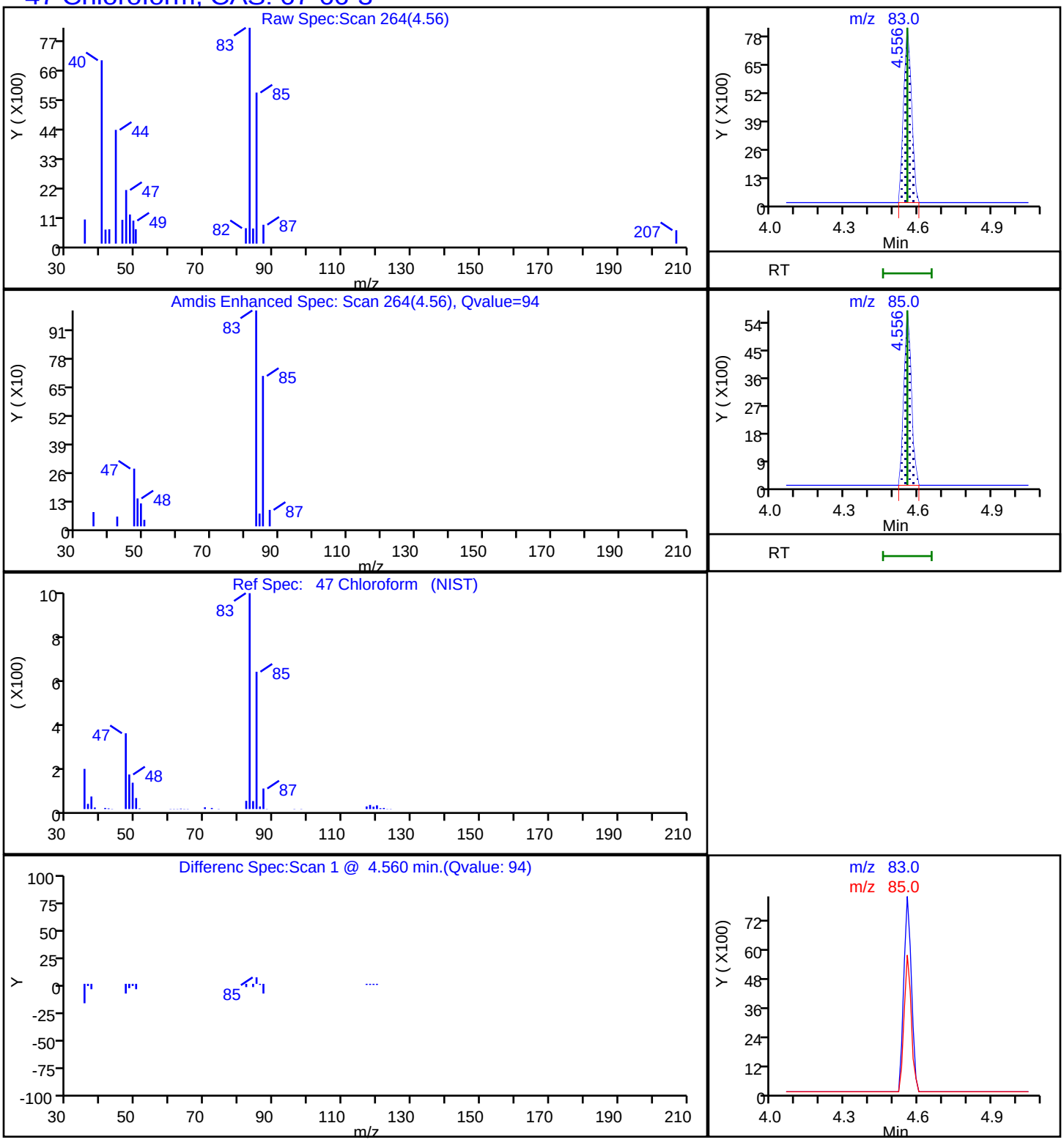
Report Date: 23-Oct-2018 09:34:06 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6499.D

Injection Date:	22-Oct-2018 15:58:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-10	Lab Sample ID:	240-102783-10
Client ID:	GW-100918-AF-044		
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

47 Chloroform, CAS: 67-66-3



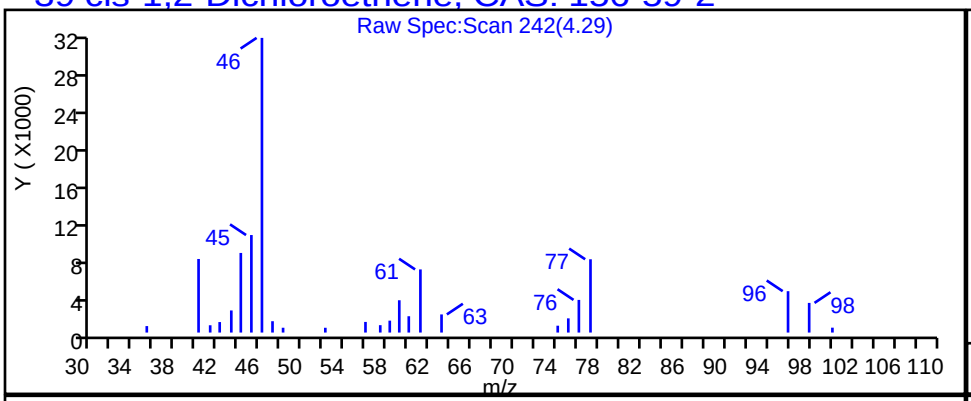
Report Date: 23-Oct-2018 09:34:06 Chrom Revision: 2.3 12-Oct-2018 08:24:38

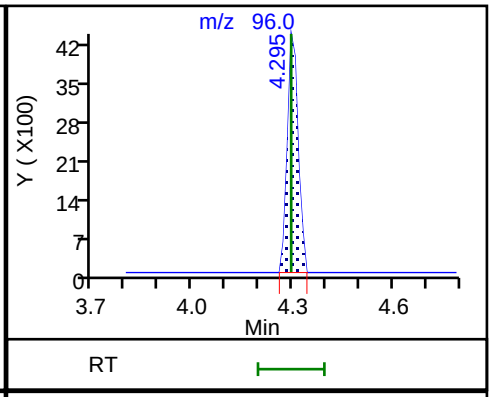
TestAmerica Canton

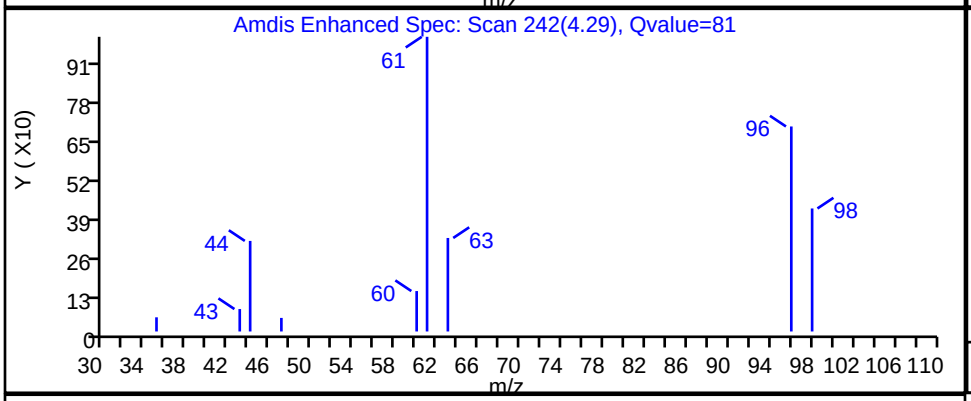
Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6499.D

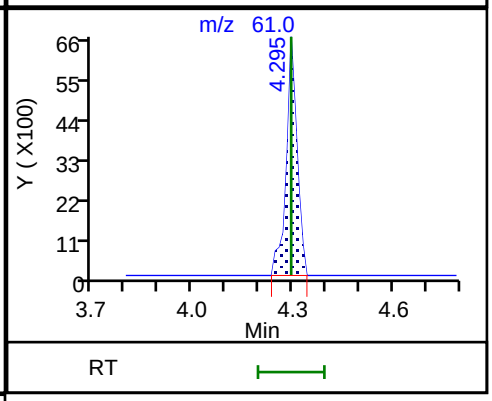
Injection Date:	22-Oct-2018 15:58:30	Instrument ID:	A3UX15		
Lims ID:	240-102783-B-10	Lab Sample ID:	240-102783-10		
Client ID:	GW-100918-AF-044				
Operator ID:		ALS Bottle#:	20	Worklist Smp#:	52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

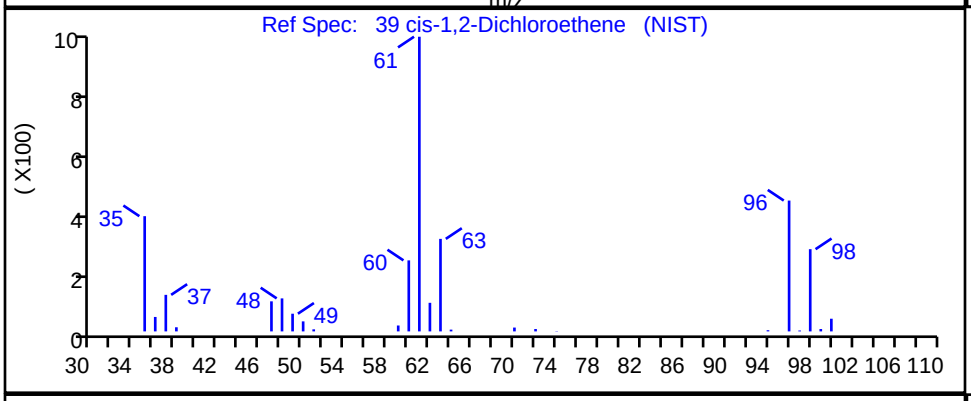
39 cis-1,2-Dichloroethene, CAS: 156-59-2

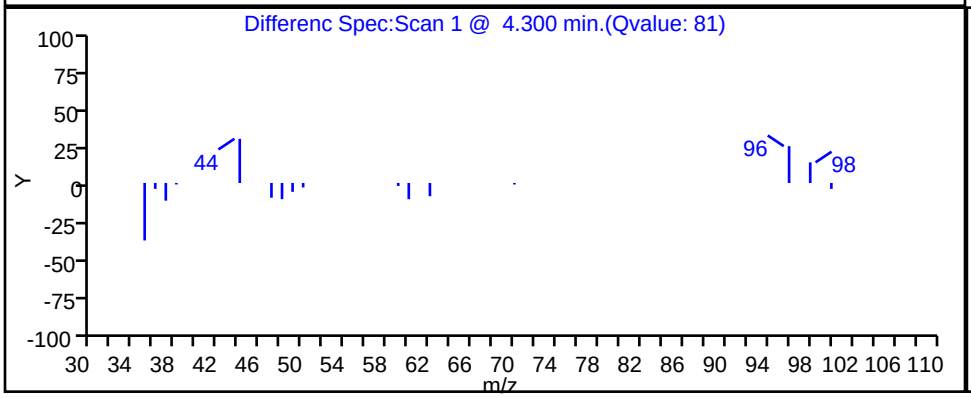


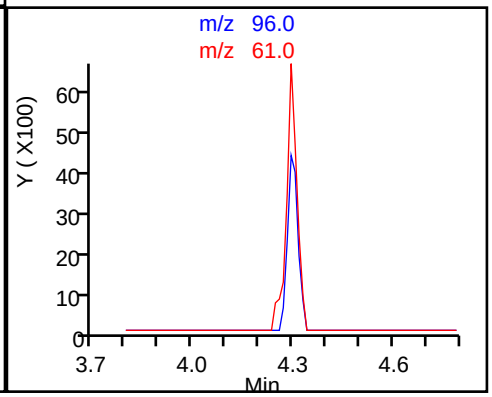












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-045 Lab Sample ID: 240-102783-11

Matrix: Water Lab File ID: UXC6500.D

Analysis Method: 8260B Date Collected: 10/10/2018 10:57

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 16:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-045 Lab Sample ID: 240-102783-11

Matrix: Water Lab File ID: UXC6500.D

Analysis Method: 8260B Date Collected: 10/10/2018 10:57

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 16:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		70-121
460-00-4	4-Bromofluorobenzene (Surr)	87		59-120
2037-26-5	Toluene-d8 (Surr)	92		70-123
1868-53-7	Dibromofluoromethane (Surr)	120		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6500.D
Lims ID: 240-102783-B-11
Client ID: GW-101018-AF-045
Sample Type: Client
Inject. Date: 22-Oct-2018 16:19:30 ALS Bottle#: 21 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-053
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:26:38

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1383799	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1044062	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	94	518837	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	342991	9.56	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.001	100	411579	8.46	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1030858	7.36	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	337229	6.92	
	10 Chloromethane	50		1.721				ND	
	11 Vinyl chloride	62		1.816				ND	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.172				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.872	2.860	0.012	99	7249	1.87	
	24 Carbon disulfide	76		3.026				ND	
	28 Methylene Chloride	84		3.227				ND	
	30 trans-1,2-Dichloroethene	96		3.465				ND	
	34 1,1-Dichloroethane	63		3.809				ND	
	39 cis-1,2-Dichloroethene	96		4.295				ND	
	41 2-Butanone (MEK)	72		4.295				ND	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.852				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130		5.564				ND	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.990				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.247				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

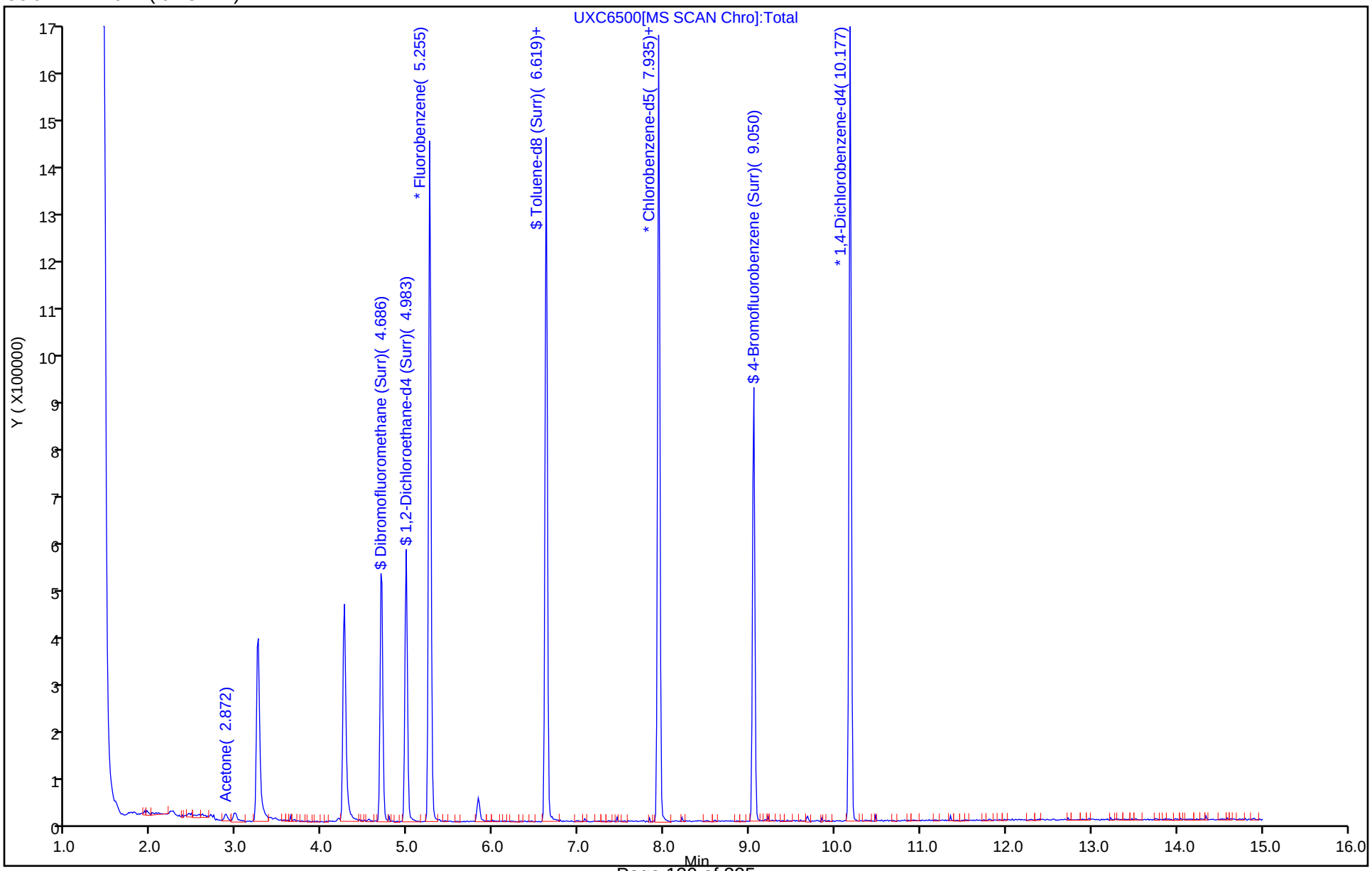
Report Date: 23-Oct-2018 09:34:10 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6500.D

Injection Date:	22-Oct-2018 16:19:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-11	Lab Sample ID:	240-102783-11	Worklist Smp#:	53
Client ID:	GW-101018-AF-045				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6500.D
Lims ID: 240-102783-B-11
Client ID: GW-101018-AF-045
Sample Type: Client
Inject. Date: 22-Oct-2018 16:19:30 ALS Bottle#: 21 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-053
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:26:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.56	119.97
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.46	106.16
$ 6 Toluene-d8 (Surr)	7.97	7.36	92.30
$ 7 4-Bromofluorobenzene (Surr)	7.97	6.92	86.87

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-046 Lab Sample ID: 240-102783-12

Matrix: Water Lab File ID: UXC6501.D

Analysis Method: 8260B Date Collected: 10/10/2018 12:17

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 16:41

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	17	U	17	4.0
79-34-5	1,1,2,2-Tetrachloroethane	17	U	17	2.2
79-00-5	1,1,2-Trichloroethane	17	U	17	1.5
75-34-3	1,1-Dichloroethane	17	U	17	2.8
75-35-4	1,1-Dichloroethene	17	U	17	3.2
107-06-2	1,2-Dichloroethane	17	U	17	3.5
78-87-5	1,2-Dichloropropane	17	U	17	2.5
591-78-6	2-Hexanone	170	U	170	9.0
67-64-1	Acetone	170	U	170	90
71-43-2	Benzene	17	U	17	2.2
75-25-2	Bromoform	17	U	17	13
74-83-9	Bromomethane	17	U	17	7.0
75-15-0	Carbon disulfide	17	U	17	4.7
56-23-5	Carbon tetrachloride	17	U	17	4.3
108-90-7	Chlorobenzene	17	U	17	2.3
75-00-3	Chloroethane	17	U	17	14
67-66-3	Chloroform	17	U	17	2.2
74-87-3	Chloromethane	17	U	17	3.3
156-59-2	cis-1,2-Dichloroethene	300		17	2.7
10061-01-5	cis-1,3-Dichloropropene	17	U	17	10
75-27-4	Dichlorobromomethane	17	U	17	2.8
100-41-4	Ethylbenzene	17	U	17	1.8
78-93-3	2-Butanone (MEK)	170	U	170	19
108-10-1	4-Methyl-2-pentanone (MIBK)	170	U	170	7.0
75-09-2	Methylene Chloride	83	U	83	44
100-42-5	Styrene	17	U	17	1.7
127-18-4	Tetrachloroethene	17	U	17	2.5
108-88-3	Toluene	17	U	17	2.3
156-60-5	trans-1,2-Dichloroethene	17	U	17	3.2
10061-02-6	trans-1,3-Dichloropropene	17	U	17	11
79-01-6	Trichloroethene	17	U	17	1.7
75-01-4	Vinyl chloride	240		17	3.3
1330-20-7	Xylenes, Total	33	U	33	2.5
124-48-1	Chlorodibromomethane	17	U	17	6.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-046 Lab Sample ID: 240-102783-12

Matrix: Water Lab File ID: UXC6501.D

Analysis Method: 8260B Date Collected: 10/10/2018 12:17

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 16:41

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	90		59-120
2037-26-5	Toluene-d8 (Surr)	93		70-123
1868-53-7	Dibromofluoromethane (Surr)	118		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6501.D
Lims ID: 240-102783-B-12
Client ID: GW-101018-AF-046
Sample Type: Client
Inject. Date: 22-Oct-2018 16:41:30 ALS Bottle#: 22 Worklist Smp#: 54
Purge Vol: 5.000 mL Dil. Factor: 16.6700
Sample Info: 240-0081069-054
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:27:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1493976	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1099512	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	95	562580	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	95	363252	9.38	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	0.000	100	436275	8.31	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1087986	7.37	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	369004	7.19	
10 Chloromethane	50		1.721				ND	
11 Vinyl chloride	62	1.816	1.816	0.000	99	776952	14.7	
13 Bromomethane	94		2.101				ND	
14 Chloroethane	64		2.172				ND	
19 1,1-Dichloroethene	96		2.824				ND	
22 Acetone	58	2.883	2.860	0.023	97	2297	0.5476	
24 Carbon disulfide	76		3.026				ND	
28 Methylene Chloride	84		3.227				ND	
30 trans-1,2-Dichloroethene	96		3.465				ND	
34 1,1-Dichloroethane	63	3.808	3.809	0.000	71	9434	0.1282	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	80	884734	17.9	
41 2-Butanone (MEK)	72		4.295				ND	
47 Chloroform	83		4.556				ND	
48 1,1,1-Trichloroethane	97		4.722				ND	
50 Carbon tetrachloride	117		4.852				ND	
53 Benzene	78		5.030				ND	
54 1,2-Dichloroethane	62		5.042				ND	
58 Trichloroethene	130		5.564				ND	
61 1,2-Dichloropropane	63		5.765				ND	
65 Dichlorobromomethane	83		5.990				ND	
68 cis-1,3-Dichloropropene	75		6.382				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
70 Toluene	91		6.678				ND	
71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.247				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

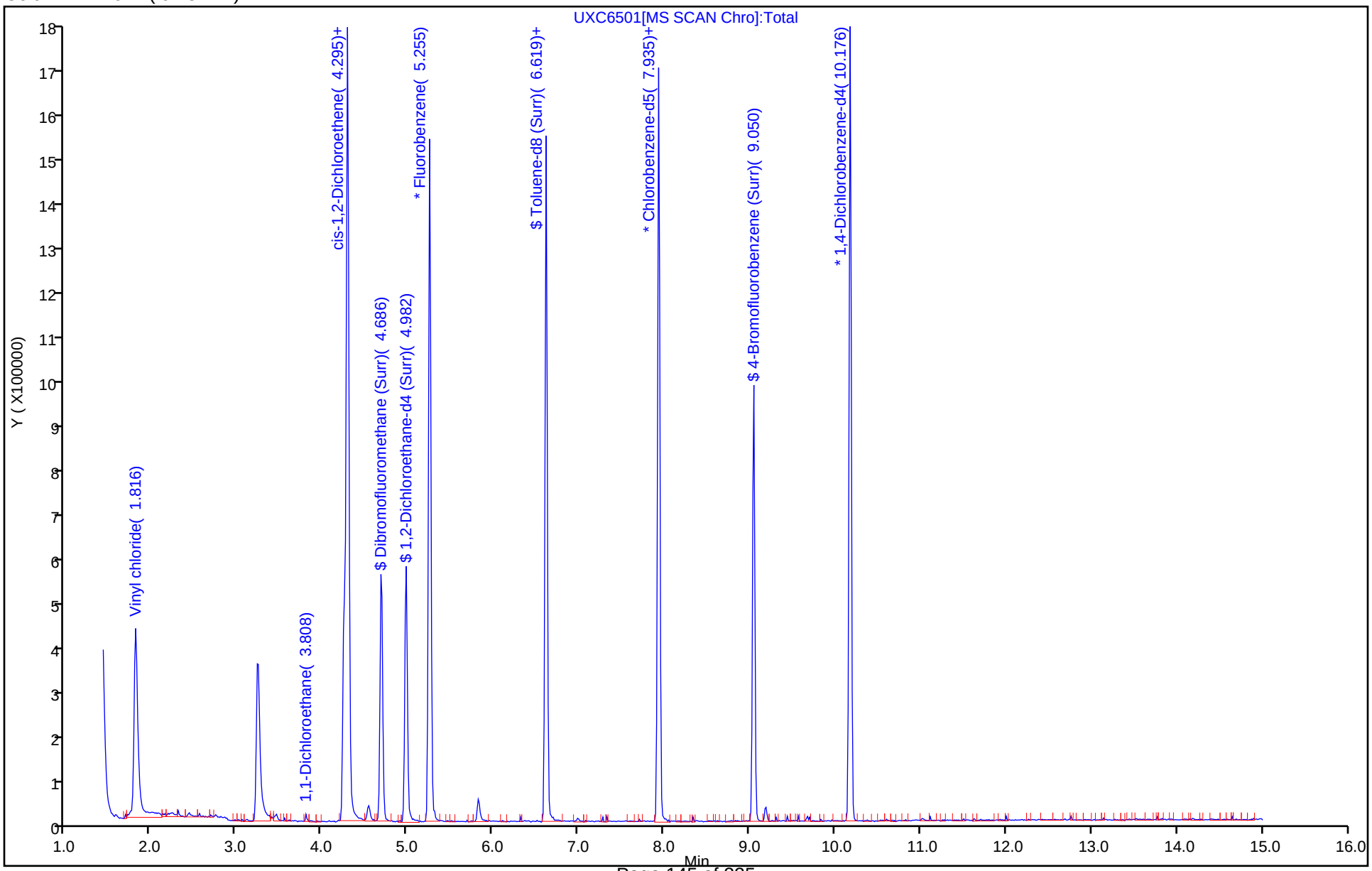
Report Date: 23-Oct-2018 09:34:14 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6501.D

Injection Date:	22-Oct-2018 16:41:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-12	Lab Sample ID:	240-102783-12	Worklist Smp#:	54
Client ID:	GW-101018-AF-046				
Purge Vol:	5.000 mL	Dil. Factor:	16.6700	ALS Bottle#:	22
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6501.D
Lims ID: 240-102783-B-12
Client ID: GW-101018-AF-046
Sample Type: Client
Inject. Date: 22-Oct-2018 16:41:30 ALS Bottle#: 22 Worklist Smp#: 54
Purge Vol: 5.000 mL Dil. Factor: 16.6700
Sample Info: 240-0081069-054
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:27:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.38	117.69
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.31	104.23
$ 6 Toluene-d8 (Surr)	7.97	7.37	92.51
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.19	90.26

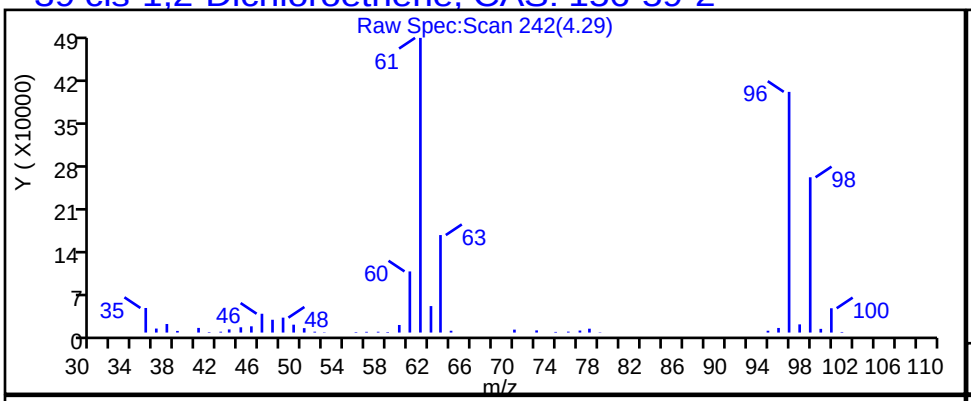
Report Date: 23-Oct-2018 09:34:14 Chrom Revision: 2.3 12-Oct-2018 08:24:38

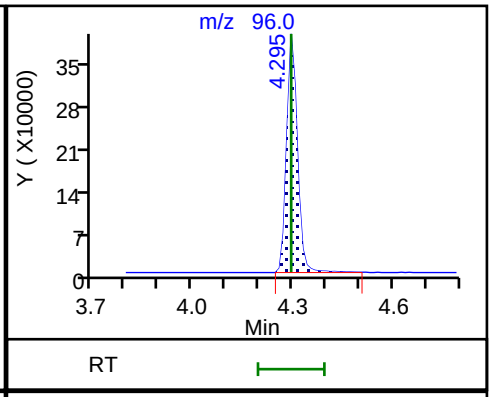
TestAmerica Canton

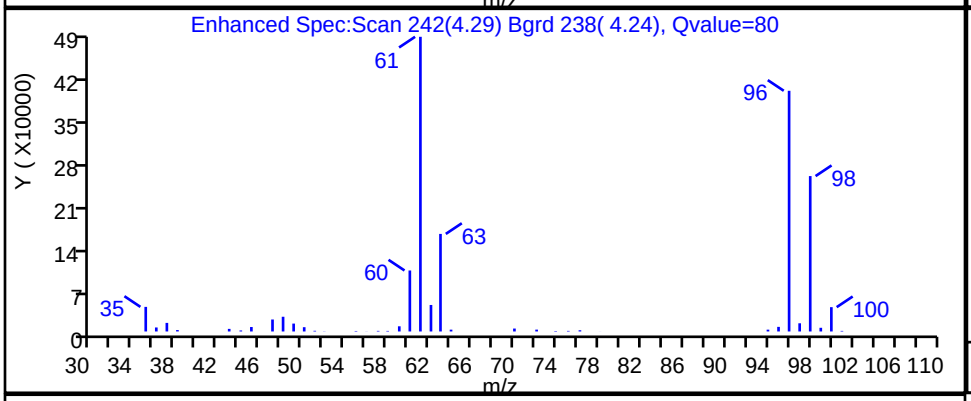
Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6501.D

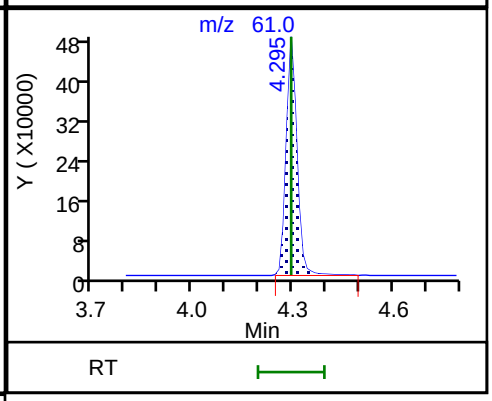
Injection Date:	22-Oct-2018 16:41:30	Instrument ID:	A3UX15		
Lims ID:	240-102783-B-12	Lab Sample ID:	240-102783-12		
Client ID:	GW-101018-AF-046				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	16.6700		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

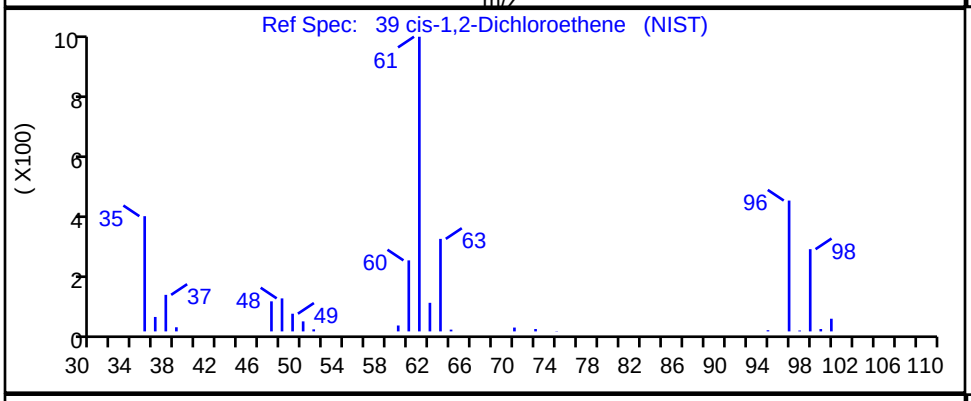
39 cis-1,2-Dichloroethene, CAS: 156-59-2

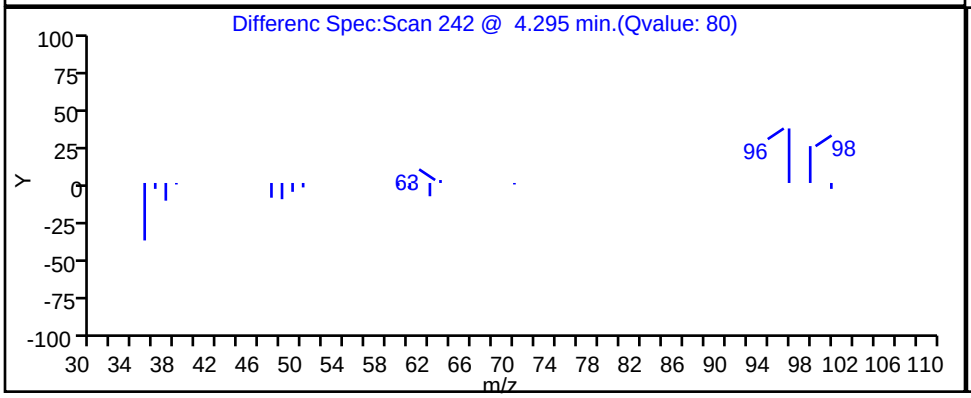


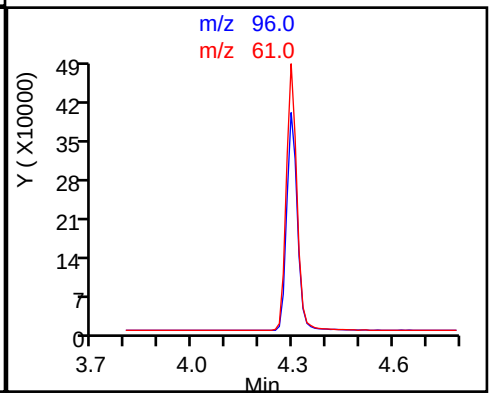












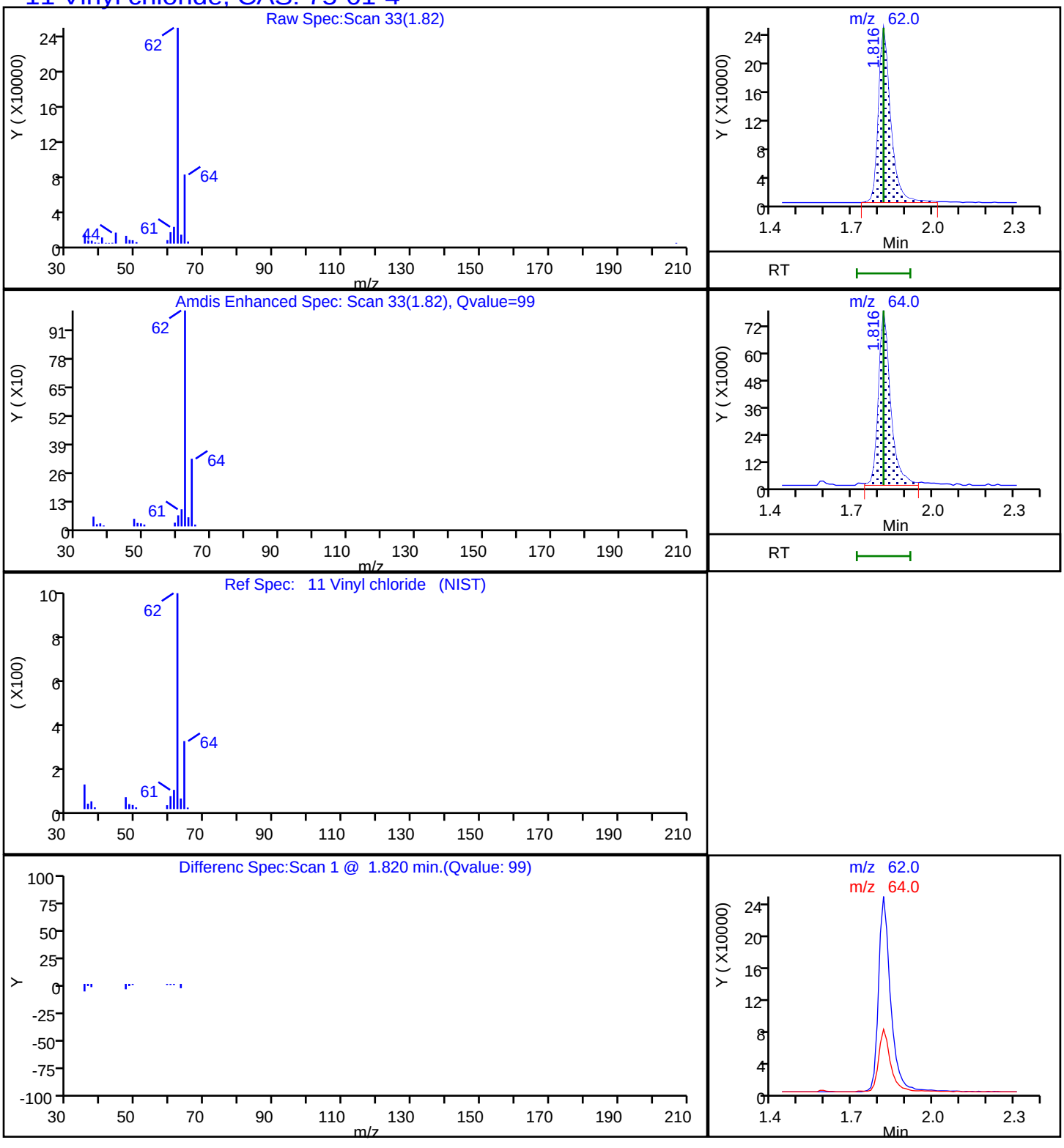
Report Date: 23-Oct-2018 09:34:14 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6501.D

Injection Date:	22-Oct-2018 16:41:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-12	Lab Sample ID:	240-102783-12
Client ID:	GW-101018-AF-046		
Operator ID:		ALS Bottle#:	22 Worklist Smp#: 54
Purge Vol:	5.000 mL	Dil. Factor:	16.6700
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: EB-101018-AF-005 Lab Sample ID: 240-102783-13

Matrix: Water Lab File ID: UXC6502.D

Analysis Method: 8260B Date Collected: 10/10/2018 12:33

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 17:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	0.33	J	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	0.37	J	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: EB-101018-AF-005 Lab Sample ID: 240-102783-13

Matrix: Water Lab File ID: UXC6502.D

Analysis Method: 8260B Date Collected: 10/10/2018 12:33

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 17:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-121
460-00-4	4-Bromofluorobenzene (Surr)	85		59-120
2037-26-5	Toluene-d8 (Surr)	91		70-123
1868-53-7	Dibromofluoromethane (Surr)	115		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6502.D
Lims ID: 240-102783-B-13
Client ID: EB-101018-AF-005
Sample Type: Client
Inject. Date: 22-Oct-2018 17:03:30 ALS Bottle#: 23 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-055
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:28:01

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1461438	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1122243	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.177	10.177	-0.001	94	556860	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	347157	9.16	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	0.000	100	417565	8.13	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1095758	7.27	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	356344	6.81	
	10 Chloromethane	50		1.721				ND	
	11 Vinyl chloride	62	1.816	1.816	0.000	91	8716	0.1683	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.172				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.872	2.860	0.012	94	3780	0.9211	
	24 Carbon disulfide	76	3.026	3.026	0.000	99	39764	0.3301	
	28 Methylene Chloride	84	3.239	3.227	0.012	88	23223	0.5554	
	30 trans-1,2-Dichloroethene	96		3.465				ND	
	34 1,1-Dichloroethane	63		3.809				ND	
	39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	75	17860	0.3693	
	41 2-Butanone (MEK)	72		4.295				ND	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.852				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130		5.564				ND	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.990				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.247				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

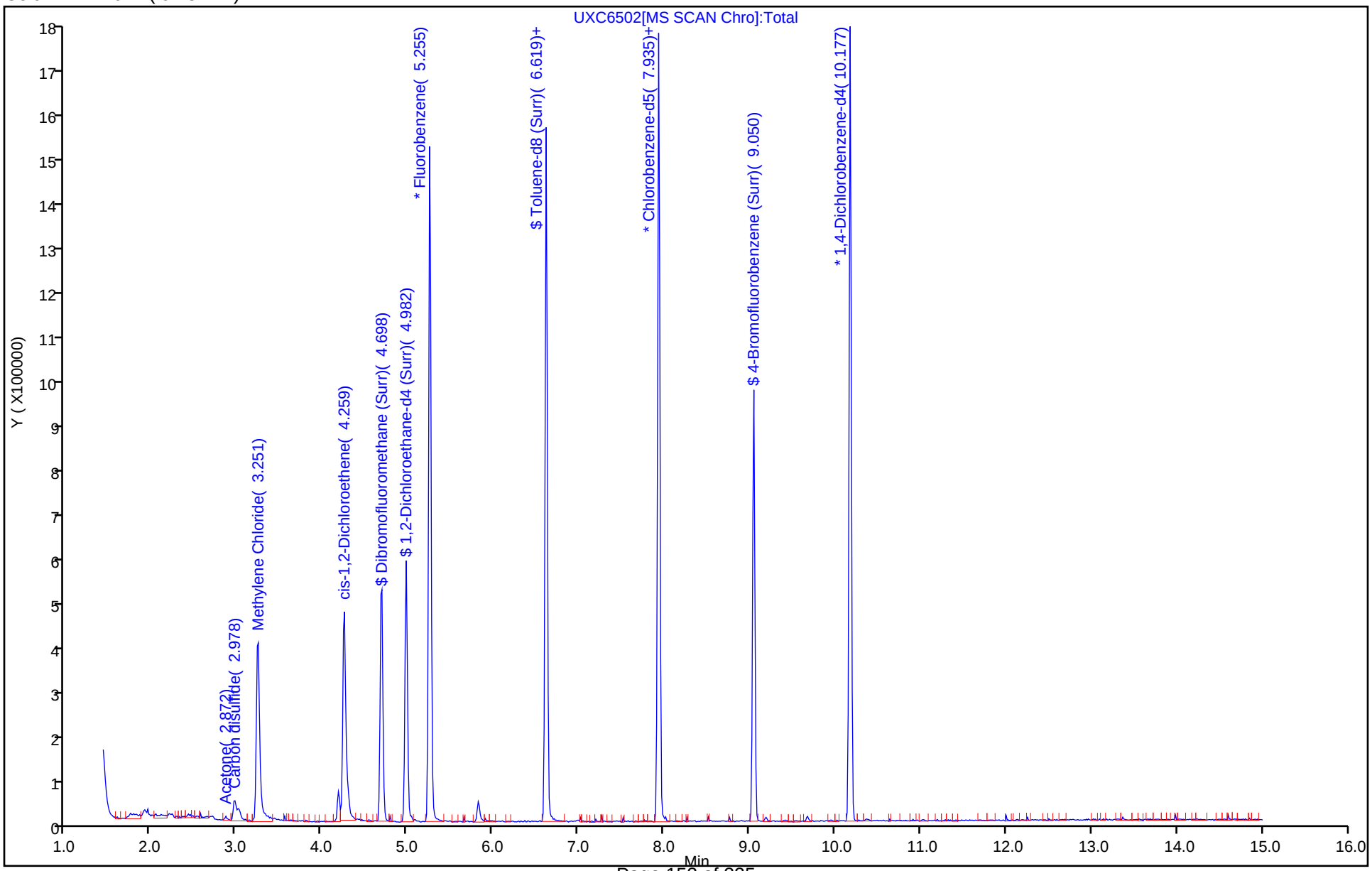
Report Date: 23-Oct-2018 09:34:17 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6502.D

Injection Date:	22-Oct-2018 17:03:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-13	Lab Sample ID:	240-102783-13	Worklist Smp#:	55
Client ID:	EB-101018-AF-005				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6502.D
Lims ID: 240-102783-B-13
Client ID: EB-101018-AF-005
Sample Type: Client
Inject. Date: 22-Oct-2018 17:03:30 ALS Bottle#: 23 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-055
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:28:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.16	114.98
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.13	101.98
$ 6 Toluene-d8 (Surr)	7.97	7.27	91.28
$ 7 4-Bromofluorobenzene (Surr)	7.97	6.81	85.40

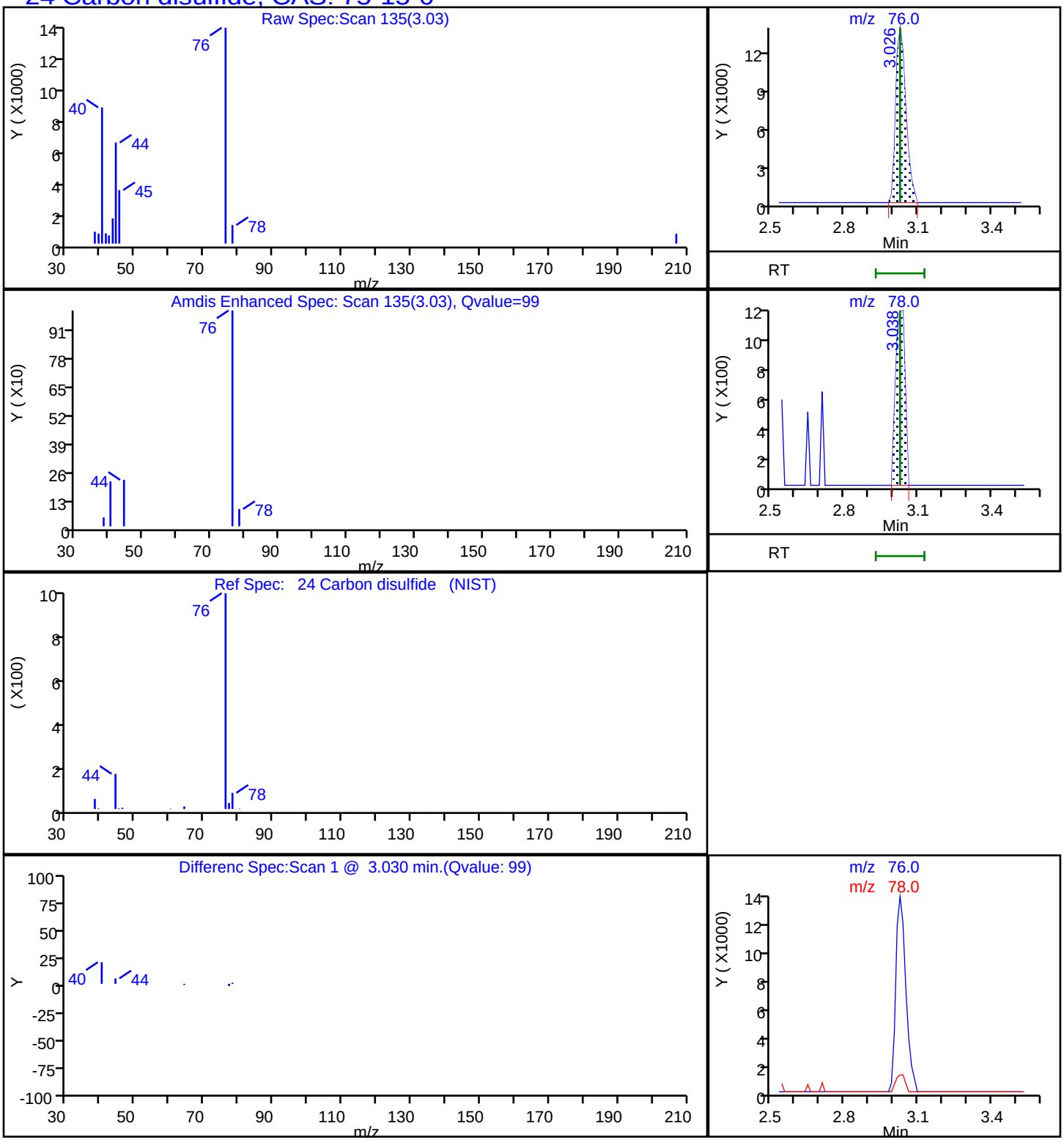
Report Date: 23-Oct-2018 09:34:17 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6502.D

Injection Date:	22-Oct-2018 17:03:30	Instrument ID:	A3UX15		
Lims ID:	240-102783-B-13	Lab Sample ID:	240-102783-13		
Client ID:	EB-101018-AF-005				
Operator ID:		ALS Bottle#:	23	Worklist Smp#:	55
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Carbon disulfide, CAS: 75-15-0



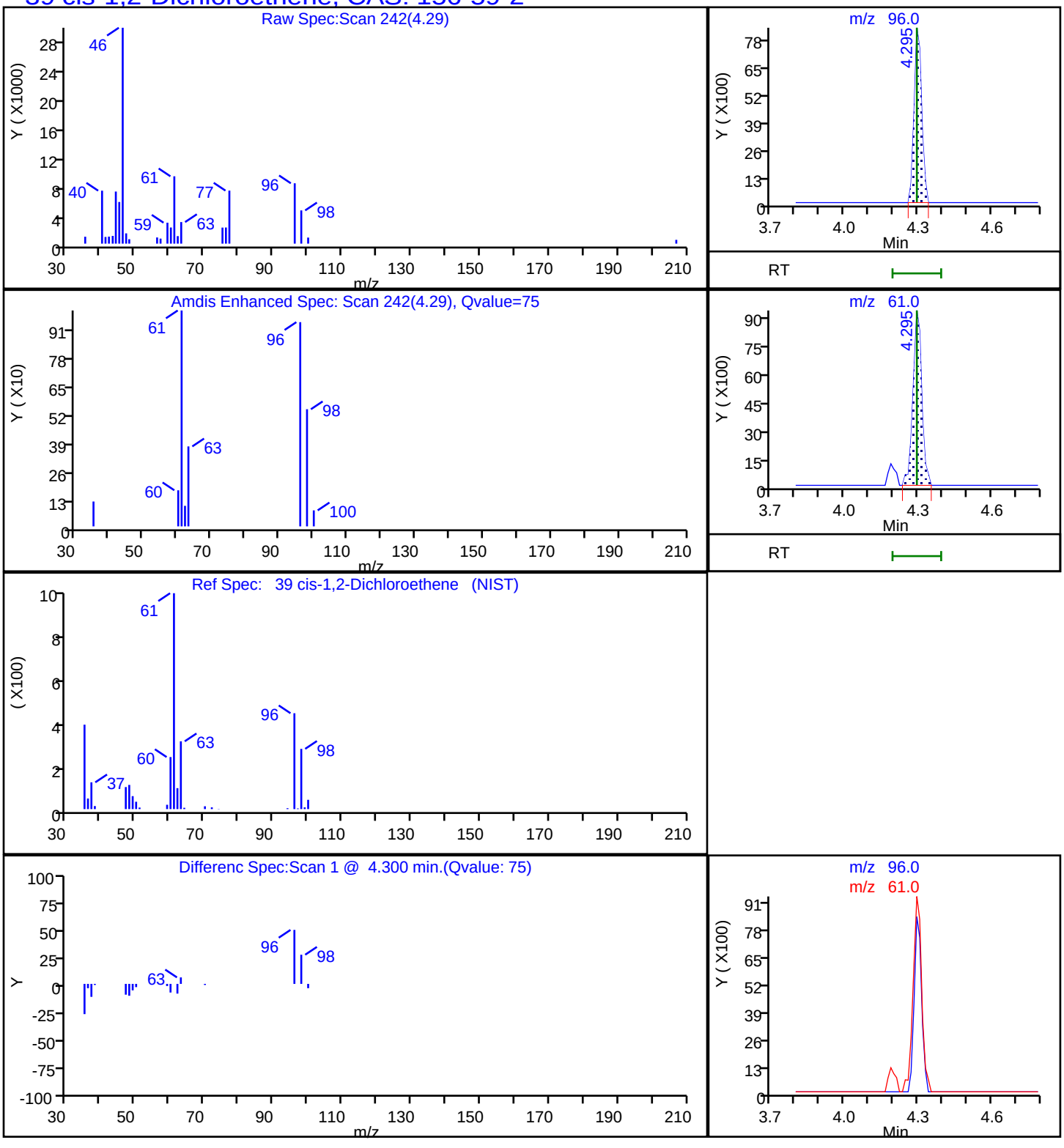
Report Date: 23-Oct-2018 09:34:19 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6502.D

Injection Date:	22-Oct-2018 17:03:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-13	Lab Sample ID:	240-102783-13
Client ID:	EB-101018-AF-005		
Operator ID:		ALS Bottle#:	23 Worklist Smp#: 55
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

39 cis-1,2-Dichloroethene, CAS: 156-59-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-047 Lab Sample ID: 240-102783-14

Matrix: Water Lab File ID: UXC6503.D

Analysis Method: 8260B Date Collected: 10/10/2018 13:51

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 17:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-047 Lab Sample ID: 240-102783-14

Matrix: Water Lab File ID: UXC6503.D

Analysis Method: 8260B Date Collected: 10/10/2018 13:51

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 17:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	94		70-123
1868-53-7	Dibromofluoromethane (Surr)	125		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6503.D
Lims ID: 240-102783-B-14
Client ID: GW-101018-AF-047
Sample Type: Client
Inject. Date: 22-Oct-2018 17:25:30 ALS Bottle#: 24 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-056
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:28:46

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1396672	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1062782	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	553721	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	359639	9.93	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	0.000	99	432386	8.81	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1068103	7.49	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	370214	7.47	
	10 Chloromethane	50		1.721				ND	
	11 Vinyl chloride	62		1.816				ND	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.172				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.872	2.860	0.012	96	2562	0.6533	
	24 Carbon disulfide	76		3.026				ND	
	28 Methylene Chloride	84		3.227				ND	
	30 trans-1,2-Dichloroethene	96		3.465				ND	
	34 1,1-Dichloroethane	63		3.809				ND	
	39 cis-1,2-Dichloroethene	96		4.295				ND	
	41 2-Butanone (MEK)	72		4.295				ND	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.852				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130		5.564				ND	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.990				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.247				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

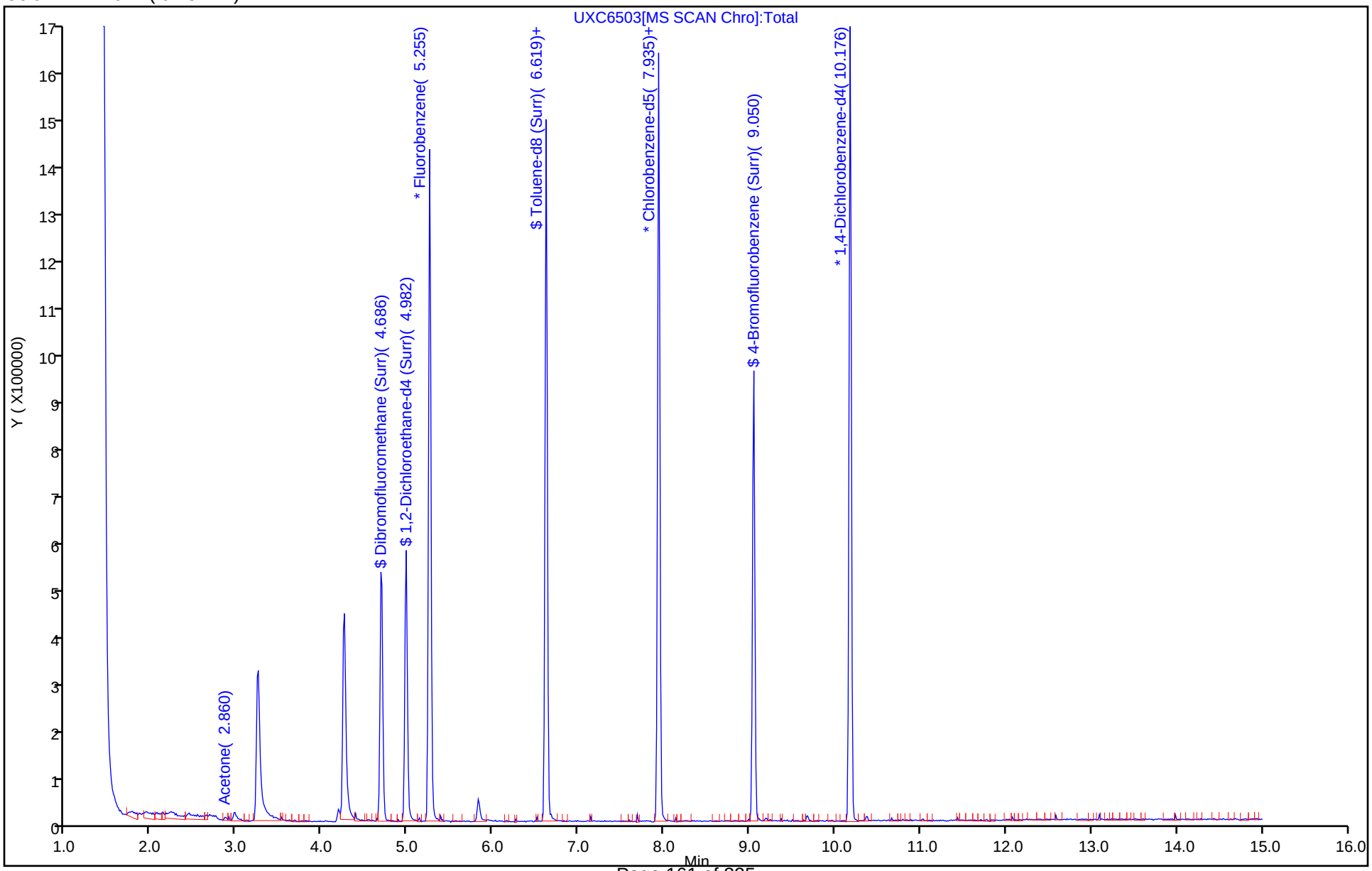
Report Date: 23-Oct-2018 09:34:22 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6503.D

Injection Date:	22-Oct-2018 17:25:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-14	Lab Sample ID:	240-102783-14	Worklist Smp#:	56
Client ID:	GW-101018-AF-047				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6503.D
Lims ID: 240-102783-B-14
Client ID: GW-101018-AF-047
Sample Type: Client
Inject. Date: 22-Oct-2018 17:25:30 ALS Bottle#: 24 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-056
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:28:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.93	124.64
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.81	110.50
$ 6 Toluene-d8 (Surr)	7.97	7.49	93.95
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.47	93.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-048 Lab Sample ID: 240-102783-15

Matrix: Water Lab File ID: UXC6504.D

Analysis Method: 8260B Date Collected: 10/10/2018 15:27

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 17:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	0.45	J	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	0.12	J	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-048 Lab Sample ID: 240-102783-15

Matrix: Water Lab File ID: UXC6504.D

Analysis Method: 8260B Date Collected: 10/10/2018 15:27

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 17:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	103		70-123
1868-53-7	Dibromofluoromethane (Surr)	124		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6504.D
Lims ID: 240-102783-B-15
Client ID: GW-101018-AF-048
Sample Type: Client
Inject. Date: 22-Oct-2018 17:47:30 ALS Bottle#: 25 Worklist Smp#: 57
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-057
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:29:12

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1490407	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1133483	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	614909	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	382305	9.90	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	0.000	100	454801	8.68	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1248838	8.21	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	397188	7.51	
	10 Chloromethane	50		1.721				ND	
	11 Vinyl chloride	62	1.804	1.816	-0.012	47	9326	0.1765	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.172				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.860	2.860	0.000	99	9288	2.22	
	24 Carbon disulfide	76	3.026	3.026	0.000	97	18835	0.1533	
	28 Methylene Chloride	84		3.227				ND	
	30 trans-1,2-Dichloroethene	96		3.465				ND	
	34 1,1-Dichloroethane	63		3.809				ND	
	39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	80	22130	0.4487	
	41 2-Butanone (MEK)	72		4.295				ND	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.852				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130	5.563	5.564	-0.001	85	5697	0.1173	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.990				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.247				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

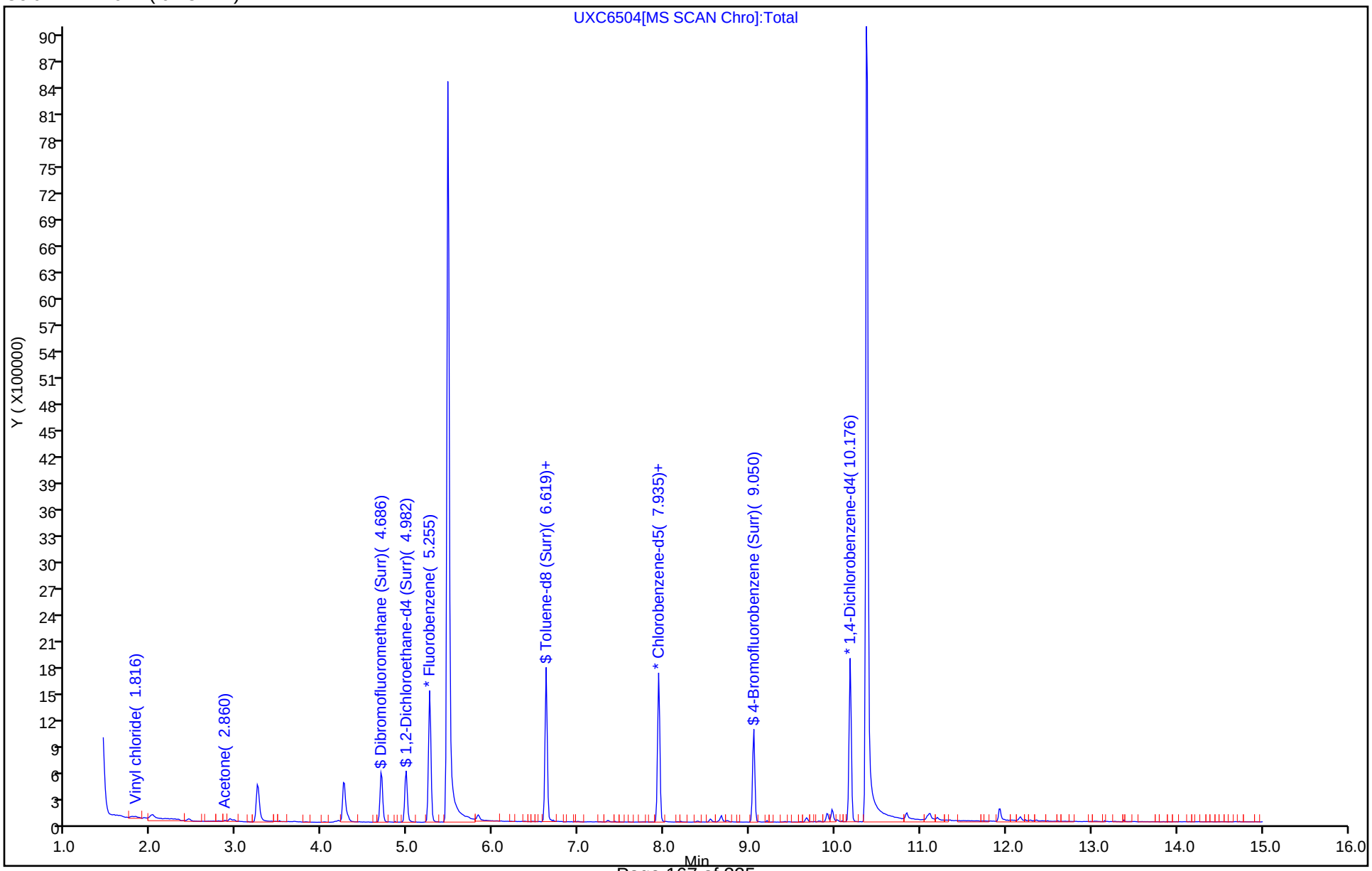
Report Date: 23-Oct-2018 09:34:27 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6504.D

Injection Date:	22-Oct-2018 17:47:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-15	Lab Sample ID:	240-102783-15	Worklist Smp#:	57
Client ID:	GW-101018-AF-048				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6504.D
Lims ID: 240-102783-B-15
Client ID: GW-101018-AF-048
Sample Type: Client
Inject. Date: 22-Oct-2018 17:47:30 ALS Bottle#: 25 Worklist Smp#: 57
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-057
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:29:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.90	124.16
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.68	108.92
$ 6 Toluene-d8 (Surr)	7.97	8.21	103.00
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.51	94.24

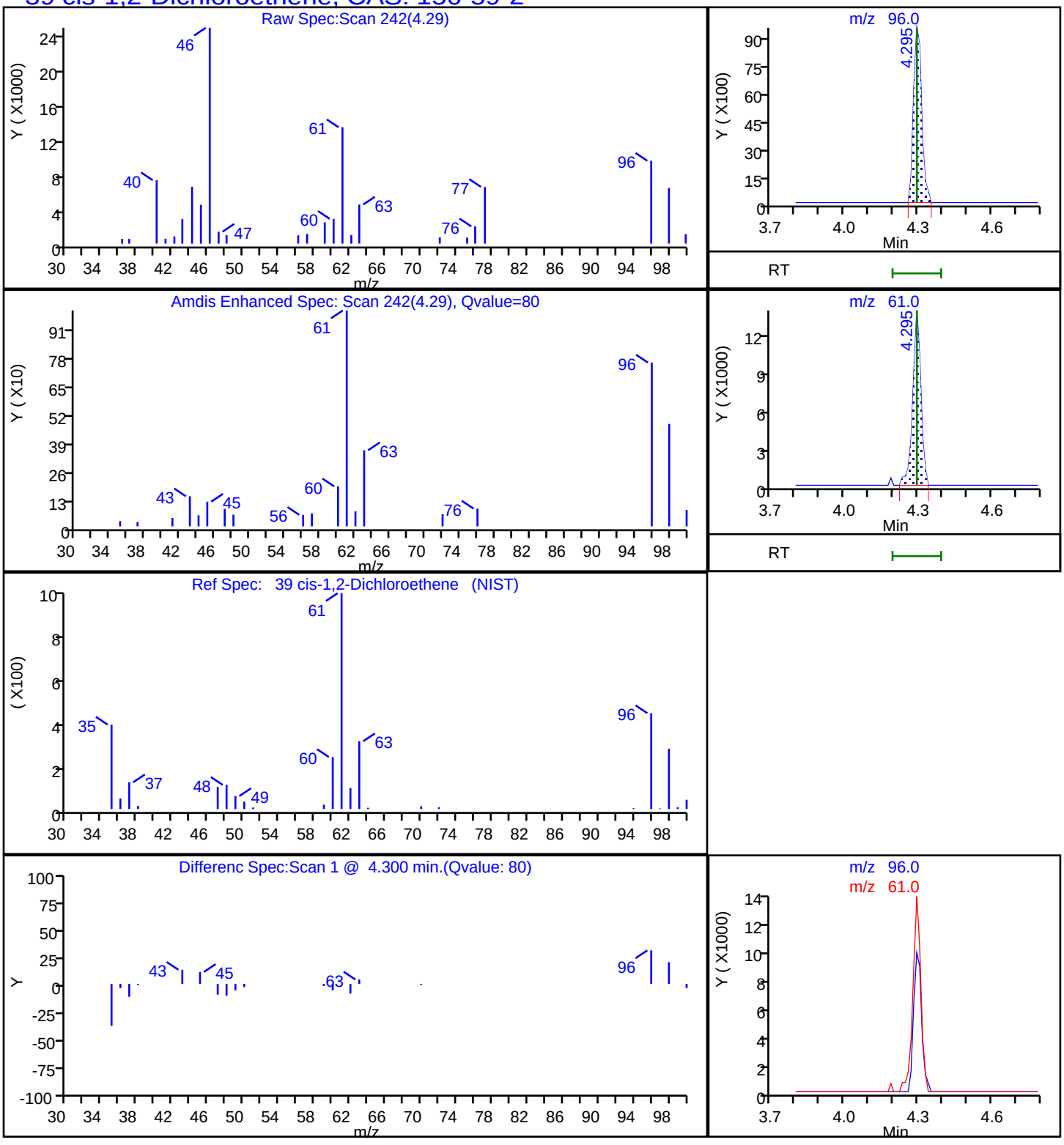
Report Date: 23-Oct-2018 09:34:28 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6504.D

Injection Date:	22-Oct-2018 17:47:30	Instrument ID:	A3UX15		
Lims ID:	240-102783-B-15	Lab Sample ID:	240-102783-15		
Client ID:	GW-101018-AF-048				
Operator ID:		ALS Bottle#:	25	Worklist Smp#:	57
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

39 cis-1,2-Dichloroethene, CAS: 156-59-2



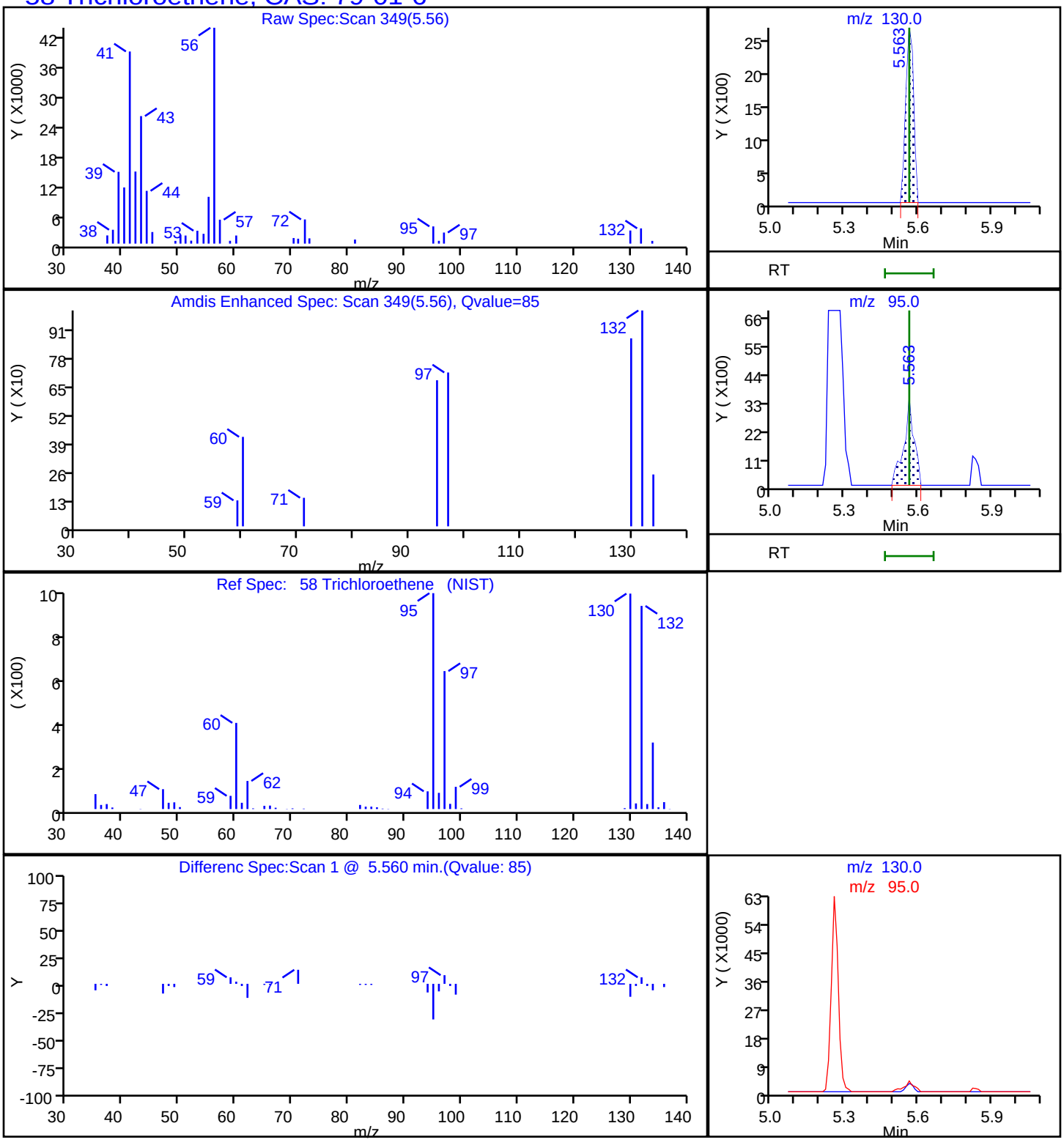
Report Date: 23-Oct-2018 09:34:28 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6504.D

Injection Date:	22-Oct-2018 17:47:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-15	Lab Sample ID:	240-102783-15
Client ID:	GW-101018-AF-048		
Operator ID:		ALS Bottle#:	25 Worklist Smp#: 57
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-049 Lab Sample ID: 240-102783-16

Matrix: Water Lab File ID: UXC6505.D

Analysis Method: 8260B Date Collected: 10/10/2018 15:30

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 18:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	0.38	J	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	0.14	J	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-049 Lab Sample ID: 240-102783-16

Matrix: Water Lab File ID: UXC6505.D

Analysis Method: 8260B Date Collected: 10/10/2018 15:30

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 18:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	88		59-120
2037-26-5	Toluene-d8 (Surr)	99		70-123
1868-53-7	Dibromofluoromethane (Surr)	117		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6505.D
Lims ID: 240-102783-B-16
Client ID: GW-101018-AF-049
Sample Type: Client
Inject. Date: 22-Oct-2018 18:08:30 ALS Bottle#: 26 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-058
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:30:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1481938	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1110389	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	94	581873	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	359573	9.36	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.001	99	426390	8.19	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1181296	7.93	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	364750	7.04	
	10 Chloromethane	50		1.721				ND	
	11 Vinyl chloride	62	1.816	1.816	0.000	40	9104	0.1733	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.172				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.872	2.860	0.012	97	12215	2.94	
	24 Carbon disulfide	76	3.038	3.026	0.012	99	19813	0.1622	
	28 Methylene Chloride	84	3.239	3.227	0.012	87	11181	0.2637	
	30 trans-1,2-Dichloroethene	96		3.465				ND	
	34 1,1-Dichloroethane	63		3.809				ND	
	39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	84	18534	0.3779	
	41 2-Butanone (MEK)	72	4.295	4.295	0.000	44	1591	0.3086	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.852				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130	5.564	5.564	0.000	86	6535	0.1354	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.990				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.247				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

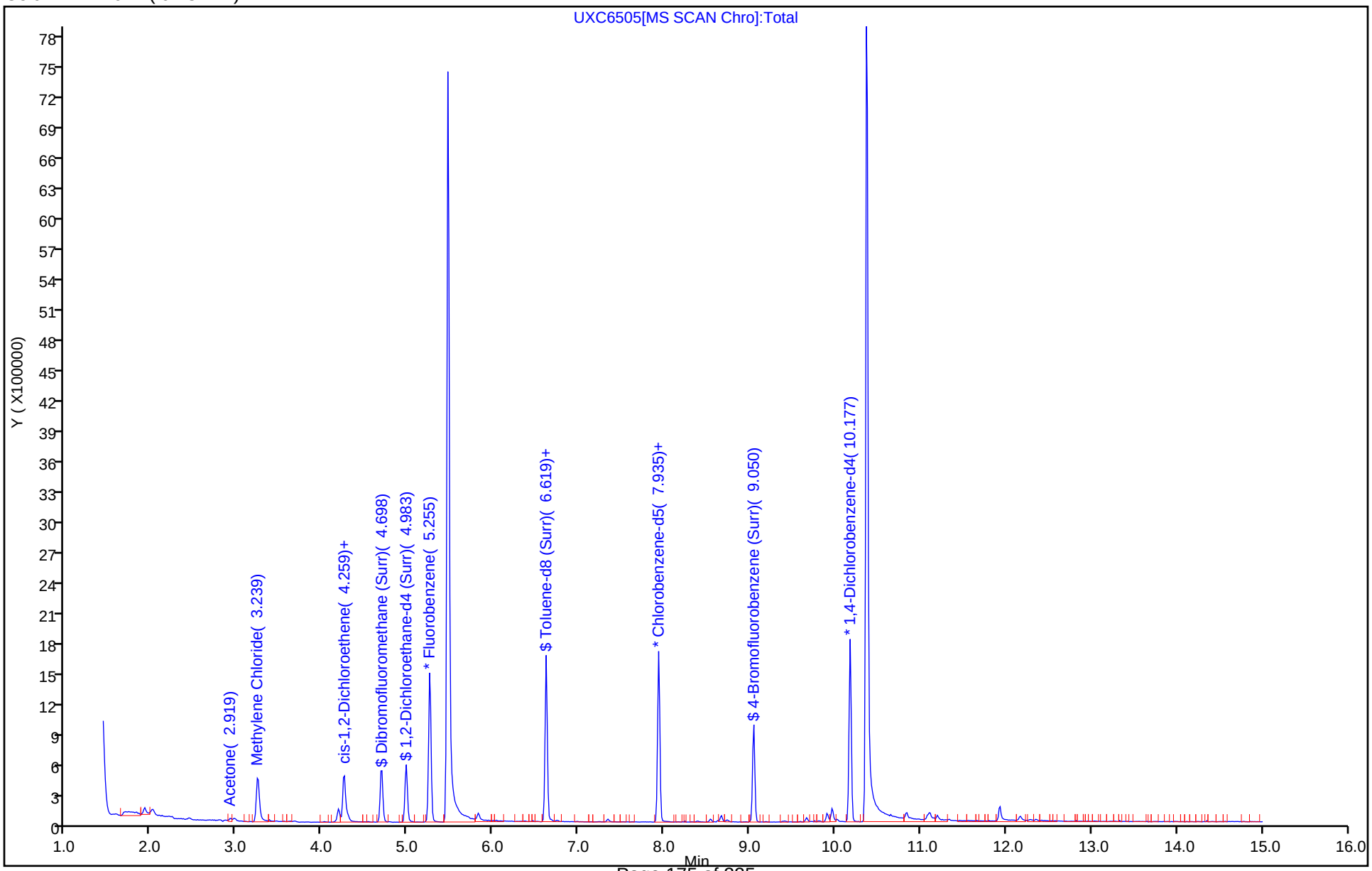
Report Date: 23-Oct-2018 09:34:32 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6505.D

Injection Date:	22-Oct-2018 18:08:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-16	Lab Sample ID:	240-102783-16	Worklist Smp#:	58
Client ID:	GW-101018-AF-049				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6505.D
Lims ID: 240-102783-B-16
Client ID: GW-101018-AF-049
Sample Type: Client
Inject. Date: 22-Oct-2018 18:08:30 ALS Bottle#: 26 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-058
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:30:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.36	117.45
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.19	102.70
$ 6 Toluene-d8 (Surr)	7.97	7.93	99.46
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.04	88.34

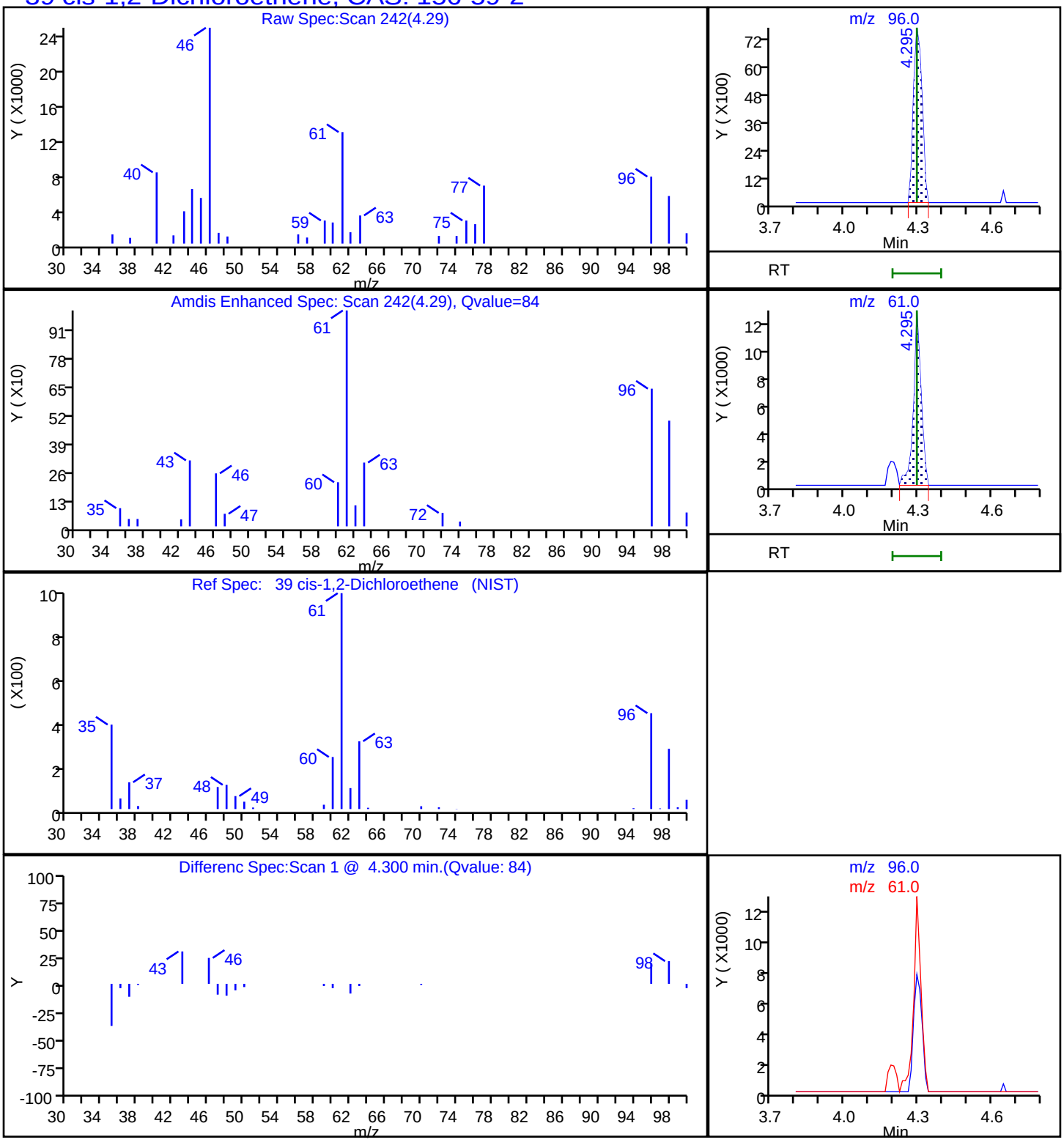
Report Date: 23-Oct-2018 09:34:33 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6505.D

Injection Date:	22-Oct-2018 18:08:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-16	Lab Sample ID:	240-102783-16
Client ID:	GW-101018-AF-049		
Operator ID:		ALS Bottle#:	26 Worklist Smp#: 58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

39 cis-1,2-Dichloroethene, CAS: 156-59-2



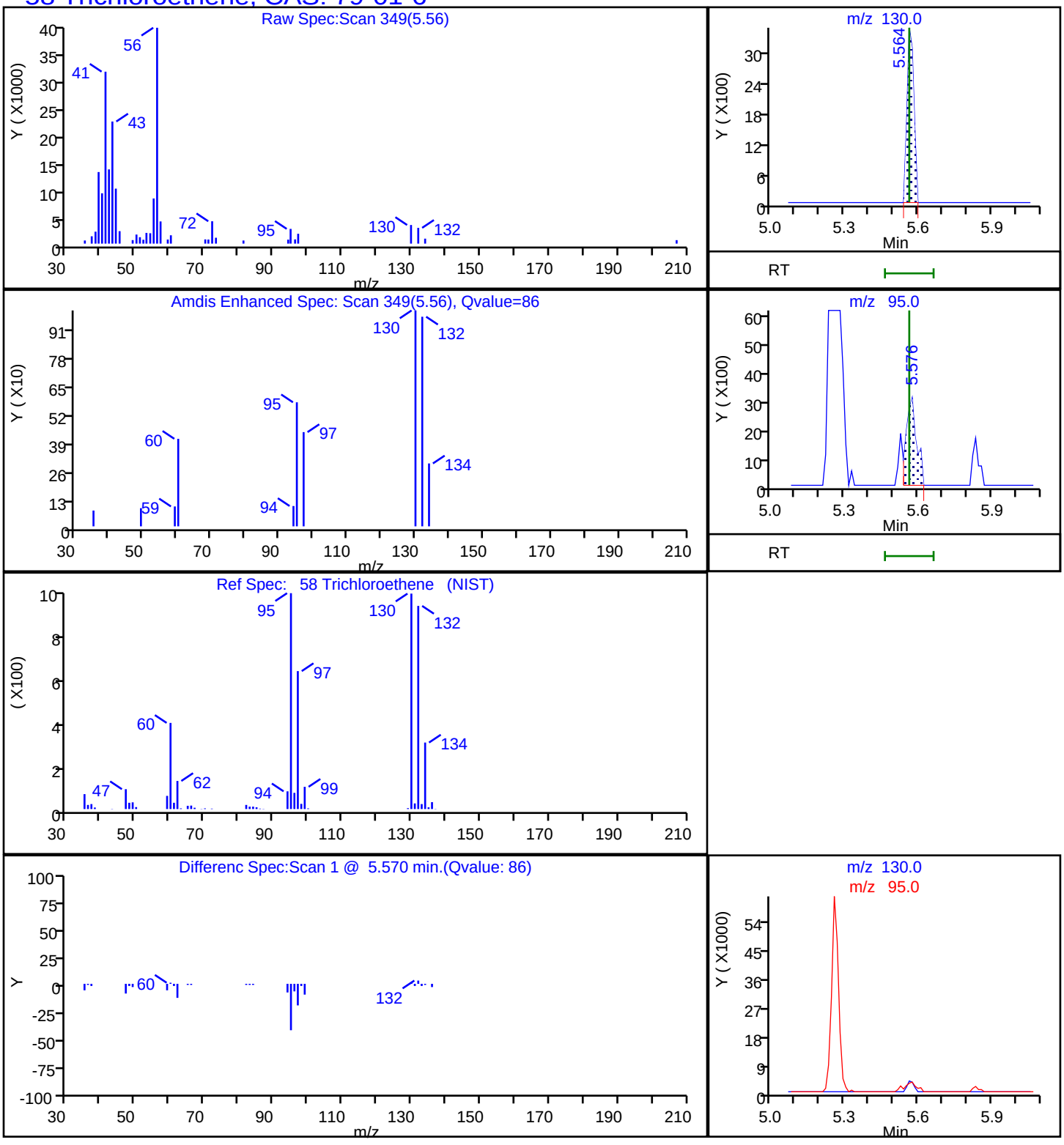
Report Date: 23-Oct-2018 09:34:33 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6505.D

Injection Date:	22-Oct-2018 18:08:30	Instrument ID:	A3UX15
Lims ID:	240-102783-B-16	Lab Sample ID:	240-102783-16
Client ID:	GW-101018-AF-049		
Operator ID:		ALS Bottle#:	26 Worklist Smp#: 58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-050 Lab Sample ID: 240-102783-17

Matrix: Water Lab File ID: UXC6515.D

Analysis Method: 8260B Date Collected: 10/10/2018 17:05

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 12:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-050 Lab Sample ID: 240-102783-17

Matrix: Water Lab File ID: UXC6515.D

Analysis Method: 8260B Date Collected: 10/10/2018 17:05

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 12:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-121
460-00-4	4-Bromofluorobenzene (Surr)	84		59-120
2037-26-5	Toluene-d8 (Surr)	89		70-123
1868-53-7	Dibromofluoromethane (Surr)	112		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6515.D
Lims ID: 240-102783-B-17
Client ID: GW-101018-AF-050
Sample Type: Client
Inject. Date: 23-Oct-2018 12:55:30 ALS Bottle#: 7 Worklist Smp#: 35
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-035
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: evansle Date: 23-Oct-2018 13:14:32

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1555459	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	86	1183484	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	580067	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	95	359728	8.92	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	-0.001	100	437847	8.01	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1132031	7.13	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	370504	6.71	
	10 Chloromethane	50		1.722				ND	
	11 Vinyl chloride	62		1.816				ND	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.184				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.860	2.872	-0.012	98	2022	0.4629	
	24 Carbon disulfide	76		3.026				ND	
	28 Methylene Chloride	84		3.239				ND	
	30 trans-1,2-Dichloroethene	96		3.465				ND	
	34 1,1-Dichloroethane	63		3.820				ND	
	39 cis-1,2-Dichloroethene	96		4.295				ND	
	41 2-Butanone (MEK)	72		4.307				ND	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.864				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130		5.564				ND	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.991				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.248				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.181				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

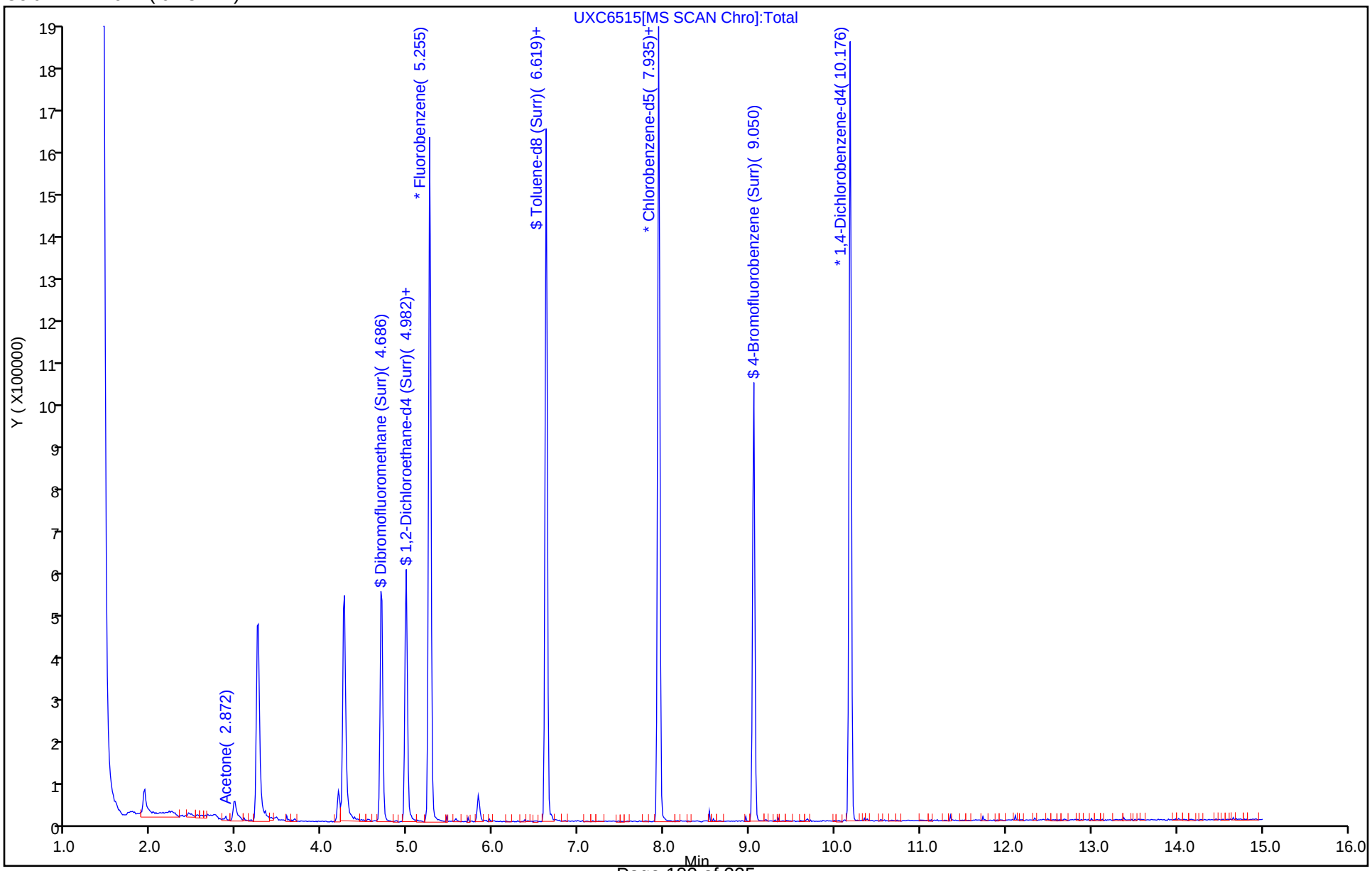
Report Date: 24-Oct-2018 08:08:00 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6515.D

Injection Date:	23-Oct-2018 12:55:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-17	Lab Sample ID:	240-102783-17	Worklist Smp#:	35
Client ID:	GW-101018-AF-050				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6515.D
Lims ID: 240-102783-B-17
Client ID: GW-101018-AF-050
Sample Type: Client
Inject. Date: 23-Oct-2018 12:55:30 ALS Bottle#: 7 Worklist Smp#: 35
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-035
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: evansle Date: 23-Oct-2018 13:14:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	8.92	111.94
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.01	100.47
$ 6 Toluene-d8 (Surr)	7.97	7.13	89.42
$ 7 4-Bromofluorobenzene (Surr)	7.97	6.71	84.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-051 Lab Sample ID: 240-102783-18

Matrix: Water Lab File ID: UXC6516.D

Analysis Method: 8260B Date Collected: 10/10/2018 18:15

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 13:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-051 Lab Sample ID: 240-102783-18

Matrix: Water Lab File ID: UXC6516.D

Analysis Method: 8260B Date Collected: 10/10/2018 18:15

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 13:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-121
460-00-4	4-Bromofluorobenzene (Surr)	89		59-120
2037-26-5	Toluene-d8 (Surr)	92		70-123
1868-53-7	Dibromofluoromethane (Surr)	116		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6516.D
Lims ID: 240-102783-B-18
Client ID: GW-101018-AF-051
Sample Type: Client
Inject. Date: 23-Oct-2018 13:17:30 ALS Bottle#: 8 Worklist Smp#: 36
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-036
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1594370	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	86	1204314	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	617298	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	380958	9.22	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	-0.001	99	445896	7.96	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1182144	7.31	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	396785	7.06	
	10 Chloromethane	50		1.722				ND	
	11 Vinyl chloride	62		1.816				ND	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.184				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.872	2.872	0.000	72	1343	0.3000	
	24 Carbon disulfide	76		3.026				ND	
	28 Methylene Chloride	84		3.239				ND	
	30 trans-1,2-Dichloroethene	96		3.465				ND	
	34 1,1-Dichloroethane	63		3.820				ND	
	39 cis-1,2-Dichloroethene	96		4.295				ND	
	41 2-Butanone (MEK)	72		4.307				ND	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.864				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130		5.564				ND	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.991				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	
	73 1,1,2-Trichloroethane	97		7.034				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.248				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.181				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

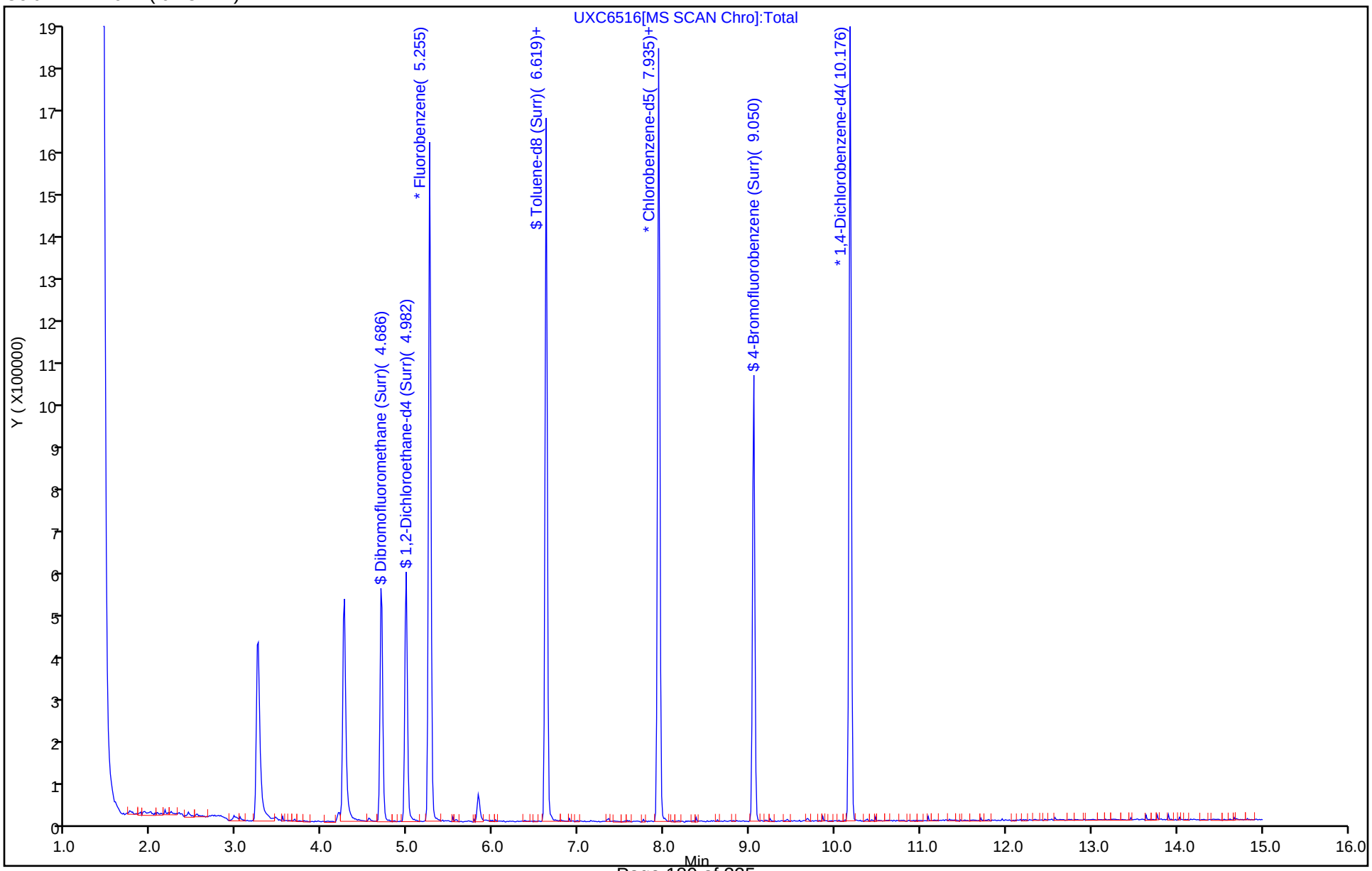
Report Date: 24-Oct-2018 08:08:02 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6516.D

Injection Date:	23-Oct-2018 13:17:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-18	Lab Sample ID:	240-102783-18	Worklist Smp#:	36
Client ID:	GW-101018-AF-051				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6516.D
Lims ID: 240-102783-B-18
Client ID: GW-101018-AF-051
Sample Type: Client
Inject. Date: 23-Oct-2018 13:17:30 ALS Bottle#: 8 Worklist Smp#: 36
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-036
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.22	115.66
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	7.96	99.82
$ 6 Toluene-d8 (Surr)	7.97	7.31	91.76
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.06	88.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: TB-101118-AF-006 Lab Sample ID: 240-102783-19

Matrix: Water Lab File ID: UXC6517.D

Analysis Method: 8260B Date Collected: 10/11/2018 15:30

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 13:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: TB-101118-AF-006 Lab Sample ID: 240-102783-19

Matrix: Water Lab File ID: UXC6517.D

Analysis Method: 8260B Date Collected: 10/11/2018 15:30

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 13:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-121
460-00-4	4-Bromofluorobenzene (Surr)	90		59-120
2037-26-5	Toluene-d8 (Surr)	95		70-123
1868-53-7	Dibromofluoromethane (Surr)	119		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6517.D
Lims ID: 240-102783-A-19
Client ID: TB-101118-AF-006
Sample Type: Client
Inject. Date: 23-Oct-2018 13:38:30 ALS Bottle#: 9 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-037
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1488980	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	86	1098849	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	94	540902	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	366932	9.51	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	-0.001	100	435970	8.33	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1114131	7.55	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	368923	7.20	
	10 Chloromethane	50		1.722				ND	
	11 Vinyl chloride	62		1.816				ND	
	13 Bromomethane	94		2.101				ND	
	14 Chloroethane	64		2.184				ND	
	19 1,1-Dichloroethene	96		2.824				ND	
	22 Acetone	58	2.872	2.872	0.000	99	5673	1.36	
	24 Carbon disulfide	76		3.026				ND	
	28 Methylene Chloride	84		3.239				ND	
	30 trans-1,2-Dichloroethene	96		3.465				ND	
	34 1,1-Dichloroethane	63		3.820				ND	
	39 cis-1,2-Dichloroethene	96		4.295				ND	
	41 2-Butanone (MEK)	72		4.307				ND	
	47 Chloroform	83		4.556				ND	
	48 1,1,1-Trichloroethane	97		4.722				ND	
	50 Carbon tetrachloride	117		4.864				ND	
	53 Benzene	78		5.030				ND	
	54 1,2-Dichloroethane	62		5.042				ND	
	58 Trichloroethene	130		5.564				ND	
	61 1,2-Dichloropropane	63		5.765				ND	
	65 Dichlorobromomethane	83		5.991				ND	
	68 cis-1,3-Dichloropropene	75		6.382				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	
	70 Toluene	91		6.678				ND	
	71 trans-1,3-Dichloropropene	75		6.868				ND	
	73 1,1,2-Trichloroethane	97		7.034				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.248				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.181				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

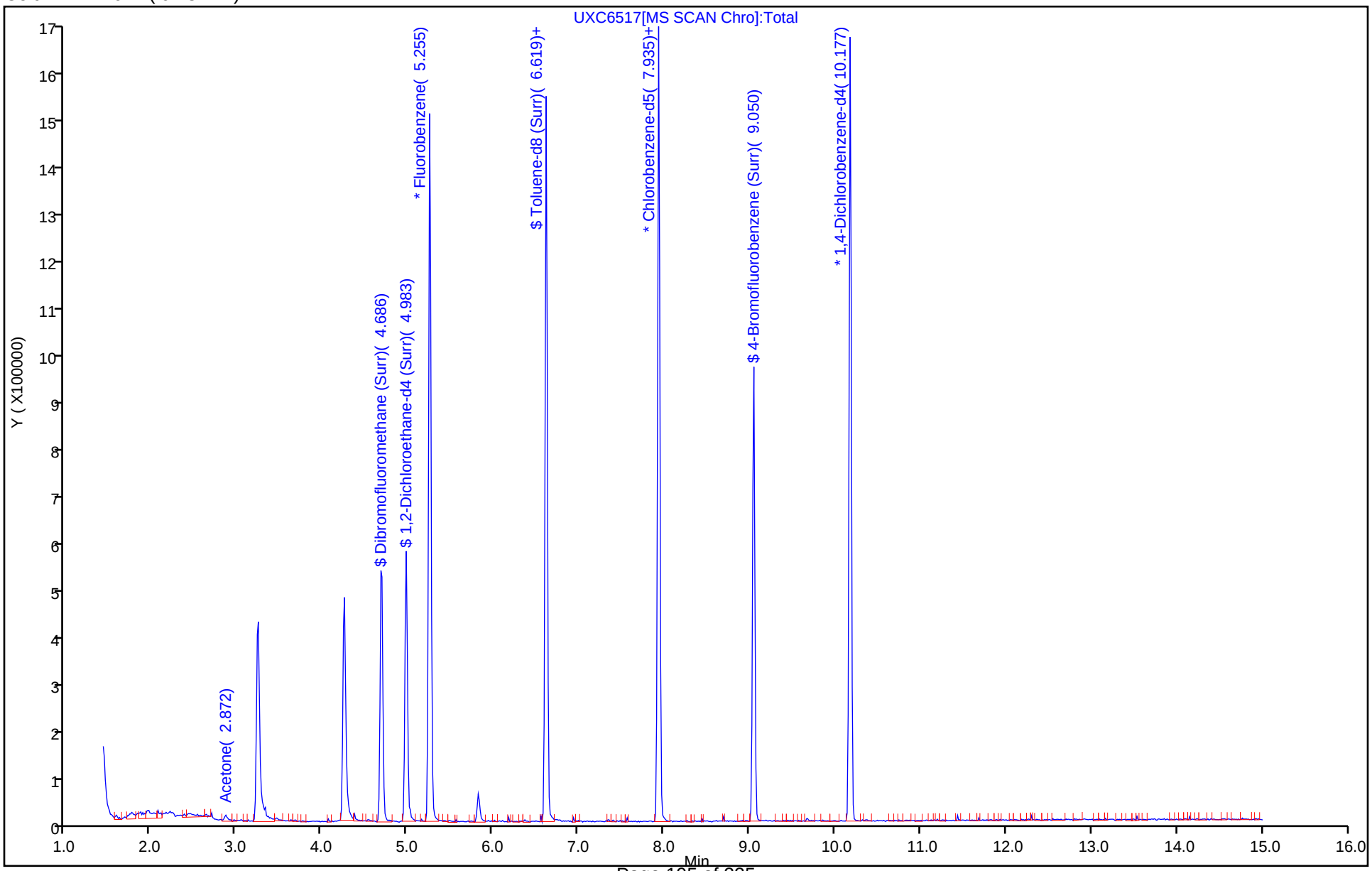
Report Date: 24-Oct-2018 08:08:05 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6517.D

Injection Date:	23-Oct-2018 13:38:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-A-19	Lab Sample ID:	240-102783-19	Worklist Smp#:	37
Client ID:	TB-101118-AF-006				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6517.D
Lims ID: 240-102783-A-19
Client ID: TB-101118-AF-006
Sample Type: Client
Inject. Date: 23-Oct-2018 13:38:30 ALS Bottle#: 9 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-037
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.51	119.28
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.33	104.51
$ 6 Toluene-d8 (Surr)	7.97	7.55	94.79
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.20	90.29

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-342615/7	UXC4608.D
Level 2	STD8260 240-342615/6	UXC4607.D
Level 3	STD8260 240-342615/5	UXC4606.D
Level 4	STD8260 240-342615/4	UXC4605.D
Level 5	STD8260 240-342615/3	UXC4604.D
Level 6	STD8260 240-342615/2	UXC4603.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3700 0.3351	0.3445	0.3777	0.3534	0.3586	Ave		0.3565				4.4		15.0			
Chloromethane	0.3603 0.3037	0.3336	0.3594	0.3337	0.3433	Ave		0.3390			0.1000	6.2		15.0			
Vinyl chloride	0.3948 0.3237	0.3540	0.3667	0.3520	0.3355	Ave		0.3545				7.0		15.0			
Butadiene	0.4802 0.3676	0.4306	0.4594	0.4060	0.4001	Ave		0.4240				9.7		15.0			
Bromomethane	0.3290 0.2588	0.2597	0.3035	0.2611	0.2584	Ave		0.2784				10.9		15.0			
Chloroethane	0.2646 0.2251	0.2236	0.2605	0.2323	0.2285	Ave		0.2391				7.7		15.0			
Dichlorofluoromethane	0.6883 0.5621	0.5727	0.6292	0.5859	0.5795	Ave		0.6029				7.9		15.0			
Trichlorofluoromethane	0.5862 0.5718	0.5378	0.5745	0.5730	0.5806	Ave		0.5707				3.0		15.0			
Ethyl ether	0.3038 0.2747	0.2898	0.3077	0.2878	0.2929	Ave		0.2928				4.1		15.0			
Acrolein	0.0613 0.0531	0.0543	0.0511	0.0561	0.0563	Ave		0.0554				6.3		15.0			
1,1-Dichloroethene	0.2967 0.3039	0.3104	0.2795	0.3411	0.2766	Ave		0.3014				7.8		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2324 0.2256	0.2224	0.2097	0.2616	0.2048	Ave		0.2261				8.9		15.0			
Acetone	0.0296 0.0248	0.0322	0.0280	0.0292	0.0247	Ave		0.0281				10.4		15.0			
Iodomethane	0.4518 0.4053	0.4603	0.4192	0.4450	0.4144	Ave		0.4327				5.2		15.0			
Carbon disulfide	0.9427 0.7083	0.8967	0.8299	0.8127	0.7550	Ave		0.8242				10.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.1911 0.1755	0.1873	0.1944	0.1795	0.1820	Ave		0.1850				3.9		15.0			
Methyl acetate	0.2265 0.1963	0.2094	0.2131	0.2124	0.2076	Ave		0.2109				4.6		15.0			
Methylene Chloride	0.3147 0.2588	0.3053	0.2767	0.2900	0.2712	Ave		0.2861				7.4		15.0			
2-Methyl-2-propanol	0.0202 0.0186	0.0209	0.0207	0.0183	0.0185	Ave		0.0195				6.1		15.0			
Acrylonitrile	0.1101 0.1017	0.1058	0.1083	0.1061	0.1061	Ave		0.1063				2.6		15.0			
Methyl tert-butyl ether	0.7741 0.7898	0.7888	0.7947	0.7982	0.8070	Ave		0.7921				1.4		15.0			
trans-1,2-Dichloroethene	0.3308 0.2800	0.3096	0.3039	0.2979	0.2927	Ave		0.3025				5.7		15.0			
Hexane	0.0868 0.0709	0.0729	0.0740	0.0708	0.0742	Ave		0.0749				8.0		15.0			
1,1-Dichloroethane	0.5168 0.4610	0.5028	0.4979	0.4940	0.4837	Ave		0.4927			0.1000	3.9		15.0			
Vinyl acetate	0.4592 0.4640	0.4092	0.4349	0.4512	0.4877	Ave		0.4510				5.9		15.0			
2,2-Dichloropropane	0.0563 0.0552	0.0575	0.0558	0.0637	0.0610	Ave		0.0583				5.8		15.0			
cis-1,2-Dichloroethene	0.3678 0.3026	0.3388	0.3360	0.3239	0.3166	Ave		0.3309				6.8		15.0			
2-Butanone (MEK)	0.0359 0.0331	0.0333	0.0368	0.0342	0.0353	Ave		0.0348				4.2		15.0			
Chlorobromomethane	0.1643 0.1462	0.1627	0.1574	0.1552	0.1518	Ave		0.1563				4.3		15.0			
Tetrahydrofuran	0.1686 0.0763	0.1178	0.0987	0.0857	0.0820	Lin1	0.1885	0.0754							0.9990		0.9900
Chloroform	0.5287 0.4702	0.5114	0.5088	0.5006	0.4914	Ave		0.5019				4.0		15.0			
1,1,1-Trichloroethane	0.3891 0.3449	0.3722	0.3666	0.3940	0.3688	Ave		0.3726				4.7		15.0			
Cyclohexane	0.4670 0.4328	0.4709	0.4707	0.4560	0.4491	Ave		0.4577				3.3		15.0			
1,1-Dichloropropene	0.4449 0.3772	0.4247	0.4174	0.4024	0.3935	Ave		0.4100				5.9		15.0			
Carbon tetrachloride	0.3176 0.3270	0.3134	0.3217	0.3365	0.3370	Ave		0.3255				3.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0048 0.0066	0.0056	0.0062	0.0062	0.0066	Ave		0.0060				11.6		15.0			
Benzene	1.2946 1.1429	1.2112	1.2043	1.1832	1.1732	Ave		1.2016				4.3		15.0			
1,2-Dichloroethane	0.4609 0.3973	0.4220	0.4345	0.4133	0.4192	Ave		0.4245				5.1		15.0			
n-Heptane	0.0784 0.0723	0.0713	0.0769	0.0710	0.0724	Ave		0.0737				4.3		15.0			
Trichloroethene	0.3558 0.3002	0.3260	0.3345	0.3180	0.3204	Ave		0.3258				5.7		15.0			
Methylcyclohexane	0.4938 0.4565	0.4570	0.4737	0.4663	0.4704	Ave		0.4696				2.9		15.0			
1,2-Dichloropropane	0.3143 0.2567	0.2752	0.2790	0.2696	0.2707	Ave		0.2776				7.0		15.0			
1,4-Dioxane	0.0026 0.0021	0.0030	0.0029	0.0021	0.0022	Lin1	0.0232	0.0021							0.9900		0.9900
Dibromomethane	0.1989 0.1672	0.1833	0.1822	0.1789	0.1762	Ave		0.1811				5.8		15.0			
Dichlorobromomethane	0.3603 0.3572	0.3464	0.3653	0.3609	0.3711	Ave		0.3602				2.3		15.0			
2-Chloroethyl vinyl ether	0.1635 0.1618	0.1466	0.1679	0.1602	0.1701	Ave		0.1617				5.1		15.0			
cis-1,3-Dichloropropene	0.4036 0.4193	0.3826	0.4095	0.4117	0.4310	Ave		0.4096				4.0		15.0			
4-Methyl-2-pentanone (MIBK)	0.2640 0.2507	0.2619	0.2740	0.2594	0.2632	Ave		0.2622				2.9		15.0			
Toluene	1.7323 1.5692	1.6192	1.6097	1.5966	1.5916	Ave		1.6198				3.6		15.0			
trans-1,3-Dichloropropene	0.4469 0.4788	0.4198	0.4530	0.4623	0.4839	Ave		0.4575				5.1		15.0			
Ethyl methacrylate	0.3640 0.4196	0.3517	0.4158	0.4159	0.4313	Ave		0.3997				8.3		15.0			
1,1,2-Trichloroethane	0.3244 0.2860	0.3066	0.3098	0.3049	0.3067	Ave		0.3064				4.0		15.0			
Tetrachloroethene	0.3436 0.3091	0.3265	0.3337	0.3242	0.3153	Ave		0.3254				3.8		15.0			
1,3-Dichloropropane	0.5652 0.5094	0.5600	0.5645	0.5356	0.5360	Ave		0.5451				4.1		15.0			
2-Hexanone	0.2275 0.2089	0.2074	0.2404	0.2220	0.2222	Ave		0.2214				5.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.2932 0.3336	0.2885	0.3052	0.3235	0.3338	Ave		0.3130				6.4		15.0			
Ethylene Dibromide	0.3415 0.3017	0.3151	0.3247	0.3159	0.3196	Ave		0.3198				4.1		15.0			
Chlorobenzene	1.1037 0.9790	1.0269	1.0233	1.0294	0.9982	Ave		1.0268			0.3000	4.1		15.0			
1,1,1,2-Tetrachloroethane	0.3179 0.3294	0.3018	0.3151	0.3233	0.3269	Ave		0.3191				3.1		15.0			
Ethylbenzene	0.5946 0.5481	0.5495	0.5542	0.5552	0.5485	Ave		0.5584				3.2		15.0			
m-Xylene & p-Xylene	1.4106 1.3324	1.3399	1.3561	1.3134	1.3407	Ave		1.3489				2.5		15.0			
o-Xylene	0.6892 0.6772	0.6762	0.6665	0.6780	0.6756	Ave		0.6771				1.1		15.0			
Styrene	1.1163 1.1726	1.0894	1.1487	1.1356	1.1506	Ave		1.1355				2.6		15.0			
Bromoform	0.1645 0.2246	0.1641	0.1853	0.1977	0.2132	Ave		0.1916			0.1000	13.0		15.0			
Isopropylbenzene	1.7219 1.7218	1.6759	1.6937	1.6901	1.7031	Ave		1.7011				1.1		15.0			
1,1,2,2-Tetrachloroethane	0.7282 0.6359	0.7281	0.7454	0.7374	0.6990	Ave		0.7123			0.3000	5.7		15.0			
Bromobenzene	0.8345 0.7380	0.8377	0.8171	0.8135	0.7949	Ave		0.8059				4.6		15.0			
1,2,3-Trichloropropane	0.2638 0.2181	0.2506	0.2535	0.2537	0.2465	Ave		0.2477				6.3		15.0			
trans-1,4-Dichloro-2-butene	0.1688 0.1822	0.1494	0.1892	0.1802	0.1863	Ave		0.1760				8.4		15.0			
N-Propylbenzene	0.8435 0.7888	0.8429	0.8209	0.8470	0.8303	Ave		0.8289				2.6		15.0			
2-Chlorotoluene	0.7461 0.6758	0.7427	0.7261	0.7429	0.7086	Ave		0.7237				3.8		15.0			
1,3,5-Trimethylbenzene	2.5474 2.3785	2.4763	2.4890	2.5174	2.5114	Ave		2.4867				2.3		15.0			
4-Chlorotoluene	2.6257 2.2862	2.5313	2.4777	2.4699	2.4410	Ave		2.4720				4.5		15.0			
tert-Butylbenzene	2.3128 2.0694	2.1756	2.2341	2.2147	2.1920	Ave		2.1998				3.6		15.0			
1,2,4-Trimethylbenzene	2.6893 2.4762	2.6002	2.5965	2.6467	2.5905	Ave		2.5999				2.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	3.0622 2.8101	2.9499	2.9965	2.9707	2.9828	Ave		2.9620				2.8		15.0			
1,3-Dichlorobenzene	1.5755 1.3702	1.5096	1.5028	1.4623	1.4318	Ave		1.4754				4.8		15.0			
4-Isopropyltoluene	2.6479 2.5122	2.6049	2.6416	2.6264	2.6597	Ave		2.6154				2.1		15.0			
1,4-Dichlorobenzene	1.6978 1.4349	1.5827	1.5363	1.5108	1.4922	Ave		1.5424				5.9		15.0			
n-Butylbenzene	2.2989 1.9965	2.2164	2.2662	2.2023	2.1541	Ave		2.1891				4.9		15.0			
1,2-Dichlorobenzene	1.4990 1.3278	1.4841	1.4415	1.4044	1.3749	Ave		1.4220				4.6		15.0			
1,2-Dibromo-3-Chloropropane	0.1209 0.1349	0.1281	0.1430	0.1368	0.1389	Ave		0.1338				6.0		15.0			
1,2,4-Trichlorobenzene	1.0301 0.7046	0.9703	0.9932	0.8041	0.7581	Lin1	0.4931	0.7226							0.9930		0.9900
Hexachlorobutadiene	0.5751 0.3007	0.5311	0.4896	0.3929	0.3470	Qua	0.3543	0.3775	-0.002156						0.9990		0.9900
Naphthalene	2.4909 1.9225	2.5429	2.5827	2.1350	2.0572	Ave		2.2885				12.4		15.0			
1,2,3-Trichlorobenzene	0.9558 0.6213	0.9179	0.8963	0.6940	0.6628	Lin1	0.5119	0.6314							0.9920		0.9900
Dibromofluoromethane (Surr)	0.2772 0.2494	0.2365	0.2667	0.2661	0.2595	Ave		0.2592				5.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3800 0.3273	0.3369	0.3610	0.3553	0.3486	Ave		0.3515				5.3		15.0			
Toluene-d8 (Surr)	1.3687 1.3273	1.2509	1.3791	1.3797	1.3471	Ave		1.3421				3.7		15.0			
4-Bromofluorobenzene (Surr)	0.4937 0.4621	0.4373	0.4718	0.4739	0.4605	Ave		0.4665				4.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-342615/7	UXC4608.D
Level 2	STD8260 240-342615/6	UXC4607.D
Level 3	STD8260 240-342615/5	UXC4606.D
Level 4	STD8260 240-342615/4	UXC4605.D
Level 5	STD8260 240-342615/3	UXC4604.D
Level 6	STD8260 240-342615/2	UXC4603.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	51090 2151019	99449	263574	514967	1084602	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	49755 1949437	96314	250803	486195	1038482	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	54514 2077902	102198	255916	512831	1014909	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	66308 2359744	124291	320588	591560	1210237	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	45430 1661505	74964	211810	380445	781682	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	36530 1445182	64547	181806	338465	691069	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	95036 3607918	165328	439090	853684	1752766	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	80946 3670417	155260	400963	834925	1756160	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	41947 1763199	83644	214762	419282	885893	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	42299 1704038	78340	178383	408826	852133	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	40975 1950630	89599	195061	496990	836602	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	32084 1448354	64198	146352	381213	619547	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	8171 317797	18581	39046	85201	149667	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	62391 2601840	132860	292570	648378	1253537	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	130163 4546547	258844	579203	1184137	2283845	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	26387 1126808	54065	135704	261489	550419	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	62540 2519509	120893	297438	619046	1256154	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	43451 1661037	88133	193120	422521	820454	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	27927 1195418	60280	144216	266659	558768	10.0 400	20.0	50.0	100	200
Acrylonitrile	FB	Ave	151973 6531285	305390	756029	1545241	3209434	10.0 400	20.0	50.0	100	200
Methyl tert-butyl ether	FB	Ave	106890 5069745	227704	554587	1162934	2441171	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	45683 1797327	89378	212075	434049	885324	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	11991 454877	21037	51625	103099	224378	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	71365 2958891	145135	347475	719694	1463087	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	63403 2978765	118113	303494	657464	1475305	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	7779 354388	16588	38943	92883	184461	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	50784 1942211	97789	234487	471955	957605	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	9914 425288	19248	51396	99704	213792	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	22686 938193	46975	109826	226061	459253	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Lin1	46565 979284	67986	137826	249598	496322	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	73006 3018378	147623	355113	729439	1486261	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	53729 2213784	107448	255837	574099	1115496	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	64478 2777916	135925	328506	664362	1358408	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	61427 2421434	122585	291324	586242	1190202	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	43848 2099055	90460	224508	490254	1019237	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	16618 1054973	40146	107586	226791	502500	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	178764 7336120	349635	840471	1723985	3548810	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	63635 2550136	121816	303249	602108	1268087	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	10828 463913	20569	53656	103443	218846	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	49124 1926774	94117	233418	463284	969151	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	68185 2930264	131910	330609	679361	1422820	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	43396 1647905	79430	194745	392754	818828	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Lin1	7172 268216	17039	40852	61679	135171	20.0 800	40.0	100	200	400
Dibromomethane	FB	Ave	27467 1073081	52909	127136	260728	532937	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorobromomethane	FB	Ave	49747 2292578	99989	254947	525886	1122493	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	45157 2076912	84614	234337	466916	1029015	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	55734 2691410	110446	285804	599906	1303555	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	72911 3217945	151182	382397	755826	1592323	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBNZ d5	Ave	184784 8097475	360112	881362	1804119	3847132	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	47670 2470937	93357	248052	522430	1169665	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	38829 2165277	78210	227664	469921	1042625	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	34603 1476032	68188	169610	344482	741419	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	36649 1594779	72611	182728	366357	762245	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	60294 2628824	124554	309080	605243	1295545	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	48544 2155808	92271	263267	501703	1074153	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	31278 1721372	64155	167099	365569	806953	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	36430 1556983	70071	177787	357004	772553	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	117733 5052017	228397	560251	1163232	2412875	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	33907 1699887	67113	172536	365327	790289	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	63425 2828371	122210	303457	627398	1325912	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	150472 6875454	298005	742495	1484111	3240775	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	73518 3494468	150387	364913	766072	1633090	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	119079 6050686	242295	628913	1283228	2781246	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Ave	17545 1158753	36504	101434	223352	515442	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	183680 8884599	372726	927335	1909735	4116767	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	42907 1972167	88499	229450	454586	941592	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	49172 2288647	101826	251514	501479	1070768	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	15543 676341	30467	78022	156410	332054	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	9948 565067	18164	58240	111071	250921	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	49701 2446119	102452	252689	522131	1118492	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	43960 2095834	90274	223486	457984	954592	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	150099 7376294	301004	766132	1551836	3383149	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	154714 7090013	307681	762649	1522582	3288381	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	136275 6417476	264446	687688	1365241	2952867	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	158463 7679166	316061	799221	1631571	3489704	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	180431 8714666	358564	922349	1831274	4018191	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	92830 4249364	183499	462588	901423	1928776	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	156020 7790696	316632	813114	1619033	3582920	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	100040 4449820	192375	472879	931313	2010234	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	135459 6191555	269407	697566	1357600	2901891	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	88325 4117858	180401	443716	865716	1852120	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	7126 418372	15572	44032	84343	187127	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Lin1	60696 2185024	117937	305726	495697	1021303	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Qua	33885 932429	64554	150712	242174	467463	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCBd 4	Ave	146771 5961997	309095	794990	1316144	2771303	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Lin1	56321 1926671	111571	275892	427842	892903	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	38282 1600795	68259	186126	387653	784787	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	52466 2100742	97249	251959	517731	1054547	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	145998 6849199	278202	755069	1559068	3256156	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	52658 2384620	97247	258316	535504	1113098	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Report Date: 28-Aug-2018 10:27:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4603.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Aug-2018 10:56:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-002
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:16 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 27-Aug-2018 11:40:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1604772	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1290043	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.176	0.001	93	775295	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	1600795	40.0	38.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.982	0.001	100	2100742	40.0	37.2	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	6849199	40.0	39.6	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	2384620	40.0	39.6	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	2151019	40.0	37.6	
10 Chloromethane	50	1.721	1.721	0.000	99	1949437	40.0	35.8	
11 Vinyl chloride	62	1.816	1.816	0.000	99	2077902	40.0	36.5	
12 Butadiene	54	1.828	1.828	0.000	98	2359744	40.0	34.7	
13 Bromomethane	94	2.101	2.101	0.000	91	1661505	40.0	37.2	
14 Chloroethane	64	2.184	2.184	0.000	100	1445182	40.0	37.7	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	99	3607918	40.0	37.3	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	99	3670417	40.0	40.1	
17 Ethyl ether	59	2.611	2.623	-0.012	91	1763199	40.0	37.5	
18 Acrolein	56	2.741	2.741	0.000	99	1704038	200.0	191.8	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	1950630	40.0	40.3	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	92	1448354	40.0	39.9	
22 Acetone	58	2.872	2.860	0.012	99	317797	80.0	70.5	
23 Iodomethane	142	2.967	2.966	0.001	99	2601840	40.0	37.5	
24 Carbon disulfide	76	3.026	3.026	0.000	100	4546547	40.0	34.4	
27 Methyl acetate	43	3.133	3.132	0.001	98	2519509	80.0	74.4	
25 3-Chloro-1-propene	76	3.121	3.132	-0.011	88	1126808	40.0	38.0	
28 Methylene Chloride	84	3.227	3.227	0.000	92	1661037	40.0	36.2	
29 2-Methyl-2-propanol	59	3.322	3.310	0.012	96	1195418	400.0	381.5	
32 Acrylonitrile	53	3.441	3.441	0.000	99	6531285	400.0	382.7	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	96	5069745	40.0	39.9	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	94	1797327	40.0	37.0	
33 Hexane	86	3.678	3.678	0.000	93	454877	40.0	37.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.809	3.820	-0.011	97	2958891	40.0	37.4	
36 Vinyl acetate	43	3.844	3.844	0.000	97	2978765	40.0	41.2	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	84	1942211	40.0	36.6	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	64	354388	40.0	37.9	
41 2-Butanone (MEK)	72	4.307	4.306	0.001	99	425288	80.0	76.2	
45 Chlorobromomethane	128	4.496	4.496	0.000	94	938193	40.0	37.4	
46 Tetrahydrofuran	42	4.532	4.544	-0.012	87	979284	80.0	78.4	
47 Chloroform	83	4.556	4.556	0.000	96	3018378	40.0	37.5	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	2213784	40.0	37.0	
49 Cyclohexane	56	4.769	4.769	0.000	91	2777916	40.0	37.8	
50 Carbon tetrachloride	117	4.852	4.852	0.000	84	2099055	40.0	40.2	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	2421434	40.0	36.8	
52 Isobutyl alcohol	41	4.911	4.911	0.000	93	1054973	1000.0	1096.0	
53 Benzene	78	5.030	5.030	0.000	95	7336120	40.0	38.0	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	2550136	40.0	37.4	
56 n-Heptane	100	5.220	5.220	0.000	93	463913	40.0	39.2	
58 Trichloroethene	130	5.564	5.563	0.001	96	1926774	40.0	36.9	
60 Methylcyclohexane	83	5.730	5.730	0.000	91	2930264	40.0	38.9	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	1647905	40.0	37.0	
63 Dibromomethane	93	5.872	5.872	0.000	92	1073081	40.0	36.9	
64 1,4-Dioxane	88	5.872	5.872	0.000	37	268216	800.0	776.4	
65 Dichlorobromomethane	83	5.991	5.990	0.000	99	2292578	40.0	39.7	
67 2-Chloroethyl vinyl ether	63	6.240	6.239	0.001	93	2076912	80.0	80.0	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	2691410	40.0	40.9	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	3217945	80.0	76.5	
70 Toluene	91	6.678	6.678	0.000	98	8097475	40.0	38.8	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	94	2470937	40.0	41.9	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	2165277	40.0	42.0	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	1476032	40.0	37.3	
74 Tetrachloroethene	164	7.176	7.176	0.000	98	1594779	40.0	38.0	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	93	2628824	40.0	37.4	
76 2-Hexanone	43	7.248	7.247	0.001	97	2155808	80.0	75.5	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	1721372	40.0	42.6	
80 Ethylene Dibromide	107	7.520	7.520	0.000	99	1556983	40.0	37.7	
82 Chlorobenzene	112	7.959	7.959	0.000	95	5052017	40.0	38.1	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	94	1699887	40.0	41.3	
84 Ethylbenzene	106	8.054	8.054	0.000	98	2828371	40.0	39.3	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	6875454	40.0	39.5	
86 o-Xylene	106	8.540	8.540	0.000	94	3494468	40.0	40.0	
87 Styrene	104	8.552	8.552	0.000	94	6050686	40.0	41.3	
88 Bromoform	173	8.742	8.742	0.000	98	1158753	40.0	46.9	
89 Isopropylbenzene	105	8.896	8.884	0.012	95	8884599	40.0	40.5	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	97	1972167	40.0	35.7	
92 Bromobenzene	156	9.204	9.204	0.000	93	2288647	40.0	36.6	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	89	676341	40.0	35.2	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	82	565067	40.0	41.4	
96 N-Propylbenzene	120	9.287	9.287	0.000	98	2446119	40.0	38.1	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	2095834	40.0	37.4	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	7376294	40.0	38.3	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	7090013	40.0	37.0	
101 tert-Butylbenzene	119	9.773	9.773	0.000	92	6417476	40.0	37.6	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	96	7679166	40.0	38.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.999	9.987	0.012	93	8714666	40.0	37.9	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	99	4249364	40.0	37.1	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	7790696	40.0	38.4	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	96	4449820	40.0	37.2	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	6191555	40.0	36.5	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	99	4117858	40.0	37.4	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.350	0.001	86	418372	40.0	40.3	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	2185024	40.0	38.3	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	932429	40.0	40.1	
117 Naphthalene	128	12.418	12.430	-0.012	97	5961997	40.0	33.6	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	1926671	40.0	38.5	
S 127 1,2-Dichloroethene, Total	96				0			73.6	
S 128 1,3-Dichloropropene, Total	75				0			82.8	
S 129 Xylenes, Total	106				0		80.0	79.5	
S 130 Trihalomethanes, Total	1				0		160.0	166.7	

Reagents:

vm50ss_stk_00078	Amount Added:	32.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL
VMRPRIMW_00297	Amount Added:	32.00	Units: uL
VMAROLISTDW_00260	Amount Added:	32.00	Units: uL
VMRGAS_00259	Amount Added:	32.00	Units: uL

Report Date: 28-Aug-2018 10:27:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4603.D

Injection Date: 27-Aug-2018 10:56:30 Instrument ID: A3UX15 Operator ID:

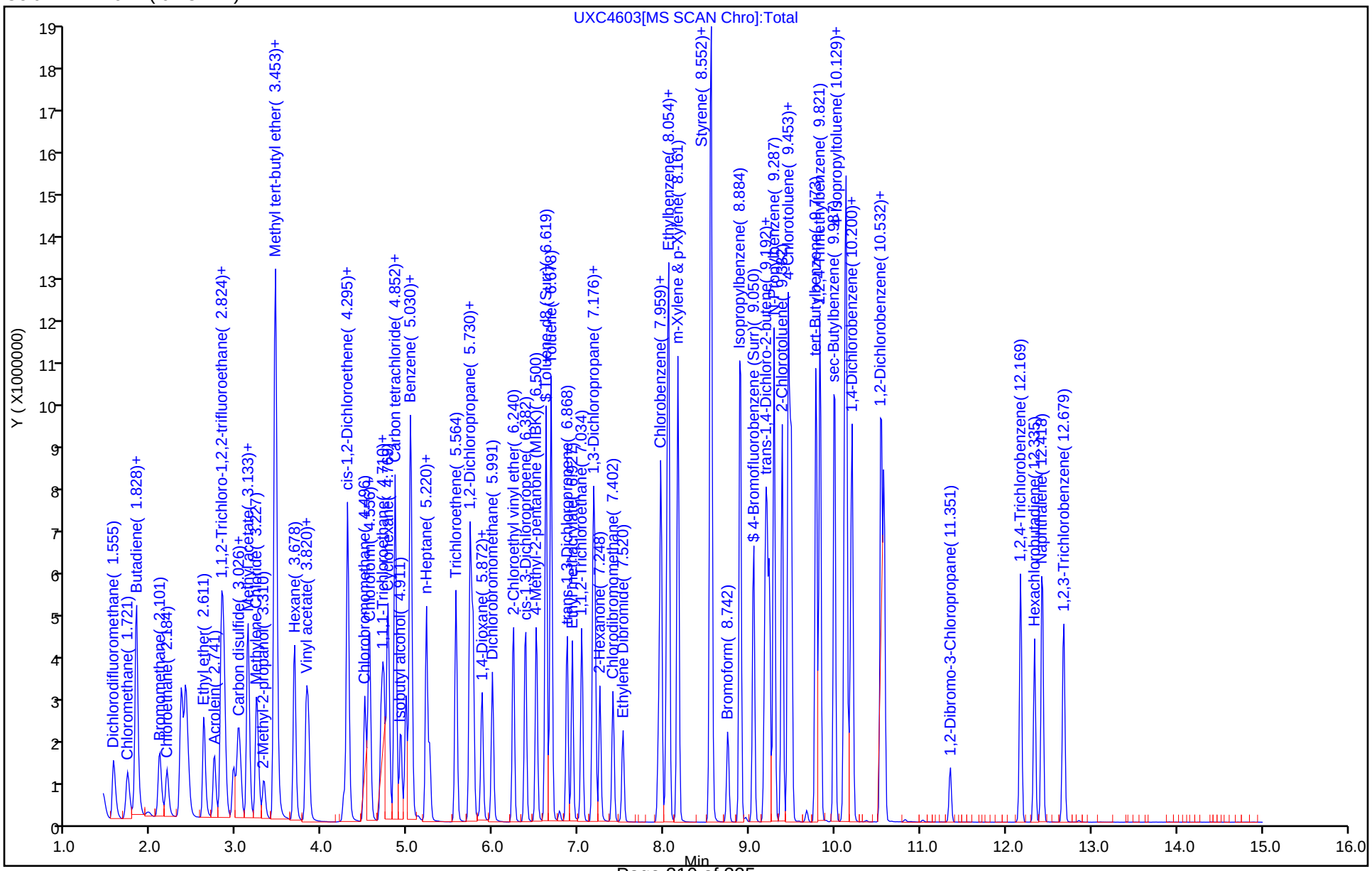
Lims ID: STD8260 L6 Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4604.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 27-Aug-2018 11:18:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-003
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:22 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	98	1512404	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	84	1208582	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.176	0.000	93	673559	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	784787	20.0	20.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.982	0.000	100	1054547	20.0	19.8	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	3256156	20.0	20.1	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	1113098	20.0	19.7	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	1084602	20.0	20.1	
10 Chloromethane	50	1.721	1.721	0.000	99	1038482	20.0	20.3	
11 Vinyl chloride	62	1.816	1.816	0.000	99	1014909	20.0	18.9	
12 Butadiene	54	1.828	1.828	0.000	99	1210237	20.0	18.9	
13 Bromomethane	94	2.101	2.101	0.000	91	781682	20.0	18.6	
14 Chloroethane	64	2.196	2.184	0.012	100	691069	20.0	19.1	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	100	1752766	20.0	19.2	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	99	1756160	20.0	20.3	
17 Ethyl ether	59	2.611	2.623	-0.012	90	885893	20.0	20.0	
18 Acrolein	56	2.741	2.741	0.000	99	852133	100.0	101.8	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	836602	20.0	18.4	
20 1,1,2-Trichloro-1,2,2-trif	151	2.848	2.836	0.012	93	619547	20.0	18.1	
22 Acetone	58	2.860	2.860	0.000	99	149667	40.0	35.2	
23 Iodomethane	142	2.967	2.966	0.000	99	1253537	20.0	19.2	
24 Carbon disulfide	76	3.026	3.026	0.000	100	2283845	20.0	18.3	
25 3-Chloro-1-propene	76	3.133	3.132	0.001	88	550419	20.0	19.7	
27 Methyl acetate	43	3.144	3.132	0.012	98	1256154	40.0	39.4	
28 Methylene Chloride	84	3.227	3.227	0.000	92	820454	20.0	19.0	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	96	558768	200.0	189.2	
32 Acrylonitrile	53	3.441	3.441	0.000	99	3209434	200.0	199.5	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	96	2441171	20.0	20.4	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	885324	20.0	19.4	
33 Hexane	86	3.678	3.678	0.000	94	224378	20.0	19.8	
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	1463087	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.844	3.844	0.000	97	1475305	20.0	21.6	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	62	184461	20.0	20.9	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	957605	20.0	19.1	
41 2-Butanone (MEK)	72	4.307	4.306	0.000	99	213792	40.0	40.6	
45 Chlorobromomethane	128	4.496	4.496	0.000	95	459253	20.0	19.4	
46 Tetrahydrofuran	42	4.544	4.544	0.000	86	496322	40.0	41.0	
47 Chloroform	83	4.556	4.556	0.000	96	1486261	20.0	19.6	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	1115496	20.0	19.8	
49 Cyclohexane	56	4.769	4.769	0.000	91	1358408	20.0	19.6	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	1190202	20.0	19.2	
50 Carbon tetrachloride	117	4.852	4.852	0.000	98	1019237	20.0	20.7	
52 Isobutyl alcohol	41	4.923	4.911	0.012	94	502500	500.0	553.9	
53 Benzene	78	5.030	5.030	0.000	96	3548810	20.0	19.5	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	1268087	20.0	19.8	
56 n-Heptane	100	5.220	5.220	0.000	92	218846	20.0	19.6	
58 Trichloroethene	130	5.564	5.563	0.001	97	969151	20.0	19.7	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	1422820	20.0	20.0	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	818828	20.0	19.5	
64 1,4-Dioxane	88	5.872	5.872	0.000	36	135171	400.0	410.1	
63 Dibromomethane	93	5.872	5.872	0.000	93	532937	20.0	19.5	
65 Dichlorobromomethane	83	5.990	5.990	0.000	99	1122493	20.0	20.6	
67 2-Chloroethyl vinyl ether	63	6.239	6.239	0.000	93	1029015	40.0	42.1	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	1303555	20.0	21.0	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	1592323	40.0	40.2	
70 Toluene	91	6.678	6.678	0.000	98	3847132	20.0	19.7	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	95	1169665	20.0	21.2	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	1042625	20.0	21.6	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	741419	20.0	20.0	
74 Tetrachloroethene	164	7.176	7.176	0.000	99	762245	20.0	19.4	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	94	1295545	20.0	19.7	
76 2-Hexanone	43	7.247	7.247	0.000	98	1074153	40.0	40.1	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	806953	20.0	21.3	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	772553	20.0	20.0	
82 Chlorobenzene	112	7.959	7.959	0.000	94	2412875	20.0	19.4	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	94	790289	20.0	20.5	
84 Ethylbenzene	106	8.054	8.054	0.000	98	1325912	20.0	19.6	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	3240775	20.0	19.9	
86 o-Xylene	106	8.540	8.540	0.000	97	1633090	20.0	20.0	
87 Styrene	104	8.552	8.552	0.000	93	2781246	20.0	20.3	
88 Bromoform	173	8.742	8.742	0.000	97	515442	20.0	22.3	
89 Isopropylbenzene	105	8.896	8.884	0.012	95	4116767	20.0	20.0	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	941592	20.0	19.6	
92 Bromobenzene	156	9.204	9.204	0.000	92	1070768	20.0	19.7	
95 trans-1,4-Dichloro-2-buten	53	9.240	9.228	0.012	85	250921	20.0	21.2	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	89	332054	20.0	19.9	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	1118492	20.0	20.0	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	954592	20.0	19.6	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	3383149	20.0	20.2	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	3288381	20.0	19.7	
101 tert-Butylbenzene	119	9.773	9.773	0.000	91	2952867	20.0	19.9	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	3489704	20.0	19.9	
105 sec-Butylbenzene	105	9.999	9.987	0.012	94	4018191	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	1928776	20.0	19.4	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	3582920	20.0	20.3	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	2010234	20.0	19.3	
111 n-Butylbenzene	91	10.532	10.532	0.000	98	2901891	20.0	19.7	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	98	1852120	20.0	19.3	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.350	0.000	85	187127	20.0	20.8	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	93	1021303	20.0	20.3	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	467463	20.0	19.6	
117 Naphthalene	128	12.430	12.430	0.000	96	2771303	20.0	18.0	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	892903	20.0	20.2	
S 127 1,2-Dichloroethene, Total	96				0			38.5	
S 128 1,3-Dichloropropene, Total	75				0			42.2	
S 129 Xylenes, Total	106				0		40.0	39.8	
S 130 Trihalomethanes, Total	1				0		80.0	83.8	

Reagents:

vm50ss_stk_00078	Amount Added:	16.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL
VMRPRIMW_00297	Amount Added:	16.00	Units: uL
VMAROLISTDW_00260	Amount Added:	16.00	Units: uL
VMRGAS_00259	Amount Added:	16.00	Units: uL

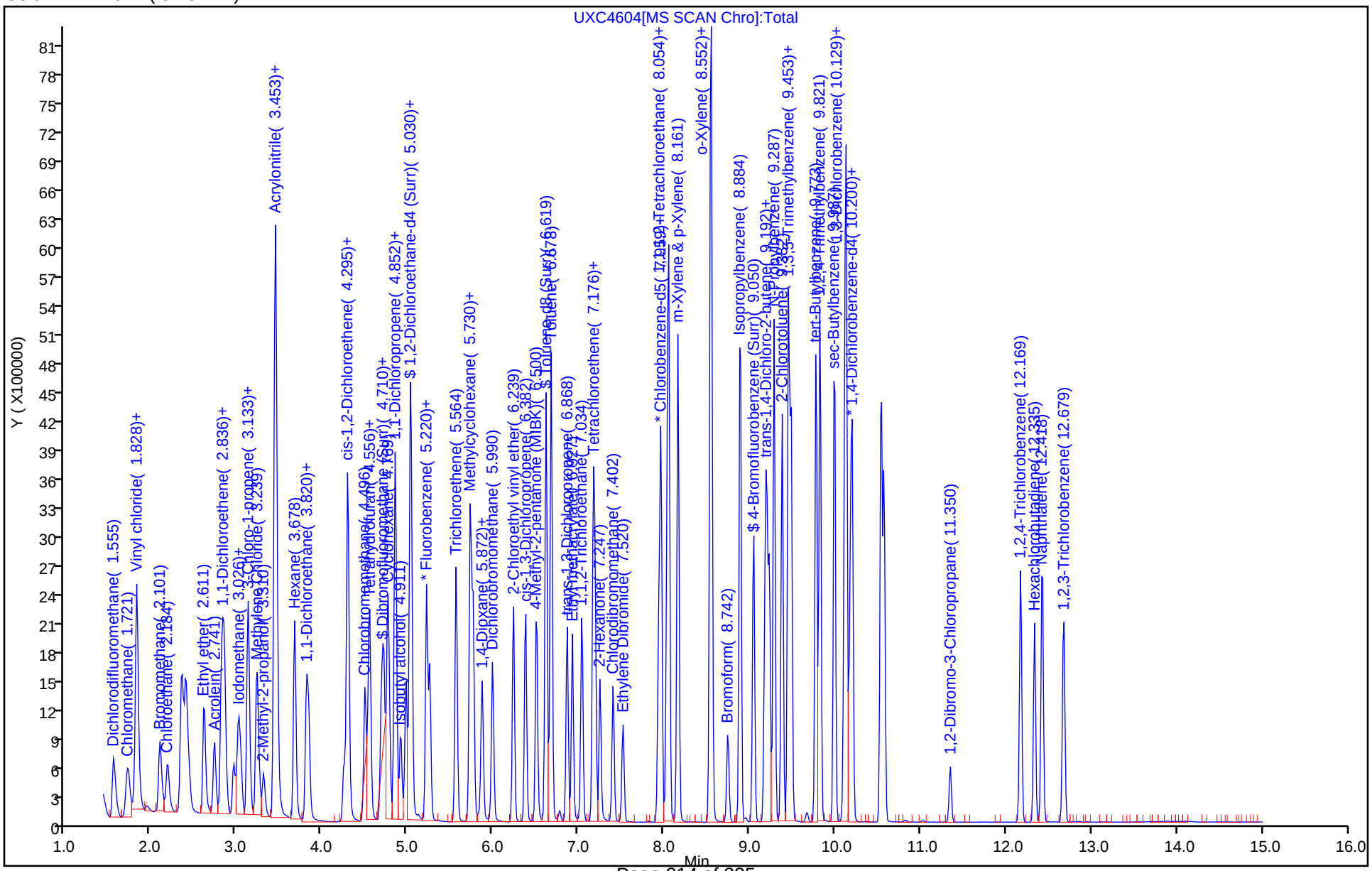
Report Date: 28-Aug-2018 10:27:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4604.D

Injection Date:	27-Aug-2018 11:18:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4605.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 27-Aug-2018 11:39:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-004
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:29 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 27-Aug-2018 12:21:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	98	1456997	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1129967	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.176	0.000	92	616450	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	93	387653	10.0	10.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.982	0.000	100	517731	10.0	10.1	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	94	1559068	10.0	10.3	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	535504	10.0	10.2	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	514967	10.0	9.91	
10 Chloromethane	50	1.721	1.721	0.000	99	486195	10.0	9.84	
11 Vinyl chloride	62	1.816	1.816	0.000	99	512831	10.0	9.93	
12 Butadiene	54	1.828	1.828	0.000	98	591560	10.0	9.58	
13 Bromomethane	94	2.101	2.101	0.000	92	380445	10.0	9.38	
14 Chloroethane	64	2.184	2.184	0.000	100	338465	10.0	9.72	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	100	853684	10.0	9.72	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	98	834925	10.0	10.0	
17 Ethyl ether	59	2.623	2.623	0.000	90	419282	10.0	9.83	
18 Acrolein	56	2.741	2.741	0.000	99	408826	50.0	50.7	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	496990	10.0	11.3	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	91	381213	10.0	11.6	
22 Acetone	58	2.860	2.860	0.000	100	85201	20.0	20.8	
23 Iodomethane	142	2.966	2.966	0.000	99	648378	10.0	10.3	
24 Carbon disulfide	76	3.026	3.026	0.000	100	1184137	10.0	9.86	
27 Methyl acetate	43	3.132	3.132	0.000	97	619046	20.0	20.1	
25 3-Chloro-1-propene	76	3.132	3.132	0.000	87	261489	10.0	9.70	
28 Methylene Chloride	84	3.227	3.227	0.000	92	422521	10.0	10.1	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	96	266659	100.0	93.7	
32 Acrylonitrile	53	3.441	3.441	0.000	99	1545241	100.0	99.7	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	96	1162934	10.0	10.1	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	434049	10.0	9.85	
33 Hexane	86	3.678	3.678	0.000	94	103099	10.0	9.45	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	719694	10.0	10.0	
36 Vinyl acetate	43	3.844	3.844	0.000	97	657464	10.0	10.0	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	471955	10.0	9.79	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	60	92883	10.0	10.9	
41 2-Butanone (MEK)	72	4.306	4.306	0.000	98	99704	20.0	19.7	
45 Chlorobromomethane	128	4.496	4.496	0.000	95	226061	10.0	9.93	
46 Tetrahydrofuran	42	4.544	4.544	0.000	87	249598	20.0	20.2	
47 Chloroform	83	4.556	4.556	0.000	95	729439	10.0	9.98	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	574099	10.0	10.6	
49 Cyclohexane	56	4.769	4.769	0.000	91	664362	10.0	9.96	
50 Carbon tetrachloride	117	4.852	4.852	0.000	98	490254	10.0	10.3	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	586242	10.0	9.81	
52 Isobutyl alcohol	41	4.911	4.911	0.000	93	226791	250.0	259.5	
53 Benzene	78	5.030	5.030	0.000	95	1723985	10.0	9.85	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	602108	10.0	9.73	
56 n-Heptane	100	5.220	5.220	0.000	91	103443	10.0	9.63	
58 Trichloroethene	130	5.563	5.563	0.000	97	463284	10.0	9.76	
60 Methylcyclohexane	83	5.730	5.730	0.000	91	679361	10.0	9.93	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	392754	10.0	9.71	
63 Dibromomethane	93	5.872	5.872	0.000	93	260728	10.0	9.88	
64 1,4-Dioxane	88	5.872	5.872	0.000	36	61679	200.0	188.5	
65 Dichlorobromomethane	83	5.990	5.990	0.000	99	525886	10.0	10.0	
67 2-Chloroethyl vinyl ether	63	6.239	6.239	0.000	93	466916	20.0	19.8	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	599906	10.0	10.1	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	755826	20.0	19.8	
70 Toluene	91	6.678	6.678	0.000	98	1804119	10.0	9.86	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	95	522430	10.0	10.1	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	469921	10.0	10.4	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	344482	10.0	9.95	
74 Tetrachloroethene	164	7.176	7.176	0.000	99	366357	10.0	9.96	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	93	605243	10.0	9.83	
76 2-Hexanone	43	7.247	7.247	0.000	98	501703	20.0	20.1	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	365569	10.0	10.3	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	357004	10.0	9.88	
82 Chlorobenzene	112	7.959	7.959	0.000	94	1163232	10.0	10.0	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	93	365327	10.0	10.1	
84 Ethylbenzene	106	8.054	8.054	0.000	98	627398	10.0	9.94	
85 m-Xylene & p-Xylene	91	8.160	8.160	0.000	93	1484111	10.0	9.74	
86 o-Xylene	106	8.540	8.540	0.000	95	766072	10.0	10.0	
87 Styrene	104	8.552	8.552	0.000	94	1283228	10.0	10.0	
88 Bromoform	173	8.742	8.742	0.000	97	223352	10.0	10.3	
89 Isopropylbenzene	105	8.884	8.884	0.000	96	1909735	10.0	9.94	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	454586	10.0	10.4	
92 Bromobenzene	156	9.204	9.204	0.000	94	501479	10.0	10.1	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	88	156410	10.0	10.2	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	70	111071	10.0	10.2	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	522131	10.0	10.2	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	457984	10.0	10.3	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	1551836	10.0	10.1	
99 4-Chlorotoluene	91	9.489	9.489	0.000	98	1522582	10.0	10.0	
101 tert-Butylbenzene	119	9.773	9.773	0.000	93	1365241	10.0	10.1	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	1631571	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.987	9.987	0.000	94	1831274	10.0	10.0	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	901423	10.0	9.91	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	1619033	10.0	10.0	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	931313	10.0	9.79	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	1357600	10.0	10.1	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	98	865716	10.0	9.88	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.350	0.000	83	84343	10.0	10.2	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	495697	10.0	10.4	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	242174	10.0	10.0	
117 Naphthalene	128	12.430	12.430	0.000	97	1316144	10.0	9.33	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	427842	10.0	10.2	
S 129 Xylenes, Total	106				0		20.0	19.7	
S 130 Trihalomethanes, Total	1				0		40.0	40.7	

Reagents:

VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_stk_00078	Amount Added:	8.00	Units: uL
VMRPRIMW_00297	Amount Added:	8.00	Units: uL
VMAROLISTDW_00260	Amount Added:	8.00	Units: uL
VMRGAS_00259	Amount Added:	8.00	Units: uL

Report Date: 28-Aug-2018 10:27:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4605.D

Injection Date: 27-Aug-2018 11:39:30 Instrument ID: A3UX15 Operator ID:

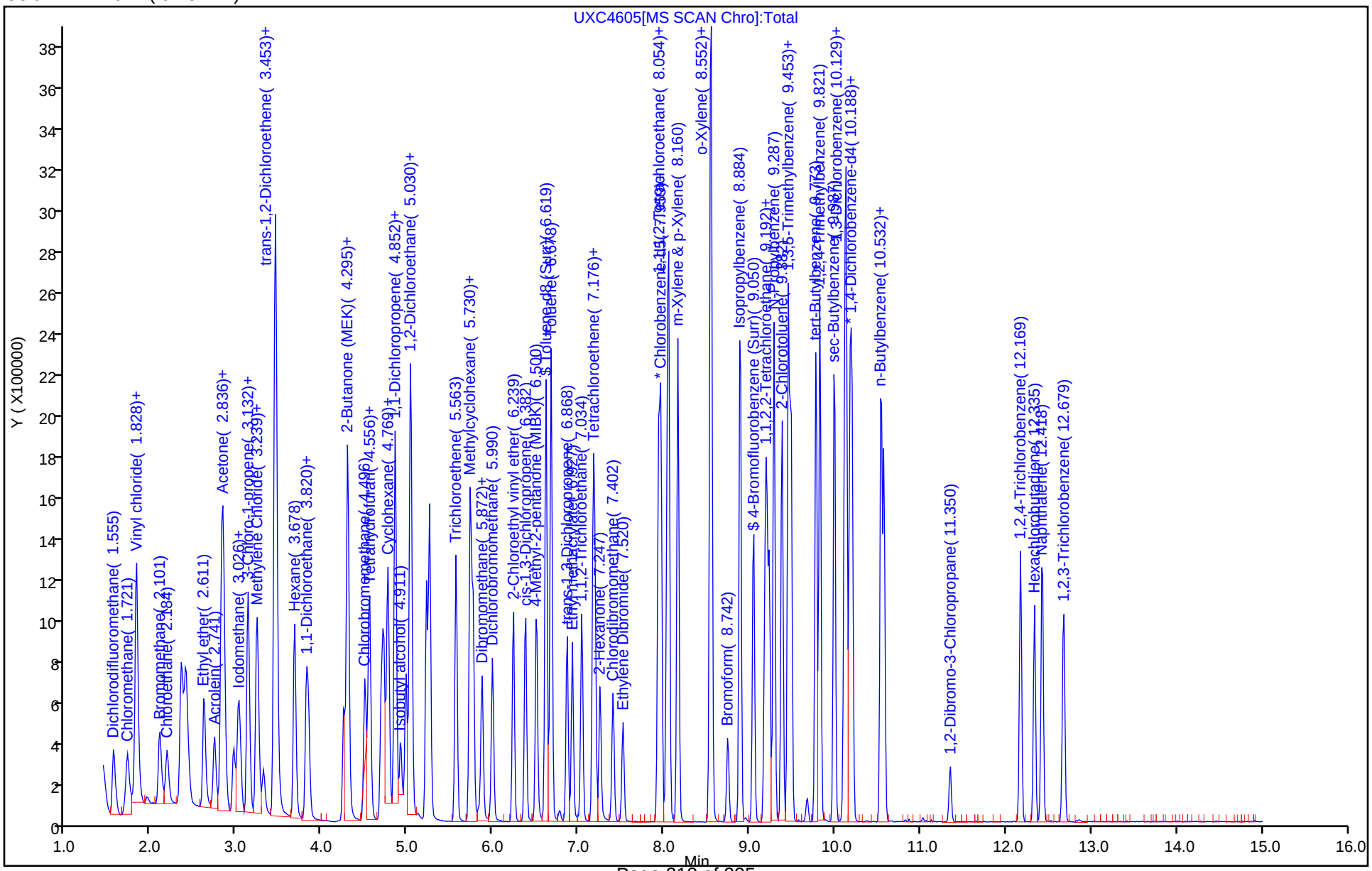
Lims ID: STD8260 L4 Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4606.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 27-Aug-2018 12:01:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-005
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:35 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1395779	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	87	1095038	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.176	0.001	94	615621	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	186126	5.00	5.14	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.982	0.001	100	251959	5.00	5.14	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	755069	5.00	5.14	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	258316	5.00	5.06	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	263574	5.00	5.30	
10 Chloromethane	50	1.721	1.721	0.000	99	250803	5.00	5.30	
11 Vinyl chloride	62	1.828	1.816	0.012	69	255916	5.00	5.17	
12 Butadiene	54	1.828	1.828	0.000	98	320588	5.00	5.42	
13 Bromomethane	94	2.101	2.101	0.000	91	211810	5.00	5.45	
14 Chloroethane	64	2.184	2.184	0.000	100	181806	5.00	5.45	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	99	439090	5.00	5.22	
16 Trichlorofluoromethane	101	2.409	2.397	0.012	99	400963	5.00	5.03	
17 Ethyl ether	59	2.623	2.623	0.000	90	214762	5.00	5.26	
18 Acrolein	56	2.741	2.741	0.000	99	178383	25.0	23.1	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	98	195061	5.00	4.64	
20 1,1,2-Trichloro-1,2,2-trif	151	2.848	2.836	0.012	93	146352	5.00	4.64	
22 Acetone	58	2.872	2.860	0.012	99	39046	10.0	9.96	
23 Iodomethane	142	2.990	2.966	0.024	100	292570	5.00	4.84	
24 Carbon disulfide	76	3.038	3.026	0.012	100	579203	5.00	5.03	
25 3-Chloro-1-propene	76	3.133	3.132	0.001	87	135704	5.00	5.26	
27 Methyl acetate	43	3.144	3.132	0.012	98	297438	10.0	10.1	
28 Methylene Chloride	84	3.227	3.227	0.000	93	193120	5.00	4.84	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	95	144216	50.0	52.9	
32 Acrylonitrile	53	3.441	3.441	0.000	98	756029	50.0	50.9	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	97	554587	5.00	5.02	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	212075	5.00	5.02	
33 Hexane	86	3.678	3.678	0.000	94	51625	5.00	4.94	
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	347475	5.00	5.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.844	3.844	0.000	98	303494	5.00	4.82	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	63	38943	5.00	4.79	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	234487	5.00	5.08	
41 2-Butanone (MEK)	72	4.307	4.306	0.001	99	51396	10.0	10.6	
45 Chlorobromomethane	128	4.496	4.496	0.000	96	109826	5.00	5.04	
46 Tetrahydrofuran	42	4.544	4.544	0.000	88	137826	10.0	10.6	
47 Chloroform	83	4.556	4.556	0.000	96	355113	5.00	5.07	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	99	255837	5.00	4.92	
49 Cyclohexane	56	4.769	4.769	0.000	91	328506	5.00	5.14	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	291324	5.00	5.09	
50 Carbon tetrachloride	117	4.852	4.852	0.000	98	224508	5.00	4.94	
52 Isobutyl alcohol	41	4.923	4.911	0.012	94	107586	125.0	128.5	
53 Benzene	78	5.030	5.030	0.000	96	840471	5.00	5.01	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	303249	5.00	5.12	
56 n-Heptane	100	5.220	5.220	0.000	91	53656	5.00	5.22	
58 Trichloroethene	130	5.564	5.563	0.001	97	233418	5.00	5.13	
60 Methylcyclohexane	83	5.730	5.730	0.000	89	330609	5.00	5.04	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	92	194745	5.00	5.03	
64 1,4-Dioxane	88	5.872	5.872	0.000	41	40852	100.0	126.9	
63 Dibromomethane	93	5.872	5.872	0.000	91	127136	5.00	5.03	
65 Dichlorobromomethane	83	5.991	5.990	0.001	99	254947	5.00	5.07	
67 2-Chloroethyl vinyl ether	63	6.240	6.239	0.001	92	234337	10.0	10.4	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	93	285804	5.00	5.00	
69 4-Methyl-2-pentanone (MIBK	43	6.512	6.500	0.012	97	382397	10.0	10.4	
70 Toluene	91	6.678	6.678	0.000	98	881362	5.00	4.97	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	96	248052	5.00	4.95	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	227664	5.00	5.20	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	169610	5.00	5.06	
74 Tetrachloroethene	164	7.176	7.176	0.000	98	182728	5.00	5.13	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	92	309080	5.00	5.18	
76 2-Hexanone	43	7.248	7.247	0.001	98	263267	10.0	10.9	
79 Chlorodibromomethane	129	7.402	7.402	0.000	91	167099	5.00	4.88	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	177787	5.00	5.08	
82 Chlorobenzene	112	7.959	7.959	0.000	95	560251	5.00	4.98	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	93	172536	5.00	4.94	
84 Ethylbenzene	106	8.054	8.054	0.000	98	303457	5.00	4.96	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	742495	5.00	5.03	
86 o-Xylene	106	8.540	8.540	0.000	95	364913	5.00	4.92	
87 Styrene	104	8.552	8.552	0.000	94	628913	5.00	5.06	
88 Bromoform	173	8.742	8.742	0.000	97	101434	5.00	4.84	
89 Isopropylbenzene	105	8.896	8.884	0.012	96	927335	5.00	4.98	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	229450	5.00	5.23	
92 Bromobenzene	156	9.204	9.204	0.000	94	251514	5.00	5.07	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	79	58240	5.00	5.37	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	88	78022	5.00	5.12	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	252689	5.00	4.95	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	223486	5.00	5.02	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	766132	5.00	5.00	
99 4-Chlorotoluene	91	9.489	9.489	0.000	98	762649	5.00	5.01	
101 tert-Butylbenzene	119	9.773	9.773	0.000	91	687688	5.00	5.08	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	95	799221	5.00	4.99	
105 sec-Butylbenzene	105	9.999	9.987	0.012	94	922349	5.00	5.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	462588	5.00	5.09	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	813114	5.00	5.05	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	472879	5.00	4.98	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	697566	5.00	5.18	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	97	443716	5.00	5.07	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.350	0.001	82	44032	5.00	5.35	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	93	305726	5.00	6.19	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	150712	5.00	5.73	
117 Naphthalene	128	12.430	12.430	0.000	97	794990	5.00	5.64	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	275892	5.00	6.29	
S 127 1,2-Dichloroethene, Total	96				0			10.1	
S 128 1,3-Dichloropropene, Total	75				0			9.95	
S 129 Xylenes, Total	106				0		10.0	9.95	
S 130 Trihalomethanes, Total	1				0		20.0	19.9	

Reagents:

VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_stk_00078	Amount Added:	4.00	Units: uL
VMRPRIMW_00297	Amount Added:	4.00	Units: uL
VMAROLISTDW_00260	Amount Added:	4.00	Units: uL
VMRGAS_00259	Amount Added:	4.00	Units: uL

Report Date: 28-Aug-2018 10:27:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4606.D

Injection Date: 27-Aug-2018 12:01:30 Instrument ID: A3UX15 Operator ID:

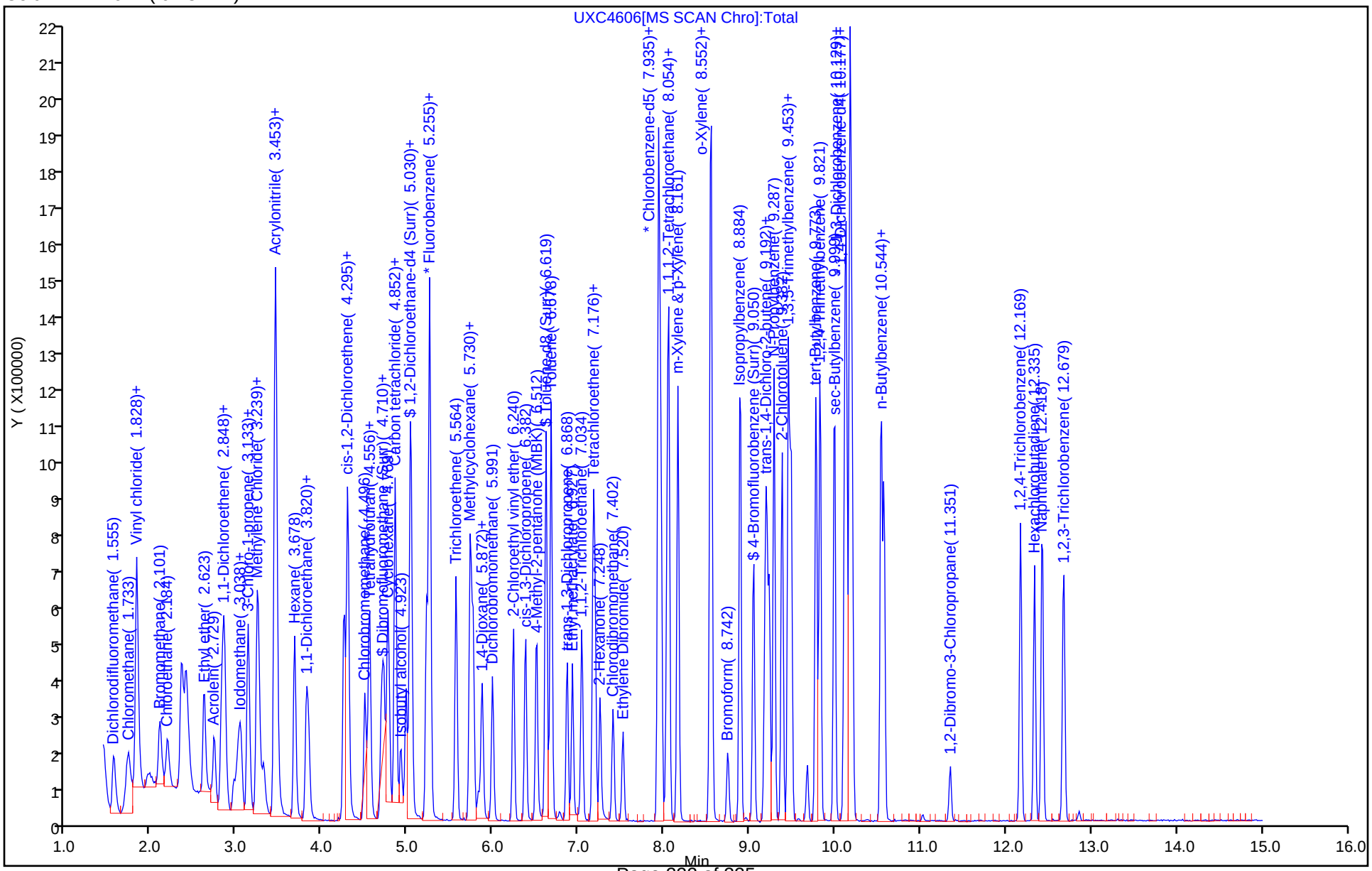
Lims ID: STD8260 L3 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4607.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Aug-2018 12:23:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-006
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:41 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 27-Aug-2018 12:49:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1443343	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	87	1112023	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.176	0.001	95	607762	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	93	68259	2.00	1.82	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.982	0.001	99	97249	2.00	1.92	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	94	278202	2.00	1.86	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	91	97247	2.00	1.87	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	99449	2.00	1.93	
10 Chloromethane	50	1.721	1.721	0.000	99	96314	2.00	1.97	
11 Vinyl chloride	62	1.816	1.816	0.000	98	102198	2.00	2.00	
12 Butadiene	54	1.828	1.828	0.000	98	124291	2.00	2.03	
13 Bromomethane	94	2.101	2.101	0.000	92	74964	2.00	1.87	
14 Chloroethane	64	2.184	2.184	0.000	99	64547	2.00	1.87	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	98	165328	2.00	1.90	
16 Trichlorofluoromethane	101	2.409	2.397	0.012	98	155260	2.00	1.88	
17 Ethyl ether	59	2.623	2.623	0.000	90	83644	2.00	1.98	
18 Acrolein	56	2.741	2.741	0.000	99	78340	10.0	9.80	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	98	89599	2.00	2.06	
20 1,1,2-Trichloro-1,2,2-trif	151	2.848	2.836	0.012	92	64198	2.00	1.97	
22 Acetone	58	2.872	2.860	0.012	99	18581	4.00	4.58	
23 Iodomethane	142	2.967	2.966	0.001	99	132860	2.00	2.13	
24 Carbon disulfide	76	3.026	3.026	0.000	100	258844	2.00	2.18	
27 Methyl acetate	43	3.145	3.132	0.012	98	120893	4.00	3.97	
25 3-Chloro-1-propene	76	3.133	3.132	0.001	86	54065	2.00	2.03	
28 Methylene Chloride	84	3.239	3.227	0.012	93	88133	2.00	2.13	
29 2-Methyl-2-propanol	59	3.311	3.310	0.001	96	60280	20.0	21.4	
32 Acrylonitrile	53	3.441	3.441	0.000	99	305390	20.0	19.9	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	98	227704	2.00	1.99	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	89378	2.00	2.05	
33 Hexane	86	3.678	3.678	0.000	94	21037	2.00	1.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	145135	2.00	2.04	
36 Vinyl acetate	43	3.844	3.844	0.000	98	118113	2.00	1.81	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	97789	2.00	2.05	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	62	16588	2.00	1.97	
41 2-Butanone (MEK)	72	4.307	4.306	0.001	98	19248	4.00	3.83	
45 Chlorobromomethane	128	4.496	4.496	0.000	92	46975	2.00	2.08	
46 Tetrahydrofuran	42	4.544	4.544	0.000	90	67986	4.00	3.75	
47 Chloroform	83	4.556	4.556	0.000	96	147623	2.00	2.04	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	107448	2.00	2.00	
49 Cyclohexane	56	4.769	4.769	0.000	91	135925	2.00	2.06	
50 Carbon tetrachloride	117	4.864	4.852	0.012	96	90460	2.00	1.93	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	94	122585	2.00	2.07	
52 Isobutyl alcohol	41	4.923	4.911	0.012	94	40146	50.0	46.4	
53 Benzene	78	5.030	5.030	0.000	96	349635	2.00	2.02	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	97	121816	2.00	1.99	
56 n-Heptane	100	5.220	5.220	0.000	90	20569	2.00	1.93	
58 Trichloroethene	130	5.564	5.563	0.001	97	94117	2.00	2.00	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	131910	2.00	1.95	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	79430	2.00	1.98	
63 Dibromomethane	93	5.872	5.872	0.000	93	52909	2.00	2.02	
64 1,4-Dioxane	88	5.872	5.872	0.000	39	17039	40.0	44.7	
65 Dichlorobromomethane	83	5.991	5.990	0.001	99	99989	2.00	1.92	
67 2-Chloroethyl vinyl ether	63	6.240	6.239	0.001	93	84614	4.00	3.63	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	110446	2.00	1.87	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	96	151182	4.00	4.00	
70 Toluene	91	6.678	6.678	0.000	97	360112	2.00	2.00	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	96	93357	2.00	1.84	
72 Ethyl methacrylate	69	6.927	6.927	0.000	90	78210	2.00	1.76	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	68188	2.00	2.00	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	72611	2.00	2.01	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	92	124554	2.00	2.05	
76 2-Hexanone	43	7.248	7.247	0.001	98	92271	4.00	3.75	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	64155	2.00	1.84	
80 Ethylene Dibromide	107	7.520	7.520	0.000	97	70071	2.00	1.97	
82 Chlorobenzene	112	7.959	7.959	0.000	95	228397	2.00	2.00	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	90	67113	2.00	1.89	
84 Ethylbenzene	106	8.054	8.054	0.000	98	122210	2.00	1.97	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	298005	2.00	1.99	
86 o-Xylene	106	8.540	8.540	0.000	97	150387	2.00	2.00	
87 Styrene	104	8.552	8.552	0.000	94	242295	2.00	1.92	
88 Bromoform	173	8.742	8.742	0.000	96	36504	2.00	1.71	
89 Isopropylbenzene	105	8.884	8.884	0.000	96	372726	2.00	1.97	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	88499	2.00	2.04	
92 Bromobenzene	156	9.204	9.204	0.000	94	101826	2.00	2.08	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	87	30467	2.00	2.02	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	69	18164	2.00	1.70	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	102452	2.00	2.03	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	90274	2.00	2.05	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	93	301004	2.00	1.99	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	307681	2.00	2.05	
101 tert-Butylbenzene	119	9.773	9.773	0.000	92	264446	2.00	1.98	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	316061	2.00	2.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.987	9.987	0.000	94	358564	2.00	1.99	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	183499	2.00	2.05	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	316632	2.00	1.99	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	192375	2.00	2.05	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	269407	2.00	2.02	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	97	180401	2.00	2.09	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.350	0.001	81	15572	2.00	1.92	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	117937	2.00	2.00	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	64554	2.00	1.90	
117 Naphthalene	128	12.430	12.430	0.000	97	309095	2.00	2.22	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	94	111571	2.00	2.10	
S 127 1,2-Dichloroethene, Total	96				0			4.09	
S 128 1,3-Dichloropropene, Total	75				0			3.70	
S 129 Xylenes, Total	106				0		4.00	3.98	
S 130 Trihalomethanes, Total	1				0		8.00	7.52	

Reagents:

VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_stk_00078	Amount Added:	1.60	Units: uL
VMRPRIMW_00297	Amount Added:	1.60	Units: uL
VMAROLISTDW_00260	Amount Added:	1.60	Units: uL
VMRGAS_00259	Amount Added:	1.60	Units: uL

Report Date: 28-Aug-2018 10:27:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4607.D

Injection Date: 27-Aug-2018 12:23:30 Instrument ID: A3UX15 Operator ID:

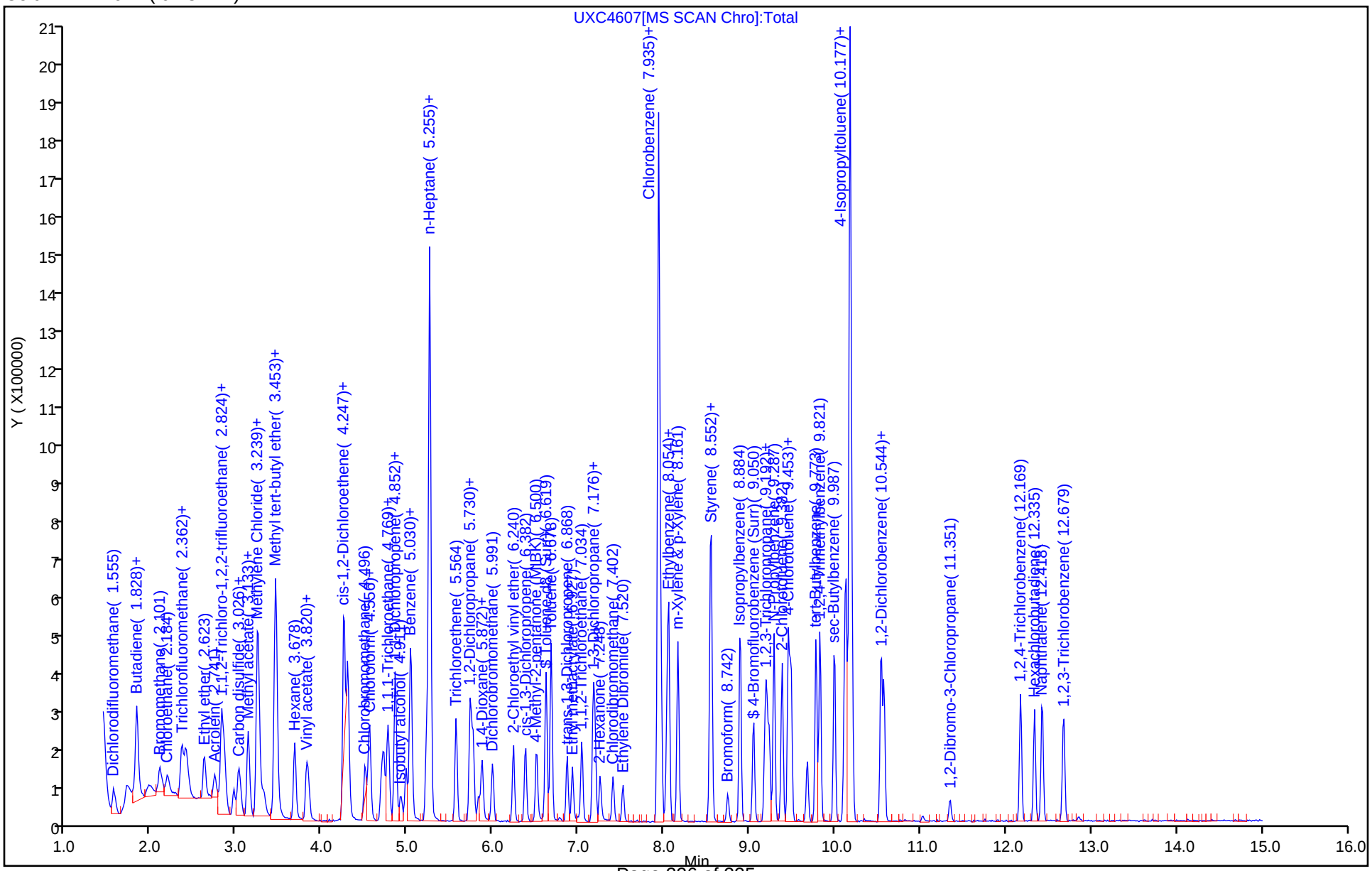
Lims ID: STD8260 L2 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4608.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Aug-2018 12:45:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-007
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:30:51 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 27-Aug-2018 14:15:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1380815	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	87	1066704	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	589225	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	92	38282	1.00	1.07	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.982	0.000	99	52466	1.00	1.08	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	145998	1.00	1.02	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	92	52658	1.00	1.06	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	51090	1.00	1.04	
10 Chloromethane	50	1.721	1.721	0.000	99	49755	1.00	1.06	
11 Vinyl chloride	62	1.816	1.816	0.000	94	54514	1.00	1.11	
12 Butadiene	54	1.828	1.828	0.000	95	66308	1.00	1.13	
13 Bromomethane	94	2.101	2.101	0.000	92	45430	1.00	1.18	
14 Chloroethane	64	2.184	2.184	0.000	98	36530	1.00	1.11	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	99	95036	1.00	1.14	
16 Trichlorofluoromethane	101	2.409	2.397	0.012	98	80946	1.00	1.03	
17 Ethyl ether	59	2.623	2.623	0.000	89	41947	1.00	1.04	
18 Acrolein	56	2.741	2.741	0.000	98	42299	5.00	5.53	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	98	40975	1.00	0.9847	
20 1,1,2-Trichloro-1,2,2-trif	151	2.848	2.836	0.012	88	32084	1.00	1.03	
22 Acetone	58	2.872	2.860	0.012	97	8171	2.00	2.11	
23 Iodomethane	142	2.966	2.966	0.000	99	62391	1.00	1.04	
24 Carbon disulfide	76	3.026	3.026	0.000	99	130163	1.00	1.14	
27 Methyl acetate	43	3.144	3.132	0.012	98	62540	2.00	2.15	
25 3-Chloro-1-propene	76	3.133	3.132	0.000	87	26387	1.00	1.03	
28 Methylene Chloride	84	3.239	3.227	0.012	93	43451	1.00	1.10	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	97	27927	10.0	10.4	
32 Acrylonitrile	53	3.441	3.441	0.000	98	151973	10.0	10.3	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	97	106890	1.00	0.9773	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	98	45683	1.00	1.09	
33 Hexane	86	3.678	3.678	0.000	94	11991	1.00	1.16	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.820	3.820	0.000	96	71365	1.00	1.05	
36 Vinyl acetate	43	3.844	3.844	0.000	97	63403	1.00	1.02	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	82	50784	1.00	1.11	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	57	7779	1.00	0.9670	
41 2-Butanone (MEK)	72	4.306	4.306	0.000	73	9914	2.00	2.06	
45 Chlorobromomethane	128	4.496	4.496	0.000	93	22686	1.00	1.05	
46 Tetrahydrofuran	42	4.544	4.544	0.000	88	46565	2.00	1.97	
47 Chloroform	83	4.556	4.556	0.000	96	73006	1.00	1.05	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	97	53729	1.00	1.04	
49 Cyclohexane	56	4.769	4.769	0.000	91	64478	1.00	1.02	
50 Carbon tetrachloride	117	4.864	4.852	0.012	96	43848	1.00	0.9756	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	61427	1.00	1.09	
52 Isobutyl alcohol	41	4.911	4.911	0.000	94	16618	25.0	20.1	
53 Benzene	78	5.030	5.030	0.000	95	178764	1.00	1.08	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	97	63635	1.00	1.09	
56 n-Heptane	100	5.220	5.220	0.000	82	10828	1.00	1.06	a
58 Trichloroethene	130	5.563	5.563	0.000	96	49124	1.00	1.09	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	68185	1.00	1.05	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	43396	1.00	1.13	
63 Dibromomethane	93	5.872	5.872	0.000	92	27467	1.00	1.10	
64 1,4-Dioxane	88	5.872	5.872	0.000	37	7172	20.0	13.5	
65 Dichlorobromomethane	83	5.990	5.990	0.000	98	49747	1.00	1.00	
67 2-Chloroethyl vinyl ether	63	6.239	6.239	0.000	93	45157	2.00	2.02	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	93	55734	1.00	0.9854	
69 4-Methyl-2-pentanone (MIBK	43	6.512	6.500	0.012	97	72911	2.00	2.01	
70 Toluene	91	6.678	6.678	0.000	98	184784	1.00	1.07	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	94	47670	1.00	0.9769	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	38829	1.00	0.9107	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	34603	1.00	1.06	
74 Tetrachloroethene	164	7.176	7.176	0.000	95	36649	1.00	1.06	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	91	60294	1.00	1.04	
76 2-Hexanone	43	7.247	7.247	0.000	98	48544	2.00	2.06	
79 Chlorodibromomethane	129	7.402	7.402	0.000	91	31278	1.00	0.9369	
80 Ethylene Dibromide	107	7.520	7.520	0.000	96	36430	1.00	1.07	
82 Chlorobenzene	112	7.959	7.959	0.000	95	117733	1.00	1.07	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	90	33907	1.00	1.00	
84 Ethylbenzene	106	8.054	8.054	0.000	98	63425	1.00	1.06	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	94	150472	1.00	1.05	
86 o-Xylene	106	8.540	8.540	0.000	96	73518	1.00	1.02	
87 Styrene	104	8.552	8.552	0.000	93	119079	1.00	0.9831	
88 Bromoform	173	8.742	8.742	0.000	92	17545	1.00	0.8586	
89 Isopropylbenzene	105	8.884	8.884	0.000	96	183680	1.00	1.01	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	98	42907	1.00	1.02	
92 Bromobenzene	156	9.204	9.204	0.000	94	49172	1.00	1.04	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	85	15543	1.00	1.06	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	66	9948	1.00	0.9592	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	49701	1.00	1.02	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	43960	1.00	1.03	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	150099	1.00	1.02	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	154714	1.00	1.06	
101 tert-Butylbenzene	119	9.773	9.773	0.000	92	136275	1.00	1.05	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	95	158463	1.00	1.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.987	9.987	0.000	93	180431	1.00	1.03	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	92830	1.00	1.07	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	156020	1.00	1.01	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	100040	1.00	1.10	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	135459	1.00	1.05	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	97	88325	1.00	1.05	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.350	0.000	78	7126	1.00	0.9039	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	60696	1.00	0.7431	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	33885	1.00	0.5868	
117 Naphthalene	128	12.430	12.430	0.000	96	146771	1.00	1.09	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	56321	1.00	0.7032	
S 127 1,2-Dichloroethene, Total	96				0			2.21	
S 128 1,3-Dichloropropene, Total	75				0			1.96	
S 129 Xylenes, Total	106				0		2.00	2.06	
S 130 Trihalomethanes, Total	1				0		4.00	3.85	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_stk_00078	Amount Added:	0.80	Units: uL
VMRPRIMW_00297	Amount Added:	0.80	Units: uL
VMAROLISTDW_00260	Amount Added:	0.80	Units: uL
VMRGAS_00259	Amount Added:	0.80	Units: uL

Report Date: 28-Aug-2018 10:30:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4608.D

Injection Date: 27-Aug-2018 12:45:30 Instrument ID: A3UX15 Operator ID:

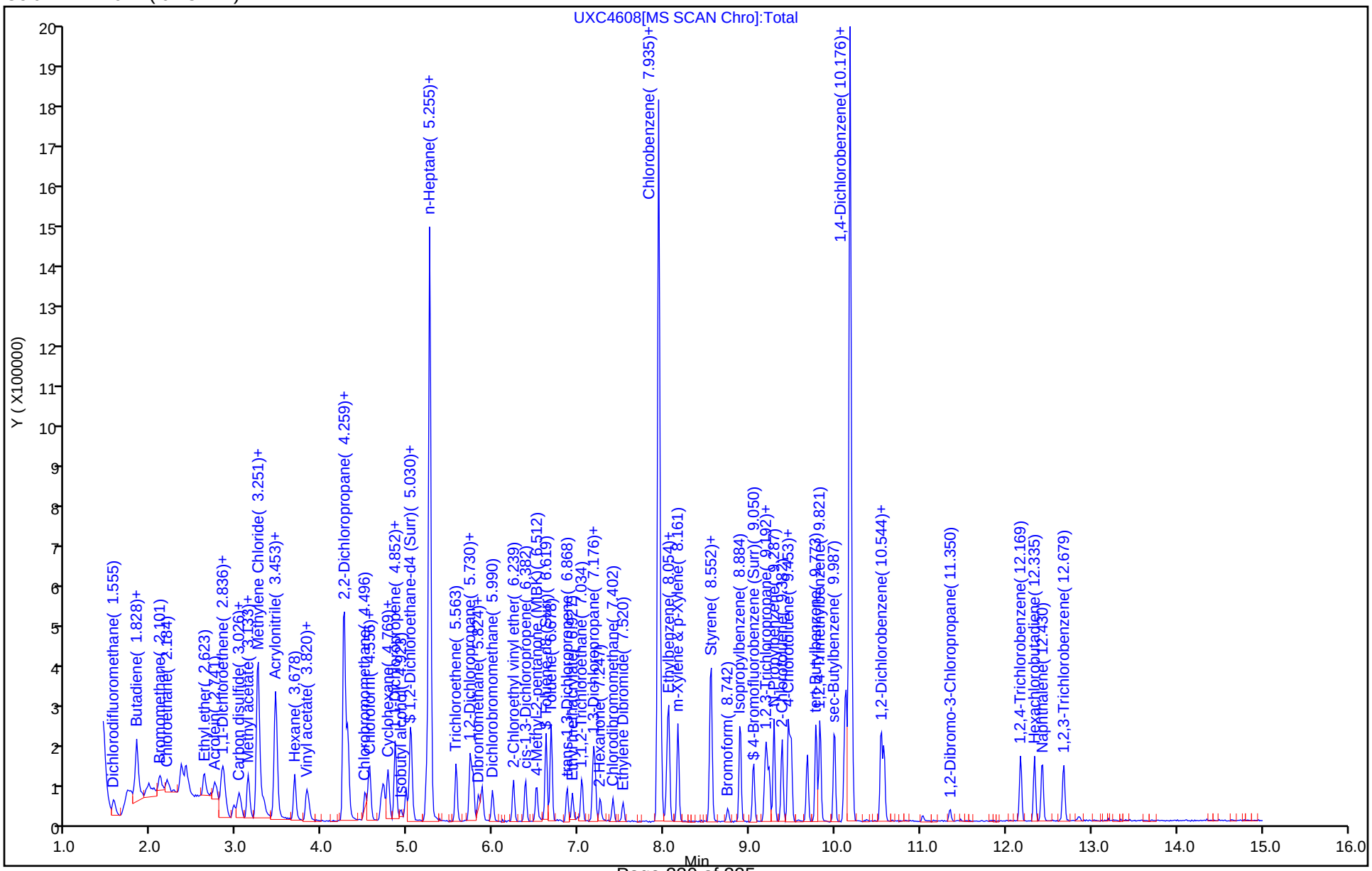
Lims ID: STD8260 L1 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Canton

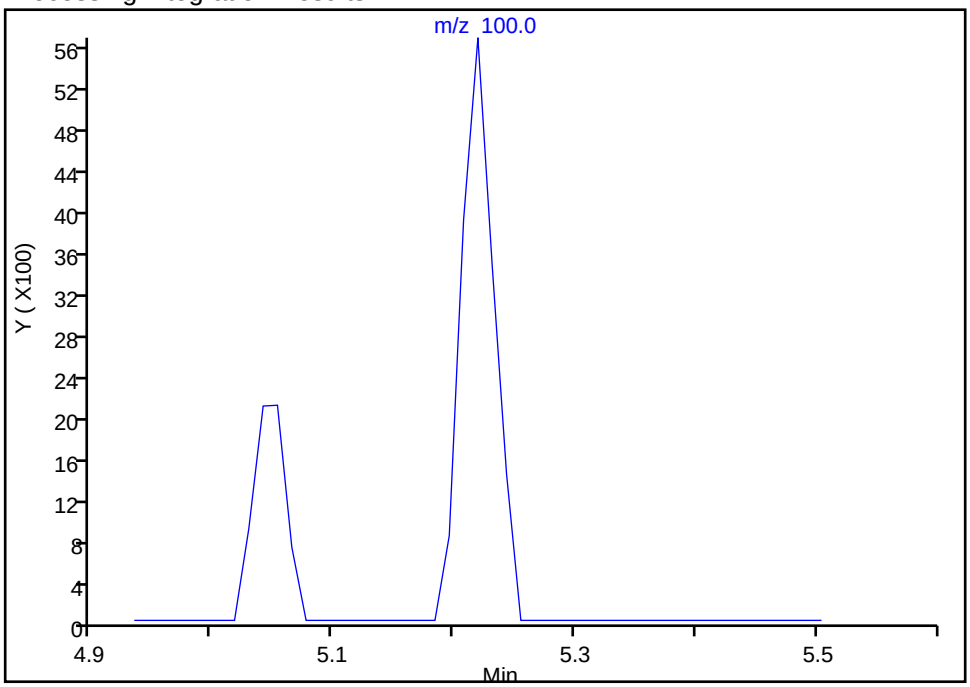
Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4608.D
Injection Date: 27-Aug-2018 12:45:30 Instrument ID: A3UX15
Lims ID: STD8260 L1
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

56 n-Heptane, CAS: 142-82-5

Signal: 1

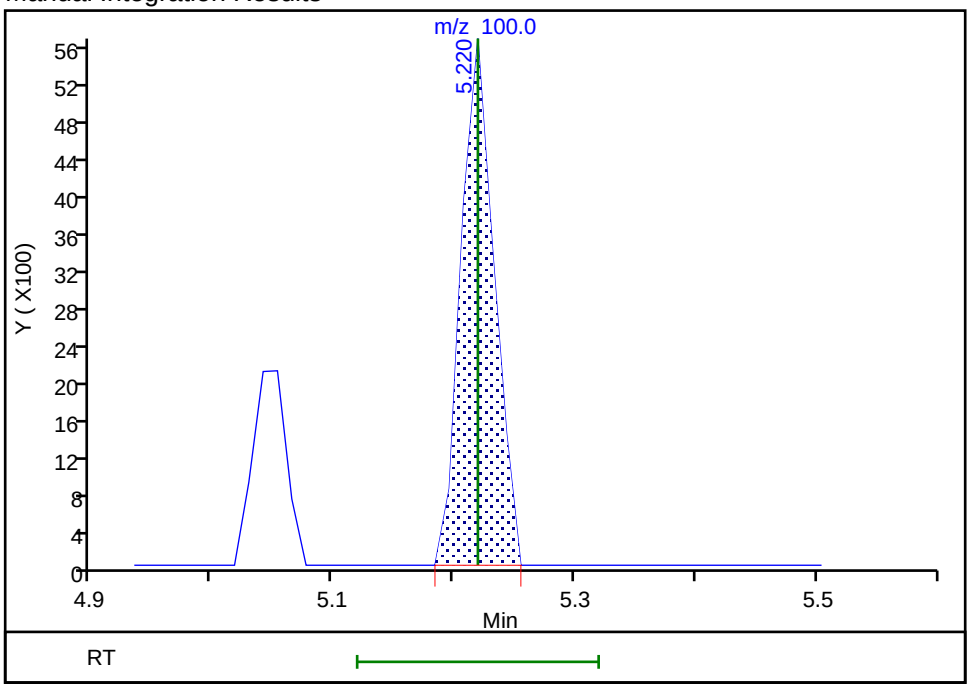
Not Detected
Expected RT: 5.22

Processing Integration Results



Manual Integration Results

RT: 5.22
Area: 10828
Amount: 1.064071
Amount Units: ug/l



Reviewer: evansle, 27-Aug-2018 14:12:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: ICV 240-342615/14 Calibration Date: 08/27/2018 13:07

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC4609.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3565	0.3395		0.00952	0.0100	-4.8	50.0
Chloromethane	Ave	0.3390	0.3227	0.1000	0.00952	0.0100	-4.8	50.0
Vinyl chloride	Ave	0.3545	0.3535		0.00997	0.0100	-0.3	20.0
Butadiene	Ave	0.4240	0.3760		0.00887	0.0100	-11.3	50.0
Bromomethane	Ave	0.2784	0.2816		0.0101	0.0100	1.1	50.0
Chloroethane	Ave	0.2391	0.2420		0.0101	0.0100	1.2	50.0
Dichlorofluoromethane	Ave	0.6029	0.6280		0.0104	0.0100	4.2	50.0
Trichlorofluoromethane	Ave	0.5707	0.6009		0.0105	0.0100	5.3	50.0
Ethyl ether	Ave	0.2928	0.3090		0.0106	0.0100	5.6	50.0
Acrolein	Ave	0.0554	0.0476		0.0430	0.0500	-14.1	50.0
1,1-Dichloroethene	Ave	0.3014	0.3365		0.0112	0.0100	11.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2261	0.2596		0.0115	0.0100	14.8	50.0
Acetone	Ave	0.0281	0.0260		0.0185	0.0200	-7.3	50.0
Iodomethane	Ave	0.4327	0.4422		0.0102	0.0100	2.2	50.0
Carbon disulfide	Ave	0.8242	0.7705		0.00935	0.0100	-6.5	50.0
3-Chloro-1-propene	Ave	0.1850	0.1795		0.00971	0.0100	-2.9	50.0
Methyl acetate	Ave	0.2109	0.2033		0.0193	0.0200	-3.6	50.0
Methylene Chloride	Ave	0.2861	0.2755		0.00963	0.0100	-3.7	50.0
2-Methyl-2-propanol	Ave	0.0195	0.0189		0.0965	0.100	-3.5	50.0
Acrylonitrile	Ave	0.1063	0.1067		0.100	0.100	0.3	50.0
Methyl tert-butyl ether	Ave	0.7921	0.7779		0.00982	0.0100	-1.8	50.0
trans-1,2-Dichloroethene	Ave	0.3025	0.3004		0.00993	0.0100	-0.7	50.0
Hexane	Ave	0.0749	0.0744		0.00992	0.0100	-0.8	20.0
1,1-Dichloroethane	Ave	0.4927	0.4920	0.1000	0.00999	0.0100	-0.1	50.0
Vinyl acetate	Ave	0.4510	0.4762		0.0106	0.0100	5.6	50.0
2,2-Dichloropropane	Ave	0.0583	0.0595		0.0102	0.0100	2.1	50.0
cis-1,2-Dichloroethene	Ave	0.3309	0.3193		0.00965	0.0100	-3.5	50.0
2-Butanone (MEK)	Ave	0.0348	0.0327		0.0188	0.0200	-6.0	50.0
Chlorobromomethane	Ave	0.1563	0.1555		0.00995	0.0100	-0.5	50.0
Tetrahydrofuran	Lin1		0.0839		0.0198	0.0200	-1.2	50.0
Chloroform	Ave	0.5019	0.5013		0.00999	0.0100	-0.1	20.0
1,1,1-Trichloroethane	Ave	0.3726	0.3868		0.0104	0.0100	3.8	50.0
Cyclohexane	Ave	0.4577	0.4687		0.0102	0.0100	2.4	50.0
1,1-Dichloropropene	Ave	0.4100	0.3951		0.00964	0.0100	-3.6	50.0
Carbon tetrachloride	Ave	0.3255	0.3204		0.00984	0.0100	-1.6	50.0
Isobutyl alcohol	Ave	0.0060	0.0061		0.253	0.250	1.2	50.0
Benzene	Ave	1.202	1.181		0.00983	0.0100	-1.7	50.0
1,2-Dichloroethane	Ave	0.4245	0.4184		0.00986	0.0100	-1.4	50.0
n-Heptane	Ave	0.0737	0.0723		0.00981	0.0100	-1.9	50.0
Trichloroethene	Ave	0.3258	0.3174		0.00974	0.0100	-2.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: ICV 240-342615/14 Calibration Date: 08/27/2018 13:07

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC4609.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4696	0.4522		0.00963	0.0100	-3.7	50.0
1,2-Dichloropropane	Ave	0.2776	0.2747		0.00990	0.0100	-1.0	20.0
1,4-Dioxane	Lin1		0.0025		0.224	0.200	11.9	50.0
Dibromomethane	Ave	0.1811	0.1738		0.00959	0.0100	-4.1	50.0
Dichlorobromomethane	Ave	0.3602	0.3562		0.00989	0.0100	-1.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1617	0.1603		0.00991	0.0100	-0.9	50.0
cis-1,3-Dichloropropene	Ave	0.4096	0.4234		0.0103	0.0100	3.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2622	0.2478		0.0189	0.0200	-5.5	50.0
Toluene	Ave	1.620	1.595		0.00985	0.0100	-1.5	20.0
trans-1,3-Dichloropropene	Ave	0.4575	0.4389		0.00959	0.0100	-4.1	50.0
Ethyl methacrylate	Ave	0.3997	0.3860		0.00966	0.0100	-3.4	50.0
1,1,2-Trichloroethane	Ave	0.3064	0.3115		0.0102	0.0100	1.7	50.0
Tetrachloroethene	Ave	0.3254	0.3188		0.00980	0.0100	-2.0	50.0
1,3-Dichloropropane	Ave	0.5451	0.5338		0.00979	0.0100	-2.1	50.0
2-Hexanone	Ave	0.2214	0.2103		0.0190	0.0200	-5.0	50.0
Chlorodibromomethane	Ave	0.3130	0.3121		0.00997	0.0100	-0.3	50.0
Ethylene Dibromide	Ave	0.3198	0.3102		0.00970	0.0100	-3.0	50.0
Chlorobenzene	Ave	1.027	1.001	0.3000	0.00975	0.0100	-2.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3191	0.3175		0.00995	0.0100	-0.5	50.0
Ethylbenzene	Ave	0.5584	0.5503		0.00985	0.0100	-1.5	20.0
m-Xylene & p-Xylene	Ave	1.349	1.319		0.00978	0.0100	-2.2	50.0
o-Xylene	Ave	0.6771	0.6775		0.0100	0.0100	0.0	50.0
Styrene	Ave	1.136	1.116		0.00983	0.0100	-1.7	50.0
Bromoform	Ave	0.1916	0.1867	0.1000	0.00975	0.0100	-2.5	50.0
Isopropylbenzene	Ave	1.701	1.686		0.00991	0.0100	-0.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7123	0.7061	0.3000	0.00991	0.0100	-0.9	50.0
Bromobenzene	Ave	0.8059	0.7809		0.00969	0.0100	-3.1	50.0
1,2,3-Trichloropropane	Ave	0.2477	0.2356		0.00951	0.0100	-4.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1760	0.1690		0.00960	0.0100	-4.0	50.0
N-Propylbenzene	Ave	0.8289	0.8330		0.0101	0.0100	0.5	50.0
2-Chlorotoluene	Ave	0.7237	0.7174		0.00991	0.0100	-0.9	50.0
1,3,5-Trimethylbenzene	Ave	2.487	2.464		0.00991	0.0100	-0.9	50.0
4-Chlorotoluene	Ave	2.472	2.421		0.00980	0.0100	-2.0	50.0
tert-Butylbenzene	Ave	2.200	2.177		0.00990	0.0100	-1.0	50.0
1,2,4-Trimethylbenzene	Ave	2.600	2.578		0.00991	0.0100	-0.9	50.0
sec-Butylbenzene	Ave	2.962	2.923		0.00987	0.0100	-1.3	50.0
1,3-Dichlorobenzene	Ave	1.475	1.422		0.00964	0.0100	-3.6	50.0
4-Isopropyltoluene	Ave	2.615	2.593		0.00991	0.0100	-0.9	50.0
1,4-Dichlorobenzene	Ave	1.542	1.464		0.00949	0.0100	-5.1	50.0
n-Butylbenzene	Ave	2.189	2.106		0.00962	0.0100	-3.8	50.0
1,2-Dichlorobenzene	Ave	1.422	1.395		0.00981	0.0100	-1.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: ICV 240-342615/14 Calibration Date: 08/27/2018 13:07

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC4609.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1338	0.1332		0.00995	0.0100	-0.5	50.0
1,2,4-Trichlorobenzene	Lin1		0.8896		0.0116	0.0100	16.3	50.0
Hexachlorobutadiene	Qua		0.3818		0.00971	0.0100	-2.9	50.0
Naphthalene	Ave	2.289	2.416		0.0106	0.0100	5.6	50.0
1,2,3-Trichlorobenzene	Lin1		0.8253		0.0123	0.0100	22.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2592	0.2810		0.00864	0.00797	8.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3515	0.3744		0.00849	0.00797	6.5	50.0
Toluene-d8 (Surr)	Ave	1.342	1.478		0.00878	0.00797	10.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4665	0.5344		0.00913	0.00797	14.5	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4609.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 27-Aug-2018 13:07:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-014
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:43:19 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 28-Aug-2018 11:39:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	98	1402023	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	87	1092127	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	92	614205	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	93	313947	7.97	8.64	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.982	0.000	100	418318	7.97	8.49	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1286644	7.97	8.78	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	465171	7.97	9.13	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	476029	10.0	9.52	
10 Chloromethane	50	1.721	1.721	0.000	99	452399	10.0	9.52	
11 Vinyl chloride	62	1.816	1.816	0.000	99	495669	10.0	9.97	
12 Butadiene	54	1.828	1.828	0.000	100	527100	10.0	8.87	
13 Bromomethane	94	2.089	2.101	-0.012	91	394759	10.0	10.1	
14 Chloroethane	64	2.184	2.184	0.000	100	339280	10.0	10.1	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	99	880507	10.0	10.4	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	100	842432	10.0	10.5	
17 Ethyl ether	59	2.611	2.623	-0.012	90	433248	10.0	10.6	
18 Acrolein	56	2.741	2.741	0.000	99	333432	50.0	43.0	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	471727	10.0	11.2	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	91	363892	10.0	11.5	
22 Acetone	58	2.872	2.860	0.012	99	73022	20.0	18.5	
23 Iodomethane	142	2.967	2.966	0.001	99	619994	10.0	10.2	
24 Carbon disulfide	76	3.026	3.026	0.000	100	1080266	10.0	9.35	
25 3-Chloro-1-propene	76	3.121	3.132	-0.011	87	251706	10.0	9.71	
27 Methyl acetate	43	3.144	3.132	0.012	98	570083	20.0	19.3	
28 Methylene Chloride	84	3.227	3.227	0.000	92	386229	10.0	9.63	
29 2-Methyl-2-propanol	59	3.322	3.310	0.012	94	264341	100.0	96.5	
32 Acrylonitrile	53	3.441	3.441	0.000	99	1495188	100.0	100.3	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	97	1090610	10.0	9.82	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	421120	10.0	9.93	
33 Hexane	86	3.678	3.678	0.000	94	104241	10.0	9.92	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.808	3.820	-0.012	98	689801	10.0	9.99	
36 Vinyl acetate	43	3.844	3.844	0.000	98	667632	10.0	10.6	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	60	83410	10.0	10.2	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	447598	10.0	9.65	
41 2-Butanone (MEK)	72	4.307	4.306	0.001	99	91740	20.0	18.8	
45 Chlorobromomethane	128	4.496	4.496	0.000	95	218070	10.0	9.95	
46 Tetrahydrofuran	42	4.544	4.544	0.000	86	235349	20.0	19.8	
47 Chloroform	83	4.556	4.556	0.000	96	702779	10.0	9.99	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	542359	10.0	10.4	
49 Cyclohexane	56	4.769	4.769	0.000	91	657147	10.0	10.2	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	94	553943	10.0	9.64	
50 Carbon tetrachloride	117	4.852	4.852	0.000	97	449245	10.0	9.84	
52 Isobutyl alcohol	41	4.923	4.911	0.012	94	212667	250.0	252.9	
53 Benzene	78	5.030	5.030	0.000	96	1655208	10.0	9.83	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	586635	10.0	9.86	
56 n-Heptane	100	5.220	5.220	0.000	90	101330	10.0	9.81	
58 Trichloroethene	130	5.564	5.563	0.001	96	444968	10.0	9.74	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	633927	10.0	9.63	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	385155	10.0	9.90	
64 1,4-Dioxane	88	5.872	5.872	0.000	37	69854	200.0	223.8	
63 Dibromomethane	93	5.872	5.872	0.000	93	243627	10.0	9.59	
65 Dichlorobromomethane	83	5.990	5.990	0.000	99	499390	10.0	9.89	
67 2-Chloroethyl vinyl ether	63	6.239	6.239	0.000	93	224675	10.0	9.91	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	593618	10.0	10.3	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	694781	20.0	18.9	
70 Toluene	91	6.678	6.678	0.000	98	1741704	10.0	9.85	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	96	479305	10.0	9.59	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	421567	10.0	9.66	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	340197	10.0	10.2	
74 Tetrachloroethene	164	7.176	7.176	0.000	98	348130	10.0	9.80	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	93	583002	10.0	9.79	
76 2-Hexanone	43	7.247	7.247	0.000	97	459366	20.0	19.0	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	340870	10.0	9.97	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	338781	10.0	9.70	
82 Chlorobenzene	112	7.959	7.959	0.000	94	1093109	10.0	9.75	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	92	346740	10.0	9.95	
84 Ethylbenzene	106	8.054	8.054	0.000	98	600952	10.0	9.85	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	1440253	10.0	9.78	
86 o-Xylene	106	8.540	8.540	0.000	97	739893	10.0	10.0	
87 Styrene	104	8.552	8.552	0.000	94	1218614	10.0	9.83	
88 Bromoform	173	8.742	8.742	0.000	97	203923	10.0	9.75	
89 Isopropylbenzene	105	8.884	8.884	0.000	96	1841388	10.0	9.91	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	433688	10.0	9.91	
92 Bromobenzene	156	9.204	9.204	0.000	95	479599	10.0	9.69	
95 trans-1,4-Dichloro-2-buten	53	9.240	9.228	0.012	71	103817	10.0	9.60	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	88	144703	10.0	9.51	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	511658	10.0	10.1	
97 2-Chlorotoluene	126	9.382	9.382	0.000	97	440636	10.0	9.91	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	1513284	10.0	9.91	
99 4-Chlorotoluene	91	9.489	9.489	0.000	98	1487210	10.0	9.80	
101 tert-Butylbenzene	119	9.773	9.773	0.000	93	1337264	10.0	9.90	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	95	1583237	10.0	9.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.987	9.987	0.000	94	1795308	10.0	9.87	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	873649	10.0	9.64	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	1592733	10.0	9.91	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	98	899100	10.0	9.49	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	1293620	10.0	9.62	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	98	856518	10.0	9.81	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.350	0.000	83	81797	10.0	9.95	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	93	546416	10.0	11.6	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	234502	10.0	9.71	
117 Naphthalene	128	12.430	12.430	0.000	96	1483749	10.0	10.6	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	506883	10.0	12.3	
S 129 Xylenes, Total	106				0		20.0	19.8	
S 130 Trihalomethanes, Total	1				0		40.0	39.6	

Reagents:

VMFASPW_00264	Amount Added:	8.00	Units: uL	
VMFASAW_00246	Amount Added:	8.00	Units: uL	
VMFASGW_00271	Amount Added:	8.00	Units: uL	
VM50IS_00071	Amount Added:	1.00	Units: uL	
vmDist_H2o_00124	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent

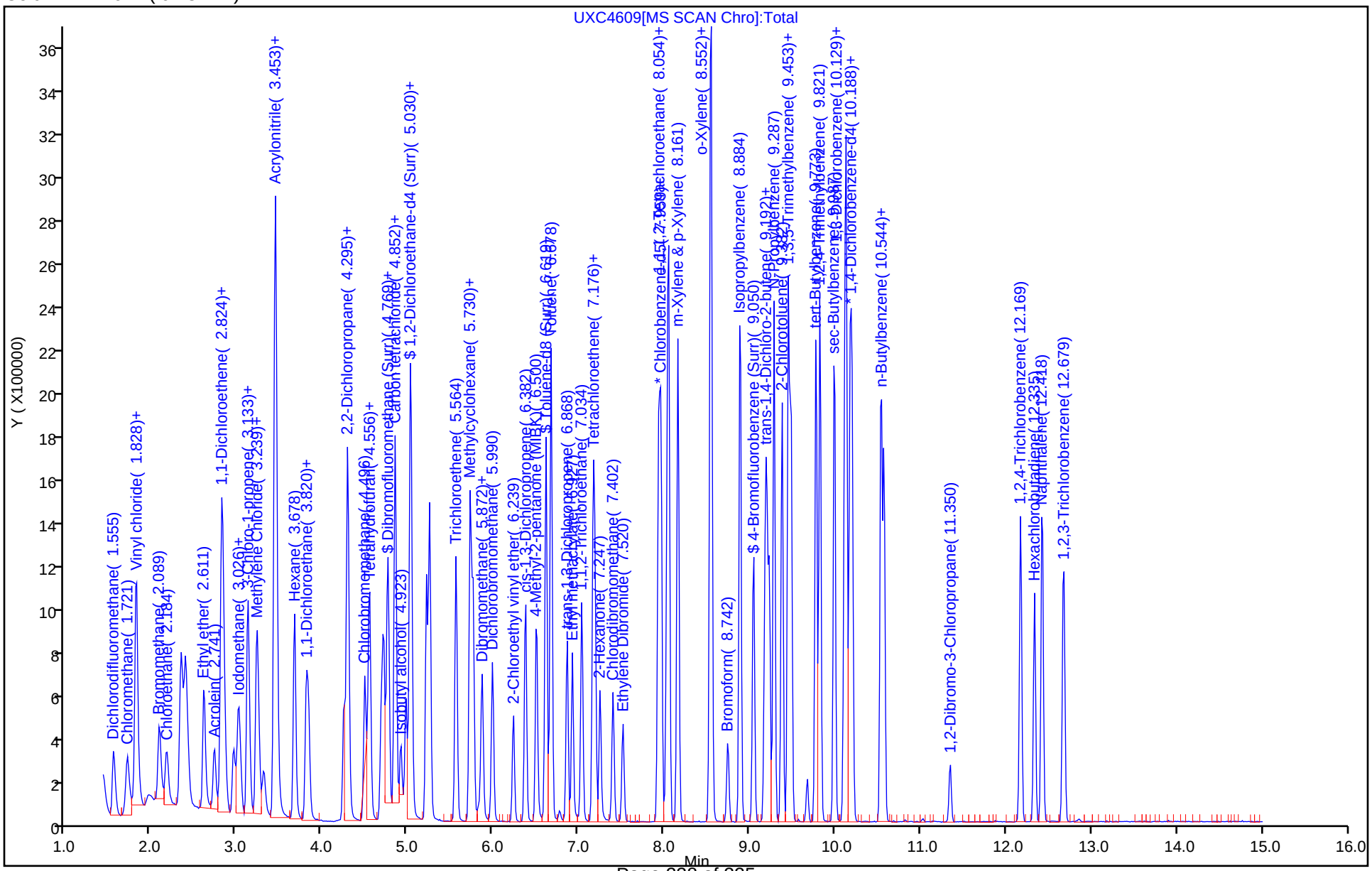
Report Date: 28-Aug-2018 11:39:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4609.D

Injection Date:	27-Aug-2018 13:07:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: CCVIS 240-351197/2 Calibration Date: 10/22/2018 09:02

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC6480.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3565	0.3648		0.0102	0.0100	2.3	50.0
Chloromethane	Ave	0.3390	0.3254	0.1000	0.00960	0.0100	-4.0	50.0
Vinyl chloride	Ave	0.3545	0.3232		0.00912	0.0100	-8.8	20.0
Butadiene	Ave	0.4240	0.3959		0.00934	0.0100	-6.6	50.0
Bromomethane	Ave	0.2784	0.2011		0.00722	0.0100	-27.8	50.0
Chloroethane	Ave	0.2391	0.1730		0.00723	0.0100	-27.7	50.0
Dichlorofluoromethane	Ave	0.6029	0.4767		0.00791	0.0100	-20.9	50.0
Trichlorofluoromethane	Ave	0.5707	0.4391		0.00769	0.0100	-23.1	50.0
Ethyl ether	Ave	0.2928	0.2502		0.00855	0.0100	-14.5	50.0
Acrolein	Ave	0.0554	0.0287		0.0259	0.0500	-48.2	50.0
1,1-Dichloroethene	Ave	0.3014	0.2720		0.00903	0.0100	-9.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2261	0.2194		0.00970	0.0100	-3.0	50.0
Acetone	Ave	0.0281	0.0252		0.0179	0.0200	-10.3	50.0
Iodomethane	Ave	0.4327	0.4855		0.0112	0.0100	12.2	50.0
Carbon disulfide	Ave	0.8242	0.8522		0.0103	0.0100	3.4	50.0
3-Chloro-1-propene	Ave	0.1850	0.1831		0.00990	0.0100	-1.0	50.0
Methyl acetate	Ave	0.2109	0.2003		0.0190	0.0200	-5.0	50.0
Methylene Chloride	Ave	0.2861	0.3299		0.0115	0.0100	15.3	50.0
2-Methyl-2-propanol	Ave	0.0195	0.0159		0.0812	0.100	-18.8	50.0
Acrylonitrile	Ave	0.1063	0.1097		0.103	0.100	3.2	50.0
Methyl tert-butyl ether	Ave	0.7921	0.6541		0.00826	0.0100	-17.4	50.0
trans-1,2-Dichloroethene	Ave	0.3025	0.3243		0.0107	0.0100	7.2	50.0
Hexane	Ave	0.0749	0.0651		0.00870	0.0100	-13.0	20.0
1,1-Dichloroethane	Ave	0.4927	0.5319	0.1000	0.0108	0.0100	8.0	50.0
Vinyl acetate	Ave	0.4510	0.3909		0.00867	0.0100	-13.3	50.0
2,2-Dichloropropane	Ave	0.0583	0.0678		0.0116	0.0100	16.4	50.0
cis-1,2-Dichloroethene	Ave	0.3309	0.3527		0.0107	0.0100	6.6	50.0
2-Butanone (MEK)	Ave	0.0348	0.0319		0.0183	0.0200	-8.4	50.0
Chlorobromomethane	Ave	0.1563	0.1679		0.0107	0.0100	7.4	50.0
Tetrahydrofuran	Lin1		0.0804		0.0188	0.0200	-5.9	50.0
Chloroform	Ave	0.5019	0.5346		0.0107	0.0100	6.5	20.0
1,1,1-Trichloroethane	Ave	0.3726	0.4075		0.0109	0.0100	9.4	50.0
Cyclohexane	Ave	0.4577	0.4805		0.0105	0.0100	5.0	50.0
1,1-Dichloropropene	Ave	0.4100	0.4140		0.0101	0.0100	1.0	50.0
Carbon tetrachloride	Ave	0.3255	0.3914		0.0120	0.0100	20.3	50.0
Isobutyl alcohol	Ave	0.0060	0.0078		0.324	0.250	29.6	50.0
Benzene	Ave	1.202	1.303		0.0108	0.0100	8.5	50.0
1,2-Dichloroethane	Ave	0.4245	0.3912		0.00922	0.0100	-7.8	50.0
n-Heptane	Ave	0.0737	0.0489		0.00663	0.0100	-33.7	50.0
Trichloroethene	Ave	0.3258	0.3249		0.00997	0.0100	-0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: CCVIS 240-351197/2 Calibration Date: 10/22/2018 09:02

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC6480.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4696	0.4075		0.00868	0.0100	-13.2	50.0
1,2-Dichloropropane	Ave	0.2776	0.2802		0.0101	0.0100	0.9	20.0
1,4-Dioxane	Lin1		0.0026		0.236	0.200	18.0	50.0
Dibromomethane	Ave	0.1811	0.1720		0.00950	0.0100	-5.0	50.0
Dichlorobromomethane	Ave	0.3602	0.3607		0.0100	0.0100	0.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1617	0.1141		0.0141	0.0200	-29.4	50.0
cis-1,3-Dichloropropene	Ave	0.4096	0.3473		0.00848	0.0100	-15.2	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2622	0.2114		0.0161	0.0200	-19.4	50.0
Toluene	Ave	1.620	1.759		0.0109	0.0100	8.6	20.0
trans-1,3-Dichloropropene	Ave	0.4575	0.4109		0.00898	0.0100	-10.2	50.0
Ethyl methacrylate	Ave	0.3997	0.4068		0.0102	0.0100	1.8	50.0
1,1,2-Trichloroethane	Ave	0.3064	0.3355		0.0110	0.0100	9.5	50.0
Tetrachloroethene	Ave	0.3254	0.3599		0.0111	0.0100	10.6	50.0
1,3-Dichloropropane	Ave	0.5451	0.5750		0.0105	0.0100	5.5	50.0
2-Hexanone	Ave	0.2214	0.2024		0.0183	0.0200	-8.6	50.0
Chlorodibromomethane	Ave	0.3130	0.3457		0.0110	0.0100	10.5	50.0
Ethylene Dibromide	Ave	0.3198	0.3058		0.00956	0.0100	-4.4	50.0
Chlorobenzene	Ave	1.027	1.077	0.3000	0.0105	0.0100	4.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3191	0.3873		0.0121	0.0100	21.4	50.0
Ethylbenzene	Ave	0.5584	0.5572		0.00998	0.0100	-0.2	20.0
m-Xylene & p-Xylene	Ave	1.349	1.377		0.0102	0.0100	2.1	50.0
o-Xylene	Ave	0.6771	0.6896		0.0102	0.0100	1.8	50.0
Styrene	Ave	1.136	1.179		0.0104	0.0100	3.8	50.0
Bromoform	Ave	0.1916	0.2107	0.1000	0.0110	0.0100	10.0	50.0
Isopropylbenzene	Ave	1.701	1.643		0.00966	0.0100	-3.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7123	0.7144	0.3000	0.0100	0.0100	0.3	50.0
Bromobenzene	Ave	0.8059	0.7904		0.00981	0.0100	-1.9	50.0
1,2,3-Trichloropropane	Ave	0.2477	0.2331		0.00941	0.0100	-5.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1760	0.0963		0.00547	0.0100	-45.3	50.0
N-Propylbenzene	Ave	0.8289	0.7623		0.00920	0.0100	-8.0	50.0
2-Chlorotoluene	Ave	0.7237	0.7117		0.00983	0.0100	-1.7	50.0
1,3,5-Trimethylbenzene	Ave	2.487	2.352		0.00946	0.0100	-5.4	50.0
4-Chlorotoluene	Ave	2.472	2.410		0.00975	0.0100	-2.5	50.0
tert-Butylbenzene	Ave	2.200	1.838		0.00836	0.0100	-16.4	50.0
1,2,4-Trimethylbenzene	Ave	2.600	2.511		0.00966	0.0100	-3.4	50.0
sec-Butylbenzene	Ave	2.962	2.483		0.00838	0.0100	-16.2	50.0
1,3-Dichlorobenzene	Ave	1.475	1.446		0.00980	0.0100	-2.0	50.0
4-Isopropyltoluene	Ave	2.615	2.259		0.00864	0.0100	-13.6	50.0
1,4-Dichlorobenzene	Ave	1.542	1.487		0.00964	0.0100	-3.6	50.0
n-Butylbenzene	Ave	2.189	1.717		0.00784	0.0100	-21.6	50.0
1,2-Dichlorobenzene	Ave	1.422	1.458		0.0103	0.0100	2.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: CCVIS 240-351197/2 Calibration Date: 10/22/2018 09:02

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC6480.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1338	0.1272		0.00951	0.0100	-4.9	50.0
1,2,4-Trichlorobenzene	Lin1		0.7250		0.00935	0.0100	-6.5	50.0
Hexachlorobutadiene	Qua		0.3750		0.00951	0.0100	-4.9	50.0
Naphthalene	Ave	2.289	1.551		0.00678	0.0100	-32.2	50.0
1,2,3-Trichlorobenzene	Lin1		0.7157		0.0105	0.0100	5.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2592	0.2662		0.00819	0.00797	2.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3515	0.3124		0.00708	0.00797	-11.1	50.0
Toluene-d8 (Surr)	Ave	1.342	1.425		0.00846	0.00797	6.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4665	0.4933		0.00843	0.00797	5.7	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6480.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 22-Oct-2018 09:02:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-002
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:31:57 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1836584	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1277656	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	93	763027	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	389670	7.97	8.19	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.000	99	457231	7.97	7.08	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1451543	7.97	8.46	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	502274	7.97	8.43	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	670040	10.0	10.2	
10 Chloromethane	50	1.721	1.721	0.000	99	597671	10.0	9.60	
11 Vinyl chloride	62	1.816	1.816	0.000	99	593615	10.0	9.12	
12 Butadiene	54	1.828	1.828	0.000	97	727102	10.0	9.34	
13 Bromomethane	94	2.101	2.101	0.000	91	369365	10.0	7.22	
14 Chloroethane	64	2.172	2.172	0.000	99	317676	10.0	7.23	
15 Dichlorofluoromethane	67	2.338	2.338	0.000	98	875577	10.0	7.91	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	100	806446	10.0	7.69	
17 Ethyl ether	59	2.611	2.611	0.000	90	459536	10.0	8.55	
18 Acrolein	56	2.741	2.741	0.000	99	263171	50.0	25.9	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	499570	10.0	9.03	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	91	402923	10.0	9.70	
22 Acetone	58	2.860	2.860	0.000	100	92477	20.0	17.9	
23 Iodomethane	142	2.967	2.967	0.000	97	891575	10.0	11.2	
24 Carbon disulfide	76	3.026	3.026	0.000	99	1565171	10.0	10.3	
25 3-Chloro-1-propene	76	3.121	3.121	0.000	92	336181	10.0	9.90	
27 Methyl acetate	43	3.133	3.133	0.000	97	735680	20.0	19.0	
28 Methylene Chloride	84	3.227	3.227	0.000	92	605839	10.0	11.5	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	88	291381	100.0	81.2	
32 Acrylonitrile	53	3.441	3.441	0.000	99	2014792	100.0	103.2	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	95	1201291	10.0	8.26	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	595593	10.0	10.7	
33 Hexane	86	3.678	3.678	0.000	91	119637	10.0	8.70	
34 1,1-Dichloroethane	63	3.809	3.809	0.000	97	976929	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.844	3.844	0.000	97	717982	10.0	8.67	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	83	647785	10.0	10.7	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	59	124565	10.0	11.6	
41 2-Butanone (MEK)	72	4.307	4.295	0.012	98	117120	20.0	18.3	
45 Chlorobromomethane	128	4.496	4.496	0.000	94	308272	10.0	10.7	
46 Tetrahydrofuran	42	4.532	4.532	0.000	89	295293	20.0	18.8	
47 Chloroform	83	4.556	4.556	0.000	94	981871	10.0	10.7	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	748336	10.0	10.9	
49 Cyclohexane	56	4.769	4.769	0.000	89	882390	10.0	10.5	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	97	760384	10.0	10.1	
50 Carbon tetrachloride	117	4.852	4.852	0.000	97	718901	10.0	12.0	
52 Isobutyl alcohol	41	4.911	4.911	0.000	91	357023	250.0	324.1	
53 Benzene	78	5.030	5.030	0.000	95	2393298	10.0	10.8	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	97	718492	10.0	9.22	
56 n-Heptane	100	5.220	5.220	0.000	89	89767	10.0	6.63	
58 Trichloroethene	130	5.564	5.564	0.000	97	596625	10.0	9.97	
60 Methylcyclohexane	83	5.730	5.730	0.000	92	748435	10.0	8.68	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	96	514541	10.0	10.1	
63 Dibromomethane	93	5.872	5.872	0.000	90	315855	10.0	9.50	
64 1,4-Dioxane	88	5.872	5.872	0.000	40	96307	200.0	236.1	
65 Dichlorobromomethane	83	5.990	5.990	0.000	100	662465	10.0	10.0	
67 2-Chloroethyl vinyl ether	63	6.240	6.240	0.000	92	419169	20.0	14.1	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	96	637812	10.0	8.48	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	776564	20.0	16.1	
70 Toluene	91	6.678	6.678	0.000	98	2246835	10.0	10.9	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	92	524965	10.0	8.98	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	519721	10.0	10.2	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	91	428699	10.0	11.0	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	459805	10.0	11.1	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	91	734612	10.0	10.5	
76 2-Hexanone	43	7.247	7.247	0.000	96	517182	20.0	18.3	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	441698	10.0	11.0	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	390705	10.0	9.56	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1375844	10.0	10.5	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	94	494767	10.0	12.1	
84 Ethylbenzene	106	8.054	8.054	0.000	98	711879	10.0	9.98	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	92	1759722	10.0	10.2	
86 o-Xylene	106	8.540	8.540	0.000	97	881102	10.0	10.2	
87 Styrene	104	8.552	8.552	0.000	93	1506670	10.0	10.4	
88 Bromoform	173	8.742	8.742	0.000	98	269167	10.0	11.0	
89 Isopropylbenzene	105	8.896	8.896	0.000	95	2099029	10.0	9.66	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	545092	10.0	10.0	
92 Bromobenzene	156	9.204	9.204	0.000	92	603079	10.0	9.81	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	86	177871	10.0	9.41	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	76	73465	10.0	5.47	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	581618	10.0	9.20	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	543027	10.0	9.83	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	1794365	10.0	9.46	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	1838676	10.0	9.75	
101 tert-Butylbenzene	119	9.785	9.785	0.000	91	1402573	10.0	8.36	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	1915594	10.0	9.66	
105 sec-Butylbenzene	105	9.999	9.999	0.000	94	1894315	10.0	8.38	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	1103552	10.0	9.80	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	1723990	10.0	8.64	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	97	1134894	10.0	9.64	
111 n-Butylbenzene	91	10.544	10.544	0.000	97	1310087	10.0	7.84	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	99	1112803	10.0	10.3	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.351	0.000	87	97061	10.0	9.51	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	553156	10.0	9.35	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	94	286139	10.0	9.51	
117 Naphthalene	128	12.430	12.430	0.000	96	1183190	10.0	6.78	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	546063	10.0	10.5	
S 129 Xylenes, Total	106				0		20.0	20.4	
S 130 Trihalomethanes, Total	1				0		40.0	42.7	

Reagents:

VMRGAS_00266	Amount Added:	8.00	Units: uL	
VMRPRIMW_00305	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00269	Amount Added:	8.00	Units: uL	
vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

Report Date: 23-Oct-2018 09:31:59 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6480.D

Injection Date: 22-Oct-2018 09:02:30 Instrument ID: A3UX15 Operator ID:

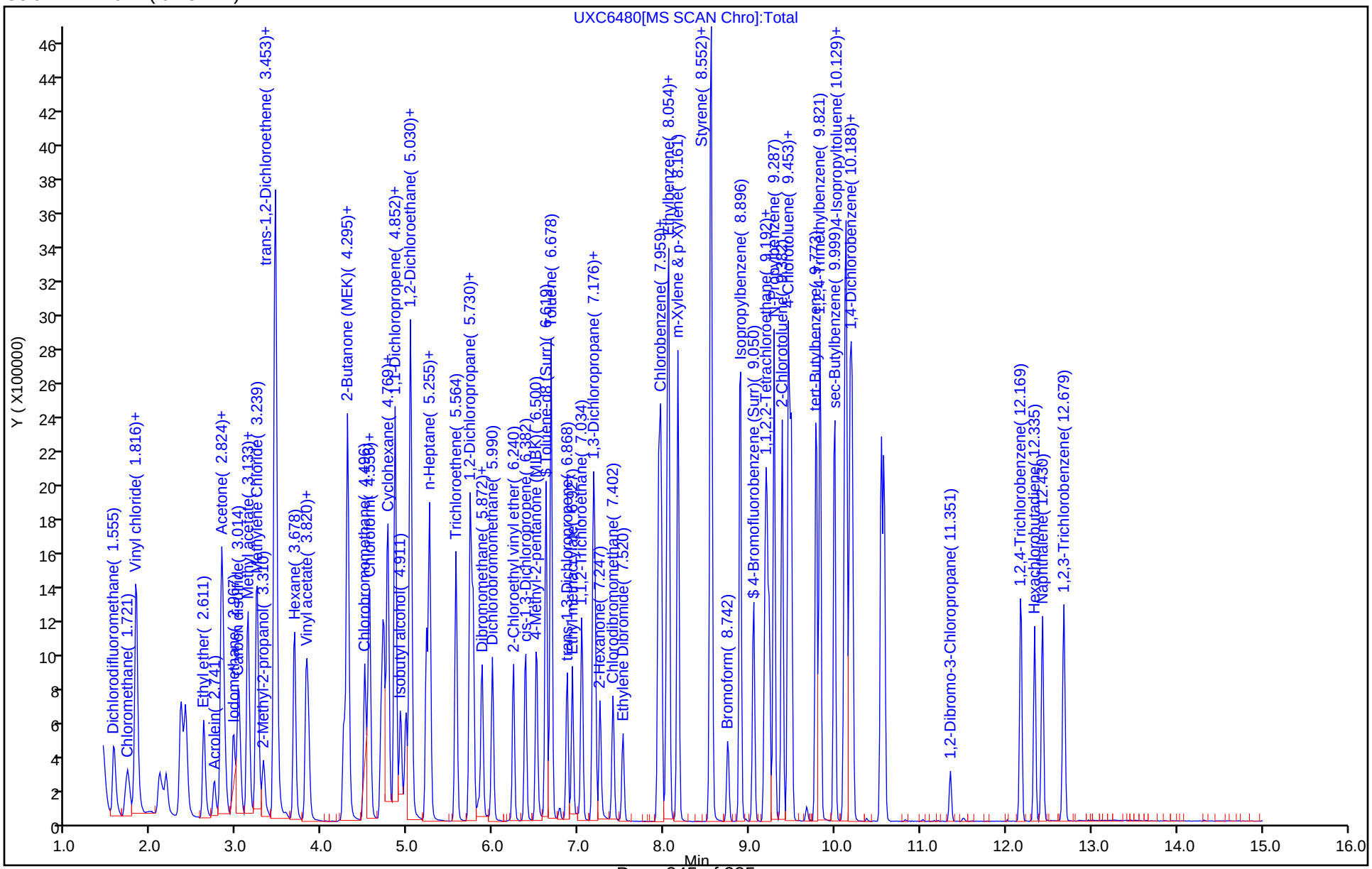
Lims ID: CCVIS L4 8260 Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: CCVIS 240-351439/2 Calibration Date: 10/23/2018 10:43

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC6509.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3565	0.4076		0.0114	0.0100	14.3	50.0
Chloromethane	Ave	0.3390	0.3786	0.1000	0.0112	0.0100	11.7	50.0
Vinyl chloride	Ave	0.3545	0.3408		0.00962	0.0100	-3.8	20.0
Butadiene	Ave	0.4240	0.3936		0.00928	0.0100	-7.2	50.0
Bromomethane	Ave	0.2784	0.1855		0.00666	0.0100	-33.4	50.0
Chloroethane	Ave	0.2391	0.1670		0.00699	0.0100	-30.1	50.0
Dichlorofluoromethane	Ave	0.6029	0.4938		0.00819	0.0100	-18.1	50.0
Trichlorofluoromethane	Ave	0.5707	0.4497		0.00788	0.0100	-21.2	50.0
Ethyl ether	Ave	0.2928	0.2491		0.00851	0.0100	-14.9	50.0
Acrolein	Ave	0.0554	0.0254		0.0230	0.0500	-54.1*	50.0
1,1-Dichloroethene	Ave	0.3014	0.2812		0.00933	0.0100	-6.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2261	0.2247		0.00994	0.0100	-0.6	50.0
Acetone	Ave	0.0281	0.0318		0.0226	0.0200	13.2	50.0
Iodomethane	Ave	0.4327	0.4660		0.0108	0.0100	7.7	50.0
Carbon disulfide	Ave	0.8242	0.8263		0.0100	0.0100	0.3	50.0
3-Chloro-1-propene	Ave	0.1850	0.1723		0.00931	0.0100	-6.9	50.0
Methyl acetate	Ave	0.2109	0.1910		0.0181	0.0200	-9.4	50.0
Methylene Chloride	Ave	0.2861	0.3261		0.0114	0.0100	14.0	50.0
2-Methyl-2-propanol	Ave	0.0195	0.0145		0.0742	0.100	-25.8	50.0
Acrylonitrile	Ave	0.1063	0.1003		0.0943	0.100	-5.7	50.0
Methyl tert-butyl ether	Ave	0.7921	0.6350		0.00802	0.0100	-19.8	50.0
trans-1,2-Dichloroethene	Ave	0.3025	0.3285		0.0109	0.0100	8.6	50.0
Hexane	Ave	0.0749	0.0644		0.00859	0.0100	-14.1	20.0
1,1-Dichloroethane	Ave	0.4927	0.5328	0.1000	0.0108	0.0100	8.1	50.0
Vinyl acetate	Ave	0.4510	0.3512		0.00779	0.0100	-22.1	50.0
2,2-Dichloropropane	Ave	0.0583	0.0641		0.0110	0.0100	10.0	50.0
cis-1,2-Dichloroethene	Ave	0.3309	0.3546		0.0107	0.0100	7.2	50.0
2-Butanone (MEK)	Ave	0.0348	0.0299		0.0172	0.0200	-14.1	50.0
Chlorobromomethane	Ave	0.1563	0.1666		0.0107	0.0100	6.6	50.0
Tetrahydrofuran	Lin1		0.0710		0.0163	0.0200	-18.4	50.0
Chloroform	Ave	0.5019	0.5369		0.0107	0.0100	7.0	20.0
1,1,1-Trichloroethane	Ave	0.3726	0.4032		0.0108	0.0100	8.2	50.0
Cyclohexane	Ave	0.4577	0.4542		0.00992	0.0100	-0.8	50.0
1,1-Dichloropropene	Ave	0.4100	0.4167		0.0102	0.0100	1.6	50.0
Carbon tetrachloride	Ave	0.3255	0.3687		0.0113	0.0100	13.3	50.0
Isobutyl alcohol	Ave	0.0060	0.0071		0.295	0.250	17.9	50.0
Benzene	Ave	1.202	1.295		0.0108	0.0100	7.8	50.0
1,2-Dichloroethane	Ave	0.4245	0.4007		0.00944	0.0100	-5.6	50.0
n-Heptane	Ave	0.0737	0.0502		0.00681	0.0100	-31.9	50.0
Trichloroethene	Ave	0.3258	0.3267		0.0100	0.0100	0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: CCVIS 240-351439/2 Calibration Date: 10/23/2018 10:43

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC6509.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4696	0.3957		0.00843	0.0100	-15.7	50.0
1,2-Dichloropropane	Ave	0.2776	0.2867		0.0103	0.0100	3.3	20.0
1,4-Dioxane	Lin1		0.0026		0.232	0.200	16.1	50.0
Dibromomethane	Ave	0.1811	0.1691		0.00933	0.0100	-6.7	50.0
Dichlorobromomethane	Ave	0.3602	0.3643		0.0101	0.0100	1.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1617	0.1072		0.0133	0.0200	-33.7	50.0
cis-1,3-Dichloropropene	Ave	0.4096	0.3492		0.00852	0.0100	-14.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2622	0.1913		0.0146	0.0200	-27.0	50.0
Toluene	Ave	1.620	1.773		0.0109	0.0100	9.5	20.0
trans-1,3-Dichloropropene	Ave	0.4575	0.4001		0.00875	0.0100	-12.5	50.0
Ethyl methacrylate	Ave	0.3997	0.3725		0.00932	0.0100	-6.8	50.0
1,1,2-Trichloroethane	Ave	0.3064	0.3205		0.0105	0.0100	4.6	50.0
Tetrachloroethene	Ave	0.3254	0.3681		0.0113	0.0100	13.1	50.0
1,3-Dichloropropane	Ave	0.5451	0.5584		0.0102	0.0100	2.4	50.0
2-Hexanone	Ave	0.2214	0.1792		0.0162	0.0200	-19.1	50.0
Chlorodibromomethane	Ave	0.3130	0.3413		0.0109	0.0100	9.1	50.0
Ethylene Dibromide	Ave	0.3198	0.3019		0.00944	0.0100	-5.6	50.0
Chlorobenzene	Ave	1.027	1.083	0.3000	0.0105	0.0100	5.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3191	0.3960		0.0124	0.0100	24.1	50.0
Ethylbenzene	Ave	0.5584	0.5743		0.0103	0.0100	2.9	20.0
m-Xylene & p-Xylene	Ave	1.349	1.375		0.0102	0.0100	1.9	50.0
o-Xylene	Ave	0.6771	0.6930		0.0102	0.0100	2.3	50.0
Styrene	Ave	1.136	1.188		0.0105	0.0100	4.6	50.0
Bromoform	Ave	0.1916	0.2109	0.1000	0.0110	0.0100	10.1	50.0
Isopropylbenzene	Ave	1.701	1.651		0.00971	0.0100	-2.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7123	0.7045	0.3000	0.00989	0.0100	-1.1	50.0
Bromobenzene	Ave	0.8059	0.8096		0.0100	0.0100	0.5	50.0
1,2,3-Trichloropropane	Ave	0.2477	0.2211		0.00893	0.0100	-10.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1760	0.1176		0.00668	0.0100	-33.2	50.0
N-Propylbenzene	Ave	0.8289	0.7921		0.00956	0.0100	-4.4	50.0
2-Chlorotoluene	Ave	0.7237	0.7264		0.0100	0.0100	0.4	50.0
1,3,5-Trimethylbenzene	Ave	2.487	2.413		0.00970	0.0100	-3.0	50.0
4-Chlorotoluene	Ave	2.472	2.485		0.0101	0.0100	0.5	50.0
tert-Butylbenzene	Ave	2.200	1.887		0.00858	0.0100	-14.2	50.0
1,2,4-Trimethylbenzene	Ave	2.600	2.564		0.00986	0.0100	-1.4	50.0
sec-Butylbenzene	Ave	2.962	2.556		0.00863	0.0100	-13.7	50.0
1,3-Dichlorobenzene	Ave	1.475	1.483		0.0101	0.0100	0.5	50.0
4-Isopropyltoluene	Ave	2.615	2.306		0.00882	0.0100	-11.8	50.0
1,4-Dichlorobenzene	Ave	1.542	1.522		0.00987	0.0100	-1.3	50.0
n-Butylbenzene	Ave	2.189	1.717		0.00784	0.0100	-21.6	50.0
1,2-Dichlorobenzene	Ave	1.422	1.482		0.0104	0.0100	4.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Lab Sample ID: CCVIS 240-351439/2 Calibration Date: 10/23/2018 10:43

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC6509.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1338	0.1215		0.00908	0.0100	-9.2	50.0
1,2,4-Trichlorobenzene	Lin1		0.7656		0.00991	0.0100	-0.9	50.0
Hexachlorobutadiene	Qua		0.3867		0.00986	0.0100	-1.4	50.0
Naphthalene	Ave	2.289	1.584		0.00692	0.0100	-30.8	50.0
1,2,3-Trichlorobenzene	Lin1		0.7573		0.0112	0.0100	11.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2592	0.2592		0.00797	0.00797	0.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3515	0.3076		0.00697	0.00797	-12.5	50.0
Toluene-d8 (Surr)	Ave	1.342	1.399		0.00831	0.00797	4.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4665	0.4988		0.00852	0.00797	6.9	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6509.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 23-Oct-2018 10:43:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-002
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:45 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: evansle Date: 23-Oct-2018 11:08:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1758260	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1247905	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	94	728603	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	363236	7.97	7.97	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.000	100	431022	7.97	6.97	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1391885	7.97	8.31	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	97	496073	7.97	8.52	
9 Dichlorodifluoromethane	85	1.567	1.567	0.000	99	716701	10.0	11.4	
10 Chloromethane	50	1.722	1.722	0.000	100	665722	10.0	11.2	
11 Vinyl chloride	62	1.816	1.816	0.000	98	599287	10.0	9.62	
12 Butadiene	54	1.828	1.828	0.000	97	692058	10.0	9.28	
13 Bromomethane	94	2.101	2.101	0.000	90	326208	10.0	6.66	
14 Chloroethane	64	2.184	2.184	0.000	99	293706	10.0	6.99	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	98	868160	10.0	8.19	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	100	790680	10.0	7.88	
17 Ethyl ether	59	2.623	2.623	0.000	91	437888	10.0	8.51	
18 Acrolein	56	2.741	2.741	0.000	99	223529	50.0	23.0	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	494387	10.0	9.33	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	90	395060	10.0	9.94	
22 Acetone	58	2.872	2.872	0.000	100	111814	20.0	22.6	
23 Iodomethane	142	2.967	2.967	0.000	97	819416	10.0	10.8	
24 Carbon disulfide	76	3.026	3.026	0.000	99	1452838	10.0	10.0	
25 3-Chloro-1-propene	76	3.133	3.133	0.000	91	302875	10.0	9.31	
27 Methyl acetate	43	3.145	3.145	0.000	98	671578	20.0	18.1	
28 Methylene Chloride	84	3.239	3.239	0.000	93	573400	10.0	11.4	
29 2-Methyl-2-propanol	59	3.311	3.311	0.000	87	254690	100.0	74.2	
32 Acrylonitrile	53	3.441	3.441	0.000	99	1763328	100.0	94.3	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	95	1116512	10.0	8.02	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	99	577557	10.0	10.9	
33 Hexane	86	3.678	3.678	0.000	92	113181	10.0	8.59	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	936838	10.0	10.8	
36 Vinyl acetate	43	3.844	3.844	0.000	97	617412	10.0	7.79	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	83	623555	10.0	10.7	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	73	112710	10.0	11.0	
41 2-Butanone (MEK)	72	4.307	4.307	0.000	98	105121	20.0	17.2	
45 Chlorobromomethane	128	4.496	4.496	0.000	95	292972	10.0	10.7	
46 Tetrahydrofuran	42	4.544	4.544	0.000	86	249561	20.0	16.3	
47 Chloroform	83	4.556	4.556	0.000	94	943931	10.0	10.7	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	708909	10.0	10.8	
49 Cyclohexane	56	4.769	4.769	0.000	89	798656	10.0	9.92	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	96	732667	10.0	10.2	
50 Carbon tetrachloride	117	4.864	4.864	0.000	97	648234	10.0	11.3	
52 Isobutyl alcohol	41	4.911	4.911	0.000	91	310829	250.0	294.7	
53 Benzene	78	5.030	5.030	0.000	95	2277755	10.0	10.8	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	97	704466	10.0	9.44	
56 n-Heptane	100	5.220	5.220	0.000	88	88208	10.0	6.81	
58 Trichloroethene	130	5.564	5.564	0.000	99	574489	10.0	10.0	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	695732	10.0	8.43	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	96	504071	10.0	10.3	
63 Dibromomethane	93	5.872	5.872	0.000	91	297226	10.0	9.33	
64 1,4-Dioxane	88	5.872	5.872	0.000	84	90745	200.0	232.2	
65 Dichlorobromomethane	83	5.991	5.991	0.000	100	640497	10.0	10.1	
67 2-Chloroethyl vinyl ether	63	6.240	6.240	0.000	92	376804	20.0	13.3	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	96	613958	10.0	8.52	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	96	672712	20.0	14.6	
70 Toluene	91	6.678	6.678	0.000	98	2212979	10.0	10.9	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	93	499270	10.0	8.75	
72 Ethyl methacrylate	69	6.927	6.927	0.000	88	464839	10.0	9.32	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	91	399943	10.0	10.5	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	459368	10.0	11.3	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	91	696793	10.0	10.2	
76 2-Hexanone	43	7.248	7.248	0.000	97	447325	20.0	16.2	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	425946	10.0	10.9	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	376705	10.0	9.44	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1351341	10.0	10.5	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	95	494133	10.0	12.4	
84 Ethylbenzene	106	8.054	8.054	0.000	98	716711	10.0	10.3	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	93	1715355	10.0	10.2	
86 o-Xylene	106	8.540	8.540	0.000	94	864800	10.0	10.2	
87 Styrene	104	8.552	8.552	0.000	93	1482391	10.0	10.5	
88 Bromoform	173	8.742	8.742	0.000	98	263220	10.0	11.0	
89 Isopropylbenzene	105	8.896	8.896	0.000	95	2060599	10.0	9.71	
93 1,1,2,2-Tetrachloroethane	83	9.181	9.181	0.000	95	513265	10.0	9.89	
92 Bromobenzene	156	9.204	9.204	0.000	91	589869	10.0	10.0	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	85	161104	10.0	8.93	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	81	85690	10.0	6.68	
96 N-Propylbenzene	120	9.287	9.287	0.000	98	577141	10.0	9.56	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	529272	10.0	10.0	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	1758241	10.0	9.70	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	1810786	10.0	10.1	
101 tert-Butylbenzene	119	9.773	9.773	0.000	91	1374824	10.0	8.58	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	1867860	10.0	9.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.999	9.999	0.000	94	1862374	10.0	8.63	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	1080597	10.0	10.1	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	1680310	10.0	8.82	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	1108838	10.0	9.87	
111 n-Butylbenzene	91	10.544	10.544	0.000	97	1251253	10.0	7.84	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	99	1079720	10.0	10.4	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.351	0.000	88	88513	10.0	9.08	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	557813	10.0	9.91	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	94	281733	10.0	9.86	
117 Naphthalene	128	12.430	12.430	0.000	96	1154388	10.0	6.92	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	551740	10.0	11.2	
S 129 Xylenes, Total	106				0		20.0	20.4	
S 130 Trihalomethanes, Total	1				0		40.0	42.7	

Reagents:

VMRGAS_00266	Amount Added:	8.00	Units: uL	
VMRPRIMW_00305	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00269	Amount Added:	8.00	Units: uL	
vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

Report Date: 24-Oct-2018 08:07:46 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6509.D

Injection Date: 23-Oct-2018 10:43:30 Instrument ID: A3UX15 Operator ID:

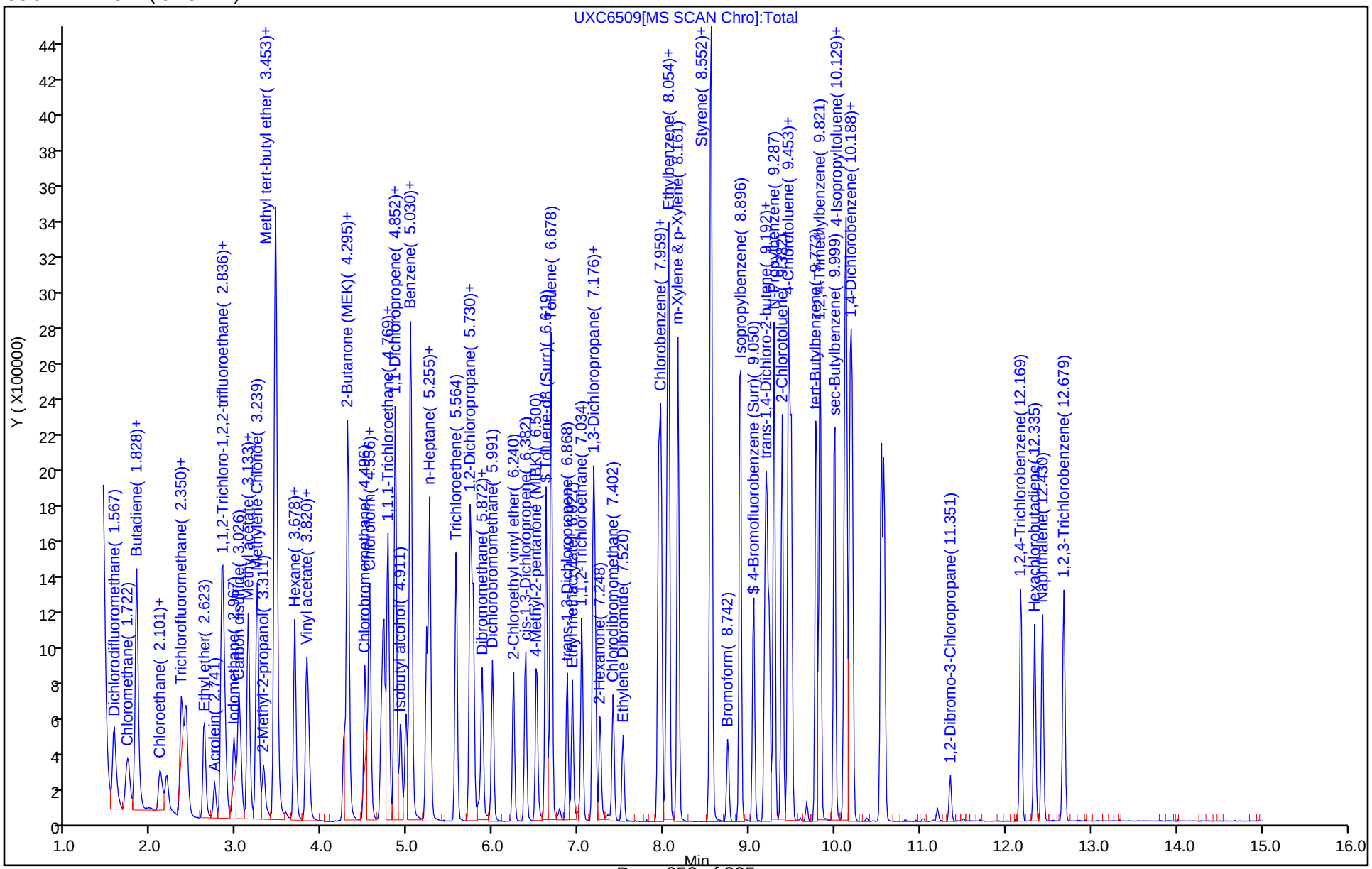
Lims ID: CCVIS L4 8260 Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\BFB827.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 27-Aug-2018 10:10:30 ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C80827A-IC,BFBUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:12 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.761	3.761	0.000	0	258892	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

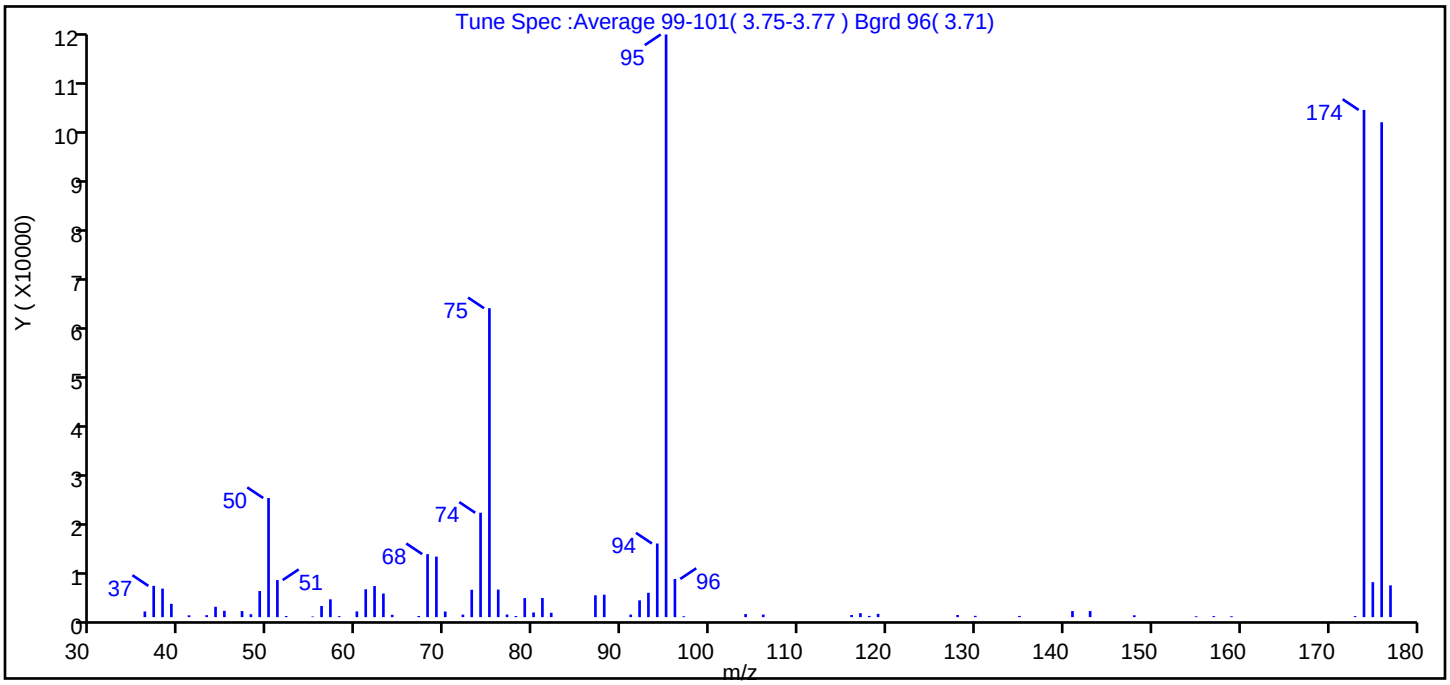
vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\BFB827.D
Injection Date: 27-Aug-2018 10:10:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	53.0
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.2 (0.2)
174	50 to 120% of m/z 95	87.1
175	5 to 9% of m/z 174	6.0 (6.9)
176	Greater than 95% but less than 101% of m/z 174	84.9 (97.6)
177	5 to 9% of m/z 176	5.5 (6.4)

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\BFB827.D\8260_15.rslt\spectra.d
Injection Date: 27-Aug-2018 10:10:30
Spectrum: Tune Spec :Average 99-101(3.75-3.77) Bgrd 96(3.71)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 67

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1105	58.00	187	79.00	3709	118.00	240
37.00	6089	60.00	1118	80.00	914	119.00	637
38.00	5559	61.00	5429	81.00	3729	128.00	412
39.00	2599	62.00	6057	82.00	842	130.00	258
41.00	358	63.00	4603	87.00	4258	135.00	236
43.00	390	64.00	454	88.00	4373	141.00	1189
44.00	2022	67.00	220	91.00	496	143.00	1185
45.00	1228	68.00	12274	92.00	3278	148.00	365
47.00	1189	69.00	11791	93.00	4747	155.00	168
48.00	572	70.00	1099	94.00	14345	157.00	199
49.00	5087	72.00	497	95.00	113504	159.00	171
50.00	23200	73.00	5336	96.00	7435	173.00	199
51.00	7223	74.00	20336	97.00	170	174.00	98808
52.00	222	75.00	60176	104.00	597	175.00	6813
55.00	121	76.00	5371	106.00	508	176.00	96408
56.00	2175	77.00	507	116.00	414	177.00	6196
57.00	3470	78.00	220	117.00	775		

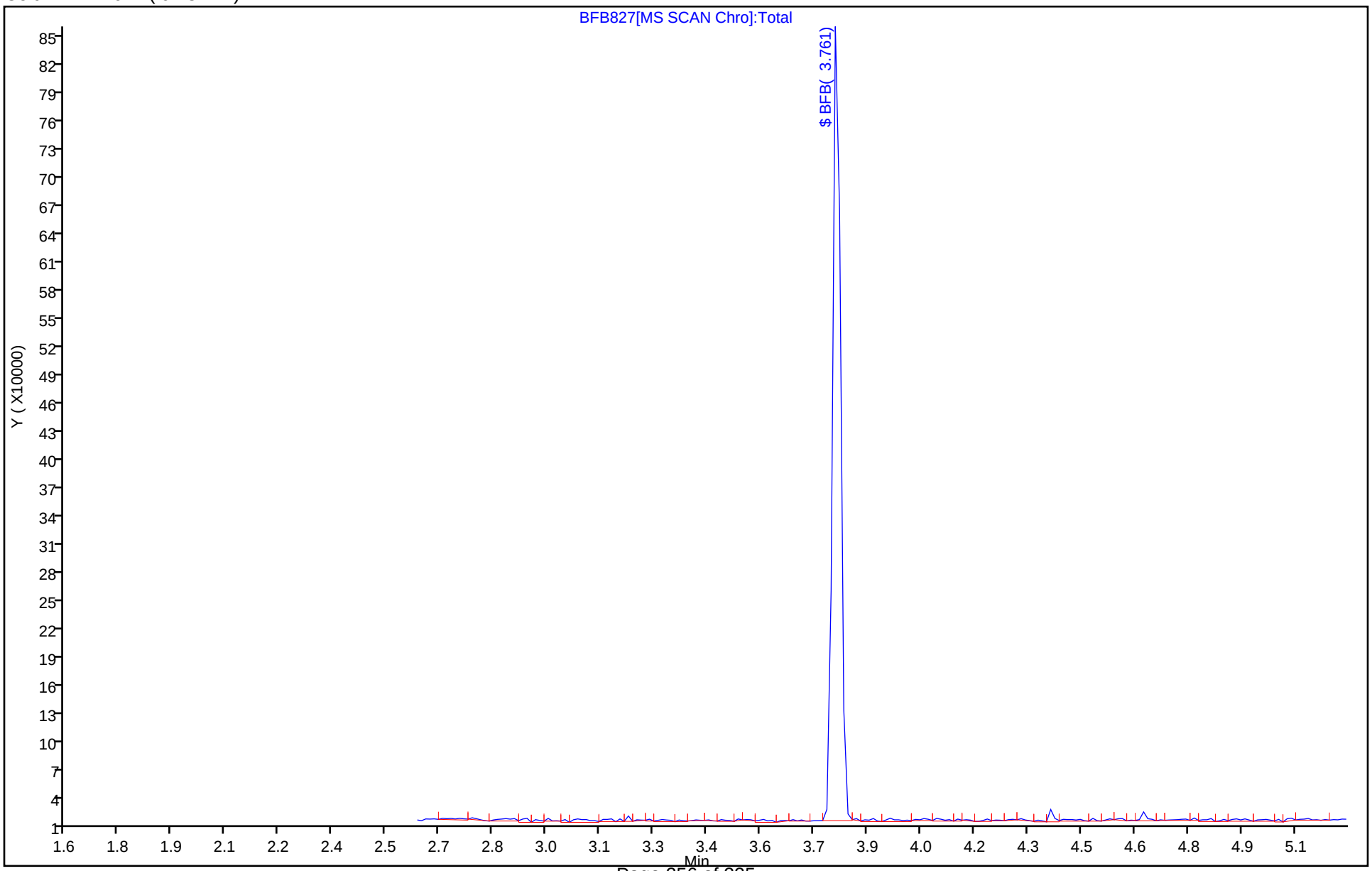
Report Date: 28-Aug-2018 10:27:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\BFB827.D

Injection Date:	27-Aug-2018 10:10:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\BFB828.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 28-Aug-2018 11:13:30 ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C80828A,BFBUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 30-Aug-2018 10:14:42 Calib Date: 28-Aug-2018 14:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\UXC4635.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.761	3.761	0.000	0	203518	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

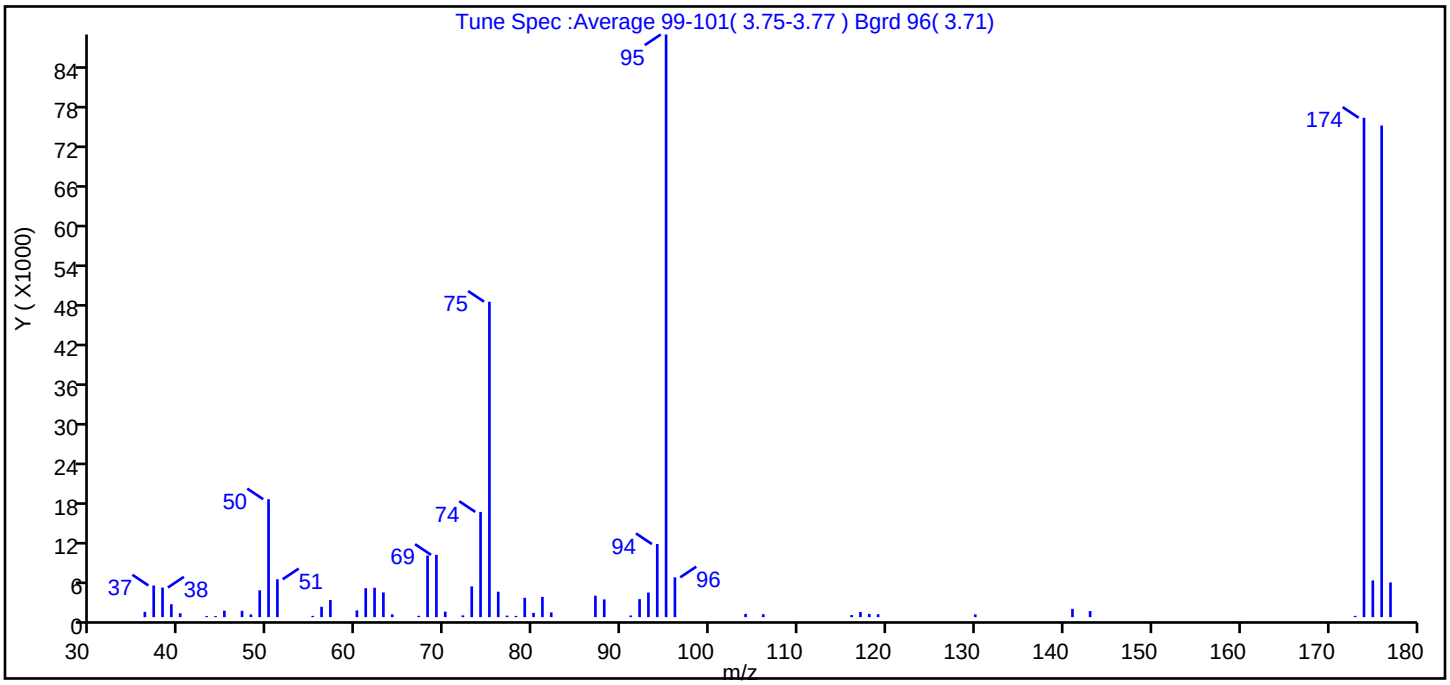
vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\BFB828.D
Injection Date: 28-Aug-2018 11:13:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.2
75	30 to 60% of m/z 95	54.1
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	85.7
175	5 to 9% of m/z 174	6.3 (7.4)
176	Greater than 95% but less than 101% of m/z 174	84.4 (98.4)
177	5 to 9% of m/z 176	6.0 (7.1)

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\BFB828.D\8260_15.rslt\spectra.d
Injection Date: 28-Aug-2018 11:13:30
Spectrum: Tune Spec :Average 99-101(3.75-3.77) Bgrd 96(3.71)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	808	57.00	2617	77.00	237	106.00	448
37.00	4832	60.00	1029	78.00	187	116.00	321
38.00	4516	61.00	4414	79.00	2958	117.00	791
39.00	1967	62.00	4486	80.00	644	118.00	497
40.00	591	63.00	3771	81.00	3086	119.00	445
43.00	172	64.00	423	82.00	717	130.00	420
44.00	163	67.00	203	87.00	3273	141.00	1261
45.00	993	68.00	9391	88.00	2705	143.00	927
47.00	966	69.00	9498	91.00	250	173.00	196
48.00	417	70.00	842	92.00	2748	174.00	76168
49.00	4096	72.00	270	93.00	3751	175.00	5607
50.00	17984	73.00	4689	94.00	11147	176.00	74984
51.00	5778	74.00	16052	95.00	88872	177.00	5297
55.00	191	75.00	48112	96.00	6072		
56.00	1579	76.00	3880	104.00	496		

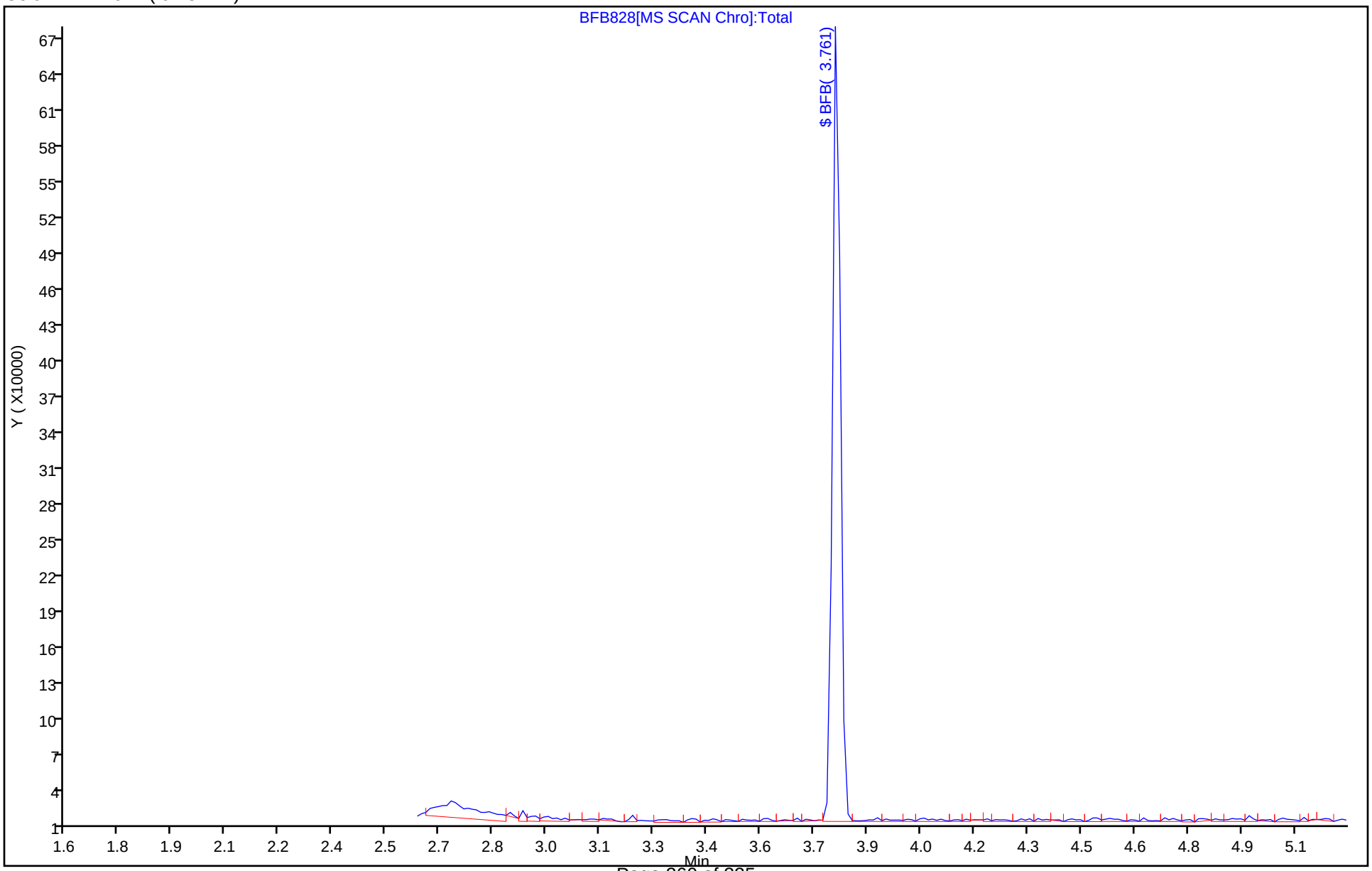
Report Date: 30-Aug-2018 10:14:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\BFB828.D

Injection Date:	28-Aug-2018 11:13:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\BFB1022.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	22-Oct-2018 08:37:30	ALS Bottle#:	29	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C81022A,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	23-Oct-2018 09:31:47	Calib Date:	27-Aug-2018 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0312				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.761	3.761	0.000	0	262018	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

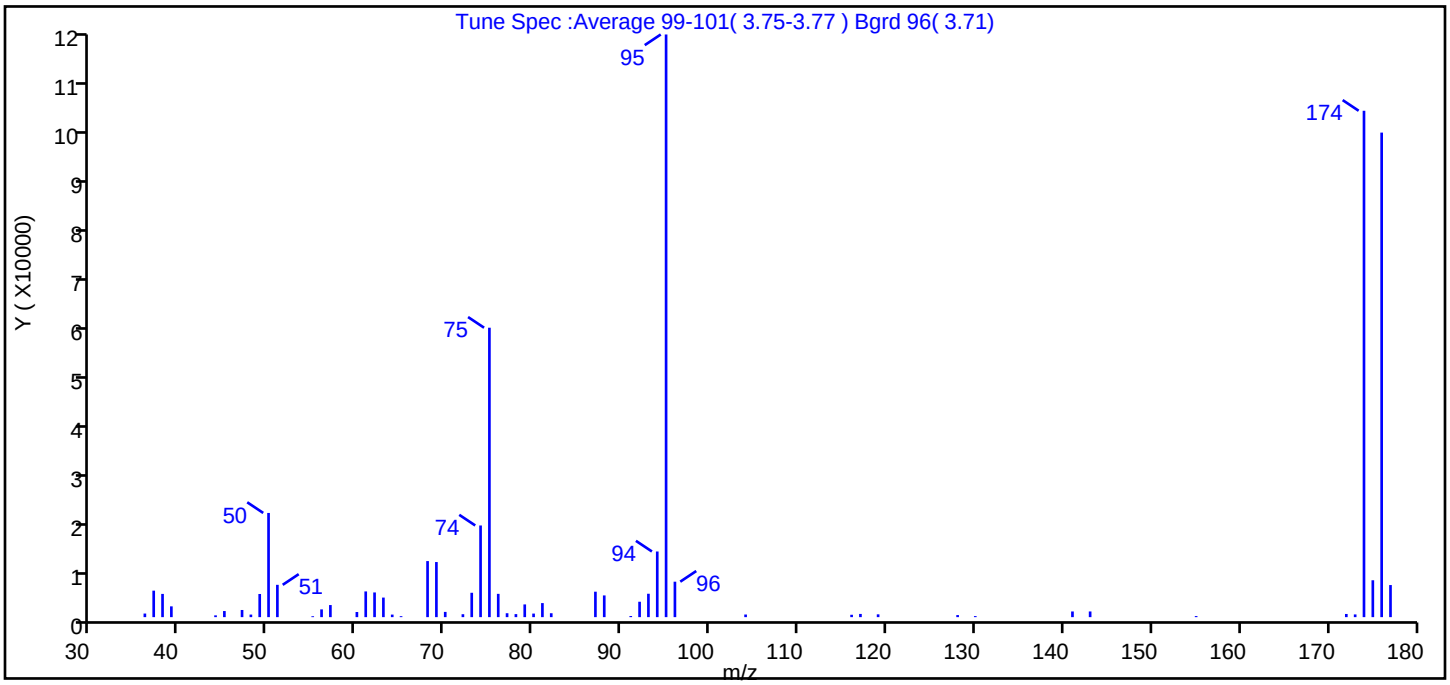
vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\BFB1022.D
Injection Date: 22-Oct-2018 08:37:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.9
75	30 to 60% of m/z 95	49.7
96	5 to 9% of m/z 95	6.1
173	Less than 2% of m/z 174	0.5 (0.5)
174	50 to 120% of m/z 95	86.9
175	5 to 9% of m/z 174	6.3 (7.3)
176	Greater than 95% but less than 101% of m/z 174	83.2 (95.7)
177	5 to 9% of m/z 176	5.5 (6.6)

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\BFB1022.D\8260_15.rslt\spectra.d
Injection Date: 22-Oct-2018 08:37:30
Spectrum: Tune Spec :Average 99-101(3.75-3.77) Bgrd 96(3.71)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 57

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	695	61.00	4976	79.00	2462	119.00	543
37.00	5125	62.00	4778	80.00	690	128.00	401
38.00	4495	63.00	3785	81.00	2718	130.00	202
39.00	2087	64.00	496	82.00	757	141.00	1100
44.00	346	65.00	185	87.00	4924	143.00	1099
45.00	1181	68.00	10847	88.00	4202	155.00	208
47.00	1385	69.00	10662	91.00	214	172.00	614
48.00	497	70.00	1015	92.00	2981	173.00	527
49.00	4480	72.00	568	93.00	4527	174.00	97976
50.00	20160	73.00	4716	94.00	12702	175.00	7137
51.00	6253	74.00	17736	95.00	112736	176.00	93752
55.00	173	75.00	56000	96.00	6859	177.00	6209
56.00	1501	76.00	4508	104.00	509		
57.00	2339	77.00	758	116.00	460		
60.00	996	78.00	587	117.00	621		

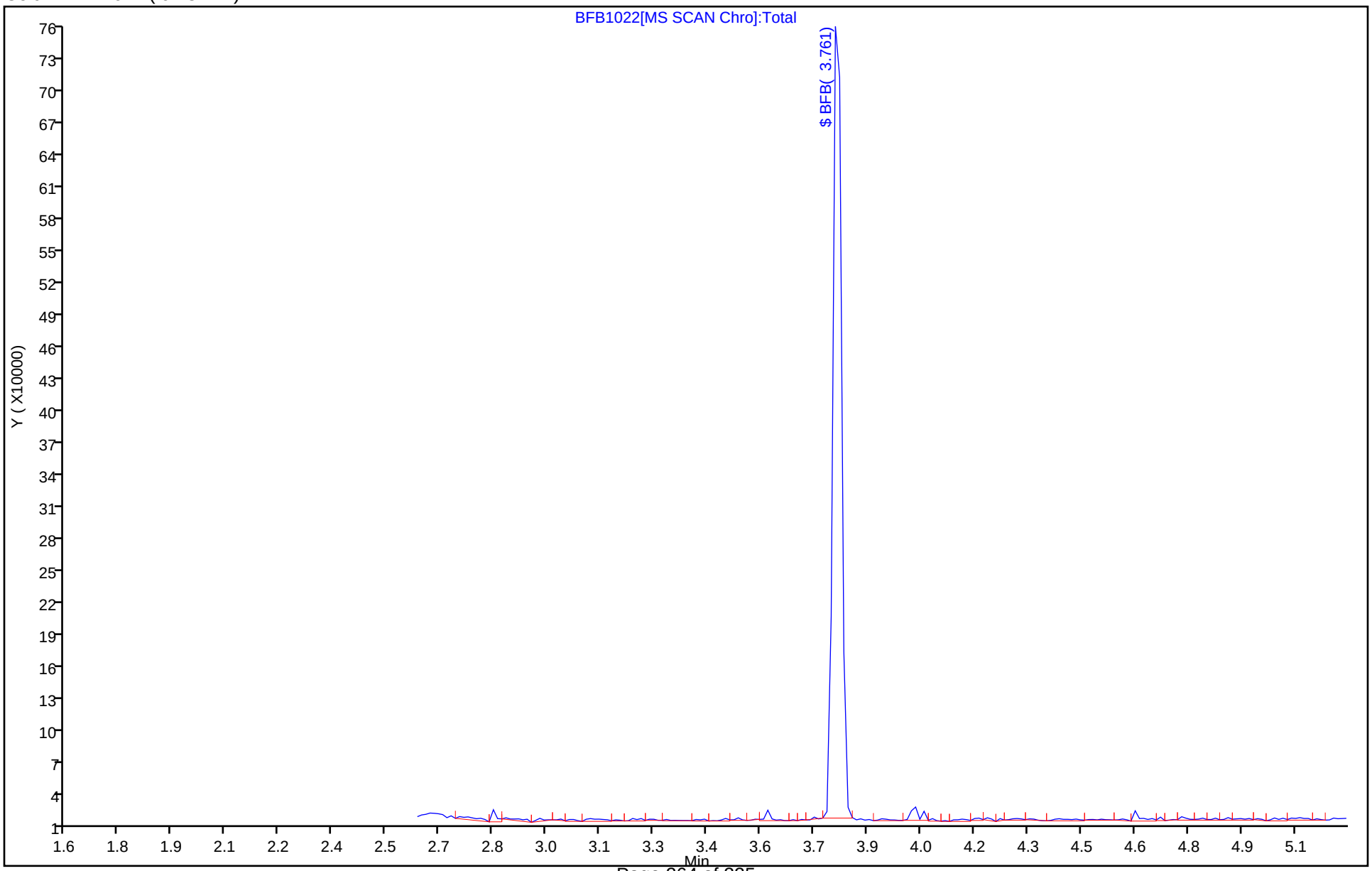
Report Date: 23-Oct-2018 09:31:49 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\BFB1022.D

Injection Date:	22-Oct-2018 08:37:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\BFB1023.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	23-Oct-2018 10:02:30	ALS Bottle#:	29	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C81023A,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	24-Oct-2018 08:07:42	Calib Date:	27-Aug-2018 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0315				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.761	3.761	0.000	0	246632	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

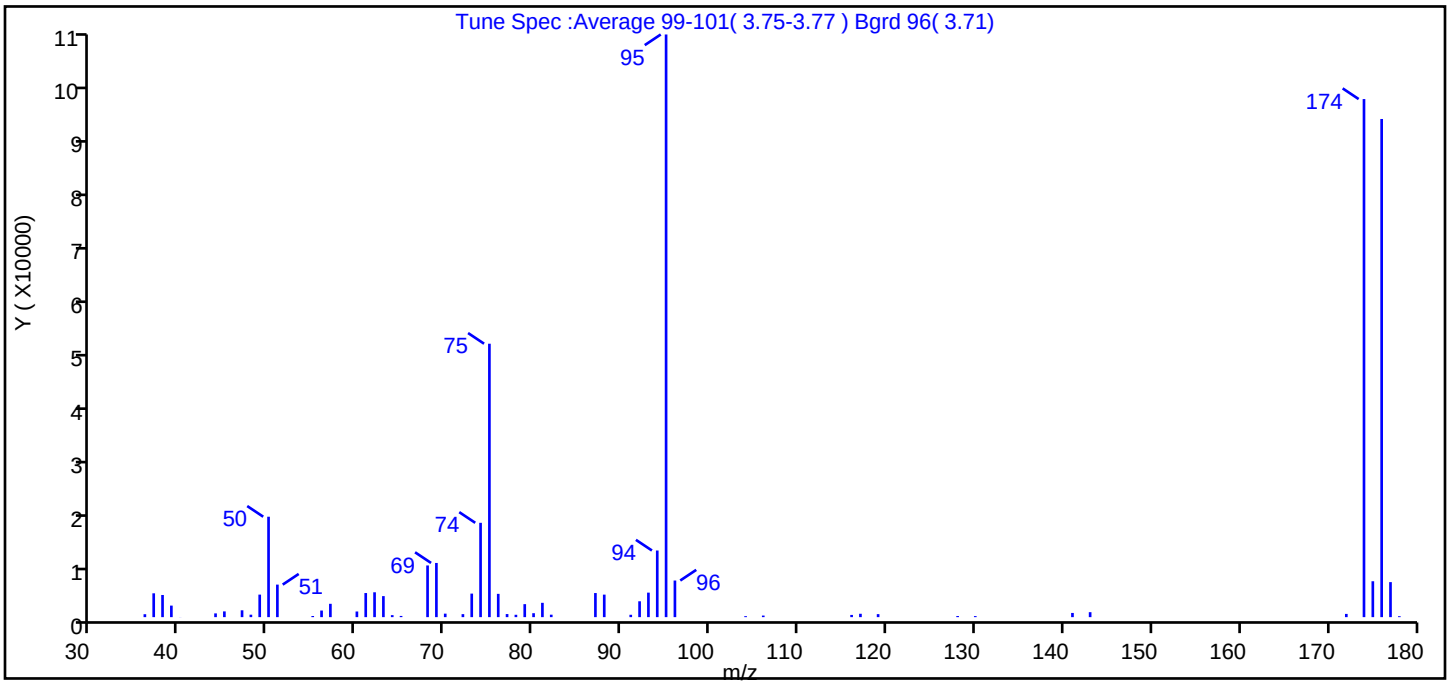
vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\BFB1023.D
Injection Date: 23-Oct-2018 10:02:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.2
75	30 to 60% of m/z 95	46.9
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	88.9
175	5 to 9% of m/z 174	6.2 (6.9)
176	Greater than 95% but less than 101% of m/z 174	85.5 (96.2)
177	5 to 9% of m/z 176	6.0 (7.0)

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\BFB1023.D\8260_15.rslt\spectra.d
Injection Date: 23-Oct-2018 10:02:30
Spectrum: Tune Spec :Average 99-101(3.75-3.77) Bgrd 96(3.71)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	540	60.00	1040	78.00	435	116.00	408
37.00	4384	61.00	4433	79.00	2390	117.00	620
38.00	4075	62.00	4573	80.00	725	119.00	554
39.00	2123	63.00	3869	81.00	2635	128.00	206
40.00	16	64.00	369	82.00	453	130.00	193
44.00	691	65.00	223	87.00	4433	141.00	771
45.00	1057	68.00	9508	88.00	4143	143.00	914
47.00	1260	69.00	9967	91.00	436	172.00	595
48.00	452	70.00	643	92.00	2919	174.00	95296
49.00	4145	72.00	554	93.00	4508	175.00	6603
50.00	18472	73.00	4330	94.00	12258	176.00	91632
51.00	5985	74.00	17352	95.00	107176	177.00	6443
55.00	209	75.00	50296	96.00	6736	178.00	169
56.00	1215	76.00	4285	104.00	182		
57.00	2453	77.00	567	106.00	290		

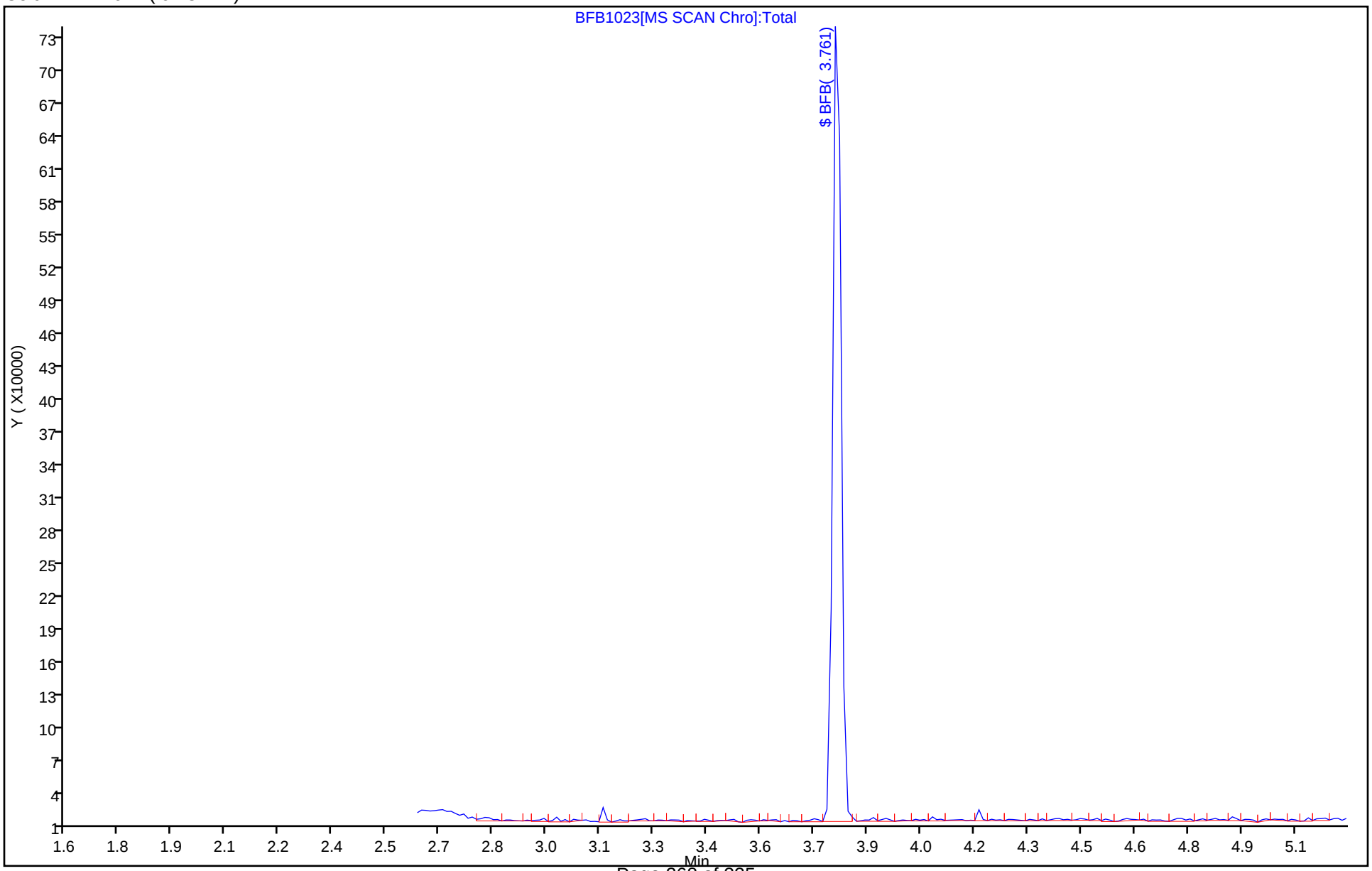
Report Date: 24-Oct-2018 08:07:43 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\BFB1023.D

Injection Date:	23-Oct-2018 10:02:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-351197/6

Matrix: Water Lab File ID: UXC6484.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 10:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-351197/6

Matrix: Water Lab File ID: UXC6484.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 10:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-121
460-00-4	4-Bromofluorobenzene (Surr)	90		59-120
2037-26-5	Toluene-d8 (Surr)	96		70-123
1868-53-7	Dibromofluoromethane (Surr)	109		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6484.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 22-Oct-2018 10:29:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-006
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 22-Oct-2018 11:49:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1641969	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	86	1201610	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	-0.001	94	632007	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.698	4.686	0.012	95	368986	7.97	8.67	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	0.000	100	435744	7.97	7.55	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1235662	7.97	7.66	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	403337	7.97	7.19	
9 Dichlorodifluoromethane	85		1.555					ND	
10 Chloromethane	50		1.721					ND	
11 Vinyl chloride	62		1.816					ND	
12 Butadiene	54		1.828					ND	
13 Bromomethane	94		2.101					ND	
14 Chloroethane	64		2.172					ND	
15 Dichlorofluoromethane	67		2.338					ND	
16 Trichlorofluoromethane	101		2.397					ND	
17 Ethyl ether	59		2.611					ND	
18 Acrolein	56		2.741					ND	
19 1,1-Dichloroethene	96		2.824					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.836					ND	
22 Acetone	58	2.872	2.860	0.012	96	3076		0.6672	
21 Methylal	45		2.872					ND	
23 Iodomethane	142		2.967					ND	
24 Carbon disulfide	76	3.038	3.026	0.012	99	16769		0.1239	
26 Acetonitrile	41		3.109					ND	
25 3-Chloro-1-propene	76		3.121					ND	
27 Methyl acetate	43		3.133					ND	
28 Methylene Chloride	84		3.227					ND	
29 2-Methyl-2-propanol	59		3.310					ND	
32 Acrylonitrile	53		3.441					ND	
31 Methyl tert-butyl ether	73		3.453					ND	
30 trans-1,2-Dichloroethene	96		3.465					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
125 Chlorodifluoromethane TIC	51		3.571					ND	
33 Hexane	86		3.678					ND	
34 1,1-Dichloroethane	63		3.809					ND	
36 Vinyl acetate	43		3.844					ND	
35 Isopropyl ether	87		3.856					ND	
37 2-Chloro-1,3-butadiene	53		3.892					ND	
38 Tert-butyl ethyl ether	59		4.152					ND	
39 cis-1,2-Dichloroethene	96		4.295					ND	
40 2,2-Dichloropropane	97		4.295					ND	
41 2-Butanone (MEK)	72	4.307	4.295	0.012	98	2754		0.4821	
42 Ethyl acetate	43		4.342					ND	U
43 Propionitrile	54		4.366					ND	
44 Methacrylonitrile	41		4.484					ND	
45 Chlorobromomethane	128		4.496					ND	
46 Tetrahydrofuran	42		4.532					ND	
47 Chloroform	83		4.556					ND	
48 1,1,1-Trichloroethane	97		4.722					ND	
49 Cyclohexane	56		4.769					ND	
51 1,1-Dichloropropene	75		4.852					ND	
50 Carbon tetrachloride	117		4.852					ND	
52 Isobutyl alcohol	41		4.911					ND	
53 Benzene	78		5.030					ND	
54 1,2-Dichloroethane	62		5.042					ND	
55 Tert-amyl methyl ether	73		5.101					ND	
56 n-Heptane	100		5.220					ND	
57 n-Butanol	56		5.469					ND	
58 Trichloroethene	130		5.564					ND	
59 Ethyl acrylate	55		5.635					ND	
60 Methylcyclohexane	83		5.730					ND	
61 1,2-Dichloropropane	63		5.765					ND	
62 Methyl methacrylate	41		5.836					ND	
63 Dibromomethane	93		5.872					ND	
64 1,4-Dioxane	88		5.872					ND	
65 Dichlorobromomethane	83		5.990					ND	
66 2-Nitropropane	41		6.192					ND	
67 2-Chloroethyl vinyl ether	63		6.240					ND	
68 cis-1,3-Dichloropropene	75		6.382					ND	
69 4-Methyl-2-pentanone (MIBK	43		6.500					ND	
70 Toluene	91		6.678					ND	
71 trans-1,3-Dichloropropene	75		6.868					ND	
72 Ethyl methacrylate	69		6.927					ND	
73 1,1,2-Trichloroethane	97		7.034					ND	
74 Tetrachloroethene	164		7.176					ND	
75 1,3-Dichloropropane	76		7.188					ND	
76 2-Hexanone	43		7.247					ND	
77 n-Butyl acetate	43		7.354					ND	
78 Tetrahydrothiophene	60		7.402					ND	
79 Chlorodibromomethane	129		7.402					ND	
80 Ethylene Dibromide	107		7.520					ND	
81 1-Chlorohexane	91		7.923					ND	
82 Chlorobenzene	112		7.959					ND	
83 1,1,1,2-Tetrachloroethane	131		8.030					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Ethylbenzene	106		8.054					ND	
85 m-Xylene & p-Xylene	91		8.161					ND	
86 o-Xylene	106		8.540					ND	
87 Styrene	104		8.552					ND	
88 Bromoform	173		8.742					ND	
89 Isopropylbenzene	105		8.896					ND	
90 1,4-Dichlorobutane	55		8.991					ND	
91 Cyclohexanone	55		9.003					ND	
93 1,1,2,2-Tetrachloroethane	83		9.180					ND	
92 Bromobenzene	156		9.204					ND	
94 1,2,3-Trichloropropane	110		9.228					ND	
95 trans-1,4-Dichloro-2-buten	53		9.228					ND	
96 N-Propylbenzene	120		9.287					ND	
100 3-Ethyltoluene	105		9.324					ND	
97 2-Chlorotoluene	126		9.382					ND	
98 1,3,5-Trimethylbenzene	105		9.453					ND	
99 4-Chlorotoluene	91		9.489					ND	
104 2-Ethyltoluene	105		9.609					ND	
101 tert-Butylbenzene	119		9.785					ND	
102 Pentachloroethane	167		9.809					ND	
103 1,2,4-Trimethylbenzene	105		9.821					ND	
105 sec-Butylbenzene	105		9.999					ND	
106 1,3-Dichlorobenzene	146		10.117					ND	
107 4-Isopropyltoluene	119		10.129					ND	
108 1,4-Dichlorobenzene	146		10.200					ND	
109 1,2,3-Trimethylbenzene	105		10.248					ND	
110 Benzyl chloride	126		10.343					ND	
111 n-Butylbenzene	91		10.544					ND	
112 1,2-Dichlorobenzene	146		10.568					ND	
113 1,2-Dibromo-3-Chloropropan	157		11.351					ND	
114 1,3,5-Trichlorobenzene	180		11.552					ND	
115 1,2,4-Trichlorobenzene	180		12.169					ND	
116 Hexachlorobutadiene	225		12.335					ND	
117 Naphthalene	128		12.430					ND	
118 1,2,3-Trichlorobenzene	180		12.679					ND	
119 2-Methylnaphthalene	142		13.746					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
120 Epichlorohydrin	1		0.000					ND	
122 Ethylene oxide	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

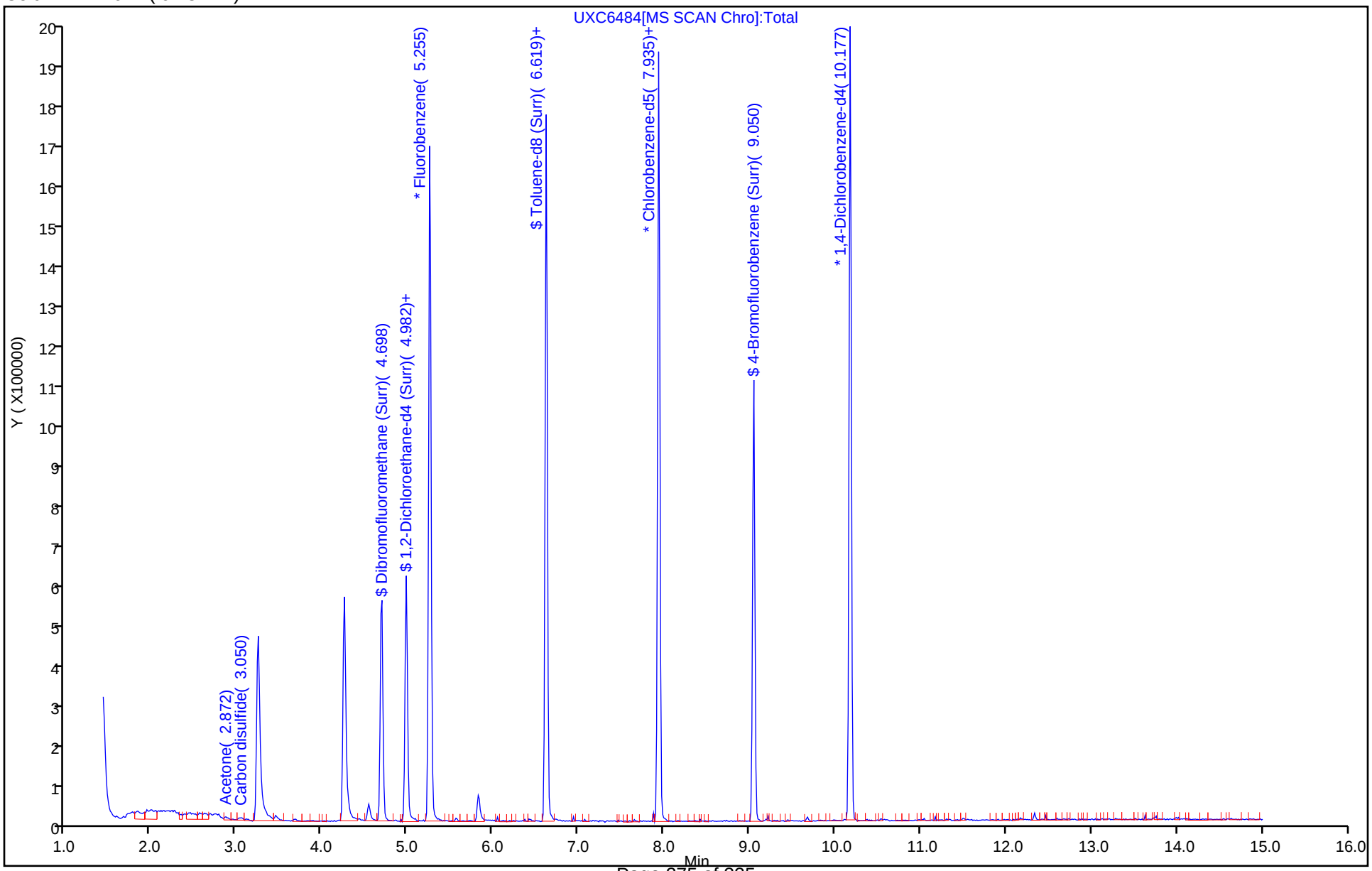
Report Date: 23-Oct-2018 09:32:37 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6484.D

Injection Date:	22-Oct-2018 10:29:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6484.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 22-Oct-2018 10:29:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-006
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 22-Oct-2018 11:49:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	8.67	108.77
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	7.55	94.72
$ 6 Toluene-d8 (Surr)	7.97	7.66	96.14
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.19	90.27

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-351439/6

Matrix: Water Lab File ID: UXC6513.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 12:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-351439/6

Matrix: Water Lab File ID: UXC6513.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 12:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	95		70-123
1868-53-7	Dibromofluoromethane (Surr)	115		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6513.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 23-Oct-2018 12:11:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-006
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: evansle Date: 23-Oct-2018 12:42:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1655830	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1228265	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	94	620990	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	95	391758	7.97	9.13	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.000	100	467385	7.97	8.03	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1243926	7.97	7.55	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	94	419066	7.97	7.31	
9 Dichlorodifluoromethane	85		1.567					ND	
10 Chloromethane	50		1.722					ND	
11 Vinyl chloride	62		1.816					ND	
12 Butadiene	54		1.828					ND	
13 Bromomethane	94		2.101					ND	
14 Chloroethane	64		2.184					ND	
15 Dichlorofluoromethane	67		2.350					ND	
16 Trichlorofluoromethane	101		2.397					ND	
17 Ethyl ether	59		2.623					ND	
18 Acrolein	56		2.741					ND	
19 1,1-Dichloroethene	96		2.824					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.836					ND	
22 Acetone	58	2.860	2.872	-0.012	100	15289		3.29	
21 Methylal	45		2.872					ND	
23 Iodomethane	142		2.967					ND	
24 Carbon disulfide	76	3.026	3.026	0.000	95	15890		0.1164	
26 Acetonitrile	41		3.109					ND	U
25 3-Chloro-1-propene	76		3.133					ND	
27 Methyl acetate	43		3.145					ND	
28 Methylene Chloride	84	3.239	3.239	0.000	95	13250		0.2797	
29 2-Methyl-2-propanol	59		3.311					ND	
32 Acrylonitrile	53		3.441					ND	
31 Methyl tert-butyl ether	73		3.453					ND	
30 trans-1,2-Dichloroethene	96		3.465					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
125 Chlorodifluoromethane TIC	51		3.571					ND	
33 Hexane	86		3.678					ND	
34 1,1-Dichloroethane	63		3.820					ND	
36 Vinyl acetate	43		3.844					ND	
35 Isopropyl ether	87		3.856					ND	
37 2-Chloro-1,3-butadiene	53		3.891					ND	
38 Tert-butyl ethyl ether	59		4.152					ND	
39 cis-1,2-Dichloroethene	96		4.295					ND	
40 2,2-Dichloropropane	97		4.295					ND	
41 2-Butanone (MEK)	72	4.307	4.307	0.000	99	4717		0.8188	
42 Ethyl acetate	43		4.342					ND	U
43 Propionitrile	54		4.366					ND	U
44 Methacrylonitrile	41		4.484					ND	
45 Chlorobromomethane	128		4.496					ND	
46 Tetrahydrofuran	42		4.544					ND	
47 Chloroform	83		4.556					ND	
48 1,1,1-Trichloroethane	97		4.722					ND	
49 Cyclohexane	56		4.769					ND	
51 1,1-Dichloropropene	75		4.852					ND	
50 Carbon tetrachloride	117		4.864					ND	
52 Isobutyl alcohol	41		4.911					ND	
53 Benzene	78		5.030					ND	
54 1,2-Dichloroethane	62		5.042					ND	
55 Tert-amyl methyl ether	73		5.101					ND	
56 n-Heptane	100		5.220					ND	
57 n-Butanol	56		5.469					ND	
58 Trichloroethene	130		5.564					ND	
59 Ethyl acrylate	55		5.635					ND	
60 Methylcyclohexane	83		5.730					ND	
61 1,2-Dichloropropane	63		5.765					ND	
62 Methyl methacrylate	41		5.836					ND	
63 Dibromomethane	93		5.872					ND	
64 1,4-Dioxane	88		5.872					ND	
65 Dichlorobromomethane	83		5.991					ND	
66 2-Nitropropane	41		6.192					ND	
67 2-Chloroethyl vinyl ether	63		6.240					ND	
68 cis-1,3-Dichloropropene	75		6.382					ND	
69 4-Methyl-2-pentanone (MIBK	43		6.500					ND	
70 Toluene	91		6.678					ND	
71 trans-1,3-Dichloropropene	75		6.868					ND	
72 Ethyl methacrylate	69		6.927					ND	
73 1,1,2-Trichloroethane	97		7.034					ND	
74 Tetrachloroethene	164		7.176					ND	
75 1,3-Dichloropropane	76		7.188					ND	
76 2-Hexanone	43		7.248					ND	
77 n-Butyl acetate	43		7.354					ND	
78 Tetrahydrothiophene	60		7.402					ND	
79 Chlorodibromomethane	129		7.402					ND	
80 Ethylene Dibromide	107		7.520					ND	
81 1-Chlorohexane	91		7.923					ND	
82 Chlorobenzene	112		7.959					ND	
83 1,1,1,2-Tetrachloroethane	131		8.030					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Ethylbenzene	106		8.054					ND	
85 m-Xylene & p-Xylene	91		8.161					ND	
86 o-Xylene	106		8.540					ND	
87 Styrene	104		8.552					ND	
88 Bromoform	173		8.742					ND	
89 Isopropylbenzene	105		8.896					ND	
90 1,4-Dichlorobutane	55		8.991					ND	
91 Cyclohexanone	55		9.002					ND	
93 1,1,2,2-Tetrachloroethane	83		9.181					ND	
92 Bromobenzene	156		9.204					ND	
94 1,2,3-Trichloropropane	110		9.228					ND	
95 trans-1,4-Dichloro-2-buten	53		9.228					ND	
96 N-Propylbenzene	120		9.287					ND	
100 3-Ethyltoluene	105		9.324					ND	
97 2-Chlorotoluene	126		9.382					ND	
98 1,3,5-Trimethylbenzene	105		9.453					ND	
99 4-Chlorotoluene	91		9.489					ND	
104 2-Ethyltoluene	105		9.609					ND	
101 tert-Butylbenzene	119		9.773					ND	
102 Pentachloroethane	167		9.809					ND	
103 1,2,4-Trimethylbenzene	105		9.821					ND	
105 sec-Butylbenzene	105		9.999					ND	
106 1,3-Dichlorobenzene	146		10.117					ND	
107 4-Isopropyltoluene	119		10.129					ND	
108 1,4-Dichlorobenzene	146		10.200					ND	
109 1,2,3-Trimethylbenzene	105		10.248					ND	
110 Benzyl chloride	126		10.331					ND	
111 n-Butylbenzene	91		10.544					ND	
112 1,2-Dichlorobenzene	146		10.568					ND	
113 1,2-Dibromo-3-Chloropropan	157		11.351					ND	
114 1,3,5-Trichlorobenzene	180		11.552					ND	
115 1,2,4-Trichlorobenzene	180		12.169					ND	
116 Hexachlorobutadiene	225		12.335					ND	
117 Naphthalene	128		12.430					ND	
118 1,2,3-Trichlorobenzene	180		12.679					ND	
119 2-Methylnaphthalene	142		13.746					ND	
120 Epichlorohydrin	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
122 Ethylene oxide	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

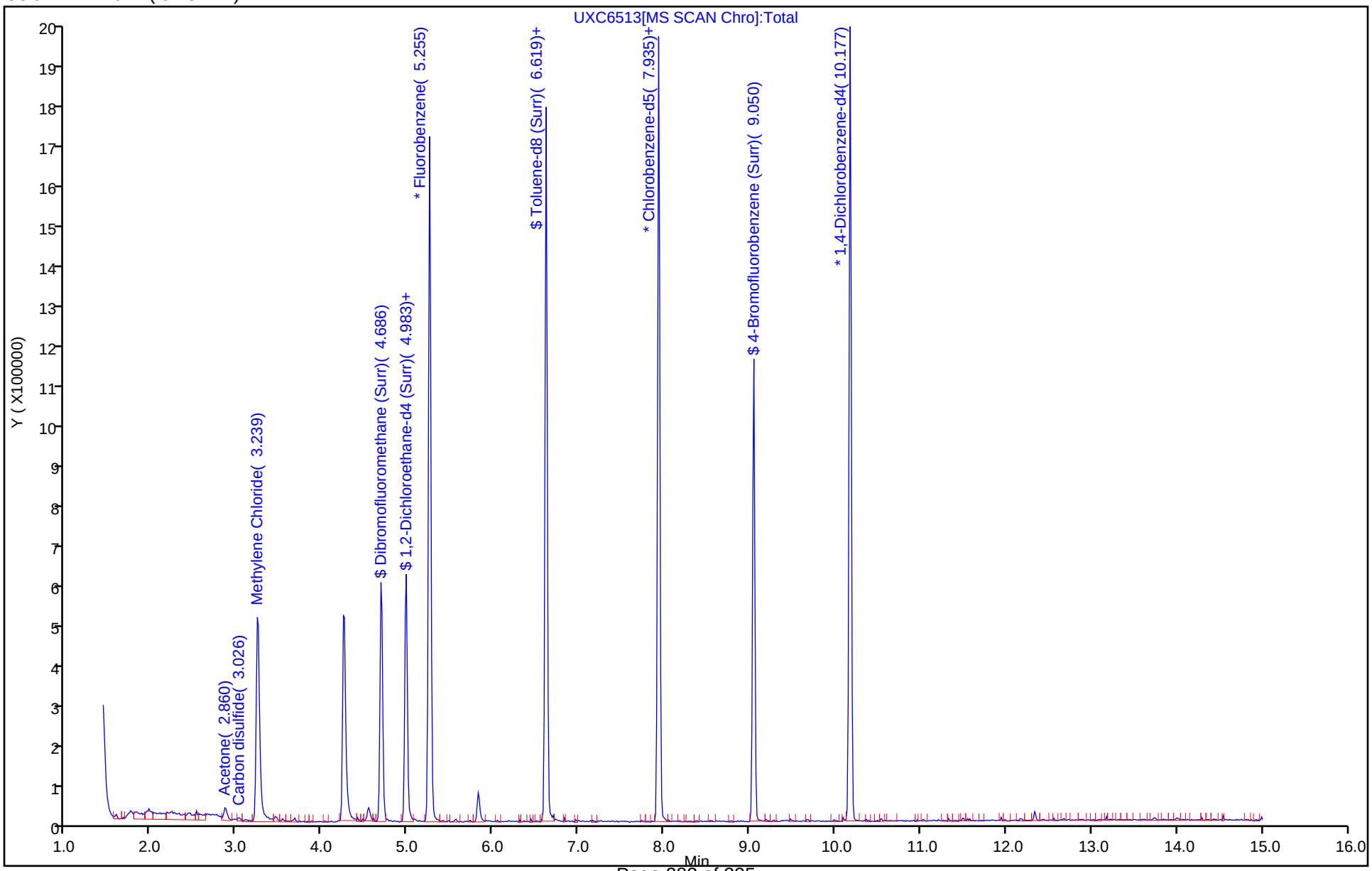
Report Date: 24-Oct-2018 08:07:58 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6513.D

Injection Date:	23-Oct-2018 12:11:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6513.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 23-Oct-2018 12:11:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-006
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: evansle Date: 23-Oct-2018 12:42:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.13	114.52
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.03	100.75
$ 6 Toluene-d8 (Surr)	7.97	7.55	94.68
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.31	91.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-351197/4

Matrix: Water Lab File ID: UXC6481.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 09:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	10.1		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	9.72		1.0	0.13
79-00-5	1,1,2-Trichloroethane	10.4		1.0	0.090
75-34-3	1,1-Dichloroethane	9.86		1.0	0.17
75-35-4	1,1-Dichloroethene	8.48		1.0	0.19
107-06-2	1,2-Dichloroethane	8.58		1.0	0.21
78-87-5	1,2-Dichloropropane	9.78		1.0	0.15
591-78-6	2-Hexanone	18.4		10	0.54
67-64-1	Acetone	18.1		10	5.4
71-43-2	Benzene	9.94		1.0	0.13
75-25-2	Bromoform	9.80		1.0	0.76
74-83-9	Bromomethane	5.06		1.0	0.42
75-15-0	Carbon disulfide	8.83		1.0	0.28
56-23-5	Carbon tetrachloride	10.7		1.0	0.26
108-90-7	Chlorobenzene	9.73		1.0	0.14
75-00-3	Chloroethane	5.64		1.0	0.83
67-66-3	Chloroform	9.97		1.0	0.13
74-87-3	Chloromethane	9.07		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	9.83		1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	8.04		1.0	0.61
75-27-4	Dichlorobromomethane	9.26		1.0	0.17
100-41-4	Ethylbenzene	9.31		1.0	0.11
78-93-3	2-Butanone (MEK)	16.9		10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	15.2		10	0.42
75-09-2	Methylene Chloride	10.5		5.0	2.6
100-42-5	Styrene	9.51		1.0	0.10
127-18-4	Tetrachloroethene	10.3		1.0	0.15
108-88-3	Toluene	10.2		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	10.2		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	8.20		1.0	0.67
79-01-6	Trichloroethene	9.29		1.0	0.10
75-01-4	Vinyl chloride	7.81		1.0	0.20
1330-20-7	Xylenes, Total	18.9		2.0	0.15
124-48-1	Chlorodibromomethane	10.1		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-351197/4

Matrix: Water Lab File ID: UXC6481.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 09:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		70-121
460-00-4	4-Bromofluorobenzene (Surr)	103		59-120
2037-26-5	Toluene-d8 (Surr)	103		70-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6481.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 22-Oct-2018 09:24:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-004
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1811075	10.0	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1252697	10.0	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	723296	10.0	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	95	376105	7.97	8.01	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	0.000	99	446044	7.97	7.01	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1375439	7.97	8.18	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	479975	7.97	8.21	
	9 Dichlorodifluoromethane	85	1.567	1.555	0.012	100	526028	10.0	8.15	
	10 Chloromethane	50	1.721	1.721	0.000	99	556713	10.0	9.07	
	11 Vinyl chloride	62	1.816	1.816	0.000	98	501463	10.0	7.81	
	12 Butadiene	54	1.828	1.828	0.000	97	553406	10.0	7.21	
	13 Bromomethane	94	2.101	2.101	0.000	90	255117	10.0	5.06	
	14 Chloroethane	64	2.184	2.172	0.012	99	244149	10.0	5.64	
	15 Dichlorofluoromethane	67	2.350	2.338	0.012	99	755644	10.0	6.92	
	16 Trichlorofluoromethane	101	2.397	2.397	0.000	99	670968	10.0	6.49	
	17 Ethyl ether	59	2.611	2.611	0.000	90	425447	10.0	8.02	
	18 Acrolein	56	2.741	2.741	0.000	99	379181	50.0	37.8	
	19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	462703	10.0	8.48	
	20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	91	367749	10.0	8.98	
	22 Acetone	58	2.872	2.860	0.012	100	92096	20.0	18.1	
	23 Iodomethane	142	2.967	2.967	-0.001	97	765193	10.0	9.76	
	24 Carbon disulfide	76	3.026	3.026	0.000	99	1318213	10.0	8.83	
	25 3-Chloro-1-propene	76	3.133	3.121	0.012	92	288044	10.0	8.60	
	27 Methyl acetate	43	3.144	3.133	0.011	97	660325	20.0	17.3	
	28 Methylene Chloride	84	3.227	3.227	0.000	91	544651	10.0	10.5	
	29 2-Methyl-2-propanol	59	3.310	3.310	0.000	87	256549	100.0	72.5	
	32 Acrylonitrile	53	3.441	3.441	0.000	100	1824390	100.0	94.7	
	31 Methyl tert-butyl ether	73	3.453	3.453	0.000	95	1062790	10.0	7.41	
	30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	99	558153	10.0	10.2	
	33 Hexane	86	3.678	3.678	0.000	92	105524	10.0	7.78	
	34 1,1-Dichloroethane	63	3.808	3.809	0.000	97	879602	10.0	9.86	
	36 Vinyl acetate	43	3.844	3.844	0.000	97	689213	10.0	8.44	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	83	588994	10.0	9.83	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	61	109750	10.0	10.4	
41 2-Butanone (MEK)	72	4.307	4.295	0.012	99	106542	20.0	16.9	
45 Chlorobromomethane	128	4.496	4.496	0.000	96	284152	10.0	10.0	
46 Tetrahydrofuran	42	4.544	4.532	0.012	88	252301	20.0	16.0	
47 Chloroform	83	4.556	4.556	0.000	94	906114	10.0	9.97	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	99	680628	10.0	10.1	
49 Cyclohexane	56	4.769	4.769	0.000	89	799468	10.0	9.64	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	97	705637	10.0	9.50	
50 Carbon tetrachloride	117	4.852	4.852	0.000	97	633737	10.0	10.7	
52 Isobutyl alcohol	41	4.911	4.911	0.000	91	327568	250.0	301.5	
53 Benzene	78	5.030	5.030	0.000	95	2163729	10.0	9.94	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	659892	10.0	8.58	
56 n-Heptane	100	5.220	5.220	0.000	88	86236	10.0	6.46	
58 Trichloroethene	130	5.564	5.564	0.000	97	547867	10.0	9.29	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	670440	10.0	7.88	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	97	491850	10.0	9.78	
63 Dibromomethane	93	5.872	5.872	0.000	91	286811	10.0	8.74	
64 1,4-Dioxane	88	5.872	5.872	0.000	39	86994	200.0	215.3	
65 Dichlorobromomethane	83	5.990	5.990	0.000	100	604231	10.0	9.26	
67 2-Chloroethyl vinyl ether	63	6.239	6.240	-0.001	93	172197	10.0	5.88	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	96	596796	10.0	8.04	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	96	720382	20.0	15.2	
70 Toluene	91	6.678	6.678	0.000	98	2059831	10.0	10.2	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	92	470083	10.0	8.20	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	481938	10.0	9.62	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	91	399259	10.0	10.4	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	420944	10.0	10.3	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	90	675529	10.0	9.89	
76 2-Hexanone	43	7.247	7.247	0.000	97	511514	20.0	18.4	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	396793	10.0	10.1	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	364388	10.0	9.10	
82 Chlorobenzene	112	7.959	7.959	0.000	96	1251426	10.0	9.73	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	95	458712	10.0	11.5	
84 Ethylbenzene	106	8.054	8.054	0.000	98	651247	10.0	9.31	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	93	1594627	10.0	9.44	
86 o-Xylene	106	8.540	8.540	0.000	96	798945	10.0	9.42	
87 Styrene	104	8.552	8.552	0.000	92	1352633	10.0	9.51	
88 Bromoform	173	8.742	8.742	0.000	98	235266	10.0	9.80	
89 Isopropylbenzene	105	8.896	8.896	0.000	95	1932266	10.0	9.07	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	95	500762	10.0	9.72	
92 Bromobenzene	156	9.204	9.204	0.000	91	552413	10.0	9.48	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	86	157603	10.0	8.80	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	74	67003	10.0	5.26	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	534101	10.0	8.91	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	497609	10.0	9.51	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	1635028	10.0	9.09	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	1701576	10.0	9.52	
101 tert-Butylbenzene	119	9.785	9.785	0.000	91	1299034	10.0	8.16	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	96	1746744	10.0	9.29	
105 sec-Butylbenzene	105	9.999	9.999	0.000	94	1820467	10.0	8.50	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	1027131	10.0	9.63	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	1648189	10.0	8.71	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	96	1043906	10.0	9.36	
111 n-Butylbenzene	91	10.544	10.544	0.000	97	1273297	10.0	8.04	
112 1,2-Dichlorobenzene	146	10.580	10.568	0.012	99	1029772	10.0	10.0	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.351	-0.001	87	85682	10.0	8.85	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	531385	10.0	9.48	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	94	281644	10.0	9.94	
117 Naphthalene	128	12.430	12.430	0.000	96	1130844	10.0	6.83	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	550754	10.0	11.2	
S 129 Xylenes, Total	106				0		20.0	18.9	
S 130 Trihalomethanes, Total	1				0		40.0	39.2	

Reagents:

VMFASPW_00272	Amount Added:	8.00	Units: uL	
VMFASAW_00253	Amount Added:	8.00	Units: uL	
VMFASGW_00279	Amount Added:	8.00	Units: uL	
vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

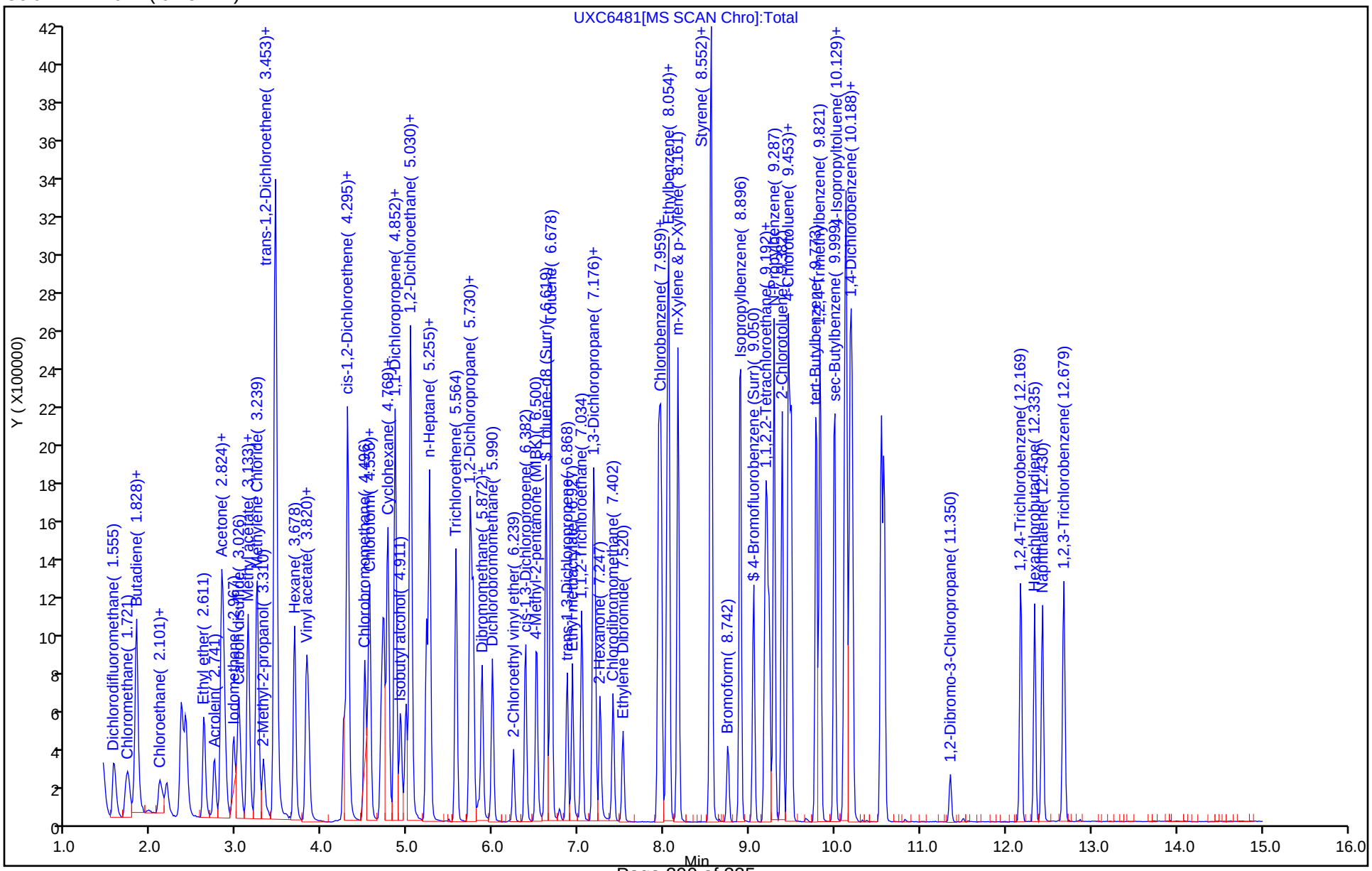
Report Date: 23-Oct-2018 09:32:16 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6481.D

Injection Date:	22-Oct-2018 09:24:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6481.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 22-Oct-2018 09:24:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081069-004
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	8.01	100.52
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	7.01	87.91
$ 6 Toluene-d8 (Surr)	7.97	8.18	102.65
$ 7 4-Bromofluorobenzene (Surr)	7.97	8.21	103.05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-351439/4

Matrix: Water Lab File ID: UXC6510.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 11:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	10.3		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	9.84		1.0	0.13
79-00-5	1,1,2-Trichloroethane	10.4		1.0	0.090
75-34-3	1,1-Dichloroethane	10.2		1.0	0.17
75-35-4	1,1-Dichloroethene	8.42		1.0	0.19
107-06-2	1,2-Dichloroethane	8.84		1.0	0.21
78-87-5	1,2-Dichloropropane	10.2		1.0	0.15
591-78-6	2-Hexanone	16.9		10	0.54
67-64-1	Acetone	21.9		10	5.4
71-43-2	Benzene	10.3		1.0	0.13
75-25-2	Bromoform	9.94		1.0	0.76
74-83-9	Bromomethane	5.30		1.0	0.42
75-15-0	Carbon disulfide	8.23		1.0	0.28
56-23-5	Carbon tetrachloride	10.7		1.0	0.26
108-90-7	Chlorobenzene	10.0		1.0	0.14
75-00-3	Chloroethane	6.41		1.0	0.83
67-66-3	Chloroform	10.2		1.0	0.13
74-87-3	Chloromethane	9.17		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	10.2		1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	8.25		1.0	0.61
75-27-4	Dichlorobromomethane	9.52		1.0	0.17
100-41-4	Ethylbenzene	9.56		1.0	0.11
78-93-3	2-Butanone (MEK)	17.8		10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	14.7		10	0.42
75-09-2	Methylene Chloride	10.4		5.0	2.6
100-42-5	Styrene	9.67		1.0	0.10
127-18-4	Tetrachloroethene	10.5		1.0	0.15
108-88-3	Toluene	10.4		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	10.3		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	8.22		1.0	0.67
79-01-6	Trichloroethene	9.62		1.0	0.10
75-01-4	Vinyl chloride	7.60		1.0	0.20
1330-20-7	Xylenes, Total	19.3		2.0	0.15
124-48-1	Chlorodibromomethane	10.1		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-351439/4

Matrix: Water Lab File ID: UXC6510.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/23/2018 11:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351439 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		70-121
460-00-4	4-Bromofluorobenzene (Surr)	110		59-120
2037-26-5	Toluene-d8 (Surr)	107		70-123
1868-53-7	Dibromofluoromethane (Surr)	105		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6510.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Oct-2018 11:05:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-004
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: evansle Date: 23-Oct-2018 11:40:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1891341	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1337930	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	94	767563	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	95	410376	7.97	8.37	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.000	99	480299	7.97	7.22	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1527263	7.97	8.51	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	97	545059	7.97	8.73	
9 Dichlorodifluoromethane	85	1.567	1.567	0.000	100	545590	10.0	8.09	
10 Chloromethane	50	1.721	1.722	-0.001	99	588098	10.0	9.17	
11 Vinyl chloride	62	1.828	1.816	0.012	96	509685	10.0	7.60	
12 Butadiene	54	1.828	1.828	0.000	97	603018	10.0	7.52	
13 Bromomethane	94	2.101	2.101	0.000	90	278943	10.0	5.30	
14 Chloroethane	64	2.184	2.184	0.000	100	290060	10.0	6.41	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	98	804338	10.0	7.05	
16 Trichlorofluoromethane	101	2.409	2.397	0.012	99	697595	10.0	6.46	
17 Ethyl ether	59	2.611	2.623	-0.012	91	459306	10.0	8.29	
18 Acrolein	56	2.741	2.741	0.000	100	369293	50.0	35.3	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	479921	10.0	8.42	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	89	385272	10.0	9.01	
22 Acetone	58	2.872	2.872	0.000	100	116260	20.0	21.9	
23 Iodomethane	142	2.967	2.967	0.000	97	767544	10.0	9.38	
24 Carbon disulfide	76	3.038	3.026	0.012	99	1283360	10.0	8.23	
25 3-Chloro-1-propene	76	3.133	3.133	0.000	90	290439	10.0	8.30	
27 Methyl acetate	43	3.145	3.145	0.000	97	702523	20.0	17.6	
28 Methylene Chloride	84	3.239	3.239	0.000	92	561207	10.0	10.4	
29 2-Methyl-2-propanol	59	3.311	3.311	0.000	87	281556	100.0	76.2	
32 Acrylonitrile	53	3.441	3.441	0.000	99	1936817	100.0	96.3	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	95	1178905	10.0	7.87	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	98	591498	10.0	10.3	
33 Hexane	86	3.678	3.678	0.000	91	111549	10.0	7.87	
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	949807	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.844	3.844	0.000	97	713376	10.0	8.36	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	82	640325	10.0	10.2	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	61	120348	10.0	10.9	
41 2-Butanone (MEK)	72	4.307	4.307	0.000	99	117412	20.0	17.8	
45 Chlorobromomethane	128	4.496	4.496	0.000	96	298580	10.0	10.1	
46 Tetrahydrofuran	42	4.544	4.544	0.000	87	274271	20.0	16.7	
47 Chloroform	83	4.556	4.556	0.000	94	966284	10.0	10.2	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	727393	10.0	10.3	
49 Cyclohexane	56	4.769	4.769	0.000	89	822266	10.0	9.50	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	97	749375	10.0	9.66	
50 Carbon tetrachloride	117	4.852	4.864	-0.012	96	660234	10.0	10.7	
52 Isobutyl alcohol	41	4.911	4.911	0.000	91	341432	250.0	301.0	
53 Benzene	78	5.030	5.030	0.000	95	2332081	10.0	10.3	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	709840	10.0	8.84	
56 n-Heptane	100	5.220	5.220	0.000	88	94998	10.0	6.82	
58 Trichloroethene	130	5.564	5.564	0.000	97	592944	10.0	9.62	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	712848	10.0	8.03	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	95	533951	10.0	10.2	
63 Dibromomethane	93	5.872	5.872	0.000	91	308043	10.0	8.99	
64 1,4-Dioxane	88	5.872	5.872	0.000	80	90173	200.0	213.6	
65 Dichlorobromomethane	83	5.991	5.991	0.000	100	648571	10.0	9.52	
67 2-Chloroethyl vinyl ether	63	6.240	6.240	0.000	92	182912	10.0	5.98	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	96	639187	10.0	8.25	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	96	727303	20.0	14.7	
70 Toluene	91	6.678	6.678	0.000	98	2246310	10.0	10.4	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	92	503031	10.0	8.22	
72 Ethyl methacrylate	69	6.927	6.927	0.000	88	500546	10.0	9.36	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	425419	10.0	10.4	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	457556	10.0	10.5	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	91	720717	10.0	9.88	
76 2-Hexanone	43	7.248	7.248	0.000	96	499284	20.0	16.9	
79 Chlorodibromomethane	129	7.402	7.402	0.000	91	423855	10.0	10.1	
80 Ethylene Dibromide	107	7.520	7.520	0.000	99	391005	10.0	9.14	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1377621	10.0	10.0	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	94	501306	10.0	11.7	
84 Ethylbenzene	106	8.054	8.054	0.000	98	714523	10.0	9.56	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	93	1749035	10.0	9.69	
86 o-Xylene	106	8.540	8.540	0.000	94	874561	10.0	9.65	
87 Styrene	104	8.552	8.552	0.000	94	1469352	10.0	9.67	
88 Bromoform	173	8.742	8.742	0.000	98	254654	10.0	9.94	
89 Isopropylbenzene	105	8.896	8.896	0.000	95	2115626	10.0	9.30	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.181	-0.001	95	538050	10.0	9.84	
92 Bromobenzene	156	9.204	9.204	0.000	91	611547	10.0	9.89	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	85	176151	10.0	9.26	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	77	76459	10.0	5.66	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	591215	10.0	9.29	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	551516	10.0	9.93	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	1798584	10.0	9.42	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	1874531	10.0	9.88	
101 tert-Butylbenzene	119	9.773	9.773	0.000	92	1429063	10.0	8.46	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	1900438	10.0	9.52	
105 sec-Butylbenzene	105	9.999	9.999	0.000	94	1970029	10.0	8.67	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	1106382	10.0	9.77	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	1778342	10.0	8.86	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	96	1148987	10.0	9.70	
111 n-Butylbenzene	91	10.544	10.544	0.000	97	1333113	10.0	7.93	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	99	1118642	10.0	10.2	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.351	0.000	88	90707	10.0	8.83	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	558433	10.0	9.39	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	93	303368	10.0	10.1	
117 Naphthalene	128	12.430	12.430	0.000	96	1206403	10.0	6.87	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	572159	10.0	11.0	
S 129 Xylenes, Total	106				0		20.0	19.3	
S 130 Trihalomethanes, Total	1				0		40.0	39.8	

Reagents:

VMFASPW_00272	Amount Added:	8.00	Units: uL	
VMFASAW_00253	Amount Added:	8.00	Units: uL	
VMFASGW_00280	Amount Added:	8.00	Units: uL	
vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

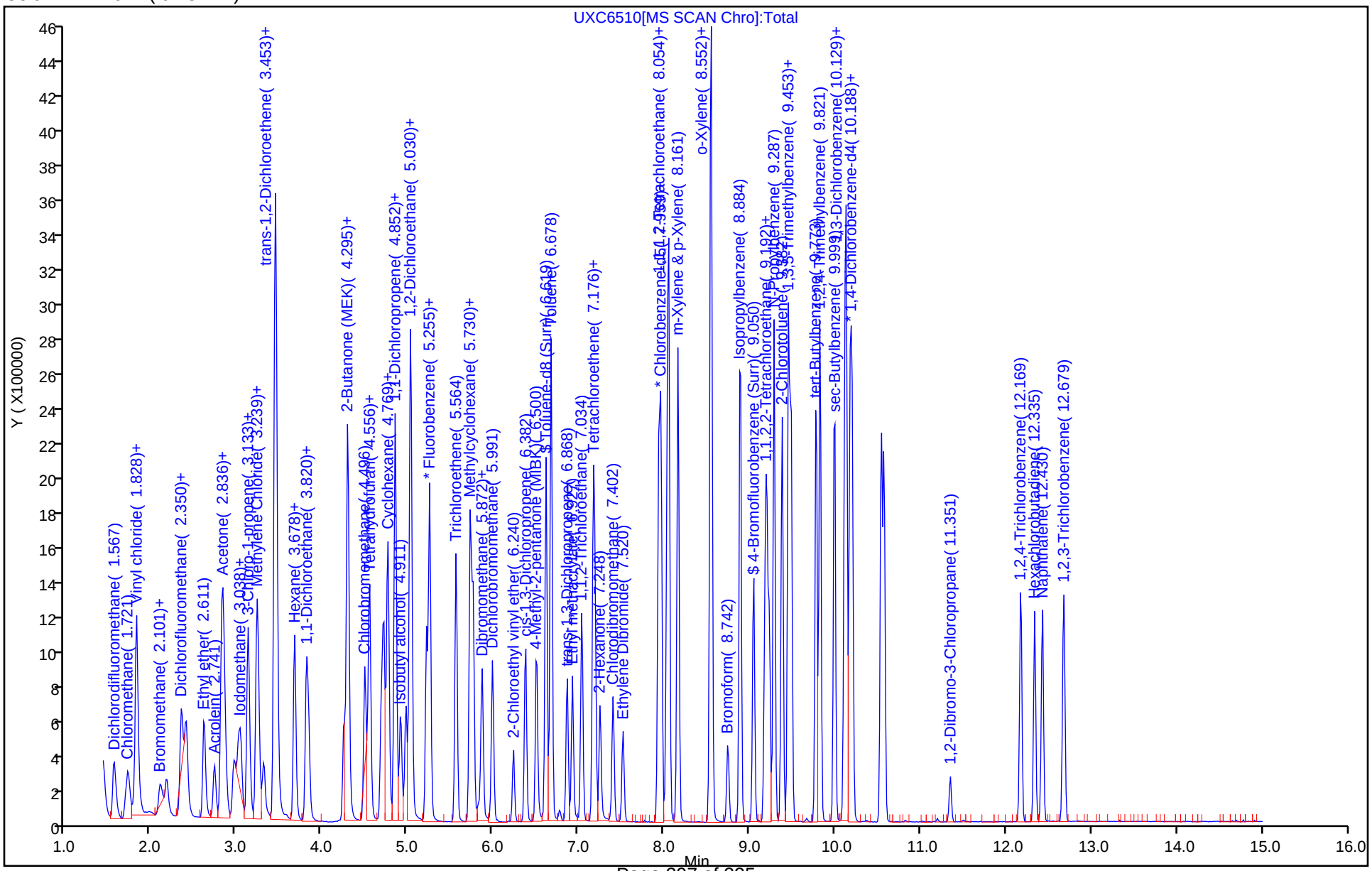
Report Date: 24-Oct-2018 08:07:52 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6510.D

Injection Date:	23-Oct-2018 11:05:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\UXC6510.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Oct-2018 11:05:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0081123-004
Misc. Info.: C81023A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181023-81123.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Oct-2018 08:07:48 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: evansle Date: 23-Oct-2018 11:40:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	8.37	105.02
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	7.22	90.64
$ 6 Toluene-d8 (Surr)	7.97	8.51	106.72
$ 7 4-Bromofluorobenzene (Surr)	7.97	8.73	109.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-046 MS Lab Sample ID: 240-102783-12 MS

Matrix: Water Lab File ID: UXC6506.D

Analysis Method: 8260B Date Collected: 10/10/2018 12:17

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 18:30

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	167		17	4.0
79-34-5	1,1,2,2-Tetrachloroethane	164		17	2.2
79-00-5	1,1,2-Trichloroethane	178		17	1.5
75-34-3	1,1-Dichloroethane	174		17	2.8
75-35-4	1,1-Dichloroethene	138		17	3.2
107-06-2	1,2-Dichloroethane	150		17	3.5
78-87-5	1,2-Dichloropropane	162		17	2.5
591-78-6	2-Hexanone	260		170	9.0
67-64-1	Acetone	275		170	90
71-43-2	Benzene	168		17	2.2
75-25-2	Bromoform	159		17	13
74-83-9	Bromomethane	75.2		17	7.0
75-15-0	Carbon disulfide	145		17	4.7
56-23-5	Carbon tetrachloride	168		17	4.3
108-90-7	Chlorobenzene	165		17	2.3
75-00-3	Chloroethane	91.5		17	14
67-66-3	Chloroform	173		17	2.2
74-87-3	Chloromethane	117		17	3.3
156-59-2	cis-1,2-Dichloroethene	430		17	2.7
10061-01-5	cis-1,3-Dichloropropene	121		17	10
75-27-4	Dichlorobromomethane	153		17	2.8
100-41-4	Ethylbenzene	157		17	1.8
78-93-3	2-Butanone (MEK)	298		170	19
108-10-1	4-Methyl-2-pentanone (MIBK)	237		170	7.0
75-09-2	Methylene Chloride	182		83	44
100-42-5	Styrene	161		17	1.7
127-18-4	Tetrachloroethene	163		17	2.5
108-88-3	Toluene	169		17	2.3
156-60-5	trans-1,2-Dichloroethene	175		17	3.2
10061-02-6	trans-1,3-Dichloropropene	121		17	11
79-01-6	Trichloroethene	151		17	1.7
75-01-4	Vinyl chloride	339		17	3.3
1330-20-7	Xylenes, Total	316		33	2.5
124-48-1	Chlorodibromomethane	170		17	6.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-046 MS Lab Sample ID: 240-102783-12 MS

Matrix: Water Lab File ID: UXC6506.D

Analysis Method: 8260B Date Collected: 10/10/2018 12:17

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 18:30

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		70-121
460-00-4	4-Bromofluorobenzene (Surr)	110		59-120
2037-26-5	Toluene-d8 (Surr)	109		70-123
1868-53-7	Dibromofluoromethane (Surr)	108		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6506.D
Lims ID: 240-102783-B-12 MS
Client ID: GW-101018-AF-046
Sample Type: MS
Inject. Date: 22-Oct-2018 18:30:30 ALS Bottle#: 27 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 16.6700
Sample Info: 240-0081069-059
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:35:12 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	1745019	10.0	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1234685	10.0	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	93	721458	10.0	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	95	389961	7.97	8.62	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.001	99	441450	7.97	7.20	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	92	1437253	7.97	8.67	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	505117	7.97	8.77	
	10 Chloromethane	50	1.722	1.721	0.001	99	414945	10.0	7.01	
	11 Vinyl chloride	62	1.816	1.816	0.000	98	1256929	10.0	20.3	
	13 Bromomethane	94	2.101	2.101	0.000	90	219246	10.0	4.51	
	14 Chloroethane	64	2.184	2.172	0.012	100	229121	10.0	5.49	
	19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	436838	10.0	8.31	
	22 Acetone	58	2.860	2.860	0.000	100	80704	20.0	16.5	
	24 Carbon disulfide	76	3.026	3.026	0.000	99	1249759	10.0	8.69	
	28 Methylene Chloride	84	3.228	3.227	0.001	91	546354	10.0	10.9	
	30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	98	554278	10.0	10.5	
	34 1,1-Dichloroethane	63	3.820	3.809	0.012	97	895622	10.0	10.4	
	39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	82	1490580	10.0	25.8	
	41 2-Butanone (MEK)	72	4.307	4.295	0.012	98	108638	20.0	17.9	
	47 Chloroform	83	4.556	4.556	0.000	94	908243	10.0	10.4	
	48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	653256	10.0	10.0	
	50 Carbon tetrachloride	117	4.852	4.852	0.000	96	573266	10.0	10.1	
	53 Benzene	78	5.030	5.030	0.000	95	2115150	10.0	10.1	
	54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	665802	10.0	8.99	
	58 Trichloroethene	130	5.564	5.564	0.000	98	514385	10.0	9.05	
	61 1,2-Dichloropropane	63	5.765	5.765	0.000	96	471358	10.0	9.73	
	65 Dichlorobromomethane	83	5.991	5.990	0.001	100	577110	10.0	9.18	
	68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	96	520801	10.0	7.29	
	69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	650420	20.0	14.2	
	70 Toluene	91	6.678	6.678	0.000	98	2032731	10.0	10.2	
	71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	92	411075	10.0	7.28	
	73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	403437	10.0	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
74 Tetrachloroethene	164	7.176	7.176	0.000	98	392324	10.0	9.76	
76 2-Hexanone	43	7.248	7.247	0.001	97	426769	20.0	15.6	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	394515	10.0	10.2	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1251595	10.0	9.87	
84 Ethylbenzene	106	8.054	8.054	0.000	98	649382	10.0	9.42	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	93	1582895	10.0	9.50	
86 o-Xylene	106	8.540	8.540	0.000	96	791073	10.0	9.46	
87 Styrene	104	8.552	8.552	0.000	93	1351479	10.0	9.64	
88 Bromoform	173	8.742	8.742	0.000	98	225658	10.0	9.54	
93 1,1,2,2-Tetrachloroethane	83	9.181	9.180	0.000	95	505559	10.0	9.84	
S 129 Xylenes, Total	106				0		20.0	19.0	

Reagents:

VMFASPW_00272	Amount Added:	8.00	Units: uL	
VMFASAW_00253	Amount Added:	8.00	Units: uL	
VMFASGW_00279	Amount Added:	8.00	Units: uL	
vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

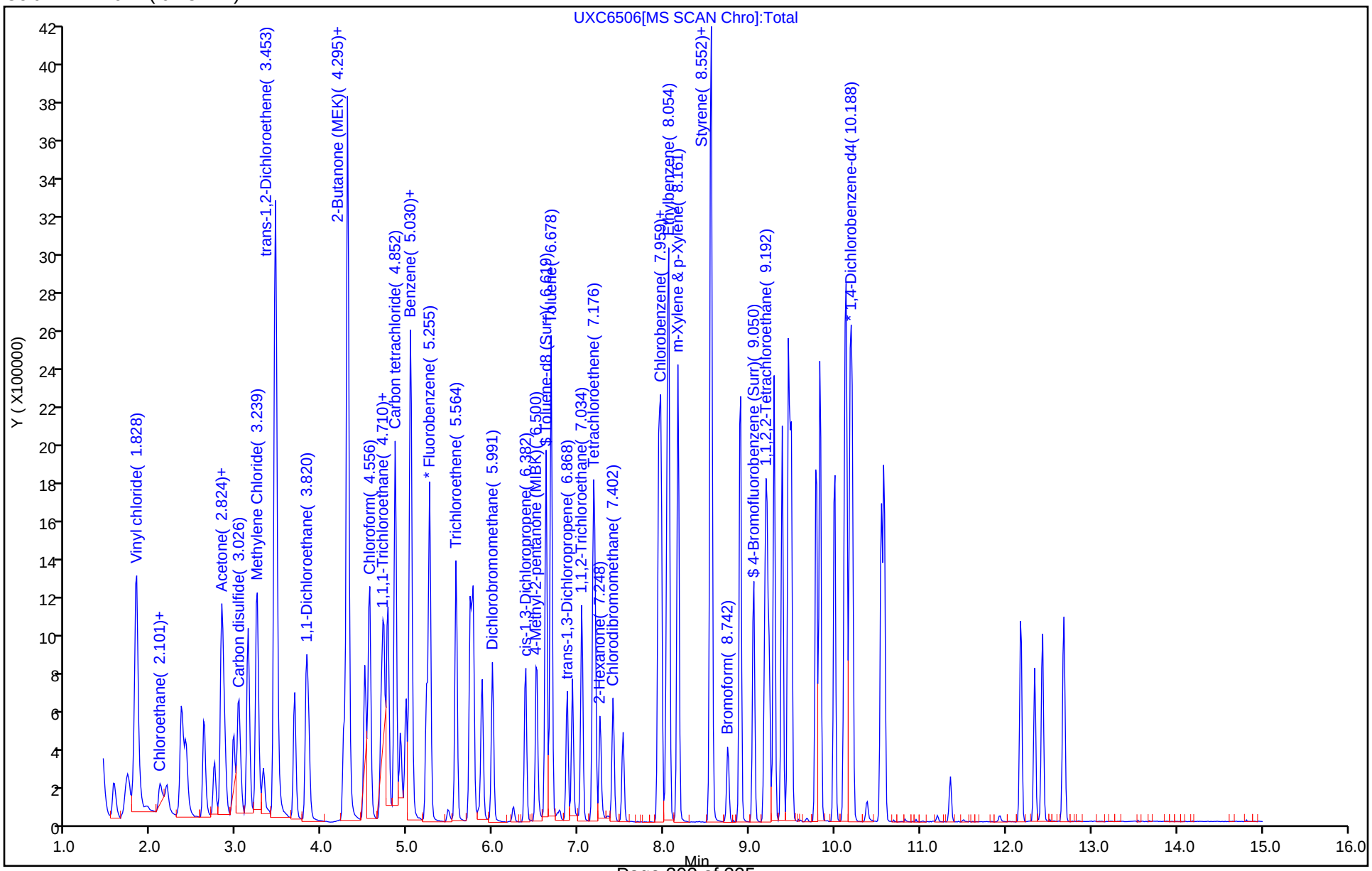
Report Date: 23-Oct-2018 09:35:13 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6506.D

Injection Date:	22-Oct-2018 18:30:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-102783-B-12 MS			Worklist Smp#:	59
Client ID:	GW-101018-AF-046				
Purge Vol:	5.000 mL	Dil. Factor:	16.6700	ALS Bottle#:	27
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6506.D
Lims ID: 240-102783-B-12 MS
Client ID: GW-101018-AF-046
Sample Type: MS
Inject. Date: 22-Oct-2018 18:30:30 ALS Bottle#: 27 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 16.6700
Sample Info: 240-0081069-059
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:35:12 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	8.62	108.17
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	7.20	90.30
$ 6 Toluene-d8 (Surr)	7.97	8.67	108.82
$ 7 4-Bromofluorobenzene (Surr)	7.97	8.77	110.02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-046 MSD Lab Sample ID: 240-102783-12 MSD

Matrix: Water Lab File ID: UXC6507.D

Analysis Method: 8260B Date Collected: 10/10/2018 12:17

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 18:52

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	167		17	4.0
79-34-5	1,1,2,2-Tetrachloroethane	160		17	2.2
79-00-5	1,1,2-Trichloroethane	169		17	1.5
75-34-3	1,1-Dichloroethane	168		17	2.8
75-35-4	1,1-Dichloroethene	137		17	3.2
107-06-2	1,2-Dichloroethane	144		17	3.5
78-87-5	1,2-Dichloropropane	158		17	2.5
591-78-6	2-Hexanone	256		170	9.0
67-64-1	Acetone	282		170	90
71-43-2	Benzene	165		17	2.2
75-25-2	Bromoform	163		17	13
74-83-9	Bromomethane	95.3		17	7.0
75-15-0	Carbon disulfide	144		17	4.7
56-23-5	Carbon tetrachloride	170		17	4.3
108-90-7	Chlorobenzene	161		17	2.3
75-00-3	Chloroethane	110		17	14
67-66-3	Chloroform	167		17	2.2
74-87-3	Chloromethane	143		17	3.3
156-59-2	cis-1,2-Dichloroethene	425		17	2.7
10061-01-5	cis-1,3-Dichloropropene	123		17	10
75-27-4	Dichlorobromomethane	151		17	2.8
100-41-4	Ethylbenzene	153		17	1.8
78-93-3	2-Butanone (MEK)	298		170	19
108-10-1	4-Methyl-2-pentanone (MIBK)	238		170	7.0
75-09-2	Methylene Chloride	179		83	44
100-42-5	Styrene	157		17	1.7
127-18-4	Tetrachloroethene	164		17	2.5
108-88-3	Toluene	165		17	2.3
156-60-5	trans-1,2-Dichloroethene	170		17	3.2
10061-02-6	trans-1,3-Dichloropropene	123		17	11
79-01-6	Trichloroethene	150		17	1.7
75-01-4	Vinyl chloride	335		17	3.3
1330-20-7	Xylenes, Total	311		33	2.5
124-48-1	Chlorodibromomethane	167		17	6.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Client Sample ID: GW-101018-AF-046 MSD Lab Sample ID: 240-102783-12 MSD

Matrix: Water Lab File ID: UXC6507.D

Analysis Method: 8260B Date Collected: 10/10/2018 12:17

Sample wt/vol: 5(mL) Date Analyzed: 10/22/2018 18:52

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 351197 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		70-121
460-00-4	4-Bromofluorobenzene (Surr)	107		59-120
2037-26-5	Toluene-d8 (Surr)	105		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6507.D
Lims ID: 240-102783-B-12 MSD
Client ID: GW-101018-AF-046
Sample Type: MSD
Inject. Date: 22-Oct-2018 18:52:30 ALS Bottle#: 28 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 16.6700
Sample Info: 240-0081069-060
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:34:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1838469	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	86	1300554	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	91	765165	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	392096	7.97	8.23	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.001	100	459110	7.97	7.10	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	92	1460154	7.97	8.37	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	97	517734	7.97	8.53	
10 Chloromethane	50	1.721	1.721	0.000	99	534477	10.0	8.58	
11 Vinyl chloride	62	1.816	1.816	0.000	99	1309814	10.0	20.1	
13 Bromomethane	94	2.101	2.101	0.000	91	292509	10.0	5.71	
14 Chloroethane	64	2.172	2.172	0.000	99	291162	10.0	6.62	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	456488	10.0	8.24	
22 Acetone	58	2.872	2.860	0.012	100	87182	20.0	16.9	
24 Carbon disulfide	76	3.026	3.026	0.000	99	1306714	10.0	8.62	
28 Methylene Chloride	84	3.228	3.227	0.001	91	564787	10.0	10.7	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	99	566272	10.0	10.2	
34 1,1-Dichloroethane	63	3.809	3.809	0.001	97	914192	10.0	10.1	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	81	1550674	10.0	25.5	
41 2-Butanone (MEK)	72	4.307	4.295	0.012	99	114296	20.0	17.9	
47 Chloroform	83	4.556	4.556	0.000	94	925264	10.0	10.0	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	687394	10.0	10.0	
50 Carbon tetrachloride	117	4.852	4.852	0.000	97	609329	10.0	10.2	
53 Benzene	78	5.030	5.030	0.000	95	2181818	10.0	9.88	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	672530	10.0	8.62	
58 Trichloroethene	130	5.564	5.564	0.000	98	538694	10.0	8.99	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	94	484423	10.0	9.49	
65 Dichlorobromomethane	83	5.991	5.990	0.001	100	598977	10.0	9.05	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	96	556308	10.0	7.39	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	96	686961	20.0	14.3	
70 Toluene	91	6.678	6.678	0.000	98	2091039	10.0	9.93	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	92	440450	10.0	7.40	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	403621	10.0	10.1	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	415117	10.0	9.81	
76 2-Hexanone	43	7.248	7.247	0.001	97	442251	20.0	15.4	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	407574	10.0	10.0	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1290452	10.0	9.66	
84 Ethylbenzene	106	8.054	8.054	0.000	98	665497	10.0	9.16	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	93	1648432	10.0	9.40	
86 o-Xylene	106	8.540	8.540	0.000	94	815852	10.0	9.26	
87 Styrene	104	8.552	8.552	0.000	92	1393058	10.0	9.43	
88 Bromoform	173	8.742	8.742	0.000	98	243990	10.0	9.79	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	95	524378	10.0	9.62	
S 129 Xylenes, Total	106				0		20.0	18.7	

Reagents:

VMFASAW_00253	Amount Added:	8.00	Units: uL	
VMFASPW_00272	Amount Added:	8.00	Units: uL	
VMFASGW_00279	Amount Added:	8.00	Units: uL	
vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00129	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00130	Amount Added:	0.00	Units:	Run Reagent

Report Date: 23-Oct-2018 09:35:04 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6507.D

Injection Date: 22-Oct-2018 18:52:30 Instrument ID: A3UX15 Operator ID:

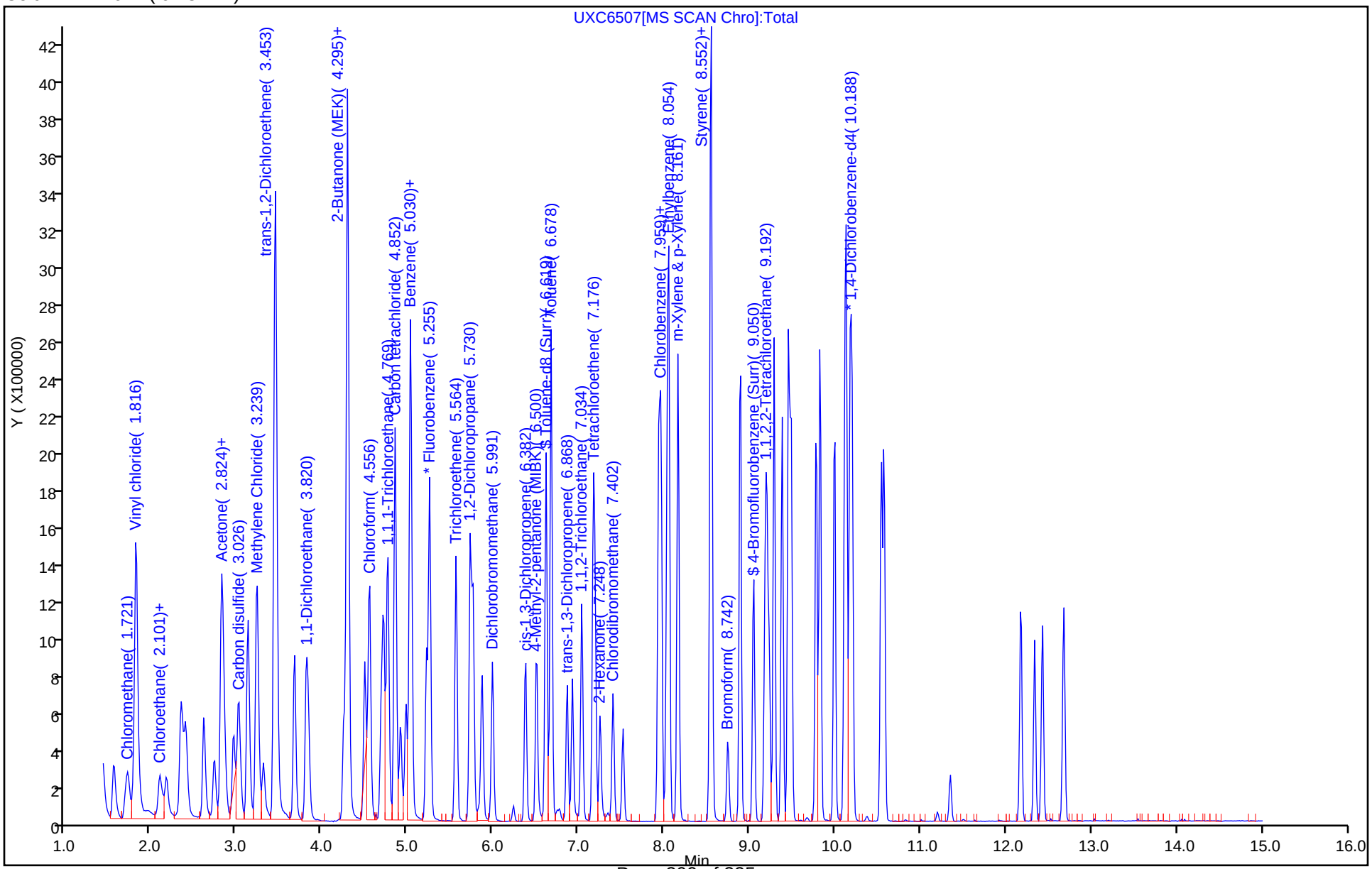
Lims ID: 240-102783-B-12 MSD Worklist Smp#: 60

Client ID: GW-101018-AF-046

Purge Vol: 5.000 mL Dil. Factor: 16.6700 ALS Bottle#: 28

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\UXC6507.D
Lims ID: 240-102783-B-12 MSD
Client ID: GW-101018-AF-046
Sample Type: MSD
Inject. Date: 22-Oct-2018 18:52:30 ALS Bottle#: 28 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 16.6700
Sample Info: 240-0081069-060
Misc. Info.: C81022A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20181022-81069.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Oct-2018 09:32:08 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: evansle Date: 23-Oct-2018 09:34:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	8.23	103.23
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	7.10	89.14
$ 6 Toluene-d8 (Surr)	7.97	8.37	104.96
$ 7 4-Bromofluorobenzene (Surr)	7.97	8.53	107.06

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Instrument ID: A3UX15 Start Date: 08/27/2018 10:10

Analysis Batch Number: 342615 End Date: 08/27/2018 18:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-342615/1		08/27/2018 10:10	1	BFB827.D	DB-624 0.18(mm)
STD8260 240-342615/2 IC		08/27/2018 10:56	1	UXC4603.D	DB-624 0.18(mm)
STD8260 240-342615/3 IC		08/27/2018 11:18	1	UXC4604.D	DB-624 0.18(mm)
STD8260 240-342615/4 ICIS		08/27/2018 11:39	1	UXC4605.D	DB-624 0.18(mm)
STD8260 240-342615/5 IC		08/27/2018 12:01	1	UXC4606.D	DB-624 0.18(mm)
STD8260 240-342615/6 IC		08/27/2018 12:23	1	UXC4607.D	DB-624 0.18(mm)
STD8260 240-342615/7 IC		08/27/2018 12:45	1	UXC4608.D	DB-624 0.18(mm)
ICV 240-342615/14		08/27/2018 13:07	1	UXC4609.D	DB-624 0.18(mm)
STD 240-342615/8 IC		08/27/2018 13:28	1		DB-624 0.18(mm)
STD 240-342615/9 IC		08/27/2018 13:50	1		DB-624 0.18(mm)
STD 240-342615/10 IC		08/27/2018 14:12	1		DB-624 0.18(mm)
STD 240-342615/11 IC		08/27/2018 14:34	1		DB-624 0.18(mm)
STD 240-342615/12 IC		08/27/2018 14:56	1		DB-624 0.18(mm)
STD 240-342615/13 IC		08/27/2018 15:17	1		DB-624 0.18(mm)
MRL 240-342615/16 MDLV		08/27/2018 16:01	1		DB-624 0.18(mm)
240-98181-A-1 MDLV		08/27/2018 16:23	1		DB-624 0.18(mm)
STD 240-342615/18 IC		08/27/2018 16:45	1		DB-624 0.18(mm)
STD 240-342615/19 IC		08/27/2018 17:06	1		DB-624 0.18(mm)
STD 240-342615/20 IC		08/27/2018 17:28	1		DB-624 0.18(mm)
STD 240-342615/21 IC		08/27/2018 17:50	1		DB-624 0.18(mm)
STD 240-342615/22 IC		08/27/2018 18:12	1		DB-624 0.18(mm)
STD 240-342615/23 IC		08/27/2018 18:34	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Instrument ID: A3UX15 Start Date: 08/28/2018 11:13

Analysis Batch Number: 342834 End Date: 08/28/2018 19:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-342834/1		08/28/2018 11:13	1	BFB828.D	DB-624 0.18(mm)
CCVIS 240-342834/2		08/28/2018 11:48	1		DB-624 0.18(mm)
CCV 240-342834/3		08/28/2018 12:10	1		DB-624 0.18(mm)
ICV 240-342834/32		08/28/2018 12:32	1	UXC4629.D	DB-624 0.18(mm)
ZZZZZ		08/28/2018 15:20	1		DB-624 0.18(mm)
ZZZZZ		08/28/2018 16:04	1		DB-624 0.18(mm)
MRL 240-342834/5 MDLV		08/28/2018 16:47	1		DB-624 0.18(mm)
ZZZZZ		08/28/2018 17:09	1		DB-624 0.18(mm)
ZZZZZ		08/28/2018 18:51	500		DB-624 0.18(mm)
ZZZZZ		08/28/2018 19:35	50		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Instrument ID: A3UX15 Start Date: 10/22/2018 08:37

Analysis Batch Number: 351197 End Date: 10/22/2018 18:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-351197/1		10/22/2018 08:37	1	BFB1022.D	DB-624 0.18(mm)
CCVIS 240-351197/2		10/22/2018 09:02	1	UXC6480.D	DB-624 0.18(mm)
LCS 240-351197/4		10/22/2018 09:24	1	UXC6481.D	DB-624 0.18(mm)
CCV 240-351197/3		10/22/2018 09:46	1	UXC6482.D	DB-624 0.18(mm)
MRL 240-351197/5 MDLV		10/22/2018 10:07	1		DB-624 0.18(mm)
MB 240-351197/6		10/22/2018 10:29	1	UXC6484.D	DB-624 0.18(mm)
ZZZZZ		10/22/2018 11:13	2.5		DB-624 0.18(mm)
ZZZZZ		10/22/2018 11:35	1		DB-624 0.18(mm)
ZZZZZ		10/22/2018 11:57	1		DB-624 0.18(mm)
ZZZZZ		10/22/2018 12:18	40		DB-624 0.18(mm)
ZZZZZ		10/22/2018 12:40	1		DB-624 0.18(mm)
ZZZZZ		10/22/2018 13:02	5		DB-624 0.18(mm)
ZZZZZ		10/22/2018 13:25	6.67		DB-624 0.18(mm)
ZZZZZ		10/22/2018 13:47	6.67		DB-624 0.18(mm)
ZZZZZ		10/22/2018 14:08	1		DB-624 0.18(mm)
ZZZZZ		10/22/2018 14:30	1		DB-624 0.18(mm)
ZZZZZ		10/22/2018 14:52	1		DB-624 0.18(mm)
ZZZZZ		10/22/2018 15:14	1		DB-624 0.18(mm)
240-102783-9		10/22/2018 15:36	4	UXC6498.D	DB-624 0.18(mm)
240-102783-10		10/22/2018 15:58	1	UXC6499.D	DB-624 0.18(mm)
240-102783-11		10/22/2018 16:19	1	UXC6500.D	DB-624 0.18(mm)
240-102783-12		10/22/2018 16:41	16.67	UXC6501.D	DB-624 0.18(mm)
240-102783-13		10/22/2018 17:03	1	UXC6502.D	DB-624 0.18(mm)
240-102783-14		10/22/2018 17:25	1	UXC6503.D	DB-624 0.18(mm)
240-102783-15		10/22/2018 17:47	1	UXC6504.D	DB-624 0.18(mm)
240-102783-16		10/22/2018 18:08	1	UXC6505.D	DB-624 0.18(mm)
240-102783-12 MS		10/22/2018 18:30	16.67	UXC6506.D	DB-624 0.18(mm)
240-102783-12 MSD		10/22/2018 18:52	16.67	UXC6507.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Instrument ID: A3UX15 Start Date: 10/23/2018 10:02

Analysis Batch Number: 351439 End Date: 10/23/2018 20:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-351439/1		10/23/2018 10:02	1	BFB1023.D	DB-624 0.18(mm)
CCVIS 240-351439/2		10/23/2018 10:43	1	UXC6509.D	DB-624 0.18(mm)
LCS 240-351439/4		10/23/2018 11:05	1	UXC6510.D	DB-624 0.18(mm)
CCV 240-351439/3		10/23/2018 11:27	1	UXC6511.D	DB-624 0.18(mm)
MRL 240-351439/5 MDLV		10/23/2018 11:49	1		DB-624 0.18(mm)
MB 240-351439/6		10/23/2018 12:11	1	UXC6513.D	DB-624 0.18(mm)
240-102783-17		10/23/2018 12:55	1	UXC6515.D	DB-624 0.18(mm)
240-102783-18		10/23/2018 13:17	1	UXC6516.D	DB-624 0.18(mm)
240-102783-19		10/23/2018 13:38	1	UXC6517.D	DB-624 0.18(mm)
ZZZZZ		10/23/2018 14:00	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 14:22	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 14:44	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 15:06	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 15:28	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 15:50	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 16:11	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 16:33	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 16:55	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 17:17	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 17:39	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 18:01	500		DB-624 0.18(mm)
ZZZZZ		10/23/2018 18:22	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 18:44	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 19:06	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 19:40	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 20:02	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 20:23	1		DB-624 0.18(mm)
ZZZZZ		10/23/2018 20:45	1		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Batch Number: 342615 Batch Start Date: 08/27/18 10:10 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00071	vm50ss_stk 00078	VMAROLISTDW 00260	vmbfb 00020
BFB 240-342615/1		8260B		5 mL	5 mL				1 uL
STD8260 240-342615/2 IC		8260B		5 mL	5 mL	1 uL	32 uL	32 uL	
STD8260 240-342615/3 IC		8260B		5 mL	5 mL	1 uL	16 uL	16 uL	
STD8260 240-342615/4 ICIS		8260B		5 mL	5 mL	1 uL	8 uL	8 uL	
STD8260 240-342615/5 IC		8260B		5 mL	5 mL	1 uL	4 uL	4 uL	
STD8260 240-342615/6 IC		8260B		5 mL	5 mL	1 uL	1.6 uL	1.6 uL	
STD8260 240-342615/7 IC		8260B		5 mL	5 mL	1 uL	0.8 uL	0.8 uL	
ICV 240-342615/14		8260B		5 mL	5 mL	1 uL	0.797 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASAW 00246	VMFASGW 00271	VMFASPW 00264	VMRGAS 00259	VMRPRIMW 00297	
BFB 240-342615/1		8260B							
STD8260 240-342615/2 IC		8260B					32 uL	32 uL	
STD8260 240-342615/3 IC		8260B					16 uL	16 uL	
STD8260 240-342615/4 ICIS		8260B					8 uL	8 uL	
STD8260 240-342615/5 IC		8260B					4 uL	4 uL	
STD8260 240-342615/6 IC		8260B					1.6 uL	1.6 uL	
STD8260 240-342615/7 IC		8260B					0.8 uL	0.8 uL	
ICV 240-342615/14		8260B		8 uL	8 uL	8 uL			

Batch Notes	
pH Indicator ID	HC746949

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Batch Number: 342615 Batch Start Date: 08/27/18 10:10 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Batch Number: 342834 Batch Start Date: 08/28/18 11:13 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00071	vmbfb 00020	VMFASA9W 00198	
BFB 240-342834/1		8260B		5 mL	5 mL		1 uL		
ICV 240-342834/32		8260B		5 mL	5 mL	1 uL		8 uL	

Batch Notes	
pH Indicator ID	hc746949

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Batch Number: 351197 Batch Start Date: 10/22/18 08:37 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VM50IS 00072	vm50ss_stk 00078	VMAROLISTDW 00269
BFB 240-351197/1		8260B		5 mL	5 mL				
CCVIS 240-351197/2		8260B		5 mL	5 mL		1 uL	0.797 uL	8 uL
CCV 240-351197/3		8260B		5 mL	5 mL		1 uL		
LCS 240-351197/4		8260B		5 mL	5 mL		1 uL	0.797 uL	
MB 240-351197/6		8260B		5 mL	5 mL		1 uL	0.797 uL	
240-102783-B-9	GW-100918-AF-043	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-10	GW-100918-AF-044	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-11	GW-101018-AF-045	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-12	GW-101018-AF-046	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-13	EB-101018-AF-005	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-14	GW-101018-AF-047	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-15	GW-101018-AF-048	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-16	GW-101018-AF-049	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-12 MS	GW-101018-AF-046	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-12 MSD	GW-101018-AF-046	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	VMFASAW 00253	VMFASGW 00279	VMFASPW 00272	VMRA9W 00270	VMRGAS 00266
BFB 240-351197/1		8260B		1 uL					
CCVIS 240-351197/2		8260B							8 uL
CCV 240-351197/3		8260B						8 uL	
LCS 240-351197/4		8260B			8 uL	8 uL	8 uL		
MB 240-351197/6		8260B							
240-102783-B-9	GW-100918-AF-043	8260B	T						
240-102783-B-10	GW-100918-AF-044	8260B	T						
240-102783-B-11	GW-101018-AF-045	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Batch Number: 351197 Batch Start Date: 10/22/18 08:37 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	VMFASAW 00253	VMFASGW 00279	VMFASPW 00272	VMRA9W 00270	VMRGAS 00266
240-102783-B-12	GW-101018-AF-046	8260B	T						
240-102783-B-13	EB-101018-AF-005	8260B	T						
240-102783-B-14	GW-101018-AF-047	8260B	T						
240-102783-B-15	GW-101018-AF-048	8260B	T						
240-102783-B-16	GW-101018-AF-049	8260B	T						
240-102783-B-12 MS	GW-101018-AF-046	8260B	T		8 uL	8 uL	8 uL		
240-102783-B-12 MSD	GW-101018-AF-046	8260B	T		8 uL	8 uL	8 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00305					
BFB 240-351197/1		8260B							
CCVIS 240-351197/2		8260B		8 uL					
CCV 240-351197/3		8260B							
LCS 240-351197/4		8260B							
MB 240-351197/6		8260B							
240-102783-B-9	GW-100918-AF-043	8260B	T						
240-102783-B-10	GW-100918-AF-044	8260B	T						
240-102783-B-11	GW-101018-AF-045	8260B	T						
240-102783-B-12	GW-101018-AF-046	8260B	T						
240-102783-B-13	EB-101018-AF-005	8260B	T						
240-102783-B-14	GW-101018-AF-047	8260B	T						
240-102783-B-15	GW-101018-AF-048	8260B	T						
240-102783-B-16	GW-101018-AF-049	8260B	T						
240-102783-B-12 MS	GW-101018-AF-046	8260B	T						
240-102783-B-12 MSD	GW-101018-AF-046	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Batch Number: 351197 Batch Start Date: 10/22/18 08:37 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC746949

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Batch Number: 351439 Batch Start Date: 10/23/18 10:02 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VM50IS 00072	vm50ss_stk 00078	VMAROLISTDW 00269
BFB 240-351439/1		8260B		5 mL	5 mL				
CCVIS 240-351439/2		8260B		5 mL	5 mL		1 uL	0.797 uL	8 uL
CCV 240-351439/3		8260B		5 mL	5 mL		1 uL		
LCS 240-351439/4		8260B		5 mL	5 mL		1 uL	0.797 uL	
MB 240-351439/6		8260B		5 mL	5 mL		1 uL	0.797 uL	
240-102783-B-17	GW-101018-AF-050	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-B-18	GW-101018-AF-051	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-102783-A-19	TB-101118-AF-006	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	VMFASAW 00253	VMFASGW 00280	VMFASPW 00272	VMRA9W 00270	VMRGAS 00266
BFB 240-351439/1		8260B		1 uL					
CCVIS 240-351439/2		8260B							8 uL
CCV 240-351439/3		8260B						8 uL	
LCS 240-351439/4		8260B			8 uL	8 uL	8 uL		
MB 240-351439/6		8260B							
240-102783-B-17	GW-101018-AF-050	8260B	T						
240-102783-B-18	GW-101018-AF-051	8260B	T						
240-102783-A-19	TB-101118-AF-006	8260B	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00305					
BFB 240-351439/1		8260B							
CCVIS 240-351439/2		8260B		8 uL					
CCV 240-351439/3		8260B							
LCS 240-351439/4		8260B							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-102783-2

SDG No.:

Batch Number: 351439 Batch Start Date: 10/23/18 10:02 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00305					
MB 240-351439/6		8260B							
240-102783-B-17	GW-101018-AF-050	8260B	T						
240-102783-B-18	GW-101018-AF-051	8260B	T						
240-102783-A-19	TB-101118-AF-006	8260B	T						

Batch Notes	
pH Indicator ID	HC746949

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

CHAIN OF CUSTODY RECORD

COC NO.: IN-14331
PAGE 2 OF 2
(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
6520 Corporate Drive, Indianapolis, Indiana 46278
Phone: (317) 291-7007 Fax: (317) 328-2666

0.8/1.7

Project No/ Phase/Task Code: 017302-T08-2018	**Laboratory Name:** Test America NC	**Lab Location:** North Canton, OH	**SSOW ID:** 17302-T08
Project Name: MLK-Anderson, IN GW Sampling	**Lab Contact:** D. Hechler	**Lab Quote No:**	**Cooler No:** 1 of 1
Project Location: Anderson, IN			**Carrier:** Fedex
Chemistry Contact: D. Andrascho			**Airbill No:**
Sampler(s): A. Feldman			**Date Shipped:** 10/11/18

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Sample Type: Matrix Code (see back of COC)	Sample Type: Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: VOC	MS/MSD Request	Comments/ Special Instructions:
1	GW-100918-AF-043	10/09/18	1520	WG	G		3							3	X		
2	GW-100918-AF-044	10/09/18	1607				3							3	X		
3	GW-100918-AF-045	10/10/18	1057				3							3	X		
	GW-101018-AF-046		1217				9							9	X	X	
	EB-101018-AF-005		1233	EB			3							3	X		
	GW-101018-AF-047		1351	WG			3							3	X		
	GW-101018-AF-048		1527				3							3	X		
8	GW-101018-AF-049		1530				3							3	X		
9	GW-101018-AF-050		1705				3							3	X		
10	GW-101018-AF-051		1815				3							3	X		
11	TB-101118-AF-006		1530				18							18	X		
12																	
13																	
14																	
15																	

37 ~~37~~

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TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: ~~37~~ 37

Notes/ Special Requirements:
All Samples in Cooler must be on COC

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	Ari Feldman	GHD	10/11/18	1700		TJC	10/12/18	930
2.								
3.								

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 102783

Client GHD Site Name

Cooler Received on 10/12/18 Opened on 10/12/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Cooler unpacked by: DSD

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # 7A Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.9 °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 1.7 °C
   IR GUN #36 (CF +0.6°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC849161
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered	Yes	No
16. Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: JK

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

ANALYTICAL REPORT

Job Number: 240-105817-1

Job Description: 17302, RACER Delphi Anderson

For:
GHD Services Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, NY 14304

Attention: Ms. Deborah Andrasko

Approved for release.
Leslie Howell
Project Manager I
1/16/2019 11:45 AM

Designee for
Denise D Heckler, Project Manager II
4101 Shuffel Street NW, North Canton, OH, 44720
(330)966-9477
denise.heckler@testamericainc.com
01/16/2019
Revision: 1

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
240-105817-1
REVISED

Comments
Revised report 1/16/2019: a revised report was provided to remove the MS/MSD that was reported with just surrogagtes. The MS/MSD should not have been includes as the parent sample required reanalysis.

No additional comments.

Receipt
The samples were received on 12/14/2018 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: GHD Services Inc.
Project/Site: 17302, RACER Delphi Anderson

TestAmerica Job ID: 240-105817-1

Client Sample ID: GW-121318-BE-001 — Lab Sample ID: 240-105817-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	12		1.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-105817-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	28		10	5.4	ug/L	1		8260B	Total/NA
Methylene Chloride	6.1		5.0	2.6	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-121318-BE-001

Lab Sample ID: 240-105817-1

Date Collected: 12/13/18 12:53

Matrix: Water

Date Received: 12/14/18 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			12/27/18 17:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			12/27/18 17:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			12/27/18 17:54	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			12/27/18 17:54	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/27/18 17:54	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			12/27/18 17:54	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			12/27/18 17:54	1
2-Hexanone	10	U	10	0.54	ug/L			12/27/18 17:54	1
Acetone	10	U	10	5.4	ug/L			12/27/18 17:54	1
Benzene	1.0	U	1.0	0.13	ug/L			12/27/18 17:54	1
Bromoform	1.0	U	1.0	0.76	ug/L			12/27/18 17:54	1
Bromomethane	1.0	U	1.0	0.42	ug/L			12/27/18 17:54	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			12/27/18 17:54	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			12/27/18 17:54	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			12/27/18 17:54	1
Chloroethane	1.0	U	1.0	0.83	ug/L			12/27/18 17:54	1
Chloroform	1.0	U	1.0	0.13	ug/L			12/27/18 17:54	1
Chloromethane	1.0	U	1.0	0.20	ug/L			12/27/18 17:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/27/18 17:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			12/27/18 17:54	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			12/27/18 17:54	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/27/18 17:54	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			12/27/18 17:54	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			12/27/18 17:54	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			12/27/18 17:54	1
Styrene	1.0	U	1.0	0.10	ug/L			12/27/18 17:54	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/27/18 17:54	1
Toluene	1.0	U	1.0	0.14	ug/L			12/27/18 17:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/27/18 17:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			12/27/18 17:54	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/27/18 17:54	1
Vinyl chloride	**12**		1.0	0.20	ug/L			12/27/18 17:54	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			12/27/18 17:54	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			12/27/18 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 121*		*12/27/18 17:54*	*1*
4-Bromofluorobenzene (Surr)	*99*		*59 - 120*		*12/27/18 17:54*	*1*
Toluene-d8 (Surr)	*97*		*70 - 123*		*12/27/18 17:54*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 128*		*12/27/18 17:54*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-105817-2

Date Collected: 12/13/18 00:00

Matrix: Water

Date Received: 12/14/18 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			12/26/18 14:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			12/26/18 14:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			12/26/18 14:23	1

Client Sample ID: TRIP BLANK

Date Collected: 12/13/18 00:00
Date Received: 12/14/18 09:50

Lab Sample ID: 240-105817-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			12/26/18 14:23	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/26/18 14:23	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			12/26/18 14:23	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			12/26/18 14:23	1
2-Hexanone	10	U	10	0.54	ug/L			12/26/18 14:23	1
Acetone	**28**		10	5.4	ug/L			12/26/18 14:23	1
Benzene	1.0	U	1.0	0.13	ug/L			12/26/18 14:23	1
Bromoform	1.0	U	1.0	0.76	ug/L			12/26/18 14:23	1
Bromomethane	1.0	U	1.0	0.42	ug/L			12/26/18 14:23	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			12/26/18 14:23	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			12/26/18 14:23	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			12/26/18 14:23	1
Chloroethane	1.0	U	1.0	0.83	ug/L			12/26/18 14:23	1
Chloroform	1.0	U	1.0	0.13	ug/L			12/26/18 14:23	1
Chloromethane	1.0	U	1.0	0.20	ug/L			12/26/18 14:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/26/18 14:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			12/26/18 14:23	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			12/26/18 14:23	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/26/18 14:23	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			12/26/18 14:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			12/26/18 14:23	1
Methylene Chloride	**6.1**		5.0	2.6	ug/L			12/26/18 14:23	1
Styrene	1.0	U	1.0	0.10	ug/L			12/26/18 14:23	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/26/18 14:23	1
Toluene	1.0	U	1.0	0.14	ug/L			12/26/18 14:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/26/18 14:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			12/26/18 14:23	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/26/18 14:23	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/26/18 14:23	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			12/26/18 14:23	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			12/26/18 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 121*		*12/26/18 14:23*	*1*
4-Bromofluorobenzene (Surr)	*67*		*59 - 120*		*12/26/18 14:23*	*1*
Toluene-d8 (Surr)	*82*		*70 - 123*		*12/26/18 14:23*	*1*
Dibromofluoromethane (Surr)	*124*		*75 - 128*		*12/26/18 14:23*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17302, RACER Delphi Anderson

TestAmerica Job ID: 240-105817-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-105817-1	GW-121318-BE-001	89	99	97	96
240-105817-2	TRIP BLANK	107	67	82	124
LCS 240-361663/4	Lab Control Sample	83	83	88	97
LCS 240-361928/4	Lab Control Sample	94	97	98	99
MB 240-361663/6	Method Blank	108	66	75	127
MB 240-361928/6	Method Blank	94	97	102	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-361663/6
Matrix: Water
Analysis Batch: 361663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			12/26/18 11:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			12/26/18 11:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			12/26/18 11:07	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			12/26/18 11:07	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/26/18 11:07	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			12/26/18 11:07	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			12/26/18 11:07	1
2-Hexanone	10	U	10	0.54	ug/L			12/26/18 11:07	1
Acetone	10	U	10	5.4	ug/L			12/26/18 11:07	1
Benzene	1.0	U	1.0	0.13	ug/L			12/26/18 11:07	1
Bromoform	1.0	U	1.0	0.76	ug/L			12/26/18 11:07	1
Bromomethane	1.0	U	1.0	0.42	ug/L			12/26/18 11:07	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			12/26/18 11:07	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			12/26/18 11:07	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			12/26/18 11:07	1
Chloroethane	1.0	U	1.0	0.83	ug/L			12/26/18 11:07	1
Chloroform	0.289	J	1.0	0.13	ug/L			12/26/18 11:07	1
Chloromethane	1.0	U	1.0	0.20	ug/L			12/26/18 11:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/26/18 11:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			12/26/18 11:07	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			12/26/18 11:07	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/26/18 11:07	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			12/26/18 11:07	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			12/26/18 11:07	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			12/26/18 11:07	1
Styrene	1.0	U	1.0	0.10	ug/L			12/26/18 11:07	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/26/18 11:07	1
Toluene	1.0	U	1.0	0.14	ug/L			12/26/18 11:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/26/18 11:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			12/26/18 11:07	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/26/18 11:07	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/26/18 11:07	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			12/26/18 11:07	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			12/26/18 11:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 121*		*12/26/18 11:07*	*1*
4-Bromofluorobenzene (Surr)	*66*		*59 - 120*		*12/26/18 11:07*	*1*
Toluene-d8 (Surr)	*75*		*70 - 123*		*12/26/18 11:07*	*1*
Dibromofluoromethane (Surr)	*127*		*75 - 128*		*12/26/18 11:07*	*1*

Lab Sample ID: LCS 240-361663/4
Matrix: Water
Analysis Batch: 361663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane			10.0	11.9		ug/L		119	69 - 134		
1,1,2,2-Tetrachloroethane			10.0	9.54		ug/L		95	65 - 139		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-361663/4
Matrix: Water
Analysis Batch: 361663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	10.0	10.9		ug/L		109	78 - 133
1,1-Dichloroethane	10.0	11.3		ug/L		113	75 - 133
1,1-Dichloroethene	10.0	10.6		ug/L		106	65 - 139
1,2-Dichloroethane	10.0	9.68		ug/L		97	71 - 135
1,2-Dichloropropane	10.0	10.2		ug/L		102	78 - 133
2-Hexanone	20.0	16.5		ug/L		83	43 - 148
Acetone	20.0	20.7		ug/L		103	21 - 162
Benzene	10.0	10.4		ug/L		104	80 - 123
Bromoform	10.0	10.3		ug/L		103	49 - 141
Bromomethane	10.0	7.25		ug/L		72	41 - 175
Carbon disulfide	10.0	11.2		ug/L		112	60 - 138
Carbon tetrachloride	10.0	12.9		ug/L		129	63 - 140
Chlorobenzene	10.0	10.4		ug/L		104	80 - 121
Chloroethane	10.0	8.63		ug/L		86	33 - 173
Chloroform	10.0	11.4		ug/L		114	79 - 127
Chloromethane	10.0	9.82		ug/L		98	54 - 143
cis-1,2-Dichloroethene	10.0	11.0		ug/L		110	76 - 128
cis-1,3-Dichloropropene	10.0	8.22		ug/L		82	64 - 132
Dichlorobromomethane	10.0	10.1		ug/L		101	77 - 125
Ethylbenzene	10.0	9.51		ug/L		95	80 - 120
m-Xylene & p-Xylene	10.0	9.31		ug/L		93	80 - 120
2-Butanone (MEK)	20.0	16.3		ug/L		82	39 - 163
4-Methyl-2-pentanone (MIBK)	20.0	14.8		ug/L		74	49 - 143
Methylene Chloride	10.0	12.2		ug/L		122	70 - 134
o-Xylene	10.0	8.73		ug/L		87	80 - 120
Styrene	10.0	8.96		ug/L		90	79 - 120
Tetrachloroethene	10.0	10.8		ug/L		108	74 - 130
Toluene	10.0	10.2		ug/L		102	78 - 129
trans-1,2-Dichloroethene	10.0	12.2		ug/L		122	78 - 133
trans-1,3-Dichloropropene	10.0	8.37		ug/L		84	55 - 128
Trichloroethene	10.0	9.58		ug/L		96	76 - 125
Vinyl chloride	10.0	9.26		ug/L		93	58 - 143
Xylenes, Total	20.0	18.0		ug/L		90	80 - 120
Chlorodibromomethane	10.0	11.0		ug/L		110	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 121*
4-Bromofluorobenzene (Surr)	*83*		*59 - 120*
Toluene-d8 (Surr)	*88*		*70 - 123*
Dibromofluoromethane (Surr)	*97*		*75 - 128*

Lab Sample ID: MB 240-361928/6
Matrix: Water
Analysis Batch: 361928

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			12/27/18 12:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			12/27/18 12:45	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-361928/6
Matrix: Water
Analysis Batch: 361928

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			12/27/18 12:45	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			12/27/18 12:45	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/27/18 12:45	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			12/27/18 12:45	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			12/27/18 12:45	1
2-Hexanone	10	U	10	0.54	ug/L			12/27/18 12:45	1
Acetone	10	U	10	5.4	ug/L			12/27/18 12:45	1
Benzene	1.0	U	1.0	0.13	ug/L			12/27/18 12:45	1
Bromoform	1.0	U	1.0	0.76	ug/L			12/27/18 12:45	1
Bromomethane	1.0	U	1.0	0.42	ug/L			12/27/18 12:45	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			12/27/18 12:45	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			12/27/18 12:45	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			12/27/18 12:45	1
Chloroethane	1.0	U	1.0	0.83	ug/L			12/27/18 12:45	1
Chloroform	1.0	U	1.0	0.13	ug/L			12/27/18 12:45	1
Chloromethane	1.0	U	1.0	0.20	ug/L			12/27/18 12:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/27/18 12:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			12/27/18 12:45	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			12/27/18 12:45	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			12/27/18 12:45	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			12/27/18 12:45	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			12/27/18 12:45	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			12/27/18 12:45	1
Styrene	1.0	U	1.0	0.10	ug/L			12/27/18 12:45	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/27/18 12:45	1
Toluene	1.0	U	1.0	0.14	ug/L			12/27/18 12:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/27/18 12:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			12/27/18 12:45	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/27/18 12:45	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/27/18 12:45	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			12/27/18 12:45	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			12/27/18 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 121*		*12/27/18 12:45*	*1*
4-Bromofluorobenzene (Surr)	*97*		*59 - 120*		*12/27/18 12:45*	*1*
Toluene-d8 (Surr)	*102*		*70 - 123*		*12/27/18 12:45*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 128*		*12/27/18 12:45*	*1*

Lab Sample ID: LCS 240-361928/4
Matrix: Water
Analysis Batch: 361928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.64		ug/L		96	69 - 134
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	65 - 139
1,1,2-Trichloroethane	10.0	9.52		ug/L		95	78 - 133
1,1-Dichloroethane	10.0	11.3		ug/L		113	75 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-361928/4
Matrix: Water
Analysis Batch: 361928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.99		ug/L		100	65 - 139
1,2-Dichloroethane	10.0	9.68		ug/L		97	71 - 135
1,2-Dichloropropane	10.0	10.2		ug/L		102	78 - 133
2-Hexanone	20.0	26.0		ug/L		130	43 - 148
Acetone	20.0	23.9		ug/L		120	21 - 162
Benzene	10.0	10.3		ug/L		103	80 - 123
Bromoform	10.0	8.94		ug/L		89	49 - 141
Bromomethane	10.0	11.0		ug/L		110	41 - 175
Carbon disulfide	10.0	9.88		ug/L		99	60 - 138
Carbon tetrachloride	10.0	8.74		ug/L		87	63 - 140
Chlorobenzene	10.0	9.73		ug/L		97	80 - 121
Chloroethane	10.0	11.9		ug/L		119	33 - 173
Chloroform	10.0	11.1		ug/L		111	79 - 127
Chloromethane	10.0	11.2		ug/L		112	54 - 143
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	76 - 128
cis-1,3-Dichloropropene	10.0	8.54		ug/L		85	64 - 132
Dichlorobromomethane	10.0	9.16		ug/L		92	77 - 125
Ethylbenzene	10.0	9.24		ug/L		92	80 - 120
m-Xylene & p-Xylene	10.0	9.08		ug/L		91	80 - 120
2-Butanone (MEK)	20.0	22.3		ug/L		112	39 - 163
4-Methyl-2-pentanone (MIBK)	20.0	22.0		ug/L		110	49 - 143
Methylene Chloride	10.0	10.5		ug/L		105	70 - 134
o-Xylene	10.0	9.47		ug/L		95	80 - 120
Styrene	10.0	9.05		ug/L		91	79 - 120
Tetrachloroethene	10.0	8.96		ug/L		90	74 - 130
Toluene	10.0	10.0		ug/L		100	78 - 129
trans-1,2-Dichloroethene	10.0	10.9		ug/L		109	78 - 133
trans-1,3-Dichloropropene	10.0	8.73		ug/L		87	55 - 128
Trichloroethene	10.0	9.51		ug/L		95	76 - 125
Vinyl chloride	10.0	11.8		ug/L		118	58 - 143
Xylenes, Total	20.0	18.6		ug/L		93	80 - 120
Chlorodibromomethane	10.0	9.31		ug/L		93	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 121*
4-Bromofluorobenzene (Surr)	*97*		*59 - 120*
Toluene-d8 (Surr)	*98*		*70 - 123*
Dibromofluoromethane (Surr)	*99*		*75 - 128*

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17302, RACER Delphi Anderson

TestAmerica Job ID: 240-105817-1

GC/MS VOA

Analysis Batch: 361663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-105817-2	TRIP BLANK	Total/NA	Water	8260B	
MB 240-361663/6	Method Blank	Total/NA	Water	8260B	
LCS 240-361663/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 361928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-105817-1	GW-121318-BE-001	Total/NA	Water	8260B	
MB 240-361928/6	Method Blank	Total/NA	Water	8260B	
LCS 240-361928/4	Lab Control Sample	Total/NA	Water	8260B	

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17302, RACER Delphi Anderson

TestAmerica Job ID: 240-105817-1

Client Sample ID: GW-121318-BE-001

Lab Sample ID: 240-105817-1

Date Collected: 12/13/18 12:53

Matrix: Water

Date Received: 12/14/18 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	361928	12/27/18 17:54	LRW	TAL CAN

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-105817-2

Date Collected: 12/13/18 00:00

Matrix: Water

Date Received: 12/14/18 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	361663	12/26/18 14:23	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc. TestAmerica Job ID: 240-105817-1
Project/Site: 17302, RACER Delphi Anderson

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19 *
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	04-30-19
Kentucky (UST)	State Program	4	58	02-23-19 *
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19 *
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: GHD Services Inc.
Project/Site: 17302, RACER Delphi Anderson

TestAmerica Job ID: 240-105817-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: GHD Services Inc.
Project/Site: 17302, RACER Delphi Anderson

TestAmerica Job ID: 240-105817-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-105817-1	GW-121318-BE-001	Water	12/13/18 12:53	12/14/18 09:50
240-105817-2	TRIP BLANK	Water	12/13/18 00:00	12/14/18 09:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX10 Analysis Batch Number: 348190

Lab Sample ID: STD8260 240-348190/2 IC Client Sample ID:

Date Analyzed: 10/02/18 15:27 Lab File ID: UXX5939.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene-d5	8.25	Peak assignment corrected	williamsl a	10/02/18 16:16

Lab Sample ID: STD8260 240-348190/4 IC Client Sample ID:

Date Analyzed: 10/02/18 16:17 Lab File ID: UXX5941.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.84	Split Peak	bosworthh	10/03/18 11:27

Lab Sample ID: STD8260 240-348190/5 IC Client Sample ID:

Date Analyzed: 10/02/18 16:42 Lab File ID: UXX5942.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.83	Split Peak	bosworthh	10/03/18 11:28
1,4-Dioxane	6.19	Baseline	bosworthh	10/03/18 12:13

Lab Sample ID: STD8260 240-348190/8 IC Client Sample ID:

Date Analyzed: 10/02/18 17:56 Lab File ID: UXX5945.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.86	Split Peak	bosworthh	10/03/18 11:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX10 Analysis Batch Number: 361928

Lab Sample ID: CCVIS 240-361928/2 Client Sample ID:

Date Analyzed: 12/27/18 11:06 Lab File ID: UXX8803.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.85	Split Peak	williamsla	12/27/18 11:47

Lab Sample ID: LCS 240-361928/4 Client Sample ID:

Date Analyzed: 12/27/18 11:55 Lab File ID: UXX8805.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.84	Split Peak	williamsla	12/27/18 12:36

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX15 Analysis Batch Number: 342615

Lab Sample ID: STD8260 240-342615/7 IC Client Sample ID:

Date Analyzed: 08/27/18 12:45 Lab File ID: UXC4608.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptane	5.22	Peak assignment corrected	evansle	08/27/18 14:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX15 Analysis Batch Number: 361663

Lab Sample ID: 240-105817-2 Client Sample ID: TRIP BLANK

Date Analyzed: 12/26/18 14:23 Lab File ID: UXC8102.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	evansle	12/27/18 07:58

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VM50IS_00071	01/03/19	07/03/18	MEOH, Lot 177891	50 mL	VM568718_00011	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00011	01/31/22		restek, Lot A0124343		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM50IS_00072	03/18/19	09/18/18	MEOH, Lot 177891	50 mL	VM568718_00012	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00012	05/31/22		restek, Lot A0127975		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50ss_00337	10/05/18	09/28/18	MEOH, Lot na	4 mL	vm50ss_stk_00078	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00078	12/20/18	06/20/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00029	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00078	12/20/18	06/20/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00029	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00079	05/07/19	11/07/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00029	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00260	08/27/18	08/20/18	MEOH, Lot na	4 mL	VMACROLSTD_00062	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00062	08/31/18	06/01/18	MEOH, Lot 178178	100 mL	VM568720_00028	1.25 mL	Acrolein	250 ug/mL
..VM568720_00028	08/31/18		restek, Lot A0135693		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00267	10/08/18	10/01/18	MEOH, Lot na	4 mL	VMACROLSTD_00064	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00064	10/31/18	10/01/18	MEOH, Lot 0000196626	20 mL	VM568720_00029	0.25 mL	Acrolein	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM568720_00029	10/31/18		restek, Lot A0137497		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00020							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00002	1.25 mL	BFB	50 ug/mL
.vm30026_00002	07/31/21		restek, Lot A0120567		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00021							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00002	1.25 mL	BFB	50 ug/mL
.vm30026_00002	07/31/21		restek, Lot A0120567		(Purchased Reagent)		BFB	2000 ug/mL
VMFASGW_00271	08/28/18	08/21/18	MEOH, Lot NA	4 mL	VMFASG_00074	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00074	09/13/18	08/13/18	MEOH, Lot 0000196626	100 mL	vm569722S_00004	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00004	11/30/18		Restek, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00276	10/05/18	09/28/18	MEOH, Lot NA	4 mL	VMFASG_00075	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00075	10/14/18	09/14/18	MEOH, Lot 0000196626	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00289	12/30/18	12/23/18	MEOH, Lot NA	4 mL	VMFASG_00078	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	50 ug/mL
.VMFASG_00078	01/17/19	12/17/18	MEOH, Lot 0000196628	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASPW_00264	09/03/18	08/27/18	MEOH, Lot n/a	4 mL	VMRFASP_00049	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00049	10/31/18	07/18/18	MEOH, Lot 0000196626	100 mL	VM569721S_00003	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992S_00002	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00002	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00269	10/05/18	09/28/18	MEOH, Lot n/a	4 mL	VMRFASP_00050	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00050	10/31/18	08/30/18	MEOH, Lot 0000196626	100 mL	VM569721S_00003	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992S_00001	2 mL	1,1,1-Trichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00001	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00281	12/28/18	12/21/18	MEOH, Lot n/a	4 mL	VMRFASP_00052	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00052	12/31/18	11/29/18	MEOH, Lot 0000196628	100 mL	VM569721S_00003	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					VM571992S_00003	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00003	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMRGAS_00259	08/31/18	08/24/18	MEOH, Lot 0000196628	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00263	10/03/18	09/26/18	MEOH, Lot 0000196626	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00275	12/27/18	12/20/18	MEOH, Lot 0000196628	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRPRIMW_00297	08/29/18	08/22/18	MEOH, Lot NA	4 mL	VMRPRIM_00029	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00029	10/31/18	07/28/18	MEOH, Lot 0000196626	50 mL	VM569721_00004	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00004	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00016	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00004	11/30/18		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00004	11/30/18		restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00016	10/31/18		Restek, Lot A0137562		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMRPRIMW_00303	10/08/18	10/01/18	MEOH, Lot NA	4 mL	VMRPRIM_00030	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00030	10/31/18	09/24/18	MEOH, Lot +200920000196626JH	50 mL	VM569721_00003	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00004	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00016	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00002	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00003	11/30/18		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00004	11/30/18		restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00016	10/31/18		Restek, Lot A0137562		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00002	06/30/19		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00315	01/01/19	12/25/18	MEOH, Lot NA	4 mL	VMRPRIM_00032	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00032	02/28/19	12/01/18	MEOH, Lot 0000196628	50 mL	VM569721_00005	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992_00002	1 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721_00005	04/30/21		Restek, Lot A0137509		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992_00002	06/30/19		Restek, Lot A0123711		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL

Reagent

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vm30026_00002

Rec: 4/11/17 (5)

VM30026-00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0120567

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,019.3 µg/mL	+/- 11.8506	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 113.2335	µg/mL	Unstressed
	Purity 99%		+/- 115.8825	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00029

Rec: 8/22/17
VM567650-00029

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0124069

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012016) **Purity** 99%	2,521.2 µg/mL	+/- 14.6582 µg/mL +/- 141.3584 µg/mL +/- 144.6660 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-25433) **Purity** 98%	2,513.8 µg/mL	+/- 14.6157 µg/mL +/- 140.9489 µg/mL +/- 144.2469 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,519.4 µg/mL	+/- 14.6480 µg/mL +/- 141.2603 µg/mL +/- 144.5656 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,520.8 µg/mL	+/- 14.6559 µg/mL +/- 141.3360 µg/mL +/- 144.6430 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00011

VM568718_00011 Rec: 8-22-2017

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0124343

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot I-201) **Purity** 99%	5,050.0 µg/mL	+/- 29.3596 µg/mL +/- 108.1207 µg/mL +/- 111.2640 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,262.5 µg/mL	+/- 7.3403 µg/mL +/- 27.0303 µg/mL +/- 27.8161 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	251.6 µg/mL	+/- 1.4664 µg/mL +/- 5.3884 µg/mL +/- 5.5450 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19942) **Purity** 99%	5,048.8 µg/mL	+/- 29.3526 µg/mL +/- 108.0950 µg/mL +/- 111.2375 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	251.5 µg/mL	+/- 1.4654 µg/mL +/- 5.3849 µg/mL +/- 5.5413 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	252.5 µg/mL	+/- 1.4714 µg/mL +/- 5.4070 µg/mL +/- 5.5641 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM568718_00012

Rcvd: 11/8/17

VM568718_00012

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0127975

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot I-201) **Purity** 99%	5,022.1 µg/mL	+/- 29.1976 µg/mL +/- 107.5241 µg/mL +/- 110.6500 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,257.5 µg/mL	+/- 7.3114 µg/mL +/- 26.9239 µg/mL +/- 27.7067 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	250.8 µg/mL	+/- 1.4613 µg/mL +/- 5.3699 µg/mL +/- 5.5259 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19942) **Purity** 99%	5,009.4 µg/mL	+/- 29.1236 µg/mL +/- 107.2514 µg/mL +/- 110.3694 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-21944) **Purity** 99%	251.7 µg/mL	+/- 1.4666 µg/mL +/- 5.3891 µg/mL +/- 5.5458 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	251.3 µg/mL	+/- 1.4645 µg/mL +/- 5.3813 µg/mL +/- 5.5377 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM568720_00028

rec: 6/1/18

VM568720-00028

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0135693

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,777.5	µg/mL	+/- 115.8016	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 171116JLM)			+/- 634.1288	µg/mL	Unstressed
	Purity 99%				+/- 737.1054	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00029

VMS68720_00029 Rec: 8/7/18

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0137497

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,757.3	µg/mL	+/- 115.6835	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 171116JLM)			+/- 633.4822	µg/mL	Unstressed
	Purity 99%				+/- 736.3538	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00003

VM569721_00003 Rec: 9/8/16

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0115554

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1 (Lot 07196AK) **Purity** 99%	12,501.8 µg/mL	+/- 72.6865 µg/mL +/- 754.2890 µg/mL +/- 756.0798 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBG0444V) **Purity** 98%	12,499.7 µg/mL	+/- 72.6744 µg/mL +/- 754.1625 µg/mL +/- 755.9530 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF9556V) **Purity** 99%	12,500.6 µg/mL	+/- 72.6796 µg/mL +/- 754.2166 µg/mL +/- 756.0072 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBT3158V) **Purity** 99%	12,502.4 µg/mL	+/- 72.6900 µg/mL +/- 754.3252 µg/mL +/- 756.1161 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721_00004

Rec: 1-25-17

VM569721-00004

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0115554

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1 (Lot 07196AK) **Purity** 99%	12,501.8 µg/mL	+/- 72.6865 µg/mL +/- 754.2890 µg/mL +/- 756.0798 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBG0444V) **Purity** 98%	12,499.7 µg/mL	+/- 72.6744 µg/mL +/- 754.1625 µg/mL +/- 755.9530 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF9556V) **Purity** 99%	12,500.6 µg/mL	+/- 72.6796 µg/mL +/- 754.2166 µg/mL +/- 756.0072 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBT3158V) **Purity** 99%	12,502.4 µg/mL	+/- 72.6900 µg/mL +/- 754.3252 µg/mL +/- 756.1161 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721S_00003

Rec: 7/12/16 (20)
VM569721S-00003

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.sec **Lot No.:** A0118013

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1.SEC (Lot P14A572) **Purity** 99%	12,550.0 µg/mL	+/- 73.4830 µg/mL +/- 757.2470 µg/mL +/- 759.0446 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RA58J) **Purity** 99%	12,603.0 µg/mL	+/- 73.7933 µg/mL +/- 760.4450 µg/mL +/- 762.2502 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,591.5 µg/mL	+/- 73.7260 µg/mL +/- 759.7511 µg/mL +/- 761.5546 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot V3NRA) **Purity** 99%	12,588.0 µg/mL	+/- 73.7055 µg/mL +/- 759.5399 µg/mL +/- 761.3429 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00011

Rec: 4/17/18

VM569722_00011

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0131502

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,501.3 µg/mL	+/- 20.2137 µg/mL +/- 140.9452 µg/mL +/- 144.2108 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG9707V) **Purity** 99%	2,504.9 µg/mL	+/- 24.8531 µg/mL +/- 141.8827 µg/mL +/- 145.1364 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.3 µg/mL	+/- 21.7258 µg/mL +/- 141.0069 µg/mL +/- 144.2635 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBH7966) **Purity** 99%	2,499.9 µg/mL	+/- 19.8572 µg/mL +/- 140.8167 µg/mL +/- 144.0816 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.4 µg/mL	+/- 24.9675 µg/mL +/- 141.6590 µg/mL +/- 144.9064 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.1 µg/mL	+/- 25.2649 µg/mL +/- 141.6931 µg/mL +/- 144.9388 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 16.7114 µg/mL +/- 140.4149 µg/mL +/- 143.6892 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	(Lot SHBH4155V)	2,499.5 µg/mL	+/- 20.7085 +/- 140.9189 +/- 144.1805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

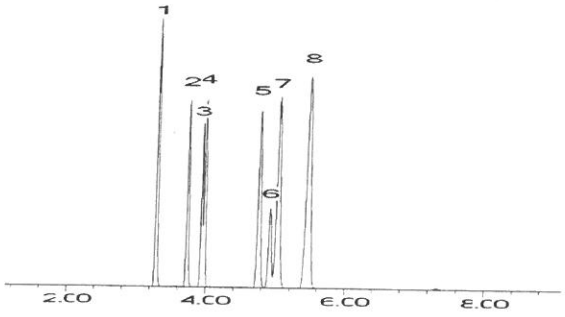
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 10-Oct-2017 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 12-Oct-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

vm569722S_00004

VM569722S-00004 Rec'd 7/12/16 (20)

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Catalog No. : 569722.sec **Lot No.:** A0115484

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 22274) **Purity** 99%	2,505.6 µg/mL	+/- 16.6251 µg/mL +/- 140.7169 µg/mL +/- 143.9990 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,517.3 µg/mL	+/- 17.3796 µg/mL +/- 141.4522 µg/mL +/- 144.7477 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,510.2 µg/mL	+/- 16.6342 µg/mL +/- 140.9727 µg/mL +/- 144.2609 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 22331) **Purity** 99%	2,516.5 µg/mL	+/- 17.4874 µg/mL +/- 141.4240 µg/mL +/- 144.7182 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,511.5 µg/mL	+/- 16.8310 µg/mL +/- 141.0664 µg/mL +/- 144.3557 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,504.8 µg/mL	+/- 16.4341 µg/mL +/- 140.6469 µg/mL +/- 143.9283 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,500.5 µg/mL	+/- 16.1659 µg/mL +/- 140.3776 µg/mL +/- 143.6540 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)	[illegible]	2,524.5	µg/mL	+/- 16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/- 141.7952	µg/mL	Unstressed
	Purity 99%				+/- 145.1017	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

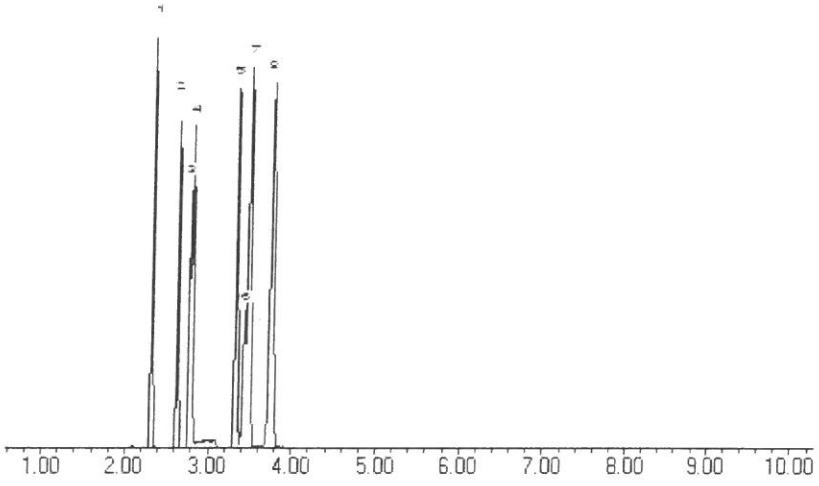
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

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Reagent

vm569722S_00005

VM 569722S-0005 Rec: 7/17/17

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Catalog No. : 569722.SEC **Lot No.:** A0124116

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 23586) **Purity** 99%	2,503.4 µg/mL	+/- 19.5506 µg/mL +/- 140.9699 µg/mL +/- 144.2404 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,508.1 µg/mL	+/- 21.1963 µg/mL +/- 141.4639 µg/mL +/- 144.7353 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.6 µg/mL	+/- 19.4186 µg/mL +/- 141.7924 µg/mL +/- 145.0836 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 22331) **Purity** 99%	2,504.0 µg/mL	+/- 20.5722 µg/mL +/- 141.1450 µg/mL +/- 144.4130 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,498.5 µg/mL	+/- 19.9806 µg/mL +/- 140.7602 µg/mL +/- 144.0229 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,494.9 µg/mL	+/- 17.8868 µg/mL +/- 140.2786 µg/mL +/- 143.5429 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,503.4 µg/mL	+/- 20.0421 µg/mL +/- 141.0350 µg/mL +/- 144.3039 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,503.2	µg/mL	+/-	18.7037	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	140.8450	µg/mL	Unstressed
	Purity 99%				+/-	144.1179	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

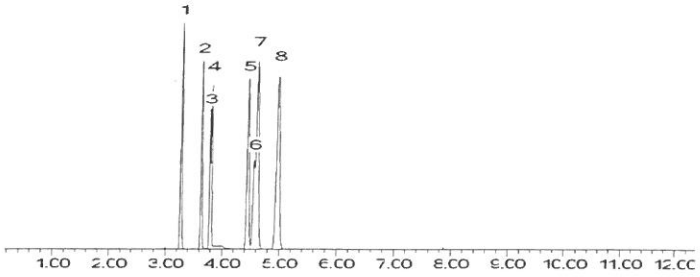
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 12-Jan-2017 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00004

VM569723-00004 Rec: 5/16/16 (20)

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Catalog No. : 569723 **Lot No.:** A0115628

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBK2735V) **Purity** 99%	2,509.2 µg/mL	+/- 14.5887 µg/mL +/- 53.7223 µg/mL +/- 55.2841 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00016

VM569724_ 05016 Rcd: 7/13/18

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0137562

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,020.0 µg/mL	+/- 29.4602	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 302.9053	µg/mL	Unstressed
	Purity 99%		+/- 303.6243	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00001

VM571992_00001 Rec'd 1-25-17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,502.1 µg/mL	+/- 14.5476	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBH2578V)		+/- 150.9643	µg/mL	Unstressed
	Purity 99%			+/- 151.3227	µg/mL	Stressed
9	Carbon disulfide		2,501.4 µg/mL	+/- 14.5432	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot S20A856)		+/- 150.9190	µg/mL	Unstressed
	Purity 99%			+/- 151.2773	µg/mL	Stressed
10	Acrylonitrile		25,001.3 µg/mL	+/- 145.3518	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot T07B2030)		+/- 1,508.4355	µg/mL	Unstressed
	Purity 99%			+/- 1,512.0167	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,505.3 µg/mL	+/- 14.5657	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBG2655V)		+/- 151.1528	µg/mL	Unstressed
	Purity 99%			+/- 151.5117	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,500.5 µg/mL	+/- 14.5379	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBV2831V)		+/- 150.8644	µg/mL	Unstressed
	Purity 98%			+/- 151.2226	µg/mL	Stressed
13	n-Hexane (C6)		2,503.8 µg/mL	+/- 14.5570	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBG2674V)		+/- 151.0623	µg/mL	Unstressed
	Purity 99%			+/- 151.4210	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4 µg/mL	+/- 14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 00008621)		+/- 150.8587	µg/mL	Unstressed
	Purity 99%			+/- 151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,501.0 µg/mL	+/- 14.5408	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBR0622V)		+/- 150.8940	µg/mL	Unstressed
	Purity 98%			+/- 151.2522	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,503.8 µg/mL	+/- 14.5570	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot 09431AEV)		+/- 151.0623	µg/mL	Unstressed
	Purity 99%			+/- 151.4210	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,512.5 µg/mL	+/- 363.4341	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBG8201V)		+/- 3,771.6543	µg/mL	Unstressed
	Purity 99%			+/- 3,780.6088	µg/mL	Stressed
18	chloroform		2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot MKBV2089V)		+/- 150.9492	µg/mL	Unstressed
	Purity 99%			+/- 151.3076	µg/mL	Stressed
19	Bromochloromethane		2,503.3 µg/mL	+/- 14.5541	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00004559)		+/- 151.0322	µg/mL	Unstressed
	Purity 99%			+/- 151.3907	µg/mL	Stressed
20	Tetrahydrofuran		5,001.3 µg/mL	+/- 29.0777	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBG2910V)		+/- 301.7476	µg/mL	Unstressed
	Purity 99%			+/- 302.4640	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.3 µg/mL	+/- 14.5367	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)		+/- 150.8512	µg/mL	Unstressed
	Purity 99%			+/- 151.2093	µg/mL	Stressed
22	Cyclohexane		2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKBX4768V)		+/- 150.9567	µg/mL	Unstressed
	Purity 99%			+/- 151.3151	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 160727JLM)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5 µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8 µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4 µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0 µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4 µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9 µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3 µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6 µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,500.2 µg/mL	+/-	14.5365	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBW3597V)		+/-	150.8497	µg/mL	Unstressed
	Purity 98%			+/-	151.2078	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
42	Chlorobenzene		2,500.1 µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)		+/-	150.8436	µg/mL	Unstressed
	Purity 99%			+/-	151.2017	µg/mL	Stressed
43	m-Xylene		1,250.3 µg/mL	+/-	7.2691	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBG4347V)		+/-	75.4331	µg/mL	Unstressed
	Purity 99%			+/-	75.6122	µg/mL	Stressed
44	p-Xylene		1,251.3 µg/mL	+/-	7.2749	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBG3928V)		+/-	75.4935	µg/mL	Unstressed
	Purity 99%			+/-	75.6727	µg/mL	Stressed
45	Ethylbenzene		2,503.3 µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)		+/-	151.0322	µg/mL	Unstressed
	Purity 99%			+/-	151.3907	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.3 µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)		+/-	150.8512	µg/mL	Unstressed
	Purity 99%			+/-	151.2093	µg/mL	Stressed
47	o-Xylene		2,504.9 µg/mL	+/-	14.5636	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH3432V)		+/-	151.1302	µg/mL	Unstressed
	Purity 99%			+/-	151.4890	µg/mL	Stressed
48	Styrene		2,506.3 µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)		+/-	151.2132	µg/mL	Unstressed
	Purity 99%			+/-	151.5722	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,501.6 µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)		+/-	150.9341	µg/mL	Unstressed
	Purity 99%			+/-	151.2925	µg/mL	Stressed
50	bromoform		2,502.9 µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBD8459V)		+/-	151.0095	µg/mL	Unstressed
	Purity 99%			+/-	151.3681	µg/mL	Stressed
51	bromodichloromethane		2,506.8 µg/mL	+/-	14.5750	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKBW5506V)		+/-	151.2490	µg/mL	Unstressed
	Purity 97%			+/-	151.6081	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,508.5 µg/mL	+/-	14.5846	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)		+/-	151.3489	µg/mL	Unstressed
	Purity 99%			+/-	151.7082	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.8 µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)		+/-	150.8817	µg/mL	Unstressed
	Purity 95%			+/-	151.2399	µg/mL	Stressed
55	n-Propylbenzene		2,501.9 µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)		+/-	150.9492	µg/mL	Unstressed
	Purity 99%			+/-	151.3076	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot MKBD4032V)	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBQ2165V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.6 µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot S52237V)	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 98%	(Lot MKBJ6229V)	2,500.8 µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,505.4 µg/mL	+/- 14.5665 +/- 151.1604 +/- 151.5193	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBS2604V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBM5751V)	2,503.9 µg/mL	+/- 14.5577 +/- 151.0699 +/- 151.4285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS1350V)	2,509.9 µg/mL	+/- 14.5926 +/- 151.4319 +/- 151.7914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09418JJV)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBD7331V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,505.0 µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBC5541V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,506.5 µg/mL	+/- 14.5728 +/- 151.2266 +/- 151.5856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,511.1	µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)			+/-	151.5073	µg/mL	Unstressed
	Purity 99%				+/-	151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

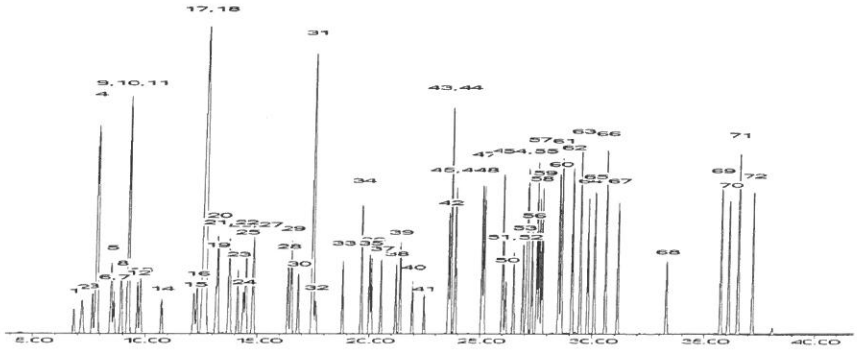
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM571992_00002

Rec: 6/15/18 20 vials

VMS71992_00002

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 +/- 151.1453 +/- 151.5041	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 +/- 151.5299 +/- 151.8897	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 +/- 1,508.4656 +/- 1,512.0470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 +/- 301.7023 +/- 302.4186	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 +/- 151.8693 +/- 152.2299	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3 µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5 µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5 µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9 µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3 µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5 µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8 µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4 µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0 µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4 µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9 µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3 µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6 µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKBW3597V)	2,500.2	µg/mL	+/- 14.5365 +/- 150.8497 +/- 151.2078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBF0505V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBG4347V)	1,250.3	µg/mL	+/- 7.2691 +/- 75.4331 +/- 75.6122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBG3928V)	1,251.3	µg/mL	+/- 7.2749 +/- 75.4935 +/- 75.6727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBG5920V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH3432V)	2,504.9	µg/mL	+/- 14.5636 +/- 151.1302 +/- 151.4890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKBS7097V)	2,506.3	µg/mL	+/- 14.5716 +/- 151.2132 +/- 151.5722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBD8459V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 97%	(Lot MKBW5506V)	2,506.8	µg/mL	+/- 14.5750 +/- 151.2490 +/- 151.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,508.5	µg/mL	+/- 14.5846 +/- 151.3489 +/- 151.7082	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBP6041V)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8817 +/- 151.2399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKBJ0332V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,507.0 µg/mL	+/- 14.5759	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)		+/- 151.2584	µg/mL	Unstressed
	Purity 99%			+/- 151.6175	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,501.1 µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBQ2165V)		+/- 150.9040	µg/mL	Unstressed
	Purity 99%			+/- 151.2622	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)		+/- 150.8738	µg/mL	Unstressed
	Purity 99%			+/- 151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,501.3 µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)		+/- 150.9115	µg/mL	Unstressed
	Purity 99%			+/- 151.2698	µg/mL	Stressed
60	tert-Butylbenzene		2,507.0 µg/mL	+/- 14.5759	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot S52237V)		+/- 151.2584	µg/mL	Unstressed
	Purity 99%			+/- 151.6175	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.8 µg/mL	+/- 14.5401	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)		+/- 150.8866	µg/mL	Unstressed
	Purity 98%			+/- 151.2448	µg/mL	Stressed
62	sec-Butylbenzene		2,505.4 µg/mL	+/- 14.5665	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)		+/- 151.1604	µg/mL	Unstressed
	Purity 99%			+/- 151.5193	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,503.8 µg/mL	+/- 14.5570	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBS2604V)		+/- 151.0623	µg/mL	Unstressed
	Purity 99%			+/- 151.4210	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,503.9 µg/mL	+/- 14.5577	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)		+/- 151.0699	µg/mL	Unstressed
	Purity 99%			+/- 151.4285	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.9 µg/mL	+/- 14.5926	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)		+/- 151.4319	µg/mL	Unstressed
	Purity 99%			+/- 151.7914	µg/mL	Stressed
66	n-Butylbenzene		2,503.3 µg/mL	+/- 14.5541	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09418JJV)		+/- 151.0322	µg/mL	Unstressed
	Purity 99%			+/- 151.3907	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,503.8 µg/mL	+/- 14.5570	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)		+/- 151.0623	µg/mL	Unstressed
	Purity 99%			+/- 151.4210	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,505.0 µg/mL	+/- 14.5643	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)		+/- 151.1378	µg/mL	Unstressed
	Purity 99%			+/- 151.4966	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,505.3 µg/mL	+/- 14.5657	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)		+/- 151.1528	µg/mL	Unstressed
	Purity 99%			+/- 151.5117	µg/mL	Stressed
70	Hexachlorobutadiene		2,506.5 µg/mL	+/- 14.5728	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)		+/- 151.2266	µg/mL	Unstressed
	Purity 98%			+/- 151.5856	µg/mL	Stressed
71	Naphthalene		2,500.9 µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)		+/- 150.8889	µg/mL	Unstressed
	Purity 99%			+/- 151.2471	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,511.1 µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	151.5073	µg/mL	Unstressed
	Purity 99%			+/-	151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

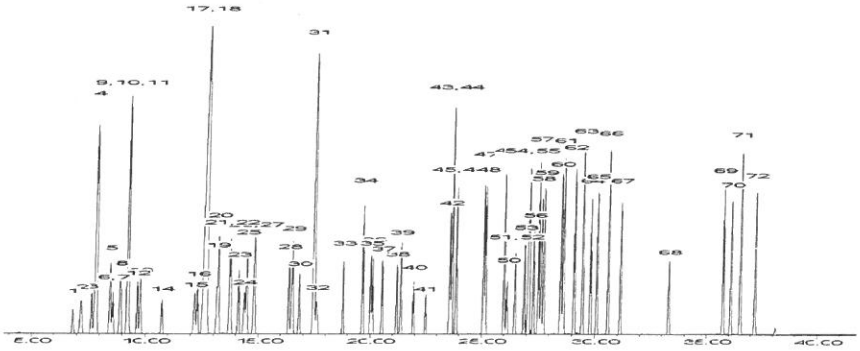
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00001

Rec: 1-25-17
VMS71992S-00001

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%		2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%		2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%		25,000.9	µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZAQTA-MS) **Purity** 99%		2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%		2,500.7	µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot 10188491) **Purity** 99%		2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%		2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%		2,500.1	µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%		2,500.2	µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot 83NHH) **Purity** 99%		62,506.9	µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%		2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%		2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot K3V7J-SJ) **Purity** 99%		5,002.3	µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot CS160712) **Purity** 98%		2,500.7	µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%		2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%		2,501.3	µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
25	n-Heptane (C7)		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
26	1,2-Dichloroethane		2,500.1 µg/mL	+/- 14.5359	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)		+/- 150.8436	µg/mL	Unstressed
	Purity 99%			+/- 151.2017	µg/mL	Stressed
27	Benzene		2,501.5 µg/mL	+/- 14.5439	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)		+/- 150.9266	µg/mL	Unstressed
	Purity 99%			+/- 151.2849	µg/mL	Stressed
28	Trichloroethene		2,501.0 µg/mL	+/- 14.5410	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)		+/- 150.8964	µg/mL	Unstressed
	Purity 99%			+/- 151.2547	µg/mL	Stressed
29	Methylcyclohexane		2,500.9 µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)		+/- 150.8889	µg/mL	Unstressed
	Purity 99%			+/- 151.2471	µg/mL	Stressed
30	1,2-Dichloropropane		2,501.1 µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)		+/- 150.9040	µg/mL	Unstressed
	Purity 99%			+/- 151.2622	µg/mL	Stressed
31	1,4-Dioxane		50,007.1 µg/mL	+/- 290.7305	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot MUFZH)		+/- 3,017.1500	µg/mL	Unstressed
	Purity 99%			+/- 3,024.3132	µg/mL	Stressed
32	Dibromomethane		2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)		+/- 150.9341	µg/mL	Unstressed
	Purity 99%			+/- 151.2925	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,500.1 µg/mL	+/- 14.5359	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)		+/- 150.8436	µg/mL	Unstressed
	Purity 99%			+/- 151.2017	µg/mL	Stressed
34	Toluene		2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)		+/- 150.8361	µg/mL	Unstressed
	Purity 99%			+/- 151.1942	µg/mL	Stressed
35	Ethyl methacrylate		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.8 µg/mL	+/- 14.5401	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 5034600)		+/- 150.8866	µg/mL	Unstressed
	Purity 98%			+/- 151.2448	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
39	Tetrachloroethene		2,501.3 µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)		+/- 150.9115	µg/mL	Unstressed
	Purity 99%			+/- 151.2698	µg/mL	Stressed

40	Dibromochloromethane		2,500.4	µg/mL	+/- 14.5376	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)			+/- 150.8613	µg/mL	Unstressed
	Purity 97%				+/- 151.2194	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
42	Chlorobenzene		2,501.0	µg/mL	+/- 14.5410	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/- 150.8964	µg/mL	Unstressed
	Purity 99%				+/- 151.2547	µg/mL	Stressed
43	m-Xylene		1,250.9	µg/mL	+/- 7.2727	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/- 75.4708	µg/mL	Unstressed
	Purity 99%				+/- 75.6500	µg/mL	Stressed
44	p-Xylene		1,250.5	µg/mL	+/- 7.2705	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/- 75.4482	µg/mL	Unstressed
	Purity 99%				+/- 75.6273	µg/mL	Stressed
45	Ethylbenzene		2,500.9	µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/- 150.8889	µg/mL	Unstressed
	Purity 99%				+/- 151.2471	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,501.1	µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/- 150.9040	µg/mL	Unstressed
	Purity 99%				+/- 151.2622	µg/mL	Stressed
47	o-Xylene		2,500.9	µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/- 150.8889	µg/mL	Unstressed
	Purity 99%				+/- 151.2471	µg/mL	Stressed
48	Styrene		2,500.4	µg/mL	+/- 14.5374	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/- 150.8587	µg/mL	Unstressed
	Purity 99%				+/- 151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.5	µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/- 150.8662	µg/mL	Unstressed
	Purity 99%				+/- 151.2244	µg/mL	Stressed
50	Bromoform		2,502.3	µg/mL	+/- 14.5483	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5139000)			+/- 150.9718	µg/mL	Unstressed
	Purity 99%				+/- 151.3303	µg/mL	Stressed
51	Bromodichloromethane		2,500.1	µg/mL	+/- 14.5358	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/- 150.8423	µg/mL	Unstressed
	Purity 98%				+/- 151.2004	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3	µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/- 150.9115	µg/mL	Unstressed
	Purity 99%				+/- 151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,500.1	µg/mL	+/- 14.5358	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/- 150.8423	µg/mL	Unstressed
	Purity 98%				+/- 151.2004	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,501.0	µg/mL	+/- 14.5408	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/- 150.8940	µg/mL	Unstressed
	Purity 98%				+/- 151.2522	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/- 150.8361	µg/mL	Unstressed
	Purity 99%				+/- 151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

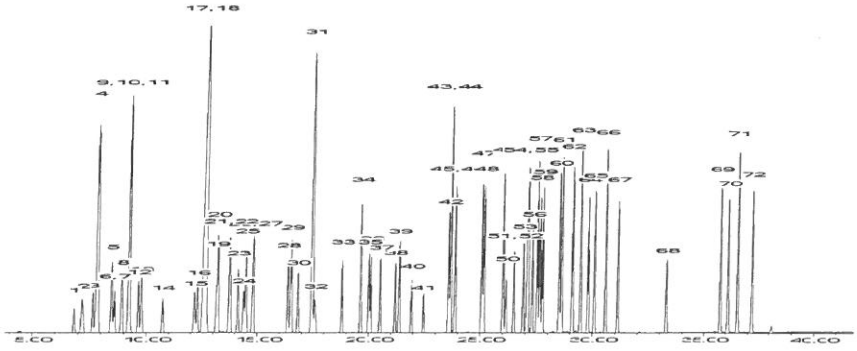
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00002

Rec: 5/4/17
VMS71992S-00002

(10)

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%		2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 99%	(Lot MKBL1376V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC **Purity** 99%	(Lot UERIL)	25,000.9 µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC **Purity** 99%	(Lot ZAQTA-MS)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC **Purity** 98%	(Lot HGC01-BLKT)	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC **Purity** 99%	(Lot 10188491)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC **Purity** 99%	(Lot 5379000)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC **Purity** 98%	(Lot 17E8E)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC **Purity** 97%	(Lot TS5UB)	2,500.2 µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC **Purity** 99%	(Lot 83NHH)	62,506.9 µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC **Purity** 99%	(Lot 1297547)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC **Purity** 99%	(Lot 5670200)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC **Purity** 99%	(Lot K3V7J-SJ)	5,002.3 µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC **Purity** 98%	(Lot CS160712)	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC **Purity** 99%	(Lot YADRA)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC **Purity** 96%	(Lot 5221100)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot OGM01)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot 24MSD-CD)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot OGG01)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot MUFZH)	50,007.1	µg/mL	+/- 290.7305 +/- 3,017.1500 +/- 3,024.3132	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 99%	(Lot ZDMSL)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 98%	(Lot 5034600)	2,500.8	µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10181507)	2,500.4 µg/mL	+/- 14.5376 +/- 150.8613 +/- 151.2194	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,250.9 µg/mL	+/- 7.2727 +/- 75.4708 +/- 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,250.5 µg/mL	+/- 7.2705 +/- 75.4482 +/- 75.6273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01-KTPK)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 99%	(Lot 5139000)	2,502.3 µg/mL	+/- 14.5483 +/- 150.9718 +/- 151.3303	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 98%	(Lot OGI01)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC-IT)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

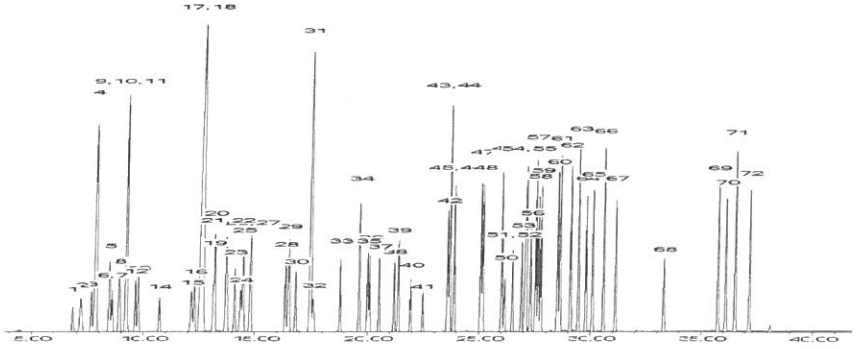
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

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Recd 7/17/17
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Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,000.9 µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZAQTA-MS) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot 10188491) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,500.2 µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot 83NHH) **Purity** 99%	62,506.9 µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot K3V7J-SJ) **Purity** 99%	5,002.3 µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot CS160712) **Purity** 98%	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,501.3 µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot OGM01)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,501.0	µg/mL	+/- +/- +/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot 24MSD-CD)	2,500.9	µg/mL	+/- +/- +/-	14.5403 150.8889 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot OGG01)	2,501.1	µg/mL	+/- +/- +/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot MUFZH)	50,007.1	µg/mL	+/- +/- +/-	290.7305 3,017.1500 3,024.3132	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,501.6	µg/mL	+/- +/- +/-	14.5447 150.9341 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,500.0	µg/mL	+/- +/- +/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 99%	(Lot ZDMSL)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 98%	(Lot 5034600)	2,500.8	µg/mL	+/- +/- +/-	14.5401 150.8866 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,501.3	µg/mL	+/- +/- +/-	14.5425 150.9115 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane		2,500.4 µg/mL	+/-	14.5376	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)		+/-	150.8613	µg/mL	Unstressed
	Purity 97%			+/-	151.2194	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)		+/-	150.8662	µg/mL	Unstressed
	Purity 99%			+/-	151.2244	µg/mL	Stressed
42	Chlorobenzene		2,501.0 µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)		+/-	150.8964	µg/mL	Unstressed
	Purity 99%			+/-	151.2547	µg/mL	Stressed
43	m-Xylene		1,250.9 µg/mL	+/-	7.2727	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)		+/-	75.4708	µg/mL	Unstressed
	Purity 99%			+/-	75.6500	µg/mL	Stressed
44	p-Xylene		1,250.5 µg/mL	+/-	7.2705	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)		+/-	75.4482	µg/mL	Unstressed
	Purity 99%			+/-	75.6273	µg/mL	Stressed
45	Ethylbenzene		2,500.9 µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)		+/-	150.8889	µg/mL	Unstressed
	Purity 99%			+/-	151.2471	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,501.1 µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)		+/-	150.9040	µg/mL	Unstressed
	Purity 99%			+/-	151.2622	µg/mL	Stressed
47	o-Xylene		2,500.9 µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)		+/-	150.8889	µg/mL	Unstressed
	Purity 99%			+/-	151.2471	µg/mL	Stressed
48	Styrene		2,500.4 µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)		+/-	150.8587	µg/mL	Unstressed
	Purity 99%			+/-	151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)		+/-	150.8662	µg/mL	Unstressed
	Purity 99%			+/-	151.2244	µg/mL	Stressed
50	Bromoform		2,502.3 µg/mL	+/-	14.5483	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5139000)		+/-	150.9718	µg/mL	Unstressed
	Purity 99%			+/-	151.3303	µg/mL	Stressed
51	Bromodichloromethane		2,500.1 µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)		+/-	150.8423	µg/mL	Unstressed
	Purity 98%			+/-	151.2004	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,500.1 µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)		+/-	150.8423	µg/mL	Unstressed
	Purity 98%			+/-	151.2004	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,501.0 µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)		+/-	150.8940	µg/mL	Unstressed
	Purity 98%			+/-	151.2522	µg/mL	Stressed
55	n-Propylbenzene		2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)		+/-	150.8361	µg/mL	Unstressed
	Purity 99%			+/-	151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/- 14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/- 150.8792	µg/mL	Unstressed
	Purity 98%			+/- 151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

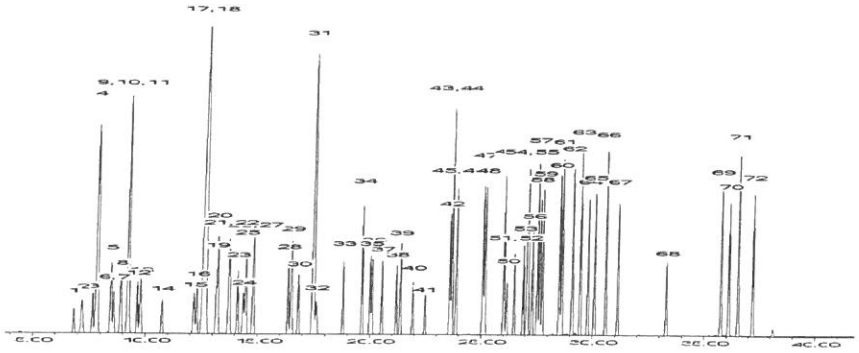
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
GW-121318-BE-001	240-105817-1	96	89	97	99
TRIP BLANK	240-105817-2	124	107	82	67
	MB 240-361663/6	127	108	75	66
	MB 240-361928/6	98	94	102	97
	LCS 240-361663/4	97	83	88	83
	LCS 240-361928/4	99	94	98	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-128
DCA = 1,2-Dichloroethane-d4 (Surr)	70-121
TOL = Toluene-d8 (Surr)	70-123
BFB = 4-Bromofluorobenzene (Surr)	59-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC8090.D

Lab ID: LCS 240-361663/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	11.9	119	69-134	
1,1,2,2-Tetrachloroethane	10.0	9.54	95	65-139	
1,1,2-Trichloroethane	10.0	10.9	109	78-133	
1,1-Dichloroethane	10.0	11.3	113	75-133	
1,1-Dichloroethene	10.0	10.6	106	65-139	
1,2-Dichloroethane	10.0	9.68	97	71-135	
1,2-Dichloropropane	10.0	10.2	102	78-133	
2-Hexanone	20.0	16.5	83	43-148	
Acetone	20.0	20.7	103	21-162	
Benzene	10.0	10.4	104	80-123	
Bromoform	10.0	10.3	103	49-141	
Bromomethane	10.0	7.25	72	41-175	
Carbon disulfide	10.0	11.2	112	60-138	
Carbon tetrachloride	10.0	12.9	129	63-140	
Chlorobenzene	10.0	10.4	104	80-121	
Chloroethane	10.0	8.63	86	33-173	
Chloroform	10.0	11.4	114	79-127	
Chloromethane	10.0	9.82	98	54-143	
cis-1,2-Dichloroethene	10.0	11.0	110	76-128	
cis-1,3-Dichloropropene	10.0	8.22	82	64-132	
Dichlorobromomethane	10.0	10.1	101	77-125	
Ethylbenzene	10.0	9.51	95	80-120	
m-Xylene & p-Xylene	10.0	9.31	93	80-120	
2-Butanone (MEK)	20.0	16.3	82	39-163	
4-Methyl-2-pentanone (MIBK)	20.0	14.8	74	49-143	
Methylene Chloride	10.0	12.2	122	70-134	
o-Xylene	10.0	8.73	87	80-120	
Styrene	10.0	8.96	90	79-120	
Tetrachloroethene	10.0	10.8	108	74-130	
Toluene	10.0	10.2	102	78-129	
trans-1,2-Dichloroethene	10.0	12.2	122	78-133	
trans-1,3-Dichloropropene	10.0	8.37	84	55-128	
Trichloroethene	10.0	9.58	96	76-125	
Vinyl chloride	10.0	9.26	93	58-143	
Xylenes, Total	20.0	18.0	90	80-120	
Chlorodibromomethane	10.0	11.0	110	70-132	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX8805.D

Lab ID: LCS 240-361928/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	9.64	96	69-134	
1,1,2,2-Tetrachloroethane	10.0	10.7	107	65-139	
1,1,2-Trichloroethane	10.0	9.52	95	78-133	
1,1-Dichloroethane	10.0	11.3	113	75-133	
1,1-Dichloroethene	10.0	9.99	100	65-139	
1,2-Dichloroethane	10.0	9.68	97	71-135	
1,2-Dichloropropane	10.0	10.2	102	78-133	
2-Hexanone	20.0	26.0	130	43-148	
Acetone	20.0	23.9	120	21-162	
Benzene	10.0	10.3	103	80-123	
Bromoform	10.0	8.94	89	49-141	
Bromomethane	10.0	11.0	110	41-175	
Carbon disulfide	10.0	9.88	99	60-138	
Carbon tetrachloride	10.0	8.74	87	63-140	
Chlorobenzene	10.0	9.73	97	80-121	
Chloroethane	10.0	11.9	119	33-173	
Chloroform	10.0	11.1	111	79-127	
Chloromethane	10.0	11.2	112	54-143	
cis-1,2-Dichloroethene	10.0	10.9	109	76-128	
cis-1,3-Dichloropropene	10.0	8.54	85	64-132	
Dichlorobromomethane	10.0	9.16	92	77-125	
Ethylbenzene	10.0	9.24	92	80-120	
m-Xylene & p-Xylene	10.0	9.08	91	80-120	
2-Butanone (MEK)	20.0	22.3	112	39-163	
4-Methyl-2-pentanone (MIBK)	20.0	22.0	110	49-143	
Methylene Chloride	10.0	10.5	105	70-134	
o-Xylene	10.0	9.47	95	80-120	
Styrene	10.0	9.05	91	79-120	
Tetrachloroethene	10.0	8.96	90	74-130	
Toluene	10.0	10.0	100	78-129	
trans-1,2-Dichloroethene	10.0	10.9	109	78-133	
trans-1,3-Dichloropropene	10.0	8.73	87	55-128	
Trichloroethene	10.0	9.51	95	76-125	
Vinyl chloride	10.0	11.8	118	58-143	
Xylenes, Total	20.0	18.6	93	80-120	
Chlorodibromomethane	10.0	9.31	93	70-132	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab File ID: UXC8093.D Lab Sample ID: MB 240-361663/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 12/26/2018 11:07

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-361663/4	UXC8090.D	12/26/2018 10:01
TRIP BLANK	240-105817-2	UXC8102.D	12/26/2018 14:23

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab File ID: UXX8807.D Lab Sample ID: MB 240-361928/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 12/27/2018 12:45

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-361928/4	UXX8805.D	12/27/2018 11:55
GW-121318-BE-001	240-105817-1	UXX8818.D	12/27/2018 17:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab File ID: BFB1940.D BFB Injection Date: 10/02/2018

Instrument ID: A3UX10 BFB Injection Time: 14:58

Analysis Batch No.: 348190

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.4	
75	30.0 - 60.0 % of mass 95	52.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	1.5	(2.0) 1
174	50.0 - 120.00 % of mass 95	73.9	
175	5.0 - 9.0 % of mass 174	5.6	(7.5) 1
176	95.0 - 101.0 % of mass 174	74.0	(100.0) 1
177	5.0 - 9.0 % of mass 176	6.7	(9.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-348190/2	UXX5939.D	10/02/2018	15:27
	STD8260 240-348190/3	UXX5940.D	10/02/2018	15:52
	STD8260 240-348190/4	UXX5941.D	10/02/2018	16:17
	STD8260 240-348190/5	UXX5942.D	10/02/2018	16:42
	STD8260 240-348190/6	UXX5943.D	10/02/2018	17:06
	STD8260 240-348190/7	UXX5944.D	10/02/2018	17:31
	STD8260 240-348190/8	UXX5945.D	10/02/2018	17:56
	ICV 240-348190/9	UXX5946.D	10/02/2018	18:21
	ICV 240-348190/17	UXX5954.D	10/02/2018	21:39

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab File ID: BFB2101.D BFB Injection Date: 12/27/2018

Instrument ID: A3UX10 BFB Injection Time: 10:40

Analysis Batch No.: 361928

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.1	
75	30.0 - 60.0 % of mass 95	51.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.9	(1.1) 1
174	50.0 - 120.00 % of mass 95	76.0	
175	5.0 - 9.0 % of mass 174	5.3	(6.9) 1
176	95.0 - 101.0 % of mass 174	75.3	(99.1) 1
177	5.0 - 9.0 % of mass 176	5.3	(7.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-361928/2	UXX8803.D	12/27/2018	11:06
	CCV 240-361928/3	UXX8804.D	12/27/2018	11:30
	LCS 240-361928/4	UXX8805.D	12/27/2018	11:55
	MB 240-361928/6	UXX8807.D	12/27/2018	12:45
GW-121318-BE-001	240-105817-1	UXX8818.D	12/27/2018	17:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab File ID: BFB827.D BFB Injection Date: 08/27/2018

Instrument ID: A3UX15 BFB Injection Time: 10:10

Analysis Batch No.: 342615

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.4	
75	30.0 - 60.0 % of mass 95	53.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2) 1
174	50.0 - 120.00 % of mass 95	87.1	
175	5.0 - 9.0 % of mass 174	6.0	(6.9) 1
176	95.0 - 101.0 % of mass 174	84.9	(97.6) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-342615/2	UXC4603.D	08/27/2018	10:56
	STD8260 240-342615/3	UXC4604.D	08/27/2018	11:18
	STD8260 240-342615/4	UXC4605.D	08/27/2018	11:39
	STD8260 240-342615/5	UXC4606.D	08/27/2018	12:01
	STD8260 240-342615/6	UXC4607.D	08/27/2018	12:23
	STD8260 240-342615/7	UXC4608.D	08/27/2018	12:45
	ICV 240-342615/14	UXC4609.D	08/27/2018	13:07

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab File ID: BFB828.D BFB Injection Date: 08/28/2018

Instrument ID: A3UX15 BFB Injection Time: 11:13

Analysis Batch No.: 342834

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.2	
75	30.0 - 60.0 % of mass 95	54.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	50.0 - 120.00 % of mass 95	85.7	
175	5.0 - 9.0 % of mass 174	6.3	(7.4) 1
176	95.0 - 101.0 % of mass 174	84.4	(98.4) 1
177	5.0 - 9.0 % of mass 176	6.0	(7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 240-342834/32	UXC4629.D	08/28/2018	12:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab File ID: BFB1226.D BFB Injection Date: 12/26/2018

Instrument ID: A3UX15 BFB Injection Time: 08:52

Analysis Batch No.: 361663

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.5	
75	30.0 - 60.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	50.0 - 120.00 % of mass 95	90.1	
175	5.0 - 9.0 % of mass 174	6.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	86.3	(95.8) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-361663/2	UXC8089.D	12/26/2018	09:39
	LCS 240-361663/4	UXC8090.D	12/26/2018	10:01
	CCV 240-361663/3	UXC8091.D	12/26/2018	10:23
	MB 240-361663/6	UXC8093.D	12/26/2018	11:07
GW-121318-BE-001 MS	240-105817-1 MS	UXC8099.D	12/26/2018	13:18
GW-121318-BE-001 MSD	240-105817-1 MSD	UXC8100.D	12/26/2018	13:40
GW-121318-BE-001	240-105817-1	UXC8101.D	12/26/2018	14:02
TRIP BLANK	240-105817-2	UXC8102.D	12/26/2018	14:23

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Sample No.: STD8260 240-348190/4 Date Analyzed: 10/02/2018 16:17

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5941.D Heated Purge: (Y/N) N

Calibration ID: 47198

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		789818	5.57	636861	8.25	356275	10.49
UPPER LIMIT		1579636	6.07	1273722	8.75	712550	10.99
LOWER LIMIT		394909	5.07	318431	7.75	178138	9.99
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-348190/9		756139	5.57	615440	8.25	331268	10.49
ICV 240-348190/17		812172	5.57	634991	8.25	333549	10.49
CCVIS 240-361928/2		740437	5.57	489024	8.25	273564	10.49

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Sample No.: CCVIS 240-361928/2 Date Analyzed: 12/27/2018 11:06

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX8803.D Heated Purge: (Y/N) N

Calibration ID: 47200

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		740437	5.57	489024	8.25	273564	10.49
UPPER LIMIT		1480874	6.07	978048	8.75	547128	10.99
LOWER LIMIT		370219	5.07	244512	7.75	136782	9.99
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-361928/3		681573	5.57	453593	8.25	244817	10.49
LCS 240-361928/4		702605	5.57	494714	8.25	267891	10.49
MB 240-361928/6		678200	5.57	451539	8.25	264046	10.49
240-105817-1	GW-121318-BE-001	655205	5.57	476992	8.25	257475	10.49

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Sample No.: STD8260 240-342615/4 Date Analyzed: 08/27/2018 11:39

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC4605.D Heated Purge: (Y/N) N

Calibration ID: 46691

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1456997	5.26	1129967	7.94	616450	10.18
UPPER LIMIT		2913994	5.76	2259934	8.44	1232900	10.68
LOWER LIMIT		728499	4.76	564984	7.44	308225	9.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-342615/14		1402023	5.26	1092127	7.94	614205	10.18
CCVIS 240-361663/2		2583464	5.26	1780885	7.94	1082877	10.18

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Sample No.: CCVIS 240-361663/2 Date Analyzed: 12/26/2018 09:39

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC8089.D Heated Purge: (Y/N) N

Calibration ID: 46695

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2583464	5.26	1780885	7.94	1082877	10.18
UPPER LIMIT		5166928	5.76	3561770	8.44	2165754	10.68
LOWER LIMIT		1291732	4.76	890443	7.44	541439	9.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-361663/4		2456566	5.26	1808379	7.94	1025738	10.18
CCV 240-361663/3		2129102	5.26	1696328	7.94	641143	10.18
MB 240-361663/6		1459082	5.26	1099689	7.94	543446	10.18
240-105817-1 MS	GW-121318-BE-001 MS	2422998	5.26	1852102	7.94	1110130	10.18
240-105817-1 MSD	GW-121318-BE-001 MSD	2226144	5.26	1692283	7.94	1008121	10.18
240-105817-1	GW-121318-BE-001	2068090	5.26	1705880	7.94	782193	10.18
240-105817-2	TRIP BLANK	1817700	5.26	1467435	7.94	638750	10.18

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: GW-121318-BE-001 | Lab Sample ID: 240-105817-1

Matrix: Water | Lab File ID: UXX8818.D

Analysis Method: 8260B | Date Collected: 12/13/2018 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2018 17:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361928 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	12		1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: GW-121318-BE-001 | Lab Sample ID: 240-105817-1

Matrix: Water | Lab File ID: UXX8818.D

Analysis Method: 8260B | Date Collected: 12/13/2018 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2018 17:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361928 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		70-121
460-00-4	4-Bromofluorobenzene (Surr)	99		59-120
2037-26-5	Toluene-d8 (Surr)	97		70-123
1868-53-7	Dibromofluoromethane (Surr)	96		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8818.D
Lims ID: 240-105817-C-1
Client ID: GW-121318-BE-001
Sample Type: Client
Inject. Date: 27-Dec-2018 17:54:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083269-017
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Dec-2018 09:58:14 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 28-Dec-2018 09:50:19

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.565	5.565	0.000	98	655205	10.0	
*	2 Chlorobenzene-d5	117	8.250	8.251	-0.001	88	476992	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.485	10.486	-0.001	97	257475	10.0	
$	4 Dibromofluoromethane (Surr	113	4.985	4.986	-0.001	93	165614	9.62	
$	5 1,2-Dichloroethane-d4 (Sur	65	5.281	5.282	-0.001	93	196379	8.93	
$	6 Toluene-d8 (Surr)	98	6.937	6.938	-0.001	95	584685	9.71	
$	7 4-Bromofluorobenzene (Surr	95	9.350	9.351	-0.001	85	227768	9.93	
	10 Chloromethane	50		1.851				ND	
	11 Vinyl chloride	62	1.957	1.958	-0.001	98	289295	12.3	
	13 Bromomethane	94		2.253				ND	
	14 Chloroethane	64		2.324				ND	
	19 1,1-Dichloroethene	96		3.034				ND	
	21 Acetone	43		3.093				ND	
	24 Carbon disulfide	76		3.247				ND	
	28 Methylene Chloride	84		3.472				ND	
	30 trans-1,2-Dichloroethene	96		3.720				ND	
	34 1,1-Dichloroethane	63		4.087				ND	
	40 cis-1,2-Dichloroethene	96		4.584				ND	
	41 2-Butanone (MEK)	43		4.596				ND	
	47 Chloroform	83		4.856				ND	
	48 1,1,1-Trichloroethane	97		5.021				ND	
	51 Carbon tetrachloride	117		5.163				ND	
	53 Benzene	78		5.329				ND	
	54 1,2-Dichloroethane	62		5.341				ND	
	58 Trichloroethene	130		5.873				ND	
	61 1,2-Dichloropropane	63		6.074				ND	
	65 Dichlorobromomethane	83		6.299				ND	
	68 cis-1,3-Dichloropropene	75		6.689				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.819				ND	
	70 Toluene	91		6.997				ND	
	71 trans-1,3-Dichloropropene	75		7.174				ND	
	73 1,1,2-Trichloroethane	97		7.352				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
74 Tetrachloroethene	164		7.494				ND	
76 2-Hexanone	43		7.565				ND	
78 Chlorodibromomethane	129		7.706				ND	
82 Chlorobenzene	112		8.274				ND	
84 Ethylbenzene	106		8.369				ND	
85 m-Xylene & p-Xylene	106		8.475				ND	
86 o-Xylene	106		8.854				ND	
87 Styrene	104		8.866				ND	
88 Bromoform	173		9.055				ND	
92 1,1,2,2-Tetrachloroethane	83		9.481				ND	
S 130 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00079	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00071	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

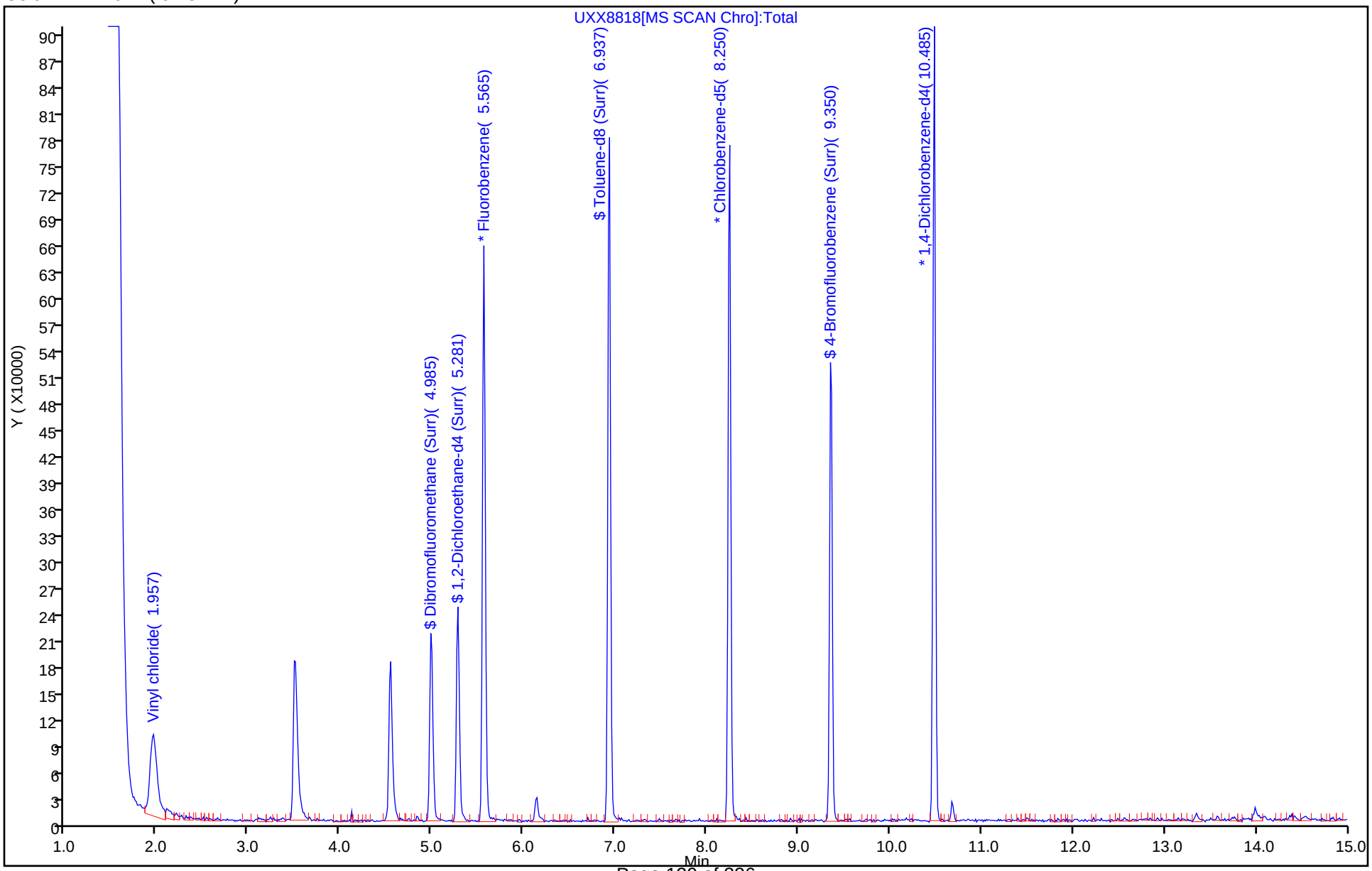
Report Date: 28-Dec-2018 09:58:30 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8818.D

Injection Date:	27-Dec-2018 17:54:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	240-105817-C-1	Lab Sample ID:	240-105817-1	Worklist Smp#:	17
Client ID:	GW-121318-BE-001				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8818.D
Lims ID: 240-105817-C-1
Client ID: GW-121318-BE-001
Sample Type: Client
Inject. Date: 27-Dec-2018 17:54:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083269-017
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Dec-2018 09:58:14 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 28-Dec-2018 09:50:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.62	96.22
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.93	89.29
$ 6 Toluene-d8 (Surr)	10.0	9.71	97.09
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.93	99.33

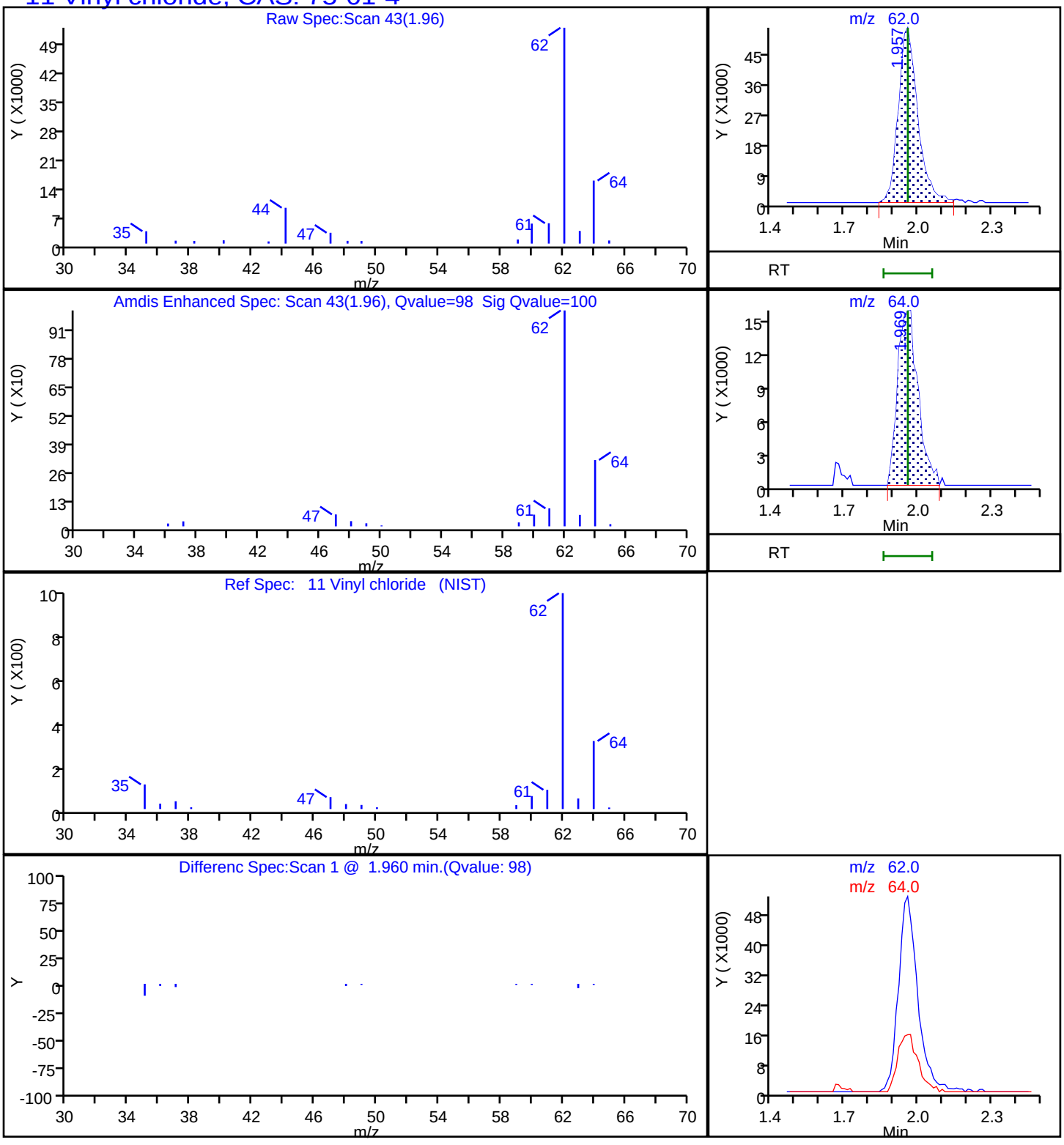
Report Date: 28-Dec-2018 09:58:30 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8818.D

Injection Date:	27-Dec-2018 17:54:30	Instrument ID:	A3UX10		
Lims ID:	240-105817-C-1	Lab Sample ID:	240-105817-1		
Client ID:	GW-121318-BE-001				
Operator ID:	001644	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_10	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-105817-2

Matrix: Water | Lab File ID: UXC8102.D

Analysis Method: 8260B | Date Collected: 12/13/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 12/26/2018 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361663 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	28		10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	6.1		5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-105817-2

Matrix: Water | Lab File ID: UXC8102.D

Analysis Method: 8260B | Date Collected: 12/13/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 12/26/2018 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361663 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-121
460-00-4	4-Bromofluorobenzene (Surr)	67		59-120
2037-26-5	Toluene-d8 (Surr)	82		70-123
1868-53-7	Dibromofluoromethane (Surr)	124		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8102.D
Lims ID: 240-105817-A-2
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 26-Dec-2018 14:23:30 ALS Bottle#: 14 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083213-042
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 27-Dec-2018 07:58:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1817700	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1467435	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	638750	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	466047	9.89	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	-0.001	100	544315	8.52	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1284223	6.52	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	367551	5.37	
10 Chloromethane	50		1.721				ND	
11 Vinyl chloride	62		1.804				ND	
13 Bromomethane	94		2.089				ND	
14 Chloroethane	64		2.172				ND	
19 1,1-Dichloroethene	96		2.824				ND	
22 Acetone	58	2.872	2.860	0.012	100	142986	28.0	
24 Carbon disulfide	76	3.014	3.014	0.000	99	23996	0.1602	
28 Methylene Chloride	84	3.227	3.228	-0.001	92	317905	6.11	
30 trans-1,2-Dichloroethene	96		3.465				ND	
34 1,1-Dichloroethane	63		3.809				ND	
39 cis-1,2-Dichloroethene	96		4.295				ND	
41 2-Butanone (MEK)	72	4.306	4.295	0.011	99	5320	0.8413	
47 Chloroform	83		4.556				ND	
48 1,1,1-Trichloroethane	97		4.722				ND	
50 Carbon tetrachloride	117		4.852				ND	
53 Benzene	78		5.030				ND	
54 1,2-Dichloroethane	62		5.042				ND	
58 Trichloroethene	130		5.564				ND	
61 1,2-Dichloropropane	63		5.765				ND	
65 Dichlorobromomethane	83		5.991				ND	
68 cis-1,3-Dichloropropene	75		6.382				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.500				ND	U
70 Toluene	91		6.678				ND	
71 trans-1,3-Dichloropropene	75		6.868				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		7.034				ND	
74 Tetrachloroethene	164		7.176				ND	
76 2-Hexanone	43		7.248				ND	
79 Chlorodibromomethane	129		7.402				ND	
82 Chlorobenzene	112		7.959				ND	
84 Ethylbenzene	106		8.054				ND	
85 m-Xylene & p-Xylene	91		8.161				ND	
86 o-Xylene	106		8.540				ND	
87 Styrene	104		8.552				ND	
88 Bromoform	173		8.742				ND	
93 1,1,2,2-Tetrachloroethane	83		9.180				ND	
S 129 Xylenes, Total	106		16.530				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00079	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

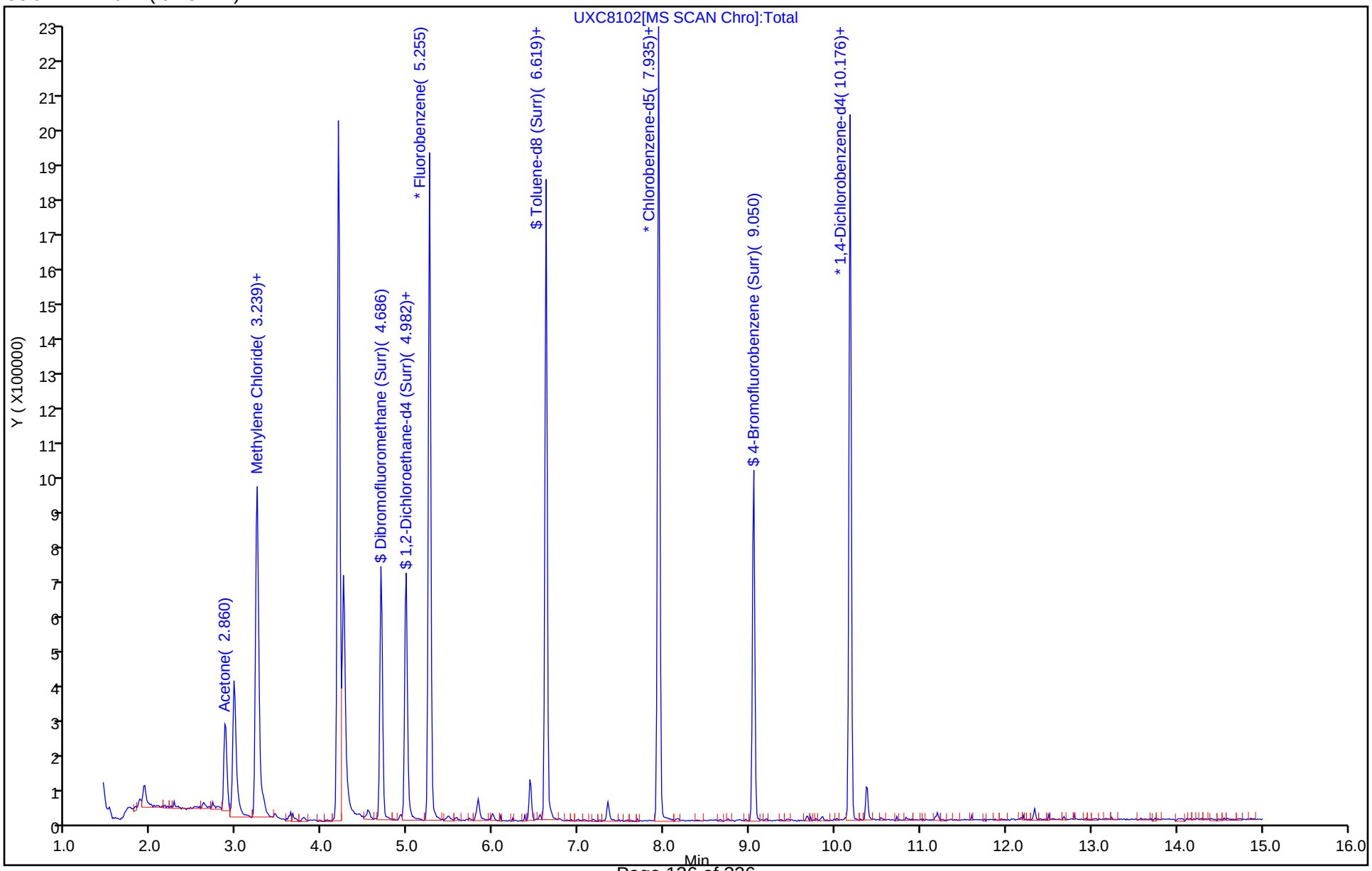
Report Date: 27-Dec-2018 08:10:59 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8102.D

Injection Date:	26-Dec-2018 14:23:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-105817-A-2	Lab Sample ID:	240-105817-2	Worklist Smp#:	42
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8102.D
Lims ID: 240-105817-A-2
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 26-Dec-2018 14:23:30 ALS Bottle#: 14 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083213-042
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 27-Dec-2018 07:58:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	9.89	124.10
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.52	106.89
$ 6 Toluene-d8 (Surr)	7.97	6.52	81.81
$ 7 4-Bromofluorobenzene (Surr)	7.97	5.37	67.36

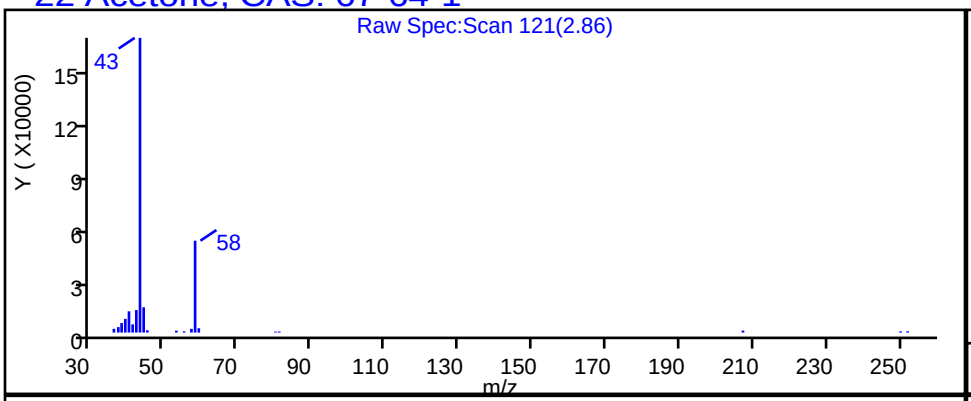
Report Date: 27-Dec-2018 08:10:59 Chrom Revision: 2.3 13-Dec-2018 17:23:12

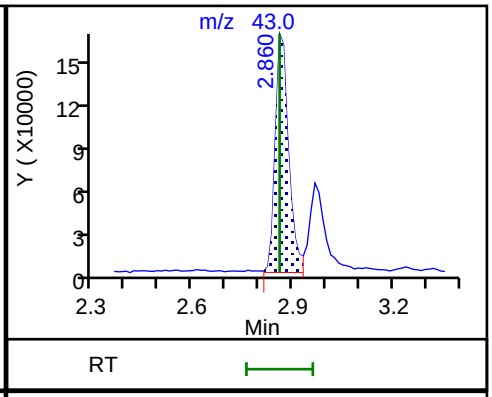
TestAmerica Canton

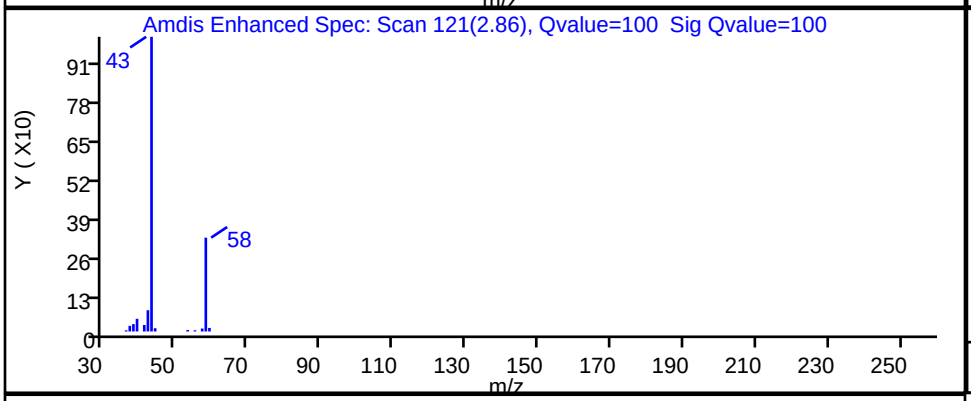
Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8102.D

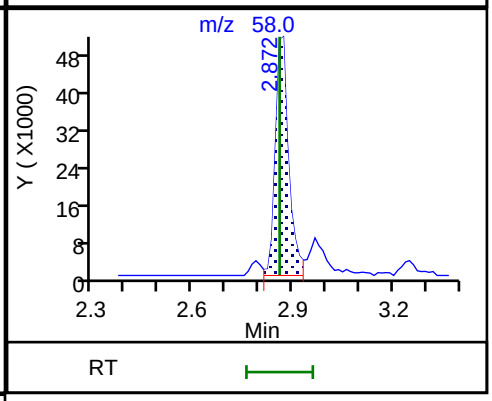
Injection Date:	26-Dec-2018 14:23:30	Instrument ID:	A3UX15
Lims ID:	240-105817-A-2	Lab Sample ID:	240-105817-2
Client ID:	TRIP BLANK		
Operator ID:		ALS Bottle#:	14 Worklist Smp#: 42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

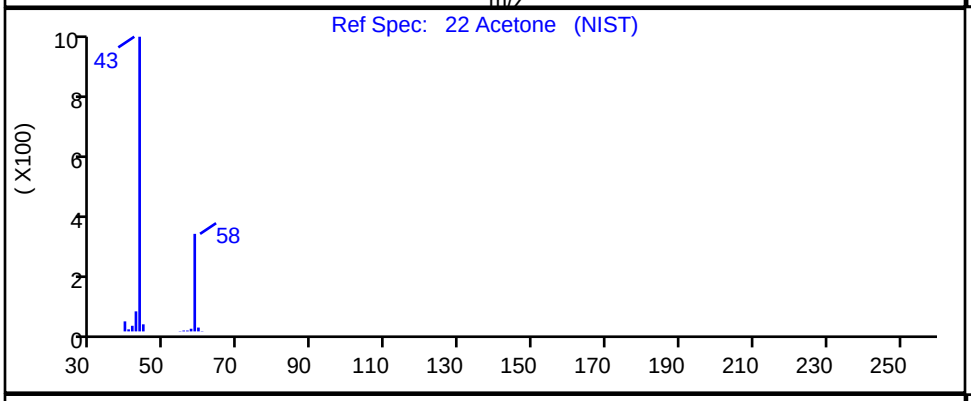
22 Acetone, CAS: 67-64-1

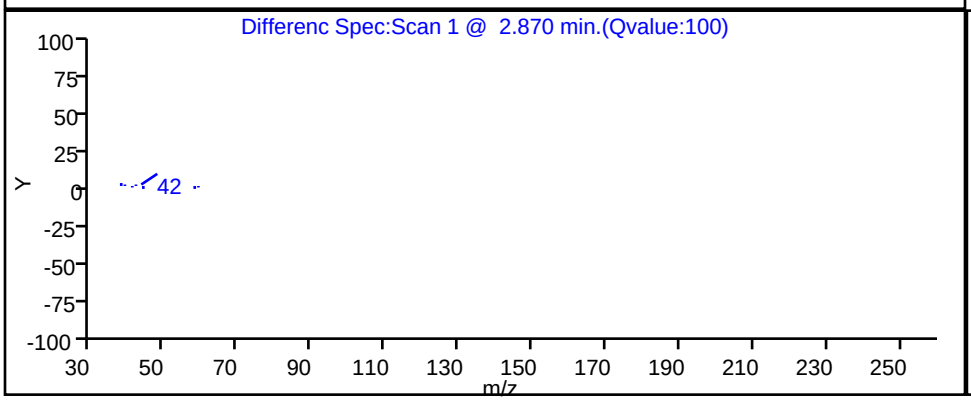


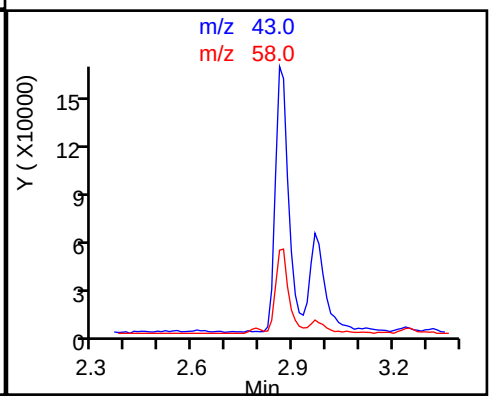












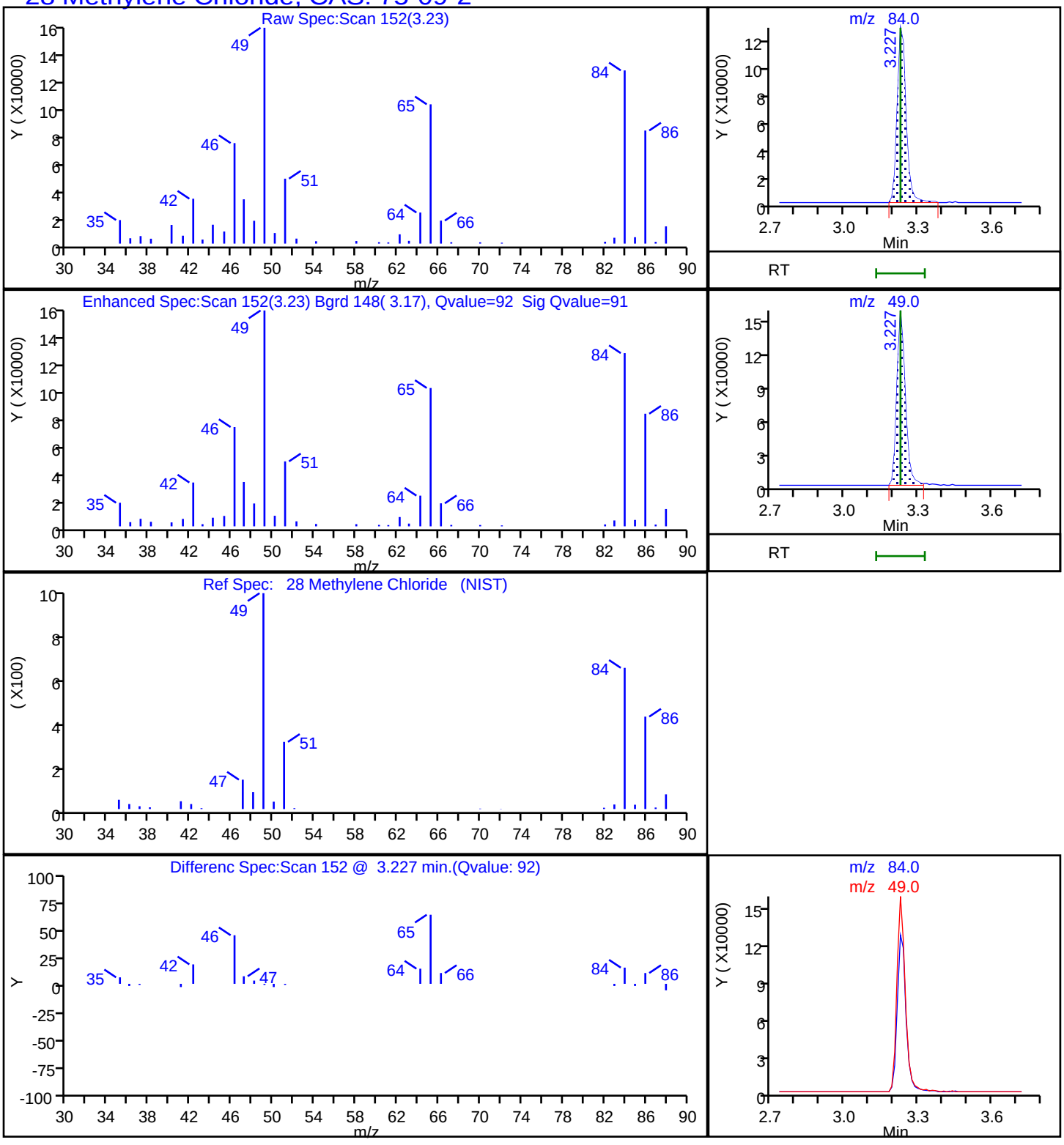
Report Date: 27-Dec-2018 08:10:59 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8102.D

Injection Date:	26-Dec-2018 14:23:30	Instrument ID:	A3UX15
Lims ID:	240-105817-A-2	Lab Sample ID:	240-105817-2
Client ID:	TRIP BLANK		
Operator ID:		ALS Bottle#:	14 Worklist Smp#: 42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

28 Methylene Chloride, CAS: 75-09-2



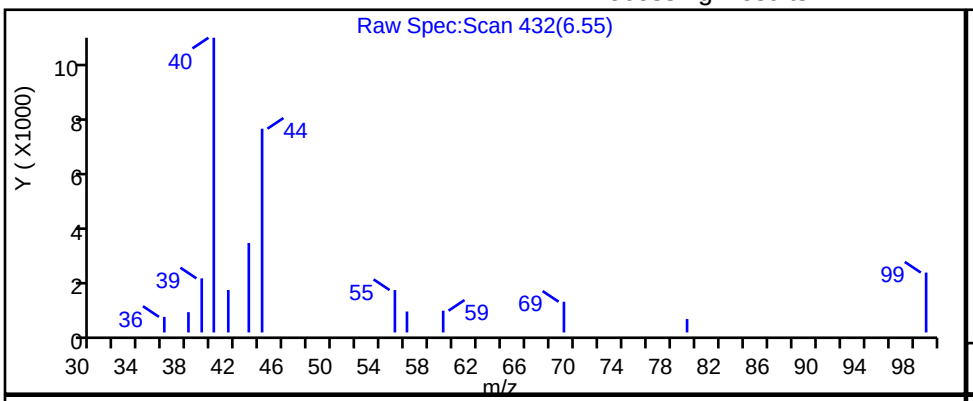
User Disabled Compound Report

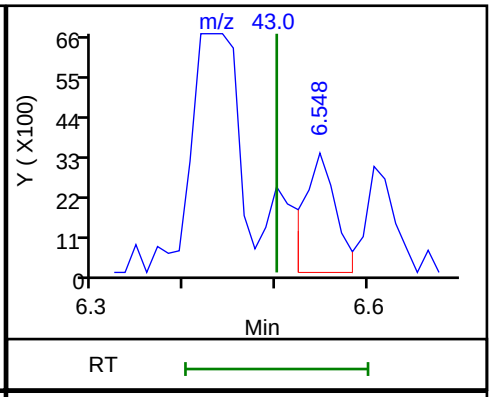
TestAmerica Canton

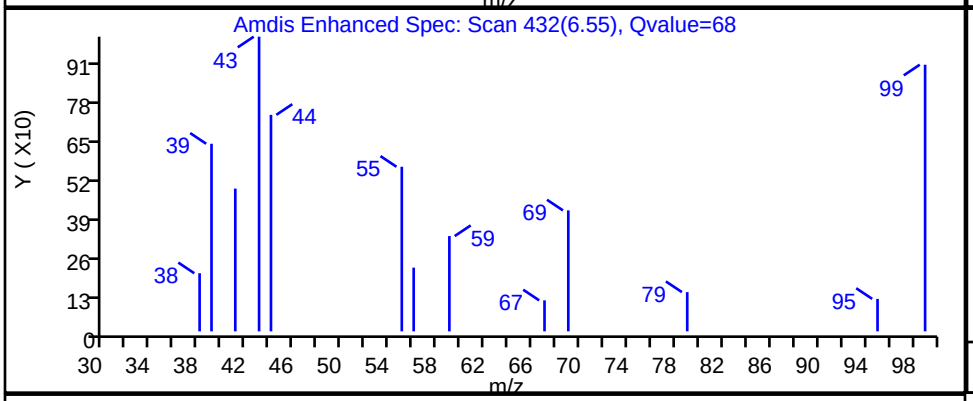
Data File:	\\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8102.D				
Injection Date:	26-Dec-2018 14:23:30	Instrument ID:	A3UX15		
Lims ID:	240-105817-A-2	Lab Sample ID:	240-105817-2		
Client ID:	TRIP BLANK				
Operator ID:		ALS Bottle#:	14	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

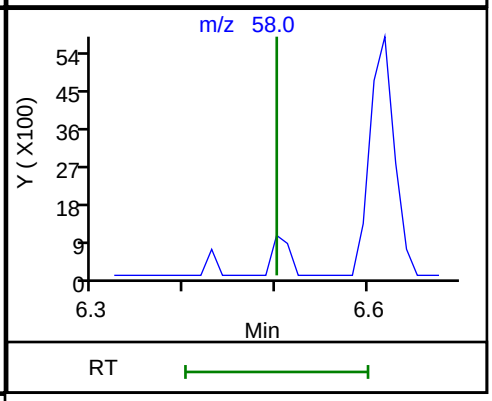
69 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

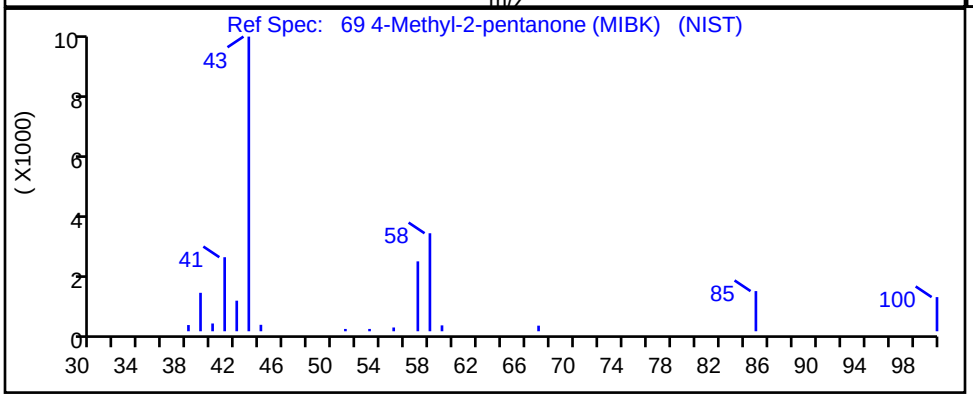
Processing Results











RT	Mass	Response	Amount
6.55	43.00	8193	0.171917
6.50	58.00	0	

Reviewer: evansle, 27-Dec-2018 07:58:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-348190/8	UXX5945.D
Level 2	STD8260 240-348190/7	UXX5944.D
Level 3	STD8260 240-348190/6	UXX5943.D
Level 4	STD8260 240-348190/5	UXX5942.D
Level 5	STD8260 240-348190/4	UXX5941.D
Level 6	STD8260 240-348190/3	UXX5940.D
Level 7	STD8260 240-348190/2	UXX5939.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3986 0.3382	0.3469 0.3117	0.3262	0.3301	0.3565	Ave		0.3440				8.2		15.0			
Chloromethane	0.4771 0.3669	0.4153 0.3611	0.3616	0.4096	0.4292	Ave		0.4030			0.1000	10.7		15.0			
Butadiene	0.3883 0.3725	0.3775 0.3703	0.3527	0.3739	0.4108	Ave		0.3780				4.7		15.0			
Vinyl chloride	0.4026 0.3470	0.3452 0.3521	0.3372	0.3489	0.3811	Ave		0.3591				6.6		15.0			
Bromomethane	0.2403 0.1972	0.1914 0.2205	0.2119	0.2029	0.2209	Ave		0.2122				7.9		15.0			
Chloroethane	0.1117 0.2143	0.2186 0.2313	0.2159	0.2153	0.2303	Lin1	-0.083	0.2307							0.9980		0.9900
Dichlorofluoromethane	0.5501 0.5074	0.4617 0.5209	0.5054	0.5164	0.5386	Ave		0.5143				5.5		15.0			
Trichlorofluoromethane	0.4682 0.3899	0.3776 0.4011	0.3751	0.3751	0.4149	Ave		0.4003				8.4		15.0			
Ethyl ether	0.2561 0.2177	0.2417 0.2142	0.2353	0.2411	0.2397	Ave		0.2351				6.2		15.0			
Acrolein	0.0403 0.0375	0.0410 0.0339	0.0386	0.0353	0.0397	Ave		0.0380				7.0		15.0			
1,1-Dichloroethene	0.3446 0.2740	0.2791 0.2715	0.2796	0.2787	0.2876	Ave		0.2879				8.9		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1322 0.2035	0.2059 0.2056	0.2050	0.2313	0.2165	Lin1	-0.032	0.2098							0.9970		0.9900
Acetone	0.1463 0.0675	0.0965 0.0644	0.0885	0.0777	0.0810	Lin1	0.1639	0.0640							0.9950		0.9900
Iodomethane	0.5427 0.5017	0.5096 0.5092	0.5234	0.5285	0.5479	Ave		0.5233				3.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	1.0127 0.9201	0.9409 0.9562	0.9557	0.9958	0.9910	Ave		0.9675				3.4		15.0			
3-Chloro-1-propene	0.2357 0.2033	0.2057 0.2087	0.2074	0.2014	0.2273	Ave		0.2128				6.2		15.0			
Methyl acetate	0.1949 0.1408	0.1585 0.1440	0.1606	0.1661	0.1583	Ave		0.1605				11.0		15.0			
Methylene Chloride	0.4013 0.3119	0.3665 0.3223	0.3560	0.3559	0.3536	Ave		0.3525				8.3		15.0			
2-Methyl-2-propanol	0.0301 0.0258	0.0299 0.0249	0.0307	0.0239	0.0295	Ave		0.0278				10.3		15.0			
Acrylonitrile	0.0977 0.0917	0.0937 0.0925	0.0997	0.0941	0.1011	Ave		0.0958				3.9		15.0			
trans-1,2-Dichloroethene	0.3348 0.3058	0.3029 0.3147	0.3236	0.3237	0.3275	Ave		0.3190				3.7		15.0			
Methyl tert-butyl ether	0.8966 0.8291	0.8616 0.8787	0.9302	0.8910	0.9034	Ave		0.8844				3.7		15.0			
Hexane	0.0638 0.0462	0.0514 0.0518	0.0557	0.0504	0.0584	Ave		0.0540				10.8		15.0			
1,1-Dichloroethane	0.6013 0.5343	0.5352 0.5612	0.5907	0.5768	0.5836	Ave		0.5690			0.1000	4.6		15.0			
Vinyl acetate	0.4651 0.4165	0.4611 0.4455	0.4553	0.4524	0.4613	Ave		0.4510				3.7		15.0			
cis-1,2-Dichloroethene	0.3394 0.3093	0.3313 0.3253	0.3471	0.3356	0.3565	Ave		0.3349				4.5		15.0			
2,2-Dichloropropane	0.1122 0.0904	0.0933 0.0944	0.0896	0.0949	0.0920	Ave		0.0953				8.1		15.0			
2-Butanone (MEK)	0.0989 0.0762	0.1048 0.0805	0.0993	0.0843	0.1037	Ave		0.0926				12.8		15.0			
Chlorobromomethane	0.1660 0.1357	0.1344 0.1470	0.1502	0.1576	0.1564	Ave		0.1496				7.8		15.0			
Tetrahydrofuran	0.0829 0.0579	0.0682 0.0560	0.0714	0.0638	0.0664	Ave		0.0667				13.5		15.0			
Chloroform	0.5292 0.4519	0.4814 0.4740	0.4981	0.5143	0.5073	Ave		0.4937				5.3		15.0			
1,1,1-Trichloroethane	0.5311 0.4378	0.4701 0.4721	0.4782	0.4982	0.4838	Ave		0.4816				5.9		15.0			
Cyclohexane	0.5437 0.5052	0.5073 0.5448	0.5405	0.5590	0.5488	Ave		0.5356				3.9		15.0			
1,1-Dichloropropene	0.3852 0.3109	0.3326 0.3420	0.3441	0.3617	0.3598	Ave		0.3480				6.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.4279 0.3710	0.3569 0.3965	0.3801	0.3987	0.4092	Ave		0.3915				6.1		15.0			
Isobutyl alcohol	0.0108 0.0076	0.0096 0.0079	0.0104	0.0082	0.0095	Ave		0.0091				13.5		15.0			
Benzene	1.2600 1.0302	1.1482 1.1226	1.1302	1.1667	1.1698	Ave		1.1468				6.0		15.0			
1,2-Dichloroethane	0.4897 0.3706	0.4209 0.3931	0.4112	0.4346	0.4186	Ave		0.4198				8.9		15.0			
n-Heptane	0.0494 0.0413	0.0394 0.0413	0.0433	0.0511	0.0432	Ave		0.0441				9.9		15.0			
Trichloroethene	0.3156 0.2617	0.2659 0.2787	0.2980	0.2867	0.2938	Ave		0.2858				6.6		15.0			
Methylcyclohexane	0.4067 0.3851	0.3951 0.3940	0.3993	0.4239	0.4117	Ave		0.4023				3.2		15.0			
1,2-Dichloropropane	0.3159 0.2729	0.2918 0.2858	0.2942	0.3131	0.3103	Ave		0.2977				5.4		15.0			
Dibromomethane	0.1949 0.1463	0.1721 0.1554	0.1696	0.1743	0.1697	Ave		0.1689				9.1		15.0			
1,4-Dioxane	0.0027 0.0025	0.0034 0.0021	0.0025	0.0023	0.0032	Qua	-0.018	0.0032	-0.000001						0.9940		0.9900
Dichlorobromomethane	0.3945 0.3317	0.3718 0.3664	0.3726	0.3885	0.3911	Ave		0.3738				5.8		15.0			
2-Chloroethyl vinyl ether	0.1630 0.1498	0.1513 0.1529	0.1583	0.1630	0.1603	Ave		0.1569				3.5		15.0			
cis-1,3-Dichloropropene	0.4299 0.3874	0.3932 0.4199	0.4217	0.4239	0.4223	Ave		0.4140				4.0		15.0			
4-Methyl-2-pentanone (MIBK)	0.2462 0.2049	0.2263 0.2115	0.2414	0.2454	0.2341	Ave		0.2300				7.2		15.0			
Toluene	1.6334 1.3415	1.5205 1.5700	1.5373	1.5169	1.5509	Ave		1.5244				5.9		15.0			
trans-1,3-Dichloropropene	0.4811 0.4083	0.4262 0.4652	0.4474	0.4658	0.4662	Ave		0.4515				5.7		15.0			
Ethyl methacrylate	0.3847 0.3241	0.3570 0.3716	0.3779	0.3963	0.3796	Ave		0.3702				6.4		15.0			
1,1,2-Trichloroethane	0.3190 0.2429	0.2893 0.2789	0.2791	0.2838	0.2918	Ave		0.2836				8.0		15.0			
Tetrachloroethene	0.2711 0.2317	0.2798 0.2653	0.2578	0.2769	0.2759	Ave		0.2655				6.3		15.0			
1,3-Dichloropropane	0.5727 0.4146	0.4670 0.4596	0.4848	0.5094	0.4964	Ave		0.4864				10.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.2005 0.1601	0.1931 0.1646	0.2046	0.1909	0.1907	Ave		0.1864				9.2		15.0			
Chlorodibromomethane	0.3016 0.2988	0.2926 0.3369	0.3271	0.3245	0.3319	Ave		0.3162				5.7		15.0			
Ethylene Dibromide	0.3003 0.2550	0.2684 0.2802	0.2701	0.2818	0.2992	Ave		0.2793				5.9		15.0			
Chlorobenzene	1.0444 0.8960	1.0188 1.0039	0.9937	0.9947	1.0128	Ave		0.9949			0.3000	4.7		15.0			
1,1,1,2-Tetrachloroethane	0.3982 0.3308	0.3718 0.3876	0.3847	0.3675	0.3862	Ave		0.3753				5.9		15.0			
Ethylbenzene	0.6089 0.5076	0.5249 0.5575	0.5496	0.5604	0.5762	Ave		0.5550				6.0		15.0			
m-Xylene & p-Xylene	0.7544 0.6259	0.6871 0.7113	0.6580	0.6907	0.6851	Ave		0.6875				5.9		15.0			
o-Xylene	0.7596 0.6453	0.7221 0.7473	0.6952	0.7106	0.7318	Ave		0.7160				5.3		15.0			
Styrene	1.1786 1.0718	1.1098 1.2402	1.0656	1.1379	1.1730	Ave		1.1396				5.5		15.0			
Bromoform	0.1792 0.1903	0.1888 0.2289	0.1821	0.1866	0.2026	Ave		0.1941			0.1000	8.8		15.0			
Isopropylbenzene	1.8296 1.5815	1.6753 1.9166	1.7107	1.7237	1.7825	Ave		1.7457				6.2		15.0			
1,1,2,2-Tetrachloroethane	0.7123 0.5621	0.6782 0.5883	0.7162	0.7613	0.7109	Ave		0.6756			0.3000	10.8		15.0			
Bromobenzene	0.7588 0.6600	0.7936 0.7327	0.7832	0.8349	0.8102	Ave		0.7676				7.5		15.0			
1,2,3-Trichloropropane	0.2209 0.1826	0.2336 0.1825	0.2254	0.2224	0.2166	Ave		0.2120				9.8		15.0			
trans-1,4-Dichloro-2-butene	0.0971 0.1237	0.1507 0.1392	0.1591	0.1362	0.1485	Lin1	-0.003	0.1374							0.9920		0.9900
N-Propylbenzene	0.7888 0.7117	0.7971 0.7749	0.8072	0.8562	0.8507	Ave		0.7981				6.1		15.0			
2-Chlorotoluene	0.8519 0.6536	0.6781 0.7034	0.7591	0.7984	0.7975	Ave		0.7489				9.7		15.0			
1,3,5-Trimethylbenzene	2.4725 2.2872	2.4258 2.5026	2.5932	2.6801	2.6778	Ave		2.5199				5.6		15.0			
4-Chlorotoluene	0.7474 0.6827	0.7494 0.7252	0.7413	0.8080	0.7621	Ave		0.7451				5.1		15.0			
tert-Butylbenzene	2.1833 1.7620	2.1298 1.9882	1.9822	2.1193	2.1556	Ave		2.0458				7.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	3.0184 2.4470	2.7364 2.6608	2.8336	2.7881	2.8564	Ave		2.7630				6.5		15.0			
sec-Butylbenzene	2.8650 2.4842	2.7533 2.7550	2.7314	2.8090	2.9317	Ave		2.7614				5.1		15.0			
1,3-Dichlorobenzene	1.6396 1.3415	1.5060 1.4575	1.5179	1.5621	1.5464	Ave		1.5102				6.2		15.0			
4-Isopropyltoluene	2.4637 2.1908	2.2931 2.4151	2.4682	2.4741	2.5061	Ave		2.4016				4.8		15.0			
1,4-Dichlorobenzene	1.5988 1.3676	1.5405 1.5084	1.5328	1.6208	1.5998	Ave		1.5384				5.6		15.0			
n-Butylbenzene	1.9641 1.7432	1.9760 1.8954	1.9703	2.0006	2.0286	Ave		1.9397				4.9		15.0			
1,2-Dichlorobenzene	1.5565 1.3671	1.5596 1.4796	1.5968	1.5809	1.6164	Ave		1.5367				5.6		15.0			
1,2-Dibromo-3-Chloropropane	0.1680 0.1243	0.1634 0.1389	0.1712	0.1562	0.1559	Ave		0.1540				10.9		15.0			
1,2,4-Trichlorobenzene	1.0593 0.8110	1.0103 0.8100	0.9076	0.9011	1.0217	Ave		0.9316				10.9		15.0			
Hexachlorobutadiene	0.4119 0.2653	0.3002 0.2445	0.2971	0.2897	0.3260	Qua	0.0760	0.2993	-0.001434						0.9980		0.9900
Naphthalene	2.6504 2.1132	2.4882 2.0761	2.5897	2.4549	2.6105	Ave		2.4261				9.8		15.0			
1,2,3-Trichlorobenzene	1.0673 0.7835	0.9878 0.7246	0.9377	0.8773	0.9727	Ave		0.9073				13.3		15.0			
Dibromofluoromethane (Surr)	0.2613 0.2569	0.2591 0.2541	0.2664	0.2702	0.2708	Ave		0.2627				2.5		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3641 0.3199	0.3549 0.3210	0.3402	0.3167	0.3329	Ave		0.3357				5.5		15.0			
Toluene-d8 (Surr)	1.2871 1.1605	1.3529 1.2930	1.2292	1.2496	1.2649	Ave		1.2625				4.7		15.0			
4-Bromofluorobenzene (Surr)	0.4660 0.4795	0.4708 0.5146	0.4769	0.4653	0.4919	Ave		0.4807				3.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-348190/8	UXX5945.D
Level 2	STD8260 240-348190/7	UXX5944.D
Level 3	STD8260 240-348190/6	UXX5943.D
Level 4	STD8260 240-348190/5	UXX5942.D
Level 5	STD8260 240-348190/4	UXX5941.D
Level 6	STD8260 240-348190/3	UXX5940.D
Level 7	STD8260 240-348190/2	UXX5939.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	29702 514557	49306 983706	96492	125358	281542	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chloromethane	FB	Ave	35559 558142	59028 1139409	106974	155540	339023	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Butadiene	FB	Ave	28939 566804	53656 1168420	104330	141964	324473	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Vinyl chloride	FB	Ave	30003 527876	49059 1111107	99749	132484	300976	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromomethane	FB	Ave	17909 299966	27208 695854	62698	77029	174504	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chloroethane	FB	Lin1	8326 326090	31062 729967	63869	81755	181873	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	40997 771948	65618 1643670	149507	196060	425393	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	34895 593135	53671 1265887	110955	142428	327669	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethyl ether	FB	Ave	19083 331251	34347 675875	69595	91555	189334	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acrolein	FB	Ave	15013 285095	29169 534864	57102	67032	156817	5.00 100	10.0 200	20.0	25.0	50.0
1,1-Dichloroethene	FB	Ave	25681 416816	39664 856734	82722	105838	227156	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Lin1	9855 309577	29262 648736	60642	87826	171003	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acetone	FB	Lin1	21800 205299	27438 406703	52366	59024	127962	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Iodomethane	FB	Ave	40446 763308	72419 1606886	154849	200675	432735	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Carbon disulfide	FB	Ave	75471 1399853	133722 3017501	282734	378111	782683	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	17566 309282	29228 658534	61342	76468	179488	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methyl acetate	FB	Ave	29045 428545	45042 909030	95048	126100	249995	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Methylene Chloride	FB	Ave	29904 474592	52083 1017150	105307	135144	279268	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Methyl-2-propanol	FB	Ave	22408 392784	42479 785080	90900	90591	233093	10.0 200	20.0 400	40.0	50.0	100
Acrylonitrile	FB	Ave	72831 1395587	133123 2918908	294885	357275	798555	10.0 200	20.0 400	40.0	50.0	100
trans-1,2-Dichloroethene	FB	Ave	24954 465280	43043 993015	95719	122892	258631	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methyl tert-butyl ether	FB	Ave	66819 1261437	122456 2773005	275180	338334	713524	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Hexane	FB	Ave	4752 70252	7303 163590	16483	19143	46098	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloroethane	FB	Ave	44813 812922	76059 1771078	174733	219004	460948	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Vinyl acetate	FB	Ave	34661 633638	65528 1405879	134694	171771	364316	1.00 20.0	2.00 40.0	4.00	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	25292 470642	47089 1026709	102678	127410	281579	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	8364 137490	13262 297781	26495	36034	72680	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Butanone (MEK)	FB	Ave	14745 231977	29788 508179	58774	64038	163857	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chlorobromomethane	FB	Ave	12372 206532	19102 464023	44433	59842	123496	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Tetrahydrofuran	FB	Ave	12349 176156	19381 353680	42256	48442	104928	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chloroform	FB	Ave	39440 687485	68417 1495865	147357	195295	400639	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	39579 666091	66817 1489765	141477	189167	382116	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Cyclohexane	FB	Ave	40517 768592	72096 1719352	159885	212264	433465	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	28707 473071	47265 1079383	101794	137348	284153	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Carbon tetrachloride	FB	Ave	31891 564380	50727 1251286	112446	151393	323195	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Isobutyl alcohol	CBNZ d5	Ave	15567 252528	25786 508277	61586	65605	150525	25.0 500	50.0 1000	100	125	250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	93899 1567390	163180 3542746	334335	443011	923963	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloroethane	FB	Ave	36495 563877	59820 1240480	121653	165013	330637	1.00 20.0	2.00 40.0	4.00	5.00	10.0
n-Heptane	FB	Ave	3680 62798	5603 130324	12823	19398	34121	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Trichloroethene	FB	Ave	23518 398156	37793 879438	88143	108876	232021	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methylcyclohexane	FB	Ave	30311 585934	56155 1243335	118131	160970	325155	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	23541 415183	41474 902011	87035	118902	245104	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dibromomethane	FB	Ave	14524 222579	24453 490472	50177	66172	134033	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,4-Dioxane	FB	Qua	3984 77487	9548 133459	14536	17749	51135	20.0 400	40.0 800	80.0	100	200
Dichlorobromomethane	FB	Ave	29398 504627	52845 1156392	110220	147502	308915	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	24294 455859	43002 964865	93684	123818	253171	2.00 40.0	4.00 80.0	8.00	10.0	20.0
cis-1,3-Dichloropropene	FB	Ave	32036 589452	55884 1325129	124749	160953	333506	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	36693 623507	64321 1335139	142818	186347	369803	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Toluene	CBNZ d5	Ave	94411 1773988	163738 4022193	364924	486520	987739	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	27810 539870	45894 1191800	106207	149395	296932	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	22235 428540	38450 952039	89700	127102	241738	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	18441 321237	31150 714597	66256	91013	185848	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	15669 306405	30127 679783	61206	88799	175682	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	33102 548275	50296 1177346	115086	163398	316160	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Hexanone	CBNZ d5	Ave	23174 423322	41590 843364	97136	122476	242960	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chlorodibromomethane	CBNZ d5	Ave	17431 395090	31514 863135	77635	104067	211372	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	17360 337253	28905 717928	64125	90394	190578	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	60368 1184812	109713 2571998	235880	319037	645008	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	23016 437489	40039 993121	91323	117864	245955	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	35195 671218	56525 1428374	130454	179744	366978	1.00 20.0	2.00 40.0	4.00	5.00	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	43604 827660	73996 1822298	156186	221524	436330	1.00 20.0	2.00 40.0	4.00	5.00	10.0
o-Xylene	CBNZ d5	Ave	43905 853338	77759 1914562	165032	227919	466041	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Styrene	CBNZ d5	Ave	68125 1417346	119516 3177334	252959	364983	747052	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromoform	CBNZ d5	Ave	10359 251662	20327 586449	43222	59836	129035	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Isopropylbenzene	CBNZ d5	Ave	105750 2091262	180416 4910038	406092	552849	1135218	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	22805 447641	40471 975654	92437	130252	253276	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromobenzene	DCBd 4	Ave	24293 525557	47356 1215279	101075	142846	288667	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	7073 145421	13937 302742	29093	38050	77183	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	3110 98479	8994 230911	20531	23302	52920	1.00 20.0	2.00 40.0	4.00	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	25253 566807	47561 1285152	104182	146487	303075	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	27274 520503	40464 1166610	97963	136591	284129	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	79157 1821446	144751 4150687	334679	458536	954033	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	23929 543666	44716 1202708	95669	138235	271503	1.00 20.0	2.00 40.0	4.00	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	69898 1403191	127089 3297539	255822	362585	767980	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	96634 1948656	163283 4413140	365703	477013	1017650	1.00 20.0	2.00 40.0	4.00	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	91722 1978322	164294 4569258	352509	480582	1044498	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	52492 1068286	89865 2417404	195901	267256	550957	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	78874 1744696	136832 4005507	318550	423296	892863	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 348190

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/02/2018 15:27 Calibration End Date: 10/02/2018 17:56 Calibration ID: 47198

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	51185 1089088	91925 2501722	197818	277301	569972	1.00 20.0	2.00 40.0	4.00	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	62879 1388235	117911 3143613	254281	342280	722754	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	49830 1088688	93064 2454053	206076	270475	575895	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	5380 98986	9748 230360	22093	26723	55531	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	33912 645835	60286 1343492	117135	154166	364018	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Hexachlorobutadiene	DCBd 4	Qua	13186 211312	17916 405483	38345	49562	116162	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Naphthalene	DCBd 4	Ave	84851 1682830	148471 3443386	334226	420006	930050	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	34169 623919	58942 1201706	121014	150099	346559	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	19470 390826	36825 801982	78811	102613	213883	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	27137 486740	50442 1012863	100639	120256	262894	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	74395 1534612	145690 3312433	291793	400786	805597	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	26936 634068	50696 1318259	113207	149244	313290	1.00 20.0	2.00 40.0	4.00	5.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5939.D
Lims ID: STD8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Oct-2018 15:27:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-002
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:08 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: williamsla Date: 02-Oct-2018 16:17:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.568	5.565	0.003	99	788936	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.253	8.250	0.003	86	640476	10.0	10.0	a
* 3 1,4-Dichlorobenzene-d4	152	10.488	10.486	0.002	91	414638	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.000	4.997	0.003	93	801982	40.0	38.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.284	5.281	0.003	99	1012863	40.0	38.2	
$ 6 Toluene-d8 (Surr)	98	6.940	6.937	0.003	94	3312433	40.0	41.0	
$ 7 4-Bromofluorobenzene (Surr	95	9.353	9.350	0.003	92	1318259	40.0	42.8	
9 Dichlorodifluoromethane	85	1.676	1.662	0.014	100	983706	40.0	36.2	
10 Chloromethane	50	1.830	1.827	0.003	98	1139409	40.0	35.8	
12 Butadiene	54	1.948	1.945	0.003	89	1168420	40.0	39.2	
11 Vinyl chloride	62	1.948	1.957	-0.009	81	1111107	40.0	39.2	
13 Bromomethane	94	2.256	2.265	-0.009	92	695854	40.0	41.6	
14 Chloroethane	64	2.327	2.348	-0.021	98	729967	40.0	40.5	
15 Dichlorofluoromethane	67	2.540	2.549	-0.009	98	1643670	40.0	40.5	
16 Trichlorofluoromethane	101	2.587	2.584	0.003	97	1265887	40.0	40.1	
17 Ethyl ether	59	2.823	2.833	-0.010	92	675875	40.0	36.4	
18 Acrolein	56	2.953	2.951	0.002	99	534864	200.0	178.2	
19 1,1-Dichloroethene	96	3.036	3.045	-0.009	96	856734	40.0	37.7	
20 1,1,2-Trichloro-1,2,2-trif	151	3.072	3.069	0.003	94	648736	40.0	39.3	
21 Acetone	43	3.095	3.093	0.002	100	406703	80.0	78.0	
22 Iodomethane	142	3.178	3.187	-0.009	98	1606886	40.0	38.9	
24 Carbon disulfide	76	3.249	3.247	0.002	100	3017501	40.0	39.5	
26 3-Chloro-1-propene	76	3.368	3.377	-0.009	88	658534	40.0	39.2	
27 Methyl acetate	43	3.391	3.400	-0.009	98	909030	80.0	71.8	
28 Methylene Chloride	84	3.486	3.483	0.003	98	1017150	40.0	36.6	
29 2-Methyl-2-propanol	59	3.580	3.578	0.002	98	785080	400.0	357.7	
31 Acrylonitrile	53	3.699	3.708	-0.009	100	2918908	400.0	386.3	
32 Methyl tert-butyl ether	73	3.734	3.732	0.002	97	2773005	40.0	39.7	
30 trans-1,2-Dichloroethene	96	3.722	3.732	-0.010	94	993015	40.0	39.5	
33 Hexane	86	3.959	3.968	-0.009	89	163590	40.0	38.4	
34 1,1-Dichloroethane	63	4.089	4.098	-0.009	97	1771078	40.0	39.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.125	4.134	-0.009	98	1405879	40.0	39.5	
40 cis-1,2-Dichloroethene	96	4.586	4.595	-0.009	88	1026709	40.0	38.9	
41 2-Butanone (MEK)	43	4.598	4.595	0.003	99	508179	80.0	69.6	
39 2,2-Dichloropropane	97	4.598	4.595	0.003	91	297781	40.0	39.6	
45 Chlorobromomethane	128	4.799	4.796	0.003	97	464023	40.0	39.3	
46 Tetrahydrofuran	42	4.834	4.843	-0.009	97	353680	80.0	67.3	
47 Chloroform	83	4.858	4.855	0.003	95	1495865	40.0	38.4	
48 1,1,1-Trichloroethane	97	5.023	5.021	0.002	98	1489765	40.0	39.2	
49 Cyclohexane	56	5.071	5.080	-0.009	92	1719352	40.0	40.7	
51 Carbon tetrachloride	117	5.165	5.163	0.002	97	1251286	40.0	40.5	
50 1,1-Dichloropropene	75	5.154	5.163	-0.009	93	1079383	40.0	39.3	
52 Isobutyl alcohol	41	5.236	5.234	0.002	95	508277	1000.0	868.8	
53 Benzene	78	5.343	5.340	0.003	97	3542746	40.0	39.2	
54 1,2-Dichloroethane	62	5.343	5.352	-0.009	98	1240480	40.0	37.5	
56 n-Heptane	100	5.544	5.541	0.003	90	130324	40.0	37.4	
58 Trichloroethene	130	5.887	5.884	0.003	95	879438	40.0	39.0	
60 Methylcyclohexane	83	6.053	6.050	0.003	95	1243335	40.0	39.2	
61 1,2-Dichloropropane	63	6.076	6.074	0.002	95	902011	40.0	38.4	
63 Dibromomethane	93	6.183	6.180	0.003	96	490472	40.0	36.8	
64 1,4-Dioxane	88	6.183	6.192	-0.009	97	133459	800.0	803.3	
65 Dichlorobromomethane	83	6.301	6.310	-0.009	98	1156392	40.0	39.2	
67 2-Chloroethyl vinyl ether	63	6.549	6.559	-0.010	92	964865	80.0	77.9	
68 cis-1,3-Dichloropropene	75	6.691	6.689	0.002	93	1325129	40.0	40.6	
69 4-Methyl-2-pentanone (MIBK	43	6.821	6.819	0.002	95	1335139	80.0	73.6	
70 Toluene	91	6.999	6.996	0.003	98	4022193	40.0	41.2	
71 trans-1,3-Dichloropropene	75	7.176	7.174	0.002	95	1191800	40.0	41.2	
72 Ethyl methacrylate	69	7.247	7.245	0.002	89	952039	40.0	40.2	
73 1,1,2-Trichloroethane	97	7.354	7.351	0.003	92	714597	40.0	39.3	
74 Tetrachloroethene	164	7.496	7.493	0.003	96	679783	40.0	40.0	
75 1,3-Dichloropropane	76	7.507	7.505	0.002	93	1177346	40.0	37.8	
76 2-Hexanone	43	7.567	7.564	0.003	94	843364	80.0	70.7	
78 Chlorodibromomethane	129	7.720	7.718	0.002	91	863135	40.0	42.6	
80 Ethylene Dibromide	107	7.827	7.824	0.003	98	717928	40.0	40.1	
82 Chlorobenzene	112	8.276	8.274	0.002	94	2571998	40.0	40.4	
83 1,1,1,2-Tetrachloroethane	131	8.347	8.345	0.002	95	993121	40.0	41.3	
84 Ethylbenzene	106	8.371	8.368	0.003	98	1428374	40.0	40.2	
85 m-Xylene & p-Xylene	106	8.477	8.475	0.002	99	1822298	40.0	41.4	
86 o-Xylene	106	8.856	8.853	0.003	96	1914562	40.0	41.8	
87 Styrene	104	8.868	8.865	0.003	94	3177334	40.0	43.5	
88 Bromoform	173	9.057	9.054	0.003	96	586449	40.0	47.2	
89 Isopropylbenzene	105	9.199	9.208	-0.009	95	4910038	40.0	43.9	
92 1,1,2,2-Tetrachloroethane	83	9.483	9.480	0.003	95	975654	40.0	34.8	
93 Bromobenzene	156	9.518	9.516	0.002	95	1215279	40.0	38.2	
94 1,2,3-Trichloropropane	110	9.542	9.539	0.003	86	302742	40.0	34.4	
95 trans-1,4-Dichloro-2-buten	53	9.542	9.539	0.003	81	230911	40.0	40.6	
96 N-Propylbenzene	120	9.601	9.598	0.003	99	1285152	40.0	38.8	
97 2-Chlorotoluene	126	9.696	9.693	0.003	96	1166610	40.0	37.6	
98 1,3,5-Trimethylbenzene	105	9.767	9.764	0.003	94	4150687	40.0	39.7	
99 4-Chlorotoluene	126	9.802	9.800	0.002	97	1202708	40.0	38.9	
100 tert-Butylbenzene	119	10.098	10.095	0.003	91	3297539	40.0	38.9	
102 1,2,4-Trimethylbenzene	105	10.133	10.143	-0.010	96	4413140	40.0	38.5	
103 sec-Butylbenzene	105	10.311	10.308	0.003	93	4569258	40.0	39.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	10.429	10.426	0.003	98	2417404	40.0	38.6	
105 4-Isopropyltoluene	119	10.441	10.450	-0.009	97	4005507	40.0	40.2	
106 1,4-Dichlorobenzene	146	10.512	10.509	0.003	96	2501722	40.0	39.2	
109 n-Butylbenzene	91	10.855	10.852	0.003	98	3143613	40.0	39.1	
110 1,2-Dichlorobenzene	146	10.879	10.876	0.003	98	2454053	40.0	38.5	
111 1,2-Dibromo-3-Chloropropan	157	11.659	11.657	0.002	88	230360	40.0	36.1	
113 1,2,4-Trichlorobenzene	180	12.487	12.485	0.002	94	1343492	40.0	34.8	
114 Hexachlorobutadiene	225	12.653	12.650	0.003	98	405483	40.0	40.1	
115 Naphthalene	128	12.736	12.733	0.003	100	3443386	40.0	34.2	
116 1,2,3-Trichlorobenzene	180	12.984	12.981	0.003	98	1201706	40.0	31.9	
S 128 1,2-Dichloroethene, Total	96				0			78.3	
S 129 1,3-Dichloropropene, Total	75				0			81.8	
S 130 Xylenes, Total	106				0		80.0	83.1	
S 131 Trihalomethanes, Total	1				0		160.0	167.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VMRPRIMW_00303	Amount Added:	32.00	Units: uL
VMRGAS_00263	Amount Added:	32.00	Units: uL
vm50ss_00337	Amount Added:	32.00	Units: uL
VMAROLISTDW_00267	Amount Added:	32.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL

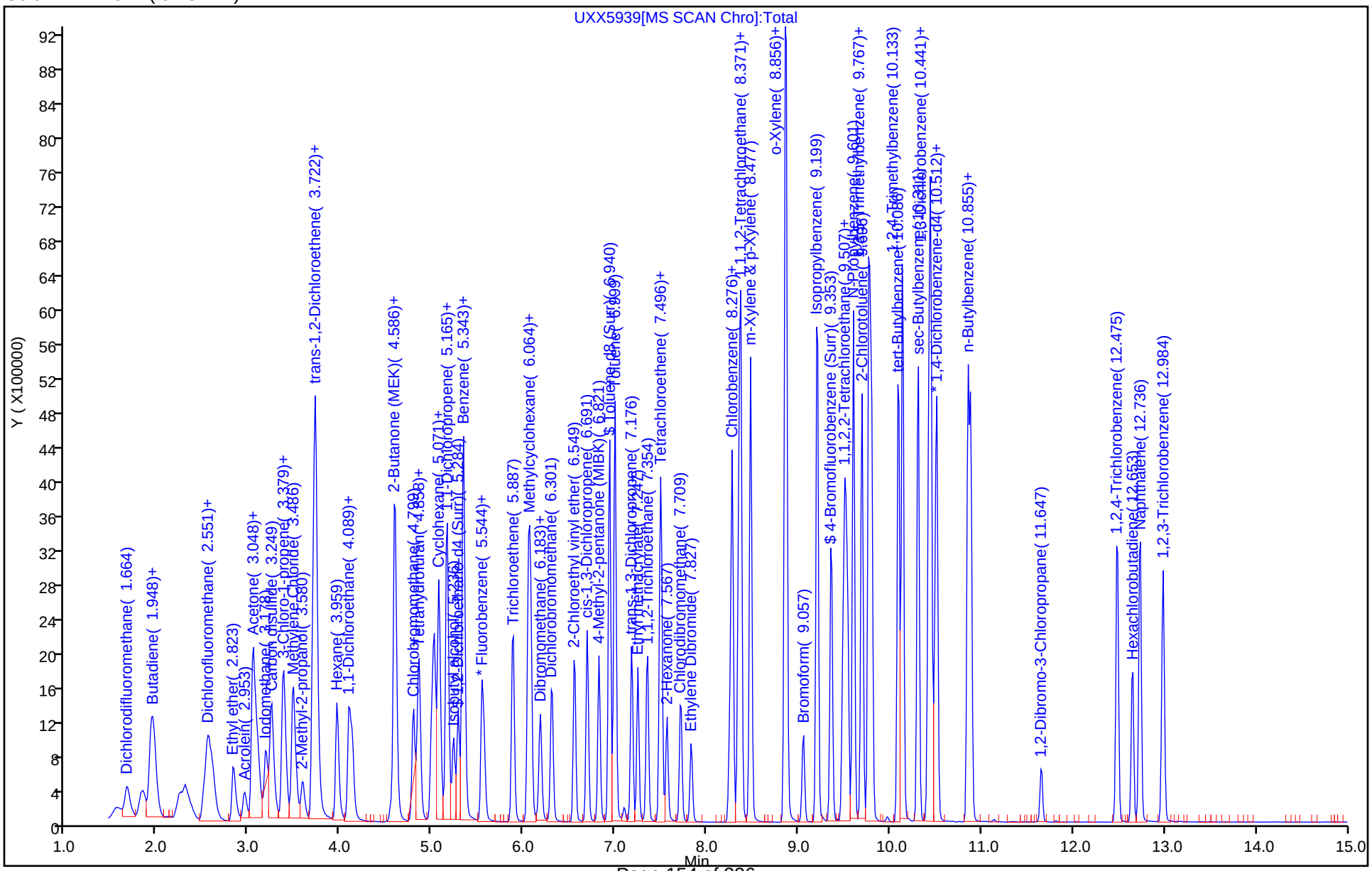
Report Date: 03-Oct-2018 12:29:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5939.D

Injection Date:	02-Oct-2018 15:27:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L7			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Canton

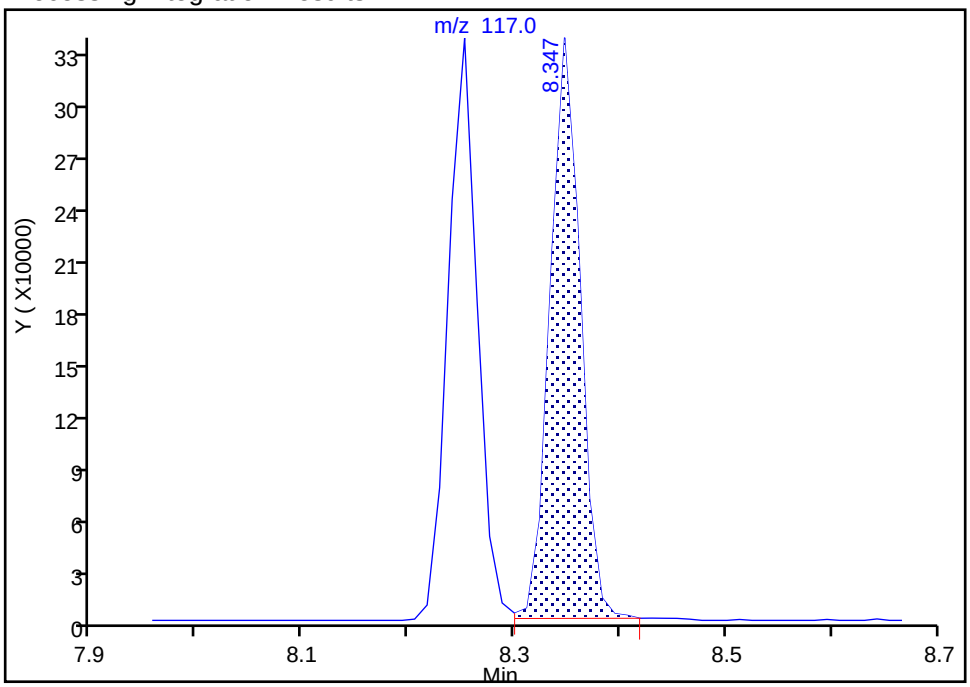
Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5939.D
Injection Date: 02-Oct-2018 15:27:30 Instrument ID: A3UX10
Lims ID: STD8260 L7
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

* 2 Chlorobenzene-d5, CAS: 3114-55-4

Signal: 1

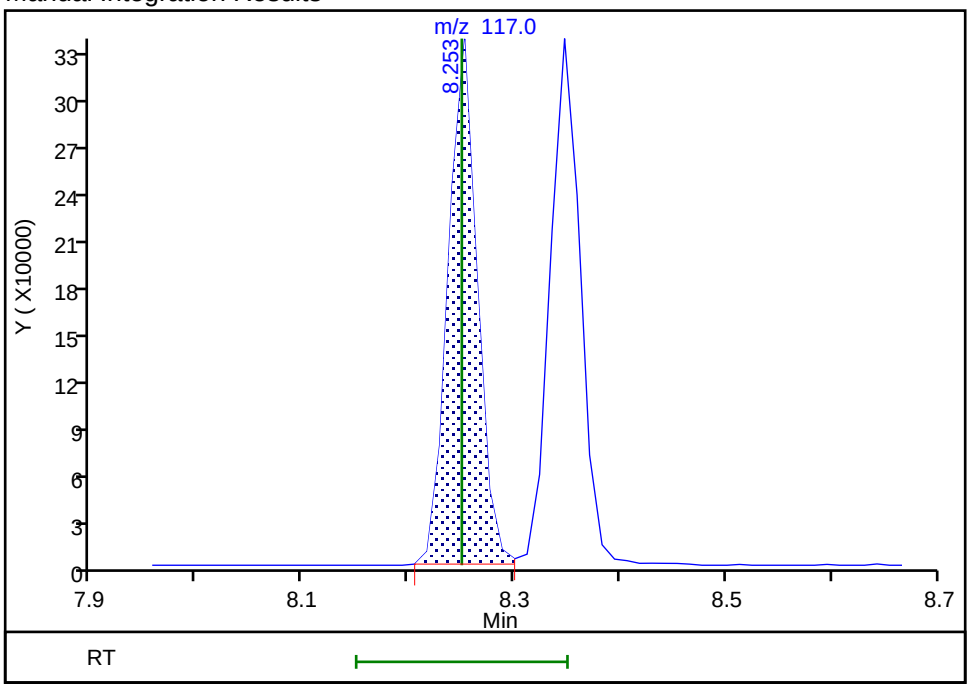
Processing Integration Results

RT: 8.35
Area: 661247
Amount: 10.000000
Amount Units: ug/l



Manual Integration Results

RT: 8.25
Area: 640476
Amount: 10.000000
Amount Units: ug/l



Reviewer: williamsla, 02-Oct-2018 16:16:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5940.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Oct-2018 15:52:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-003
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:14 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: williamsla Date: 02-Oct-2018 16:17:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.565	5.565	0.000	99	760710	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.250	8.250	0.000	86	661175	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.485	10.486	-0.001	94	398179	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.997	4.997	0.000	92	390826	20.0	19.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.281	5.281	0.000	98	486740	20.0	19.1	
$ 6 Toluene-d8 (Surr)	98	6.937	6.937	0.000	93	1534612	20.0	18.4	
$ 7 4-Bromofluorobenzene (Surr	95	9.362	9.350	0.012	92	634068	20.0	19.9	
9 Dichlorodifluoromethane	85	1.673	1.662	0.011	100	514557	20.0	19.7	
10 Chloromethane	50	1.827	1.827	0.000	99	558142	20.0	18.2	
12 Butadiene	54	1.945	1.945	0.000	88	566804	20.0	19.7	
11 Vinyl chloride	62	1.945	1.957	-0.012	82	527876	20.0	19.3	
13 Bromomethane	94	2.253	2.265	-0.012	91	299966	20.0	18.6	
14 Chloroethane	64	2.312	2.348	-0.036	99	326090	20.0	18.9	
15 Dichlorofluoromethane	67	2.537	2.549	-0.012	98	771948	20.0	19.7	
16 Trichlorofluoromethane	101	2.584	2.584	0.000	95	593135	20.0	19.5	
17 Ethyl ether	59	2.832	2.833	-0.001	91	331251	20.0	18.5	
18 Acrolein	56	2.951	2.951	0.000	99	285095	100.0	98.5	
19 1,1-Dichloroethene	96	3.045	3.045	0.000	96	416816	20.0	19.0	
20 1,1,2-Trichloro-1,2,2-trif	151	3.057	3.069	-0.012	94	309577	20.0	19.6	
21 Acetone	43	3.093	3.093	0.000	100	205299	40.0	39.6	
22 Iodomethane	142	3.187	3.187	0.000	98	763308	20.0	19.2	
24 Carbon disulfide	76	3.246	3.247	-0.001	100	1399853	20.0	19.0	
26 3-Chloro-1-propene	76	3.377	3.377	-0.001	88	309282	20.0	19.1	
27 Methyl acetate	43	3.388	3.400	-0.012	98	428545	40.0	35.1	
28 Methylene Chloride	84	3.483	3.483	0.000	98	474592	20.0	17.7	
29 2-Methyl-2-propanol	59	3.578	3.578	0.000	98	392784	200.0	185.6	
31 Acrylonitrile	53	3.696	3.708	-0.012	100	1395587	200.0	191.5	
30 trans-1,2-Dichloroethene	96	3.731	3.732	-0.001	69	465280	20.0	19.2	
32 Methyl tert-butyl ether	73	3.731	3.732	-0.001	98	1261437	20.0	18.8	
33 Hexane	86	3.956	3.968	-0.012	89	70252	20.0	17.1	
34 1,1-Dichloroethane	63	4.098	4.098	0.000	97	812922	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.134	4.134	0.000	97	633638	20.0	18.5	
41 2-Butanone (MEK)	43	4.595	4.595	0.000	98	231977	40.0	32.9	
40 cis-1,2-Dichloroethene	96	4.595	4.595	0.000	87	470642	20.0	18.5	
39 2,2-Dichloropropane	97	4.595	4.595	0.000	73	137490	20.0	19.0	
45 Chlorobromomethane	128	4.796	4.796	0.000	96	206532	20.0	18.1	
46 Tetrahydrofuran	42	4.831	4.843	-0.012	97	176156	40.0	34.7	
47 Chloroform	83	4.855	4.855	0.000	94	687485	20.0	18.3	
48 1,1,1-Trichloroethane	97	5.021	5.021	0.000	97	666091	20.0	18.2	
49 Cyclohexane	56	5.068	5.080	-0.012	92	768592	20.0	18.9	
50 1,1-Dichloropropene	75	5.163	5.163	0.000	92	473071	20.0	17.9	
51 Carbon tetrachloride	117	5.163	5.163	0.000	98	564380	20.0	19.0	
52 Isobutyl alcohol	41	5.234	5.234	0.000	93	252528	500.0	418.1	
53 Benzene	78	5.340	5.340	0.000	98	1567390	20.0	18.0	
54 1,2-Dichloroethane	62	5.352	5.352	0.000	97	563877	20.0	17.7	
56 n-Heptane	100	5.541	5.541	0.000	90	62798	20.0	18.7	
58 Trichloroethene	130	5.884	5.884	0.000	94	398156	20.0	18.3	
60 Methylcyclohexane	83	6.050	6.050	0.000	92	585934	20.0	19.1	
61 1,2-Dichloropropane	63	6.073	6.074	-0.001	95	415183	20.0	18.3	
63 Dibromomethane	93	6.180	6.180	0.000	95	222579	20.0	17.3	
64 1,4-Dioxane	88	6.180	6.192	-0.012	96	77487	400.0	386.3	
65 Dichlorobromomethane	83	6.310	6.310	0.000	97	504627	20.0	17.7	
67 2-Chloroethyl vinyl ether	63	6.558	6.559	-0.001	92	455859	40.0	38.2	
68 cis-1,3-Dichloropropene	75	6.688	6.689	-0.001	94	589452	20.0	18.7	
69 4-Methyl-2-pentanone (MIBK	43	6.819	6.819	0.000	94	623507	40.0	35.6	
70 Toluene	91	6.996	6.996	0.000	98	1773988	20.0	17.6	
71 trans-1,3-Dichloropropene	75	7.173	7.174	-0.001	95	539870	20.0	18.1	
72 Ethyl methacrylate	69	7.244	7.245	-0.001	89	428540	20.0	17.5	
73 1,1,2-Trichloroethane	97	7.351	7.351	0.000	92	321237	20.0	17.1	
74 Tetrachloroethene	164	7.493	7.493	0.000	96	306405	20.0	17.5	
75 1,3-Dichloropropane	76	7.505	7.505	0.000	93	548275	20.0	17.0	
76 2-Hexanone	43	7.564	7.564	0.000	94	423322	40.0	34.4	
78 Chlorodibromomethane	129	7.718	7.718	0.000	90	395090	20.0	18.9	
80 Ethylene Dibromide	107	7.824	7.824	0.000	99	337253	20.0	18.3	
82 Chlorobenzene	112	8.274	8.274	0.000	94	1184812	20.0	18.0	
83 1,1,1,2-Tetrachloroethane	131	8.344	8.345	-0.001	94	437489	20.0	17.6	
84 Ethylbenzene	106	8.368	8.368	0.000	98	671218	20.0	18.3	
85 m-Xylene & p-Xylene	106	8.475	8.475	0.000	99	827660	20.0	18.2	
86 o-Xylene	106	8.853	8.853	0.000	96	853338	20.0	18.0	
87 Styrene	104	8.865	8.865	0.000	94	1417346	20.0	18.8	
88 Bromoform	173	9.054	9.054	0.000	95	251662	20.0	19.6	
89 Isopropylbenzene	105	9.208	9.208	0.000	95	2091262	20.0	18.1	
92 1,1,2,2-Tetrachloroethane	83	9.480	9.480	0.000	96	447641	20.0	16.6	
93 Bromobenzene	156	9.516	9.516	0.000	95	525557	20.0	17.2	
95 trans-1,4-Dichloro-2-buten	53	9.539	9.539	0.000	73	98479	20.0	18.0	
94 1,2,3-Trichloropropane	110	9.539	9.539	0.000	85	145421	20.0	17.2	
96 N-Propylbenzene	120	9.598	9.598	0.000	99	566807	20.0	17.8	
97 2-Chlorotoluene	126	9.693	9.693	0.000	96	520503	20.0	17.5	
98 1,3,5-Trimethylbenzene	105	9.764	9.764	0.000	94	1821446	20.0	18.2	
99 4-Chlorotoluene	126	9.799	9.800	-0.001	98	543666	20.0	18.3	
100 tert-Butylbenzene	119	10.095	10.095	0.000	91	1403191	20.0	17.2	
102 1,2,4-Trimethylbenzene	105	10.142	10.143	-0.001	96	1948656	20.0	17.7	
103 sec-Butylbenzene	105	10.308	10.308	0.000	94	1978322	20.0	18.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	10.426	10.426	0.000	99	1068286	20.0	17.8	
105 4-Isopropyltoluene	119	10.450	10.450	0.000	97	1744696	20.0	18.2	
106 1,4-Dichlorobenzene	146	10.509	10.509	0.000	95	1089088	20.0	17.8	
109 n-Butylbenzene	91	10.852	10.852	0.000	98	1388235	20.0	18.0	
110 1,2-Dichlorobenzene	146	10.876	10.876	0.000	98	1088688	20.0	17.8	
111 1,2-Dibromo-3-Chloropropan	157	11.656	11.657	-0.001	83	98986	20.0	16.1	
113 1,2,4-Trichlorobenzene	180	12.484	12.485	-0.001	95	645835	20.0	17.4	
114 Hexachlorobutadiene	225	12.650	12.650	0.000	97	211312	20.0	19.3	
115 Naphthalene	128	12.733	12.733	0.000	100	1682830	20.0	17.4	
116 1,2,3-Trichlorobenzene	180	12.981	12.981	0.000	98	623919	20.0	17.3	
S 128 1,2-Dichloroethene, Total	96				0			37.6	
S 129 1,3-Dichloropropene, Total	75				0			36.8	
S 130 Xylenes, Total	106				0		40.0	36.2	
S 131 Trihalomethanes, Total	1				0		80.0	74.6	

Reagents:

VMRPRIMW_00303	Amount Added:	16.00	Units: uL
VMRGAS_00263	Amount Added:	16.00	Units: uL
vm50ss_00337	Amount Added:	16.00	Units: uL
VMAROLISTDW_00267	Amount Added:	16.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL

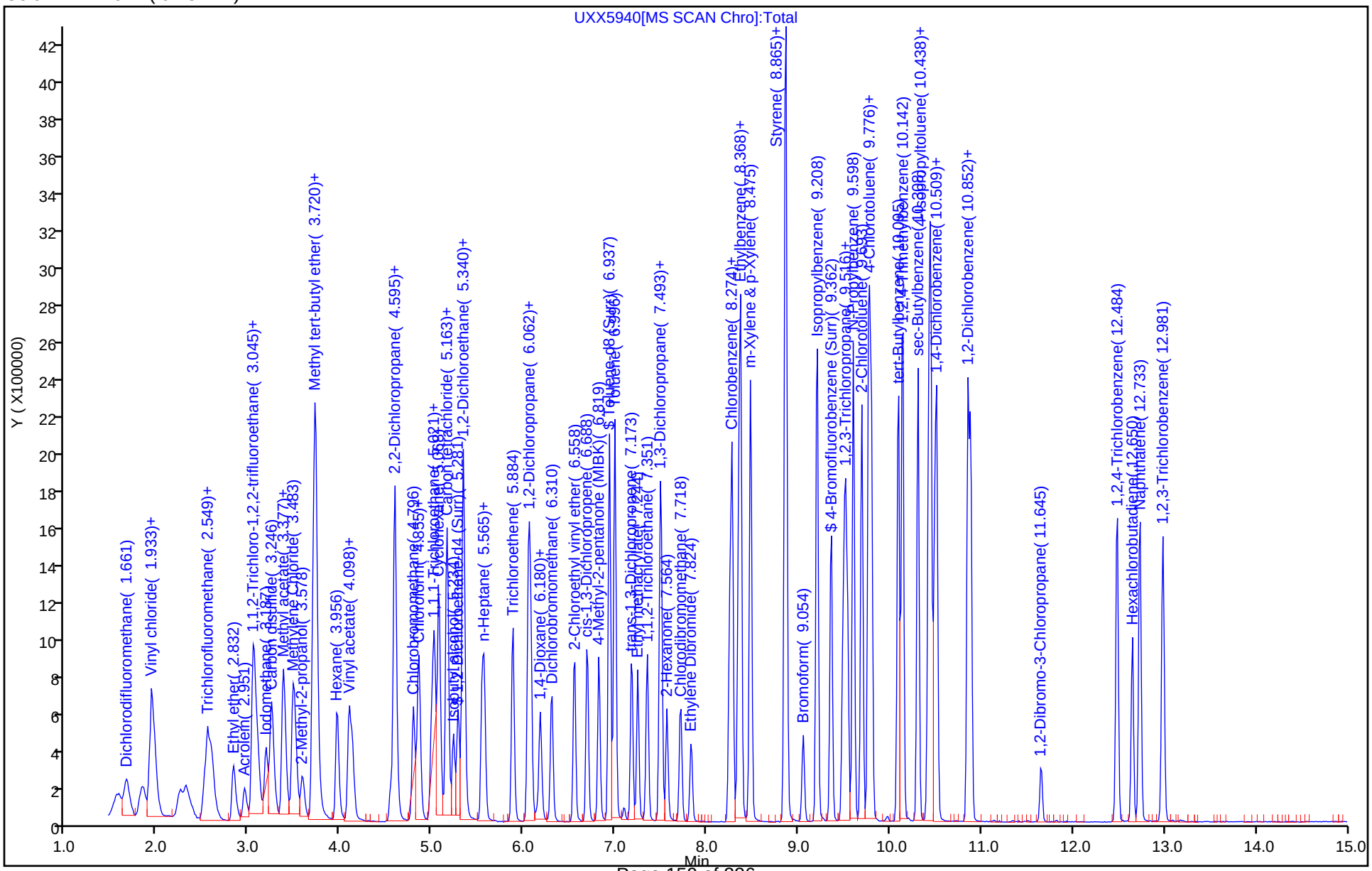
Report Date: 03-Oct-2018 12:29:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5940.D

Injection Date:	02-Oct-2018 15:52:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L6			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5941.D
Lims ID: STD8260 L5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 02-Oct-2018 16:17:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-004
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:20 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: williamsla Date: 03-Oct-2018 11:15:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.567	5.567	0.000	98	789818	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.252	8.252	0.000	87	636861	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.487	10.487	0.000	93	356275	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.999	4.999	0.000	93	213883	10.0	10.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.283	5.283	0.000	98	262894	10.0	9.92	
$ 6 Toluene-d8 (Surr)	98	6.939	6.939	0.000	94	805597	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr	95	9.352	9.352	0.000	87	313290	10.0	10.2	
9 Dichlorodifluoromethane	85	1.675	1.675	0.000	100	281542	10.0	10.4	
10 Chloromethane	50	1.841	1.841	0.000	97	339023	10.0	10.7	M
12 Butadiene	54	1.947	1.947	0.000	87	324473	10.0	10.9	
11 Vinyl chloride	62	1.959	1.959	0.000	86	300976	10.0	10.6	
13 Bromomethane	94	2.278	2.278	0.000	92	174504	10.0	10.4	
14 Chloroethane	64	2.326	2.326	0.000	99	181873	10.0	10.3	
15 Dichlorofluoromethane	67	2.538	2.538	0.000	97	425393	10.0	10.5	
16 Trichlorofluoromethane	101	2.586	2.586	0.000	92	327669	10.0	10.4	
17 Ethyl ether	59	2.834	2.834	0.000	92	189334	10.0	10.2	
18 Acrolein	56	2.952	2.952	0.000	97	156817	50.0	52.2	
19 1,1-Dichloroethene	96	3.047	3.047	0.000	95	227156	10.0	10.0	
20 1,1,2-Trichloro-1,2,2-trif	151	3.059	3.059	0.000	93	171003	10.0	10.5	
21 Acetone	43	3.094	3.094	0.000	98	127962	20.0	22.8	
22 Iodomethane	142	3.189	3.189	0.000	97	432735	10.0	10.5	
24 Carbon disulfide	76	3.248	3.248	0.000	100	782683	10.0	10.2	
26 3-Chloro-1-propene	76	3.378	3.378	0.000	88	179488	10.0	10.7	
27 Methyl acetate	43	3.390	3.390	0.000	98	249995	20.0	19.7	
28 Methylene Chloride	84	3.485	3.485	0.000	95	279268	10.0	10.0	
29 2-Methyl-2-propanol	59	3.579	3.579	0.000	97	233093	100.0	106.1	
31 Acrylonitrile	53	3.698	3.698	0.000	98	798555	100.0	105.6	
32 Methyl tert-butyl ether	73	3.733	3.733	0.000	98	713524	10.0	10.2	
30 trans-1,2-Dichloroethene	96	3.721	3.721	0.000	68	258631	10.0	10.3	
33 Hexane	86	3.970	3.970	0.000	88	46098	10.0	10.8	
34 1,1-Dichloroethane	63	4.100	4.100	0.000	97	460948	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.135	4.135	0.000	97	364316	10.0	10.2	
40 cis-1,2-Dichloroethene	96	4.597	4.597	0.000	87	281579	10.0	10.6	
41 2-Butanone (MEK)	43	4.597	4.597	0.000	48	163857	20.0	22.4	
39 2,2-Dichloropropane	97	4.597	4.597	0.000	70	72680	10.0	9.66	
45 Chlorobromomethane	128	4.798	4.798	0.000	95	123496	10.0	10.5	
46 Tetrahydrofuran	42	4.845	4.845	0.000	97	104928	20.0	19.9	
47 Chloroform	83	4.857	4.857	0.000	94	400639	10.0	10.3	
48 1,1,1-Trichloroethane	97	5.022	5.022	0.000	97	382116	10.0	10.0	
49 Cyclohexane	56	5.070	5.070	0.000	91	433465	10.0	10.2	
51 Carbon tetrachloride	117	5.164	5.164	0.000	98	323195	10.0	10.5	
50 1,1-Dichloropropene	75	5.164	5.164	0.000	93	284153	10.0	10.3	
52 Isobutyl alcohol	41	5.235	5.235	0.000	97	150525	250.0	258.8	
53 Benzene	78	5.342	5.342	0.000	96	923963	10.0	10.2	
54 1,2-Dichloroethane	62	5.354	5.354	0.000	97	330637	10.0	9.97	
56 n-Heptane	100	5.543	5.543	0.000	88	34121	10.0	9.79	
58 Trichloroethene	130	5.886	5.886	0.000	94	232021	10.0	10.3	
60 Methylcyclohexane	83	6.052	6.052	0.000	93	325155	10.0	10.2	
61 1,2-Dichloropropane	63	6.075	6.075	0.000	96	245104	10.0	10.4	
63 Dibromomethane	93	6.182	6.182	0.000	94	134033	10.0	10.0	
64 1,4-Dioxane	88	6.182	6.182	0.000	44	51135	200.0	230.2	
65 Dichlorobromomethane	83	6.300	6.300	0.000	98	308915	10.0	10.5	
67 2-Chloroethyl vinyl ether	63	6.548	6.548	0.000	94	253171	20.0	20.4	
68 cis-1,3-Dichloropropene	75	6.690	6.690	0.000	94	333506	10.0	10.2	
69 4-Methyl-2-pentanone (MIBK	43	6.820	6.820	0.000	96	369803	20.0	20.4	
70 Toluene	91	6.998	6.998	0.000	97	987739	10.0	10.2	
71 trans-1,3-Dichloropropene	75	7.175	7.175	0.000	97	296932	10.0	10.3	
72 Ethyl methacrylate	69	7.246	7.246	0.000	88	241738	10.0	10.3	
73 1,1,2-Trichloroethane	97	7.353	7.353	0.000	91	185848	10.0	10.3	
74 Tetrachloroethene	164	7.495	7.495	0.000	96	175682	10.0	10.4	
75 1,3-Dichloropropane	76	7.506	7.506	0.000	92	316160	10.0	10.2	
76 2-Hexanone	43	7.566	7.566	0.000	93	242960	20.0	20.5	
78 Chlorodibromomethane	129	7.719	7.719	0.000	91	211372	10.0	10.5	
80 Ethylene Dibromide	107	7.826	7.826	0.000	97	190578	10.0	10.7	
82 Chlorobenzene	112	8.275	8.275	0.000	94	645008	10.0	10.2	
83 1,1,1,2-Tetrachloroethane	131	8.346	8.346	0.000	93	245955	10.0	10.3	
84 Ethylbenzene	106	8.370	8.370	0.000	98	366978	10.0	10.4	
85 m-Xylene & p-Xylene	106	8.476	8.476	0.000	99	436330	10.0	9.97	
86 o-Xylene	106	8.855	8.855	0.000	97	466041	10.0	10.2	
87 Styrene	104	8.867	8.867	0.000	94	747052	10.0	10.3	
88 Bromoform	173	9.056	9.056	0.000	96	129035	10.0	10.4	
89 Isopropylbenzene	105	9.198	9.198	0.000	96	1135218	10.0	10.2	
92 1,1,2,2-Tetrachloroethane	83	9.482	9.482	0.000	96	253276	10.0	10.5	
93 Bromobenzene	156	9.505	9.505	0.000	96	288667	10.0	10.6	
94 1,2,3-Trichloropropane	110	9.541	9.541	0.000	86	77183	10.0	10.2	
95 trans-1,4-Dichloro-2-buten	53	9.541	9.541	0.000	68	52920	10.0	10.8	
96 N-Propylbenzene	120	9.600	9.600	0.000	99	303075	10.0	10.7	
97 2-Chlorotoluene	126	9.695	9.695	0.000	96	284129	10.0	10.6	
98 1,3,5-Trimethylbenzene	105	9.766	9.766	0.000	94	954033	10.0	10.6	
99 4-Chlorotoluene	126	9.801	9.801	0.000	98	271503	10.0	10.2	
100 tert-Butylbenzene	119	10.097	10.097	0.000	93	767980	10.0	10.5	
102 1,2,4-Trimethylbenzene	105	10.132	10.132	0.000	98	1017650	10.0	10.3	
103 sec-Butylbenzene	105	10.310	10.310	0.000	94	1044498	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	10.428	10.428	0.000	98	550957	10.0	10.2	
105 4-Isopropyltoluene	119	10.440	10.440	0.000	97	892863	10.0	10.4	
106 1,4-Dichlorobenzene	146	10.511	10.511	0.000	95	569972	10.0	10.4	
109 n-Butylbenzene	91	10.854	10.854	0.000	97	722754	10.0	10.5	
110 1,2-Dichlorobenzene	146	10.878	10.878	0.000	97	575895	10.0	10.5	
111 1,2-Dibromo-3-Chloropropan	157	11.658	11.658	0.000	82	55531	10.0	10.1	
113 1,2,4-Trichlorobenzene	180	12.486	12.486	0.000	93	364018	10.0	11.0	
114 Hexachlorobutadiene	225	12.652	12.652	0.000	96	116162	10.0	11.2	
115 Naphthalene	128	12.723	12.723	0.000	100	930050	10.0	10.8	
116 1,2,3-Trichlorobenzene	180	12.983	12.983	0.000	96	346559	10.0	10.7	
S 130 Xylenes, Total	106				0		20.0	20.2	
S 131 Trihalomethanes, Total	1				0		40.0	41.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VMRPRIMW_00303	Amount Added:	8.00	Units: uL
VMRGAS_00263	Amount Added:	8.00	Units: uL
vm50ss_00337	Amount Added:	8.00	Units: uL
VMAROLISTDW_00267	Amount Added:	8.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL

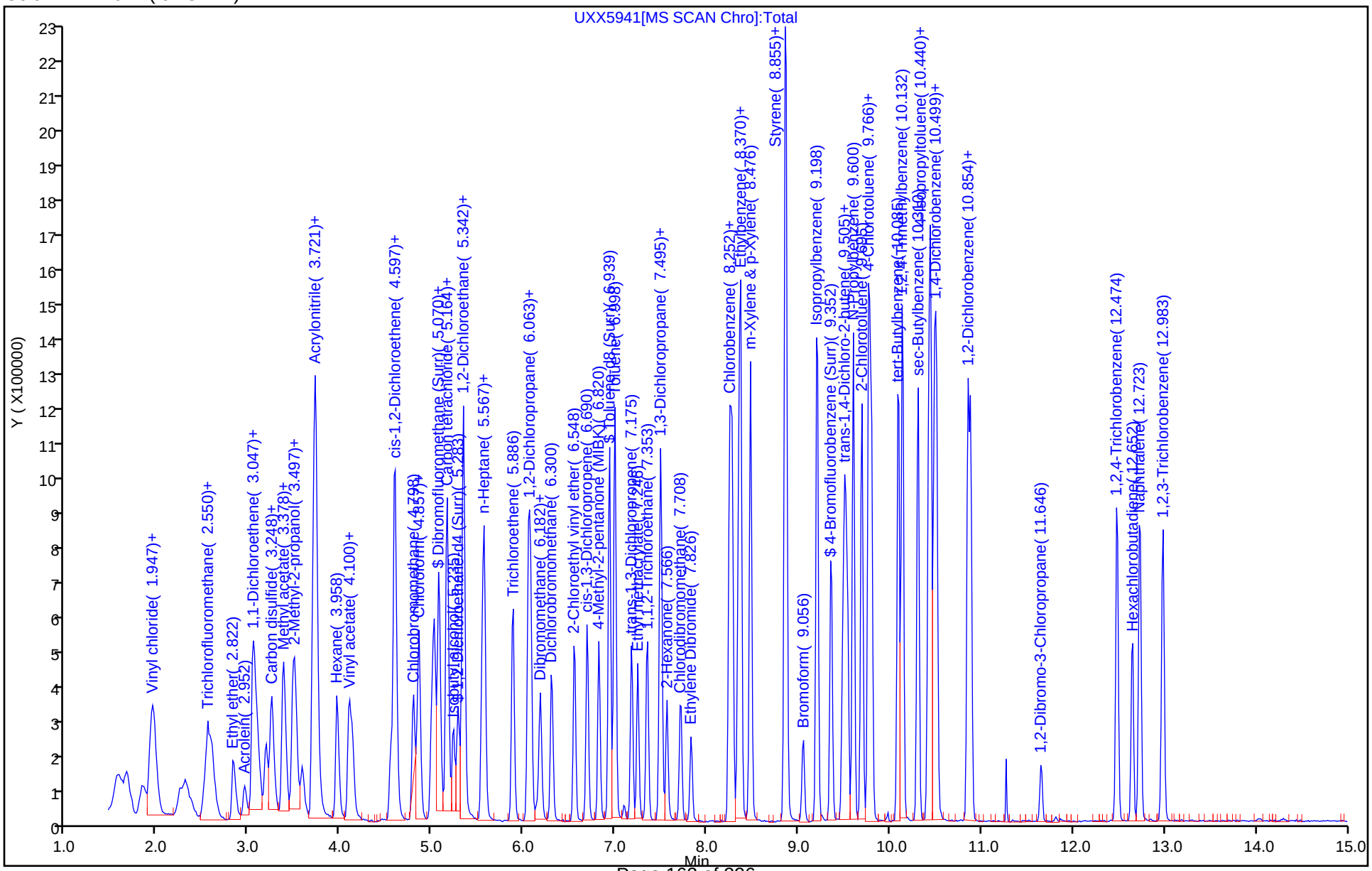
Report Date: 03-Oct-2018 12:29:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5941.D

Injection Date:	02-Oct-2018 16:17:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton

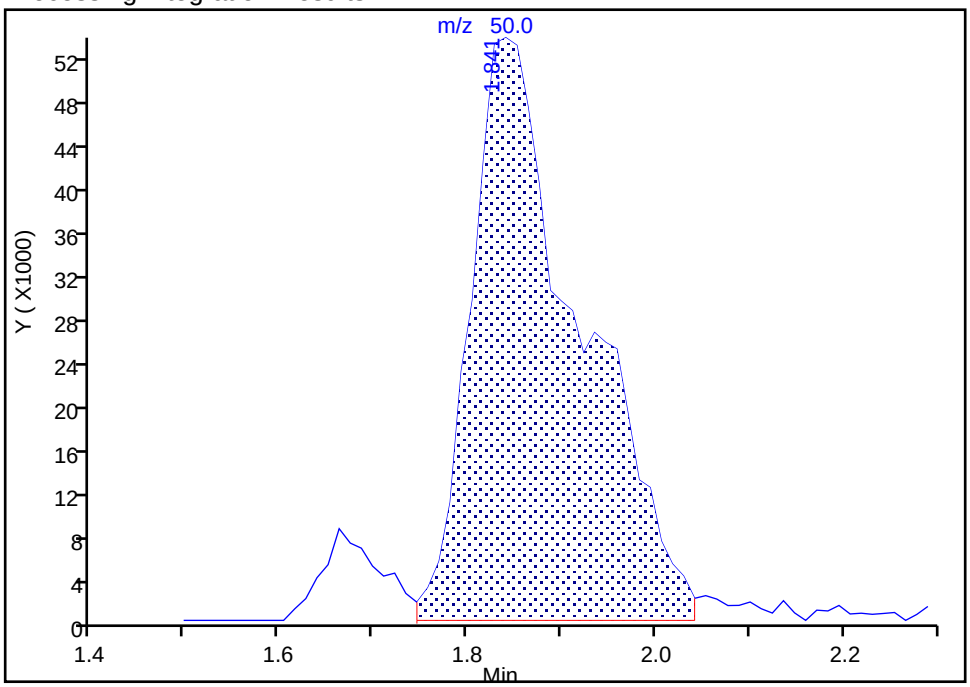
Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5941.D
Injection Date: 02-Oct-2018 16:17:30 Instrument ID: A3UX10
Lims ID: STD8260 L5
Client ID:
Operator ID: 001644 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

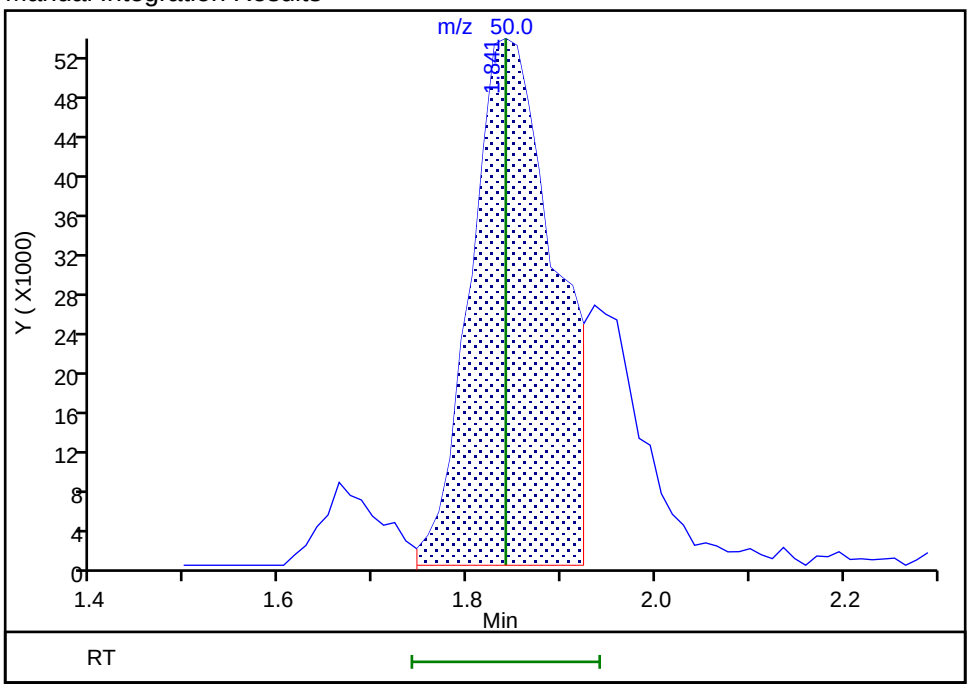
Processing Integration Results

RT: 1.84
Area: 438674
Amount: 15.711090
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 339023
Amount: 10.651584
Amount Units: ug/l



Reviewer: bosworthh, 03-Oct-2018 11:27:24
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5942.D
Lims ID: STD8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Oct-2018 16:42:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-005
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:28 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bosworthh Date: 03-Oct-2018 11:28:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.565	5.565	0.000	98	759407	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.250	8.250	0.000	88	641477	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.486	10.486	0.000	95	342177	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.997	4.997	0.000	91	102613	5.00	5.14	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.281	5.281	0.000	96	120256	5.00	4.72	
$ 6 Toluene-d8 (Surr)	98	6.937	6.937	0.000	94	400786	5.00	4.95	
$ 7 4-Bromofluorobenzene (Surr	95	9.350	9.350	0.000	89	149244	5.00	4.84	
9 Dichlorodifluoromethane	85	1.662	1.662	0.000	96	125358	5.00	4.80	
10 Chloromethane	50	1.827	1.827	0.000	99	155540	5.00	5.08	M
12 Butadiene	54	1.945	1.945	0.000	85	141964	5.00	4.95	
11 Vinyl chloride	62	1.957	1.957	0.000	94	132484	5.00	4.86	
13 Bromomethane	94	2.265	2.265	0.000	93	77029	5.00	4.78	
14 Chloroethane	64	2.348	2.348	0.000	96	81755	5.00	5.03	
15 Dichlorofluoromethane	67	2.549	2.549	0.000	96	196060	5.00	5.02	
16 Trichlorofluoromethane	101	2.584	2.584	0.000	97	142428	5.00	4.69	
17 Ethyl ether	59	2.833	2.833	0.000	92	91555	5.00	5.13	
18 Acrolein	56	2.951	2.951	0.000	96	67032	25.0	23.2	
19 1,1-Dichloroethene	96	3.045	3.045	0.000	94	105838	5.00	4.84	
20 1,1,2-Trichloro-1,2,2-trif	151	3.069	3.069	0.000	66	87826	5.00	5.67	
21 Acetone	43	3.093	3.093	0.000	71	59024	10.0	9.59	
22 Iodomethane	142	3.187	3.187	0.000	98	200675	5.00	5.05	
24 Carbon disulfide	76	3.247	3.247	0.000	100	378111	5.00	5.15	
26 3-Chloro-1-propene	76	3.377	3.377	0.000	87	76468	5.00	4.73	
27 Methyl acetate	43	3.400	3.400	0.000	82	126100	10.0	10.3	
28 Methylene Chloride	84	3.483	3.483	0.000	96	135144	5.00	5.05	
29 2-Methyl-2-propanol	59	3.578	3.578	0.000	97	90591	50.0	42.9	
31 Acrylonitrile	53	3.708	3.708	0.000	99	357275	50.0	49.1	
30 trans-1,2-Dichloroethene	96	3.732	3.732	0.000	70	122892	5.00	5.07	
32 Methyl tert-butyl ether	73	3.732	3.732	0.000	98	338334	5.00	5.04	
33 Hexane	86	3.968	3.968	0.000	88	19143	5.00	4.67	
34 1,1-Dichloroethane	63	4.098	4.098	0.000	97	219004	5.00	5.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.134	4.134	0.000	97	171771	5.00	5.02	
41 2-Butanone (MEK)	43	4.595	4.595	0.000	42	64038	10.0	9.11	
40 cis-1,2-Dichloroethene	96	4.595	4.595	0.000	85	127410	5.00	5.01	
39 2,2-Dichloropropane	97	4.595	4.595	0.000	66	36034	5.00	4.98	
45 Chlorobromomethane	128	4.796	4.796	0.000	96	59842	5.00	5.27	
46 Tetrahydrofuran	42	4.843	4.843	0.000	97	48442	10.0	9.57	
47 Chloroform	83	4.855	4.855	0.000	95	195295	5.00	5.21	
48 1,1,1-Trichloroethane	97	5.021	5.021	0.000	97	189167	5.00	5.17	
49 Cyclohexane	56	5.080	5.080	0.000	92	212264	5.00	5.22	
50 1,1-Dichloropropene	75	5.163	5.163	0.000	91	137348	5.00	5.20	
51 Carbon tetrachloride	117	5.163	5.163	0.000	97	151393	5.00	5.09	
52 Isobutyl alcohol	41	5.234	5.234	0.000	97	65605	125.0	112.0	
53 Benzene	78	5.340	5.340	0.000	97	443011	5.00	5.09	
54 1,2-Dichloroethane	62	5.352	5.352	0.000	97	165013	5.00	5.18	
56 n-Heptane	100	5.541	5.541	0.000	91	19398	5.00	5.79	
58 Trichloroethene	130	5.884	5.884	0.000	93	108876	5.00	5.02	
60 Methylcyclohexane	83	6.050	6.050	0.000	95	160970	5.00	5.27	
61 1,2-Dichloropropane	63	6.074	6.074	0.000	92	118902	5.00	5.26	
63 Dibromomethane	93	6.180	6.180	0.000	93	66172	5.00	5.16	
64 1,4-Dioxane	88	6.192	6.192	0.000	35	17749	100.0	81.5	M
65 Dichlorobromomethane	83	6.310	6.310	0.000	97	147502	5.00	5.20	
67 2-Chloroethyl vinyl ether	63	6.559	6.559	0.000	93	123818	10.0	10.4	
68 cis-1,3-Dichloropropene	75	6.689	6.689	0.000	92	160953	5.00	5.12	
69 4-Methyl-2-pentanone (MIBK	43	6.819	6.819	0.000	95	186347	10.0	10.7	
70 Toluene	91	6.996	6.996	0.000	98	486520	5.00	4.98	
71 trans-1,3-Dichloropropene	75	7.174	7.174	0.000	97	149395	5.00	5.16	
72 Ethyl methacrylate	69	7.245	7.245	0.000	88	127102	5.00	5.35	
73 1,1,2-Trichloroethane	97	7.351	7.351	0.000	93	91013	5.00	5.00	
74 Tetrachloroethene	164	7.493	7.493	0.000	96	88799	5.00	5.21	
75 1,3-Dichloropropane	76	7.505	7.505	0.000	92	163398	5.00	5.24	
76 2-Hexanone	43	7.564	7.564	0.000	97	122476	10.0	10.2	
78 Chlorodibromomethane	129	7.718	7.718	0.000	92	104067	5.00	5.13	
80 Ethylene Dibromide	107	7.824	7.824	0.000	99	90394	5.00	5.04	
82 Chlorobenzene	112	8.274	8.274	0.000	93	319037	5.00	5.00	
83 1,1,1,2-Tetrachloroethane	131	8.345	8.345	0.000	94	117864	5.00	4.90	
84 Ethylbenzene	106	8.368	8.368	0.000	98	179744	5.00	5.05	
85 m-Xylene & p-Xylene	106	8.475	8.475	0.000	99	221524	5.00	5.02	
86 o-Xylene	106	8.853	8.853	0.000	96	227919	5.00	4.96	
87 Styrene	104	8.865	8.865	0.000	93	364983	5.00	4.99	
88 Bromoform	173	9.054	9.054	0.000	95	59836	5.00	4.81	
89 Isopropylbenzene	105	9.208	9.208	0.000	96	552849	5.00	4.94	
92 1,1,2,2-Tetrachloroethane	83	9.480	9.480	0.000	95	130252	5.00	5.63	
93 Bromobenzene	156	9.516	9.516	0.000	97	142846	5.00	5.44	
95 trans-1,4-Dichloro-2-buten	53	9.539	9.539	0.000	66	23302	5.00	4.98	
94 1,2,3-Trichloropropane	110	9.539	9.539	0.000	86	38050	5.00	5.24	
96 N-Propylbenzene	120	9.598	9.598	0.000	99	146487	5.00	5.36	
97 2-Chlorotoluene	126	9.693	9.693	0.000	96	136591	5.00	5.33	
98 1,3,5-Trimethylbenzene	105	9.764	9.764	0.000	94	458536	5.00	5.32	
99 4-Chlorotoluene	126	9.800	9.800	0.000	98	138235	5.00	5.42	
100 tert-Butylbenzene	119	10.095	10.095	0.000	91	362585	5.00	5.18	
102 1,2,4-Trimethylbenzene	105	10.143	10.143	0.000	96	477013	5.00	5.05	
103 sec-Butylbenzene	105	10.308	10.308	0.000	94	480582	5.00	5.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	10.426	10.426	0.000	97	267256	5.00	5.17	
105 4-Isopropyltoluene	119	10.450	10.450	0.000	96	423296	5.00	5.15	
106 1,4-Dichlorobenzene	146	10.509	10.509	0.000	94	277301	5.00	5.27	
109 n-Butylbenzene	91	10.852	10.852	0.000	98	342280	5.00	5.16	
110 1,2-Dichlorobenzene	146	10.876	10.876	0.000	97	270475	5.00	5.14	
111 1,2-Dibromo-3-Chloropropan	157	11.657	11.657	0.000	86	26723	5.00	5.07	
113 1,2,4-Trichlorobenzene	180	12.485	12.485	0.000	93	154166	5.00	4.84	
114 Hexachlorobutadiene	225	12.650	12.650	0.000	95	49562	5.00	4.69	
115 Naphthalene	128	12.733	12.733	0.000	100	420006	5.00	5.06	
116 1,2,3-Trichlorobenzene	180	12.981	12.981	0.000	96	150099	5.00	4.84	
S 128 1,2-Dichloroethene, Total	96				0			10.1	
S 129 1,3-Dichloropropene, Total	75				0			10.3	
S 130 Xylenes, Total	106				0		10.0	9.99	
S 131 Trihalomethanes, Total	1				0		20.0	20.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VMRPRIMW_00303	Amount Added:	4.00	Units: uL
VMRGAS_00263	Amount Added:	4.00	Units: uL
vm50ss_00337	Amount Added:	4.00	Units: uL
VMAROLISTDW_00267	Amount Added:	4.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL

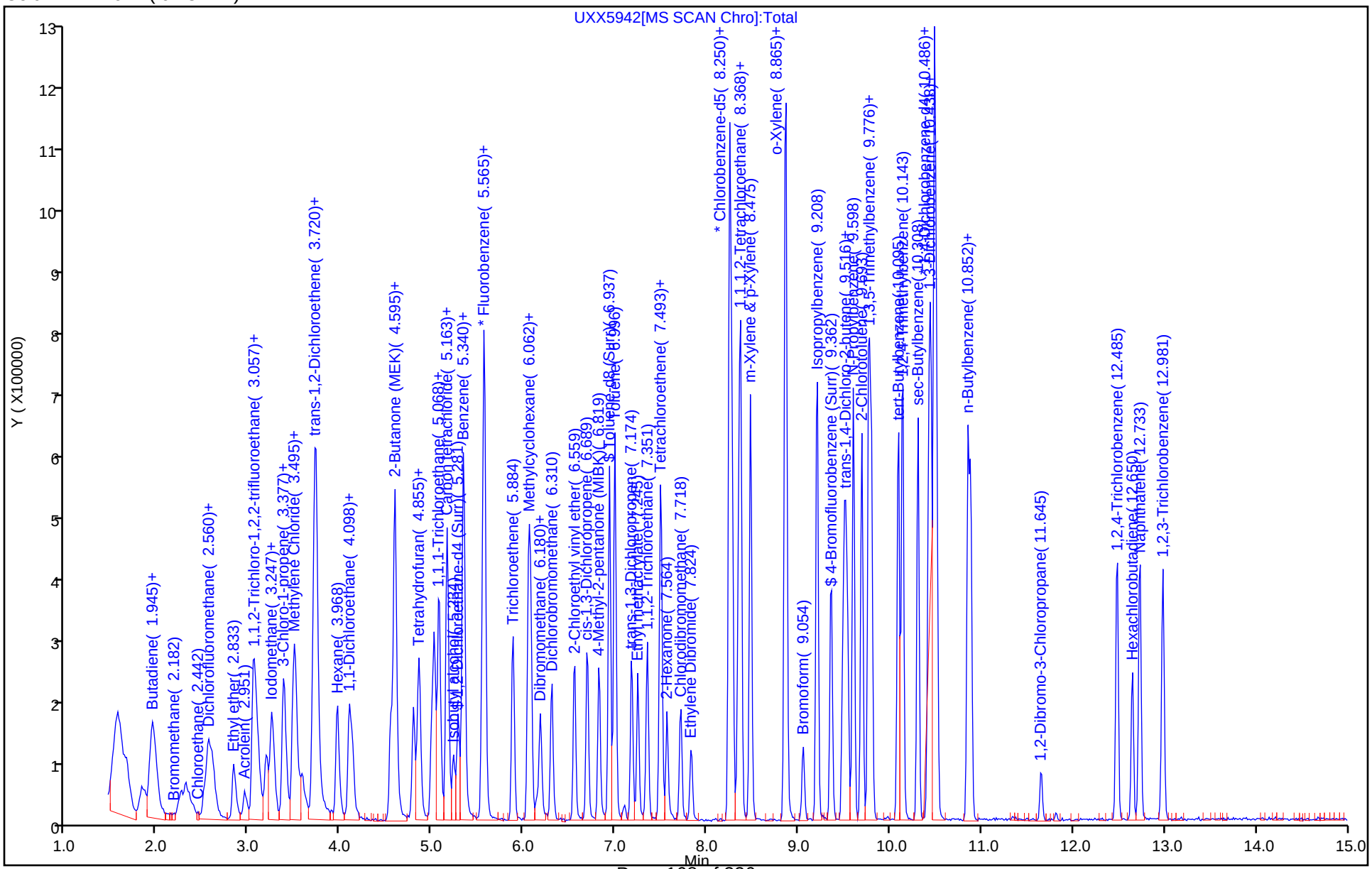
Report Date: 03-Oct-2018 12:29:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5942.D

Injection Date:	02-Oct-2018 16:42:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L4			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Canton

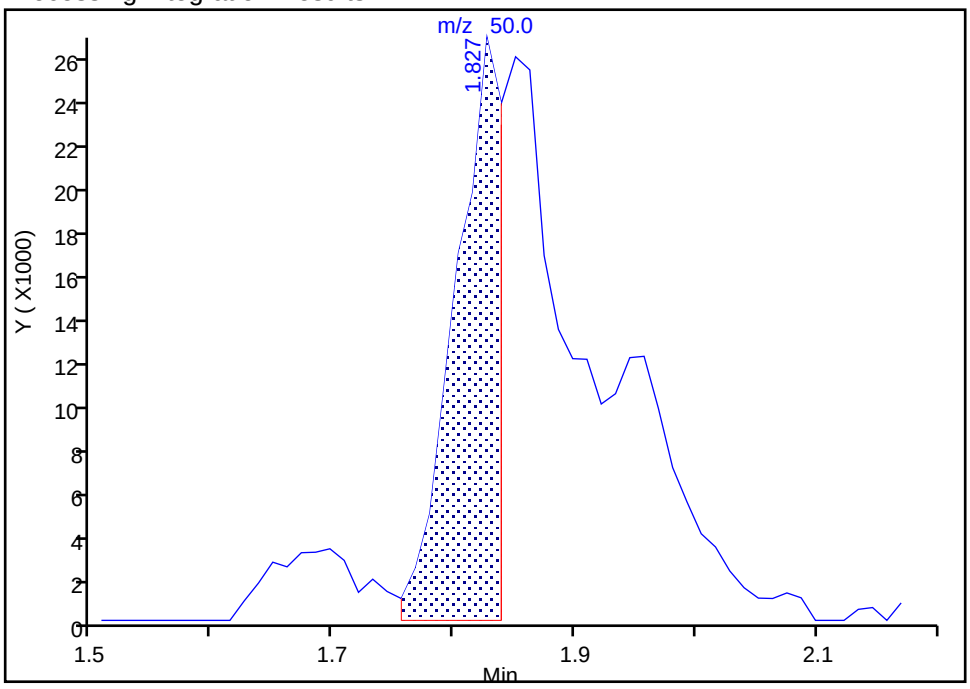
Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5942.D
Injection Date: 02-Oct-2018 16:42:30 Instrument ID: A3UX10
Lims ID: STD8260 L4
Client ID:
Operator ID: 001644 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

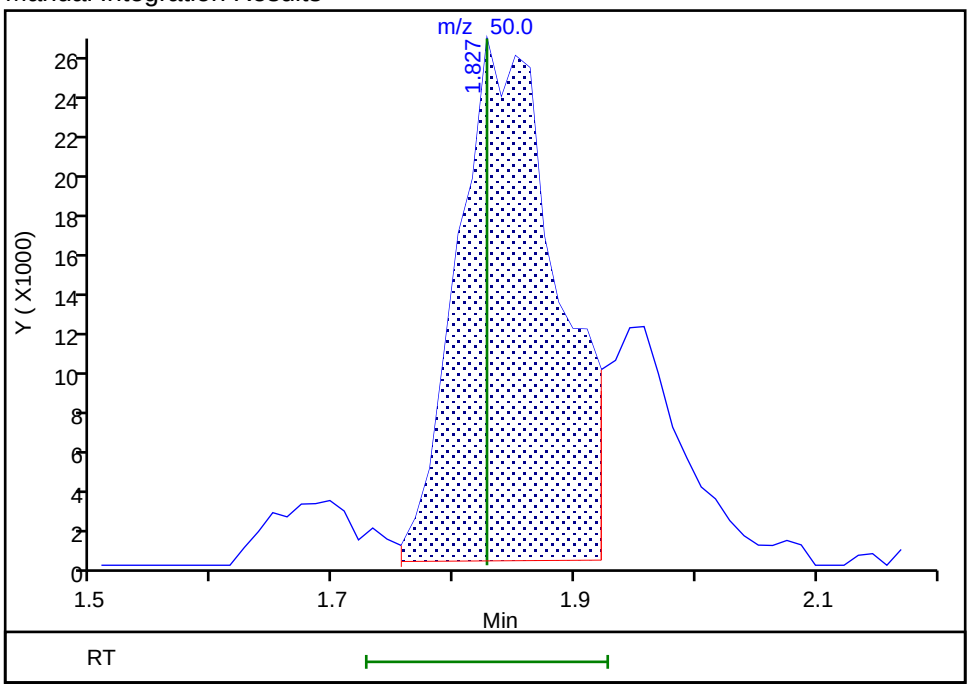
Processing Integration Results

RT: 1.83
Area: 75731
Amount: 3.043824
Amount Units: ug/l



Manual Integration Results

RT: 1.83
Area: 155540
Amount: 5.082526
Amount Units: ug/l



Reviewer: bosworthh, 03-Oct-2018 11:28:13
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Canton

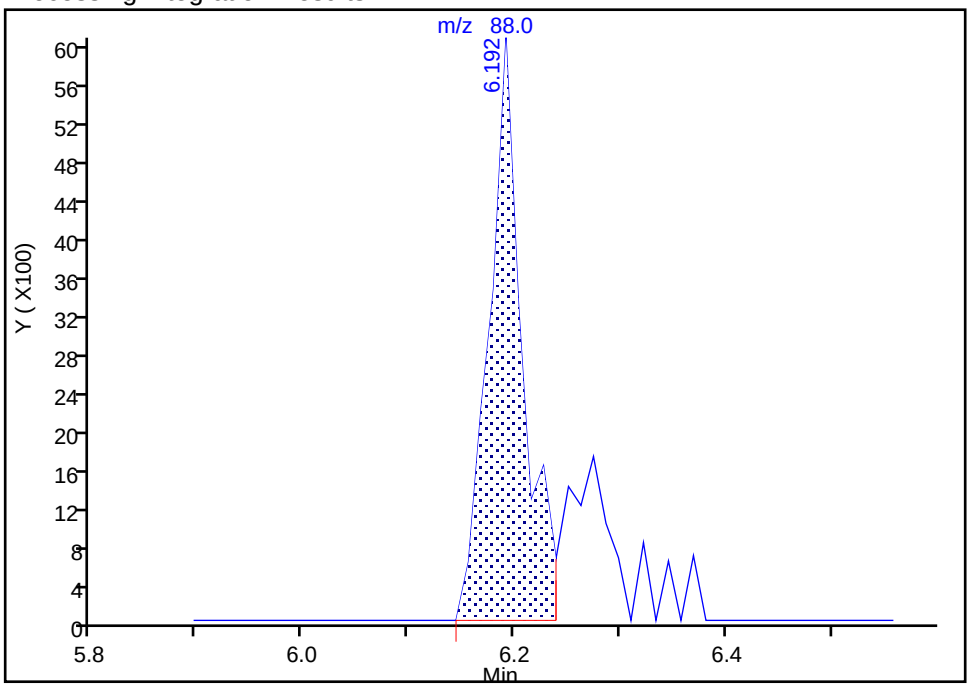
Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5942.D
Injection Date: 02-Oct-2018 16:42:30 Instrument ID: A3UX10
Lims ID: STD8260 L4
Client ID:
Operator ID: 001644 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

64 1,4-Dioxane, CAS: 123-91-1

Signal: 1

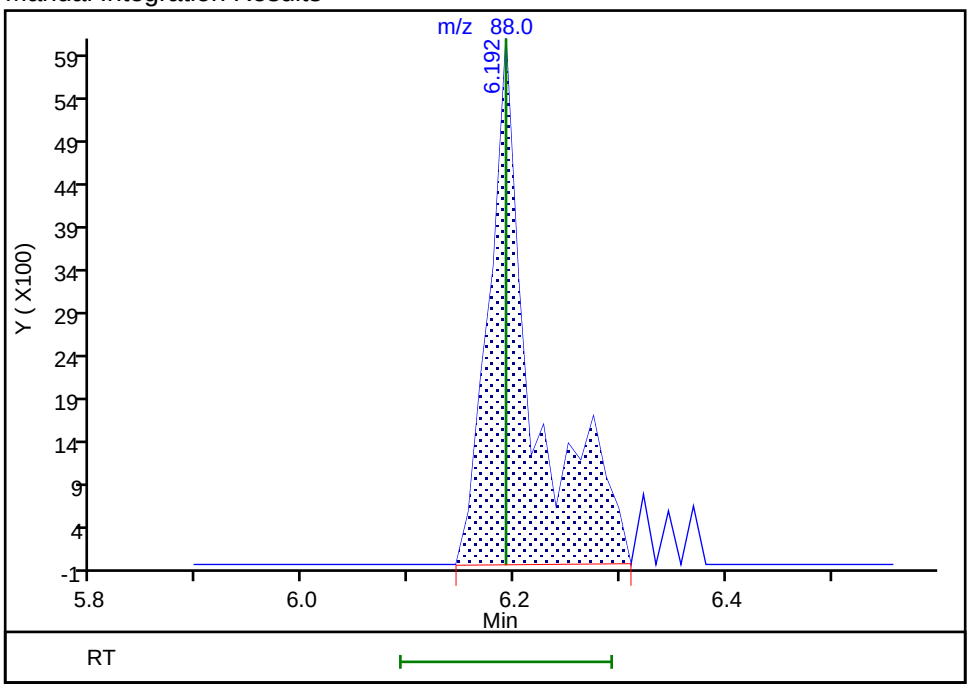
Processing Integration Results

RT: 6.19
Area: 13530
Amount: 66.398879
Amount Units: ug/l



Manual Integration Results

RT: 6.19
Area: 17749
Amount: 81.454515
Amount Units: ug/l



Reviewer: bosworthh, 03-Oct-2018 12:13:36
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5943.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Oct-2018 17:06:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-006
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:35 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: williamsla Date: 03-Oct-2018 11:32:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.564	5.565	-0.001	98	739562	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.249	8.250	-0.001	88	593448	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.484	10.486	-0.002	96	322649	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.996	4.997	-0.001	93	78811	4.00	4.06	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.280	5.281	-0.001	97	100639	4.00	4.05	
$ 6 Toluene-d8 (Surr)	98	6.936	6.937	-0.001	93	291793	4.00	3.89	
$ 7 4-Bromofluorobenzene (Surr	95	9.361	9.350	0.011	88	113207	4.00	3.97	
9 Dichlorodifluoromethane	85	1.672	1.662	0.010	97	96492	4.00	3.79	
10 Chloromethane	50	1.826	1.827	-0.001	97	106974	4.00	3.59	
12 Butadiene	54	1.944	1.945	-0.001	89	104330	4.00	3.73	
11 Vinyl chloride	62	1.944	1.957	-0.013	87	99749	4.00	3.76	
13 Bromomethane	94	2.264	2.265	-0.001	86	62698	4.00	4.00	
14 Chloroethane	64	2.323	2.348	-0.025	98	63869	4.00	4.11	
15 Dichlorofluoromethane	67	2.536	2.549	-0.013	96	149507	4.00	3.93	
16 Trichlorofluoromethane	101	2.583	2.584	-0.001	95	110955	4.00	3.75	
17 Ethyl ether	59	2.831	2.833	-0.002	90	69595	4.00	4.00	
18 Acrolein	56	2.961	2.951	0.010	98	57102	20.0	20.3	
19 1,1-Dichloroethene	96	3.044	3.045	-0.001	96	82722	4.00	3.89	
20 1,1,2-Trichloro-1,2,2-trif	151	3.080	3.069	0.011	75	60642	4.00	4.06	
21 Acetone	43	3.103	3.093	0.010	97	52366	8.00	8.51	
22 Iodomethane	142	3.186	3.187	-0.001	98	154849	4.00	4.00	
24 Carbon disulfide	76	3.245	3.247	-0.002	99	282734	4.00	3.95	
26 3-Chloro-1-propene	76	3.375	3.377	-0.002	87	61342	4.00	3.90	
27 Methyl acetate	43	3.387	3.400	-0.013	74	95048	8.00	8.01	
28 Methylene Chloride	84	3.482	3.483	-0.001	94	105307	4.00	4.04	
29 2-Methyl-2-propanol	59	3.588	3.578	0.010	98	90900	40.0	44.2	
31 Acrylonitrile	53	3.707	3.708	-0.001	99	294885	40.0	41.6	
30 trans-1,2-Dichloroethene	96	3.730	3.732	-0.002	67	95719	4.00	4.06	
32 Methyl tert-butyl ether	73	3.730	3.732	-0.002	97	275180	4.00	4.21	
33 Hexane	86	3.967	3.968	-0.001	90	16483	4.00	4.13	
34 1,1-Dichloroethane	63	4.097	4.098	-0.001	97	174733	4.00	4.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.132	4.134	-0.002	97	134694	4.00	4.04	
40 cis-1,2-Dichloroethene	96	4.594	4.595	-0.001	88	102678	4.00	4.15	
41 2-Butanone (MEK)	43	4.606	4.595	0.011	54	58774	8.00	8.59	
39 2,2-Dichloropropane	97	4.594	4.595	-0.001	89	26495	4.00	3.76	
45 Chlorobromomethane	128	4.795	4.796	-0.001	95	44433	4.00	4.02	
46 Tetrahydrofuran	42	4.842	4.843	-0.001	97	42256	8.00	8.57	
47 Chloroform	83	4.854	4.855	-0.001	96	147357	4.00	4.04	
48 1,1,1-Trichloroethane	97	5.020	5.021	-0.001	98	141477	4.00	3.97	
49 Cyclohexane	56	5.079	5.080	-0.001	91	159885	4.00	4.04	
51 Carbon tetrachloride	117	5.162	5.163	-0.001	96	112446	4.00	3.88	
50 1,1-Dichloropropene	75	5.162	5.163	-0.001	90	101794	4.00	3.95	
52 Isobutyl alcohol	41	5.233	5.234	-0.001	93	61586	100.0	113.6	
53 Benzene	78	5.339	5.340	-0.001	97	334335	4.00	3.94	
54 1,2-Dichloroethane	62	5.351	5.352	-0.001	96	121653	4.00	3.92	
56 n-Heptane	100	5.540	5.541	-0.001	91	12823	4.00	3.93	
58 Trichloroethene	130	5.883	5.884	-0.001	96	88143	4.00	4.17	
60 Methylcyclohexane	83	6.049	6.050	-0.001	95	118131	4.00	3.97	
61 1,2-Dichloropropane	63	6.072	6.074	-0.002	93	87035	4.00	3.95	
64 1,4-Dioxane	88	6.191	6.192	-0.001	41	14536	80.0	69.0	
63 Dibromomethane	93	6.179	6.180	-0.001	96	50177	4.00	4.02	
65 Dichlorobromomethane	83	6.309	6.310	-0.001	98	110220	4.00	3.99	
67 2-Chloroethyl vinyl ether	63	6.557	6.559	-0.002	93	93684	8.00	8.07	
68 cis-1,3-Dichloropropene	75	6.699	6.689	0.010	92	124749	4.00	4.07	
69 4-Methyl-2-pentanone (MIBK	43	6.818	6.819	-0.001	96	142818	8.00	8.40	
70 Toluene	91	6.995	6.996	-0.001	97	364924	4.00	4.03	
71 trans-1,3-Dichloropropene	75	7.184	7.174	0.010	95	106207	4.00	3.96	
72 Ethyl methacrylate	69	7.243	7.245	-0.002	87	89700	4.00	4.08	
73 1,1,2-Trichloroethane	97	7.350	7.351	-0.001	93	66256	4.00	3.94	
74 Tetrachloroethene	164	7.492	7.493	-0.001	94	61206	4.00	3.88	
75 1,3-Dichloropropane	76	7.504	7.505	-0.001	95	115086	4.00	3.99	
76 2-Hexanone	43	7.563	7.564	-0.001	94	97136	8.00	8.78	
78 Chlorodibromomethane	129	7.717	7.718	-0.001	90	77635	4.00	4.14	
80 Ethylene Dibromide	107	7.823	7.824	-0.001	100	64125	4.00	3.87	
82 Chlorobenzene	112	8.272	8.274	-0.002	93	235880	4.00	4.00	
83 1,1,1,2-Tetrachloroethane	131	8.343	8.345	-0.002	92	91323	4.00	4.10	
84 Ethylbenzene	106	8.367	8.368	-0.001	99	130454	4.00	3.96	
85 m-Xylene & p-Xylene	106	8.474	8.475	-0.001	99	156186	4.00	3.83	
86 o-Xylene	106	8.852	8.853	-0.001	94	165032	4.00	3.88	
87 Styrene	104	8.864	8.865	-0.001	90	252959	4.00	3.74	
88 Bromoform	173	9.053	9.054	-0.001	91	43222	4.00	3.75	
89 Isopropylbenzene	105	9.207	9.208	-0.001	96	406092	4.00	3.92	
92 1,1,2,2-Tetrachloroethane	83	9.479	9.480	-0.001	95	92437	4.00	4.24	
93 Bromobenzene	156	9.514	9.516	-0.002	95	101075	4.00	4.08	
94 1,2,3-Trichloropropane	110	9.538	9.539	-0.001	84	29093	4.00	4.25	
95 trans-1,4-Dichloro-2-buten	53	9.538	9.539	-0.001	68	20531	4.00	4.66	
96 N-Propylbenzene	120	9.597	9.598	-0.001	99	104182	4.00	4.05	
97 2-Chlorotoluene	126	9.692	9.693	-0.001	96	97963	4.00	4.05	
98 1,3,5-Trimethylbenzene	105	9.763	9.764	-0.001	94	334679	4.00	4.12	
99 4-Chlorotoluene	126	9.798	9.800	-0.002	98	95669	4.00	3.98	
100 tert-Butylbenzene	119	10.094	10.095	-0.001	92	255822	4.00	3.88	
102 1,2,4-Trimethylbenzene	105	10.141	10.143	-0.002	96	365703	4.00	4.10	
103 sec-Butylbenzene	105	10.307	10.308	-0.001	94	352509	4.00	3.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	10.425	10.426	-0.001	97	195901	4.00	4.02	
105 4-Isopropyltoluene	119	10.449	10.450	-0.001	97	318550	4.00	4.11	
106 1,4-Dichlorobenzene	146	10.508	10.509	-0.001	94	197818	4.00	3.99	
109 n-Butylbenzene	91	10.851	10.852	-0.001	98	254281	4.00	4.06	
110 1,2-Dichlorobenzene	146	10.875	10.876	-0.001	97	206076	4.00	4.16	
111 1,2-Dibromo-3-Chloropropan	157	11.655	11.657	-0.002	78	22093	4.00	4.45	
113 1,2,4-Trichlorobenzene	180	12.483	12.485	-0.002	94	117135	4.00	3.90	
114 Hexachlorobutadiene	225	12.649	12.650	-0.001	95	38345	4.00	3.79	
115 Naphthalene	128	12.732	12.733	-0.001	100	334226	4.00	4.27	
116 1,2,3-Trichlorobenzene	180	12.980	12.981	-0.001	95	121014	4.00	4.13	
S 128 1,2-Dichloroethene, Total	96				0			8.20	
S 129 1,3-Dichloropropene, Total	75				0			8.04	
S 130 Xylenes, Total	106				0		8.00	7.71	
S 131 Trihalomethanes, Total	1				0		16.0	15.9	

Reagents:

VMRPRIMW_00303	Amount Added:	3.20	Units: uL
VMRGAS_00263	Amount Added:	3.20	Units: uL
vm50ss_00337	Amount Added:	3.20	Units: uL
VMAROLISTDW_00267	Amount Added:	3.20	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL

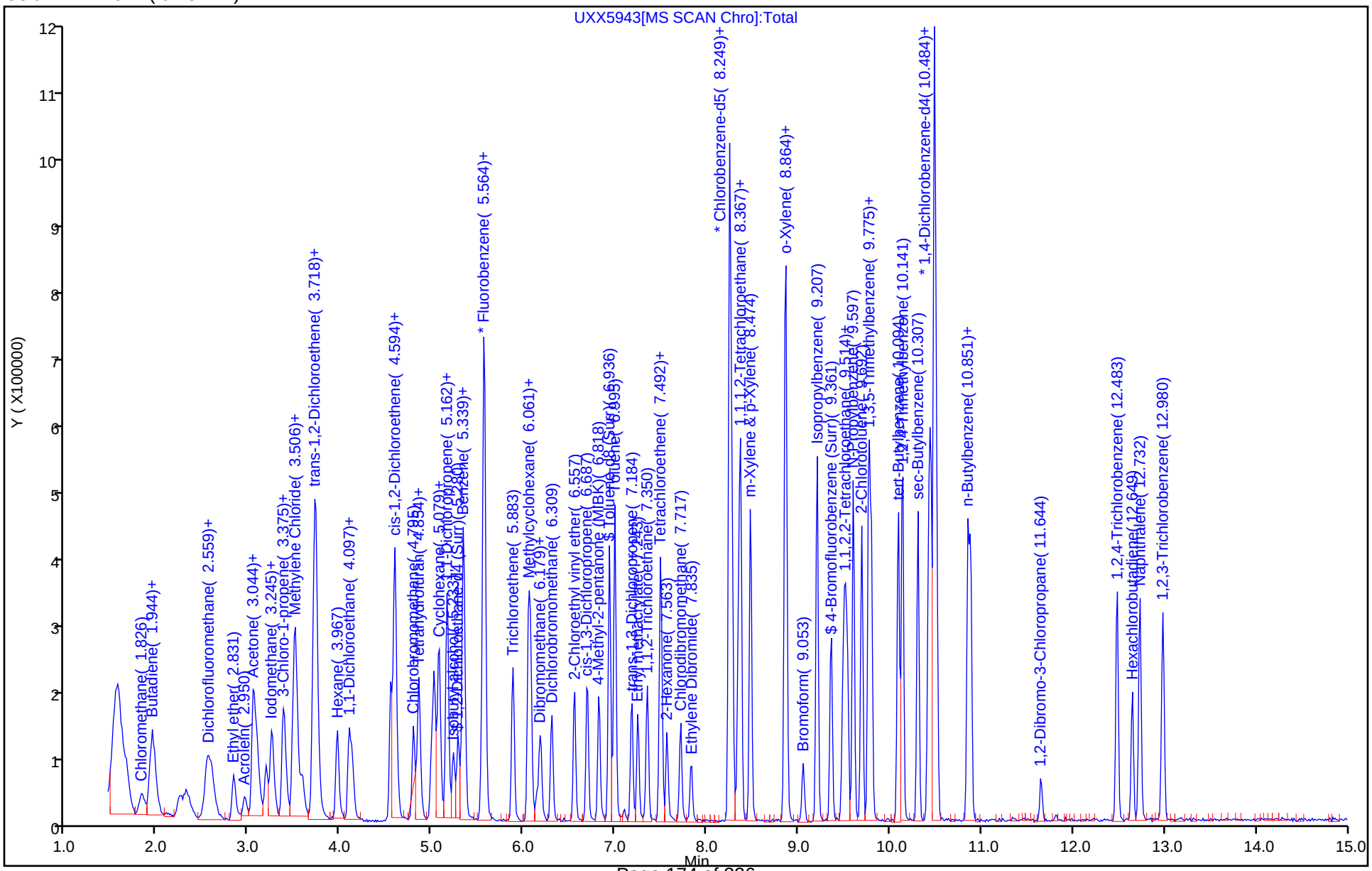
Report Date: 03-Oct-2018 12:29:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5943.D

Injection Date:	02-Oct-2018 17:06:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L3			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5944.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Oct-2018 17:31:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-007
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:44 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.564	5.565	-0.001	98	710597	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.249	8.250	-0.001	88	538446	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.485	10.486	-0.001	96	298355	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.997	4.997	0.000	91	36825	2.00	1.97	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.281	5.281	0.000	96	50442	2.00	2.11	
$ 6 Toluene-d8 (Surr)	98	6.937	6.937	-0.001	95	145690	2.00	2.14	
$ 7 4-Bromofluorobenzene (Surr	95	9.361	9.350	0.011	90	50696	2.00	1.96	
9 Dichlorodifluoromethane	85	1.685	1.662	0.023	66	49306	2.00	2.02	
10 Chloromethane	50	1.827	1.827	0.000	98	59028	2.00	2.06	
12 Butadiene	54	1.957	1.945	0.012	88	53656	2.00	2.00	
11 Vinyl chloride	62	1.945	1.957	-0.012	87	49059	2.00	1.92	
13 Bromomethane	94	2.264	2.265	-0.001	72	27208	2.00	1.80	
14 Chloroethane	64	2.335	2.348	-0.013	97	31062	2.00	2.26	
15 Dichlorofluoromethane	67	2.524	2.549	-0.025	97	65618	2.00	1.80	
16 Trichlorofluoromethane	101	2.572	2.584	-0.012	95	53671	2.00	1.89	
17 Ethyl ether	59	2.832	2.833	-0.001	91	34347	2.00	2.06	
18 Acrolein	56	2.950	2.951	-0.001	93	29169	10.0	10.8	
19 1,1-Dichloroethene	96	3.045	3.045	0.000	94	39664	2.00	1.94	
20 1,1,2-Trichloro-1,2,2-trif	151	3.057	3.069	-0.012	75	29262	2.00	2.12	
21 Acetone	43	3.104	3.093	0.011	96	27438	4.00	3.47	
22 Iodomethane	142	3.187	3.187	0.000	97	72419	2.00	1.95	
24 Carbon disulfide	76	3.246	3.247	-0.001	100	133722	2.00	1.95	
26 3-Chloro-1-propene	76	3.376	3.377	-0.001	88	29228	2.00	1.93	
27 Methyl acetate	43	3.388	3.400	-0.012	59	45042	4.00	3.95	
28 Methylene Chloride	84	3.483	3.483	0.000	95	52083	2.00	2.08	
29 2-Methyl-2-propanol	59	3.577	3.578	-0.001	99	42479	20.0	21.5	
31 Acrylonitrile	53	3.707	3.708	-0.001	99	133123	20.0	19.6	
32 Methyl tert-butyl ether	73	3.731	3.732	-0.001	97	122456	2.00	1.95	
30 trans-1,2-Dichloroethene	96	3.719	3.732	-0.013	68	43043	2.00	1.90	
33 Hexane	86	3.956	3.968	-0.012	87	7303	2.00	1.90	
34 1,1-Dichloroethane	63	4.098	4.098	0.000	97	76059	2.00	1.88	
35 Vinyl acetate	43	4.133	4.134	-0.001	97	65528	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	4.594	4.595	-0.001	45	29788	4.00	4.53	
40 cis-1,2-Dichloroethene	96	4.594	4.595	-0.001	88	47089	2.00	1.98	
39 2,2-Dichloropropane	97	4.594	4.595	-0.001	64	13262	2.00	1.96	
45 Chlorobromomethane	128	4.796	4.796	0.000	95	19102	2.00	1.80	
46 Tetrahydrofuran	42	4.831	4.843	-0.012	80	19381	4.00	4.09	
47 Chloroform	83	4.855	4.855	0.000	97	68417	2.00	1.95	
48 1,1,1-Trichloroethane	97	5.020	5.021	-0.001	96	66817	2.00	1.95	
49 Cyclohexane	56	5.068	5.080	-0.012	92	72096	2.00	1.89	
50 1,1-Dichloropropene	75	5.162	5.163	-0.001	90	47265	2.00	1.91	
51 Carbon tetrachloride	117	5.162	5.163	-0.001	92	50727	2.00	1.82	
52 Isobutyl alcohol	41	5.245	5.234	0.011	89	25786	50.0	52.4	
53 Benzene	78	5.340	5.340	0.000	97	163180	2.00	2.00	
54 1,2-Dichloroethane	62	5.351	5.352	-0.001	96	59820	2.00	2.01	
56 n-Heptane	100	5.541	5.541	0.000	78	5603	2.00	1.79	
58 Trichloroethene	130	5.884	5.884	0.000	91	37793	2.00	1.86	
60 Methylcyclohexane	83	6.049	6.050	-0.001	93	56155	2.00	1.96	
61 1,2-Dichloropropane	63	6.073	6.074	-0.001	93	41474	2.00	1.96	
63 Dibromomethane	93	6.179	6.180	-0.001	91	24453	2.00	2.04	
64 1,4-Dioxane	88	6.191	6.192	-0.001	40	9548	40.0	48.6	
65 Dichlorobromomethane	83	6.310	6.310	0.000	97	52845	2.00	1.99	
67 2-Chloroethyl vinyl ether	63	6.558	6.559	-0.001	92	43002	4.00	3.86	
68 cis-1,3-Dichloropropene	75	6.688	6.689	-0.001	92	55884	2.00	1.90	
69 4-Methyl-2-pentanone (MIBK	43	6.818	6.819	-0.001	96	64321	4.00	3.94	
70 Toluene	91	6.996	6.996	0.000	98	163738	2.00	1.99	
71 trans-1,3-Dichloropropene	75	7.185	7.174	0.011	94	45894	2.00	1.89	
72 Ethyl methacrylate	69	7.244	7.245	-0.001	90	38450	2.00	1.93	
73 1,1,2-Trichloroethane	97	7.351	7.351	-0.001	93	31150	2.00	2.04	
74 Tetrachloroethene	164	7.492	7.493	-0.001	95	30127	2.00	2.11	
75 1,3-Dichloropropane	76	7.504	7.505	-0.001	91	50296	2.00	1.92	
76 2-Hexanone	43	7.563	7.564	-0.001	93	41590	4.00	4.14	
78 Chlorodibromomethane	129	7.717	7.718	-0.001	92	31514	2.00	1.85	
80 Ethylene Dibromide	107	7.824	7.824	0.000	99	28905	2.00	1.92	
82 Chlorobenzene	112	8.273	8.274	-0.001	94	109713	2.00	2.05	
83 1,1,1,2-Tetrachloroethane	131	8.344	8.345	-0.001	92	40039	2.00	1.98	
84 Ethylbenzene	106	8.368	8.368	0.000	99	56525	2.00	1.89	
85 m-Xylene & p-Xylene	106	8.474	8.475	-0.001	97	73996	2.00	2.00	
86 o-Xylene	106	8.853	8.853	0.000	96	77759	2.00	2.02	
87 Styrene	104	8.865	8.865	0.000	92	119516	2.00	1.95	
88 Bromoform	173	9.054	9.054	0.000	94	20327	2.00	1.95	
89 Isopropylbenzene	105	9.208	9.208	0.000	95	180416	2.00	1.92	
92 1,1,2,2-Tetrachloroethane	83	9.480	9.480	0.000	95	40471	2.00	2.01	
93 Bromobenzene	156	9.515	9.516	-0.001	97	47356	2.00	2.07	
94 1,2,3-Trichloropropane	110	9.539	9.539	0.000	86	13937	2.00	2.20	
95 trans-1,4-Dichloro-2-buten	53	9.539	9.539	0.000	66	8994	2.00	2.22	
96 N-Propylbenzene	120	9.598	9.598	0.000	99	47561	2.00	2.00	
97 2-Chlorotoluene	126	9.693	9.693	0.000	95	40464	2.00	1.81	
98 1,3,5-Trimethylbenzene	105	9.764	9.764	0.000	95	144751	2.00	1.93	
99 4-Chlorotoluene	126	9.799	9.800	-0.001	97	44716	2.00	2.01	
100 tert-Butylbenzene	119	10.095	10.095	0.000	92	127089	2.00	2.08	
102 1,2,4-Trimethylbenzene	105	10.142	10.143	-0.001	96	163283	2.00	1.98	
103 sec-Butylbenzene	105	10.308	10.308	0.000	94	164294	2.00	1.99	
104 1,3-Dichlorobenzene	146	10.426	10.426	0.000	99	89865	2.00	1.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 4-Isopropyltoluene	119	10.450	10.450	0.000	96	136832	2.00	1.91	
106 1,4-Dichlorobenzene	146	10.509	10.509	0.000	93	91925	2.00	2.00	
109 n-Butylbenzene	91	10.852	10.852	0.000	98	117911	2.00	2.04	
110 1,2-Dichlorobenzene	146	10.887	10.876	0.011	96	93064	2.00	2.03	
111 1,2-Dibromo-3-Chloropropan	157	11.656	11.657	-0.001	84	9748	2.00	2.12	
113 1,2,4-Trichlorobenzene	180	12.484	12.485	-0.001	92	60286	2.00	2.17	
114 Hexachlorobutadiene	225	12.650	12.650	0.000	89	17916	2.00	1.77	
115 Naphthalene	128	12.732	12.733	-0.001	98	148471	2.00	2.05	
116 1,2,3-Trichlorobenzene	180	12.981	12.981	0.000	94	58942	2.00	2.18	
S 128 1,2-Dichloroethene, Total	96				0			3.88	
S 129 1,3-Dichloropropene, Total	75				0			3.79	
S 130 Xylenes, Total	106				0		4.00	4.02	
S 131 Trihalomethanes, Total	1				0		8.00	7.74	

Reagents:

VMRPRIMW_00303	Amount Added:	1.60	Units: uL
VMRGAS_00263	Amount Added:	1.60	Units: uL
vm50ss_00337	Amount Added:	1.60	Units: uL
VMAROLISTDW_00267	Amount Added:	1.60	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL

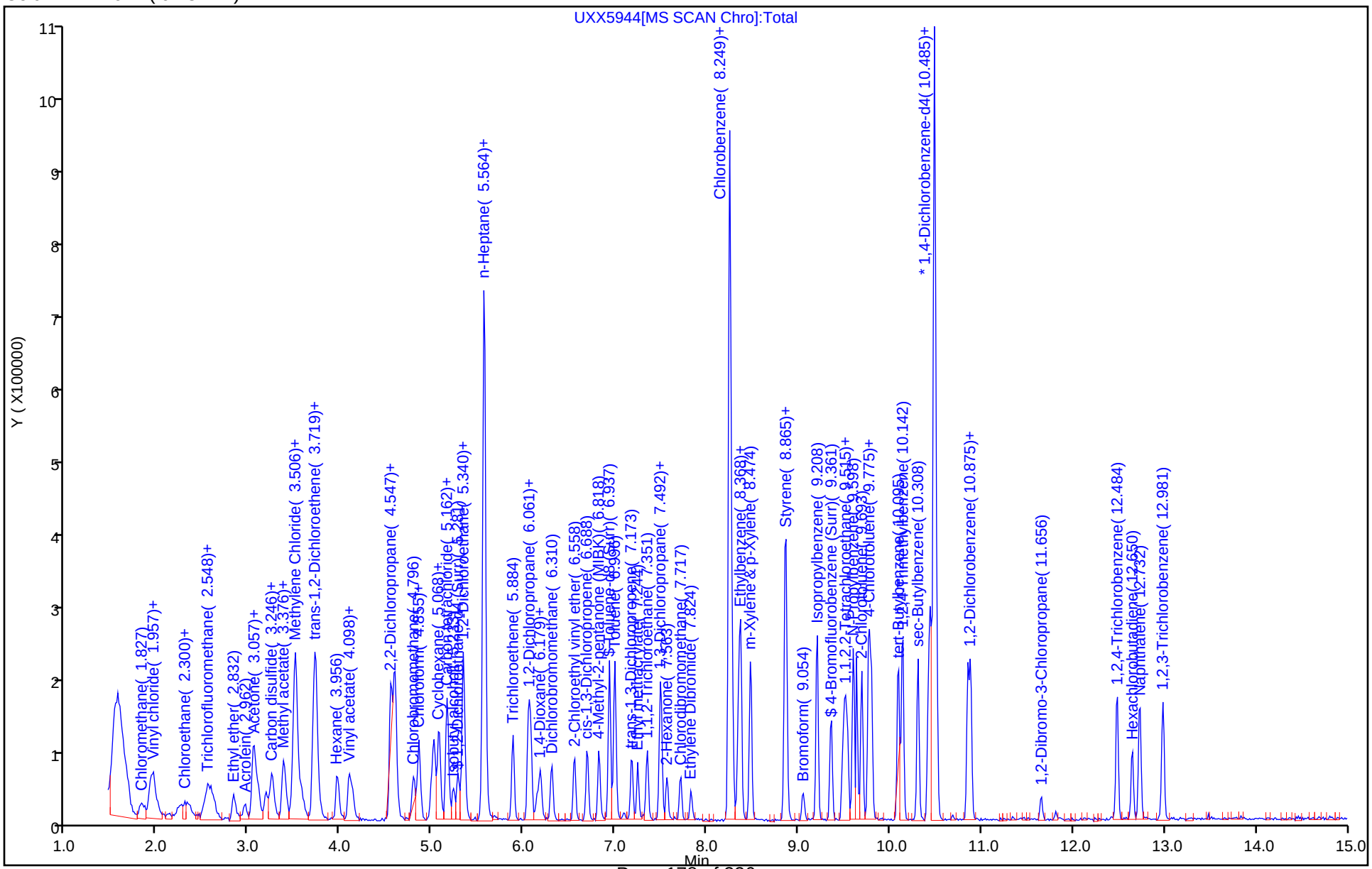
Report Date: 03-Oct-2018 12:29:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5944.D

Injection Date:	02-Oct-2018 17:31:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L2			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5945.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Oct-2018 17:56:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-008
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:52 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bosworthh Date: 03-Oct-2018 11:29:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.576	5.565	0.011	99	745248	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.249	8.250	-0.001	88	578008	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.485	10.486	-0.001	96	320147	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.996	4.997	-0.001	90	19470	1.00	0.99	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.280	5.281	-0.001	96	27137	1.00	1.08	
$ 6 Toluene-d8 (Surr)	98	6.936	6.937	-0.001	93	74395	1.00	1.02	
$ 7 4-Bromofluorobenzene (Surr	95	9.361	9.350	0.011	92	26936	1.00	0.9694	
9 Dichlorodifluoromethane	85	1.685	1.662	0.022	86	29702	1.00	1.16	
10 Chloromethane	50	1.862	1.827	0.035	94	35559	1.00	1.18	M
12 Butadiene	54	1.957	1.945	0.012	81	28939	1.00	1.03	
11 Vinyl chloride	62	1.945	1.957	-0.012	93	30003	1.00	1.12	
13 Bromomethane	94	2.264	2.265	-0.001	90	17909	1.00	1.13	
14 Chloroethane	64	2.359	2.348	0.011	13	8326	1.00	0.8460	
15 Dichlorofluoromethane	67	2.548	2.549	-0.001	92	40997	1.00	1.07	
16 Trichlorofluoromethane	101	2.572	2.584	-0.012	89	34895	1.00	1.17	
17 Ethyl ether	59	2.832	2.833	-0.001	89	19083	1.00	1.09	
18 Acrolein	56	2.974	2.951	0.023	94	15013	5.00	5.29	
19 1,1-Dichloroethene	96	3.057	3.045	0.012	97	25681	1.00	1.20	
20 1,1,2-Trichloro-1,2,2-trif	151	3.080	3.069	0.011	56	9855	1.00	0.7843	
21 Acetone	43	3.104	3.093	0.011	100	21800	2.00	2.01	
22 Iodomethane	142	3.187	3.187	0.000	98	40446	1.00	1.04	
24 Carbon disulfide	76	3.258	3.247	0.011	98	75471	1.00	1.05	
26 3-Chloro-1-propene	76	3.376	3.377	-0.001	85	17566	1.00	1.11	
27 Methyl acetate	43	3.388	3.400	-0.012	70	29045	2.00	2.43	
28 Methylene Chloride	84	3.482	3.483	-0.001	95	29904	1.00	1.14	
29 2-Methyl-2-propanol	59	3.589	3.578	0.011	96	22408	10.0	10.8	
31 Acrylonitrile	53	3.707	3.708	-0.001	99	72831	10.0	10.2	
30 trans-1,2-Dichloroethene	96	3.731	3.732	-0.001	70	24954	1.00	1.05	
32 Methyl tert-butyl ether	73	3.731	3.732	-0.001	99	66819	1.00	1.01	
33 Hexane	86	3.956	3.968	-0.012	90	4752	1.00	1.18	
34 1,1-Dichloroethane	63	4.098	4.098	0.000	96	44813	1.00	1.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.133	4.134	-0.001	97	34661	1.00	1.03	
40 cis-1,2-Dichloroethene	96	4.594	4.595	-0.001	88	25292	1.00	1.01	
41 2-Butanone (MEK)	43	4.594	4.595	-0.001	48	14745	2.00	2.14	
39 2,2-Dichloropropane	97	4.594	4.595	-0.001	76	8364	1.00	1.18	
45 Chlorobromomethane	128	4.795	4.796	-0.001	94	12372	1.00	1.11	
46 Tetrahydrofuran	42	4.843	4.843	0.000	45	12349	2.00	2.49	
47 Chloroform	83	4.855	4.855	0.000	92	39440	1.00	1.07	
48 1,1,1-Trichloroethane	97	5.020	5.021	-0.001	97	39579	1.00	1.10	
49 Cyclohexane	56	5.067	5.080	-0.013	90	40517	1.00	1.02	
51 Carbon tetrachloride	117	5.162	5.163	-0.001	94	31891	1.00	1.09	
50 1,1-Dichloropropene	75	5.162	5.163	-0.001	87	28707	1.00	1.11	
52 Isobutyl alcohol	41	5.233	5.234	-0.001	94	15567	25.0	29.5	
53 Benzene	78	5.340	5.340	0.000	96	93899	1.00	1.10	
54 1,2-Dichloroethane	62	5.351	5.352	-0.001	63	36495	1.00	1.17	
56 n-Heptane	100	5.541	5.541	0.000	59	3680	1.00	1.12	
58 Trichloroethene	130	5.884	5.884	0.000	93	23518	1.00	1.10	
60 Methylcyclohexane	83	6.049	6.050	-0.001	89	30311	1.00	1.01	
61 1,2-Dichloropropane	63	6.073	6.074	-0.001	91	23541	1.00	1.06	
63 Dibromomethane	93	6.179	6.180	-0.001	89	14524	1.00	1.15	
64 1,4-Dioxane	88	6.179	6.192	-0.013	44	3984	20.0	22.5	
65 Dichlorobromomethane	83	6.309	6.310	-0.001	96	29398	1.00	1.06	
67 2-Chloroethyl vinyl ether	63	6.558	6.559	-0.001	92	24294	2.00	2.08	
68 cis-1,3-Dichloropropene	75	6.688	6.689	-0.001	90	32036	1.00	1.04	
69 4-Methyl-2-pentanone (MIBK	43	6.818	6.819	-0.001	94	36693	2.00	2.14	
70 Toluene	91	6.996	6.996	0.000	98	94411	1.00	1.07	
71 trans-1,3-Dichloropropene	75	7.185	7.174	0.011	96	27810	1.00	1.07	
72 Ethyl methacrylate	69	7.244	7.245	-0.001	89	22235	1.00	1.04	
73 1,1,2-Trichloroethane	97	7.350	7.351	-0.001	82	18441	1.00	1.13	
74 Tetrachloroethene	164	7.492	7.493	-0.001	93	15669	1.00	1.02	
75 1,3-Dichloropropane	76	7.504	7.505	-0.001	92	33102	1.00	1.18	
76 2-Hexanone	43	7.563	7.564	-0.001	96	23174	2.00	2.15	
78 Chlorodibromomethane	129	7.717	7.718	-0.001	92	17431	1.00	0.9538	
80 Ethylene Dibromide	107	7.824	7.824	0.000	97	17360	1.00	1.08	
82 Chlorobenzene	112	8.273	8.274	-0.001	93	60368	1.00	1.05	
83 1,1,1,2-Tetrachloroethane	131	8.344	8.345	-0.001	89	23016	1.00	1.06	
84 Ethylbenzene	106	8.368	8.368	0.000	98	35195	1.00	1.10	
85 m-Xylene & p-Xylene	106	8.474	8.475	-0.001	99	43604	1.00	1.10	
86 o-Xylene	106	8.853	8.853	0.000	94	43905	1.00	1.06	
87 Styrene	104	8.864	8.865	-0.001	94	68125	1.00	1.03	
88 Bromoform	173	9.054	9.054	0.000	93	10359	1.00	0.9235	
89 Isopropylbenzene	105	9.207	9.208	-0.001	96	105750	1.00	1.05	
92 1,1,2,2-Tetrachloroethane	83	9.491	9.480	0.011	97	22805	1.00	1.05	
93 Bromobenzene	156	9.515	9.516	-0.001	97	24293	1.00	0.9885	
95 trans-1,4-Dichloro-2-buten	53	9.539	9.539	0.000	66	3110	1.00	0.7319	
94 1,2,3-Trichloropropane	110	9.539	9.539	0.000	83	7073	1.00	1.04	
96 N-Propylbenzene	120	9.598	9.598	0.000	99	25253	1.00	0.9884	
97 2-Chlorotoluene	126	9.692	9.693	-0.001	96	27274	1.00	1.14	
98 1,3,5-Trimethylbenzene	105	9.763	9.764	-0.001	95	79157	1.00	0.9812	
99 4-Chlorotoluene	126	9.799	9.800	-0.001	98	23929	1.00	1.00	
100 tert-Butylbenzene	119	10.095	10.095	0.000	92	69898	1.00	1.07	
102 1,2,4-Trimethylbenzene	105	10.142	10.143	-0.001	94	96634	1.00	1.09	
103 sec-Butylbenzene	105	10.308	10.308	0.000	95	91722	1.00	1.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	10.426	10.426	0.000	98	52492	1.00	1.09	
105 4-Isopropyltoluene	119	10.449	10.450	-0.001	96	78874	1.00	1.03	
106 1,4-Dichlorobenzene	146	10.509	10.509	0.000	90	51185	1.00	1.04	
109 n-Butylbenzene	91	10.852	10.852	0.000	95	62879	1.00	1.01	
110 1,2-Dichlorobenzene	146	10.887	10.876	0.011	94	49830	1.00	1.01	
111 1,2-Dibromo-3-Chloropropan	157	11.656	11.657	-0.001	82	5380	1.00	1.09	
113 1,2,4-Trichlorobenzene	180	12.484	12.485	-0.001	94	33912	1.00	1.14	
114 Hexachlorobutadiene	225	12.650	12.650	0.000	88	13186	1.00	1.13	
115 Naphthalene	128	12.732	12.733	-0.001	99	84851	1.00	1.09	
116 1,2,3-Trichlorobenzene	180	12.981	12.981	0.000	91	34169	1.00	1.18	
S 128 1,2-Dichloroethene, Total	96				0			2.06	
S 129 1,3-Dichloropropene, Total	75				0			2.10	
S 130 Xylenes, Total	106				0		2.00	2.16	
S 131 Trihalomethanes, Total	1				0		4.00	4.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VMRPRIMW_00303	Amount Added:	0.80	Units: uL
VMAROLISTDW_00267	Amount Added:	0.80	Units: uL
VMRGAS_00263	Amount Added:	0.80	Units: uL
vm50ss_00337	Amount Added:	0.80	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL

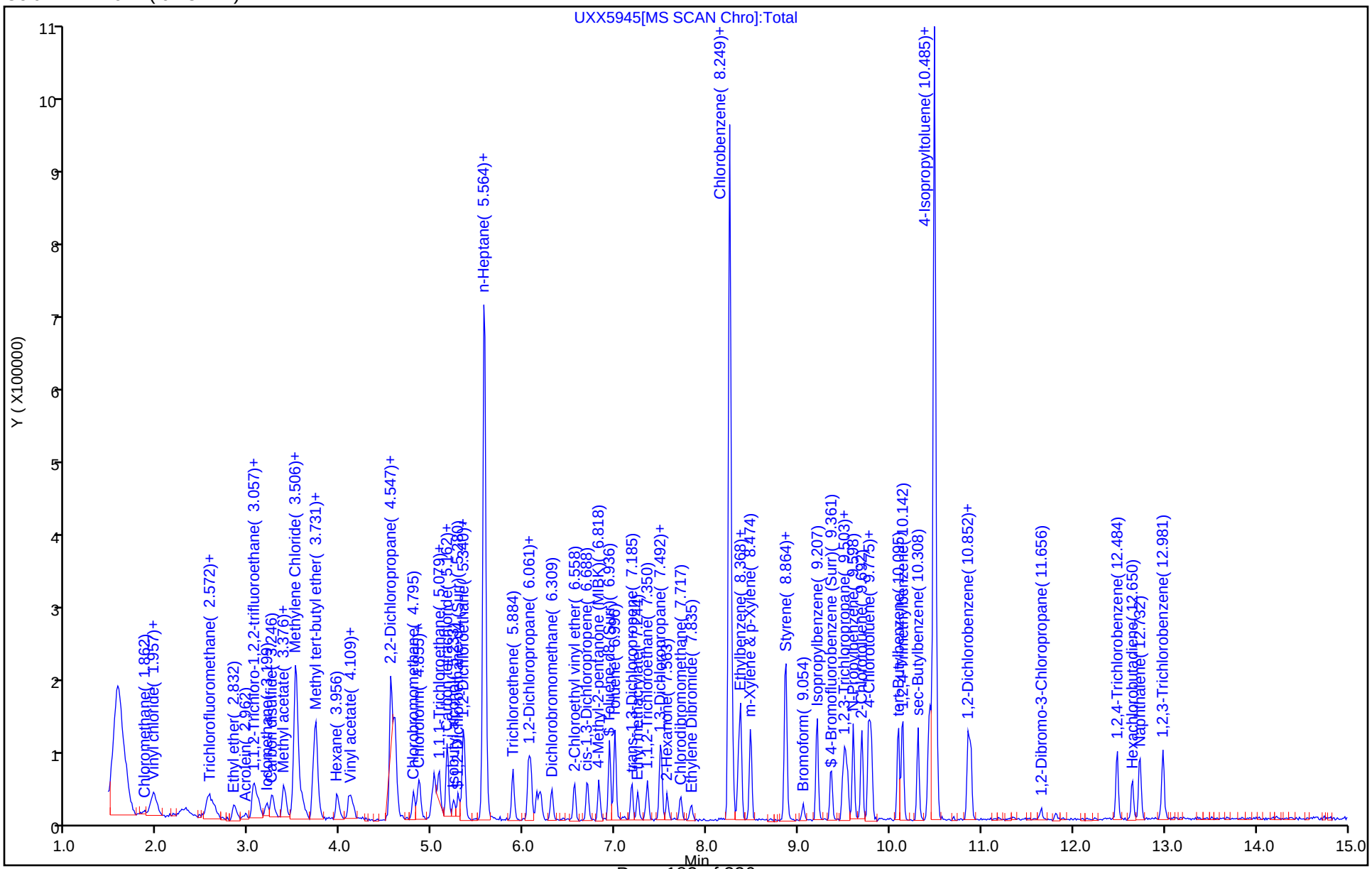
Report Date: 03-Oct-2018 12:29:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5945.D

Injection Date:	02-Oct-2018 17:56:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L1			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Canton

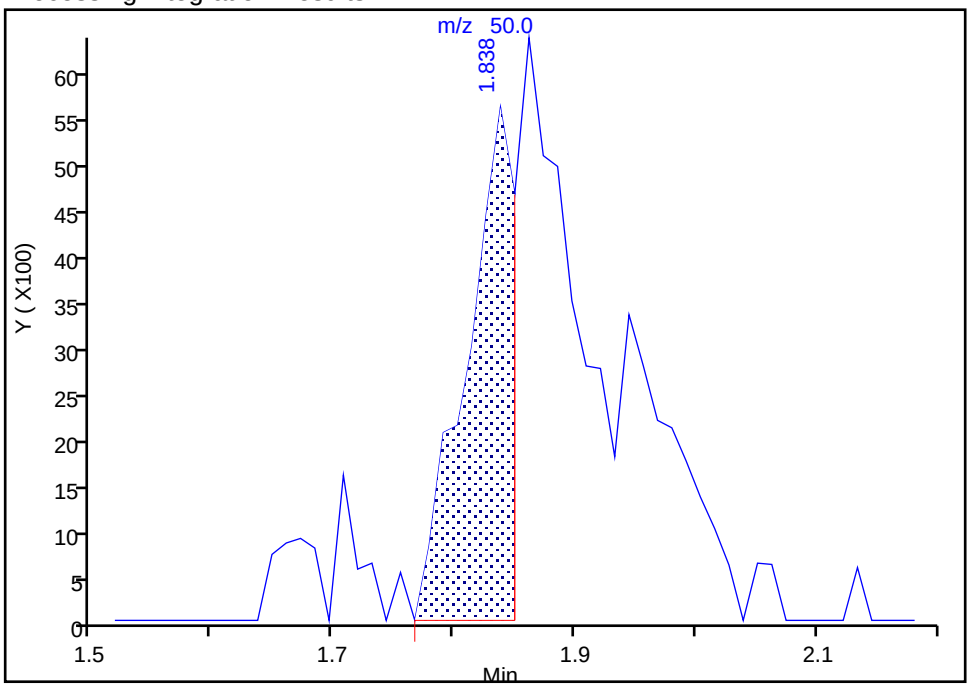
Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5945.D
Injection Date: 02-Oct-2018 17:56:30 Instrument ID: A3UX10
Lims ID: STD8260 L1
Client ID:
Operator ID: 001644 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

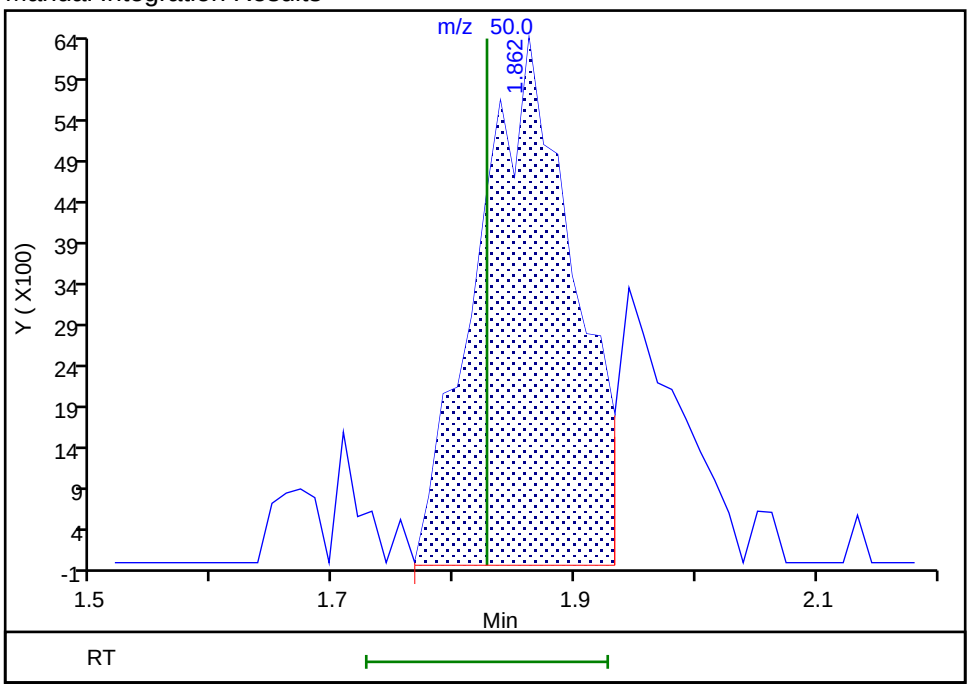
Processing Integration Results

RT: 1.84
Area: 16014
Amount: 0.665907
Amount Units: ug/l



Manual Integration Results

RT: 1.86
Area: 35559
Amount: 1.184025
Amount Units: ug/l



Reviewer: bosworthh, 03-Oct-2018 11:29:28
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-342615/7	UXC4608.D
Level 2	STD8260 240-342615/6	UXC4607.D
Level 3	STD8260 240-342615/5	UXC4606.D
Level 4	STD8260 240-342615/4	UXC4605.D
Level 5	STD8260 240-342615/3	UXC4604.D
Level 6	STD8260 240-342615/2	UXC4603.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3700 0.3351	0.3445	0.3777	0.3534	0.3586	Ave		0.3565				4.4		15.0			
Chloromethane	0.3603 0.3037	0.3336	0.3594	0.3337	0.3433	Ave		0.3390			0.1000	6.2		15.0			
Vinyl chloride	0.3948 0.3237	0.3540	0.3667	0.3520	0.3355	Ave		0.3545				7.0		15.0			
Butadiene	0.4802 0.3676	0.4306	0.4594	0.4060	0.4001	Ave		0.4240				9.7		15.0			
Bromomethane	0.3290 0.2588	0.2597	0.3035	0.2611	0.2584	Ave		0.2784				10.9		15.0			
Chloroethane	0.2646 0.2251	0.2236	0.2605	0.2323	0.2285	Ave		0.2391				7.7		15.0			
Dichlorofluoromethane	0.6883 0.5621	0.5727	0.6292	0.5859	0.5795	Ave		0.6029				7.9		15.0			
Trichlorofluoromethane	0.5862 0.5718	0.5378	0.5745	0.5730	0.5806	Ave		0.5707				3.0		15.0			
Ethyl ether	0.3038 0.2747	0.2898	0.3077	0.2878	0.2929	Ave		0.2928				4.1		15.0			
Acrolein	0.0613 0.0531	0.0543	0.0511	0.0561	0.0563	Ave		0.0554				6.3		15.0			
1,1-Dichloroethene	0.2967 0.3039	0.3104	0.2795	0.3411	0.2766	Ave		0.3014				7.8		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2324 0.2256	0.2224	0.2097	0.2616	0.2048	Ave		0.2261				8.9		15.0			
Acetone	0.0296 0.0248	0.0322	0.0280	0.0292	0.0247	Ave		0.0281				10.4		15.0			
Iodomethane	0.4518 0.4053	0.4603	0.4192	0.4450	0.4144	Ave		0.4327				5.2		15.0			
Carbon disulfide	0.9427 0.7083	0.8967	0.8299	0.8127	0.7550	Ave		0.8242				10.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.1911 0.1755	0.1873	0.1944	0.1795	0.1820	Ave		0.1850				3.9		15.0			
Methyl acetate	0.2265 0.1963	0.2094	0.2131	0.2124	0.2076	Ave		0.2109				4.6		15.0			
Methylene Chloride	0.3147 0.2588	0.3053	0.2767	0.2900	0.2712	Ave		0.2861				7.4		15.0			
2-Methyl-2-propanol	0.0202 0.0186	0.0209	0.0207	0.0183	0.0185	Ave		0.0195				6.1		15.0			
Acrylonitrile	0.1101 0.1017	0.1058	0.1083	0.1061	0.1061	Ave		0.1063				2.6		15.0			
Methyl tert-butyl ether	0.7741 0.7898	0.7888	0.7947	0.7982	0.8070	Ave		0.7921				1.4		15.0			
trans-1,2-Dichloroethene	0.3308 0.2800	0.3096	0.3039	0.2979	0.2927	Ave		0.3025				5.7		15.0			
Hexane	0.0868 0.0709	0.0729	0.0740	0.0708	0.0742	Ave		0.0749				8.0		15.0			
1,1-Dichloroethane	0.5168 0.4610	0.5028	0.4979	0.4940	0.4837	Ave		0.4927			0.1000	3.9		15.0			
Vinyl acetate	0.4592 0.4640	0.4092	0.4349	0.4512	0.4877	Ave		0.4510				5.9		15.0			
2,2-Dichloropropane	0.0563 0.0552	0.0575	0.0558	0.0637	0.0610	Ave		0.0583				5.8		15.0			
cis-1,2-Dichloroethene	0.3678 0.3026	0.3388	0.3360	0.3239	0.3166	Ave		0.3309				6.8		15.0			
2-Butanone (MEK)	0.0359 0.0331	0.0333	0.0368	0.0342	0.0353	Ave		0.0348				4.2		15.0			
Chlorobromomethane	0.1643 0.1462	0.1627	0.1574	0.1552	0.1518	Ave		0.1563				4.3		15.0			
Tetrahydrofuran	0.1686 0.0763	0.1178	0.0987	0.0857	0.0820	Lin1	0.1885	0.0754							0.9990		0.9900
Chloroform	0.5287 0.4702	0.5114	0.5088	0.5006	0.4914	Ave		0.5019				4.0		15.0			
1,1,1-Trichloroethane	0.3891 0.3449	0.3722	0.3666	0.3940	0.3688	Ave		0.3726				4.7		15.0			
Cyclohexane	0.4670 0.4328	0.4709	0.4707	0.4560	0.4491	Ave		0.4577				3.3		15.0			
1,1-Dichloropropene	0.4449 0.3772	0.4247	0.4174	0.4024	0.3935	Ave		0.4100				5.9		15.0			
Carbon tetrachloride	0.3176 0.3270	0.3134	0.3217	0.3365	0.3370	Ave		0.3255				3.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0048 0.0066	0.0056	0.0062	0.0062	0.0066	Ave		0.0060				11.6		15.0			
Benzene	1.2946 1.1429	1.2112	1.2043	1.1832	1.1732	Ave		1.2016				4.3		15.0			
1,2-Dichloroethane	0.4609 0.3973	0.4220	0.4345	0.4133	0.4192	Ave		0.4245				5.1		15.0			
n-Heptane	0.0784 0.0723	0.0713	0.0769	0.0710	0.0724	Ave		0.0737				4.3		15.0			
Trichloroethene	0.3558 0.3002	0.3260	0.3345	0.3180	0.3204	Ave		0.3258				5.7		15.0			
Methylcyclohexane	0.4938 0.4565	0.4570	0.4737	0.4663	0.4704	Ave		0.4696				2.9		15.0			
1,2-Dichloropropane	0.3143 0.2567	0.2752	0.2790	0.2696	0.2707	Ave		0.2776				7.0		15.0			
1,4-Dioxane	0.0026 0.0021	0.0030	0.0029	0.0021	0.0022	Lin1	0.0232	0.0021							0.9900		0.9900
Dibromomethane	0.1989 0.1672	0.1833	0.1822	0.1789	0.1762	Ave		0.1811				5.8		15.0			
Dichlorobromomethane	0.3603 0.3572	0.3464	0.3653	0.3609	0.3711	Ave		0.3602				2.3		15.0			
2-Chloroethyl vinyl ether	0.1635 0.1618	0.1466	0.1679	0.1602	0.1701	Ave		0.1617				5.1		15.0			
cis-1,3-Dichloropropene	0.4036 0.4193	0.3826	0.4095	0.4117	0.4310	Ave		0.4096				4.0		15.0			
4-Methyl-2-pentanone (MIBK)	0.2640 0.2507	0.2619	0.2740	0.2594	0.2632	Ave		0.2622				2.9		15.0			
Toluene	1.7323 1.5692	1.6192	1.6097	1.5966	1.5916	Ave		1.6198				3.6		15.0			
trans-1,3-Dichloropropene	0.4469 0.4788	0.4198	0.4530	0.4623	0.4839	Ave		0.4575				5.1		15.0			
Ethyl methacrylate	0.3640 0.4196	0.3517	0.4158	0.4159	0.4313	Ave		0.3997				8.3		15.0			
1,1,2-Trichloroethane	0.3244 0.2860	0.3066	0.3098	0.3049	0.3067	Ave		0.3064				4.0		15.0			
Tetrachloroethene	0.3436 0.3091	0.3265	0.3337	0.3242	0.3153	Ave		0.3254				3.8		15.0			
1,3-Dichloropropane	0.5652 0.5094	0.5600	0.5645	0.5356	0.5360	Ave		0.5451				4.1		15.0			
2-Hexanone	0.2275 0.2089	0.2074	0.2404	0.2220	0.2222	Ave		0.2214				5.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.2932 0.3336	0.2885	0.3052	0.3235	0.3338	Ave		0.3130				6.4		15.0			
Ethylene Dibromide	0.3415 0.3017	0.3151	0.3247	0.3159	0.3196	Ave		0.3198				4.1		15.0			
Chlorobenzene	1.1037 0.9790	1.0269	1.0233	1.0294	0.9982	Ave		1.0268			0.3000	4.1		15.0			
1,1,1,2-Tetrachloroethane	0.3179 0.3294	0.3018	0.3151	0.3233	0.3269	Ave		0.3191				3.1		15.0			
Ethylbenzene	0.5946 0.5481	0.5495	0.5542	0.5552	0.5485	Ave		0.5584				3.2		15.0			
m-Xylene & p-Xylene	1.4106 1.3324	1.3399	1.3561	1.3134	1.3407	Ave		1.3489				2.5		15.0			
o-Xylene	0.6892 0.6772	0.6762	0.6665	0.6780	0.6756	Ave		0.6771				1.1		15.0			
Styrene	1.1163 1.1726	1.0894	1.1487	1.1356	1.1506	Ave		1.1355				2.6		15.0			
Bromoform	0.1645 0.2246	0.1641	0.1853	0.1977	0.2132	Ave		0.1916			0.1000	13.0		15.0			
Isopropylbenzene	1.7219 1.7218	1.6759	1.6937	1.6901	1.7031	Ave		1.7011				1.1		15.0			
1,1,2,2-Tetrachloroethane	0.7282 0.6359	0.7281	0.7454	0.7374	0.6990	Ave		0.7123			0.3000	5.7		15.0			
Bromobenzene	0.8345 0.7380	0.8377	0.8171	0.8135	0.7949	Ave		0.8059				4.6		15.0			
1,2,3-Trichloropropane	0.2638 0.2181	0.2506	0.2535	0.2537	0.2465	Ave		0.2477				6.3		15.0			
trans-1,4-Dichloro-2-butene	0.1688 0.1822	0.1494	0.1892	0.1802	0.1863	Ave		0.1760				8.4		15.0			
N-Propylbenzene	0.8435 0.7888	0.8429	0.8209	0.8470	0.8303	Ave		0.8289				2.6		15.0			
2-Chlorotoluene	0.7461 0.6758	0.7427	0.7261	0.7429	0.7086	Ave		0.7237				3.8		15.0			
1,3,5-Trimethylbenzene	2.5474 2.3785	2.4763	2.4890	2.5174	2.5114	Ave		2.4867				2.3		15.0			
4-Chlorotoluene	2.6257 2.2862	2.5313	2.4777	2.4699	2.4410	Ave		2.4720				4.5		15.0			
tert-Butylbenzene	2.3128 2.0694	2.1756	2.2341	2.2147	2.1920	Ave		2.1998				3.6		15.0			
1,2,4-Trimethylbenzene	2.6893 2.4762	2.6002	2.5965	2.6467	2.5905	Ave		2.5999				2.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	3.0622 2.8101	2.9499	2.9965	2.9707	2.9828	Ave		2.9620				2.8		15.0			
1,3-Dichlorobenzene	1.5755 1.3702	1.5096	1.5028	1.4623	1.4318	Ave		1.4754				4.8		15.0			
4-Isopropyltoluene	2.6479 2.5122	2.6049	2.6416	2.6264	2.6597	Ave		2.6154				2.1		15.0			
1,4-Dichlorobenzene	1.6978 1.4349	1.5827	1.5363	1.5108	1.4922	Ave		1.5424				5.9		15.0			
n-Butylbenzene	2.2989 1.9965	2.2164	2.2662	2.2023	2.1541	Ave		2.1891				4.9		15.0			
1,2-Dichlorobenzene	1.4990 1.3278	1.4841	1.4415	1.4044	1.3749	Ave		1.4220				4.6		15.0			
1,2-Dibromo-3-Chloropropane	0.1209 0.1349	0.1281	0.1430	0.1368	0.1389	Ave		0.1338				6.0		15.0			
1,2,4-Trichlorobenzene	1.0301 0.7046	0.9703	0.9932	0.8041	0.7581	Lin1	0.4931	0.7226							0.9930		0.9900
Hexachlorobutadiene	0.5751 0.3007	0.5311	0.4896	0.3929	0.3470	Qua	0.3543	0.3775	-0.002156						0.9990		0.9900
Naphthalene	2.4909 1.9225	2.5429	2.5827	2.1350	2.0572	Ave		2.2885				12.4		15.0			
1,2,3-Trichlorobenzene	0.9558 0.6213	0.9179	0.8963	0.6940	0.6628	Lin1	0.5119	0.6314							0.9920		0.9900
Dibromofluoromethane (Surr)	0.2772 0.2494	0.2365	0.2667	0.2661	0.2595	Ave		0.2592				5.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3800 0.3273	0.3369	0.3610	0.3553	0.3486	Ave		0.3515				5.3		15.0			
Toluene-d8 (Surr)	1.3687 1.3273	1.2509	1.3791	1.3797	1.3471	Ave		1.3421				3.7		15.0			
4-Bromofluorobenzene (Surr)	0.4937 0.4621	0.4373	0.4718	0.4739	0.4605	Ave		0.4665				4.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-342615/7	UXC4608.D
Level 2	STD8260 240-342615/6	UXC4607.D
Level 3	STD8260 240-342615/5	UXC4606.D
Level 4	STD8260 240-342615/4	UXC4605.D
Level 5	STD8260 240-342615/3	UXC4604.D
Level 6	STD8260 240-342615/2	UXC4603.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	51090 2151019	99449	263574	514967	1084602	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	49755 1949437	96314	250803	486195	1038482	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	54514 2077902	102198	255916	512831	1014909	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	66308 2359744	124291	320588	591560	1210237	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	45430 1661505	74964	211810	380445	781682	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	36530 1445182	64547	181806	338465	691069	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	95036 3607918	165328	439090	853684	1752766	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	80946 3670417	155260	400963	834925	1756160	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	41947 1763199	83644	214762	419282	885893	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	42299 1704038	78340	178383	408826	852133	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	40975 1950630	89599	195061	496990	836602	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	32084 1448354	64198	146352	381213	619547	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	8171 317797	18581	39046	85201	149667	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	62391 2601840	132860	292570	648378	1253537	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	130163 4546547	258844	579203	1184137	2283845	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	26387 1126808	54065	135704	261489	550419	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	62540 2519509	120893	297438	619046	1256154	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	43451 1661037	88133	193120	422521	820454	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	27927 1195418	60280	144216	266659	558768	10.0 400	20.0	50.0	100	200
Acrylonitrile	FB	Ave	151973 6531285	305390	756029	1545241	3209434	10.0 400	20.0	50.0	100	200
Methyl tert-butyl ether	FB	Ave	106890 5069745	227704	554587	1162934	2441171	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	45683 1797327	89378	212075	434049	885324	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	11991 454877	21037	51625	103099	224378	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	71365 2958891	145135	347475	719694	1463087	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	63403 2978765	118113	303494	657464	1475305	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	7779 354388	16588	38943	92883	184461	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	50784 1942211	97789	234487	471955	957605	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	9914 425288	19248	51396	99704	213792	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	22686 938193	46975	109826	226061	459253	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Lin1	46565 979284	67986	137826	249598	496322	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	73006 3018378	147623	355113	729439	1486261	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	53729 2213784	107448	255837	574099	1115496	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	64478 2777916	135925	328506	664362	1358408	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	61427 2421434	122585	291324	586242	1190202	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	43848 2099055	90460	224508	490254	1019237	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	16618 1054973	40146	107586	226791	502500	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	178764 7336120	349635	840471	1723985	3548810	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	63635 2550136	121816	303249	602108	1268087	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	10828 463913	20569	53656	103443	218846	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	49124 1926774	94117	233418	463284	969151	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	68185 2930264	131910	330609	679361	1422820	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	43396 1647905	79430	194745	392754	818828	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Lin1	7172 268216	17039	40852	61679	135171	20.0 800	40.0	100	200	400
Dibromomethane	FB	Ave	27467 1073081	52909	127136	260728	532937	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorobromomethane	FB	Ave	49747 2292578	99989	254947	525886	1122493	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	45157 2076912	84614	234337	466916	1029015	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	55734 2691410	110446	285804	599906	1303555	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	72911 3217945	151182	382397	755826	1592323	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBNZ d5	Ave	184784 8097475	360112	881362	1804119	3847132	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	47670 2470937	93357	248052	522430	1169665	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	38829 2165277	78210	227664	469921	1042625	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	34603 1476032	68188	169610	344482	741419	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	36649 1594779	72611	182728	366357	762245	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	60294 2628824	124554	309080	605243	1295545	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	48544 2155808	92271	263267	501703	1074153	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	31278 1721372	64155	167099	365569	806953	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	36430 1556983	70071	177787	357004	772553	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	117733 5052017	228397	560251	1163232	2412875	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	33907 1699887	67113	172536	365327	790289	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	63425 2828371	122210	303457	627398	1325912	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	150472 6875454	298005	742495	1484111	3240775	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	73518 3494468	150387	364913	766072	1633090	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	119079 6050686	242295	628913	1283228	2781246	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Ave	17545 1158753	36504	101434	223352	515442	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	183680 8884599	372726	927335	1909735	4116767	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	42907 1972167	88499	229450	454586	941592	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	49172 2288647	101826	251514	501479	1070768	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	15543 676341	30467	78022	156410	332054	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	9948 565067	18164	58240	111071	250921	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	49701 2446119	102452	252689	522131	1118492	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	43960 2095834	90274	223486	457984	954592	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	150099 7376294	301004	766132	1551836	3383149	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	154714 7090013	307681	762649	1522582	3288381	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	136275 6417476	264446	687688	1365241	2952867	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	158463 7679166	316061	799221	1631571	3489704	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	180431 8714666	358564	922349	1831274	4018191	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	92830 4249364	183499	462588	901423	1928776	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	156020 7790696	316632	813114	1619033	3582920	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	100040 4449820	192375	472879	931313	2010234	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-105817-1 Analy Batch No.: 342615

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 10:56 Calibration End Date: 08/27/2018 12:45 Calibration ID: 46691

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	135459 6191555	269407	697566	1357600	2901891	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	88325 4117858	180401	443716	865716	1852120	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	7126 418372	15572	44032	84343	187127	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Lin1	60696 2185024	117937	305726	495697	1021303	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Qua	33885 932429	64554	150712	242174	467463	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCBd 4	Ave	146771 5961997	309095	794990	1316144	2771303	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Lin1	56321 1926671	111571	275892	427842	892903	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	38282 1600795	68259	186126	387653	784787	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	52466 2100742	97249	251959	517731	1054547	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	145998 6849199	278202	755069	1559068	3256156	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	52658 2384620	97247	258316	535504	1113098	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Report Date: 28-Aug-2018 10:27:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4603.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Aug-2018 10:56:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-002
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:16 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 27-Aug-2018 11:40:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1604772	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1290043	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.176	0.001	93	775295	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	1600795	40.0	38.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.982	0.001	100	2100742	40.0	37.2	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	6849199	40.0	39.6	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	2384620	40.0	39.6	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	2151019	40.0	37.6	
10 Chloromethane	50	1.721	1.721	0.000	99	1949437	40.0	35.8	
11 Vinyl chloride	62	1.816	1.816	0.000	99	2077902	40.0	36.5	
12 Butadiene	54	1.828	1.828	0.000	98	2359744	40.0	34.7	
13 Bromomethane	94	2.101	2.101	0.000	91	1661505	40.0	37.2	
14 Chloroethane	64	2.184	2.184	0.000	100	1445182	40.0	37.7	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	99	3607918	40.0	37.3	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	99	3670417	40.0	40.1	
17 Ethyl ether	59	2.611	2.623	-0.012	91	1763199	40.0	37.5	
18 Acrolein	56	2.741	2.741	0.000	99	1704038	200.0	191.8	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	1950630	40.0	40.3	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	92	1448354	40.0	39.9	
22 Acetone	58	2.872	2.860	0.012	99	317797	80.0	70.5	
23 Iodomethane	142	2.967	2.966	0.001	99	2601840	40.0	37.5	
24 Carbon disulfide	76	3.026	3.026	0.000	100	4546547	40.0	34.4	
27 Methyl acetate	43	3.133	3.132	0.001	98	2519509	80.0	74.4	
25 3-Chloro-1-propene	76	3.121	3.132	-0.011	88	1126808	40.0	38.0	
28 Methylene Chloride	84	3.227	3.227	0.000	92	1661037	40.0	36.2	
29 2-Methyl-2-propanol	59	3.322	3.310	0.012	96	1195418	400.0	381.5	
32 Acrylonitrile	53	3.441	3.441	0.000	99	6531285	400.0	382.7	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	96	5069745	40.0	39.9	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	94	1797327	40.0	37.0	
33 Hexane	86	3.678	3.678	0.000	93	454877	40.0	37.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.809	3.820	-0.011	97	2958891	40.0	37.4	
36 Vinyl acetate	43	3.844	3.844	0.000	97	2978765	40.0	41.2	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	84	1942211	40.0	36.6	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	64	354388	40.0	37.9	
41 2-Butanone (MEK)	72	4.307	4.306	0.001	99	425288	80.0	76.2	
45 Chlorobromomethane	128	4.496	4.496	0.000	94	938193	40.0	37.4	
46 Tetrahydrofuran	42	4.532	4.544	-0.012	87	979284	80.0	78.4	
47 Chloroform	83	4.556	4.556	0.000	96	3018378	40.0	37.5	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	2213784	40.0	37.0	
49 Cyclohexane	56	4.769	4.769	0.000	91	2777916	40.0	37.8	
50 Carbon tetrachloride	117	4.852	4.852	0.000	84	2099055	40.0	40.2	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	2421434	40.0	36.8	
52 Isobutyl alcohol	41	4.911	4.911	0.000	93	1054973	1000.0	1096.0	
53 Benzene	78	5.030	5.030	0.000	95	7336120	40.0	38.0	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	2550136	40.0	37.4	
56 n-Heptane	100	5.220	5.220	0.000	93	463913	40.0	39.2	
58 Trichloroethene	130	5.564	5.563	0.001	96	1926774	40.0	36.9	
60 Methylcyclohexane	83	5.730	5.730	0.000	91	2930264	40.0	38.9	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	1647905	40.0	37.0	
63 Dibromomethane	93	5.872	5.872	0.000	92	1073081	40.0	36.9	
64 1,4-Dioxane	88	5.872	5.872	0.000	37	268216	800.0	776.4	
65 Dichlorobromomethane	83	5.991	5.990	0.000	99	2292578	40.0	39.7	
67 2-Chloroethyl vinyl ether	63	6.240	6.239	0.001	93	2076912	80.0	80.0	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	2691410	40.0	40.9	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	3217945	80.0	76.5	
70 Toluene	91	6.678	6.678	0.000	98	8097475	40.0	38.8	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	94	2470937	40.0	41.9	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	2165277	40.0	42.0	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	1476032	40.0	37.3	
74 Tetrachloroethene	164	7.176	7.176	0.000	98	1594779	40.0	38.0	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	93	2628824	40.0	37.4	
76 2-Hexanone	43	7.248	7.247	0.001	97	2155808	80.0	75.5	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	1721372	40.0	42.6	
80 Ethylene Dibromide	107	7.520	7.520	0.000	99	1556983	40.0	37.7	
82 Chlorobenzene	112	7.959	7.959	0.000	95	5052017	40.0	38.1	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	94	1699887	40.0	41.3	
84 Ethylbenzene	106	8.054	8.054	0.000	98	2828371	40.0	39.3	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	6875454	40.0	39.5	
86 o-Xylene	106	8.540	8.540	0.000	94	3494468	40.0	40.0	
87 Styrene	104	8.552	8.552	0.000	94	6050686	40.0	41.3	
88 Bromoform	173	8.742	8.742	0.000	98	1158753	40.0	46.9	
89 Isopropylbenzene	105	8.896	8.884	0.012	95	8884599	40.0	40.5	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	97	1972167	40.0	35.7	
92 Bromobenzene	156	9.204	9.204	0.000	93	2288647	40.0	36.6	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	89	676341	40.0	35.2	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	82	565067	40.0	41.4	
96 N-Propylbenzene	120	9.287	9.287	0.000	98	2446119	40.0	38.1	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	2095834	40.0	37.4	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	7376294	40.0	38.3	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	7090013	40.0	37.0	
101 tert-Butylbenzene	119	9.773	9.773	0.000	92	6417476	40.0	37.6	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	96	7679166	40.0	38.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.999	9.987	0.012	93	8714666	40.0	37.9	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	99	4249364	40.0	37.1	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	7790696	40.0	38.4	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	96	4449820	40.0	37.2	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	6191555	40.0	36.5	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	99	4117858	40.0	37.4	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.350	0.001	86	418372	40.0	40.3	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	2185024	40.0	38.3	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	932429	40.0	40.1	
117 Naphthalene	128	12.418	12.430	-0.012	97	5961997	40.0	33.6	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	1926671	40.0	38.5	
S 127 1,2-Dichloroethene, Total	96				0			73.6	
S 128 1,3-Dichloropropene, Total	75				0			82.8	
S 129 Xylenes, Total	106				0		80.0	79.5	
S 130 Trihalomethanes, Total	1				0		160.0	166.7	

Reagents:

vm50ss_stk_00078	Amount Added:	32.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL
VMRPRIMW_00297	Amount Added:	32.00	Units: uL
VMAROLISTDW_00260	Amount Added:	32.00	Units: uL
VMRGAS_00259	Amount Added:	32.00	Units: uL

Report Date: 28-Aug-2018 10:27:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4603.D

Injection Date: 27-Aug-2018 10:56:30 Instrument ID: A3UX15 Operator ID:

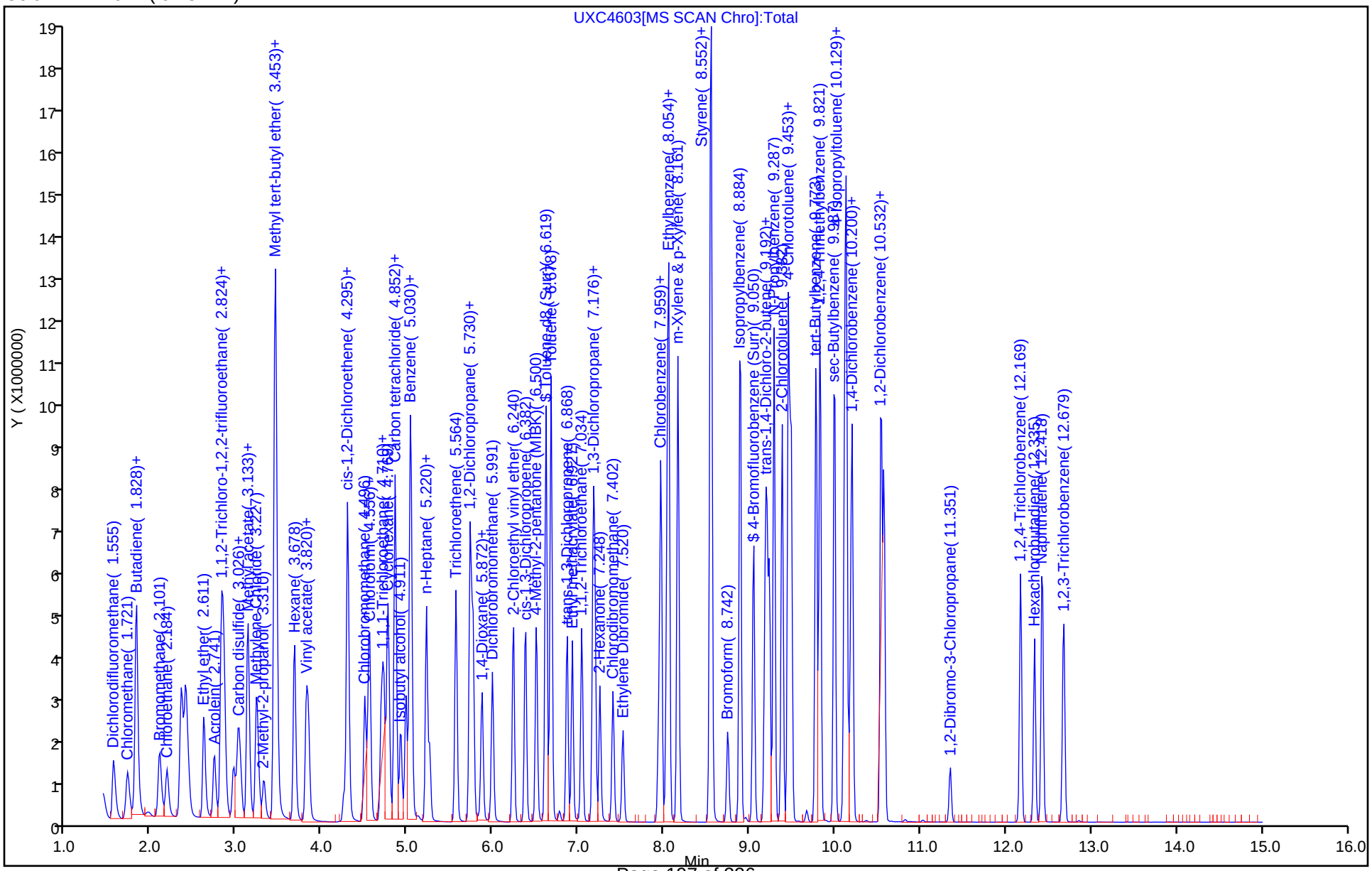
Lims ID: STD8260 L6 Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4604.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 27-Aug-2018 11:18:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-003
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:22 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	98	1512404	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	84	1208582	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.176	0.000	93	673559	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	784787	20.0	20.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.982	0.000	100	1054547	20.0	19.8	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	3256156	20.0	20.1	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	1113098	20.0	19.7	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	1084602	20.0	20.1	
10 Chloromethane	50	1.721	1.721	0.000	99	1038482	20.0	20.3	
11 Vinyl chloride	62	1.816	1.816	0.000	99	1014909	20.0	18.9	
12 Butadiene	54	1.828	1.828	0.000	99	1210237	20.0	18.9	
13 Bromomethane	94	2.101	2.101	0.000	91	781682	20.0	18.6	
14 Chloroethane	64	2.196	2.184	0.012	100	691069	20.0	19.1	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	100	1752766	20.0	19.2	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	99	1756160	20.0	20.3	
17 Ethyl ether	59	2.611	2.623	-0.012	90	885893	20.0	20.0	
18 Acrolein	56	2.741	2.741	0.000	99	852133	100.0	101.8	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	836602	20.0	18.4	
20 1,1,2-Trichloro-1,2,2-trif	151	2.848	2.836	0.012	93	619547	20.0	18.1	
22 Acetone	58	2.860	2.860	0.000	99	149667	40.0	35.2	
23 Iodomethane	142	2.967	2.966	0.000	99	1253537	20.0	19.2	
24 Carbon disulfide	76	3.026	3.026	0.000	100	2283845	20.0	18.3	
25 3-Chloro-1-propene	76	3.133	3.132	0.001	88	550419	20.0	19.7	
27 Methyl acetate	43	3.144	3.132	0.012	98	1256154	40.0	39.4	
28 Methylene Chloride	84	3.227	3.227	0.000	92	820454	20.0	19.0	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	96	558768	200.0	189.2	
32 Acrylonitrile	53	3.441	3.441	0.000	99	3209434	200.0	199.5	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	96	2441171	20.0	20.4	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	885324	20.0	19.4	
33 Hexane	86	3.678	3.678	0.000	94	224378	20.0	19.8	
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	1463087	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.844	3.844	0.000	97	1475305	20.0	21.6	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	62	184461	20.0	20.9	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	957605	20.0	19.1	
41 2-Butanone (MEK)	72	4.307	4.306	0.000	99	213792	40.0	40.6	
45 Chlorobromomethane	128	4.496	4.496	0.000	95	459253	20.0	19.4	
46 Tetrahydrofuran	42	4.544	4.544	0.000	86	496322	40.0	41.0	
47 Chloroform	83	4.556	4.556	0.000	96	1486261	20.0	19.6	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	1115496	20.0	19.8	
49 Cyclohexane	56	4.769	4.769	0.000	91	1358408	20.0	19.6	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	1190202	20.0	19.2	
50 Carbon tetrachloride	117	4.852	4.852	0.000	98	1019237	20.0	20.7	
52 Isobutyl alcohol	41	4.923	4.911	0.012	94	502500	500.0	553.9	
53 Benzene	78	5.030	5.030	0.000	96	3548810	20.0	19.5	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	1268087	20.0	19.8	
56 n-Heptane	100	5.220	5.220	0.000	92	218846	20.0	19.6	
58 Trichloroethene	130	5.564	5.563	0.001	97	969151	20.0	19.7	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	1422820	20.0	20.0	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	818828	20.0	19.5	
64 1,4-Dioxane	88	5.872	5.872	0.000	36	135171	400.0	410.1	
63 Dibromomethane	93	5.872	5.872	0.000	93	532937	20.0	19.5	
65 Dichlorobromomethane	83	5.990	5.990	0.000	99	1122493	20.0	20.6	
67 2-Chloroethyl vinyl ether	63	6.239	6.239	0.000	93	1029015	40.0	42.1	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	1303555	20.0	21.0	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	1592323	40.0	40.2	
70 Toluene	91	6.678	6.678	0.000	98	3847132	20.0	19.7	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	95	1169665	20.0	21.2	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	1042625	20.0	21.6	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	741419	20.0	20.0	
74 Tetrachloroethene	164	7.176	7.176	0.000	99	762245	20.0	19.4	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	94	1295545	20.0	19.7	
76 2-Hexanone	43	7.247	7.247	0.000	98	1074153	40.0	40.1	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	806953	20.0	21.3	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	772553	20.0	20.0	
82 Chlorobenzene	112	7.959	7.959	0.000	94	2412875	20.0	19.4	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	94	790289	20.0	20.5	
84 Ethylbenzene	106	8.054	8.054	0.000	98	1325912	20.0	19.6	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	3240775	20.0	19.9	
86 o-Xylene	106	8.540	8.540	0.000	97	1633090	20.0	20.0	
87 Styrene	104	8.552	8.552	0.000	93	2781246	20.0	20.3	
88 Bromoform	173	8.742	8.742	0.000	97	515442	20.0	22.3	
89 Isopropylbenzene	105	8.896	8.884	0.012	95	4116767	20.0	20.0	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	941592	20.0	19.6	
92 Bromobenzene	156	9.204	9.204	0.000	92	1070768	20.0	19.7	
95 trans-1,4-Dichloro-2-buten	53	9.240	9.228	0.012	85	250921	20.0	21.2	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	89	332054	20.0	19.9	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	1118492	20.0	20.0	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	954592	20.0	19.6	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	3383149	20.0	20.2	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	3288381	20.0	19.7	
101 tert-Butylbenzene	119	9.773	9.773	0.000	91	2952867	20.0	19.9	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	3489704	20.0	19.9	
105 sec-Butylbenzene	105	9.999	9.987	0.012	94	4018191	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	1928776	20.0	19.4	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	3582920	20.0	20.3	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	2010234	20.0	19.3	
111 n-Butylbenzene	91	10.532	10.532	0.000	98	2901891	20.0	19.7	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	98	1852120	20.0	19.3	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.350	0.000	85	187127	20.0	20.8	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	93	1021303	20.0	20.3	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	467463	20.0	19.6	
117 Naphthalene	128	12.430	12.430	0.000	96	2771303	20.0	18.0	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	892903	20.0	20.2	
S 127 1,2-Dichloroethene, Total	96				0			38.5	
S 128 1,3-Dichloropropene, Total	75				0			42.2	
S 129 Xylenes, Total	106				0		40.0	39.8	
S 130 Trihalomethanes, Total	1				0		80.0	83.8	

Reagents:

vm50ss_stk_00078	Amount Added:	16.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL
VMRPRIMW_00297	Amount Added:	16.00	Units: uL
VMAROLISTDW_00260	Amount Added:	16.00	Units: uL
VMRGAS_00259	Amount Added:	16.00	Units: uL

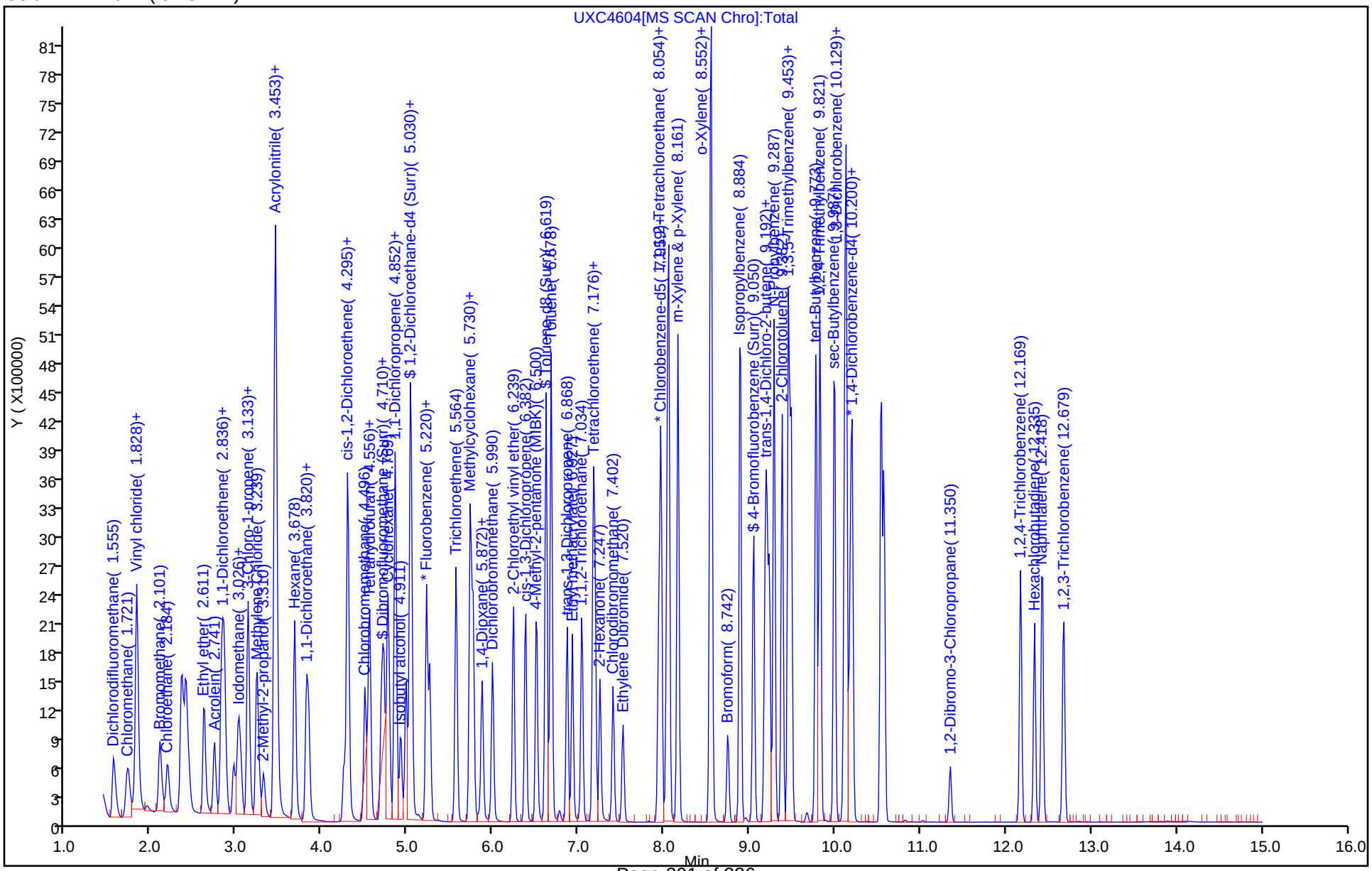
Report Date: 28-Aug-2018 10:27:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4604.D

Injection Date:	27-Aug-2018 11:18:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4605.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 27-Aug-2018 11:39:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-004
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:29 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 27-Aug-2018 12:21:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	98	1456997	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1129967	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.176	0.000	92	616450	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	93	387653	10.0	10.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.982	0.000	100	517731	10.0	10.1	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	94	1559068	10.0	10.3	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	535504	10.0	10.2	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	514967	10.0	9.91	
10 Chloromethane	50	1.721	1.721	0.000	99	486195	10.0	9.84	
11 Vinyl chloride	62	1.816	1.816	0.000	99	512831	10.0	9.93	
12 Butadiene	54	1.828	1.828	0.000	98	591560	10.0	9.58	
13 Bromomethane	94	2.101	2.101	0.000	92	380445	10.0	9.38	
14 Chloroethane	64	2.184	2.184	0.000	100	338465	10.0	9.72	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	100	853684	10.0	9.72	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	98	834925	10.0	10.0	
17 Ethyl ether	59	2.623	2.623	0.000	90	419282	10.0	9.83	
18 Acrolein	56	2.741	2.741	0.000	99	408826	50.0	50.7	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	496990	10.0	11.3	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	91	381213	10.0	11.6	
22 Acetone	58	2.860	2.860	0.000	100	85201	20.0	20.8	
23 Iodomethane	142	2.966	2.966	0.000	99	648378	10.0	10.3	
24 Carbon disulfide	76	3.026	3.026	0.000	100	1184137	10.0	9.86	
27 Methyl acetate	43	3.132	3.132	0.000	97	619046	20.0	20.1	
25 3-Chloro-1-propene	76	3.132	3.132	0.000	87	261489	10.0	9.70	
28 Methylene Chloride	84	3.227	3.227	0.000	92	422521	10.0	10.1	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	96	266659	100.0	93.7	
32 Acrylonitrile	53	3.441	3.441	0.000	99	1545241	100.0	99.7	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	96	1162934	10.0	10.1	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	434049	10.0	9.85	
33 Hexane	86	3.678	3.678	0.000	94	103099	10.0	9.45	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	719694	10.0	10.0	
36 Vinyl acetate	43	3.844	3.844	0.000	97	657464	10.0	10.0	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	471955	10.0	9.79	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	60	92883	10.0	10.9	
41 2-Butanone (MEK)	72	4.306	4.306	0.000	98	99704	20.0	19.7	
45 Chlorobromomethane	128	4.496	4.496	0.000	95	226061	10.0	9.93	
46 Tetrahydrofuran	42	4.544	4.544	0.000	87	249598	20.0	20.2	
47 Chloroform	83	4.556	4.556	0.000	95	729439	10.0	9.98	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	574099	10.0	10.6	
49 Cyclohexane	56	4.769	4.769	0.000	91	664362	10.0	9.96	
50 Carbon tetrachloride	117	4.852	4.852	0.000	98	490254	10.0	10.3	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	586242	10.0	9.81	
52 Isobutyl alcohol	41	4.911	4.911	0.000	93	226791	250.0	259.5	
53 Benzene	78	5.030	5.030	0.000	95	1723985	10.0	9.85	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	602108	10.0	9.73	
56 n-Heptane	100	5.220	5.220	0.000	91	103443	10.0	9.63	
58 Trichloroethene	130	5.563	5.563	0.000	97	463284	10.0	9.76	
60 Methylcyclohexane	83	5.730	5.730	0.000	91	679361	10.0	9.93	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	392754	10.0	9.71	
63 Dibromomethane	93	5.872	5.872	0.000	93	260728	10.0	9.88	
64 1,4-Dioxane	88	5.872	5.872	0.000	36	61679	200.0	188.5	
65 Dichlorobromomethane	83	5.990	5.990	0.000	99	525886	10.0	10.0	
67 2-Chloroethyl vinyl ether	63	6.239	6.239	0.000	93	466916	20.0	19.8	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	599906	10.0	10.1	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	755826	20.0	19.8	
70 Toluene	91	6.678	6.678	0.000	98	1804119	10.0	9.86	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	95	522430	10.0	10.1	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	469921	10.0	10.4	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	344482	10.0	9.95	
74 Tetrachloroethene	164	7.176	7.176	0.000	99	366357	10.0	9.96	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	93	605243	10.0	9.83	
76 2-Hexanone	43	7.247	7.247	0.000	98	501703	20.0	20.1	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	365569	10.0	10.3	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	357004	10.0	9.88	
82 Chlorobenzene	112	7.959	7.959	0.000	94	1163232	10.0	10.0	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	93	365327	10.0	10.1	
84 Ethylbenzene	106	8.054	8.054	0.000	98	627398	10.0	9.94	
85 m-Xylene & p-Xylene	91	8.160	8.160	0.000	93	1484111	10.0	9.74	
86 o-Xylene	106	8.540	8.540	0.000	95	766072	10.0	10.0	
87 Styrene	104	8.552	8.552	0.000	94	1283228	10.0	10.0	
88 Bromoform	173	8.742	8.742	0.000	97	223352	10.0	10.3	
89 Isopropylbenzene	105	8.884	8.884	0.000	96	1909735	10.0	9.94	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	454586	10.0	10.4	
92 Bromobenzene	156	9.204	9.204	0.000	94	501479	10.0	10.1	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	88	156410	10.0	10.2	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	70	111071	10.0	10.2	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	522131	10.0	10.2	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	457984	10.0	10.3	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	1551836	10.0	10.1	
99 4-Chlorotoluene	91	9.489	9.489	0.000	98	1522582	10.0	10.0	
101 tert-Butylbenzene	119	9.773	9.773	0.000	93	1365241	10.0	10.1	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	1631571	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.987	9.987	0.000	94	1831274	10.0	10.0	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	901423	10.0	9.91	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	1619033	10.0	10.0	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	931313	10.0	9.79	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	1357600	10.0	10.1	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	98	865716	10.0	9.88	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.350	0.000	83	84343	10.0	10.2	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	495697	10.0	10.4	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	242174	10.0	10.0	
117 Naphthalene	128	12.430	12.430	0.000	97	1316144	10.0	9.33	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	427842	10.0	10.2	
S 129 Xylenes, Total	106				0		20.0	19.7	
S 130 Trihalomethanes, Total	1				0		40.0	40.7	

Reagents:

VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_stk_00078	Amount Added:	8.00	Units: uL
VMRPRIMW_00297	Amount Added:	8.00	Units: uL
VMAROLISTDW_00260	Amount Added:	8.00	Units: uL
VMRGAS_00259	Amount Added:	8.00	Units: uL

Report Date: 28-Aug-2018 10:27:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4605.D

Injection Date: 27-Aug-2018 11:39:30 Instrument ID: A3UX15 Operator ID:

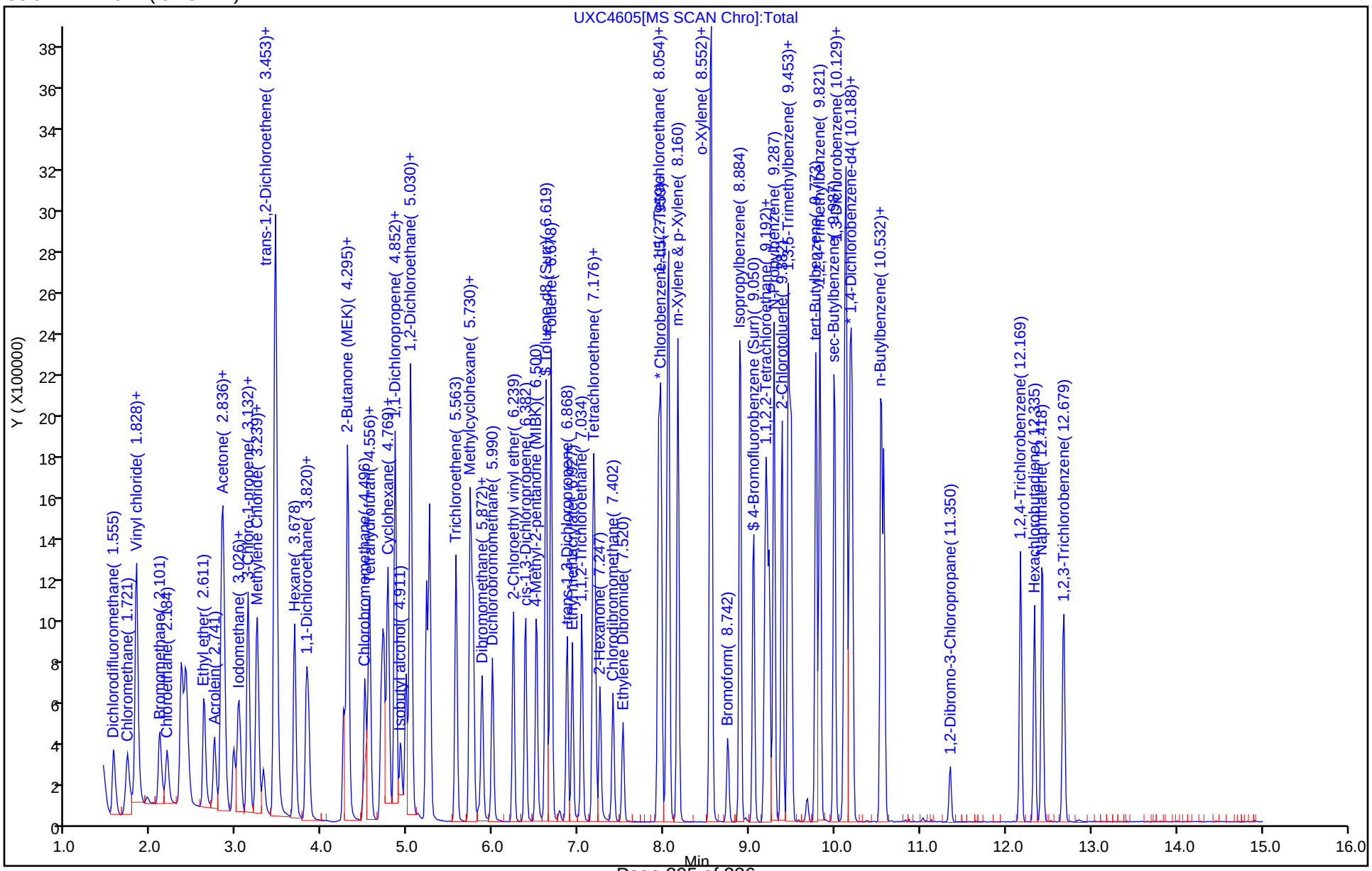
Lims ID: STD8260 L4 Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4606.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 27-Aug-2018 12:01:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-005
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:35 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1395779	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	87	1095038	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.176	0.001	94	615621	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	186126	5.00	5.14	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.982	0.001	100	251959	5.00	5.14	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	755069	5.00	5.14	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	258316	5.00	5.06	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	263574	5.00	5.30	
10 Chloromethane	50	1.721	1.721	0.000	99	250803	5.00	5.30	
11 Vinyl chloride	62	1.828	1.816	0.012	69	255916	5.00	5.17	
12 Butadiene	54	1.828	1.828	0.000	98	320588	5.00	5.42	
13 Bromomethane	94	2.101	2.101	0.000	91	211810	5.00	5.45	
14 Chloroethane	64	2.184	2.184	0.000	100	181806	5.00	5.45	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	99	439090	5.00	5.22	
16 Trichlorofluoromethane	101	2.409	2.397	0.012	99	400963	5.00	5.03	
17 Ethyl ether	59	2.623	2.623	0.000	90	214762	5.00	5.26	
18 Acrolein	56	2.741	2.741	0.000	99	178383	25.0	23.1	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	98	195061	5.00	4.64	
20 1,1,2-Trichloro-1,2,2-trif	151	2.848	2.836	0.012	93	146352	5.00	4.64	
22 Acetone	58	2.872	2.860	0.012	99	39046	10.0	9.96	
23 Iodomethane	142	2.990	2.966	0.024	100	292570	5.00	4.84	
24 Carbon disulfide	76	3.038	3.026	0.012	100	579203	5.00	5.03	
25 3-Chloro-1-propene	76	3.133	3.132	0.001	87	135704	5.00	5.26	
27 Methyl acetate	43	3.144	3.132	0.012	98	297438	10.0	10.1	
28 Methylene Chloride	84	3.227	3.227	0.000	93	193120	5.00	4.84	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	95	144216	50.0	52.9	
32 Acrylonitrile	53	3.441	3.441	0.000	98	756029	50.0	50.9	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	97	554587	5.00	5.02	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	212075	5.00	5.02	
33 Hexane	86	3.678	3.678	0.000	94	51625	5.00	4.94	
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	347475	5.00	5.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.844	3.844	0.000	98	303494	5.00	4.82	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	63	38943	5.00	4.79	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	234487	5.00	5.08	
41 2-Butanone (MEK)	72	4.307	4.306	0.001	99	51396	10.0	10.6	
45 Chlorobromomethane	128	4.496	4.496	0.000	96	109826	5.00	5.04	
46 Tetrahydrofuran	42	4.544	4.544	0.000	88	137826	10.0	10.6	
47 Chloroform	83	4.556	4.556	0.000	96	355113	5.00	5.07	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	99	255837	5.00	4.92	
49 Cyclohexane	56	4.769	4.769	0.000	91	328506	5.00	5.14	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	291324	5.00	5.09	
50 Carbon tetrachloride	117	4.852	4.852	0.000	98	224508	5.00	4.94	
52 Isobutyl alcohol	41	4.923	4.911	0.012	94	107586	125.0	128.5	
53 Benzene	78	5.030	5.030	0.000	96	840471	5.00	5.01	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	303249	5.00	5.12	
56 n-Heptane	100	5.220	5.220	0.000	91	53656	5.00	5.22	
58 Trichloroethene	130	5.564	5.563	0.001	97	233418	5.00	5.13	
60 Methylcyclohexane	83	5.730	5.730	0.000	89	330609	5.00	5.04	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	92	194745	5.00	5.03	
64 1,4-Dioxane	88	5.872	5.872	0.000	41	40852	100.0	126.9	
63 Dibromomethane	93	5.872	5.872	0.000	91	127136	5.00	5.03	
65 Dichlorobromomethane	83	5.991	5.990	0.001	99	254947	5.00	5.07	
67 2-Chloroethyl vinyl ether	63	6.240	6.239	0.001	92	234337	10.0	10.4	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	93	285804	5.00	5.00	
69 4-Methyl-2-pentanone (MIBK	43	6.512	6.500	0.012	97	382397	10.0	10.4	
70 Toluene	91	6.678	6.678	0.000	98	881362	5.00	4.97	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	96	248052	5.00	4.95	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	227664	5.00	5.20	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	169610	5.00	5.06	
74 Tetrachloroethene	164	7.176	7.176	0.000	98	182728	5.00	5.13	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	92	309080	5.00	5.18	
76 2-Hexanone	43	7.248	7.247	0.001	98	263267	10.0	10.9	
79 Chlorodibromomethane	129	7.402	7.402	0.000	91	167099	5.00	4.88	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	177787	5.00	5.08	
82 Chlorobenzene	112	7.959	7.959	0.000	95	560251	5.00	4.98	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	93	172536	5.00	4.94	
84 Ethylbenzene	106	8.054	8.054	0.000	98	303457	5.00	4.96	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	742495	5.00	5.03	
86 o-Xylene	106	8.540	8.540	0.000	95	364913	5.00	4.92	
87 Styrene	104	8.552	8.552	0.000	94	628913	5.00	5.06	
88 Bromoform	173	8.742	8.742	0.000	97	101434	5.00	4.84	
89 Isopropylbenzene	105	8.896	8.884	0.012	96	927335	5.00	4.98	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	229450	5.00	5.23	
92 Bromobenzene	156	9.204	9.204	0.000	94	251514	5.00	5.07	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	79	58240	5.00	5.37	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	88	78022	5.00	5.12	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	252689	5.00	4.95	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	223486	5.00	5.02	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	766132	5.00	5.00	
99 4-Chlorotoluene	91	9.489	9.489	0.000	98	762649	5.00	5.01	
101 tert-Butylbenzene	119	9.773	9.773	0.000	91	687688	5.00	5.08	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	95	799221	5.00	4.99	
105 sec-Butylbenzene	105	9.999	9.987	0.012	94	922349	5.00	5.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	462588	5.00	5.09	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	813114	5.00	5.05	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	472879	5.00	4.98	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	697566	5.00	5.18	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	97	443716	5.00	5.07	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.350	0.001	82	44032	5.00	5.35	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	93	305726	5.00	6.19	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	150712	5.00	5.73	
117 Naphthalene	128	12.430	12.430	0.000	97	794990	5.00	5.64	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	275892	5.00	6.29	
S 127 1,2-Dichloroethene, Total	96				0			10.1	
S 128 1,3-Dichloropropene, Total	75				0			9.95	
S 129 Xylenes, Total	106				0		10.0	9.95	
S 130 Trihalomethanes, Total	1				0		20.0	19.9	

Reagents:

VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_stk_00078	Amount Added:	4.00	Units: uL
VMRPRIMW_00297	Amount Added:	4.00	Units: uL
VMAROLISTDW_00260	Amount Added:	4.00	Units: uL
VMRGAS_00259	Amount Added:	4.00	Units: uL

Report Date: 28-Aug-2018 10:27:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4606.D

Injection Date: 27-Aug-2018 12:01:30 Instrument ID: A3UX15 Operator ID:

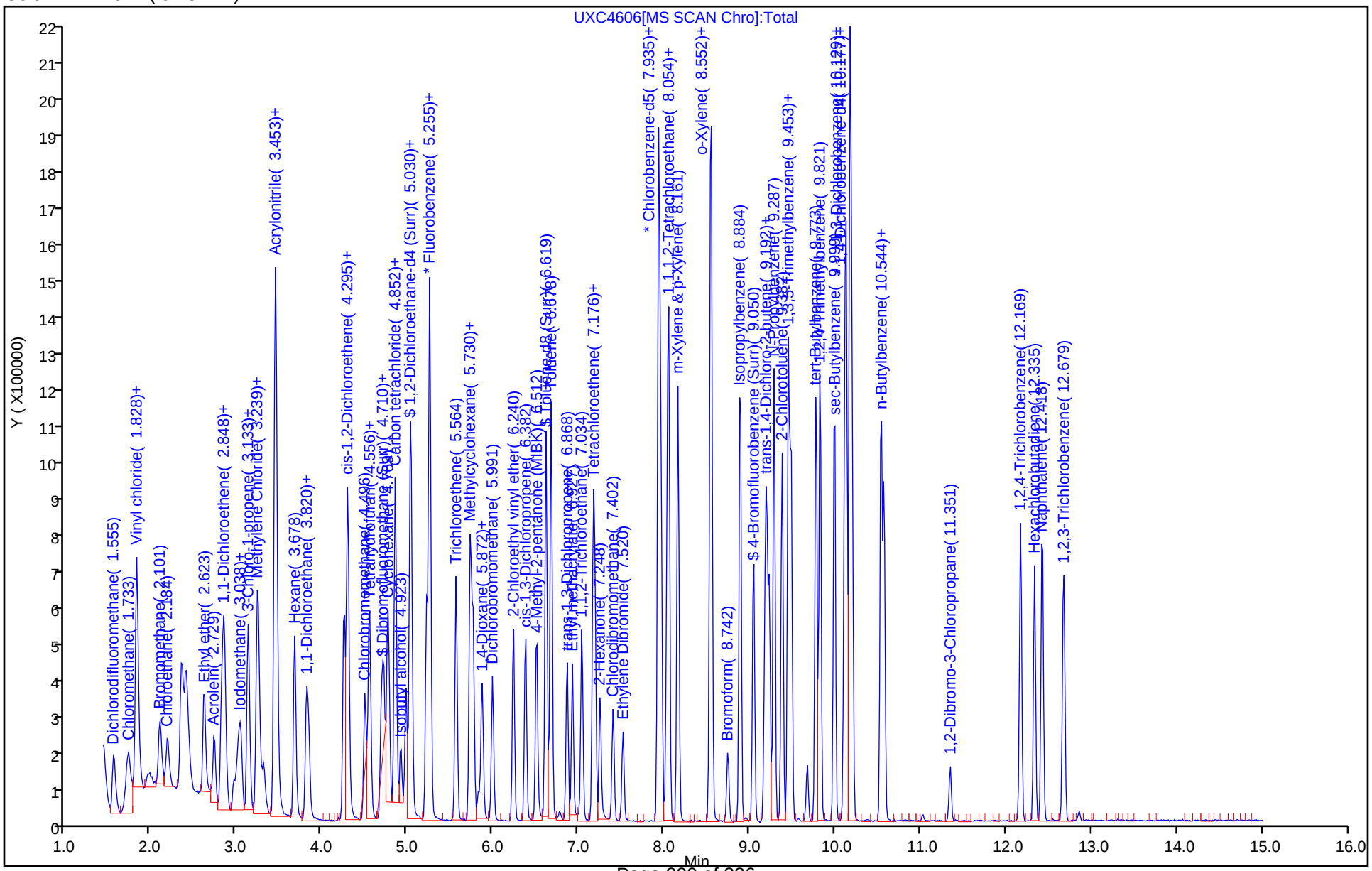
Lims ID: STD8260 L3 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4607.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Aug-2018 12:23:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-006
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:41 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 27-Aug-2018 12:49:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1443343	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	87	1112023	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.176	0.001	95	607762	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	93	68259	2.00	1.82	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.982	0.001	99	97249	2.00	1.92	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	94	278202	2.00	1.86	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	91	97247	2.00	1.87	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	99449	2.00	1.93	
10 Chloromethane	50	1.721	1.721	0.000	99	96314	2.00	1.97	
11 Vinyl chloride	62	1.816	1.816	0.000	98	102198	2.00	2.00	
12 Butadiene	54	1.828	1.828	0.000	98	124291	2.00	2.03	
13 Bromomethane	94	2.101	2.101	0.000	92	74964	2.00	1.87	
14 Chloroethane	64	2.184	2.184	0.000	99	64547	2.00	1.87	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	98	165328	2.00	1.90	
16 Trichlorofluoromethane	101	2.409	2.397	0.012	98	155260	2.00	1.88	
17 Ethyl ether	59	2.623	2.623	0.000	90	83644	2.00	1.98	
18 Acrolein	56	2.741	2.741	0.000	99	78340	10.0	9.80	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	98	89599	2.00	2.06	
20 1,1,2-Trichloro-1,2,2-trif	151	2.848	2.836	0.012	92	64198	2.00	1.97	
22 Acetone	58	2.872	2.860	0.012	99	18581	4.00	4.58	
23 Iodomethane	142	2.967	2.966	0.001	99	132860	2.00	2.13	
24 Carbon disulfide	76	3.026	3.026	0.000	100	258844	2.00	2.18	
27 Methyl acetate	43	3.145	3.132	0.012	98	120893	4.00	3.97	
25 3-Chloro-1-propene	76	3.133	3.132	0.001	86	54065	2.00	2.03	
28 Methylene Chloride	84	3.239	3.227	0.012	93	88133	2.00	2.13	
29 2-Methyl-2-propanol	59	3.311	3.310	0.001	96	60280	20.0	21.4	
32 Acrylonitrile	53	3.441	3.441	0.000	99	305390	20.0	19.9	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	98	227704	2.00	1.99	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	89378	2.00	2.05	
33 Hexane	86	3.678	3.678	0.000	94	21037	2.00	1.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.820	3.820	0.000	97	145135	2.00	2.04	
36 Vinyl acetate	43	3.844	3.844	0.000	98	118113	2.00	1.81	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	97789	2.00	2.05	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	62	16588	2.00	1.97	
41 2-Butanone (MEK)	72	4.307	4.306	0.001	98	19248	4.00	3.83	
45 Chlorobromomethane	128	4.496	4.496	0.000	92	46975	2.00	2.08	
46 Tetrahydrofuran	42	4.544	4.544	0.000	90	67986	4.00	3.75	
47 Chloroform	83	4.556	4.556	0.000	96	147623	2.00	2.04	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	107448	2.00	2.00	
49 Cyclohexane	56	4.769	4.769	0.000	91	135925	2.00	2.06	
50 Carbon tetrachloride	117	4.864	4.852	0.012	96	90460	2.00	1.93	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	94	122585	2.00	2.07	
52 Isobutyl alcohol	41	4.923	4.911	0.012	94	40146	50.0	46.4	
53 Benzene	78	5.030	5.030	0.000	96	349635	2.00	2.02	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	97	121816	2.00	1.99	
56 n-Heptane	100	5.220	5.220	0.000	90	20569	2.00	1.93	
58 Trichloroethene	130	5.564	5.563	0.001	97	94117	2.00	2.00	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	131910	2.00	1.95	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	79430	2.00	1.98	
63 Dibromomethane	93	5.872	5.872	0.000	93	52909	2.00	2.02	
64 1,4-Dioxane	88	5.872	5.872	0.000	39	17039	40.0	44.7	
65 Dichlorobromomethane	83	5.991	5.990	0.001	99	99989	2.00	1.92	
67 2-Chloroethyl vinyl ether	63	6.240	6.239	0.001	93	84614	4.00	3.63	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	110446	2.00	1.87	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	96	151182	4.00	4.00	
70 Toluene	91	6.678	6.678	0.000	97	360112	2.00	2.00	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	96	93357	2.00	1.84	
72 Ethyl methacrylate	69	6.927	6.927	0.000	90	78210	2.00	1.76	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	68188	2.00	2.00	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	72611	2.00	2.01	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	92	124554	2.00	2.05	
76 2-Hexanone	43	7.248	7.247	0.001	98	92271	4.00	3.75	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	64155	2.00	1.84	
80 Ethylene Dibromide	107	7.520	7.520	0.000	97	70071	2.00	1.97	
82 Chlorobenzene	112	7.959	7.959	0.000	95	228397	2.00	2.00	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	90	67113	2.00	1.89	
84 Ethylbenzene	106	8.054	8.054	0.000	98	122210	2.00	1.97	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	298005	2.00	1.99	
86 o-Xylene	106	8.540	8.540	0.000	97	150387	2.00	2.00	
87 Styrene	104	8.552	8.552	0.000	94	242295	2.00	1.92	
88 Bromoform	173	8.742	8.742	0.000	96	36504	2.00	1.71	
89 Isopropylbenzene	105	8.884	8.884	0.000	96	372726	2.00	1.97	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	88499	2.00	2.04	
92 Bromobenzene	156	9.204	9.204	0.000	94	101826	2.00	2.08	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	87	30467	2.00	2.02	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	69	18164	2.00	1.70	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	102452	2.00	2.03	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	90274	2.00	2.05	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	93	301004	2.00	1.99	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	307681	2.00	2.05	
101 tert-Butylbenzene	119	9.773	9.773	0.000	92	264446	2.00	1.98	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	316061	2.00	2.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.987	9.987	0.000	94	358564	2.00	1.99	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	183499	2.00	2.05	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	316632	2.00	1.99	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	192375	2.00	2.05	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	269407	2.00	2.02	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	97	180401	2.00	2.09	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.350	0.001	81	15572	2.00	1.92	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	117937	2.00	2.00	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	64554	2.00	1.90	
117 Naphthalene	128	12.430	12.430	0.000	97	309095	2.00	2.22	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	94	111571	2.00	2.10	
S 127 1,2-Dichloroethene, Total	96				0			4.09	
S 128 1,3-Dichloropropene, Total	75				0			3.70	
S 129 Xylenes, Total	106				0		4.00	3.98	
S 130 Trihalomethanes, Total	1				0		8.00	7.52	

Reagents:

VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_stk_00078	Amount Added:	1.60	Units: uL
VMRPRIMW_00297	Amount Added:	1.60	Units: uL
VMAROLISTDW_00260	Amount Added:	1.60	Units: uL
VMRGAS_00259	Amount Added:	1.60	Units: uL

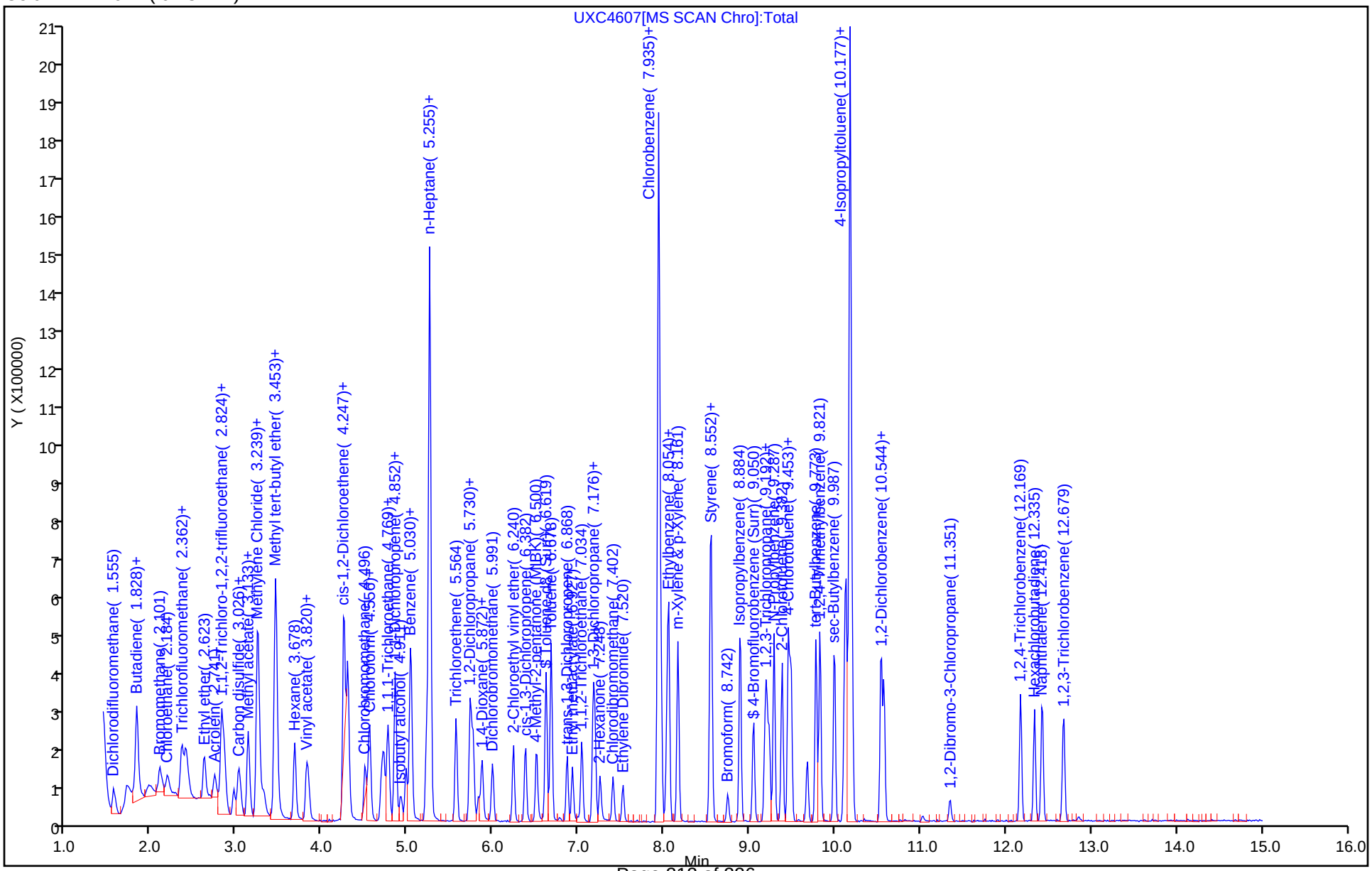
Report Date: 28-Aug-2018 10:27:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4607.D

Injection Date:	27-Aug-2018 12:23:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4608.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Aug-2018 12:45:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-007
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:30:51 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 27-Aug-2018 14:15:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1380815	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	87	1066704	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	94	589225	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	92	38282	1.00	1.07	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.982	0.000	99	52466	1.00	1.08	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	145998	1.00	1.02	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	92	52658	1.00	1.06	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	51090	1.00	1.04	
10 Chloromethane	50	1.721	1.721	0.000	99	49755	1.00	1.06	
11 Vinyl chloride	62	1.816	1.816	0.000	94	54514	1.00	1.11	
12 Butadiene	54	1.828	1.828	0.000	95	66308	1.00	1.13	
13 Bromomethane	94	2.101	2.101	0.000	92	45430	1.00	1.18	
14 Chloroethane	64	2.184	2.184	0.000	98	36530	1.00	1.11	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	99	95036	1.00	1.14	
16 Trichlorofluoromethane	101	2.409	2.397	0.012	98	80946	1.00	1.03	
17 Ethyl ether	59	2.623	2.623	0.000	89	41947	1.00	1.04	
18 Acrolein	56	2.741	2.741	0.000	98	42299	5.00	5.53	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	98	40975	1.00	0.9847	
20 1,1,2-Trichloro-1,2,2-trif	151	2.848	2.836	0.012	88	32084	1.00	1.03	
22 Acetone	58	2.872	2.860	0.012	97	8171	2.00	2.11	
23 Iodomethane	142	2.966	2.966	0.000	99	62391	1.00	1.04	
24 Carbon disulfide	76	3.026	3.026	0.000	99	130163	1.00	1.14	
27 Methyl acetate	43	3.144	3.132	0.012	98	62540	2.00	2.15	
25 3-Chloro-1-propene	76	3.133	3.132	0.000	87	26387	1.00	1.03	
28 Methylene Chloride	84	3.239	3.227	0.012	93	43451	1.00	1.10	
29 2-Methyl-2-propanol	59	3.310	3.310	0.000	97	27927	10.0	10.4	
32 Acrylonitrile	53	3.441	3.441	0.000	98	151973	10.0	10.3	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	97	106890	1.00	0.9773	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	98	45683	1.00	1.09	
33 Hexane	86	3.678	3.678	0.000	94	11991	1.00	1.16	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.820	3.820	0.000	96	71365	1.00	1.05	
36 Vinyl acetate	43	3.844	3.844	0.000	97	63403	1.00	1.02	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	82	50784	1.00	1.11	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	57	7779	1.00	0.9670	
41 2-Butanone (MEK)	72	4.306	4.306	0.000	73	9914	2.00	2.06	
45 Chlorobromomethane	128	4.496	4.496	0.000	93	22686	1.00	1.05	
46 Tetrahydrofuran	42	4.544	4.544	0.000	88	46565	2.00	1.97	
47 Chloroform	83	4.556	4.556	0.000	96	73006	1.00	1.05	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	97	53729	1.00	1.04	
49 Cyclohexane	56	4.769	4.769	0.000	91	64478	1.00	1.02	
50 Carbon tetrachloride	117	4.864	4.852	0.012	96	43848	1.00	0.9756	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	93	61427	1.00	1.09	
52 Isobutyl alcohol	41	4.911	4.911	0.000	94	16618	25.0	20.1	
53 Benzene	78	5.030	5.030	0.000	95	178764	1.00	1.08	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	97	63635	1.00	1.09	
56 n-Heptane	100	5.220	5.220	0.000	82	10828	1.00	1.06	a
58 Trichloroethene	130	5.563	5.563	0.000	96	49124	1.00	1.09	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	68185	1.00	1.05	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	43396	1.00	1.13	
63 Dibromomethane	93	5.872	5.872	0.000	92	27467	1.00	1.10	
64 1,4-Dioxane	88	5.872	5.872	0.000	37	7172	20.0	13.5	
65 Dichlorobromomethane	83	5.990	5.990	0.000	98	49747	1.00	1.00	
67 2-Chloroethyl vinyl ether	63	6.239	6.239	0.000	93	45157	2.00	2.02	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	93	55734	1.00	0.9854	
69 4-Methyl-2-pentanone (MIBK	43	6.512	6.500	0.012	97	72911	2.00	2.01	
70 Toluene	91	6.678	6.678	0.000	98	184784	1.00	1.07	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	94	47670	1.00	0.9769	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	38829	1.00	0.9107	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	34603	1.00	1.06	
74 Tetrachloroethene	164	7.176	7.176	0.000	95	36649	1.00	1.06	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	91	60294	1.00	1.04	
76 2-Hexanone	43	7.247	7.247	0.000	98	48544	2.00	2.06	
79 Chlorodibromomethane	129	7.402	7.402	0.000	91	31278	1.00	0.9369	
80 Ethylene Dibromide	107	7.520	7.520	0.000	96	36430	1.00	1.07	
82 Chlorobenzene	112	7.959	7.959	0.000	95	117733	1.00	1.07	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	90	33907	1.00	1.00	
84 Ethylbenzene	106	8.054	8.054	0.000	98	63425	1.00	1.06	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	94	150472	1.00	1.05	
86 o-Xylene	106	8.540	8.540	0.000	96	73518	1.00	1.02	
87 Styrene	104	8.552	8.552	0.000	93	119079	1.00	0.9831	
88 Bromoform	173	8.742	8.742	0.000	92	17545	1.00	0.8586	
89 Isopropylbenzene	105	8.884	8.884	0.000	96	183680	1.00	1.01	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	98	42907	1.00	1.02	
92 Bromobenzene	156	9.204	9.204	0.000	94	49172	1.00	1.04	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	85	15543	1.00	1.06	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	66	9948	1.00	0.9592	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	49701	1.00	1.02	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	43960	1.00	1.03	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	150099	1.00	1.02	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	154714	1.00	1.06	
101 tert-Butylbenzene	119	9.773	9.773	0.000	92	136275	1.00	1.05	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	95	158463	1.00	1.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.987	9.987	0.000	93	180431	1.00	1.03	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	92830	1.00	1.07	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	156020	1.00	1.01	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	100040	1.00	1.10	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	135459	1.00	1.05	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	97	88325	1.00	1.05	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.350	0.000	78	7126	1.00	0.9039	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	60696	1.00	0.7431	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	33885	1.00	0.5868	
117 Naphthalene	128	12.430	12.430	0.000	96	146771	1.00	1.09	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	56321	1.00	0.7032	
S 127 1,2-Dichloroethene, Total	96				0			2.21	
S 128 1,3-Dichloropropene, Total	75				0			1.96	
S 129 Xylenes, Total	106				0		2.00	2.06	
S 130 Trihalomethanes, Total	1				0		4.00	3.85	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_stk_00078	Amount Added:	0.80	Units: uL
VMRPRIMW_00297	Amount Added:	0.80	Units: uL
VMAROLISTDW_00260	Amount Added:	0.80	Units: uL
VMRGAS_00259	Amount Added:	0.80	Units: uL

Report Date: 28-Aug-2018 10:30:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4608.D

Injection Date: 27-Aug-2018 12:45:30 Instrument ID: A3UX15 Operator ID:

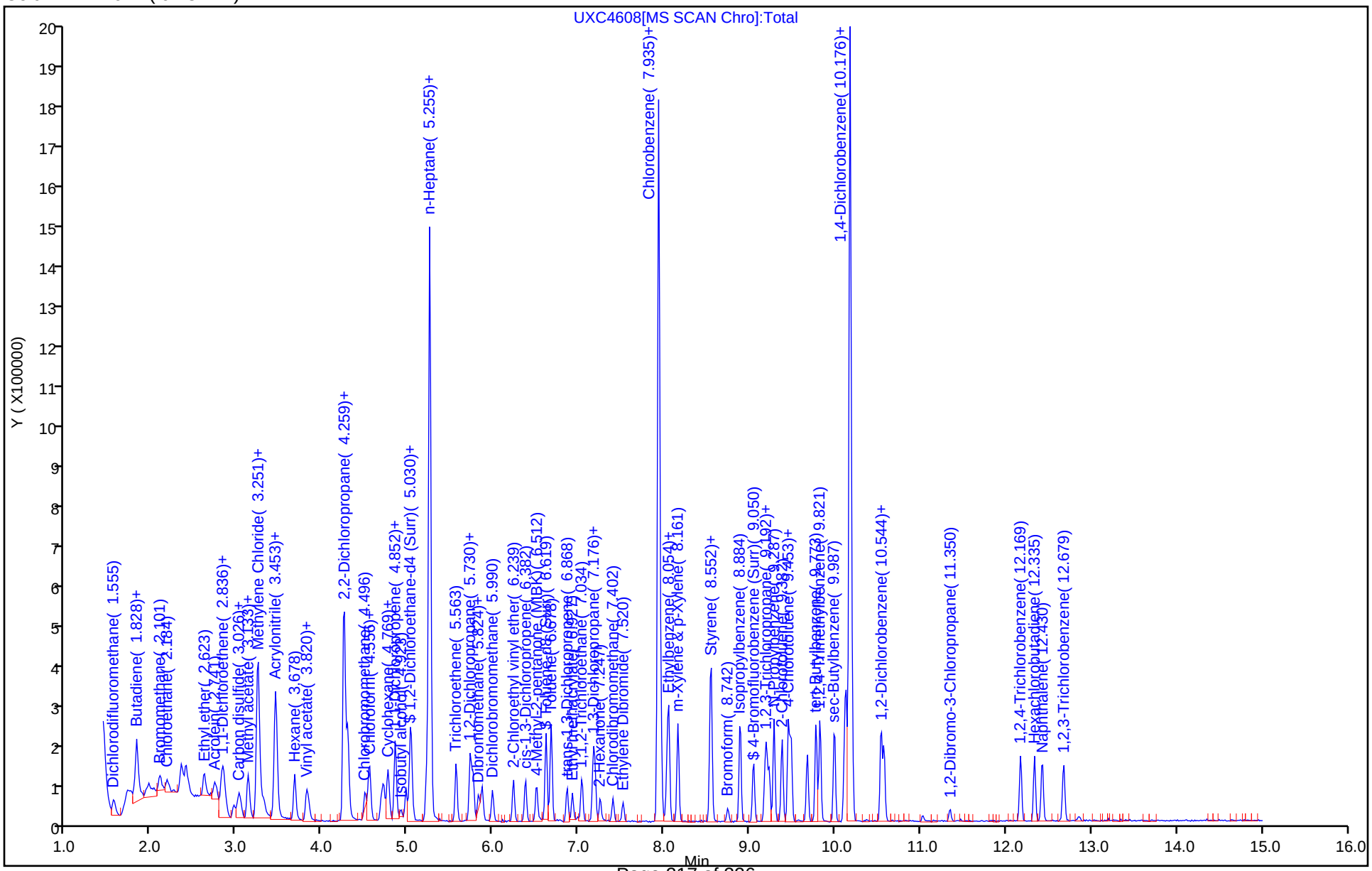
Lims ID: STD8260 L1 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Canton

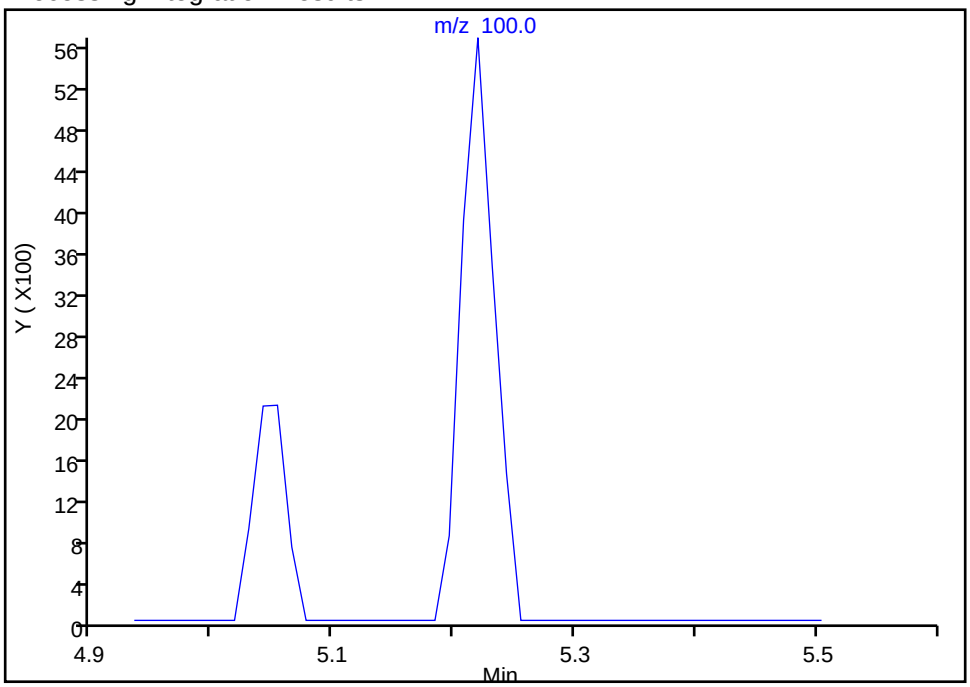
Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4608.D
Injection Date: 27-Aug-2018 12:45:30 Instrument ID: A3UX15
Lims ID: STD8260 L1
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

56 n-Heptane, CAS: 142-82-5

Signal: 1

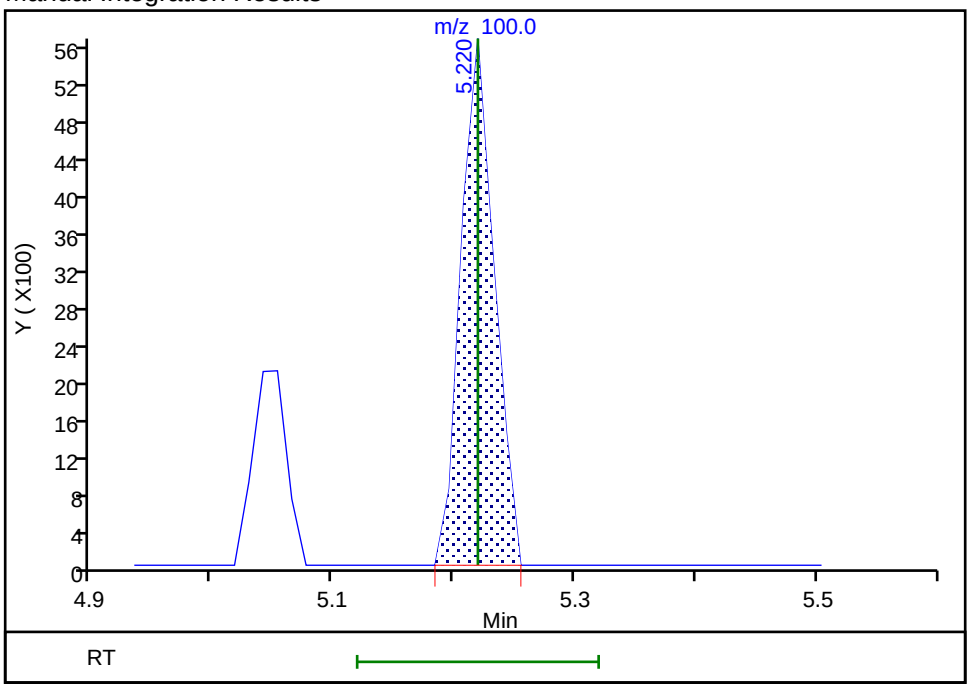
Not Detected
Expected RT: 5.22

Processing Integration Results



Manual Integration Results

RT: 5.22
Area: 10828
Amount: 1.064071
Amount Units: ug/l



Reviewer: evansle, 27-Aug-2018 14:12:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: ICV 240-348190/9 Calibration Date: 10/02/2018 18:21

Instrument ID: A3UX10 Calib Start Date: 10/02/2018 15:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 17:56

Lab File ID: UXX5946.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3440	0.3451		0.0100	0.0100	0.3	50.0
Chloromethane	Ave	0.4030	0.3613	0.1000	0.00896	0.0100	-10.4	50.0
Butadiene	Ave	0.3780	0.3331		0.00881	0.0100	-11.9	50.0
Vinyl chloride	Ave	0.3591	0.3452		0.00961	0.0100	-3.9	20.0
Bromomethane	Ave	0.2122	0.1913		0.00901	0.0100	-9.9	50.0
Chloroethane	Lin1		0.1940		0.00877	0.0100	-12.3	50.0
Dichlorofluoromethane	Ave	0.5143	0.4937		0.00960	0.0100	-4.0	50.0
Trichlorofluoromethane	Ave	0.4003	0.3666		0.00916	0.0100	-8.4	50.0
Ethyl ether	Ave	0.2351	0.2403		0.0102	0.0100	2.2	50.0
Acrolein	Ave	0.0380	0.0424		0.0557	0.0500	11.4	50.0
1,1-Dichloroethene	Ave	0.2879	0.3055		0.0106	0.0100	6.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin1		0.2166		0.0105	0.0100	4.8	50.0
Acetone	Lin1		0.0612		0.0166	0.0200	-17.2	50.0
Iodomethane	Ave	0.5233	0.5267		0.0101	0.0100	0.7	50.0
Carbon disulfide	Ave	0.9675	0.9637		0.00996	0.0100	-0.4	50.0
3-Chloro-1-propene	Ave	0.2128	0.2096		0.00985	0.0100	-1.5	50.0
Methyl acetate	Ave	0.1605	0.1565		0.0195	0.0200	-2.5	50.0
Methylene Chloride	Ave	0.3525	0.3388		0.00961	0.0100	-3.9	50.0
2-Methyl-2-propanol	Ave	0.0278	0.0215		0.0774	0.100	-22.6	50.0
Acrylonitrile	Ave	0.0958	0.0915		0.0955	0.100	-4.5	50.0
Methyl tert-butyl ether	Ave	0.8844	0.8779		0.00993	0.0100	-0.7	50.0
trans-1,2-Dichloroethene	Ave	0.3190	0.3363		0.0105	0.0100	5.4	50.0
Hexane	Ave	0.0540	0.0562		0.0104	0.0100	4.1	20.0
1,1-Dichloroethane	Ave	0.5690	0.5736	0.1000	0.0101	0.0100	0.8	50.0
Vinyl acetate	Ave	0.4510	0.4649		0.0103	0.0100	3.1	50.0
2,2-Dichloropropane	Ave	0.0953	0.0924		0.00970	0.0100	-3.0	50.0
2-Butanone (MEK)	Ave	0.0926	0.0789		0.0171	0.0200	-14.7	50.0
cis-1,2-Dichloroethene	Ave	0.3349	0.3388		0.0101	0.0100	1.2	50.0
Chlorobromomethane	Ave	0.1496	0.1507		0.0101	0.0100	0.7	50.0
Tetrahydrofuran	Ave	0.0667	0.0564		0.0169	0.0200	-15.4	50.0
Chloroform	Ave	0.4937	0.4935		0.0100	0.0100	-0.0	20.0
1,1,1-Trichloroethane	Ave	0.4816	0.4753		0.00987	0.0100	-1.3	50.0
Cyclohexane	Ave	0.5356	0.5471		0.0102	0.0100	2.1	50.0
1,1-Dichloropropene	Ave	0.3480	0.3613		0.0104	0.0100	3.8	50.0
Carbon tetrachloride	Ave	0.3915	0.3928		0.0100	0.0100	0.3	50.0
Isobutyl alcohol	Ave	0.0091	0.0077		0.211	0.250	-15.8	50.0
Benzene	Ave	1.147	1.145		0.00999	0.0100	-0.1	50.0
1,2-Dichloroethane	Ave	0.4198	0.4202		0.0100	0.0100	0.1	50.0
n-Heptane	Ave	0.0441	0.0488		0.0111	0.0100	10.6	50.0
Trichloroethene	Ave	0.2858	0.2864		0.0100	0.0100	0.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: ICV 240-348190/9 Calibration Date: 10/02/2018 18:21

Instrument ID: A3UX10 Calib Start Date: 10/02/2018 15:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 17:56

Lab File ID: UXX5946.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4023	0.3992		0.00992	0.0100	-0.8	50.0
1,2-Dichloropropane	Ave	0.2977	0.3081		0.0103	0.0100	3.5	20.0
1,4-Dioxane	Qua		0.0016		0.111	0.200	-44.5	50.0
Dibromomethane	Ave	0.1689	0.1608		0.00952	0.0100	-4.8	50.0
Dichlorobromomethane	Ave	0.3738	0.3860		0.0103	0.0100	3.3	50.0
2-Chloroethyl vinyl ether	Ave	0.1569	0.1547		0.00985	0.0100	-1.5	50.0
cis-1,3-Dichloropropene	Ave	0.4140	0.4330		0.0105	0.0100	4.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2300	0.2246		0.0195	0.0200	-2.3	50.0
Toluene	Ave	1.524	1.527		0.0100	0.0100	0.2	20.0
trans-1,3-Dichloropropene	Ave	0.4515	0.4624		0.0102	0.0100	2.4	50.0
Ethyl methacrylate	Ave	0.3702	0.3874		0.0105	0.0100	4.7	50.0
1,1,2-Trichloroethane	Ave	0.2836	0.2833		0.00999	0.0100	-0.0	50.0
Tetrachloroethene	Ave	0.2655	0.2614		0.00984	0.0100	-1.6	50.0
1,3-Dichloropropane	Ave	0.4864	0.4763		0.00979	0.0100	-2.1	50.0
2-Hexanone	Ave	0.1864	0.1863		0.0200	0.0200	-0.0	50.0
Chlorodibromomethane	Ave	0.3162	0.3326		0.0105	0.0100	5.2	50.0
Ethylene Dibromide	Ave	0.2793	0.2762		0.00989	0.0100	-1.1	50.0
Chlorobenzene	Ave	0.9949	0.9762	0.3000	0.00981	0.0100	-1.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3753	0.3601		0.00960	0.0100	-4.0	50.0
Ethylbenzene	Ave	0.5550	0.5421		0.00977	0.0100	-2.3	20.0
m-Xylene & p-Xylene	Ave	0.6875	0.6797		0.00989	0.0100	-1.1	50.0
o-Xylene	Ave	0.7160	0.6810		0.00951	0.0100	-4.9	50.0
Styrene	Ave	1.140	1.099		0.00965	0.0100	-3.5	50.0
Bromoform	Ave	0.1941	0.1912	0.1000	0.00985	0.0100	-1.5	50.0
Isopropylbenzene	Ave	1.746	1.691		0.00969	0.0100	-3.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6756	0.6826	0.3000	0.0101	0.0100	1.0	50.0
Bromobenzene	Ave	0.7676	0.7690		0.0100	0.0100	0.2	50.0
1,2,3-Trichloropropane	Ave	0.2120	0.2116		0.00998	0.0100	-0.2	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1573		0.0115	0.0100	14.7	50.0
N-Propylbenzene	Ave	0.7981	0.8486		0.0106	0.0100	6.3	50.0
2-Chlorotoluene	Ave	0.7489	0.7353		0.00982	0.0100	-1.8	50.0
1,3,5-Trimethylbenzene	Ave	2.520	2.599		0.0103	0.0100	3.2	50.0
4-Chlorotoluene	Ave	0.7451	0.7947		0.0107	0.0100	6.6	50.0
tert-Butylbenzene	Ave	2.046	2.073		0.0101	0.0100	1.3	50.0
1,2,4-Trimethylbenzene	Ave	2.763	2.787		0.0101	0.0100	0.9	50.0
sec-Butylbenzene	Ave	2.761	2.810		0.0102	0.0100	1.8	50.0
1,3-Dichlorobenzene	Ave	1.510	1.514		0.0100	0.0100	0.3	50.0
4-Isopropyltoluene	Ave	2.402	2.473		0.0103	0.0100	3.0	50.0
1,4-Dichlorobenzene	Ave	1.538	1.522		0.00989	0.0100	-1.1	50.0
n-Butylbenzene	Ave	1.940	1.904		0.00981	0.0100	-1.9	50.0
1,2-Dichlorobenzene	Ave	1.537	1.510		0.00983	0.0100	-1.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: ICV 240-348190/9 Calibration Date: 10/02/2018 18:21

Instrument ID: A3UX10 Calib Start Date: 10/02/2018 15:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 17:56

Lab File ID: UXX5946.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1474		0.00957	0.0100	-4.3	50.0
1,2,4-Trichlorobenzene	Ave	0.9316	0.8227		0.00883	0.0100	-11.7	50.0
Hexachlorobutadiene	Qua		0.2234		0.00748	0.0100	-25.2	50.0
Naphthalene	Ave	2.426	2.081		0.00858	0.0100	-14.2	50.0
1,2,3-Trichlorobenzene	Ave	0.9073	0.7077		0.00780	0.0100	-22.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2627	0.2751		0.0105	0.0100	4.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3357	0.3486		0.0104	0.0100	3.9	50.0
Toluene-d8 (Surr)	Ave	1.262	1.312		0.0104	0.0100	3.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4807	0.4846		0.0101	0.0100	0.8	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5946.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Oct-2018 18:21:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-009
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub63

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:52 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.566	5.565	0.001	98	756139	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.251	8.250	0.001	86	615440	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.486	10.486	0.000	95	331268	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.998	4.997	0.001	93	208004	10.0	10.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.282	5.281	0.001	98	263590	10.0	10.4	
$ 6 Toluene-d8 (Surr)	98	6.938	6.937	0.001	94	807523	10.0	10.4	
$ 7 4-Bromofluorobenzene (Surr	95	9.351	9.350	0.001	88	298215	10.0	10.1	
9 Dichlorodifluoromethane	85	1.686	1.662	0.024	99	260949	10.0	10.0	
10 Chloromethane	50	1.851	1.827	0.024	99	273156	10.0	8.96	
12 Butadiene	54	1.958	1.945	0.013	83	251855	10.0	8.81	
11 Vinyl chloride	62	1.970	1.957	0.013	93	260987	10.0	9.61	
13 Bromomethane	94	2.277	2.265	0.012	92	144616	10.0	9.01	
14 Chloroethane	64	2.336	2.348	-0.012	99	146721	10.0	8.77	
15 Dichlorofluoromethane	67	2.549	2.549	0.000	92	373319	10.0	9.60	
16 Trichlorofluoromethane	101	2.597	2.584	0.013	93	277192	10.0	9.16	
17 Ethyl ether	59	2.833	2.833	0.000	91	181675	10.0	10.2	
18 Acrolein	56	2.951	2.951	0.000	99	160194	50.0	55.7	
19 1,1-Dichloroethene	96	3.046	3.045	0.001	96	230996	10.0	10.6	
20 1,1,2-Trichloro-1,2,2-trif	151	3.070	3.069	0.001	92	163784	10.0	10.5	
21 Acetone	43	3.105	3.093	0.012	98	92507	20.0	16.6	
22 Iodomethane	142	3.188	3.187	0.001	98	398276	10.0	10.1	
24 Carbon disulfide	76	3.247	3.247	0.000	100	728689	10.0	9.96	
26 3-Chloro-1-propene	76	3.377	3.377	0.000	88	158504	10.0	9.85	
27 Methyl acetate	43	3.401	3.400	0.001	98	236671	20.0	19.5	
28 Methylene Chloride	84	3.484	3.483	0.001	95	256191	10.0	9.61	
29 2-Methyl-2-propanol	59	3.578	3.578	0.000	98	162888	100.0	77.4	
31 Acrylonitrile	53	3.709	3.708	0.000	99	691822	100.0	95.5	
32 Methyl tert-butyl ether	73	3.732	3.732	0.000	98	663789	10.0	9.93	
30 trans-1,2-Dichloroethene	96	3.732	3.732	0.000	71	254251	10.0	10.5	
33 Hexane	86	3.969	3.968	0.001	89	42454	10.0	10.4	
34 1,1-Dichloroethane	63	4.099	4.098	0.001	97	433741	10.0	10.1	
35 Vinyl acetate	43	4.134	4.134	0.000	97	351545	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	4.596	4.595	0.001	42	119348	20.0	17.1	
40 cis-1,2-Dichloroethene	96	4.596	4.595	0.001	85	256177	10.0	10.1	
39 2,2-Dichloropropane	97	4.596	4.595	0.001	70	69884	10.0	9.70	
45 Chlorobromomethane	128	4.797	4.796	0.001	95	113953	10.0	10.1	
46 Tetrahydrofuran	42	4.844	4.843	0.001	95	85271	20.0	16.9	
47 Chloroform	83	4.856	4.855	0.001	96	373179	10.0	10.0	
48 1,1,1-Trichloroethane	97	5.021	5.021	0.000	98	359358	10.0	9.87	
49 Cyclohexane	56	5.081	5.080	0.001	91	413674	10.0	10.2	
50 1,1-Dichloropropene	75	5.163	5.163	0.000	91	273218	10.0	10.4	
51 Carbon tetrachloride	117	5.163	5.163	0.000	92	297022	10.0	10.0	
52 Isobutyl alcohol	41	5.234	5.234	0.000	96	118397	250.0	210.6	
53 Benzene	78	5.341	5.340	0.001	97	865903	10.0	9.99	
54 1,2-Dichloroethane	62	5.353	5.352	0.001	97	317755	10.0	10.0	
56 n-Heptane	100	5.542	5.541	0.001	91	36918	10.0	11.1	
58 Trichloroethene	130	5.885	5.884	0.001	94	216544	10.0	10.0	
60 Methylcyclohexane	83	6.051	6.050	0.001	95	301857	10.0	9.92	
61 1,2-Dichloropropane	63	6.074	6.074	0.000	94	232927	10.0	10.3	
63 Dibromomethane	93	6.181	6.180	0.001	95	121619	10.0	9.52	
64 1,4-Dioxane	88	6.181	6.192	-0.011	37	24227	200.0	110.9	
65 Dichlorobromomethane	83	6.311	6.310	0.001	98	291857	10.0	10.3	
67 2-Chloroethyl vinyl ether	63	6.547	6.559	-0.012	92	116938	10.0	9.85	
68 cis-1,3-Dichloropropene	75	6.689	6.689	0.000	93	327430	10.0	10.5	
69 4-Methyl-2-pentanone (MIBK	43	6.819	6.819	0.000	95	339622	20.0	19.5	
70 Toluene	91	6.997	6.996	0.001	97	939987	10.0	10.0	
71 trans-1,3-Dichloropropene	75	7.174	7.174	0.000	96	284590	10.0	10.2	
72 Ethyl methacrylate	69	7.245	7.245	0.000	89	238428	10.0	10.5	
73 1,1,2-Trichloroethane	97	7.352	7.351	0.001	93	174374	10.0	10.0	
74 Tetrachloroethene	164	7.494	7.493	0.001	93	160843	10.0	9.84	
75 1,3-Dichloropropane	76	7.505	7.505	0.000	93	293110	10.0	9.79	
76 2-Hexanone	43	7.565	7.564	0.001	94	229315	20.0	20.0	
78 Chlorodibromomethane	129	7.718	7.718	0.000	90	204701	10.0	10.5	
80 Ethylene Dibromide	107	7.825	7.824	0.001	100	170009	10.0	9.89	
82 Chlorobenzene	112	8.274	8.274	0.000	93	600799	10.0	9.81	
83 1,1,1,2-Tetrachloroethane	131	8.345	8.345	0.000	92	221623	10.0	9.60	
84 Ethylbenzene	106	8.369	8.368	0.001	99	333615	10.0	9.77	
85 m-Xylene & p-Xylene	106	8.475	8.475	0.000	99	418327	10.0	9.89	
86 o-Xylene	106	8.854	8.853	0.001	97	419106	10.0	9.51	
87 Styrene	104	8.866	8.865	0.001	94	676504	10.0	9.65	
88 Bromoform	173	9.055	9.054	0.001	94	117676	10.0	9.85	
89 Isopropylbenzene	105	9.209	9.208	0.001	96	1040869	10.0	9.69	
92 1,1,2,2-Tetrachloroethane	83	9.481	9.480	0.001	97	226135	10.0	10.1	
93 Bromobenzene	156	9.516	9.516	0.000	97	254758	10.0	10.0	
94 1,2,3-Trichloropropane	110	9.540	9.539	0.001	85	70080	10.0	9.98	
95 trans-1,4-Dichloro-2-buten	53	9.540	9.539	0.001	70	52102	10.0	11.5	
96 N-Propylbenzene	120	9.599	9.598	0.001	99	281107	10.0	10.6	
97 2-Chlorotoluene	126	9.694	9.693	0.001	96	243568	10.0	9.82	
98 1,3,5-Trimethylbenzene	105	9.765	9.764	0.001	94	861102	10.0	10.3	
99 4-Chlorotoluene	126	9.800	9.800	0.000	98	263249	10.0	10.7	
100 tert-Butylbenzene	119	10.096	10.095	0.001	92	686806	10.0	10.1	
102 1,2,4-Trimethylbenzene	105	10.131	10.143	-0.012	97	923259	10.0	10.1	
103 sec-Butylbenzene	105	10.309	10.308	0.001	94	930926	10.0	10.2	
104 1,3-Dichlorobenzene	146	10.427	10.426	0.001	98	501587	10.0	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 4-Isopropyltoluene	119	10.451	10.450	0.001	97	819344	10.0	10.3	
106 1,4-Dichlorobenzene	146	10.510	10.509	0.001	94	504218	10.0	9.89	
109 n-Butylbenzene	91	10.853	10.852	0.001	97	630665	10.0	9.81	
110 1,2-Dichlorobenzene	146	10.877	10.876	0.001	97	500236	10.0	9.83	
111 1,2-Dibromo-3-Chloropropan	157	11.645	11.657	-0.012	83	48818	10.0	9.57	
113 1,2,4-Trichlorobenzene	180	12.485	12.485	0.000	94	272548	10.0	8.83	
114 Hexachlorobutadiene	225	12.651	12.650	0.001	97	74011	10.0	7.48	
115 Naphthalene	128	12.734	12.733	0.001	99	689371	10.0	8.58	
116 1,2,3-Trichlorobenzene	180	12.982	12.981	0.001	97	234431	10.0	7.80	
S 130 Xylenes, Total	106				0		20.0	19.4	
S 131 Trihalomethanes, Total	1				0		40.0	40.7	

Reagents:

VMFASPW_00269	Amount Added:	8.00	Units: uL
VMFASGW_00276	Amount Added:	8.00	Units: uL
VMFASAW_00250	Amount Added:	8.00	Units: uL
VM50IS_00071	Amount Added:	1.00	Units: uL
vm50ss_00337	Amount Added:	8.00	Units: uL

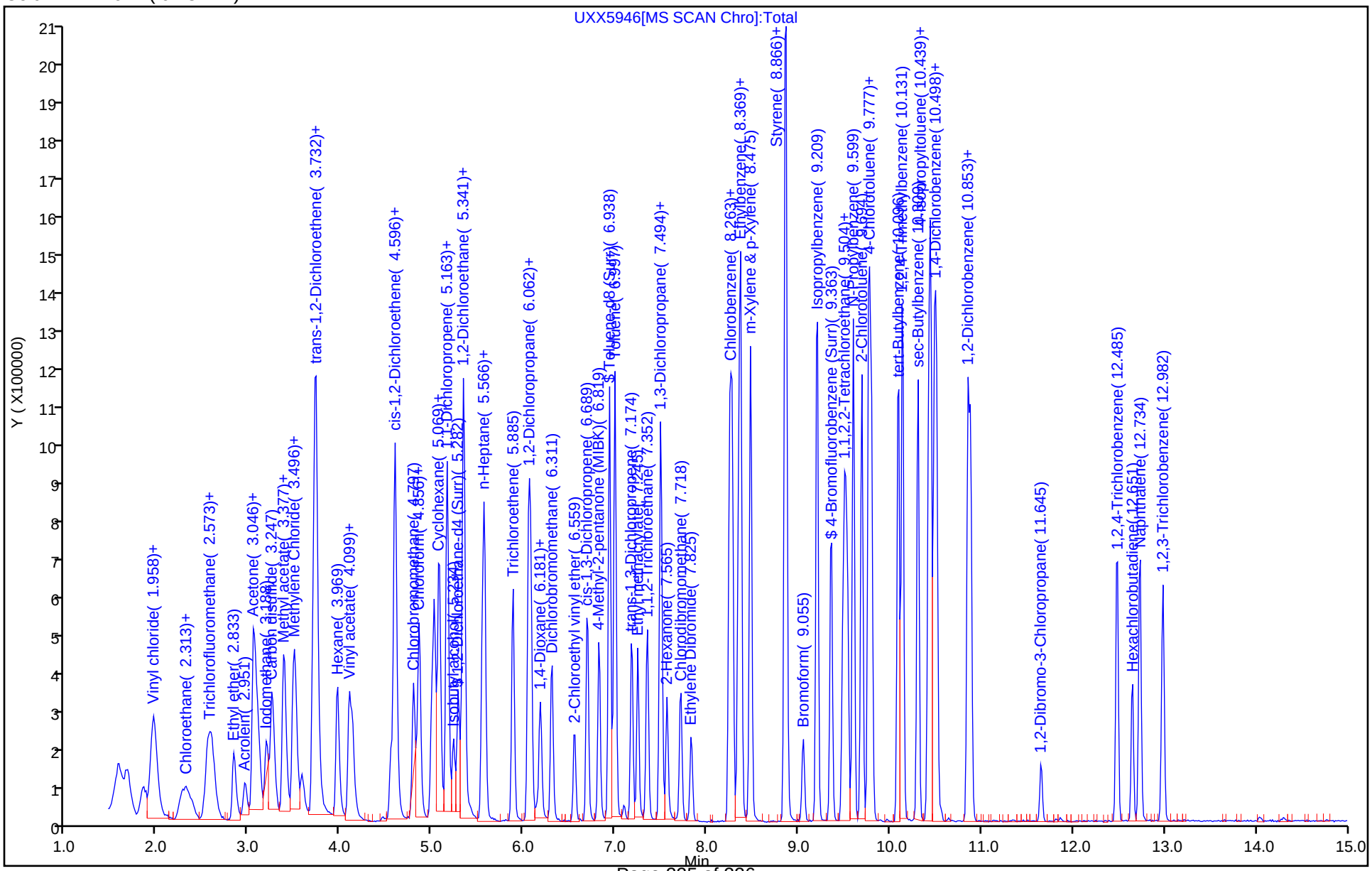
Report Date: 03-Oct-2018 12:30:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5946.D

Injection Date:	02-Oct-2018 18:21:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	ICV			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: CCVIS 240-361928/2 Calibration Date: 12/27/2018 11:06

Instrument ID: A3UX10 Calib Start Date: 10/02/2018 15:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 17:56

Lab File ID: UXX8803.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3440	0.3025		0.00879	0.0100	-12.1	50.0
Chloromethane	Ave	0.4030	0.4422	0.1000	0.0110	0.0100	9.7	50.0
Butadiene	Ave	0.3780	0.4152		0.0110	0.0100	9.8	50.0
Vinyl chloride	Ave	0.3591	0.3548		0.00988	0.0100	-1.2	20.0
Bromomethane	Ave	0.2122	0.1993		0.00939	0.0100	-6.1	50.0
Chloroethane	Lin1		0.2253		0.0101	0.0100	1.3	50.0
Dichlorofluoromethane	Ave	0.5143	0.4759		0.00925	0.0100	-7.5	50.0
Trichlorofluoromethane	Ave	0.4003	0.3927		0.00981	0.0100	-1.9	50.0
Ethyl ether	Ave	0.2351	0.2880		0.0122	0.0100	22.5	50.0
Acrolein	Ave	0.0380	0.0457		0.0600	0.0500	20.1	50.0
1,1-Dichloroethene	Ave	0.2879	0.2901		0.0101	0.0100	0.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin1		0.2118		0.0102	0.0100	2.5	50.0
Acetone	Lin1		0.0859		0.0243	0.0200	21.4	50.0
Iodomethane	Ave	0.5233	0.5185		0.00991	0.0100	-0.9	50.0
Carbon disulfide	Ave	0.9675	0.9526		0.00985	0.0100	-1.5	50.0
3-Chloro-1-propene	Ave	0.2128	0.2187		0.0103	0.0100	2.8	50.0
Methyl acetate	Ave	0.1605	0.1988		0.0248	0.0200	23.9	50.0
Methylene Chloride	Ave	0.3525	0.3627		0.0103	0.0100	2.9	50.0
2-Methyl-2-propanol	Ave	0.0278	0.0277		0.0996	0.100	-0.4	50.0
Acrylonitrile	Ave	0.0958	0.1126		0.118	0.100	17.5	50.0
Methyl tert-butyl ether	Ave	0.8844	0.8525		0.00964	0.0100	-3.6	50.0
trans-1,2-Dichloroethene	Ave	0.3190	0.3326		0.0104	0.0100	4.3	50.0
Hexane	Ave	0.0540	0.0498		0.00923	0.0100	-7.7	20.0
1,1-Dichloroethane	Ave	0.5690	0.6580	0.1000	0.0116	0.0100	15.6	50.0
Vinyl acetate	Ave	0.4510	0.4555		0.0101	0.0100	1.0	50.0
2,2-Dichloropropane	Ave	0.0953	0.0928		0.00974	0.0100	-2.6	50.0
cis-1,2-Dichloroethene	Ave	0.3349	0.3648		0.0109	0.0100	8.9	50.0
2-Butanone (MEK)	Ave	0.0926	0.1048		0.0226	0.0200	13.2	50.0
Chlorobromomethane	Ave	0.1496	0.1491		0.00996	0.0100	-0.4	50.0
Tetrahydrofuran	Ave	0.0667	0.0718		0.0215	0.0200	7.7	50.0
Chloroform	Ave	0.4937	0.5530		0.0112	0.0100	12.0	20.0
1,1,1-Trichloroethane	Ave	0.4816	0.4647		0.00965	0.0100	-3.5	50.0
Cyclohexane	Ave	0.5356	0.5830		0.0109	0.0100	8.8	50.0
1,1-Dichloropropene	Ave	0.3480	0.3603		0.0104	0.0100	3.5	50.0
Carbon tetrachloride	Ave	0.3915	0.3857		0.00985	0.0100	-1.5	50.0
Isobutyl alcohol	Ave	0.0091	0.0135		0.368	0.250	47.3	50.0
Benzene	Ave	1.147	1.178		0.0103	0.0100	2.7	50.0
1,2-Dichloroethane	Ave	0.4198	0.4237		0.0101	0.0100	0.9	50.0
n-Heptane	Ave	0.0441	0.0365		0.00827	0.0100	-17.3	50.0
Trichloroethene	Ave	0.2858	0.2742		0.00960	0.0100	-4.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: CCVIS 240-361928/2 Calibration Date: 12/27/2018 11:06

Instrument ID: A3UX10 Calib Start Date: 10/02/2018 15:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 17:56

Lab File ID: UXX8803.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4023	0.3656		0.00909	0.0100	-9.1	50.0
1,2-Dichloropropane	Ave	0.2977	0.3044		0.0102	0.0100	2.2	20.0
Dibromomethane	Ave	0.1689	0.1582		0.00936	0.0100	-6.4	50.0
1,4-Dioxane	Qua		0.0020		0.141	0.200	-29.5	50.0
Dichlorobromomethane	Ave	0.3738	0.3588		0.00960	0.0100	-4.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1569	0.1147		0.0146	0.0200	-26.9	50.0
cis-1,3-Dichloropropene	Ave	0.4140	0.3497		0.00845	0.0100	-15.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2300	0.2419		0.0210	0.0200	5.2	50.0
Toluene	Ave	1.524	1.647		0.0108	0.0100	8.1	20.0
trans-1,3-Dichloropropene	Ave	0.4515	0.4479		0.00992	0.0100	-0.8	50.0
Ethyl methacrylate	Ave	0.3702	0.3876		0.0105	0.0100	4.7	50.0
1,1,2-Trichloroethane	Ave	0.2836	0.2940		0.0104	0.0100	3.7	50.0
Tetrachloroethene	Ave	0.2655	0.2768		0.0104	0.0100	4.2	50.0
1,3-Dichloropropane	Ave	0.4864	0.4992		0.0103	0.0100	2.6	50.0
2-Hexanone	Ave	0.1864	0.2448		0.0263	0.0200	31.4	50.0
Chlorodibromomethane	Ave	0.3162	0.3228		0.0102	0.0100	2.1	50.0
Ethylene Dibromide	Ave	0.2793	0.2847		0.0102	0.0100	1.9	50.0
Chlorobenzene	Ave	0.9949	1.005	0.3000	0.0101	0.0100	1.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3753	0.4067		0.0108	0.0100	8.4	50.0
Ethylbenzene	Ave	0.5550	0.5495		0.00990	0.0100	-1.0	20.0
m-Xylene & p-Xylene	Ave	0.6875	0.6665		0.00970	0.0100	-3.0	50.0
o-Xylene	Ave	0.7160	0.7394		0.0103	0.0100	3.3	50.0
Styrene	Ave	1.140	1.139		0.0100	0.0100	-0.0	50.0
Bromoform	Ave	0.1941	0.1716	0.1000	0.00884	0.0100	-11.6	50.0
Isopropylbenzene	Ave	1.746	1.820		0.0104	0.0100	4.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6756	0.7341	0.3000	0.0109	0.0100	8.7	50.0
Bromobenzene	Ave	0.7676	0.7599		0.00990	0.0100	-1.0	50.0
1,2,3-Trichloropropane	Ave	0.2120	0.2264		0.0107	0.0100	6.8	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1642		0.0120	0.0100	19.7	50.0
N-Propylbenzene	Ave	0.7981	0.8058		0.0101	0.0100	1.0	50.0
2-Chlorotoluene	Ave	0.7489	0.7371		0.00984	0.0100	-1.6	50.0
1,3,5-Trimethylbenzene	Ave	2.520	2.688		0.0107	0.0100	6.7	50.0
4-Chlorotoluene	Ave	0.7451	0.7599		0.0102	0.0100	2.0	50.0
tert-Butylbenzene	Ave	2.046	2.041		0.00998	0.0100	-0.2	50.0
1,2,4-Trimethylbenzene	Ave	2.763	2.865		0.0104	0.0100	3.7	50.0
sec-Butylbenzene	Ave	2.761	2.811		0.0102	0.0100	1.8	50.0
1,3-Dichlorobenzene	Ave	1.510	1.517		0.0100	0.0100	0.5	50.0
4-Isopropyltoluene	Ave	2.402	2.456		0.0102	0.0100	2.2	50.0
1,4-Dichlorobenzene	Ave	1.538	1.584		0.0103	0.0100	3.0	50.0
n-Butylbenzene	Ave	1.940	2.004		0.0103	0.0100	3.3	50.0
1,2-Dichlorobenzene	Ave	1.537	1.598		0.0104	0.0100	4.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: CCVIS 240-361928/2 Calibration Date: 12/27/2018 11:06

Instrument ID: A3UX10 Calib Start Date: 10/02/2018 15:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/02/2018 17:56

Lab File ID: UXX8803.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1540	0.1453		0.00943	0.0100	-5.7	50.0
1,2,4-Trichlorobenzene	Ave	0.9316	0.8372		0.00899	0.0100	-10.1	50.0
Hexachlorobutadiene	Qua		0.2595		0.00879	0.0100	-12.1	50.0
Naphthalene	Ave	2.426	2.201		0.00907	0.0100	-9.3	50.0
1,2,3-Trichlorobenzene	Ave	0.9073	0.7880		0.00869	0.0100	-13.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2627	0.2551		0.00971	0.0100	-2.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3357	0.3181		0.00948	0.0100	-5.2	50.0
Toluene-d8 (Surr)	Ave	1.262	1.313		0.0104	0.0100	4.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4807	0.4764		0.00991	0.0100	-0.9	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8803.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 27-Dec-2018 11:06:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083269-002
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Dec-2018 09:58:12 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 27-Dec-2018 11:47:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.565	5.565	0.000	99	740437	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.251	8.251	0.000	88	489024	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.486	10.486	0.000	96	273564	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.986	4.986	0.000	92	188858	10.0	9.71	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.282	5.282	0.000	96	235550	10.0	9.48	
$ 6 Toluene-d8 (Surr)	98	6.938	6.938	0.000	95	641954	10.0	10.4	
$ 7 4-Bromofluorobenzene (Surr	95	9.351	9.351	0.000	88	232966	10.0	9.91	
9 Dichlorodifluoromethane	85	1.662	1.662	0.000	98	224014	10.0	8.79	
10 Chloromethane	50	1.851	1.851	0.000	98	327451	10.0	11.0	M
12 Butadiene	54	1.934	1.934	0.000	85	307445	10.0	11.0	
11 Vinyl chloride	62	1.958	1.958	0.000	91	262686	10.0	9.88	
13 Bromomethane	94	2.253	2.253	0.000	91	147580	10.0	9.39	
14 Chloroethane	64	2.324	2.324	0.000	99	166797	10.0	10.1	
15 Dichlorofluoromethane	67	2.526	2.526	0.000	97	352404	10.0	9.25	
16 Trichlorofluoromethane	101	2.585	2.585	0.000	92	290737	10.0	9.81	
17 Ethyl ether	59	2.821	2.821	0.000	93	213211	10.0	12.2	
18 Acrolein	56	2.940	2.940	0.000	98	169122	50.0	60.0	
19 1,1-Dichloroethene	96	3.034	3.034	0.000	95	214803	10.0	10.1	
20 1,1,2-Trichloro-1,2,2-trif	151	3.070	3.070	0.000	93	156793	10.0	10.2	
21 Acetone	43	3.093	3.093	0.000	99	127128	20.0	24.3	
22 Iodomethane	142	3.176	3.176	0.000	97	383908	10.0	9.91	
24 Carbon disulfide	76	3.247	3.247	0.000	99	705355	10.0	9.85	
26 3-Chloro-1-propene	76	3.365	3.365	0.000	87	161938	10.0	10.3	
27 Methyl acetate	43	3.389	3.389	0.000	99	294441	20.0	24.8	
28 Methylene Chloride	84	3.472	3.472	0.000	97	268551	10.0	10.3	
29 2-Methyl-2-propanol	59	3.578	3.578	0.000	96	205200	100.0	99.6	
31 Acrylonitrile	53	3.697	3.697	0.000	100	833592	100.0	117.5	
30 trans-1,2-Dichloroethene	96	3.720	3.720	0.000	74	246282	10.0	10.4	
32 Methyl tert-butyl ether	73	3.720	3.720	0.000	98	631247	10.0	9.64	
33 Hexane	86	3.957	3.957	0.000	88	36869	10.0	9.23	
34 1,1-Dichloroethane	63	4.087	4.087	0.000	97	487168	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.122	4.122	0.000	98	337251	10.0	10.1	
39 2,2-Dichloropropane	97	4.584	4.584	0.000	64	68723	10.0	9.74	
40 cis-1,2-Dichloroethene	96	4.584	4.584	0.000	88	270140	10.0	10.9	
41 2-Butanone (MEK)	43	4.596	4.596	0.000	50	155159	20.0	22.6	
45 Chlorobromomethane	128	4.785	4.785	0.000	92	110394	10.0	9.96	
46 Tetrahydrofuran	42	4.832	4.832	0.000	97	106343	20.0	21.5	
47 Chloroform	83	4.856	4.856	0.000	98	409437	10.0	11.2	
48 1,1,1-Trichloroethane	97	5.021	5.021	0.000	96	344100	10.0	9.65	
49 Cyclohexane	56	5.069	5.069	0.000	93	431682	10.0	10.9	
50 1,1-Dichloropropene	75	5.151	5.151	0.000	90	266800	10.0	10.4	
51 Carbon tetrachloride	117	5.163	5.163	0.000	96	285613	10.0	9.85	
52 Isobutyl alcohol	41	5.234	5.234	0.000	95	164517	250.0	368.3	
53 Benzene	78	5.329	5.329	0.000	97	872283	10.0	10.3	
54 1,2-Dichloroethane	62	5.341	5.341	0.000	97	313686	10.0	10.1	
56 n-Heptane	100	5.542	5.542	0.000	93	27040	10.0	8.27	
58 Trichloroethene	130	5.873	5.873	0.000	95	203048	10.0	9.60	
60 Methylcyclohexane	83	6.050	6.050	0.000	96	270671	10.0	9.09	
61 1,2-Dichloropropane	63	6.074	6.074	0.000	96	225374	10.0	10.2	
63 Dibromomethane	93	6.169	6.169	0.000	94	117113	10.0	9.36	
64 1,4-Dioxane	88	6.181	6.181	0.000	43	30081	200.0	140.9	
65 Dichlorobromomethane	83	6.299	6.299	0.000	97	265634	10.0	9.60	
67 2-Chloroethyl vinyl ether	63	6.547	6.547	0.000	92	169881	20.0	14.6	
68 cis-1,3-Dichloropropene	75	6.689	6.689	0.000	91	258904	10.0	8.45	
69 4-Methyl-2-pentanone (MIBK	43	6.819	6.819	0.000	96	358223	20.0	21.0	
70 Toluene	91	6.997	6.997	0.000	97	805567	10.0	10.8	
71 trans-1,3-Dichloropropene	75	7.174	7.174	0.000	98	219021	10.0	9.92	
72 Ethyl methacrylate	69	7.245	7.245	0.000	92	189552	10.0	10.5	
73 1,1,2-Trichloroethane	97	7.352	7.352	0.000	93	143777	10.0	10.4	
74 Tetrachloroethene	164	7.494	7.494	0.000	92	135340	10.0	10.4	
75 1,3-Dichloropropane	76	7.505	7.505	0.000	94	244128	10.0	10.3	
76 2-Hexanone	43	7.565	7.565	0.000	95	239412	20.0	26.3	
78 Chlorodibromomethane	129	7.706	7.706	0.000	91	157874	10.0	10.2	
80 Ethylene Dibromide	107	7.825	7.825	0.000	98	139245	10.0	10.2	
82 Chlorobenzene	112	8.274	8.274	0.000	92	491355	10.0	10.1	
83 1,1,1,2-Tetrachloroethane	131	8.345	8.345	0.000	92	198861	10.0	10.8	
84 Ethylbenzene	106	8.369	8.369	0.000	99	268703	10.0	9.90	
85 m-Xylene & p-Xylene	106	8.475	8.475	0.000	99	325950	10.0	9.70	
86 o-Xylene	106	8.854	8.854	0.000	97	361570	10.0	10.3	
87 Styrene	104	8.866	8.866	0.000	93	557225	10.0	10.0	
88 Bromoform	173	9.055	9.055	0.000	92	83927	10.0	8.84	
89 Isopropylbenzene	105	9.197	9.197	0.000	96	889973	10.0	10.4	
92 1,1,2,2-Tetrachloroethane	83	9.481	9.481	0.000	97	200824	10.0	10.9	
93 Bromobenzene	156	9.504	9.504	0.000	99	207884	10.0	9.90	
94 1,2,3-Trichloropropane	110	9.528	9.528	0.000	87	61947	10.0	10.7	
95 trans-1,4-Dichloro-2-buten	53	9.540	9.540	0.000	67	44920	10.0	12.0	
96 N-Propylbenzene	120	9.599	9.599	0.000	99	220439	10.0	10.1	
97 2-Chlorotoluene	126	9.694	9.694	0.000	95	201649	10.0	9.84	
98 1,3,5-Trimethylbenzene	105	9.765	9.765	0.000	94	735376	10.0	10.7	
99 4-Chlorotoluene	126	9.800	9.800	0.000	98	207883	10.0	10.2	
100 tert-Butylbenzene	119	10.084	10.084	0.000	94	558317	10.0	9.98	
102 1,2,4-Trimethylbenzene	105	10.131	10.131	0.000	95	783659	10.0	10.4	
103 sec-Butylbenzene	105	10.309	10.309	0.000	95	769027	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	10.427	10.427	0.000	97	415038	10.0	10.0	
105 4-Isopropyltoluene	119	10.439	10.439	0.000	97	671739	10.0	10.2	
106 1,4-Dichlorobenzene	146	10.510	10.510	0.000	93	433276	10.0	10.3	
109 n-Butylbenzene	91	10.853	10.853	0.000	97	548288	10.0	10.3	
110 1,2-Dichlorobenzene	146	10.877	10.877	0.000	97	437256	10.0	10.4	
111 1,2-Dibromo-3-Chloropropan	157	11.645	11.645	0.000	78	39738	10.0	9.43	
113 1,2,4-Trichlorobenzene	180	12.485	12.485	0.000	94	229017	10.0	8.99	
114 Hexachlorobutadiene	225	12.651	12.651	0.000	93	70979	10.0	8.79	
115 Naphthalene	128	12.734	12.734	0.000	99	602082	10.0	9.07	
116 1,2,3-Trichlorobenzene	180	12.982	12.982	0.000	97	215570	10.0	8.69	
S 130 Xylenes, Total	106				0		20.0	20.0	
S 131 Trihalomethanes, Total	1				0		40.0	39.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VMRPRIMW_00315	Amount Added:	8.00	Units: uL	
VMRGAS_00275	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00278	Amount Added:	8.00	Units: uL	
vm50ss_stk_00079	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00071	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

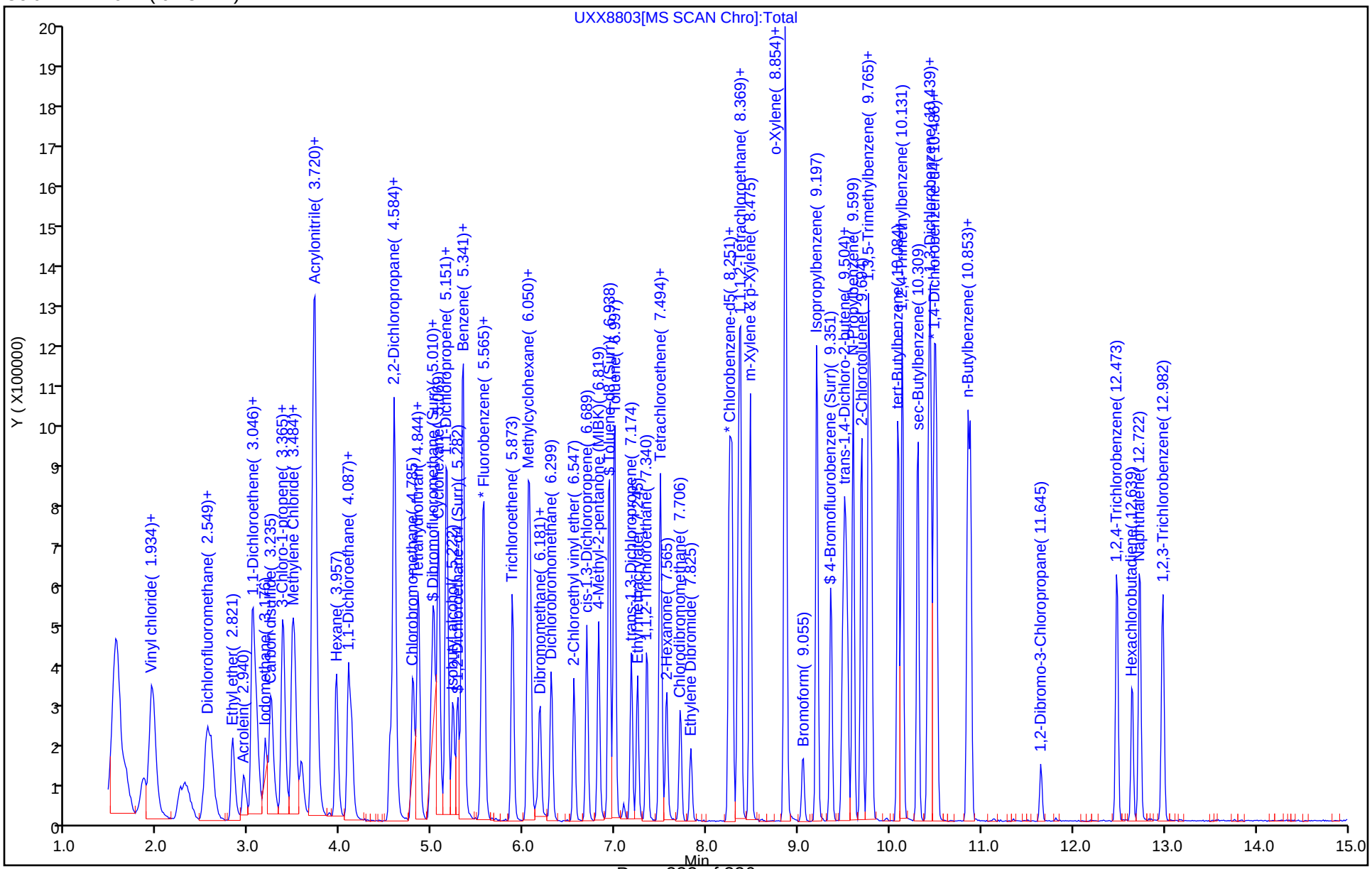
Report Date: 28-Dec-2018 09:58:12 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8803.D

Injection Date:	27-Dec-2018 11:06:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Canton

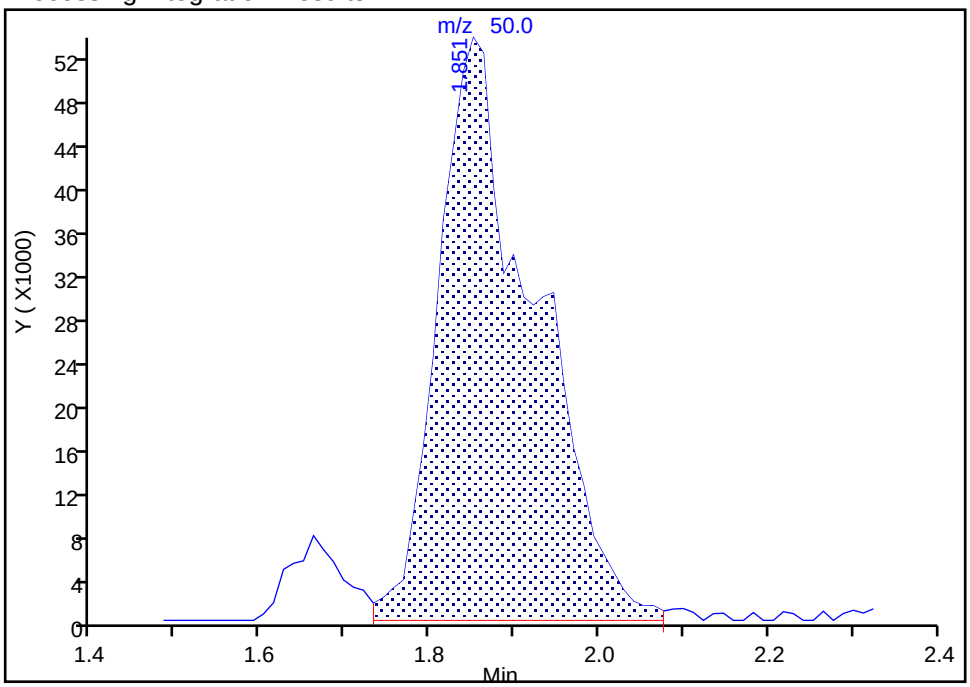
Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8803.D
Injection Date: 27-Dec-2018 11:06:30 Instrument ID: A3UX10
Lims ID: CCVIS L4 8260
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

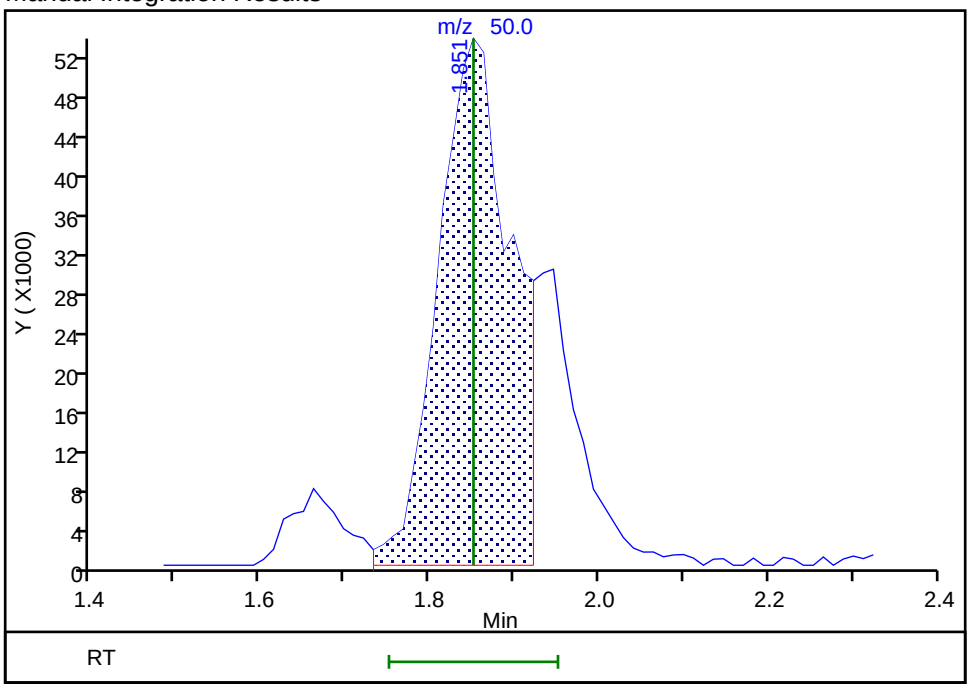
Processing Integration Results

RT: 1.85
Area: 424500
Amount: 14.226617
Amount Units: ug/l



Manual Integration Results

RT: 1.85
Area: 327451
Amount: 10.974134
Amount Units: ug/l



Reviewer: williamsla, 27-Dec-2018 11:47:46
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: ICV 240-342615/14 Calibration Date: 08/27/2018 13:07

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC4609.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3565	0.3395		0.00952	0.0100	-4.8	50.0
Chloromethane	Ave	0.3390	0.3227	0.1000	0.00952	0.0100	-4.8	50.0
Vinyl chloride	Ave	0.3545	0.3535		0.00997	0.0100	-0.3	20.0
Butadiene	Ave	0.4240	0.3760		0.00887	0.0100	-11.3	50.0
Bromomethane	Ave	0.2784	0.2816		0.0101	0.0100	1.1	50.0
Chloroethane	Ave	0.2391	0.2420		0.0101	0.0100	1.2	50.0
Dichlorofluoromethane	Ave	0.6029	0.6280		0.0104	0.0100	4.2	50.0
Trichlorofluoromethane	Ave	0.5707	0.6009		0.0105	0.0100	5.3	50.0
Ethyl ether	Ave	0.2928	0.3090		0.0106	0.0100	5.6	50.0
Acrolein	Ave	0.0554	0.0476		0.0430	0.0500	-14.1	50.0
1,1-Dichloroethene	Ave	0.3014	0.3365		0.0112	0.0100	11.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2261	0.2596		0.0115	0.0100	14.8	50.0
Acetone	Ave	0.0281	0.0260		0.0185	0.0200	-7.3	50.0
Iodomethane	Ave	0.4327	0.4422		0.0102	0.0100	2.2	50.0
Carbon disulfide	Ave	0.8242	0.7705		0.00935	0.0100	-6.5	50.0
3-Chloro-1-propene	Ave	0.1850	0.1795		0.00971	0.0100	-2.9	50.0
Methyl acetate	Ave	0.2109	0.2033		0.0193	0.0200	-3.6	50.0
Methylene Chloride	Ave	0.2861	0.2755		0.00963	0.0100	-3.7	50.0
2-Methyl-2-propanol	Ave	0.0195	0.0189		0.0965	0.100	-3.5	50.0
Acrylonitrile	Ave	0.1063	0.1067		0.100	0.100	0.3	50.0
Methyl tert-butyl ether	Ave	0.7921	0.7779		0.00982	0.0100	-1.8	50.0
trans-1,2-Dichloroethene	Ave	0.3025	0.3004		0.00993	0.0100	-0.7	50.0
Hexane	Ave	0.0749	0.0744		0.00992	0.0100	-0.8	20.0
1,1-Dichloroethane	Ave	0.4927	0.4920	0.1000	0.00999	0.0100	-0.1	50.0
Vinyl acetate	Ave	0.4510	0.4762		0.0106	0.0100	5.6	50.0
2,2-Dichloropropane	Ave	0.0583	0.0595		0.0102	0.0100	2.1	50.0
cis-1,2-Dichloroethene	Ave	0.3309	0.3193		0.00965	0.0100	-3.5	50.0
2-Butanone (MEK)	Ave	0.0348	0.0327		0.0188	0.0200	-6.0	50.0
Chlorobromomethane	Ave	0.1563	0.1555		0.00995	0.0100	-0.5	50.0
Tetrahydrofuran	Lin1		0.0839		0.0198	0.0200	-1.2	50.0
Chloroform	Ave	0.5019	0.5013		0.00999	0.0100	-0.1	20.0
1,1,1-Trichloroethane	Ave	0.3726	0.3868		0.0104	0.0100	3.8	50.0
Cyclohexane	Ave	0.4577	0.4687		0.0102	0.0100	2.4	50.0
1,1-Dichloropropene	Ave	0.4100	0.3951		0.00964	0.0100	-3.6	50.0
Carbon tetrachloride	Ave	0.3255	0.3204		0.00984	0.0100	-1.6	50.0
Isobutyl alcohol	Ave	0.0060	0.0061		0.253	0.250	1.2	50.0
Benzene	Ave	1.202	1.181		0.00983	0.0100	-1.7	50.0
1,2-Dichloroethane	Ave	0.4245	0.4184		0.00986	0.0100	-1.4	50.0
n-Heptane	Ave	0.0737	0.0723		0.00981	0.0100	-1.9	50.0
Trichloroethene	Ave	0.3258	0.3174		0.00974	0.0100	-2.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: ICV 240-342615/14 Calibration Date: 08/27/2018 13:07

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC4609.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4696	0.4522		0.00963	0.0100	-3.7	50.0
1,2-Dichloropropane	Ave	0.2776	0.2747		0.00990	0.0100	-1.0	20.0
1,4-Dioxane	Lin1		0.0025		0.224	0.200	11.9	50.0
Dibromomethane	Ave	0.1811	0.1738		0.00959	0.0100	-4.1	50.0
Dichlorobromomethane	Ave	0.3602	0.3562		0.00989	0.0100	-1.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1617	0.1603		0.00991	0.0100	-0.9	50.0
cis-1,3-Dichloropropene	Ave	0.4096	0.4234		0.0103	0.0100	3.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2622	0.2478		0.0189	0.0200	-5.5	50.0
Toluene	Ave	1.620	1.595		0.00985	0.0100	-1.5	20.0
trans-1,3-Dichloropropene	Ave	0.4575	0.4389		0.00959	0.0100	-4.1	50.0
Ethyl methacrylate	Ave	0.3997	0.3860		0.00966	0.0100	-3.4	50.0
1,1,2-Trichloroethane	Ave	0.3064	0.3115		0.0102	0.0100	1.7	50.0
Tetrachloroethene	Ave	0.3254	0.3188		0.00980	0.0100	-2.0	50.0
1,3-Dichloropropane	Ave	0.5451	0.5338		0.00979	0.0100	-2.1	50.0
2-Hexanone	Ave	0.2214	0.2103		0.0190	0.0200	-5.0	50.0
Chlorodibromomethane	Ave	0.3130	0.3121		0.00997	0.0100	-0.3	50.0
Ethylene Dibromide	Ave	0.3198	0.3102		0.00970	0.0100	-3.0	50.0
Chlorobenzene	Ave	1.027	1.001	0.3000	0.00975	0.0100	-2.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3191	0.3175		0.00995	0.0100	-0.5	50.0
Ethylbenzene	Ave	0.5584	0.5503		0.00985	0.0100	-1.5	20.0
m-Xylene & p-Xylene	Ave	1.349	1.319		0.00978	0.0100	-2.2	50.0
o-Xylene	Ave	0.6771	0.6775		0.0100	0.0100	0.0	50.0
Styrene	Ave	1.136	1.116		0.00983	0.0100	-1.7	50.0
Bromoform	Ave	0.1916	0.1867	0.1000	0.00975	0.0100	-2.5	50.0
Isopropylbenzene	Ave	1.701	1.686		0.00991	0.0100	-0.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7123	0.7061	0.3000	0.00991	0.0100	-0.9	50.0
Bromobenzene	Ave	0.8059	0.7809		0.00969	0.0100	-3.1	50.0
1,2,3-Trichloropropane	Ave	0.2477	0.2356		0.00951	0.0100	-4.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1760	0.1690		0.00960	0.0100	-4.0	50.0
N-Propylbenzene	Ave	0.8289	0.8330		0.0101	0.0100	0.5	50.0
2-Chlorotoluene	Ave	0.7237	0.7174		0.00991	0.0100	-0.9	50.0
1,3,5-Trimethylbenzene	Ave	2.487	2.464		0.00991	0.0100	-0.9	50.0
4-Chlorotoluene	Ave	2.472	2.421		0.00980	0.0100	-2.0	50.0
tert-Butylbenzene	Ave	2.200	2.177		0.00990	0.0100	-1.0	50.0
1,2,4-Trimethylbenzene	Ave	2.600	2.578		0.00991	0.0100	-0.9	50.0
sec-Butylbenzene	Ave	2.962	2.923		0.00987	0.0100	-1.3	50.0
1,3-Dichlorobenzene	Ave	1.475	1.422		0.00964	0.0100	-3.6	50.0
4-Isopropyltoluene	Ave	2.615	2.593		0.00991	0.0100	-0.9	50.0
1,4-Dichlorobenzene	Ave	1.542	1.464		0.00949	0.0100	-5.1	50.0
n-Butylbenzene	Ave	2.189	2.106		0.00962	0.0100	-3.8	50.0
1,2-Dichlorobenzene	Ave	1.422	1.395		0.00981	0.0100	-1.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: ICV 240-342615/14 Calibration Date: 08/27/2018 13:07

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC4609.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1338	0.1332		0.00995	0.0100	-0.5	50.0
1,2,4-Trichlorobenzene	Lin1		0.8896		0.0116	0.0100	16.3	50.0
Hexachlorobutadiene	Qua		0.3818		0.00971	0.0100	-2.9	50.0
Naphthalene	Ave	2.289	2.416		0.0106	0.0100	5.6	50.0
1,2,3-Trichlorobenzene	Lin1		0.8253		0.0123	0.0100	22.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2592	0.2810		0.00864	0.00797	8.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3515	0.3744		0.00849	0.00797	6.5	50.0
Toluene-d8 (Surr)	Ave	1.342	1.478		0.00878	0.00797	10.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4665	0.5344		0.00913	0.00797	14.5	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4609.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 27-Aug-2018 13:07:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0079285-014
Misc. Info.: C80827A-IC,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:43:19 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: evansle Date: 28-Aug-2018 11:39:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	98	1402023	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	87	1092127	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	92	614205	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	93	313947	7.97	8.64	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.982	0.000	100	418318	7.97	8.49	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1286644	7.97	8.78	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	95	465171	7.97	9.13	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	476029	10.0	9.52	
10 Chloromethane	50	1.721	1.721	0.000	99	452399	10.0	9.52	
11 Vinyl chloride	62	1.816	1.816	0.000	99	495669	10.0	9.97	
12 Butadiene	54	1.828	1.828	0.000	100	527100	10.0	8.87	
13 Bromomethane	94	2.089	2.101	-0.012	91	394759	10.0	10.1	
14 Chloroethane	64	2.184	2.184	0.000	100	339280	10.0	10.1	
15 Dichlorofluoromethane	67	2.350	2.350	0.000	99	880507	10.0	10.4	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	100	842432	10.0	10.5	
17 Ethyl ether	59	2.611	2.623	-0.012	90	433248	10.0	10.6	
18 Acrolein	56	2.741	2.741	0.000	99	333432	50.0	43.0	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	471727	10.0	11.2	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	91	363892	10.0	11.5	
22 Acetone	58	2.872	2.860	0.012	99	73022	20.0	18.5	
23 Iodomethane	142	2.967	2.966	0.001	99	619994	10.0	10.2	
24 Carbon disulfide	76	3.026	3.026	0.000	100	1080266	10.0	9.35	
25 3-Chloro-1-propene	76	3.121	3.132	-0.011	87	251706	10.0	9.71	
27 Methyl acetate	43	3.144	3.132	0.012	98	570083	20.0	19.3	
28 Methylene Chloride	84	3.227	3.227	0.000	92	386229	10.0	9.63	
29 2-Methyl-2-propanol	59	3.322	3.310	0.012	94	264341	100.0	96.5	
32 Acrylonitrile	53	3.441	3.441	0.000	99	1495188	100.0	100.3	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	97	1090610	10.0	9.82	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	96	421120	10.0	9.93	
33 Hexane	86	3.678	3.678	0.000	94	104241	10.0	9.92	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.808	3.820	-0.012	98	689801	10.0	9.99	
36 Vinyl acetate	43	3.844	3.844	0.000	98	667632	10.0	10.6	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	60	83410	10.0	10.2	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	85	447598	10.0	9.65	
41 2-Butanone (MEK)	72	4.307	4.306	0.001	99	91740	20.0	18.8	
45 Chlorobromomethane	128	4.496	4.496	0.000	95	218070	10.0	9.95	
46 Tetrahydrofuran	42	4.544	4.544	0.000	86	235349	20.0	19.8	
47 Chloroform	83	4.556	4.556	0.000	96	702779	10.0	9.99	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	542359	10.0	10.4	
49 Cyclohexane	56	4.769	4.769	0.000	91	657147	10.0	10.2	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	94	553943	10.0	9.64	
50 Carbon tetrachloride	117	4.852	4.852	0.000	97	449245	10.0	9.84	
52 Isobutyl alcohol	41	4.923	4.911	0.012	94	212667	250.0	252.9	
53 Benzene	78	5.030	5.030	0.000	96	1655208	10.0	9.83	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	586635	10.0	9.86	
56 n-Heptane	100	5.220	5.220	0.000	90	101330	10.0	9.81	
58 Trichloroethene	130	5.564	5.563	0.001	96	444968	10.0	9.74	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	633927	10.0	9.63	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	93	385155	10.0	9.90	
64 1,4-Dioxane	88	5.872	5.872	0.000	37	69854	200.0	223.8	
63 Dibromomethane	93	5.872	5.872	0.000	93	243627	10.0	9.59	
65 Dichlorobromomethane	83	5.990	5.990	0.000	99	499390	10.0	9.89	
67 2-Chloroethyl vinyl ether	63	6.239	6.239	0.000	93	224675	10.0	9.91	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	94	593618	10.0	10.3	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	694781	20.0	18.9	
70 Toluene	91	6.678	6.678	0.000	98	1741704	10.0	9.85	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	96	479305	10.0	9.59	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	421567	10.0	9.66	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	340197	10.0	10.2	
74 Tetrachloroethene	164	7.176	7.176	0.000	98	348130	10.0	9.80	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	93	583002	10.0	9.79	
76 2-Hexanone	43	7.247	7.247	0.000	97	459366	20.0	19.0	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	340870	10.0	9.97	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	338781	10.0	9.70	
82 Chlorobenzene	112	7.959	7.959	0.000	94	1093109	10.0	9.75	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	92	346740	10.0	9.95	
84 Ethylbenzene	106	8.054	8.054	0.000	98	600952	10.0	9.85	
85 m-Xylene & p-Xylene	91	8.161	8.160	0.001	93	1440253	10.0	9.78	
86 o-Xylene	106	8.540	8.540	0.000	97	739893	10.0	10.0	
87 Styrene	104	8.552	8.552	0.000	94	1218614	10.0	9.83	
88 Bromoform	173	8.742	8.742	0.000	97	203923	10.0	9.75	
89 Isopropylbenzene	105	8.884	8.884	0.000	96	1841388	10.0	9.91	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	433688	10.0	9.91	
92 Bromobenzene	156	9.204	9.204	0.000	95	479599	10.0	9.69	
95 trans-1,4-Dichloro-2-buten	53	9.240	9.228	0.012	71	103817	10.0	9.60	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	88	144703	10.0	9.51	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	511658	10.0	10.1	
97 2-Chlorotoluene	126	9.382	9.382	0.000	97	440636	10.0	9.91	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	1513284	10.0	9.91	
99 4-Chlorotoluene	91	9.489	9.489	0.000	98	1487210	10.0	9.80	
101 tert-Butylbenzene	119	9.773	9.773	0.000	93	1337264	10.0	9.90	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	95	1583237	10.0	9.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.987	9.987	0.000	94	1795308	10.0	9.87	
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	873649	10.0	9.64	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	97	1592733	10.0	9.91	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	98	899100	10.0	9.49	
111 n-Butylbenzene	91	10.532	10.532	0.000	97	1293620	10.0	9.62	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	98	856518	10.0	9.81	
113 1,2-Dibromo-3-Chloropropan	157	11.350	11.350	0.000	83	81797	10.0	9.95	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	93	546416	10.0	11.6	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	97	234502	10.0	9.71	
117 Naphthalene	128	12.430	12.430	0.000	96	1483749	10.0	10.6	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	95	506883	10.0	12.3	
S 129 Xylenes, Total	106				0		20.0	19.8	
S 130 Trihalomethanes, Total	1				0		40.0	39.6	

Reagents:

VMFASPW_00264	Amount Added:	8.00	Units: uL	
VMFASAW_00246	Amount Added:	8.00	Units: uL	
VMFASGW_00271	Amount Added:	8.00	Units: uL	
VM50IS_00071	Amount Added:	1.00	Units: uL	
vmDist_H2o_00124	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00078	Amount Added:	0.80	Units: uL	Run Reagent

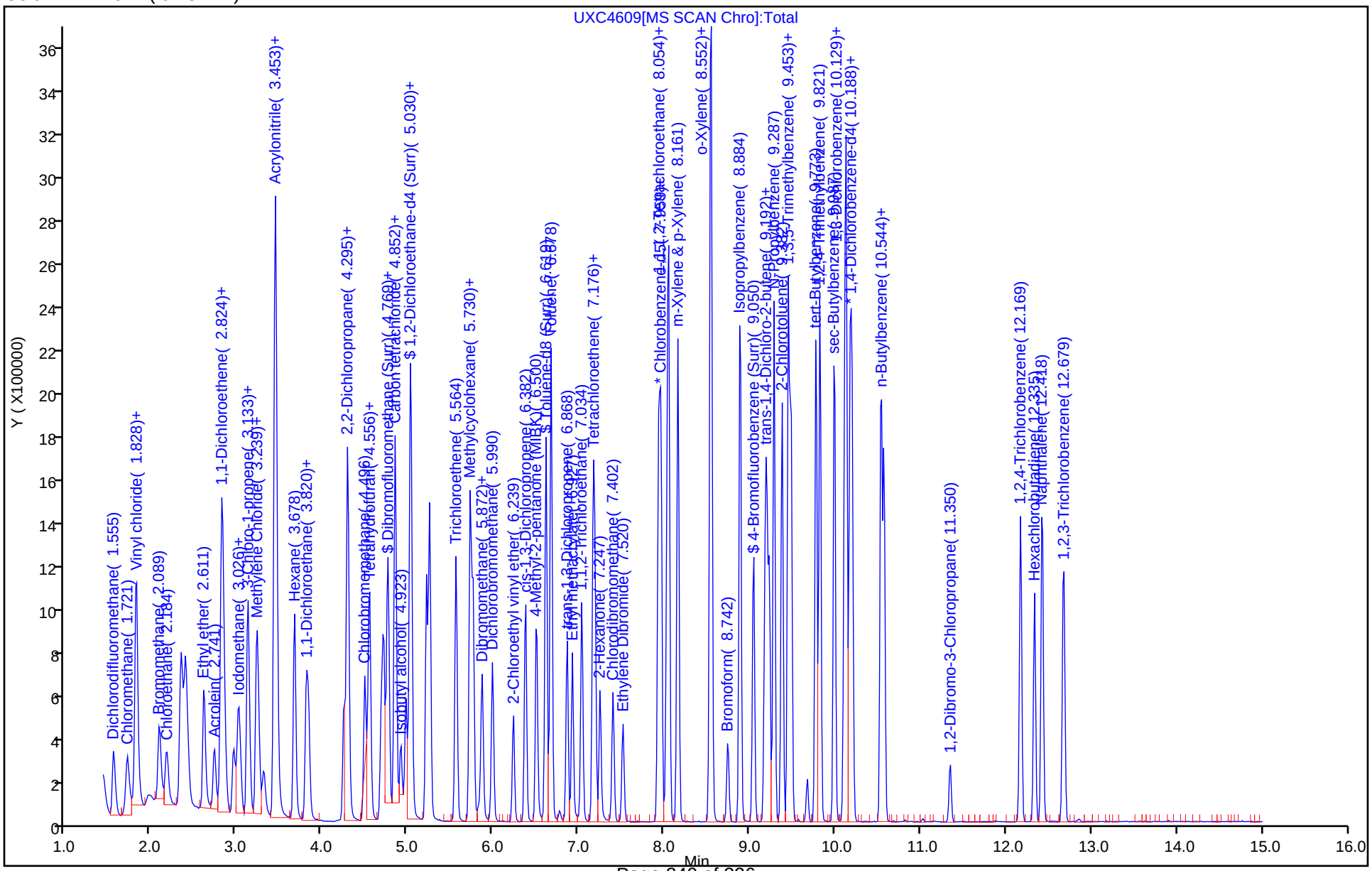
Report Date: 28-Aug-2018 11:39:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4609.D

Injection Date:	27-Aug-2018 13:07:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: CCVIS 240-361663/2 Calibration Date: 12/26/2018 09:39

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC8089.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3565	0.2800		0.00785	0.0100	-21.5	50.0
Chloromethane	Ave	0.3390	0.3095	0.1000	0.00913	0.0100	-8.7	50.0
Vinyl chloride	Ave	0.3545	0.3149		0.00888	0.0100	-11.2	20.0
Butadiene	Ave	0.4240	0.3579		0.00844	0.0100	-15.6	50.0
Bromomethane	Ave	0.2784	0.2079		0.00747	0.0100	-25.3	50.0
Chloroethane	Ave	0.2391	0.2074		0.00867	0.0100	-13.3	50.0
Dichlorofluoromethane	Ave	0.6029	0.4706		0.00780	0.0100	-22.0	50.0
Trichlorofluoromethane	Ave	0.5707	0.4215		0.00739	0.0100	-26.1	50.0
Ethyl ether	Ave	0.2928	0.2437		0.00832	0.0100	-16.8	50.0
Acrolein	Ave	0.0554	0.0386		0.0348	0.0500	-30.4	50.0
1,1-Dichloroethene	Ave	0.3014	0.2911		0.00966	0.0100	-3.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2261	0.2267		0.0100	0.0100	0.3	50.0
Acetone	Ave	0.0281	0.0255		0.0182	0.0200	-9.2	50.0
Iodomethane	Ave	0.4327	0.5311		0.0123	0.0100	22.7	50.0
Carbon disulfide	Ave	0.8242	0.8921		0.0108	0.0100	8.2	50.0
3-Chloro-1-propene	Ave	0.1850	0.1823		0.00986	0.0100	-1.4	50.0
Methyl acetate	Ave	0.2109	0.1593		0.0151	0.0200	-24.5	50.0
Methylene Chloride	Ave	0.2861	0.3401		0.0119	0.0100	18.9	50.0
2-Methyl-2-propanol	Ave	0.0195	0.0118		0.0602	0.100	-39.8	50.0
Acrylonitrile	Ave	0.1063	0.0887		0.0834	0.100	-16.6	50.0
Methyl tert-butyl ether	Ave	0.7921	0.5307		0.00670	0.0100	-33.0	50.0
trans-1,2-Dichloroethene	Ave	0.3025	0.3355		0.0111	0.0100	10.9	50.0
Hexane	Ave	0.0749	0.0550		0.00734	0.0100	-26.6*	20.0
1,1-Dichloroethane	Ave	0.4927	0.5197	0.1000	0.0105	0.0100	5.5	50.0
Vinyl acetate	Ave	0.4510	0.3239		0.00718	0.0100	-28.2	50.0
2,2-Dichloropropane	Ave	0.0583	0.0667		0.0114	0.0100	14.4	50.0
cis-1,2-Dichloroethene	Ave	0.3309	0.3420		0.0103	0.0100	3.3	50.0
2-Butanone (MEK)	Ave	0.0348	0.0232		0.0133	0.0200	-33.5	50.0
Chlorobromomethane	Ave	0.1563	0.1667		0.0107	0.0100	6.7	50.0
Tetrahydrofuran	Lin1		0.0512		0.0111	0.0200	-44.6	50.0
Chloroform	Ave	0.5019	0.5470		0.0109	0.0100	9.0	20.0
1,1,1-Trichloroethane	Ave	0.3726	0.4182		0.0112	0.0100	12.2	50.0
Cyclohexane	Ave	0.4577	0.4074		0.00890	0.0100	-11.0	50.0
1,1-Dichloropropene	Ave	0.4100	0.3857		0.00941	0.0100	-5.9	50.0
Carbon tetrachloride	Ave	0.3255	0.4046		0.0124	0.0100	24.3	50.0
Isobutyl alcohol	Ave	0.0060	0.0062		0.260	0.250	3.8	50.0
Benzene	Ave	1.202	1.197		0.00996	0.0100	-0.4	50.0
1,2-Dichloroethane	Ave	0.4245	0.3850		0.00907	0.0100	-9.3	50.0
n-Heptane	Ave	0.0737	0.0399		0.00542	0.0100	-45.8	50.0
Trichloroethene	Ave	0.3258	0.3001		0.00921	0.0100	-7.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: CCVIS 240-361663/2 Calibration Date: 12/26/2018 09:39

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC8089.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4696	0.3287		0.00700	0.0100	-30.0	50.0
1,2-Dichloropropane	Ave	0.2776	0.2575		0.00928	0.0100	-7.2	20.0
Dibromomethane	Ave	0.1811	0.1590		0.00878	0.0100	-12.2	50.0
1,4-Dioxane	Lin1		0.0020		0.174	0.200	-13.1	50.0
Dichlorobromomethane	Ave	0.3602	0.3560		0.00988	0.0100	-1.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1617	0.0373		0.00461	0.0200	-77.0*	50.0
cis-1,3-Dichloropropene	Ave	0.4096	0.3019		0.00737	0.0100	-26.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2622	0.1603		0.0122	0.0200	-38.9	50.0
Toluene	Ave	1.620	1.657		0.0102	0.0100	2.3	20.0
trans-1,3-Dichloropropene	Ave	0.4575	0.3580		0.00783	0.0100	-21.7	50.0
Ethyl methacrylate	Ave	0.3997	0.3018		0.00755	0.0100	-24.5	50.0
1,1,2-Trichloroethane	Ave	0.3064	0.2982		0.00973	0.0100	-2.7	50.0
Tetrachloroethene	Ave	0.3254	0.3352		0.0103	0.0100	3.0	50.0
1,3-Dichloropropane	Ave	0.5451	0.5083		0.00932	0.0100	-6.8	50.0
2-Hexanone	Ave	0.2214	0.1447		0.0131	0.0200	-34.7	50.0
Chlorodibromomethane	Ave	0.3130	0.3266		0.0104	0.0100	4.4	50.0
Ethylene Dibromide	Ave	0.3198	0.2758		0.00863	0.0100	-13.7	50.0
Chlorobenzene	Ave	1.027	1.018	0.3000	0.00992	0.0100	-0.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3191	0.3756		0.0118	0.0100	17.7	50.0
Ethylbenzene	Ave	0.5584	0.5007		0.00897	0.0100	-10.3	20.0
m-Xylene & p-Xylene	Ave	1.349	1.228		0.00911	0.0100	-8.9	50.0
o-Xylene	Ave	0.6771	0.5918		0.00874	0.0100	-12.6	50.0
Styrene	Ave	1.136	1.072		0.00944	0.0100	-5.6	50.0
Bromoform	Ave	0.1916	0.1976	0.1000	0.0103	0.0100	3.2	50.0
Isopropylbenzene	Ave	1.701	1.338		0.00787	0.0100	-21.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7123	0.5902	0.3000	0.00829	0.0100	-17.1	50.0
Bromobenzene	Ave	0.8059	0.7201		0.00894	0.0100	-10.6	50.0
1,2,3-Trichloropropane	Ave	0.2477	0.1979		0.00799	0.0100	-20.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1760	0.0841		0.00478	0.0100	-52.2*	50.0
N-Propylbenzene	Ave	0.8289	0.6503		0.00785	0.0100	-21.5	50.0
2-Chlorotoluene	Ave	0.7237	0.6252		0.00864	0.0100	-13.6	50.0
1,3,5-Trimethylbenzene	Ave	2.487	1.964		0.00790	0.0100	-21.0	50.0
4-Chlorotoluene	Ave	2.472	2.189		0.00885	0.0100	-11.5	50.0
tert-Butylbenzene	Ave	2.200	1.431		0.00651	0.0100	-34.9	50.0
1,2,4-Trimethylbenzene	Ave	2.600	2.134		0.00821	0.0100	-17.9	50.0
sec-Butylbenzene	Ave	2.962	2.014		0.00680	0.0100	-32.0	50.0
1,3-Dichlorobenzene	Ave	1.475	1.306		0.00885	0.0100	-11.5	50.0
4-Isopropyltoluene	Ave	2.615	1.841		0.00704	0.0100	-29.6	50.0
1,4-Dichlorobenzene	Ave	1.542	1.338		0.00868	0.0100	-13.2	50.0
n-Butylbenzene	Ave	2.189	1.266		0.00578	0.0100	-42.2	50.0
1,2-Dichlorobenzene	Ave	1.422	1.305		0.00918	0.0100	-8.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Lab Sample ID: CCVIS 240-361663/2 Calibration Date: 12/26/2018 09:39

Instrument ID: A3UX15 Calib Start Date: 08/27/2018 10:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 12:45

Lab File ID: UXC8089.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1338	0.0880		0.00658	0.0100	-34.2	50.0
1,2,4-Trichlorobenzene	Lin1		0.4913		0.00612	0.0100	-38.8	50.0
Hexachlorobutadiene	Qua		0.3184		0.00785	0.0100	-21.5	50.0
Naphthalene	Ave	2.289	0.7710		0.00337	0.0100	-66.3*	50.0
1,2,3-Trichlorobenzene	Lin1		0.5002		0.00711	0.0100	-28.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2592	0.2576		0.00792	0.00797	-0.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3515	0.2948		0.00668	0.00797	-16.1	50.0
Toluene-d8 (Surr)	Ave	1.342	1.258		0.00747	0.00797	-6.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4665	0.4113		0.00703	0.00797	-11.8	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8089.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 26-Dec-2018 09:39:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083213-002
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:30 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	2583464	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	91	1780885	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	93	1082877	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	530352	7.97	7.92	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.000	100	606961	7.97	6.68	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1785876	7.97	7.47	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	97	583826	7.97	7.03	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	723454	10.0	7.85	
10 Chloromethane	50	1.721	1.721	0.000	99	799509	10.0	9.13	
11 Vinyl chloride	62	1.804	1.804	0.000	98	813440	10.0	8.88	
12 Butadiene	54	1.816	1.816	0.000	98	924649	10.0	8.44	
13 Bromomethane	94	2.089	2.089	0.000	90	537023	10.0	7.47	
14 Chloroethane	64	2.172	2.172	0.000	99	535755	10.0	8.67	
15 Dichlorofluoromethane	67	2.338	2.338	0.000	99	1215724	10.0	7.80	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	99	1088832	10.0	7.39	
17 Ethyl ether	59	2.611	2.611	0.000	92	629477	10.0	8.32	
18 Acrolein	56	2.729	2.729	0.000	100	498129	50.0	34.8	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	752136	10.0	9.66	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	90	585629	10.0	10.0	
22 Acetone	58	2.860	2.860	0.000	100	131761	20.0	18.2	
23 Iodomethane	142	2.955	2.955	0.000	98	1371963	10.0	12.3	
24 Carbon disulfide	76	3.014	3.014	0.000	99	2304723	10.0	10.8	
25 3-Chloro-1-propene	76	3.121	3.121	0.000	90	471069	10.0	9.86	
27 Methyl acetate	43	3.133	3.133	0.000	97	822909	20.0	15.1	
28 Methylene Chloride	84	3.228	3.228	0.000	90	878731	10.0	11.9	
29 2-Methyl-2-propanol	59	3.311	3.311	0.000	87	303937	100.0	60.2	
32 Acrylonitrile	53	3.441	3.441	0.000	99	2291338	100.0	83.4	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	93	1370979	10.0	6.70	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	99	866828	10.0	11.1	
33 Hexane	86	3.678	3.678	0.000	94	142012	10.0	7.34	
34 1,1-Dichloroethane	63	3.809	3.809	0.000	97	1342514	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.832	3.832	0.000	98	836830	10.0	7.18	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	83	883483	10.0	10.3	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	78	172242	10.0	11.4	
41 2-Butanone (MEK)	72	4.307	4.295	0.012	97	119629	20.0	13.3	
45 Chlorobromomethane	128	4.496	4.496	0.000	93	430725	10.0	10.7	
46 Tetrahydrofuran	42	4.532	4.532	0.000	86	264522	20.0	11.1	
47 Chloroform	83	4.556	4.556	0.000	94	1413037	10.0	10.9	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	1080436	10.0	11.2	
49 Cyclohexane	56	4.769	4.769	0.000	89	1052364	10.0	8.90	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	96	996415	10.0	9.41	
50 Carbon tetrachloride	117	4.852	4.852	0.000	97	1045266	10.0	12.4	
52 Isobutyl alcohol	41	4.911	4.911	0.000	86	402273	250.0	259.6	
53 Benzene	78	5.030	5.030	0.000	95	3091505	10.0	9.96	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	994544	10.0	9.07	
56 n-Heptane	100	5.220	5.220	0.000	85	103134	10.0	5.42	
58 Trichloroethene	130	5.564	5.564	0.000	97	775161	10.0	9.21	
60 Methylcyclohexane	83	5.730	5.730	0.000	91	849158	10.0	7.00	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	94	665263	10.0	9.28	
63 Dibromomethane	93	5.860	5.860	0.000	92	410718	10.0	8.78	
64 1,4-Dioxane	88	5.872	5.872	0.000	38	101309	200.0	173.8	
65 Dichlorobromomethane	83	5.991	5.991	0.000	100	919800	10.0	9.88	
67 2-Chloroethyl vinyl ether	63	6.240	6.240	0.000	93	192470	20.0	4.61	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	95	779875	10.0	7.37	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	828132	20.0	12.2	
70 Toluene	91	6.678	6.678	0.000	98	2950551	10.0	10.2	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	94	637515	10.0	7.83	
72 Ethyl methacrylate	69	6.927	6.927	0.000	89	537444	10.0	7.55	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	531019	10.0	9.73	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	596985	10.0	10.3	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	92	905282	10.0	9.32	
76 2-Hexanone	43	7.248	7.248	0.000	97	515257	20.0	13.1	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	581704	10.0	10.4	
80 Ethylene Dibromide	107	7.520	7.520	0.000	98	491214	10.0	8.63	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1813533	10.0	9.92	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	93	668891	10.0	11.8	
84 Ethylbenzene	106	8.054	8.054	0.000	98	891748	10.0	8.97	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	93	2187524	10.0	9.11	
86 o-Xylene	106	8.540	8.540	0.000	96	1053987	10.0	8.74	
87 Styrene	104	8.552	8.552	0.000	93	1908210	10.0	9.44	
88 Bromoform	173	8.742	8.742	0.000	98	351975	10.0	10.3	
89 Isopropylbenzene	105	8.896	8.896	0.000	96	2383251	10.0	7.87	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	97	639086	10.0	8.29	
92 Bromobenzene	156	9.204	9.204	0.000	91	779811	10.0	8.94	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	85	214285	10.0	7.99	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	74	91068	10.0	4.78	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	704173	10.0	7.85	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	676959	10.0	8.64	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	2126538	10.0	7.90	
99 4-Chlorotoluene	91	9.489	9.489	0.000	96	2370325	10.0	8.85	
101 tert-Butylbenzene	119	9.785	9.785	0.000	93	1549778	10.0	6.51	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	94	2310939	10.0	8.21	
105 sec-Butylbenzene	105	9.999	9.999	0.000	94	2181012	10.0	6.80	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	1414233	10.0	8.85	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	96	1993873	10.0	7.04	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	95	1449349	10.0	8.68	
111 n-Butylbenzene	91	10.544	10.544	0.000	97	1370663	10.0	5.78	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	99	1412885	10.0	9.18	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.351	0.000	85	95326	10.0	6.58	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	532041	10.0	6.12	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	94	344752	10.0	7.85	
117 Naphthalene	128	12.430	12.430	0.000	96	834936	10.0	3.37	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	541666	10.0	7.11	
S 129 Xylenes, Total	106				0		20.0	17.8	
S 130 Trihalomethanes, Total	1				0		40.0	41.5	

Reagents:

VMRGAS_00275	Amount Added:	8.00	Units: uL	
VMRPRIMW_00315	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00278	Amount Added:	8.00	Units: uL	
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00079	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

Report Date: 27-Dec-2018 08:10:32 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8089.D

Injection Date: 26-Dec-2018 09:39:30 Instrument ID: A3UX15 Operator ID:

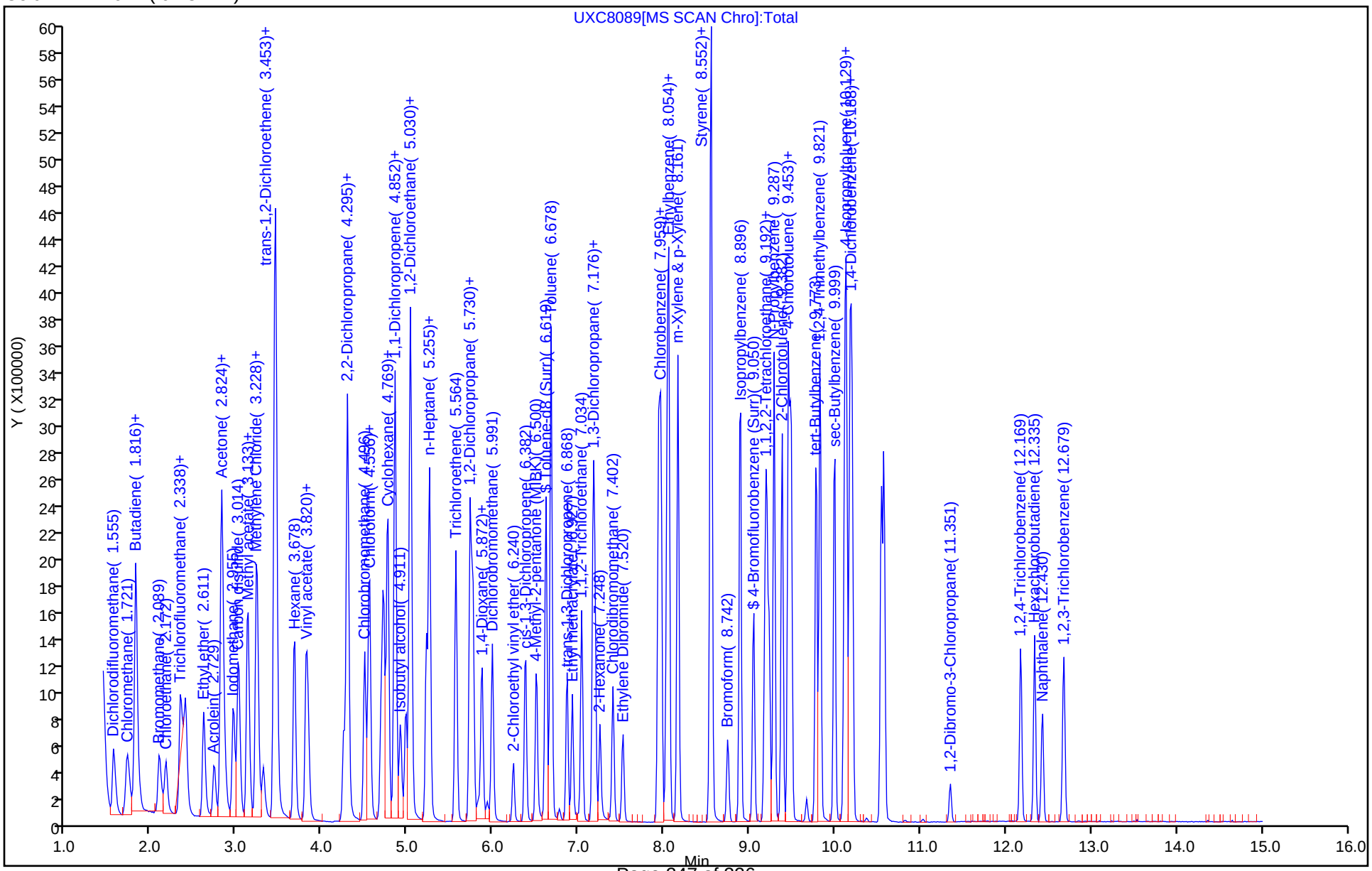
Lims ID: CCVIS L4 8260 Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\BFB1940.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 02-Oct-2018 14:58:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0080450-001
Operator ID: 001644 Instrument ID: A3UX10

Method: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 03-Oct-2018 12:29:03 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.674	3.674	0.000	0	187859	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

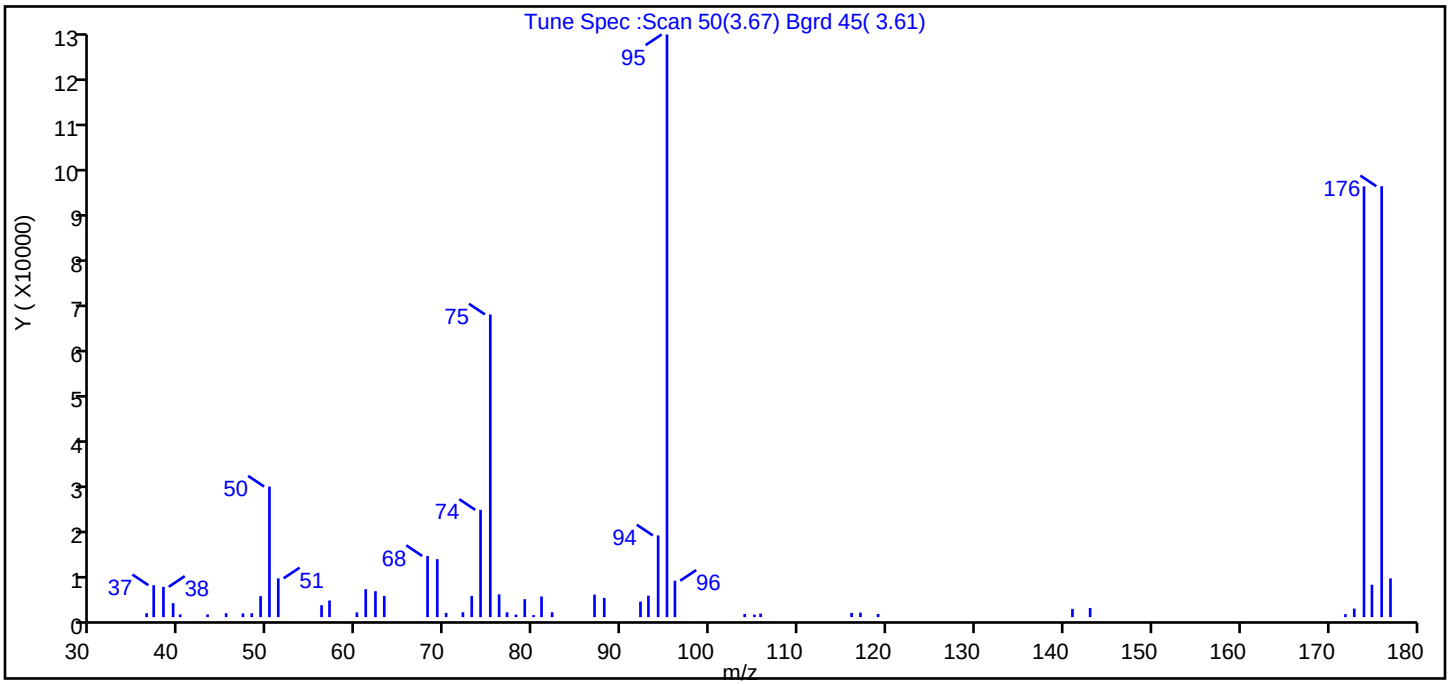
vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\BFB1940.D
Injection Date: 02-Oct-2018 14:58:30 Instrument ID: A3UX10
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.4
75	30 to 60% of m/z 95	52.0
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	1.5 (2.0)
174	50 to 120% of m/z 95	73.9
175	5 to 9% of m/z 174	5.6 (7.5)
176	Greater than 95% but less than 101% of m/z 174	74.0 (100.0)
177	5 to 9% of m/z 176	6.7 (9.0)

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\BFB1940.D\8260_10.rslt\spectra.d
Injection Date: 02-Oct-2018 14:58:30
Spectrum: Tune Spec :Scan 50(3.67) Bgrd 45(3.61)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 53

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.20	814	60.00	980	79.00	3719	116.00	880
37.00	6611	61.00	5778	80.00	425	117.00	936
38.10	6274	62.10	5372	80.90	4279	119.00	652
39.20	2895	63.10	4390	82.10	1008	141.00	1712
40.00	572	68.00	12659	86.90	4664	143.00	1881
43.10	558	69.10	11997	88.00	3982	171.90	621
45.20	810	70.10	871	92.10	3225	172.90	1766
47.10	766	72.00	1017	93.00	4451	174.00	89152
48.10	810	73.00	4402	94.10	16912	174.90	6699
49.10	4352	74.00	22200	95.10	120576	176.00	89168
50.10	27024	75.10	62640	96.00	7539	177.00	8026
51.10	8031	76.10	4709	103.90	670		
56.00	2469	77.00	1000	105.00	516		
56.90	3451	78.00	537	105.70	738		

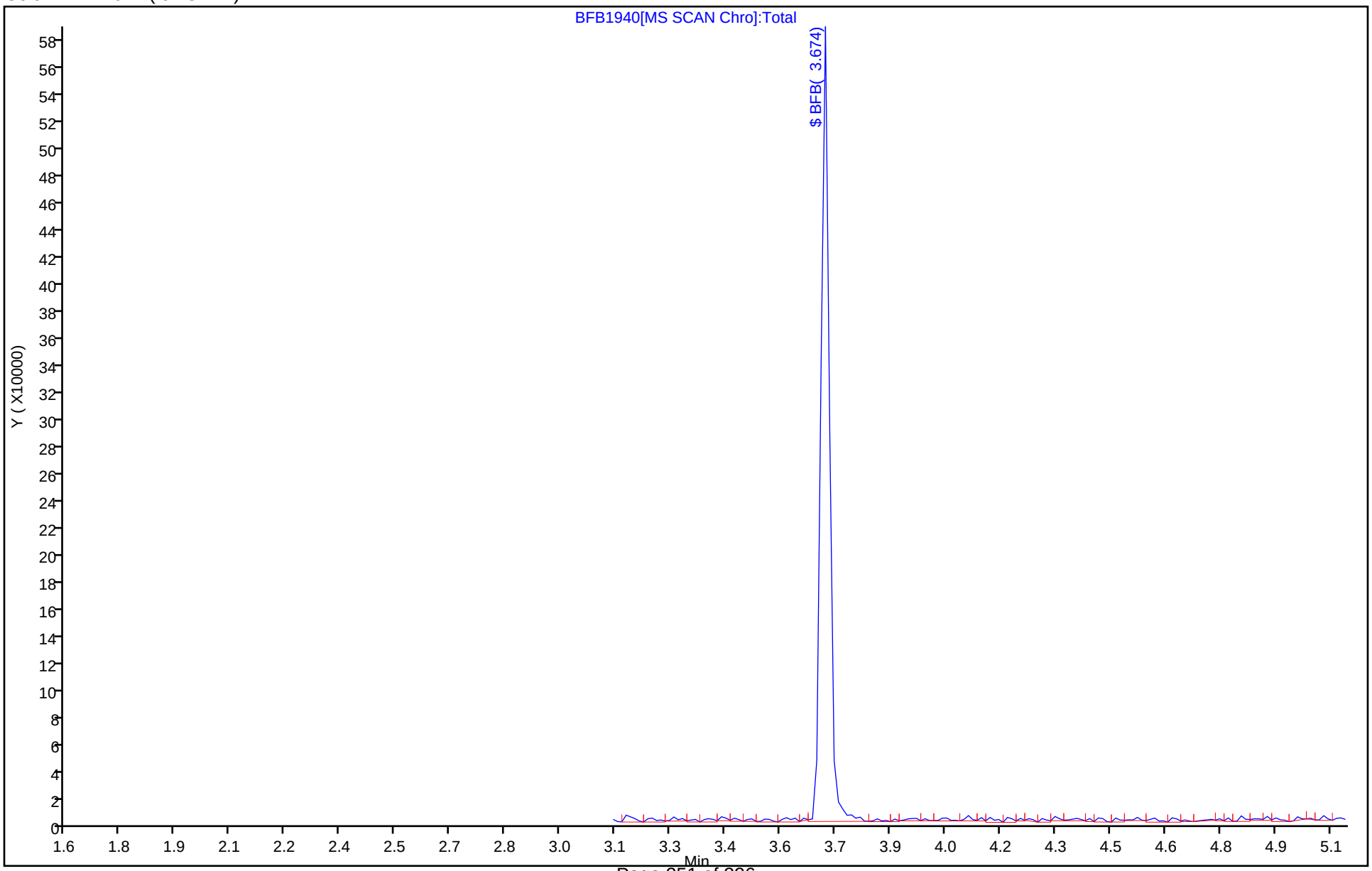
Report Date: 03-Oct-2018 12:29:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\BFB1940.D

Injection Date:	02-Oct-2018 14:58:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\BFB2101.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 27-Dec-2018 10:40:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0083269-001
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Dec-2018 09:58:10 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.794	3.794	0.000	0	468062	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

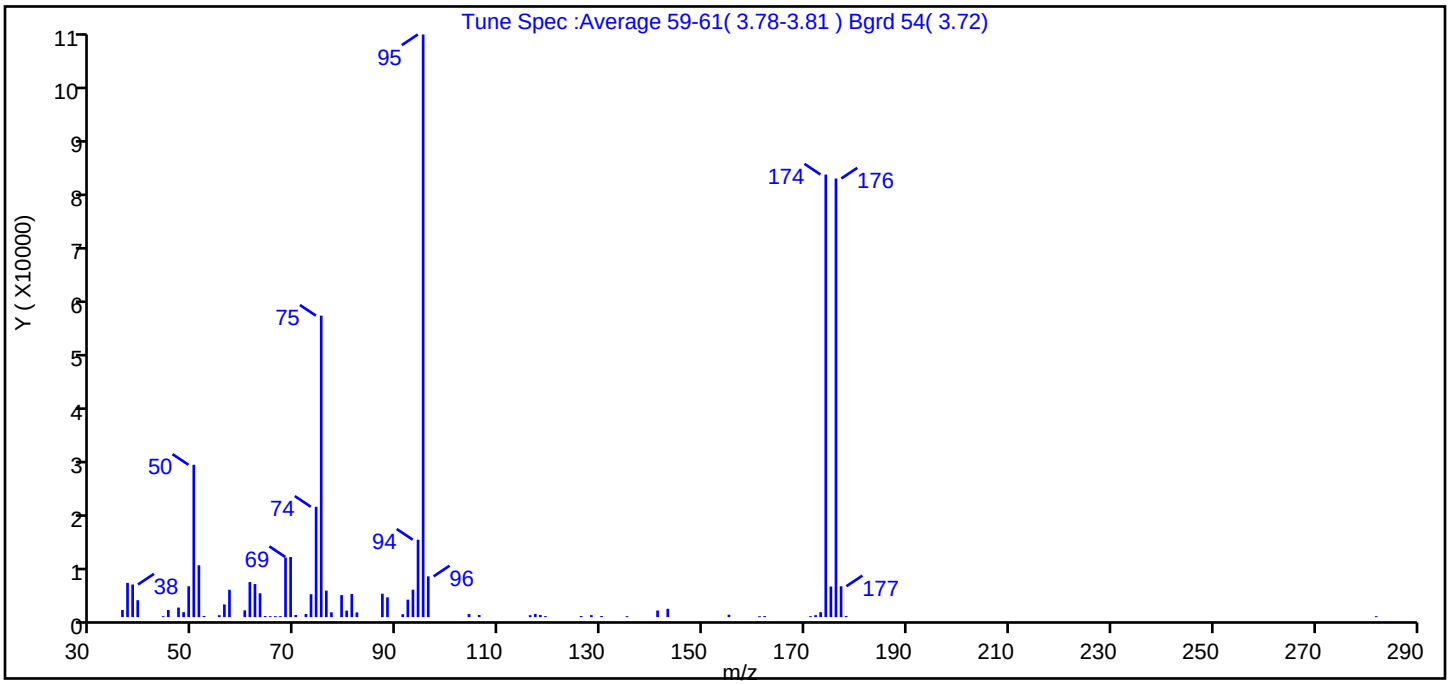
VMBFB_00021 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\BFB2101.D
Injection Date: 27-Dec-2018 10:40:30 Instrument ID: A3UX10
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.1
75	30 to 60% of m/z 95	51.7
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.9 (1.1)
174	50 to 120% of m/z 95	76.0
175	5 to 9% of m/z 174	5.3 (6.9)
176	Greater than 95% but less than 101% of m/z 174	75.3 (99.1)
177	5 to 9% of m/z 176	5.3 (7.0)

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\BFB2101.D\8260_10.rslt\spectra.d
Injection Date: 27-Dec-2018 10:40:30
Spectrum: Tune Spec :Average 59-61(3.78-3.81) Bgrd 54(3.72)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1314	62.00	6063	81.00	4241	128.00	366
37.00	6278	63.00	4375	82.00	862	130.00	203
38.00	5978	64.00	207	87.00	4290	135.00	183
39.00	3101	65.00	171	88.00	3631	141.00	1215
44.00	170	66.00	184	91.00	530	143.00	1531
45.00	1312	67.00	186	92.00	3207	155.00	445
47.00	1754	68.00	10909	93.00	5028	161.00	175
48.00	913	69.00	11017	94.00	14192	162.00	198
49.00	5659	70.00	392	95.00	106760	171.00	181
50.00	27912	72.00	575	96.00	7471	172.00	360
51.00	9502	73.00	4197	104.00	587	173.00	910
52.00	221	74.00	20224	106.00	394	174.00	81096
55.00	362	75.00	55240	116.00	361	175.00	5612
56.00	2334	76.00	4866	117.00	600	176.00	80368
57.00	5011	77.00	882	118.00	399	177.00	5658
60.00	1246	79.00	4046	119.00	193	178.00	223
61.00	6427	80.00	1186	126.00	212	282.00	183

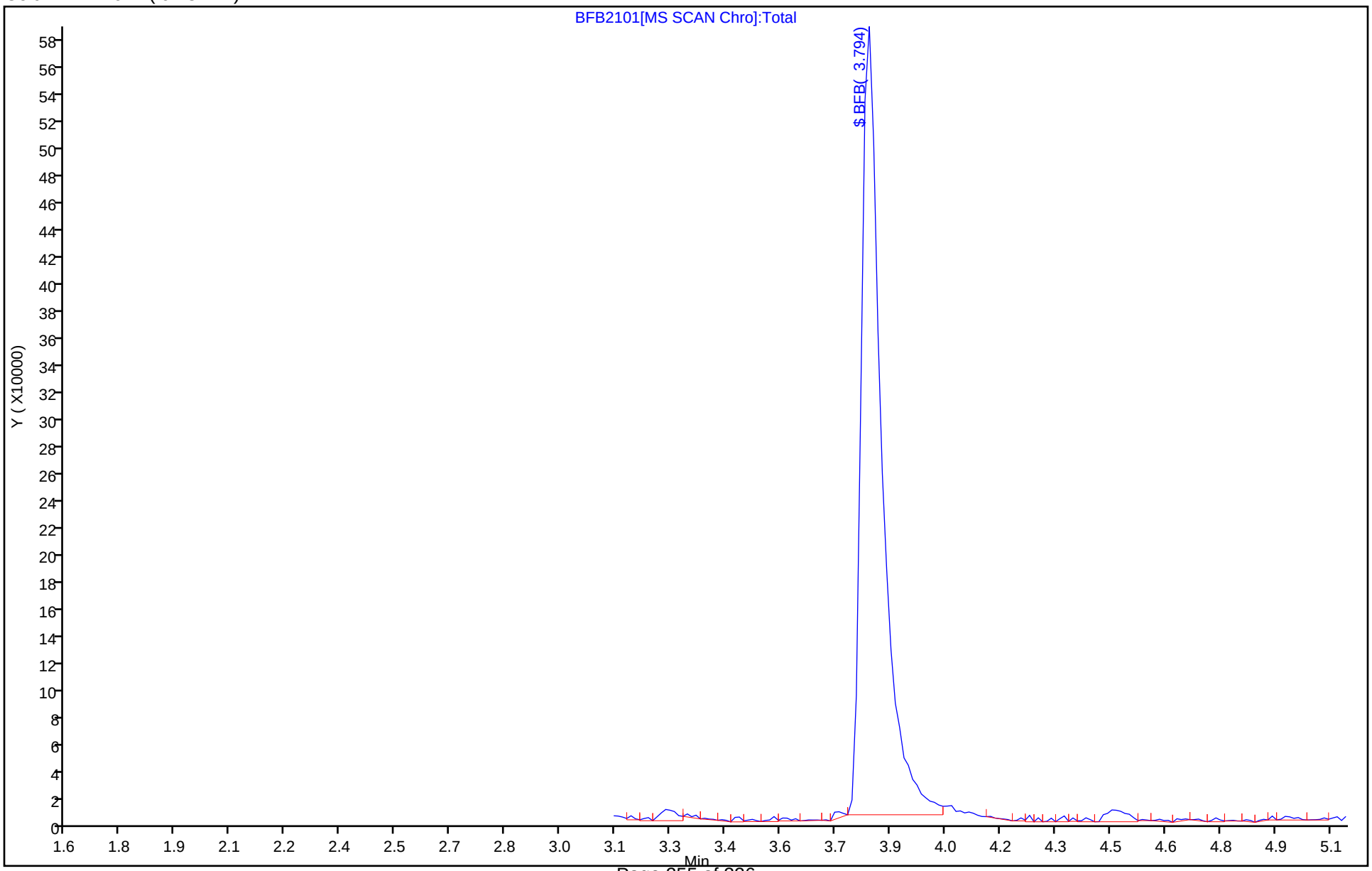
Report Date: 28-Dec-2018 09:58:11 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\BFB2101.D

Injection Date:	27-Dec-2018 10:40:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\BFB827.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 27-Aug-2018 10:10:30 ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C80827A-IC,BFBUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Aug-2018 10:27:12 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.761	3.761	0.000	0	258892	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

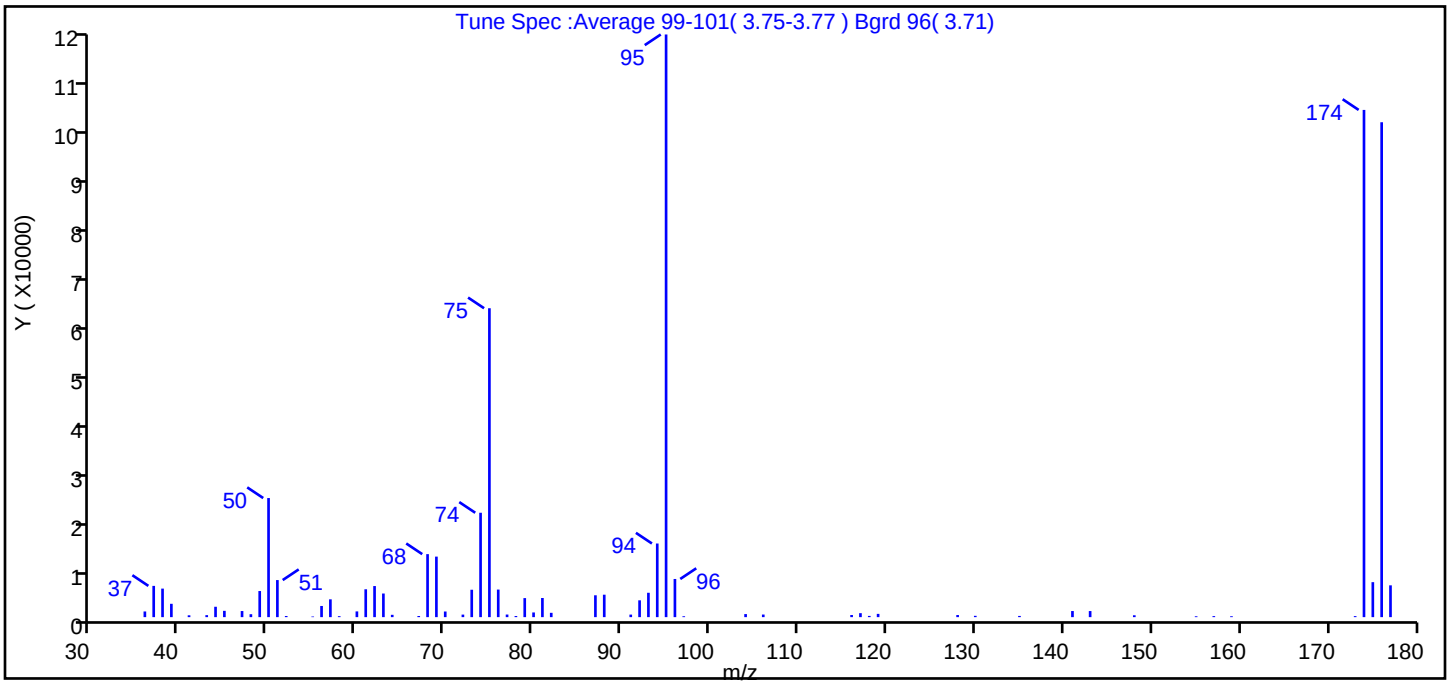
vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\BFB827.D
Injection Date: 27-Aug-2018 10:10:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	53.0
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.2 (0.2)
174	50 to 120% of m/z 95	87.1
175	5 to 9% of m/z 174	6.0 (6.9)
176	Greater than 95% but less than 101% of m/z 174	84.9 (97.6)
177	5 to 9% of m/z 176	5.5 (6.4)

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\BFB827.D\8260_15.rslt\spectra.d
Injection Date: 27-Aug-2018 10:10:30
Spectrum: Tune Spec :Average 99-101(3.75-3.77) Bgrd 96(3.71)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 67

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1105	58.00	187	79.00	3709	118.00	240
37.00	6089	60.00	1118	80.00	914	119.00	637
38.00	5559	61.00	5429	81.00	3729	128.00	412
39.00	2599	62.00	6057	82.00	842	130.00	258
41.00	358	63.00	4603	87.00	4258	135.00	236
43.00	390	64.00	454	88.00	4373	141.00	1189
44.00	2022	67.00	220	91.00	496	143.00	1185
45.00	1228	68.00	12274	92.00	3278	148.00	365
47.00	1189	69.00	11791	93.00	4747	155.00	168
48.00	572	70.00	1099	94.00	14345	157.00	199
49.00	5087	72.00	497	95.00	113504	159.00	171
50.00	23200	73.00	5336	96.00	7435	173.00	199
51.00	7223	74.00	20336	97.00	170	174.00	98808
52.00	222	75.00	60176	104.00	597	175.00	6813
55.00	121	76.00	5371	106.00	508	176.00	96408
56.00	2175	77.00	507	116.00	414	177.00	6196
57.00	3470	78.00	220	117.00	775		

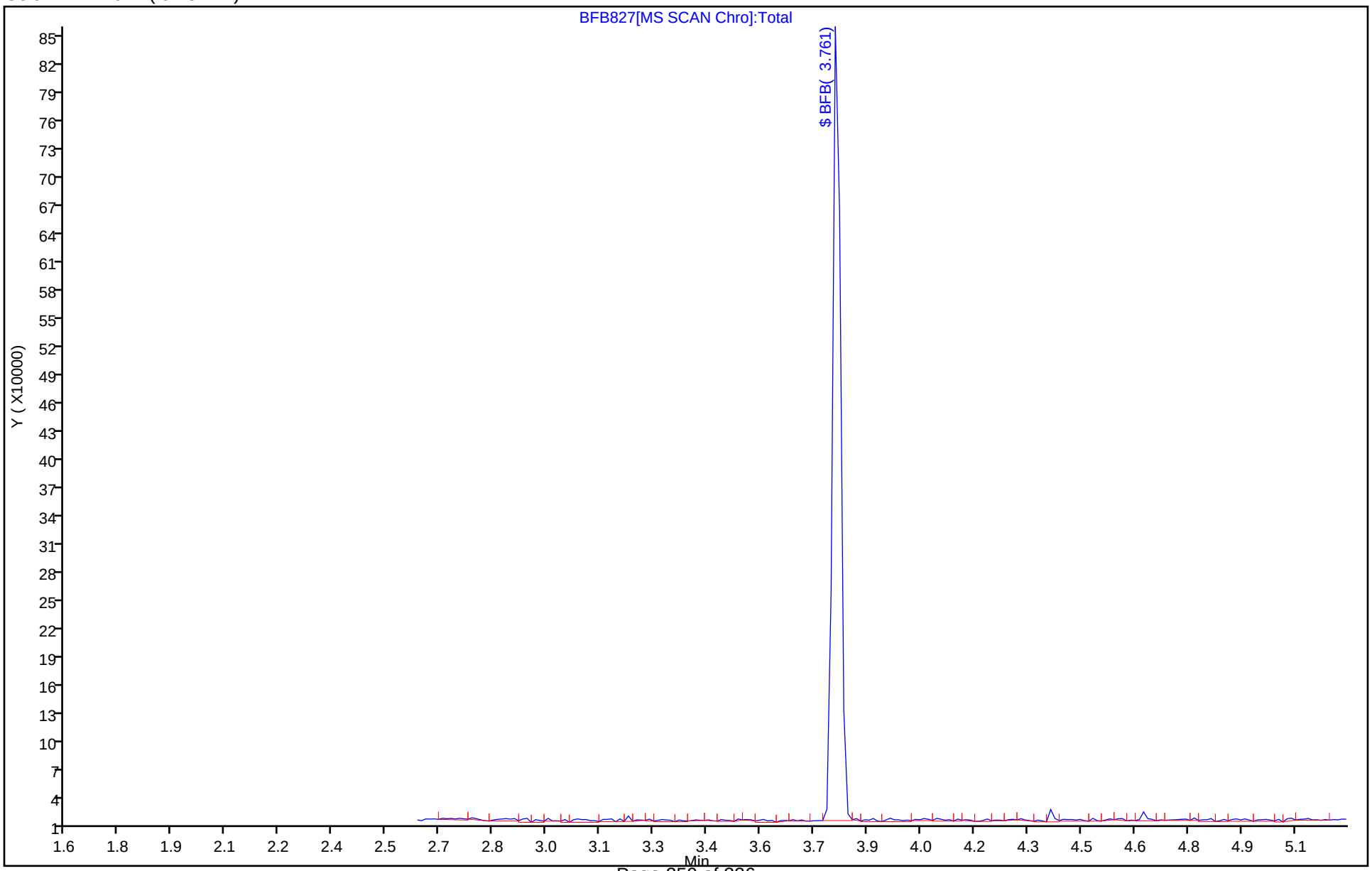
Report Date: 28-Aug-2018 10:27:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\BFB827.D

Injection Date:	27-Aug-2018 10:10:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\BFB828.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 28-Aug-2018 11:13:30 ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C80828A,BFBUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 30-Aug-2018 10:14:42 Calib Date: 28-Aug-2018 14:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\UXC4635.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.761	3.761	0.000	0	203518	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

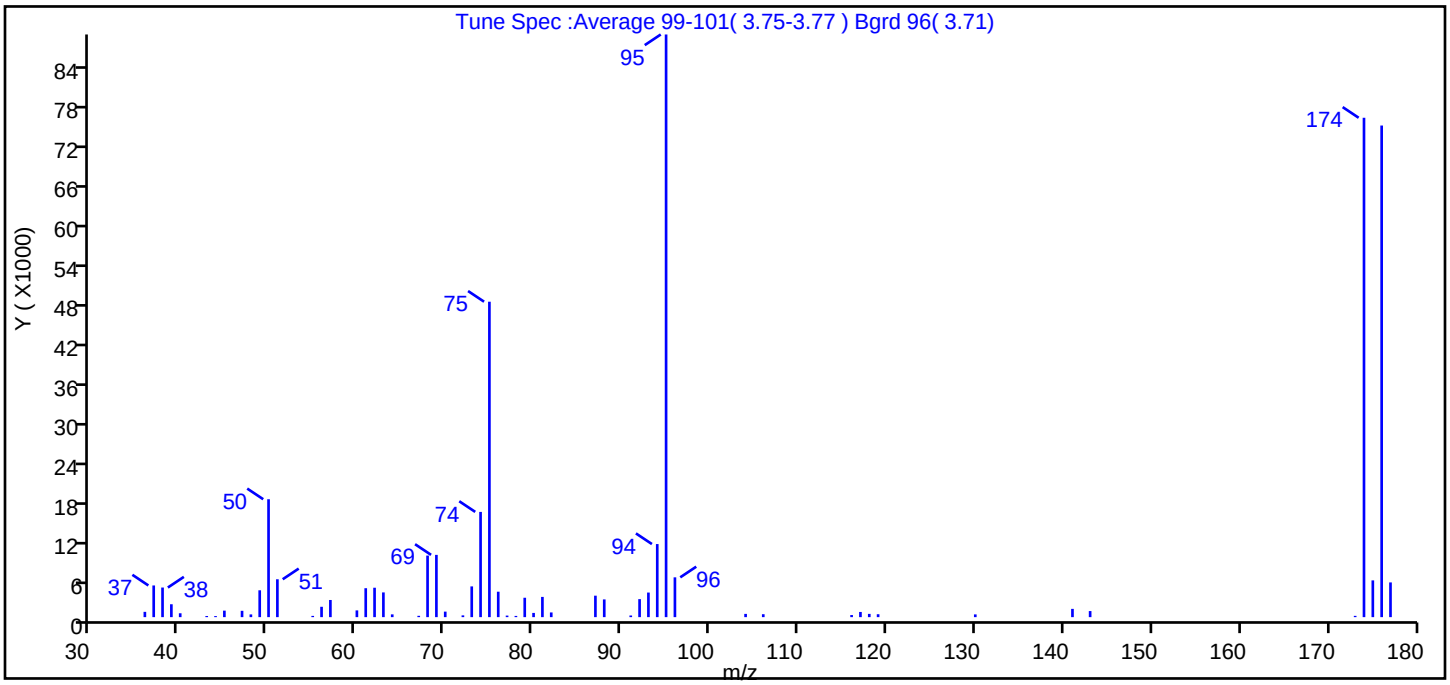
vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\BFB828.D
Injection Date: 28-Aug-2018 11:13:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.2
75	30 to 60% of m/z 95	54.1
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	85.7
175	5 to 9% of m/z 174	6.3 (7.4)
176	Greater than 95% but less than 101% of m/z 174	84.4 (98.4)
177	5 to 9% of m/z 176	6.0 (7.1)

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\BFB828.D\8260_15.rslt\spectra.d
Injection Date: 28-Aug-2018 11:13:30
Spectrum: Tune Spec :Average 99-101(3.75-3.77) Bgrd 96(3.71)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	808	57.00	2617	77.00	237	106.00	448
37.00	4832	60.00	1029	78.00	187	116.00	321
38.00	4516	61.00	4414	79.00	2958	117.00	791
39.00	1967	62.00	4486	80.00	644	118.00	497
40.00	591	63.00	3771	81.00	3086	119.00	445
43.00	172	64.00	423	82.00	717	130.00	420
44.00	163	67.00	203	87.00	3273	141.00	1261
45.00	993	68.00	9391	88.00	2705	143.00	927
47.00	966	69.00	9498	91.00	250	173.00	196
48.00	417	70.00	842	92.00	2748	174.00	76168
49.00	4096	72.00	270	93.00	3751	175.00	5607
50.00	17984	73.00	4689	94.00	11147	176.00	74984
51.00	5778	74.00	16052	95.00	88872	177.00	5297
55.00	191	75.00	48112	96.00	6072		
56.00	1579	76.00	3880	104.00	496		

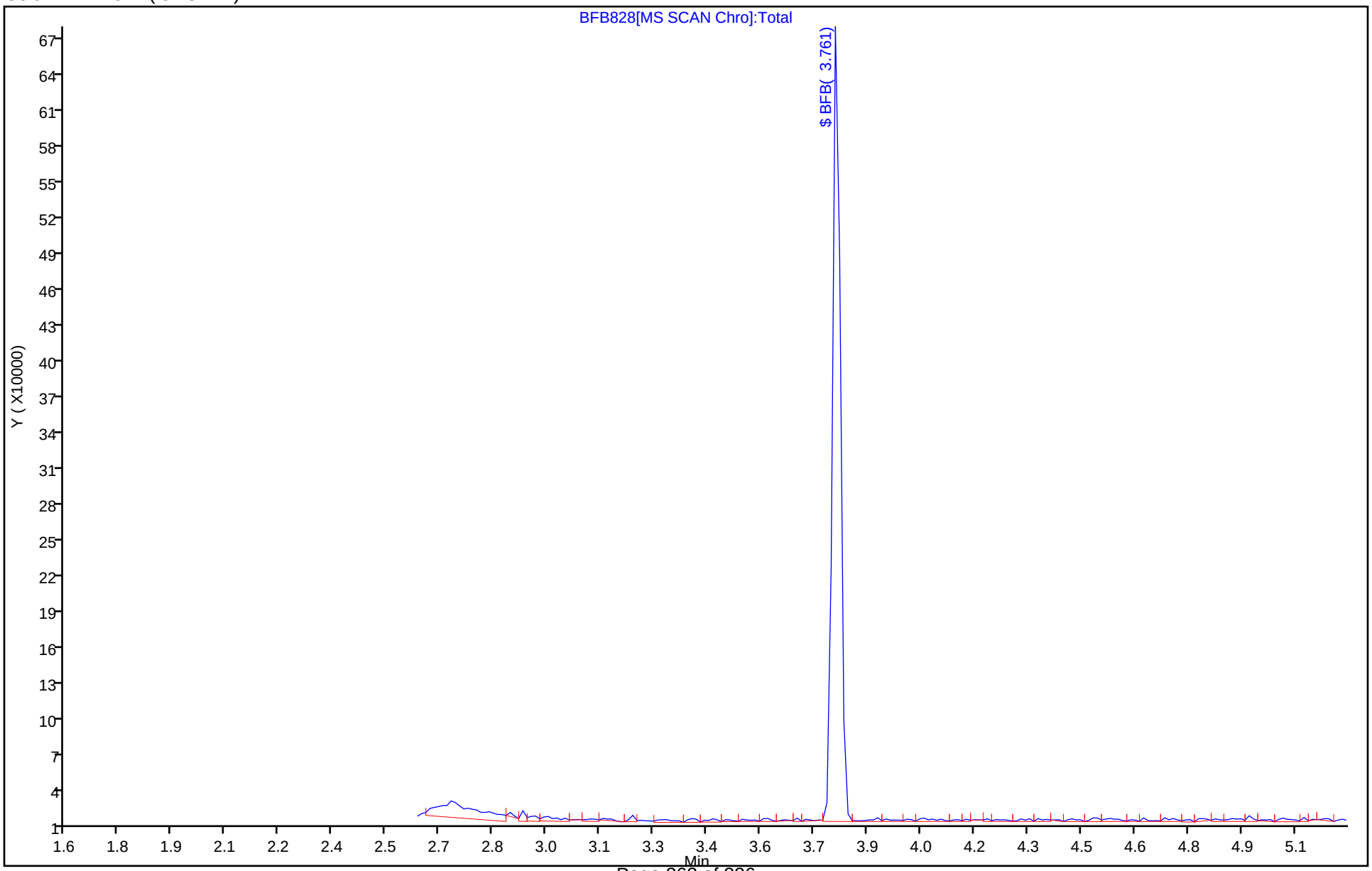
Report Date: 30-Aug-2018 10:14:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20180828-79331.b\BFB828.D

Injection Date:	28-Aug-2018 11:13:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\chromna\Canton\ChromData\A3UX15\20181226-83213.b\BFB1226.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	26-Dec-2018 08:52:30	ALS Bottle#:	29	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C81226A,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	27-Dec-2018 08:10:28	Calib Date:	27-Aug-2018 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0324				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.761	3.761	0.000	0	337178	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

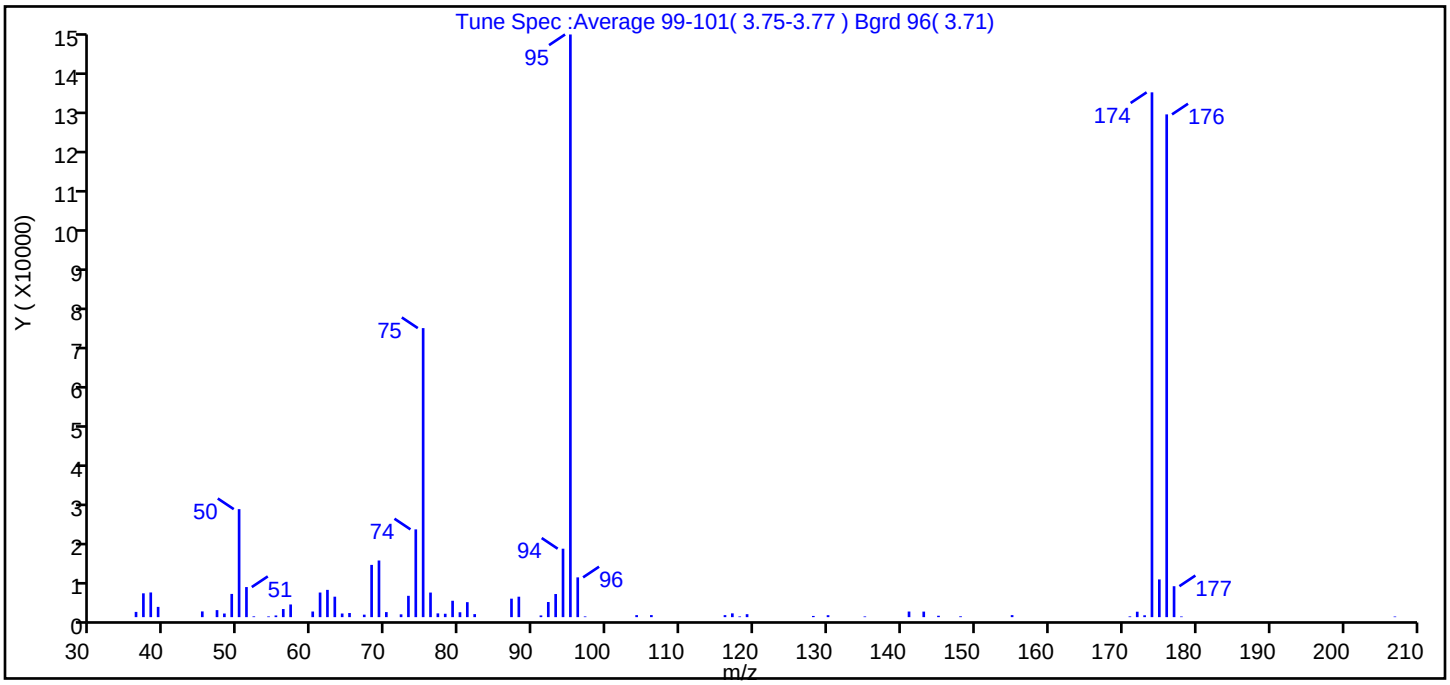
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\BFB1226.D
Injection Date: 26-Dec-2018 08:52:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.5
75	30 to 60% of m/z 95	49.6
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	90.1
175	5 to 9% of m/z 174	6.5 (7.2)
176	Greater than 95% but less than 101% of m/z 174	86.3 (95.8)
177	5 to 9% of m/z 176	5.3 (6.2)

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\BFB1226.D\8260_15.rslt\spectra.d
Injection Date: 26-Dec-2018 08:52:30
Spectrum: Tune Spec :Average 99-101(3.75-3.77) Bgrd 96(3.71)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1329	62.00	6907	81.00	3796	128.00	302
37.00	6033	63.00	5181	82.00	767	130.00	491
38.00	6252	64.00	921	87.00	4680	135.00	180
39.00	2600	65.00	1046	88.00	5176	141.00	1421
45.00	1451	67.00	632	91.00	432	143.00	1403
47.00	1780	68.00	13235	92.00	3832	145.00	351
48.00	917	69.00	14347	93.00	5854	148.00	211
49.00	5881	70.00	1280	94.00	17336	155.00	513
50.00	27352	72.00	710	95.00	147584	171.00	192
51.00	7619	73.00	5403	96.00	10075	172.00	1376
52.00	197	74.00	22232	97.00	181	173.00	470
54.00	183	75.00	73208	104.00	511	174.00	132928
55.00	426	76.00	6227	106.00	518	175.00	9556
56.00	2055	77.00	955	116.00	511	176.00	127344
57.00	3210	78.00	861	117.00	957	177.00	7835
60.00	1429	79.00	4150	118.00	175	178.00	168
61.00	6235	80.00	1240	119.00	749	207.00	159

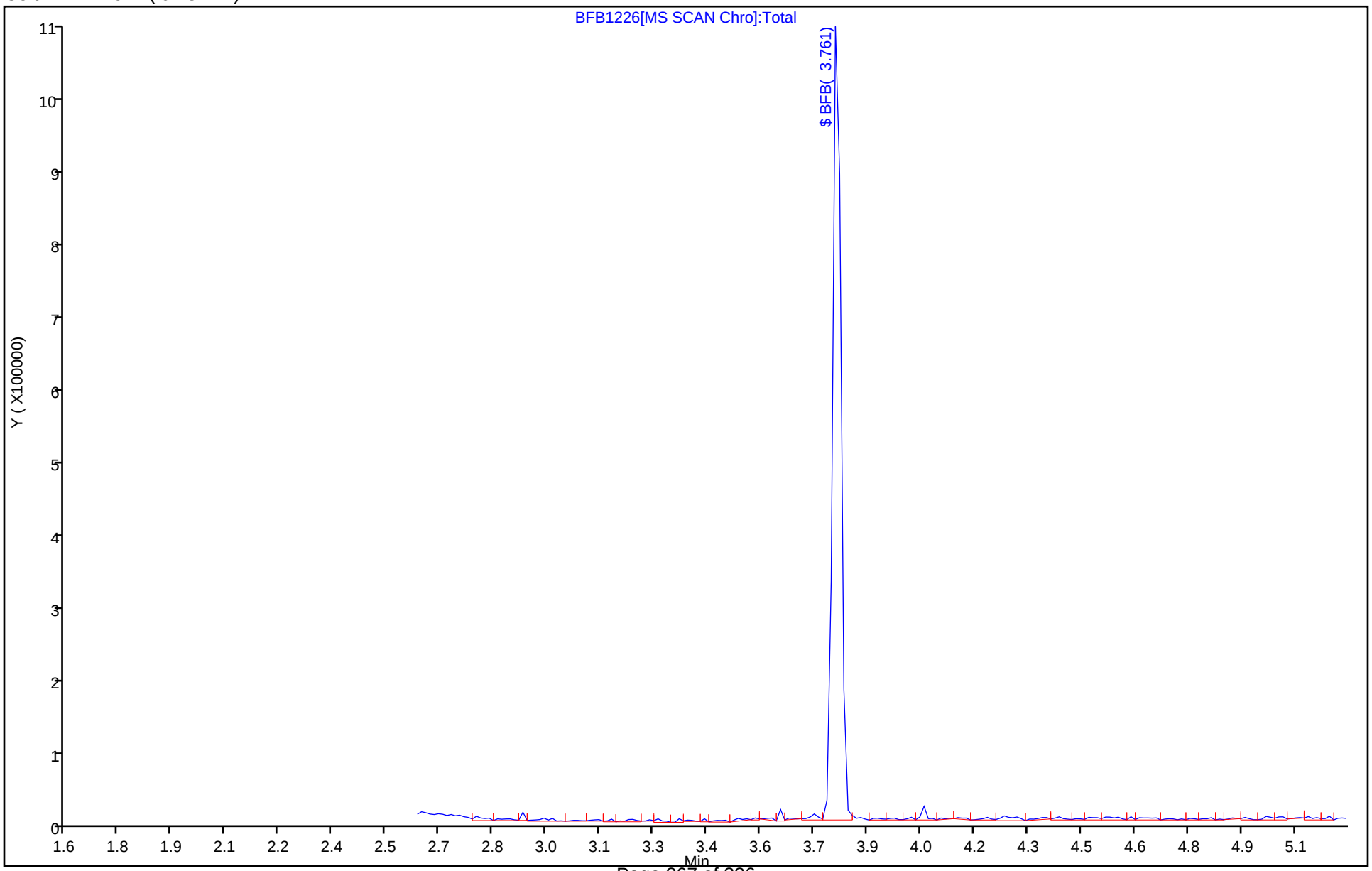
Report Date: 27-Dec-2018 08:10:28 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\BFB1226.D

Injection Date:	26-Dec-2018 08:52:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-361663/6

Matrix: Water | Lab File ID: UXC8093.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/26/2018 11:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361663 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	0.289	J	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-361663/6

Matrix: Water | Lab File ID: UXC8093.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/26/2018 11:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361663 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-121
460-00-4	4-Bromofluorobenzene (Surr)	66		59-120
2037-26-5	Toluene-d8 (Surr)	75		70-123
1868-53-7	Dibromofluoromethane (Surr)	127		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8093.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 26-Dec-2018 11:07:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083213-006
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 26-Dec-2018 11:27:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	1459082	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1099689	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	94	543446	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	383125	7.97	10.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.000	100	441449	7.97	8.61	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	886685	7.97	6.01	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	270551	7.97	5.27	
9 Dichlorodifluoromethane	85		1.555					ND	
10 Chloromethane	50		1.721					ND	
11 Vinyl chloride	62		1.804					ND	
12 Butadiene	54		1.816					ND	
13 Bromomethane	94		2.089					ND	
14 Chloroethane	64		2.172					ND	
15 Dichlorofluoromethane	67		2.338					ND	
16 Trichlorofluoromethane	101		2.397					ND	
17 Ethyl ether	59		2.611					ND	
18 Acrolein	56		2.729					ND	
19 1,1-Dichloroethene	96		2.824					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.836					ND	
22 Acetone	58	2.872	2.860	0.012	70	1641		0.4005	
21 Methylal	45		2.872					ND	
23 Iodomethane	142		2.955					ND	
24 Carbon disulfide	76	3.038	3.014	0.024	99	22045		0.1833	
26 Acetonitrile	41		3.109					ND	
25 3-Chloro-1-propene	76		3.121					ND	
27 Methyl acetate	43		3.133					ND	
28 Methylene Chloride	84		3.228					ND	
29 2-Methyl-2-propanol	59		3.311					ND	
32 Acrylonitrile	53		3.441					ND	
31 Methyl tert-butyl ether	73		3.453					ND	
30 trans-1,2-Dichloroethene	96		3.465					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
125 Chlorodifluoromethane TIC	51		3.571					ND	
33 Hexane	86		3.678					ND	
34 1,1-Dichloroethane	63		3.809					ND	
36 Vinyl acetate	43		3.832					ND	
35 Isopropyl ether	87		3.856					ND	
37 2-Chloro-1,3-butadiene	53		3.892					ND	
38 Tert-butyl ethyl ether	59		4.152					ND	
39 cis-1,2-Dichloroethene	96		4.295					ND	
40 2,2-Dichloropropane	97		4.295					ND	
41 2-Butanone (MEK)	72		4.295					ND	
42 Ethyl acetate	43		4.342					ND	
43 Propionitrile	54		4.366					ND	
44 Methacrylonitrile	41		4.485					ND	
45 Chlorobromomethane	128		4.496					ND	
46 Tetrahydrofuran	42		4.532					ND	
47 Chloroform	83	4.556	4.556	0.000	94	21161		0.2890	
48 1,1,1-Trichloroethane	97		4.722					ND	
49 Cyclohexane	56		4.769					ND	
51 1,1-Dichloropropene	75		4.852					ND	
50 Carbon tetrachloride	117		4.852					ND	
52 Isobutyl alcohol	41		4.911					ND	
53 Benzene	78		5.030					ND	
54 1,2-Dichloroethane	62		5.042					ND	
55 Tert-amyl methyl ether	73		5.101					ND	
56 n-Heptane	100		5.220					ND	
57 n-Butanol	56		5.469					ND	
58 Trichloroethene	130		5.564					ND	
59 Ethyl acrylate	55		5.635					ND	
60 Methylcyclohexane	83		5.730					ND	
61 1,2-Dichloropropane	63		5.765					ND	
62 Methyl methacrylate	41		5.836					ND	
63 Dibromomethane	93		5.860					ND	
64 1,4-Dioxane	88		5.872					ND	
65 Dichlorobromomethane	83		5.991					ND	
66 2-Nitropropane	41		6.192					ND	
67 2-Chloroethyl vinyl ether	63		6.240					ND	
68 cis-1,3-Dichloropropene	75		6.382					ND	
69 4-Methyl-2-pentanone (MIBK	43		6.500					ND	
70 Toluene	91		6.678					ND	
71 trans-1,3-Dichloropropene	75		6.868					ND	
72 Ethyl methacrylate	69		6.927					ND	
73 1,1,2-Trichloroethane	97		7.034					ND	
74 Tetrachloroethene	164		7.176					ND	
75 1,3-Dichloropropane	76		7.188					ND	
76 2-Hexanone	43		7.248					ND	
77 n-Butyl acetate	43		7.354					ND	
78 Tetrahydrothiophene	60		7.390					ND	
79 Chlorodibromomethane	129		7.402					ND	
80 Ethylene Dibromide	107		7.520					ND	
81 1-Chlorohexane	91		7.923					ND	
82 Chlorobenzene	112		7.959					ND	
83 1,1,1,2-Tetrachloroethane	131		8.030					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Ethylbenzene	106		8.054					ND	
85 m-Xylene & p-Xylene	91		8.161					ND	
86 o-Xylene	106		8.540					ND	
87 Styrene	104		8.552					ND	
88 Bromoform	173		8.742					ND	
89 Isopropylbenzene	105		8.896					ND	
90 1,4-Dichlorobutane	55		8.991					ND	
91 Cyclohexanone	55		9.003					ND	
93 1,1,2,2-Tetrachloroethane	83		9.180					ND	
92 Bromobenzene	156		9.204					ND	
94 1,2,3-Trichloropropane	110		9.228					ND	
95 trans-1,4-Dichloro-2-buten	53		9.228					ND	
96 N-Propylbenzene	120		9.287					ND	
100 3-Ethyltoluene	105		9.324					ND	
97 2-Chlorotoluene	126		9.382					ND	
98 1,3,5-Trimethylbenzene	105		9.453					ND	
99 4-Chlorotoluene	91		9.489					ND	
104 2-Ethyltoluene	105		9.609					ND	
101 tert-Butylbenzene	119		9.785					ND	
102 Pentachloroethane	167		9.809					ND	
103 1,2,4-Trimethylbenzene	105		9.821					ND	
105 sec-Butylbenzene	105		9.999					ND	
106 1,3-Dichlorobenzene	146		10.117					ND	
107 4-Isopropyltoluene	119		10.129					ND	
108 1,4-Dichlorobenzene	146		10.200					ND	
109 1,2,3-Trimethylbenzene	105		10.248					ND	
110 Benzyl chloride	126		10.331					ND	
111 n-Butylbenzene	91		10.544					ND	
112 1,2-Dichlorobenzene	146		10.568					ND	
113 1,2-Dibromo-3-Chloropropan	157		11.351					ND	
114 1,3,5-Trichlorobenzene	180		11.552					ND	
115 1,2,4-Trichlorobenzene	180		12.169					ND	
116 Hexachlorobutadiene	225		12.335					ND	
117 Naphthalene	128		12.430					ND	
118 1,2,3-Trichlorobenzene	180		12.679					ND	
119 2-Methylnaphthalene	142		13.746					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
120 Epichlorohydrin	1		0.000					ND	
122 Ethylene oxide	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Trihalomethanes, Total	1				0			0.2890	

Reagents:

vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00079	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

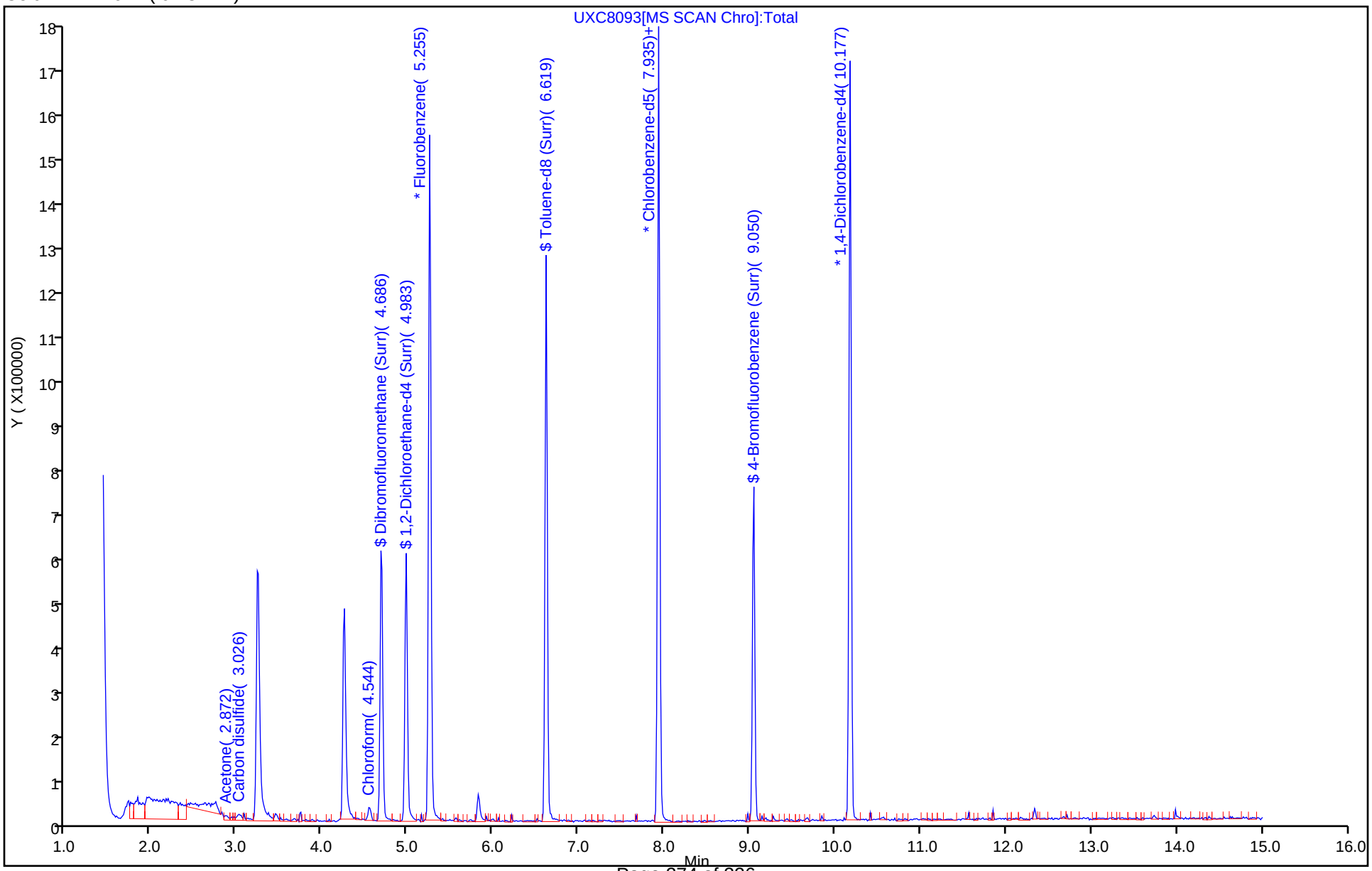
Report Date: 27-Dec-2018 08:10:45 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8093.D

Injection Date:	26-Dec-2018 11:07:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8093.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 26-Dec-2018 11:07:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083213-006
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 26-Dec-2018 11:27:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	10.1	127.10
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	8.61	107.99
$ 6 Toluene-d8 (Surr)	7.97	6.01	75.38
$ 7 4-Bromofluorobenzene (Surr)	7.97	5.27	66.17

Report Date: 27-Dec-2018 08:10:45 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8093.D

Injection Date: 26-Dec-2018 11:07:30 Instrument ID: A3UX15

Lims ID: MB

Client ID:

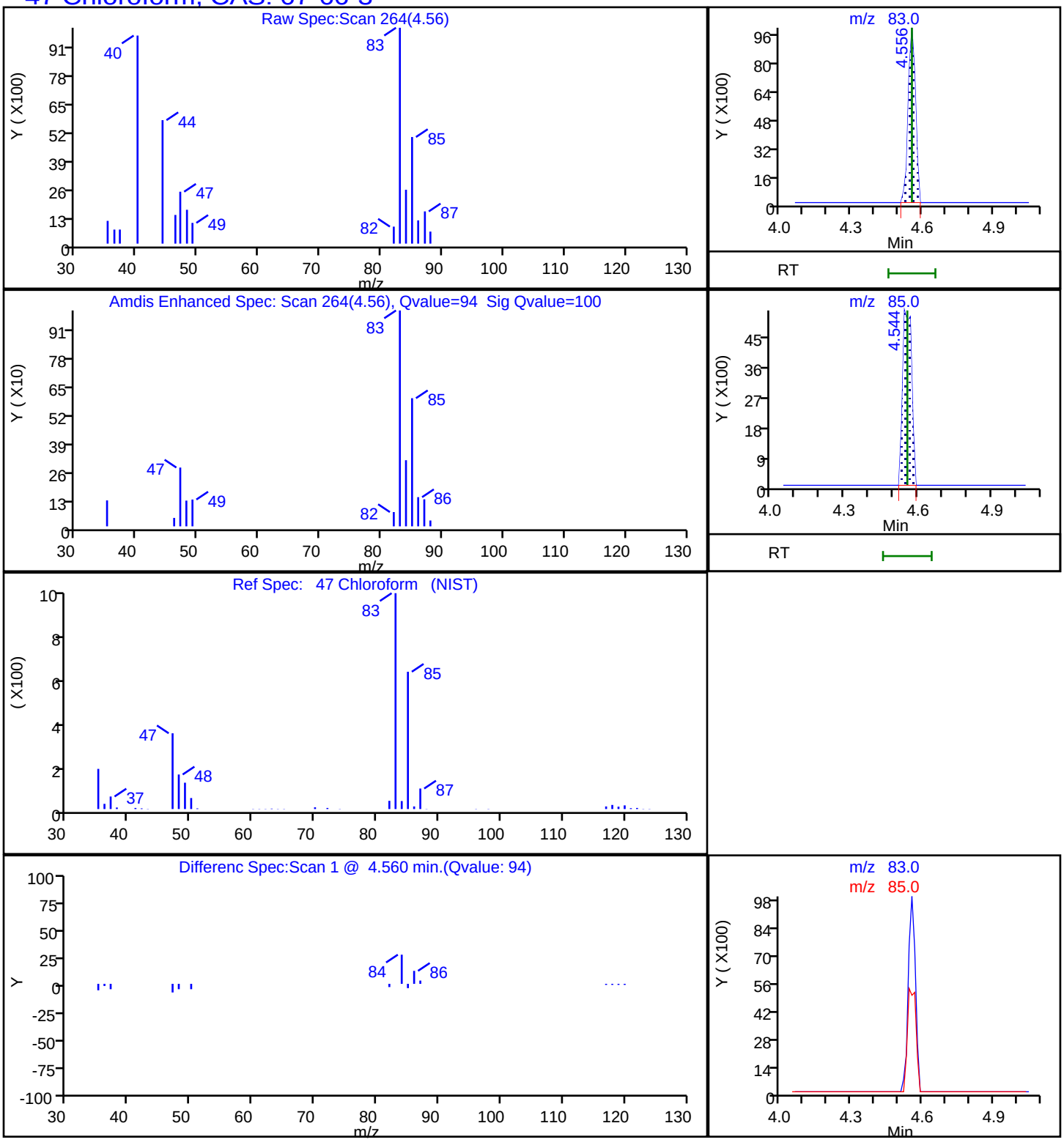
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

47 Chloroform, CAS: 67-66-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-361928/6

Matrix: Water | Lab File ID: UXX8807.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2018 12:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361928 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.090
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
591-78-6	2-Hexanone	10	U	10	0.54
67-64-1	Acetone	10	U	10	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.17
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
78-93-3	2-Butanone (MEK)	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.42
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
100-42-5	Styrene	1.0	U	1.0	0.10
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-01-4	Vinyl chloride	1.0	U	1.0	0.20
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-361928/6

Matrix: Water Lab File ID: UXX8807.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/27/2018 12:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 361928 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-121
460-00-4	4-Bromofluorobenzene (Surr)	97		59-120
2037-26-5	Toluene-d8 (Surr)	102		70-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8807.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 27-Dec-2018 12:45:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083269-006
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Dec-2018 09:58:14 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 27-Dec-2018 13:04:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.565	5.565	0.000	98	678200	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.251	8.251	0.000	89	451539	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.486	10.486	0.000	97	264046	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.986	4.986	0.000	92	174770	10.0	9.81	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.282	5.282	0.000	95	213941	10.0	9.40	
$ 6 Toluene-d8 (Surr)	98	6.938	6.938	0.000	95	579269	10.0	10.2	
$ 7 4-Bromofluorobenzene (Surr	95	9.351	9.351	0.000	85	210439	10.0	9.69	
9 Dichlorodifluoromethane	85		1.662					ND	
10 Chloromethane	50		1.851					ND	
12 Butadiene	54		1.934					ND	
11 Vinyl chloride	62		1.958					ND	
13 Bromomethane	94		2.253					ND	
14 Chloroethane	64		2.324					ND	
15 Dichlorofluoromethane	67		2.526					ND	
16 Trichlorofluoromethane	101		2.585					ND	
17 Ethyl ether	59		2.821					ND	
120 Propene oxide	58		2.856					ND	
18 Acrolein	56		2.940					ND	
19 1,1-Dichloroethene	96		3.034					ND	
23 Methylal	45		3.057					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.070					ND	
21 Acetone	43		3.093					ND	
22 Iodomethane	142		3.176					ND	
24 Carbon disulfide	76		3.247					ND	
25 Acetonitrile	41		3.341					ND	
26 3-Chloro-1-propene	76		3.365					ND	
27 Methyl acetate	43		3.389					ND	
28 Methylene Chloride	84		3.472					ND	
29 2-Methyl-2-propanol	59		3.578					ND	U
31 Acrylonitrile	53		3.697					ND	
30 trans-1,2-Dichloroethene	96		3.720					ND	
32 Methyl tert-butyl ether	73		3.720					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Hexane	86		3.957					ND	
34 1,1-Dichloroethane	63		4.087					ND	
35 Vinyl acetate	43		4.122					ND	
36 Isopropyl ether	87		4.134					ND	
37 2-Chloro-1,3-butadiene	53		4.169					ND	
42 Ethyl acetate	43		4.453					ND	U
38 Tert-butyl ethyl ether	59		4.453					ND	
39 2,2-Dichloropropane	97		4.584					ND	
40 cis-1,2-Dichloroethene	96		4.584					ND	
41 2-Butanone (MEK)	43		4.596					ND	
43 Propionitrile	54		4.642					ND	
44 Methacrylonitrile	41		4.772					ND	
45 Chlorobromomethane	128		4.785					ND	
46 Tetrahydrofuran	42		4.832					ND	
47 Chloroform	83		4.856					ND	
48 1,1,1-Trichloroethane	97		5.021					ND	
49 Cyclohexane	56		5.069					ND	
50 1,1-Dichloropropene	75		5.151					ND	
51 Carbon tetrachloride	117		5.163					ND	
52 Isobutyl alcohol	41		5.234					ND	
53 Benzene	78		5.329					ND	
54 1,2-Dichloroethane	62		5.341					ND	
55 Tert-amyl methyl ether	73		5.411					ND	
56 n-Heptane	100		5.542					ND	
57 n-Butanol	56		5.790					ND	
58 Trichloroethene	130		5.873					ND	
59 Ethyl acrylate	55		5.943					ND	
60 Methylcyclohexane	83		6.050					ND	
61 1,2-Dichloropropane	63		6.074					ND	
62 Methyl methacrylate	41		6.145					ND	
63 Dibromomethane	93		6.169					ND	
64 1,4-Dioxane	88		6.181					ND	U
65 Dichlorobromomethane	83		6.299					ND	
66 2-Nitropropane	41		6.499					ND	
67 2-Chloroethyl vinyl ether	63		6.547					ND	
68 cis-1,3-Dichloropropene	75		6.689					ND	
69 4-Methyl-2-pentanone (MIBK	43		6.819					ND	
70 Toluene	91		6.997					ND	
71 trans-1,3-Dichloropropene	75		7.174					ND	
72 Ethyl methacrylate	69		7.245					ND	
73 1,1,2-Trichloroethane	97		7.352					ND	
74 Tetrachloroethene	164		7.494					ND	
75 1,3-Dichloropropane	76		7.505					ND	
76 2-Hexanone	43		7.565					ND	
77 n-Butyl acetate	56		7.670					ND	
79 Tetrahydrothiophene	60		7.696					ND	
78 Chlorodibromomethane	129		7.706					ND	
80 Ethylene Dibromide	107		7.825					ND	
81 1-Chlorohexane	91		8.238					ND	
82 Chlorobenzene	112		8.274					ND	
83 1,1,1,2-Tetrachloroethane	131		8.345					ND	
84 Ethylbenzene	106		8.369					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106		8.475					ND	
86 o-Xylene	106		8.854					ND	
87 Styrene	104		8.866					ND	
88 Bromoform	173		9.055					ND	
89 Isopropylbenzene	105		9.197					ND	
90 1,4-Dichlorobutane	55		9.294					ND	
91 Cyclohexanone	55		9.303					ND	
92 1,1,2,2-Tetrachloroethane	83		9.481					ND	
93 Bromobenzene	156		9.504					ND	
94 1,2,3-Trichloropropane	110		9.528					ND	
95 trans-1,4-Dichloro-2-buten	53		9.540					ND	
96 N-Propylbenzene	120		9.599					ND	
126 3-Ethyltoluene	105		9.662					ND	
97 2-Chlorotoluene	126		9.694					ND	
98 1,3,5-Trimethylbenzene	105		9.765					ND	
99 4-Chlorotoluene	126		9.800					ND	
119 2-Ethyltoluene	105		9.946					ND	
100 tert-Butylbenzene	119		10.084					ND	
101 Pentachloroethane	167		10.119					ND	
102 1,2,4-Trimethylbenzene	105		10.131					ND	
103 sec-Butylbenzene	105		10.309					ND	
104 1,3-Dichlorobenzene	146		10.427					ND	
105 4-Isopropyltoluene	119		10.439					ND	
106 1,4-Dichlorobenzene	146		10.510					ND	
107 1,2,3-Trimethylbenzene	105		10.557					ND	
108 Benzyl chloride	126		10.639					ND	
109 n-Butylbenzene	91		10.853					ND	
110 1,2-Dichlorobenzene	146		10.877					ND	
111 1,2-Dibromo-3-Chloropropan	157		11.645					ND	
112 1,3,5-Trichlorobenzene	180		11.858					ND	
113 1,2,4-Trichlorobenzene	180		12.485					ND	
114 Hexachlorobutadiene	225		12.651					ND	
115 Naphthalene	128	12.722	12.734	-0.012	95	8168		0.1275	
116 1,2,3-Trichlorobenzene	180	12.982	12.982	0.000	94	5404		0.2256	
117 2-Methylnaphthalene	142		14.034					ND	
118 1,3-Diethylbenzene TIC	1		0.000					ND	
124 Ethylene oxide	1		0.000					ND	
122 Epichlorohydrin	1		0.000					ND	
S 128 1,2-Dichloroethene, Total	96		1.140					ND	
S 129 1,3-Dichloropropene, Total	75		6.760					ND	
S 130 Xylenes, Total	106		16.530					ND	
S 131 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00079	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00071	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

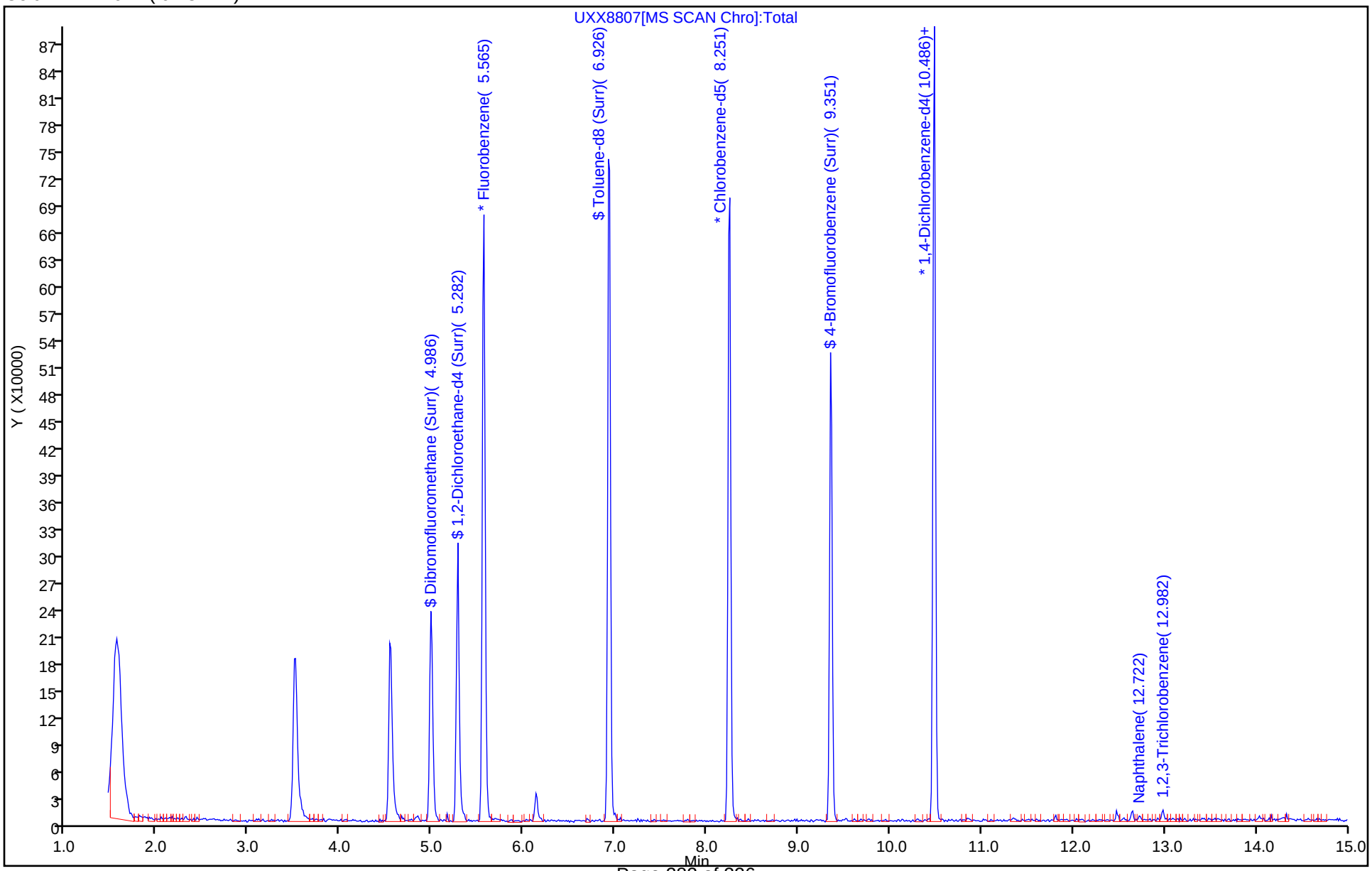
Report Date: 28-Dec-2018 09:58:19 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8807.D

Injection Date:	27-Dec-2018 12:45:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8807.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 27-Dec-2018 12:45:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083269-006
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Dec-2018 09:58:14 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 27-Dec-2018 13:04:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.81	98.10
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.40	93.98
$ 6 Toluene-d8 (Surr)	10.0	10.2	101.62
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.69	96.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-361663/4

Matrix: Water | Lab File ID: UXC8090.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/26/2018 10:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361663 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	11.9		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	9.54		1.0	0.13
79-00-5	1,1,2-Trichloroethane	10.9		1.0	0.090
75-34-3	1,1-Dichloroethane	11.3		1.0	0.17
75-35-4	1,1-Dichloroethene	10.6		1.0	0.19
107-06-2	1,2-Dichloroethane	9.68		1.0	0.21
78-87-5	1,2-Dichloropropane	10.2		1.0	0.15
591-78-6	2-Hexanone	16.5		10	0.54
67-64-1	Acetone	20.7		10	5.4
71-43-2	Benzene	10.4		1.0	0.13
75-25-2	Bromoform	10.3		1.0	0.76
74-83-9	Bromomethane	7.25		1.0	0.42
75-15-0	Carbon disulfide	11.2		1.0	0.28
56-23-5	Carbon tetrachloride	12.9		1.0	0.26
108-90-7	Chlorobenzene	10.4		1.0	0.14
75-00-3	Chloroethane	8.63		1.0	0.83
67-66-3	Chloroform	11.4		1.0	0.13
74-87-3	Chloromethane	9.82		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	11.0		1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	8.22		1.0	0.61
75-27-4	Dichlorobromomethane	10.1		1.0	0.17
100-41-4	Ethylbenzene	9.51		1.0	0.11
78-93-3	2-Butanone (MEK)	16.3		10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	14.8		10	0.42
75-09-2	Methylene Chloride	12.2		5.0	2.6
100-42-5	Styrene	8.96		1.0	0.10
127-18-4	Tetrachloroethene	10.8		1.0	0.15
108-88-3	Toluene	10.2		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	12.2		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	8.37		1.0	0.67
79-01-6	Trichloroethene	9.58		1.0	0.10
75-01-4	Vinyl chloride	9.26		1.0	0.20
1330-20-7	Xylenes, Total	18.0		2.0	0.15
124-48-1	Chlorodibromomethane	11.0		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-361663/4

Matrix: Water | Lab File ID: UXC8090.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/26/2018 10:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361663 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		70-121
460-00-4	4-Bromofluorobenzene (Surr)	83		59-120
2037-26-5	Toluene-d8 (Surr)	88		70-123
1868-53-7	Dibromofluoromethane (Surr)	97		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8090.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 26-Dec-2018 10:01:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083213-004
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 26-Dec-2018 10:20:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	2456566	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1808379	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	91	1025738	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	95	493275	7.97	7.75	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.000	100	572816	7.97	6.63	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1711777	7.97	7.05	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	97	557723	7.97	6.61	
9 Dichlorodifluoromethane	85	1.555	1.555	0.000	100	665843	10.0	7.60	
10 Chloromethane	50	1.721	1.721	0.000	99	818001	10.0	9.82	
11 Vinyl chloride	62	1.816	1.804	0.012	98	806116	10.0	9.26	
12 Butadiene	54	1.816	1.816	0.000	98	856132	10.0	8.22	
13 Bromomethane	94	2.089	2.089	0.000	90	495711	10.0	7.25	
14 Chloroethane	64	2.172	2.172	0.000	99	506848	10.0	8.63	
15 Dichlorofluoromethane	67	2.338	2.338	0.000	98	1232104	10.0	8.32	
16 Trichlorofluoromethane	101	2.397	2.397	0.000	99	1046482	10.0	7.46	
17 Ethyl ether	59	2.611	2.611	0.000	91	690109	10.0	9.60	
18 Acrolein	56	2.729	2.729	0.000	99	361252	50.0	26.6	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	784753	10.0	10.6	
20 1,1,2-Trichloro-1,2,2-trif	151	2.836	2.836	0.000	89	636881	10.0	11.5	
22 Acetone	58	2.860	2.860	0.000	100	142562	20.0	20.7	
23 Iodomethane	142	2.955	2.955	0.000	97	1348959	10.0	12.7	
24 Carbon disulfide	76	3.014	3.014	0.000	99	2260779	10.0	11.2	
25 3-Chloro-1-propene	76	3.121	3.121	0.000	90	456485	10.0	10.0	
27 Methyl acetate	43	3.133	3.133	0.000	97	938609	20.0	18.1	
28 Methylene Chloride	84	3.228	3.228	0.000	91	859252	10.0	12.2	
29 2-Methyl-2-propanol	59	3.311	3.311	0.001	87	352291	100.0	73.4	
32 Acrylonitrile	53	3.441	3.441	0.000	99	2442558	100.0	93.5	
31 Methyl tert-butyl ether	73	3.453	3.453	0.000	94	1487091	10.0	7.64	
30 trans-1,2-Dichloroethene	96	3.453	3.465	-0.012	98	905134	10.0	12.2	
33 Hexane	86	3.678	3.678	0.000	93	148600	10.0	8.07	
34 1,1-Dichloroethane	63	3.809	3.809	0.000	97	1362180	10.0	11.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.832	3.832	0.000	98	836936	10.0	7.55	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	83	896817	10.0	11.0	
40 2,2-Dichloropropane	97	4.295	4.295	0.000	65	180003	10.0	12.6	
41 2-Butanone (MEK)	72	4.295	4.295	0.000	98	139488	20.0	16.3	
45 Chlorobromomethane	128	4.496	4.496	0.000	92	429722	10.0	11.2	
46 Tetrahydrofuran	42	4.532	4.532	0.000	87	284573	20.0	12.9	
47 Chloroform	83	4.556	4.556	0.000	94	1404443	10.0	11.4	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	1093414	10.0	11.9	
49 Cyclohexane	56	4.769	4.769	0.000	89	1080315	10.0	9.61	
51 1,1-Dichloropropene	75	4.852	4.852	0.000	96	1003422	10.0	9.96	
50 Carbon tetrachloride	117	4.852	4.852	0.000	97	1032141	10.0	12.9	
52 Isobutyl alcohol	41	4.911	4.911	0.000	88	455033	250.0	308.8	
53 Benzene	78	5.030	5.030	0.000	95	3080137	10.0	10.4	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	96	1009091	10.0	9.68	
56 n-Heptane	100	5.220	5.220	0.000	86	108510	10.0	5.99	
58 Trichloroethene	130	5.564	5.564	0.000	97	766981	10.0	9.58	
60 Methylcyclohexane	83	5.730	5.730	0.000	90	858845	10.0	7.44	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	96	694327	10.0	10.2	
63 Dibromomethane	93	5.860	5.860	0.000	89	417294	10.0	9.38	
64 1,4-Dioxane	88	5.872	5.872	0.000	38	116000	200.0	211.5	
65 Dichlorobromomethane	83	5.991	5.991	0.000	100	893784	10.0	10.1	
67 2-Chloroethyl vinyl ether	63	6.240	6.240	0.000	92	101327	10.0	2.55	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	95	827236	10.0	8.22	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	953327	20.0	14.8	
70 Toluene	91	6.678	6.678	0.000	98	2989170	10.0	10.2	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	93	692790	10.0	8.37	
72 Ethyl methacrylate	69	6.927	6.927	0.000	88	623337	10.0	8.62	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	605280	10.0	10.9	
74 Tetrachloroethene	164	7.176	7.176	0.000	97	634780	10.0	10.8	
75 1,3-Dichloropropane	76	7.188	7.188	0.000	92	989297	10.0	10.0	
76 2-Hexanone	43	7.248	7.248	0.000	97	662229	20.0	16.5	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	623841	10.0	11.0	
80 Ethylene Dibromide	107	7.520	7.520	0.000	100	545260	10.0	9.43	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1924423	10.0	10.4	
83 1,1,1,2-Tetrachloroethane	131	8.030	8.030	0.000	93	714879	10.0	12.4	
84 Ethylbenzene	106	8.054	8.054	0.000	98	960708	10.0	9.51	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	93	2270300	10.0	9.31	
86 o-Xylene	106	8.540	8.540	0.000	94	1068807	10.0	8.73	
87 Styrene	104	8.552	8.552	0.000	93	1839532	10.0	8.96	
88 Bromoform	173	8.742	8.742	0.000	98	357028	10.0	10.3	
89 Isopropylbenzene	105	8.896	8.896	0.000	95	2473930	10.0	8.04	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	696761	10.0	9.54	
92 Bromobenzene	156	9.204	9.204	0.000	91	788676	10.0	9.54	
94 1,2,3-Trichloropropane	110	9.228	9.228	0.000	86	224613	10.0	8.84	
95 trans-1,4-Dichloro-2-buten	53	9.228	9.228	0.000	74	77509	10.0	4.29	
96 N-Propylbenzene	120	9.287	9.287	0.000	99	715861	10.0	8.42	
97 2-Chlorotoluene	126	9.382	9.382	0.000	98	698936	10.0	9.42	
98 1,3,5-Trimethylbenzene	105	9.453	9.453	0.000	94	2188598	10.0	8.58	
99 4-Chlorotoluene	91	9.489	9.489	0.000	97	2392675	10.0	9.44	
101 tert-Butylbenzene	119	9.773	9.785	-0.012	91	1597678	10.0	7.08	
103 1,2,4-Trimethylbenzene	105	9.821	9.821	0.000	95	2334114	10.0	8.75	
105 sec-Butylbenzene	105	9.999	9.999	0.000	94	2309853	10.0	7.60	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.117	10.117	0.000	98	1418651	10.0	9.37	
107 4-Isopropyltoluene	119	10.129	10.129	0.000	96	2075342	10.0	7.74	
108 1,4-Dichlorobenzene	146	10.200	10.200	0.000	96	1488649	10.0	9.41	
111 n-Butylbenzene	91	10.544	10.544	0.000	97	1439449	10.0	6.41	
112 1,2-Dichlorobenzene	146	10.568	10.568	0.000	98	1456152	10.0	9.98	
113 1,2-Dibromo-3-Chloropropan	157	11.351	11.351	0.000	86	110628	10.0	8.06	
115 1,2,4-Trichlorobenzene	180	12.169	12.169	0.000	94	576007	10.0	7.09	
116 Hexachlorobutadiene	225	12.335	12.335	0.000	93	385466	10.0	9.53	
117 Naphthalene	128	12.430	12.430	0.000	96	1005814	10.0	4.28	
118 1,2,3-Trichlorobenzene	180	12.679	12.679	0.000	96	636527	10.0	9.02	
S 129 Xylenes, Total	106				0		20.0	18.0	
S 130 Trihalomethanes, Total	1				0		40.0	42.8	

Reagents:

VMFASPW_00281	Amount Added:	8.00	Units: uL	
VMFASAW_00261	Amount Added:	8.00	Units: uL	
VMFASGW_00289	Amount Added:	8.00	Units: uL	
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00079	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

Report Date: 27-Dec-2018 08:10:38 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8090.D

Injection Date: 26-Dec-2018 10:01:30 Instrument ID: A3UX15 Operator ID:

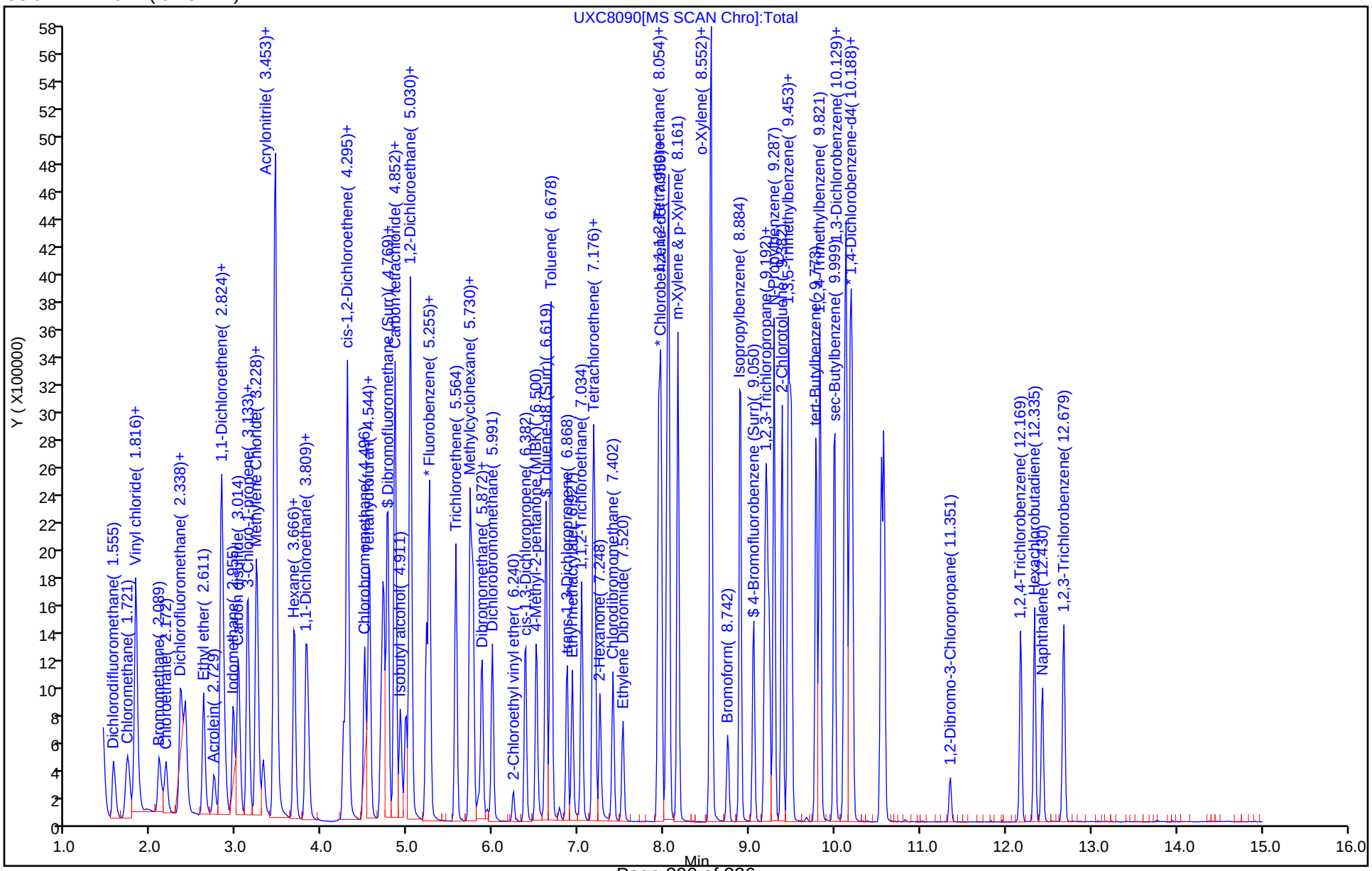
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260_15 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8090.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 26-Dec-2018 10:01:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083213-004
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 26-Dec-2018 10:20:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	7.75	97.19
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	6.63	83.23
$ 6 Toluene-d8 (Surr)	7.97	7.05	88.49
$ 7 4-Bromofluorobenzene (Surr)	7.97	6.61	82.94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-361928/4

Matrix: Water | Lab File ID: UXX8805.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2018 11:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361928 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	9.64		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	10.7		1.0	0.13
79-00-5	1,1,2-Trichloroethane	9.52		1.0	0.090
75-34-3	1,1-Dichloroethane	11.3		1.0	0.17
75-35-4	1,1-Dichloroethene	9.99		1.0	0.19
107-06-2	1,2-Dichloroethane	9.68		1.0	0.21
78-87-5	1,2-Dichloropropane	10.2		1.0	0.15
591-78-6	2-Hexanone	26.0		10	0.54
67-64-1	Acetone	23.9		10	5.4
71-43-2	Benzene	10.3		1.0	0.13
75-25-2	Bromoform	8.94		1.0	0.76
74-83-9	Bromomethane	11.0		1.0	0.42
75-15-0	Carbon disulfide	9.88		1.0	0.28
56-23-5	Carbon tetrachloride	8.74		1.0	0.26
108-90-7	Chlorobenzene	9.73		1.0	0.14
75-00-3	Chloroethane	11.9		1.0	0.83
67-66-3	Chloroform	11.1		1.0	0.13
74-87-3	Chloromethane	11.2		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	10.9		1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	8.54		1.0	0.61
75-27-4	Dichlorobromomethane	9.16		1.0	0.17
100-41-4	Ethylbenzene	9.24		1.0	0.11
78-93-3	2-Butanone (MEK)	22.3		10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	22.0		10	0.42
75-09-2	Methylene Chloride	10.5		5.0	2.6
100-42-5	Styrene	9.05		1.0	0.10
127-18-4	Tetrachloroethene	8.96		1.0	0.15
108-88-3	Toluene	10.0		1.0	0.14
156-60-5	trans-1,2-Dichloroethene	10.9		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	8.73		1.0	0.67
79-01-6	Trichloroethene	9.51		1.0	0.10
75-01-4	Vinyl chloride	11.8		1.0	0.20
1330-20-7	Xylenes, Total	18.6		2.0	0.15
124-48-1	Chlorodibromomethane	9.31		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-361928/4

Matrix: Water | Lab File ID: UXX8805.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/27/2018 11:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361928 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-121
460-00-4	4-Bromofluorobenzene (Surr)	97		59-120
2037-26-5	Toluene-d8 (Surr)	98		70-123
1868-53-7	Dibromofluoromethane (Surr)	99		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8805.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 27-Dec-2018 11:55:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083269-004
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Dec-2018 09:58:14 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 27-Dec-2018 12:36:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.565	5.565	0.000	98	702605	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.250	8.251	-0.001	89	494714	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.486	10.486	0.000	94	267891	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.986	4.986	0.000	92	183085	10.0	9.92	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.281	5.282	-0.001	98	220780	10.0	9.36	
$ 6 Toluene-d8 (Surr)	98	6.937	6.938	-0.001	94	610997	10.0	9.78	
$ 7 4-Bromofluorobenzene (Surr	95	9.350	9.351	-0.001	85	230863	10.0	9.71	
9 Dichlorodifluoromethane	85	1.662	1.662	0.000	98	208239	10.0	8.62	
10 Chloromethane	50	1.839	1.851	-0.012	98	316123	10.0	11.2	M
12 Butadiene	54	1.946	1.934	0.012	83	282601	10.0	10.6	
11 Vinyl chloride	62	1.958	1.958	0.000	95	297424	10.0	11.8	
13 Bromomethane	94	2.265	2.253	0.012	93	164015	10.0	11.0	
14 Chloroethane	64	2.336	2.324	0.012	99	186744	10.0	11.9	
15 Dichlorofluoromethane	67	2.525	2.526	-0.001	97	396740	10.0	11.0	
16 Trichlorofluoromethane	101	2.549	2.585	-0.036	80	294789	10.0	10.5	
17 Ethyl ether	59	2.821	2.821	0.000	95	202684	10.0	12.3	
18 Acrolein	56	2.951	2.940	0.011	98	115275	50.0	43.1	
19 1,1-Dichloroethene	96	3.034	3.034	0.000	93	202115	10.0	10.0	
20 1,1,2-Trichloro-1,2,2-trif	151	3.058	3.070	-0.012	64	145714	10.0	10.0	
21 Acetone	43	3.081	3.093	-0.012	100	119043	20.0	23.9	
22 Iodomethane	142	3.176	3.176	0.000	98	364516	10.0	9.91	
24 Carbon disulfide	76	3.247	3.247	0.000	100	671500	10.0	9.88	
26 3-Chloro-1-propene	76	3.365	3.365	0.000	87	156717	10.0	10.5	
27 Methyl acetate	43	3.389	3.389	0.000	98	272587	20.0	24.2	
28 Methylene Chloride	84	3.472	3.472	0.000	98	259654	10.0	10.5	
29 2-Methyl-2-propanol	59	3.578	3.578	0.000	97	192399	100.0	98.4	
31 Acrylonitrile	53	3.696	3.697	-0.001	99	779272	100.0	115.8	
30 trans-1,2-Dichloroethene	96	3.720	3.720	0.000	76	243773	10.0	10.9	
32 Methyl tert-butyl ether	73	3.720	3.720	0.000	99	579543	10.0	9.33	
33 Hexane	86	3.957	3.957	0.000	88	33636	10.0	8.87	
34 1,1-Dichloroethane	63	4.087	4.087	0.000	98	452849	10.0	11.3	
35 Vinyl acetate	43	4.122	4.122	0.000	98	275662	10.0	8.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2,2-Dichloropropane	97	4.584	4.584	0.000	89	63618	10.0	9.51	
40 cis-1,2-Dichloroethene	96	4.584	4.584	0.000	88	256231	10.0	10.9	
41 2-Butanone (MEK)	43	4.595	4.596	-0.001	58	145288	20.0	22.3	
45 Chlorobromomethane	128	4.785	4.785	0.000	93	107585	10.0	10.2	
46 Tetrahydrofuran	42	4.832	4.832	0.000	95	92507	20.0	19.8	
47 Chloroform	83	4.856	4.856	0.000	97	383664	10.0	11.1	
48 1,1,1-Trichloroethane	97	5.021	5.021	0.000	97	326106	10.0	9.64	
49 Cyclohexane	56	5.068	5.069	-0.001	92	411314	10.0	10.9	
50 1,1-Dichloropropene	75	5.151	5.151	0.000	92	246952	10.0	10.1	
51 Carbon tetrachloride	117	5.163	5.163	0.000	96	240479	10.0	8.74	
52 Isobutyl alcohol	41	5.222	5.234	-0.012	93	138916	250.0	307.4	
53 Benzene	78	5.329	5.329	0.000	97	833511	10.0	10.3	
54 1,2-Dichloroethane	62	5.341	5.341	0.000	96	285424	10.0	9.68	
56 n-Heptane	100	5.542	5.542	0.000	90	21202	10.0	6.84	
58 Trichloroethene	130	5.885	5.873	0.012	96	190840	10.0	9.51	
60 Methylcyclohexane	83	6.050	6.050	0.000	97	249651	10.0	8.83	
61 1,2-Dichloropropane	63	6.074	6.074	0.000	96	213174	10.0	10.2	
63 Dibromomethane	93	6.169	6.169	0.000	94	105309	10.0	8.87	
64 1,4-Dioxane	88	6.180	6.181	-0.001	41	26004	200.0	128.2	
65 Dichlorobromomethane	83	6.299	6.299	0.000	97	240659	10.0	9.16	
67 2-Chloroethyl vinyl ether	63	6.547	6.547	0.000	90	73805	10.0	6.69	
68 cis-1,3-Dichloropropene	75	6.689	6.689	0.000	92	248496	10.0	8.54	
69 4-Methyl-2-pentanone (MIBK	43	6.819	6.819	0.000	97	355377	20.0	22.0	
70 Toluene	91	6.997	6.997	0.000	98	756909	10.0	10.0	
71 trans-1,3-Dichloropropene	75	7.174	7.174	0.000	97	194968	10.0	8.73	
72 Ethyl methacrylate	69	7.245	7.245	0.000	91	172929	10.0	9.44	
73 1,1,2-Trichloroethane	97	7.351	7.352	-0.001	96	133522	10.0	9.52	
74 Tetrachloroethene	164	7.493	7.494	-0.001	93	117716	10.0	8.96	
75 1,3-Dichloropropane	76	7.505	7.505	0.000	95	236913	10.0	9.85	
76 2-Hexanone	43	7.564	7.565	0.000	96	239928	20.0	26.0	
78 Chlorodibromomethane	129	7.706	7.706	0.000	90	145606	10.0	9.31	
80 Ethylene Dibromide	107	7.825	7.825	0.000	99	131287	10.0	9.50	
82 Chlorobenzene	112	8.274	8.274	0.000	92	478761	10.0	9.73	
83 1,1,1,2-Tetrachloroethane	131	8.345	8.345	0.000	91	194820	10.0	10.5	
84 Ethylbenzene	106	8.369	8.369	0.000	99	253589	10.0	9.24	
85 m-Xylene & p-Xylene	106	8.475	8.475	0.000	98	308806	10.0	9.08	
86 o-Xylene	106	8.854	8.854	0.000	97	335271	10.0	9.47	
87 Styrene	104	8.865	8.866	-0.001	93	510262	10.0	9.05	
88 Bromoform	173	9.055	9.055	0.000	93	85828	10.0	8.94	
89 Isopropylbenzene	105	9.197	9.197	0.000	96	803047	10.0	9.30	
92 1,1,2,2-Tetrachloroethane	83	9.481	9.481	0.000	96	193977	10.0	10.7	
93 Bromobenzene	156	9.504	9.504	0.000	99	205406	10.0	9.99	
94 1,2,3-Trichloropropane	110	9.528	9.528	0.000	89	61482	10.0	10.8	
95 trans-1,4-Dichloro-2-buten	53	9.540	9.540	0.000	68	40463	10.0	11.0	
96 N-Propylbenzene	120	9.599	9.599	0.000	99	205361	10.0	9.61	
97 2-Chlorotoluene	126	9.693	9.694	-0.001	95	199490	10.0	9.94	
98 1,3,5-Trimethylbenzene	105	9.764	9.765	-0.001	94	694200	10.0	10.3	
99 4-Chlorotoluene	126	9.800	9.800	0.000	98	204976	10.0	10.3	
100 tert-Butylbenzene	119	10.096	10.084	0.012	94	534874	10.0	9.76	
102 1,2,4-Trimethylbenzene	105	10.131	10.131	0.000	95	758510	10.0	10.2	
103 sec-Butylbenzene	105	10.309	10.309	0.000	94	726003	10.0	9.81	
104 1,3-Dichlorobenzene	146	10.427	10.427	0.000	98	398094	10.0	9.84	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 4-Isopropyltoluene	119	10.439	10.439	0.000	97	631005	10.0	9.81	
106 1,4-Dichlorobenzene	146	10.510	10.510	0.000	94	408379	10.0	9.91	
109 n-Butylbenzene	91	10.853	10.853	0.000	98	521239	10.0	10.0	
110 1,2-Dichlorobenzene	146	10.876	10.877	0.000	96	414077	10.0	10.1	
111 1,2-Dibromo-3-Chloropropan	157	11.657	11.645	0.012	90	37525	10.0	9.10	
113 1,2,4-Trichlorobenzene	180	12.485	12.485	0.000	93	227179	10.0	9.10	
114 Hexachlorobutadiene	225	12.651	12.651	0.000	93	62930	10.0	7.89	
115 Naphthalene	128	12.722	12.734	-0.012	99	581154	10.0	8.94	
116 1,2,3-Trichlorobenzene	180	12.982	12.982	0.000	97	213145	10.0	8.77	
S 130 Xylenes, Total	106				0		20.0	18.5	
S 131 Trihalomethanes, Total	1				0		40.0	38.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VMFASPW_00281	Amount Added:	8.00	Units: uL	
VMFASAW_00261	Amount Added:	8.00	Units: uL	
VMFASGW_00289	Amount Added:	8.00	Units: uL	
vm50ss_stk_00079	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00071	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

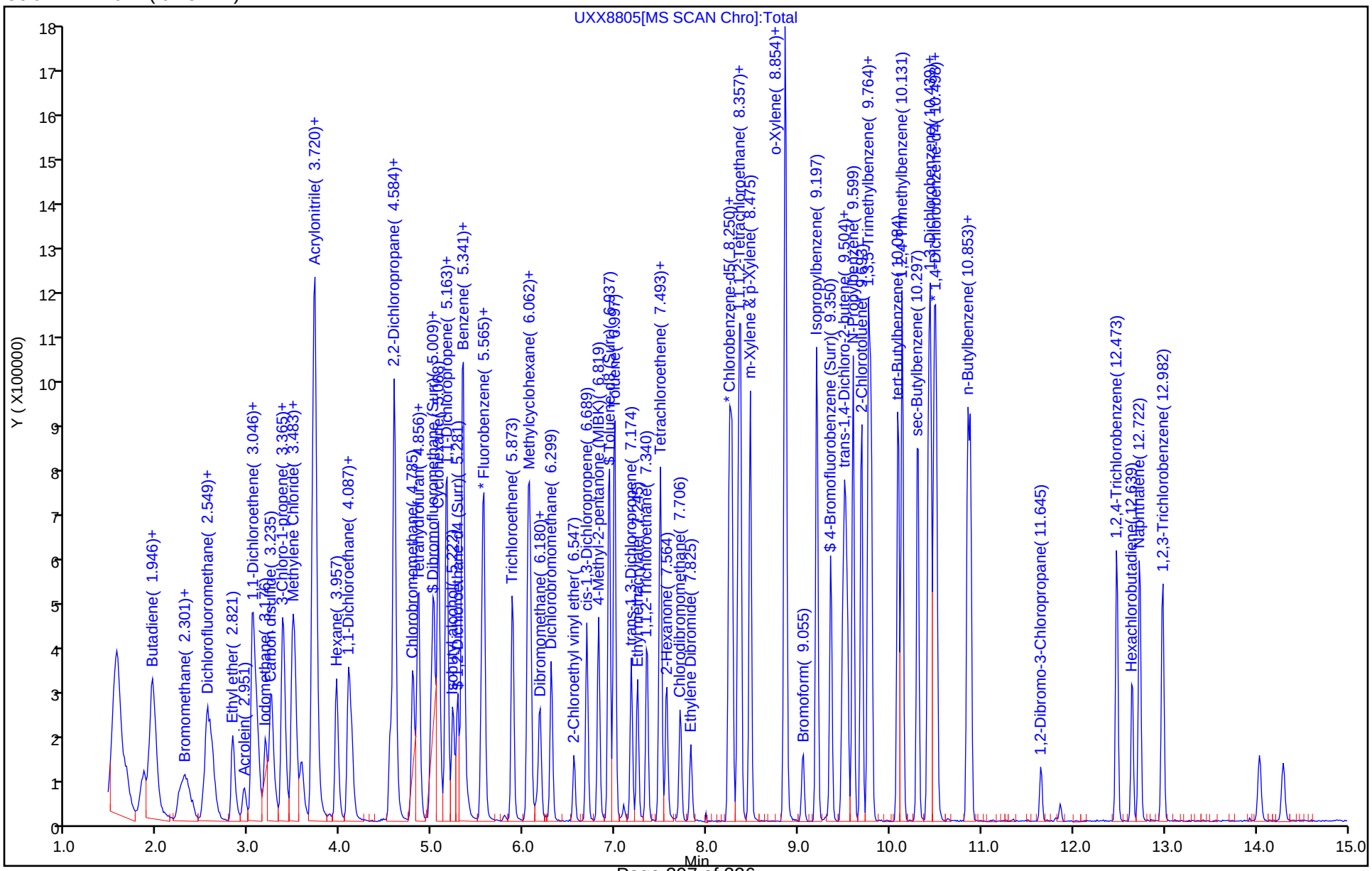
Report Date: 28-Dec-2018 09:58:17 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8805.D

Injection Date:	27-Dec-2018 11:55:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8805.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 27-Dec-2018 11:55:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0083269-004
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 28-Dec-2018 09:58:14 Calib Date: 02-Oct-2018 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX10\20181002-80450.b\UXX5953.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 27-Dec-2018 12:36:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.92	99.20
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.36	93.61
$ 6 Toluene-d8 (Surr)	10.0	9.78	97.83
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.71	97.08

Manual Integration/User Assign Peak Report

TestAmerica Canton

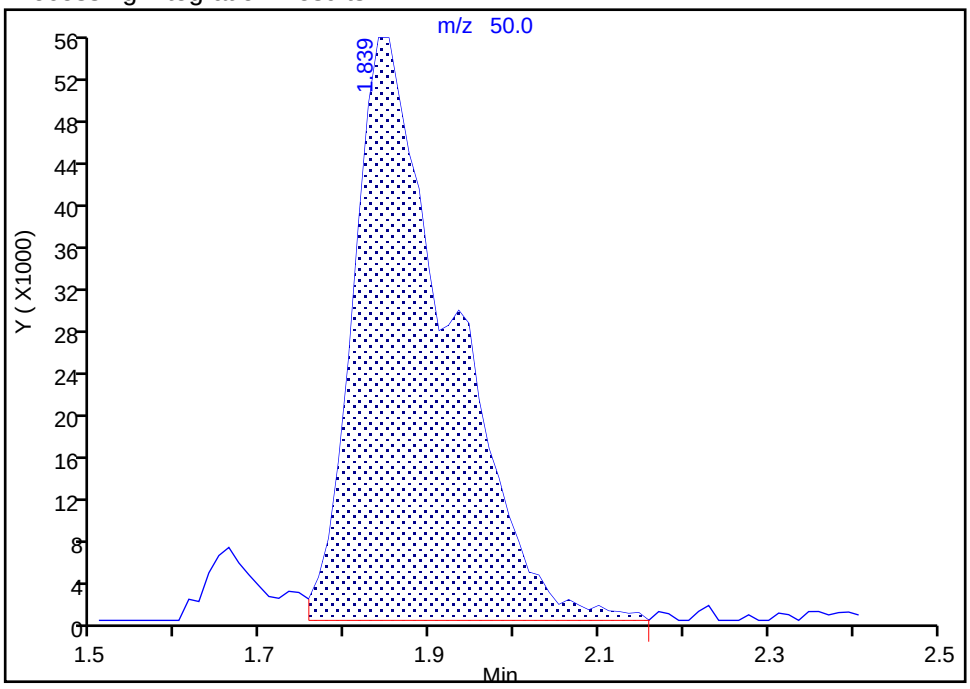
Data File: \\chromna\Canton\ChromData\A3UX10\20181227-83269.b\UXX8805.D
Injection Date: 27-Dec-2018 11:55:30 Instrument ID: A3UX10
Lims ID: LCS
Client ID:
Operator ID: 001644 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

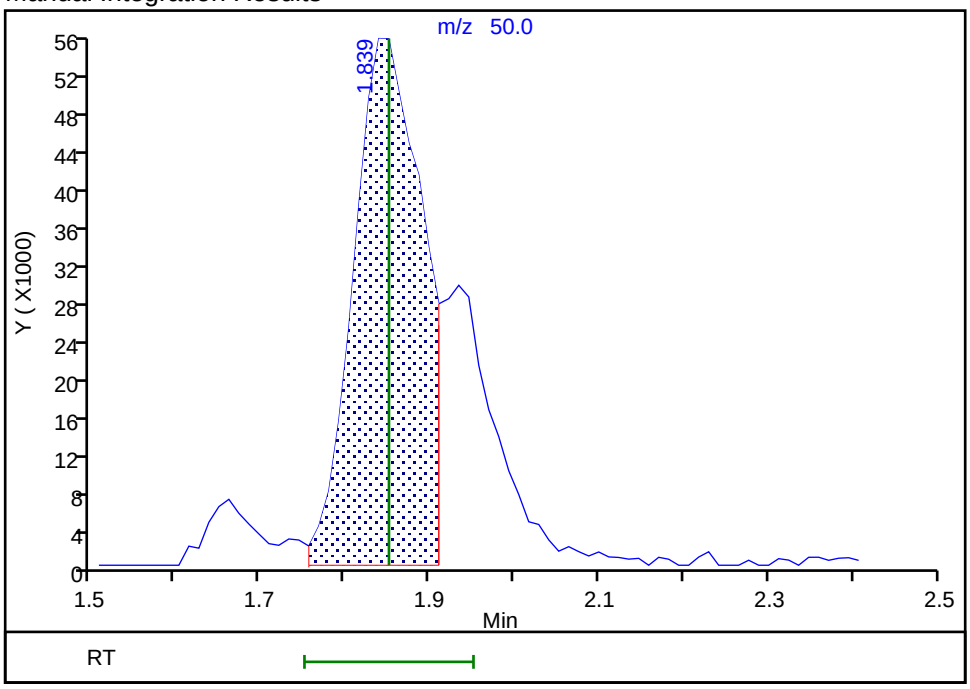
Processing Integration Results

RT: 1.84
Area: 440203
Amount: 15.547259
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 316123
Amount: 11.164954
Amount Units: ug/l



Reviewer: williamsla, 27-Dec-2018 12:36:32
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: GW-121318-BE-001 MS | Lab Sample ID: 240-105817-1 MS

Matrix: Water | Lab File ID: UXC8099.D

Analysis Method: 8260B | Date Collected: 12/13/2018 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 12/26/2018 13:18

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361663 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		70-121
460-00-4	4-Bromofluorobenzene (Surr)	83		59-120
2037-26-5	Toluene-d8 (Surr)	83		70-123
1868-53-7	Dibromofluoromethane (Surr)	94		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8099.D
Lims ID: 240-105817-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 26-Dec-2018 13:18:30 ALS Bottle#: 11 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0083213-039
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.255	5.255	0.000	99	2422998	10.0	10.0	
*	2 Chlorobenzene-d5	117	7.935	7.935	0.000	86	1852102	10.0	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.176	10.177	-0.001	91	1110130	10.0	10.0	
$	4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	472170	7.97	7.52	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.982	4.983	-0.001	100	544265	7.97	6.39	
$	6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1637739	7.97	6.59	
$	7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	96	573438	7.97	6.64	
	10 Chloromethane	50	1.721	1.721	0.000	100	488648	10.0	5.95	
	11 Vinyl chloride	62	1.816	1.804	0.012	98	877467	10.0	10.2	
	13 Bromomethane	94	2.089	2.089	0.000	90	419351	10.0	6.22	
	14 Chloroethane	64	2.172	2.172	0.000	99	417058	10.0	7.20	
	19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	614185	10.0	8.41	
	22 Acetone	58	2.872	2.860	0.012	100	105395	20.0	15.5	
	24 Carbon disulfide	76	3.026	3.014	0.012	99	1894838	10.0	9.49	
	28 Methylene Chloride	84	3.227	3.228	-0.001	91	754961	10.0	10.9	
	30 trans-1,2-Dichloroethene	96	3.465	3.465	-0.001	97	707536	10.0	9.65	
	34 1,1-Dichloroethane	63	3.808	3.809	-0.001	98	1108057	10.0	9.28	
	39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	83	744659	10.0	9.29	
	41 2-Butanone (MEK)	72	4.306	4.295	0.011	98	111195	20.0	13.2	
	47 Chloroform	83	4.555	4.556	-0.001	94	1162315	10.0	9.56	
	48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	98	838612	10.0	9.29	
	50 Carbon tetrachloride	117	4.852	4.852	0.000	97	771530	10.0	9.78	
	53 Benzene	78	5.030	5.030	0.000	95	2551757	10.0	8.76	
	54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	883539	10.0	8.59	
	58 Trichloroethene	130	5.563	5.564	-0.001	97	613048	10.0	7.77	
	61 1,2-Dichloropropane	63	5.765	5.765	0.000	95	593837	10.0	8.83	
	65 Dichlorobromomethane	83	5.990	5.991	-0.001	99	766728	10.0	8.79	
	68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	95	658629	10.0	6.64	
	69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	770187	20.0	12.1	
	70 Toluene	91	6.678	6.678	0.000	98	2481690	10.0	8.27	
	71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	94	572707	10.0	6.76	
	73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	93	520373	10.0	9.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
74 Tetrachloroethene	164	7.176	7.176	0.000	97	513218	10.0	8.52	
76 2-Hexanone	43	7.247	7.248	-0.001	97	528507	20.0	12.9	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	543857	10.0	9.38	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1683146	10.0	8.85	
84 Ethylbenzene	106	8.054	8.054	0.000	98	774708	10.0	7.49	
85 m-Xylene & p-Xylene	91	8.160	8.161	-0.001	93	1922044	10.0	7.69	
86 o-Xylene	106	8.540	8.540	0.000	96	959972	10.0	7.65	
87 Styrene	104	8.552	8.552	0.000	93	1672045	10.0	7.95	
88 Bromoform	173	8.742	8.742	0.000	98	317229	10.0	8.94	
93 1,1,2,2-Tetrachloroethane	83	9.180	9.180	0.000	96	644929	10.0	8.16	
S 129 Xylenes, Total	106				0		20.0	15.3	

Reagents:

VMFASPW_00281	Amount Added:	8.00	Units: uL	
VMFASAW_00261	Amount Added:	8.00	Units: uL	
VMFASGW_00289	Amount Added:	8.00	Units: uL	
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00079	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

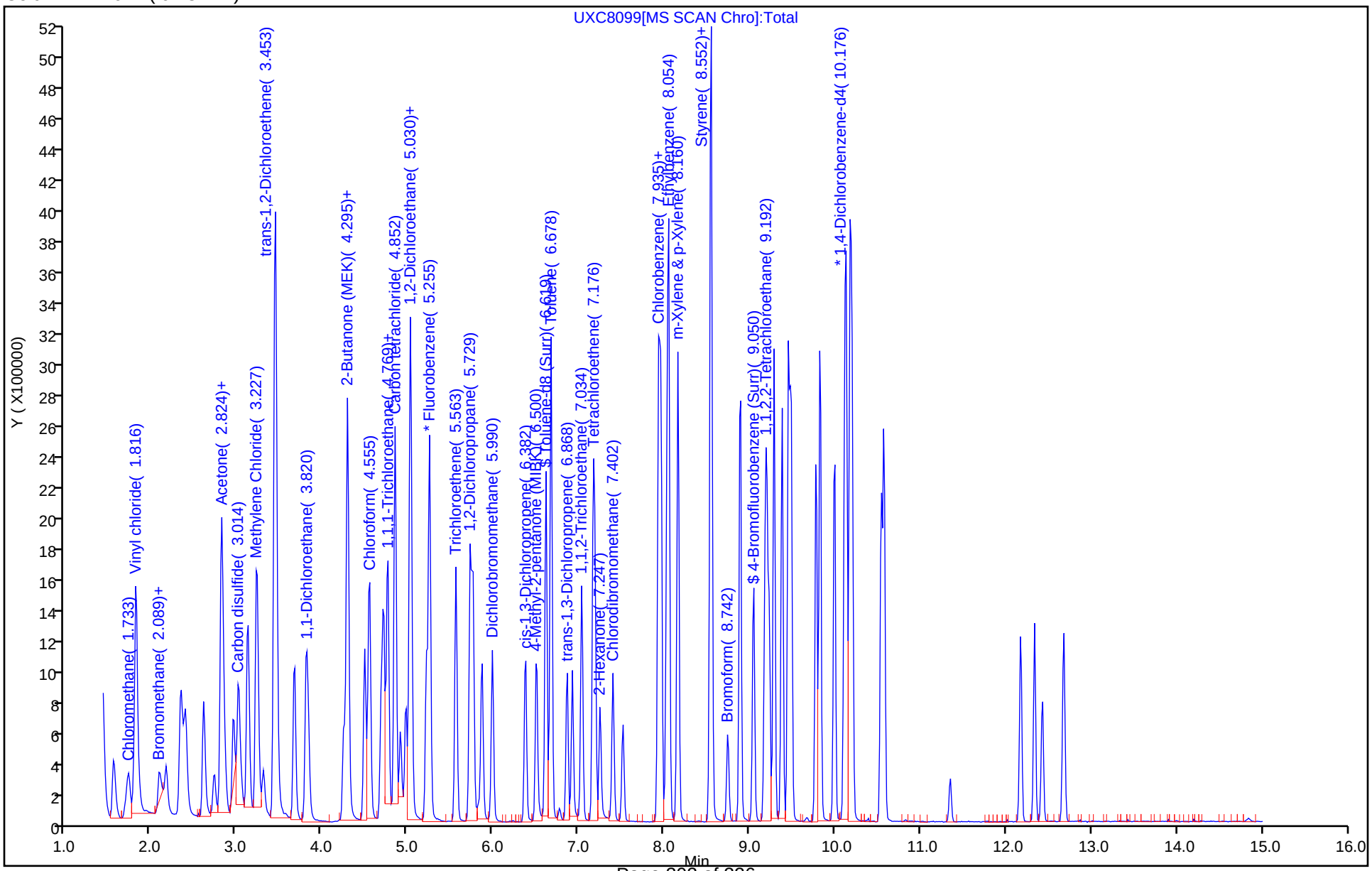
Report Date: 27-Dec-2018 08:10:54 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8099.D

Injection Date:	26-Dec-2018 13:18:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-105817-B-1 MS			Worklist Smp#:	39
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	11
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8099.D
Lims ID: 240-105817-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 26-Dec-2018 13:18:30 ALS Bottle#: 11 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0083213-039
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	7.52	94.32
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	6.39	80.18
$ 6 Toluene-d8 (Surr)	7.97	6.59	82.67
$ 7 4-Bromofluorobenzene (Surr)	7.97	6.64	83.27

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-105817-1

SDG No.:

Client Sample ID: GW-121318-BE-001 MSD | Lab Sample ID: 240-105817-1 MSD

Matrix: Water | Lab File ID: UXC8100.D

Analysis Method: 8260B | Date Collected: 12/13/2018 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 12/26/2018 13:40

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 361663 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	92		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8100.D
Lims ID: 240-105817-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 26-Dec-2018 13:40:30 ALS Bottle#: 12 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0083213-040
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.255	5.255	0.000	99	2226144	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.935	7.935	0.000	85	1692283	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.177	10.177	0.000	92	1008121	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.686	4.686	0.000	94	466966	7.97	8.09	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.983	4.983	0.000	100	556218	7.97	7.11	
$ 6 Toluene-d8 (Surr)	98	6.619	6.619	0.000	93	1664033	7.97	7.33	
$ 7 4-Bromofluorobenzene (Surr	95	9.050	9.050	0.000	97	591627	7.97	7.49	
10 Chloromethane	50	1.722	1.721	0.001	100	589547	10.0	7.81	
11 Vinyl chloride	62	1.816	1.804	0.012	98	988933	10.0	12.5	
13 Bromomethane	94	2.101	2.089	0.012	89	445561	10.0	7.19	
14 Chloroethane	64	2.172	2.172	0.000	99	461803	10.0	8.68	
19 1,1-Dichloroethene	96	2.824	2.824	0.000	99	746949	10.0	11.1	
22 Acetone	58	2.860	2.860	0.000	99	107053	20.0	17.1	
24 Carbon disulfide	76	3.026	3.014	0.012	99	2238937	10.0	12.2	
28 Methylene Chloride	84	3.228	3.228	0.000	90	791574	10.0	12.4	
30 trans-1,2-Dichloroethene	96	3.465	3.465	0.000	98	822425	10.0	12.2	
34 1,1-Dichloroethane	63	3.809	3.809	0.000	97	1226947	10.0	11.2	
39 cis-1,2-Dichloroethene	96	4.295	4.295	0.000	83	809305	10.0	11.0	
41 2-Butanone (MEK)	72	4.307	4.295	0.012	97	116064	20.0	15.0	
47 Chloroform	83	4.556	4.556	0.000	94	1269721	10.0	11.4	
48 1,1,1-Trichloroethane	97	4.722	4.722	0.000	97	996920	10.0	12.0	
50 Carbon tetrachloride	117	4.852	4.852	0.000	97	947654	10.0	13.1	
53 Benzene	78	5.030	5.030	0.000	95	2830031	10.0	10.6	
54 1,2-Dichloroethane	62	5.042	5.042	0.000	98	900002	10.0	9.52	
58 Trichloroethene	130	5.564	5.564	0.000	97	708419	10.0	9.77	
61 1,2-Dichloropropane	63	5.765	5.765	0.000	95	625752	10.0	10.1	
65 Dichlorobromomethane	83	5.991	5.991	0.000	100	801322	10.0	10.0	
68 cis-1,3-Dichloropropene	75	6.382	6.382	0.000	95	702012	10.0	7.70	
69 4-Methyl-2-pentanone (MIBK	43	6.500	6.500	0.000	97	807381	20.0	13.8	
70 Toluene	91	6.678	6.678	0.000	98	2790497	10.0	10.2	
71 trans-1,3-Dichloropropene	75	6.868	6.868	0.000	93	616683	10.0	7.97	
73 1,1,2-Trichloroethane	97	7.034	7.034	0.000	92	541402	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
74 Tetrachloroethene	164	7.176	7.176	0.000	97	601099	10.0	10.9	
76 2-Hexanone	43	7.248	7.248	0.000	97	561773	20.0	15.0	
79 Chlorodibromomethane	129	7.402	7.402	0.000	90	565556	10.0	10.7	
82 Chlorobenzene	112	7.959	7.959	0.000	95	1810639	10.0	10.4	
84 Ethylbenzene	106	8.054	8.054	0.000	98	906989	10.0	9.60	
85 m-Xylene & p-Xylene	91	8.161	8.161	0.000	93	2212112	10.0	9.69	
86 o-Xylene	106	8.540	8.540	0.000	94	1067300	10.0	9.31	
87 Styrene	104	8.552	8.552	0.000	93	1816295	10.0	9.45	
88 Bromoform	173	8.742	8.742	0.000	98	334924	10.0	10.3	
93 1,1,2,2-Tetrachloroethane	83	9.181	9.180	0.000	96	659489	10.0	9.18	
S 129 Xylenes, Total	106				0		20.0	19.0	

Reagents:

VMFASPW_00281	Amount Added:	8.00	Units: uL	
VMFASAW_00261	Amount Added:	8.00	Units: uL	
VMFASGW_00289	Amount Added:	8.00	Units: uL	
vm40ml_vials_00009	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00079	Amount Added:	0.80	Units: uL	Run Reagent
VM50IS_00072	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00136	Amount Added:	0.00	Units:	Run Reagent

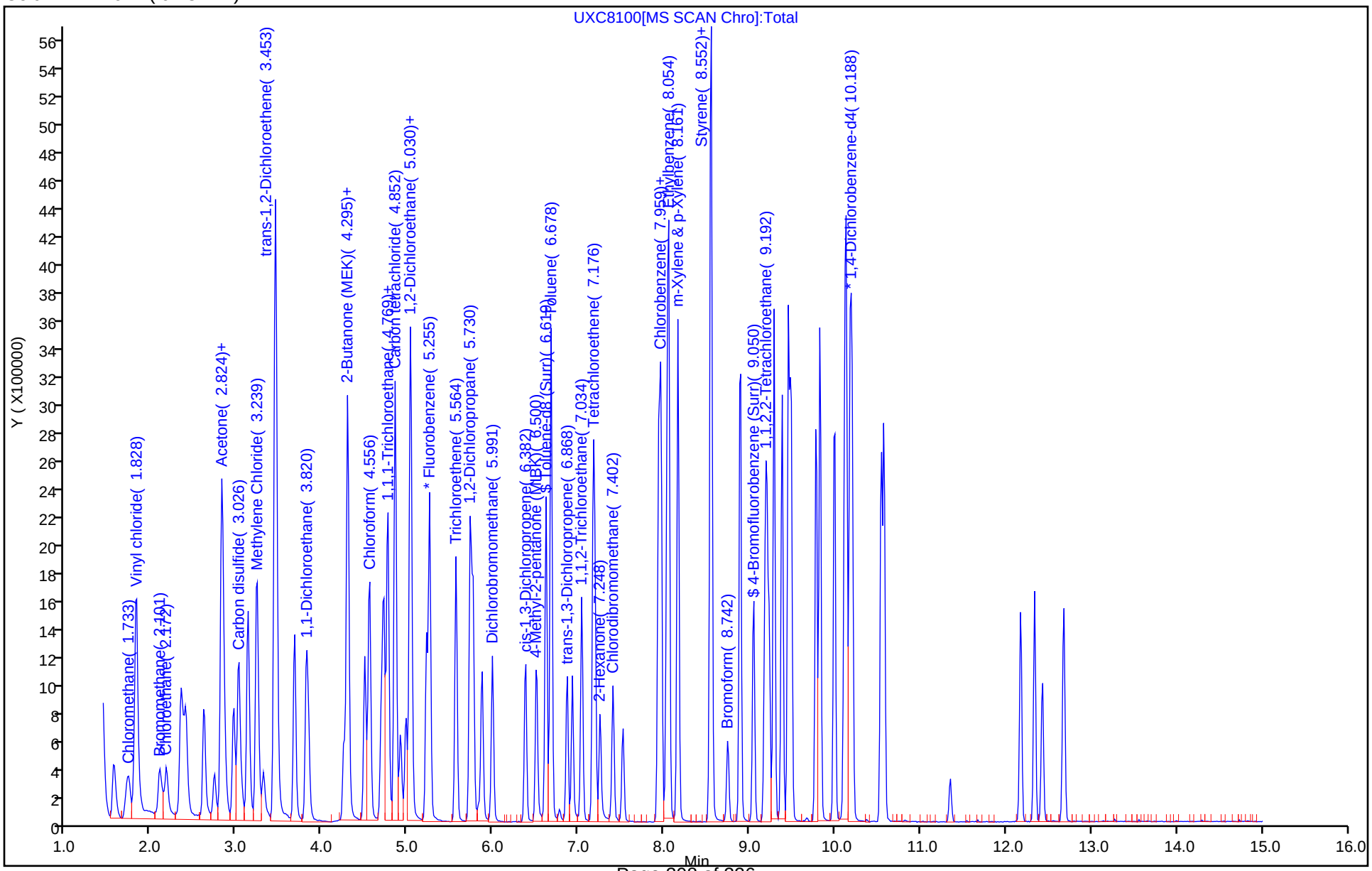
Report Date: 27-Dec-2018 08:10:55 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8100.D

Injection Date:	26-Dec-2018 13:40:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	240-105817-B-1 MSD			Worklist Smp#:	40
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	12
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\UXC8100.D
Lims ID: 240-105817-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 26-Dec-2018 13:40:30 ALS Bottle#: 12 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0083213-040
Misc. Info.: C81226A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromna\Canton\ChromData\A3UX15\20181226-83213.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 27-Dec-2018 08:10:34 Calib Date: 27-Aug-2018 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20180827-79285.b\UXC4624.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	7.97	8.09	101.53
$ 5 1,2-Dichloroethane-d4 (Surr)	7.97	7.11	89.18
$ 6 Toluene-d8 (Surr)	7.97	7.33	91.93
$ 7 4-Bromofluorobenzene (Surr)	7.97	7.49	94.02

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX15 Start Date: 08/27/2018 10:10

Analysis Batch Number: 342615 End Date: 08/27/2018 18:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-342615/1		08/27/2018 10:10	1	BFB827.D	DB-624 0.18(mm)
STD8260 240-342615/2 IC		08/27/2018 10:56	1	UXC4603.D	DB-624 0.18(mm)
STD8260 240-342615/3 IC		08/27/2018 11:18	1	UXC4604.D	DB-624 0.18(mm)
STD8260 240-342615/4 ICIS		08/27/2018 11:39	1	UXC4605.D	DB-624 0.18(mm)
STD8260 240-342615/5 IC		08/27/2018 12:01	1	UXC4606.D	DB-624 0.18(mm)
STD8260 240-342615/6 IC		08/27/2018 12:23	1	UXC4607.D	DB-624 0.18(mm)
STD8260 240-342615/7 IC		08/27/2018 12:45	1	UXC4608.D	DB-624 0.18(mm)
ICV 240-342615/14		08/27/2018 13:07	1	UXC4609.D	DB-624 0.18(mm)
STD 240-342615/8 IC		08/27/2018 13:28	1		DB-624 0.18(mm)
STD 240-342615/9 IC		08/27/2018 13:50	1		DB-624 0.18(mm)
STD 240-342615/10 IC		08/27/2018 14:12	1		DB-624 0.18(mm)
STD 240-342615/11 IC		08/27/2018 14:34	1		DB-624 0.18(mm)
STD 240-342615/12 IC		08/27/2018 14:56	1		DB-624 0.18(mm)
STD 240-342615/13 IC		08/27/2018 15:17	1		DB-624 0.18(mm)
MRL 240-342615/16 MDLV		08/27/2018 16:01	1		DB-624 0.18(mm)
MRL 240-342615/17 MDLV		08/27/2018 16:23	1		DB-624 0.18(mm)
STD 240-342615/18 IC		08/27/2018 16:45	1		DB-624 0.18(mm)
STD 240-342615/19 IC		08/27/2018 17:06	1		DB-624 0.18(mm)
STD 240-342615/20 IC		08/27/2018 17:28	1		DB-624 0.18(mm)
STD 240-342615/21 IC		08/27/2018 17:50	1		DB-624 0.18(mm)
STD 240-342615/22 IC		08/27/2018 18:12	1		DB-624 0.18(mm)
STD 240-342615/23 IC		08/27/2018 18:34	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX15 Start Date: 08/28/2018 11:13

Analysis Batch Number: 342834 End Date: 08/28/2018 19:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-342834/1		08/28/2018 11:13	1	BFB828.D	DB-624 0.18(mm)
CCVIS 240-342834/2		08/28/2018 11:48	1		DB-624 0.18(mm)
CCV 240-342834/3		08/28/2018 12:10	1		DB-624 0.18(mm)
ICV 240-342834/32		08/28/2018 12:32	1	UXC4629.D	DB-624 0.18(mm)
ZZZZZ		08/28/2018 15:20	1		DB-624 0.18(mm)
ZZZZZ		08/28/2018 16:04	1		DB-624 0.18(mm)
MRL 240-342834/5 MDLV		08/28/2018 16:47	1		DB-624 0.18(mm)
ZZZZZ		08/28/2018 17:09	1		DB-624 0.18(mm)
ZZZZZ		08/28/2018 18:51	500		DB-624 0.18(mm)
ZZZZZ		08/28/2018 19:35	50		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX10 Start Date: 10/02/2018 14:58

Analysis Batch Number: 348190 End Date: 10/02/2018 21:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-348190/1		10/02/2018 14:58	1	BFB1940.D	DB-624 0.18(mm)
STD8260 240-348190/2 IC		10/02/2018 15:27	1	UXX5939.D	DB-624 0.18(mm)
STD8260 240-348190/3 IC		10/02/2018 15:52	1	UXX5940.D	DB-624 0.18(mm)
STD8260 240-348190/4 ICIS		10/02/2018 16:17	1	UXX5941.D	DB-624 0.18(mm)
STD8260 240-348190/5 IC		10/02/2018 16:42	1	UXX5942.D	DB-624 0.18(mm)
STD8260 240-348190/6 IC		10/02/2018 17:06	1	UXX5943.D	DB-624 0.18(mm)
STD8260 240-348190/7 IC		10/02/2018 17:31	1	UXX5944.D	DB-624 0.18(mm)
STD8260 240-348190/8 IC		10/02/2018 17:56	1	UXX5945.D	DB-624 0.18(mm)
ICV 240-348190/9		10/02/2018 18:21	1	UXX5946.D	DB-624 0.18(mm)
STDA9 240-348190/10 IC		10/02/2018 18:46	1		DB-624 0.18(mm)
STDA9 240-348190/11 IC		10/02/2018 19:11	1		DB-624 0.18(mm)
STDA9 240-348190/12 IC		10/02/2018 19:36	1		DB-624 0.18(mm)
STDA9 240-348190/13 IC		10/02/2018 20:01	1		DB-624 0.18(mm)
STDA9 240-348190/14 IC		10/02/2018 20:25	1		DB-624 0.18(mm)
STDA9 240-348190/15 IC		10/02/2018 20:50	1		DB-624 0.18(mm)
STDA9 240-348190/16 IC		10/02/2018 21:14	1		DB-624 0.18(mm)
ICV 240-348190/17		10/02/2018 21:39	1	UXX5954.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX15 Start Date: 12/26/2018 08:52

Analysis Batch Number: 361663 End Date: 12/26/2018 19:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-361663/1		12/26/2018 08:52	1	BFB1226.D	DB-624 0.18(mm)
CCVIS 240-361663/2		12/26/2018 09:39	1	UXC8089.D	DB-624 0.18(mm)
LCS 240-361663/4		12/26/2018 10:01	1	UXC8090.D	DB-624 0.18(mm)
CCV 240-361663/3		12/26/2018 10:23	1	UXC8091.D	DB-624 0.18(mm)
MRL 240-361663/5 MDLV		12/26/2018 10:45	1		DB-624 0.18(mm)
MB 240-361663/6		12/26/2018 11:07	1	UXC8093.D	DB-624 0.18(mm)
ZZZZZ		12/26/2018 11:50	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 12:12	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 12:34	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 12:56	1		DB-624 0.18(mm)
240-105817-1 MS		12/26/2018 13:18	5	UXC8099.D	DB-624 0.18(mm)
240-105817-1 MSD		12/26/2018 13:40	5	UXC8100.D	DB-624 0.18(mm)
240-105817-1		12/26/2018 14:02	5	UXC8101.D	DB-624 0.18(mm)
240-105817-2		12/26/2018 14:23	1	UXC8102.D	DB-624 0.18(mm)
ZZZZZ		12/26/2018 14:45	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 15:07	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 15:29	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 15:51	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 16:13	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 16:35	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 16:56	5		DB-624 0.18(mm)
ZZZZZ		12/26/2018 17:18	5		DB-624 0.18(mm)
ZZZZZ		12/26/2018 17:40	5		DB-624 0.18(mm)
ZZZZZ		12/26/2018 18:02	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 18:24	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 18:45	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 19:29	1		DB-624 0.18(mm)
ZZZZZ		12/26/2018 19:51	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Instrument ID: A3UX10 Start Date: 12/27/2018 10:40

Analysis Batch Number: 361928 End Date: 12/27/2018 22:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-361928/1		12/27/2018 10:40	1	BFB2101.D	DB-624 0.18(mm)
CCVIS 240-361928/2		12/27/2018 11:06	1	UXX8803.D	DB-624 0.18(mm)
CCV 240-361928/3		12/27/2018 11:30	1	UXX8804.D	DB-624 0.18(mm)
LCS 240-361928/4		12/27/2018 11:55	1	UXX8805.D	DB-624 0.18(mm)
MB 240-361928/6		12/27/2018 12:45	1	UXX8807.D	DB-624 0.18(mm)
ZZZZZ		12/27/2018 13:10	5		DB-624 0.18(mm)
ZZZZZ		12/27/2018 13:35	2		DB-624 0.18(mm)
ZZZZZ		12/27/2018 13:59	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 14:25	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 14:51	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 15:41	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 16:11	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 16:37	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 17:02	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 17:28	1		DB-624 0.18(mm)
240-105817-1		12/27/2018 17:54	1	UXX8818.D	DB-624 0.18(mm)
ZZZZZ		12/27/2018 18:21	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 18:48	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 19:12	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 19:37	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 20:01	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 20:27	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 20:52	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 21:28	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 21:53	1		DB-624 0.18(mm)
ZZZZZ		12/27/2018 22:23	5		DB-624 0.18(mm)
ZZZZZ		12/27/2018 22:48	5		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 342615 Batch Start Date: 08/27/18 10:10 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00071	vm50ss_stk 00078	VMAROLISTDW 00260	vmbfb 00020
BFB 240-342615/1		8260B		5 mL	5 mL				1 uL
STD8260 240-342615/2 IC		8260B		5 mL	5 mL	1 uL	32 uL	32 uL	
STD8260 240-342615/3 IC		8260B		5 mL	5 mL	1 uL	16 uL	16 uL	
STD8260 240-342615/4 ICIS		8260B		5 mL	5 mL	1 uL	8 uL	8 uL	
STD8260 240-342615/5 IC		8260B		5 mL	5 mL	1 uL	4 uL	4 uL	
STD8260 240-342615/6 IC		8260B		5 mL	5 mL	1 uL	1.6 uL	1.6 uL	
STD8260 240-342615/7 IC		8260B		5 mL	5 mL	1 uL	0.8 uL	0.8 uL	
ICV 240-342615/14		8260B		5 mL	5 mL	1 uL	0.797 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASAW 00246	VMFASGW 00271	VMFASPW 00264	VMRGAS 00259	VMRPRIMW 00297	
BFB 240-342615/1		8260B							
STD8260 240-342615/2 IC		8260B					32 uL	32 uL	
STD8260 240-342615/3 IC		8260B					16 uL	16 uL	
STD8260 240-342615/4 ICIS		8260B					8 uL	8 uL	
STD8260 240-342615/5 IC		8260B					4 uL	4 uL	
STD8260 240-342615/6 IC		8260B					1.6 uL	1.6 uL	
STD8260 240-342615/7 IC		8260B					0.8 uL	0.8 uL	
ICV 240-342615/14		8260B		8 uL	8 uL	8 uL			

Batch Notes	
pH Indicator ID	HC746949

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 342615 Batch Start Date: 08/27/18 10:10 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 342834 Batch Start Date: 08/28/18 11:13 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00071	vmbfb 00020	VMFASA9W 00198	
BFB 240-342834/1		8260B		5 mL	5 mL		1 uL		
ICV 240-342834/32		8260B		5 mL	5 mL	1 uL		8 uL	

Batch Notes	
pH Indicator ID	hc746949

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 348190 Batch Start Date: 10/02/18 14:58 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00071	vm50ss 00337	VMAROLISTDW 00267	vmbfb 00020
BFB 240-348190/1		8260B		5 mL	5 mL				1 uL
STD8260 240-348190/2 IC		8260B		5 mL	5 mL	1 uL	32 uL	32 uL	
STD8260 240-348190/3 IC		8260B		5 mL	5 mL	1 uL	16 uL	16 uL	
STD8260 240-348190/4 ICIS		8260B		5 mL	5 mL	1 uL	8 uL	8 uL	
STD8260 240-348190/5 IC		8260B		5 mL	5 mL	1 uL	4 uL	4 uL	
STD8260 240-348190/6 IC		8260B		5 mL	5 mL	1 uL	3.2 uL	3.2 uL	
STD8260 240-348190/7 IC		8260B		5 mL	5 mL	1 uL	1.6 uL	1.6 uL	
STD8260 240-348190/8 IC		8260B		5 mL	5 mL	1 uL	0.8 uL	0.8 uL	
ICV 240-348190/9		8260B		5 mL	5 mL	1 uL	8 uL		
ICV 240-348190/17		8260B		5 mL	5 mL	1 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00203	VMFASAW 00250	VMFASGW 00276	VMFASPW 00269	VMRGAS 00263	VMRPRIMW 00303
BFB 240-348190/1		8260B							
STD8260 240-348190/2 IC		8260B						32 uL	32 uL
STD8260 240-348190/3 IC		8260B						16 uL	16 uL
STD8260 240-348190/4 ICIS		8260B						8 uL	8 uL
STD8260 240-348190/5 IC		8260B						4 uL	4 uL
STD8260 240-348190/6 IC		8260B						3.2 uL	3.2 uL
STD8260 240-348190/7 IC		8260B						1.6 uL	1.6 uL
STD8260 240-348190/8 IC		8260B						0.8 uL	0.8 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 348190 Batch Start Date: 10/02/18 14:58 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00203	VMFASAW 00250	VMFASGW 00276	VMFASPW 00269	VMRGAS 00263	VMRPRIMW 00303
ICV 240-348190/9		8260B			8 uL	8 uL	8 uL		
ICV 240-348190/17		8260B		8 uL					

Batch Notes	
pH Indicator ID	hc746949

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 361663 Batch Start Date: 12/26/18 08:52 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VM50IS 00072	vm50ss_stk 00079	VMAROLISTDW 00278
BFB 240-361663/1		8260B		5 mL	5 mL				
CCVIS 240-361663/2		8260B		5 mL	5 mL		1 uL	0.797 uL	8 uL
CCV 240-361663/3		8260B		5 mL	5 mL		1 uL		
LCS 240-361663/4		8260B		5 mL	5 mL		1 uL	0.797 uL	
MB 240-361663/6		8260B		5 mL	5 mL		1 uL	0.797 uL	
240-105817-B-1 MS	GW-121318-BE-001	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-105817-B-1 MSD	GW-121318-BE-001	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-105817-B-1	GW-121318-BE-001	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	
240-105817-A-2	TRIP BLANK	8260B	T	5 mL	5 mL	<2 SU	1 uL	0.797 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00021	VMFASAW 00261	VMFASGW 00289	VMFASPW 00281	VMRA9W 00279	VMRGAS 00275
BFB 240-361663/1		8260B		1 uL					
CCVIS 240-361663/2		8260B							8 uL
CCV 240-361663/3		8260B						8 uL	
LCS 240-361663/4		8260B			8 uL	8 uL	8 uL		
MB 240-361663/6		8260B							
240-105817-B-1 MS	GW-121318-BE-001	8260B	T		8 uL	8 uL	8 uL		
240-105817-B-1 MSD	GW-121318-BE-001	8260B	T		8 uL	8 uL	8 uL		
240-105817-B-1	GW-121318-BE-001	8260B	T						
240-105817-A-2	TRIP BLANK	8260B	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00315					
BFB 240-361663/1		8260B							
CCVIS 240-361663/2		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 361663 Batch Start Date: 12/26/18 08:52 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00315					
CCV 240-361663/3		8260B							
LCS 240-361663/4		8260B							
MB 240-361663/6		8260B							
240-105817-B-1 MS	GW-121318-BE-001	8260B	T						
240-105817-B-1 MSD	GW-121318-BE-001	8260B	T						
240-105817-B-1	GW-121318-BE-001	8260B	T						
240-105817-A-2	TRIP BLANK	8260B	T						

Batch Notes	
pH Indicator ID	HC746949

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 361928 Batch Start Date: 12/27/18 10:40 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VM50IS 00071	vm50ss_stk 00079	VMAROLISTDW 00278
BFB 240-361928/1		8260B		5 mL	5 mL				
CCVIS 240-361928/2		8260B		5 mL	5 mL		1 uL	1 uL	8 uL
CCV 240-361928/3		8260B		5 mL	5 mL		1 uL		
LCS 240-361928/4		8260B		5 mL	5 mL		1 uL	1 uL	
MB 240-361928/6		8260B		5 mL	5 mL		1 uL	1 uL	
240-105817-C-1	GW-121318-BE-001	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMBFB 00021	VMFASAW 00261	VMFASGW 00289	VMFASPW 00281	VMRA9W 00279	VMRGAS 00275
BFB 240-361928/1		8260B		1 uL					
CCVIS 240-361928/2		8260B							8 uL
CCV 240-361928/3		8260B						8 uL	
LCS 240-361928/4		8260B			8 uL	8 uL	8 uL		
MB 240-361928/6		8260B							
240-105817-C-1	GW-121318-BE-001	8260B	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00315					
BFB 240-361928/1		8260B							
CCVIS 240-361928/2		8260B		8 uL					
CCV 240-361928/3		8260B							
LCS 240-361928/4		8260B							
MB 240-361928/6		8260B							
240-105817-C-1	GW-121318-BE-001	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-105817-1

SDG No.:

Batch Number: 361928 Batch Start Date: 12/27/18 10:40 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC746949

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

CHAIN OF CUSTODY RECORD

CONESTOGA-ROVERS & ASSOCIATES

4.4|4.4

6520 Corporate Drive, Indianapolis, Indiana 46278
Phone: (317) 291-7007 Fax: (317) 328-2666

COC NO.: IN- 14358
PAGE 1 OF 1
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017302A -T07	Laboratory Name: Test America	Lab Location: North Canton, OH	SSOW ID: 017302-T07
Project Name: MLK GW	Lab Contact: Denise Heckler	Lab Quote No:	Cooler No: 1 of 1
Project Location: Anderson IN			Carrier: Fedex
Chemistry Contact: Deborah Andrasko			Airbill No:
Sampler(s): Brynn Einecker			Date Shipped: 12/13/18

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Sample Type: Matrix Code (see back of COC)	Sample Type: Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: VOC	MS/MSD Request	Comments/ Special Instructions:
1	GW-121318-BE-001	12/13/18	1253	GW	G		3							3	X		
2	TRIP BLANK	12/13/18		TB			1							1	X		
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

240-105817 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Total Number of Containers: 4

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. Brynn Einecker	GHD	12/13/18	1500	1. [illegible]	TA	12-14-18	0950
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 165817**
Canton Facility

Client CRA Site Name _____ Cooler unpacked by: Ryan Cribley

Cooler Received on 12-14-18 Opened on 12-14-18

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) (Foam) (Plastic Bag) None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF **+0**°C) Observed Cooler Temp. 4.4 °C Corrected Cooler Temp. 4.4 °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No,
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC854592**
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes (No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ (Yes) No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____